

FEBRUARY 2011



# Stanford University Medical Center Facilities Renewal and Replacement

## **Final Environmental Impact Report - VOLUME I**

*Prepared for*  
The City of Palo Alto

SCH # 2007082130

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*Prepared for*  
The City of Palo Alto

*Prepared by*  
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SCH # 2007082130

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# Section 1

## Introduction

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### 1.1 BACKGROUND

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#### The EIR Process Following Release of the Draft EIR

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A Draft Environmental Impact Report (EIR), pursuant to the California Environmental Quality Act (CEQA), was prepared by the City of Palo Alto (City) to disclose the potential environmental effects of the Stanford University Medical Center Facilities Renewal and Replacement Project (SUMC Project). The Draft EIR, issued for public review on May 20, 2010, includes a description of the SUMC Project, an assessment of its potential effects, a description of possible mitigation measures to reduce significant effects that were identified in the Draft EIR, and a consideration of alternatives that could address potential impacts. The SUMC Project would involve demolition, replacement, and expansion of existing medical facilities at the SUMC Sites, which are comprised of the 56-acre Main SUMC Site and the 9.9-acre Hoover Pavilion Site. The SUMC Project sponsors are the Stanford Hospital and Clinics (SHC), the Lucile Packard Children's Hospital (LPCH), and the Stanford University School of Medicine (SoM). See below for a further description of the SUMC Project.

The 69-day public review period for the Draft EIR began on May 20, 2010 and ended July 27, 2010. During this time frame, the document was reviewed by various State, regional, and local agencies, as well as by interested organizations and individuals. Comment letters on the Draft EIR were received from 10 public agencies, three City Council members, three private organizations (including the SUMC Project sponsors), and 34 private individuals. The public review period also included six Planning and Transportation Commission (Commission) hearings, five City Council hearings, one Architectural Review Board (ARB) hearing, and one Historic Resources Board (HRB) hearing, for a total of 13 public hearings. The Commission and City Council hearings were open to the public and comments during the hearings were received from members of the public, commissioners, City Councilmembers, and members of the ARB and HRB. Please see Section 2, List of Commentors, for a listing of all agencies, organizations, and individuals who commented on the Draft EIR.

This document responds to written and oral comments on the Draft EIR that were raised during the public review period, and contains revisions intended to correct, clarify, and amplify the Draft EIR. The responses and revisions in this document substantiate and confirm or correct the analyses contained in the Draft EIR. No new significant environmental impacts and no substantial increase in the severity of an earlier identified impact have resulted from responding to comments. However, as a result of the Draft EIR review process, the previously identified significant and unavoidable level of service (LOS) impact on three Menlo Park intersections would now be reduced to less-than-significant levels through identified mitigation measures. Also, the cumulative impacts pertaining to toxic air contaminants would now be less than significant. Also, the SUMC Project's contribution to global climate change

would now be less than cumulatively considerable with mitigation. Lastly, the numbers of Protected Trees that would be removed by the SUMC Project and Tree Preservation Alternative have been clarified. These changes to the previously identified significant and unavoidable impacts are discussed below and addressed in detail in Section 3 of this document.

Together, the previously released Draft EIR and this “Responses to Comments” document constitute the Final Environmental Impact Report (Final EIR). As the lead agency, the City of Palo Alto must certify the Final EIR before action can be taken on the SUMC Project. Certification requires that the lead agency make findings that the Final EIR complies with CEQA.

## **Project Description**

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The SUMC Project would demolish, renovate, and replace on-site structures, thereby adding approximately 1.3 million square feet of net new floor area, broken down as follows:

- Demolition, renovation, and construction of SHC facilities, providing a net increase of approximately 824,000 square feet;
- Demolition, renovation, and construction of LPCH facilities, resulting in approximately 442,000 additional square feet;
- Demolition of four existing SoM buildings and construction of three replacement buildings, with no net increase in square feet;
- Demolition of shops and storage space, renovation of existing Hoover Pavilion, and net addition of approximately 46,000 square feet of new medical, office, research, clinic, and administrative facilities at the Hoover Pavilion Site for medical offices for community practitioners and SUMC-related medical offices, clinical facilities, and support uses;
- Demolition of existing parking spaces and construction of 2,985 new and replacement spaces, for a net increase of 2,053 spaces to address additional demand for the SUMC Project, to be located in surface parking and above- and underground structures;
- Construction of a new road connecting Sand Hill Road and Welch Road, and provision of interior driveways and improved circulation connections, including the extension of Quarry Road to Roth Way;
- Widening of Welch Road by the addition of a third lane to accommodate left turns in both directions; and
- Related on-site and off-site improvements.

The SUMC Project sponsors have applied to the City for a Comprehensive Plan Amendment, rezoning, architectural review, annexation of 0.75 acres adjacent to the SoM, and a possible Development Agreement. In addition, the City may require a Conditional Use Permit for the SUMC Project. The

EIR is intended to satisfy CEQA's environmental review requirements applicable to the City's approval of each of the requested entitlements, execution of the requested or required Development Agreement with the SUMC Project sponsors, subsequent City approvals and/or modifications to the SUMC Project as proposed, approvals by other responsible agencies, and construction and operation of the SUMC Project.

## **Significant Unavoidable Environmental Impacts**

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**Significant and Unavoidable Impacts.** Section 21100(b)(2)(A) of the CEQA Guidelines requires that an EIR identify any significant environmental effects that cannot be avoided if the SUMC Project is implemented. Most impacts identified for the SUMC Project would either be less than significant or could be mitigated to a less-than-significant level. However, the Draft EIR, on pages S-93, 4-1, and 5-2, identifies the following significant and unavoidable project-level and cumulative impacts, some of which would no longer be significant and unavoidable per revisions to the analysis:

- Deterioration of intersection LOS during Peak Hour conditions at three Menlo Park intersections (Middlefield Road and Willow Road, Bayfront Expressway and Willow Road, and University Avenue and Bayfront Expressway). However, per revisions to the LOS analysis, all significant intersection impacts from the SUMC Project would now be reduced to less-than-significant levels with identified mitigation measures, and the SUMC Project would no longer have significant and unavoidable intersection LOS impacts;
- Increased average daily traffic on four Menlo Park roadway segments, on Marsh Road, Sand Hill Road, Willow Road, and Alpine Road;
- Emission of criteria air pollutants (NO<sub>x</sub>) during construction, on both a project level and cumulative level;
- Emission of criteria air pollutants (ROG, NO<sub>x</sub>, PM<sub>10</sub>) during operation, on both a project level and cumulative level;
- Contribution to cumulative emissions of TACs. However, per revisions to the cumulative TAC and fine particulate matter analysis, cumulative TAC and fine particulate matter and emissions would now be less than significant and the SUMC Project would no longer have significant and unavoidable cumulative TAC and fine particulate matter impacts;
- Emission of greenhouse gases. However, per revisions to the climate change analysis, the SUMC Project's greenhouse gas emissions would be less than cumulatively considerable, and the SUMC Project's consistency with the City of Palo Alto Climate Protection Plan would be less than significant with identified mitigation measures. As such, the SUMC Project would no longer have a significant and unavoidable contribution to global climate change;
- Temporary but substantial noise during construction, on both a project level and cumulative level;

- Emission of ambulance noise along a new route along Sand Hill Road into the proposed Durand Way extension, so that noise levels at roadside residences would increase by a level considered unacceptable under the City’s Comprehensive Plan;
- Demolition of an historical structure, the 1959 Hospital Building complex (also referred to as the Stone Building complex), which is a significant and unavoidable impact on both a project and cumulative level; and
- Removal of up to 74 Protected Trees, as defined in City of Palo Alto’s Tree Protection and Management Regulations, which is a significant and unavoidable impact on both a project level and a cumulative level. While the Draft EIR identified the loss of up to 71 Protected Trees, per revisions to the analysis, this number has been corrected to 74 Protected Trees.

Additionally, the analysis of the Tree Preservation Alternative included pile-driving activities during construction. It has been determined by the SUMC Project sponsors that pile-driving may be required in order to construct the replacement SHC Hospital. Also the SUMC Project sponsors have identified the Tree Preservation Alternative as a preferred site plan such that, going forward, refinements to project design would focus on the site plan for the Tree Preservation Alternative. As such, the Draft EIR addresses pile driving impacts under the Tree Preservation Alternative scenario. The Draft EIR indicates that potential pile-driving activities would result in significant and unavoidable noise effects to nearby residents.

**Revisions to the Previously Identified Significant and Unavoidable Impacts.** As indicated above, some revisions to the previously identified significant and unavoidable impacts have resulted from responding to comments on the Draft EIR. This Responses to Comments document addresses the following revisions:

- First, the significant and unavoidable LOS impacts during Peak Hour conditions at three Menlo Park intersections (Middlefield Road and Willow Road, Bayfront Expressway and Willow Road, and University Avenue and Bayfront Expressway) has now been reduced. After receiving input from the City of Menlo Park, the City of Palo Alto has now determined that the impact these intersections would be mitigated to a less-than-significant level. Please refer to Staff-Initiated Change 2 in Section 3 of this document for a detailed explanation of this change to the Draft EIR.
- Second, a revised analysis of cumulative TAC and fine particulate matter emissions has been completed for the SUMC Project using the methodology and thresholds established by the 2010 Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines. This quantified analysis replaces the qualitative analysis in the Draft EIR and yields more accurate results, which show that all cumulative estimates for cancer risk, chronic non-cancer Health Indexes (HI), and annual average PM2.5 concentration would be below the BAAQMD cumulative significance thresholds for on-site patient receptors and maximally exposed off-site residential receptors within the zone of influence. Please refer to Staff-Initiated Change 3 in Section 3 of this document for a detailed explanation of this change to the Draft EIR.



- Third, the City has reevaluated the Draft EIR analysis of the SUMC Project’s greenhouse gas emissions. The reevaluation has determined that, compared to the Business as Usual (BAU) scenario, the SUMC Project would reduce greenhouse gas emissions by more than 30 percent. Also, the SUMC Project would be consistent with the goals of the City’s Climate Protection Plan after implementation of identified mitigation measures. As such, the SUMC Project’s contribution to global climate change would be less than cumulatively considerable after mitigation. A major driver for the change in this conclusion is that the City has determined that, from a global perspective, increased patient/visitor trips would not constitute new trips that would result from the SUMC expansion. This is because patients would be expected to seek medical treatment somewhere, even if the SUMC Hospitals were not expanded. Please refer to Staff-Initiated Change 4 in Section 3 of this document for a detailed explanation of this change to the Draft EIR.
- Fourth, the City has clarified the number of Protected Trees to be removed by the SUMC Project. The City has determined that a total of 74 Protected Trees would be removed under the SUMC Project, rather than 71 Protected Trees. Under the Tree Preservation Alternative, up to 59 Protected Trees potentially would be removed. Staff-Initiated Change 6, in Section 3 of this document, provides this clarification under the SUMC Project and the Tree Preservation Alternative. The significant and unavoidable conclusion in the Draft EIR would remain.

## Project Alternatives

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Section 15126.6(a) of the CEQA Guidelines states that “An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of a project, and evaluate the comparative merits of the alternatives.” Therefore, in addition to the SUMC Project, the Draft EIR considers and evaluates seven alternatives, as well as variations on those alternatives, as enumerated below. These alternatives are described in more detail in Section 5 of the Draft EIR.

- **No Project Alternative A: Retrofitting Only/ No New Structures.** Under No Project Alternative A, only those Hospital facilities that could be modified to meet the 2013 and 2030 deadlines would be retrofitted. No new buildings would be constructed. In the long-term, portions of the Hospital facilities would not meet SB 1953 requirements for the 2030 deadline, and one or both of the Hospitals would be closed. Under this alternative, there would be no new construction at the Hoover Pavilion Site and the interior of the existing Hoover Pavilion building would not need to be renovated to relocate the users of 1101 Welch Road. No rezoning, annexation, or changes to existing land use designations would be required.
- **No Project Alternative B: Replace SB 1953 Noncompliant Structures at Maximum Allowable FAR.** Under No Project Alternative B, Hospital facilities that are not compliant with OSHPD structural standards would be replaced with new structures. New structures would be built out to the maximum size allowed under PF zoning. In addition, the LPCH

would continue to use its existing facilities, with non-structural renovations made to noncompliant critical care areas. No rezoning, annexation, or changes to existing land use designations would be required to replace the SB 1953 noncompliant buildings with the maximum allowable FAR. It is assumed that No Project Alternative B would be completed by 2015.

- **Reduced Intensity Alternative A: Right-Size SHC and LPCH Facilities without Adding Beds.** Under Reduced Intensity Alternative A, noncompliant facilities would be demolished and replaced with new structures. Construction of new Hospital facilities would be limited to the minimum additional square footage required to right-size the existing LPCH and SHC facilities without adding space for additional growth. All other uses on the Main SUMC Site would remain the same as under current conditions, subject to minor seismic retrofit work. In addition, the Hoover Pavilion would be internally renovated to accommodate additional clinic and office uses; however, no new structures would be constructed at this site. Unlike the previous two alternatives, the implementation of Reduced Intensity Alternative A would require rezoning of the Main SUMC Sites to accommodate proposed development intensities because the PF-zoned area is almost entirely built out under existing conditions.
- **Reduced Intensity Alternative B: Right-Size SHC and LPCH Facilities Plus Add Floor Area in an Amount Less Than the SUMC Project.** Reduced Intensity Alternative B would include all of the components of Reduced Intensity Alternative A, but would also include additional square footage for clinics/medical offices, research facilities, and other non-Hospital uses. The additions under Reduced Intensity Alternative B would be approximately 60 percent of the floor area of the SUMC Project medical offices and 60 percent of the floor area of the SUMC Project Hospital space above the amounts needed for right-sizing.
- **Tree Preservation Alternative.** The Tree Preservation Alternative would seek to avoid the significant and unavoidable impact from the removal of Protected Trees, in particular, Protected Trees that are considered both biological and aesthetic tree resources (as defined in more detail in Section 3.9 of the Draft EIR, Biological Resources). The Tree Preservation Alternative would have the same development program as the proposed SUMC Project, including the same site plan and square footages for the LPCH Hospital and clinic/medical office buildings and for the Hoover Pavilion Site. In addition, the Tree Preservation Alternative would include the same square footages for the SHC Hospital and clinic/medical office buildings and the FIM 1 building as under the SUMC Project; however, the site plan and building footprints for the SHC and FIM 1 would be different to avoid the removal of Protected Trees. As indicated above, the SUMC Project sponsors have identified the Tree Preservation Alternative as a preferred site plan such that, going forward, refinements to project design would focus on the site plan for the Tree Preservation Alternative.
- **Historic Preservation Alternative.** The Historic Preservation Alternative would seek to avoid the SUMC Project's significant and unavoidable impact from demolition of the Stone Building complex, which is considered a historic resource. Under the Historic Preservation Alternative,

the Stone Building complex would be used as clinics, medical offices and SoM research labs, and not used as hospital buildings, as defined by the Office of Statewide Health Planning and Development (OSHPD). As such, all Hospital functions would be moved out of the 1959 Hospital Building complex, as is contemplated under the SUMC Project, and the new SHC and LPCH Hospital buildings would be constructed.

- **Village Concept Alternative.** The Village Concept Alternative would include the SUMC Project as proposed, but in addition would provide opportunities to enhance the SUMC Project by creating a more walkable, bikeable, mixed-use, transit-oriented, and well-connected urban environment. The Village Concept Alternative includes City recommendations that 490 previously approved, but not yet constructed, housing units along Quarry Road and Pasteur Drive, on Stanford lands, be affordable units that would be dedicated for occupancy by SUMC Project employees. Under the City's recommendation, these housing units would be constructed within two to four years after the issuance of building permits for the SUMC Project. The Village Concept Alternative would also include specific pedestrian linkages between the SUMC Project, the Stanford Shopping Center, Stanford University, the PAITS, and downtown, with corresponding urban design recommendations.

In addition to the No Project Alternatives, the Draft EIR identifies Reduced Intensity Alternative A as the environmentally superior SUMC Project alternative. The alternatives as presented in the Draft EIR are examples of potentially feasible alternatives that would reduce the impacts of the SUMC Project, attempt to meet the majority of objectives, and promote a functional site plan. Therefore, the alternatives included in the Draft EIR represent a range of reasonable alternatives to the SUMC Project, but are not meant to limit the City Council and the Commission in determining the best option for the SUMC Project. It is at the discretion of City Council whether to approve portions of the proposed alternatives that would mitigate or avoid significant environmental impacts, while rejecting the alternatives that are deemed to be infeasible. As such, the final SUMC Project could be the SUMC Project as proposed in the Draft EIR, an alternative to the SUMC Project, or a combination of the SUMC Project and different alternatives.

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## **1.2 PURPOSE OF THIS RESPONSES TO COMMENTS DOCUMENT**

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Under CEQA, the City is required, after completion of a Draft EIR, to consult with and obtain comments from public agencies having jurisdiction by law with respect to the SUMC Project, and to provide the general public with an opportunity to comment on the Draft EIR. As the lead agency, the City of Palo Alto is also required to respond to significant environmental issues raised in the review and consultation process.

This Responses to Comments document has been prepared to respond to public agency and general public comments received on the Draft EIR for the SUMC Project, which was circulated for a 69-day public review period, May 20, 2010 to July 27, 2010, and to respond to comments received at the 13 hearings that took place during that same time period. This document contains the public comments

received on the Draft EIR, written responses to those comments, and changes made to the Draft EIR in response to the comments.

The Responses to Comments document provides clarification and further substantiation for the analysis and conclusions presented in the Draft EIR. Additionally, the responses correct and remedy minor technical mistakes or errors identified in the Draft EIR. The purpose of the Responses to Comments document is to address concerns raised about the adequacy of the Draft EIR and the process by which the City of Palo Alto conducted the CEQA process. Comments that express an opinion about the merits of the SUMC Project or SUMC Project alternatives, rather than the adequacy of the Draft EIR of the SUMC Project's compliance with CEQA, are not examined in this document. This document does not provide a response regarding the merits of the SUMC Project or SUMC Project alternatives. Section 15088 of the CEQA Guidelines stipulates that responses should pertain to major or significant environmental issues raised by commentors. As explained earlier, the previously released Draft EIR and this "Responses to Comments" document constitute the Final EIR.

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### **1.3 HOW TO USE THIS REPORT**

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This document addresses substantive comments received during the public review period and consists of six sections: (1) Introduction, (2) List of Commentors, (3) Staff-Initiated Changes and Master Responses, (4) Responses to Written Comments on the Draft EIR, (5) Responses to Oral Comments on the Draft EIR, and (6) Revisions to the Draft EIR. Section 1 reviews the purpose and contents of this Responses to Comments document. Section 2 lists the public agencies, organizations, and individuals who submitted comments on the Draft EIR. In addition, Section 3 provides Staff-Initiated Changes and Master Responses to comments that were raised on multiple occasions and warrant a single comprehensive response. Following the Staff-Initiated Changes and Master Responses, Section 4 contains each comment letter and written response to the individual comments. Section 5 contains comments made by speakers at the public hearings during circulation of the Draft EIR, and the responses to these comments. In Sections 4 and 5, specific comments within each comment letter or oral testimony at the public hearings have been bracketed and enumerated in the margin of the letter or transcript. Each commentor has been assigned a discrete comment letter or speaker number, as listed in Section 2. Responses to each of these comments follow each comment letter in Section 4 and follow the transcripts reproduced in Section 5. For the most part, the responses provide explanatory information or additional discussion of text in the Draft EIR. In some instances, the response supersedes or supplements the text of the Draft EIR for accuracy or clarification. New text that has been added to the Draft EIR is indicated with underlining. Text that has been deleted is indicated with ~~strike through~~. Finally, Section 6 provides a comprehensive listing of the text changes to the Draft EIR that have resulted from responding to comment or staff-initiated changes.

## Section 2

# List of Commentors

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### 2.1 WRITTEN COMMENTS

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Comment letters on the Draft EIR were received from 10 public agencies, three City Council members, three private organizations, and 34 individuals, as listed below. The public agencies, organizations, and individuals listed below are in the order that their comments are presented in Section 4 of this document. Following this list, an alphabetized list of these agencies, organizations, and individuals is provided in order to help the commentor find their responses more easily.

#### Public Agencies

1. Governor's Office of Planning and Research, State Clearinghouse and Planning Unit, Scott Morgan (letter dated July 7, 2010)
2. Department of Toxic Substances, Andrew Berna-Hicks, P.E. (letter dated June 7, 2010)
3. Santa Clara Valley Transportation Authority, Michael T. Burns (letter dated July 27, 2010)
  - 3a. Santa Clara Valley Transportation Authority, CMA Planning Department, Robert Swierk, AICP (letter dated July 27, 2010)
4. Local Agency Formation Commission of Santa Clara County, Dunia Noel (letter dated June 17, 2010)
5. County of San Mateo Planning and Building Department, Jim Eggemeyer (letter dated July 27, 2010)
6. County of San Mateo Manager, David Boesch (letter dated August 2, 2010)
7. City of East Palo Alto Community Development Department, Planning Division, Brent Butler (letter dated July 26, 2010)
8. City of Menlo Park, Richard Cline, Mayor (letter dated July 27, 2010)
9. Town of Portola Valley, Stephen Toben, Mayor (letter dated July 21, 2010)
10. Palo Alto Unified School District, Kevin Skelly, Ph.D. (letter dated July 27, 2010)
11. City of Palo Alto Utilities Department, Water-Gas-Wastewater Engineering, Roland Ekstrand (letter dated August 2, 2010)

#### City Council Letters

12. Councilmember Karen Holman, City Council (letter dated June 14, 2010)
13. Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010)

14. Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010)
15. Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010)
16. Councilmember Greg Schmid, City Council (letter dated June 30, 2010)
17. Councilmember Greg Schmid, Mayor Patrick Burt, and Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010)
18. Councilmember Karen Holman, City Council (letter dated July 27, 2010)
19. Councilmember Karen Holman, City Council (letter dated July 27, 2010)

### **Private Organizations**

20. Committee for Green Foothills, Brian A. Schmidt (letter dated July 27, 2010)
21. Middlefield North Neighborhood Association, John Guislin (letter dated May 21, 2010)
22. Stanford University Medical Center, Michael J. Peterson (letter dated July 27, 2010)
  - 22a. Stanford University Medical Center, Barbara Schussman (letter dated February 24, 2009)
  - 22b. Stanford University Medical Center, Michael J. Peterson (letter dated July 27, 2010)
  - 22c. Stanford University Medical Center (letter dated January 9, 2010)
  - 22d. Stanford University Medical Center, Barbara Schussman (letter dated July 27, 2010)
  - 22e. Stanford University Medical Center (letter dated July 20, 2010)

### **Individuals**

23. Brian and Susan Anuskewicz (letter dated July 27, 2010)
24. Dorothy Bender (letter dated July 23, 2010)
25. Melvin and Aviva Bernstein (letter dated July 27, 2010)
26. Charlie Bourne (letter dated July 24, 2010)
27. Irv Brenner (letter dated July 21, 2010)
28. Beth Bunnenberg (letter dated July 22, 2010)
29. Diane Churchill (letter dated June 10, 2010)
30. Katrina and James Currier (letter dated July 21, 2010)
31. Janet Davis (letter dated May 22, 2010)
32. Janet Davis (letter dated June 22, 2010)
33. Janet Davis (letter dated July 27, 2010)
34. Natalie Fisher (letter dated May 25, 2010)



35. Margaret Fruth (letter dated August 26, 2010)
36. Michael Griffin (letter dated June 24, 2010)
37. Michael Griffin (letter dated July 12, 2010)
38. Ken Hake (letter dated July 21, 2010)
39. David Haray (Letter dated July 19, 2010)
40. Alan Hess (letter dated July 26, 2010)
41. Richard Heydt (letter dated July 23, 2010)
42. John Hultgren (letter dated July 27, 2010)
43. Tom Jordan (letter dated July 15, 2010)
44. Tom Jordan (letter dated July 21, 2010)
45. Yoriko Kishimoro (letter dated July 15, 2010)
46. Libby Lucas (letter dated July 23, 2010)
47. Libby Lucas (letter dated July 27, 2010)
48. Wayne Martin (letter dated June 5, 2010)
49. Wayne Martin (letter dated July 27, 2010)
50. Wayne Martin (letter dated July 27, 2010)
51. Stepheny McGraw (letter dated July 8, 2010)
52. Doug Moran (letter dated May 24, 2010)
53. Bob Moss (letter dated July 27, 2010)
54. Stephanie Munoz (letter dated June 29, 2010)
55. Sidney Overland (letter dated July 22, 2010)
56. Nancy Peterson (letter dated May 22, 2010)
57. Richard Placone (letter dated July 10, 2010)
58. Rich Rollins (letter dated July 27, 2010)
59. Steve Schmidt (letter dated July 6, 2010)
60. Jeannie and Tony Seigman (letter dated July 25, 2010)
61. David A. Stonestrom (letter dated July 27, 2010)
62. Soa Tsung, MD (letter dated May 28, 2010)
63. Jaya Virmani, MD (letter dated May 28, 2010)

## **Alphabetical List of Public Agencies, City Council, Private Organizations, and Individuals Submitting Written Comments on the Draft EIR**

Brian and Susan Anuskewicz (letter dated July 27, 2010) – Letter 23

Dorothy Bender (letter dated July 23, 2010) – Letter 24

Andrew Berna-Hicks, P.E., Department of Toxic Substances (dated June 7, 2010) – Letter 2

Melvin and Aviva Bernstein (letter dated July 27, 2010) – Letter 25

David Boesch, County of San Mateo Manager (letter dated August 2, 2010) – Letter 6

Charlie Bourne (letter dated July 24, 2010) – Letter 26

Irv Brenner (letter dated July 21, 2010) – Letter 27

Beth Bunnenberg (letter dated July 22, 2010) – Letter 28

Michael T. Burns, Santa Clara Valley Transportation Authority (letter dated July 27, 2010) –Letter 3

Brent Butler, City of East Palo Alto Community Development Department, Planning Division (letter dated July 26, 2010) – Letter 7

Diane Churchill (letter dated June 10, 2010) – Letter 29

Richard Cline, Mayor, City of Menlo Park (letter dated July 27, 2010) – Letter 8

Katrina and James Currier (letter dated July 21, 2010) – Letter 30

Janet Davis (letter dated May 22, 1010) – Letter 31

Janet Davis (letter dated June 22, 2010) – Letter 32

Janet Davis (letter dated July 27, 2010) – Letter 33

Jim Eggermeyer, County of San Mateo Planning and Building Department (letter dated July 27, 2010) – Letter 5

Roland Ekstrand, City of Palo Alto Utilities Department (letter dated August 2, 1010) – Letter 11

Natalie Fisher (letter dated may 25, 2010) – Letter 34

Margaret Fruth (letter dated August 26, 2010) – Letter 35

Michael Griffin (letter dated June 24, 2010) – Letter 36

Michael Griffin (letter dated July 12, 2010) – Letter 37

John Guislin, Middlefield North Neighborhood Association (letter dated May 21, 2010) – Letter 21

Ken Hake (letter dated July 21, 2010) – Letter 38

David Haray (Letter dated July 19, 2010) – Letter 39

Alan Hess (letter dated July 26, 2010) – Letter 40

Richard Heydt (letter dated July 23, 2010) – Letter 41

Karen Holman, City Council (letter dated June 14, 2010) – Letter 12

Karen Holman, City Council (letter dated July 27, 2010) – Letter 18

Karen Holman, City Council (letter dated July 27, 2010) – Letter 19

John Hultgren (letter dated July 27, 2010) – Letter 42

Tom Jordan (letter dated July 15, 2010) - Letter 43

Tom Jordan (letter dated July 21, 2010) - Letter 44

Yoriko Kishimoro (letter dated July 15, 2010) – Letter 45

Libby Lucas (letter dated July 23, 2010) – Letter 46

Libby Lucas (letter dated July 27, 2010) – Letter 47

Wayne Martin (letter dated June 5, 2010) – Letter 48

Wayne Martin (letter dated July 27, 2010) – Letter 49

Wayne Martin (letter dated July 27, 2010) – Letter 50

Stepheny McGraw (letter dated July 8, 2010) – Letter 51

Doug Moran (letter dated may 24, 2010) – Letter 52

Scott Morgan, Governor’s Office of Planning and Research, State Clearinghouse (dated July 7, 2010) – Letter 1

Bob Moss (letter dated July 27, 2010) – Letter 53

Stephanie Munoz (letter dated June 29, 2010) – Letter 54

Dunia Noel, Local Agency Formation Commission of Santa Clara County (letter dated June 17, 2010) – Letter 4

Sidney Overland (letter dated July 22, 2010) – Letter 55

Michael J. Peterson, Stanford University Medical Center (letter dated July 27, 2010) – Letter 22

Michael J. Peterson, Stanford University Medical Center (letter dated July 27, 2010) - Letter 22b

Nancy Peterson (letter dated May 22, 2010) – Letter 56

Richard Placone (letter dated July 10, 2010) – Letter 57

Rich Rollins (letter dated July 27, 2010) – Letter 58

Councilmember Greg Schmid, City Council (letter dated June 30, 2010) – Letter 16

Councilmember Greg Schmid, Mayor Patrick Burt, and Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010) – Letter 17

Brian A. Schmidt, Committee for Green Foothills (letter dated July 27, 2010) – Letter 20

Steve Schmidt (letter dated July 6, 2010) – Letter 59

Barbara Schussman, Stanford University Medical Center (letter dated February 24, 2009) – Letter 22a

Barbara Schussman, Stanford University Medical Center (letter dated July 27, 2010) – Letter 22d  
Jeannie and Tony Seigman (letter dated July 25, 2010) – Letter 60  
Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010) – Letter 13  
Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010) – Letter 14  
Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010) – Letter 15  
Kevin Skelly, Ph.D., Palo Alto Unified School District (letter dated July 27, 2010) – Letter 10  
David A. Stonestrom (letter dated July 27, 2010) – Letter 61  
Robert Swierk, AICP, Santa Clara Valley Transportation Authority CMA Planning Department (letter dated July 27, 2010) – Letter 3a  
Stephen Toben, Mayor, Town of Portola Valley (letter dated July 21, 2010)  
Soa Tsung, MD (letter dated May 28, 2010) – Letter 62  
Jaya Virmani, MD (letter dated May 28, 2010) – Letter 63

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## **2.2 COMMENTS RECEIVED AT THE PUBLIC HEARINGS**

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Comments were received at six Planning and Transportation Commission (Commission) hearings, five City Council hearings, one Architectural Review Board (ARB) hearing, and one Historic Resources Board (HRB) hearing, for a total of 13 public hearings. In delineating the discrete comments received at the public hearings, the following codes have been used to identify commentors and comments; these codes are reflected in the transcripts from the public hearings:

- PTC – Comments made at the Planning and Transportation Commission hearings
- CC – Comments made at the City Council hearings
- ARB – Comments made at the Architectural Review Board hearing
- HRB – Comments made at the Historic Resources Board hearing

### **PTC1 – Planning and Transportation Commission hearing (June 2, 2010)**

The following commissioners provided comments on the Draft EIR during this hearing:

Daniel Garber – Chair  
Susan Fineberg  
Eduardo Martinez  
Arthur Keller  
Lee Lippert  
Greg Tanaka

In addition to the commissioners, the following members of the public provided comments on the Draft EIR during this hearing:

Robert Moss

Sherri Sager

### **PTC2 – Planning and Transportation Commission hearing (June 9, 2010)**

The following commissioners provided comments on the Draft EIR during this hearing:

Daniel Garber – Chair

Eduardo Martinez

Arthur Keller

Greg Tanaka

No members of the public provided comments on the Draft EIR during this hearing.

### **PTC3 – Planning and Transportation Commission hearing (June 16, 2010)**

The following commissioners provided comments on the Draft EIR during this hearing:

Daniel Garber – Chair

Arthur Keller

Lee Lippert

Eduardo Martinez

Susan Fineberg

Greg Tanaka

In addition to the commissioners, the following members of the public provided comments on the Draft EIR during this hearing:

Michael Griffin

Robert Moss

### **PTC4 – Planning and Transportation Commission hearing (June 24, 2010)**

The following commissioners provided comments on the Draft EIR during this hearing:

Daniel Garber – Chair

Arthur Keller

Lee Lippert

Eduardo Martinez

Susan Fineberg

Greg Tanaka

In addition to the commissioners, the following members of the public provided comments on the Draft EIR during this hearing:

Michael Griffin

**PTC5 – Planning and Transportation Commission hearing (June 30, 2010)**

The following commissioners provided comments on the Draft EIR during this hearing:

Daniel Garber- Chair

Arthur Keller

Susan Fineberg

Greg Tanaka

Eduardo Martinez

In addition to the commissioners, the following members of the public provided comments on the Draft EIR during this hearing:

Robert Moss

**PTC6 – Planning and Transportation Commission hearing (July 7, 2010)**

The following commissioners provided comments on the Draft EIR during this hearing:

Arthur Keller

Eduardo Martinez

Susan Fineberg

Lee Lippert

Daniel Garber – Chair

Greg Tanaka

In addition to the commissioners, the following members of the public provided comments on the Draft EIR during this hearing:

Robert Moss



## **CC1 – City Council hearing (June 7, 2010)**

The following City Councilmembers provided comments on the Draft EIR during this hearing:

Sid Espinosa – Vice Mayor

Karen Holman

Nancy Shepherd

Gregory Scharff

Greg Schmid

In addition to the Councilmembers, the following Commissioner and members of the public provided comments on the Draft EIR during this hearing:

Eduardo Martinez – Planning and Transportation Commissioner

Larry Taylor

Crystal Gamage

Stephen Player

Stephanie Munoz

Mark Lawrence

Brian Steen

Joseph Hopkins

Jim Rebosio

Alison Cormack

Craig Thom

Susie Thom

Robert Moss

## **CC2 – City Council hearing (June 14, 2010)**

The following City Councilmembers provided comments on the Draft EIR during this hearing:

Patrick Burt – Mayor

Karen Holman

Gail Price

Gregory Scharff

Greg Schmid

Yiaway Yeh

In addition to the Councilmembers, the following Commissioner and members of the public provided comments on the Draft EIR during this hearing:

Eduardo Martinez – Planning and Transportation Commissioner

Stanley Mayerson

Brian Schmidt

Robert Moss

Stephanie Munoz

A. Gladys Stavn

### **CC3 – City Council hearing (July 12, 2010)**

The following City Councilmembers provided comments on the Draft EIR during this hearing:

Patrick Burt – Mayor

Sid Espinosa – Vice Mayor

Karen Holman

Gail Price

Gregory Scharff

Greg Schmid

Nancy Shepherd

Yiaway Yeh

In addition to the Councilmembers, the following Commissioner and members of the public provided comments on the Draft EIR during this hearing:

Daniel Garber – Chair

Walt Hays

Arden Anderson

Harry Dennis

Hal Mickelson

Michael Griffin

Traci Fallecker

Carn Cappel

Alan Grundmann

Michele Grundmann

Nancy Peterson  
Boyd Smith  
Norman Beamer  
Stephanie Munoz  
Tom Jordan  
Robert Moss

**CC4 – City Council hearing (July 19, 2010)**

The following City Councilmembers provided comments on the Draft EIR during this hearing:

Patrick Burt – Mayor  
Sid Espinosa – Vice Mayor  
Karen Holman  
Gail Price  
Gregory Scharff  
Greg Schmid  
Yiaway Yeh

In addition to the Councilmembers, the following members of the public provided comments on the Draft EIR during this hearing:

David Haray  
Beth Bunnenberg

**CC5 – City Council hearing (July 26, 2010)**

The following City Councilmembers provided comments on the Draft EIR during this hearing:

Patrick Burt – Mayor  
Karen Holman  
Gail Price  
Gregory Scharff  
Nancy Shepherd

In addition to the Councilmembers, the following Commissioner and members of the public provided comments on the Draft EIR during this hearing:

Daniel Garber – Chair

Michael Weiland  
Adele Ullman  
Paul Cole  
Bonnie Balfour  
Mary Ann Carmack  
Bruce Coddling  
Fred Taleghani  
Richard Greene  
George Liddle  
Howard Wolf  
Beth Bunnenberg  
Raymond Neal  
Bruce Baker  
Robert Moss  
Herb Borock  
Stephanie Munoz

**ARB1- Architectural Review Board Hearing (July 1, 2010)**

The following Architectural Review Board Members provided comments on the Draft EIR during this hearing:

Alexander Lew – Chair  
Clare Malone Prichard – Vice Chair  
Judith Wasserman  
Heather Young

**HRB1- Historic Resources Board Hearing (July 7, 2010)**

The following Historic Resources Board Members provided comments on the Draft EIR during this hearing:

David Bower – Chair  
Natalie Loukianoff – Vice Chair  
Martin Bernstein  
Beth Bunnenberg

Roger Kohler

Michael Makinen

**Alphabetical List of Commissioners, City Councilmembers, ARB Members, HRB Members, and Individuals Submitting Oral Comments on the Draft EIR**

Arden Anderson, Public- CC3

Bruce Baker, Public – CC5

Bonnie Balfour, Public –CC5

Norman Beamer, Public – CC3

Martin Bernstein, Board Member, Historic Resources Board – HRB1

Herb Borock, Public - CC5

David Bower, Chair, Historic Resources Board- HRB1

Beth Bunnenberg, Historic Resource Board – HRB1

Beth Bunnenberg, Public – CC4, CC5

Patrick Burt, Mayor, City Council – CC2, CC3, CC4, CC5

Caren Cappell, Public – CC3

Mary Ann Carmack, Public – CC5

Bruce Codding, Public – CC5

Paul Cole, Public – CC5

Alison Cormack, Public – CC1

Harry Dennis, Public – CC3

Sid Espinosa, Vice Mayor, City Council – CC1, CC3, CC4

Traci Fallecker, Public – CC3

Susan Fineberg, Commissioner, Planning and Transportation Commission – PTC1, PTC3, PTC4, PTC5, PTC6

Crystal Gamage, Public – CC1

Daniel Garber, Chair, Planning and Transportation Commission – PTC1, PTC2, PTC3, PTC4, PTC5, PTC6, CC3, CC5

Richard Greene, Public - CC5

Michael Griffin, Public – PTC3, PTC4, CC3

Alan Grundmann, Public – CC3

Michele Grundmann, Public – CC3

David Haray, Public – CC4

Walt Hays, Public – CC3

Karen Holman, Councilmember, City Council – CC1, CC2, CC3, CC4, CC5

Joseph Hopkins, Public – CC1

Tom Jordan, Public – CC3

Arthur Keller, Commissioner, Planning and Transportation Commission – PTC1, PTC2, PTC3, PTC4, PTC5, PTC6

Roger Kohler, Boardmember, Historic Resources Board – HRB1

Mark Lawrence, Public – CC1

Alexander Lew, Chair, Architectural Review Board – ARB1

George Liddle, Public – CC5

Lee Lippert, Commissioner, Planning and Transportation Commission – PTC1, PTC3, PTC4, PTC6

Natalie Loukianoff, Vice Chair, Historic Resources Board – HRB1

Michael Makinen, Boardmember, Historic Resources Board – HRB1

Eduardo Martinez, Commissioner, Planning and Transportation Commission – PTC1, PTC2, PTC3, PTC4, PTC5, PTC6, CC1, CC2

Stanley Mayerson, Public – CC2

Hal Mickelson, Public – CC3

Robert Moss, Public – PTC1, PTC3, PTC5, PTC6, CC1, CC2, CC3, CC5

Stephanie Munoz, Public – CC1, CC2, CC3, CC5

Raymond Neal, Public – CC5

Nancy Peterson, Public – CC3

Stephen Player, Public – CC1

Gail Price, Councilmember, City Council – CC2, CC3, CC4, CC5

Clare Malone Prichard, Vice Chair, Architectural Review Board – ARB1

Jim Rebosio, Public – CC1

Sheri Sager, Public – PTC1

Gregory Scharff, Councilmember, City Council – CC1, CC2, CC3, CC4, CC5

Greg Schmid, Councilmember, City Council – CC1, CC2, CC3, CC4

Brian Schmidt, Public – CC2

Nancy Shepherd, Councilmember, City Council – CC1, CC3, CC5

Boyd Smith, Public – CC3

A. Gladys Stavn, Public – CC2

Brian Steen, Public – CC1

Fred Taleghani, Public – CC5

Greg Tanaka, Commissioner, Planning and Transportation Commission – PTC 1, PTC2, PTC3, PTC4, PTC5, PTC6

Larry Taylor, Public – CC1

Craig Thom, Public – CC1

Susie Thom, Public – CC1

Adele Ullman, Public – CC5

Judith Wasserman, Boardmember, Architectural Review Board – ARB1

Michael Weiland, Public – CC5

Howard Wolf, Public – CC5

Yiaway Yeh, Councilmember, City Council – CC2, CC3, CC4

Heather Young, Boardmember, Architectural Review Board – ARB1

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## Section 3

# Staff-Initiated Changes and Master Responses

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### 3.1 INTRODUCTION

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This section presents changes and additions to the Draft EIR that City of Palo Alto (City) staff have identified as necessary to correct errors, revisit impact assumptions, or to offer further explanation. These changes are referred to here as Staff-Initiated Changes. This section also contains Master Responses to address comments that were raised repeatedly and provide information in a comprehensive, easily-located discussion that clarifies and elaborates upon the analyses in the Draft EIR. The Staff-Initiated Changes and Master Responses presented below address the following topics.

#### Staff-Initiated Changes

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- Staff-Initiated Change 1: Quantified SUMC Project Transit Analysis
- Staff-Initiated Change 2: Changes to Intersection Impact Conclusions
- Staff-Initiated Change 3: Changes to Analysis of Cumulative Health Risk from Toxic Air Contaminants
- Staff-Initiated Change 4: Changes to Calculation of Greenhouse Gas Emissions and Climate Change Analysis of the SUMC Project and its Alternatives
- Staff-Initiated Change 5: Impacts of the Proposed Hoover Pavilion Renovation and Site Development on the Hoover Pavilion’s Potential Status as a Historic Resource
- Staff-Initiated Change 6: Changes to Protected Tree Numbers and Mitigation Measures Under the SUMC Project and the Tree Preservation Alternative
- Staff-Initiated Change 7: Changes to Table 3.13-8, SUMC Project 2025 Indirect Housing Demand by County/City Based on Existing SUMC Employee Zip Code Distribution
- Staff-Initiated Change 8: Changes to Trip Generation and Level of Service Analysis of Alternatives to the SUMC Project

#### Master Responses

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- Master Response 1: Viability of the Caltrain GO Pass Mitigation Measure and Alternative Mitigation Measures to the GO Pass
- Master Response 2: Other Traffic Mitigation Measures

- Master Response 3: Background Growth and Cumulative Traffic Impacts
- Master Response 4: Construction Traffic
- Master Response 5: Connection of Pasteur Drive and Roth Way
- Master Response 6: Cost of Transportation-Related Mitigation Measures and Fair Share Calculations
- Master Response 7: Impact on City’s Jobs to Employed Residents Ratio and Mitigation Regarding Affordable Housing
- Master Response 8: Range of Alternatives Analyzed and Consideration of Alternatives in the SUMC Project Approval Process
- Master Response 9: Merits of the SUMC Project and Alternatives
- Master Response 10: Response to Comments Not Applicable to CEQA and Not Applicable to SUMC Project
- Master Response 11: City Process for Reviewing and Deciding on SUMC Project
- Master Response 12: Development Agreement

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## 3.2 STAFF-INITIATED CHANGES

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### Staff-Initiated Change 1: Quantified SUMC Project Transit Analysis

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#### Introduction

Staff-Initiated Change 1 addresses comments 3.3, 3.4, 3a.2, 3a.3, 3.a4, 3a.5, 3a.6, 3a.8, 5.4, 8.18, 22.29, 22.32, 22.33, 22.34, 22.37, 22.38, 22.92, 22.c.1, 45.7, PTC1.31, PTC1.77, PTC3.5, PTC3.24, PTC3.38, PTC3.39, PTC3.42, PTC6.3, PTC6.70, CC3.53, and CC3.68.

Staff-Initiated Change 1 provides a quantified analysis of potential Stanford University Medical Center (SUMC) Project impacts on transit. Staff-Initiated Change 1 supersedes Impact TR-7 on pages 3.4-77 to 3.4-81 of the Draft EIR. First, Staff-Initiated Change 1 determines if the additional SUMC Project transit users would adversely impact the transit services (buses and Caltrain) serving Palo Alto, either with or without the GO Pass that is part of Mitigation Measure TR-2.3. The SUMC Project would have a significant impact if the total ridership (with the SUMC Project) would be greater than the operational capacity of each particular transit route. As explained below, the SUMC Project would not significantly impact bus or Caltrain service in either direction, with or without the GO Pass. Second, Mitigation Measure TR-7.1 has been revised. The City has identified an alternative requirement to the provision of transit centers on site, as discussed below. In addition, Staff-Initiated Change 1 provides the text revisions to the Draft EIR that result from the two above changes.

## SUMC Project Transit Impacts

**Existing Transit Services.** There are currently 12 bus routes (excluding the Marguerite shuttles) serving the Palo Alto Intermodal Transit Station (PAITS), in addition to Caltrain. These transit services are provided by the Santa Clara Valley Transportation Authority (VTA), San Mateo County Transit (SamTrans), City of Palo Alto shuttles, operators for the Dumbarton Express, and Caltrain. Table 3.2-1 lists the service providers, their corresponding routes, and the current frequency of service. Four Caltrain trains in the Peak Hour, and at least four local shuttles, three East Bay buses, three northbound transit buses, and six southbound transit buses serve the PAITS during the Peak Hour.

**Table 3.2-1  
Transit Service at the Palo Alto Intermodal Transit Station**

Service Provider	Routes	Peak Hour Frequency
VTA	22, 35, 522	10 to 30 minutes per direction
SamTrans	280, 281, 297 <sup>a</sup> , 390, 397 <sup>a</sup> , KX	30 to 60 minutes per direction
City of Palo Alto	Crosstown Shuttle, Embarcadero Shuttle (loop)	60 minutes per direction 15 to 20 minutes
Joint operators	Dumbarton Express	15 to 20 minutes per direction
Peninsula Corridor Joint Powers Board (PCJPB)	Caltrain	15 minutes per direction

Source: VTA, 2010.

Note:

a. Services do not operate during Peak Hours.

**SUMC Project Ridership.** The SUMC Project would increase SUMC employment from approximately 8,300 employees to approximately 10,600 employees by 2025.<sup>1</sup> According to the SUMC Project sponsors, the current mode split for public bus (excluding the Marguerite shuttles) and Caltrain is 4.7 percent and 3.6 percent, respectively.<sup>2</sup> While the mode split for buses is expected to remain approximately the same into the future, implementation of the proposed GO Pass program under Mitigation Measure TR-2.3 (see Draft EIR, page 3.4-76) would cause the mode split for Caltrain to increase to 15.8 percent in 2025.

Table 3.2-2 presents SUMC Project trips for buses and Caltrain in 2025 with and without the GO Pass program. These trips are in addition to transit travel by existing employees. Table 3.2-2 shows Peak Periods trips that would generally occur between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. The Peak Hour is the highest hour during the Peak Period. The Peak Hour represents 55

<sup>1</sup> Employment numbers applied to the SUMC Project transportation analysis are based on employment identified in the following memorandum: Fehr & Peers Transportation Consultants, Analysis of GO Pass Program for Hospital Employees, September 22, 2008, pp. 9-10. See Appendix H to the Transportation Impact Analysis, which is provided as Appendix C of the Draft EIR.

<sup>2</sup> Fehr & Peers, Analysis of GO Pass Program for Hospital Employees, September 2008.

percent of the Peak Period volume. The AM and PM Peak Hours would be identical with the AM volumes inbound and the PM volumes outbound at the PAITS. The calculations are shown in Appendix S of this document.

**Table 3.2-2**  
**SUMC Project-Related Bus and Caltrain Trips With and Without the Caltrain GO Pass**

	Without GO Pass			With GO Pass		
	Bus	Caltrain	Total	Bus	Caltrain	Total
Peak Period Trips	77	59	136	77	981	1,058
Peak Hour Trips	43	33	76	43	540	583

*Source: AECOM, 2010.*

**Bus Trip Assignment.** The Peak Hour trips presented in Table 3.2-2 are assigned to the different bus routes in order to determine passenger loads associated with the SUMC Project. The SUMC Project trips are distributed according to the same distributions presented in Section 3.4 and Appendix C of the Draft EIR. Table 3.2-3 presents the assignment of SUMC Project trips to the different bus routes. Appendix S of this document presents the calculation details.

**Table 3.2-3**  
**Assignment of SUMC Project Trips to Bus Service**

Transit Service Area	Total Peak Hour Project Trips	Maximum Peak Hour Project Trips per individual bus
East Bay - Bus (Dumbarton Express)	4	2
North of Palo Alto - Bus (#390, KX)	17	6
South of Palo Alto - Bus (#22, #35, #522)	18	3
Within Palo Alto - Bus (city shuttles)	4	1
East Palo Alto - Bus (#280, #281)	1	1
Total	44 <sup>a</sup>	-

*Source: AECOM, 2010.*

*Note:*

a. Total differs slightly from Table 3.2-2 due to rounding.

Given the low number of additional SUMC Project trips that would be added to existing bus service, the SUMC Project would not significantly impact bus service. The small number of SUMC Project transit users would not hinder the ability of VTA and SamTrans to meet future demand. As such, the remaining discussion focuses on the potential impact of the SUMC Project on Caltrain services.

**2025 Caltrain Ridership without SUMC Project.** Table 3.2-4 presents the AM Peak Period passenger activity extracted from the February 2010 Caltrain Annual Passenger Counts.<sup>3</sup> The AM Peak Period is defined as all trains departing the San Francisco or San Jose Diridon Stations from start of service to 9:00 a.m. Based on the current Caltrain schedule, there are 13 northbound and 10 southbound trains serving the PAITS in the AM Peak Period. The AM Peak Period ridership data for northbound and southbound service is presented in Table 3.2-4. Similar levels of ridership are expected in the PM Peak Period.

The number of passengers remaining on the trains at each station was calculated using the “on-off” passenger counts. Based on this data, during the AM Peak Period, the average number of passengers onboard a northbound train arriving at the PAITS during the AM Peak Period is 354 passengers. The average number of passengers on a southbound train approaching at the PAITS during the AM Peak Period is about 418.

Assuming that transit ridership would grow at the same rate as the average growth rate obtained from the City’s Travel Demand Forecasting Model (1.6 percent per year), the average number of passengers on board a northbound Caltrain train approaching the PAITS during the AM Peak Period in 2025 would be 435 passengers. The average number of passengers onboard a southbound Caltrain arriving at the PAITS during the AM Peak Period in 2025 would be 514 passengers. Assuming a seated train capacity of 650 passengers, the 2025 AM Peak Period Caltrain load factor would be between 67 percent and 79 percent capacity.

**2025 Caltrain Ridership with SUMC Project.** The total new AM Peak Period SUMC Project Caltrain trips with the GO Pass (Mitigation Measure TR-2.3) would be 981 trips. This translates to an average addition of 39 trips on each northbound train and 47 trips on each southbound train during the AM Peak Period; approximately six to seven percent of each train’s capacity. Appendix S presents the detailed assumptions and calculations. As a result, this increase in Peak Period ridership would increase the average number of passengers on a northbound train to 474 and on a southbound train to 561. The 2025 AM Peak Period average load factor per train with the SUMC Project (with GO Pass) would be between 72 percent and 86 percent; within the operating capacity. The actual load factor would vary among the individual trains, and some trains could have standing passengers just as they do today.

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<sup>3</sup> Caltrain, February 2010 Caltrain Annual Passenger Counts: Key Findings, May 14, 2010, website: [http://www.caltrain.com/Assets/Stats+and+Reports/Ridership/2010\\_Caltrain\\_Ridership\\_Counts.pdf](http://www.caltrain.com/Assets/Stats+and+Reports/Ridership/2010_Caltrain_Ridership_Counts.pdf), accessed: December 7, 2010.

**Table 3.2-4  
2010 February Caltrain AM Peak Period Passenger Activity<sup>a</sup>**

Station	Northbound			Southbound		
	On	Off	On Train	On	Off	On Train
San Francisco	0	4,900	1	2,104	0	2104
22nd Street	1	33	4,901	773	10	2,867
Bayshore	11	15	4,933	56	3	2,920
South San Francisco	51	147	4,937	37	48	2,909
San Bruno	108	55	5,033	88	17	2,980
Millbrae	216	770	4,980	795	49	3,726
Burlingame	167	67	5,534	133	49	3,810
San Mateo	324	150	5,434	353	123	4,040
Hayward Park	27	30	5,260	34	40	4,034
Hillsdale	718	229	5,263	312	203	4,143
Belmont	65	33	4,774	60	45	4,158
San Carlos	140	124	4,742	229	206	4,181
Redwood City	529	252	4,726	250	458	3973
Menlo Park	228	247	4,449	156	429	3700
Palo Alto	659	790	4,468	161	1,399	2462
California Avenue	186	144	4,599	53	224	2291
San Antonio	190	13	4,557	28	62	2257
Mountain View	1,108	117	4,380	108	1,254	1,111
Sunnyvale	1,180	57	3,389	19	113	1,017
Lawrence	121	51	2266	18	217	818
Santa Clara	208	42	2,196	5	138	685
College Park	0	32	2,030	0	101	584
San Jose Diridon	1,339	30	2,062	2	562	24
Tamien	506	79	753	0	23	1
Capitol	21	3	326	0	0	1
Blossom Hill	43	4	308	0	0	1
Morgan Hill	105	0	269	0	0	1
San Martin	45	0	164	0	0	1
Gilroy	119	0	119	0	0	1
<b>TOTAL</b>	<b>8,416</b>	<b>8,416</b>		<b>5,773</b>	<b>5,773</b>	

Source: AECOM, 2010; [http://www.caltrain.com/Assets/Stats+and+Reports/Ridership/2010\\_Caltrain\\_Ridership\\_Counts.pdf](http://www.caltrain.com/Assets/Stats+and+Reports/Ridership/2010_Caltrain_Ridership_Counts.pdf).

Note:

a. 5:00 a.m. to 9:00 a.m. (Caltrain Peak Period)

**Caltrain Service Cuts.** Caltrain recently announced that it will cut four trains from its schedule as part of a plan to balance its budget. Another component of the plan is to raise fares, including raising the annual cost of the GO Pass from \$140 to \$155. The cut in service would affect two trains in the AM, one departing from San Francisco and one departing from San Jose at 9:30 a.m., and two trains in the PM, one departing from San Francisco and one departing from San Jose at 2:30 p.m. With this service cut, the number of trains per day would be reduced to 86. Since these cuts are outside of the peak commute times, they would not affect this analysis or the ability of Caltrain to accommodate additional SUMC passengers during the Peak Hours.

**Conclusion.** The above analysis demonstrates that the SUMC Project would not adversely impact either AM or PM Peak Hour bus service in Palo Alto. Based on the available AM data, the SUMC Project would also not adversely impact the Caltrain service in either direction, with and without the GO Pass. It likewise follows that the SUMC Project would also not adversely impact the PM Peak Period service. The PM Peak Period has a wider spread and as such, it is expected that the train ridership without the SUMC Project would be marginally lower than the AM Peak Period. Adding the SUMC Project trips would therefore not exceed an average load factor of 1.00 (100 percent of seated capacity). Caltrain would be able to accommodate the expected increase in SUMC Project ridership during the PM Peak Period as well. Nonetheless, mitigation is being required as discussed below.

### **Draft EIR Text Revisions**

Draft EIR text on page 3.4-80, Mitigation Measure TR-7.1 is revised, along with the other affected sections of the Draft EIR, as shown below. In lieu of requiring transit centers in the site plans, City staff has determined that it would be appropriate to require the SUMC Project sponsors to incorporate enhanced bus stops at the Stanford Hospital and Clinics (SHC) and at the Hoover Pavilion to accommodate the Marguerite shuttles into the design of the SUMC Project. The enhanced bus stops shall provide riders with shelter, seating, lighting, signage, maps, route information (bus lines served and schedules), and bike parking as necessary. With this revised mitigation measure as well as revised Mitigation Measure TR-7.2 (see Master Response 2), impacts would be less than significant, as concluded in the Draft EIR.

This quantified transit service analysis demonstrates that existing VTA bus service would be sufficient to accommodate transit demand created by the SUMC Project. Any expansion of transit service for the SUMC Project would be confined to the Marguerite Shuttles and the U-Line. Therefore, payment by the SUMC Project to fund a portion of the Crosstown Shuttle, VTA Commuter Bus Services, the Menlo Park Shuttle, or expansion of Marguerite service into Palo Alto is not required. Please refer to Master Response 2 for a further discussion on these transit services. In view of the above analysis, Draft EIR Summary, Section 3.4, and Section 5 have been revised as outlined below.

Summary. Draft EIR text on pages S-44 through S-45 in Table S-4 is revised as follows:

**Table S-4**  
**SUMC Project Summary of Impacts and Mitigation Measures**

Impacts	Impact Significance Without Mitigation	Mitigation Measures	Impact Significance With Mitigation
<p>TR-7. Transit Impacts. <del>Implementation of the SUMC Project could impeded the operation of the transit system as a result of increased ridership, and result in a significant impact. The SUMC Project would not adversely impact either AM or PM Peak Hour bus service in Palo Alto or Caltrain service. Nonetheless, mitigation to provide enhanced bus stops and shuttle service is identified here.</del></p>	<p><u>SLTS</u></p>	<p>Mitigation Measure TR-7.1 involves the addition of <del>transit centers</del> <u>enhanced bus stops</u> to the SUMC Project's site plans, and Mitigation Measure TR-7.2 involves financial contributions towards the expansion of transit service. Implementation of these measures would <del>reduce</del> <u>ensure that the the</u> SUMC Project's transit impacts to a less-than-significant level.</p> <p><i>TR-7.1 Incorporate <del>Transit Centers</del> <u>Enhanced Bus Stops</u> Into Site Plans.</i> The SUMC Project sponsors shall revise their SUMC Project site plan to incorporate two <del>transit centers</del> <u>enhanced bus stops</u> to reduce the impacts to transit service caused by the SUMC Project. These <del>transit centers</del> <u>enhanced bus stops</u> shall be located at Hoover Pavilion and at SHC, and shall be <u>on</u> <del>off</del>-street facilities. The <del>transit centers</del> <u>enhanced bus stops</u> shall accommodate <del>three to four</del> <u>two</u> buses simultaneously, and shall have shelters, seating, lighting, signs, maps, bus schedules, and bicycle parking. On-street bus stops along Welch Road and Quarry Road shall also be provided, but the <del>transit centers</del> <u>enhanced bus stops</u> shall accommodate the majority of transit riders and shall be located to maximize the convenience of employees, patients and visitors. One <del>transit center</del> <u>enhanced bus stop</u> shall be located in the vicinity of Welch Road and Pasteur Drive to serve SHC. The other <del>transit center</del> <u>enhanced bus stop</u> shall be located near the entrance to Hoover Pavilion. Both of these <del>transit centers</del> <u>enhanced bus stops</u> shall provide the focal point for transit use for the SUMC.</p> <p><i>TR-7.2 Provide Expanded Transit Service.</i> The SUMC Project <del>S</del>sponsors shall <u>fund expansion of the Marguerite Shuttle service between the SUMC and PAITS, and shall make a fair share financial contribution to the cost of expanding existing bus service of the Marguerite, Crosstown and Menlo Park Shuttle U-Line bus services, and to the VTA Community Bus Service.</u></p> <ul style="list-style-type: none"> <li>• <b>Marguerite Shuttle.</b> The SUMC Project <del>S</del>sponsors shall fund expansion of <u>make a</u></li> </ul>	<p><u>SU N/A</u></p>



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~~financial contribution to expand the Marguerite shuttle service into Palo Alto between SUMC and PAITS.~~

- ~~• U-Line. The SUMC Project Sponsors shall use reasonable efforts to assure that the controlling transit agency maintains - Arrangements with AC Transit shall be made to increase U Line service (such as decreasing headways) to meet the increase in demand attributable to the SUMC Project, and ensure that load factors of less than 1.0 on the U-Line.~~
- ~~• Crosstown Shuttle. The SUMC Project sponsors shall participate in operating the Palo Alto Crosstown Shuttle service by contributing to the Citywide Traffic Impact Fee, which would include covering the costs of this service. Then current fee is \$2,861 per net new PM Peak Hour trips. A portion of Stanford's Citywide Traffic Impact Fee shall be used by the City to expand City Shuttle services.~~
- ~~• VTA Community Bus Service. The SUMC Project Sponsors shall contribute to fund the project's fair share of Palo Alto's share of expanded VTA Community Bus Service.~~
- ~~• Menlo Park Shuttle Bus. The SUMC Project sponsors shall pay into the City of Menlo Park shuttle fee at \$0.105 per square foot of new development annually or a percentage agreed between Menlo Park and SUMC Project sponsors. In Menlo Park, the contribution shall be tied to the amount of project traffic added to analyzed roadway segments and intersections.~~

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**Section 3.4, Transportation.** Draft EIR text on page 3.4-77, Impact TR-7, is revised as follows:

*TR-7. Transit Impacts. ~~Implementation of the SUMC Project could impede the operation of the transit system as a result of increased ridership, and result in a significant impact. (S) The SUMC Project would not adversely impact either AM or PM Peak Hour bus service in Palo Alto or Caltrain service. Nonetheless, mitigation to provide enhanced bus stops and shuttle service is identified here. (LTS)~~*

Draft EIR text on page.4-78, first paragraph, is revised as follows:

The SUMC Project would increase on-site employment by 2,242 full-time equivalent employees and would also increase visitorship, and result in increased ridership. ~~The resulting increase in ridership could exceed capacity in the various transit services to and from the~~

~~SUMC Sites. As such, the SUMC Project could result in a significant impact on transit. However, as discussed in Staff-Initiated Change 1 of the Responses to Comments document, transit capacity can accommodate the SUMC Project, with or without the GO Pass mitigation measure.~~

Draft EIR text on pages 3.4-79 through 3.4-80, in Section 3.4, Transportation, starting at the third paragraph on page 3.4-79, is revised as follows:

**Enhanced Bus Stops ~~Transit Centers~~.** The projected increase in transit ridership would require the ~~provision addition~~ of enhanced bus stops ~~mini transit centers~~ at the SUMC. These ~~transit centers~~ bus stops would be located at Hoover Pavilion and at SHC and would be ~~on~~ off-street facilities. The ~~transit centers~~ enhanced bus stops would accommodate ~~three to four~~ two buses simultaneously, have shelters, seating, lighting, signs, maps, bus schedules, and bicycle parking. On-street bus stops along Welch Road and Quarry Road would also be provided, but the ~~transit centers~~ enhanced bus stops would accommodate the majority of transit riders and would be located to maximize the convenience of employees, patients and visitors. One ~~transit center~~ enhanced bus stop in the vicinity of Welch Road and Pasteur Drive to serve SHC and another near the entrance to Hoover Pavilion would provide the focal point for transit use for SUMC. The SUMC Project sponsors shall revise their SUMC site plan to incorporate two ~~transit hubs~~ enhanced bus stops as noted above to reduce the impacts to transit service caused by the proposed expansion.

**Expand Transit Service.** The Marguerite, ~~Crosstown and Menlo Park Shuttle services~~ and the ~~VTA Community~~ U-Line Bus service ~~would~~ may need to be expanded to meet the projected increase in demand. In some cases, additional capacity ~~would~~ might need to be provided, in the form of new routes, or additional buses and higher frequencies on existing routes.

- **Marguerite Shuttle.** The SUMC Project sponsors shall ~~expand~~ fund expansion of the Stanford University Marguerite shuttle service to PAITS as necessary to support additional ridership created by issuing GO Passes to all SUMC employees into Palo Alto. ~~Specifically, Marguerite shuttles shall connect the SUMC to downtown Palo Alto and the areas surrounding the downtown. Currently, Marguerite shuttle routes A and B do not extend into downtown Palo Alto. While the Marguerite shuttle DT and M routes do extend into downtown areas, they do not operate during the majority of the day. This expanded shuttle service could follow new routes or an extension of existing routes. Current headways on existing routes shall be maintained with the expansion.~~
- **U-Line.** ~~Arrangements with AC Transit shall be made to increase U-Line service (such as decreasing headways) to meet the increase in demand attributable to the SUMC Project, and ensure that~~ The SUMC Project sponsors shall use reasonable efforts to assure that the controlling transit agency maintains a load ~~remain~~ factor below 1.0 on the U-Line.
- ~~**Crosstown Shuttle.** The City of Palo Alto currently operates the Crosstown Shuttle. More efficient transit service may be provided by providing this service as a part of the Marguerite Shuttle. SUMC should participate in operating the Palo Alto Crosstown Shuttle service.~~

- ~~VTA Community Bus Service.~~ In 2007, the VTA adopted a new Bus Service Operating Plan which made major modifications to the current bus transit network. The plan introduced Community Bus Service throughout Santa Clara County, which features smaller vehicles with an identity tied to the individual communities served. As part of that plan, local communities are required to cover 25 percent of the cost if they want to have the service free of charge to the riders.
- ~~Menlo Park Shuttle Bus.~~ SUMC should contribute to additional shuttle bus service to Menlo Park, as a means of mitigating the increase in daily traffic on minor arterials and collector streets in the City.

Draft EIR text on pages 3.4-80 through 3.4-81, Mitigation Measures TR-7.1 and TR-7.2, are revised as follows:

Mitigation Measure TR-7.1 involves the addition of ~~transit centers~~ enhanced bus stops to the SUMC Project's site plans, and Mitigation Measure TR-7.2 involves financial contributions towards the expansion of transit service. Implementation of these measures would ~~reduce~~ ensure that the SUMC Project's transit impacts to a less-than-significant level. (LTS)

*TR-7.1 Incorporate ~~Transit Centers~~ Enhanced Bus Stops Into Site Plans.* The SUMC Project sponsors shall revise their SUMC Project site plan to incorporate two ~~transit centers~~ enhanced bus stops to reduce the impacts to transit service caused by the SUMC Project. These ~~transit centers~~ enhanced bus stops shall be located at Hoover Pavilion and at SHC, and shall be on ~~off~~-street facilities. The ~~transit centers~~ enhanced bus stops shall accommodate ~~three to four~~ two buses simultaneously, and shall have shelters, seating, lighting, signs, maps, bus schedules, and bicycle parking. On-street bus stops along Welch Road and Quarry Road shall also be provided, but the ~~transit centers~~ enhanced bus stops shall accommodate the majority of transit riders and shall be located to maximize the convenience of employees, patients and visitors. One ~~transit center~~ enhanced bus stop shall be located in the vicinity of Welch Road and Pasteur Drive to serve SHC. The other ~~transit center~~ enhanced bus stop shall be located near the entrance to Hoover Pavilion. Both of these ~~transit centers~~ enhanced bus stops shall provide the focal point for transit use for the SUMC.

*TR-7.2 Provide Expanded Transit Service.* The SUMC Project sponsors shall fund expansion of the Marguerite shuttle service between the SUMC and PAITS, and shall make a fair share financial contribution to the cost of expanding ~~existing bus service of the Marguerite, U-Line bus service Crosstown, and Menlo Park Shuttle bus services, and to the VTA Community Bus Service.~~

- **Marguerite Shuttle.** The SUMC project sponsors shall ~~make a financial contribution to expand~~ fund expansion of the Marguerite shuttle service into Palo Alto between SUMC and PAITS.

- ~~U-Line.~~ The SUMC project sponsors shall ~~make a financial contribution towards the operation of the U-Line use reasonable efforts to assure that the controlling transit agency maintains~~. ~~Arrangements with AC Transit shall be made to increase U-Line service (such as decreasing headways) to meet the increase in demand attributable to the SUMC Project, and ensure that load factors remain below~~ of less than 1.0 on the U-Line.
- ~~VTA Community Bus Service.~~ The SUMC project sponsors shall contribute to fund the project's fair share of Palo Alto's share of expanded VTA Community Bus Service.
- ~~Menlo Park Shuttle Bus.~~ The SUMC Project Sponsors shall pay into the City of Menlo Park shuttle fee at \$0.105 per square foot of new development annually or a percentage agreed between Menlo Park and SUMC Project sponsors. In Menlo Park, the contribution shall be tied to the amount of project traffic added to analyzed roadway segments and intersections.

**Section 5, Alternatives.** Draft EIR text on page 5-115, seventh paragraph, under Reduced Intensity Alternative B, is revised as follows:

**Transit Impacts.** Just as with the SUMC Project, Reduced Intensity Alternative B ~~would increase on-site employment and visitorship, and this increase would in turn result in increased ridership on the routes serving the SUMC Sites. The resulting increase in ridership could exceed the capacity of the various transit services to and from the SUMC Sites. As such, the Reduced Intensity Alternative B could result in a significant impact on transit.~~ would not adversely impact either AM or PM Peak Hour bus service in Palo Alto or Caltrain service, with or without to GO Pass mitigation measure. Nonetheless, mitigation to provide enhanced bus stops and shuttle service is identified here.

Draft EIR text on page 5-116, second paragraph, under Reduced Intensity Alternative B, is revised as follows:

~~However, the success of the TDM program would also mean increased transit ridership. This increased ridership could push load factors above 1.0, indicating overcrowding on the buses. Impacts to transit service are considered a significant impact according to City of Palo Alto criteria.~~

Draft EIR text on page 5-116, third paragraph, under Reduced Intensity Alternative B, is revised as follows:

Therefore, with implementation of the following mitigation measures involving the addition of two ~~transit centers~~ enhanced bus stops at LPCH and SHC and Hoover Pavilion, and the expansion of transit service, this alternative would have a less-than-significant transit impact, like the SUMC Project. (S/LTS)

- TR-7.1: Incorporate ~~Transit Centers~~ Enhanced Bus Stops into Site Plans
- TR-7.2: Provide Expanded Public ~~Public~~ Transit Service

Draft EIR text on page 5-143, third and fifth paragraphs under the Tree Preservation Alternative, is revised as follows:

**Transit Impacts.** Just as with the SUMC Project, the Tree Preservation Alternative ~~would increase on site employment, and this increase would in turn result in increased ridership on the routes serving the SUMC Sites. The resulting increase in ridership could exceed the capacity of the various transit services to and from the SUMC Sites. As such, the Tree Preservation Alternative could result in a significant impact on transit.~~ would not adversely impact either AM or PM Peak Hour bus service in Palo Alto or Caltrain service, with or without to GO Pass mitigation measure. Nonetheless, mitigation to provide enhanced bus stops and shuttle service is identified here.

~~The success of the TDM program under Mitigation Measure TR 2.3 would also mean increased transit ridership. This increased ridership could push load factors above 1.0, indicating overcrowding on buses. Impacts to transit service in the Study Area are considered a significant impact according to City of Palo Alto criteria.~~

Draft EIR text in the last paragraph on page 5-143, under the Tree Preservation Alternative, is revised as follows:

With implementation of the following mitigation measures involving the modification of project design to include the addition of two ~~transit centers~~ enhanced bus stops, and the expansion of public transit service, this alternative would have a less-than-significant transit impact, like the SUMC Project. (S/LTS)

- TR-7.1: Incorporate ~~Transit Centers~~ Enhanced Bus Stops into Site Plans
- TR-7.2: Provide Expanded Public ~~Public~~ Transit Service

Draft EIR text on page 5-172, fourth paragraph, under Historic Preservation Alternative, is revised as follows:

*Transit Impacts.* Just as with the SUMC Project, the Historic Preservation Alternative ~~would increase on site employment and visitorship, and this increase would in turn result in increased ridership on the routes serving the SUMC Sites. The resulting increase in ridership could exceed the capacity of the various transit services to and from the SUMC Sites. As such, the Reduced Intensity Alternative B could result in a significant impact on transit.~~ would not adversely impact either AM or PM Peak Hour bus service in Palo Alto or Caltrain service, with or without to GO Pass mitigation measure. Nonetheless, mitigation to provide enhanced bus stops and shuttle service is identified here.

Draft EIR text on page 5-173, first paragraph, under Historic Preservation Alternative, is revised as follows:

~~However, the success of the TDM program would also mean increased transit ridership. This increased ridership could push load factors above 1.0, indicating overcrowding on the buses. Impacts to transit service are considered a significant impact according to City of Palo Alto criteria.~~

Draft EIR text on page 5-173, second paragraph, under the Historic Preservation Alternative, is revised as follows:

Therefore, with implementation of the following mitigation measures involving the modification of the SUMC Project's design to include the addition of two ~~transit centers~~ enhanced bus stops, and the expansion of public transit service, this alternative would have a less-than-significant transit impact, like the SUMC Project. (S/LTS)

- TR-7.1: Incorporate ~~Transit Centers~~ Enhanced Bus Stops into Site Plans
- TR-7.2: Provide Expanded Public Transit Service

Draft EIR text on page 5-203, second and fifth paragraphs under the Village Concept Alternative, is revised as follows:

**Transit Impacts.** ~~The transit oriented design of the Village Concept Alternative, combined with the increase in employment and activity at the SUMC Sites, could result higher ridership on the transit routes serving the SUMC Sites and the larger Village Concept Study Area. The resulting increase in ridership could exceed the capacity of the various transit services to and from the SUMC Sites and the larger Village Concept Study Area. As such, the Village Concept Alternative could result in a significant impact on transit. Just as with the SUMC Project, the Village Concept Alternative would not adversely impact either AM or PM Peak Hour bus service in Palo Alto or Caltrain service, with or without to GO Pass mitigation measure. Nonetheless, mitigation to provide enhanced bus stops and shuttle service is identified here.~~

~~However, the combination of the enhanced TDM program and the transit oriented focus of this alternative would translate into increased transit ridership. This increased ridership could push load factors on many of the local shuttles to above 1.0, indicating overcrowding on the buses. Impacts to transit service in the Study Area are considered a significant impact according to City of Palo Alto criteria.~~

Draft EIR text on page 5-203, seventh paragraph, under the Village Concept Alternative, is revised as follows:

- TR-7.1: Incorporate ~~Transit Centers~~ Enhanced Bus Stops into Site Plans
- TR-7.2: Provided Expanded Transit Service

## **Staff-Initiated Change 2: Changes to Intersection Impact Conclusions**

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### **Introduction**

Staff-Initiated Change 2 addresses Comments 3a.12, 8.6, 8a.4, 8a.6, 8.12, 8.13, 8.14, 8.22, 8.25, 8a.1, 17.4, 20.8, 20.13, 20.14, 20.15, 20.16, 22.11, 22.14, 22.15, 26.3, 26.4, 31.1, 36.4, 37.5, 59.1, PTC1.31, PTC1.60, PTC1.70, PTC3.13, PTC6.3, PTC6.4, PTC6.66, PTC6.86, PTC6.87, CC1.9, CC3.10, CC3.30, CC3.59, CC3.71, and CC5.6.

This discussion provides staff-initiated changes to the analysis and conclusions under Impact TR-2, Intersection Level of Service, on pages 3.4-45 to 3.4-70 of the Draft EIR. Changes to this analysis have been driven by updates to intersection geometry; adjustments to Mitigation Measure TR-2.1, which requires the SUMC Project sponsors to install traffic-adaptive signal technology at specified intersections; expansion of the Study Area for the transportation analysis; and inclusion of the latest intersection improvement measures identified in the City of Menlo Park's 2009 Transportation Impact Fee Study Report. In addition to changes to Section 3.4, Transportation, this Staff-Initiated Change also shows the edits to the corresponding sections that would also change, such as the Summary, Section 4, Other CEQA Considerations, and Section 5, Alternatives.

### **Updated Intersection Geometry**

The intersection geometries for the intersections of El Camino Real/Valparaiso Avenue (intersection #1) and Marsh Road/US 101 Southbound Off-Ramp (intersection #49) have been updated. Please see Appendix T for a revised depiction of the intersection geometries. As a result of this update, the level of service (LOS) calculations for the Existing, 2025 No Project, and 2025 Project scenarios are revised through this discussion. The revisions to the text, tables, and figures in the Draft EIR are specified below. However, no changes to significance conclusions described in the Draft EIR result from the updated geometry. As described in the Draft EIR, the SUMC Project would not result in a significant impact to intersections #1 or #49.

### **Traffic-Adaptive Signal Technology**

The previous analysis assumed that there is currently no traffic-adaptive signal technology at the following intersections in the City of Menlo Park under Existing and 2025 scenarios:

- El Camino Real/Valparaiso-Glenwood Avenue (intersection #1)
- El Camino Real/Santa Cruz Avenue (intersection #2)
- El Camino Real/Ravenswood-Menlo Avenue (intersection #3)
- El Camino Real/Roble Avenue (intersection #4)
- El Camino Real/Middle Avenue (intersection #5)
- El Camino Real/Cambridge Avenue (intersection #6)
- El Camino Real/Sand Hill Road-Alma Street (intersection #7)

- El Camino Real/Quarry Road (intersection #8)
- Junipero Serra Boulevard/Alpine Road-Santa Cruz Avenue (intersection #27)
- Santa Cruz Avenue/Sand Hill Road (intersection #30)
- Oak Avenue/Sand Hill Road-Vine Street (intersection #31)
- El Camino Real and Oak Grove Avenue (intersection #44)
- El Camino Real and Encinal Road (intersection #47)

However, it has now been clarified that the above intersections do currently feature traffic-adaptive signal technology. The Draft EIR identified a significant impact at the El Camino Real/Ravenswood Avenue and Santa Cruz Avenue/Sand Hill Road intersections (intersections #3 and #30, respectively). However, given the current traffic-adaptive signal technology at these intersections, the modified intersection analysis for these intersections indicates that they would no longer be significantly impacted by the SUMC Project. The number of impacted intersections (before mitigation) has been reduced by one during both Peak Hours, to four in the AM Peak Hour and 11 in the PM Peak Hour. Mitigation Measure TR-2.1 on pages 3.4-66 to 3.4-67 of the Draft EIR requires the SUMC Project sponsors to contribute towards installation of traffic-adaptive signal technology at impacted intersections where future traffic-adaptive signal technology has been planned. Mitigation Measure TR-2.1 is revised to exclude intersections in Menlo Park that already have such technology. Additionally, improvements to intersections #3 and #30 described in Table 3.4-18 of the Draft EIR would no longer be needed as mitigation.

Mitigation Measure TR-2.1 is revised to include a fair share contribution towards traffic-adaptive signal technology at the two following Menlo Park intersections. However, it should be noted that additional contributions towards Menlo Park's Traffic Impact Fee Program (beyond that required in Mitigation Measure TR-2.1) will be made by the SUMC Project sponsors, as discussed in Master Response 6.

- Middlefield Road/Willow Road (intersection #18)
- Middlefield Road/Ravenswood Avenue (intersection #46)

As described in the Draft EIR, the impact at intersection #18 would be mitigated to less than significant after implementation of Mitigation Measures TR-2.1, TR-2.2, TR-2.3, and TR-2.4. Also, the significant impact at intersection #46 would be mitigated to less than significant after implementation of Mitigation Measures TR-2.1, TR-2.2, and TR-2.3. However, as a result of the recalculation of effects due to changes in traffic-adaptive signal technology assumptions and mitigation, the significant impacts at intersections #18 and #46 would also be mitigated to less than significant through Mitigation Measure TR-2.1 alone. No additional mitigation would be needed at intersections #18 and #46.



## Expanded Study Area

The Study Area for the transportation analysis has been expanded to include the US 101 freeway segment between Marsh Road and Woodside Road. The LOS calculations for this segment under the Existing, 2025 No Project, and 2025 Project scenarios are provided in the text and table changes later in this discussion. As shown, the evaluation of this freeway segment determined that the SUMC Project would not result in a significant impact on this freeway segment. As such, the Draft EIR conclusion remains that the SUMC Project would have a less-than-significant impact on freeway segments.

Also, the Study Area has been expanded to include the following five intersections (#67 through #71):

- Middlefield Road/Oregon Expressway (intersection #67)
- Durham Street/Willow Road (intersection #68)
- Middlefield Road/Marsh Road (intersection #69)
- Newbridge Street/Willow Road (intersection #70)
- West Bayshore Road/Embarcadero Road (unsignalized) (intersection #71)

The LOS calculations for these intersections under the Existing, 2025 No Project, and 2025 Project scenarios are provided in the text and table changes later in this discussion. The additional evaluation determined that the SUMC Project would result in less-than-significant impacts at intersections #67 through #71.

## Inclusion of Roadway Improvements under the City of Menlo Park's 2009 Transportation Impact Fee Study Report

Table 3.4-18 of the Draft EIR identifies roadway improvements that would mitigate LOS impacts resulting from the SUMC Project. Table 3.4-18 indicates which improvements are considered feasible, and which are not feasible or only potentially feasible. Table 3.4-18 indicates the identified roadway improvements at Middlefield Road/Willow Road (intersection #18), Middlefield Road/Ravenswood Avenue (intersection #46), Bayfront Expressway/Willow Road (intersection #52), and Bayfront Expressway/University Avenue (intersection #53), would either be potentially feasible or not feasible. These intersections are all within Menlo Park boundaries. However, upon its review of the Transportation Impact Analysis (Appendix C of the Draft EIR), the City of Menlo Park indicated that the City of Menlo Park's 2009 Transportation Impact Fee Study Report includes roadway improvements at intersections #18, #46, #52, and #53. This Transportation Impact Fee Study Report establishes a nexus between anticipated growth in Menlo Park and necessary improvements to local transportation facilities, and serves as a basis for requiring traffic impact fees for implementing transportation improvements.<sup>4</sup> As a result, the roadway improvements that would mitigate LOS

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<sup>4</sup> City of Menlo Park, City of Menlo Park Traffic Impact Fee Program, Draft Report, August 14, 2009, <http://www.menlopark.org/departments/eng/SS1-attachmentA.pdf>, accessed December 5, 2010.

impacts resulting from the SUMC Project at intersections #18 and #46 are now considered to be feasible. However, as explained above in discussing traffic-adaptive signal technology, no improvements to intersections #18 and #46 would be necessary. Impacts at intersection #18 can be reduced to a less-than-significant level by traffic-adaptive signal technology. Impacts at intersection #46 can be reduced by a combination of traffic-adaptive signal technology and an enhanced transportation demand management (TDM) program.

With respect to intersections #52 and #53, the fact that these intersection improvements have been identified in the City of Menlo Park's 2009 Transportation Impact Fee Study Report and thus will be funded is a strong indication that these improvements can and will feasibly be completed. Because these intersections are within the jurisdiction of Caltrans, any such improvements would be subject to Caltrans review and approval. C/CAG is considering and potentially recommending improvements to intersection #52 in conjunction with its Willow Road Traffic Study (a component of its Peninsula Gateway Corridor 2020 Traffic Study). Based on a meeting between Menlo Park and Caltrans, it does not appear that Caltrans has many issues or concerns with the proposed improvements for intersection #52. It is therefore unlikely that Caltrans would oppose such approval to the City of Menlo Park for improvements to these intersections. It is also unlikely that Caltrans would have any objections to the suggested improvements for intersection #53. Ultimately, the determination of whether these improvements are, in fact, feasible is a determination that will have to be made by the City of Palo Alto City Council. However, it is the opinion of City of Palo Alto staff, based upon its experience with the Caltrans review and approval process and its assessment of the improvements in question, that these improvements for intersections #52 and #53 are feasible.

The Draft EIR, on page 3.4-66, concluded that the SUMC Project would have significant and unavoidable impacts on the intersections of Middlefield Road/Willow Road (intersection #18), Bayfront Expressway/Willow Road (intersection #52), and University Avenue/Bayfront Expressway (intersection #53). However, the impacts on these three intersections, as well as all other intersections that would be significantly impacted prior to mitigation, would now be less than significant after mitigation.

The corresponding changes to the figures, tables, and text in Draft EIR are presented in detail under Draft EIR Text Revisions.

### **Draft EIR Text Revisions**

**Summary.** As explained above, Mitigation Measure TR-2.1 is revised to exclude intersections that already have traffic-adaptive signal technology. Additionally, improvements to intersections #3 and #30 described in Draft EIR Table 3.4-18 would no longer be needed as mitigation. As such, Mitigation Measure TR-2.1 is revised to delete these intersections. Mitigation Measure TR-2.1 is also revised to include a fair share contribution towards traffic-adaptive signal technology at additional intersections in the cities of Palo Alto and Menlo Park.

As a result, Draft EIR text on pages S-34 through S-36, Table S-4, is revised as follows:

MITIGATION MEASURES. Given the magnitude of the SUMC Project's intersection impacts, there is no single feasible mitigation measure that can reduce the impacts to a less-than-significant level. However, there are a range of measures that, when taken individually, would each contribute to a partial reduction in the SUMC Project's impacts. When combined, these measures could result in a substantial reduction in the SUMC Project's impacts.

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~~Under all combinations of feasible mitigation measures below, impacts of the SUMC Project on intersection LOS would remain significant and unavoidable. Of all of the feasible combinations, the one that would have the largest reduction in impact, and that mitigates the greatest number of the intersection impacts, is The combination of mitigation measures involving traffic-adaptive signal technology, additional bicycle and pedestrian undercrossings, enhanced Travel-Transportation Demand Management (TDM) program, and feasible intersection improvements. This combination of mitigation measures would reduce the SUMC Project impacts to a less-than-significant level at all of the impacted intersections during the AM and PM Peak Hours. However, intersection impacts would remain significant and unavoidable in the PM Peak Hour at three intersections with mitigation.~~

*TR-2.1 Install Traffic-Adaptive Signal Technology.* The SUMC Project sponsors shall contribute to the Palo Alto Citywide Traffic Impact Fee program, for the installation of traffic-adaptive signals. ~~However, this fee is not structured to mitigate one hundred percent of project related impacts, and an additional fee could be imposed by the City on the SUMC Project sponsors to mitigate the remaining share of the SUMC Project impacts.~~ In Menlo Park, the SUMC Project sponsors shall contribute their fair share amount, which shall be tied to the amount of traffic added to analyzed intersections by the SUMC Project. The SUMC Project sponsors' contributions shall apply towards the installation of traffic-adaptive signals as listed below.

- Sand Hill Road (Oak Creek to Shopping Center) - 4 signals
- Arboretum Road (Shopping Center to Palm Drive) - 3 signals
- Embarcadero Road (Bryant to Saint Francis) - 7 signals
- University Avenue (Palm to Lincoln) - 13 signals
- Lytton Avenue (Alma to Middlefield) - 10 signals
- Hamilton Avenue (Alma to Middlefield) - 10 signals
- Middlefield Road (San Antonio to Homer) - 9 signals
- Charleston Road (Alma to Middlefield) - 2 signals
- El Camino Real (northern city limits of ~~Menlo Park~~ Palo Alto to southern city limits of Palo Alto) – signals would require approval of Caltrans

In addition, the SUMC Project sponsors shall pay a fair share contribution towards installation of traffic-adaptive signals at the below significantly-impacted intersections in Menlo Park. These intersections are among those at which Menlo Park anticipates installing traffic-adaptive signals:

- Middlefield Road/Willow Road (intersection #18)
- Middlefield Road/Ravenswood Avenue (intersection #46)

*TR-2.2 Fund Additional Bicycle and Pedestrian Undercrossings.* The SUMC Project sponsors shall contribute their fair share to the cost of construction of the Everett Avenue undercrossing of the Caltrain tracks in Palo Alto and the Middle

Avenue undercrossing in Menlo Park. In Palo Alto, there is a Citywide Traffic Impact Fee program that the SUMC Project sponsors shall contribute to. ~~However, this fee is not structured to mitigate one hundred percent of the SUMC Project related impacts, and an additional fee may be imposed by the City to mitigate the remaining share of the SUMC Project impacts.~~ In Menlo Park, the fair share contribution shall be tied to the amount of traffic added to analyzed intersections by the SUMC Project. The construction of the Everett Avenue and Middle Avenue undercrossings would reduce traffic volumes on nearby streets, such as Ravenswood Avenue and University Avenue.

Draft EIR text on pages S-38 through S-40, Table S-4, is revised as follows:

*TR-2.4 Fund or Implement those Intersection Improvements that Have Been Determined to be Feasible.* The SUMC Project sponsors shall implement the following measures:

- ~~• For the intersection of El Camino Real/Page Mill Road—Oregon Expressway, the SUMC Project sponsors shall pay a fair share towards (1) provision of exclusive right turn lane for westbound Oregon Expressway, in addition to the two through lanes, (2) increasing the cycle length to 160 seconds. Improvements to the westbound right turn lane would require right of way from the Santa Clara Valley Transportation (VTA) park and ride lot.~~
- At the intersection of Arboretum Road/Galvez Street, the SUMC Project sponsors shall install a traffic signal.
- At the intersection of Bayfront Expressway/Willow Road, the SUMC Project sponsors shall pay a fair share towards providing one more right-turn lane for eastbound Willow Road.
- At the intersection of Bayfront Expressway/University Avenue, the SUMC Project sponsors shall pay a fair share towards widening southbound Bayfront Expressway to include an additional through lane and re-stripe the exclusive right turn lane to a shared through right turn lane. As a result, two additional receiving lanes in the southbound direction on Bayfront Expressway would be needed.

~~*TR 2.5 Coordinate with Other Jurisdictions for Potentially Feasible Roadway Improvements.* The City of Palo Alto shall work with other jurisdictions to try to achieve feasibility for the following roadway improvements or adjustments. In the event that one or more of the below improvements would then be determined to be feasible, the SUMC Project sponsors shall pay their fair share towards implementation of the improvements, if a fair share contribution would apply.~~

- ~~• Alpine Road/I-280 Northbound Off Ramp—Signalize this intersection. The City shall coordinate with Caltrans regarding feasibility of these improvements.~~
- ~~• El Camino Real/Ravenswood Avenue—Re stripe the exclusive right turn lane on southbound El Camino Real to a shared through/right lane. Also, provide an additional through lane for northbound El Camino Real by removing the right turn slip island. Also, provide an exclusive right-turn lane for eastbound Menlo Avenue. The City shall coordinate with the City of Menlo Park and Caltrans regarding feasibility of these improvements.~~
- ~~• Bayfront Expressway/Willow Road—Provide one more right turn lane~~

~~for eastbound Willow Road and make the right turn movement for southbound Bayfront Expressway “overlap” with the left turn of eastbound Willow Road. The intersection has signals for the right turn movement for southbound Bayfront Expressway, but the “overlap” phase is not implemented. The City shall coordinate with the City of Menlo Park regarding feasibility of these improvements.~~

- ~~• Middlefield Road/Ravenswood Avenue Provide an additional exclusive left turn lane for northbound Middlefield Road. The City shall coordinate with the City of Menlo Park regarding feasibility of this improvement.~~
- ~~• Junipero Serra Boulevard/Campus Drive West Request that Santa Clara County change the signal cycle length at this intersection to 90 seconds. The City shall coordinate with the County of Santa Clara regarding feasibility of this adjustment.~~

Draft EIR text on page S-93, first bullet of the significant and unavoidable impact list is deleted as follows:

- ~~• Deterioration of intersection level of service during Peak Hour conditions at three two Menlo Park intersections (Middlefield Road and Willow Road, Bayfront Expressway and Willow Road, and University Avenue and Bayfront Expressway);~~

**Section 3.4, Transportation.** Draft EIR text on page 3.4-6, first paragraph under Study Area Intersections, is revised as follows:

The traffic study analyzed a total of ~~66~~ 71 intersections.<sup>3</sup> ~~Sixty-four~~ of these intersections are signalized and the following ~~six~~ seven are unsignalized:

- Galvez Street/Arboretum Road
- Stanford Road/Bowdoin Street
- I-280 Northbound Off-Ramp/Alpine Road
- I-280 Southbound Off-Ramp/Alpine Road
- Page Mill/I-280 Northbound Off-Ramp
- Page Mill/I-280 Southbound Off-Ramp
- West Bayshore Road/Embarcadero Road

Draft EIR text on page 3.4-6, first sentence in the fifth paragraph under Study Area Intersections, is revised as follows:

The Transportation Impact Analysis analyzed a total of ~~66~~ 71 intersections in the City of Palo Alto, City of Menlo Park, and City of East Palo Alto.

Footnote 3 on page 3.4-6 of the Draft EIR has been deleted as follows:

<sup>3</sup>—~~The 66 intersections include five intersections that were split into two directions, including Junipero Serra Boulevard and Campus Drive, Marsh Road and US 101, Welch Road and Pasteur Drive, I-280 and Alpine Road, and I-280 and Page Mill Road.~~

Draft EIR text on page 3.4-10, first full paragraph, is revised as follows:

**Freeway Segments.** The following ~~six~~ seven freeway segments were analyzed:

- US 101 north of Marsh Road
- US 101 north of University Avenue
- US 101 south of University Avenue
- US 101 south of Embarcadero/Oregon Expressway
- I-280 north of Sand Hill Road
- I-280 south of Alpine Road
- I-280 south of Page Mill Road

Draft EIR text on page 3.4-17, second paragraph, is revised as follows:

During the PM Peak Hour, the following ~~seven~~ eight intersections operate at unsatisfactory levels of service:

- Junipero Serra Boulevard – Foothill Expressway/Page Mill Rd (LOS F) [intersection #23]
- Galvez Street/Arboretum Road (LOS F) [intersection #37]
- Willow Road/Bayfront Expressway (LOS E) [intersection #52]
- University Avenue/Bayfront Expressway (LOS E) [intersection #53]
- Bay Road/University Avenue (LOS E) [intersection #54]
- I-280 NB Off-Ramp/Alpine Road (LOS F) [intersection #62]
- Foothill Expressway/Arastradero Road (LOS E) [intersection #66]
- Middlefield Road/Oregon Expressway (LOS E) [intersection #67]

Draft EIR text on page 3.4-18, third sentence in the first paragraph under Freeway Segments, is revised as follows:

These include the segments of US 101 north of Marsh Road, north of University Avenue, south of University Avenue, and south of Embarcadero/Oregon Expressway.

Draft EIR text on page 3.4-33, second and third sentence in the fifth paragraph, is revised as follows:

During the AM Peak Hour, the following ~~11~~ 12 intersections would operate at unsatisfactory levels of service. Of these ~~11~~ 12 intersections, ~~six~~ seven would operate at LOS E and five would operate at LOS F in the AM Peak Hour.

Draft EIR text on page 3.4-34, after the sixth bullet in the first bulleted list, is added as follows:

- Middlefield Road/Oregon Expressway (LOS E) [intersection # 67]

Draft EIR text page 3.4-34, first bullet in the second bulleted list, is deleted and one more bullet is added as follows:

- ~~El Camino Real/Ravenswood Avenue (LOS E) [intersection #3]~~
- Middlefield Road/Oregon Expressway (LOS E) [intersection # 67]

Draft EIR text on page 3.4-50, first paragraph is revised, as follows:

As seen in Table 3.4-17, a total of ~~five~~ four intersections would be significantly impacted by the SUMC Project during the AM Peak Hour:

Draft EIR text page 3.4-50, third bullet in the first bulleted list, is deleted as follows:

- ~~Sand Hill Road/Santa Cruz Avenue [intersection #30] — LOS would change from LOS D to E and therefore this intersection would be significantly affected by the SUMC Project.~~

Draft EIR text on page 3.4-50, second paragraph, is revised as follows:

A total of ~~12~~ 11 intersections would be significantly impacted by the SUMC Project during the PM Peak Hour:

Draft EIR text on page 3.4-50, first bullet in the second bulleted list, is deleted as follows:

- ~~El Camino Real/Ravenswood Avenue [intersection #3] — LOS would remain at E but at least one critical movement for this State-controlled, Menlo Park intersection exceeded 0.8 seconds. This intersection would be significantly affected by the SUMC Project.~~

Draft EIR text in the fourth paragraph on page 3.4-55 is revised as follows:

**Traffic-Adaptive Signal Technology.** Traffic-adaptive signals technology were was first implemented in Palo Alto along the Charleston-Arastradero corridor. It has also been installed at intersections along El Camino Real (between Encinal Avenue and Quarry Road), Sand Hill Road (at Oak Avenue – Vine Street, and Santa Cruz Avenue), and at Santa Cruz Avenue/Junipero Serra Boulevard/Alpine Road. This technology reduces overall intersection delay by sensing traffic movements as they approach the intersection and adjusting the signal indications to serve those vehicles. The City estimates that overall intersection delay can be

reduced by up to 12 percent with the installation of traffic-adaptive signal technology. Mitigation Measure TR-2.1 requires Stanford University to make a fair-share financial contribution towards the implementation of traffic-adaptive signals at impacted intersections.

Draft EIR text on page 3.4-56, after third bullet in the first bulleted list, is added as follows:

In addition, the City of Menlo Park has identified the following intersections for implementation of a traffic-adaptive technology:

- Middlefield Road/Willow Road (intersection #18)
- Sand Circle/Sand Hill Road/I-280 (intersection #28)
- Sharon Park Drive/Sand Hill Road (intersection #29)
- Middlefield Road/Ringwood Avenue (intersection #45)
- Middlefield Road/Ravenswood Avenue (intersection #46)
- Marsh Road/Bay Road (intersection #48)
- Marsh Road/US 101 SB Off-Ramp (intersection #49)
- Marsh Road/US 101 NB Off-Ramp (intersection #50)
- Willow Road/Bay Road (intersection #51)
- Durham Street/Willow Road (intersection #68)
- Middlefield Road/Marsh Road (intersection #69)
- Newbridge Street/Willow Road (intersection #70)

Draft EIR text on page 3.4-56, second sentence in the first full paragraph, is added as follows:

However, the following ~~four~~ three intersections would remain significantly impacted.

Draft EIR text on page 3.4-56, second bullet in the second bulleted list, is deleted as follows:

- ~~Santa Cruz Avenue/Sand Hill Road [intersection #30]~~

Draft EIR text on page 3.4-56, second full paragraph, is revised as follows:

In the PM Peak Hour, implementation of traffic-adaptive signal technology would alleviate impacts at the following ~~three~~ four intersections.

- ~~El Camino Real/Ravenswood Avenue [intersection #3]~~
- El Camino Real/Page Mill Road – Oregon Expressway [intersection #16]
- Middlefield Road/Willow Road [intersection #18]
- Middlefield Road/Lytton Avenue [intersection #19]



- Middlefield Road/Ravenswood Avenue [intersection #46]

Draft EIR text on page 3.4-56, third full paragraph, is revised as follows:

However, the following ~~nine~~ seven intersections would remain significantly impacted.

Draft EIR text on page 3.4-56, the fourth bulleted list, is revised as follows:

- El Camino Real/University Avenue-Palm Drive [intersection #10]
- ~~Middlefield Road/Willow Road [intersection #18]~~
- Junipero Serra Boulevard – Foothill Expressway/Page Mill Road [intersection #23]
- Junipero Serra Boulevard/Campus Drive West [intersection #26]
- Arboretum Road/Galvez Street [intersection #37]
- ~~Middlefield Road/Ravenswood Avenue [intersection #46]~~

Draft EIR text on page 3.4-58, the second paragraph and the second bulleted list, are revised as follows:

In the PM Peak Hour, combining bicycle and pedestrian undercrossings with traffic-adaptive signal technology would not result in any change in the number of intersection adversely impacted by the SUMC Project. As with the implementation of traffic-adaptive signal technology by itself, implementation of the combination of traffic-adaptive signal technology and bicycle and pedestrian undercrossings would alleviate impacts at the following ~~three~~ four intersections:

- ~~El Camino Real/Ravenswood Avenue [intersection #3]~~
- El Camino Real/Page Mill Road – Oregon Expressway [intersection #16]
- Middlefield Road/Willow Road [intersection #18]
- Middlefield Road/Lytton Avenue [intersection #19]
- Middlefield Road/Ravenswood Avenue [intersection #46]

Draft EIR text on page 3.4-58, third paragraph and third bulleted list, is revised as follows:

The same ~~nine~~ seven intersections would remain significantly impacted even with implementation of both traffic-adaptive signal technology (Mitigation Measure TR-2.1) and bicycle and pedestrian undercrossings (Mitigation Measure TR-2.2):

- El Camino Real/University Avenue-Palm Drive [intersection #10]
- ~~Middlefield Road/Willow Road [intersection #18]~~
- Junipero Serra Boulevard – Foothill Expressway/Page Mill Road [intersection #23]
- Junipero Serra Boulevard/Campus Drive West [intersection #26]

- Arboretum Road/Galvez Street [intersection #37]
- ~~Middlefield Road/Ravenswood Avenue [intersection #46]~~

Draft EIR text on page 3.4-61, the second sentence of the first paragraph, is revised as follows:

SUMC Project impacts at all ~~five~~ four previously affected intersections would be alleviated.

Draft EIR text on page 3.4-61, second paragraph and second bulleted list, is revised as follows:

In the PM Peak Hour, significant impacts at ~~eight~~ seven intersections would be alleviated. However, the following ~~four~~ three intersections would remain significantly impacted:

- ~~Middlefield Road/Willow Road [intersection #18]~~
- Arboretum Road/Galvez Street [intersection #37]
- Bayfront Expressway/Willow Road [intersection #52]
- University Avenue/Bayfront Expressway [intersection #53]

Draft EIR text on page 3.4-61, fifth paragraph and third bulleted list, is revised as follows:

Intersection improvements have been identified at the following ~~13~~ three intersections: These intersections would remain impacted after implementing Priority 1 – 3 Mitigation Measures:

- ~~El Camino Real/Ravenswood Avenue [intersection #3]~~
- ~~El Camino Real/University Avenue – Palm Drive [intersection #10]~~
- ~~El Camino Real/Page Mill Road – Oregon Expressway [intersection #16]~~

Draft EIR text on page 3.4-62, the following bullets are deleted as follows:

- ~~Middlefield Road/Willow Road [intersection #18]~~
- ~~Middlefield Road/Lytton Avenue [intersection #19]~~
- ~~Junipero Serra Boulevard – Foothill Expressway/Page Mill Road [intersection #23]~~
- ~~Junipero Serra Boulevard/Campus Drive West [intersection #26]~~
- ~~Santa Cruz Avenue/Sand Hill Road [intersection #30]~~
- Arboretum Road/Galvez Street [intersection #37]
- ~~Middlefield Road/Ravenswood Avenue [#46]~~
- Bayfront Expressway/Willow Road [intersection #52]
- University Avenue/Bayfront Expressway [intersection #53]
- ~~Alpine Road/I 280 NB Off Ramp [intersection #62]~~

Draft EIR text on page 3.4-62, second sentence of the second paragraph, is revised as follows:

The improvements to intersections in the City of Menlo Park are from the City's General Plan 2009 Menlo Park Traffic Impact Fee Report.

In view of the changes to Table 3.4-18 on page 3.4-63 of the Draft EIR, Draft EIR text on page 3.4-65, first paragraph, is revised as follows:

The three feasible intersection improvements in Table 3.4-18 were combined with the other three higher priority mitigation measures, to determine what the combined impact of all four mitigation measures would be. Implementation of the feasible improvements would be required under Mitigation Measure TR-2.4. ~~Mitigation Measure TR 2.5 requires the City of Palo Alto to work with other jurisdictions towards achieving feasibility for improvements that have been determined to be potentially feasible; subsequently, the SUMC Project sponsors would be required to pay their fair share towards those improvements determined to be feasible. However, since feasibility of those potentially feasible improvements is uncertain, then Mitigation Measure TR 2.5 is not counted towards post-mitigation conclusion for the SUMC Project.~~ If the following four mitigation measures:

- Traffic-adaptive signal technology (Mitigation Measure TR-2.1)
- Additional bicycle and pedestrian undercrossings (Mitigation Measure TR-2.2)
- Enhanced Transportation Demand Management (Mitigation Measure TR-2.3)
- Feasible intersection improvements (Mitigation Measure TR-2.4)

were to be implemented together, they would completely mitigate the SUMC Project's intersection impacts during both the AM and PM Peak Hours. SUMC Project impacts at all ~~five~~ previously affected intersections would be alleviated.

Draft EIR text on page 3.4-66, first paragraph, is deleted as follows:

~~In the PM Peak Hour, SUMC Project impacts at nine intersections would be alleviated. However, the following three intersections would remain significantly impacted:~~

- ~~Middlefield Road/Willow Road [intersection #18]~~
- ~~Bayfront Expressway/Willow Road [intersection #52]~~
- ~~University Avenue/Bayfront Expressway [intersection #53]~~

Draft EIR text on page 3.4-66, second paragraph, is revised as follows:

**Summary.** The results of the above sequential analysis are summarized in Table 3.4-19. Under all at least one combinations of feasible mitigation measures, impacts of the ~~SIMC~~ SUMC Project on intersection LOS would ~~remain significant and unavoidable~~ be less than significant. Of all of the feasible combinations, the one that would have the largest reduction in impact, and that mitigates the greatest number of the intersection impacts, would be the combination of traffic-

adaptive signal technology (Priority 1), additional bicycle and pedestrian undercrossings (Priority 2), enhanced ~~Travel~~ Transportation Demand Management program (Priority 3), and feasible intersection improvements (Priority 4). This combination of mitigation measures would reduce the SUMC Project impacts to a less-than-significant level at all of the impacted intersections during the AM and PM Peak Hours. ~~However, intersection impacts would remain significant and unavoidable in the PM Peak Hour at the following three intersections with mitigation.~~

- ~~• Middlefield Road/Willow Road [intersection #18]~~
- ~~• Bayfront Expressway/Willow Road [intersection #52]~~
- ~~• University Avenue/Bayfront Expressway [intersection #53]~~

Draft EIR text on page 3.4-66, lines two through five of Table 3.4-19, is revised as follows:

**Table 3.4-19  
Summary of Mitigation of Intersection Impacts**

Combination of Mitigation Measures	# of Remaining AM Peak Hour Intersections Impacted	# of Remaining PM Peak Hour Intersections Impacted	Significance Level with Mitigation
P1	4 <del>3</del>	9 <del>7</del>	SU
P1 + P2	3 <del>2</del>	9 <del>7</del>	SU
P1 + P2 + P3	0	4 <del>3</del>	SU
P1 + P2 + P3 + P4	0	3 <del>0</del>	SUL <u>TS</u>

Source: AECOM Transportation, 2010.

Note: SU = Significant and Unavoidable

In view of the proposed traffic-adaptive signal technology in the City of Menlo Park, the list of implementation locations has been added as the last bullet of Mitigation Measure TR-2.1 on page 3.4-67. In addition, Mitigation Measure TR-2.1 is revised to exclude intersections that already have traffic-adaptive signal technology and is also revised to include a fair share contribution towards traffic-adaptive signal technology at additional intersections in the cities of Palo Alto and Menlo Park. As a result, Draft EIR text on pages 3.4-66 through 3.4-67, Mitigation Measure TR-2.1, is revised as follows:

*TR-2.1 Install Traffic-Adaptive Signal Technology.* The SUMC Project sponsors shall contribute to the Palo Alto Citywide Traffic Impact Fee program, for the installation of traffic-adaptive signals. ~~However, this fee is not structured to mitigate one hundred percent of project related impacts, and an additional fee could be imposed by the City on the SUMC Project sponsors to mitigate the remaining share of the SUMC Project impacts.~~ In Menlo Park, the SUMC Project sponsors shall contribute their fair share amount, which shall be tied to the amount of traffic added to analyzed intersections by the SUMC Project. The SUMC Project sponsors’

contributions shall apply towards the installation of traffic-adaptive signals as listed below.

- Sand Hill Road (Oak Creek to Shopping Center) - 4 3 signals
- Arboretum Road (Shopping Center to Palm Drive) - 3 signals
- Embarcadero Road (Bryant to Saint Francis) - 7 signals
- University Avenue (Palm to Lincoln) - 13 signals
- Lytton Avenue (Alma to Middlefield) - 10 signals
- Hamilton Avenue (Alma to Middlefield) - 10 signals
- Middlefield Road (San Antonio to Homer) - 9 signals
- Charleston Road (Alma to Middlefield) - 2 signals
- El Camino Real (northern city limits of ~~Menlo Park~~ Palo Alto to southern city limits of Palo Alto) – signals would require approval of Caltrans

In addition, the SUMC Project sponsors shall pay a fair share contribution towards installation of traffic-adaptive signals at the below significantly-impacted intersections in Menlo Park. These intersections are among those at which Menlo Park anticipates installing traffic-adaptive signals:

- Middlefield Road/Willow Road (intersection #18)
- Middlefield Road/Ravenswood Avenue (intersection #46)

Mitigation Measure TR-2.4 on page 3.4-69 is revised as follows:

*TR-2.4 Fund or Implement those Intersection Improvements that Have Been Determined to be Feasible.* The SUMC Project sponsors shall implement the following measures:

- ~~For the intersection of El Camino Real/Page Mill Road/Oregon Expressway, the SUMC Project sponsors shall pay a fair share towards (1) provision of exclusive right turn lane for westbound Oregon Expressway, in addition to the two through lanes, (2) increasing the cycle length to 160 seconds. Improvements to the westbound right turn lane would require right of way from the VTA park and ride lot.~~
- At the intersection of Arboretum Road/Galvez Street, the SUMC Project sponsors shall install a traffic signal.
- At the intersection of Bayfront Expressway/Willow Road, the SUMC Project sponsors shall pay a fair share towards providing one more right-turn lane for eastbound Willow Road.
- At the intersection of Bayfront Expressway/University Avenue, the SUMC Project sponsors shall pay a fair share towards widening southbound Bayfront

Expressway to include an additional through lane and re-stripe the exclusive right turn lane to a shared through right turn lane. As a result, two additional receiving lanes in the southbound direction on Bayfront Expressway would be needed.

Draft EIR text on pages 3.4-69 through 3.4-70, Mitigation Measure TR-2.5 is, deleted as follows:

~~*TR-2.5 Coordinate with Other Jurisdictions for Potentially Feasible Roadway Improvements.* The City of Palo Alto shall work with other jurisdictions to try to achieve feasibility for the following roadway improvements or adjustments. In the event that one or more of the below improvements would then be determined to be feasible, the SUMC Project sponsors shall pay their fair share towards implementation of the improvements, if a fair share contribution would apply.~~

- ~~• Alpine Road/I-280 Northbound Off Ramp Signalize this intersection. The City shall coordinate with Caltrans regarding feasibility of these improvements.~~
- ~~• El Camino Real/Ravenswood Avenue Re stripe the exclusive right turn lane on southbound El Camino Real to a shared through/right lane. Also, provide an additional through lane for northbound El Camino Real by removing the right turn slip island. Also, provide an exclusive right turn lane for eastbound Menlo Avenue. The City shall coordinate with the City of Menlo Park and Caltrans regarding feasibility of these improvements.~~
- ~~• Bayfront Expressway/Willow Road Provide one more right turn lane for eastbound Willow Road and make the right turn movement for southbound Bayfront Expressway “overlap” with the left turn of eastbound Willow Road. The intersection has signals for the right turn movement for southbound Bayfront Expressway, but the “overlap” phase is not implemented. The City shall coordinate with the City of Menlo Park regarding feasibility of these improvements.~~
- ~~• Middlefield Road/Ravenswood Avenue Provide an additional exclusive left-turn lane for northbound Middlefield Road. The City shall coordinate with the City of Menlo Park regarding feasibility of this improvement.~~
- ~~• Junipero Serra Boulevard/Campus Drive West Request that Santa Clara County change the signal cycle length at this intersection to 90 seconds. The City shall coordinate with the County of Santa Clara regarding feasibility of this adjustment.~~

**Section 4, Other CEQA Considerations.** Draft EIR text on page 4-1 first bullet of the significant and unavoidable impact list is deleted as follows:

- ~~• Deterioration of intersection level of service during Peak Hour conditions at three Menlo Park intersections (Middlefield Road and Willow Road, Bayfront Expressway and Willow Road, and University Avenue and Bayfront Expressway);~~

**Section 5, Alternatives.** Draft EIR text on page 5-2, first bullet of the significant and unavoidable impact list, is revised as follows:

- ~~Deterioration of intersection level of service during Peak Hour conditions at three Menlo Park intersections (Middlefield Road and Willow Road, Bayfront Expressway and Willow Road, and University Avenue and Bayfront Expressway);~~

Please see Staff-Initiated Change 8 for revisions to the Draft EIR text regarding transportation impacts on Alternatives.

In addition, comments were submitted on the Draft EIR that requested specific edits, as listed below:

In response to Comments 31.1 and 59.1, included in Section 4 of this document, Draft EIR Figure 3.4-2 on page 3.4-20 and Figure 3.4-3 on page 3.4-21 have been revised to show a Class I bike facility along Alpine Road, between the intersection of Alpine Road/Junipero Serra Boulevard and just north of Stowe Lane. Please refer to Appendix T of this document for the revised Figure 3.4-2 and Figure 3.4-3.

In response to Comment 3a.12, included in Section 4 of this document, Draft EIR Figure 3.4-9 on page 3.4-48 is revised (see Table 3.2-5 above). Please refer to Appendix T of this document for the revised Figure 3.4-9.

In response to Comment 8a.3, included in Section 4 of this document, additional information has been added after the first sentence of second paragraph of TR-1 on page 3.4-40 as follows:

Figure 3.4-6 illustrates the proposed truck routes in the ~~near~~ vicinity of the SUMC Sites and Figure 3.4-7 illustrates the designated truck routes in the City of Menlo Park. The City of Menlo Park requires truck route permits for truck travel on Menlo Park streets.

**Revised Figures.** As a result of the changes listed above, a number of figures from the Draft EIR and Transportation Impact Analysis (Appendix C of the Draft EIR) are revised. These revisions are listed in Table 3.2-5. The corresponding figures from the Transportation Impact Analysis are also listed in Table 3.2-5. All revised figures are included as Appendix T of this document and the revised figures from Draft EIR Section 3.4, Transportation, are also included in this section. For revised figures from the Transportation Impact Analysis, please see Appendix T. Please note that all revised figures, as included below and in Appendix T, are included in their entirety and fully replace figures in the Draft EIR. For the sake of legibility, replaced figures do not show strikethroughs and underlines.

**Table 3.2-5  
List of Draft EIR Figure Changes**

<b>Draft EIR Figure Number and Page</b>	<b>Figure Title</b>	<b>Changes</b>	<b>Transportation Impact Analysis Figure Number</b>
3.4-1 Page 3.4-3	Transportation Analysis Study Area and Intersections	Added locations of five new study intersections (#67-#71). Revised Figure 3.4-1 replaces Figure 3.4-1 in the Draft EIR.	1-1
N/A	Existing Intersection Geometry	Added existing geometry of five new study intersections (#67 through #71) and updated geometry for intersections #1 and #49. See Appendix T of this document.	2-1
N/A	Existing Traffic Volumes	Added existing volumes of five new study intersections (#67 through #71). See Appendix T of this document.	2-2
3.4-2 Page 3.4-20	Existing Bicycle Facilities in the vicinity of the SUMC Sites	Amended Class I bike facilities along Alpine Road. Revised Figure 3.4-2 replaces Figure 3.4-2 in the Draft EIR.	2.4
N/A	2025 Intersection Geometry	Added 2025 geometry of five new study intersections (#67 through #71) and updated geometry for intersections #1 and #49. See Appendix T of this document.	3-1
N/A	2025 Background Without SUMC Project Volumes	Added 2025 without project volumes of five new study intersections (#67 through #71). See Appendix T of this document.	3-2
3.4-9 Page 3.4-48	SUMC Trip Distribution (Regional)	Moved the '21%' (from south of the SUMC Sites along US 101) from between Oregon Expressway and San Antonio Road to south of San Antonio Road. Revised Figure 3.4-9 replaces Figure 3.4-9 in the Draft EIR.	3-3
N/A	2025 SUMC Only Project Volumes	Added 2025 SUMC Project volumes of five new study intersections (#67 through #71). See Appendix T of this document.	3-5
N/A	Existing Volumes with SUMC	Added existing + SUMC Project volumes of five new study intersections (#67 through #71). See Appendix T of this document.	3-6
N/A	2025 Traffic Volumes with SUMC	Added 2025 with SUMC volumes of five new study intersections (#67 through #71). See Appendix T of this document.	3-7
N/A	Development Locations	Replaced with East Palo Alto Truck Routes. See Appendix T of this document.	3.11
N/A	- (Additional figure)	Development Locations (formerly Figure 3.11). See Appendix T of this document.	3.12
N/A	Intersection Mitigation Geometry Modifications	Updated mitigation measures for intersections #18, #46, #52 and #53 based on City of Menlo Park's 2009 Transportation Impact Fee Study Report and removed mitigation measure for #3 and #30 as they are no longer impacted by the SUMC Project. See Appendix T of this document.	4-1

Source: AECOM, 2010.

Note: N/A = not used in Draft EIR, please refer to the Transportation Impact Analysis.





Source: AECOM Transportation, 2010.



REVISED FIGURE 3.4-1  
 Transportation Analysis Study Area and Intersections

D41357.00





**Revised Tables.** As a result of the changes listed above, a number of tables from the Draft EIR and Transportation Impact Analysis (Appendix C of the Draft EIR) are also revised. These revisions, and the corresponding tables from the Draft EIR, are listed in Table 3.2-6, below. All Draft EIR tables that are revised are included in this section at the end of Staff-Initiated Change 2. All tables that were included in the Transportation Impact Analysis, but not in Section 3.4 of the Draft EIR, are included in Appendix T of this document. The revised tables in their entirety replace the corresponding tables in the Draft EIR and the Transportation Impact Analysis. For the sake of legibility, replaced text and numbers are not stricken or underlined in the tables unless otherwise denoted.

**Table 3.2-6  
List of Draft EIR Table Changes**

Draft EIR Table Number and Pages	Table Title	Changes	Transportation Impact Analysis Table Number
3.4-1 Pages 3.4-7 through 3.4-9	List of Study Intersections	Added information of five new study intersections (#67 through #71). Revised Table 3.4-1 replaces Table 3.4-1 in the Draft EIR.	1-1
3.4-6 Pages 3.4-14 through 3.4-16	Existing Peak Hour Intersection Level of Service	Revised LOS for intersections #1 through #8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under existing conditions and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). Revised Table 3.4-6 replaces Table 3.4-6 in the Draft EIR.	2-4
3.4-8 Page 3.4-18	Freeway Segment Level of Service	Added information for the new study segment between Marsh Road and Woodside Road along US 101. Revised Table 3.4-8 replaces Table 3.4-8 in the Draft EIR. Additional text has been underlined.	2-6
3.4-12 Pages 3.4-35 through 3.4-37	LOS of Study Intersection for 2025 No Project	Revised LOS for intersections #1 through #8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under 2025 No Project conditions and revised LOS for intersections #1 and #49 due to updated geometry and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). Revised Table 3.4-12 replaces Table 3.4-12 in the Draft EIR.	3-1
N/A	LOS Comparison with Existing + SUMC	Revised LOS for intersections #1 through #8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under existing conditions and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). See Appendix T of this document.	3-3
3.4-15 Page 3.4-39	2025 No Project Freeway LOS	Added 2025 information for the new study segment between Marsh Road and Woodside Road along US 101. Revised Table 3.4-15 replaces Table 3.4-15 in the Draft EIR. Additional text has been underlined.	3-6
3.4-17 Pages 3.4-51 through 3.4-53	LOS Comparison with SUMC Only in 2025 – SUMC Only Project Impact	Revised LOS for intersections #1-#8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under 2025 No Project conditions and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). Revised Table 3.4-17 replaces Table 3.4-17 in the Draft EIR.	3-4

**Table 3.2-6  
List of Draft EIR Table Changes**

<b>Draft EIR Table Number and Pages</b>	<b>Table Title</b>	<b>Changes</b>	<b>Transportation Impact Analysis Table Number</b>
N/A	Summary of Impacted Locations	Revised LOS for intersections #1 through #8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under existing and 2025 No Project conditions and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). See Appendix T of this document.	3-5
3.4-18 Pages 3.4-63 through 3.4-65	Intersection Improvements	Updated mitigation measures for intersections #18, #46, #52, and #53 based on City of Menlo Park's 2009 Transportation Impact Fee Study Report and removed mitigation measures for intersections #3 and #30 as they are no longer impacted by the SUMC Project. Revised Table 3.4-18 replaces Table 3.4-18 in the Draft EIR.	4-4
3.4-23 Page 3.4-74	2025 With SUMC Project Freeway Analysis	Added 2025 analysis results for the new study segment between Marsh Road and Woodside Road along US 101. Revised Table 3.4-23 replaces Table 3.4-23 in the Draft EIR. Additional text has been underlined.	3-7
N/A	Summary of SUMC Impact with Traffic-Adaptive Technology	Revised LOS for intersections #1 through #8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under 2025 No Project conditions and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). Revised LOS for intersections #18, #28, #29, #45, #46, and #48 through #51 due to Menlo Park's proposed implementation of traffic-adaptive signal technology as mitigation measures. See Appendix T of this document.	4-1
N/A	Summary of SUMC Impact with Traffic-Adaptive Technology and Bicycle and Pedestrian Undercrossings	Revised LOS for intersections #1 through #8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under 2025 No Project conditions and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). Revised LOS for intersections #18, #28, #29, #45, #46, and #48 through #51 due to Menlo Park's proposed implementation of traffic-adaptive signal technology as mitigation measures. See Appendix T of this document.	4-2
N/A	Summary of SUMC Project Impact with TDM, Bicycle and Pedestrian Undercrossings and Traffic-Adaptive Technology	Revised LOS for intersections #1 through #8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under 2025 No Project conditions and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). Revised LOS for intersections #18, #28, #29, #45, #46, and #48 through #51 due to Menlo Park's proposed implementation of traffic-adaptive signal technology as mitigation measures. See Appendix T of this document.	4-3
N/A	LOS Comparison for Roadway Mitigation	Updated LOS for intersections #18, #46, #52 and #53 based on City of Menlo Park's 2009 Transportation Impact Fee Study Report and removed intersections #3 and #30 as they are no longer impacted by the SUMC Project. See Appendix T of this document.	4-5

**Table 3.2-6  
List of Draft EIR Table Changes**

<b>Draft EIR Table Number and Pages</b>	<b>Table Title</b>	<b>Changes</b>	<b>Transportation Impact Analysis Table Number</b>
N/A	Summary of SUMC Project Impact with Remote Parking, Bicycle and Pedestrian Undercrossings and Traffic-Adaptive Technology	Revised LOS for intersections #1 through #8, #27, #30, and #31 due to presence of traffic-adaptive signal technology under 2025 No Project conditions and revised LOS for intersections #1 and #49 due to updated geometry. Added LOS for five new study intersections (#67 through #71). Revised LOS for intersections #18, #28, #29, #45, #46, and #48 through #51 due to Menlo Park's proposed implementation of traffic-adaptive signal technology as mitigation measures. See Appendix T of this document.	4-6

Source: AECOM Transportation, 2010.

Note: N/A = not used in Draft EIR, please refer to the Transportation Impact Analysis.

**Revised Table 3.4-1 of Draft EIR  
(Revised Table 1-5 of Draft EIR Appendix C)  
List of Study Intersections**

<b>#</b>	<b>Intersections</b>	<b>City/Jurisdiction</b>	<b>Source and Date of Count</b>
1	El Camino Real and Valparaiso Avenue	Menlo Park	AECOM October 2009
2	El Camino Real and Santa Cruz Avenue	Menlo Park	MP October 2006
3	El Camino Real and Ravenswood Avenue	Menlo Park	AECOM October 2009
4	El Camino Real and Roble Avenue	Menlo Park	MP October 2006
5	El Camino Real and Middle Avenue	Menlo Park	MP October 2006
6	El Camino Real and Cambridge Avenue	Menlo Park	MP October 2006
7	El Camino Real and Sand Hill Road and Alma Street	Palo Alto	AECOM February 2008
8	El Camino Real and Quarry Road	Palo Alto	PA Monitoring October 2006
9	Alma Street and Lytton Avenue	Palo Alto	AECOM October 2007
10	El Camino Real and University Avenue and Palm Drive*	Palo Alto	PA October 2008
11	El Camino Real and Embarcadero Road and Galvez Street	Palo Alto	PA October 2009
12	El Camino Real and Churchill Avenue	Palo Alto	AECOM September 2009
13	El Camino Real and Serra Street-Park Boulevard	Palo Alto	AECOM October 2007
14	El Camino Real and Stanford Avenue	Palo Alto	AECOM October 2007
15	El Camino Real and California Avenue	Palo Alto	PA May 2009
16	El Camino Real and Page Mill Road	Palo Alto	PA October 2008
17	Woodland Avenue and University Avenue	East Palo Alto	PA October 2008
18	Middlefield Road and Willow Road	Menlo Park	AECOM October 2009
19	Middlefield Road and Lytton Avenue	Palo Alto	AECOM October 2007
20	Middlefield Road and University Avenue	Palo Alto	PA October 2008
21	Middlefield Road and Embarcadero Road	Palo Alto	PA October 2008
22	Alma Street and Churchill Avenue	Palo Alto	PA Monitoring October 2006
23	Junipero Serra Boulevard and Foothill Expressway/Page Mill Road	Palo Alto	PA October 2008
24	Junipero Serra Boulevard and Stanford Avenue	Santa Clara County	AECOM October 2007
25	Junipero Serra Boulevard and Campus Drive East	Santa Clara County	AECOM October 2007
26	Junipero Serra Boulevard and Campus Drive West	Santa Clara County	PA Monitoring October 2006
27	Junipero Serra Boulevard and Alpine Road and Santa Cruz Avenue	Menlo Park	MP October 2006
28	Sand Circle and Sand Hill Road/I-280	Menlo Park	AECOM September 2009
29	Sand Hill Road Sharon Park	Menlo Park	MP November 2006
30	Santa Cruz Avenue and Sand Hill Road	Menlo Park	PA October 2008

**Revised Table 3.4-1 of Draft EIR  
(Revised Table 1-5 of Draft EIR Appendix C)  
List of Study Intersections**

#	Intersections	City/Jurisdiction	Source and Date of Count
31	Oak Avenue and Sand Hill Road	Menlo Park	MP November 2006
32	Stockfarm Road and Sand Hill Road and Oak Creek Drive	Palo Alto	AECOM October 2007
33	Pasteur Drive and Sand Hill Road	Palo Alto	AECOM October 2007
34	Arboretum Road and Sand Hill Road	Palo Alto	PA Monitoring October 2006
35	Arboretum Road and Quarry Road	Palo Alto	PA October 2008
36	Arboretum Road and Palm Drive	Palo Alto	PA Monitoring October 2007
37	Galvez Street and Arboretum Road	Palo Alto	PA Monitoring October 2006
38	El Camino Real and Charleston Road and Arastradero Road	Palo Alto	AECOM February 2008
39	Alma Street and Charleston Road	Palo Alto	PA October 2008
40	Middlefield Road and Charleston Road	Palo Alto	PA October 2008
41	Middlefield Road and Hamilton Avenue	Palo Alto	AECOM February 2008
42	Alma Street and Hamilton Avenue	Palo Alto	AECOM February 2008
43	University Drive and Santa Cruz Avenue	Menlo Park	MP October 2006
44	El Camino Real and Oak Grove Avenue	Menlo Park	AECOM October 2009
45	Middlefield Road and Ringwood Avenue	Menlo Park	MP October 2008
46	Middlefield Road and Ravenswood Avenue	Menlo Park	AECOM October 2009
47	El Camino Real and Encinal Road	Menlo Park	MP October 2006
48	Bay Road and Marsh Road	Menlo Park	MP November 2006
49	Marsh Road and US 101 SB off Ramp	Menlo Park	MP November 2006
50	Marsh Road and US 101 NB off Ramp	Menlo Park	MP November 2006
51	Bay Road and Willow Road	Menlo Park	MP October 2006
52	Bayfront Expressway and Willow Road	Menlo Park	MP October 2006
53	Bayfront Expressway and University Avenue	Menlo Park	AECOM February 2008
54	Bay Road and University Avenue	East Palo Alto	Fehr & Peers September 2007
55	Donohoe Street University Avenue	East Palo Alto	AECOM September 2009
56	Welch Road and Quarry Road	Palo Alto	PA Monitoring October 2006
57	Durand Way and Sand Hill Road	Palo Alto	AECOM February 2008
58	Pasteur Drive NB and Welch Road	Palo Alto	PA Monitoring October 2006
59	Pasteur Drive SB and Welch Road	Palo Alto	PA Monitoring October 2006
60	Durand Way Extension and Welch Road	Palo Alto	N/A
61	Bowdoin Street and Stanford Road	Palo Alto	AECOM February 2008
62	Alpine Road and I-280 NB Off-Ramp	Palo Alto	AECOM October 2008
63	Alpine Road and I-280 SB Off-Ramp	Palo Alto	AECOM October 2008
64	Page Mill Road and I-280 NB Off-Ramp	Palo Alto	AECOM January 2009
65	Page Mill Road and I-280 SB Off-Ramp	Palo Alto	AECOM January 2009
66	Foothill Expressway and Arastradero Road	Santa Clara County	PA October 2008
67	Middlefield Road and Oregon Expressway	Palo Alto	PA October 2008
68	Durham Street and Willow Road	Menlo Park	AECOM September 2010
69	Middlefield Road and Marsh Road	Menlo Park	AECOM September 2010
70	Newbridge Street and Willow Road	East Palo Alto	AECOM October 2010
71	West Bayshore Road and Embarcadero Road	Palo Alto	AECOM October 2010

Source: AECOM Transportation, 2010.

Note: \*Two separate intersections analyzed as a single intersection because of their proximity to each other.



**Revised Table 3.4-6 of Draft EIR  
(Revised Table 2-4 of Draft EIR Appendix C)  
Existing Intersection Level Of Service**

	Intersection	AM			PM			Avg Crit Delay	
		LOS	Avg Delay	Critical V/C	LOS	Avg Delay	Critical V/C		
1	El Camino Real/Valparaiso Avenue-Glenwood Avenue	C	28.2	0.660	30.6	C-	32.6	0.665	33.6
2	El Camino Real/Santa Cruz Avenue	B+	10.7	0.503	10.3	B	15.4	0.568	15.8
3	El Camino Real/Ravenswood Avenue-Menlo Avenue	D+	35.2	0.786	37.5	D	41.0	0.847	50.1
4	El Camino Real/Roble Avenue	A	9.2	0.427	8.3	B+	10.1	0.454	8.2
5	El Camino Real/Middle Avenue	C+	21.3	0.694	25.4	C-	32.1	0.822	34.8
6	El Camino Real/Cambridge Avenue	B+	11.8	0.561	13.0	B+	10.9	0.507	5.9
7	El Camino Real/Sand Hill Road-Alma Street	C+	21.2	0.567	30.1	C	31.2	0.618	37.2
8	El Camino Real/Quarry Road	B	12.1	0.369	16.3	C+	20.2	0.478	11.4
9	Alma Street/Lytton Avenue	B	16.7	0.517	16.8	C	25.5	0.848	30.4
10	El Camino Real/University Avenue-Palm Drive	C	30.1	0.714	33.4	D+	37.6	0.790	41.6
11	El Camino Real/Embarcadero Road-Galvez Street	D	44.7	0.729	47.5	D	45.4	0.753	48.1
12	El Camino Real/Churchill Avenue	C	26.0	0.569	31.2	C	23.1	0.596	33.9
13	El Camino Real/Serra Street-Park Boulevard	B	17.2	0.473	21.7	C	25.9	0.664	30.1
14	El Camino Real/Stanford Avenue	C+	22.5	0.449	17.0	C+	22.3	0.608	25.8
15	El Camino Real/California Avenue	C	25.0	0.563	26.4	C	27.4	0.628	27.5
16	El Camino Real/Page Mill Road-Oregon Expressway	D	50.1	0.910	55.9	D	46.6	0.868	52.0
17	Woodland Avenue/University Avenue	C	31.2	0.646	30.4	D+	38.2	0.789	44.0
18	Middlefield Road/Willow Road	C-	34.1	0.562	33.3	D	50.8	0.838	57.3
19	Middlefield Road/Lytton Avenue	C	24.2	0.664	24.6	D+	37.5	0.806	40.0
20	Middlefield Road/University Avenue	C	26.1	0.462	27.0	C	27.7	0.527	30.0
21	Middlefield Road/Embarcadero Road	D+	37.3	0.572	39.2	D+	35.7	0.620	38.1
22	Alma Street/Churchill Avenue	B-	19.1	0.657	16.6	C	27.2	0.769	30.6
23	Junipero Serra Boulevard-Foothill Expressway/Page Mill Road	F	83.9	1.048	103.3	F	82.3	0.995	103.1
24	Junipero Serra Boulevard/Stanford Avenue	B	12.3	0.614	17.1	B	15.1	0.616	18.5
25	Junipero Serra Boulevard/Campus Drive East	B+	11.5	0.489	16.4	B	12.7	0.463	15.4
26	Junipero Serra Boulevard/Campus Drive West	D+	36.3	0.611	43.4	C-	34.5	0.766	40.9
27	Junipero Serra Boulevard/Alpine Road-Santa Cruz Avenue	C	23.8	0.723	27.2	C	27.1	0.745	28.2
28	Sand Hill Cir- I-280/Sand Hill Road	C-	34.6	0.704	29.2	B-	19.3	0.696	21.4
29	Sharon Park Drive/Sand Hill Road	C	23.5	0.644	19.9	C+	20.6	0.625	22.7
30	Santa Cruz Avenue/Sand Hill Road	C	29.6	0.900	37.7	C-	33.5	0.662	34.1
31	Oak Avenue/Sand Hill Road - Vine Street	A	8.1	0.651	8.8	A	6.0	0.675	7.1
32	Stock Farm Road/Sand Hill Road	B	15.4	0.562	16.5	C	25.3	0.666	27.2
33	Pasteur Drive/Sand Hill Road	C+	20.4	0.585	22.0	C+	22.5	0.534	22.8
34	Arboretum Road Sand Hill Road	C+	20.4	0.443	22.0	C	24.8	0.601	27.8
35	Arboretum Road/Quarry Road	C	31.5	0.513	32.2	C	28.6	0.604	31.4
36	Arboretum Road/Palm Drive	C+	22.6	0.822	27.4	C+	20.6	0.723	21.9
37	Arboretum Road/Galvez Street/(unsignalized)	D	25.6	0.643	25.6	F	54.6	0.938	54.6
38	El Camino Real/Charleston Road	D	47.4	0.723	47.0	D	49.7	0.834	51.9
39	Alma Street/Charleston Road	D	39.4	0.744	40.2	D	41.1	0.816	44.7
40	Middlefield Road/Charleston Road	D	39.4	0.618	41.5	D	41.7	0.727	43.4
41	Middlefield Road/Hamilton Avenue	B-	18.5	0.336	18.7	B-	18.6	0.375	19.0



**Revised Table 3.4-6 of Draft EIR  
(Revised Table 2-4 of Draft EIR Appendix C)  
Existing Intersection Level Of Service**

Intersection	AM				PM			
	LOS	Avg Delay	Critical V/C	Avg Crit Delay	LOS	Avg Delay	Critical V/C	Avg Crit Delay
42 Alma Street/Hamilton Avenue	B+	11.3	0.503	12.8	C+	21.1	0.618	21.8
43 University Drive/Santa Cruz Avenue	C+	21.8	0.449	26.9	C	27.7	0.520	30.1
44 El Camino Real/Oak Grove Avenue	C	25.4	0.529	23.7	C	29.4	0.566	31.1
45 Middlefield Road/Ringwood Avenue	C	28.7	0.614	31.2	C	28.4	0.713	33.6
46 Middlefield Road/Ravenswood Avenue	C+	21.1	0.666	28.6	C	26.5	0.767	36.2
47 El Camino Real/Encinal Road	B	15.6	0.592	12.8	B	16.9	0.616	17.9
48 Bay Road/Marsh Road	B	12.4	0.510	13.6	B+	11.9	0.451	13.0
49 Marsh Road/US 101 SB Off-Ramp	B-	18.2	0.744	20.5	B-	19.8	0.789	20.6
50 Marsh Road/US 101 NB Off-Ramp	B	14.0	0.514	14.7	B	14.1	0.783	15.9
51 Bay Road/Willow Road	B-	18.4	0.625	22.4	B	15.9	0.524	19.4
52 Bayfront Expressway/Willow Road	C	28.3	0.708	40.8	E	61.7	1.024	71.1
53 University Avenue/Bayfront Expressway	C	24.7	0.921	49.5	E-	80.0	1.095	90.9
54 Bay Road/University Avenue	C-	34.5	0.713	36.4	E	71.5	1.064	89.9
55 Donohoe Street/University Avenue	D-	51.9	0.896	55.0	D+	38.0	0.791	42.9
56 Welch Road/Quarry Road	C+	20.8	0.552	23.9	C+	21.4	0.539	23.1
57 Durand Way/Sand Hill Road	A	6.1	0.315	9.1	A	5.8	0.398	7.7
58 Pasteur Drive NB/Welch Road	A	8.4	0.328	10.1	B+	10.4	0.402	10.8
59 Pasteur Drive SB/Welch Road	B+	10.6	0.351	8.9	A	7.7	0.240	8.2
60 Durand Way Extension/Welch Road								
61 Bowdoin Street/Stanford Road/(unsignalized)	B	13.5	0.671	13.5	B	11.7	0.536	11.7
62 Alpine Road/I-280 NB Off-Ramp (unsignalized)	F	158.1	1.851	158.1	F	82.8	1.252	82.8
63 Alpine Road/I-280 SB Off-Ramp (unsignalized)	F	80.7	1.124	80.7	C	17.7	0.426	17.7
64 Page Mill/I-280 NB Off-Ramp/(unsignalized)	D	30.9	0.506	30.9	B	11.9	0.146	11.9
65 Page Mill Road/I-280 SB Off-Ramp (unsignalized)	F	98.0	1.309	98.0	D	30.9	0.984	30.9
66 Foothill Expressway/Arastradero Road	E	64.1	0.573	96.1	E+	56.9	0.622	73.6
67 Middlefield Road/Oregon Expressway	D	47.1	0.665	53.0	E+	56.1	0.660	60.4
68 Durham Street/Willow Road	B	15.7	0.709	17.0	B	13.8	0.595	12.8
69 Middlefield Road/Marsh Road	C	24.1	0.711	34.3	C	26.6	0.766	41.0
70 Newbridge Street/Willow Road	D	40.0	0.749	44.8	D+	37.2	0.688	47.3
71 West Bayshore Road/Embarcadero Road (unsignalized)	F	663.9	2.542	663.9	F	442.2	1.631	442.2

Source: AECOM Transportation, 2010.

Note: Shading indicates intersection operating at LOS E or F.

**Revised Table 3.4-8 of Draft EIR  
(Revised Table 2-6 of Draft EIR Appendix C)  
Freeway Segment Level of Service**

Freeway Segment	Direction	AADT	LOS (AM)	LOS (PM)
<u>US 101 North of Marsh Road</u>	<u>NB</u>	<u>194,000</u>	<u>F</u>	<u>F</u>
	<u>SB</u>		<u>F</u>	<u>F</u>
US 101 North of University Avenue	NB	192,000	F	F
	SB		F	F
US 101 South of University Avenue	NB	200,000	F	F
	SB		F	F
US 101 South of Embarcadero Road/Oregon Expressway	NB	202,000	E	F
	SB		D	F
I-280 north of Sand Hill Road	NB	102,000	D	D
	SB		D	D
I-280 south of Alpine Road	NB	103,000	C	C
	SB		D	C
I-280 south of Page Mill Road	NB	109,000	D	C
	SB		C	D

*Source:* Caltrans 2008 Counts, 2009 San Mateo CMP & 2008 Santa Clara CMP.

**Revised Table 3.4-12 of Draft EIR  
(Revised Table 3-1 of Draft EIR Appendix C)  
LOS of Study Intersections for 2025 – No Project**

Intersection	LOS	AM			PM			Avg Crit Delay
		Avg Delay	Critical V/C	Avg Crit Delay	Avg Delay	Critical V/C	Avg Crit Delay	
		LOS	LOS	LOS	LOS	LOS		
1 El Camino Real/Valparaiso Avenue-Glenwood Avenue	C-	33.3	0.806	38.0	D	40.8	0.877	44.0
2 El Camino Real/Santa Cruz Avenue	B	13.9	0.552	13.2	B-	18.9	0.614	19.0
3 El Camino Real/Ravenswood Avenue-Menlo Avenue	D	40.9	0.902	45.4	D-	51.8	0.962	67.6
4 El Camino Real/Roble Avenue	A	8.4	0.535	7.9	B+	11.1	0.528	9.9
5 El Camino Real/Middle Avenue	C+	23.0	0.810	29.1	D+	36.6	0.925	41.1
6 El Camino Real/Cambridge Avenue	B	13.5	0.687	16.4	B	12.2	0.573	18.0
7 El Camino Real/Sand Hill Road-Alma Street	C+	22.4	0.607	31.3	C-	32.3	0.726	39.7
8 El Camino Real/Quarry Road	B	12.4	0.497	15.8	C+	20.1	0.579	14.1
9 Alma Street/Lytton Avenue	B-	18.1	0.628	18.9	D+	38.4	0.975	51.5
10 El Camino Real/University Avenue-Palm Drive	E-	79.5	1.107	98.3	D-	51.6	0.943	61.3
11 El Camino Real/Embarcadero Road-Galvez Street	D	49.9	0.853	55.0	E+	55.5	0.936	63.3
12 El Camino Real/Churchill Avenue	C	24.5	0.667	30.8	C	23.1	0.757	34.8
13 El Camino Real/Serra Street-Park Boulevard	B-	18.7	0.536	24.5	C	26.5	0.727	31.6
14 El Camino Real/Stanford Avenue	C	23.8	0.540	17.9	C	27.7	0.733	33.0
15 El Camino Real/California Avenue	C	25.8	0.698	28.0	C	28.1	0.756	29.7
16 El Camino Real/Page Mill Road-Oregon Expressway	E	66.6	1.032	82.9	E	67.2	1.038	84.4
17 Woodland Avenue/University Avenue	D	40.6	0.843	41.4	D-	51.6	0.962	66.7
18 Middlefield Road/Willow Road	D+	36.4	0.657	40.3	E	60.1	0.922	67.6
19 Middlefield Road/Lytton Avenue	D	41.7	0.874	44.8	D-	54.5	0.955	60.1
20 Middlefield Road/University Avenue	C	28.7	0.608	31.0	C-	33.3	0.815	38.5
21 Middlefield Road/Embarcadero Road	D	41.3	0.666	43.4	D+	38.8	0.672	41.2
22 Alma Street/Churchill Avenue	C	23.5	0.773	30.1	D+	36.0	0.930	45.3
23 Junipero Serra Boulevard-Foothill Expressway/Page Mill Road	F	126.0	1.230	177.0	F	109.2	1.136	151.4
24 Junipero Serra Boulevard/Stanford Avenue	B	14.2	0.721	20.6	C+	20.6	0.794	25.6
25 Junipero Serra Boulevard/Campus Drive East	B	14.0	0.606	19.8	B	13.6	0.618	16.9
26 Junipero Serra Boulevard/Campus Drive West	D	50.8	0.687	62.3	E-	79.8	0.995	103.8
27 Junipero Serra Boulevard/Alpine Road-Santa Cruz Avenue	C-	32.2	0.902	36.5	D	42.9	0.963	44.6
28 Sand Hill Cir- I-280/Sand Hill Road	D+	36.9	0.723	31.5	C+	22.4	0.722	25.1
29 Sharon Park Drive/Sand Hill Road	C	30.7	0.842	29.6	C	27.8	0.892	32.8
30 Santa Cruz Avenue/Sand Hill Road	D	46.2	1.067	72.2	D	39.3	0.832	39.4
31 Oak Avenue/Sand Hill Road -Vine Street	A	7.9	0.702	9.1	A	7.9	0.847	9.8
32 Stock Farm Road/Sand Hill Road	B	17.0	0.627	19.6	C-	34.4	0.833	42.7
33 Pasteur Drive/Sand Hill Road	B-	18.5	0.585	20.0	C	26.8	0.678	31.0
34 Arboretum Road/Sand Hill Road	C+	20.5	0.520	23.4	C	30.6	0.689	39.4
35 Arboretum Road/Quarry Road	C	31.6	0.517	32.3	C	28.8	0.610	31.7
36 Arboretum Road/Palm Drive	C	24.6	0.856	30.5	C+	21.2	0.744	23.1
37 Arboretum Road/Galvez Street/(unsignalized)	E	38.8	0.772	38.8	F	230.5	1.463	230.5
38 El Camino Real/Charleston Road	D-	53.1	0.877	55.3	E	65.4	0.992	75.0
39 Alma Street/Charleston Road	E+	55.8	0.965	62.0	E-	76.2	1.055	87.8
40 Middlefield Road/Charleston Road	D	46.6	0.828	49.4	D	47.5	0.848	51.5
41 Middlefield Road/Hamilton Avenue	B	17.0	0.508	17.9	B-	18.7	0.431	19.3
42 Alma Street/Hamilton Avenue	B	14.3	0.590	16.1	C+	20.6	0.694	22.4
43 University Drive/Santa Cruz Avenue	C+	22.8	0.612	30.0	C	29.5	0.718	37.3
44 El Camino Real/Oak Grove Avenue	C	26.8	0.655	25.7	C	30.8	0.745	29.9

**Revised Table 3.4-12 of Draft EIR  
(Revised Table 3-1 of Draft EIR Appendix C)  
LOS of Study Intersections for 2025 – No Project**

Intersection	AM				PM			
	LOS	Avg	Critica	Avg	LOS	Avg	Critical	Avg
		Delay	1 V/C	Crit		Delay	V/C	Crit
45 Middlefield Road/Ringwood Avenue	C	30.4	0.704	34.0	C-	33.8	0.868	43.6
46 Middlefield Road/Ravenswood Avenue	C	30.6	0.865	41.6	D-	54.1	1.008	73.4
47 El Camino Real/Encinal Road	B	17.8	0.658	15.8	B-	18.7	0.686	20.9
48 Bay Road/Marsh Road	B	13.3	0.606	14.9	B	12.6	0.537	13.9
49 Marsh Road/US 101 SB Off-Ramp	C+	22.7	0.885	27.7	C	27.6	0.939	31.2
50 Marsh Road/US 101 NB Off-Ramp	B	15.1	0.612	16.0	C+	21.3	0.932	25.0
51 Bay Road/Willow Road	B-	18.8	0.648	23.0	B	17.5	0.619	21.2
52 Bayfront Expressway/Willow Road	D	42.5	0.969	65.3	F	115.6	1.221	147.7
53 University Avenue/Bayfront Expressway	D	43.5	1.057	86.8	F	104.6	1.167	120.8
54 Bay Road/University Avenue	D+	38.8	0.836	43.7	F	96.1	1.166	129.2
55 Donohoe Street/University Avenue	E	73.9	1.018	81.6	D	43.0	0.899	51.4
56 Welch Road/Quarry Road	C+	20.9	0.558	24.1	C+	21.4	0.541	23.1
57 Durand Way/Sand Hill Road	B	12.1	0.662	10.4	B-	19.5	0.617	19.4
58 Pasteur Drive NB/Welch Road	A	8.8	0.354	10.3	B+	10.5	0.433	10.9
59 Pasteur Drive SB/Welch Road	B+	10.1	0.310	10.1	A	8.5	0.272	9.0
60 Durand Way Extension/Welch Road	C-	32.5	0.732	37.9	C	26.8	0.631	26.4
61 Bowdoin Street/Stanford Road/(unsignalized)	C	23.5	0.887	23.5	D	31.4	0.921	31.4
62 Alpine Road/I-280 NB Off-Ramp (unsignalized)	F	323.6	2.474	323.6	F	205.7	1.789	205.7
63 Alpine Road/I-280 SB Off-Ramp (unsignalized)	F	273.7	1.705	273.7	C	24.7	0.558	24.7
64 Page Mill/I-280 NB Off-Ramp/(unsignalized)	E	44.6	0.632	44.6	C	16.1	0.276	16.1
65 Page Mill Road/I-280 SB Off-Ramp (unsignalized)	F	122.6	1.386	122.6	F	100.9	1.497	100.9
66 Foothill Expressway/Arastradero Road	F	105.8	0.743	185.0	F	97.0	0.811	140.0
67 Middlefield Road/Oregon Expressway	E	61.5	0.856	67.8	E-	77.9	0.992	90.7
68 Durham Street/Willow Road	B	15.6	0.674	16.7	B	15.3	0.703	16.0
69 Middlefield Road/Marsh Road	C	31.9	0.882	48.3	D	43.0	0.978	70.4
70 Newbridge Street/Willow Road	D	40.9	0.777	46.3	D	42.6	0.813	53.9
71 West Bayshore Road/Embarcadero Road (unsignalized)	F	1128.8	4.017	1128.8	F	594.7	2.024	594.7

Source: AECOM Transportation, 2010.

Note: Shading indicates intersection operating at LOS E or F.

**Revised Table 3.4-17 of Draft EIR  
(Revised Table 3-4 of Appendix C)  
LOS Comparison with SUMC only in 2025 – SUMC Only Project Impact**

	Intersection	2025AM			2025AM+SUMC			Compare			2025PM			2025PM + SUMC			Compare						
		LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	Δ Avg Crit Delay	Δ V/C	Impact?	LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)	Δ Avg Crit Delay	Δ V/C	Impact?
1	El Camino Real/Valparaiso Avenue	C-	33.3	0.806	38.0	C-	33.5	0.829	38.9	0.9	0.023	N	D	40.8	0.877	44.0	D	41.8	0.897	45.8	1.8	0.02	N
2	El Camino Real/Santa Cruz Avenue	B	13.9	0.552	13.2	B	13.6	0.579	13.0	-0.2	0.027	N	B-	18.9	0.614	19.0	B-	18.7	0.638	18.8	-0.2	0.024	N
3	El Camino Real/Ravenswood Avenue	D	40.9	0.902	45.4	D	43.1	0.936	49.2	3.8	0.034	N	D-	51.8	0.962	67.6	D-	54.7	0.969	61.2	-6.3	0.007	N
4	El Camino Real/Roble Avenue	A	8.4	0.535	7.9	A	8.2	0.557	7.8	-0.1	0.022	N	B+	11.1	0.528	9.9	B+	10.8	0.549	9.8	-0.2	0.021	N
5	El Camino Real/Middle Avenue	C+	23.0	0.810	29.1	C	23.3	0.834	29.7	0.5	0.024	N	D+	36.6	0.925	41.1	D+	38.3	0.954	44.4	3.3	0.029	N
6	El Camino Real/Cambridge Avenue	B	13.5	0.687	16.4	B	13.6	0.710	16.5	0.2	0.023	N	B	12.2	0.573	18.0	B+	11.4	0.566	6.5	-11.4	0.007	N
7	El Camino Real/Sand Hill Road-Alma Street	C+	22.4	0.607	31.3	C	24.9	0.617	31.9	0.5	0.01	N	C-	32.3	0.726	39.7	C-	33.7	0.754	40.7	1.0	0.028	N
8	El Camino Real/Quarry Road	B	12.4	0.497	15.8	B	14.2	0.546	18.5	2.7	0.049	N	C+	20.1	0.579	14.1	C+	22.6	0.627	13.7	-0.4	0.048	N
9	Alma Street/Lytton Avenue	B-	18.1	0.628	18.9	B-	19.1	0.668	20.6	1.7	0.04	N	D+	38.4	0.975	51.5	D	43.0	1.005	59.5	8.0	0.03	N
10	El Camino Real/University Avenue-Palm Drive	E-	79.5	1.107	98.3	F	95.8	1.165	120.9	22.6	0.058	Y	D-	51.6	0.943	61.3	E	71.0	1.017	79.8	18.5	0.074	Y
11	El Camino Real/Embarcadero Road-Galvez Street	D	49.9	0.853	55.0	D-	51.2	0.875	56.9	1.9	0.022	N	E+	55.5	0.936	63.3	E+	57.0	0.948	65.3	2.0	0.012	N
12	El Camino Real/Churchill Avenue	C	24.5	0.667	30.8	C	24.7	0.690	31.2	0.4	0.023	N	C	23.1	0.757	34.8	C	23.3	0.769	35.3	0.5	0.012	N
13	El Camino Real/Serra Street-Park Drive	B-	18.7	0.536	24.5	B-	18.5	0.542	24.4	-0.1	0.006	N	C	26.5	0.727	31.6	C	26.4	0.743	31.6	0.0	0.016	N
14	El Camino Real/Stanford Avenue	C	23.8	0.540	17.9	C	23.5	0.557	17.7	-0.2	0.017	N	C	27.7	0.733	33.0	C	27.6	0.749	33.0	0.0	0.016	N
15	El Camino Real/California Avenue	C	25.8	0.698	28.0	C	25.8	0.716	28.1	0.1	0.018	N	C	28.1	0.756	29.7	C	28.1	0.773	29.8	0.1	0.017	N
16	El Camino Real/Page Mill Road-Oregon Expressway	E	66.6	1.032	82.9	E	71.7	1.058	91.0	8.1	0.026	Y	E	67.2	1.038	84.4	E	70.7	1.054	89.7	5.3	0.016	Y
17	Woodland Avenue/University Avenue	D	40.6	0.843	41.4	D	40.9	0.858	42.3	0.9	0.015	N	D-	51.6	0.962	66.7	D-	53.4	0.977	69.9	3.2	0.015	N
18	Middlefield Road/Willow Road	D+	36.4	0.657	40.3	D+	37.0	0.690	41.2	0.9	0.033	N	E	60.1	0.922	67.6	E	66.8	0.966	76.0	8.4	0.044	Y
19	Middlefield Road/Lytton Avenue	D	41.7	0.874	44.8	D	47.8	0.904	51.8	7.0	0.03	N	D-	54.5	0.955	60.1	E+	59.0	0.976	65.7	5.6	0.021	Y
20	Middlefield Road/University	C	28.7	0.608	31.0	C	28.9	0.618	31.2	0.2	0.01	N	C-	33.3	0.815	38.5	C-	33.8	0.830	39.5	1.0	0.015	N

**Revised Table 3.4-17 of Draft EIR  
(Revised Table 3-4 of Appendix C)  
LOS Comparison with SUMC only in 2025 – SUMC Only Project Impact**

Intersection	2025AM			2025AM+SUMC			Compare			2025PM			2025PM + SUMC			Compare						
	LOS	Avg Del	Crit V/C	Avg Crit Del	Avg Del	Crit V/C	Avg Crit Del	Δ Avg Crit	Δ V/C	Impact?	LOS	Avg Del	Crit V/C	Avg Crit Del	Avg Del	Crit V/C	Avg Crit Del	Δ Avg Crit	Δ V/C	Impact?		
		(Sec)		(sec)	(sec)		(sec)	Delay				(Sec)		(sec)	(Sec)		(sec)	Delay				
Avenue																						
21 Middlefield Road/Embarcadero Road	D	41.3	0.666	43.4	D	41.2	0.679	43.5	0.1	0.013	N	D+	38.8	0.672	41.2	D+	38.7	0.684	41.3	0.1	0.012	N
22 Alma Street/Churchill Avenue	C	23.5	0.773	30.1	C	23.9	0.787	20.5	-9.6	0.014	N	D+	36.0	0.930	45.3	D+	37.2	0.940	47.3	2.0	0.01	N
23 Junipero Serra Boulevard-Foothill Expressway/Page Mill Road	F	126.0	1.230	177.0	F	127.5	1.236	180.0	3.0	0.006	N	F	109.2	1.136	151.4	F	112.9	1.152	157.7	6.3	0.016	Y
24 Junipero Serra Boulevard/Stanford Avenue	B	14.2	0.721	20.6	B	14.8	0.752	21.7	1.1	0.031	N	C+	20.6	0.794	25.6	C+	21.5	0.805	26.3	0.7	0.011	N
25 Junipero Serra Boulevard/Campus Drive East	B	14.0	0.606	19.8	B	14.7	0.636	21.1	1.3	0.03	N	B	13.6	0.618	16.9	B	13.8	0.628	17.0	0.1	0.01	N
26 Junipero Serra Boulevard/Campus Drive West	D	50.8	0.687	62.3	D-	54.5	0.697	62.9	0.6	0.01	N	E-	79.8	0.995	103.8	F	83.9	1.005	108.2	4.4	0.01	Y
27 Junipero Serra Boulevard/Alpine Road-Santa Cruz Avenue	C-	32.2	0.902	36.5	C-	33.4	0.915	38.0	1.5	0.013	N	D	42.9	0.963	44.6	D	45.4	0.978	47.3	2.7	0.015	N
28 Sand Hill Cir- I-280/Sand Hill Road	D+	36.9	0.723	31.5	D+	38.6	0.744	33.0	1.5	0.021	N	C+	22.4	0.722	25.1	C+	22.7	0.743	25.6	0.5	0.021	N
29 Sharon Park Drive/Sand Hill Road	C	30.7	0.842	29.6	C	31.3	0.863	30.7	1.1	0.021	N	C	27.8	0.892	32.8	C	28.9	0.912	34.4	1.6	0.02	N
30 Santa Cruz Avenue/Sand Hill Road	D	46.2	1.067	72.2	D-	54.4	1.120	89.0	16.7	0.053	N	D	39.3	0.832	39.4	D	40.5	0.853	40.6	1.1	0.021	N
31 Oak Avenue/Sand Hill Road -Vine Street	A	7.9	0.702	9.1	A	8.1	0.735	9.3	0.3	0.033	N	A	7.9	0.847	9.8	A	8.8	0.878	11.1	1.3	0.031	N
32 Stock Farm Road/Sand Hill Road	B	17.0	0.627	19.6	B	17.4	0.652	20.3	0.7	0.025	N	C-	34.4	0.833	42.7	D	41.7	0.868	53.8	11.1	0.035	N
33 Pasteur Drive/Sand Hill Road	B-	18.5	0.585	20.0	C+	20.7	0.631	23.3	3.3	0.046	N	C	26.8	0.678	31.0	C	29.3	0.698	34.4	3.4	0.02	N
34 Arboretum Road/Sand Hill Road	C+	20.5	0.520	23.4	C+	22.2	0.591	26.1	2.7	0.071	N	C	30.6	0.689	39.4	C-	34.0	0.716	45.1	5.7	0.027	N
35 Arboretum Road/Quarry Road	C	31.6	0.517	32.3	C-	33.0	0.589	33.8	1.5	0.072	N	C	28.8	0.610	31.7	C	29.2	0.657	33.3	1.6	0.047	N
36 Arboretum Road/Palm Drive	C	24.6	0.856	30.5	C	28.7	0.907	37.4	6.9	0.051	N	C+	21.2	0.744	23.1	C+	22.2	0.766	24.3	1.2	0.022	N
37 Arboretum Road/Galvez Street/(unsignalized)	E	38.8	0.772	38.8	E	45.4	0.819	45.4	6.6	0.047	Y	F	230.5	1.463	230.5	F	263.1	1.543	263.1	32.6	0.08	Y
38 El Camino Real/Charleston Road	D-	53.1	0.877	55.3	D-	53.7	0.889	56.3	1.0	0.012	N	E	65.4	0.992	75.0	E	66.7	0.999	76.7	1.7	0.007	N
39 Alma Street/Charleston Road	E+	55.8	0.965	62.0	E+	57.7	0.976	64.6	2.6	0.011	N	E-	76.2	1.055	87.8	E-	78.8	1.065	91.3	3.5	0.01	N
40 Middlefield Road/Charleston Road	D	46.6	0.828	49.4	D	46.7	0.830	49.5	0.1	0.002	N	D	47.5	0.848	51.5	D	47.7	0.850	51.7	0.2	0.002	N

**Revised Table 3.4-17 of Draft EIR  
(Revised Table 3-4 of Appendix C)  
LOS Comparison with SUMC only in 2025 – SUMC Only Project Impact**

Intersection	2025AM			2025AM+SUMC			Compare			2025PM			2025PM + SUMC			Compare						
	LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	Δ Avg Crit Delay	Δ V/C Crit	Impact?	LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)	Δ Avg Crit Delay	Δ V/C Crit	Impact?	
41 Middlefield Road/Hamilton Avenue	B	17.0	0.508	17.9	B	17.9	0.532	19.0	1.1	0.024	N	B-	18.7	0.431	19.3	B-	19.2	0.453	19.8	0.5	0.022	N
42 Alma Street/Hamilton Avenue	B	14.3	0.590	16.1	B	15.6	0.618	17.5	1.4	0.028	N	C+	20.6	0.694	22.4	C+	21.1	0.703	22.8	0.4	0.009	N
43 University Drive/Santa Cruz Avenue	C+	22.8	0.612	30.0	C	23.0	0.617	30.2	0.2	0.005	N	C	29.5	0.718	37.3	C	29.6	0.723	37.5	0.2	0.005	N
44 El Camino Real/Oak Grove Avenue	C	26.8	0.655	25.7	C	26.7	0.683	25.6	-0.1	0.028	N	C	30.8	0.745	29.9	C	30.9	0.771	30.3	0.4	0.026	N
45 Middlefield Road/Ringwood Avenue	C	30.4	0.704	34.0	C	30.4	0.707	34.1	0.1	0.003	N	C-	33.8	0.868	43.6	C-	33.9	0.870	43.9	0.3	0.002	N
46 Middlefield Road/Ravenswood Avenue	C	30.6	0.865	41.6	C-	32.1	0.880	43.5	1.9	0.015	N	D-	54.1	1.008	73.4	E+	57.1	1.022	77.2	3.8	0.014	Y
47 El Camino Real/Encinal Road	B	17.8	0.658	15.8	B	17.7	0.680	15.9	0.1	0.022	N	B-	18.7	0.686	20.9	B-	18.6	0.706	20.9	0.0	0.02	N
48 Bay Road/Marsh Road	B	13.3	0.606	14.9	B	13.3	0.614	14.9	0.0	0.008	N	B	12.6	0.537	13.9	B	12.6	0.545	13.9	0.0	0.008	N
49 Marsh Road/US 101 SB Off-Ramp	C+	22.7	0.885	27.7	C	23.6	0.901	29.4	1.7	0.016	N	C	27.6	0.939	31.2	C	28.2	0.945	32.3	1.1	0.006	N
50 Marsh Road/US 101 NB Off-Ramp	B	15.1	0.612	16.0	B	15.1	0.612	16.0	0.0	0	N	C+	21.3	0.932	25.0	C+	21.3	0.932	25.0	0.0	0	N
51 Bay Road/Willow Road	B-	18.8	0.648	23.0	B-	18.6	0.666	23.0	0.0	0.018	N	B	17.5	0.619	21.2	B	17.8	0.670	16.8	-4.4	0.051	N
52 Bayfront Expressway/Willow Road	D	42.5	0.969	65.3	D	43.6	0.981	67.9	2.6	0.012	N	F	115.6	1.221	147.7	F	119.2	1.232	152.3	4.6	0.011	Y
53 University Avenue/Bayfront Expressway	D	43.5	1.057	86.8	D	44.6	1.064	89.3	2.5	0.007	N	F	104.6	1.167	120.8	F	107.7	1.176	124.5	3.7	0.009	Y
54 Bay Road/University Avenue	D+	38.8	0.836	43.7	D+	38.9	0.840	43.9	0.2	0.004	N	F	96.1	1.166	129.2	F	97.1	1.170	130.6	1.4	0.004	N
55 Donohoe Street/University Avenue	E	73.9	1.018	81.6	E	74.9	1.022	82.9	1.3	0.004	N	D	43.0	0.899	51.4	D	43.0	0.899	51.4	0.0	0	N
56 Welch Road/Quarry Road	C+	20.9	0.558	24.1	C	24.1	0.645	29.4	5.3	0.087	N	C+	21.4	0.541	23.1	C	25.1	0.614	30.0	6.9	0.073	N
57 Durand Way/Sand Hill Road	B	12.1	0.662	10.4	B	13.4	0.698	12.5	2.1	0.036	N	B-	19.5	0.617	19.4	C+	20.1	0.648	20.2	0.8	0.031	N
58 Pasteur Drive NB/Welch Road	A	8.8	0.354	10.3	A	8.9	0.385	10.4	0.1	0.031	N	B+	10.5	0.433	10.9	B+	10.7	0.464	10.9	0.0	0.031	N
59 Pasteur Drive SB/Welch Road	B+	10.1	0.310	10.1	B+	10.3	0.363	10.4	0.3	0.053	N	A	8.5	0.272	9.0	A	8.7	0.303	9.2	0.2	0.031	N
60 Durand Way Extension/Welch Road	C-	32.5	0.732	37.9	D+	37.6	0.772	45.9	8.0	0.04	N	C	26.8	0.631	26.4	C	28.7	0.660	27.9	1.5	0.029	N
61 Bowdoin Street/Stanford Road/(unsignalized)	C	23.5	0.887	23.5	C	23.7	0.889	23.7	0.2	0.002	N	D	31.4	0.921	31.4	D	31.8	0.923	31.8	0.4	0.002	N

**Revised Table 3.4-17 of Draft EIR  
(Revised Table 3-4 of Appendix C)  
LOS Comparison with SUMC only in 2025 – SUMC Only Project Impact**

Intersection	2025AM			2025AM+SUMC			Compare			2025PM			2025PM + SUMC			Compare						
	LOS	Avg Del	Crit V/C	Avg Del	Crit V/C	Δ	Impact?	LOS	Avg Del	Crit V/C	Δ	LOS	Avg Del	Crit V/C	Δ	Impact?						
		(Sec)	(sec)	(sec)	Delay	(Sec)			(Sec)	(Sec)	(Sec)		(Sec)	(Sec)	(Sec)		(Sec)	(Sec)	(Sec)	Delay		
62 Alpine Road/I-280 NB Off-Ramp (unsignalized)	F	323.6	2.474	323.6	F	335.5	2.524	335.5	11.9	0.05	Y	F	205.7	1.789	205.7	F	215.8	1.830	215.8	10.1	0.041	Y
63 Alpine Road/I-280 SB Off-Ramp (unsignalized)	F	273.7	1.705	273.7	F	277.3	1.719	277.3	3.6	0.014	N	C	24.7	0.558	24.7	D	25.1	0.563	25.1	0.4	0.005	N
64 Page Mill/I-280 NB Off-Ramp/(unsignalized)	E	44.6	0.632	44.6	E	45.5	0.639	45.5	0.9	0.007	N	C	16.1	0.276	16.1	C	16.1	0.276	16.1	0.0	0	N
65 Page Mill Road/I-280 SB Off-Ramp (unsignalized)	F	122.6	1.386	122.6	F	123.5	1.387	123.5	0.9	0.001	N	F	100.9	1.497	100.9	F	101.9	1.503	101.9	1.0	0.006	N
66 Foothill Expressway/Arastradero Road	F	105.8	0.743	185.0	F	105.1	0.745	184.2	-0.8	0.002	N	F	97.0	0.811	140.0	F	96.7	0.814	139.5	-0.5	0.003	N
67 Middlefield Road/Oregon Expressway	E	61.5	0.856	67.8	E	62.2	0.867	68.7	0.9	0.011	N	E-	77.9	0.992	90.7	E-	79.5	1.002	93.3	2.6	0.01	N
68 Durham Street/Willow Road	B	15.6	0.674	16.7	B	15.8	0.711	17.4	0.7	0.037	N	B	15.3	0.703	16.0	B	15.3	0.716	16.3	0.3	0.013	N
69 Middlefield Road/Marsh Road	C	31.9	0.882	48.3	C-	33.2	0.899	50.4	2.1	0.017	N	D	43.0	0.978	70.4	D	44.1	0.987	72.7	2.3	0.009	N
70 Newbridge Street/Willow Road	D	40.9	0.777	46.3	D	41	0.787	46.4	0.1	0.01	N	D	42.6	0.813	53.9	D	42.7	0.817	54.1	0.2	0.004	N
71 West Bayshore Road/Embarcadero Road (unsignalized)	F	1128.8	4.017	1128.8	F	1200.9	4.228	1200.9	72.1	0.211	N	F	594.7	2.024	594.7	F	626.8	2.102	626.8	32.1	0.078	N

Source: AECOM Transportation, 2010.

Note: Shading indicates intersection operating at LOS E or F.



**Revised Table 3.4-15 of Draft EIR  
(Revised Table 3-6 of Draft EIR Appendix C)  
2025 No Project Freeway LOS**

		Direction	No. of Mixed Lanes	Peak Period	Volume (pc/hr)	LOS
<i>U.S. 101 Segment</i>						
<u>1</u>	Marsh Road to Woodside Road	<u>NB</u>	4	<u>AM</u> <u>PM</u>	<u>5940</u> <u>5730</u>	<u>F</u> <u>F</u>
<u>2</u>	Woodside Road to Marsh Road	<u>SB</u>	3	<u>AM</u> <u>PM</u>	<u>5430</u> <u>4380</u>	<u>F</u> <u>F</u>
<u>13</u>	University Avenue to Willow Road	NB	3	AM PM	6660 6000	F F
<u>24</u>	University Avenue to Willow Road	SB	3	AM PM	5580 4530	F F
<u>35</u>	University Avenue to Embarcadero/Oregon E' way	NB	3	AM PM	5910 5540	F F
<u>46</u>	University Avenue to Embarcadero/Oregon E' way	SB	3	AM PM	5170 4210	F F
<u>57</u>	Embarcadero/Oregon Expressway to San Antonio Road	NB	3	AM PM	7610 6030	F F
<u>68</u>	Embarcadero/Oregon Expressway to San Antonio Road	SB	3	AM PM	6510 5720	F F
<i>I-280 Segment</i>						
1	Sand Hill Road to Woodside Road	NB	4	AM PM	6310 8790	D E
2	Sand Hill Road to Woodside Road	SB	4	AM PM	9430 6210	F D
3	Alpine Road to Page Mill Road	NB	4	AM PM	7350 8220	D D
4	Alpine Road to Page Mill Road	SB	4	AM PM	8920 7030	E D
5	Page Mill Road to El Monte Avenue	NB	4	AM PM	9660 7450	F D
6	Page Mill Road to El Monte Avenue	SB	4	AM PM	7100 8480	D E

Source: AECOM Transportation, 2010.



**Revised Table 3.4-18 of Draft EIR  
(Revised Table 4-4 of Draft EIR Appendix C)  
Intersection Improvements**

#	Intersection	Peak Hour	Jurisdiction	Roadway Mitigation	Feasible?
37	Arboretum Road/Galvez Street	AM/ PM	PA	Signalize the intersection. Signalization of this intersection is feasible. Traffic signal warrants are met. This mitigation measure was previously identified in the Sand Hill Road EIR and was also assumed as an improvement in the Cancer Center EIR.	Yes
52	Bayfront Expressway/ Willow Road	PM	Caltrans	<p>Under Menlo Park's 2009 Transportation Impact Fee Study Report, the proposed improvement is to provide one more right-turn lane for eastbound Willow Road.</p> <p>The intersection has signals for the right-turn movement for southbound Bayfront but the 'overlap' phase is not implemented. The SUMC Project TIA recommends making the right-turn movement for southbound Bayfront Expressway 'overlap' with the left-turn of eastbound Willow Road to further improve the intersection performance. However, the SUMC Project impact can be mitigated with only the additional eastbound right-turn lane provision. Implementation of both measures is physically possible.</p> <p>This intersection is located in Menlo Park. Changes to the traffic signal would require consent from Caltrans and Menlo Park. This mitigation is considered feasible as Caltrans is likely to accept the proposal.</p>	Yes
53	University Avenue/ Bayfront Expressway	PM	Caltrans	<p>Under Menlo Park's 2009 Transportation Impact Fee Study Report, the proposed improvements are: Widen southbound Bayfront Expressway to include an additional through lane and re-stripe the exclusive right turn lane to a shared through right turn lane. As a result, two additional receiving lanes in the southbound direction on Bayfront Expressway would be needed.</p> <p>This intersection is located in Menlo Park. Changes to the traffic signal would require consent from Caltrans and Menlo Park. This mitigation is considered feasible as Caltrans is likely to accept the proposal.</p>	Yes

Source: AECOM Transportation, 2010.

## **Staff-Initiated Change 3: Changes to Analysis of Cumulative Health Risk from Toxic Air Contaminants (TACs)**

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### **Introduction**

Staff-Initiated Change 3 addresses Comments 7.34, 22.43, and CC3.1.

Section 3.5, Air Quality, of the Draft EIR provides a qualitative analysis of cumulative emissions of toxic air contaminants (TACs) under Impact AQ-8. Staff-Initiated Change 3 provides a quantified health risk analysis for the cumulative scenario. This analysis replaces the qualitative cumulative analysis under Impact AQ-8 on pages 3.5-26 through 3.5-27 of the Draft EIR. Please refer to Appendix U of this document for complete analysis of cumulative health risks from TACs and fine particulate matter associated with the SUMC Project.

### **Quantified Analysis of Cumulative Health Risk from Toxic Air Contaminants**

**Previous Cumulative Analysis Health Risk from Toxic Air Contaminants.** When the SUMC Project's Notice of Preparation (NOP) was released and the Draft EIR was circulated, the Bay Area Air Quality Management District (BAAQMD) provided methodology and significance criteria for the environmental analysis of development projects in the document *California Environmental Quality Act Guidelines* (CEQA Guidelines), which it had adopted in December 1999 and had not been revised. The 1999 CEQA Guidelines made the following recommendation (on page 19) with respect to the analysis of cumulative air quality impacts from Bay Area projects and the significance findings from such analysis:

In a jurisdiction with a general plan consistent with the Clean Air Plan, a project may be proposed that is not consistent with that general plan because it requires a general plan amendment (GPA). In such instances, the cumulative impact analysis should consider the difference(s) between the project and the original (pre-GPA) land use designation for the site with respect to motor vehicle use and potential land use conflicts. A project would not have a significant cumulative impact if: vehicle miles traveled (VMT) from the project would not be greater than the VMT that would be anticipated under the original land use designation, and 2) the project would not result in sensitive receptors being in close proximity to sources of objectionable odors, toxics or accidental releases of hazardous materials.

The cumulative air quality analysis contained in the Draft EIR relied on the recommendations of the 1999 CEQA Guidelines for its methodology and significance criteria. Aspects of the 1999 CEQA Guidelines motivating the Draft EIR's finding that the SUMC Project's cumulative TAC impacts were significant and unavoidable include the following:

- The SUMC Project would require a General Plan Amendment and zoning change to proceed. Further, the Draft EIR found that there would be a net increase in VMT from the more intensive development proposed for the SUMC Sites, and the air quality analysis found that the

net criteria air pollutant emissions for the SUMC Project would exceed BAAQMD thresholds for ozone precursors and particulate matter.

- The SUMC Project would include new TAC sources, new on-site TAC-sensitive receptors, and contain design features that could affect the TAC exposures of existing and future off-site sensitive receptors.

In addition, other more recent findings were taken into account in arriving at the Draft EIR's significant and unavoidable finding, specifically:

- BAAQMD TAC risk modeling studies, conducted after the adoption of the 1999 CEQA Guidelines, found that the Bay Area's highest TAC emissions occur in certain urban core areas, including eastern San Mateo County, specifically in the communities of Redwood City and East Palo Alto. Consequently, health risks in Palo Alto are likely to be substantially higher than the Bay Area average (e.g., a median cancer risk of 500 to 700 in a million, compared with the 1999 CEQA Guidelines 10 in a million significance threshold for development projects undergoing CEQA analysis).
- Although reduction in TAC emissions has been given priority by federal, State, and local agencies, and regulations are in place to bring about substantial reductions over the next 5 or 10 years, there is still no regional plan in place to reduce the Bay Area's TAC health risk to acceptable levels within a foreseeable time frame.
- The Health Risk Assessment performed for the SUMC Project (Appendix F of the Draft EIR) found that TACs from SUMC Project construction and operational sources would not exceed the project-level significance thresholds established by the 1999 CEQA Guidelines (i.e., a cancer risk of 10 in a million and a non-cancer chronic hazard index of 1.0), but SUMC Project construction-related cancer risk to off-site maximally exposed residential receptors would be very close to the cancer risk threshold (i.e., 9.6 in a million, compared to the 10 in a million threshold).

The SUMC Project would introduce new TAC sources to the SUMC Sites and the vicinity, while Palo Alto already has high TAC background concentrations due to regional TAC sources. In addition, the closeness of the SUMC Project's incremental cancer risk is close to the BAAQMD threshold and the SUMC Project is the largest project on the list of cumulative projects expected to be developed in the City of Palo Alto. As such, there is ample justification, in the absence of other more specific quantitative methodology and criteria in the 1999 CEQA Guidelines, for regarding SUMC Project TAC emissions as making a "cumulatively considerable" contribution to the high background TAC risk (i.e., greater than 700 in a million) that affects Palo Alto now and into the foreseeable future. Thus, the Draft EIR concludes that the SUMC Project's cumulative TAC impacts would be significant and unavoidable.

**Revised Cumulative Analysis Health Risk from Toxic Air Contaminants.** On June 2, 2010, the BAAQMD adopted a revised version of its CEQA Guidelines. The resolution approving the new guidelines states that the 2010 BAAQMD CEQA Guidelines apply only to projects with NOPs issued and environmental analyses begun on or after the date of adoption. In addition, at the December 10,

2010 Board meeting, the BAAQMD revised the effective dates for the risk and hazards thresholds for new receptors from January 1, 2011 to May 1, 2011. Although the 2010 BAAQMD CEQA Guidelines have not been generally applied to the SUMC Project, as a conservative measure, the City of Palo has requested that a cumulative TAC analysis be completed for the SUMC Project using the methodology and thresholds established by the revised CEQA Guidelines. A summary of the methodology and thresholds established by the 2010 BAAQMD CEQA Guidelines and the findings of the SUMC Project cumulative TAC analysis are presented below.

The 2010 BAAQMD CEQA Guidelines methodology recommends evaluation of cumulative TAC and fine particulate matter impacts at sensitive receptors within a “zone of influence” extending 1,000 feet from the property line of a development project site and including the effects of all substantial TAC and fine particulate matter sources within this zone of influence. The SUMC Project cumulative analysis estimated the excess lifetime cancer risks, the non-cancer hazard indices (HIs), and the PM<sub>2.5</sub> concentrations at sensitive receptor locations that are attributable to mobile sources (i.e., surface streets with traffic exceeding 10,000 vehicles per day, including El Camino Real, Sand Hill Road, Quarry Road, Campus Drive, and Welch Road) and stationary sources (i.e., existing and proposed diesel generators, truck loading docks, the Cardinal Cogen power plant, and two gas-dispensing facilities) within the zone of influence around the SUMC Sites. Such risk and hazard estimates were obtained using air dispersion models approved by the EPA and recommended by the BAAQMD (i.e., CAL3QHCR for mobile sources, and AERMOD for stationary sources). Consistent with the BAAQMD’s definition of a sensitive receptor, cumulative impacts were evaluated for patients at the new SHC and Lucile Packard Children’s Hospital (LPCH) Hospital buildings, and at the location of the maximally exposed off-site residential receptor (MEIR) identified in the cumulative health risk analysis for the SUMC Project (Appendix U of this document). The results of the cumulative analysis were compared with the following cumulative significance thresholds as identified in the 2010 BAAQMD CEQA Guidelines:

- An excess lifetime cancer risk of more than 100 in one million;
- A chronic non-cancer HI greater than 10.0; and
- An incremental increase in the annual average PM<sub>2.5</sub> of 0.8 µg/m<sup>3</sup> or greater.

Estimates for project-level construction and operational TAC impacts are available from the SUMC Project Health Risk Assessment (Appendix F of the Draft EIR) where their significance was assessed according to the following significance thresholds:

- An excess lifetime cancer risk of more than 10 in one million; and
- A chronic non-cancer HI greater than 1.0.

As presented in Table 3.5-9 on page 3.5-23 of the Draft EIR, project-level cancer and non-cancer TAC impacts were found to be less than significant for maximally exposed on-site patient and worker receptors, and for off-site residential and other sensitive receptors. It is important to note that the 2010 BAAQMD CEQA Guidelines retained the same project-level cancer and chronic non-cancer significance thresholds as the 1999 CEQA Guidelines, but added a new 0.3 µg/m<sup>3</sup> project-level

threshold for PM<sub>2.5</sub>. The project-level TAC impacts of PM<sub>2.5</sub> were not assessed in the SUMC Project Health Risk Assessment, but PM<sub>2.5</sub> emissions from SUMC Project mobile and stationary sources were estimated, compared with 2010 BAAQMD CEQA Guidelines thresholds for criteria pollutants, and found to be less than significant in the Draft EIR.

The results of the cumulative analysis are listed separately by source in Table 3.5-11 in Draft EIR Text Revisions, and then totaled for all operational sources. Table 3.5-11 is a new table that was not included in the Draft EIR. Construction TAC emissions would not be individually significant (per Impact AQ-4 of the Draft EIR) and, if added to operational emissions, would not contribute to cumulative TAC levels exceeding BAAQMD thresholds. All cumulative estimates for cancer risk, chronic non-cancer HI, and annual average PM<sub>2.5</sub> concentration would be below the 2010 BAAQMD CEQA Guidelines cumulative significance thresholds for on-site patient receptors and maximally exposed off-site residential receptors within the zone of influence. Thus, the SUMC Project would have a less-than-significant cumulative impact related to TACs and fine particulate matter.

### Draft EIR Text Revisions

**Summary.** Table S-4 on pages S-50 and S-51 of the Draft EIR has been revised as follows.

**Table S-4  
SUMC Project Summary of Impacts and Mitigation Measures**

Impacts	Impact Significance Without Mitigation	Mitigation Measures	Impact Significance With Mitigation
<p>AQ-8. Cumulative Construction and Operational TAC and fine particulate matter Emissions. SUMC Project TAC and fine particulate matter emissions—could contribute considerably to the health risk of sensitive receptors on and near the SUMC Project site and, thus, have a significant cumulative impact, and TAC and fine particulate matter emissions from other sources within a 1,000-foot zone of influence of the Main SUMC Site, would have a less-than-significant cumulative impact on public health.</p>	<p><u>SLTS</u></p>	<p><del>MITIGATION MEASURE. Mitigation Measure AQ 1.2 (Implement Equipment Exhaust Emission Reduction Measures) has been identified primarily to reduce construction phase criteria pollutant emissions, but it would also reduce Diesel Particulate Matter (DPM) emissions. However, the emissions of criteria and DPM emissions from project construction sources were based on current best estimates of the type, number, and duration of use of the SUMC Project construction equipment. While some additional reductions of Toxic Air Contaminants (TACs) would be expected with Mitigation Measure AQ 1.2, where their implementation is feasible, their potential additional reductions were not included in the SUMC Project's DPM estimates that were the basis of the Health Risk Assessment. However, it is not likely that the additional reductions in SUMC Project TAC emissions resulting from their implementation would reduce the SUMC Project health risk to the point where it would not be cumulatively considerable in the context of Palo Alto's high TAC background levels. Thus, SUMC Project TAC emissions would remain cumulatively significant even after the implementation of all feasible TAC reduction measures.</del></p> <p><u>None required.</u></p>	<p><u>SU N/A</u></p>

Draft EIR text on page S-93, fifth bullet, is deleted as follows:

- ~~Contribution to cumulative emissions of toxic air contaminants;~~

Table S-5 on page S-99 has been revised as follows:

Table S-5 Assessment of SUMC Project Alternatives (Compared to the SUMC Project)								
Impact	SUMC Project <sup>a</sup>	No Project Alternative A	No Project Alternative B	Reduced Intensity Alternative A	Reduced Intensity Alternative B	Tree Preservation Alternative	Historic Preservation Alternative	Village Concept Alternative
<b>Air Quality</b>								
Cumulative Impacts	S/SU	<del>S/SU</del> <u>SLTS</u>	S/SU	S/SU	S/SU	S/SU	S/SU	S/SU

**Section 3.5, Air Quality.** Draft EIR text on page 3.5-26, fourth paragraph, has been revised as follows:

*AQ-8. Cumulative Construction and Operational TAC and Fine Particulate Matter Emissions. SUMC Project TAC and fine particulate matter emissions could contribute considerably to the health risk of sensitive receptors on and near the SUMC Project site and, thus, have a significant cumulative impact. , and TAC and fine particulate matter emissions from other sources within a 1,000-foot zone of influence of the Main SUMC Site, would have a less-than-significant cumulative impact on public health. (SLTS)*

Draft EIR text starting on page 3.5-26, last paragraph, and continuing on page 3.5-27 has been revised as follows:

~~Under the Community Air Risk Evaluation (CARE) program, the BAAQMD identified communities in the Bay Area subject to high TAC emissions, with sensitive populations that could be affected by them. During Phase I of CARE, the BAAQMD developed a preliminary Bay Area wide TAC emissions inventory (for the Year 2000) and compiled demographic and health statistics data to identify sensitive populations. Five TACs (i.e., DPM, 1,3 butadiene, benzene, hexavalent chromium, and formaldehyde) were estimated to be responsible for about 97 percent of the Bay Area's cumulative cancer risk, with DPM alone accounting for about 80 percent of this risk. The major sources of DPM were identified as on road and off road heavy duty diesel trucks and construction equipment. BAAQMD risk modeling studies indicate that exposure to DPM results in a Bay Area average cancer risk of 500-700 in a million. However, the Bay Area's highest DPM emissions were found to occur in the urban core areas of eastern San Francisco, western Alameda, central Santa Clara, and eastern San Mateo Counties (the latter including Redwood City and East Palo Alto), where cancer risks were found to be substantially higher than the regional average.~~



~~The Health Risk Assessment conducted for the SUMC Project found that DPM from project construction equipment would be the main TAC emitted. But it also evaluated operational DPM emissions from the facility's emergency generators and delivery trucks and determined health risks from both source categories. The health risks from both the SUMC Project's construction and operational sources were found to be less than the BAAQMD's TAC exposure significance threshold (i.e., 10 chances in a million of contracting cancer over a lifetime exposure). However, the SUMC Sites are adjacent to a BAAQMD identified CARE "Priority Community," where the background DPM cancer risk is likely substantially greater than the Bay Area average 500 to 700 in a million. Although reduction in DPM from diesel engines has been given priority by federal, State, and local agencies, and regulations are in place to bring about substantial reduction of DPM from diesel engines over time, there is still no regional modeling study that predicts when remediation can be expected of the Bay Area's elevated DPM health risk identified in the CARE studies. Furthermore, the SUMC Project is the largest project compared to the list of cumulative projects expected to be developed in the City of Palo Alto (see Appendix B). Consequently, SUMC Project TAC emissions must be considered cumulatively considerable even though the health risk they pose to the local population is relatively small (i.e., 10 in a million) in comparison to the background TAC risk (i.e., greater than 700 in a million) that affects Palo Alto and environs.~~

~~MITIGATION MEASURE. Mitigation Measure AQ 1.2 (Implement Equipment Exhaust Emission Reduction Measures) has been identified primarily to reduce construction phase criteria pollutant emissions, but it would also reduce DPM emissions. However, the emissions of criteria and DPM emissions from project construction sources were based on current best estimates of the type, number, and duration of use of the SUMC Project construction equipment. While some additional reductions of TACs would be expected with Mitigation Measure AQ 1.2, where their implementation is feasible, their potential additional reductions were not included in the SUMC Project's DPM estimates that were the basis of the Health Risk Assessment. However, it is not likely that the additional reductions in SUMC Project TAC emissions resulting from their implementation would reduce the SUMC Project health risk to the point where it would not be cumulatively considerable in the context of Palo Alto's high TAC background levels. Thus, SUMC Project TAC emissions would remain cumulatively significant even after the implementation of all feasible TAC reduction measures. (SU)~~

The 2010 BAAQMD CEQA Guidelines methodology recommends evaluation of cumulative TAC and fine particulate matter impacts at sensitive receptors within a "zone of influence" extending 1,000 feet from the property line of a development project site and including the effects of all substantial TAC and fine particulate matter sources within this zone of influence. The SUMC Project cumulative analysis estimated excess the lifetime cancer risks, the non-cancer hazard indices (HIs), and the PM<sub>2.5</sub> concentrations at sensitive receptor locations that are attributable to mobile sources (i.e., surface streets with traffic exceeding 10,000 vehicles per day, including El Camino Real, Sand Hill Road, Quarry Road, Campus Drive, and Welch Road) and stationary sources (i.e., existing and proposed diesel generators, truck loading docks, the Cardinal Cogen power plant, and two gas-dispensing facilities) within the zone of

influence around the SUMC Sites. Such risk and hazard estimates were obtained using air dispersion models approved by the EPA and recommended by the BAAQMD (i.e., CAL3QHCR for mobile sources, and AERMOD for stationary sources). Consistent with the BAAQMD's definition of a sensitive receptor, cumulative impacts were evaluated for patients at the new SHC and LPCH hospital buildings, and at the location of the maximally exposed off-site residential receptor (MEIR) identified in the Health Risk Assessment for the SUMC Project. The results of the cumulative analysis were compared with the following cumulative significance thresholds identified in the 2010 BAAQMD CEQA Guidelines:

- An excess lifetime cancer risk of more than 100 in one million;
- A chronic non-cancer HI greater than 10.0; and
- An incremental increase in the annual average PM<sub>2.5</sub> of 0.8  $\mu$ g/m<sup>3</sup> or greater.

Estimates for project-level construction and operational TAC impacts are available from the SUMC Project Health Risk Assessment where their significance was assessed according to the following significance thresholds:

- An excess lifetime cancer risk of more than 10 in one million; and
- A chronic non-cancer HI greater than 1.0.

As presented in Table 3.5-9, project-level cancer and non-cancer TAC impacts were found to be less than significant for maximally exposed on-site patient and worker receptors, and for off-site residential and other sensitive receptors.

The results of the cumulative analysis are listed separately by source and then totaled for all operational sources in Table 3.5-11. Construction TAC emissions were not found to be individually significant (per Impact AQ-4) and, if added to operational emissions, would not contribute to cumulative TAC levels exceeding BAAQMD thresholds. All cumulative estimates for cancer risk, chronic non-cancer HI and annual average PM<sub>2.5</sub> concentration would be below the 2010 BAAQMD CEQA Guidelines cumulative significance thresholds for on-site patient receptors and maximally exposed off-site residential receptors within the zone of influence. Thus, the SUMC Project would have a less-than-significant cumulative impact related to TACs and fine particulate matter BAAQMD 2010 CEQA Guidelines. (LTS)

Table 3.5-11 is a new table, which has been inserted as follows after the revised text on page 3.5-27 of the Draft EIR:

<b>Table 3.5-11</b>									
<b>Cumulative Impacts from the SUMC Project Sources and Other Sources within the Project Site</b>									
<b>Zone of Influence</b>									
<u>Modeled Source</u>	<u>Cancer Risk (per million)</u>			<u>Chronic Hazard Index</u>			<u>PM<sub>2.5</sub> Concentration (ug/m<sup>3</sup>)</u>		
	<u>SHC Patient</u>	<u>LPCH Patient</u>	<u>Offsite Resident</u>	<u>SHC Patient</u>	<u>LPCH Patient</u>	<u>Offsite Resident</u>	<u>SHC Patient</u>	<u>LPCH Patient</u>	<u>Offsite Resident</u>
<u>Project Diesel Generators</u>	<u>0.6</u>	<u>0.06</u>		<u>0.005</u>	<u>0.0001</u>		<u>0.03</u>	<u>0.0007</u>	
<u>Project Loading Docks</u>	<u>0.007</u>	<u>0.015</u>	<u>1.4<sup>a</sup></u>	<u>0.00006</u>	<u>0.00004</u>	<u>0.0005<sup>a</sup></u>	<u>0.0003</u>	<u>0.0002</u>	<u>0.0025</u>
<u>Existing Point Sources<sup>b</sup></u>	<u>0.2</u>	<u>0.0</u>	<u>2.6</u>	<u>0.002</u>	<u>0.002</u>	<u>0.001</u>	<u>0.008</u>	<u>0.006</u>	<u>0.005</u>
<u>Existing Loading Docks</u>	<u>0.1</u>	<u>0.2</u>	<u>7.1</u>	<u>0.0008</u>	<u>0.0006</u>	<u>0.003</u>	<u>0.004</u>	<u>0.003</u>	<u>0.01</u>
<u>Traffic</u>	<u>0.2</u>	<u>0.6</u>	<u>14.3</u>	<u>0.002</u>	<u>0.002</u>	<u>0.006</u>	<u>0.06</u>	<u>0.05</u>	<u>0.15</u>
<u>Gas Dispensing Facility</u>	<u>0.1</u>	<u>0.3</u>	<u>2.0</u>	<u>0.002</u>	<u>0.002</u>	<u>0.002</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b><u>Total Cumulative Sources</u></b>	<b><u>1.2</u></b>	<b><u>1.1</u></b>	<b><u>27.0</u></b>	<b><u>0.01</u></b>	<b><u>0.006</u></b>	<b><u>0.01</u></b>	<b><u>0.1</u></b>	<b><u>0.1</u></b>	<b><u>0.2</u></b>
<b><u>BAAQMD Cumulative CEQA Threshold</u></b>		<b><u>100</u></b>			<b><u>10</u></b>			<b><u>0.8</u></b>	
<b><u>Cumulative Impact?</u></b>	<b><u>No</u></b>	<b><u>No</u></b>	<b><u>No</u></b>	<b><u>No</u></b>	<b><u>No</u></b>	<b><u>No</u></b>	<b><u>No</u></b>	<b><u>No</u></b>	<b><u>No</u></b>

Source: Environ, January 2011.

Note:

- a. Only total risk, HI and PM<sub>2.5</sub> exposures from combined generator and loading dock sources were determined, not the individual contributions from each source type.
- b. Modeled sources include onsite and offsite diesel generators and the cogeneration power plant.

**Section 4, Other CEQA Considerations.** Draft EIR text on page 4-1, fifth bullet, is deleted as follows:

- ~~Contribution to cumulative emissions of toxic air contaminants;~~

**Section 5, Alternatives.** Draft EIR text on page 5-2, fifth bullet, is deleted as follows:

- ~~Contribution to cumulative emissions of toxic air contaminants;~~

Table 5-8 on page 5-52 has been revised as follows. Note that although the cumulative TAC impacts for the SUMC Project and its alternatives would have less-than-significant cumulative impacts, all alternatives except for No Project Alternative A would still have significant and unavoidable cumulative construction NOx emissions, as shown in the table below.

Impact	SUMC Project <sup>a</sup>	No Project Alternative A	No Project Alternative B	Reduced Intensity Alternative A	Reduced Intensity Alternative B	Tree Preservation Alternative	Historic Preservation Alternative	Village Concept Alternative
<b>Air Quality</b>								
Cumulative Impacts	S/SU	<del>S/SULTS</del>	S/SU	S/SU	S/SU	S/SU	S/SU	S/SU

Draft EIR text on page 5-58, third paragraph, for No Project Alternative A, has been revised as follows:

**Cumulative Impacts.** ~~The SUMC Project’s emissions of NOx during construction and of TACs during construction and operation were determined to have a cumulatively considerable contributions to significant cumulative impacts. Under No Project Alternative A, emissions of NOx during construction would likely not exceed the Bay Area Air Quality Management District’s (BAAQMD’s) 80 lbs/day threshold. However, the TACs emitted during construction, though likely posing a lesser health risk than those of the SUMC Project, would still make a cumulatively considerable contribution to the high TAC background levels of the area in which the SUMC Sites are located. Consequently, this alternative’s cumulative TAC impacts would be cumulatively significant. Mitigation Measure AQ 1.2 would help reduce TAC emissions from this alternative, but not to a less than considerable level. Consequently~~ Therefore, this alternative’s construction NOx emissions cumulative TAC impacts would be less than cumulatively significant. The TACs and fine particulate matter emitted during construction and operation, in combination with TACs and fine particulate matter emitted within the zone of influence for the SUMC Sites, would likely not exceed the cumulative significance thresholds of the 2010 BAAQMD CEQA Guidelines. (S/SULTS)

Draft EIR text on page 5-76, first paragraph, for No Project Alternative B, has been revised as follows:

**Cumulative Impacts.** ~~The SUMC Project’s emissions of NOx during construction and of TACs during construction and operation were identified as making cumulatively considerable contributions to significant cumulative impacts. Under No Project Alternative B, emissions of NOx during construction would also potentially exceed the BAAQMD’s 80 lbs/day threshold,~~

and could contribute to significant cumulative impacts. The TACs and fine particulate matter emitted during construction and operation, though likely posing a lesser health risk than those of the SUMC Project, would also make a cumulatively considerable contribution to the high TAC background levels of the area in which the SUMC Sites are located. in combination with TACs and fine particulate matter emitted within the zone of influence for the SUMC Sites, would likely not exceed the cumulative significance thresholds of the 2010 BAAQMD CEQA Guidelines. Consequently, this alternative's cumulative TAC and fine particulate matter impacts would be less than cumulatively significant. ~~The same construction period mitigation measure mentioned above would help reduce TAC emission from this alternative, but not to a less than considerable level. Consequently~~ Therefore, only this alternative's construction NOx emissions and cumulative TAC impacts would be cumulatively significant. (S/SU)

Draft EIR text on page 5-95, second full paragraph, for Reduced Intensity Alternative A, has been revised as follows:

**Cumulative Impacts.** ~~The SUMC Project's emissions of NOx during construction and of TACs during construction and operation were identified as making cumulatively considerable contributions to significant cumulative impacts. Under Reduced Intensity Alternative A, emissions of NOx during construction would also potentially exceed the BAAQMD's 80 lbs/day threshold, and could contribute to significant cumulative impacts. The TACs and fine particulate matter emitted during construction and operation, though likely posing a lesser health risk than those of the SUMC Project, would also make a cumulatively considerable contribution to the high TAC background levels of the area in which the SUMC Sites are located.~~ in combination with TACs and fine particulate matter emitted within the zone of influence for the SUMC Sites, would likely not exceed the cumulative significance thresholds of the 2010 BAAQMD CEQA Guidelines. Consequently, this alternative's cumulative TAC and fine particulate matter impacts would be less than cumulatively significant. ~~The same construction period Mitigation Measure AQ 1.2, mentioned above, would help reduce TAC emission from this alternative, but not to a less than considerable level. Consequently~~ Therefore, only this alternative's construction NOx emissions and cumulative TAC impacts would be cumulatively significant. (S/SU)

Draft EIR text on page 5-118, last paragraph, for Reduced Intensity Alternative B, has been revised as follows:

**Cumulative Impacts.** ~~The SUMC Project's emissions of NOx during construction and of TACs during construction and operation were identified as making cumulatively considerable contributions to significant cumulative impacts. Under Reduced Intensity Alternative B, emissions of NOx during construction would also potentially exceed the BAAQMD's 80 lbs/day threshold, and could contribute to significant cumulative impacts. The TACs and fine particulate matter emitted during construction and operation, though likely posing a lesser health risk than those of the SUMC Project, would also make a cumulatively considerable contribution to the high TAC background levels of the area in which the SUMC Sites are located.~~ in combination with TACs and fine particulate matter emitted within the zone of

influence for the SUMC Sites, would likely not exceed the cumulative significance thresholds of the 2010 BAAQMD CEQA Guidelines. Consequently, this alternative's cumulative TAC and fine particulate matter impacts would be less than cumulatively significant. ~~The same construction period Mitigation Measure AQ 1.2, mentioned above, would help reduce TAC emission from this alternative, but not to a less than considerable level. Consequently~~ Therefore, only this alternative's construction NOx emissions ~~and cumulative TAC impacts~~ would be cumulatively significant. (S/SU)

Draft EIR text on page 5-146, second full paragraph, for the Tree Preservation Alternative, has been revised as follows. Please note that Table 5-11A, as provided below, is new and not included in the Draft EIR:

~~**Cumulative Impacts.** The SUMC Project's emissions of NOx during construction and of TACs during construction and operation were identified as making cumulatively considerable contributions to significant cumulative impacts. Under the Tree Preservation Alternative, emissions of NOx during construction would not potentially exceed the BAAQMD's 80 lbs/day threshold, but and could still contribute to significant cumulative impacts on future regional ozone levels. Similar to the SUMC Project, the TACs and fine particulate matter emitted during construction of the Tree Preservation Alternative would also make a cumulatively considerable contribution to the high TAC background levels of the area in which the SUMC Sites are located. and operation, in combination with TACs and fine particulate matter emitted within the zone of influence for the SUMC Sites, would not exceed the cumulative significance thresholds of the 2010 BAAQMD CEQA Guidelines, as demonstrated by the cumulative risk assessment shown in Table 5-11A. Consequently, this alternative's cumulative TAC and fine particulate matter impacts would be less than cumulatively significant. Mitigation Measure AQ 1.2 would help reduce TAC emission from this alternative, but not to a less than considerable level. Consequently~~ Therefore, only this alternative's construction NOx emissions ~~and cumulative TAC impacts~~ would be cumulatively significant. (S/SU)

- ~~• AQ 1.2: Implement Diesel Emission Reduction Measures~~

**Table 5-11A**  
**Cumulative Impacts from the Tree Preservation Alternative and Other Sources within the Project Site**  
**Zone of Influence**

Modeled Source	Cancer Risk (per million)			Chronic Hazard Index			PM <sub>2.5</sub> Concentration (ug/m <sup>3</sup> )		
	SHC Patient	LPCH Patient	Offsite Resident	SHC Patient	LPCH Patient	Offsite Resident	SHC Patient	LPCH Patient	Offsite Resident
Project Diesel Generators	0.06	0.07	1.0 <sup>a</sup>	0.0006	0.0002	0.0004 <sup>a</sup>	0.003	0.0009	0.002
Project Loading Docks	0.007	0.02		0.0	0.0		0.0	0.0	
Existing Point Sources <sup>b</sup>	0.2	0.4	2.8	0.002	0.002	0.0	0.008	0.006	0.005
Existing Loading Docks	0.1	0.2	7.0	0.0008	0.0006	0.003	0.004	0.003	0.01
Traffic	0.3	0.6	17.5	0.00	0.00	0.01	0.1	0.1	0.18
Gas Dispensing Facility	0.1	0.3	2.0	0.002	0.002	0.002	0	0	0
<b>Total Cumulative Sources</b>	<b>0.8</b>	<b>1.6</b>	<b>30.0</b>	<b>0.01</b>	<b>0.006</b>	<b>0.01</b>	<b>0.1</b>	<b>0.07</b>	<b>0.2</b>
<b>BAAQMD Cumulative CEQA Threshold</b>		<b>100</b>			<b>10</b>			<b>0.8</b>	
<b>Cumulative Impact?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Environ, January 2011.

Note:

- Only total risk, HI and PM<sub>2.5</sub> exposures from combined generator and loading dock sources were determined, not the individual contributions from each source type.
- Modeled sources include onsite and offsite diesel generators and the cogeneration power plant.

Draft EIR text on page 5-175, first full paragraph, for the Historic Preservation Alternative, has been revised as follows:

**Cumulative Impacts.** ~~The SUMC Project's emissions of NOx during construction and of TACs during construction and operation were identified as making cumulatively considerable contributions to significant cumulative impacts. Under the Historic Preservation Alternative, emissions of NOx during construction would also potentially exceed the BAAQMD's 80 lbs/day threshold, and could contribute to significant cumulative impacts. The TACs and fine particulate matter emitted during construction, though likely posing a lesser health risk than those of the SUMC Project, would also make a cumulatively considerable contribution to the high TAC background levels of the area in which the SUMC Sites are located. in combination with TACs and fine particulate matter emitted within the zone of influence for the SUMC Sites, would likely not exceed the cumulative significance thresholds of the 2010 BAAQMD CEQA Guidelines. Consequently, this alternative's cumulative TAC and fine particulate matter impacts would be less than cumulatively significant. The same construction period Mitigation Measure AQ 1.2, mentioned above, would help reduce TAC emission from this alternative, but not to a less than considerable level. Consequently Therefore, only this alternative's construction NOx emissions and cumulative TAC impacts would be cumulatively significant.~~ (S/SU)

Draft EIR text on page 5-206, first full paragraph, for the Village Concept Alternative, has been revised as follows:

~~Cumulative Impacts. The SUMC Project's emissions of NO<sub>x</sub> during construction and of TACs during construction and operation were identified as making cumulatively considerable contributions to significant cumulative impacts. Under the Village Concept Alternative, emissions of NO<sub>x</sub> during construction would also exceed the BAAQMD's 80 lbs/day threshold, and could contribute to significant cumulative impacts. and the TACs and fine particulate matter emitted during construction and operation, being the same as for the SUMC project, would make a cumulatively considerable contribution to the high TAC background levels of the area in which the SUMC Sites are located. The same construction period Mitigation Measure AQ 1.2, mentioned above, would help reduce TAC emission from this alternative, but not to a less than considerable level. Consequently, in combination with TACs and fine particulate matter emitted within the zone of influence for the SUMC Sites, would likely not exceed the cumulative significance thresholds of the 2010 BAAQMD CEQA Guidelines. Consequently, this alternative's cumulative TAC and fine particulate matter impacts would be less than cumulatively significant. Therefore, only this alternative's construction NO<sub>x</sub> emissions and cumulative TAC impacts would be cumulatively significant. (S/SU)~~

#### **Staff-Initiated Change 4: Changes to Calculation of Greenhouse Gas Emissions and Climate Change Analysis of the SUMC Project and its Alternatives**

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##### **Introduction**

Staff-Initiated Change 4 addresses Comments 8.36, 8.38, 9.9, 22.45, 22.46, 22.48, 22.53, 22.99, 22.100, 22.101, 22d.1, 22d.3, 22d.4, 22d.5, PTC3.37, PTC4.16, PTC4.23, PTC4.38, PTC4.40, PTC4.47, PTC4.50, PTC4.55, PTC4.57, PTC4.62, PTC4.63, PTC6.16, PTC6.21, PTC6.64, PTC6.73, PTC6.80, PTC6.83, PTC6.89, PTC6.93, CC3.20, and CC5.4.

Subsequent to the publication of the Draft EIR, the City identified several revisions with respect to the greenhouse gas emissions calculations and climate change analysis of the SUMC Project and its alternatives. In addition to the revisions below, greenhouse gas calculation revisions are provided as Appendix V of this document. The following discussion of this staff-initiated change is summarized by major revision topic, as outlined below:

- *Patient and Visitor Trips.* The analysis of the greenhouse gas emissions has been revised to omit visitor and patient vehicle trip emissions from the comparison of SUMC Project-generated emissions to a Business as Usual (BAU) scenario. This information continues to be provided for full disclosure of all activities. However, it is not relevant to the BAU comparison because patients would be expected to seek medical treatment whether or not the SUMC facilities are expanded.



- *State-Adopted AB 32 Scoping Plan Measures.* The analysis of the emissions inventory for the SUMC Project now includes the AB 32 Scoping Plan Measures that are currently mandated by regulation.
- *Reduced Emissions from the Central Energy Plant.* Since energy-savings components of the SUMC Project would reduce the amount of chilled water and steam needed for the Hospitals, the revised analysis reduces emissions calculations from the Central Energy Plant.
- *Energy Efficiency Rating of the SUMC Project.* The analysis has been revised to include a 30 percent energy efficiency rating of the Hospital facilities under the SUMC Project.
- *Other Corrections and/or Text Changes in the Analysis.* This portion of Staff-Initiated Change 4 includes text changes to address the inconsistencies and minor errors in the Draft EIR analysis.
- *Adjustments to Alternatives.* The alternatives presented in Section 5 of the Draft EIR have also been revised to reflect the edits above.

## **Patient and Visitor Trips**

Patients and visitors are a function of need rather than a function of the SUMC Project. Even if the SUMC Project is not implemented, the patients and visitors would need to go to another facility. The emissions from the travel of patients and visitors would occur with or without the SUMC Project. According to the Stanford EIR – Revised VMT Calculation for SUMC Memo by AECOM dated January 20, 2011 (Appendix W of this document), the patients and visitors account for 60 percent and the employees account for 40 percent of the daily vehicle trips to the Hospitals.<sup>5</sup> The average daily miles per trip are 31.8 and 20.8 for patients/visitors and employees, respectively. Taking into account the difference in average trip lengths, employees account for 30.36 percent of the total vehicle miles traveled (VMT). For purposes of comparing SUMC Project greenhouse gas emissions to a BAU scenario, patient and visitor trips have been removed from the analysis.

The transportation demand management (TDM) measures that are part of the SUMC Project and that have been identified as mitigation would reduce the employee trips. While the transit orientation of the SUMC Project and shuttles may help to reduce visitor trips, the SUMC Project cannot dictate how patients or visitors reach the Hospitals. Particular to patient trips, health and safety issues are a priority over trip reductions. Therefore, it is not assumed that implementation of TDM would significantly reduce vehicle trips of patients and visitors.

## **State Adopted AB 32 Scoping Plan Measures**

The measures within the AB 32 Scoping Plan are necessary for the reduction of State emissions to reach the 30 percent below BAU reduction target. These staff-initiated revisions have been implemented to account for the reductions afforded by State measures that have been mandated since

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<sup>5</sup> Dennis Struecker, P.E., and Nichole Seow, AECOM Transportation, Memorandum to Trixie Martelino, Stanford EIR - Revised VMT Calculation for SUMC, January 20, 2011.

adoption of AB 32. The measures are taken into account in the BAU comparison by applying them to the reduced emissions scenarios. The State Measures that have been mandated since adoption of AB 32, and their afforded reductions, include:

- AB 1109 Energy Efficiency Light Standard (37 percent of non-residential electrical usage is from lighting and AB 1109 reduces energy usage from lighting by 25 percent).
- Updated Title 24 Standards (for medical office buildings only, energy efficiency is increased to 15 percent beyond 2004 Title 24 requirements).
- Increased efficiency of combined heat and power facilities (increases energy efficiency for electricity and natural gas usage by 7.6 percent).
- Vehicle Reductions are shown in Table 3.2-7 by year and vehicle class. Vehicle classes are: LDA – Light duty automobile, LDT1 – light duty trucks <3,750 lbs, LDT2 – light duty trucks 3,751 lbs to 5,750 lbs; MDT – medium duty trucks; and HD – heavy duty trucks.

**Table 3.2-7  
Vehicle Reductions for Year 2025 and 2015**

State Measure	LDA	LDT1	LDT2	MDT	HD	Bus	Motor cycle	Motor home
<b>2025 (Percent)</b>								
Pavley I & II Reduction	26.87	24.86	17.60	17.42	0.00	0.00	0.00	0.00
Executive Order S-1097 Low Carbon Fuel Standard	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20
Tire Pressure Program	6.90	6.90	6.90	0.00	0.00	0.00	6.90	0.00
Low Rolling Resistance Tires	0.30	0.30	0.30	0.00	0.00	0.00	0.30	0.00
Low Friction Engine Oils	1.70	1.70	1.70	0.00	0.00	0.00	1.70	0.00
Cool Paints/Reflective Glazing on Vehicles	0.60	0.60	0.60	0.00	0.00	0.00	0.60	0.00
Goods Movement Efficiency Standard	0.00	0.00	0.00	1.60	1.60	0.00	0.00	0.00
<b>2015 (Percent)</b>								
Pavley I & II Reduction	10.74	9.38	6.54	6.17	0.00	0.00	0.00	0.00
Executive Order S-1097 Low Carbon Fuel Standard	3.60	3.60	3.60	3.60	3.60	3.60	3.60	3.60
Tire Pressure Program	3.45	3.45	3.45	0.00	0.00	0.00	3.45	0.00
Low Rolling Resistance Tires	0.15	0.15	0.15	0.00	0.00	0.00	0.15	0.00
Low Friction Engine Oils	0.85	0.85	0.85	0.00	0.00	0.00	0.85	0.00
Cool Paints/Reflective Glazing on Vehicles	0.30	0.30	0.30	0.00	0.00	0.00	0.30	0.00
Goods Movement Efficiency Standard	0.00	0.00	0.00	0.80	0.80	0.00	0.00	0.00

*Sources:*

BAAQMD: Bay Area Air Quality Management District Greenhouse Gas Model (BGM Version 1.1.9 Beta ), 2010.

CARB: Climate change proposed scoping plan. Volume 2: analysis and documentation. December 12, 2008. Accessed November 2010 <http://www.arb.ca.gov/cc/scopingplan/document/appendix2.pdf>;

CARB: Greenhouse Gas Inventory Data – 2020 Forecast. Accessed November 2010. <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

## **Reduced Emissions from the Central Energy Plant**

The increase in energy efficiency with the energy conservation measures included in the SUMC Project would in turn reduce the amount of steam and chilled water required for the operation of the SUMC Project compared with BAU. The revised analysis takes into account this energy efficiency increase and reduces the amount of energy needed for steam and chilled water accordingly. For the non-Hospital facilities, such as medical office buildings and other areas subject to Title 24 standards, a reduction of 30 percent compared with 2004 Title 24 standards is applied, which equates to a 15 percent efficiency increase beyond current (2008) Title 24 requirements, which were placed in effect since 2010. For the Hospital buildings not subject to Title 24, a reduction in energy equal to the efficiency beyond typical hospitals (30 percent) is applied.

## **Energy Efficiency Ratings of the SUMC Project**

The SUMC Project sponsors have provided design and engineering data demonstrating that the SUMC Project Hospital facilities would operate 30 percent more efficiently than a typical hospital (based on a comparison to the hospital energy consumption data base used by the Environmental Protection Agency). This level of efficiency would in turn reduce the energy consumed by the Hospital facilities by 30 percent. Therefore, indirect sources greenhouse gas emissions associated with the energy needs of the Hospitals show a 30 percent reduction from “Business as Usual,” which is a typical hospital facility.

## **Other Corrections and/or Text Changes in the Analysis**

This section addresses the inconsistencies and minor errors in the Draft EIR analysis. In particular, text changes with respect to the following topics were changed as a result of the previous analysis revisions and staff comments:

- **Mitigation Measure CC-1.1:** The language of Mitigation Measure CC-1.1 has been changed to reflect that commissioning of the SUMC Project would occur one year after beginning operation and would perform annual energy efficiency check-ups of the facilities thereafter.
- **Mitigation Measure CC-1.2:** The language of Mitigation Measure CC-1.2 has been revised to indicate that the SUMC Project sponsors would be required to participate in a renewable energy program, but not the City’s Palo Alto Green renewable energy program.
- **Inconsistent VMT Values.** The VMT values used in Section 3.6, Climate Change, and Appendix H of the Draft EIR were slightly different than those used in Appendix E of the Draft EIR, which provided VMT calculations by AECOM Transportation. The differences are due to rounding within the URBEMIS2007 model that was used to determine the CO<sub>2</sub> emissions for SUMC Project vehicle trips. The CO<sub>2</sub> emissions for the SUMC Project have now been updated as part of this Staff-Initiated Change 4 based on the revised VMT calculations to for employees and visitors/patients, as noted below. However, there are still differences, albeit slighter differences, in the VMT due to rounding in the URBEMIS model.

- **Title 24 Citations.** The Draft EIR text has been updated throughout to clarify that the Title 24 standards only applies to the medical office buildings and not the Hospital facilities.
- **VMT Calculations for Construction Workers.** Greenhouse gas emissions from the construction worker commutes for the SUMC Project have been calculated based on the revisions to the VMT analysis as presented by AECOM Transportation (Appendix W of this document). Construction is assumed to take place in two phases. During Phase 1, the average daily employees would be approximately 833, which would result in an estimated daily mileage of 22,660. During Phase 2, the average daily employees would be 106, which would result in an estimated daily mileage of 2,880. The estimated daily miles traveled are used here to determine the emissions of greenhouse gases with respect to construction worker commutes. The daily miles traveled are multiplied by the grams/mile for carbon dioxide, methane, and nitrous oxide. Then, the total grams/mile are converted to metric tons of carbon dioxide equivalents (MT CO<sub>2e</sub>). Greenhouse gas emissions from commuter vehicles would total 30,359.31 MT CO<sub>2e</sub> and total greenhouse gas emissions from construction worker commuting are estimated at approximately 36,573.23 MT CO<sub>2e</sub> for the duration of the construction activities. Calculations are provided in Appendix V of this document.

### **Resulting Changes to Conclusions in Section 3.6, Climate Change, of the Draft EIR**

As a result of the changes listed above for Section 3.6, Climate Change, of the Draft EIR, the conclusions in the Draft EIR have been revised. The analysis in the Draft EIR indicated that the Emissions Reduction Program proposed for the SUMC Project would not result in a 30 percent reduction compared to BAU, even with mitigation, and as such would result in a cumulatively considerable contribution to significant cumulative impacts from global climate change (Impact CC-2 starting on page 3.6-59 of the Draft EIR). The Draft EIR also found that the Emissions Reduction Program for the SUMC Project would not be sufficient to further the goals of the City's Climate Protection Plan (Impact CC-1 starting on page 3.6-26 of the Draft EIR). However, Mitigation Measures CC-1.1 through CC-1.5 were identified to help the SUMC Project meet the goals of the City's Climate Protection Plan.

With the revisions listed above, in particular the removal of patient and visitor trips from the BAU comparison, the SUMC Project, including its Emissions Reduction Program and regulations adopted since the CARB Scoping Plan, would result in a 36.09 percent reduction compared to BAU, as shown in the revised Table 3.6-7, below. With implementation of the Emissions Reduction Program, regulatory requirements, and the GO Pass mitigation measure, the SUMC Project would result in a 44.09 reduction compared to BAU, as shown in the revised Table 3.6-9, provided later in this discussion. As such, the conclusion under Impact CC-2 of the Draft EIR is now revised such that the SUMC Project would have a less than cumulatively considerable contribution to climate change impacts with respect to quantified greenhouse gas emissions, without mitigation measures.

The consistency analysis for the SUMC Project compared to the individual Climate Protection Plan Policies (Table 3.6-5, as revised below), reflects that most components of the Emissions Reduction Program would be consistent with the policies of the Climate Protection Plan; however, revised

versions of the mitigation measures proposed in the Draft EIR would still be required. As such, with mitigation, the SUMC Project would comply with and would further all of the individual goals and policies of the City's Climate Protection Plan.

## **Adjustments to Alternatives**

Re-evaluation of each alternative was required as a result of the above changes. Additionally, this Staff-Initiated Change 4 applies revisions to the quantified VMT under the Village Concept Alternative. As explained in more detail in Staff-Initiated Change 8, the analysis of the Village Concept Alternative in Section 5 of the Draft EIR added background traffic growth, including trips from the Stanford University CP/GUP, to the trip generation from the Village Concept Alternative housing component. However, the City has since determined that the trips generated by CP/GUP housing at the Quarry Road sites should be *replaced* with new trips that would be generated by the recommended housing occupants under the Village Concept Alternative. The new trips from the recommended housing occupants also account for trips from SUMC employee spouses, who would create traffic in the immediate area during the AM and PM Peak Hours as they commute to jobs, take children to school, etc. In addition, trip generation from housing under Village Concept Alternative analysis has been re-evaluated to include the relocation or displacement of the postdoctoral fellows and medical residents to off-campus locations. As such, the trip generation under the Village Concept Alternative analysis has been revised, and the VMT under the Village Concept Alternative has also been revised. The resulting VMT and overall greenhouse gas emissions under the Village Concept Alternative would be higher than the VMT and overall greenhouse gas emissions of the SUMC Project, considering these changes.

As a result of the changes to the SUMC Project analysis and the associated changes to each of the alternatives, the SUMC Project and each of the alternatives, except the Historic Preservation Alternative, would result in a less than cumulatively considerable contribution to global climate change with mitigation. The Historic Preservation Alternative would result in significant and unavoidable impacts related to climate change because an Emissions Reduction Program for minimizing greenhouse gas emissions would only be associated with new building operation. The energy efficiencies of the preserved buildings would remain as they are, which would result in a potential increase in emissions beyond what is presented for the SUMC Project and would potentially result in an emission reduction of less than 30 percent from BAU.

The resulting text and table changes related to this section are presented below.

## **Draft EIR Text Revisions**

**Revised Tables.** A number of tables from the Draft EIR have been revised, including Summary Table S-4 (Draft EIR pages S-51 through S-53); Table 3.6-3 (Draft EIR page 3.6-11); Table 3.6-4 (Draft EIR page 3.6-30); Table 3.6-6 (Draft EIR page 3.6-51); Table 3.6-7 (Draft EIR page 3.6-52); Table 3.6-8 (Draft EIR page 3.6-56); Table 3.6-9 (page 3.6-57); Table 5-13 (Draft EIR page 5-206); Table 5-14 (Draft EIR page 5-207); and Tables 5-15 and 5-16 (Draft EIR page 5-209). All tables that have been revised since the Draft EIR are included below under their respective sections.

Summary. Table S-4 starting on page S-51 of the Draft EIR has been revised as follows:<sup>6</sup>

**Table S-4**  
**SUMC Project Summary of Impacts and Mitigation Measures**

Impacts	Impact Significance Without Mitigation	Mitigation Measures	Impact Significance With Mitigation
<p>CC-1. Furthering <del>Goals and Individual</del> Policies of the Palo Alto Climate Protection Plan. The proposed Emissions Reduction Program would minimize greenhouse gas emission increases associated with the proposed development program. However, the proposed Emissions Reduction Program would not be sufficient to further <del>the goals</del> <u>some of the individual policies</u> of the City's Climate Protection Plan.</p>	S	<p>MITIGATION MEASURES. The mitigation measures below, <del>which</del> in addition to the proposed Emissions Reduction Program, would <u>enable the SUMC Project to meet all of the individual policies of the City's Climate Protection Plan. further minimize the increase in greenhouse gas emissions from this project. However, even with these measures the SUMC Project would contravene the goals in the City's Climate Protection Plan and would have a cumulatively considerable contribution to global climate change.</u></p> <p><i>CC-1.1 Commission and Retro-Commission Energy Systems for New Buildings.</i> New construction <del>and existing buildings altered by construction of</del> <u>for the SUMC Project shall undergo commissioning<sup>76</sup> of energy and HVAC systems during construction and on an annual basis during the first five years of operation within one year following building occupancy.</u> The commissioning process shall follow the standards of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Guideline 0-2005 or the International Performance Measurement and Verification Protocol (MVP). <u>The SUMC Project sponsors shall provide the City of Palo Alto with commissioning verification data within 12 months of OSHPD (or City) certificate of occupancy for each new SUMC Project building component (parking structures excluded). These components shall include: SHC Hospital (Phase 1), SHC Hospital (Phase 2), LPCH Hospital Expansion, Hoover Medical Office Building, School of Medicine (FIM 1, FIM 2 and FIM 3) and 429,000 square feet of clinic space for SHC. The commissioning of the new SHC and LPCH Expansion Hospitals shall be conducted as part of LEED Enhanced Commissioning in compliance with the ASHRAE Guideline 0-2005. During years</u></p>	<u>SULTS</u>

<sup>6</sup> There are no text changes to Mitigation Measures CC-1.3 and CC-1.5. See also the revised Table S-4, SUMC Project Summary of Impacts and Mitigation Measures, in Section 6, Revisions to the Draft EIR, of this document.

**Table S-4  
SUMC Project Summary of Impacts and Mitigation Measures**

Impacts	Impact Significance Without Mitigation	Mitigation Measures	Impact Significance With Mitigation
		<p>two to five after completion of the entire SUMC Project, the SUMC Project sponsors shall annually provide the City of Palo Alto with an EPA Energy Star Statement of Energy Performance report for each new building component. This report shall be generated using the EPA Energy Star Portfolio Manager system. Building profiles and consumption details entered in the Portfolio Manager system and a resulting energy efficiency rating is provided based on similar facilities (i.e., academic teaching facility, community hospital, free-standing surgery center, etc.) This process would ensure that new and existing energy systems would perform interactively according to construction documents, the SUMC Project design intent and the owner’s operational needs.</p>	
	CC-1.2	<p><del>Participate in Palo Alto Green Energy Program, Other Equivalent Renewable Energy Program, or combination thereof. a Renewable Energy Program. Under the Palo Alto Green program, residential, business and industrial customers purchase renewable energy equivalent to their electricity needs at an additional cost of 1.5 cents per kWh above standard electric rates. The SHC and LPCH Project sponsors facilities shall participate in this a renewable energy program approved by the City to partially offset electricity emissions; develop new renewable generation sources in collaboration with the CPAU; incorporate a renewable energy source (such as photovoltaics) into the SUMC Project, or a combination thereof, such that a minimum of 54,640 MWh of electricity usage is offset annually. and/or otherwise promote expansion of the use of renewable energy by CPAU customers (“Renewable Energy Program”). The Renewable Energy Program shall be approved by the City and need not directly reduce the emissions from the SUMC Project facilities, and may be designed to promote expansion of the use of renewable energy by CPAU customers, either by providing a new source of renewable energy, educating the public about</del></p>	

**Table S-4  
SUMC Project Summary of Impacts and Mitigation Measures**

Impacts	Impact Significance Without Mitigation	Mitigation Measures	Impact Significance With Mitigation
		<p><u>use of renewable energy, or contributing to research and development of renewable energy sources.</u></p> <p><i>CC-1.4 Prepare Waste Reduction Audit.</i> The SUMC Project sponsors shall perform a waste reduction audit of waste management practices at the hospitals prior to construction of new facilities and after completion of the SUMC Project to determine post-project diversions. <del>This audit shall be repeated annually, and with the results being made available to the public or to City of Palo Alto staff.</del></p>	

Table S-4 starting on page S-53 of the Draft EIR has been revised as follows:

**Table S-4  
SUMC Project Summary of Impacts and Mitigation Measures**

Impacts	Impact Significance Without Mitigation	Mitigation Measures	Impact Significance With Mitigation
<p>CC-2 Emit Significant Greenhouse Gas Emissions. The proposed Emissions Reduction Program would minimize the greenhouse gas emission increases associated with the proposed development program, <del>although</del> <u>and</u> the proposed Emissions Reduction Program along with regulations adopted after the CARB Scoping Plan would <del>not</del> reduce emissions to <del>30</del> <u>36.09</u> percent below BAU (excluding emissions from patients and visitor trips). Therefore the SUMC project would <del>not result in have</del> a cumulatively considerable contribution to global climate change. (<u>\$ LTS</u>)</p>	<u>\$LTS</u>	<p><u>None required.</u></p> <p><del>MITIGATION MEASURE. Mitigation Measures CC 1.1 through CC 1.5, and TR 2.3 would reduce greenhouse gas emissions. In addition, to further reduce impacts related to greenhouse gas emissions, the City shall consider the feasibility of Mitigation Measure PH 3.1.</del></p> <p><del>However, even with the implementation of all feasible mitigation measures, the anticipated emissions would remain above both the City of Palo Alto's Climate Protection Plan and the CARB's reduction emission goals of 30 percent below BAU emissions. Because these reduction levels cannot be achieved, the SUMC Project would emit significant amounts of greenhouse gases and would have a cumulatively considerable contribution to global climate change.</del></p>	<u>\$ULTS</u>



Draft EIR text on page S-93, sixth bullet, has been deleted as follows:

- ~~Emission of greenhouse gases, which would contravene the City’s ability to meet emission reduction goals in the Palo Alto Climate Protection Plan and which would have a cumulatively considerable contribution to global climate change;~~

Table S-5 on page S-99 has been revised as follows:

**Table S-5**  
**Assessment of SUMC Project Alternatives (Compared to the SUMC Project)**

Impact	SUMC Project <sup>a</sup>	No Project Alternative A	No Project Alternative B	Reduced Intensity Alternative A	Reduced Intensity Alternative B	Tree Preservation Alternative	Historic Preservation Alternative	Village Concept Alternative
<b>Climate Change</b>								
Consistency with <u>Individual Policies of the Climate Protection Plan</u>	<del>S/SU</del> LTS	LTS	LTS	LTS	S/LTS	<del>S/SU</del> LTS	S/SU	<del>S/SU</del> LTS
Result in Significant Emissions of Greenhouse Gases	<del>S/SU</del> LTS	LTS	LTS	LTS	<del>S/LTS</del>	<del>S/SU</del> LTS	S/SU	<del>S/SU</del> LTS

**Section 3.6, Climate Change.** Draft EIR text on page 3.6-9, third bullet, has been revised as follows:

- *Vehicular Emissions, Non-Fleet Vehicles.* The inventory includes quantification of the emissions associated with employee, patient, and visitor vehicles based on an estimate of the Vehicle Miles Traveled (VMT) to and from the SUMC Sites. The VMT was calculated by AECOM Transportation<sup>30</sup> based on the commuting patterns of existing employees and patients (see Appendix ~~E~~ W of the Final EIR). The VMT calculations assume that 60 percent of the daily trips are made by patients and 40 percent made by employees. Using employee and patient-origin data (zip codes) provided in the project application, distances from these origins to the SUMC Sites were estimated. An average trip length was applied to the trip generation factors in the Transportation Impact Analysis. CO<sub>2</sub> emissions associated with existing VMT were calculated using CARB’s URBEMIS 2007 model, while N<sub>2</sub>O and CH<sub>4</sub> were calculated using CCAR fuel emissions factors. Because patient and visitor trips would be expected to occur somewhere in the region or global environment whether or not SUMC facilities are expanded, this component of the vehicular emissions is not included in the comparison to a BAU scenario.

Table 3.6-3 on page 3.6-11 of the Draft EIR has been revised as follows:

**Table 3.6-3  
Existing Annual Greenhouse Gas Emissions, SHC, LPCH, and SoM**

Source of Emissions	Units Consumed			Emissions (MT CO <sub>2</sub> e)		
	SHC and LPCH	SoM	Total	SHC and LPCH	SoM	Total
Natural Gas (therms)	331,429	0	331,429	1,759	0	1,759
Diesel Generators (gallons)	13,707	0	13,707	139	0	139
Medical Nitrous Oxide (cubic feet)	8,815	0	8,815	137	0	137
Fleet Vehicle Fuels (gallons)	41,864	0	41,864	356	0	356
Helicopter Fuel (gallons)	75,297	0	75,297	721	0	721
Electricity (MWh) <sup>a</sup>	63,365	12,223	75,588	14,979	2,889	17,869
Steam and Chilled Water (MBtu)	N/A	131,765	131,765	28,050	11,991	40,041
Non-fleet <u>Employee</u> Vehicular Emissions (VMT) <sup>b</sup>	N/A	N/A	<del>600,246</del> <u>182,431</u>	N/A	N/A	<del>102,619</del> <u>31,189</u>
Solid Waste (tons) <sup>c</sup>	N/A	N/A	3,700	N/A	N/A	1,324
<b>Subtotal for BAU Comparison</b>						<b>93,533<sup>d</sup></b>
<u>Non-fleet Patient and Visitor Vehicular Emissions (VMT)<sup>b, e</sup></u>	<u>N/A</u>	<u>N/A</u>	<u>417,815</u>	<u>N/A</u>	<u>N/A</u>	<u>71,430</u>
<b>Total SUMC Project Emissions</b>						<b>164,964<sup>d</sup></b>

Source: Mazzetti and Associates Consultants and Engineers, 2008, Stanford University Medical Center 2007 Greenhouse Gas Inventory. Additional data provided by PBS&J, 2010.

Notes:

N/A = No data available.

- The Mazzetti and Associates inventory (sourced for this table) used an electricity emission factor of 263.62 lbs CO<sub>2</sub>/MWh, cited to CPAU. However, the City has indicated that this emissions factor does not apply to the development on the SUMC Sites and requested that the inventory be revised using CO<sub>2</sub> emissions factor of 520 lbs CO<sub>2</sub>/MWh based on the City's energy purchasing records, and CCAR's standard emissions factors for N<sub>2</sub>O and CH<sub>4</sub> (0.0037 lbs N<sub>2</sub>O/MWh and 0.0067 lbs CH<sub>4</sub>/MWh). The electricity emissions in this table represent the use of the revised emission factors. The emissions for electricity include the emissions from actual electrical consumption as well as the consumption of electricity to treat and transport wastewater. Therefore, the emissions numbers are slightly higher than the emissions from actual electrical consumption alone.
- Calculated using VMT assumptions reported by AECOM Transportation, (Appendix ~~X E~~). Emissions were modeled using the VMT assumptions from AECOM in the URBEMIS 2007 software.
- SUMC solid waste emissions were determined based on total citywide emissions. Existing SUMC solid waste generation is 5 percent of citywide waste generation. Therefore, emissions attributed to SUMC generation was determined to be 5 percent of total citywide waste emissions.
- Numbers may not add exactly due to rounding.
- Patient and visitor trips are not included in BAU calculations since these trips would occur whether or not the SUMC facilities are expanded.

Draft EIR text on page 3.6-24, fourth paragraph, first sentence, has been revised as follows:

The non-Hospital portions (medical office buildings) of the SUMC Project are subject to the Title 24 standards; however due to the nature of hospital operations, the Hospital facilities are not. Hospital buildings are subject to distinct building code requirements administered by the Office of Statewide Health Planning and Development (OSHPD).

Draft EIR text on page 3.6-24, fifth paragraph, has been revised as follows:

On June 2, 2008, the Palo Alto City Council adopted Ordinance 5006, a mandatory Green Building Ordinance that is applicable to residential and non-residential private development projects subject to the City's building codes. The ordinance became effective on July 3, 2008 and is retroactive for commercial projects for which planning applications were submitted after December 3, 2007, the date the City Council adopted the Climate Protection Plan. Because hospital buildings are not subject to the City's building codes, the City's Green Building Ordinance is not applicable to the Hospital components of the SUMC Project. ~~however, it would be~~ In addition, because the application for the SUMC Project was submitted prior to December 3, 2007, the City's Green Building Ordinance would also not be applicable to the clinic, medical office, SoM FIM, and research buildings that require City building permits.

Draft EIR text on page 3.6-26, third full paragraph, has been revised as follows:

*CC-1. Furthering Individual Policies ~~Goals and Policies~~ of the Palo Alto Climate Protection Plan. The proposed Emissions Reduction Program would minimize greenhouse gas emission increases associated with the proposed development program. However, the proposed Emissions Reduction Program would not be sufficient to further ~~the goals~~ some of the individual policies of the City's Climate Protection Plan. (S)*

Draft EIR text on page 3.6-27, second full paragraph starting at the third sentence, has been revised as follows:

As part of the SUMC Project, SHC and LPCH have committed to design their new facilities such that they will use 35 percent less energy than typical hospitals (based on a comparison to the ~~Department of Energy's Commercial Buildings Energy Consumption Survey~~ hospital energy consumption database used by the Environmental Protection Agency) and 20 percent less energy than a hospital designed to meet ASHRAE 90.1 standards. The SoM has committed to design its new facilities such that they will meet Stanford University's 2008 Building Performance Guidelines, which set a target energy efficiency in new buildings of 30 percent below California Title 24 ~~(2006 standards)~~ ASHRAE 90.1 (2004 standards), or 15 percent below the current (2008) Title 24 Standards that are in place as of October 2010.

Draft EIR text on pages 3.6-28 through 3.6-29, fifth bullet, has been revised as follows:

- *Non-fleet Vehicle Trips.* The SUMC Project inventory includes quantification of the emissions associated with employee, patient, and visitor vehicles traveling to and from the SUMC Sites, based on VMT to and from the SUMC facilities. SUMC Project VMT was calculated using similar methods to those reported in the Existing Conditions subsection, except that trip generation was scaled according to the increase in square footage and activity. While there is an acknowledged trend in the increase in the use of alternative fueled vehicles (hybrid, electric, hydrogen) and that trend is anticipated to continue between 2010 and 2025 the ratio of alternative-fueled vehicles to gasoline fueled vehicles at that time is unknown. Therefore, the analysis conservatively assumes that the entire fleet is

gasoline fueled for all analysis years. Further, in order to compare conditions to a BAU scenario, fleet vehicle emissions are first calculated based on regulations in effect in 2004 (BAU) and then compared to a scenario that accounts for regulations adopted since that date.

It is important to recognize that the SHC and LPCH are not meeting all of the existing demand for hospital facilities; therefore, some of the trips associated with the SUMC Project are trips that already are occurring in the region as patients seek healthcare elsewhere and medical employees meet those needs at other hospitals. ~~Also, a substantial portion of the emissions in this category could occur whether or not the SUMC Project is approved. This is because people are likely to seek the type of medical services provided by the SHC and LPCH whether those services are offered at SHC and LPCH or at some other hospital. However, it is uncertain what percentage of the projected trips would occur if the SUMC Project were not implemented.~~ Ultimately, patients and visitors are a function of need rather than a function of the SUMC Project. Even if the SUMC Project is not implemented the patients and visitors would need to go to another facility. The emissions from the travel of patients and visitors would occur with or without the SUMC Project and therefore are not included in non-fleet vehicle emissions calculations for purposes of the BAU comparison. All emissions associated with the projected SUMC Project VMT are conservatively reported in the SUMC Project inventory.

Draft EIR text on page 3.6-29, fourth full paragraph, has been revised as follows:

Estimated greenhouse gas emissions associated with the SUMC Project are summarized in Table 3.6-4. As discussed in the Existing Conditions subsection, the existing SUMC facilities are assumed to produce approximately 164,964 MT CO<sub>2</sub>e of greenhouse gases annually. Including non-fleet patient and visitor VMT, The SUMC Project operations would result in a net annual emissions increase of up to 74,803,298 MT of CO<sub>2</sub>e, which is a 34.38 percent increase over the existing emissions generated at the SUMC Sites. However, as stated above, for the purposes of defining the BAU scenario and comparing SUMC Project emissions to BAU emissions, non-fleet patient and visitor VMT is excluded since non-fleet patient and visitor trips would occur whether or not the SUMC facilities are expanded. Without non-fleet patient and visitor VMT, the BAU scenario emissions for the SUMC Project would be 46,085 MT of CO<sub>2</sub>e.

Draft EIR Table 3.6-4 on page 3.6-30 has been revised as follows:

**Table 3.6-4**  
**Net Business as Usual SUMC Project Greenhouse Gas Emissions, 2025**

Source of Emissions	Units Consumed, Net Increase	Net Emissions (metric tons CO <sub>2</sub> e)
Natural Gas (therms)	5,137	27
Diesel Generators (gallons)	2,232	23
Medical Nitrous Oxide (cubic feet)	6,127	99
Fleet Vehicle Fuels (gallons)	13,845	100
Helicopter Fuel (gallons)	21,083	201
Electricity (MWh) <sup>a</sup>	54,640	12,914
Steam and Chilled Water (million Btu)	10,995	19,542
Non-fleet <u>Employee</u> Vehicular Emissions (VMT) <sup>b</sup>	<del>275,566</del> 83,834	<del>41,257</del> 12,539
Solid Waste (tons) <sup>c</sup>	1,792	640
<b>Subtotal for BAU Comparison</b>		<b>46,085</b>
<u>Non-fleet Patient and Visitor Vehicular Emissions (VMT)<sup>b, d</sup></u>	<u>191,732</u>	<u>17,213</u>
<b>Total Net SUMC Project Emissions</b>		<b>74,80363,298</b>

*Source:* Mazzetti and Associates Consultants and Engineers, 2008, Stanford University Medical Center 2007 Greenhouse Gas Inventory. Additional data provided by PBS&J, 2010 (Appendix VH).

*Notes:*

- a. The Mazzetti and Associates inventory (sourced for this table) used an electricity emission factor of 263.62 lbs CO<sub>2</sub>/MWh, cited to CPAU. However, the City has indicated that this emissions factor does not apply to the development on the SUMC Sites and requested that the inventory be revised using CO<sub>2</sub> emissions factor of 520 lbs CO<sub>2</sub>/MWh based on the City's energy purchasing records, and CCAR's standard emissions factors for N<sub>2</sub>O and CH<sub>4</sub> (0.0037 lbs N<sub>2</sub>O/MWh and 0.0067 lbs CH<sub>4</sub>/MWh). The electricity emissions in this table represent the use of the revised emission factors
- b. Calculated using VMT assumptions reported in AECOM Transportation (Appendix WE). Emissions were modeled using the VMT assumptions from AECOM in the URBEMIS 2007 software. The numbers vary slightly from the VMT in the AECOM memo due to rounding purposes for the URBEMIS model. Based on VMT of 275,566, which varies slightly from the VMT in the AECOM memo (275,837 VMT) due to rounding purposes for the URBEMIS model.
- c. SUMC solid waste emissions were determined based on total City wide emissions. Existing SUMC solid waste generation is 5 percent of City wide waste generation therefore emissions attributed to SUMC generation was determined to be 5 percent of total City wide waste emissions.
- d. Patient and visitor trips are not included in BAU calculations since these trips would occur whether or not the SUMC facilities are expanded.

Draft EIR Table 3.6-5 on pages 3.6-31 to 3.6-33 is revised as follows:

**Table 3.6-5  
Comparison of SUMC Project Emissions,  
Reduction Program to Climate Protection Plan Policies**

Action/Goal	SUMC Measure	Compliant with Climate Protection Plan Policies?
<b>Utilities</b>		
Reduce Electricity and natural gas use through conservation and energy efficiency.	Proposed Emissions Reduction Programs: <ul style="list-style-type: none"> <li>• <i>Enhanced Energy Efficiency – School of Medicine.</i> As part of the SUMC Project, the new SoM buildings would meet Stanford University’s 2008 Building Performance Guidelines, which set a target energy efficiency in new buildings of 30 percent below California Title 24/ASHRAE 90.1 (2004), which equates to 15 percent below current (2008 – in effect as of October 2010) Title 24 standards.</li> </ul> <p>These measures would be consistent with the City’s Climate Protection Plan Policies. However, an audit would be necessary to verify compliance with the City’s Climate Protection Plan Policies</p>	No <u>Yes</u>
	<p><b>Mitigation Measure:</b></p> <p><i>Commissioning and Retro-Commissioning of Energy Systems for New Buildings.</i> New construction <del>and existing buildings altered by construction of</del> for the SUMC Project shall undergo commissioning of energy and HVAC systems <del>during construction and on an annual basis during the first five years of operation</del> within one year following building occupancy. The commissioning process shall follow the standards of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Guideline 0-2005 or the International Performance Measurement and Verification Protocol (MVP). <u>The SUMC Project sponsors shall provide the City of Palo Alto with commissioning verification data within 12 months of OSHPD (or City) certificate of occupancy for each new SUMC Project building component (parking structures excluded). These components are: SHC Hospital (Phase 1), SHC Hospital (Phase 2), LPCH Hospital Expansion, Hoover Medical Office Building, School of Medicine (FIM 1, FIM 2 and FIM 3) and 429,000 SF of clinic space for SHC. The commissioning of the new SHC and LPCH Expansion Hospitals will be conducted as part of LEED Enhanced Commissioning in compliance with the ASHRAE Guideline 0-2005. During years two to five after completion of the entire SUMC Project, SUMC will annually provide the City of Palo Alto with an EPA Energy Star Statement of Energy Performance report for each new building component. This report is generated using the EPA Energy Star Portfolio Manager system. Building profiles and consumption details entered in the Portfolio Manager system and a resulting energy efficiency rating is provided based on similar facilities (i.e., academic teaching facility, community hospital, free-standing surgery center, etc.) This process would</u></p>	Yes

**Table 3.6-5  
Comparison of SUMC Project Emissions,  
Reduction Program to Climate Protection Plan Policies**

Action/Goal	SUMC Measure	Compliant with Climate Protection Plan Policies?
Expand use of renewable energy installed or purchased directly by customers. Reduce carbon intensity of energy supply.	ensure that new and existing energy systems would perform interactively according to construction documents, the SUMC Project design intent and the owner’s operational needs.	No
	<p><b>Existing Emissions Reduction Program (with proposed expansion):</b></p> <p><i>Purchase of Electricity and Natural Gas from City.</i> The SUMC Project sponsors would obtain electricity and natural gas from the City of Palo Alto Utilities Department. The City has adopted a 10-year energy efficiency plan; one of the plan’s goals is to meet up to 33 percent of the City’s electricity needs through renewable sources of power, such as wind, landfill gas, and solar, by the year 2015. However, the SHC, LPCH and SoM have not committed to expanding renewable energy facilities on the SUMC Sites. Given the extent to which the facilities on the SUMC Sites contribute to the City’s overall energy demand, the lack of definite commitments to <del>directly install new</del> <u>participate in a program to expand use of renewable energy facilities installed or purchased by CPAU customers</u> would be inconsistent with the Climate Protection Plan.</p>	
	<p><b>Mitigation Measures:</b></p> <p><u>Participation in a renewable energy program.</u> The SHC and LPCH Project sponsors shall participate in a renewable energy program approved by the City to partially offset electricity emissions; <u>develop new renewable generation sources in collaboration with the CPAU; incorporate a renewable energy source (such as photovoltaic) into the SUMC Project, and/or otherwise promote expansion of the use of renewable energy by CPAU customers. (“Renewable Energy Program”).</u> <u>The Renewable Energy Program need not directly reduce the emissions from the SUMC Project facilities, and may be designed to promote expansion of the use of renewable energy by CPAU customers, either by providing a new source of renewable energy, educating the public about use of renewable energy, or contributing to research and development of renewable energy sources.</u> <u>Palo Alto Green Energy Program.</u> Under the <del>PaloAltoGreen</del> program, residential, business and industrial customers purchase renewable energy equivalent to their electricity needs at an additional cost of 1.5 cents per kilowatt hour (kWh) above standard electric rates. <del>The SHC and LPCH facilities shall participate in this program to offset electricity emissions, or alternatively, develop new renewable generation sources in collaboration with the CPAU.</del></p>	Yes

Draft EIR Table 3.6-5 on page 3.6-45 has been revised as follows:

<b>Table 3.6-5 Comparison of SUMC Project Emissions, Reduction Program to Climate Protection Plan Policies</b>		
Action/Goal	SUMC Measure	Compliant with Climate Protection Plan Policies?
<b>Zero Waste</b>		
Expand implementation of Zero Waste programs.	The SUMC Project includes a number of waste reduction programs described throughout this table. However, an audit would be necessary to verify compliance with the City’s Climate Protection Plan Policies.	<del>No</del> <u>Yes</u>
	<p><b>Mitigation Measure</b></p> <p><i>Preparation of a Waste Reduction Audit.</i> The SUMC Project sponsors shall perform a waste reduction audit of waste management practices at the <del>h</del>Hospitals prior to construction of new facilities and after completion of the SUMC Project to determine post-project diversions. <del>This audit shall be repeated annually, and with the results being made available to the public or to City of Palo Alto staff.</del></p>	Yes

Draft EIR text on page 3.6-50, second paragraph, has been revised as follows:

**Quantification of Emissions with Proposed Emissions Reduction Program and Regulations adopted since CARB Scoping Plan.** This section employs a quantitative analysis of the proposed Emissions Reduction Program in order to assess whether the SUMC Project complies with the City’s long term numeric reduction goals in its Climate Protection Plan. This section also addresses the State emission reduction measures adopted in the AB 32 Scoping Plan. As discussed above, to account for full project build out, this analysis uses the 30 percent BAU emissions target reduction for 2020 as the criteria for assessing compliance with the goals of the Climate Protection Plan. As the proposed Emissions Reduction Program’s design features, together with adopted State regulations, by itself themselves would not reach the emission reduction ensure compliance with the numeric goals of the Climate Protection Plan, additional mitigation measures are not required to achieve a 30 percent below BAU standard. ~~are suggested and evaluated here.~~

Draft EIR text on page 3.6-51, third sentence, and Table 3.6-6, have been revised as follows:

As shown, with the proposed Emissions Reduction Program and regulations adopted after the CARB Scoping Plan, the greenhouse gas emissions would be reduced from ~~74,803~~63,298 MT CO<sub>2</sub>e to approximately ~~70,355~~ 46,666 MT CO<sub>2</sub>e (including emissions from non-fleet patient and visitor trips). The greenhouse gas emissions for comparison to a BAU scenario, which does not include emissions from patient and visitor trips, would be reduced from 46,085 MT CO<sub>2</sub>e to approximately 29,453 MT CO<sub>2</sub>e.



**Table 3.6-6  
SUMC Project Greenhouse Gas Emissions, With and Without Proposed Emissions Reduction Program and Post-2004 Regulations**

Source of Emissions	With Proposed Emissions Reduction Program and Post-2004 Regulations		Without Proposed Emissions Reduction Program and Post-2004 Regulations (BAU)	
	Units Consumed	Net Emissions (MT CO <sub>2</sub> e)	Units Consumed	Net Emissions (MT CO <sub>2</sub> e)
Natural Gas (therms)	4,110 <u>3,323</u>	<u>22</u> 17	5,137	27
Diesel Generators (gallons)	2,232	23	2,232	23
Medical Nitrous Oxide (cubic feet)	6,127	99	6,127	99
Fleet Vehicle Fuels (gallons)	13,845	100	13,845	100
Helicopter Fuel (gallons)	21,083	201	21,083	201
Electricity (MWh) <sup>a</sup>	<del>54,640</del> <u>32,147</u>	<del>8,632</del> <u>6,569</u>	54,630	12,914
Steam and Chilled Water (MBtu)	<del>10,995</del> <u>7,696</u>	<del>19,542</del> <u>13,679</u>	10,995	19,542
Non-fleet <u>Employee</u> Vehicular Emissions (VMT) <sup>b</sup>	<del>275,566</del> <u>83,834</u>	<del>41,257</del> <u>8,285</u>	<del>275,566</del> <u>83,834</u>	<del>41,257</del> <u>12,539</u>
Solid Waste (tons) <sup>c</sup>	1,792	480	1,792	640
<b>Subtotal for BAU Comparison</b>		<b><u>29,453</u></b>		<b><u>46,085</u></b>
Non-fleet Patient and Visitor Vehicular Emissions (VMT) <sup>b,d</sup>	<u>191,732</u>	<u>17,213</u> <sup>e</sup>	<u>191,732</u>	<u>17,213</u>
<b>Total SUMC Project Emissions</b>		<b><u>70,355</u><u>46,666</u></b>		<b><u>74,803</u><u>63,298</u></b>

Source: Emissions provided by Mazetti & Associates and adjusted by PBS&J, 2011~~0~~ (Appendix ~~VH~~) and reductions provided by PBS&J and AECOM, 2011~~0~~ (Appendix ~~VG~~).

Notes:

- The Mazetti and Associates inventory used an electricity emission factor of 263.62 lbs CO<sub>2</sub>/megawatt hour (MWh) provided by CPAU. The City has indicated that this emissions factor does not apply to the development on the SUMC Sites and requested that the inventory be revised using CO<sub>2</sub> emissions factor of 499.32 lbs CO<sub>2</sub>/MWh based on the City's energy purchasing records; and CCAR's standard emissions factors for N<sub>2</sub>O and CH<sub>4</sub> (0.0037 lbs N<sub>2</sub>O/MWh and 0.0067 lbs CH<sub>4</sub>/MWh). The electricity emissions in this table represent the use of the revised emission factors with the incorporation of the appropriate reductions.
- Calculated using VMT assumptions reported in AECOM Transportation, January, 2011~~February, 2010~~. Emissions were modeled using the VMT assumptions from AECOM in the URBEMIS 2007 software. The numbers vary slightly from the VMT in the AECOM memo due to rounding purposes for the URBEMIS model. AECOM Transportation, January 20, 2011~~February 11, 2010~~ Memorandum to Trixie Martelino, Revised VMT Calculations for SUMC Project.
- SUMC solid waste emissions were determined based on total City wide emissions. Existing SUMC solid waste generation is 5 percent of City wide waste generation therefore emissions attributed to SUMC generation was determined to be 5 percent of total City wide waste emissions.
- Patient and visitor trips are not included in BAU calculations since these trips would occur whether or not the SUMC facilities are expanded.
- While the transit orientation of the SUMC Project and shuttles may help to reduce visitor trips, the SUMC Project cannot dictate how patients or visitors reach the Hospitals. Particular to patient trips, health and safety issues are a priority over trip reductions. Therefore, the reduction in vehicle trips with implementation of TDM are assumed to be reductions in employee trips for purposes of calculating greenhouse gas emissions.

Draft EIR text on page 3.6-51, first bullet, has been revised as follows:

- The design of all ~~non SoM buildings have an energy efficiency rating that is at least 20 percent greater than current Title 24 requirements~~ Hospital facilities would reduce energy usage by 35 percent (as compared to the hospital energy consumption database used by the Environmental Protection Agency), which conservatively is estimated to reduce electricity and natural gas demand by ~~20~~ 30 percent;

Draft EIR text on page 3.6-52, first bullet, has been revised as follows:

- The design of the SoM buildings have an energy efficiency rating that is at least 15 ~~30~~ percent greater than current Title 24 ~~energy efficiency requirements (2008 standards in effect as of October 2010)~~, which would reduce electricity and natural gas demand by 30 percent from BAU. ~~Note that natural gas consumed within the SoM buildings is from consumption by the boilers/steam plant and would not be affected by the energy efficiency of the building, but rather by the efficiency of the boiler/steam plant. Therefore, boiler/steam plant natural gas consumption would not be reduced based upon the energy rating of the building.~~

Draft EIR text on page 3.6-52; first full paragraph, second sentence, has been revised as follows:

Therefore, BAU would include ~~current Title 24 energy efficiency standards~~, the current water supply system, and the current transit opportunities into and from the SUMC Sites, but would not take into account current Title 24 energy efficiency standards, other regulations adopted since preparation of the CARB Scoping Plan, SUMC Project design features that increase energy efficiency beyond 2004 Title 24 standards for all non-Hospital buildings, or energy efficiency increases for Hospital facilities, SUMC Project improvements to transit, or other design features that reduce emissions.

Draft EIR text on page 3.6-52; first paragraph, last three sentences, has been revised as follows:

As shown in Table 3.6-7, with the proposed Emissions Reduction Program, the SUMC Project would have ~~5-95~~ 36.09 percent less emissions than the BAU scenario. As discussed above, this analysis uses the 30 percent BAU emissions target reduction for 2020 as the criteria for assessing a quantitative compliance with the numeric goals of the Climate Protection Plan. However, w~~Without the implementation of additional mitigation measures, the SUMC Project would be more than 24 percent short of meeting this reduction goal~~ would fail to further the some of the individual policies of the Climate Protection Plan.

Draft EIR Table 3.6-7 on page 3.6-52, has been revised as follows:

<b>Table 3.6-7</b>		
<b>Comparison of SUMC Project Greenhouse Emissions with Business As Usual Emissions</b>		
	<b>MT CO<sub>2e</sub></b>	
<b>Net Emissions</b>	<b>Net 2025 BAU</b>	<b>SUMC Project Emissions with Proposed Emissions Reduction Program and Post-2004 Regulations</b>
<i>Total BAU Emissions</i>	<del>74,802</del> <u>46,085</u>	<del>70,355</del> <u>29,453</u>
% reduction from BAU	-	<del>5.95</del> <u>36.09</u>
AB 32 BAU Reduction %	-	30
Significant?		<del>Yes</del> <u>No</u>

Source: PBS&J, 2010 (Appendix ~~VH~~).

Draft EIR text on page 3.6-53, first paragraph, has been revised as follows:

**Summary.** As shown in Table 3.6-7, the proposed Emissions Reduction Program together with regulations adopted since preparation of the CARB Scoping Plan ~~alone~~ would be insufficient for the SUMC Project to ~~further the goals and policies established in the City's Climate Protection Plan.~~ Additionally, ~~without additional mitigation measures, the SUMC Project with its proposed Emissions Reduction Program would reduce emissions compared to the BAU scenario by more than 30 percent.~~ by 5.95 percent, substantially less than the 30 percent reduction per CARB's Climate Change Scoping Plan. ~~As such, w~~ However, without additional mitigation measures, the SUMC Project would have a ~~cumulatively considerable contribution to cumulative greenhouse gas emissions, and would not be sufficient to further the goals~~ some of the individual policies of the City's Climate Protection Plan and would therefore have a cumulatively considerable contribution to the City's climate change impacts.

Draft EIR page 3.6-53, second paragraph, has been revised as follows:

MITIGATION MEASURES. The following discussion addresses additional feasible mitigation measures that could be implemented by the SUMC Project in order to ~~further reduce impacts related to greenhouse gas emissions~~ meet all of the individual policies of the City's Climate Protection Plan. ~~For example, non fleet vehicular emissions represent over half of the total emissions associated with the SUMC Project,<sup>73</sup> and programs proposed by the SUMC Project sponsors do not employ all feasible strategies for reducing such emissions. Moreover, the SHC, LPCH, and SoM do not participate in the City's Palo Alto Green renewable energy program or share emissions inventories with City departments.~~

<sup>73</sup> ~~According to the conservative assumptions used to prepare the inventory; see discussion of these assumptions on page 3.6-29.~~

Draft EIR text on page 3.6-53, last sentence of third paragraph, has been revised as follows:

Inclusion of the Caltrain GO Pass program, or equivalent TDM Measure, is anticipated to reduce non-fleet employee vehicle emissions by about ~~13.5~~ 44.5 percent.

Draft EIR text on pages 3.6-53 through 3.6-54, starting at the second sentence of the fifth paragraph, has been revised as follows:

Mitigation Measures ~~CC-1.1, CC-1.2, and CC-1.3,~~ and CC-1.4 below, would serve a similar purpose as the City's municipal monitoring program in ensuring that the emission reduction features proposed under the SUMC Project and the continuation of existing programs would further the City's Climate Protection Plan goals individual policies.

Draft EIR text on page 3.6-54, first full paragraph, has been revised as follows:

Finally, ~~because the SHC and LPCH account for a large percentage of future CPAU energy demand,~~ to further the policy to expand use of renewable energy installed or purchased by CPAU customers, the Hospitals' participation in a the City's renewable energy program, Palo Alto Green, an equivalent renewable program, or combination thereof, must be required to makewould support the determination that the SUMC Project would be consistent with all of the energy policies of the Climate Protection Plan. ~~Participation in Palo Alto Green is expected to result in an approximately 17 percent reduction from BAU and an approximately 12 percent reduction from emissions with the proposed Emissions Reduction Program.<sup>74</sup> Inclusion in the Palo Alto Green program is identified as Mitigation Measure CC-1.2.<sup>75</sup>~~

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<sup>74</sup> ~~The approximately 17 percent reduction from BAU was determined by the following equation:  $(74,803 - 61,889)/74,803$ . Where 74,803 is equal to the total annual BAU emissions (in MT CO<sub>2e</sub>), and 61,889 is equally to the annual BAU emissions (in MT CO<sub>2e</sub>) minus the 12,914 MT CO<sub>2e</sub> from electrical usage offset by the mitigation measure. Similarly, the approximately 12 percent reduction from emissions with the incorporation of design features was determined by  $(70,335 - 61,723)/70,335$ . Where 70,335 is the total annual emissions in MT CO<sub>2e</sub> after incorporation of the project design features and 61,723 is the total annual emissions in MT CO<sub>2e</sub> minus the 8,632 MT CO<sub>2e</sub> from electrical usage that is offset by the mitigation measure. Note that the emissions offset with design features incorporated is less because the design features reduce the amount of emissions emitted per MWh used.~~

<sup>75</sup> ~~Per Karl Van Orsdol, Energy Risk Manager, City of Palo Alto. Personal communication with Randi Adair, PBS&J, January 20, 2009.~~

Draft EIR text under Mitigation Measure CC-1.1 on page 3.6-54 has been revised as follows:

*CC-1.1 Commission and Retro-Commission Energy Systems for New Buildings.* New construction and ~~existing buildings altered by construction of~~ for the SUMC Project shall undergo commissioning<sup>76</sup> of energy and HVAC systems within one year following building occupancy ~~during construction and on an annual~~

~~basis during the first five years of operation.~~ The commissioning process shall follow the standards of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Guideline 0-2005 or the International Performance Measurement and Verification Protocol (MVP). The SUMC Project sponsors shall provide the City of Palo Alto with commissioning verification data within 12 months of OSHPD (or City) certificate of occupancy for each new SUMC Project building component (parking structures excluded). These components shall include: SHC Hospital (Phase 1), SHC Hospital (Phase 2), LPCH Hospital Expansion, Hoover Medical Office Building, School of Medicine (FIM 1, FIM 2 and FIM 3) and 429,000 square feet of clinic space for SHC. The commissioning of the new SHC and LPCH Expansion Hospitals shall be conducted as part of LEED Enhanced Commissioning in compliance with the ASHRAE Guideline 0-2005. During years two to five after completion of the entire SUMC Project, the SUMC Project sponsors shall annually provide the City of Palo Alto with an EPA Energy Star Statement of Energy Performance report for each new building component. This report shall be generated using the EPA Energy Star Portfolio Manager system. Building profiles and consumption details entered in the Portfolio Manager system and a resulting energy efficiency rating is provided based on similar facilities (i.e., academic teaching facility, community hospital, free-standing surgery center, etc.) This process would ensure that new and existing energy systems would perform interactively according to construction documents, the SUMC Project design intent and the owner’s operational needs.

Draft EIR text under Mitigation Measure CC-1.2 on page 3.6-55, first paragraph, has been revised as follows

*CC-1.2 ~~Participate in Palo Alto Green Energy Program, Other Equivalent Renewable Energy Program, or combination thereof.—a Renewable Energy Program.~~ Under the Palo Alto Green program, residential, business and industrial customers purchase renewable energy equivalent to their electricity needs at an additional cost of 1.5 cents per kWh above standard electric rates. The SHC and LPCH Project sponsors facilities shall participate in a renewable energy this program approved by the City to partially offset electricity emissions; develop new renewable generation sources in collaboration with the CPAU; incorporate a renewable energy source (such as photovoltaics) into the SUMC Project, and/or otherwise promote expansion of the use of renewable energy by CPAU customers (“Renewable Energy Program”). The Renewable Energy Program shall be approved by the City and need not directly reduce the emissions from the SUMC Project facilities, and may be designed to promote expansion of the use of renewable energy by CPAU customers, either by providing a new source of renewable energy, educating the public about use of renewable energy, or contributing to research and development of renewable*

~~energy sources or a combination thereof, such that a minimum of 54,640 MWh of electricity usage is offset annually.~~

Draft EIR text under Mitigation Measure CC-1.4 on page 3.6-55, third paragraph, has been revised as follows:

*CC-1.4 Prepare Waste Reduction Audit.* The SUMC Project sponsors shall perform a waste reduction audit of waste management practices at the hospitals prior to construction of new facilities and after completion of the SUMC Project to determine post-project diversions. ~~This audit shall be repeated annually, and with the results being made available to the public or to City of Palo Alto staff.~~

Draft EIR text on page 3.6-55, Post Mitigation Quantification, has been revised as follows:

**Post-Mitigation Quantification.** Table 3.6-8 shows the anticipated reduction from the incorporation of ~~the above mitigation measures~~ Mitigation Measure TR-2.3 (involving enhanced an TDM program) in addition to the proposed Emissions Reduction Program. As shown in Table 3.6-8, ~~the above mitigation measures~~ Mitigation Measure TR-2.3 would reduce the SUMC Project's greenhouse gas emissions from ~~70,355~~ 46,666 MT CO<sub>2e</sub> to ~~56,190~~ 42,989 MT CO<sub>2e</sub>. The greenhouse gas emissions for comparison to a BAU scenario, which does not include emissions from patient and visitor trips, would be reduced from 29,453 MT CO<sub>2e</sub> to approximately 25,766 MT CO<sub>2e</sub>.

Draft EIR text on page 3.6-55, last paragraph, has been revised as follows:

With the ~~above mitigation measures~~ Mitigation Measure TR-2.3, greenhouse gas emissions would be ~~56,190~~ 42,989 MT CO<sub>2e</sub> per year, an approximately ~~7~~ 3.24 percent increase in emissions from the 2005 baseline for the community of Palo Alto of greenhouse gases. When the City Council established reduction goals for the City and community, it set as its goal a 15 percent decrease in 2005 baseline emissions by 2020, or a reduction in emissions of approximately 119,000 MT. With mitigation, the SUMC Project would ~~still contravene the City's and the community's ability to meet the City Council goals in greenhouse gas reductions as it would require the City to reduce greenhouse gas emissions by 219,905 MT per year in 2025 through other actions. comply with, and further the goals of the City Council in reducing greenhouse gas emissions.~~ This reduction would constitute a ~~25.9~~ 44.09 percent reduction in greenhouse gas emissions from ~~the 2005 baseline~~ BAU estimates in the year 2025. As shown by Table 3.6-9, with mitigation the SUMC Project would meet the AB 32 reduction goal of 30 percent below BAU and would comply with the goals and policies in the City of Palo Alto's Climate Protection Plan.

Draft EIR Table 3.6-8 on page 3.6-56 has been revised as follows:

**Table 3.6-8  
Net Mitigated SUMC Project Greenhouse Gas Emissions**

Source of Emissions	SUMC Project with Proposed Emissions Reduction Program and Post-2004 Regulations		SUMC Project with Proposed Emissions Reduction Program, Post-2004 Regulations, and + Mitigation Measure TR-2.3	
	Units Consumed	Net Emissions (MT CO <sub>2</sub> e)	Units Consumed	Net Emissions (MT CO <sub>2</sub> e)
Natural Gas (therms)	4,110 3,323	22-17	4,110 3,323	22-17
Diesel Generators (gallons)	2,232	23	2,232	23
Medical Nitrous Oxide (cubic feet)	6,127	99	6,127	99
Fleet Vehicle Fuels (gallons)	13,845	100	13,845	100
Helicopter Fuel (gallons)	21,083	201	21,083	201
Electricity (MWh) <sup>a</sup>	54,640-32,147	8,632-6,569	54,640 32,147	0-6,569
Steam and Chilled Water (MBtu)	10,995-7,696	19,542-13,679	10,995 7,696	19,542-13,679
Non-fleet <u>Employee</u> Vehicular Emissions (VMT) <sup>b</sup>	275,566 83,834	41,257-8,285	238,355 46,516	35,724 4,597
Solid Waste (tons) <sup>c</sup>	1,792	480	1,792	480
<b>Subtotal for BAU Comparison</b>		<b>29,453</b>		<b>25,766</b>
Non-fleet Patient and Visitor Vehicular Emissions (VMT) <sup>b</sup>	191,732	17,213	191,732	17,213
<b>Total Net SUMC Project Emissions</b>		<b>70,35546,666</b>		<b>56,190 42,989</b>

Source: Reductions provided by PBS&J, 2010 (Appendix VH), and AECOM 2010 (Appendix VG).

Notes:

- The Mazzetti and Associates inventory used an electricity emission factor of 263.62 lbs CO<sub>2</sub>/MWh provided by CPAU. The City has indicated that this emissions factor does not apply to the development on the SUMC Sites and requested that the inventory be revised using CO<sub>2</sub> emissions factor of 499.32 lbs CO<sub>2</sub>/MWh based on the City's energy purchasing records; and CCAR's standard emissions factors for N<sub>2</sub>O and CH<sub>4</sub> (0.0037 lbs N<sub>2</sub>O/MWh and 0.0067 lbs CH<sub>4</sub>/MWh). The electricity emissions in this table represent the use of the revised emission factors with the incorporation of the appropriate reductions.
- Calculated using VMT assumptions reported by AECOM Transportation, ~~January, 2011~~ February 11, 2010 Memorandum to Trixie Martelino, Revised VMT Calculations for SUMC Project. Emissions were modeled using the VMT assumptions from AECOM in the URBEMIS 2007 software. The numbers vary slightly from the VMT in the AECOM memo due to rounding purposes for the URBEMIS model.
- SUMC solid waste emissions were determined based on total citywide emissions. Existing SUMC solid waste generation is 5 percent of citywide waste generation therefore emissions attributed to SUMC generation was determined to be 5 percent of total citywide waste emissions.

Draft EIR text on page 3.6-56, last paragraph, has been deleted as follows:

~~The additional 54,640 MWh of load requires the City to purchase an additional 18,213 MWh of renewable power to meet State requirements. The City is required to make this expenditure, without which the City would not be able to meet its renewable portfolio standards. State laws are currently being proposed which would impose considerable fines should the City not meet the goal. The City would need to purchase additional renewable power to meet the City Council mandated~~

~~renewable portfolio standard of 33 percent by 2012 and beyond. Renewable energy resource development is lagging behind regulatory driven demand, and the City would find it increasingly difficult to locate renewable power sources to cover the additional requirements. Therefore, it may not be feasible to achieve the reduction in emissions from electricity usage shown in Table 3.6-9.~~

Draft EIR Table 3.6-9 on page 3.6-57 has been revised as follows:

<b>Table 3.6-9</b>				
<b>Annual SUMC Project Greenhouse Gas Emissions Reduction from Business as Usual Emissions, Without and With Mitigation</b>				
Net Emissions	MT CO <sub>2</sub> e			
	Net 2025 BAU	Net 2025 Project Design	Net 2025 Project Design + Mitigation	
Total Emissions	74,802 <u>46,085</u>	70,355 <u>29,453</u>	56,189	<u>25,766</u>
% reduction from BAU	-	5.95 <u>36.09</u>	24.88	<u>44.09</u>
AB 32 BAU reduction %	-	30	30	
City Target BAU Reduction %	-	<b>30</b>	<b>30</b>	
Significant?	-	<b>Yes</b> <u>No</u>	<b>Yes</b> <u>No</u>	

Source: PBS&J, 2010 (Appendix VH).

Draft EIR text on page 3.6-57, first paragraph, has been deleted as follows:

~~As shown in Table 3.6-8, over half percent of the SUMC Project's emissions come from "non-fleet vehicular emissions," which are emissions from VMT. Of these trips, an estimated 40 percent are from employee trips and 60 percent are from patient trips. An analysis of potential measures to reduce VMT is included in Section 3.4, Transportation, particularly under the discussion of Impact TR 2, and in Section 3.5, Air Quality, particularly under the discussion of Impact AQ 2. As discussed in those sections, implementation of Mitigation Measure TR 2.3 is expected to reduce VMT by 13.5 percent, and that reduction is reflected in Table 3.6-9. In addition, the discussion of Impact PH 3 in Section 3.13, Population and Housing, includes additional potential mitigation measures that could further reduce VMT by improving the City's Jobs to Employed Residents Ratio. The City will need to consider the feasibility of implementing some or all of the measures identified under Mitigation Measure PH 3.1, but even full implementation of these measures is not expected to fully mitigate this impact.~~

Draft EIR text on page 3.6-57, second paragraph, has been revised as follows:

Table 3.6-9 shows the reduction from the BAU emissions with the implementation of the proposed Emissions Reduction Program and mitigation measures. As shown in Table 3.6-9, the resulting greenhouse gas emissions reduction from the SUMC Project would be 24.88 44.09 percent less than the BAU emissions. This reduction ~~is still below~~ exceeds the 30 percent reduction specified under CARB's *Climate Change Scoping Plan*, and applied in the City of Palo Alto's Climate Protection Plan. Therefore, ~~even~~ with Mitigation Measures CC-1.1 through CC-1.4, and TR-2.3,



the SUMC Project's contribution to global climate change would be ~~cumulatively considerable.~~ (SU) less than cumulatively considerable. (LTS)

Draft EIR page 3.6-58, paragraph fragment before table and Table 3.6-10, has been revised as follows:

...generated during the 12-year construction period would be approximately ~~6,214~~ 36,573 MT CO<sub>2</sub>e, of which 1,050 MT CO<sub>2</sub>e (~~17~~ 2.87 percent) would be attributable to the equipment used during the construction of the LPCH, 767 MT CO<sub>2</sub>e (~~12~~ 2.12 percent) would be attributable to the Hoover Pavilion Site facilities, 1,191 MT CO<sub>2</sub>e (~~19~~ 3.26 percent) would be attributable to the SoM facilities, ~~and~~ 3,205 MT CO<sub>2</sub>e (~~52~~ 8.76 percent) would be attributable to the SHC facilities, and 30,359 MT CO<sub>2</sub>e (83.01 percent) would result from worker commutes during construction activities.

**Table 3.6-10  
Construction Greenhouse Gas Emissions, SHC, LPCH, and SoM (MT CO<sub>2</sub>e)**

Phase	MT CO <sub>2</sub> e	Subtotal	% by Category
<b>LPCH Facilities</b>			
LPCH Parking	469.75		
LPCH Expansion	580.56	1,050.32	<del>16.90</del> <u>2.87</u> %
<b>SCH Facilities</b>			
SHC Parking	771.01		
Parking Structure 3 Demo	42.94		
SHC Replacement Hospital	879.25		
Core Expansion/Demo	232.83		
SHC Clinics Parking	708.58		
SHC Clinics	570.85	3,205.45	<del>51.59</del> <u>8.76</u> %
<b>Hoover Pavilion</b>			
Hoover Pavilion Parking	701.14		
Hoover Pavilion MOB	66.16	767.30	<del>12.35</del> <u>2.10</u> %
<b>SoM Facilities</b>			
FIM #1	349.59		
Edwards Demo	46.84		
FIM #2	346.49		
Lane Alway Demo	56.08		
FIM #3	335.79		
Grant Demo	56.06	1,190.85	<del>19.16</del> <u>3.26</u> %
<b>Worker Commute</b>			
Phase 1 Emissions	<u>26,963.84</u>		
Phase 2 Emissions	<u>3,395.47</u>	<u>30,359.31</u>	<u>83.01</u> %
		<b><u>6,213.91</u></b>	<b>100.00</b> %
<b>Total CO<sub>2</sub>e Emissions</b>		<b><u>36,573.23</u></b>	

Source: PBS&J, 2010. Based on calculations provided in Appendix VH.

Draft EIR text on page 3.6-59, under Impact CC-2, has been revised as follows:

*CC-2 Emit Significant Greenhouse Gas Emissions. The proposed Emissions Reduction Program would minimize the greenhouse gas emission increases associated with the proposed development program, ~~although~~ and the proposed Emissions Reduction Program along with regulations adopted after the CARB Scoping Plan would ~~not~~ reduce emissions to ~~30~~ 36.09 percent below BAU (excluding emissions from patients and visitor trips). Therefore the SUMC project would not result in ~~have a~~ cumulatively considerable contribution to global climate change. (SLTS)*

Draft EIR on page 3.6-59, third paragraph, has been revised as follows:

A quantitative emissions inventory for the SUMC Project was detailed in Impact CC-1, above. As shown in the above analysis, the anticipated emissions would ~~be above~~ exceed both the City of Palo Alto's Climate Protection Plan and the CARB's reduction emission goals of 30 percent below BAU emissions, without mitigation. SUMC Project's contribution to global climate change would not be cumulatively considerable.

Draft EIR on page 3.6-59 through 3.6-60, starting on the fourth paragraph, has been deleted as follows:

~~MITIGATION MEASURE. Mitigation Measures CC 1.1 through CC 1.5, and TR 2.3 in Section 3.4, Transportation, would reduce greenhouse gas emissions. In addition, to further reduce impacts related to greenhouse gas emissions, the City shall consider the feasibility of Mitigation Measure PH 3.1, as identified and discussed in further detail in Section 3.13, Population and Housing. The mitigation measures include:~~

- ~~• TR 2.3: Enhance Stanford University Travel Demand Management (TDM) Program~~
- ~~• CC 1.1: Commissioning and Retro Commissioning of Energy Systems for New and Existing Buildings.~~
- ~~• CC 1.2: Participation in Palo Alto Green Energy Program.~~
- ~~• CC 1.3: Annual Greenhouse Gas Reporting~~
- ~~• CC 1.4: Preparation of a Waste Reduction Audit~~
- ~~• CC 1.5: BAAQMD Construction Emission Reduction Measures.~~
- ~~• PH 3.1: Reduce the Impacts on the Jobs to Employed Residents Ratio~~

~~However, as demonstrated in Table 3.6-9, even with the implementation of all feasible mitigation measures, the anticipated emissions would remain above both the City of Palo Alto's Climate Protection Plan and the CARB's reduction emission goals of 30 percent below BAU emissions. Because these reduction levels cannot be achieved, the SUMC Project would emit significant amounts of GHGs and would have a cumulatively considerable contribution to global climate change. (SU)~~

**Section 4, Other CEQA Considerations.** Draft EIR text on page 4-1, sixth bullet, has been deleted as follows:

- ~~Emission of greenhouse gases, which would contravene the City’s ability to meet emission reduction goals in the Palo Alto Climate Protection Plan and which would have a cumulatively considerable contribution to global climate change;~~

**Section 5, Alternatives.** Draft EIR text on page 5-2, sixth bullet, has been deleted as follows:

- ~~Emission of greenhouse gases, which would contravene the City’s ability to meet emission reduction goals in the Palo Alto Climate Protection Plan and which would have a cumulatively considerable contribution to global climate change;~~

Draft EIR Table 5-8 on page 5-52 has been revised as follows:

Impact	SUMC Project <sup>a</sup>	No Project Alternative A	No Project Alternative B	Reduced Intensity Alternative A	Reduced Intensity Alternative B	Tree Preservation Alternative	Historic Preservation Alternative	Village Concept Alternative
<b>Climate Change</b>								
Consistency with <u>Individual Policies of the Climate Protection Plan</u>	<del>S/S</del> <u>LTS</u>	LTS	LTS	LTS	S/LTS	<del>S/S</del> <u>LTS</u>	S/SU	<del>S/S</del> <u>LTS</u>
Result in Significant Emissions of Greenhouse Gases	<del>S/S</del> <u>LTS</u>	LTS	LTS	LTS	<del>S</del> <u>LTS</u>	<del>S/S</del> <u>LTS</u>	S/SU	<del>S/S</del> <u>LTS</u>

Draft EIR text on page 5-119, first full paragraph, has been revised as follows:

**Consistency with the Climate Protection Plan.** Reduced Intensity Alternative B is assumed to include the Emissions Reduction Program proposed under the SUMC Project. However, the Emissions Reduction Program would not ensure that Reduced Intensity Alternative B would further some of the individual policies of the Climate Protection Plan.

Draft EIR text on page 5-119, last paragraph, fourth sentence, has been revised as follows:

This alternative is anticipated to result in approximately ~~75~~ 83 percent of the emissions anticipated with the proposed SUMC Project or approximately ~~56,296~~ 38,250 metric tons CO<sub>2</sub>e per year, which is a ~~25~~ 29 percent increase from existing emissions. This alternative, including the Emissions Reduction Program, would reduce greenhouse gas emissions by approximately 9 34 percent compared with BAU emissions for this alternative (calculations are provided in Appendix V of the Responses to Comments document). ~~Therefore, Reduced Alternative B must employ~~

~~additional mitigation measures to further reduce emission impacts.~~ This analysis uses the 30 percent BAU emissions target reduction for 2020 as the criterion for assessing a quantitative compliance with the goals of the Climate Protection Plan. However, without mitigation measures similar to those proposed for the SUMC Project the Emissions Reduction Program would not ensure that Reduced Intensity Alternative B would further some of the individual policies of the Climate Protection Plan.

Draft EIR text on page 5-120, third bullet, has been revised as follows:

- CC-1.2: Participation in a Renewable ~~Palo Alto Green~~ Energy Program.

Draft EIR text on page 5-120, second paragraph, has been revised as follows:

Incorporation of design features and mitigation measures would reduce emissions from Reduced Intensity Alternative B to ~~38,107~~ 21,403 metric tons CO<sub>2</sub>e per year, a reduction of ~~32.18~~ 16.93 percent from the SUMC Project and ~~32.31~~ 44.04 percent from BAU emissions for this alternative (see Appendix V of the Responses to Comments document for calculations). This reduction exceeds the 30 percent reduction from BAU emissions and furthers the goals of the City's Climate Protection Plan. However, without mitigation measures similar to those proposed for the SUMC Project, the Emissions Reduction Program would not ensure that Reduced Intensity Alternative B would further some of the individual policies of the Climate Protection Plan. Therefore, with incorporation of Mitigation Measures CC-1.1 through CC-1.4, and TR-2.3, ~~and possibly PH 3.1,~~ Reduced Intensity Alternative B's contribution to global climate change would be less than cumulatively considerable. (S/LTS)

Draft EIR text on page 5-147, second paragraph, has been revised as follows:

For the new and expanded ~~h~~Hospital facilities, the Tree Preservation Alternative would include an Emissions Reduction Program for minimizing greenhouse gas emissions associated with new building construction and operation, similar to the SUMC Project. The programs implemented at the facilities would minimize greenhouse gas at those facilities similarly to the proposed SUMC Project's reduction of approximately ~~6~~ 36.09 percent, compared to BAU emissions, without mitigation. ~~AB 32, the CARB's Scoping Plan, incorporates a 30 percent reduction target from 2020 BAU emissions limits. The City's Climate Protection Plan's incorporates this BAU approach to quantify emissions from significant, new project which were not included in the City's existing inventory. As such, this analysis applies the 2020 reduction goal (equivalent to 30 percent below BAU) as a target threshold for compliance with the City Climate Protection Plan. Like the SUMC Project, this alternative would not meet the standards of reducing emissions by 30 percent compared to BAU emissions. Therefore, the Tree Preservation Alternative must employ additional mitigation measures to further reduce emissions impacts.~~ This analysis uses the 30 percent BAU emissions target reduction for 2020 as the criterion for assessing a quantitative compliance with the goals of the Climate Protection Plan. However, without mitigation measures similar to those proposed for the SUMC Project, the Emissions Reduction Program would not ensure that the Tree

Preservation Alternative would further some of the individual policies of the Climate Protection Plan.

Draft EIR text on page 5-147, third bullet, has been revised as follows:

- CC-1.2: Participation in a Renewable Palo Alto Green Energy Program.

Draft EIR text on page 5-147, fourth paragraph, has been revised as follows:

~~Notwithstanding all of these features that satisfy individual policies set forth in the Climate Change Plan, as with the SUMC Project, the Tree Preservation Alternative would still result in a significant overall increase in greenhouse gas emissions within the City, in contravention of the overall goals of the Climate Protection Plan. As emissions from the Tree Preservation Alternative would be similar to the SUMC Project, it is anticipated that, as with the SUMC Project, the reductions afforded by the proposed mitigation would not reduce emissions to a level 30 percent below BAU. Therefore, emissions from the proposed Tree Preservation Alternative are considered significant and unavoidable. (S/SU) With Mitigation Measure TR 2.3, greenhouse gas emissions would be reduced by 44.09 percent from the BAU estimates in the year 2025. Further, with the implementation of the mitigation measures the Tree Preservation Alternative would comply with the individual policies in the City of Palo Alto's Climate Protection Plan. Therefore, emissions from the proposed Tree Preservation Alternative are considered less than cumulatively considerable. (S/LTS)~~

Draft EIR text on page 5-147 through 5-148, starting at the fifth paragraph, has been revised as follows:

**Result in Significant Emissions of Greenhouse Gases.** ~~Even with the implementation of all feasible mitigation measures, it~~ It is anticipated that emissions reductions afforded the Tree Preservation Alternative would ~~not~~ achieve ~~either~~ both the City of Palo Alto's Climate Protection Plan and the CARB's reduction emission goal of 30 percent below BAU. Because these reduction levels ~~cannot~~ are be achieved, the Tree Preservation Alternative would ~~not~~ emit significant amounts of greenhouse gases and would have a less than cumulatively considerable contribution to global climate change. (S/~~SU~~ LTS)

Draft EIR text on page 5-175, second full paragraph, has been revised as follows:

**Consistency with the Climate Protection Plan.** The Historic Preservation Alternative is assumed to include the Emissions Reduction Program proposed under the SUMC Project. However, the Emissions Reduction Program would not ensure that the Historic Preservation Alternative would further some of the individual policies and the numeric goals of the Climate Protection Plan.

Draft EIR text on page 5-176, first full paragraph, has been revised as follows:

~~AB 32, the CARB's Scoping Plan, incorporates a 30 percent reduction target from 2020 BAU emissions limits. The City's Climate Protection Plan's incorporates this BAU approach to quantify emissions from significant, new project which were not included in the City's existing inventory.~~

~~As such, this analysis applies the 2020 reduction goal (equivalent to 30 percent below BAU) as a target threshold for compliance with the City Climate Protection Plan. As it is anticipated that the Historic Preservation Alternative may result in increased emissions from and therefore less of a reduction than the approximately 6 percent anticipated with the proposed SUMC Project, the Historic Preservation Alternative must employ additional mitigation measures to further reduce emission impacts. For the new Hospital facilities, the Historic Preservation Alternative is assumed to include an Emissions Reduction Program for minimizing greenhouse gas emissions associated with new building operation, similar to the SUMC Project. The programs would minimize greenhouse gas at those facilities; however, the energy efficiencies of the preserved buildings would remain as they are. This would result in a potential increase in emissions beyond what is presented for the SUMC Project and potentially would result in an emission reduction of less than 30 percent from BAU. This analysis uses the 30 percent BAU emissions target reduction for 2020 as the criterion for assessing a quantitative compliance with the numeric goals of the Climate Protection Plan.~~

Draft EIR text on page 5-176, third bullet, has been revised as follows:

- CC-1.2: Participation in a Renewable Palo Alto Green Energy Program.

Draft EIR text on page 5-176, third paragraph, has been revised as follows:

~~Notwithstanding all of these features that satisfy individual policies set forth in the Climate Change Plan, as with the SUMC Project, the Historic Preservation Alternative would still result in a significant overall increase in greenhouse gas emissions within the City, in contravention of the overall goals of the Climate Protection Plan. As emissions from the Tree Preservation Alternative would be similar to the SUMC Project, it is anticipated that, as with the SUMC Project, the reductions afforded by the proposed mitigation would not reduce emissions to a level 30 percent below BAU. Therefore, emissions from the proposed Tree Preservation Alternative are considered significant and unavoidable. (S/SU) With the implementation of the mitigation measures, the Historic Preservation Alternative would comply with the individual policies in the City of Palo Alto's Climate Protection Plan. However, the energy efficiencies of the preserved buildings would remain as they are. This would result in a potential increase in emissions beyond what is presented for the SUMC Project and potentially would result in an emission reduction of less than 30 percent from BAU. Therefore, emissions from the Historic Preservation Alternative are considered significant and unavoidable. (S/SU)~~

Draft EIR page 5-176, fourth paragraph, has been revised as follows:

**Result in Significant Emissions of Greenhouse Gases.** ~~Even w~~With the implementation of all feasible mitigation measures, it is anticipated that emissions reductions afforded the Historic Preservation Alternative would not necessarily achieve either the City of Palo Alto's Climate Protection Plan or the CARB's reduction emission goal of 30 percent below BAU emissions. Because the higher energy consuming buildings would be maintained with limited upgrades or new construction, the reductions afforded building efficiency would only be attributable to the upgrades

and new buildings. Because these 30 percent below BAU reduction levels is dependent on the replacement of older buildings with new, higher efficiency buildings, attainment of this level of reduction cannot be anticipated. achieved. Therefore, the Historic Preservation Alternative would potentially emit significant amounts of greenhouse gases and would have a cumulatively considerable contribution to global climate change. (S/SU)

Draft EIR page 5-206, second paragraph, last sentence has been revised as follows:

As determined by AECOM Transportation,<sup>89,90,91</sup> VMT was calculated as shown in Table (see the Revised VMT calculations memorandum and the revised Alternatives Analysis by AECOM, provided as Appendix R W and Appendix X, respectively, of this document).

<sup>89</sup> ~~AECOM Transportation, *Stanford EIR Alternative Analysis – Village Concept VMT* Memo to Trixie Martelino, dated February 11, 2010.~~

<sup>90</sup> ~~AECOM Transportation, *Stanford EIR – Revised VMT Calculations for SUMC* Memo to Trixie Martelino, dated February 11, 2010.~~

<sup>91</sup> ~~AECOM Transportation, *VCA VMT with Enhanced TDM – Correction*, electronic communication with Trixie Martelino, dated March 30, 2010.~~

<sup>89</sup> AECOM Transportation, *Stanford EIR Transportation Impact Analysis Alternative Analysis – Appendix K VMT Calculation for Village Concept*, dated January, 2011.

<sup>90</sup> AECOM Transportation, *Stanford EIR – Revised VMT Calculations for SUMC* Memo to Trixie Martelino, dated January 20, 2011.

Draft EIR Table 5-13 on page 5-206 has been revised as follows:

**Table 5-13  
Comparison of Vehicle Miles Traveled for SUMC Project and Village Concept Alternative**

	SUMC Project VMT <sup>a,b</sup>	Village Concept Alternative VMT <sup>a,b</sup>
Without mitigation measure TR-2.3 (employee, patient and spouse trips)	306,098	280,235
Without <del>m</del> Mitigation <del>m</del> Measure TR-2.3 (employee and patient trips only)	275,837 <del>566</del>	265,682 <del>289,156</del>
With <del>m</del> Mitigation <del>m</del> Measure TR-2.3 (employee and patient trips only)	238,519 <del>355</del>	236,245 <del>251,837</del>

Source: URBEMIS 2007

Notes:

- a. Calculated using VMT assumptions reported by AECOM Transportation, (Appendices W and X). Emissions were modeled using the VMT assumptions from AECOM in the URBEMIS 2007 software. The VMT numbers vary slightly from the VMT in the AECOM memos due to rounding in the URBEMIS model.
- b. In this table, the SUMC Project VMT includes both employee and patient/visitor trips, the Village Concept Alternative VMT includes employee, visitor/patient, and housing trips. Table 5-14 and 5-15 separate VMT emissions from patient/visitor trips.

Draft EIR text on page 5-207, second full paragraph, has been revised as follows:

*Construction Greenhouse Gas Emissions.* Construction emissions with this alternative would ~~slightly~~ increase from the ~~6,213.91~~ 36,573 MT CO<sub>2</sub>e greenhouse gas emissions estimated from the SUMC Project.

Draft EIR text on page 5-207, third paragraph, third sentence and Table 5-14, have been revised as follows:

As shown in Table 5-14, the vehicle miles traveled associated with the Village Concept Alternative are anticipated to ~~decrease~~increase with the implementation of the Village Concept Alternative, which would result in an overall ~~decrease~~increase in emissions from the SUMC Project of 2.8 percent.

**Table 5-14**  
**Village Concept Alternative Greenhouse Gas Emissions (Compared to SUMC Project)**

Source of Emissions	Village Concept Alternative Without TDM ( <del>265,682</del> <u>289,156</u> VMT) (MT CO <sub>2</sub> e)	SUMC Project Without TDM ( <del>275,566</del> <u>275,837</u> VMT) (MT CO <sub>2</sub> e)
Natural Gas (therms)	<del>22</del> <u>17</u>	<del>22</del> <u>17</u>
Diesel Generators (gallons)	23	23
Medical Nitrous Oxide (cubic feet)	99	99
Fleet Vehicle Fuels (gallons)	100	100
Helicopter Fuel (gallons)	201	201
Electricity (MWh)	<u>6,569</u>	<u>6,569</u>
Steam and Chilled water (MBtu)	<del>19,542</del> <u>13,679</u>	<del>19,542</del> <u>13,679</u>
Non-fleet <u>Employee and Housing</u> Vehicular Emissions (VMT) <sup>a</sup>	<del>39,773</del> <u>9,680</u>	<del>41,257</del> <u>8,285</u>
Solid Waste (tons)	480	480
<b>Subtotal for BAU Comparison</b>	<b><u>30,849</u></b>	<b><u>29,453</u></b>
<u>Non-fleet Patient and Visitor Vehicular Emissions (VMT)<sup>a</sup></u>	<u>17,133</u>	<u>17,213</u>
<b>Total Emissions</b>	<b><u>60,240</u> <del>47,982</del></b>	<b><u>63,035</u> <del>46,666</del></b>

Source: Reductions provided by PBS&J, 2011<sub>0</sub> (Appendix V E), and AECOM, 2011<sub>0</sub> (Appendix W and X P).

Notes:

Calculated using VMT assumptions reported in AECOM Transportation, ~~January 2011~~ February and March, 2010. Emissions modeled using the VMT Assumptions from AECOM in the URBEMIS 2007 software. The numbers vary slightly from the VMT in the AECOM memos due to rounding purposes for the URBEMIS model. AECOM Transportation, January 20, 2011 ~~February, 11, 2010~~ Memorandum to Trixie Martelino, Revised VMT Calculations for SUMC Project. AECOM Transportation Stanford University Medical Center Draft Environmental Impact Report Transportation Impact Analysis Alternatives Analysis, March 2010, AECOM, revised January 2011.



Draft EIR text on page 5-208, first paragraph, is deleted as follows:

~~Table 5-14 considers just the VMT reduction from SUMC employees occupying the housing sites; it does not account for spousal trips to transit or separate jobs. If those spousal trips are accounted for, then VMT from the Village Concept Alternative would increase compared to the SUMC Project, as discussed later in this section.~~

Draft EIR text on page 5-208, second paragraph, fourth sentence, has been revised as follows:

Based on Table 5-14, this alternative is anticipated to result in up to a ~~2.45~~ 2.8 percent ~~decrease~~increase in emissions from the proposed SUMC Project. This is a ~~27~~ 25 percent increase from existing conditions. ~~The reduced vehicle trips coupled with~~ This alternative, including the reductions from the Emissions Reduction Program, would minimize greenhouse gas emissions by approximately ~~18~~ 36 percent compared with the BAU emissions for this alternative, without mitigation (calculations are provided in Appendix V of the Responses to Comments document). ~~Therefore, the Village Concept Alternative must employ additional mitigation measures to further reduce emission impacts.~~ This analysis uses the 30 percent BAU emissions target reduction for 2020 as the criteria for assessing a quantitative compliance with the goals of the Climate Protection Plan. However, without mitigation measures similar to those proposed for the SUMC Project the Emissions Reduction Program alone would not ensure that the Village Concept Alternative would further the goals of the Climate Protection Plan.

Draft EIR text on page 5-208, third bullet, has been revised as follows:

- CC-1.2: Participation in a Renewable ~~Palo Alto Green~~ Energy Program.

Draft EIR text on page 5-208, fourth paragraph, has been revised as follows:

Incorporation of the ~~mitigation measures~~ Mitigation Measure TR-2.3 would reduce emissions from the Village Concept Alternative to ~~55,863~~ 44,294 metric tons CO<sub>2</sub>e per year (Table 5-15), a ~~decrease~~increase of ~~0.59~~ 3 percent from the SUMC Project ~~but and~~ an increase of 25 24.8 percent over existing emissions. As shown in ~~Table 5-14~~ Table 5-15, the resulting greenhouse gas emissions reduction from the Village Concept Alternative would be ~~23.81~~ 43.65 percent less than the BAU emissions for this alternative (see also Appendix V for calculations). ~~This reduction would be below the 30 percent reduction from BAU emissions. Therefore, even with Mitigation Measure CC 1.1 through CC 1.4, TR 2.3, and possibly PH 3.1, the Village Concept Alternative's contribution to global climate change would be cumulatively considerable and would contravene the goals of the Climate Protection Plan. (S/SU)~~ With the implementation of the mitigation measures, the Village Concept Alternative would exceed the 30 percent reduction from BAU target and would comply with the individual policies in the City of Palo Alto's Climate Protection Plan. Therefore, emissions from the proposed The Village Concept Alternative would be less than cumulatively considerable after mitigation. (S/LTS)

Draft EIR text on page 5-208, fifth paragraph, has been revised as follows:

~~Although this alternative provides preferential housing for employees of the SUMC facilities, there may be other members of the household that have to drive to work. With the inclusion of spousal trips, there would be an increase in VMT for both the SUMC Project and the Village Concept Alternative. Table 5-16 shows the Increase in VMT and the resulting emissions from the inclusion of the spousal trips.~~

Draft EIR text on page 5-209, first paragraph, and Tables 5-15 and Table 5-16 have been revised as follows:

~~**Result in Significant Emissions of Greenhouse Gases.** Even with the implementation of all feasible mitigation measures, emissions reductions afforded the Village Concept Alternative would not achieve either the City of Palo Alto's Climate Protection Plan or the CARB's reduction emission goals of 30 percent below BAU emissions. Because these reduction levels cannot be achieved, the Village Concept Alternative would emit significant amounts of greenhouse gas and would have a cumulatively considerable contribution to global climate change. (S/SU)~~ With the implementation of all feasible mitigation measures, it is anticipated that emissions reductions afforded the Village Concept Alternative would achieve both the individual policies of the City of Palo Alto's Climate Protection Plan and the CARB's reduction emission goal of 30 percent below BAU. Therefore, the Village Concept Alternative would not emit significant amounts of greenhouse gas and would have a less than cumulatively considerable contribution to global climate change. (LTS)

**Table 5-15**  
**Mitigated Village Concept Alternative Greenhouse Gas Emissions With TDM (Compared to SUMC Project With TDM)**

Source of Emissions	Village Concept Alternative With TDM (236,422 251,837 VMT) (MT CO <sub>2</sub> e)	SUMC Project With TDM (238,355 238,519 VMT) (MT CO <sub>2</sub> e)
Natural Gas (therms)	<del>22</del> 17	<del>22</del> 17
Diesel Generators (gallons)	23	23
Medical Nitrous Oxide (cubic feet)	99	99
Fleet Vehicle Fuels (gallons)	100	100
Helicopter Fuel (gallons)	201	201
Electricity (MWh)	<u>6,569</u>	<u>6,569</u>
Steam and Chilled water (MBtu)	<del>19,542</del> 13,679	<del>19,542</del> 13,679
Non-fleet Employee and Housing Vehicular Emissions (VMT) <sup>a</sup>	<del>35,390</del> <u>5,993</u>	<del>35,724</del> <u>4,597</u>
Solid Waste (tons)	480	480
<b>Subtotal for BAU Comparison</b>	<b><u>27,161</u></b>	<b><u>25,766</u></b>
Non-fleet Patient and Visitor Vehicular Emissions (VMT) <sup>a</sup>	<u>17,133</u>	<u>17,213</u>
<b>Total Emissions</b>	<b><u>55,86344,294</u></b>	<b><u>56,19042,989</u></b>

Source: Reductions provided by PBS&J, 2011<sup>10</sup> (Appendix VE), and AECOM, 2011<sup>10</sup> (Appendix XP).

Notes:

Calculated using VMT assumptions reported in AECOM Transportation, ~~January 2011~~ February and March, 2010. Emissions modeled using the VMT Assumptions from AECOM in the URBEMIS 2007 software. The numbers vary slightly from the VMT in the AECOM memos due to rounding purposes for the URBEMIS model. AECOM Transportation, January 20, 2011~~February, 11, 2010~~ Memorandum to Trixie Martelino, Revised VMT Calculations for SUMC Project. AECOM Transportation Stanford University Medical Center Draft Environmental Impact Report Transportation Impact Analysis Alternatives Analysis, March 2010. AECOM, revised January 2011.

**Table 5-16**  
**Comparison of Greenhouse Gas Emissions with Inclusion of Spousal Trips**

Net Emissions	MT CO <sub>2e</sub>	
	Village Concept Alternative Without TDM	SUMC Project Without TDM
Vehicle miles traveled	280,235	306,098
<b>Total Emissions</b>	<b>62,504</b>	<b>75,013</b>

*Source:* PBS&J 2010 (Appendix E), AECOM, February 11, 2010, AECOM, March 2010.

*Notes*

a. Calculated using VMT assumptions reported in AECOM Transportation, February and March, 2010. Emissions were modeled using the VMT assumptions from AECOM in the URBEMIS 2007 software. The numbers vary slightly from the VMT in the AECOM memos due to rounding purposes for the URBEMIS model. AECOM Transportation, February 11, 2010 Memorandum to Trixie Martelino, Revised VMT Calculations for SUMC Project. AECOM Transportation Stanford University Medical Center Draft Environmental Impact Report Transportation Impact Analysis Alternatives Analysis, March 2010.

**Staff-Initiated Change 5: Impacts of the Proposed Hoover Pavilion Renovation and Site Development on the Hoover Pavilion’s Potential Status as a Historic Resource**

**Introduction**

Staff-Initiated Change 5 addresses Comments 28.1, PTC1.9, PTC1.27, PTC2.2, PTC2.14, PTC2.22, CC1.21, CC2.5, CC4.5, CC5.49, and CC5.51.

Comments on the Draft EIR express concern that: views of the Hoover Pavilion would be obstructed by the proposed medical office building and parking structure at the Hoover Pavilion Site; the SUMC Project could impact the overall visual quality at the Hoover Pavilion Site; and the design of the main entrance and entry facade to Hoover Pavilion could impact the historic structure. Commentors also request the restoration plans and ask if the California Historical Building Code was used in the preparation of the plans for the Hoover Pavilion renovation. Due to these public concerns regarding the Hoover Pavilion, staff has provided a more in-depth examination of impacts on the Hoover Pavilion from (1) the proposed renovation of the Hoover Pavilion and (2) the proposed site plan at the Hoover Pavilion Site. This Staff-Initiated Change 5 supplements the analysis provided under Impact CR-1 on pages 3.8-18 through 3.8-23 of the Draft EIR. The Architectural Resources Group (ARG) has prepared a report, *Stanford Hoover Pavilion Renovation Project* (ARG Report),<sup>7</sup> which further analyzes the potential impact of the SUMC Project on the Hoover Pavilion. The report is included as Appendix Y to this document.

<sup>7</sup> Architectural Resources Group, *Stanford Hoover Pavilion Renovation Project*, January 18, 2011.

## Clarification of Impacts of Hoover Pavilion Renovation and Site Development

Staff-Initiated Change 5 analyzes the impacts of the Hoover Pavilion renovation and the construction of the new medical office building and parking structure. Specifically, this sub-section addresses the potential impacts of these project components on the characteristics of the Hoover Pavilion that justify its inclusion in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). According to CEQA, a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment (Pub. Res. Code 21084.1). CEQA Guideline Section 15064.5(b)(1) defines substantial adverse change in the significance of a historical resource as the “physical demolition, destruction, relocation, alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.” CEQA Guideline Section 15064.5(b)(2)(A) continues stating that a historical resource “is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources.” The ARG Report concludes that the Hoover Pavilion would retain good integrity and the physical characteristics that convey its historical significance and that justify its eligibility for inclusion in the CRHR. The renovation of the Hoover Pavilion and the layout of the medical office building and parking structure at the Hoover Pavilion Site would result in a less-than-significant impact to the Hoover Pavilion.<sup>8</sup>

Under CEQA, a project that follows the *Secretary of the Interiors Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (The Standards)* has mitigated impacts to historical resources to less than significant. The SUMC Project would not result in a significant adverse impact to the Hoover Pavilion; therefore, no mitigation is required. Nevertheless, the ARG Report analyzes consistency of the new medical office building and parking structure on the Hoover Pavilion Site with *The Standards*.

These potential impacts were discussed under the consistency analysis for Standards 2 and 9 of Standard 2 states:

The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.<sup>9</sup>

The discussion in the ARG Report is broken out into two impact areas: Hoover Pavilion Renovations and New Construction. Under New Construction, the analysis considers the significant characteristics of the Hoover Pavilion and the location, massing, and style of the new medical office building and parking structure. The ARG Report states that the site plan would not be consistent with Standard 2

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<sup>8</sup> Architectural Resources Group, *Stanford Hoover Pavilion Renovation Project*, January 18, 2011, page 1.

<sup>9</sup> Architectural Resources Group, *Stanford Hoover Pavilion Renovation Project*, January 18, 2011, page 9.

because the siting of the proposed the medical office building would block views of the west façade (along Quarry Road), one of two primary facades of the Hoover Pavilion.<sup>10</sup>

By contrast, the Stanford University Director of Heritage Services has submitted evidence that the west façade was not a primary façade; this discussion is provided as Appendix Z of this document.<sup>11</sup> As discussed in Appendix Z, upon construction of the Palo Alto Hospital in 1930,<sup>12</sup> Palo Road was constructed as the main entrance/drive to the facility and a service road on the opposite side of the site. A service/ambulance driveway was created as a loop leading from the service road to the ambulance entrance, and then to Quarry Road and Palo Road. The main entrance to the hospital faced El Camino Real and Palo Road. On the Quarry Road side, the ground floor contained service and ambulance entrances to the emergency room and support uses, such as storage, laundry, staff lockers and the morgue. Appendix Z provides historic site plans that depict the orientation that the Hoover Pavilion's primary façade faces El Camino Real/Palo Road and its secondary façade faces Quarry Road. It should be noted that Quarry Road was a minor farm road during the majority of the period of significance for the Palo Alto Hospital, and this road obtained its more urban character after the primary hospital functions had moved to the current SHC location.

This difference of opinion between ARG and the Stanford University Director of Heritage Services need not be resolved because ARG, City staff, and the EIR preparers agree that the new blockage of the Hoover Pavilion would not result in a significant impact as defined by CEQA. The new medical office building would not block views of the historic entrance to the Hoover Pavilion building, or to the view of the building from the Quarry Road/Palo Road intersection. Under that analysis, with which the City and EIR preparers concur, the new building would not result in a significant impact under CEQA.

Standard 9 states:

New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

As with Standard 2, the discussion in the ARG Report is broken out into two impact areas: Hoover Pavilion Renovations and New Construction. Under New Construction, the analysis considers the significant characteristics of Hoover Pavilion and the location, massing, and style of the new medical office building and parking structure. The report again states that the SUMC Project is largely

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<sup>10</sup> Architectural Resources Group, *Stanford Hoover Pavilion Renovation Project*, January 18, 2011, page 15.

<sup>11</sup> Laura Jones, PhD, Heritage Services, Stanford University, *Hoover Pavilion/Palo Alto Hospital: Historic Site Development and Viewsheds*, December 8, 2010.

<sup>12</sup> As indicated on page 3.8-11 of the Draft EIR, the Hoover Pavilion was constructed in 1930 to house the Palo Alto Hospital.

consistent with Standard 9, with the exception of the siting of the medical office building, which partially blocks views of Hoover Pavilion from Quarry Road.<sup>13</sup>

However, as previously stated, the Hoover Pavilion historical resource would retain good integrity and the physical characteristics that convey its historical significance and that justify its eligibility for inclusion in the CRHR.<sup>14</sup> As such, the proposed site plan at the Hoover Pavilion Site would not obstruct views of the Hoover Pavilion to the extent that the Hoover Pavilion would no longer be eligible for listing in the NRHP and CRHR and no significant impact under CEQA would result from the siting of the medical office building.

The ARG Report also analyzes the proposed renovations to the Hoover Pavilion itself, specifically the design changes to the main entrance and façade. These changes are also discussed under the consistency analysis for Standard 2 of *The Standards*, under the discussion of Hoover Pavilion Renovations. Character defining details of the main entrance and the façade as a whole are discussed in detail followed by a discussion of the proposed changes per the project plans. Proposed changes to the main entry are discussed in detail, especially the proposed storefront system that would enclose the two-story opening directly above the main entrance on the north facade. The ARG Report indicates that the proposed storefront system would sit approximately three feet back from the exterior wall plane. The depth is sufficient to maintain the open character and deep shadow pattern created by the two-story opening, which is particularly striking when viewed at an angle.<sup>15</sup> The proposed alterations to the main entrance or façade would thus not result in inconsistencies with *The Standards*.

In light of the above analysis, the proposed renovation of the Hoover Pavilion and layout of the medical office building and parking structure at the Hoover Pavilion Site would not render the Hoover Pavilion ineligible for listing in the NRHP and CRHR and would therefore have a less-than-significant impact under CEQA.

## **Staff-Initiated Change 6: Changes to Protected Tree Numbers and Mitigation Measures Under the SUMC Project and the Tree Preservation Alternative**

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### **Introduction**

Staff-Initiated Change 6 addresses Comments 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 22.54, 22.55, 22.56, 22.57, 22.58, 22.59, 22.60, 22.61, 22.62, 22.63, 22.77, 22e.1, 22e.2, 22e.3, 22e.4, 22e.5, 46.2, PTC2.30, PTC6.35, PTC6.36, PTC6.37, PTC6.39, PTC6.42, CC2.12, CC2.20, CC2.21, CC5.3, CC5.32, CC5.38, and CC5.39.

It was noted in both the comment letters and at the public hearings that the description in the Draft EIR of the Protected Trees is unclear. In addition, the Protected Tree numbers included in the Draft EIR analysis for the SUMC Project and the Tree Preservation Alternative conflict to a small degree with the

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<sup>13</sup> Architectural Resources Group, *Stanford Hoover Pavilion Renovation Project*, January 18, 2011, page 21.

<sup>14</sup> Architectural Resources Group, *Stanford Hoover Pavilion Renovation Project*, January 18, 2011, page 1.

<sup>15</sup> Architectural Resources Group, *Stanford Hoover Pavilion Renovation Project*, January 18, 2011, page 10.

numbers presented by the SUMC Project sponsors at the public hearings. As such, the City of Palo Alto and the SUMC Project sponsors have resolved the Protected Tree numbers and edits have been made to the Draft EIR to provide the correct numbers, as presented here. Additionally, edits have been made to the mitigation measures in the Draft EIR in response to several comments.

### **Clarification to Impacts on Protected Trees**

Impact BR-4 in Section 3.9, Biological Resources, of the Draft EIR discusses and analyzes the existing Protected Trees at the SUMC Sites and the impacts to these trees as a result of the SUMC Project. In addition, mitigation measures are presented on pages 3.9-26 through 3.9-28 of the Draft EIR to reduce the impacts to Protected Trees, but not to a level of less than significant. As described in the Draft EIR, there are 1,562 trees within the SUMC Sites, several of which are considered to be Protected Trees. The Draft EIR includes a definition of Protected Trees, provides the number of Protected Trees to be removed as a result of the SUMC Project, and presents Mitigation Measures BR-4.1 through BR-4.6 to reduce the impacts. In addition, the Draft EIR describes the proposed new Hospital District zoning requirements under which some of the significant Protected Trees warrant additional protection. These “biological and aesthetic tree resources” would be preserved, while a limited number of the other Protected Trees (those not considered to be biological and aesthetic tree resources) would be allowed to be removed.

The Draft EIR also includes an analysis of the Tree Preservation Alternative, which would seek to retain or relocate all of the Protected Trees that are both biological and aesthetic tree resources at the SUMC Sites. However, the Draft EIR concludes that even if most of the biological and aesthetic tree resources are saved, the Tree Preservation Alternative would not be able to preserve all Protected Trees, even with mitigation. Like the SUMC Project, the Tree Preservation Alternative would allow for the removal of Protected Trees that are considered biological resources but not considered aesthetic tree resources, therefore resulting in a significant and unavoidable impact.

As mentioned above, since the publication of the Draft EIR, the Protected Tree numbers have been corrected, as shown in Table 3.2-8. Although the Protected Tree numbers have been clarified and the mitigation measures have been edited since the publication of the Draft EIR, the significance conclusions have not changed. As stated on page 3.9-26, Mitigation Measures BR-4.1 through BR-4.5 would reduce the SUMC Project’s impact on Protected Trees.

Table 3.2-8 identifies the tree counts previously presented in the Draft EIR, corrects tree counts for the SUMC Project, and corrects tree counts for the Tree Preservation Alternative. As shown in the table, the SUMC Project would result in removal of approximately 74 trees that are currently protected under the City’s Tree Ordinance (Protected Trees). The Tree Preservation Alternative, by contrast, would result in removal or relocation of up to 62 Protected Trees.

**Table 3.2-8  
Protected Trees at the SUMC Sites**

	Draft EIR		Updated	
	SUMC Project	Tree Preservation Alternative	SUMC Project	Tree Preservation Alternative
Total Trees within the SUMC Sites	1,562	1,562	1,562	1,562
Total Protected Trees <sup>a</sup>	176	176	178	178
Total Protected Trees that are also Aesthetic Tree Resources	23	23	18	18
<b>Protected Trees to be Removed</b>				
Protected Trees Potentially Subject to Removal Under the Hospital District Zoning	48	48	61	59
Biological and Aesthetic Tree Resources Potentially Subject to Removal	23	10	13	3 <sup>b</sup>
<i>Total</i>	<i>71</i>	<i>58</i>	<i>74</i>	<i>62</i>
<b>Biological and Aesthetic Tree Resources to be Retained/Relocated</b>				
Biological and Aesthetic Tree Resources <sup>c</sup> to be Retained in Place	0	13	5	15
Biological and Aesthetic Tree Resources to be Relocated	0	3	0	3
<i>Total</i>	<i>0</i>	<i>16</i>	<i>5</i>	<i>18</i>

Source: City of Palo Alto, 2010.

Notes:

- a. All Protected Trees are considered biological resources.
- b. All three aesthetic tree resources would be relocated, not removed.
- c. Proposed project design (before any mitigation) would retain five and potentially remove 13 aesthetic tree resources

The new Hospital Zoning Ordinance adopted as part of the SUMC Project or as part of the Tree Preservation Alternative would include procedures to permit the removal or relocation of some of the Protected Trees on the SUMC Sites. As currently contemplated, the zoning ordinance would define two categories of Protected Trees: trees that are protected under the City’s Tree Ordinance because they are a biological tree resource, and trees that are biological tree resources and also have an especially high aesthetic value (“aesthetic tree resources”). As applied to the Tree Preservation Alternative, the new zoning would allow removal of up to 59 Protected Trees. If removed, Protected Trees would need to be replaced pursuant to the ratios in the City’s Tree Technical Manual. The new zoning ordinance would allow relocation of three Protected Trees that are also aesthetic tree resources. Fifteen Protected Trees that are also aesthetic tree resources would be preserved in place, for a total of 18 Protected Trees that are aesthetic tree resources to be retained. By contrast, the SUMC Project as originally designed would have removed as many as 13 Protected Trees that are also aesthetic tree resources.



Due to the changes shown in Table 3.2-8, the following text edits have been made to various sections of the Draft EIR, as included below.

### Draft EIR Text Revisions

**Summary.** The fourth bullet under the subheader “Other City Approvals” on pages S-13 to S-14 of the Draft EIR has been revised as follows:

- Regulations in this district would include applicability, preservation, and exemptions for removal and replacement of Protected Trees. The Hospital District would create a procedure to permit the removal or relocation of ~~approximately 48~~ Protected Trees while preserving ~~approximately 23 Protected Trees~~ trees that are considered both biologically and aesthetically ~~significant~~ tree resources. The existing Protected Trees that are considered both biologically and aesthetically ~~significant~~ tree resources are discussed in more detail in Section 3.9, Biological Resources, and Section 5, Alternatives. The Hospital District ordinance would include provisions for ~~an applicable timeline (development vs. non-development) and for~~ specific Protected Tree retention and preservation through development standards and regulations. Some Protected Trees that qualified for exemption to the regulations could be removed, providing that they are replaced per the City Tree Technical Manual (TTM) standards (TTM, Section 3.00). In addition, the Hospital District ordinance would require a minor amendment to the Tree Ordinance (PAMC 8.10) to recognize and cross-reference with the Hospital District ordinance.<sup>11</sup>

The third column under the header “Mitigation Measures” on pages S-68 through S-71 has been revised as follows:

MITIGATION MEASURES. Mitigation Measures BR-4.1 through BR-4.5, below, to be implemented by the SUMC Project sponsors, would reduce the SUMC Project’s impact on Protected Trees. In addition, Mitigation Measure BR-4.6 would require minor SUMC Project site plan adjustments to avoid removal of some biologically and aesthetically ~~significant Protected Trees~~ tree resources. However, ~~the new Hospital District under the SUMC Project would allow the removal of up to 48 Protected Trees that are protected under the existing Municipal Code.~~ up to 61 Protected Trees that are not aesthetic tree resources could be removed under the SUMC Project. In addition, minor modifications to the SUMC Project site plans would not be able to avoid the nine biologically and aesthetically ~~significant Protected Trees~~ tree resources in the Kaplan Lawn area. Therefore, the SUMC Project would result in a significant and unavoidable impact to Protected Trees. (SU)

*BR-4.1 Prepare a Tree Preservation Report for all Trees to be Retained.* An updated tree survey and tree preservation report (TPR) prepared by a certified arborist shall be submitted for review ~~and acceptance by~~ and approval by the Director of Planning and Community Environment in consultation with the City Urban Forester Arborist. For reference clarity, the tree survey shall include (list and field tag) all existing trees within the SUMC Sites, including adjacent trees overhanging the

SUMC Sites. The approved TPR shall be implemented in full, including mandatory inspections and monthly reporting to City ~~Urban Forester~~ Arborist. The TPR shall be based on latest SUMC plans and amended as needed to address activity ~~or~~ within the dripline area of any existing Protected Tree to be preserved, including incidental work (utilities trenching, street work, lighting, irrigation, etc.) that may affect the health of a preserved Protected Tree. ~~The SUMC Project shall be modified to address recommendations identified to reduce impacts to existing ordinance-regulated trees.~~ The TPR shall be consistent with the criteria set forth in the Tree Preservation Ordinance, Palo Alto Municipal Code Section 8.10.030, and the City Tree Technical Manual, Section 3.00, 4.00 and 6.30. To avoid improvements that may be detrimental to the health of ~~regulated~~ Protected Trees, the ~~TPR~~ Director of Planning and Community Environment, in consultation with the City Arborist, shall review the SUMC Project sponsors' landscape plan to ensure the new landscape is consistent with Tree Technical Manual, Section 5.45 and Appendix L, Landscaping under Native Oaks.

*BR-4.2 Prepare a Solar Access Study (SAS) of Short and Long Term Effects on Protected Oaks.* The SUMC Project sponsors shall prepare a SAS of Short and Long Term Effects on Protected Oaks that are aesthetic tree resources for review and approval by the Director of Planning and Community Environment in consultation with the City Arborist. The SAS shall be prepared by a qualified expert team (horticulturalist, architect designer, consulting arborist) capable of determining effects, if any, to foliage, health, disease susceptibility and also prognosis for longevity. The SAS shall ~~provide alternative massing scenarios to provide sufficient solar access and reduce shading detriment at different thresholds of tree health/decline, as provided for in the SAS. The SAS adequacy shall be subject to peer review as determined necessary by the City. The SAS design alternatives shall be the subject of specific discussion at all levels of ARB, Planning Commission, City Council, and public review in conjunction with the SUMC Project sponsors, the City Urban Forester, and Director of the Planning and Community Environment Department, until a final design is approved.~~ contain the same information as the SAS for FIM 1 trees that are aesthetic tree resources submitted September 23, 2010. If the Director of Planning and Community Environment, in consultation with the City Arborist, determines that the SUMC Project would have an adverse effect on solar access to a Protected Tree that is an aesthetic tree resource such that the tree is unlikely to survive, then the SUMC Project sponsors shall relocate the Protected Tree to a site with sufficient solar access, as determined by the Direct of Planning and Community Environment, in consultation with the City Arborist. The SAS has been completed and accepted by the City for trees #608, Kaplan Lawn (trees #33 through 41), and FIM (trees #317 through 320 and #322).

BR-4.3 *Prepare a Tree Relocation Feasibility Plan for Any Protected Tree Proposed for Relocation and Retention.* Relocation of Protected Trees with the SUMC Sites shall be allowed only upon issuance of a Protected Tree relocation permit from the Director of Planning and Community Environment in consultation with the City Arborist. Because of inherent mortality associated with the process of moving mature trees, the SUMC Project sponsors shall prepare a Tree Relocation and Maintenance Plan (TRMP) ~~shall be prepared subject to Urban Forester's approval to be reviewed in connection with the Protected Tree relocation permit.~~ The SUMC Project sponsors shall submit a The TRMP to determine shall evaluate the feasibility of moving the Protected Trees to an appropriate location on site. Feasibility shall consider current site and tree conditions, a tree's ability to tolerate moving, relocation measures, optimum needs for the new location, aftercare, irrigation, and other long-term needs.

The tree relocation permit shall specify that if the relocated trees do not survive after a period of five years, the ~~tree canopy~~ relocated tree or trees shall be replaced with a ~~tree of equivalent size or security deposit value~~ trees or a combination of trees and Tree Value Standards consistent with Section 3.20, Table 3-1 Tree Canopy Replacement, of the Tree Technical Manual. The TRMP shall be inclusive of the following minimum information: appropriate irrigation, monitoring inspections, post relocation tree maintenance, and for an annual arborist report of the condition of the relocated trees. If a tree is disfigured, leaning with supports needed, in decline with a dead top or dieback of more than 25 percent, the tree shall be considered a total loss and replaced in kind and size as described above. ~~The final annual arborist report shall serve as the basis for return of the Tree Security Deposit (see Mitigation Measure BR 4.4, below, for a discussion of the Tree Security Deposit).~~

BR-4.4A *Provide a Tree Preservation Bond/Security Guarantee/Enter into a Memorandum of Understanding for Tree Maintenance.* ~~The natural tree resources on the SUMC Site include significant Protected Trees and those that provide neighborhood screening, including two trees proposed for relocation. Prior to building permit submittal, the Tree Security Deposit for the total value of the relocated trees, as referenced in the Tree Technical Manual, Section 3.26, Security Deposits, shall be posted to the City Revenue Collections in a form acceptable by the City Attorney. As a security measure, the SUMC Project sponsors shall be subject to a Memorandum of Understanding (MOU) between the City of Palo Alto and the SUMC Project sponsors describing a tree retention amount, the list of trees to be retained, an appraised value for each listed tree, a five-year tree growth and establishment, criteria and timeline for return of security, and conditions of approval related to Protected Trees, as cited in the Record of Land Use Action Conditional Use Permit for the SUMC Project. The SUMC Project sponsors and SUMC Project arborist, to be retained by the SUMC Project sponsors, shall~~

coordinate with the City ~~Urban Forester~~ Arborist to determine ~~the amount of~~ bonding conditions required to guarantee the protection and/or replacement of the regulated trees on the site during construction and within five years after occupancy. ~~The SUMC Project sponsors shall bond for 150 percent of the value for the relocated trees, and 50 percent of the value of the remaining trees to be protected during construction (as identified in the revised and final approved Tree Protection Report). The SUMC Project sponsors shall also provide an appraisal of the trees with the proposed level of bonding in a tree value table to be reviewed and accepted by the Director of Planning and Community Environment with the description of each tree by number, value, and total combined value of all the trees to be retained. A return of the guarantee shall be subject to an annual followed by a final tree assessment report on all the relocated and retained trees from the SUMC Project arborist, as approved by the City Urban Forester, five years following final inspection for occupancy, to the satisfaction of the Director of the Planning and Community Environment Department.~~ provide a security guarantee for the trees, as determined by the Director of Planning and Community Environment, in consultation with the City Arborist, in an amount consistent with the City of Palo Alto Tree Technical Manual.

*BR 4.4B* Replace Protected Trees in Accordance with the Tree Technical Manual. Removal of Protected Trees shall be allowed only upon issuance of a Protected Tree removal permit from the Director of Planning and Community Environment, in consultation with the City Arborist. Protected Trees that are removed without being relocated shall be replaced in accordance with the ratios set forth in Table 3-1 of the City of Palo Alto Tree Technical Manual in the following way, in order to maintain the appropriate landscape approach at the SUMC Sites, which has limited opportunities to plant the required replacement of trees:

- The Protected Tree removal permit issued shall stipulate the tree replacement requirements for the removed tree, including number of trees, location, and irrigation;
- The number and size of trees required for replacement would be calculated in accordance with Table 3-1; and
- The difference between the required tree replacement and the number of trees planted at the SUMC Sites would be mitigated through contribution to the Forestry Fund in the City of Palo Alto. Payment to the Forestry Fund would be in the amount representing the value of the replacement trees that would be required under the TTM standard.

The third column under header “Mitigation Measures on page S-73 of the Draft EIR has been revised as follows.

*BR-4.6* Implement Minor Site Modifications to Preserve Biologically and Aesthetically Significant Protected Trees Tree Resources. The SUMC Project sponsors shall

design and implement modifications to building design, hardscape, and landscape to incorporate the below and above ground area needed to preserve ~~as many biologically and aesthetically significant Protected Trees as possible~~ the following trees that are both biological and aesthetic tree resources:

- FIM 1 Grove. Retain five Protected Trees that is an aesthetic tree resource (#319) and relocate two Protected Trees that are aesthetic tree resources (#323 and 324) in the FIM 1 Grove.
- Adjacent to Welch Road. Retain the century-old solitary oak located between Welch Road to the north and the Blake-Wilbur Clinic building to the south (#608). In addition, relocate the mature Protected oak tree located to the east of the proposed LPCH hospital building (#996).

The tenth bullet on page S-93 is revised as follows:

- Removal of up to ~~74~~ 74 Protected Trees, as defined in City of Palo Alto’s Tree Protection and Management Regulations, which is a significant and unavoidable impact on both a project level and a cumulative level.

**Section 2, Project Description.** The fourth bullet under the subheader “Other City Approvals” on page 2-28, extending to page 2-29 of the Draft EIR, has been revised as follows:

- Regulations in this district would include applicability, preservation, and exemptions for removal and replacement of Protected Trees. The Hospital District would create a procedure to permit the removal or relocation of ~~approximately 48~~ Protected Trees while preserving ~~approximately 23 Protected Trees~~ trees that are considered both biologically and aesthetically significant tree resources.<sup>23</sup> The existing Protected Trees that are considered both biologically and aesthetically significant tree resources are discussed in more detail in Section 3.9, Biological Resources, and Section 5, Alternatives. The Hospital District ordinance would include provisions for ~~an applicable timeline (development vs. non-development) and for~~ specific Protected Tree retention and preservation through development standards and regulations. Some Protected Trees that qualified for exemption to the regulations could be removed, providing that they are replaced per the City Tree Technical Manual (TTM) standards (TTM, Section 3.00). In addition, the Hospital District ordinance would require a minor amendment to the Tree Ordinance (Palo Alto Municipal Code Section 8.10) to recognize and cross-reference with the Hospital District ordinance.<sup>23</sup>

**Section 3.2, Land Use.** The first paragraph under Policy N-14, under the header “SUMC Project Consistency” in Table 3.2-2, page 3.2-20, has been revised as follows:

The SUMC Project would replace trees removed during construction and would supply new street trees. However, the SUMC Project would remove up to ~~74~~ 74 Protected Trees, which are considered an important resource to the City. Mitigation Measures BR-4.1 through BR-4.5, provided in Section 3.9, Biological Resources, require the preparation of a Tree Preservation

Report, a solar access study, a Tree Relocation Feasibility Plan, a Tree Preservation Bond/Security Guarantee Memorandum of Understanding, and minor site modifications to the current site plans. While complete preservation or relocation of Protected Trees would not occur, this mitigation would fulfill the City's responsibility to protect, revitalize, and expand Palo Alto's urban forest.

**Section 3.3, Visual Quality.** The last paragraph on page 3.3-5, continuing to page 3.3-6, has been revised as follows:

Of the ~~176~~ 178 Protected Trees at the SUMC Sites, ~~60~~ 63 Protected Trees on the Main SUMC Site appear to be within or sufficiently close to new building footprint areas or paved areas associated with site reconfiguration such that they may be affected by SUMC Project construction. Out of these ~~60~~ 63 Protected Trees potentially to be removed at the Main SUMC Site, the City has designated approximately ~~23~~ 13 of these Protected Trees as ~~having~~ both biological and aesthetic tree resources ~~characteristics~~. In addition, there are five Protected Trees that have also been determined to be biological and aesthetic tree resources, but would be retained in place under the SUMC Project, for a total of 18 biological and aesthetic tree resources on the Main SUMC Site.<sup>6</sup> All Protected Trees are biological tree resources. A "Biological Tree Resource" is a protected category oak or redwood of a certain size as defined in the Palo Alto Municipal Code, Chapter 8.10, Tree Preservation and Management Regulations. Under the proposed Hospital District zoning, An "Aesthetic Tree Resource" is a Protected Tree that is deemed important to the SUMC ~~Project Sites~~, as designated by the Department of Planning and Community Environment or the City Council, because it has one or more of the following qualities: functions as an important or prominent visual feature; contributes to a larger grove or landscape theme; and/or possesses unique character as defined in the designation of Heritage Trees (per Palo Alto Municipal Code Section 8.10.090). ~~The 23~~ Protected Trees that are both biologically and aesthetically ~~significant tree resources~~ would require retention and preservation under the proposed Hospital District zoning ordinance for the SUMC Project.<sup>67</sup> Section 3.9, Biological Resources, discusses biologically and aesthetically ~~significant Protected Trees~~ tree resources in more detail; therefore, this topic will not be addressed further in this section.

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<sup>6</sup> City of Palo Alto, SUMC Protected Tree Survey, July 20, 2010.

<sup>67</sup> City of Palo Alto Department of Planning and Community Environment, Dave Dockter, Environmental Planner, "SUMC Environmental Impact Report Strategy: How the City will approach evaluation of the Tree Resources in the SUMC Project Area," memorandum, July 28, 2009.

The third full paragraph on page 3.3-6 has been revised as follows:

The majority of the Hoover Pavilion Site is covered by surface parking lots, although large trees and landscaped walks also surround the buildings within the Hoover Pavilion Site. Of the ~~176~~ 178 Protected Trees at the SUMC Sites, 11 Protected Trees at the Hoover Pavilion Site appear to be within or sufficiently close to new building footprint areas or paved areas associated with site reconfiguration such that they may be affected by project construction. However, the City has not

deemed these trees to ~~have both biological and~~ be aesthetic tree resources as defined by the proposed Hospital District zoning ordinance characteristics.

The third paragraph on page 3.3-34 has been revised as follows:

*Landscaping.* Overall, the SUMC Project would decrease landscaped area on the ground by about 1 acre, but would increase landscaped rooftops by about 6 acres. Approximately 1,562 trees, including native and non-native ornamental species have been identified in the SUMC Sites.<sup>20</sup> There would be removal of mature trees on both SUMC Sites, including up to a total ~~71~~ 74 Protected Trees, which is discussed in more detail in Section 3.9, Biological Resources. This Visual Quality section addresses changes in landscaping overall, and Section 3.9, Biological Resources, specifically addresses loss of Protected Trees.

**Section 3.9, Biological Resources.** The first and second full paragraph on page 3.9-12 of the Draft EIR has been revised as follows:

Based on the City listing, there are no Heritage Trees on the SUMC Sites. (Heritage Trees are defined under Applicable Plans and Regulations.) However, of the trees described above, ~~476~~ 178 coast live oaks and coast redwoods on the SUMC Sites could qualify for protection under the City of Palo Alto's Tree Protection and Management Regulations (see Regulated Trees below). Of these, ~~60~~ 63 Protected Trees on the Main SUMC Site and 11 Protected Trees at the Hoover Pavilion Site, for a sum of ~~71~~ 74 total Protected Trees, appear to be within or sufficiently close to new building footprint areas or paved areas associated with site reconfiguration such that they may be at risk and affected by SUMC Project construction. Among these Protected Trees are large and highly visible oak specimens in prominent locations. The shrub and ground cover species observed in the Project Vicinity included mock orange (*Pittosporum tobira*), rose (*Rosa* sp.), and pink knotweed (*Polygonum capitatum*).

Of the ~~71~~ 74 Protected Trees that may be at risk and affected by the SUMC Project, approximately ~~23~~ 13 trees have been determined by the City to be aesthetic tree resources characteristics. There are five additional trees that have also been determined to be aesthetic tree resources, but would be retained in place under the SUMC Project, for a total of 18 aesthetic tree resources at the Main SUMC Site.<sup>4</sup> All Protected Trees are biological tree resources. A "Biological Tree Resource" is a protected category oak or redwood of a certain size as defined in the Palo Alto Municipal Code, Chapter 8.10, Tree Preservation and Management Regulations. Under the proposed Hospital District zoning ordinance, an "Aesthetic Tree Resource" is a Protected Tree that is deemed important relative to the SUMC Sites, as designated by the Department of Planning and Community Environment or the City Council, because it has one or more of the following qualities: functions as an important or prominent visual feature; contributes to a larger grove or landscape theme; and/or possesses unique character as defined in the designation of Heritage Trees (per Municipal Code Section 8.10.090).<sup>5</sup> ~~These 23~~ Protected Trees that are both biologically and aesthetically significant tree resources would require retention and preservation under the proposed Hospital District zoning ordinance for the SUMC Project.<sup>46</sup> A breakdown of the locations of the Protected Trees that are aesthetic tree resources is as follows:

- Kaplan Lawn. Kaplan Lawn is the undeveloped area located between the two barrels of Pasteur Drive to the west and east, Blake-Wilbur Drive to the north, and the SUMC Promenade and fountain to the south. Within Kaplan Lawn are two existing groves that consist of nine oak trees. Some of these Protected Trees are over a century old, with many pre-dating the original hospital and are a remnant of the native oak grassland and agricultural use of the area. The north grove on the Kaplan Lawn functions as a prominent left-side component of the Pasture Drive gateway. There are currently nine Protected Trees that are aesthetic tree resources located in Kaplan Lawn (Trees 33 to 41).
- FIM 1 Grove. The FIM 1 Grove is located on the parcel of land that would house the proposed SoM FIM 1 building under the SUMC Project. These oak trees function as the right side component of the Pasteur Drive gateway, the canopy of which arches over the road towards the trees in the Kaplan Lawn area. There are currently seven Protected Trees that are aesthetic tree resources in the FIM 1 Grove. (Trees 317, 318, 319, 320, 322, 323, and 324).
- Adjacent to Welch Road. A century-old solitary oak is growing at the edge of the Main SUMC Site, between Welch Road to the north and the Blake-Wilbur Clinic building to the south. This existing Protected Tree is unique in character and prominently visible from Welch Road and the proposed Durand Way. The oak (tree 608) is located next to one of the original Governor's Lane eucalyptus trees and has a significant canopy spread. In addition, a mature and healthy Protected oak tree (tree 996) is located to the east of the proposed LPCH hospital building, along Welch Road.

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<sup>4</sup> City of Palo Alto, SUMC Protected Tree Survey, July 20, 2010.

<sup>45</sup> City of Palo Alto Department of Planning and Community Environment, Dave Dockter, Environmental Planner, "SUMC Environmental Impact Report Strategy: How the City will approach evaluation of the Tree Resources in the SUMC Project Area," memorandum, July 28, 2009.

<sup>6</sup> City of Palo Alto, SUMC Protected Tree Survey, July 20, 2010.

The text on pages 3.9-24 through 3.9-25 of the Draft EIR, starting at the second paragraph under Impact BR-4, has been revised as follows:

Based on the City listing, there are no Heritage Trees on the SUMC Sites. However, there are ~~176~~ 178 native oaks and redwoods on the SUMC Sites that are large enough to be designated as Protected Trees under the City of Palo Alto's Tree Preservation and Management Regulations. Protected Trees potentially subject to removal during implementation of the SUMC Project include ~~60~~ 63 Protected Trees on the Main SUMC Site and 11 Protected Trees at the Hoover Pavilion Site.<sup>49</sup> These locations appear to be within or sufficiently close to new building footprint areas or areas associated with the site reconfiguration. As final designs and construction logistics for the SUMC Project buildings are completed, it is possible that additional Protected Trees may be identified for removal. However, many of the Protected Trees initially identified as potentially subject to removal will be relocated on site, rather than removed. As a result, the total number of



Protected Trees removed (and not relocated) is not expected to exceed 74 Protected Trees. Thus, it is foreseeable that the loss of up to ~~74~~ 74 Protected Trees out of a total of ~~176~~ 178 Protected Trees present on the SUMC Sites may occur.<sup>10</sup> Implementation of the SUMC Project could impact Protected Trees during preparation for building construction, or could result in the loss of Protected Trees due to damage sustained during the construction phase of the SUMC Project.

As part of the SUMC Project, the SUMC Project sponsors propose the creation of a new zoning district that could be applied by the City to land uses specifically for hospitals, associated medical research, medical office, and support uses. The new zoning district would have its own name, such as “Hospital District,” and would include development standards that accommodate hospital-related uses like the SUMC Project. As described in Section 2, Project Description, regulations in this district pertaining to Protected Trees would include applicability, preservation, and exemptions for removal and replacement of trees.<sup>11</sup>

City staff has developed proposed zoning ordinance provisions that would require preservation of some of the trees that would have been removed under the SUMC Project. The Hospital District zoning requirements would create a procedure to permit the removal or relocation of ~~approximately 48~~ approximately 23 Protected Trees ~~trees~~ that are considered both biologically and aesthetically significant tree resources, as defined under Existing Conditions. Trees that are determined not to be aesthetic tree resources would be candidates for an exemption to the City’s Tree Ordinance, ~~and required but would be subject to~~ replacement according to the City Tree Technical Manual (TTM) standards. Although the new Hospital District regulations would seek to avoid the removal of ~~23~~ 48 Protected Trees that are both biologically and aesthetically ~~significant tree resources~~ at the SUMC Sites, 48 Protected Trees could still be removed or relocated as a result of the SUMC Project. Municipal Code Section 8.10.050 prohibits removal of a Protected Tree unless it has been determined by the Director of Planning and Community Environment, on the basis of a certified arborist and other relevant information, that the Protected Tree is dead, hazardous, or a detriment to or crowding an adjacent Protected Tree. The Municipal Code protects these trees because they give the City a unique visual character, enhance property values, and provide beneficial environmental services. Under existing code provisions, ~~the 48~~ the 48 Protected Trees that could be removed would not qualify for exemption to the regulations (that is, the trees are neither dead, hazardous, nor a detriment to or crowding an adjacent Protected Tree). Therefore, the SUMC Project would result in a significant impact due to removal of Protected Trees.<sup>12,13</sup>

Based on the biological and aesthetic tree resource category designations, as defined under the proposed new Hospital District Zoning ordinance, the ~~23~~ seven Protected Trees that would be required to be retained under the new Hospital District regulations include: nine Protected Trees in Kaplan Lawn (located between Pasteur Drive barrels), ~~12~~ seven Protected Trees in the area of the proposed SoM FIM 1 building, one Protected Tree located between the site of the Blake-Wilbur Clinic building and Welch Road, and one Protected Tree east of the new LPCH hospital building, along Welch Road.<sup>14,15</sup> The SUMC Project would result in the retention and removal of the following Protected Trees that are aesthetic tree resources:

- Kaplan Lawn: All nine Protected Trees that are aesthetic tree resources at the Kaplan Lawn would be removed;
- FIM 1 Grove: Two Protected Trees that are aesthetic tree resources would be removed and five would be retained;
- Adjacent to Welch Road: The century-old solitary oak that is located between Welch Road to the north and the Blake-Wilbur Clinic building to the south would be removed. The mature Protected oak tree located to the east of the proposed LPCH hospital building, along Welch Road, would also be removed.

As explained below in Mitigation Measure BR-4.6, minor SUMC Project site plan adjustments could be made to avoid removal of ~~several~~one Protected Trees ~~in the area of the proposed FIM 1 building and along Welch Road (a total of 14~~nine Protected Trees). ~~(608) and to retain a second Protected Tree (319), while relocating two additional Protected Trees (323 and 324) at FIM 1 that are aesthetic tree resources.~~ However, under the SUMC Project, the Protected Trees in the Kaplan Lawn area (nine trees) would not be able to be avoided with minor site plan modifications. As such, the SUMC Project would result in significant impacts to biologically and aesthetically ~~significant Protected Trees~~ tree resources in Kaplan Lawn.

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<sup>10</sup> Zach Pozner, Stanford University Medical Center, electronic communication to Whitney McNair, subject: "Protected Trees - Stanford," February 8, 2010. City of Palo Alto, SUMC Protected Tree Survey, July 20, 2010.

<sup>11</sup> Dave Dockter, Environmental Planner, City of Palo Alto Department of Planning and Community Environment, SUMC Environmental Impact Report Strategy: How the City will approach evaluation of the Tree Resources in the SUMC Project Area, memorandum, July 28, 2009.

<sup>12</sup> Dave Dockter, Environmental Planner, City of Palo Alto Department of Planning and Community Environment, SUMC Environmental Impact Report Strategy: How the City will approach evaluation of the Tree Resources in the SUMC Project Area, memorandum, July 28, 2009.

<sup>13</sup> City of Palo Alto, SUMC Protected Tree Survey, July 20, 2010.

<sup>13</sup><sup>14</sup> Dave Dockter, Environmental Planner, City of Palo Alto Department of Planning and Community Environment, SUMC Environmental Impact Report Strategy: How the City will approach evaluation of the Tree Resources in the SUMC Project Area, memorandum, July 28, 2009.

<sup>15</sup> City of Palo Alto, SUMC Protected Tree Survey, July 20, 2010.

The Draft EIR text on pages 3.9-26 through 3.9-28 has been revised as follows:

MITIGATION MEASURES. Mitigation Measures BR-4.1 through BR-4.5, below, to be implemented by the SUMC Project sponsors, would reduce the SUMC Project's impact on Protected Trees. In addition, Mitigation Measure BR-4.6 would require minor SUMC Project site plan adjustments to avoid removal of some biologically and aesthetically ~~significant Protected Trees~~ tree resources. However, ~~the new Hospital District under the SUMC Project would allow the removal of up to 48 Protected Trees that are protected under the Municipal Code~~ up to 61 Protected Trees that are not aesthetic tree resources could be removed under the SUMC Project. In addition, minor modifications to the SUMC Project site plans would not be able to avoid the nine biologically and

aesthetically significant ~~Protected Trees~~ tree resources in the Kaplan Lawn area. Therefore, the SUMC Project would result in a significant and unavoidable impact to Protected Trees. (SU)

*BR-4.1 Prepare a Tree Preservation Report for all Trees to be Retained.* An updated tree survey and tree preservation report (TPR) prepared by a certified arborist shall be submitted for review ~~and acceptance by~~ and approval by the Director of Planning and Community Environment in consultation with the City Urban Forester Arborist. For reference clarity, the tree survey shall include (list and field tag) all existing trees within the SUMC Sites, including adjacent trees overhanging the SUMC Sites. The approved TPR shall be implemented in full, including mandatory inspections and monthly reporting to City ~~Urban Forester~~ Arborist. The TPR shall be based on latest SUMC plans and amended as needed to address activity ~~or~~ within the dripline area of any existing Protected Tree to be preserved, including incidental work (utilities trenching, street work, lighting, irrigation, etc.) that may affect the health of a preserved Protected Tree. ~~The SUMC Project shall be modified to address recommendations identified to reduce impacts to existing ordinance-regulated trees.~~ The TPR shall be consistent with the criteria set forth in the Tree Preservation Ordinance, Palo Alto Municipal Code Section 8.10.030, and the City Tree Technical Manual, Section 3.00, 4.00 and 6.30. To avoid improvements that may be detrimental to the health of ~~regulated~~ Protected Trees, the ~~TPR~~ Director of Planning and Community Environment, in consultation with the City Arborist, shall review the SUMC Project sponsors' landscape plan to ensure the new landscape is consistent with Tree Technical Manual, Section 5.45 and Appendix L, Landscaping under Native Oaks.

*BR-4.2 Prepare a Solar Access Study (SAS) of Short and Long Term Effects on Protected Oaks.* The SUMC Project sponsors shall prepare a SAS of Short and Long Term Effects on Protected Oaks that are Aesthetic Tree Resources for review and approval by the Director of Planning and Community Environment in consultation with the City Arborist. The SAS shall be prepared by a qualified expert team (horticulturalist, architect designer, consulting arborist) capable of determining effects, if any, to foliage, health, disease susceptibility and also prognosis for longevity. The SAS shall ~~provide alternative massing scenarios to provide sufficient solar access and reduce shading detriment at different thresholds of tree health/decline, as provided for in the SAS.~~ The SAS adequacy shall be subject to peer review as determined necessary by the City. ~~The SAS design alternatives shall be the subject of specific discussion at all levels of ARB, Planning Commission, City Council, and public review in conjunction with the SUMC Project sponsors, the City Urban Forester, and Director of the Planning and Community Environment Department, until a final design is approved.~~ contain the same information as the SAS for FIM 1 trees that are Aesthetic Tree Resources submitted September 23, 2010. If the Director of Planning and Community Environment, in consultation with the City Arborist, determines that the SUMC

Project would have an adverse effect on solar access to a Protected Tree that is an Aesthetic Tree Resource such that the tree is unlikely to survive, then the SUMC Project sponsors shall relocate the Protected Tree to a site with sufficient solar access, as determined by the Director of Planning and Community Environment, in consultation with the City Arborist. The SAS has been completed and accepted by the City for trees #608, Kaplan Lawn (trees #33 through 41), and FIM (trees #317 through 320 and #322).

*BR-4.3 Prepare a Tree Relocation Feasibility Plan for Any Protected Tree Proposed for Relocation and Retention.* Relocation of Protected Trees with the SUMC Sites shall be allowed only upon issuance of a Protected Tree relocation permit from the Director of Planning and Community Environment in consultation with the City Arborist. Because of inherent mortality associated with the process of moving mature trees, the SUMC Project sponsors shall prepare a Tree Relocation and Maintenance Plan (TRMP) ~~shall be prepared subject to Urban Forester's approval to be reviewed in connection with the Protected Tree relocation permit. The SUMC Project sponsors shall submit a~~ The TRMP to determine shall evaluate the feasibility of moving the Protected Trees to an appropriate location on site. Feasibility shall consider current site and tree conditions, a tree's ability to tolerate moving, relocation measures, optimum needs for the new location, aftercare, irrigation, and other long-term needs.

The tree relocation permit shall specify that if the relocated trees do not survive after a period of five years, the ~~tree canopy~~ relocated tree or trees shall be replaced with a ~~tree of equivalent size or security deposit value~~ trees or a combination of trees and Tree Value Standards consistent with Section 3.20, Table 3-1 Tree Canopy Replacement, of the Tree Technical Manual. The TRMP shall be inclusive of the following minimum information: appropriate irrigation, monitoring inspections, post relocation tree maintenance, and for an annual arborist report of the condition of the relocated trees. If a tree is disfigured, leaning with supports needed, in decline with a dead top or dieback of more than 25 percent, the tree shall be considered a total loss and replaced ~~in kind and size~~ as described above. ~~The final annual arborist report shall serve as the basis for return of the Tree Security Deposit (see Mitigation Measure BR 4.4, below, for a discussion of the Tree Security Deposit).~~

*BR-4.4A Provide a Tree Preservation Bond/Security Guarantee/Enter into a Memorandum of Understanding for Tree Maintenance.* ~~The natural tree resources on the SUMC Site include significant Protected Trees and those that provide neighborhood screening, including two trees proposed for relocation. Prior to building permit submittal, the Tree Security Deposit for the total value of the relocated trees, as referenced in the Tree Technical Manual, Section 3.26, Security Deposits, shall be posted to the City Revenue Collections in a form acceptable by the City Attorney.~~

As a security measure, the SUMC Project sponsors shall be subject to a Memorandum of Understanding (MOU) between the City of Palo Alto and the SUMC Project sponsors describing a tree retention amount, the list of trees to be retained, an appraised value for each listed tree, a five-year tree growth and establishment, criteria and timeline for return of security, and conditions of approval related to Protected Trees, as cited in the ~~Record of Land Use Action Conditional Use Permit~~ for the SUMC Project. The SUMC Project sponsors and SUMC Project arborist, ~~to be retained by the SUMC Project sponsors~~, shall coordinate with the City ~~Urban Forester~~ Arborist to determine ~~the amount of bonding conditions~~ required to guarantee the protection and/or replacement of the regulated trees on the site during construction and within five years after occupancy. ~~The SUMC Project sponsors shall bond for 150 percent of the value for the relocated trees, and 50 percent of the value of the remaining trees to be protected during construction (as identified in the revised and final approved Tree Protection Report).~~ The SUMC Project sponsors shall also ~~provide an appraisal of the trees with the proposed level of bonding in a tree value table to be reviewed and accepted by the Director of Planning and Community Environment with the description of each tree by number, value, and total combined value of all the trees to be retained. A return of the guarantee shall be subject to an annual followed by a final tree assessment report on all the relocated and retained trees from the SUMC Project arborist, as approved by the City Urban Forester, five years following final inspection for occupancy, to the satisfaction of the Director of the Planning and Community Environment Department.~~ provide a security guarantee for the trees, as determined by the Director of Planning and Community Environment, in consultation with the City Arborist, in an amount consistent with the City of Palo Alto Tree Technical Manual.

BR 4.4B *Replace Protected Trees in Accordance with the Tree Technical Manual.* Removal of Protected Trees shall be allowed only upon issuance of a Protected Tree removal permit from the Director of Planning and Community Environment, in consultation with the City Arborist. Protected Trees that are removed without being relocated shall be replaced in accordance with the ratios set forth in Table 3-1 of the City of Palo Alto Tree Technical Manual in the following way, in order to maintain the appropriate landscape approach at the SUMC Sites, which has limited opportunities to plant the required replacement of trees:

- The Protected Tree removal permit issued shall stipulate the tree replacement requirements for the removed tree, including number of trees, location, and irrigation;
- The number and size of trees required for replacement would be calculated in accordance with Table 3-1; and
- The difference between the required tree replacement and the number of trees planted at the SUMC Sites would be mitigated through contribution to the

Forestry Fund in the City of Palo Alto. Payment to the Forestry Fund would be in the amount representing the value of the replacement trees that would be required under the TTM standard.

Draft EIR text for Mitigation Measure BR-4.6 on page 3.9-28 has been revised as follows:

*BR-4.6 Implement Minor Site Modifications to Preserve Biologically and Aesthetically Significant Protected Trees Tree Resources.* The SUMC Project sponsors shall design and implement modifications to building design, hardscape, and landscape to incorporate the below and above ground area needed to preserve ~~as many biologically and aesthetically significant Protected Trees as possible~~ the following trees that are both biological and aesthetic tree resources:

- FIM 1 Grove. Retain one Protected Tree that is an aesthetic tree resources (#319) and relocate two Protected Trees that are aesthetic tree resources (#323 and 324) in the FIM 1 Grove.
- Adjacent to Welch Road. Retain the century-old solitary oak located between Welch Road to the north and the Blake-Wilbur Clinic building to the south (#608). In addition, relocate the mature Protected oak tree located to the east of the proposed LPCH hospital building (#996).

The second paragraph under Impact BR-9 on page 3.9-32 has been revised as follows:

The SUMC Project would result in the loss of potentially approximately ~~48~~ 74 Protected Trees. Moreover, the Protected Trees that would be lost include those identified by the City as being ~~biologically and aesthetically significant Protected Trees~~ tree resources. Therefore, although the SUMC Project would include mitigation that would require preservation of some of the Protected Trees and replacement of Protected Trees that are removed, the SUMC Project's contribution to the cumulative loss of Protected Trees would be cumulatively considerable.

**Section 4, Other CEQA Considerations.** The tenth bullet on page 4-1 is revised as follows:

- Removal of up to ~~74~~ 74 Protected Trees, as defined in City of Palo Alto's Tree Protection and Management Regulations, which is a significant and unavoidable impact on both a project level and a cumulative level.

**Section 5, Alternatives.** The tenth bullet on page 5-2 is revised follows:

- Removal of up to ~~74~~ 74 Protected Trees, as defined in City of Palo Alto's Tree Protection and Management Regulations, which is a significant and unavoidable impact on both a project level and a cumulative level.

The text on pages 5-15 through 5-17, starting at the first paragraph under the subheader "Tree Preservation Alternative," has been revised as follows. Please note that Figure 5-1 in the Draft EIR has been replaced with new figures (Figures 5-1a through 5-1d), as included below. These figures depict the biological and aesthetic tree resources that would be removed, retained, and relocated.

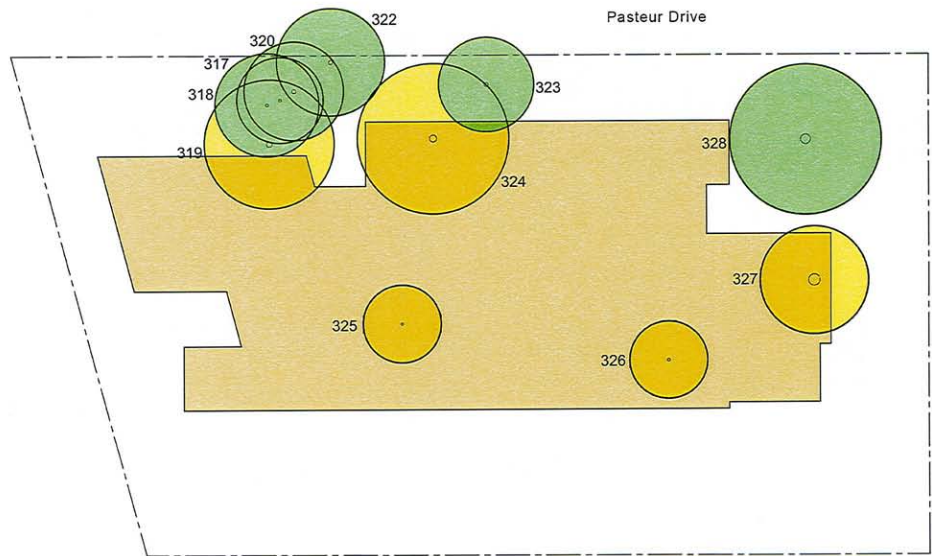
However, unlike Figure 5-1 in the Draft EIR, Figures 5-1a through 5-1d compares tree removal, retention, and relocation under the Tree Preservation Alternative with the SUMC Project.

The Tree Preservation Alternative was designed to reduce the SUMC Project's impact on Protected Trees. The Tree Preservation Alternative would seek to preserve the majority of the ~~aesthetically and biologically significant Protected Trees~~ and aesthetic tree resources at Kaplan Lawn, the FIM 1 Grove, and along Welch Road. Under this alternative, Kaplan Lawn would not be developed, and no Protected Trees would be removed at that location. In addition, the FIM 1 building would be redesigned to save ~~as many Protected Trees as possible in this area~~ a higher priority Protected Tree. The same number of trees will be retained in place. Lastly, one Protected oak trees along Welch Road would be retained in place. The site plan for this alternative would avoid ~~13~~ 10 biologically and aesthetically ~~significant Protected Trees~~ tree resources that would be affected by the SUMC Project. Further, this alternative would seek to relocate three more Protected Trees that are aesthetic tree resources that would otherwise be affected under the SUMC Project (before mitigation). Under the Tree Preservation Alternative, no trees that are aesthetic tree resources would be removed. Figure 5-1 shows the Protected Trees that would be preserved through the Tree Preservation Alternative, ~~and the potential zones for planting of relocated trees.~~ This alternative is described in more detail below.

Under the Tree Preservation Alternative (as well as the SUMC Project), a new zoning district would be created for land uses specifically for hospitals, associated medical research, medical office, and support uses. As described in Section 2, Project Description, regulations in this district would include applicability, preservation, and exemptions for removal and replacement of Protected Trees. The Hospital District would create a procedure to permit the removal or relocation of approximately ~~48~~ 62 Protected Trees at the SUMC Sites (~~59 removed plus 3 relocated~~) while preserving approximately ~~23~~ 18 Protected Trees that are considered both biologically and aesthetically ~~significant~~ tree resources, as defined in Section 3.9, Biological Resources. The approximately ~~23~~ 18 Protected Trees that would be required to be retained are located in ~~the following areas:~~ the Kaplan Lawn, the FIM 1 Grove, and adjacent to Welch Road, as described in more detail in Section 3.9, Biological Resources.

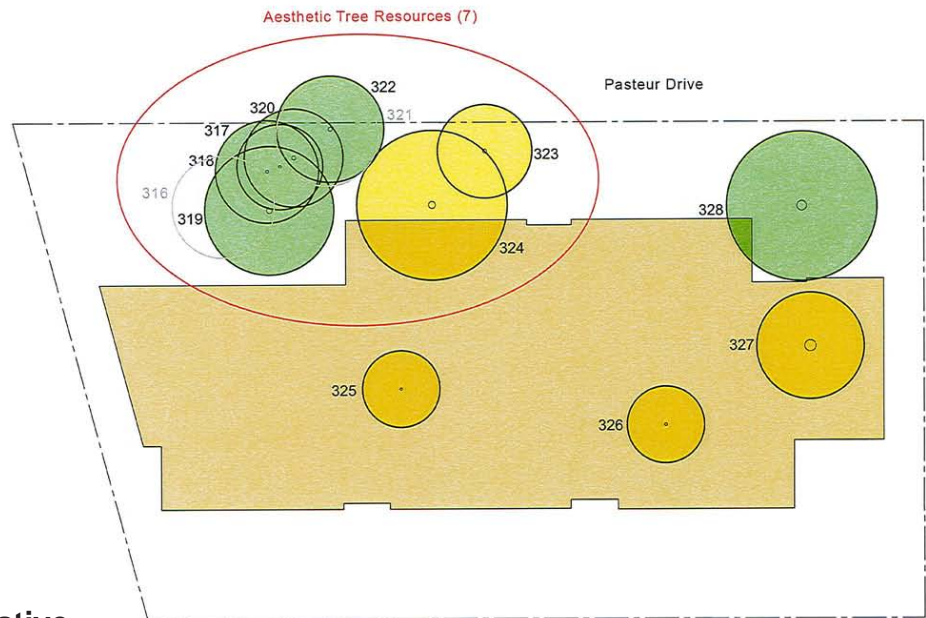
- ~~*Kaplan Lawn.* Kaplan Lawn is the undeveloped area located between the two barrels of Pasteur Drive to the west and east, Blake Wilbur Drive to the north, and the SUMC Promenade and fountain to the south. Within Kaplan Lawn are two existing groves that consist of nine oak trees. Some of these Protected Trees are over a century old, with many pre dating the original hospital and are a remnant of the native oak grassland and agricultural use of the area. The north grove on the Kaplan Lawn functions as a prominent left side component of the Pasture Drive gateway.~~
- ~~*FIM 1 Grove.* The FIM 1 Grove is located on the parcel of land that would house the proposed SoM FIM 1 building under the SUMC Project. Within the FIM 1 Grove are a total of 12 seven Protected Trees that would be removed under the SUMC Project. These oak trees function as the right side component of the Pasteur Drive gateway, the canopy of which arches over the road towards the trees in the Kaplan Lawn area.~~

-  = Protected Tree to Be Removed
-  = Protected Tree to Remain
-  = Existing Building
-  = Proposed Building



**a. SUMC Project**

-  = Protected Tree to Be Removed  
323 & 324 to Be Relocated
-  = Protected Tree to Remain
-  = Existing Building
-  = Proposed Building



**b. Tree Preservation Alternative**



Source: PBS&J, 2010.



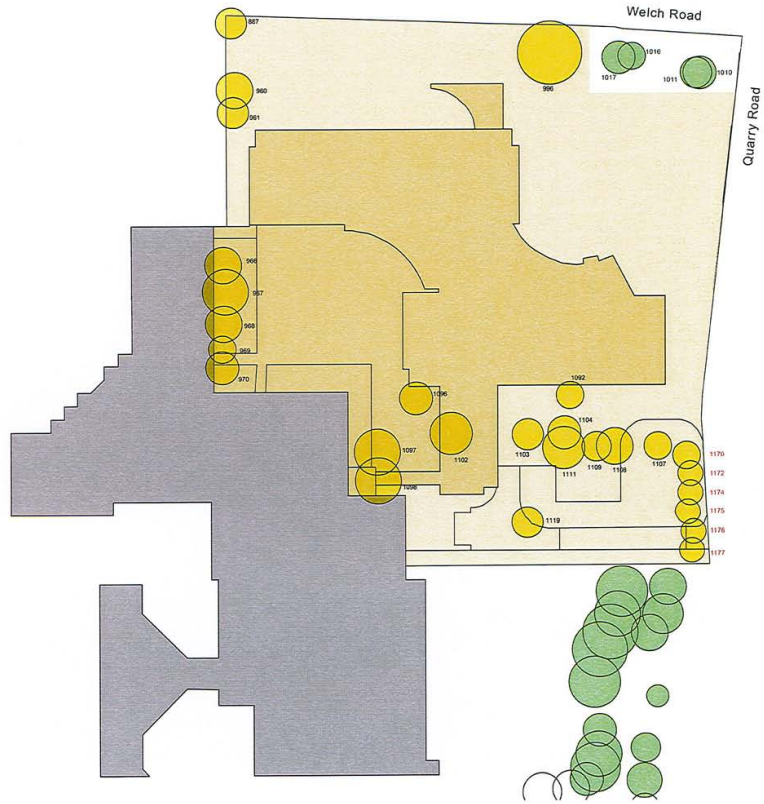
**FIGURE 5-1a**  
**Affected Protected Trees at the FIM 1 SoM Site**

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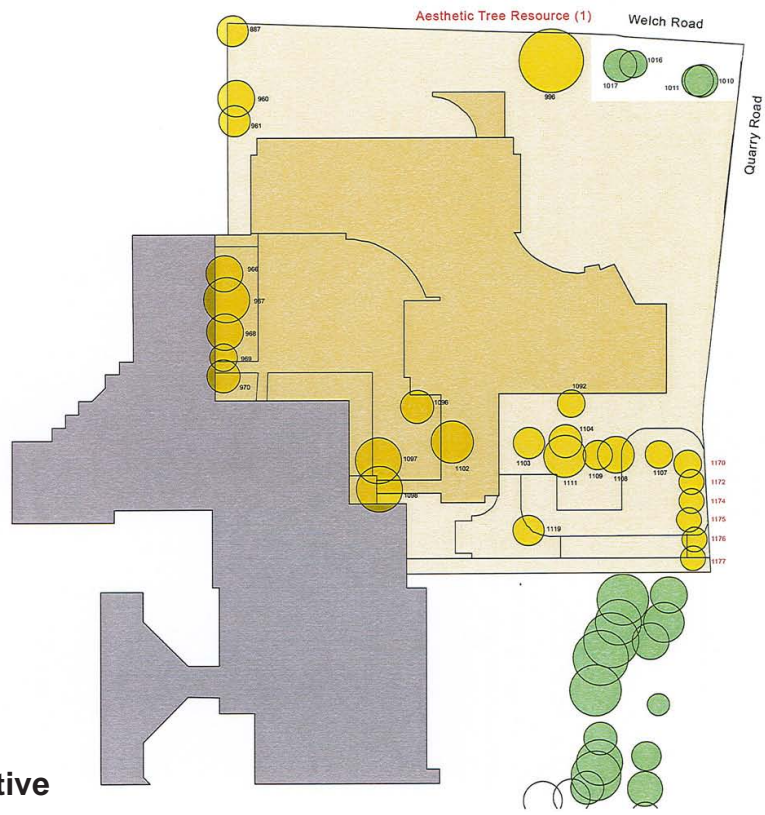


-  = Protected Tree to Be Removed
-  = Protected Tree to Remain
-  = Existing Building
-  = Proposed Building
-  = Proposed Site Work



**a. SUMC Project**

-  = Protected Tree to Be Removed
-  = Protected Tree to Remain  
996 to Be Relocated
-  = Existing Building
-  = Proposed Building
-  = Proposed Site Work



**b. Tree Preservation Alternative**



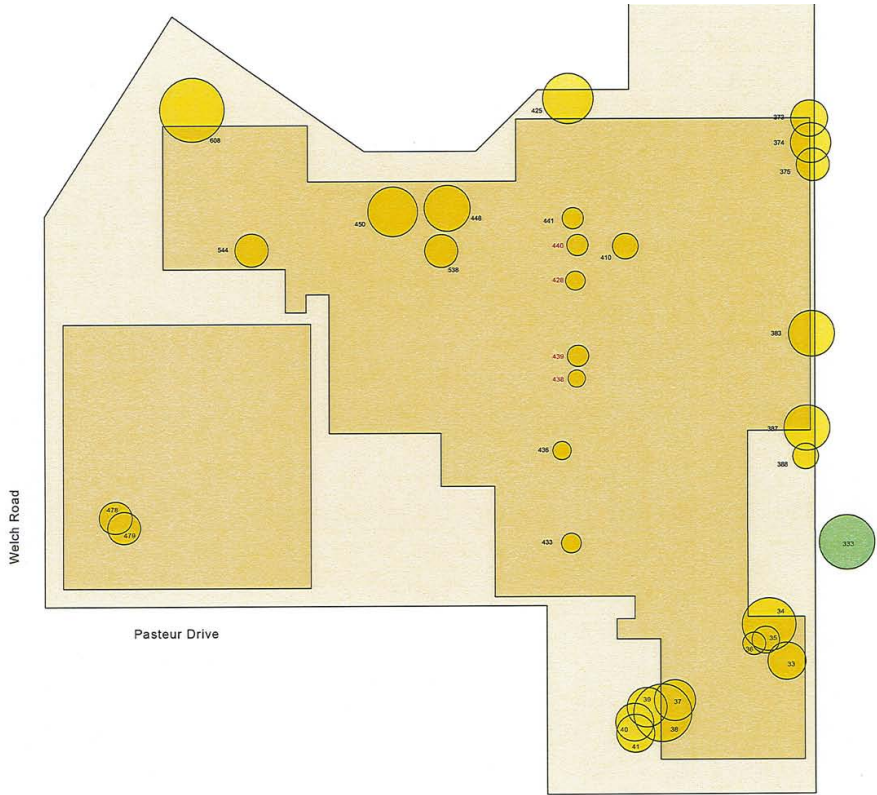
**FIGURE 5-1b  
Affected Protected Trees at the LPCH Site**

Source: PBS&J, 2010.

D41357.00

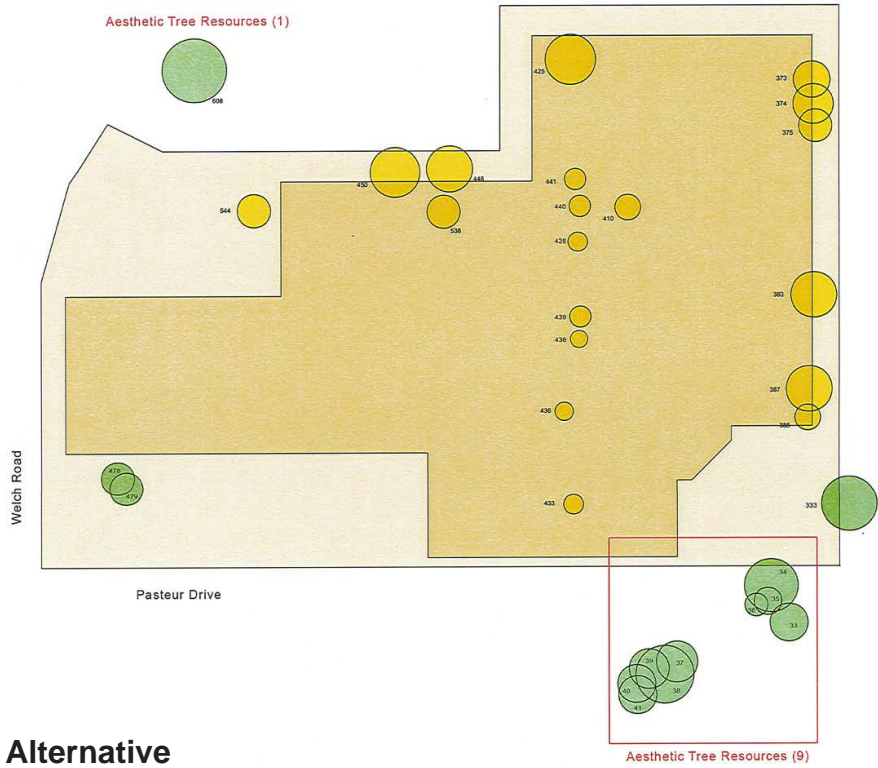
Stanford University Medical Center Facilities Renewal and Replacement Draft EIR

-  = Protected Tree to Be Removed
-  = Protected Tree to Remain
-  = Existing Building
-  = Proposed Building
-  = Proposed Site Work



**a. SUMC Project**

-  = Protected Tree to Be Removed
-  = Protected Tree to Remain
-  = Existing Building
-  = Proposed Building
-  = Proposed Site Work



**b. Tree Preservation Alternative**



-  = Protected Tree to Be Removed
-  = Protected Tree to Remain
-  = Existing Building
-  = Proposed Building



**a. SUMC Project**

-  = Protected Tree to Be Removed
-  = Protected Tree to Remain
-  = Existing Building
-  = Proposed Building



**b. Tree Preservation Alternative**



Source: PBS&J, 2010.



**FIGURE 5-1d**  
**Affected Protected Trees at the Hoover Pavilion Site**

D41357.00

- ~~• *Adjacent to Welch Road.* A century-old solitary oak is growing at the edge of the Main SUMC Site, between Welch Road to the north and the Blake Wilbur Clinic building to the south. This existing Protected Tree is unique in character and prominently visible from Welch Road and the proposed Durand Way. The oak is located next to one of the original Governor's Lane eucalyptus trees and has a significant canopy spread. In addition, a mature and healthy Protected oak tree is located to the east of the proposed LPCH hospital building, along Welch Road.~~

The SUMC Project would remove up to ~~71~~ 74 Protected Trees as defined in City of Palo Alto's Tree Protection and Management Regulations. While Mitigation Measures BR-4.1 through BR-4.6 would strive to avoid, relocate, or replace affected Protected Trees, the measures would not fully reduce the impacts to all Protected Trees, resulting in a significant and unavoidable impact (see Section 3.9, Biological Resources). As discussed in Section 3.9, Biological Resources, the SUMC Project would result in the removal of several of the Protected Trees defined as biologically and aesthetically significant ~~tree resources~~. However, the Tree Preservation Alternative would seek to preserve the biologically and aesthetically significant ~~Protected Trees~~ tree resources at Kaplan Lawn, the FIM 1 Grove, and along Welch Road. Under the SUMC Project, a 64-foot-tall SHC Hospital module ("Hospital Module Six") is proposed to be constructed on the Kaplan Lawn, which would result in the removal of nine Protected Trees. The main difference under the Tree Preservation Alternative is that the square footage and programmatic functions planned for Hospital Module Six would be incorporated into the remaining five SHC Hospital modules. This new modular plan of the SHC Hospital building would be "tightened" somewhat through the use of a smaller structural grid and a reconfigured ambulance route. As such, Kaplan Lawn would not be developed, and no Protected Trees would be removed at that location. In addition, the FIM 1 building would be redesigned to save as many Protected Trees as possible in this area-, as required in Mitigation Measure BR-4.6.

Figure 5-1 depicts the footprints of the Tree Preservation Alternative, including the alternative designs for the new SHC Hospital building and the FIM 1 building. ~~Table~~ Figure 5-1 shows the Protected Trees that would be preserved through the Tree Preservation Alternative, ~~and the potential zones for planting of relocated trees.~~ As shown in Table 5-5, the Tree Preservation Alternative would have the same development program as the proposed SUMC Project.

The third bullet on page 5-21 has been revised as follows:

#### *SoM Site*

The Tree Preservation Alternative would also include a redesign of the FIM 1 building to save as many Protected Trees as possible in this area. The proposed building size and height would be the same as the SUMC Project; however, the footprint of the building would be altered to save Protected Trees that are aesthetic tree resources at the northeast corner of the building (as required in Mitigation Measure BR-4.6). Due to the requirements of the building program, and the location of the Protected Trees on the site, not all of the Protected Trees at the FIM 1 Site would be preserved with this alternative. ~~Out of the 12~~ seven Protected Trees at the FIM 1 Site ~~that would be removed under the SUMC Project, approximately~~ Similar to the SUMC Project, three five



biological and aesthetic tree resources would be retained; however, two would be relocated under the Tree Preservation Alternative. No aesthetic tree resources at the FIM 1 site would be removed, without being relocated.

The first full paragraph on page 5-22 has been revised as follows:

As proposed under the SUMC Project, the Tree Preservation Alternative would require the demolition of the 1959 Hospital Building complex. In its place, the Tree Preservation Alternative would construct the replacement SHC clinic/medical office building and SoM FIM Buildings 2 and 3 in the same locations as under the SUMC Project (for the changes to FIM Building 1, see above). In addition, under the Tree Preservation Alternative, the site plans at the LPCH and the Hoover Pavilion would be the same as under the SUMC Project. Therefore, the ~~24~~ 27 Protected Trees at the LPCH Site and the ~~six~~ 11 Protected Trees at the Hoover Pavilion Site would still be removed and potentially relocated under this Alternative. As shown in Table 5-5, the Tree Preservation Alternative would have the same development program as the proposed SUMC Project. The Tree Preservation Alternative would necessitate the same Comprehensive Plan amendments, zoning changes, and annexation as the proposed SUMC Project.

The last paragraph on page 5-62, and the first five bullets on page 5-63, for No Project Alternative A, has been revised as follows:

**Impacts on Protected Trees.** There are ~~74~~ 74 Protected Trees that would be removed under the SUMC Project. No Project Alternative A would involve renovations and retrofits and would not expand existing facilities. While current biological conditions would generally remain the same, ground disturbance to reroute or extend utility lines to compliant and non-compliant structure would occur, thus potentially impacting Protected Trees. The removal of Protected Trees would result in a significant impact, although to a significantly lesser extent than the SUMC Project since this alternative would not construct new buildings at Kaplan Lawn and the FIM 1 grove. The following mitigation measures, as identified for the SUMC Project, would reduce this alternative's impact on Protected Trees. However, these mitigation measures would not be able to avoid and preserve all Protected Trees; therefore, No Project Alternative A would result in a significant and unavoidable impact, as with the SUMC Project. (S/SU)

- BR-4.1: Prepare a Tree Preservation Report for all Trees to be Retained
- BR-4.2: Prepare a Solar Access Study (SAS) of Short and Long Term Effects on Protected Oaks
- BR-4.3: Prepare a Tree Relocation Feasibility Plan for Any Protected Tree Proposed for Relocation and Retention
- BR-4.4A: ~~Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual
- BR-4.5: Provide Optimum Tree Replacement for Loss of Publicly-Owned Trees Regulated Tree Category.

The twelfth bullet under the first full paragraph on page 5-71 for No Project Alternative B, has been revised as follows. In addition, a bullet has been added after the twelfth bullet, as follows:

- BR-4.4A: ~~Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The fourth bullet under the second full paragraph on page 5-80, for No Project Alternative B, has been revised as follows. In addition, a bullet has been added after the fourth bullet, as follows:

- BR-4.4A: ~~Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The ninth bullet, on page 5-91 of the Draft EIR, for Reduced Intensity Alternative A has been revised as follows. In addition, a bullet has been added after the ninth bullet as follows:

- BR-4.4A: ~~Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The fourth bullet under the last paragraph on page 5-99, for Reduced Intensity Alternative A, has been revised as follows. In addition, a bullet has been added after the fourth bullet, as follows:

- BR-4.4A: ~~Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The tenth bullet, on page 5-110 of the Draft EIR, for Reduced Intensity Alternative B, has been revised as follows. In addition, a bullet has been added after the tenth bullet, as follows:

- BR-4.4A: ~~Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The second bullet on page 5-124, for Reduced Intensity Alternative B, has been revised as follows. In addition, a bullet has been added after the second bullet, as follows:

- BR-4.4A: ~~Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The tenth bullet on page 5-136 of the Draft EIR, for the Tree Preservation Alternative, has been revised as follows. In addition, a bullet has been added after the tenth bullet, as follows:

- BR-4.4A: Provide a Tree Preservation Bond/Security Guarantee Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The text on pages 5-152 through 5-153, starting at the last paragraph on page 5-152 under the subheader “Impacts on Protected Trees,” has been revised as follows:

**Impacts on Protected Trees.** The Tree Preservation Alternative would seek to retain as many Protected Trees as feasible. The SUMC Project would result in the removal of up to ~~71~~ 74 Protected Trees, ~~23~~ 13 of which are considered to be biologically and aesthetically ~~significant tree resources~~, as discussed in more detail in Section 3.9, Biological Resources. Additionally, the SUMC Project would retain five trees that have been identified as biological and aesthetic tree resources, for a total of 18 of these Protected Trees. The Tree Preservation Alternative would reduce the impact to Protected Trees, particularly the trees that are considered to be biologically and aesthetically ~~significant tree resources~~ as compared to the SUMC Project. However, this alternative would still result in the removal of up to ~~48~~ 59 Protected Trees that do not fall under biologically and aesthetically ~~significant tree resource~~ distinction and the ~~removal or relocation of an additional 40~~ three biologically and aesthetically ~~significant Protected Trees tree resources~~. Therefore, although to a lesser extent than the SUMC Project, the Tree Preservation Alternative would still result in a significant impact to Protected Trees.

The Tree Preservation Alternative focuses on protecting the biologically and aesthetically ~~significant trees~~ tree resources located in the Kaplan Lawn, the FIM 1 Grove, and along Welch Road. Although the site plans for the SHC Hospital building, FIM 1, and circulation have been modified to retain and avoid as many biologically and aesthetically ~~significant Protected Trees tree resources~~ as possible, some would still need to be ~~relocated or removed~~, as shown in Figure 5-1 and explained in more detail below:

- *Kaplan Lawn.* All nine existing Protected Trees in Kaplan Lawn would be retained in place and protected under this alternative.
- *FIM 1 Grove.* There are currently ~~42~~ seven Protected Trees that are aesthetic tree resources in the FIM 1 Grove. Under the Tree Preservation Alternative, ~~three~~ five trees that are aesthetic tree resources would be retained and two trees that are aesthetic tree resources would be relocated to a different location in the vicinity of the Main SUMC Site. ~~The other seven biologically and aesthetically significant Protected Trees at the FIM 1 Grove would be removed.~~
- *Adjacent to Welch Road.* The century-old solitary oak located between Welch Road to the north and the Blake-Wilbur Clinic building to the south would be retained in place under this alternative. The mature and healthy Protected oak tree located to the east of the proposed LPCH hospital building, along Welch Road would be relocated to another area in the vicinity of the Main SUMC Site.

Overall, under the Tree Preservation Alternative, a total of up to ~~58~~ 62 Protected Trees could be removed or relocated. Of these Protected Trees, ~~48~~ 59 Protected Trees that are not considered ~~biologically and aesthetically significant~~ aesthetic tree resources would be removed. Under the SUMC Project, 61 Protected Trees that are not aesthetic tree resources would be removed; however, the Tree Preservation Alternative would retain two of these trees located at the corner of Welch Road and Pasteur Drive. These two Protected Trees would not be removed under the Tree Preservation Alternative since the footprint of the parking structure would be reduced by constructing three levels of underground parking and four levels of aboveground parking. Additionally, under the SUMC Project, up to 13 Protected Trees that are aesthetic tree resources would be potentially subject to removal. No Protected Trees that are aesthetic tree resources would be removed under the Tree Preservation Alternative. ~~seven biologically and aesthetically significant Protected Trees would be removed, and~~ In addition to the 59 Protected Trees to be removed under the Tree Preservation Alternative that are not aesthetic tree resources, three biologically and aesthetically significant Protected Trees tree resources would be relocated. ~~While the Tree Preservation Alternative would seek to preserve these three of the Protected Trees through relocation, the survival of these trees is not guaranteed; therefore, for the purposes of this analysis the trees are considered to be removed.~~ As such, the removal of up to ~~58~~ 59 Protected Trees would be a significant impact, although to a lesser extent than the SUMC Project, which would remove up to ~~74~~ 74 Protected Trees. The following mitigation measures, as identified for the SUMC Project, would reduce the Tree Preservation Alternative's impact on Protected Trees to be retained and relocated. Unlike the SUMC Project, the Tree Preservation Alternative would not require Mitigation Measure BR-4.6, involving site plan modifications, since such modifications are already incorporated into this alternative. However, these measures would not be able to avoid the removal of up to ~~58~~ 59 Protected Trees and therefore, even with the implementation of the below mitigation measures, the Tree Preservation Alternative would result in a significant and unavoidable impact. (S/SU)

- BR-4.1: Prepare a Tree Preservation Report for all Trees to be Retained
- BR-4.2: Prepare a Solar Access Study (SAS) of Short and Long Term Effects on Protected Oaks
- BR-4.3: Prepare a Tree Relocation Feasibility Plan for Any Protected Tree Proposed for Relocation and Retention
- BR-4.4A: ~~Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual
- BR-4.5: Provide Optimum Tree Replacement for Loss of Publicly-Owned Trees Regulated Tree Category.



The tenth bullet on page 5-167 of the Draft EIR, for the Historic Preservation Alternative, has been revised as follows. In addition, a bullet has been added under the tenth bullet, as follows:

- ~~BR-4.4A: Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The text on page 5-182 of the Draft EIR, starting at the second paragraph, has been revised as follows:

**Impacts on Protected Trees.** The Historic Preservation Alternative would result in the removal of several trees, although to a lesser extent than the SUMC Project. As discussed in Section 3.9, Biological Resources, the SUMC Project would result in the removal of up to ~~71~~ 74 Protected Trees, ~~23~~ 13 of which are considered to be biologically and aesthetically significant tree resources. Although the Historic Preservation Alternative would attempt to protect these biologically and aesthetically significant Protected Trees tree resources, this alternative would still result in the removal of several Protected Trees at the SUMC Sites that do not fall under this distinction. Therefore, the Historic Preservation Alternative would still result in a significant impact to Protected Trees.

However, unlike the SUMC Project, the Historic Preservation Alternative would retain or relocate all of the designated biologically and aesthetically significant Protected Trees tree resources. There are nine of these Protected Trees located in Kaplan Lawn, and since a hospital module six would not be constructed under this alternative in the Kaplan Lawn, all Protected Trees in Kaplan Lawn would be retained. In addition, since the 1959 Hospital Building complex would remain, the FIM 1 building would not be constructed in the FIM 1 grove. As such, all ~~12~~ seven biologically and aesthetically significant Protected Trees tree resources in the FIM 1 grove would be retained in place. Additionally, the two biologically and aesthetically significant Protected Trees tree resources adjacent to Welch Road would either be retained or relocated.

The second bullet on page 5-183, for the Historic Preservation Alternative, has been revised as follows. In addition, a bullet under the fourth bullet has been added, as follows:

- ~~BR-4.4A: Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The second bullet on page 5-196 of the Draft EIR, for the Village Concept Alternative, has been revised as follows. In addition, a bullet has been added after the tenth bullet, as follows:

- ~~BR-4.4A: Provide a Tree Preservation Bond/Security Guarantee~~ Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual

The text on page 5-213 of the Draft EIR, first paragraph, has been revised as follows:

**Impacts on Protected Trees.** While the pedestrian enhancements would not affect Protected Trees, the Village Concept Alternative would have the same impact on Protected Trees as the SUMC Project. As described in Section 3.9, Biological Resources, the SUMC Project would result in the removal of up to ~~71~~ 74 Protected Trees, which would also apply to the Village Concept Alternative. The proposed new Hospital District zoning ordinance for the SUMC Project as modified by the Tree Preservation Alternative would create a procedure to permit the removal or relocation of approximately ~~48~~ 62 Protected Trees while attempting to preserve approximately ~~23~~ 18 Protected Trees that are considered both biologically and aesthetically significant tree resources (13 of which would be removed under the SUMC Project). Trees that are determined not to be aesthetic tree resources would be candidates for an exemption to the existing Tree Ordinance, ~~and~~ but would be subject to required replacement according to the City Tree Technical Manual (TTM) standards. Although the new Hospital District zoning regulations would seek to avoid the removal of ~~23~~ 18 Protected Trees that are both biologically and aesthetically significant tree resources at the SUMC Sites, ~~48~~ 62 Protected Trees could still be removed as a result of the SUMC Project. In addition, as discussed in Section 3.9, not all of the biologically and aesthetically significant ~~Protected Trees~~ tree resources would be retained or relocated (13 would be removed) under the SUMC Project. As such, even with the implementation of the mitigation measures below, which would serve to protect the trees to be retained and relocated, the Village Concept Alternative, like the SUMC Project, would result in significant and unavoidable impacts to Protected Trees. (S/SU)

- BR-4.1: Prepare a Tree Preservation Report for all Trees to be Retained
- BR-4.2: Prepare a Solar Access Study (SAS) of Short and Long Term Effects on Protected Oaks
- BR-4.3: Prepare a Tree Relocation Feasibility Plan for Any Protected Tree Proposed for Relocation and Retention
- BR-4.4A: Provide a Tree Preservation Bond/Security Guarantee Enter into a Memorandum of Understanding for Tree Maintenance
- BR 4.4B: Replace Protected Trees in Accordance with the Tree Technical Manual
- BR-4.5: Provide Optimum Tree Replacement for Loss of Publicly-Owned Trees Regulated Tree Category.

**Staff-Initiated Change 7: Changes to Table 3.13-8, SUMC Project 2025 Indirect Housing Demand by County/City Based on Existing SUMC Employee Zip Code Distribution**

**Introduction**

Staff-Initiated Change 7 does not address any specific comments submitted on the Draft EIR. This Staff-Initiated Change corrects housing growth numbers in Table 3.13-8 of the Draft EIR. The corrections do not affect Draft EIR conclusions regarding housing demand.

**Corrections to Table 3.13-8**

Table 3.13-8 is presented on pages 3.13-12 through 3.13-13 of the Draft EIR. This table compares SUMC Project-induced housing demand against ABAG Projections 2005, which forecasts the housing that would be built within each community up to 2025. Due to rounding errors, some of the ABAG-projected household growth numbers from 2005 to 2025 are incorrect as presented in Table 3.13-8 of the Draft EIR. Thus, some of the percentages related to SUMC Project housing demand as a percent of household growth are updated here. However, the changes are minimal (less than 0.2 percent) and do not affect the conclusions as presented in the Draft EIR. Additionally, all but one of the updated percentages decrease housing demand impact compared to those presented in the Draft EIR. As such, Table 3.13-8 in the Draft EIR presents a conservative estimate of the housing demand generated by the SUMC Project.

**Draft EIR Text Revisions**

**Section 3.13, Population and Housing.** Table 3.13-8 on pages 3.13-12 through 3.13-13 of the Draft EIR has been updated as follows.

**Table 3.13-8  
SUMC Project 2025 Indirect Housing Demand by County/  
City Based on Existing SUMC Employee Zip Code Distribution**

	<b>Residential Location of Palo Alto SUMC Employees<sup>a</sup></b>	<b>ABAG Projected Household Growth 2005-2025<sup>b</sup></b>	<b>SUMC Project Housing Demand in 2025</b>	<b>SUMC Project Housing Demand as Percent of Household Growth 2005-2025</b>
<b>Santa Clara County</b>				
Palo Alto	8.0%	6,030	104	1.7%
Stanford University Campus	1.1%	3,022 <sup>c</sup>	14	0.5%
Mountain View	5.9%	6,220	77	1.2%
Los Altos and Los Altos Hills	1.5%	590	20	3.4%
Sunnyvale, Santa Clara, Cupertino	11.0%	<del>17,780</del> 17,960	143	0.8%
San Jose	15.5%	83,780	202	0.2%
Milpitas	2.1%	5,950	27	0.5%
Campbell, Los Gatos, Saratoga, (+ Monte Sereno, Alum Rock)	2.3%	~ 2,920	30	1.0%
Gilroy, San Martin, Morgan Hill	0.7%	~ 6,104	9	0.2%
<i>Subtotal</i>	45.9%	<del>132,396</del> 132,576	626	0.5%

**Table 3.13-8  
SUMC Project 2025 Indirect Housing Demand by County/  
City Based on Existing SUMC Employee Zip Code Distribution**

	<b>Residential Location of Palo Alto SUMC Employees<sup>a</sup></b>	<b>ABAG Projected Household Growth 2005-2025<sup>b</sup></b>	<b>SUMC Project Housing Demand in 2025</b>	<b>SUMC Project Housing Demand as Percent of Household Growth 2005-2025</b>
<b>San Mateo County</b>				
Menlo Park (+ W. Menlo Park)	4.1%	1,910	53	2.8%
East Palo Alto	1.8%	2,710	24	0.9%
Atherton, Woodside, Portola Valley, Emerald Hills	0.9%	~ 850	12	1.4%
Redwood City	5.5%	<del>5,140</del> ~ 6,130	72	<del>1.4%</del> 1.2%
Belmont, San Mateo, San Carlos, and Foster City	6.2%	<del>9,060</del> ~ 10,870	81	<del>0.9%</del> 0.7%
Hillsborough, Burlingame, Millbrae	1.1%	<del>2,200</del> 2,240	14	0.6%
South San Francisco, Brisbane, Daly City, Colma, San Bruno	2.9%	<del>10,070</del> 10,350	38	0.4%
Half Moon Bay and Coastal (Pacifica, Montara, El Granada, La Honda, Pescadero, Loma Mar, Moss Beach)	1.7%	~ 3,930	22	0.6%
<i>Subtotal</i>	24.2%	<del>35,870</del> 38,990	316	<del>0.9%</del> 0.8%
<b>Alameda County</b>				
Fremont and Hayward	8.9%	-18,120	116	0.6%
Newark, Union City, San Leandro, Castro Valley, San Lorenzo	6.1%	<del>14,410</del> ~ 14,040	79	0.6%
Oakland, Berkeley, Alameda, Emeryville, Albany, Piedmont	1.0%	<del>46,640</del> 42,190	13	<del>0.02%</del> 0.03%
Dublin, Pleasanton, Livermore, Sunol, and Mountain House	1.3%	<del>26,757</del> ~ 28,106	17	0.06%
<i>Subtotal</i>	19.3%	<del>105,907</del> 102,456	225	0.2%
<b>San Francisco County</b>	4.0%	44,950	52	0.1%
<b>Contra Costa County</b>	1.3%	71,450	17	0.02%
<b>Marin, Napa, and Sonoma Counties</b>	0.6%	45,300	8	0.02%
<b>TOTAL IN BAY AREA REGION</b>	<b>95.2%<sup>d</sup></b>	<b><del>435,873</del> 477,360</b>	<b>1,241<sup>d</sup></b>	<b><del>0.28%</del> 0.26%</b>
<b>Outside the Bay Area Region</b>	4.8%	-	62	-
<b>TOTAL</b>	<b>100%<sup>d</sup></b>		<b>1,303<sup>d</sup></b>	

*Sources:*

- Stanford University Medical Center, Stanford University Medical Center Facilities Renewal and Replacement Project Application, August 2007, as amended; Tab 5, Table 5-5. See Appendix L.
- ABAG, *Projections 2005*, December 2004.
- Stanford University Community Plan/General Use Permit Draft Environmental Impact Report, Table 2-1, June 2000.

*Note:*

- Individual percentages and numbers of units may not sum to the totals due to rounding.

In addition, the text on page 3.13-13 of the Draft EIR has been revised as follows:

As demonstrated in 3.13-8 the indirect housing demand from the SUMC Project would represent a small percentage of the ABAG projected housing growth for all jurisdictions in the Bay Area region. As shown in Table 3.13-8, above, ABAG projects that the number of households would grow from 2005 to 2025 by 18.5 percent in the Bay Area region, 21.8 percent in Santa Clara County, and 20.4 percent in Palo Alto. The indirect housing demand generated by the SUMC Project would be ~~0.28~~0.26 percent of the projected household growth in the Bay Area region, 0.5 percent of household growth in Santa Clara County, ~~0.9~~0.8 percent of household growth in San Mateo County, 1.7 percent of the projected household growth within the City of Palo Alto, and 2.8 percent of housing growth in Menlo Park, from 2005 to 2025. At most, the indirect housing demand from the SUMC Project would comprise 3.4 percent of projected growth (within Los Altos and Los Altos Hills). Therefore, the SUMC Project would not significantly impact the 2025 forecasted household growth within the City and other jurisdictions within the region, and the demand for housing as a result of the SUMC Project would be less than significant.

## **Staff-Initiated Change 8: Changes to Trip Generation and Level of Service Analysis of Alternatives to the SUMC Project**

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### **Introduction**

Staff-Initiated Change 8 addresses Comments 8.38, 8a.8, 22.86, 22.87, 22.95, 22.96, 22.99, 22.100, 22.101, PTC4.38, PTC6.16, PTC6.19, PTC6.22, PTC6.57, PTC6.58, PTC6.66, PTC6.80, PTC6.93, CC1.9, CC5.1, CC5.8, CC5.9, CC5.11, CC5.37, and CC5.52.

Staff-Initiated Change 8 addresses the changes to the transportation analysis of alternatives to the SUMC Project that have resulted from the changes in Staff-Initiated Change 2. Substantive changes apply to the analysis of Reduced Intensity Alternative B, the Tree Preservation Alternative, and the Village Concept Alternative, as discussed below. To help address the changes the analysis of SUMC Project alternatives, a revised Alternative Analysis Report is included as Appendix X of this document. This report replaces Appendix N of the Draft EIR in its entirety.

Additionally, Staff-Initiated Change 8 applies revisions to the quantified trip generation and VMT under the Village Concept Alternative. That is, the analysis of the Village Concept Alternative in Section 5 of the Draft EIR added background traffic growth, including trips from the Stanford University 2000 Community Plan and General Use Permit (CP/GUP), to the trip generation from the Village Concept Alternative housing. However, the City has since determined that the trips generated by CP/GUP housing at the Quarry Road sites should be replaced with new trips that would be generated by the recommended housing occupants under the Village Concept Alternative. The new trips from the recommended housing occupants account for trips from SUMC employee spouses, who would create traffic in the immediate area during the AM and PM Peak Hours as they commute to jobs, take children to school, etc. In addition, trip generation from housing under Village Concept Alternative analysis has been re-evaluated here to include the relocation or displacement of the postdoctoral fellows and medical residents to off-campus locations. As such, the trip generation and the

LOS under the Village Concept Alternative analysis have been revised, and the VMT under the Village Concept Alternative has also been revised. The revised VMT has also been applied to Staff-Initiated Change 4.

### **Changes to Reduced Intensity Alternative B, Tree Preservation Alternative and Historic Preservation Alternative**

As explained in Staff-Initiated Change 2, existing traffic-adaptive signal technology at 11 intersections in the City of Menlo Park was not considered in the Draft EIR. The analysis has been revised to account for the use of this technology at intersections along El Camino Real (between Encinal Avenue and Quarry Road), Sand Hill Road (at Oak Avenue-Vine Street, Santa Cruz Avenue), and at Santa Cruz Avenue/Junipero Serra Boulevard/Alpine Road under Existing and 2025 No Project scenarios. Also, existing geometry for intersections #1 and #49 has been revised to reflect current conditions. In addition, the Study Area has been expanded to include one more freeway segment and five more intersections.

As a result of these changes, Reduced Intensity Alternative B, the Tree Preservation Alternative, and the Historic Preservation Alternative would now have less-than-significant impacts on intersection LOS with identified mitigation measures. This is a change from the Draft EIR conclusions, which indicated that these alternatives would have significant and unavoidable impacts in intersection LOS.

### **Revised Trip Generation Under the Village Concept Alternative**

The 420 Quarry Road housing units under the Village Concept Alternative were included in the CP/GUP. Therefore, the traffic effect of these units is accounted for in the background traffic volumes of this EIR. Trips made from these units, primarily by dependents to the students or faculty/staff, need to be removed from the background traffic. Shifting these units to occupancy by Hospital employees reduces the amount of traffic created by these employees since they would be able to walk or bike to the SUMC Sites. However, these units may also include spouses. The size of the Village Concept Alternative housing would be 2.2 persons per unit on average. These spouses would create traffic in the immediate area during the AM and PM Peak Hours as they commute to jobs, take children to school, etc. Spousal trips would be via auto and via transit. Because of the proximity of the Village Concept Alternative housing to the PAITS, the trip rates via auto were reduced using a transit oriented development (TOD) trip generation rate. The TDM measures available for the base SUMC Project would also be available for the Village Concept Alternative. There is both volume and directionality to traffic, and each of these factors can cause a significant traffic impact, particularly if the surrounding intersections are operating at or near capacity. The traffic volumes created by the spouses were adjusted downward in the Transportation Impact Analysis to account for the fact that the housing units would be located very near a major transit hub. TOD trip generation rates were used to reflect the proximity to transit.

Spouses in the Village Concept Alternative housing may change jobs from their current employment location depending on the travel distance and commute time. However, traffic impacts are not associated with the length of the trip, but rather the number of trips that travel through a Study Area

intersection. The VMT calculations associated with the Village Concept Alternative consider the trip length. The average work trip length in the greater Bay Area is 11 miles, one-way. The 11-mile distance was used in the Village Concept Alternative VMT analysis. However, even if spouses of postdoctoral fellows and medical residents would change jobs, an 11-mile work trip would extend the traffic beyond the Study Area boundaries of the Draft EIR. The location of spousal work places and whether they change work locations would be an individual decision made by each household. For this analysis, spousal traffic was based on the best available information, from Effects of TOD on Housing, Parking and Travel, TCRP Report 128, Final Draft, August 1, 2008.

Caltrain GO Passes are for eligible employees and cannot be given to spouses. Eligible employees are those that work at least 20 hours per week and do not live on campus. Therefore, the SUMC Project sponsors may not have to purchase GO Passes for employees that would live at the 490 housing units at the Village Concept Alternative housing sites, since these sites are on campus. Caltrain does not require GO Passes to be purchased for employees residing on campus.

On-campus housing was part of the approval of the CP/GUP by the Santa Clara County Board of Supervisors in December 2000. The CP/GUP has a linkage requirement so that 2,400 units must be built if the maximum build out of the academic campus is constructed. The CP/GUP also contains approval rights for 600 additional units, so those 600 additional units could be considered excess to the CP/GUP linkage requirement. Those additional units were already covered by the EIR for the CP/GUP, which accounted for all 3,000 units. However, if the units were occupied by Hospital employees, the make-up of those units would be adjusted to include more families as oppose to the postdoctoral fellows. Since spousal trips are now treated as a component of the added 600 units, spousal trips have been factored into the analysis. When factoring in the spousal trips, the benefit from the Village Concept Alternative is reduced, compared to the analysis in the Draft EIR.

The graduate students assumed in the CP/GUP analysis generate fewer Peak Hour trips than assumed for the Village Concept Alternative. In addition to the inclusion of traffic-adaptive signal technology at 11 intersections under Existing and 2025 No Project scenarios, updated intersection geometry, and the additional study intersections, the trip generation under the Village Concept Alternative has also been revised to account for the displaced postdoctoral fellows and medical residents who were originally assigned to the 420 housing units at the Quarry Road sites under the CP/GUP. The Village Concept analysis has been re-evaluated here to include the relocation or displacement of the postdoctoral fellows and medical residents to off-campus locations. The results of that analysis are contained in Appendix X of this document. As indicated in Appendix X, in the AM Peak Hour, five intersections would be impacted by the Village Concept Alternative. This is one intersection more than the four intersections under the SUMC Project. The impacted intersections would include:

- El Camino Real / University Avenue - Palm Drive (intersection #10)
- El Camino Real / Page Mill Road-Oregon Expressway (intersection #16)
- Arboretum Road / Galvez Street (intersection #37) (unsignalized)
- Alpine Road / I-280 NB Off-Ramp (intersection #62) (unsignalized)

- Alpine Road / I-280 SB Off-Ramp (intersection #63) (unsignalized)

In the PM Peak Hour, 11 intersections would be impacted under the Village Concept Alternative. These intersections would be the same 11 intersections impacted under the SUMC Project, as discussed in Staff-Initiated Change 2. The impacted intersections would include:

- El Camino Real / University Avenue -Palm Drive (intersection #10)
- El Camino Real / Page Mill Road-Oregon Expressway (intersection #16)
- Middlefield Road / Willow Road (intersection #18)
- Middlefield Road / Lytton Avenue (intersection #19)
- Junipero Serra Boulevard / Page Mill Road (intersection #23)
- Junipero Serra Boulevard / Campus Drive West (intersection #26)
- Arboretum Road / Galvez Street (intersection #37) (unsignalized)
- Middlefield Road / Ravenswood Avenue (intersection #46)
- Bayfront Expressway / Willow Road (intersection #52)
- Bayfront Expressway / University Avenue (intersection #53)
- Alpine Road / I-280 NB Off-Ramp (intersection #62) (unsignalized)

However, with implementation of Mitigation Measures TR-2.1 through TR-2.3 (as revised in Staff-Initiated Change 2), the Village Concept Alternative would have less-than-significant impacts on intersection LOS. Mitigation TR-2.4, involving roadway improvements, would not be warranted under the Village Concept Alternative. Please see Appendix X for a more detailed explanation.

Please see Master Response 8 for a discussion of the City's ability to approve components of the Village Concept Alternative or other alternatives. It should be noted that the Village Concept Alternative includes the City's *recommendation* to dedicate Quarry Road housing to SUMC employees. It is beyond the City of Palo Alto's purview to require a change the CP/GUP housing occupancy since this housing is within the jurisdiction of Santa Clara County.



**Draft EIR Text Revisions**

**Summary.** Draft EIR text on page S-99, Table S-5, under Transportation, is revised as follows:

**Table S-5**  
**Assessment of SUMC Project Alternatives (Compared to the SUMC Project)**

Impact	SUMC Project	No Project Alternative A	No Project Alternative B	Reduced Intensity Alternative A	Reduced Intensity Alternative B	Tree Preservation Alternative	Historic Preservation Alternative	Village Concept Alternative
<b>Transportation</b>								
Intersection LOS	<del>S/SU</del> <u>S/LTS</u>	NI	NI	NI	<del>S/SU</del> <u>S/LTS</u>	<del>S/SU</del> <u>S/LTS</u>	<del>S/SU</del> <u>S/LTS</u>	<del>S/SU</del> <u>S/LTS</u>

**Section 5, Alternatives.** Draft EIR text on page 5-52, line two of Table 5-8 under Transportation is revised as follows:

**Table 5-8**  
**Assessment of SUMC Project Alternatives (Compared to the SUMC Project)**

Impact	SUMC Project	No Project Alternative A	No Project Alternative B	Reduced Intensity Alternative A	Reduced Intensity Alternative B	Tree Preservation Alternative	Historic Preservation Alternative	Village Concept Alternative
<b>Transportation</b>								
Intersection LOS	<del>S/SU</del> <u>S/LTS</u>	NI	NI	NI	<del>S/SU</del> <u>S/LTS</u>	<del>S/SU</del> <u>S/LTS</u>	<del>S/SU</del> <u>S/LTS</u>	<del>S/SU</del> <u>S/LTS</u>

Draft EIR text on page 5-113, second full paragraph, is revised as follows:

**Intersection LOS.** Trip generation for the AM and PM Peak Hours for this alternative are approximately equivalent to 60 percent of the 2025 Buildout scenario of the SUMC Project. This alternative would result in a net increase of 486 vehicle trips in the AM Peak Hour and 469 vehicle trips in the PM Peak Hour. These trips result in significant impacts at ~~four~~ three intersections during AM Peak Hour and ~~10~~ nine intersections during the PM Peak Hour. Comparatively, the SUMC Project would significantly impact ~~five~~ four intersections in the AM Peak Hour and ~~12~~ 11 intersections in the PM Peak Hour. The intersection impacted by the SUMC Project but not by Reduced Intensity Alternative B in the AM Peak Hour is Galvez Street / Arboretum Road (intersection #37). The intersections impacted by the SUMC Project but not by Reduced Intensity Alternative B in the PM Peak Hour are El Camino Real / Page Mill Road – Oregon Expressway (intersection #16) and Junipero Serra Boulevard/Campus Drive West (intersection #26).

Draft EIR text on page 5-114, third and fifth bullet after the first paragraph are revised.

- TR-2.3: Enhance Stanford University ~~Travel~~ Transportation Demand Management (TDM) Program.
- ~~TR 2.5: Coordinate with Other Jurisdictions for Potentially Feasible Roadway Improvements~~

Draft EIR text on page 5-114, second paragraph, is revised as follows:

After implementation of the most effective combination of these measures, including ~~T~~traffic-~~A~~adaptive-~~S~~signal technology, additional bicycle and pedestrian undercrossings, ~~and~~ an enhanced Stanford University TDM program, and feasible intersection improvements, there would no longer be any adversely impacted intersections in the AM and PM Peak Hours. ~~However, there would still be two adversely impacted intersections in the PM Peak Hour. Therefore, even with the implementation of these measures, there would still be a significant and unavoidable impact on intersection LOS, although to a lesser extent than with SUMC Project. (S/SU)-(LTS)~~

The second bullet under the fourth paragraph on page 5-114 of the Draft EIR has been revised as follows:

- TR-2.3: Enhance Stanford University ~~Travel~~ Transportation Demand Management (TDM) Program.

Draft EIR text on page 5-141, first paragraph under Intersection LOS, is revised as follows:

**Intersection LOS.** Trip generation for the AM Peak Hour and the PM Peak Hour for the Tree Preservation Alternative would be the same as the SUMC Project. There would be a net increase of 766 vehicle trips in the AM Peak Hour and 746 vehicle trips in the PM Peak Hour. These trips result in significant impacts at ~~five~~ four intersections during the AM Peak Hour and ~~12~~ 11 intersections during the PM Peak Hour.

Draft EIR text on pages 5-141 through 5-142 starting on the last paragraph under Intersection LOS, is revised as follows:

A more viable approach to mitigation involves the implementation of several more feasible measures, each of which would contribute to a partial reduction in this alternative's impacts. These measures include the installation of traffic-adaptive signal technology in selected corridors, the construction of two additional bicycle and pedestrian undercrossings in Palo Alto and Menlo Park, the provision of an enhanced TDM program, and implementation of intersection improvements that are considered to be feasible. These measures may be combined as described in Section 3.4, Transportation. ~~However, as~~ As indicated in Section 3.4, Transportation, ~~even~~ with the most effective combination of mitigation measures, the SUMC Project as well as this alternative would have ~~significant and unavoidable~~ a less-than-significant impact on ~~three study~~ intersections. ~~Therefore, the Tree Preservation Alternative would have significant and unavoidable impacts on intersection LOS, like the SUMC Project. (S/SU)-(LTS)~~

- TR-2.1: Install Traffic-Adaptive Signal Technology
- TR-2.2: Fund Additional Bicycle and Pedestrian Undercrossings
- TR-2.3: Enhance Stanford University-~~Travel~~ Transportation Demand Management (TDM) Program
- TR-2.4: Fund or Implement those Intersection Improvements that Have Been Determined to be Feasible
- ~~TR 2.5: Coordinate with Other Jurisdictions for Potentially Feasible Roadway Improvements~~

The second bullet under the second full paragraph on page 5-142 of the Draft EIR has been revised as follows:

- TR-2.3: Enhance Stanford University-~~Travel~~ Transportation Demand Management (TDM) Program.

Draft EIR text on pages 5-170 through 5-171, starting at the third paragraph under Intersection LOS, is revised as follows:

*Intersection LOS.* Trip generation for the AM Peak Hour and the PM Peak Hour for the Historic Preservation Alternative would be the same as the SUMC Project: a net increase of 766 vehicle trips in the AM Peak Hour and 746 vehicle trips in the PM Peak Hour. These trips result in significant impacts at ~~five~~ four intersections during the AM Peak Hour and ~~12~~ 11 intersections during the PM Peak Hour.

The same intersection improvements listed for the ~~2025 Full Buildout scenario~~ SUMC Project in Section 3.4, Transportation, would mitigate all of the significantly affected intersections under this alternative. ~~However, several of these roadway capacity improvements are considered to be infeasible.~~

A more viable approach to mitigation involves the implementation of several more feasible measures, each of which would contribute to a partial reduction in the project's impacts. These measures include the installation of traffic-adaptive signal technology in selected corridors, the construction of two additional bicycle and pedestrian undercrossings in Palo Alto and Menlo Park, the provision of an enhanced TDM program, and implementation of intersection improvements that are considered to be feasible. ~~However, as~~ As with the SUMC Project, ~~even~~ with the implementation of these mitigation measures, there would ~~still~~ not be a significant and unavoidable impact on any intersections LOS under the Historic Preservation Alternative. Therefore, the Historic Preservation Alternative would have less-than-significant ~~and unavoidable~~ impacts on intersection LOS, like the SUMC Project. ~~(S/SU)-(LTS)~~

- TR-2.1: Install Traffic-Adaptive Signal Technology
- TR-2.2: Fund Additional Bicycle and Pedestrian Undercrossings
- TR-2.3: Enhance Stanford University-~~Travel~~ Transportation Demand Management (TDM) Program

- TR-2.4: Fund or Implement those Intersection Improvements that Have Been Determined to be Feasible
- ~~TR-2.5: Coordinate with Other Jurisdictions for Potentially Feasible Roadway Improvements~~

The second bullet after the third paragraph on page 5-171 of the Draft EIR has been revised as follows:

- TR-2.3: Enhance Stanford University ~~Travel~~ Transportation Demand Management (TDM) Program.

Draft EIR text on page 5-200, second and third paragraphs, is revised as follows:

Vehicle trip generation for the AM Peak Hour for this alternative would be approximately three percent higher than for the SUMC Project and vehicle trip generation for the PM Peak Hours for this alternative would be approximately ~~two to five~~ seven percent lower than for the SUMC Project. This alternative would result in a net ~~decrease~~ increase from the SUMC Project of ~~14-25~~ vehicle trips in the AM Peak Hour and a net decrease of 37 49 vehicle trips in the PM Peak Hour.

The vehicle trips from this alternative would result in significant impacts at ~~six~~ five intersections during the AM Peak Hour and ~~12 11~~ intersections during the PM Peak Hour. Comparatively, the SUMC Project would significantly impact ~~five~~ four intersections in the AM Peak Hour and ~~12 11~~ intersections in the PM Peak Hour. Therefore, this alternative would result in one additional intersection (Alpine Road / I-280 southbound off-ramp) being impacted in the AM Peak Hour, than with the SUMC Project. This increase is largely due to the different assumptions regarding the residents of the three housing sites on Quarry and Sand Hill Roads. ~~That is, the~~ The SUMC employees are assumed to have spouses and children (average family size of 2.2 persons per unit). Even though the member of the family that is working at the SUMC Sites may be walking to work, the other adult family members may also be working (at someplace other than the SUMC Sites), and would contribute vehicle trips to the surrounding roadway network and intersections.

Draft EIR text on page 5-201, second sentence of first paragraph, is revised as follows:

Therefore, the pedestrian enhancements mentioned above that are part of the Village Concept Alternative could increase the number of adversely impacted intersections above ~~six~~ five in the AM Peak Hour, and ~~12 11~~ in the PM Peak Hour.

Draft EIR text on page 5-201, third paragraph, is revised as follows:

A more viable approach to mitigation involves the implementation of several more feasible measures, each of which would contribute to a partial reduction in the Village Concept Alternative's impacts. These measures include the installation of traffic-adaptive signal technology in selected corridors, the construction of two additional bicycle and pedestrian undercrossings in Palo Alto and Menlo Park, and the provision of an enhanced TDM program, ~~and implementation of intersection improvements that are considered to be feasible.~~

Draft EIR text on page 5-201, fifth bullet of third paragraph, is deleted as follows:

- TR-2.3: Enhance Stanford University ~~Travel~~ Transportation Demand Management (TDM) Program.
- ~~TR 2.4: Fund or Implement those Intersection Improvements that Have Been Determined to be Feasible~~
- ~~TR 2.5: Coordinate with Other Jurisdictions for Potentially Feasible Roadway Improvements~~

Draft EIR text on page 5-201, fourth paragraph, is revised as follows:

After implementation of these measures, there would no longer be any ~~adversely~~ significantly impacted intersections in the AM Peak Hour and PM Peak Hour. ~~(S/LTS) However, there would still be four adversely impacted intersections in the PM Peak Hour. Therefore, even with the implementation of these measures, there would still be a significant and unavoidable impact on intersection LOS, and the Village Concept Alternative would have a significant and unavoidable impact on intersection LOS, like the SUMC Project. (S/SU)~~

The second bullet after the first paragraph on page 5-202 of the Draft EIR has been revised as follows:

- TR-2.3: Enhance Stanford University ~~Travel~~ Transportation Demand Management (TDM) Program.

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### 3.3 MASTER RESPONSES

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#### Master Response 1: Viability of the Caltrain GO Pass Mitigation Measure and Alternative Mitigation Measures to the GO Pass

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##### Introduction

Master Response 1 addresses comments 5.2, 8.8, 22.30, 26.10, 36.1, 36.2, 37.1, 37.2, 41.1, 45.5, 48.1, 48.2, 53.1, PTC1.3, PTC1.5, PTC1.23, PTC1.76, PTC3.1, PTC3.2, PTC3.3, PTC3.4, PTC3.7, PTC3.8, PTC3.10, PTC3.15, PTC3.19, PTC3.21, PTC3.24, PTC3.30, PTC3.34, PTC3.36, PTC3.37, PTC3.40, PTC3.43, PTC4.1, PTC4.2, PTC4.50, PTC4.62, PTC6.3, PTC6.67, CC3.3, CC3.9, CC3.11, CC3.16, CC3.26, CC3.27, CC3.50, CC3.52, CC3.74, and CC5.5.

Master Response 1 provides information on the GO Pass program, the mode split assumptions in the Draft EIR, the ability of Caltrain to serve additional riders generated by SUMC Project, the continued viability of Caltrain, and steps that would be taken in the event that the SUMC Project sponsors are unable to achieve the required mode splits. Master Response 1 also presents an analysis of private bus service as a means to reduce trips. Some commentors have suggested that the type of employee bus service provided by Google or Facebook could be used by the SUMC instead of the GO Pass, or could be used by the SUMC in the event Caltrain were to cease providing service.

## **GO Pass Program**

The Caltrain GO Pass is an employer-sponsored annual pass that offers unlimited rides on Caltrain through all zones, seven days per week for one annual payment per employee. The GO Pass – a small sticker affixed to an employee I.D. badge – can be used at any time of the day that Caltrain is operating. Employees traveling on Caltrain simply present the badge and the GO Pass sticker. The GO Pass is not available for purchase by individuals and does not cover parking at Caltrain stations or travel on other transit systems. It is valid for a calendar year and expires on December 31 each year. Participating employers pay an annual fee to provide the GO Pass to each and every regular, full-time employee (working more than 20 hours per week) regardless of how many will use the transit pass.

The GO Pass program is a contractual program open to companies of any size. Companies currently pay \$155 annually (2011) for every regular employee working more than 20 hours per week at the company or a flat fee of \$10,850, whichever is higher.

The GO Pass is valid for unlimited rides, including personal trips, on Caltrain during the period for which it is purchased, in any zone, seven days a week. It should be noted that the employee's ability to utilize the GO Pass for personal, non-business related use not only provides an incentive to take cars off the road during non-commute times, but also offers the opportunity for a current non-user to experience the advantages of Caltrain in other situations and become "sold" on its convenience and comfort for regular or commute use. Although anecdotal, Stanford University's experience is that this aspect helps influence changing commute choice to Caltrain.

Caltrain allows colleges and universities to participate in the same way as companies. Schools can purchase the GO Pass for staff or faculty or both and for students, but the benefit must be for everyone in the category for which the school decides to provide it – all eligible faculty or staff, for example, or all undergraduate or graduate students. Stanford does not provide GO Passes for students as most students are housed on campus. Parking & Transportation Services is the organization that manages the GO Pass for Stanford University employees. Stanford University currently purchases GO Passes for a large portion of its employees. The subgroup of GO Pass eligible employees is defined as those who work more than 20 hours a week, and those who do not live on campus, but excludes students, SLAC employees and Hospital employees.

The SUMC Project Draft EIR evaluates project-related traffic effects based upon current trip generation data at the SUMC, without assuming any changes to the Hospitals' transportation demand management (TDM) programs. This produces an analysis of SUMC Project impacts before mitigation. The Draft EIR then evaluates the reduction in traffic effects that would be achieved by the implementation of a Mitigation Measure to enhance the Hospitals' existing TDM program by providing a Caltrain GO Pass to all eligible SUMC employees.

In addition, as part of the enhanced TDM mitigation, the Hospitals would be required to use all reasonable efforts to lease parking spaces in the Ardenwood park-and-ride lot (or at an equivalent lot) at the east end of the Dumbarton Bridge to allow East Bay employees to park at the park-and-ride lot and board the U-Line to reach the Hospitals. The SUMC Project sponsors would also use all

reasonable efforts to assure that the controlling agency provides sufficient bus service on the U-Line (i.e., no standees). Therefore, while the GO Pass would not be of use to residents not served by Caltrain, alternate modes of transportation would be available to some of those employees.

As described below, the trip reduction anticipated to be achieved by offering Caltrain GO Passes to all eligible Hospital employees is based on the Caltrain usage rates that Stanford University achieved in 2006 by offering Caltrain GO Passes to University employees.

Stanford University currently has a total employment of approximately 15,300 and purchases about 10,100 GO Passes annually. In a five-year period, the University achieved a substantial decrease in the number of drive-alone commuters from 64 percent in 2004 to 50.3 percent in 2008. Much of this decrease is attributable to the Caltrain GO Pass program. The Caltrain GO Pass was initially offered in the fall of 2002 to Stanford employees. Between 2002 and 2004, Stanford University Caltrain ridership tripled from 4 percent to 12 percent of total commuters. In 2005, Caltrain opened its “Baby Bullet” service and expanded its express train service. By 2006, Stanford University commuters’ use of Caltrain to campus had quadrupled to about 16 percent. In 2007, 18 percent of Stanford University employees used Caltrain, and in 2008, the ridership increased to 20 percent.

By contrast, Hospitals do not offer GO Passes to their employees. While the level of drive-alone commuters that are Hospital employees dropped recently by approximately 4.6 percent (from 78.2 percent in 2007 to 73.6 percent in 2008), the shift from a drive-alone commute mode by Hospital employees has come due to increases in carpooling and express bus use. There has been little change in Caltrain use by Hospital employees. Accordingly, it is reasonable to expect that offering Caltrain GO Passes to Hospital employees would substantially increase transit use and reduce drive-alone rates. In 2006, the annual employee transportation survey for the Hospitals determined that the existing TDM program resulted in the following employee mode splits:

Single Occupant Modes

Drive Alone	77.1%
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Alternative Transportation Modes

Carpool	9.8%
Caltrain	3.6%
Bus	4.7%
Bicycle	2.5%
Marguerite	0.6%
Walk	0.6%
Vanpool	0.1%
<u>Other</u>	<u>1.0%</u>
Total:	22.9%

Some commentors have suggested that because of the timing of Hospital employee shifts, Caltrain use by SUMC employees would not achieve the level of mode choice that has been achieved by Stanford University employees. However, the breakdown of Hospital employees by shift shows that 77 percent of day shift employees arrive during the morning commute hours (another 12 percent arrive during the evening commute). This indicates a likely use parallel to Stanford University employees.

In addition to reviewing the timing of Hospital shifts, the City's traffic consultants also reviewed data regarding the location where Hospital employees reside in comparison to the location where Stanford University employees reside. A higher percentage (65 percent) of Hospital employees than of Stanford University employees (52 percent) live in cities that are located near the Caltrain tracks (excluding Palo Alto and Menlo Park which are considered too proximate).

The majority of the Hospital employees live on the Peninsula. Currently, the Hospitals have approximately 10,000 employees (in all locations) and 6,200 live in cities on the Peninsula serviced by Caltrain. Appendix C of the Draft EIR shows the city of residence for the Hospitals and for Stanford University employees in Table 2. The places of residence in that table are grouped according to their likelihood to use Caltrain. Group 1 cities are the cities on the Peninsula served by regular Caltrain service, except Menlo Park and Palo Alto, which are too close to Stanford and the SUMC to effectively use Caltrain. Group 2 cities are cities where the use of Caltrain is a possibility, but not to the degree of Group 1 cities. Group 3 cities are those located very near Stanford and the SUMC (Palo Alto, Menlo Park, and East Palo Alto) or are not located in proximity to the Caltrain corridor. Of all Hospital employees, 65 percent live in Group 1 cities. Of all Stanford University employees, 52 percent live in Group 1 cities. Since the percentage is greater for Hospital employees, it is highly likely that the use of Caltrain by SUMC employees would equal that of Stanford University employees soon after Hospital employees are provided GO Passes. It is not a location of residence that causes higher Caltrain ridership for Stanford University employees than Hospital employees, it is clearly the fact that Stanford University employees are provided free GO Passes and Hospital employees are not. This explains the reason that the mode split to Caltrain in 2006 was 15.8 percent for Stanford University employees and 3.6 for Hospital employees.

Commentors have asked whether it is reasonable to assume that a similar percentage of future SUMC employees would live proximate to Caltrain as occurs under existing conditions. Trying to determine the future location of Hospital employees is difficult. Residence and work choices consider commute conditions. Unless there are drastic changes in the commute conditions, future choices are likely to be similar to current choices. The best source of future employee location of residence is the place of residence of existing employees. Therefore, the Transportation Impact Analysis relied on the existing Hospital employee place of residence to determine future travel patterns.

Based on Stanford University's experience with the GO Pass, it can be conservatively assumed that Hospital employee transit use would at least double from about 3.5 percent to 7 percent with the introduction of GO Passes and could achieve substantially higher levels of use over time. The steady rise in Caltrain use by Stanford University employees since 2002 is a good indicator of the effectiveness of the GO Pass program, and there are likely to be additional changes in travel behavior due to increasing congestion on area freeways and rising fuel costs. It is very likely that Caltrain use



by Hospital employees could be at the 15.8 percent level with the GO Pass and supporting shuttle service, which is the level Stanford University achieved in 2006.

### Caltrain Capacity to Serve Hospital Employees

Please see Staff-Initiated Change 1 for an analysis of the capacity of Caltrain to serve the increase in ridership due to the SUMC Project and the provision of GO Passes to existing and future Hospital employees. Additionally, see the below discussion regarding Caltrain parking capacity to accommodate the GO Pass mitigation measure.

Table 3.3-1 presents the existing observed parking usage at Caltrain stations where GO Pass users are likely to park. Stations in Menlo Park, Palo Alto, and Mountain View, which are in the immediate vicinity of SUMC Sites, are omitted from the table as Hospital employees who would use the GO Pass are not likely to park at these stations.

**Table 3.3-1  
Caltrain Station Parking Supply and Usage**

Station	Supply	Utilized (Oct. & Nov. 2010)		Net Available	Estimated SUMC GO Pass Parking <sup>a</sup>
		#	%		
4th / King <sup>b</sup>	-	-	-	-	-
22nd Street <sup>b</sup>	-	-	-	-	51 <sup>b</sup>
Bayshore <sup>b</sup>	38	4	11%	34	-
South San Francisco	75	28	37%	47	14
San Bruno	171	114	67%	57	10
Millbrae	175	164	94%	11	5
Broadway	119	15	13%	104	
Burlingame	69	13	19%	56	8
San Mateo	226	156	69%	70	34
Hayward Park	211	13	6%	198	
Hillsdale	417	401	96%	16	
Belmont	389	20	5%	369	15
San Carlos	216	76	35%	140	20
Redwood City	562	294	52%	268	65
Atherton	96	2	2%	94	
Sunnyvale	431	417	97%	14	79
Lawrence <sup>c</sup>	122	28	23%	94	
Santa Clara <sup>c,d</sup>	189	81	43%	108	45 <sup>c</sup>
San Jose Diridon	586	557	95%	29	159
Total	4,092	2,383	58%	1,709	505

Source: AECOM, 2011.

Notes:

- GO Pass parking demand estimated based on existing SUMC employee distribution.
- The estimated GO Pass parking to support Hospital employees at the San Francisco stations would be 51 spaces, combined.
- The estimated GO Pass parking to support Hospital employees at the Santa Clara stations would be 45 spaces, combined.
- The Santa Clara station has parking lots closed for construction. Data may only reflect temporary conditions.

The data in Table 3.3-1 were collected during the mid-day (11:00 a.m. to 3:00 p.m.) on typical weekdays during October 2010. The parking demand represents a snapshot of a single day, and parking usage may vary on other days throughout the week. Table 3.3-1 shows the total number of spaces, the parking demand on the day of the survey, the percent utilization, and the number of spaces available. The table also shows the number of parking spaces required to support GO Pass usage by Hospital employees. The parking demand for SUMC GO Pass use assumes one person per vehicle, with 100 percent drive access. There are only two stations where demand for parking may exceed supply, at San Jose and Sunnyvale. The GO Pass parking demand for San Jose conservatively assumes all passengers will use Diridon Station; however, it can be expected that some passengers will use the Tamien Station, also in San Jose. The VTA Park and Ride Lot that is within 800 feet of the Tamien Station has excess parking that can be used (based on 2009 VTA park and ride parking data). Sunnyvale Station passengers could use the excess supply at the Lawrence Station, about two miles south of Sunnyvale station. It should be noted that in San Francisco, most GO Pass users would use transit to access Caltrain, in lieu of driving to Caltrain.

### **Future Viability of Caltrain**

Some commentors have noted that Caltrain is experiencing financial difficulty and have asked whether it is reasonable to rely upon provision of the GO Pass as mitigation in light of those concerns. All local and regional transit agencies are currently experiencing financial difficulties. There would be considerable changes to commuting behavior if all transit agencies were to discontinue operations. Given the high volume of ridership, it is not likely that the transit services would cease to exist. More likely, cutbacks would occur outside of the Peak Hours minimizing the effect on employee commute trips.

Caltrain, along with Metrolink in Los Angeles, are the most successful commuter rail systems on the West Coast, each carrying approximately 40,000 passengers per day. The complete loss of Caltrain service would add about 37,000 daily vehicle trips to Peninsula roadways if each current rider shifts to driving (assuming an occupancy rate of 1.1 person per car). This increase in traffic would have considerable effects on roadways in Palo Alto and up and down the Peninsula, independent from the SUMC Project. Such effects could not be addressed through mitigation measures imposed on a single project. Rather, a regional solution would need to be developed.

Caltrain's biggest challenge is its funding mechanism, which comes from three agencies: San Francisco Transportation Authority, San Mateo County Transportation Authority, and Santa Clara Valley Transportation Authority. Each of these agencies is experiencing financial constraints, which affect their allocation of funding to Caltrain. However, continued funding of Caltrain by these agencies or alternatively the creation of an independent funding source for Caltrain are the most likely outcomes.

Having employers such as the SUMC Project sponsors participate in the GO Pass program provides benefits to Caltrain. Issuing GO Passes to existing and future Hospital employees represents an annual cost for the SUMC Project sponsors. As explained above, this cost is estimated to be \$1.8 million per year. This expenditure would contribute to Caltrain's financial stability.

In sum, it is not likely that transit service on the Peninsula would cease to exist. Participation in programs such as the Caltrain GO Pass benefits transit operators. To the extent cutbacks occur, they likely would be outside of peak commute periods. In the unlikely event that Caltrain were to shut down operations, regional solutions would be needed to address the needs of the high volume of Caltrain ridership. Such regional solutions are outside of the control of individual project sponsors.

### **Draft EIR Text Revisions**

Mitigation Measure TR-2.3 requires that the SUMC Project sponsors enhance the currently-implemented TDM Program to achieve a 35.1 percent usage of alternative transportation modes (i.e., carpool, vanpool, bus, Caltrain, bicycle, and walk) by Hospital employees by build-out and full occupancy of the SUMC Project in 2025. Mitigation Measure TR-2.3 also requires that annual TDM monitoring be performed and a report submitted to the City documenting that the desired modal split to alternative forms of travel and away from a drive-alone commute is actually achieved.

To achieve the desired 35.1 percentage alternative transportation mode split for the SUMC Project, the Hospitals would need to increase its 2006 alternative transportation mode split of 22.9 percent by 12.2 percent by full project build-out and occupancy in 2025. Some commentors have asked what steps would be taken to monitor progress toward achievement of the required mode splits, and what steps would be taken if the SUMC Project sponsors cannot achieve the required mode splits, either because the Caltrain GO Pass is no longer available in its current form, or because the enhanced TDM program does not perform as anticipated. In response to these concerns, Draft EIR text on pages S-36 to S-37 and text on pages 3.4-67 to 3.4-69, Mitigation Measure TR-2.3 is revised as follows:

*TR-2.3 Enhance Stanford University ~~Travel~~ Transportation Demand Management (TDM) Program. The SUMC Project sponsors shall enhance the currently-implemented TDM program in order to achieve 35.1 percent usage of alternative transportation modes (i.e., carpool, vanpool, bus, Caltrain, bicycle, and walk) by ~~SUMC-Hospital~~ employees. The initial enhancements to the SUMC TDM program shall include the following:*

- Provide Caltrain GO Passes, or an equivalent TDM measure, to all eligible hospital employees and set target Caltrain mode share for hospital employees equal to 15.8 percent. If the GO Pass program is no longer available in its current form, then the SUMC Project sponsors shall contribute the amount of funding that they would have paid toward purchase of GO Passes, in an amount not to exceed \$1.8 million per year, toward one or more similar programs to encourage use of transit by SUMC employees as mutually agreed upon the SUMC Project Sponsors and the City's Director of Planning and Community Environment.
- ~~If Caltrain GO Passes would be provided to SUMC employees, make arrangements~~ Use all reasonable efforts to arrange with AC Transit to lease 75 spaces at the Ardenwood Park & Ride Lot, or an equivalent facility, to serve SUMC employees who commute from the East Bay.

- ~~Expand bus service in support of the issuance of GO Passes.~~
- ~~Expand the Marguerite shuttle bus service and integrate it with the other City of Palo Alto shuttle bus service.~~ between the SUMC and PAITS as needed to accommodate increased ridership by hospital employees.
- ~~Maintain~~ Use all reasonable efforts to assure that the controlling transit agency maintains load factors less than ~~or equal to~~ 1.00 on the U Line ~~and~~.
- Maintain a load factor less than or equal to 1.25 on the Marguerite shuttle.
- Expand and improve the bicycle and pedestrian networks as specified by Project site plans.
- Provide a full-time on-site TDM coordinator by 2015 for the Hospital components. The coordinator would be responsible for organizing and disseminating TDM information primarily to Hospital employees and also to Hospital patients. A central location would be made available to provide information on alternative travel modes. Also, the SUMC or Hospitals' website would contain information on TDM programs.
- Provide a guaranteed ride home program for all employees who use transit and other transport alternatives like carpool and vanpool. The guarantee ride home shall allow employees with dependent children the ability to use alternative modes to travel to and from work but still be able to travel home mid-day in case of an emergency.
- Provide employees with shower facilities within the SUMC Sites to encourage bicycling to work. The SUMC Project sponsors shall also provide bicycle storage facilities on the SUMC Sites that would be conveniently located near the employee showers.
- Establish, in conjunction with the GO Pass implementation, a "Zip Car" (or other similar car-sharing program) with Zip Cars available at the medical complex.
- Perform annual TDM monitoring and submit the report to the City of Palo Alto to ensure that the assumed modal split to alternative forms of travel and away from autos would be actually achieved. This report also shall be submitted to the City of Menlo Park for its review.
- Within six (6) months of project approval, the SUMC Project sponsors shall submit to the City's Director of Planning and Community Environment, a Hospital TDM Program Report that documents the existing TDM programs offered to the Hospital employees, participation levels in the programs, and the current mode split of Hospital employees. The report will include the level of staff support, educational efforts, and outreach strategies used for the program. This initial Hospital TDM Program Report will serve as the baseline conditions for measuring the

future TDM Program effectiveness as program enhancements are implemented to reach the 35.1 percent target in 2025.

- Subsequent to preparing the Baseline TDM Report, the Hospitals shall prepare an annual report in the spring of each year that will document the same information as the baseline report and provide a comparison with the previous year. The annual report shall be submitted to the City's Director of Planning and Community Environment.
- In addition to implementing the program enhancements described above, the Hospitals and Stanford Parking & Transportation Services shall regularly consider other enhancements to the SUMC TDM Programs on an ongoing basis. Based on its experience in running TDM programs, Stanford's Parking & Transportation Services has found that adaptability and flexibility are two key factors when providing new services. For new or enhanced programs to be successful, the programs must evolve in consideration of employee preferences and desires, the availability of new services in the marketplace (such as zip cars), pilot programs, and ongoing research and data collection regarding the comparative effectiveness of various options. As necessary, the Hospitals shall regularly consider incorporating new services into their TDM Program, and shall meet with the City annually to exchange information about new innovations, research and strategies.

~~These enhancements may not immediately change the mode split for SUMC Hospital employees, because many employees would be unable to change long standing commute patterns overnight. However, with the passage of a mutually agreed amount of time, it is expected that the enhanced TDM program would gradually result in a shift in the mode split of SUMC Hospital employees. If this proves not to be the case, then a second round of improvements to the TDM program shall be implemented. Examples of additional measures could be to increase the parking permit charges while increasing the incentives to those who carpool or do not drive. If, by the year 2025, at least 35.1 percent of SUMC employees are not using alternative transportation modes, then a second round of improvements to the TDM shall be implemented. Examples of additional measures could be to increase the parking permit charges while increasing the incentives to those who carpool or do not drive. Thereafter, SUMC Project sponsors shall monitor/survey employee use of alternative modes of transportation on an at least bi-annual basis, and shall continue to improve its TDM program, until it is confirmed to the satisfaction of the City that the target of 35.1 percent usage has been met. The following interim targets in Table 3.4-19A shall be used to measure the progress toward meeting the desired mode split in 2025. These interim targets assume that in the early phases of implementation, there may be larger shifts to alternative modes than the shifts that may occur in later phases of the TDM~~

program enhancement. New programs, such as the implementation of the Caltrain GO Pass, would generate a large shift once it is offered; however, other program enhancements may generate more modest shifts in mode choice.

**Table 3.4-19A**  
**Shift in Hospital Employee Mode Split**

<u>Target Year</u>	<u>Alternative Mode Share</u>	<u>Percent Change</u>
<u>EIR Baseline (2006)</u>	<u>22.9 %</u>	<u>NA</u>
<u>Project Approval Baseline (2011)</u>		
<u>2018</u>	<u>30 %</u>	<u>7.1 %</u>
<u>2021</u>	<u>33 %</u>	<u>+3 %</u>
<u>2025</u>	<u>35.1 %</u>	<u>+2.1 %</u>

For each of the interim target years, following submission of the Hospitals TDM Annual Report, the City shall determine if the interim year target has been met. If the Hospitals have not met the interim target, the Hospitals and the City shall meet to review the TDM Program and to identify possible additional TDM Program enhancements that the Hospitals should consider incorporating into their TDM Program in order to increase the Program’s effectiveness.

If the Hospitals do not meet the applicable interim targets for any two consecutive years prior to 2025, the Hospitals shall provide alternative transportation funding to the City of Palo Alto in the amount of \$175,000 per year until the Hospitals achieve the applicable interim mode split target. The alternative transportation funding shall be used by the City of Palo Alto for local projects and programs that encourage citywide use of alternative transportation mode uses.

If by 2025, the Hospitals have not demonstrated substantial compliance with the 35.1 modal split for alternative transportation modes, the following measure shall be required:

- The Hospitals shall make a lump sum payment of \$4.0 million to the City of Palo Alto for local projects and programs that encourage and improve citywide use of alternative transportation mode uses. The City of Palo Alto shall identify capital projects and program enhancements for which the funds may be applied. Sample projects may include contributions towards regional transportation projects of interest to the City of Palo Alto and that are identified within the Valley Transportation Authority – Valley Transportation Plan or other local planning documents.

The bulleted list on page 3.4-60 of the Draft EIR has been revised as follows:

- Provide Caltrain GO Passes, or an equivalent TDM measure, to all eligible hospital employees and set target Caltrain mode share for hospital employees equal to 15.8 percent. If the GO Pass program is no longer available in its current form, then the SUMC Project sponsors shall contribute the amount of funding that they would have paid toward purchase of GO Passes, in an amount not to exceed \$1.8 million per year, toward one or more similar programs to encourage use of transit by SUMC employees as mutually agreed upon the SUMC Project Sponsors and the City's Director of Planning and Community Environment.
- ~~If Caltrain GO Passes would be provided to SUMC employees, arrangements would also be needed~~ Use all reasonable efforts to arrange with AC Transit to lease 75 spaces at the Ardenwood Park and Ride Lot, or an equivalent facility, for those to serve SUMC employees who commutinge from the East Bay.
- ~~Expand bus service in support of the issuance of GO Passes.~~
- ~~Expand the Marguerite shuttle bus service and integrate it with the other City of Palo Alto shuttle bus service.~~ between the SUMC and PAITS as needed to accommodate increased ridership by hospital employees.
- Use all reasonable efforts to assure that the controlling transit agency maintains load factors less than 1.00 on the U Line.
- Maintain a load factor less than or equal to 1.25 on the Marguerite shuttle.
- Expand and improve the bicycle and pedestrian networks as specified by Project site plans.
- Provide a full-time on-site TDM coordinator by 2015 for the hospital components. The coordinator would be responsible for organizing and disseminating TDM information primarily to hospital employees and also to hospital patients. A central location would be made available to provide information on alternative travel modes. Also, the SUMC or hospitals' website would contain information on TDM programs.
- Provide a guaranteed ride home program for all employees who use transit and other transport alternatives like carpool and vanpool. The guarantee ride home shall allow employees with dependent children the ability to use alternative modes to travel to and from work but still be able to travel home mid-day in case of an emergency.
- Provide employees with shower facilities within the SUMC Sites to encourage bicycling to work. ~~The SUMC Project sponsors shall also provide bicycle storage facilities would also be required~~ on the SUMC Sites that would be conveniently located near the employee showers.

- Perform annual TDM monitoring and submit the report to the City of Palo Alto to ensure that the assumed modal split to alternative forms of travel and away from autos would be actually achieved. This report also shall be submitted to the City of Menlo Park for its review.
- Establish, in conjunction with the GO Pass implementation, a “Zip Car” (or other similar car-sharing program) with Zip Cars available at ~~the medical complex~~ the SUMC Sites.
- Within six (6) months of project approval, the SUMC Project sponsors shall submit to the City’s Director of Planning and Community Environment, a Hospital TDM Program Report that documents the existing TDM programs offered to the Hospital employees, participation levels in the programs, and the current mode split of Hospital employees. The report will include the level of staff support, educational efforts, and outreach strategies used for the program. This initial Hospital TDM Program Report will serve as the baseline conditions for measuring the future TDM Program effectiveness as program enhancements are implemented to reach the 35.1 percent target in 2025.
- Subsequent to preparing the Baseline TDM Report, the hospitals shall prepare an annual report in the spring of each year that will document the same information as the baseline report and provide a comparison with the previous year. The annual report shall be submitted to the City’s Director of Planning and Community Environment.
- In addition to implementing the program enhancements described above, the hospitals and Stanford Parking & Transportation Services shall regularly consider other enhancements to the SUMC TDM Programs on an ongoing basis. Based on its experience in running TDM programs, Stanford’s Parking & Transportation Services has found that adaptability and flexibility are two key factors when providing new services. For new or enhanced programs to be successful, the programs must evolve in consideration of employee preferences and desires, the availability of new services in the marketplace (such as zip cars), pilot programs, and ongoing research and data collection regarding the comparative effectiveness of various options. As necessary, the Hospitals shall regularly consider incorporating new services into their TDM Program, and shall meet with the City annually to exchange information about new innovations, research, and strategies.

The above revisions to Mitigation Measure TR-2.3 would ensure that the SUMC Project sponsors fund programs to reduce automobile trips regardless of whether the Caltrain GO Pass continues to be offered in its current form. Further, these revisions ensure that if the SUMC Project sponsors would be unable to achieve the mode splits required under Mitigation Measure TR-2.3, funds shall be provided to the City to reduce citywide trips in order to offset trips by Hospital employees. While historic evidence supports the conclusion that the mode split requirements would be achieved, these revisions to Mitigation Measure TR-2.3 provide a backstop to address future changes in circumstances.



In response to comments provided by the City of Menlo Park, Mitigation Measure TR-2.3 also has been revised to specify that the annual TDM monitoring reports shall be provided to the City of Menlo Park for its review.

Other revisions to Mitigation Measure TR-2.3, above, are intended to clarify that Marguerite Shuttle expansion is needed to accommodate increased ridership between the SUMC and PAITS. As explained in Staff-Initiated Change 2, other transit systems will have sufficient capacity to accommodate increased ridership by SUMC employees; therefore further expansion of the Marguerite shuttle into Palo Alto, or expansion of other bus service, is not required. In addition, the revised measure recognizes that the SUMC Project sponsors cannot control availability of parking spaces at the Ardenwood Park-n-Ride lot, nor can they control operation of the U-Line. Therefore, the revisions require use of all reasonable efforts to lease parking spaces at the Ardenwood Park-n-Ride lot, or at an equivalent facility, and to assure that the controlling agency maintains a load factor of less than or equal to 1.0 on the U-Line. Finally, the revised text clarifies that the bicycle and pedestrian facilities required under this measure are those shown on the project plans.

### **Comparison of Cost Effectiveness of Private Bus Service to the GO Pass**

As explained above, the provision of the Caltrain GO Pass to Hospital employees is expected to be an effective measure to reduce vehicle trips and associated air pollutant emissions, including greenhouse gases. Further, it is unlikely that commuter train service would cease to exist on the Peninsula. Nevertheless, if such an event were to occur, or if the GO Pass program were to cease to exist in its present form, the SUMC Project sponsors have offered as part of the Development Agreement to re-allocate the GO Pass money to other trip reduction programs. Accordingly, money from the SUMC Project sponsors could be used to subsidize a future regional solution developed in response to changes to the Caltrain service or GO Pass Program.

This portion of Master Response 1 explores an alternative approach under which the City would require the SUMC Project sponsors to provide a private bus service for their employees, rather than funding the GO Pass Program or other regional transportation solutions. Information has been collected regarding shuttle bus operations from private companies. This information is presented below, including an estimate of the cost. Provision of private bus service sufficient to yield the same Peak Hour trip reduction as would result from provision of the GO Pass is estimated to cost approximately \$10.7 million per year.

For purposes of comparison, provision of GO Passes for all Hospital employees would cost approximately \$2.25 million annually. This amount is based on Caltrain GO Pass rates for 2011. Caltrain has increased the GO Pass cost in January 2011 from \$140 per pass per year to \$155 per pass per year, a nearly 11 percent increase. The per pass cost multiplied by 11,500 Hospital employees totals approximately \$1.8 million per year. Provision of expanded Marguerite shuttle service to accommodate increased ridership between the SUMC and Caltrain is estimated to cost approximately \$450,000 per year in operating costs (including capital depreciation). In addition, capital costs of new shuttles for the expanded Marguerite service are expected to add \$2 million.

## Employer-Provided Shuttles

The following analysis presents an example of a successful employer-provided shuttle program currently being implemented in the Bay Area and compares it with the SUMC conditions to determine if it is viable for the SUMC Project sponsors to implement a similar scheme.

**Existing Example.** Several large employers in the Bay Area provide dedicated shuttle services to carry Bay Area employees to their campuses. These include Google, Apple, Genentech, and Yahoo. As privately-operated systems, operating data is difficult to obtain. The most information was available about Google, and it is the subject of this example.

Google Inc, located in Mountain View, started its shuttle service in 2004. Today, 50 buses provide about 170 shuttle service runs from different parts of the Bay Area to its Mountain View headquarters and two other Bay Area campuses (San Francisco and San Bruno). There are 45 pick-up locations in the Bay Area with services starting as early as 5:00 am. The last pick-up for the AM peak service is at 10:40 a.m. The evening service runs from 3:40 p.m. to 10:00 p.m. The highest pickup frequency during the peak period is every five minutes. There are about 10,000 employees at the Mountain View campus, 500 employees at the San Francisco campus and 300 at the San Bruno campus. Currently, approximately 20 percent of Google employees make use of the shuttle service. In order to meet the constant change and increase in demand, Google has transportation coordinators who monitor the employees' residence location and regional traffic pattern to plot new routes.

By comparison, the size of SUMC at full build out is similar to the Google Mountain View campus. Apart from targeting the Caltrain users (15.8 percent), it could be possible to target bus users (4.7 percent) to switch to the employer-provided shuttle. In addition, if the shuttle routes are designed to also serve areas currently not served by public transit, the total usage could be close to 20 percent, similar to the Google usage. Like Google, SUMC has more than one campus location. Hence, SUMC has comparable characteristics for purposes of performing a cost comparison.

**Operating Cost.** The cost of providing a Google-type employee bus system can be estimated using an hourly operational cost, the number of buses required, the hours of operation, and an amortized capital cost. The cost represents the actual costs that the Hospitals would incur if they were to provide such a service.

Using the data collected regarding the Google system, the bus system for 10,000 employees at a 20 percent usage rate requires approximately 50 buses operating approximately an average of 8 hours per day. This assumes that half of the buses operate 12 hours per day and half operate six hours per day. Not all of the buses would be needed during the "shoulders" of the Peak Period (i.e., 5:00 a.m. to 6:00 a.m., 9:00 a.m. to 11:00 a.m., and 7:00 p.m. to 10:00 p.m.). Based on Stanford's experience in operating the Marguerite system, the operating cost per bus hour is \$80. Annual operating costs therefore would equal \$80 per bus per hour multiplied by 8 hours per day multiplied by 254 days per year multiplied by 50 buses, for a total of \$8.1 million per year. In addition, the Hospitals would have to incur capital costs associated with the purchase of 50 highway buses, which are estimated to cost approximately \$500,000 per bus (for a non-hybrid model), resulting in a cost of \$25 million for the bus

fleet. Assuming that each bus would last approximately 10 years, the amortized annual capital cost is estimated as \$2.6 million per year. Thus, the total annual cost (operating plus capital costs) would be \$10.7 million per year.

**Conclusion.** To run the Peak Hour private bus service would require an estimated cost of \$10.7 million, which is over four times the cost of providing GO Passes and associated Marguerite shuttle service for all eligible Hospital employees.

## **Master Response 2: Other Traffic Mitigation Measures**

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### **Introduction**

Master Response 2 addresses Comments 3.a.10, 7.32, 8.9, 8.10, 8.11, 20.8, 20.13, 20.15, 20.16, 22.16, 22b.1, 22b.2, 22b.3, 22b.4, 22b.5, 22.b.6, 26.9, 35.4, 35.18, 36.3, 36.4, 37.3, 37.4, 37.5, 43.2, 43.3, 43.4, 43.6, 56.1, PTC1.60, PTC3.1, PTC3.3, PTC3.6, PTC3.8, PTC3.9, PTC3.10, PTC3.28, PTC3.32, PTC3.43, PTC4.3, PTC4.4, PTC4.47, PTC4.59, PTC4.61, PTC6.3, CC3.16, CC3.17, CC3.18, CC3.19, CC3.28, CC3.29, CC3.30, CC3.41, CC3.44, CC3.48, CC3.50, CC3.70, CC3.77, CC3.79, CC5.6, and CC5.36.

Master Response 2 addresses other traffic mitigation measures that have been raised during the review period for the Draft EIR. First, Master Response 2 looks at the viability of expanding local shuttle service (e.g. the Marguerite shuttle) to serve SUMC employees within approximately five miles of the SUMC Sites; including East Palo Alto and portions of Menlo Park, Redwood City, and the North Fair Oaks section of unincorporated San Mateo County. Second, Master Response 2 discusses other measures to reduce the amount of traffic: remote parking lots, a bicycle sharing program, and enhancements to the current TDM program. The feasibility of a No Net New Trips requirement is also discussed. Third, Master Response 2 determines if local transit service would have the capacity to accommodate the projected ridership from the SUMC Project.

### **Expanded Shuttle Service**

The mitigation measures identified in the Draft EIR, as modified by Staff-Initiated Change 2, would reduce intersection impacts to a less-than-significant level. Accordingly, increased shuttle service for SUMC employees is not needed to reduce traffic congestion impacts. Nor would such a measure substantially reduce impacts to roadway segments in Menlo Park. Nevertheless, to respond to comments, this Master Response identifies potential new or expanded shuttle routes and evaluates their cost-effectiveness.

**Route Development.** Employees' residential locations provided in the SUMC Project application were used to identify areas of employee concentration. The route catchment includes employees residing within a quarter mile of the route. This analysis assumes that new or expanded shuttle routes would be as short as possible and the shuttles would use higher-speed arterials to travel between the SUMC Sites and targeted residential areas. Deviation from the higher-speed arterials sometimes would be needed to serve a concentration of employees. The routes would avoid duplicating existing transit routes. In

particular, after looking at the employees located in Mountain View, it was determined that the existing VTA services (Routes #522, #22 and #35) adequately serve the SUMC. Therefore, no service expansion is evaluated further for Mountain View.

The evaluated routes are loop services in order to expand coverage, but the loop size is kept to a minimum to reduce onboard time for passengers. The operational feasibility was verified using aerial photographs, to determine street width, intersection control, and possibility of turning movements.

**Evaluated Routes.** The analysis identified four routes that could serve employees. Figure 3.3-1 illustrates the four routes, represented by different colors. Table 3.3-2, presents the route details and number of employees served by each route. There are approximately 660 SUMC employees within the service area of the proposed routes. The total distance for the proposed routes ranges between 12.5 to 13.5 miles, each serving an area of approximately 160 employees on average. Based on an average traveling speed of 15 miles per hour, the total travel time for the four routes ranges between 50 to 54 minutes.

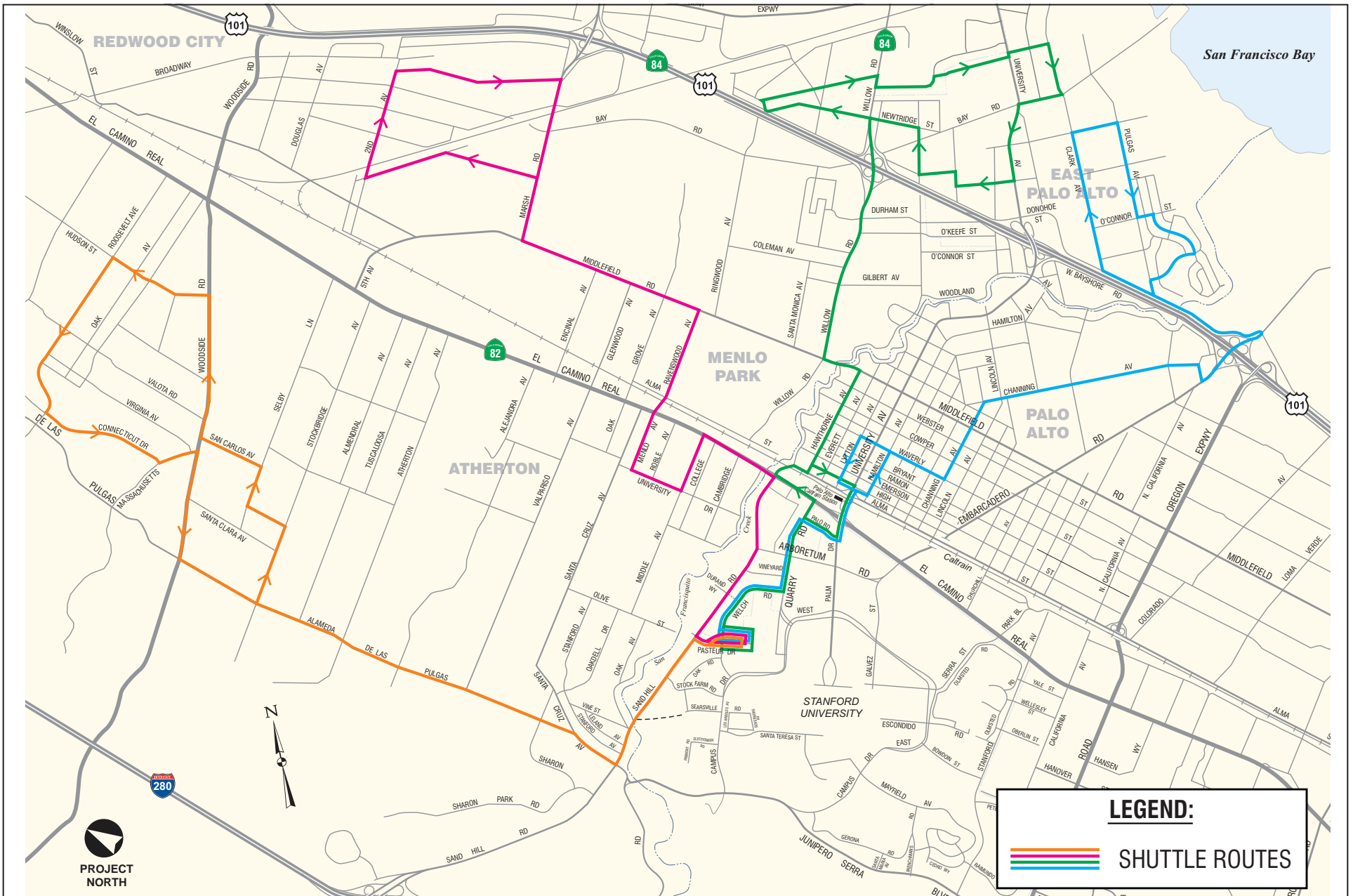
**Ridership.** It is estimated that up to 40 percent of the total employees living in the catchment area would be candidates to ride the shuttle. This percentage reflects that employees must pay for parking at SUMC and that many who drive must park in remote lots and ride a shuttle or walk from the parking lot to their work location. As a result the drive alone option for SUMC employees could be comparable to that of employees who work in dense urban downtowns, such as San Francisco. In these urban settings, transit typically attracts about 40 percent of employees. The maximum ridership for each route is calculated and tabulated in Table 3.3-3. Details are presented in the Appendix Z of this document. The calculation assumes that 80 percent of the employees work on a typical weekday and 89 percent go to and return from work during the Peak Period.

It should be noted that the provision of such an expanded shuttle service would not mitigate any identified significant intersection and roadway impacts of the SUMC Project, which are not already being mitigated by the other mitigation measures identified in this EIR. Further, ridership may be less than anticipated due to the employees' close proximity to the SUMC Sites and the perceived greater convenience of driving in Palo Alto compared with San Francisco.

**Operating Cost.** The operating and capital cost for these four routes would be approximately \$1,050,000<sup>16</sup> assuming half-hourly service during the four Peak Hours of the day – two hours in AM and two hours in PM.

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<sup>16</sup> Annual operating cost equals \$80/hour/bus x 8 buses x 4 peak period hours/day x 254 days / year = \$650,000 per year. Eight hybrid buses at \$500,000 that last 10 years results in an estimated \$400,000 in amortized annual capital cost. Total operating and capital cost for 4 hours of peak period service is approximately \$1,050,000.



**LEGEND:**

SHUTTLE ROUTES

Source: AECOM, 2010.



**FIGURE 3.3-1**  
**Proposed Shuttle Routes**

D41357.00

**Table 3.3-2  
Route Description**

<b>Route</b>	<b>Description</b>	<b>Route-trip Distance (miles)</b>	<b>SUMC Employees</b>
Pink	Menlo Park - Starts at SUMC, right on Sand Hill Rd, left on ECR, left on Middle Ave, right on University Dr, right on Menlo Ave, continue on Ravenswood Ave, left on Middlefield Rd, right on Marsh Rd, left one-way loop around Fair Oaks Ave, Edison Way, 2nd Ave & Page St to Marsh Rd then reverse route back to SUMC.	12.8	150
Green	Menlo Park/East Palo Alto - Starts at SUMC, right on Welch Rd, left on Quarry Rd, left on ECR, right on Alma St, left on Hawthorne Ave, left on Middlefield Rd, right on Willow Rd across US 101, left one-way loop around Newbridge St, Ivy Dr, O'Brien, Willow Rd, Kavanaugh Dr, Notre Dame Ave, Illinois St, Bay Rd, University Ave, Bell St, Oakwood Dr, Garden St, Menalto Av, back on Willow Rd via Newbridge St. On the return, left on High St from Hawthorne then SUMC Hospital Via Welch Rd.	12.6	180
Blue	East Palo Alto - Starts at SUMC, right on Welch Rd, left on Quarry Rd, right on El Camino Real, left on University Ave, right on High St, left on Hamilton Ave, Right on Waverly St, left on Channing Ave, right on Saint Francis, left on Embarcadero, across US 101, left on Bayshore Rd, one-way loop around Clark Ave, Weeks St, Pulgas Ave, O'Connor Dr, Wisteria Dr, Camellia Dr, Back to Bayshore Rd. On the return, left on Guinda St from Channing Ave, Homer Ave before reaching Waverly St. From Waverly St, via Lytton Ave and High St before heading back to University Ave and continuing to SUMC via Palo Rd, Quarry Rd and Welch Rd.	13.5	160
Orange	Redwood City - Starts at SUMC, left on Sand Hill Rd, right on Alameda De Las Pulgas Ave, right on Stockbird Ave, left on Santa Clara Ave, right on Selby Ln, left on Carlos Ave, One-way loop around Woodside Rd, Hudson St, Roosevelt Ave, Connecticut Dr, Massachusetts Ave to Woodside Rd, right on Woodside Rd and left on Alameda De Las Pulgas Ave and back to SUMC via Sand Hill Rd.	12.4	170

Source: AECOM Transportation, 2010.

**Table 3.3-3  
Maximum Peak Period Ridership**

<b>Route</b>	<b>SUMC Employees in Catchment</b>	<b>Potential Shuttle Users (40%)</b>	<b>Weekday Peak Period Trips</b>	<b>Total Weekday Peak Hour Trips</b>
Pink	150	60	85	47
Green	180	72	103	57
Blue	160	64	91	50
Orange	170	68	97	53
<b>Total</b>	<b>660</b>	<b>264</b>	<b>376</b>	<b>207</b>

*Source:* AECOM Transportation, 2010.

**Conclusion.** This analysis shows that four possible routes could be provided to serve local SUMC employees during the Peak Periods at an annual operating cost of \$1,050,000. Approximately 375 peak period passenger trips would be served by these four shuttle routes, removing about 100 vehicle trips from the local roadway network during each AM and PM Peak Hour. However, this EIR is not proposing such an expanded shuttle service as an additional mitigation measure because it would not be needed to mitigate the identified intersection and roadway impacts. Given the relatively large annual operating cost of \$1,050,000 per year, as compared to the relatively small incremental effect of the mitigation, such a shuttle service is not considered a feasible mitigation strategy.

### **Other Trip Reduction Measures**

**Feasibility and Effectiveness of Remote Parking.** Appendix D of the Draft EIR and Appendix K of the Transportation Impact Analysis discuss remote parking areas. Remote parking was considered by staff as a way to mitigate SUMC Project traffic impacts. However, it is not being proposed as mitigation at this time. The remote parking analysis was provided as Appendix D to the Draft EIR for informational purposes only. The primary mitigation measure to reduce traffic generated by the SUMC Project is issuance of GO Passes to all eligible employees (Mitigation Measure TR-2.3). The Hospitals are required to achieve 35.1 percent of all employee trips by 2025 by non-drive alone modes, with monitoring done annually. The GO Pass is considered superior to remote parking since the employee could walk, use transit, or drive to the local Caltrain station, board Caltrain, disembark Caltrain at the PAITS and use the Marguerite shuttle to reach the SUMC Sites. Alternatively, if remote parking were offered, employees could drive from their place of residence to the remote parking area, park their vehicle, and board a shuttle to the SUMC. Given these two options, the GO Pass is assumed to be selected as the preferred mode since it would transfer the most riders to transit and out of the auto for the majority of their commute. Intersection impacts would be mitigated through a combination of measures, including traffic-adaptive signal technology, new bicycle and pedestrian underpasses, TDM measures including the GO Pass, and roadway improvements.

Given their location, the implementation of the remote parking areas identified in the Draft EIR would not significantly change the results of the Menlo Park Roadway segment analysis. The purpose of the remote parking areas would be to reduce the number of vehicles on the local roadways by having employees ride shuttles rather than drive to the SUMC Sites. There would be additional shuttle trips

on the roadways that serve the remote parking areas identified, so there would be no reduction in the impacts on the Menlo Park roadway segments such as Sand Hill Road or Willow Road. The segments on Marsh Road and Alpine Road would not be affected based on the remote parking identified in the Draft EIR. As part of the enhanced TDM mitigation, remote parking on the east side of the Dumbarton Bridge would be required since it would reduce the amount of traffic crossing over the Dumbarton Bridge. Since all of the SUMC Project's intersection impacts would be mitigated through other means, remote parking is not being advanced at this time.

The remote parking lots also may not reduce the intersection impacts or carbon footprint of the SUMC Project to a great extent. Individuals would still drive their private vehicles for most of the trip and then use a shuttle bus for the last portion of their commute. This may slightly reduce emissions. The intent of the remote parking analysis was to show the benefit to traffic operations for intersections surrounding the SUMC Project, rather than reducing the carbon footprint. The GO Pass, by contrast, would substantially reduce greenhouse gas emissions from employee trips.

The Trip Distribution figure on page 3.4-48 of the Draft EIR (Figure 3.4-9) shows the expected travel patterns that would be used by the expanded employee base for the SUMC Project. This pattern is based on employee zip code data. There is no effective means of dictating to employees what routes they can travel to reach their place of employment. Each employee will choose a travel path that minimizes their travel time, whether via US 101 or alternatively via I-280, taking into account necessary or desirable detours and additional destinations. Remote parking lots identified in the Draft EIR were located off I-280 to serve traffic using I-280 and off US 101 to serve traffic using US 101.

The locations of the lots shown in Appendix D of the Draft EIR are conceptual at this time. There are several issues with remote parking that would need to be addressed before it can be imposed as a feasible mitigation measure. If remote parking were to be implemented for the SUMC Project, specific locations would need to be determined. If these locations would be within an adjacent jurisdiction, review and approval of the lots by that jurisdiction would be required, including an environmental assessment. Also, a program would need to be developed that addresses operational, cost, and safety issues.

In addition to the fact that remote parking would be less effective than the mitigation proposed in this EIR, remote parking would be undesirable from an operational perspective. Because other nearby hospitals do not currently have mandatory remote parking, requiring this measure could impact the competitive workforce environment. If remote parking is ever implemented at the SUMC, there may need to be employee incentives to overcome the perceived inconvenience of remote parking.

The operation of remote parking lots would require that security be provided to protect both personal and vehicle safety. Security could be either physical patrols or closed circuit television, or both. If remote parking were ever implemented for the SUMC Project, the selection of potential sites could be based, in part, on visibility from surrounding areas that would advance personal and vehicle safety.

Any remote parking implemented for the SUMC Project would require that the parking be reserved for the intended Hospital employees. Signs would need to be provided to indicate that these parking spaces



are for Hospital employees. Employees would be required to have a parking sticker, similar to the parking stickers used by the hospital today that identify a parked vehicle as belonging to an SUMC employee.

Assigning employees to the remote parking lots could raise issues with regard to equitable and fair employment practices if one group of employees (those hired because of the expansion) are treated differently than another group of employees (those hired prior to the expansion). As employees turnover, replacement employees would need to be similarly assigned. Should remote parking ever be implemented, it may be necessary to assign them to the remote parking lots on a yearly rotating basis.

There would be capital and operational costs associated with the remote parking lots. Land would need to be purchased or leased and the physical improvements installed. There would be on-going maintenance of the parking lots. This construction cost would probably be similar to constructing and maintaining a similar level of parking at the immediate SUMC Sites. Land acquisition could add costs at remote parking sites. There would also be the capital and operational cost of purchasing and operating shuttle buses to transport employees to and from the SUMC Sites. The cost of shuttles, both capital and operational, could be reduced if the remote lots are located near Marguerite shuttle routes.

Finally, parking policies that cause an economic or time penalty to employees are often subverted by parking in adjacent residential areas and either walking or using local shuttles like the Marguerite to make the last leg of the trip. Parking impacts to adjacent residential neighborhoods would need to be monitored if remote parking lots were ever implemented and a parking permit program established, similar to the one recently established in College Terrace, if such negative effects occurred.

**Remote Parking Locations.** If remote parking was implemented using the Ardenwood Park-and-Ride Lot, the SUMC Project sponsors would need to lease the appropriate number of spaces from AC Transit, the operator of the park-and-ride lot. Additional environmental review would be required if the lot were expanded beyond its current size.

The conceptual location of a remote parking lot for those employees who live south of campus and commute to the SUMC Sites by traveling north on I-280 is in the Stanford Research Park near the intersection of Page Mill Road and Hanover Street, not the existing park-and-ride lot at the I-280/Page Mill Road interchange. A remote parking lot serving traffic from the north on I-280 could be located at Lawler Ranch Road or at SLAC National Accelerator Laboratory. Both of these locations would need the approval of the local jurisdiction and the environmental issues would need to be disclosed and mitigated through an environmental document.

In Appendix D of the Draft EIR, a remote parking lot serving traffic from the south on US 101 is conceptually shown at an unoccupied office building on Embarcadero Road east of the freeway. If remote parking would be advanced as a mitigation measure, alternative locations could be explored that do not require razing an existing office building. Also, any impacts to adjacent intersections caused by the remote parking lot would be identified and mitigated through an environmental document. If a site in Redwood City was selected, it would need to be evaluated, the proper environmental clearance completed and Redwood City would need to approve such a use.

As such, the GO Pass is considered the preferred mitigation measure over remote parking lots and both programs would not be implemented together. If both programs were implemented, the remote parking lots would probably be largely vacant as most employees would choose the GO Pass option instead. Therefore, the expense of constructing and operating the remote lots would be incurred by the SUMC Project sponsors without much of a travel demand reduction.

**Feasibility and Effectiveness of Other TDM Measures.** According to the SUMC Project sponsors, there are no bike sharing programs formally planned for SUMC. There are several programs available on campus that are characterized as bike sharing. Currently, there are about 13,000 bikes on the campus every day. Often times, there is a bike-sharing situation where bicycles are not readily available. Stanford has rentals available on campus through the bike shop and several departments have their own departmental bike fleets for staff use. The alumni visitors' center has about 30 bikes that are available for any individual alumna.

The SUMC Project sponsors are generally in favor of a program that is consistent with the University's program. The University's program includes bicycle rentals from the campus bike shop, bicycle "fleets" that are maintained by individual university departments for employees and student use, and loaner bicycles for use by university alumni. The specifics of the final program could be included in the Development Agreement to be reviewed by the City Council.

The current SUMC TDM program is listed on pages 3.4-27 to 3.4-28 of the Draft EIR. With the exception of the GO Pass, the Hospitals have the same TDM measures that the larger University has, including carpool promotion and vanpool subsidies. Up to \$282 per year is provided in carpool credits and vanpools are subsidized. VTA Eco-passes are provided to all eligible Hospital employees. Also, as part of Mitigation Measure TR-2.3, the SUMC Project sponsors would be required to provide a full-time TDM coordinator by 2015. The full-time coordinator would be instrumental in advancing new state-of-the-art TDM measures for the SUMC Project.

Community physicians are not SUMC employees and are therefore not subject to Mitigation Measure TR-2.3. Since community physicians are not employees of the Hospitals, it would not be feasible to provide the TDM programs to the community doctors. However, transportation facilities such as Marguerite shuttles are free for participation by all users.

A suggested approach to minimizing SUMC Project traffic impacts by charging a daily fee to enter the campus area is not needed because the mitigation identified in the Draft EIR would reduce impacts at all intersections to a less-than-significant level. Further, such an approach would need to be applied to a larger area than just the SUMC Project. The infrastructure to establish the camera locations, the recording process, and monitoring would be beyond the ability of the SUMC Project sponsors to implement.

Some commentors have asked whether Clipper passes would be as effective as the GO Pass. Either the Clipper Pass or the GO Pass would be expected to attract the same amount of ridership if the SUMC Project sponsors covered the cost. The decision to ride Caltrain by Hospital employees would be based on several factors, such as the cost to the employee, the location of their place of residence, and

personal factors such as dropping children off at school on the way to work, etc. An evaluation of the two options shows that as long as Caltrain ridership exceeds 10.3 percent of Hospital employees, the GO Pass is the least costly option. The University use of the GO Pass was 15.8 percent in 2006, a figure used in the Draft EIR as an assumed benefit of the GO Pass mitigation.

The Transportation Impact Analysis evaluated all public transit routes that serve the area in proximity to the SUMC Project including regular VTA and Samtrans service. It also included Menlo Park and Palo Alto shuttles and contained mitigation measures to improve those services. Consideration was given to provide a Clipper transit pass to all Hospital employees which allows travel on most transit routes, but it was determined that GO Passes provide a more cost effective means of traffic mitigation and combined with other measures mitigate all SUMC Project intersection impacts. The Hospitals' TDM Program includes a guaranteed ride home regardless of shift.

As described in Master Response 11, the SUMC Project would conflict with existing development restrictions in the existing Public Facilities (PF zoning district). Therefore, the SUMC Project approval would include creation of a new zoning district. The SUMC Project sponsors have proposed "performance-based parking" as the parking requirement in the new district, rather than a parking requirement based on square footage or number of housing units, as traditionally occurs in zoning regulations. Parking would be provided to meet projected needs, with consideration given to the potential for reduced parking demand due to the proximity of the PAITS and demonstrated effective TDM programs. The performance-based parking requirements would be established by the applicable conditional use permit. The SUMC Project sponsors have proposed parking spaces for employees, patients, and visitors, with consideration to the possible utilization of PAITS and other TDM programs.

Mitigation measures such as the GO Pass would reduce the amount of parking required for the SUMC Project. The City of Palo Alto could require that the saved space be placed in landscaped parking reserve in case the parking demand increases in the future.

**Feasibility and Effectiveness of Imposing a No Net New Trips Requirement.** City staff believes that it would not be feasible to impose a No Net New Trip requirement or other cap on the number of vehicle trips on the SUMC Project, similar to the requirement imposed in the Stanford University CP/GUP EIR. This distinction is due to significant differences between the SUMC Project and the development contemplated in the CP/GUP. For example, the CP/GUP covers development within the Stanford central campus area, an area that does not include the SUMC Sites. Stanford has the unique ability to both monitor and control the number of trips generated by students and faculty to its campus. By comparison, SUMC Project sponsors have little ability to control the number of trips (especially patient trips) to their hospitals and clinics, nor would it make any sense to impose numerical limits on the number of patient trips. Such a limit would be contrary to the project objectives to meet existing and projected demand for patient care, and to provide clear, safe, and convenient access to SUMC facilities for patients and visitors. Moreover, the location and layout of the hospitals, the School of Medicine, and of other surrounding development would not allow for monitoring of the number of trips to the SUMC, as distinct from trips to other facilities, whereas trips to the Stanford central campus can be monitored more accurately.

The No Net New Trips policy that is in place for the CP/GUP is based on traffic counts rather than mode split percentages. Under the CP/GUP, traffic volumes are measured each year and compared back to the established baseline volumes. If the annual monitoring exceeds the baseline counts, Stanford can elect to receive credits for other auto trips they take off the roadways outside of campus. For example, if Stanford removes trips between PAITS and the Shopping Center, then they can use these trips removed from the network to offset the trips that were added to the network from campus growth. Ultimately, if Stanford cannot meet the No Net New Trips goal, then the CP/GUP requires specified intersection mitigation measures. The CP/GUP does not force Stanford to continue to take actions to offset or reduce trips until it achieves the standard. The No Net New Trips standard was included in the CP/GUP Conditions of Approval. It has no direct bearing on the SUMC Project and most of the traffic monitoring counts are collected away from the SUMC Sites.

The mitigation for the SUMC Project differs from the CP/GUP mitigation in that it is based upon mode split for employee travel, rather than trip counts. Nevertheless, the City recognizes that taking a trip off of the road network may offset employee trips. This will be considered in determining steps to be taken in the event the Hospitals do not achieve the mode split identified in the EIR.

The control and monitoring of traffic for the SUMC Project is by percentage of traffic using alternative forms of transportation, not on an absolute number of trips. By 2025, at least 35.1 percent of Hospital employees are required to travel by alternative modes. The SUMC Project sponsors would be required to monitor and report the mode split to alternative forms of transportation on an annual basis. By contrast, the campus experiences student and faculty/staff trips entering and leaving the campus. Therefore, the actual number of trips can be measured and evaluated against an established threshold. The Hospitals generate both employee and patient/visitor trips. The actual number of trips for employees cannot be accurately measured. Therefore, the percentage of traffic using the various modes is easier to quantify and verify through annual employee surveys.

Also, per CEQA Guidelines Section 15126.4(4)(B), mitigation measures must be roughly proportional to the impacts of the project. The standards of significance applied in the transportation analysis are listed on pages 3.4-30 through 3.4-32 of this EIR. Based on these criteria, there could be some increase in traffic that would not result in a significant impact. As such, requiring No Net New Trips as a mitigation measure would exceed the requirements of CEQA. See Staff-Initiated Change 2, which provides the revised analysis of LOS impacts, and the updated mitigation measures for significant LOS impacts. The mitigation measures identified in Staff-Initiated Change 2 are appropriate.

## **Transit Impacts**

Additional analysis was undertaken as part of the Final EIR to determine if local transit service has the capacity to accommodate the projected ridership from the SUMC Project expansion. Please refer to Staff-Initiated Change 1 for the expanded transit analysis. That analysis shows that the additional transit ridership generated by the SUMC Project can be absorbed by the existing transit network and service, including Caltrain, SamTrans, VTA, and City of Palo Alto Shuttles. Any expansion of transit service needed for the SUMC Project is confined to the Marguerite Shuttles between the SUMC and PAITS and the U-Line.

**Transit access to the East Bay** Under the enhanced TDM mitigation measure, the SUMC Project sponsors would be required to take reasonable steps to lease spaces in the Ardenwood park-and-ride lot for employees to use and then commute via the U-Line. The SUMC Project sponsors would also be required to use all reasonable efforts to assure that the transit service provider maintains a load factor less than 1.0 on the U-Line.

**East Palo Alto Shuttle.** The following information is included in the Final EIR concerning the East Palo Alto shuttle. Based on the San Mateo County Shuttle Inventory and Analysis Report (SMCTA, June 2010), the East Palo Alto Community Shuttle that operates hourly during the commute Peak Periods has an average daily boarding of 47 passengers. The free service operates 7 days per week between 5:30 a.m. to 11:30 a.m. and from 4:20 p.m. to 8:05 p.m. During the public hearings for the SUMC Project, the Palo Alto City Council also suggested that expanded transit service to East Palo Alto would help reduce traffic in both East Palo Alto and Palo Alto. During the preparation of the Final EIR and the Development Agreement for the SUMC Project, expansion of transit into East Palo Alto has been considered. Please refer to the first part of this Master Response 2 for a discussion of this potential service. It should be noted that only 1.8 percent of Hospital employees live in East Palo Alto.

## **Master Response 3: Background Growth and Cumulative Traffic Impacts**

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### **Introduction**

Master Response 3 addresses the following comments: 8.20, 16.1, 16.2, 17.2, 26.5, 26.7, 26.8, 35.17, 43.1, PTC3.12, PTC3.22, PTC3.23, PTC3.39, CC1.24, CC2.35, CC3.58, and CC5.10.

This Master Response 3 provides more information on the comparison of SUMC Project traffic to existing conditions, the forecast of background traffic growth without the SUMC Project, and the City of Palo Alto Travel Demand Forecasting Model that was used to determine the potential impacts the SUMC Project.

### **Comparison to Existing Conditions**

The Transportation Impact Analysis (Appendix C of the Draft EIR) prepared by the City's traffic consultants to evaluate the effects of the SUMC Project contains several components:

- First, it presents existing conditions at intersections and on roadways that potentially would be affected by traffic to and from the SUMC.
- Second, it determines the increase in traffic that would be generated by the SUMC Project in comparison to existing trip generation at the SUMC.
- Third, it evaluates the effect of increased traffic generated by the SUMC Project in comparison to existing conditions at affected intersections and roadways.

- Fourth, it determines the increase in background traffic growth that is expected to occur on area roadways, intersections, and freeway segments regardless of whether or not the SUMC Project is approved, constructed, or implemented.
- Fifth, it evaluates the effect of increased traffic generated by the SUMC Project in comparison to conditions without the SUMC Project in 2025.

Because step five of the Transportation Impact Analysis revealed the largest number and greatest extent of impacts of the SUMC Project, that analysis has been used in the Draft EIR to describe the full set of significant environmental effects of the project, and to ensure that all feasible mitigation measures for the SUMC Project have been identified and analyzed.

To further respond to comments on the Draft EIR, this response presents the results of the comparison of conditions with the SUMC Project to existing conditions, which was performed in step three, above, and also compares those results to the results from step five. Table 3.3-4 presents the results of the analysis of intersection effects under existing and with SUMC Project conditions in comparison to the results of the 2025 No Project and with SUMC Project conditions. In all locations analyzed, SUMC Project traffic impacts would be greater when compared to conditions expected to occur in 2025 without the SUMC Project. This analysis shows that there are no “hidden impacts” due to the background traffic growth being combined with SUMC Project traffic.

### **Background Growth**

The estimates of increased traffic under 2025 conditions without the SUMC Project were obtained from the City of Palo Alto Travel Demand Forecasting Model. The model is considered to be the best tool for estimating future growth in the area. The horizon year for the SUMC Project Transportation Impact Analysis is 2025, which corresponds with the horizon year of the City of Palo Alto Travel Demand Forecasting Model. Because of the long-term nature of the traffic analysis (from 2010 to 2025) the use of the City of Palo Alto Travel Demand Forecasting Model for projecting traffic volumes is considered far superior to using a list of planned and approved projects.

The land use basis for the City of Palo Alto Travel Demand Forecasting Model is the Association of Bay Area Governments (ABAG 2005) land use forecasts for 2025. The model is consistent with the VTA travel demand model for all of Santa Clara County. The VTA model is a subset of the Metropolitan Transportation Commission (MTC) nine-county model which uses the most recent ABAG population and employment forecasts. This traffic model is an update to previously used traffic models and is consistent with past models including the model employed in 1999 for the 2000 Stanford CP/GUP analysis. The key difference between the two models is the horizon year of the traffic forecasts. The use of ABAG forecasts is based on VTA guidance. While there may be objections to the ABAG growth projections, these region-wide allocations of future development are the best available information to be used for future traffic projections.

**Table 3.3-4  
Comparison of SUMC Project Intersection Impacts  
Existing and 2025 Conditions**

#	Intersection	City	Existing		2025		2025			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Impact		Impact		Impact		Impact	
			Existing Conditions	With SUMC Project	Existing Conditions	With SUMC Project	Without Project	With SUMC Project	Without Project	With SUMC Project
1	El Camino Real/Valparaiso Avenue	MP								
2	El Camino Real/Santa Cruz Avenue	MP								
3	El Camino Real/Ravenswood Avenue	MP							◇	
4	El Camino Real/Roble Avenue	MP								
5	El Camino Real/Middle Avenue	MP								
6	El Camino Real/Cambridge Avenue	MP								
7	El Camino Real/Sand Hill Road-Alma Street	PA								
8	El Camino Real/Quarry Rd	PA								
9	Alma Street/Lytton Avenue	PA								
10	El Camino Real/University Avenue-Palm Drive(Single Int)	PA					◇	●		●
11	El Camino Real/Embarcadero Road-Galvez Street	PA							◇	
12	El Camino Real/Churchill Avenue	PA								
13	El Camino Real/Serra Street-Park Boulevard	PA								
14	El Camino Real/Stanford Avenue	PA								
15	El Camino Real/California Avenue	PA								
16	El Camino Real/Page Mill Road-Oregon Expressway	PA					◇	●	◇	●
17	Woodland Avenue/University Avenue	EPA								
18	Middlefield Road/Willow Road	MP							◇	●
19	Middlefield Road/Lytton Avenue	PA								●
20	Middlefield Road/University Avenue	PA								●

**Table 3.3-4  
Comparison of SUMC Project Intersection Impacts  
Existing and 2025 Conditions**

#	Intersection	City	Existing		Existing		2025		2025	
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Impact		Impact		Impact		Impact	
			Existing Conditions	With SUMC Project	Existing Conditions	With SUMC Project	Without Project	With SUMC Project	Without Project	With SUMC Project
21	Middlefield Road/Embarcadero Road	PA								
22	Alma Street/Churchill Avenue	PA								
23	Junipero Serra Boulevard-Foothill Expressway/Page Mill Road	PA	◇		◇	●	◇		◇	●
24	Junipero Serra Boulevard/Stanford Avenue	SCC								
25	Junipero Serra Boulevard/Campus Drive East	SCC								
26	Junipero Serra Boulevard/Campus Drive West	SCC							◇	●
27	Junipero Serra Boulevard/Alpine Road-Santa Cruz Avenue	MP								
28	Sand Hill Cir- I-280/Sand Hill Road	MP								
29	Sharon Park Drive/Sand Hill Road	MP								
30	Santa Cruz Avenue/Sand Hill Road	MP								
31	Oak Avenue/Sand Hill Road -Vine Street	MP								
32	Stock Farm Road/Sand Hill Road	PA								
33	Pasteur Drive/Sand Hill Road	PA								
34	Arboretum Road/Sand Hill Road	PA								
35	Arboretum Road/Quarry Road	PA								
36	Arboretum Road/Palm Drive	PA								
37	Arboretum Road/Galvez Street/(unsignalized)	PA			◇	●	◇	●	◇	●
38	EL Camino Real/Charleston Road	PA							◇	
39	Alma Street/Charleston Road	PA					◇		◇	
40	Middlefield Road/Charleston Road	PA								



**Table 3.3-4  
Comparison of SUMC Project Intersection Impacts  
Existing and 2025 Conditions**

#	Intersection	City	Existing		Existing		2025		2025	
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Impact		Impact		Impact		Impact	
			Existing	With SUMC Project	Existing	With SUMC Project	Without Project	With SUMC Project	Without Project	With SUMC Project
41	Middlefield Road/Hamilton Avenue	PA								
42	Alma Street/Hamilton Avenue	PA								
43	University Drive/Santa Cruz Avenue	MP								
44	El Camino Real/Oak Grove Avenue	MP								
45	Middlefield Road/Ringwood Avenue	MP								
46	Middlefield Road/Ravenswood Avenue	MP								●
47	El Camino Real/Encinal Road	MP								
48	Bay Road/Marsh Road	MP								
49	Marsh Road/US 101 SB Off-Ramp	MP								
50	Marsh Road/US 101 NB Off-Ramp	MP								
51	Bay Road/Willow Road	MP								
52	Bayfront Expressway/Willow Road	MP			◇	●			◇	●
53	University Avenue/Bayfront Expressway	MP			◇	●			◇	●
54	Bay Road/University Avenue	EPA			◇				◇	
55	Donohoe Street/University Avenue	EPA						◇		
56	Welch Road/Quarry Road	PA								
57	Durand Way/Sand Hill Road	PA								
58	Pasteur Drive NB/Welch Road	PA								
59	Pasteur Drive SB/Welch Road	PA								
60	Durand Way Extension/Welch Road	PA								

**Table 3.3-4  
Comparison of SUMC Project Intersection Impacts  
Existing and 2025 Conditions**

#	Intersection	City	Existing AM Peak Hour		Existing PM Peak Hour		2025 AM Peak Hour		2025 PM Peak Hour	
			Impact		Impact		Impact		Impact	
			Existing Conditions	With SUMC Project	Existing Conditions	With SUMC Project	Without Project	With SUMC Project	Without Project	With SUMC Project
61	Bowdoin Street/Stanford Road (unsignalized)	PA								
62	Alpine Road/I-280 NB Off-Ramp (unsignalized)	PA	◇	●	◇	●	◇	●	◇	●
63	Alpine Road/I-280 SB Off-Ramp (unsignalized)	PA	◇				◇			
64	Page Mill Road/I-280 NB Off-Ramp (unsignalized)	PA					◇			
65	Page Mill Road/I-280 SB Off-Ramp (unsignalized)	PA	◇				◇		◇	
66	Foothill Expressway/Arastradero Road	SCC	◇		◇		◇		◇	
67	Middlefield Road/Oregon Expressway	PA			◇		◇		◇	
68	Durham Street/Willow Road	MP								
69	Middlefield Road/Marsh Road	MP								
70	Newtridge Street/Willow Road	EPA								
71	West Bayshore Road/Embarcadero Road	PA	◇		◇		◇		◇	
<b>Total Locations</b>			<b>6</b>	<b>1</b>	<b>9</b>	<b>5</b>	<b>13</b>	<b>4</b>	<b>17</b>	<b>11</b>

Source: AECOM Transportation, 2011.

Notes:

MP = Menlo Park

PA = Palo Alto

EPA = East Palo Alto

SCC = Santa Clara County

◇ = LOS E or LOS F without SUMC Project

● = SUMC Project Impact

Yellow Shade = Intersection with Traffic-adaptive Technology (Existing)

Blue Shade = Intersection with Traffic-adaptive Technology (Future)

The growth projections contained in the travel demand model include growth on Stanford lands, growth in Palo Alto (including growth at the Research Park), and in Menlo Park. The use of the City of Palo Alto Travel Demand Forecasting Model with a horizon year of 2025 incorporates all planned and approved projects, such as the 2000 CP/GUP and recently approved projects in Menlo Park, as well as future development not tied to any particular project known at this time. The land use projections show Stanford University and Stanford Shopping Center employment increasing from 23,072 to 27,392 and Stanford University population increasing from 9,315 to 11,025. The 2000 Stanford University GUP approved approximately 2 million square feet of additional campus growth. Approximately 750,000 square feet of that development has already occurred and the remaining 1.25 million square feet is included in the ABAG growth projections to 2025. The growth projections from 2006 to 2025 contained in the City of Palo Alto Travel Demand Forecasting Model show citywide Palo Alto employment increasing from 95,435 to 111,020 and the population increasing from 71,792 to 84,965.<sup>17</sup>

Within Palo Alto, the City of Palo Alto Travel Demand Forecasting Model projects the estimated traffic impacts of future development based on a combination of ABAG forecasts and staff refinements by traffic analysis zones (TAZs). The TAZs are modified by staff based on knowledge of where likely development will occur. About 14 percent of the employment growth in Palo Alto from 2005 to 2025 is estimated to be generated by the SUMC Project. However, none of the housing growth in that period is directly linked to the SUMC Project. The remaining trips generated in the City and at Stanford are expected to be generated from a combination of Stanford campus housing and non-residential growth, plus employment growth in the Embarcadero Road East, downtown, Research Park, San Antonio/101, and other areas.

Additionally, not all of the growth in traffic is associated with origins and destinations within Palo Alto and Stanford. A substantial amount of growth outside of Palo Alto will also contribute to the traffic projections. According to data extracted from the City of Palo Alto Travel Demand Forecasting Model, about 40 percent of the traffic on El Camino Real and Middlefield Road has an origin and a destination outside of either Stanford or Palo Alto. Staff has evaluated the model outputs and determined, for example, that on El Camino Real near Embarcadero Road approximately 41 percent of AM Peak Hour trips are from outside Palo Alto and are intended for destinations outside Palo Alto. Therefore, for north-south connectors such as El Camino Real, Middlefield Road, and Junipero Serra Boulevard/Foothill Expressway, the SUMC Project would contribute a relatively small percentage of traffic at Peak Hours (12 to 15 percent), while for the streets in closer proximity to the SUMC, the contribution of traffic from the SUMC Project is somewhat greater (25 percent).

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<sup>17</sup> These projections vary from the employment and population projections in Section 3.13, Population and Housing, of the Draft EIR, which reflects ABAG Projections 2005. It should be noted that the employment and population projections in this Master Response and applied to the City of Palo Alto Travel Demand Forecasting Model are based on ABAG Projections 2005, which provide data on a tract-level and which can cover growth beyond a single city's sphere of influence within the same county. However, when applying ABAG Projections 2005 into the City of Palo Alto Travel Demand Forecasting Model, adjustments are made to the tract-level data to more accurately project growth within the smaller-scale traffic analysis zones (TAZs) that are used in the model. Hence, the more precise projections used in the model may vary from the tract-level data in ABAG Projections 2005.

Also, while the model constrains some intersections and spreads Peak Hour traffic, the model output for the 2005 - 2025 background may still be somewhat conservative (high), since the 2005 ABAG forecasts for 2025 represent higher job growth than subsequent 2007 and 2009 ABAG Projections and the model does not reflect the “No Net New Trips” policy for new development on the Stanford campus (that policy applies to inbound AM and outbound PM trips).

When the City of Palo Alto obtained the VTA model on which to develop the City of Palo Alto Travel Demand Forecasting Model, the growth in employment associated with the SUMC Project was included in the land use forecasts. To assess the effect of the SUMC Project, the growth associated with the project was removed from the model to arrive at the forecasts without the project. The traffic projections without the SUMC Project are included in Appendix C of the Draft EIR in Figures 3-2 a, b, c, and d. The SUMC Project analysis then added the project trips to the without project volumes to determine the 2025 With Project traffic volumes. These traffic volumes are also included in Appendix C of the Draft EIR in Figures 3-7 a, b, c, and d. Comparing the traffic operations of the 2025 without Project traffic volumes to those of the 2025 With Project traffic volumes revealed the largest number and greatest extent of significant effects of the SUMC Project on the Study Area intersections.

### **Cumulative Impacts**

Based on the latest information provided by the SUMC Project sponsors, the CP/GUP approved in 2000 allows development of up to 2,035,000 net new square feet of academic facilities and 3,018 housing units. At the time the SUMC Project construction starts, Stanford University anticipates that it will have completed construction of approximately 750,000 square feet of academic facilities and 1,358 housing units. The remaining CP/GUP development likely would be constructed during the years that the SUMC Project is under construction. Traffic impacts associated with CP/GUP projects are included in the 2025 Without SUMC Project traffic analysis.

As explained above, the Transportation Impact Analysis initially compared increased traffic from the SUMC Project to existing conditions. That comparison did not include combined traffic from other projects. The comparison of SUMC Project to 2025 conditions without the SUMC Project identifies the project’s contribution to cumulative transportation impacts. The SUMC Project is not expected to be fully built and occupied until 2025 which is consistent with the horizon year of the City of Palo Alto Travel Demand Forecasting Model used to analyze cumulative impacts. CEQA requires mitigation of the SUMC Project’s contribution to a significant cumulative impact but not other projects’ contribution to the cumulative impact. Accordingly, the Draft EIR identifies mitigation measures to reduce the SUMC Project’s contribution to cumulative traffic impacts to a less-than-significant level.

The Draft EIR on page 3.4-85 also addresses cumulative impacts from construction traffic. Please see Master Response 4 for a discussion of cumulative impacts from construction traffic.

## Master Response 4: Construction Traffic

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### Introduction

Master Response 4 addresses comments 8a.3, 8.4, 8.5, 60.3, 60.4, PTC1.7, PTC3.23, PTC3.29, PTC3.41, PTC4.18, PTC6.3, CC3.1, CC3.2, CC3.12, CC3.79, CC4.12, CC4.13, CC5.6, and CC5.48.

This Master Response 4 addresses comments pertaining to construction-period traffic impacts. Namely, this Master Response explains why a quantified analysis of construction-related traffic would not be warranted, expands construction-period mitigation measures, and also provides an update to the cumulative construction projects under the Stanford University CP/GUP that could occur concurrently with the SUMC Project construction.

### Analysis of Construction Traffic Impacts and Mitigation Measures to Reduce Impacts

**Construction Traffic Volumes and Their Impacts on Intersection Level of Service.** Commentors suggest quantitatively determining construction volumes and their impacts on intersection operations. A detailed quantitative analysis of construction traffic is not included in the Draft EIR because the level of construction traffic would be highly variable over the course of construction, it would be temporary, and construction traffic, particularly traffic which occurs in the critical Peak Hours, would be less than the traffic that would result once the SUMC Project is completed. Consequently, traffic congestion generated during construction would be less than traffic generated during operation of the SUMC Project.

Nonetheless, the Draft EIR qualitatively analyzes construction traffic effects and identifies mitigation to reduce the impacts from construction traffic. Mitigation Measures TR-1.1 through TR-1.7 and TR1.9 on page 3.4-44 of the Draft EIR require provision of off-street parking, maintenance of pedestrian and bicycle access, restriction of delivery hours and the routes of those deliveries, protection of public roadways, maintenance of transit access, and provision of additional measures as needed during special events. In addition, Mitigation Measure TR-1.8 allows the SUMC Project sponsors to submit a detailed construction impact mitigation plan for City approval in lieu of the other specific measures identified. With these measures, construction-period impacts would be less than significant.

**Construction-Period Mitigation Measures.** Some commentors have suggested that additional mitigation measures should be provided to encourage construction workers to commute to the SUMC Sites by forms of transportation other than single-occupant vehicles. Commuter service to the SUMC Sites already exist and are available to construction workers at the SUMC Sites. The nearby PAITS is an intermodal hub served by Santa Clara VTA, SamTrans, Stanford University Marguerite shuttles, AC Transit, and Union City Transit. Other concentrations of bus lines exist at the Stanford Shopping Center, which is located one-quarter of a mile northwest of PAITS. See the discussion on 3.4-13 to 3.4-26 of the Draft EIR for more details on existing transit services to the SUMC Sites. The bicycle and pedestrian network surrounding the SUMC Sites is extensive, and sufficient for construction workers to access the SUMC Sites from the PAITS or other areas. Similarly, Marguerite shuttle

service links the PAITS to the SUMC Sites. Accordingly, no further mitigation measures would be warranted to enable construction workers to use alternative forms of transportation.

Several commentors requested additional information about truck routes and delivery restrictions. Figures 3.4-6 and 3.4-7 on pages 3.4-41 and 3.4-42 of the Draft EIR show the existing designated truck routes in Palo Alto and Menlo Park. As required by Mitigation Measure TR-1.5, the SUMC Project sponsors would be required to deliver and remove all construction-related equipment and materials on truck routes designated by the cities of Palo Alto, East Palo Alto and Menlo Park. Heavy construction vehicles would be prohibited from accessing the SUMC Sites from other routes. The delivery of construction equipment and materials to the SUMC Sites would be periodic. The majority of daily truck and equipment traffic would be internal to the SUMC sites.

Mitigation Measure TR-1.4 prohibits or limits construction material deliveries from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. on weekdays. These specific hours are when Peak Hour traffic occurs on the adjacent network. Prohibiting or limiting delivery traffic during Peak Hours would reduce traffic congestion while still allowing flexibility for the delivery of necessary materials. However, in response to Comment 8.4, Mitigation Measure TR-1.4 is expanded to also include the hours when the primary work force can arrive or depart the job site; please see Draft EIR Text Changes.

Under Mitigation Measure TR-1.8, in lieu of the other construction traffic mitigation measures, the SUMC Project sponsors can choose to submit a detailed construction impact mitigation plan to the City of Palo Alto for approval by the Director of Public Works prior to commencing any construction activities with potential transportation impacts. In response to Comment 8.5, Mitigation Measure TR-1.8 has been expanded to include review and comment by Menlo Park; please see Draft EIR Text Changes.

### **Cumulative Construction-Period Traffic Impacts**

Pages 3.1-4 through 3.1-5 of the Draft EIR list the projects under the Stanford University CP/GUP that are expected to undergo construction concurrently as the SUMC Project. These construction projects include the Bioengineering/Chemical Engineering (2011 to 2013).

The SUMC Project sponsors have identified updates to the construction projects under the CP/GUP that could occur concurrently with the construction of the SUMC Project. The construction projects that were identified in the Draft EIR as being completed in 2010 would be completed prior to the beginning of the SUMC Project construction. The Bioengineering/Chemical Engineering building construction could occur at the same time as the SUMC Project construction. The only other approved CP/GUP project that would have construction past spring 2011 is the Bing Concert Hall (877 seats), which is not located near SUMC Sites.

The timing and locations of additional development under the CP/GUP is not yet known. The CP/GUP, which was approved in 2000, allows development of up to 2,035,000 net new square feet of academic facilities and 3,018 housing units. At the time the SUMC construction starts, Stanford University anticipates that it would have completed construction of approximately 750,000 square feet

of academic facilities and 1,358 housing units. The remaining CP/GUP development likely would be constructed during the years that the SUMC Project is under construction. In December, 2008, Santa Clara County approved a Sustainable Development Study (SDS) for Stanford University. The SDS includes a preliminary map of future CP/GUP development based on the campus planning principles and ongoing, conceptual planning discussions. The SDS identifies the following potential academic facilities.

- Implement an expansion to the west of the Science and Engineering Quad;
- Execute the Stanford University School of Medicine Master Plan with the addition of two more research buildings;
- Realize plans for an Arts District; and
- Implement the expansion of the Biology/Chemistry area to the west of the Oval.

The SDS also identifies potential future CP/GUP housing sites along Santa Teresa Street and Escondido Road, in Escondido Village, and on the designated Quarry Road sites near the SUMC. Figure 3.16 on page 42 of the SDS depicts the locations of each of the academic facility and housing sites in relation to the SUMC.

Each time that Stanford University commences construction of a project under the CP/GUP, it submits a Construction Traffic Management Plan to Santa Clara County that provides information on construction parking; pedestrian, bike, and transit circulation; notifications to Stanford Police and Palo Alto Fire Department; and truck routes. Construction logistics for all projects located on Stanford lands are closely coordinated to reduce impacts to the campus operations. The updates to the cumulative construction project list under the CP/GUP do not change the conclusion in the Draft EIR. That is, with Mitigation Measures TR-1.1 through TR-1.9, as revised below, the SUMC Project's contribution to cumulative construction-period impacts would be less than cumulatively considerable.

It should be noted that the traffic impacts associated with operation of the CP/GUP projects are included in the baseline traffic analysis for the SUMC Project.

### **Draft EIR Text Changes**

**Summary.** Mitigation Measure TR-1.4 on Table S-4 on page S-32 of the Draft EIR is revised as follows:

*TR-1.4 Restrict Construction Hours.* The SUMC Project sponsors shall be required to prohibit or limit the number of construction material deliveries from 7:00 a.m. to 9:00 a.m., and from 4:00\_p.m. to 6:00\_p.m. on weekdays. The SUMC Project sponsors shall be required to limit the number of construction employees based upon an approved construction management plan from arriving or departing the site from the hours of 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:00 p.m. Although not needed to reduce the impact to a less-than-significant level, the SUMC Project sponsors also shall limit the number of construction employees from arriving at the site from 7:00 a.m. to 9:00

a.m., contingent upon the City's granting of an exception to its construction hours under its noise ordinance to allow construction to commence at 7:00 a.m.

Mitigation Measure TR-1.8 on Table S-4 on page S-33 of the Draft EIR is revised as follows:

*TR-1.8 Prepare and Implement Construction Impact Mitigation Plan.* In lieu of the above mitigation measures, the SUMC Project sponsors shall submit a detailed construction impact mitigation plan to the City of Palo Alto for approval by the Director of Public Works prior to commencing any construction activities with potential transportation impacts. This plan shall address in detail the activities to be carried out in each construction phase, the potential transportation impacts of each activity, and an acceptable method of reducing or eliminating significant transportation impacts. Details such as the routing and scheduling of materials deliveries, construction employee arrival and departure schedules, employee parking locations, and emergency vehicle access shall be described and approved. Prior to its approval of the construction impact mitigation plan, the City of Palo Alto shall provide a copy of the construction impact plan to the City of Menlo Park for review and comment.

**Section 3.4, Transportation.** The following text is added as the second paragraph on page 3.4-43 of the Draft EIR, and as the third paragraph on 3.4-86 of the Draft EIR:

There would be known CP/GUP construction projects (by Stanford University) located near the SUMC Project during the years that the SUMC Project is under construction. CEQA requires mitigation of the SUMC Project's contribution to a significant cumulative impact, if the contribution would be cumulatively considerable. Under the CP/GUP, each time Stanford University commences construction of a CP/GUP project, it must submit a Construction Traffic Management Plan to the County that provides information on construction parking; pedestrian, bike, and transit circulation; notifications to Stanford Police and Palo Alto Fire Department; and truck routes.

Draft EIR text under Mitigation Measure TR-1.4 on pages 3.4-43 through 3.4-44 is revised as follows:

*TR-1.4 Restrict Construction Hours.* The SUMC Project sponsors shall be required to prohibit or limit the number of construction material deliveries from 7:00 a.m. to 9:00 a.m., and from 4:00 p.m. to 6:00 p.m. on weekdays. The SUMC Project sponsors shall be required to limit the number of construction employees based upon an approved construction management plan from arriving or departing the site from the hours of 7:00 a.m. to 9:00 a.m. and 4:30 p.m. to 6:00 p.m. Although not needed to reduce the impact to a less-than-significant level, the SUMC Project sponsors also shall limit the number of construction employees from arriving at the site from 7:00 a.m. to 9:00 a.m., contingent upon the City's granting of an exception to its construction hours under its noise ordinance to allow construction to commence at 7:00 a.m.



Draft EIR text under Mitigation Measure TR-1.8 on page 3.4-44 is revised as follows:

*TR-1.8 Prepare and Implement Construction Impact Mitigation Plan.* In lieu of the above mitigation measures, the SUMC Project sponsors shall submit a detailed construction impact mitigation plan to the City of Palo Alto for approval by the Director of Public Works prior to commencing any construction activities with potential transportation impacts. This plan shall address in detail the activities to be carried out in each construction phase, the potential transportation impacts of each activity, and an acceptable method of reducing or eliminating significant transportation impacts. Details such as the routing and scheduling of materials deliveries, construction employee arrival and departure schedules, employee parking locations, and emergency vehicle access shall be described and approved. Prior to its approval of the construction impact mitigation plan, the City of Palo Alto shall provide a copy of the construction impact plan to the City of Menlo Park for review and comment.

## **Master Response 5: Connection of Pasteur Drive and Roth Way**

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### **Introduction**

This Master Response addresses the following comments: 22.18, 22.19, and PTC3.26. Master Response 5 provides information regarding the private street connecting Pasteur Drive and Roth Way.

### **Local Circulation Mitigation Measures Revisions**

Mitigation Measure TR-4.1 in the Draft EIR required the SUMC Project sponsors to fund a traffic study of local circulation following construction of the SHC and LPCH Hospital components to determine if the private street connection between Roth Way and Pasteur Drive should be operated as a public street. The Draft EIR concluded that this measure was necessary due to a potential safety hazard created due to potential traffic volumes on Welch Road, combined with the numerous turning vehicles, pedestrian movements across and along Welch Road, and bicycle travel along Welch Road. However, the SUMC Project sponsors have submitted a localized traffic study from Fehr & Peers Transportation Consultants demonstrating that Welch Road would function within capacity. Upon further review, City staff has determined that this study adequately demonstrates that Mitigation Measure TR-4.1 is not necessary, and that local circulation would be adequate. The City further agrees with the SUMC Project sponsors that the connection between Roth Way and Pasteur Drive is not intended to function as a public street, and that such use of this connection would adversely impact its operation as a pedestrian and bicycle linkage between the campus, Hospitals, and School of Medicine. Therefore, Mitigation Measure TR-4.1 is no longer being proposed as a measure to be imposed on the SUMC Project.

## Draft EIR Text Revisions

**Summary.** Draft EIR text on page S-40 in Table S-4, last row, third column under the heading “Mitigation Measures,” is revised as follows:

MITIGATION MEASURES. ~~Mitigation Measure TR 4.1, involving funding and implementation of a traffic impact study, and Mitigation Measure TR-4.2, involving re-striping of Durand Way,~~ would reduce the SUMC Project’s impact to a less-than-significant level. (LTS)

~~TR 4.1 Fund Traffic Impact Study. Upon construction of the SHC and LPCH hospital components, the SUMC Project sponsors shall fund an independent traffic evaluation, commissioned by the City, based on actual travel patterns, volumes and emergency access, with an emphasis on ease of circulation around and through the medical complex to determine if the private street connection between Roth Way and Pasteur Drive should be operated as a public street. If the independent traffic study demonstrates that the connection between Roth Way and Pasteur Drive as a public street would improve circulation, then the connection shall be designated as a public street for all vehicular, bicycle, pedestrian, and transit traffic.~~

**Section 3.4, Transportation.** Draft EIR text on page 3.4-49, last sentence of the fifth bullet is deleted as follows:

~~Local circulation could be improved with this roadway opening to all traffic as a public street.~~

Draft EIR text on page 3.4-72, paragraph four is revised as follows:

MITIGATION MEASURES. ~~Mitigation Measure TR 4.1, involving funding and implementation of a traffic impact study, and Mitigation Measure TR-4.2, involving re-striping of Durand Way,~~ would reduce the SUMC Project’s impact to a less-than-significant level. (LTS)

Draft EIR text on page 3.4-73, first paragraph is deleted as follows:

~~TR 4.1 Fund Traffic Impact Study. Upon construction of the SHC and LPCH hospital components, the SUMC Project sponsors shall fund an independent traffic evaluation, commissioned by the City, based on actual travel patterns, volumes and emergency access, with an emphasis on ease of circulation around and through the medical complex to determine if the private street connection between Roth Way and Pasteur Drive should be operated as a public street. If the independent traffic study demonstrates that the connection between Roth Way and Pasteur Drive as a public street would improve circulation, then the connection shall be designated as a public street for all vehicular, bicycle, pedestrian, and transit traffic.~~

**Section 5, Alternatives.** Draft EIR text on page 5-115, paragraph two, is deleted as follows:

~~The safety hazard on Welch Road can be mitigated by requiring the SUMC Project sponsors to fund an independent traffic study to determine whether the private street connection between~~

~~Roth Way and Pasteur Drive should be operated as a public street. The purpose of this study will be to analyze circulation patterns around and through the medical complex to determine if the private street connection between Roth Way and Pasteur Drive should be operated as a public street for all vehicular, bicycle, pedestrian and transit traffic.~~

Draft EIR text on page 5-142, first sentence of paragraph five, is deleted as follows:

~~The safety hazard on Welch Road can be mitigated by requiring the SUMC Project sponsors to fund an independent traffic study to determine whether the private street connection between Roth Way and Pasteur Drive should be operated as a public street.~~

Draft EIR text on page 5-142, the first bullet of paragraph five, is deleted as follows:

- ~~• TR 4.1: Fund Traffic Impact Study~~

Draft EIR text on page 5-202, first sentence of paragraph four, is deleted as follows:

~~The safety hazard on Welch Road can be mitigated by requiring the SUMC Project sponsors to fund an independent traffic study to determine whether the private street connection between Roth Way and Pasteur Drive should be operated as a public street.~~

Draft EIR text on page 5-202, the first bullet of paragraph four, is deleted as follows:

- ~~• TR 4.1: Fund Traffic Impact Study~~

## **Master Response 6: Cost of Transportation-Related Mitigation Measures and Fair Share Calculations**

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### **Introduction**

It addresses the following comments: 8.3, 8.6, 8.7, 8.13, 8.14, 8.15, 8.17, 8.19, 8a.5, 8a.6, 8a.7, 17.4, 22.11, 22.12, 22.15, 22.22, 22.24, 22.25, 22.26, 22.39, 22.90, 22.92, 35.22, PTC1.77, PTC3.42, PTC6.3, PTC6.70, CC2.26, CC3.61, and CC3.66. This Master Response presents the details of the SUMC Project's fair share contribution to the cost of each of the transportation mitigation measures.

### **Calculation of Fair Share**

There are two different ways to approach fair share allocation. One is to have the applicant fund 100 percent of the improvements, and then as other projects come online, the future developers will reimburse the applicant. This first approach usually is used in three situations: where the project impacts constitute the vast majority of the need for the particular roadway improvement; where the roadway improvement is needed in order for the project to function (such as a road extension or a new off-ramp); or where the applicant agrees to fund 100 percent of the improvement in exchange for some other consideration. The other approach in a situation such as this, in which the project contributes a relatively small amount to a larger cumulative impact, is to accumulate money from this applicant and

future applicants and, when it is fully funded, perform the improvements at that time. Under either method, fair share is generally calculated as total project traffic through an intersection divided by the total future growth in traffic at that same intersection over today's existing volumes. For Citywide improvements, the fair share calculation would be as noted above and aggregated for all intersections within the respective jurisdiction. The percent contribution is calculated based on the following formula:

$$\frac{\Sigma \text{ AM \& PM project trips}}{\Sigma \text{ AM \& PM net cumulative trips (cumulative growth)}}$$

Table 3.3-5 shows the percentage of SUMC Project traffic through each study intersection in 2025 with and without the implementation the enhanced TDM program (GO Pass). Table 3.3-6 shows the percentage of SUMC Project traffic aggregated for all Palo Alto and all Menlo Park intersections used for citywide improvement contribution.

**Table 3.3-5  
SUMC Project Contribution for All Study Intersections**

#	Intersection	City/ Jurisdiction	Percent with TDM	Percent without TDM
1	El Camino Real and Valparaiso*	Menlo Park	4%	12%
2	El Camino Real and Santa Cruz*	Menlo Park	9%	26%
3	El Camino Real and Ravenswood*	Menlo Park	0%	16%
4	El Camino Real and Roble*	Menlo Park	0%	16%
5	El Camino Real and Middle*	Menlo Park	0%	18%
6	El Camino Real and Cambridge*	Menlo Park	0%	18%
7	El Camino Real/Sand Hills/Alma*	Palo Alto	0%	35%
8	El Camino Real and Quarry*	Palo Alto	2%	27%
9	Alma and Lytton**	Palo Alto	0%	18%
10	El Camino Real/Palm Dr/University Ave**	Palo Alto	2%	23%
11	El Camino Real/Galvez/Embarcadero**	Palo Alto	5%	15%
12	El Camino Real and Churchill**	Palo Alto	3%	12%
13	El Camino Real and Serra/Park**	Palo Alto	6%	19%
14	El Camino Real and Stanford**	Palo Alto	5%	18%
15	El Camino Real and California**	Palo Alto	3%	11%
16	El Camino Real and Page Mill**	Palo Alto	3%	9%
17	Woodland and University	East Palo Alto	2%	7%
18	Middlefield and Willow**	Menlo Park	5%	15%
19	Middlefield and Lytton**	Palo Alto	2%	14%
20	Middlefield and University**	Palo Alto	1%	7%
21	Middlefield and Embarcadero**	Palo Alto	4%	15%
22	Alma and Churchill	Palo Alto	1%	4%
23	Junipero Serra (Foothill Expwy) & Page Mill	Palo Alto	2%	6%
24	Junipero Serra and Stanford	Santa Clara County	4%	12%

**Table 3.3-5  
SUMC Project Contribution for All Study Intersections**

#	Intersection	City/ Jurisdiction	Percent with TDM	Percent without TDM
25	Junipero Serra and Campus Dr East	Santa Clara County	4%	13%
26	Junipero Serra and Campus Dr West	Santa Clara County	4%	13%
27	Junipero Serra and Alpine/Santa Cruz*	Menlo Park	2%	6%
28	Sand Hill Circle and Sand Hill/I-280**	Menlo Park	18%	45%
29	Sand Hill Rd/Sharon Park Drive**	Menlo Park	2%	8%
30	Sand Hill Road and Santa Cruz Avenue*	Menlo Park	3%	11%
31	Sand Hill Rd/Oak Ave-Vine St*	Menlo Park	6%	20%
32	Sand Hill Rd/Stock Farm Rd-Oak Creek Dr	Palo Alto	6%	18%
33	Sand Hill Rd/Pasteur Dr-Clark Way**	Palo Alto	10%	33%
34	Sand Hill Rd/Arboretum Rd**	Palo Alto	9%	43%
35	Arboretum Rd/Quarry Rd**	Palo Alto	65%	94%
36	Arboretum Rd/Palm Dr	Palo Alto	0%	41%
37	Galvez Street and Arboretum Road	Palo Alto	4%	14%
38	El Camino Real and Charleston Road/Arastradero Road**	Palo Alto	2%	5%
39	Alma Street and Charleston Road**	Palo Alto	1%	4%
40	Middlefield Road and Charleston Road**	Palo Alto	1%	2%
41	Hamilton Avenue and Middlefield Road**	Palo Alto	3%	10%
42	Hamilton Avenue and Alma Street**	Palo Alto	6%	17%
43	Santa Cruz Avenue and University Drive	Menlo Park	0%	2%
44	El Camino Real and Oak Grove Avenue*	Menlo Park	4%	13%
45	Middlefield Road and Ringwood Avenue**	Menlo Park	0%	1%
46	Middlefield Road and Ravenswood Avenue**	Menlo Park	0%	4%
47	El Camino Real and Encinal Road*	Menlo Park	6%	20%
48	Marsh Road and Bay Road**	Menlo Park	2%	7%
49	Marsh Road and US 101 SB off Ramp**	Menlo Park	1%	4%
50	Marsh Road and US 101 NB off Ramp**	Menlo Park	0%	2%
51	Willow Road and Bay Road**	Menlo Park	6%	19%
52	Willow Road and Bayfront Expressway	Menlo Park	1%	3%
53	Bayfront Expressway and University Avenue	Menlo Park	2%	8%
54	University Ave/Bay Rd	East Palo Alto	1%	4%
55	University Ave/Donohoe St	East Palo Alto	1%	3%
56	Quarry Rd/Welch Rd	Palo Alto	62%	94%
57	Durand Way/Sand Hill Rd**	Palo Alto	0%	13%
58	Pasteur Dr/Welch Rd (East)	Palo Alto	0%	100%
59	Pasteur Dr/Welch Rd (West)	Palo Alto	0%	100%
60	New Extension/Welch Rd	Palo Alto	1%	8%
61	Bowdoin St/Stanford Ave	Palo Alto	0%	1%

**Table 3.3-5  
SUMC Project Contribution for All Study Intersections**

#	Intersection	City/ Jurisdiction	Percent with TDM	Percent without TDM
62	Alpine -280 NB Ramps	Palo Alto	1%	5%
63	Alpine -280 SB Ramps	Palo Alto	1%	5%
64	I-280 NB Ramps - Page Mill	Palo Alto	1%	4%
65	I-280 SB Ramps - Page Mill	Palo Alto	1%	5%
66	Foothill Expressway/Arastradero Road	Santa Clara County	1%	3%
67	Middlefield Rd/Oregon Expwy**	Palo Alto	2%	5%
68	Durham St/Willow Rd**	Menlo Park	8%	23%
69	Middlefield Rd/Marsh Rd**	Menlo Park	2%	6%
70 <sup>a</sup>	Newbridge Street/Willow Road**	Menlo Park/ East Palo Alto	3%	9%
71	West Bayshore Road/Embarcadero Road	Palo Alto	4%	14%

Source: AECOM Transportation, 2010.

Notes:

\*Intersection with existing traffic adaptive signal, as relayed by City of Menlo Park staff to AECOM Transportation on April 1, 2010.

\*\*Intersection with future traffic adaptive signal as contemplated under the Menlo Park Traffic Impact Fee Program.

- a. Intersection #70 is located at the border of Menlo Park and East Palo Alto. Based on the information provided by Menlo Park, this intersection has been identified for implementing Traffic Adaptive Technology in the future.

**Table 3.3-6  
Citywide SUMC Project Contribution**

City/Jurisdiction	Percent with TDM	Percent without TDM
Palo Alto	3%	16%
Menlo Park	1%	11%

Source: AECOM, 2010.

### **Prioritized Mitigation Measures**

As explained on pages 3.4-54 through 3.4-66 of the Draft EIR, mitigation measures to reduce the intersection level of service impacts of the SUMC Project have been prioritized; the highest priority being the most preferable solution, and the lowest priority being the least preferable. Thus, the effectiveness of the mitigation measures is analyzed by applying the measures in priority order.

#### *1. Traffic-Adaptive Signal Technology*

The first priority mitigation measure is the installation of traffic-adaptive signal technology (Mitigation Measure TR-2.1). As explained in Staff-Initiated Change 2, the list of intersections in Menlo Park having traffic-adaptive signal technology has been corrected and impacts have been re-calculated accordingly. The study intersections that already have traffic-adaptive signal technology installed are noted by an asterisk in Table 3.3-5. That table notes the percentage contribution of SUMC Project to

each intersection in 2025 with and without an enhanced TDM program. The SUMC Project sponsors would be required to contribute to installation of traffic-adaptive signal technology at the two impacted Menlo Park intersections (marked with an asterisk) listed in Table 3.3-7 based on Mitigation Measure TR-2.1. In addition, the SUMC Project sponsors have agreed to contribute additional funds towards the installation of traffic-adaptive signal technology at other non-impacted Menlo Park intersections as listed in Table 3.3-7.

The average contribution of SUMC Project traffic to these intersections is 3.9% (assuming the SUMC Project implements the enhanced TDM measure identified below). Accordingly, the fair share contribution to installation of traffic-adaptive signal technology at these intersections is \$5,679 per intersection for a total of approximately \$68,150. However, through the Development Agreement, the SUMC Project sponsors have offered to pay \$72,500 toward traffic-adaptive signal technology in Menlo Park. This contribution exceeds the requirement under Mitigation Measure TR-2.1 and exceeds the calculated \$68,150.

In Palo Alto, the cost of traffic-adaptive signal technology is included in the City’s Traffic Impact Fee. Accordingly, payment of the Traffic Impact Fee would constitute the SUMC Project’s fair share contribution to this mitigation measure in Palo Alto.

**Table 3.3-7  
SUMC Project Contribution to Menlo Park Intersections**

#	Intersection	Cost	Percent w/TDM
18	Middlefield and Willow*	\$145,000	5%
28	Sand Hill Circle and Sand Hill/I-280	\$145,000	18%
29	Sand Hill Rd/Sharon Park Drive	\$145,000	2%
45	Middlefield Road and Ringwood Avenue	\$145,000	0%
46	Middlefield Road and Ravenswood Avenue*	\$145,000	0%
48	Marsh Road and Bay Road	\$145,000	2%
49	Marsh Road and US 101 SB off ramp	\$145,000	1%
50	Marsh Road and US 101 NB off ramp	\$145,000	0%
51	Willow Road and Bay Road	\$145,000	6%
68	Durham St and Willow Rd	\$145,000	8%
69	Middlefield Rd and Marsh Rd	\$145,000	2%
70	Newbridge Street and Willow Road	\$145,000	3%

*Source:* AECOM Transportation, 2011.

*Note:*

\* *significantly impacted intersections*

## 2. *Additional Bicycle and Pedestrian Undercrossings*

The second priority mitigation measure is payment toward bicycle and pedestrian undercrossings in Menlo Park (Middle) and Palo Alto (Everett) (Mitigation Measure TR-2.2). Based upon the SUMC Project's contribution to citywide traffic near the potential future undercrossing in Menlo Park, the SUMC Project's contribution to a bicycle/pedestrian undercrossing in Menlo Park would be 5 percent of the cost of the undercrossing (assuming the SUMC Project implements the enhanced TDM measure identified below). According to the Menlo Park Traffic Impact Fee program, the Menlo Park undercrossing is estimated to cost \$3,647,000. Accordingly, the SUMC Project contribution would be \$182,400.

In Palo Alto, payment toward the potential future Everett undercrossing is included in the City's Traffic Impact Fee. Accordingly, payment of the Traffic Impact Fee would constitute the SUMC Project's fair share contribution to this mitigation measure in Palo Alto.

## 3. *Enhanced Transportation Demand Management Program*

The third priority mitigation measure is implementation of an enhanced TDM program (Mitigation Measure TR-2.3). This measure is discussed in more detail under Master Response 1. The key costs of this measure are estimated to be as follows:

- Purchase of GO Passes for eligible Hospital employees: \$1.78 million per year (\$90,907,500 over 51 years)
- Operating cost for increased Marguerite shuttle service: \$450,000 per year (\$22,950,000 over 51 years)
- Capital costs to purchase additional shuttles: \$2 million (with replacement costs covered by the operating cost budget, above)
- Provision of TDM coordinator and associated programs: \$100,000 per year (\$5,100,000 over 51 years)
- U-Line enhanced service: \$250,000 capital cost plus \$50,000 per year (\$2,800,000 over 51 years)
- Ardenwood Park-n-Ride lease: \$45,000 per year (\$2,295,000 over 51 years)

## 4. *Intersection Improvements*

The fourth priority mitigation measure is intersection improvements (Mitigation Measure TR-2.4). The following intersections would have significant project impacts after implementation of the mitigation measures identified under priorities one through three above. If implemented, the measures listed below would reduce impacts at each intersection to a less-than-significant level.

- Galvez Street/Arboretum Road (intersection #37). The significant impact at this intersection would be mitigated to a less-than-significant level by installation of a traffic signal. The



SUMC Project sponsors would be required to pay 100 percent of the cost of this measure, which is estimated to be \$250,000.

- Willow Road/Bayfront Expressway (intersection #52). The City of Menlo Park has identified the following physical improvements to address the impact at the Willow Road/Bayfront Expressway intersection: installation of a third eastbound right turn lane and minor signal adjustments. In its 2009 Traffic Impact Fee, the City of Menlo Park determined that the total cost of these improvements would be \$470,000. The SUMC Project sponsors would be required to pay their fair share percentage contribution to these improvements, which is 1 percent of the cost of the improvements (assuming the SUMC Project implements the enhanced TDM measure program per Mitigation Measures TR-2.3). Thus, the SUMC Project's fair share contribution would be \$4,700. Through the Development Agreement, the SUMC Project sponsors have offered to pay \$14,100.
- Bayfront Expressway/University Avenue (intersection #53). The City of Menlo Park has identified the following improvements at the Bayfront Expressway/University Avenue intersection: widen southbound Bayfront Expressway to include an additional through lane and re-stripe the exclusive right turn lane to a through/right turn lane. Add two new receiving lanes in the southbound direction. In its 2009 Traffic Impact Fee, the City of Menlo Park has determined that the total cost of these improvements would be \$2,500,000. The SUMC Project sponsors would be required to pay their fair share percentage contribution to these improvements, which is 2 percent of the cost of the improvements (assuming the SUMC Project implements the enhanced TDM program per mitigation measure TR-2.3). Thus, the SUMC Project's fair share contribution would be \$50,000. Through the Development Agreement, the SUMC Project sponsors have offered to pay \$225,000.

The Draft EIR also identified physical improvements to the Willow/Middlefield intersection (intersection #18). As explained in Staff-Initiated Change 2, physical improvements to this intersection would not be required because implementation of traffic-adaptive signal technology would reduce impacts at this intersection to a less-than-significant level. Accordingly, no further fair share contribution to improvements at this intersection is required. However, through the Development Agreement, the SUMC Project sponsors have offered to pay \$289,000.

##### 5. *Durand Way*

Under Mitigation Measure TR-4.2, the SUMC Project sponsors must provide improvements to the Durand Way/Sand Hill Road intersection: signage, striping, and installation and optimization of the two signals at the intersections of Durand Way/Sand Hill Road and Durand Way/Welch Road. The SUMC Project sponsors would pay 100 percent of the cost of these improvements, which already have been included in the SUMC Project costs.

## 6. *Bicycle and Pedestrian Improvements*

Under Mitigation Measure TR-6.1, the SUMC Project sponsors must fund improvements to the pedestrian and bicycle network in the immediate vicinity of the SUMC Project. The cost of each improvement to be borne by the SUMC Project sponsors is provided below.

- Create a bicycle and pedestrian connection between the Stanford Shopping Center and SUMC. The connection shall provide an alternate route to Quarry Road, which is auto dominated. This connection shall extend between Vineyard Lane and Welch Road. Pedestrian traffic signals and crosswalks shall be placed at the crossing of Vineyard Lane and Welch Road. The crosswalk shall be enhanced either by striping or by the use of contrasting paving. In their Development Agreement offer, the SUMC Project sponsors have offered to pay \$700,000 for these improvements.
- Provide a connection from the planned Everett Avenue bicycle and pedestrian undercrossing to the El Camino Real/Quarry Road intersection. Once the tunnel is completed, this linkage shall provide a direct connection between the SUMC Project and Downtown North. In their Development Agreement offer, the SUMC Project sponsors have offered to pay \$2,250,000 for these improvements.
- Install the appropriate number of Class I and Class III bicycle parking spaces as required by the City's Zoning Ordinance for the total amount of existing and future development. The SUMC Project sponsors shall install the required number of bicycle parking spaces equally distributed throughout the SUMC Sites. The cost of this measure already is included in the project costs.

Mitigation Measure TR-6.1 also requires the SUMC Project sponsors to:

- Enhance all signalized intersections in the Project vicinity, particularly along Quarry Road, Vineyard, and Welch Roads to include 12-foot pedestrian crosswalks on all legs, with textured or colored paving or diagonal or longitudinal zebra striping as determined by the City, pedestrian push buttons and countdown pedestrian signal heads, and other specific improvements that are determined as necessary during the design process, such as median refuge islands, advanced signing, flashing beacons, in-pavement lighting, etc.

In addition, Mitigation Measure TR-6.1 requires the SUMC Project sponsors to incorporate improvements into the Quarry Road corridor. In recognition of the fact that continuous sidewalks already exist along Quarry Road, City staff has determined the measure should be revised as shown in the Draft EIR Text Revisions, below.

In their Development Agreement offer, the SUMC Project sponsors have offered to pay \$400,000 for improvements to the Quarry Road right-of-way and enhancements to all signalized intersections as shown in the above two bullets. The Quarry Road/El Camino Real intersection is within Caltrans jurisdiction and improvements to this intersection are not within the City of Palo Alto's control. Similarly, the Arboretum is located in unincorporated Santa Clara County. Due to these facts, these components of Mitigation Measure TR-6.1 have been deleted, as shown in the Revisions to the Draft

EIR at the end of this Master Response. The remaining components of Mitigation Measure TR-6.1 reduce impacts of the SUMC Project to a less-than-significant level.

## 7. *Transit*

As explained under Staff-Initiated Change 1, the SUMC Project would not result in significant effects to local transit systems. Accordingly, mitigation measures to reduce effects on transit would not be required. Nevertheless, two components of Mitigation Measure TR-7.2 are incorporated into Mitigation Measure TR-2.3: expansion of Marguerite shuttle service between the SUMC and PAITS and use of all reasonable efforts to ensure load factor on the U-Line remains equal to or less than 1.0.

In addition, Mitigation Measure TR-7.2 required the SUMC Project sponsors to pay into the City of Menlo Park shuttle fee at \$0.105 per square foot of new development or a different percentage agreed upon by Menlo Park and the SUMC Project sponsors. The mitigation measure goes on to state that the SUMC Project's financial contribution would be tied to the amount of project traffic added to analyzed roadway segments and intersections. The fair share calculation for all Menlo Park intersections included in the transportation analysis is 1 percent with an enhanced TDM program. In their Development Agreement proposal, the SUMC Project sponsors have offered to pay \$46,340 per year to the Menlo Park shuttle fee, for a total of \$2,363,450 over 51 years.

## 8. *Opticom*

Mitigation Measure TR-9.1 requires the SUMC Project sponsors to pay their fair-share financial contribution to assist with the installation and operation of emergency vehicle traffic signal priority (Opticom) at all significantly impacted intersections. The intent of the mitigation measure is to require contribution to install Opticom at all intersections significantly impacted by the SUMC Project in any jurisdiction prior to mitigation, of which there are 11. Each Opticom device is estimated to cost \$8,000 per location, for a total cost of \$88,000. At a 20 percent fair share contribution, the fair share contribution would total \$17,600.

## **Draft EIR Text Revisions**

**Summary.** Mitigation Measure TR-6.1 requires the SUMC Project sponsors to incorporate improvements into the Quarry Road corridor. In recognition of the fact that continuous sidewalks already exist along Quarry Road and some measures in the Draft EIR are not necessary to reduce impacts to bicycle and pedestrian facilities, the fourth bullet on page S-42 and the second and third bullets on page S-43, in the third column of Table S-4 under the header "Mitigation Measures," have been revised as follows:

- ~~Provide an enhanced pedestrian crossing at Quarry Road/El Camino Real to establish a strong connection between the SUMC Project and Downtown Palo Alto. The pedestrian crossing shall be 12 feet wide, have contrasting pavement, countdown signal heads, and high visibility markings. Even though the intersection of Quarry Road and El Camino Real is projected to operate at acceptable levels of service, added vehicular traffic through the~~

~~intersection and bicycle and pedestrian volumes across the intersection would potentially create safety hazards which would be mitigated by the proposed enhanced crossings.~~

- ~~• Provide a bicycle and pedestrian trail through the Arboretum Drive as part of future campus planning in the SUMC area. This trail shall improve access to the SUMC Project. To support this off street path, bicycle and pedestrian crossings at Arboretum Road and Palo Road shall be enhanced to provide safe crossing of these streets. The crosswalks shall be properly signed, marked, and lighted with enhanced pavement markings and imbedded crosswalk lights. Signalization of this crossing may ultimately be required.~~
- ~~• Incorporate into the Quarry Road corridor, from El Camino Real to Welch Road, continuous sidewalks according to the SUMC Project's Design Guidelines. The extension of Quarry Road west of Welch Road shall continue the pedestrian facilities into the SUMC Project improvements to and within the public right-of-way to enhance the pedestrian and bicycle connection, including urban design elements and way finding, wider bicycle lanes, as necessary, on Quarry Road, enhanced transit nodes for bus and/or shuttle stops, and prominent bicycle facilities.~~

**Section 3.4, Transportation.** The fourth bullet on page 3.4-76 of the Draft EIR, and the second and third bullets on page 3.4-77 under Mitigation Measure 6.1, has been revised as follows:

- ~~• Provide an enhanced pedestrian crossing at Quarry Road/El Camino Real to establish a strong connection between the SUMC Project and Downtown Palo Alto. The pedestrian crossing shall be 12 feet wide, have contrasting pavement, countdown signal heads, and high visibility markings. Even though the intersection of Quarry Road and El Camino Real is projected to operate at acceptable levels of service, added vehicular traffic through the intersection and bicycle and pedestrian volumes across the intersection would potentially create safety hazards which would be mitigated by the proposed enhanced crossings.~~
- ~~• Provide a bicycle and pedestrian trail through the Arboretum Drive as part of future campus planning in the SUMC area. This trail shall improve access to the SUMC Project. To support this off street path, bicycle and pedestrian crossings at Arboretum Road and Palo Road shall be enhanced to provide safe crossing of these streets. The crosswalks shall be properly signed, marked, and lighted with enhanced pavement markings and imbedded crosswalk lights. Signalization of this crossing may ultimately be required.~~
- ~~• Incorporate into the Quarry Road corridor, from El Camino Real to Welch Road, continuous sidewalks according to the SUMC Project's Design Guidelines. The extension of Quarry Road west of Welch Road shall continue the pedestrian facilities into the SUMC Project improvements to and within the public right-of-way to enhance the pedestrian and bicycle connection, including urban design elements and way finding, wider bicycle lanes, as necessary, on Quarry Road, enhanced transit nodes for bus and/or shuttle stops, and prominent bicycle facilities.~~

## **Master Response 7: Impact on City's Jobs to Employed Residents Ratio and Mitigation Regarding Affordable Housing**

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### **Introduction**

Master Response 7 addresses Comments 7.1, 7.2, 7.23, 7.25, 7.26, 8.29, 8.30, 8.31, 9.8, 19.1, 20.6, 20.7, 20.18, 22.4, 22.42, 22.53, 22.65, 22.67, 22.68, 22.69, 22.70, 22.71, 22.72, 35.9, PTC1.6, PTC1.16, PTC1.19, PTC1.21, PTC1.55, PTC1.79, PTC3.44, PTC4.23, PTC4.60, PTC6.3, PTC6.65, PTC6.69, PTC6.95, CC1.9, CC1.26, CC1.27, CC2.13, CC2.14, CC2.35, CC3.34, and CC5.37.

A number of comments pertain to the City's jobs to employed residents ratio and corresponding mitigation, and affordable housing demand within and outside Palo Alto. Master Response 7 addresses these comments.

### **Impact on City's Jobs to Employed Residents Ratio and Mitigation Regarding Affordable Housing**

Section 3.13, Population and Housing, of the Draft EIR provides an analysis of the SUMC Project's impact on the City's jobs to employed residents ratio, which provides a gauge of the City's ability to provide housing to support the jobs within the City's sphere of influence. As acknowledged in Section 3.13, demographic changes in population and employment that would result from development of the SUMC Project are not intrinsically physical environmental impacts. However, a high jobs to employed residents ratio indicates that more Palo Alto workers live outside the City than within the City, and thus must commute into the City on each workday. As such, an imbalance between jobs and employed residents could result in secondary traffic and associated air emissions from employees commuting longer distances to the job site, depending upon where the employees live and the extent to which they use public transit. While the SUMC Project's impacts on traffic and air quality are addressed in Sections 3.4 and 3.5 of the Draft EIR, the analysis in Section 3.13 separately and directly considers the City's jobs to employed residents ratio to further inform a discussion of policy considerations that may be relevant to the conditions that contribute to these impacts on a regional level. The analysis of impacts to the jobs to employed residents ratio is presented for informational purposes, and for the purpose of identifying additional, alternative mitigation measures for significant impacts due to air pollutant emissions that have been identified in Section 3.5 of the Draft EIR. Specifically, the SUMC Project's impact on the jobs to employed residents ratio would result in increased commute traffic, and that increase in commute traffic would be a significant contributor to the SUMC Project's significant and unavoidable impacts on air quality. Thus, the analysis in Section 3.13 identifies additional mitigation measures relating to the jobs to employed residents ratio, which are additional measures the City can consider as a means for further mitigating those significant environmental impacts identified in Section 3.5 of the Draft EIR.

**SUMC Project Contribution to the City's Jobs to Employed Residents Ratio.** As indicated in Section 3.13 of the Draft EIR, the SUMC Project would have an adverse impact on the City's jobs to employed residents ratio because it would exceed the existing Comprehensive Plan and zoning

allowances for the SUMC Sites and would thus require an amendment to the Comprehensive Plan and rezoning. In order to address this issue, the City modified the existing standards of significance, “Create a substantial imbalance between employed residents and jobs,” to a more quantifiable standard. An increase to the City’s jobs to employed residents ratio of 0.01 was developed as the criterion and methodology for analyzing the SUMC Project’s impacts on the City’s jobs to employed residents ratio. An increase in 0.01 is equivalent to an increase in 430 jobs. Locating housing closer to jobs and transit enables workers in the Bay Area to drive fewer miles and therefore spend less time behind the wheel. An increase in jobs to employed residents ratio correlates to increased vehicle miles traveled, increased traffic congestion, and increased vehicular and noise emissions. It has been suggested in comments that new employment generated by the SUMC Project may be consistent with future employment projections contained in the City’s Comprehensive Plan and in ABAG employment projections. However, those projections were made based upon projections of future commercial development allowable under the zoning and the Comprehensive Plan provisions in place before the current SUMC Project was proposed. That is to say, those projections estimate the amount of future commercial and other job-generating new development within the City of Palo Alto without the current SUMC Project. It is thus reasonably conservative for this EIR to address the real possibility that the SUMC Project would result in new employment growth in excess of these pre-existing projections. It is true that the “0.01 threshold” for analyzing an impact to the jobs to employed residents ratio does not exist in the City’s existing Comprehensive Plan and was developed by staff for the purpose of assessing the SUMC Project’s unique impacts. The SUMC Project is the first proposed development within the City of Palo Alto which has requested a rezoning allowing an increase of this magnitude in non-residential development beyond what was previously allowed.

That being said, it should again be noted that the analysis of impacts to the jobs to employed residents ratio is presented for informational purposes only, and the 0.01 threshold is not being directly applied to assess the significance of any environmental impact – the EIR directly analyzes the significance of the relevant impacts to traffic and air quality in the chapters addressing those subjects. In other words, this increase in the jobs to employed residents ratio is not, itself, an environmental impact. This increase in the ratio could result in secondary environmental impacts relating to mobile source air pollutant emissions, as identified in Section 3.5 of the Draft EIR.

As indicated in Staff-Initiated Change 2, the SUMC Project would now have less-than-significant impacts on intersection LOS with identified mitigation measures, although the SUMC Project’s impact on roadway segments within Menlo Park would remain significant and unavoidable. As indicated in Staff-Initiated Change 4, the SUMC Project’s greenhouse gas emissions would have a less than cumulatively considerable contribution to global climate change due to greenhouse gas emissions, with identified mitigation measures. The significant and unavoidable traffic impacts, which relate to the average daily trips added to four Menlo Park roadways, including Marsh Road, Willow Road, Sand Hill Road, and Alpine Road, would not be substantially affected by the SUMC Project’s contribution to the jobs to employed residents ratio.

The Draft EIR recognizes that provision of the GO Pass to Hospital employees would reduce vehicle trips and associated emissions. The GO Pass program would benefit Hospital employees living near

transit; thus, the GO Pass would encourage employees who would be relocating, and who cannot live near the SUMC Sites, to find housing proximate to the Caltrain lines.

**Mitigation Measure PH-3.1.** The Draft EIR identifies Mitigation Measure PH-3.1, which conceptually describes several measures that could be implemented by either the City or the SUMC Project sponsors. Under Mitigation Measure PH-3.1, the measures that the City could implement include (1) exploring amending the Zoning Code to permit more residential uses, particularly multifamily residential uses, (2) amending the Zoning Code to remove the hospital exemption from payment of the City's affordable housing fee, (3) imposing an additional ad hoc housing fee on development to ensure development of required affordable housing, (4) providing an inclusionary housing requirement in the newly created Hospital District to provide a number of options for development of additional housing, with an emphasis on affordable housing, and (5) dedication of housing on Santa Clara County land for SUMC employees. Under Mitigation Measure PH-3.1, the measure that the SUMC Project sponsors could implement includes dedicating a specified number of housing units in the County to SUMC employees.

As has been noted, Mitigation Measure PH-3.1 is only presented in conceptual terms, and is of doubtful feasibility. This measure does not identify any specific target number of new housing units or other precise implementation strategies, but is presented to ensure that the City considers the full range of potential mitigation strategies for addressing the air quality impact which would result from commute-related traffic caused by the SUMC Project. Each of the components of Mitigation Measure PH-3.1 is discussed further below.

- (1) *Explore Amending the Zoning Code to Permit More Residential Uses.* The City is in the process of updating the Housing Element of its Comprehensive Plan. This process would identify and analyze all reasonably feasible potential housing sites within the City. To the extent that Mitigation Measure PH-3.1 calls upon the City to identify additional sites not already being identified as part of the City's current efforts, staff agrees that the measure is not feasible and should be rejected. Please see the Housing Element itself for further discussion of this issue.
- (2) *Amend Zoning Code to Remove Hospital Exemption to Affordable Housing Fee.* This portion of Mitigation Measure PH-3.1 would appear to be feasible, if the Council found it acceptable as a matter of policy. However, as part of the Development Agreement, the Hospitals have already offered to pay the full amount of the fee that otherwise would apply were the exemption not in place, so this measure may prove to be unnecessary.
- (3) *Impose Additional Ad Hoc Fee.* Comment 22.71 questions the potential feasibility of this provision in Mitigation Measure PH-3.1, which would call upon the City to impose an additional ad hoc housing fee to mitigate SUMC Project impacts to the jobs to employed residents ratio. The point of this measure is to identify additional ways to mitigate the air quality impact which would result from the increase in commute activity which results from the imbalance between jobs and employed residents. To the extent that the comment identifies policy reasons against such a measure, it will ultimately be for the City Council to weigh and consider such policy arguments in assessing the feasibility of this mitigation measure. As to

the legal arguments presented in this comment (equal protection, alleged lack of nexus), the City generally disagrees with the comment, but this EIR is not the proper venue for such legal debate. However, it is agreed that any fee imposed would have to be roughly proportional to the impacts of the SUMC Project.

- (4) *Inclusionary Housing.* Comment 22.72 questions the potential feasibility of this provision in Mitigation Measure PH-3.1, which would call upon the City to include an inclusionary housing requirement in the newly created Hospital District. The City agrees that there is a lack of potential housing sites within the proposed the Hospital District itself which could feasibly accommodate any significant potential housing, and, to that extent, agrees that this particular provision is not feasible. The Village Concept Alternative identifies potential off-site locations for such housing consistent with the spirit of this provision, and the City would need to consider the feasibility of the Village Concept Alternative when it takes action upon the SUMC Project.
- (5) *Dedication of Housing on Santa Clara County Land for SUMC Employees.* Some comments question the potential feasibility of this provision in Mitigation Measure PH-3.1, which would call upon the SUMC Project sponsors to ensure that a specified number of housing units in Santa Clara County would be dedicated to SUMC employees. The City of Palo Alto does not itself have the police power authority to control the use of housing outside of its jurisdictional boundaries, and thus, the feasibility of this measure would depend upon the willingness and/or ability of the SUMC Project sponsors to agree to implement such measures. This measure would not change the jobs to employed residents ratio within the City; the point of the mitigation measure is to reduce the environmental impacts resulting from the SUMC Project's impacts on that ratio. Such mitigation of impacts could occur without directly changing the ratio itself. That being said, if the SUMC Project sponsors are not willing to agree to such a measure, whether as part of the Development Agreement or otherwise, the measure is of doubtful feasibility.

Again, Mitigation Measure PH-3.1 is presented in the Draft EIR for informational purposes only, for considering as an alternative or additional mitigation measure to those identified in Section 3.5, Air Quality. For the reasons discussed above, City staff believes that Mitigation Measure PH-3.1 is largely infeasible.

#### **Demand for Affordable and Market-Rate Housing in Palo Alto and Neighboring Jurisdictions.**

Private individuals in Palo Alto have expressed concern regarding increased demand for affordable housing in Palo Alto. Also, the cities of East Palo Alto, Menlo Park, and Portola Valley have expressed concerns that new employment from the SUMC Project would result in additional demand for market-rate or affordable housing in those jurisdictions. As indicated on page 3.13-14 of the Draft EIR, housing affordability is considered to be a socioeconomic issue, rather than an environmental issue. Neither a shortfall of affordable units, increased demand for affordable housing, nor socioeconomic impacts due to increased demand for affordable housing, is considered to be a physical environmental impact. Nonetheless, the discussions below are provided for informational purposes.



*Demand for Affordable Housing in Palo Alto.* Some individuals expressed concern regarding increased demand for affordable housing in Palo Alto. Per Table 3.13-8 of the Draft EIR, based on existing SUMC employment trends, 8 percent of SUMC employees would seek to live in Palo Alto. As shown on Table 3.13-9, new employment of the SUMC Project would result in the need for 91 housing units with income under 50 percent of the area median income (AMI) of the locality (very low income), and 228 units with incomes between 51 and 80 percent of the AMI of the locality (low income). Applying the eight percent distribution in Palo Alto, the SUMC Project could result in demand within Palo Alto for approximately seven housing units with income under 50 percent of the AMI and 18 units with incomes between 51 and 80 percent of the AMI. The resulting potential demand for affordable housing within Palo Alto would fall within Palo Alto's 2007-2014 Regional Housing Needs Allocation (RHNA) of 690 very low income units and 543 low income units.<sup>18</sup> RHNA is a State-mandated process for determining how many housing units, including affordable units, each community must plan to accommodate.

As discussed in the Draft EIR's analysis under the discussion of Impact PH-1, the SUMC Project is not expected to have a significant impact on population growth, either within the City or within the surrounding region. Some comments question the accuracy of the Draft EIR's estimates of the location of the residences of future employees of the SUMC Project. Because the Draft EIR uses the actual residency distribution of existing SUMC employees, its estimate is considered to be more reliable than an estimate which would be developed as a result of using more general criteria or models (whether it is criteria used by ABAG or any other agency). That is not to say that there is any way to perfectly predict where future SUMC employees may live. But, for the purposes of the EIR's analysis, it is not necessary to definitively predict the exact residency distribution of future SUMC employees. It is not the purpose of the EIR to calculate the environmental impacts of all future housing development, whether within or outside of Palo Alto. Rather, the question for this EIR's housing analysis is whether the increase in employment resulting from the SUMC expansion would result in a significant increase in housing demand over what has already been projected. The EIR's analysis demonstrates that no such impact would occur, as the housing needs created by the SUMC Project would be relatively small compared to overall anticipated housing development within the Bay Area. Minor variations in the actual distribution of the residential location of future employees would not impact this overall conclusion.

*Demand for Affordable Housing in East Palo Alto.* East Palo Alto expressed concern regarding increased demand for affordable housing in its jurisdiction. Per Table 3.13-8 of the Draft EIR, based on existing SUMC employment records, 8 percent of SUMC employees live in Palo Alto, and 46 percent live in Santa Clara County. It is thus possible that SUMC employees who would demand affordable housing would seek to live outside Palo Alto and outside Santa Clara County, in areas such as East Palo Alto. Table 3.13-8 of the Draft EIR indicates that, based on the current location of SUMC employee residences, 1.8 percent of the new SUMC employees may seek housing in East Palo Alto. As shown on Table 3.13-9, new employment of the SUMC Project would result in the need for

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<sup>18</sup> Association of Bay Area Governments, San Francisco Bay Area Housing Needs Plan 2007-2014, June 2008. <http://www.abag.ca.gov/planning/pdfs/SFHousingNeedsPlan.pdf>, accessed October 4, 2010.

91 housing units with income under 50 percent of the AMI of the locality (very low income), and 228 units with incomes between 51 and 80 percent of the AMI of the locality (low income). Based on these assumptions, the SUMC Project would result in demand within East Palo Alto for approximately two housing units with income under 50 percent of the AMI and four units with incomes between 51 and 80 percent of the AMI. The resulting potential demand for affordable housing within East Palo Alto would fall within East Palo Alto's 2007-2014 RHNA of 144 very low income units and 103 low income units.<sup>19</sup> The RHNA is a state-mandated process for determining how many housing units, including affordable units, each community must plan to accommodate. As such, the SUMC Project's indirect demand for affordable housing in East Palo Alto would not likely result in displacement of existing very low and low income residents.

*Demand for Market Rate and Affordable Housing in Menlo Park.* Menlo Park expressed concern regarding increased demand for market rate and affordable housing in its jurisdiction. The resulting housing demand in Menlo Park is addressed in Table 3.13-8 of the Draft EIR, which indicates that the SUMC Project would result in a demand for 53 units in Menlo Park. The 53 units represent 2.8 percent of projected household growth in Menlo Park from 2005, and 5.3 percent of Menlo Park's RHNA of 993 units between 2007 and 2014.<sup>20</sup> As such, the SUMC Project would have a less-than-significant impact on general housing demand in Menlo Park. The demand for 53 units in Menlo Park is based on historical evidence, comprised of SUMC's data on the residential distribution of their employees. As indicated on page 3.13-11 of the Draft EIR, the distribution of housing for SUMC Project employees is based on existing SUMC employee zip code data provided by the SUMC Project sponsors (see Appendix L of the Draft EIR).<sup>21</sup>

The City of Menlo Park notes in its comment letter that new SUMC employees may seek housing in Menlo Park due to proximity to the SUMC Sites, assuming the employees can afford to live in Menlo Park. The City of Palo Alto acknowledges this possibility, but notes that almost half of existing SUMC employees live in Santa Clara County, and SUMC employees who live in Palo Alto (a comparable housing market) are almost double those who live in Menlo Park.

Regarding the resulting demand for affordable housing in Menlo Park, Table 3.13-8 of the Draft EIR indicates that 4.1 percent of the SUMC employees may seek housing in Menlo Park. As shown on Table 3.13-9, new employment of the SUMC Project would result in the need for 91 housing units with income under 50 percent of the AMI of the locality (very low income), and 228 units with incomes between 51 and 80 percent of the AMI of the locality (low income). Applying this assumption to Menlo Park, the SUMC Project could result in demand within Menlo Park for approximately four housing units with income under 50 percent of the AMI and nine units with incomes between 51 and 80

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<sup>19</sup> Association of Bay Area Governments, San Francisco Bay Area Housing Needs Plan 2007-2014, June 2008. <http://www.abag.ca.gov/planning/pdfs/SFHousingNeedsPlan.pdf>, accessed October 4, 2010.

<sup>20</sup> Association of Bay Area Governments, San Francisco Bay Area Housing Needs Plan 2007-2014, June 2008. <http://www.abag.ca.gov/planning/pdfs/SFHousingNeedsPlan.pdf>, accessed October 4, 2010.

<sup>21</sup> Stanford University Medical Center, Stanford University Medical Center Facilities Renewal and Replacement Project Application, August 13, 2007, as amended on September 28, 2007, October 31, 2007, April 14, 2008, May 30, 2008, October 23, 2008, December 11, 2008, June 2, 2008, March 8, 2010, and March 25, 2010.; Tab 5, Figure 5-5.

percent of the AMI. The resulting potential demand for affordable housing within Menlo Park would fall within Menlo Park's 2007-2014 RHNA of 226 very low income units and 163 low income units.<sup>22</sup> RHNA is a state-mandated process for determining how many housing units, including affordable units, each community must plan to accommodate. As such, the SUMC Project's indirect demand for affordable housing would fit within Menlo Park's requirement for new affordable housing.

Given the above discussions, no mitigation measures to alleviate housing demand in Menlo Park would be warranted for the SUMC Project, even if the housing measures under either the Village Concept Alternative or Mitigation Measure PH-3.1 would not be implemented.

*Demand for Housing in Portola Valley.* Portola Valley expressed concern regarding increased demand for general housing in its jurisdiction. The Draft EIR does acknowledge that some additional, indirect housing demand would occur in various jurisdictions due to the SUMC Project, although the additional housing demand would fit within each jurisdiction's projected housing growth. The resulting housing demand in Portola Valley is addressed in Table 3.13-8 of the Draft EIR, which indicates that the SUMC Project would result in a demand for 12 units in Atherton, Woodside, Portola Valley, and Emerald Hills combined. The resulting housing demand would comprise 1.4 percent of the projected housing growth in these areas through 2025.

As explained on pages 3.13-10 through 3.13-11 of the Draft EIR, the SUMC Project would result in an indirect housing demand of 1,303 units at a rate of 1.72 workers per household. According to the SUMC employee zip code data used in the Draft EIR, 29 residents of Portola Valley are employed by the SUMC. Based on the total number of SUMC employees (8,907 employees) approximately 0.3 percent of SUMC employees live in Portola Valley. As such, the SUMC Project would generate a demand for approximately four households<sup>23</sup> in Portola Valley. According to the Association of Bay Area Government's (ABAG's) Projections 2005, Portola Valley households would increase from 2,720 in 2005 to 2,900 in 2025, an increase of 180 units. Assuming that four units would be demanded within Portola Valley, the four units would comprise approximately two percent of the projected household growth in Portola Valley from 2005 to 2025. As such, the SUMC Project would have a minor impact related to housing demand in Portola Valley.

## **Draft EIR Text Revisions**

Revisions to the Draft EIR text are provided below as a result of the above changes and as to provide other corrections.

**Summary.** The Impacts column of Table S-4 on page S-86 of the Draft EIR is revised as follows:

*PH-3. Impacts on Jobs to Employed Residents Ratio.* The SUMC Project would have an adverse impact on the City's jobs to employed residents ratio because it would exceed

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<sup>22</sup> Association of Bay Area Governments, San Francisco Bay Area Housing Needs Plan 2007-2014, June 2008. <http://www.abag.ca.gov/planning/pdfs/SFHousingNeedsPlan.pdf>, accessed October 4, 2010.

<sup>23</sup> 1,303 SUMC Project housing units (full buildout) x 0.3 percent = 3.91 households = ~4 households

the existing Comprehensive Plan and zoning allowances for the SUMC Sites and thus require amendment to the Comprehensive Plan and rezoning, and it would increase the City’s jobs to employed residents ratio by more than 0.01. However, this impact is not, itself, an environmental *impact*. This impact ~~will~~ would result in secondary environmental impacts relating to additional commute traffic, including the significant and unavoidable impacts on air quality ~~and climate change~~, as identified in Sections 3.5 ~~and 3.6~~. The present analysis of impacts to the “jobs to employed residents” ratio is presented for informational purposes, and for the purpose of identifying additional mitigation measures for those identified impacts.

The SUMC Project column of Table S-5 on page S-102 of the Draft EIR is revised as follows:

Table S-5 Assessment of SUMC Project Alternatives (Compared to the SUMC Project)								
Impact	SUMC Project <sup>a</sup>	No Project Alternative A	No Project Alternative B	Reduced Intensity Alternative A	Reduced Intensity Alternative B	Tree Preservation Alternative	Historic Preservation Alternative	Village Concept Alternative
<b>Population and Housing</b>								
Cumulative Impacts	<del>S/SU</del> <u>LTS</u>	NI	NI	NI	LTS	LTS	LTS	LTS

**Section 3.13, Population and Housing.** As a result of these changes, the text in Impact PH-3, on pages 3.13-15 of the Draft EIR, is revised as follows:

*PH-3. Impacts on Jobs to Employed Residents Ratio. The SUMC Project would have an adverse impact on the City’s jobs to employed residents ratio because it would exceed the existing zoning allowances for the SUMC Sites and thus require rezoning, and it would increase the City’s jobs to employed residents ratio by more than 0.01. However, this impact is not, itself, an environmental impact. This impact would result in secondary environmental impacts relating to additional commute traffic, including the significant and unavoidable impacts on air quality ~~and climate change~~, as identified in Sections 3.5 ~~and 3.6~~. The present analysis of impacts to the “jobs to employed residents” ratio is presented for informational purposes, and for the purpose of identifying additional mitigation measures for this identified impact.*

The third paragraph under Impact PH-3, on pages 3.13-15 through 3.13-16 of the Draft EIR, is revised as follows:

Sections 3.5 ~~and 3.6~~ identify significant and unavoidable impacts relating to air quality ~~and climate change~~, and the additional commute-related traffic resulting from the imbalance between jobs and employed residents ~~is~~ can be a significant contributor to this impact. For example, Tables 3.5-6 and 3.5-7, in Section 3.5, Air Quality, demonstrate that a majority of the SUMC Project’s emissions are from mobile sources, and the section further explains that 40 percent of these mobile emissions are from employee trips. These emissions result in a significant and unavoidable impact on air quality (see Impacts AQ-2 and AQ-7). ~~Likewise, Tables 3.6-4 and 3.6-6, in Section 3.6,~~

~~Climate Change, demonstrate that the majority of the SUMC Project’s greenhouse gas emissions result from these same mobile sources (listed in the tables under the category of “Non-fleet Vehicular Emissions (VMT)”), which result in an identified significant and unavoidable impact on climate change (see Impacts CC 1 and CC 2). Finally, the SUMC Project’s impact on the jobs to employed residents ratio may also play a contributing role to the SUMC Project’s significant and unavoidable impacts on traffic circulation (see Impacts TR 2 and TR 3 in Section 3.4, Transportation).~~

**Section 5, Alternatives.** The SUMC Project column of Table 5-8 on page 5-55 of the Draft EIR is revised as follows:

Table 5-8 Assessment of SUMC Project Alternatives (Compared to the SUMC Project)								
Impact	SUMC Project <sup>a</sup>	No Project Alternative A	No Project Alternative B	Reduced Intensity Alternative A	Reduced Intensity Alternative B	Tree Preservation Alternative	Historic Preservation Alternative	Village Concept Alternative
<b>Population and Housing</b>								
Cumulative Impacts	S/SU <u>LTS</u>	NI	NI	NI	LTS	LTS	LTS	LTS

The last paragraph on page 5-130 is revised as follows:

**Jobs to Employed Residents Ratio.** As discussed in Section 3.13, Population and Housing, the jobs to employed residents ratio impact is not, by itself, considered an environmental impact; however, it is analyzed because this impact would result in secondary environmental impacts on air quality ~~and climate change~~. Specifically, as with the SUMC Project, Reduced Intensity Alternative B’s impact on the jobs to employed residents ratio would result in increased commute traffic, which is a significant contributor to this alternative’s significant and unavoidable impacts on air quality ~~and climate change~~. As such, the analysis below identifies additional mitigation measures relating to the jobs to employed residents ratio, ~~with additional measures~~ that the City can consider as a means for further mitigating those significant environmental impacts identified for air quality ~~and climate change~~.

The second sentence of the second paragraph on page 5-131 is revised as follows:

Instead, this mitigation measure shall be considered as possible additional mitigation for impacts identified under air quality ~~and climate change~~.

The last paragraph on page 5-161, continuing to page 5-162 of the Draft EIR, is revised as follows:

**Jobs to Employed Residents Ratio.** As discussed in Section 3.13, Population and Housing, the jobs to employed residents ratio impact is not, by itself, considered an environmental impact; however, it is analyzed because this impact would result in secondary environmental impacts on air quality ~~and climate change~~. Specifically, as with the SUMC Project, the Tree Preservation Alternative’s impact on the jobs to employed residents ratio would result in increased commute

traffic, which is a significant contributor to this alternative's significant and unavoidable impacts on air quality ~~and climate change~~. As such, the analysis below identifies additional mitigation measures relating to the jobs to employed residents ratio, ~~with additional measures~~ that the City can consider as a means for further mitigating those significant environmental impacts identified for air quality ~~and climate change~~.

The second sentence of the third full paragraph on page 5-162 of the Draft EIR is revised as follows:

Instead, this mitigation measure shall be considered as possible additional mitigation for impacts identified under air quality ~~and climate change~~.

The fourth paragraph on page 5-190 of the Draft EIR is revised as follows:

**Jobs to Employed Residents Ratio.** As discussed in Section 3.13, Population and Housing, the jobs to employed residents ratio impact is not, by itself, considered an environmental impact; however, it is analyzed because this impact would result in secondary environmental impacts on air quality ~~and climate change~~. Specifically, as with the SUMC Project, the Historic Preservation Alternative's impact on the jobs to employed residents ratio would result in increased commute traffic, which is a significant contributor to this alternative's significant and unavoidable impacts on air quality ~~and climate change~~. As such, the analysis below identifies additional mitigation measures relating to the jobs to employed residents ratio, ~~with additional measures~~ that the City can consider as a means for further mitigating those significant environmental impacts identified for air quality ~~and climate change~~.

The first sentence of the last paragraph on page 5-190 of the Draft EIR is revised as follows:

The ~~Village Concept~~ Historic Preservation Alternative would result in the same increase in employment as the SUMC Project. As with the SUMC Project, the Historic Preservation Alternative would be constructed and operational by 2025.

The second sentence of the first full paragraph on page 5-191 of the Draft EIR is revised as follows:

Implementation of Mitigation Measure PH-3.1, as proposed for the SUMC Project, is not directly required in order to mitigate a significant environmental impact under the Historic Preservation Alternative. Instead, this mitigation measure shall be considered as possible additional mitigation for impacts identified under air quality ~~and climate change~~.

The fifth paragraph on page 5-221 of the Draft EIR is revised as follows:

**Jobs to Employed Residents Ratio.** As discussed in Section 3.13, Population and Housing, the jobs to employed residents ratio impact is not, by itself, considered an environmental impact; however, it is analyzed because this impact would result in secondary environmental impacts on air quality ~~and climate change~~. Specifically, as with the SUMC Project, the Village Concept Alternative's impact on the jobs to employed residents ratio would result in increased commute traffic, which is a significant contributor to this alternative's significant and unavoidable impacts on

air quality ~~and climate change~~. As such, the analysis below identifies additional mitigation measures relating to the jobs to employed residents ratio, ~~with additional measures~~ that the City can consider as a means for further mitigating those significant environmental impacts identified for air quality ~~and climate change~~.

The last sentence on page 5-221 of the Draft EIR is deleted as follows:

~~This is a significant impact under the City's significance criteria.~~

The third sentence on page 5-222 of the Draft EIR is revised as follows:

Dedication of the 490 housing units to SUMC Project employees would ~~reduce~~ increase criteria pollutant and greenhouse gas emissions (associated with VMT) from the SUMC Project, ~~as explained under Air Quality and Climate Change~~.

The first and second sentences of the first paragraph on page 5-223 are revised as follows:

Implementation of Mitigation Measure PH-3.1, as proposed for the SUMC Project, is not directly required in order to mitigate a significant environmental impact under the ~~Free Preservation Village Concept~~ Village Concept Alternative. Instead, this mitigation measure shall be considered as possible additional mitigation for impacts identified under air quality ~~and climate change~~.

## **Master Response 8: Range of Alternatives Analyzed and Consideration of Alternatives in the SUMC Project Approval Process**

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### **Introduction**

Master Response 8 addresses Comments 22.53, 22.75, 22.79, 22.80, 22.89, 22.91, 25.1, 28.4, 28.6, 35.15, 40.2, 40.7, 42.2, 61.2, PTC1.4, PTC1.16, PTC1.43, PTC1.52, PTC1.55, PTC1.66, PTC2.1, PTC2.10, PTC2.11, PTC2.29, PTC2.30, PTC2.31, PTC2.34, PTC4.53, PTC6.4, PTC6.6, PTC6.8, PTC6.13, PTC6.28, PTC6.29, PTC6.30, PTC6.31, PTC6.34, PTC6.38, PTC6.39, PTC6.40, PTC6.46, PTC6.49, PTC6.52, PTC6.60, PTC6.61, PTC6.77, PTC6.78, PTC6.79, PTC6.80, PTC6.81, PTC6.82, PTC6.85, PTC6.90, CC2.4, CC2.10, CC2.13, CC3.46, CC4.7, CC5.1, CC5.2, CC5.24, CC5.37, HRB1.3, HRB1.4, HRB1.5, and HRB1.7.

A number of comments suggest alternative land uses, locations, and programmatic changes to the SUMC Project. Master Response 8 explains the CEQA requirements for identifying alternatives to be analyzed; explains why other alternative site plans, uses, or programs that have been suggested are not warranted/feasible or are covered under the analysis; and explains that the City will consider the various alternatives in its decision process. Master Response 8 also addresses comments on alternative uses of the Stone Building complex.

## **Range of Alternatives Analyzed and Consideration of Alternatives in the SUMC Project Approval Process**

CEQA (Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.) require that an EIR “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines Section 15126.6(a)). If mitigation measures or a project alternative would substantially lessen the significant environmental effects of a proposed project, the lead agency should not approve the proposed project unless it determines that specific technological, economic, social, or other considerations make the mitigation measures and the project alternative infeasible (PRC Section 21002, CEQA Guidelines Section 15091(a)(3)). The EIR must also identify alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and should briefly explain the reasons underlying the lead agency’s determination (CEQA Guidelines Section 15126.6(c)).

Per the requirements of CEQA, the SUMC Project sponsors and the City developed a list of potential alternatives to the SUMC Project that would reduce the identified significant and unavoidable impacts while also meeting the majority of SUMC Project objectives. In general, when dealing with hospital projects, a collaborative effort with the applicant is necessary to determine feasible alternatives. Hospitals require certain functional adjacencies and building programs in order to efficiently operate. As such, the SUMC Project sponsors developed a list of alternatives that would attempt to ameliorate the significant and unavoidable impacts of the SUMC Project and partially or entirely meet the objectives. The City then reviewed the list of alternatives and determined whether the proposed alternatives would comply with CEQA requirements. As a result of the joint effort between the SUMC Project sponsors and the City, the Draft EIR includes seven alternatives: No Project Alternative A, No Project Alternative B, Reduced Intensity Alternative A, Reduced Intensity Alternative B, the Tree Preservation Alternative, the Historic Preservation Alternative, and the Village Concept Alternative.

However, it is important to note that the alternatives as presented are examples of potentially feasible alternatives that would reduce the impacts of the SUMC Project, attempt to meet the majority of objectives, and promote a functional site plan. As stated in Section 15126.6 of the CEQA Guidelines, “An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation.” Therefore, the alternatives included in the Draft EIR represent a range of reasonable alternatives to the SUMC Project, but are not meant to limit the City Council and the Planning and Transportation Commission (Commission) in determining the best option for the SUMC Project. The Draft EIR is intended to serve as an informational document that provides the City Council, the Commission, and the general public with enough information to make knowledgeable decisions regarding the environmental impacts of the SUMC Project and its potential alternatives. It is at the discretion of City Council whether to approve portions of the proposed alternatives that would mitigate or avoid significant environmental impacts, while rejecting the alternatives that are deemed to be



infeasible. As such, the final SUMC Project could be the SUMC Project as proposed in the Draft EIR, an alternative to the SUMC Project, or a combination of the SUMC Project and its alternatives.

Although alternatives are required to be presented and analyzed in the Draft EIR, CEQA does not require the same level of review for alternatives as the proposed project. As stated in CEQA Guidelines Section 15126.6(d), an “EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.” As such, Section 5 of the Draft EIR, Alternatives, provides a description of the seven alternatives and compares the significant impacts of the alternatives to the significant environmental impacts of the SUMC Project as proposed. In addition, during the certification process of the EIR, City Council must determine if the Draft EIR presents an adequate range of alternatives.

Several comments were received that pertain to the adequacy of the alternatives presented in the Draft EIR. In addition, many commentors suggest potential variations to the alternatives as proposed. The discussion below provides a summary of each alternative presented in the Draft EIR and addresses comments based on the alternatives in question.

### **Comments Submitted Regarding SUMC Project Alternatives**

**No Project Alternatives A and B.** As described on page 5-4 of the Draft EIR, many of the existing SUMC facilities do not comply with the Office of Statewide Health and Planning and Development (OSHPD) requirements, stemming from Senate Bill (SB) 1953 structural and non-structural seismic safety requirements. In order for the SUMC and LPCH to continue to operate, OSHPD standards would need to be met. As such, the No Project Alternatives would involve upgrades and retrofits (No Project Alternative A) and replacement of the noncompliant structures (No Project Alternative B).

The only comments that addressed No Project Alternatives A and B were regarding the merits of these alternatives. Please refer to Master Response 9 for a discussion of merit in the CEQA process.

**Reduced Intensity Alternative A.** Reduced Intensity Alternative A is presented in the Draft EIR to identify ways of reducing the significant and unavoidable impacts of the SUMC Project, even if all of the impacts are not fully eliminated. As described on pages 5-9 through 5-12 of the Draft EIR, Reduced Intensity Alternative A would include the demolition of all noncompliant buildings and construction of replacement structures. Although this alternative would not increase the number of beds at the SHC and LPCH, the replacement structures would be right-sized, which requires an increase in square footage over existing conditions.

**Reduced Intensity Alternative B.** As explained on page 5-12 of the Draft EIR, construction of the SHC and LPCH Hospital buildings and several other SUMC Project components would be completed in a relatively short timeframe in order to meet SB 1953 deadlines. Although these components of the SUMC Project would be constructed in the near-term, other facilities, such as the new clinic buildings, would be constructed later and full occupancy of the SUMC facilities would not occur until 2025. To ensure that SUMC Project impacts were fully disclosed and mitigation is implemented in the near term, the EIR assumes that approximately 60 percent of net new growth in employment and patient activity would occur by 2015 under the SUMC Project. Therefore, 2015 trip generation is predicted to be 60 percent of the project-related trip generation at buildout.<sup>24</sup> Reduced Intensity Alternative B was derived using this 60-percent threshold. As such, the additions proposed under Reduced Intensity Alternative B would be approximately 60 percent of the square footage of the SUMC Project medical offices and 60 percent of the square footage of the SUMC Project Hospital space above the amounts needed for right-sizing.

Several comments were made at the Commission hearings that the 60 percent number is arbitrary. As explained above, the 60-percent milestone was determined based on the development milestone of the SUMC Project at the time of the then-applicable SB 1953 deadline in 2015. This level of development also was chosen because it represents a substantial reduction in growth compared to the SUMC Project, enabling decision-makers and the public to discern the degree to which impacts can be reduced by limiting expansion. This allows evaluation of the trade-off between accommodating expected demand for the facilities and reducing environmental effects. Additional variations on the Reduced Intensity Alternatives were suggested by the Commission, as described and analyzed below.

*Removal of SHC Hospital Building Top Floor.* An additional Reduced Intensity Alternative was proposed at the Commission hearings that would remove the top floor of the SHC Hospital building in order to reduce height and intensity impacts. This alternative would not substantially reduce significant impacts of the SUMC Project, as explained in more detail below.

As discussed on pages 3.3-38 through 3.3-39 of the Draft EIR, the visual impacts associated with the new SHC Hospital building under the SUMC Project would be mitigated to a less-than-significant level through implementation of the City's Architectural Review process (Mitigation Measure VQ-2.1). Further, Reduced Intensity Alternative B, as presented in the Draft EIR, would likely reduce the height of some of the SHC Hospital modules by including only 60 percent of the proposed square footage above right-sizing of the SUMC Project hospital facilities. This reduction in square footage would result in a smaller building.

Additionally, the alternative of removing the top floor of the SHC Hospital building would result in an even greater reduction of patient beds than Reduced Intensity Alternative B, further reducing the SUMC Project sponsors' ability to meet objectives and patient demand. The SUMC Project would

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<sup>24</sup> Fehr & Peers, 2015 Trip Generation Estimates for Stanford University Medical Center Environmental Impact Report. Memorandum from Robert Eckols, P.E. to Catherine Palter, Stanford Land Use and Environmental Planning, Bill Phillips, Stanford Real Estate, and Barbara Schussman, Bingham McCutchen, dated November 14, 2007. These assumptions were confirmed by AECOM Transportation.

include 600 beds to be used by the SHC Hospital: 144 beds would be located at the existing Hospital Modernization Project (HMP) building and 456 beds would be located at the new SHC Hospital. The SUMC Project has been sized to enable the SHC to meet the projected needs of its service population. Therefore, the new SHC Hospital building is designed to provide diagnostic, treatment, surgical, and other hospital support space in the 40-foot-tall podium (the first three floors), while the five modules above the podiums would house patient beds (the top four floors).

Removing the top floor from each of the proposed SHC Hospital modules would eliminate approximately 110 patient rooms (110 patient beds). In comparison, Reduced Intensity Alternative B would result in 542 patient beds, 58 fewer beds than under the SUMC Project. As such, Reduced Intensity Alternative B would succeed in reducing the building program of the SUMC Project, but would not have as significant of an impact to patient beds as the alternative proposed by the commentor. Additionally, Reduced Intensity Alternative B would reduce other portions of the SHC Hospital, including the diagnostic, treatment, surgical, and other hospital support space. Removing only the top floor would limit patient beds, but would maintain the intensity of the other hospital uses as proposed under the SUMC Project, which would result in an uneven supply of hospital services. Under the suggested variation of the alternative, the SHC Hospital would be able to perform surgeries and provide diagnostic treatments (which would occur on the first two floors) to the extent that would meet the SUMC Project sponsors' objectives; however, the SHC Hospital would not be able to care for all patients post-surgery or post-treatment.

In order to address the SUMC Project sponsors' objectives of meeting existing and future projected demand, the 110 patient rooms to be removed from the top floor of the SHC Hospital building would need to be located elsewhere. The most likely option would be to accommodate these beds in the HMP building. If the 110 beds were accommodated at the existing HMP, then the SHC would have to continue to provide shared patient rooms at the HMP, rather than renovating the building to provide single-patient rooms. The option of shared rooms at the HMP would prevent the accomplishment of several SUMC Project objectives, including those pertaining to provision of high-quality healthcare services. The existing rooms at the HMP are not sized to accommodate modern diagnostic and other medical equipment, and do not provide sufficient space for support by family members. The rooms do not meet current hospital planning guidelines. By contrast, single-patient rooms minimize risk of infection and renovation of the HMP building would enable provision of facilities designed to enhance the comfort and healing of patients.<sup>25</sup> Further, moving the patient beds from the SHC Hospital building to the HMP building would only address height impacts and would not reduce the intensity of use. If the patient beds would be accommodated in the HMP building, then this alternative would not fully constitute a "reduced intensity" alternative.

As such, in terms of reducing the intensity of the SUMC Project, this alternative would not be a superior alternative to Reduced Intensity Alternative B.

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<sup>25</sup> Stanford University Medical Center, correspondence with PBS&J, October 12, 2010.

*Reduction of SHC Hospital Beds by 25 Percent.* Another suggested variation on the Reduced Intensity Alternatives would include the reduction of SHC new hospital beds by 25 percent compared to the new beds proposed under the SUMC Project. This alternative would result in 25 percent of the SUMC Project's additional 144 beds, or 108 additional beds under this new alternative. Combining the existing beds to be retained (456 beds) plus the beds to be added (108 beds), there would be 564 beds under this alternative instead of 600 beds under the SUMC Project. In addition, a 25 percent reduction in beds at SHC Hospital would likely result in a corresponding 25 percent reduction in new SHC Clinic space to support the needs of the SHC Hospital. As suggested by the commentor, the number of beds at the Lpch would stay the same as proposed under the SUMC Project, 361 beds. Adding the total beds at the SUMC Sites, this alternative would result in a total of 925 beds, compared to 961 beds, for a reduction of 36 beds.

A reduction in 36 beds, and associated clinic space, would result in similar building mass and construction activities as the SUMC Project. Therefore, the impacts on visual quality, cultural resources, biological resources, geology, and hydrology under this variant of a reduced project alternative would be roughly the same as under the SUMC Project. The below text provides a discussion of the operational impacts for this alternative.

- *Land Use.* Land use impacts associated with this alternative would be similar to those identified for the SUMC Project. Development under this alternative would require a Comprehensive Plan Amendment and rezoning of the Main SUMC Sites, which would be adopted prior to any construction. In addition, with mitigation, this alternative would not conflict with existing Comprehensive Plan policies and would not result in adverse changes to existing or planned land use patterns. This alternative would also be compatible with adjacent land uses, would not convert farmland, and would not divide an existing community. Implementation of mitigation measures, as presented for the SUMC Project, would reduce significant land use impacts to a less-than-significant level. (S/LTS)
- *Transportation.* The operational traffic generated by this alternative would be less than that of the SUMC Project but greater than that of Reduced Intensity Alternative B. As discussed in Staff-Initiated Change 2, the SUMC Project would have less-than-significant impacts on intersection LOS with identified mitigation measures. As discussed in Staff-Initiated Change 8, Reduced Intensity Alternative B would have less-than-significant impacts on intersection LOS with identified mitigation measures. As such, like the SUMC Project and Reduced Intensity Alternative B, this alternative would have less-than-significant impacts on intersection LOS with identified mitigation measures. The SUMC Project would have significant and unavoidable impacts on Menlo Park roadways, and this alternative would also have significant and unavoidable impacts on Menlo Park roadways. As with the SUMC Project and Reduced Intensity Alternative B, this alternative would have less-than-significant impacts on freeways and parking. As with the SUMC Project and Reduced Intensity Alternative B, this alternative would have less-than-significant impacts on transit, bicycles and pedestrians, and emergency access with identified mitigation measures. (S/SU)

- *Air Quality.* The operational air pollutant emissions generated by this alternative would be less than those of the SUMC Project but greater than those of Reduced Intensity Alternative B. As discussed in Staff-Initiated Change 3, the SUMC Project would have less-than-significant cumulative impacts related to TAC and fine particulate matter emissions. Like the SUMC Project and Reduced Intensity Alternative B, this alternative would have less-than-significant impacts due to TAC and fine particulate matter emissions on a project and cumulative level. As with the SUMC Project and Reduced Intensity Alternative B, this alternative would have significant and unavoidable emissions of criteria pollutants from project operations. (S/SU)
- *Climate Change.* Like the SUMC Project and Reduced Intensity Alternative B, this alternative would achieve more than a 30 percent reduction of greenhouse gas emissions compared to the Business As Usual (BAU) scenario, but would require mitigation measures to be compliant with the individual policies of the City’s Climate Protection Plan (see Staff-Initiated Change 4). As such, this alternative would have a less than considerable contribution to global climate change with identified mitigation measures in Staff-Initiated Change 4. (S/LTS)
- *Noise.* Under this alternative, operational noise from on-site HVAC equipment, emergency generators, and loading dock/parking facility operations would be similar to the SUMC Project. That is, there would be significant noise from mechanical equipment; however, Mitigation Measure NO-4.1 would reduce the impact to less than significant. In addition, medical helicopter flyovers and heliport locations would be similar to the SUMC Project and noise from such operations would be less than significant. The motor vehicle traffic noise under the SUMC Project would be less than significant, and noise from this alternative would be slightly less than that generated by the SUMC Project, resulting in a less-than-significant impact. However, as with the SUMC Project, the Emergency Department (ED) would be relocated, resulting in a new ambulance route along Sand Hill Road. No feasible mitigation could be implemented to reduce the ambulance noise, given the urgent nature of ambulance activity, resulting in a significant and unavoidable impact. (S/SU)
- *Hazardous Materials.* Similar to the SUMC Project, operations at the new buildings under this alternative would include hazardous materials and biohazardous materials. All uses, handling, and disposal of hazardous materials are highly regulated under existing federal, State, and local regulations. As such, compliance with all regulations would ensure that impacts associated with exposure to hazardous materials during operation under this alternative would remain less than significant, as with the SUMC Project. In addition, this alternative, as with the SUMC Project, would result in a less-than-significant impact to schools, no impact related to wildfire risk, and no impact related to public airports. However, since this alternative would increase operational on-site activity compared to existing conditions, resulting in an increase in vehicular travel within the City, some emergency evacuation and response routes could be affected. Implementation of mitigation

measures, as presented for the SUMC Project, would reduce the impacts to emergency response and evacuation plans during operation to less than significant. (S/LTS)

- *Population and Housing.* As with the SUMC Project, this alternative would result in an indirect population increase associated with new visitorship and employment. The increase in employment would result in a demand for new housing units and an indirect increase in the residential population. However, the percentage of regional housing demand from this alternative would be relatively small in comparison to the rest of the region, resulting in a less-than-significant impact. In addition, the alternative would not result in the displacement of housing, as with the SUMC Project. However, like the SUMC Project, this alternative would increase the jobs to employed residents ratio above existing conditions. Nonetheless, this impact is not, by itself, considered an environmental impact and would only result in secondary environmental impacts on air quality. Therefore, similar to the SUMC Project, this alternative would result in less-than-significant population and housing impacts. (LTS)
- *Public Services.* This alternative, like the SUMC Project, would result in an increased demand in fire services, police services, and parks due to increased employment and on-site activity. However, the increased demand for services would not be large enough to trigger construction of new or expanded facilities that could adversely affect the environment. Although this alternative would not directly generate students, it would indirectly generate student demand from induced housing caused by increased employment on the SUMC Sites. Nonetheless, this indirect impact would be minor and would be mitigated by payment of the school impact fees established by SB 50. As such, this alternative would result in less-than-significant impacts to public services. (LTS)
- *Utilities.* As with the SUMC Project, this alternative would not cause the existing water supply facilities to experience substantial physical deterioration. Although this alternative would increase site activity compared to existing conditions, the City's existing water transmission facilities have adequate capacity available to serve the increased demands. As such, operation of this alternative would result in a less-than-significant impact related to water demand. In addition, wastewater and solid waste generated by this alternative would be within the capacity of the existing system and would not be a significant increase over existing conditions compared to the rest of the system. Although this alternative would consume less energy than the SUMC Project, the demand on energy has the potential to increase from current conditions because of the increase in square footage and on-site activity. Like the SUMC Project, this increase would require the installation of additional electrical feeder cables, which would occur within the footprint of this alternative. As such, wastewater and solid waste generation and energy demand would be less than significant, as with the SUMC Project. (S/LTS)

**Tree Preservation Alternative.** As described on page 5-15 through 5-22 of the Draft EIR, the Tree Preservation Alternative would seek to avoid the significant and unavoidable impact from the removal of Protected Trees, in particular, Protected Trees that are considered both biologically and aesthetically significant. The Tree Preservation Alternative would have the same development at the LPCH and the

Hoover Pavilion Site as the proposed SUMC Project. In addition, the Tree Preservation Alternative would include the same square footages for the SHC Hospital and clinic/medical office buildings and the SoM FIM buildings as under the SUMC Project; however, these site plans and building footprints would be modified slightly to avoid the removal of the most visually prominent Protected Trees. The square footage and programmatic functions planned for Hospital Module Six of the SHC Hospital building would be incorporated into the remaining five SHC Hospital modules, resulting in no Protected Tree removal at the Kaplan Lawn. In addition, the FIM 1 building would be redesigned to save as many Protected Trees as possible in this area.

The comments submitted that suggest edits or variations to the Tree Preservation Alternative as proposed in the Draft EIR include footprint reductions and site plan modifications to preserve additional Protected Trees, as discussed in more detail below. In addition, several comments focus on different aspects the Tree Preservation Alternative; however, these comments are addressed in Sections 4 and 5 of this document, Written Comments and Responses and Oral Comments and Responses, respectively. Additionally, changes have been made to correct Tree Preservation Alternative tree counts and clarify the mitigation measures, which are outlined in Staff-Initiated Change 6. Also, the figure that depicts the Tree Preservation Alternative (Figure 5-1) on page 5-19 of the Draft EIR has been replaced by Figure 5-1a through d, as included in Staff-Initiated Change 6.

*Further Reduction of Building Footprints.* The building footprints under the Tree Preservation Alternative have been reduced to avoid the most visually prominent Protected Trees. None of the aesthetic tree resources at the SHC site would be removed under the Tree Preservation Alternative. The programs at the base of the new SHC Hospital building must be located on the first and second floors and require contiguous space in order to function properly. The ED, imaging, and the interventional platform (operating rooms and prep and recovery spaces) would be located in a podium with bed modules above them. The Tree Preservation Alternative would preserve the Protected Trees around the perimeter of the SHC Hospital building, but the removal of the trees in interior locations would not be able to be avoided due to the programmatic requirements of the new SHC Hospital building for contiguous space and a podium supporting upper floors.<sup>26</sup> To the extent the size of the footprint would be reduced, please see the analysis of the Reduced Intensity Alternatives.

*Site Plan Modifications at the FIM Site.* One comment suggests moving the footprints of the FIM 2 and FIM 3 buildings closer together so that the FIM 1 building could move further south (thereby avoiding some Protected Trees). The Stone Building complex is currently located at the site of the proposed FIM 2 and FIM 3 buildings. The underground utility corridor to the north of the existing Edwards Building (a SoM wing of the Stone Building complex) would remain in its existing location under the SUMC Project and would be between the FIM 1 and FIM 2 buildings. Relocation of the FIM 1 building to the south would disrupt this utility corridor. In addition, the FIM 1 building is required to be a certain size and width due to the lab modules and the lab support spaces. Therefore,

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<sup>26</sup> Mark Tortorich, Vice President, Design and Construction, Stanford University Medical Center, Planning and Transportation Commission Hearing, July 7, 2010.

even if the FIM 1 building were reduced in length to avoid Protected Trees, it would not be feasible to reduce the width.<sup>27</sup>

Nonetheless, even if the requested changes were made to the FIM building footprints, this would not necessarily reduce the impacts to Protected Trees. The only Protected Trees in the FIM site are on the FIM 1 site, which is the only available parcel for the first increment of the SoM construction. In order for the SoM's phased construction approach to work, the initial FIM 1 building needs to accommodate enough square footage to house the programs currently occupying the Edwards building. After the FIM 1 building is constructed and occupied, the Edwards building would be demolished for the construction of the FIM 2 building. Therefore, the FIM 1 building cannot be reduced to a size smaller than the Edwards building nor can it be located within the footprint of the existing Stone Building Complex.<sup>28</sup> Additionally, the current alterations to the FIM 1 building recommended under the Tree Preservation Alternative would preserve the largest and most significant trees in this area. Therefore, further modifications to the FIM 1 footprint would not necessarily change the number of trees to be removed or to remain and would only improve the survivability of potentially one tree.<sup>29</sup>

**Historic Preservation Alternative.** As stated on page 5-22 of the Draft EIR, the Historic Preservation Alternative would preserve all of the essential historic aspects needed to maintain the eligibility of the Stone Building complex for listing on the California Register of Historic Resources (CRHR). This alternative would seek to avoid the SUMC Project's significant and unavoidable impact resulting from demolition of the Stone Building complex (see Section 3.8, Cultural Resources). In addition to the retention of the Stone Building complex itself, the Historic Preservation Alternative would preserve the historic integrity of Pasteur Drive and its landscaping, which serve as the main approach to the building. The Stone Building complex would be structurally retrofitted and reused as clinics/medical offices and for the SoM.

Several comments were made on the Draft EIR that requested the retention of the Stone Building complex and the reuse of this building for uses other than medical offices/clinics. These suggestions include use for office space, community physicians, and a retirement facility, as explained in more detail below.

*Office Space.* The reuse of the Stone Building complex as office space would not accomplish the SUMC Project objectives since there is limited demand for this use. The SUMC Project already includes a small amount of office space within the proposed clinic and medical office buildings. However, there is no programmatic need to fill the 856,178-square-foot Stone Building complex with offices since the SUMC has already moved most administrative functions to offsite locations. The SUMC Project does not include plans to bring the administrative uses back to the SUMC Sites since this action is not necessary in order for the SUMC to efficiently function. Therefore, the use of the

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<sup>27</sup> Rich Tangori, Stanford School of Medicine, Planning and Transportation Commission Hearing, July 7, 2010.

<sup>28</sup> Stanford University Medical Center, correspondence with PBS&J, November 1, 2010.

<sup>29</sup> Dave Dockter, Planning Arborist, City of Palo Alto, Planning and Transportation Commission Hearing, July 7, 2010.



Stone Building complex as office space would not address the SUMC Project's programmatic needs for new clinic and research square footage.

In addition, use of the Stone Building complex solely for office space would necessitate construction of more than 800,000 net new square feet to house clinic and research facilities. Under this suggested alternative, the 429,000 square feet of new clinic facilities for the SHC and the 414,977 square feet of new research facilities for the SoM that are proposed to replace the Stone Building complex under the SUMC Project would need to be constructed elsewhere. This increase in additional building mass would impact the existing visual quality of the Main SUMC Site or nearby sites, increase impervious surfaces, increase energy use, and increase traffic due to additional trips by office workers above and beyond the trips from the SUMC Project components.<sup>30</sup>

*Community Physicians.* There is not a high demand for reuse of the Stone Building complex as space for community physicians. Under the SUMC Project, community physicians occupying a 40,100-square-foot building at 1101 Welch Road would be offered space at the existing Hoover Pavilion. In addition, a new 60,000-square-foot building on the Hoover Pavilion Site is proposed for use by community physicians and SHC clinics. Combined, these SUMC Project components would fill only about 100,000 square feet of the 856,178-square-foot Stone Building complex. Additionally, if the Stone Building complex were used solely for community physician uses (which, as explained, is not possible at this time), then the clinic and research uses proposed to be constructed at the Stone Building complex site under the SUMC Project would need to be constructed elsewhere. The new 60,000-square-foot building at the Hoover Pavilion Site could be used exclusively for clinics; however, there would still be a programmatic need for an additional 369,000 square feet of new SHC clinic space and 414,977 square feet of new SoM research facilities. This increase in additional building mass would impact the existing visual quality at the SUMC or nearby sites, increase impervious surfaces, increase energy use, and increase traffic due to additional trips by community physicians relocating from sites elsewhere in Palo Alto or Menlo Park to the SUMC.<sup>31</sup>

*Retirement Facility.* The reuse of the Stone Building complex as a retirement facility would not be compatible with the existing land use designation. The Main SUMC Site would be zoned as a Hospital District and its land use designation would continue to be Major Institution/Special Facilities. However, retirement facilities are generally in areas with a land use designation of Multiple Family Residential. As such, since the Hospital District would only allow for hospital-related uses, an assisted living facility would not be permitted at this site, under the proposed Hospital District or the existing Comprehensive Plan designation. Further zoning changes and Comprehensive Plan amendments would need to be made in order to allow a retirement facility at the existing Stone Building complex.

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<sup>30</sup> Peterson, Michael J., Vice President, Special Projects, Stanford Hospital and Clinics, Letter to Steven Turner, Advance Planning Manager, City of Palo Alto Department of Planning and Community Environment, July 27, 2010.

<sup>31</sup> Peterson, Michael J., Vice President, Special Projects, Stanford Hospital and Clinics, Letter to Steven Turner, Advance Planning Manager, City of Palo Alto Department of Planning and Community Environment, July 27, 2010.

If assisted living uses were to be implemented at the Stone Building complex, the 429,000 square feet of new clinic facilities for the SHC and the 414,977 square feet of new research facilities for the SoM would need to be constructed elsewhere, resulting in significant impacts.

In addition to the feasibility and environmental concerns addressed above, the use of the Stone Building complex for offices, community physicians, and retirement facilities would be detrimental to the functional site relationships at the SUMC Sites. The Stone Building complex is centrally located, adjacent to the portion of the SHC Hospital to be retained, as well as the new SHC Hospital. To operate a functional hospital complex, the site should be used for outpatient clinics that rely on proximity to the SHC Hospital. Research facilities should also be proximate to the SHC Hospital in order to promote synergies between the researchers and physicians. The community physicians who would be located at the Hoover Pavilion Site do not need to be directly adjacent to the SHC Hospital. Administrative staff can be located even farther away, as demonstrated by the current operations. However, the uses at the proposed SHC clinics/medical office building need to be located in close proximity to the SHC Hospital.<sup>32</sup> As such, office, community physician, and retirement facility uses at the Stone Building complex would hinder the functionality of the SUMC Project.

**Village Concept Alternative.** As explained on pages 5-26 through 5-38 of the Draft EIR, the Village Concept Alternative would include the SUMC Project as proposed and would provide opportunities to enhance the SUMC Project by creating a more walkable, bikeable, mixed-use, transit-oriented, and well-connected urban environment. The Village Concept Alternative would recommend that 490 previously approved but not yet constructed housing units along Quarry Road and Pasteur Drive, on Stanford lands, be below market rate units that would be dedicated for occupancy by SUMC Project employees. In addition, under the City's recommendation, these housing units would be constructed within two to four years after the issuance of building permits for the SUMC Project. The Village Concept Alternative would also include specific pedestrian linkages between the SUMC Project, the Stanford Shopping Center, Stanford University, the PAITS, and downtown, with corresponding urban design recommendations.

Several comments were submitted that either express support or opposition to this alternative; however, these comments pertain to the merit of the Village Concept Alternative. Please refer to Master Response 9 for a discussion of merit in the CEQA process. Additionally, for comments regarding trip generation and LOS analysis and the Village Concept Alternative, please see Staff-Initiated Change 8, and for comments regarding the climate change analysis, please see Staff-Initiated Change 4. For other individual responses pertaining to the Village Concept Alternative, please refer to Sections 4 and 5 of this document, Written Comments and Responses and Oral Comments and Responses, respectively.

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<sup>32</sup> Peterson, Michael J., Vice President, Special Projects, Stanford Hospital and Clinics, Letter to Steven Turner, Advance Planning Manager, City of Palo Alto Department of Planning and Community Environment, July 27, 2010.

## **Suggested Additional Alternatives**

Comments were submitted that included additional alternatives that were believed by the commentors to not have been considered in the Draft EIR. Below is a list of these potential alternatives.

**Retention of Existing Hoover Pavilion Uses.** A comment was submitted that suggested an alternative that would retain the existing intensity at the Hoover Pavilion Site. As stated on page 5-5 of the Draft EIR, Alternatives, No Project Alternative A would not include construction at the Hoover Pavilion Site and the interior of the existing Hoover Pavilion would not need to be renovated. In addition, as outlined on page 5-7 of the Draft EIR, the existing buildings and storage sheds on the Hoover Pavilion Site would be preserved under No Project Alternative B. Therefore, the Draft EIR did consider and analyze an alternative that would not increase intensity at the Hoover Pavilion Site.

The components of the alternatives can be mixed and matched in numerous combinations. If the decision-makers were to decide that effects from development on the Hoover Pavilion Site were not sufficiently mitigated, they could deny the medical office building or parking structure components at the Hoover Pavilion Site. It should be noted, however, that both components support the programmatic functions of the SUMC Project. The parking structure at the Hoover Pavilion Site would enable demolition of the existing Parking Structure III, upon which the new SHC Hospital building would be constructed. The medical office building at the Hoover Pavilion Site would enable community physicians to continue to have access to space that is reasonably proximate to the expanded hospital buildings. Removing either or both of these components would hinder accomplishment of the SUMC Project objectives.

**Intensification of Development Along Welch Road.** A comment was submitted that suggested the SUMC Project sponsors consider the intensification of the outboard portion of Welch Road instead of developing at the Hoover Pavilion Site. Under this alternative, some or all of the clinic/medical office square footage at the Hoover Pavilion Site would be alternatively constructed along Welch Road, which is zoned as Medical Office Research (MOR). According to the commentor, this would increase the proximity of the clinic/medical office uses to the SHC and LPCH hospitals, reducing transportation and circulation impacts. Additionally, by limiting construction at the Hoover Pavilion Site, visual or cultural resource impacts on the Hoover Pavilion (as described in the Draft EIR and Staff-Initiated Change 5) would be reduced.

However, the parcels outboard of Welch Road are not included in the SUMC Sites and construction of SUMC Project buildings in these areas would create additional land use issues. Based on the existing development in this area, the zoning for these parcels would only allow the construction of 73,562 square feet of additional development up to the Durand Way extension (parcels west of Durand Way are not included in this calculation due to the length of their lease terms). Development beyond 73,562 square feet would exceed the floor area ratio (FAR) of 0.5 for MOR zoning. It is unlikely that this exceedance would be permitted since the City recently reviewed and established new requirements for the MOR zone and retained the 0.5 FAR limit.

The new clinic/medical office building at the Hoover Pavilion Site would consist of approximately 60,000 square feet, which would be within the 73,562 square-foot development cap. However, the feasibility of early redevelopment of this magnitude, which would have to occur at all sites to yield the approximate square footage of the proposed clinic/medical office building, has not been evaluated in detail by the SUMC Project sponsors. In general, construction of multiple, smaller expansion projects at existing clinics and medical offices would be more disruptive to ongoing healthcare operations than construction of a new medical clinic at the Hoover Pavilion Site. In addition, the site with the greatest development potential (777 Welch Road) is currently in a long-term lease and would not be able to dedicate its land to the SUMC Project. Additionally, expansion of the building at 800 Welch Road has been proposed by the SoM, separately from the SUMC Project. However, the clinic/medical office building proposed at the Hoover Pavilion Site would be affiliated with the SHC, rather than the SoM.

Finally, the development proposed at the Hoover Pavilion Site would include a parking garage with over 1,000 parking spaces that would serve the buildings at the Hoover Pavilion Site and at the Main SUMC Site. Although the clinic/medical office building could potentially be accommodated outboard of Welch Road, there is not available space in this area to provide a corresponding amount of parking. As such, if no additional development would occur at the Hoover Pavilion Site, the SUMC Project would not be able to provide adequate parking for patients, visitors, and employees.

It is important to note that the development of the clinic/medical office building along Welch Road, rather than at the Hoover Pavilion Site, would not reduce the overall environmental impacts of the SUMC Project, compared with development at the Hoover Pavilion Site. Since the development at the Hoover Pavilion Site would mainly house community physicians and non-Stanford health providers, whose primary practice would be conducted at their offices, transportation and associated air quality and climate change impacts for such uses would be lessened by the Hoover Pavilion Site's greater proximity to public transportation, compared with the outboard portion of Welch Road. In addition, construction at the Hoover Pavilion Site would result in fewer noise impacts, lower localized concentrations of pollutants, and health risks to sensitive receptors (hospital patients) than construction outboard of Welch Road, which is located directly adjacent to the Main SUMC Site.

Due to the spatial constraints, land use issues, and other environmental impacts, development at the outboard portion of Welch Road will not be considered for further analysis. As such, this will not be included as an alternative to the SUMC Project.

**Hotel.** Commentors suggest the construction of a hotel at or in the vicinity of the SUMC Sites. According to Section 15126.6(a) of the CEQA Guidelines, an alternative shall avoid or substantially lessen one or more of the significant effects of the project. The Draft EIR did not identify any impacts that would be reduced with the inclusion of a hotel; therefore, analysis of an alternative involving the development of a hotel would not be warranted under CEQA. Additionally, the construction of a hotel would result in new or more severe significant impacts. Therefore, since a hotel component of the alternatives would result in more impacts, rather than lessen them, inclusion of a hotel is not warranted.

A commentor also specifically requests the construction of a hotel at the Hoover Pavilion Site. The land at the Hoover Pavilion Site is zoned as a Public Facilities (PF) zoning district. As stated on page 2-9 of the Draft EIR, the PF district allows development of governmental, public utility, educational, community service, and/or recreational facilities. The conditional uses for this zoning district are also listed on page 2-9. While the SUMC Project would include a zoning change for the Hoover Pavilion Site, the uses allowed by the new Hospital District Zoning would be similar to the currently allowed uses. Commencement of the process to consider a new-hotel use would require City Council approval.

## **Master Response 9: Merits of the SUMC Project and Alternatives**

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### **Introduction**

This Master Response 9 pertains to Comments 3.1, 8.1, 22.76, 22.77, 22.81, 23.2, 25.1, 28.4, 28.6, 29.2, 35.27, 39.1, 45.1, 45.2, 45.4, 45.8, 51.1, 56.3, 57.2, 60.1, 61.1, 62.1, 63.1, PTC1.4, PTC1.35, PTC2.28, PTC4.37, PTC6.1, PTC6.2, PTC6.4, PTC6.26, PTC6.44, PTC6.45, PTC6.48, PTC6.50, PTC6.63, PTC6.64, PTC6.86, PTC6.88, PTC6.92, CC1.6, CC1.7, CC1.8, CC1.10, CC1.12, CC1.13, CC1.14, CC1.15, CC1.16, CC1.17, CC1.29, CC2.6, CC2.33, CC3.22, CC3.23, CC3.24, CC3.25, CC3.31, CC3.37, CC3.38, CC3.39, CC3.40, CC3.42, CC3.64, CC3.72, CC4.4, CC5.13, CC5.14, CC5.15, CC5.16, CC5.17, CC5.18, CC5.19, CC5.20, CC5.21, CC5.22, CC5.23, CC5.24, CC5.25, CC5.26, CC5.28, HRB1.3, HRB1.5, HRB1.7, HRB1.8, and HRB1.10.

A number of comments pertain to project merit rather than adequacy of the Draft EIR. Master Response 9 explains that the EIR does not address project merits and that the merits of the SUMC Project and its alternatives will be considered by the City in its decision process.

### **Project Merits**

The above-listed comments either express support of or opposition to the SUMC Project. These comments are important for the public discourse on the merits of the SUMC Project and whether it is viewed as an asset to the City. However, this Responses to Comments volume addresses comments on the adequacy of the EIR analysis and the SUMC Project's compliance with CEQA. The Draft EIR was prepared to fulfill the City's obligation under CEQA to identify the significant and potentially significant environmental impacts of the SUMC Project, regardless of the SUMC Project's merits.

Comments were also received that pertain to the merits of the proposed alternatives. CEQA Guidelines Section 15126.6(c) states that an EIR must describe a range of reasonable alternatives to the project that "could feasibly attain most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects." Under this requirement, a No Project Alternative must be identified and analyzed; CEQA defines the No Project Alternative as the circumstance that would occur should the proposed project not be approved. Under CEQA Guidelines Section 15126.6(e)(1), "the purpose of describing and analyzing a no project alternative is to allow decisionmakers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." The No Project Alternative analysis should consider what would reasonably be expected to occur in the foreseeable future should the proposed project not occur.

Per CEQA requirements, Section 5 of the Draft EIR, Alternatives, discusses and analyzes a range of project alternatives including two No Project Alternatives, two Reduced Project Alternatives, and three full-project alternatives. The Draft EIR does not consider the merits of each of the alternatives, but whether the alternatives are potentially feasible, meet the SUMC Project objectives, and would reduce the significant and unavoidable impacts of the SUMC Project. However, the merits of both the SUMC Project and/or its alternatives will be considered by the City in its decision-making process. The merit-related issues identified by all commentors will be considered as the City takes action on the SUMC Project.

## **Master Response 10: Response to Comments Not Applicable to CEQA or to the SUMC Project**

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### **Introduction**

This Master Response 10 pertains to Comments 3.3, 3a.4, 7.13, 7.17, 8.31, 9.7, 10.6, 20.6, 20.18, 35.13, 35.26, 35.28, 35.29, 42.1, 42.3, 43.5, 45.3, 46.1, 46.3, 47.1, 49.1, 50.1, 52.1, 53.2, 54.1, 54.2, 54.3, 56.2, PTC1.1, PTC1.5, PTC1.6, PTC1.21, PTC1.32, PTC1.33, PTC1.61, PTC1.74, PTC2.12, PTC2.13, PTC2.16, PTC2.17, PTC2.18, PTC2.19, PTC2.20, PTC2.27, PTC2.33, PTC4.24, PTC4.44, PTC4.60, PTC5.25, PTC5.37, PTC6.18, PTC6.32, PTC6.33, PTC6.43, PTC6.46, PTC6.48, PTC6.51, PTC6.71, CC2.10, CC2.13, CC2.16, CC2.17, CC3.21, CC3.36, CC3.39, CC3.45, CC3.48, CC3.51, CC5.28, CC5.29, CC5.33, CC5.35, CC5.41, CC5.43, CC5.44, ARB1.8, and ARB1.13.

A number of comments pertain to issues that are outside the scope of CEQA such as fiscal and social impacts, the design of the SUMC Project, and the Development Agreement. Master Response 10 explains that, to the extent they do not pertain to physical changes in the environment, the EIR does not address these issues.

### **Response to Comments Not Applicable to CEQA or to the SUMC Project**

The above-listed comments do not pertain to CEQA issues or, in some cases, the SUMC Project in general. These comments do not address the adequacy of the EIR analysis. Under CEQA Guidelines Section 15093, a lead agency must balance consideration of adverse environmental impacts with economic, legal, social, technological, or other benefits in deciding whether to approve a project. A lead agency has the authority to approve a project with significant and unavoidable impacts if it finds the benefits of the project exceed or outweigh its environmental costs. When a lead agency approves a project in spite of unavoidable adverse impacts, it must prepare a Statement of Overriding Considerations outlining its justification. However, the consideration of issues other than environmental impacts is not required to be analyzed in the EIR process under CEQA.

**Fiscal and Social Impacts of the SUMC Project.** Per CEQA Guidelines Section 15131, the focus of the EIR is on the physical environmental effects rather than social or economic issues, except where social or economic issues are known to have demonstrable physical impacts. Fiscal issues and

community benefits from the SUMC Project are topics that will be considered by the City Council and the Commission during the decision-making process.

**SUMC Project Design.** The Draft EIR analyzes whether the design features of the SUMC Project as a whole would impact the visual environment and surrounding areas, but does not consider specific design features that would not have a substantial physical impact on the environment. Therefore, comments pertaining to alterations to SUMC Project building design or site layout that would not lessen or reduce impacts identified in the Draft EIR are better addressed during the architectural review process than in the EIR.

As stated on page 3.3-27 of the Draft EIR, while the SUMC Project design is still in progress and could continue to be altered, the EIR analysis addresses the site plans presented in the SUMC Application, as originally submitted in June 2007 and last amended in March 2010. This approach is adequate and typical for CEQA. Refinements in project design, such as those being suggested, are being addressed through the City's Architectural Review process. As stated on page 3.3-27 of the Draft EIR, as required by Municipal Code Sections 2.21 and 18.76.020(b), the SUMC Project has undergone preliminary Architectural Review and the SUMC Project plans are currently being considered by the Architectural Review Board (ARB) as part of the decision-making process.

Comments pertaining to design have been addressed in Sections 4 and 5, Written Comments and Responses and Oral Comments and Responses, respectively. It should also be noted that if the ARB, Planning and Transportation Commission, or City Council makes changes to the SUMC Project that would result in new or substantially more severe impacts, a supplemental environmental analysis will need to be prepared by the City. No such changes are anticipated at this time.

**Development Agreement.** Development Agreements are negotiated contracts between a project proponent/applicant and the City. A Development Agreement is typically sought to ensure that local regulations pertaining to a project will not change over time. As explained and listed on page 2-27 of the Draft EIR, a Development Agreement would be approved as part of the SUMC Project if the terms of such an agreement can be mutually agreed upon. The Supplemental Development Agreement Terms are included on pages 2-27 through 2-28 of the Draft EIR.

The terms under the Development Agreement under negotiation also focus on financial programs, fees to be paid by the SUMC Project sponsors, and community benefits. As discussed above, fiscal and social impacts are not considered an environmental impact. If the Development Agreement included a program that would have environmental consequences beyond those identified in the EIR, then the impacts from this program or term could require mitigation and/or further environmental review. It was determined in the Draft EIR review process that none of the terms of the Development Agreement under discussion at that time would have an impact on the environment. Please refer to Master Response 12 for a complete description of the Development Agreement terms and process.

## **Master Response 11: City Process for Reviewing and Deciding on the SUMC Project**

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### **Introduction**

Master Response 11 addresses Comments 9.7, 12.1, 12.8, 20.1, 22.75, 23.3, 29.1, 35.4, 35.21, 35.30, 39.1, 44.4, 53.2, 57.1, 60.2, 60.3, 61.3, PTC1.13, PTC1.35, PTC1.55, PTC1.58, PTC1.71, PTC1.78, PTC1.80, PTC2.6, PTC2.24, PTC3.13, PTC4.44, PTC6.5, PTC6.8, PTC6.10, PTC6.13, PTC6.17, PTC6.47, PTC6.68, PTC6.70, PTC6.72, PTC6.84, PTC6.85, CC1.2, CC1.5, CC1.18, CC1.22, CC1.30, CC2.11, CC2.30, CC2.34, CC3.32, CC2.36, CC3.75, CC3.76, CC4.15, CC5.7, ARB1.9, and ARB1.18.

Several commentors have concerns and questions about the general review and approval process of the SUMC Project. These comments pertain to the process of certification and entitlements and not to the adequacy of the Draft EIR. The Draft EIR is intended to review and propose mitigations to the SUMC Project as proposed, not to determine whether the various entitlements and designs should be approved. Nonetheless, for informational purposes only, the major aspects of the City's review process of the SUMC Project and the next steps to occur during the EIR review are discussed below.

### **City Process for Review and Deciding on the SUMC Project**

Before the SUMC Project can be approved by City Council, the SUMC Project must fulfill several requirements for review. The first step is to comply with the California Environmental Quality Act (CEQA), which is the purpose of this document. Another action that needs to occur before approval of the SUMC Project is design review of the SUMC Project by the Architectural Review Board (ARB) and a preliminary review by the Historic Resources Board (HRB). Finally, the SUMC Project must adhere to the zoning and entitlement process. These pre-approval City processes are explained in further detail below. However, it is important to note that although these processes are considered separate, many steps can overlap and multiple processes could be certified or approved at the same time (e.g., the EIR may be certified the same night that the project approvals are made).

**California Environmental Quality Act.** The first major aspect of the City's review process of the SUMC Project is the environmental review, which is mandated under the CEQA. As of the publication of this document, the majority of environmental review phases have been completed, including the release of the Notice of Preparation (NOP), the release of the Draft EIR, public comment periods on the NOP and the Draft EIR, and the release of the Final EIR. Below is an explanation of each of these phases plus the next steps in the CEQA process.

*Notice of Preparation.* The City distributed an NOP on August 22, 2007, announcing its intent to prepare and distribute an EIR analyzing the impacts of the SUMC Project. As indicated in the NOP, the City provided a 41-day comment period from August 22 to October 1, 2007 (this comment period was longer than the 30 days required by CEQA). In response to the NOP, public agencies and private individuals submitted comment letters to the City. In addition, the City received oral comments at the Planning and Transportation Commission (Commission) on September 5, 2007 and at the City Council



scoping session on September 24, 2007. The comments received during the NOP public review period were considered and analyzed in the Draft EIR.

*Draft EIR.* The Draft EIR provides an analysis of physical impacts anticipated to result from the SUMC Project. Where significant impacts are identified, the Draft EIR recommends feasible mitigation measures to reduce or eliminate the significant impacts and identifies which significant impacts are unavoidable. Alternatives to the SUMC Project are also presented in Section 5 of the document. The Draft EIR is considered a draft under CEQA since it must be reviewed and commented upon by public agencies, organizations, and individuals before being finalized. The Draft EIR for the SUMC Project was released on May 20, 2010 for a 69-day review period, which closed on July 27, 2010.

*Certification of the EIR.* The City of Palo Alto City Council must ultimately certify that it has reviewed and considered the information in the EIR and that the EIR has been completed in conformity with the requirements of CEQA. As required by CEQA Guidelines Section 15091, no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant effects unless findings are made.

During the certification process, the Commission could make recommendations regarding the SUMC Project and its alternatives. After consideration of the Commission's recommendations, the City Council will make certain findings regarding the conclusions outlined in the EIR. Those findings require the City Council to decide whether there are any feasible mitigation measures that would reduce impacts identified in the EIR. The City Council could also make a finding as to whether there are feasible alternatives that would reduce the identified impacts. It is at the discretion of the City Council whether to approve portions of the proposed alternatives that would mitigate or avoid significant environmental impacts, while rejecting the alternatives that are deemed to be infeasible. As such, the Final SUMC Project could be the SUMC Project as proposed in the Draft EIR, an alternative to the SUMC Project, or a combination of the SUMC Project and different alternatives.

*Mitigation Monitoring and Reporting Program.* As explained on page 1-5 of the Draft EIR, Introduction, if the City Council decides to approve the SUMC Project, then the City Council must adopt a Mitigation Monitoring and Reporting Program (MMRP). Pursuant to CEQA Guidelines Section 15097, an MMRP is a mechanism used for the monitoring and reporting of revisions to the project or conditions of approval that the public agency has required as mitigation measures to lessen or avoid significant environmental effects. The City can conduct the reporting or monitoring, or it can delegate the responsibilities to another public agency or private entity that accepts the delegation.

The SUMC Project MMRP would identify: the specific monitoring action that would occur, the various City departments or other entities that would oversee the completion of the measures, and a timeline for when these measures would be implemented. The responsible departments would ensure that due diligence is carried out during implementation of the measures. Execution of the MMRP would reduce the severity or eliminate the identified significant impacts.

*Statement of Overriding Considerations.* If the City Council decides to approve the SUMC Project, and if the SUMC Project as approved would result in significant impacts that could not be mitigated to

less-than-significant levels, then the City Council must indicate that any such unavoidable impacts are acceptable due to overriding considerations. Pursuant to CEQA Guidelines Section 15093, a “Statement of Overriding Considerations” would balance the benefits of the SUMC Project against its unavoidable environmental effects. If the City Council finds that the benefits of the SUMC Project outweigh the impacts, then the adverse environmental effects may be considered acceptable.

*Conditions of Approval.* The Conditions of Approval would incorporate the feasible mitigation measures identified in the EIR and would identify payment responsibility for each required mitigation measure. The SUMC Project sponsors would be required to fund all mitigation measures, as identified in the Conditions of Approval, which would be developed during the approval stage of the SUMC Project process.

**Design Review.** In conjunction with the CEQA review process, the proposed design and site plans of the SUMC Project are under review by the ARB and the HRB, as explained below.

*Architectural Review Board.* As stated on pages 3.3-18 through 3.3-19 of the Draft EIR, the Palo Alto Architectural Review process assesses the design of all proposed construction, changes, and additions to commercial, industrial, and multiple-family projects in the City. The process requires a recommendation from the ARB, which is composed of five members, at least three of whom are architects, landscape architects, building designers, or other design professionals. Based on the recommendation of the ARB, architectural approval then is made by the Director of Planning and Community Environment or by the City Council. Architectural review occurs before building permits are issued, and ensures that new development is compatible with the surrounding neighborhood and environment. The ARB weighs several design considerations when reviewing a project, promotes orderly and harmonious development of the City, encourages the attainment of the most desirable use of land and improvements, enhances the desirability of living conditions in adjacent areas, and promotes visual environments that are of high aesthetic quality.<sup>33</sup>

The ARB hearing that was held during the Draft EIR public review period on July 1, 2010 is included as hearing transcript ARB1 in Section 5, Responses to Hearing Comments. The ARB comments relating to the analysis in the Draft EIR have been addressed in Responses ARB1 and have been forwarded to the City Council for consideration.

Mitigation for visual quality impacts is proposed through the ARB process. Final review and action will be conducted by the City Council. The schedule has been updated to clarify that the final ARB recommendation comes after the publication of the Final EIR and the City Council will review the final ARB recommendations. The City Council will take the final action on entitlements including architectural review.

The ARB is reviewing the SUMC Project as submitted and amended by the SUMC Project sponsors and is in the process of making recommendations on the SUMC Project as presented to them. Once

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<sup>33</sup> City of Palo Alto, “Architectural Review Board (ARB),” website accessed on October 27, 2010 at: <http://www.cityofpaloalto.org/knowzone/agendas/architectural.asp>.

the EIR is certified, the City Council will deny the project approvals or decide on a project that is either the SUMC Project as proposed, an alternative that is presented in the Draft EIR, or a mix of alternatives. If alternate site plans are selected, then the updated SUMC Project would be required to undergo the Architectural Review process again. Final Architectural Review approvals will not be granted by the City Council until after (or at the same meeting as) the entitlement review process, which is discussed in more detail, below.

It is important to note that ARB will not make decisions on the SUMC Project, but rather will propose recommendations to the City Council. The City Council will consider architectural review for final approval.

*Historic Resources Board.* The HRB is composed of seven members who have been appointed by the City Council and have demonstrated interest in and knowledge of history, architecture, or historic preservation. Additionally, one member must be an owner or occupant of a category one or two historic structure, or of a structure in an historic district; three members must be architects, landscape architects, building designers, or other design professionals; and at least one member must possess academic education or practical experience in history or a related field.

The responsibilities of the HRB include reviewing historic buildings and making recommendations to the ARB and City Council. The HRB makes recommendations to the ARB on proposed exterior changes to historic commercial and multiple-family buildings that are on the City's Historic Inventory List. In addition, the HRB makes recommendations to City Council on proposed additions to and reclassifications of existing historic buildings that on the Historic Inventory List and also performs other functions as delegated from City Council.<sup>34</sup>

However, the Historic Preservation Ordinance of the City of Palo Alto does not allow the HRB to make recommendations on buildings that are not included on the City's Historic Inventory List. None of the buildings at the SUMC Sites, including Hoover Pavilion and the Stone Building complex, are included on the City's Historic Inventory. Although the Hoover Pavilion and the Stone Building complex are considered historic resources for the purposes of CEQA, the HRB cannot formally make recommendations regarding the SUMC Project's proposed demolitions and renovations.

Nonetheless, the HRB has informally reviewed the SUMC Project since the Hoover Pavilion and the Stone Building complex are eligible for listing under the California Register of Historic Resources (CRHR). Since these buildings are eligible for listing, they are considered historic resources under CEQA and therefore, the impacts of the SUMC Project on these buildings are analyzed in the Draft EIR. This analysis has been reviewed by the HRB, in that the HRB is a certified review board as part of the Certified Local Government agreement between the State of California and City of Palo Alto. In particular, the HRB has focused on the Hoover Pavilion, which would be preserved under the SUMC Project. Since the SUMC Project involves renovations of the Hoover Pavilion façade and the

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<sup>34</sup> City of Palo Alto, "Historic Resources Board," website accessed on October 27, 2010 at: <http://www.cityofpaloalto.org/knowzone/agendas/historic/default.asp>.

contextual relationships between Hoover Pavilion and the proposed new structures, it is appropriate for the HRB to provide their historic review recommendation to the ARB for their informal consideration.

The HRB has already provided preliminary comments on the SUMC Project and the Draft EIR at a public hearing on July 7, 2010 (see hearing transcript HRB1 in Section 5 of this document, Oral Comments and Responses). The HRB comments relating to the analysis in the Draft EIR have been addressed in Responses HRB1. It is expected that the HRB will further review the proposed actions at the Hoover Pavilion Site in February 2011. The comments from the HRB will be transmitted to the ARB prior to the ARB's formal review of the Hoover Pavilion Site in February 2011. The comments from the HRB and recommendation from the ARB will then be sent to the City Council for review, which is expected to occur in April 2011.

**Zoning and Entitlement Process.** This stage of the approval process of the SUMC Project involves zoning amendments, the Comprehensive Plan Amendments, Area Plan, the Development Agreement, Conditional Use Permit, and Annexation. This stage of the SUMC Project review process could occur after certification of the EIR and preliminary design review by the ARB and the HRB, or be approved at the same time as EIR certification.

*Zoning.* Current zoning designations within the SUMC Sites would not permit the level of development proposed under the SUMC Project; therefore, it is necessary to consider new zoning designations for the SUMC Sites. The City's Zoning Ordinance establishes the allowable land uses and development standards for each area in the City, and implements the land use designations and policies established in the Comprehensive Plan. Rezoning an area or specific site modifies the uses and development standards for the area or site and may permit uses or development that would not be allowed by the existing zoning designations. The rezoning process provides a regulatory framework for reviewing project applications. All rezoning applications are subject to environmental review, as included in the Draft EIR for the SUMC Project.

As discussed on pages 2-23 through 2-25 and 3.2-29 of the Draft EIR, the SUMC Project would conflict with existing development restrictions in the existing Public Facilities (PF) zoning district. As such, to address this zoning inconsistency, a new zoning district would be created for land used specifically for hospitals, clinics, medical offices and research. The new zoning district would have its own name, such as "Hospital District," and would include development standards that accommodate the SUMC Project as proposed. While the SUMC Project sponsors have requested that the SUMC Project components be deemed to be "permitted uses" under the proposed new Hospital District, it is possible that the City would make these uses conditionally permitted. In that event, the SUMC Project would also require one or more conditional use permits from the City. Rezoning of the SUMC Sites would require approval from City Council. Conditional use permits would require approval from the Planning and Transportation Commission.

*Comprehensive Plan Amendments.* Several changes are proposed to be made to the Comprehensive Plan under the SUMC Project including text changes, and changes to land use designations. The SUMC Project would make text modifications to the Comprehensive Plan in order to clarify the proposed building height exceptions and commercial square foot limits for the SUMC. Program L-3

would be revised as identified on page 3.2-9 of the Draft EIR. In addition, text changes for Policy L-8 are included on page 3.2-29 of the Draft EIR; however, since the publication of the Draft EIR, this language has been altered slightly. Please see Section 6, Revisions to Draft EIR, for the revised Policy L-8 language.

The SUMC Project also would change land use designations included in the Comprehensive Plan on portions of the SUMC Sites. One land use designation change would be at 701 and 703 Welch Road from the Medical Research/Office Park designation to the Major Institution/Special Facilities land use designation. In addition, the SUMC Project would include the annexation to Palo Alto of a 0.75-acre property within Santa Clara County jurisdiction with a Major Institution/Special Facilities land use designation to be applied to this property.

The Comprehensive Plan Amendments for the SUMC Project are separate from the ongoing process to update the Comprehensive Plan. The Comprehensive Plan Update is on a separate schedule than the SUMC Project. While the SUMC Project entitlements are expected to be reviewed by the City Council in early 2011, the Comprehensive Plan Update, including the environmental review, is expected to be completed in the first half of 2012. The City has only recently started the review process of initial drafts of updated Comprehensive Plan chapters with the Commission and City Council. Detailed analysis and extensive public review of the SUMC Project, including the proposed changes to the existing Comprehensive Plan, has been completed in preparation for formal reviews. The analysis and review of the SUMC Project will inform the Comprehensive Plan Update process. As such, it is important to note that the SUMC Project need not be delayed as a result of the City's Comprehensive Plan update process.

*Area Plan.* Program L-46 of the City's Comprehensive Plan requires the City to work with Stanford to prepare an area plan for the Stanford University Medical Center. The Area Plan is intended to be a guidance document for the City, Stanford, and the public to provide an overview and context for anticipated future development at the SUMC Sites. It is not a regulatory document and does not comprise a coordinated area plan or specific plan under the City's Municipal Code. The content of the Area Plan is expected to evolve as expansion plans on the SUMC Sites are developed, and the Area Plan may be modified to accommodate changes in those expansion plans, to respond to new information revealed during the environmental review process, or at the City's discretion.

As a guidance document, the Area Plan may identify policies and regulatory requirements from the City's Comprehensive Plan and Municipal Code that would apply to proposed development at the SUMC Sites and/or describe proposed amendments to such applicable policies and regulations. The Area Plan is not intended to establish land use or development policies or standards, and is not intended to supersede the applicable policies, regulations, requirements, and standards of the City's Comprehensive Plan or Municipal Code. If any provisions of the Area Plan vary from or conflict with the Comprehensive Plan or Municipal Code, the current provisions of the Comprehensive Plan or Municipal Code shall prevail. The Area Plan does not identify mitigation measures for SUMC Project impacts, evaluate alternatives to the SUMC Project, or specify community benefits outside of the immediate scope of the SUMC Project.

The City of Palo Alto, in collaboration with Stanford University, SHC, and LPCH, prepared the SUMC Area Plan Update in 2007. Conceptual review and input was submitted by the City Council in July 2008. However, the updated Area Plan will undergo final review by the City Council during the entitlement review of the SUMC Project. The City Council will decide whether to accept the Area Plan.

*Development Agreement.* Development Agreements are negotiated contracts between a project proponent/applicant and the City. A Development Agreement is typically sought to ensure that local regulations pertaining to the project will not change over time. In exchange, local governments negotiate an acceptable “community benefit package.” On June 15, 2009, the SUMC Project sponsors submitted a Development Agreement proposal to the City. The City prepared a counter proposal and will continue to negotiate the terms with the SUMC Project sponsors. The City Council and the public will be provided with additional opportunities to comment on the specific deal terms. The Development Agreement cannot be approved until after certification of the Final Environmental Impact Report.

As explained and listed on page 2-27 of the Draft EIR, Project Description, a Development Agreement would be approved as part of the SUMC Project if the terms of such an agreement could be mutually agreed upon. In addition, Supplemental Development Agreement Terms are included on pages 2-27 through 2-28 of the Draft EIR. It is expected that there will be some overlap between the Development Agreement, the Conditions of Approval, and the mitigation measures proposed in the Draft EIR. Please refer to Master Response 12 for more details regarding the proposed Development Agreement.

*Conditional Use Permit.* The SUMC Project sponsors have requested that the SUMC Project components be deemed to be “permitted uses” under the proposed new Hospital District. However, it is possible that the City would only make these uses conditionally permitted. In that event, contrary to the proposal of the SUMC Project sponsors, the SUMC Project would also require one or more conditional use permits from the City. For example, as part of Mitigation Measure BR-4.4A, a Memorandum of Understanding (MOU) between the City and the SUMC Project sponsors describing the trees at the SUMC Sites and the ones to be removed/retained would be part of a Conditional Use Permit. Please see Staff-Initiated Change 6 for a full description of this mitigation measure, which has been updated since the Draft EIR.

*Annexation.* As described on page 2-1 of the Draft EIR, a 0.75-acre parcel of land adjacent to the SoM and currently under the jurisdiction of the County of Santa Clara would be annexed to the City of Palo Alto. The City would conduct the annexation process under a 100 percent consent proposal. Prior to annexation, the City would provide notice to affected agencies for a period of 10 days. After the 10-day review period, City Council would be able to act on the annexation. Although a public hearing regarding this annexation would not be required, the annexation could be considered as a routine agenda item. The City Council would need to adopt the resolution to initiate annexation proceedings and then consider the proposal at a regular meeting and waive protest proceedings. The City Council would also need to make findings per Section 56757 and adopt the resolution before annexation is approved. Once approved, the City would forward the resolution and paperwork to the Local Agency Formation Commission (LAFCO), which would record a Certificate of Completion. However, before

the annexation process begins, the City must first create the new Hospital District and then apply the pre-zoning to the annexed area.

## **Master Response 12: Development Agreement**

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### **Introduction**

This Master Response 12 addresses Comments 22.23, 22.24, 22.26, 22.30, 22.81, 22.89, 22.91, 24.1, 34.1, 56.2, PTC1.5, PTC1.28, PTC1.53, PTC1.58, PTC1.67, PTC6.18, PTC6.24, PTC6.72, CC1.9, CC1.16, CC2.13, CC2.14, CC3.33, CC4.15, and CC5.34.

As part of their requested approvals for the SUMC Project, the SUMC Project sponsors are requesting City approval of a Development Agreement. This Master Response provides further information about the nature and purpose of the Development Agreement, as generally described on pages 2-27 through 2-28 of the Draft EIR.

### **Development Agreement**

The California Planning and Zoning Law authorizes cities to enter into “development agreements,” which grant certain rights to developers, typically in exchange for other benefits which cities otherwise do not have the police power to require. The following analysis explains the role and purpose of development agreements. This analysis includes a summary of the general scope of the City’s police power and of the general rights, which developers have under federal and State law.

Under their general police power, all cities have broad authority to negotiate agreements with any person or entity, including project applicants such as the SUMC Project sponsors. However, any such agreement must include a genuine exchange of benefits (known in legal terms as “consideration”), with the parties agreeing to a negotiated exchange of one or more benefits or concessions to which they are not otherwise entitled. No one party is entitled to dictate the terms of the deal – an agreement can only be reached when each party is adequately enticed by what the other party has to offer to be induced to enter into an agreement.

Under its police power, a city also has broad, unilateral authority to impose a large variety of conditions to ensure that a proposed development would mitigate its adverse effects (both environmental and non-environmental) and would pay for the necessary infrastructure needed to serve the development. Therefore, a city does not generally need to rely on any negotiated agreement with the developer applicant to impose such conditions. However, both the United States Constitution and California statutes (particularly the Mitigation Fee Act, known sometimes as “AB 1600”) impose specific (although flexible) limitations on the types of conditions and exactions a city may impose on a particular development project. Under these limitations, courts have held that cities cannot use their land use approval authority to exact concessions from a developer applicant that have nothing to do with the impacts or needs of the proposed development itself, or, in other words, which have no “nexus” with the project. Thus, for example, a city cannot require a developer to build a new city hall in exchange for granting development entitlements. In addition to the requirement of “nexus,” any exactions are also subject to a requirement of “rough proportionality.” If a development project is only

partially responsible for a particular public improvement, a city generally can only require the developer to pay its proportionate share of that improvement (subject to certain caveats and exceptions).

A development agreement provides one exception to these limitations: a city can negotiate with developers the concessions that exceed what the city could require under its police power (for example, concessions for which there is no nexus with the proposed development, or which exceed the “rough proportionality” requirement) in exchange for approving a development agreement since development agreements provide a benefit to developers to which they are not otherwise entitled.

As a general matter, a city has broad legislative power to zone and rezone property within its jurisdiction. Thus, in theory, a city can rezone an area where apartment buildings are located to permit only development of single-family homes, or rezone an industrial area to only permit commercial development. However, even if a city were to so exercise its zoning powers, existing property owners have constitutionally protected property rights to continue with their existing use of their property. Thus, if a city were to amend its zoning ordinance to prohibit, for example, fast food restaurants in a particular location, an existing fast food restaurant would have a “vested” property right to continue to use its property for that purpose (at least absent compensation from the city for a “taking” of this property right). This use is typically referred to as a “legal non-conforming pre-existing use.”

In the context of new development, the California Supreme Court has held that a developer does not obtain a “vested right” to a proposed use of property until it has first obtained a building permit and has spent substantial sums in reliance upon that permit. (*Avco Community Developers, Inc. v. South Coast Regional Comm.* (1976) 17 Cal.3d 785.) Thus, under this holding, a developer who has incurred the expense of obtaining development approvals still faces the risk that the governing city or county can legislatively adopt new zoning requirements that either impose additional requirements, or even potentially prohibit its previously approved development.

In partial response to this holding, the Legislature adopted statutes authorizing local governments and developers to enter into “development agreements.” (Government Code sections 65864-65869.5.) A development agreement has the effect of immediately vesting a developer’s right to proceed under existing zoning and other local laws, without having to worry about later changes in those zoning requirements imposing expensive new requirements or preventing the project from proceeding. The Government Code imposes various requirements on development agreements, including a requirement that each development agreement specify its duration.

Thus, in the present circumstances, the Development Agreement sought by the SUMC Project sponsors would entitle them to proceed under, and rely upon, the zoning approvals granted by the City Council, if the City Council approves the SUMC Project. In approving the Development Agreement, the City Council would be effectively waiving its right (as well as the right of future City Councils) to later impose new or amended zoning or other legislative requirements or limitations on the SUMC Project. This waiver would exist for the duration specified in the Development Agreement. However, it should also be noted that, under the principles discussed above, once the SUMC Project is constructed, the SUMC Project sponsors would have vested rights independent of the Development Agreement to



continue to use its facilities for the purpose for which they were constructed. Thus, once the SUMC Project is constructed, even if the City were to later modify the applicable zoning, the SUMC hospital facilities could qualify as a “legal non-conforming pre-existing use” and could continue to operate notwithstanding any inconsistency with later-adopted zoning requirements (subject to certain caveats and exceptions).

In exchange for granting the SUMC Project sponsors this vested entitlement, the City may negotiate benefits and/or concessions from the SUMC Project sponsors that exceed what the City can otherwise require under its police power, potentially including benefits that would not have a “nexus” with the SUMC Project. As to this point, it should be stressed that the City does not need to rely on the proposed Development Agreement in order to impose requirements that it already has the police power to unilaterally impose. To the extent that a particular measure or other condition is necessary or appropriate to mitigate the actual impacts of the SUMC Project, or to pay for infrastructure solely or primarily needed to serve the SUMC Project, it generally would not serve as “consideration” to the City for entering into the Development Agreement (except in limited cases where the City is otherwise legally prohibited from imposing a particular mitigation measure or other condition).

It likewise bears emphasizing that the City cannot unilaterally require the SUMC Project sponsors to agree to any particular concession or benefit to the City as part of the Development Agreement. The SUMC Project sponsors’ assessment of the number and total cost of concessions and other City benefits it will agree to as part of the Development Agreement would most likely depend upon its assessment of the value of the concessions and benefits it receives under the Development Agreement (which may primarily or only be the value of the vested right it is obtaining). In addition, even if the City and the SUMC Project sponsors are not able to reach agreement on terms for a Development Agreement, it would still be entitled to have the City act upon the SUMC Project application itself. The City could not take into account the SUMC Project sponsors’ unwillingness to agree to a particular proposed concession that the City does not otherwise have the police power authority to impose, in deciding whether to approve the proposed SUMC Project. Nonetheless, the City still has broad legislative discretion in deciding whether to approve the proposed SUMC Project on its own merits.

Comment PTC2.25, included in Section 5, of this document, suggests that any mitigation measures and other conditions imposed upon the SUMC Project should remain in place even after the Development Agreement’s term expires. The City strongly agrees with this suggestion. Because of the somewhat limited role of the Development Agreement in the actual SUMC Project approval, City staff has recommended that the SUMC Project application be processed to include a conditional use permit. A conditional use permit would provide a useful mechanism for the City to exercise its police powers to impose all appropriate conditions on the SUMC Project, without the need to negotiate most of these conditions with the SUMC Project sponsors as part of the Development Agreement. The conditions imposed upon the conditional use permit could be designed to ensure that all necessary requirements of the SUMC Project are met, and those conditions would remain enforceable even after the Development Agreement expires.

The SUMC Project sponsors and City staff are still in the ongoing process of negotiating the terms of the Development Agreement itself. Staff has taken into account feedback and policy direction received from the City Council in negotiating those terms, and is attempting to negotiate terms consistent with the City Council's policy direction. Staff will continue to seek feedback from the Council as necessary throughout the process of negotiating the Development Agreement. Once terms are negotiated and a draft Development Agreement is prepared, there will be public hearings before both the Planning and Transportation Commission (Commission) and the City Council to consider those terms. The Council may continue to provide policy direction at such hearings, and further amendments could be proposed and/or made as a result of feedback provided. The EIR has been designed to analyze the environmental effects of all foreseeable terms the Development Agreement might include, whether in the analysis of the SUMC Project itself, or in the analysis of the various possible alternatives. However, as stated on page 2-28 of the Draft EIR, it is not anticipated that any of the Development Agreement terms would result in physical environmental impacts beyond those disclosed in the Draft EIR. As such, the Development Agreement component of the SUMC Project is not discussed further in the Draft EIR.

As part of the Development Agreement discussions, members of the City Council, Commission, and the public suggested several issues to be explored in Development Agreement negotiations. Several of these issues have no direct relationship to the SUMC Project and involve a series of separate complicated policy decisions and negotiations that could delay decision-making on the SUMC Project. Subject to the City Council's approval, staff is therefore recommending that these issues are better addressed outside of the SUMC Project process. In particular, comments were submitted that suggest the installation of an upstream retention basin, the use of Stanford Linear Accelerator Center (SLAC) as a backup power source, and fire services from the County of Santa Clara. The siting of an upstream retention basin on Stanford lands was not identified as a mitigation measure and can be addressed through the existing San Francisquito Joint Power Authority process. Likewise, the use of the SLAC facility as a backup power source for the community has been a longstanding issue in the community and the City and Stanford are proceeding on a separate track to discuss a range of mutually beneficial solutions. As the SUMC Project plans contain backup generators and building permits are governed by OSHPD, this issue should not be tied exclusively to the SUMC Project. Lastly, the City and Stanford have a longstanding contract where the City provides fire services to Stanford-owned land in the County of Santa Clara. Since the contract does not apply to the SUMC Project, staff is recommending that any changes to the fire service agreement be negotiated as part of the existing contract renewal process.

## Section 4

# Written Comments and Responses

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### 4.1 INTRODUCTION

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Written comments on the Draft Environmental Impact Report (EIR) are reproduced in this section. Written comments received were provided to the City of Palo Alto by letter or via email. Discrete comments from each letter are denoted in the margin by a vertical line and numbered. Responses immediately follow each comment letter and are enumerated to correspond with the comment number. Response 19.1, for example, refers to the response for the first comment in Letter 19. The italicized text in the beginning of each response denotes a summary of each distinct comment. Many responses in this section refer to Staff-Initiated Changes and Master Responses, which are found in Section 3 of this document.

### 4.2 RESPONSES TO WRITTEN COMMENTS

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Comment letters and responses begin on the following page.

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STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT

Letter 1



CYNTHIA BRVANT  
DIRECTOR

ARNOLD SCHWARZENBERGER  
GOVERNOR

July 7, 2010

Steven Turner  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301

Subject: Stanford University Medical Center Facilities Renewal and Replacement (SUMC Project)  
SCH#: 2007082130

Dear Steven Turner:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 6, 2010, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Acting Director, State Clearinghouse

Enclosures: 1  
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044  
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Stanford University Medical Center Facilities Renewal and Replacement Final EIR –  
Written Comments and Responses

Document Details Report  
State Clearinghouse Data Base

SCH# 2007082130  
Project Title Stanford University Medical Center Facilities Renewal and Replacement (SUMC Project)  
Lead Agency Palo Alto, City of

Type EIR Draft EIR

Description The SUMC Project includes demolition, replacement, and expansion at the Stanford Hospitals and Clinics, the Lucile Packard Children's Hospital, and the Stanford University School of Medicine. The SUMC Project would demolish ~1.2 million sf of existing buildings at the SUMC Sites (which comprises a total of 68 acres) and construct ~2.5 million sf of hospital, clinic, and research facilities, for a net increase of about 1.3 million sf of hospital and clinic uses (research space would not increase). In addition, other existing buildings would be renovated to meet seismic standards and ~2,053 net new parking space would be added to the sites.

Lead Agency Contact

Name Steven Turner  
Agency City of Palo Alto  
Phone 650-329-2155  
email  
Address 250 Hamilton Avenue  
City Palo Alto State CA Zip 94301  
Fax

Project Location

County Santa Clara  
City Palo Alto  
Region

Lat / Long 37° 26' 2" N / 122° 26' 37" W  
Cross Streets Pasteur Dr/Sand Hill Rd; Welch Rd/Quarry Rd  
Parcel No. 142-03-088, -04-012  
Township 8S Range 3W Section 3 Base MDB&M

Proximity to:

Highways SR 82, I-280, US 101  
Airports No  
Railways Caltrain  
Waterways San Francisco Creek  
Schools PAHS, Addison  
Land Use MOR, PE, and A1; Major Institution/Special Facilities, Research/Office Park, Major Institution/University Lands/CEF

Project Issues

Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Other Issues; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies

Resources Agency; Department of Fish and Game, Region 3; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Resources, Recycling and Recovery; California Highway Patrol; Caltrans, District 4; Regional Water Quality Control Board, Region 2; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; Other Agency(ies)

Date Received 05/20/2010 Start of Review 05/20/2010 End of Review 07/06/2010

Note: Blanks in data fields result from insufficient information provided by lead agency.

**1. Governor’s Office of Planning and Research, State Clearinghouse and Planning Unit, Scott Morgan (letter dated July 7, 2010)**

1.1 *The commentor acknowledges that the City of Palo Alto (City) has complied with the State Clearinghouse requirements for draft environmental documents per the California Environmental Quality Act (CEQA). The City acknowledges receipt of the State Clearinghouse comment letter indicating that the SUMC Project Draft EIR has been distributed to State agencies and departments for review and that the City has complied with the State Clearinghouse review requirements. No further response is necessary.*





Department of Toxic Substances Control



Maziar Movassaghi  
Acting Director  
700 Heinz Avenue  
Berkeley, California 94710-2721

RECEIVED  
TO Schwarzenegger  
Governor

JUN 09 2010

Department of Planning and  
Community Environment



Linda S. Adams  
Secretary for  
Environmental Protection

June 7, 2010

Steven Turner  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, California 94301

DRAFT EIR, STANFORD UNIVERSITY MEDICAL CENTER FACILITIES RENEWAL AND  
REPLACEMENT (SUMC PROJECT), SCH# 2007082130

Dear Mr. Turner:

The Department of Toxic Substances Control (DTSC) has reviewed the Draft EIR document referenced above and dated May 2010 for hazardous materials related issues. The due date to submit comments is July 6, 2010. As you may be aware, DTSC oversees the cleanup of hazardous substance release sites pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a potential Responsible Agency, DTSC is submitting comments to ensure that the California Environmental Quality Act (CEQA) documentation prepared for this project adequately addresses any remediation of hazardous substance releases that might be required as part of the project.

The project consists of demolition and construction of facilities at the Stanford University Medical Center. The following information was presented in the Draft EIR:

- 1) The site currently contains an office building, constructed in 1958, that has been used primarily as dental offices. Four amalgam separators are located in the basement of this building. Wastewater from each separator is conveyed to a sump that, in turn, discharges the wastewater onto either the landscaping or pavement at four locations outside the building. Also, an elevator shaft was added in 1993.
- 2) A Phase I ESA was completed for the site and recommended, prior to demolition, thorough testing of the four wastewater treatment sumps, sink piping and other surfaces for mercury, silver, tin, copper and zinc. An asbestos survey was recommended. A lead survey was recommended. Subsequent to building demolition, soils beneath the elevator shaft should be tested for PCBs and hydraulic fluid.

Steven Turner  
June 7, 2010  
Page 2 of 3

3) A Phase II Soil and Wastewater Quality Evaluation revealed elevated levels of mercury, silver, and zinc in soil impacted by discharges from the amalgam separator systems.

4) The Hoover Pavilion site, due to the operation of underground storage tanks, has VOC impacts to soil and groundwater.

DTSC has the following comments regarding the Draft EIR:

2.1

1) Soil and groundwater sampling should be performed to identify whether current or past chemical use may have resulted in a release of hazardous substances. This sampling should be conducted prior to or in conjunction with the preparation of the EIR. Any screening levels or criteria that are used in making a determination as to whether detected contaminants pose a risk to human health or the environment should be identified. If volatile organic compounds are present in soil or groundwater, the potential human health risk from vapor intrusion into future buildings will need to be considered.

2.2

3) Any remediation activities that are to be implemented as part of the project should be discussed in the EIR along with the cleanup levels that will be applied and the anticipated regulatory agency oversight. Potential impacts associated with the remediation activities should be addressed by the EIR. If the remediation activities include soil excavation, the EIR should include: (1) an assessment of air impacts and health impacts associated with the excavation activities; (2) identification of any applicable local standards which may be exceeded by the excavation activities, including dust and noise levels; (3) transportation impacts from the removal or remedial activities; and (4) risk of upset should there be an accident during cleanup.

If you have any questions, please call me at (510) 540-3956 or email me at [abermahit@dtsc.ca.gov](mailto:abermahit@dtsc.ca.gov).

Sincerely,

Andrew Bema-Hicks, P.E.  
Brownfields and Environmental Restoration Program

Steven Turner  
June 7, 2010  
Page 3 of 3

cc: Alyssa De La Cruz (via email)  
CEQA Tracking Center  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806  
[ADelacr1@dtsc.ca.gov](mailto:ADelacr1@dtsc.ca.gov)

Nancy Ritter (via email)  
Office of Environmental Planning and Analysis  
Department of Toxic Substances Control  
[nritter@dtsc.ca.gov](mailto:nritter@dtsc.ca.gov)

State Clearinghouse and Planning Unit (via email)  
Office of Planning and Research  
P.O. Box 3044  
Sacramento, California 95812-3044  
[State.clearinghouse@opr.ca.gov](mailto:State.clearinghouse@opr.ca.gov)



**2. Department of Toxic Substances, Andrew Berna-Hicks, P.E. (letter dated June 7, 2010)**

2.1 *The commentor requests that soil and groundwater sampling be performed prior to or in conjunction with the preparation of the EIR and that screening levels be identified. As described on pages 3.12-38 through 3.12-40 of the Draft EIR in the Hazardous Materials section, four Phase I ESAs, one Phase II ESA, and other soil vapor and groundwater sampling were completed in order to assess the conditions at the SUMC Sites and identify potential hazardous conditions within the SUMC Project boundary. Specifically, these samples were conducted at 701 Welch Road, 703 Welch Road, 1101 Welch Road, and the Hoover Pavilion Site. The reports provide the applicable screening level criteria.*

In addition to the studies already conducted, further soil and groundwater tests are required as Mitigation Measures HM-3.1 through HM-3.4, outlined on pages 3.12-40 through 3.12-41 of the Draft EIR. These additional tests would occur at 701 Welch Road (preparation of a Phase II ESA), 703 Welch Road (excavation of contaminated soils), and the Hoover Pavilion Site (preparation of a Soil Vapor Program and a Site Management Plan). Since preparation of the Draft EIR, the SUMC Project sponsors have completed additional tests, as well as the human health risk assessment described in Mitigation Measure HM-3.3 on page 3.12-41 of the Draft EIR. The health risk assessment shows there would be no significant impacts to health from the petroleum product in the soils at the Hoover Pavilion Site. With implementation of these mitigation measures, the significant impact on construction personnel and the public due to the exposure to contaminated soils and/or groundwater would be reduced to less than significant.

In addition, during construction activities at the SUMC Sites, unknown contaminated soils or groundwater could be discovered that would pose a risk of exposure to workers, the environment, and the community. Disturbance of unidentified contaminated areas and exposure of persons would be a significant impact. However, as required under Mitigation Measure HW-3.1 in Section 3.11, Hydrology, the SUMC Project sponsors would be required to develop a work plan for any unknown contaminated sites, which would reduce the impacts to less than significant. No further information can be provided at this time since no known contamination exists outside of the locations already analyzed.

The mitigation measures outlined in the Draft EIR, which include additional soil and groundwater sampling during construction, would be adopted as part of the SUMC Project approval and the SUMC Project sponsors would be required to comply. However, some additional studies have been conducted at the Hoover Pavilion Site, two of which occurred after the publication of the Draft EIR.

As such, the following text has been added after the first partial paragraph on page 3.12-20 of the Draft EIR.

Additional Studies at the Hoover Pavilion Site. From October 2008 through September 2010, the SUMC Project sponsors prepared and provided to the SCCDEH the following documentation which summarizes the environmental condition and the investigations and remediation that have been conducted at the Hoover Pavilion Site since 1986 to date in consideration of case closure:

- October 31, 2008: Request for Site Closure by AMEC Geomatrix, which discusses site closure for the two closed in-place 2,200 gallon diesel underground storage tanks and the results of a soil vapor survey to evaluate whether volatile constituents are present in the subsurface.
- March 26, 2009: an additional soil vapor survey was performed by AMEC Geomatrix and documented in the Additional Investigation Report for Delineation of PCE in the vicinity of Soil Boring SV-9.
- May 25, 2010: A Site Management Plan by AMEC was developed that established guidelines and health and safety requirements during construction for the following activities: notifications, air monitoring, soil excavation, soil stockpiling, on-site reuse of soil, off-site soil disposal or reuse, dust control, and groundwater management.
- September 15, 2010: Technical Summary by AMEC was prepared to discuss the regulatory status and closure activities, site information, previous investigations and results, summary of remedial measures and closure criteria.

The above AMEC reports concluded that residual petroleum is present in soil, particularly in the area of two 2,200 gallon, closed-in-place USTs that formerly contained fuel oil and diesel. Testing confirms that no petroleum constituents are present in soil vapor. Note that the presence of chlorinated volatile organic compounds (CVOCs) were also evaluated as part of the Hoover Pavilion Site (in soil) and found to be limited in concentration, area and depth, and presents no impacts to human health or the environment. The impacted area would be excavated as part of the SUMC Project parking garage excavation. Thus, all of the residual CVOCs and most of the petroleum impacted soil whose areal extent has been defined will be removed as part of the SUMC Project.

With respect to groundwater, the studies show no dissolved-phased constituents are present above environmental screening levels and the lateral extent of the plume is confined to the property. In two monitoring wells immediately adjacent to the USTs, 1/8 to 1/4 inch of product composed of a mixture of degraded viscous fuel oil (heavy fuel oil number 6) and degraded diesel has been measured; remediation of this product has been completed to the fullest extent practicable. CVOCs testing in groundwater are below the MCLs. Therefore, the Hoover Pavilion Site has been thoroughly

investigated and the cleanup meets the State's standards and poses no threat to human health or the environment.

2.2 *The commentor requests that the Draft EIR discuss remediation activities to be implemented as part of the SUMC Project, as well as the cleanup levels that would apply and the anticipated regulatory agency oversight.* As described on page pages 3.12-40 through 3.12-41 of the Draft EIR, Mitigation Measure HM-3.2 through HM-3.4 would remediate the potential contaminated soils at 703 Welch and the Hoover Pavilion Site. Specifically, HM-3.2 calls for conducting soils testing for mercury, silver, and pH levels in the 4- to 9-square-foot area near every discharge point from the building located at 703 Welch. If the soils are found to be contaminated, Mitigation Measure HM-3.2 calls for excavating, removing, and transporting contaminated soil to an approved disposal site (which would be in compliance with Occupational Health and Safety Administration [OSHA]). SUMC Project sponsors would consult with the County Department of Environmental Health (DEH) on all results and remediation actions.

Additionally, Mitigation Measure HM-3.3 in the Draft EIR calls for corrective action and active measures to address the potentially contaminated soil at the Hoover Pavilion Site. Specifically, under Mitigation Measure HM-3.3, a qualified consultant would remove all buried underground storage tanks from the property; conduct additional soil sampling to the extent necessary; and take steps necessary to ensure worker safety. Mitigation Measure HM-3.3 has been amended to update the measures to treat and remediate the potentially contaminated soil. This includes changes in the Summary, Section 3.12, and Section 5 of the Draft EIR, as shown at the end of this Response.

Lastly, Mitigation Measure HM-3.4 calls for the development of a Site Management Plan (site remediation assessment) for the Hoover Pavilion Site. The site remediation assessment would (a) outline specific measures to protect workers and the public from exposure to potential site hazards, including hazards from remediation itself, and (b) certify that the proposed remediation measures would clean up contaminants, dispose of the wastes, and protect public health in accordance with federal, State, and local requirements.

*The commentor requests further information regarding the potential impacts associated with the remediation activities discussed under Mitigation Measure HM-3.2 and H.M-3.3 with regards to air impacts, dust and noise levels, transportation impacts from the removal of soil, and risk of upset.* As described on pages 3.5-14 through 3.5-17 of the Draft EIR in the Air Quality section, emissions during construction, including remediation activities, would be caused by material handling, traffic on unpaved or unimproved surfaces, demolition of structures, use of paving materials and architectural coatings, exhaust from construction worker vehicle trips, and exhaust from diesel-powered construction equipment. Heavy construction activity or excavation on dry soil exposed during construction phases or remediation would cause emissions of dust (PM<sub>10</sub> being the air pollutant component of greatest concern). To minimize dust emissions, the Bay Area Air

Quality Management District (BAAQMD) has identified a set of feasible PM<sub>10</sub> control measures for all construction activities in the air basin. Implementation of the BAAQMD-recommended measure, Mitigation Measure AQ-1.1, would reduce the impacts caused by construction dust to a less-than-significant level. Mitigation Measure AQ-1.1 calls for implementation of recommended dust control measures and strategies developed by the BAAQMD. These strategies include covering all trucks hauling soil, sand, and other loose materials including demolition debris, or require all trucks to maintain at least two feet of freeboard; water all active construction areas (exposed or disturbed soil surfaces) at least twice daily; and use watering to control dust generation during demolition of structures or break-up of pavement. These measures would minimize the transport of contaminated materials through the air because they would impede and/or minimize the transport of potentially contaminated soil and dust.

In addition, construction activities, including remediation activities, would require the use of heavy trucks, excavating and grading equipment, and concrete breakers. On-site construction activities would expose on-site noise-sensitive uses (especially the in-patient hospital uses at SHC and LPCH) to high noise levels from operation of multiple pieces of construction and excavation equipment working simultaneously. As described on page 3.7-23 of the Draft EIR in the Noise section, Mitigation Measure NO-1.1 would reduce the construction-related noise. Mitigation Measure NO-1.1 calls for the use of quiet construction equipment whenever possible, particularly air compressors; provide sound-control devices on equipment; prohibit unnecessary idling of internal combustion engines; require applicable construction-related vehicles and equipment to comply with the City's truck route ordinance; designate a noise disturbance coordinator who would be responsible for responding to complaints about noise during construction; and require contractors to use noise-reducing pile driving techniques, including pre-drilling pile holes (if feasible, based on soils) to the maximum feasible depth, installing intake and exhaust mufflers on pile driving equipment, vibrating piles into place when feasible, and installing shrouds around the pile driving hammer where feasible. Remediation activities are very similar, if not the same, as to construction activities in terms of the level of noise generated by the equipment itself (i.e. excavating, hauling, etc). Therefore, all measures that mitigate construction related noise would also apply to remediation activity related noise. As discussed on page 3.7-23 of the Draft EIR in the Noise section, although the mitigation measures would not reduce pile driving noise at off-site sensitive receptors or other construction noise at on-site sensitive receptors to less-than-significant levels, it would lessen construction-related noise. The impact would remain significant and unavoidable.

*The commentor requests further information on the potential impacts associated with the transport of potentially contaminated material.* As noted on page 3.12-34 of the Draft EIR in the Hazardous Materials section, hazardous waste transporters are subject to both U.S. Department of Transportation (DOT) and United States Environmental Protection Agency (USEPA) regulations. The transport of hazardous materials include hauling of contaminated soil, as such, they are governed by the same regulations. The USEPA has

set forth standards applicable to transporters of hazardous wastes in 40 CFR 263. The DOT's regulations are documented in 49 CFR 171-180 and implemented by the Research and Special Programs Administration (RSPA) within the DOT. These USEPA standards incorporate and require compliance with the DOT provisions on labeling, marking, placarding, using proper containers, and reporting discharges.

As noted on page 3.12-35 of the Draft EIR in the Hazardous Materials section, a transporter must comply with the following in accordance with USEPA regulations: comply with the manifest system; maintain the appropriate records (signed manifests) for three years; take immediate action to protect human health and the environment (e.g., notify local authorities or initiate interim measures) in the case of a discharge; in the event of a hazardous waste discharge, notify the National Response Center and submit a report to the DOT Office of Hazardous Materials Regulations; and clean up any discharges to the environment and take any actions required by the appropriate government officials for mitigating the discharge effects on human health and environment.

Transporters of hazardous wastes must also adhere to all of the Federal Motor Carrier Safety Regulations which DOT has adopted under the Motor Carrier Safety Act of 1984. This Act specifies more requisites that apply to the transport vehicle and the driver, including concise specifications for vehicle parts and accessories, such as lighting devices, brakes, glazing and windows, fuel systems, tires, and horns.

These existing regulations would ensure that the increase in hazardous waste materials would not substantially increase exposure to the community and surrounding environment. Furthermore, in the event of an accident or spill, the SUMC Project would implement its required emergency response plan (as part of the Hazardous Materials Business Plan [HMBP]) in coordination with the Palo Alto Fire Department (PAFD).

*The commentor requests information regarding the risk of upset should there be an accident during cleanup.* As noted on page 3.12-33, Table 3.12-8, in the event of an accident, the community and/or on-site workers should call the Palo Alto Fire Department and its Hazardous Materials Emergency Response Team.

The pathways through which the community or the environment (e.g., local air quality and biota) could be exposed to hazardous materials include air emissions, transport of hazardous materials to or from the site, waste disposal, human contact, and accidents. As mentioned above, Table 3.12-8, on page 3.12-33 of the Draft EIR, lists all of the primary means the SUMC Project sponsors would use to protect the community and the environment from exposure to hazardous materials, as required by law, such as California's Hazardous Materials Release Response Plans and Inventory Law, the 2007 California Building Code, the 2003 Life Safety Code, the 2001 California Fire Code, the San Francisco Bay Regional Water Quality Control Board's (RWQCB) groundwater protection program, Cal/OSHA's Hazard Communication Standard, OSHA's Bloodborne Pathogen Standard, hazardous waste laws and regulations, radiation control laws and

regulations, the California Medical Waste Management Act, the DOT hazardous materials transportation regulations, the United States Postal Service (USPS) hazardous materials transportation regulations, the EPA hazardous materials transportation regulations, and the BAAQMD and Cal/OSHA regulations restricting asbestos emissions and specifying safe work practices.

Based on the changes described above, Mitigation Measure HM-3.3 in Table S-4 on page S-81 of the Draft EIR has been revised as follows:

*HM-3.3 Conduct a Soil ~~Vapor~~ Excavation Program at the Hoover Pavilion Site.* A qualified consultant, under the SUMC Project sponsors' direction, shall undertake the following activities:

- Remove all buried underground storage tanks from the property after sheds and storage buildings on the Hoover Pavilion site have been demolished;
- To the extent necessary, additional soil sampling shall be collected to determine health risks and to develop disposal criteria;
- If warranted based on soil sampling, contaminated soil shall be excavated, removed, and transported to an approved disposal facility in compliance with OSHA requirements;
- ~~If warranted based on soil sampling, a human health risk assessment shall be prepared and implemented to determine potential for impacts on construction workers as well as to develop measures to ensure it is safe to redevelop the Hoover Pavilion Site within engineering controls (e.g., SVE or vapor barriers); and~~
- To the extent required based upon the results of soil sampling and the results of a health risk assessment (if applicable), a Site Health and Safety Plan to ensure worker safety in compliance with OSHA requirements shall be developed by the SUMC Project sponsors, and in places prior to commencing work on any contaminated site; and
- The SUMC Project sponsors shall ~~cooperate with~~ submit documents to the County DEH to proceed with closure of the Hoover Pavilion Site.

Draft EIR text under Mitigation Measures HM-3.3 on page 3.12-41 of the Draft EIR is revised as follows:

*HM-3.3 Conduct a Soil ~~Vapor~~ Excavation Program at the Hoover Pavilion Site.* A qualified consultant, under the SUMC Project sponsors' direction, shall undertake the following activities:



- Remove all buried underground storage tanks from the property after sheds and storage buildings on the Hoover Pavilion site have been demolished;
- To the extent necessary, additional soil sampling shall be collected to determine health risks and to develop disposal criteria;
- If warranted based on soil sampling, contaminated soil shall be excavated, removed, and transported to an approved disposal facility in compliance with OSHA requirements; and
- ~~If warranted based on soil sampling, a human health risk assessment shall be prepared and implemented to determine potential for impacts on construction workers as well as to develop measures to ensure it is safe to redevelop the Hoover Pavilion Site within engineering controls (e.g., SVE or vapor barriers); and~~
- To the extent required based upon the results of soil sampling and the results of a health risk assessment (if applicable), a Site Health and Safety Plan to ensure worker safety in compliance with OSHA requirements shall be developed by the SUMC Project sponsors, and in places prior to commencing work on any contaminated site.
- The SUMC Project sponsors shall ~~cooperate with~~ submit documents to the County DEH to proceed with closure of the Hoover Pavilion Site.

Draft EIR text on page 5-128, second bullet, is revised as follows:

- HM-3.3: Conduct a Soil Vapor Excavation Program at the Hoover Pavilion Site

Draft EIR text on page 5-159, after the second full paragraph, third bullet, is revised as follows:

- HM-3.3: Conduct a Soil Vapor Excavation Program at the Hoover Pavilion Site

Draft EIR text on page 5-188, third bullet, is revised as follows:

- HM-3.3: Conduct a Soil Vapor Excavation Program at the Hoover Pavilion Site

Draft EIR text on page 5-218, second bullet, is revised as follows:

- HM-3.3: Conduct a Soil Vapor Excavation Program at the Hoover Pavilion Site

**Letter 3**



July 27, 2010

City of Palo Alto  
Department of Planning and Community Environment  
250 Hamilton Avenue  
Palo Alto, CA 94301

Attention: Steven Turner, Advance Planning Manager

Subject: Draft EIR and TIA for Stanford University Medical Center Facilities Renewal and Replacement Project

Dear Mr. Turner:

The Santa Clara Valley Transportation Authority (VTA) has reviewed the Draft Environmental Impact Report (DEIR) and Transportation Impact Analysis (TIA) for the Stanford University Medical Center (SUMC) Facilities Renewal and Replacement Project. We have a number of comments on these documents, which are included in the attached memorandum. However, I would like to highlight here the key themes from our review.

First, from a transportation planning perspective, we believe that the proposed SUMC Project represents an excellent opportunity to build on and make use of the existing transit and roadway network in the vicinity of the Palo Alto Transit Center. VTA supports policies and projects that target development around the established transportation cores, corridors, and station areas in Santa Clara County.

Second, we would like to commend the City and the project sponsor for the thorough analysis of all modes of transportation in the DEIR and TIA. It is clear that the City and the sponsor have given serious consideration to alternative modes of transportation in the analysis and proposed mitigation measures, which is consistent with the goals of the Santa Clara County Congestion Management Program managed by VTA.

Based on our review of the DEIR and TIA, we have a number of comments on the transportation analysis. Our detailed comments are included in the attached memorandum, but provided below is a summary of the most salient points:

- The Palo Alto Transit Center is an important component of Stanford's transit program, offering critical, convenient access to VTA, SamTrans, and Dumbarton Express bus services, as well as Caltrain rail service. The SUMC Project will generate a considerable amount of additional passenger demand at the Transit Center through Mitigation Measures TR-2.3 and TR-7.2, which rely heavily on expanded transit service and transit incentives to reduce the project's vehicular congestion impacts. Currently, the city of Palo Alto subleases the transit

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center and depot to VTA through a master lease the City has with Stanford. The terms of the current lease place an unsustainable and unacceptable burden on VTA's transit enterprise fund that is used to provide bus and rail transit services. The current lease expires in 2013, and we cannot envision entering into a new lease with similar terms in the future. We request that, as a community benefit and partial mitigation for transportation impacts of the SUMC Project, the city of Palo Alto require Stanford University to negotiate a long-term solution with VTA to appropriately address the Transit Center lease and related issues.

- The language on transit impacts in the DEIR indicates that transit providers would adjust service frequencies and distribution to meet project-generated demand. It is important to note that VTA is not in the financial position to commit to any service expansion that may be needed due to the demands created by this project. The project sponsor should be prepared to financially support service expansion or modifications due to the project.

VTA looks forward to working with the city of Palo Alto and the project sponsor to help advance the proposed project. Please do not hesitate to contact John Ristow at (408) 321-5713 if you have any questions or to discuss how we can work together with you in this process.

Sincerely,

Michael T. Burns  
General Manager

cc: Dan Smith, John Ristow, Jim Unites, Bijal Patel, Roy Molseed, Robert Swierk, VTA  
Brodie Hamilton, Stanford University Parking & Transportation Services

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**3. Santa Clara Valley Transportation Authority (VTA), Michael T. Burns (letter dated July 27, 2010)**

3.1 *The commentor expresses support for the SUMC Project.* This comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Accordingly, no further response is necessary. Please refer to Master Response 9 for a discussion of SUMC Project merit in the CEQA process.

3.2 *The comment commends the City for the thorough analysis of all modes of transportation in the Draft EIR and TIA.* Please refer to Draft EIR Section 3.4, Transportation, for an analysis of the transportation impacts as a result of the SUMC Project. Since this comment supports the analysis provided in the Draft EIR and does not offer specific suggestions, no further response is necessary.

3.3 *The commentor requests a long-term solution for the lease of the Palo Alto Intermodal Transit Service (PAITS).* Please refer to Staff-Initiated Change 1 for further analysis of the SUMC Project's impact on transit services. As explained in Staff-Initiated Change 1, the SUMC Project would not have a significant impact on transit services. Therefore, no mitigation measures for such impacts would be required under CEQA. It should be further noted that the City's existing lease with Stanford does not expire until June 30, 2033 (unless the City terminates it sooner); therefore, unless the City chooses, at its option, to terminate its lease with Stanford sooner (February 26, 2013), it would be the City that would be negotiating any extension or lease with VTA. Please refer to Master Response 10 for a discussion of non-CEQA issues.

3.4 *The commentor states that VTA is not in the financial position to commit to any service expansions to meet the transit demands potentially created by the project.* Additional analysis has been conducted for the Final EIR regarding impacts to transit. This analysis determined that the expansion of VTA transit service to support the project is not considered necessary due to the low number of new transit trips anticipated with the project. Please refer to Staff-Initiated Change 1 for the quantified transit analysis.

MEMORANDUM

Letter 3a

TO: Steven Turner, Advance Planning Manager  
City of Palo Alto Department of Planning and Community Environment

FROM: Robert Swierk, AICP  
VTA CMA Planning Department

DATE: July 27, 2010

SUBJECT: Draft EIR and TIA for Stanford University Medical Center Facilities Renewal and Replacement Project

The Santa Clara Valley Transportation Authority (VTA) has reviewed the Draft Environmental Impact Report (DEIR) and Transportation Impact Analysis (TIA) for the Stanford University Medical Center (SUMC) Facilities Renewal and Replacement Project. We have the following comments based on our review.

Description of Existing and Future Planned Transit Services  
The Draft EIR and TIA for this project do not mention VTA's plans to introduce Bus Rapid Transit (BRT) service along the El Camino Real corridor. In May 2009, the VTA Board adopted the VTA BRT Strategic Plan, which looked at BRT on six corridors in Santa Clara County. The BRT Strategic Plan recommended three corridors for near-term implementation, one of which was the El Camino Real corridor. VTA has now begun Conceptual Engineering for the El Camino Real BRT project and has begun Preliminary Engineering for the connecting Santa Clara/Alum Rock BRT project. The proposed schedule for the new BRT service between the Palo Alto Transit Center and the Eastridge Transit Center in San Jose is for service to begin in 2014. VTA believes that BRT can play a significant role in reducing single-occupant automobile trips to and from the SUMC Project site.

Proposed Project Plans – Mini Transit Centers  
VTA supports the concept of establishing 'mini transit centers' within the SUMC Project site, as described in Mitigation Measure TR-7.1. This measure would provide an attractive, convenient and safe location for passenger activity. However, it is not clear from the DEIR whether only the Marguerite Shuttle or other services, such as VTA bus routes, would serve these locations. The EIR should note that VTA is not planning to modify our route structure in this regard, and doing so would likely require additional operating funding that is not available.

Transportation Mitigation Measures – Palo Alto Transit Center  
The Palo Alto Transit Center is an important component of Stanford's transit program, offering critical, convenient access to VTA, SamTrans, and Dumbarton Express bus services, as well as Caltrain rail service. Mitigation Measure TR-2.3 indicates that the project sponsor would add Caltrain GO Passes to the TDM program for all SUMC employees. This measure, which VTA supports, would generate a considerable amount of additional passenger demand at the Palo Alto Transit Center. Mitigation Measure TR-7.2 discusses the possibility of expanding bus and

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shuttle service to support the demand generated by the project. It is logical to assume that many of these services would operate into the Palo Alto Transit Center. As Stanford is aware, this transit center and the adjacent loop road are already at capacity. The project EIR should evaluate the increased transit demands to be placed on this area and develop a plan to accommodate the additional vehicles. VTA recommends that the City require the project to fund any expansion or improvements necessary to accommodate the needs of the SUMC Project. If modifications to the Palo Alto Transit Center are needed to accommodate the demand generated by the SUMC Project or for other reasons (such as the California High-Speed Rail project), VTA will work cooperatively with the City and the project sponsor to explore opportunities for accommodating existing and future services, including Stanford's Marguerite shuttles, within the Transit Center.

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Currently, the city of Palo Alto subleases the transit center and depot to VTA through a master lease the City has with Stanford. The terms of the current lease place an unsustainable and unacceptable burden on VTA's transit enterprise fund that is used to provide bus and rail transit services. The current lease expires in 2013, and we cannot envision entering into a new lease with similar terms in the future. We request that, as a community benefit and partial mitigation for transportation impacts of the SUMC project, the city of Palo Alto require Stanford University to negotiate a long-term solution with VTA to appropriately address the Transit Center lease and related issues. This requirement should be included in the mitigation monitoring and reporting program or as a condition of approval of the project to ensure that a new lease that addresses VTA's concerns is in place as the SUMC Project progresses.

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Transportation Mitigation Measures – Expansion of Transit Service

The discussion of Transportation Impact TR-11 on page 87 of the DEIR indicates that transit providers would adjust service frequencies and distribution to meet demand trends. It is important to note that VTA is not in the financial position to commit to any service expansion that may be needed due to the demands created by this project. The project sponsor should be prepared to financially support service expansion or modifications due to the project.

3a.5

Transportation Mitigation Measures – VTA Community Bus Service

The discussion of Transportation Impact TR-7 (DEIR page 3.4-80) mentions VTA's bus service operating plan (Comprehensive Operations Analysis) which introduced Community Bus Service to Santa Clara County. This section of the DEIR states that "As a part of that plan, local communities are required to cover 25 percent of the cost [of VTA Community Bus Service] if they want to have the service free of charge to the riders." On the following page, the discussion of Mitigation Measure TR-7.2 states that "the SUMC Project Sponsors shall contribute to fund the project's fair share of Palo Alto's share of expanded Community Bus service." However, the DEIR does not specify what is meant by "expanded" service.

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We would like to note that VTA is not in the position to expand its Community Bus Service to meet additional need generated by the SUMC Project. If the SUMC generates additional demand on the existing VTA Community Bus Service in the area that exceeds the capacity of the service, the project sponsor should be required to contribute its fair share to any expansion to the existing service (i.e., new vehicles, additional trips during the current service hours). However, it should



be noted that VTA has no plans to modify its routes, serve new areas, or increase the span of service of the existing routes in the area.

VTA would also like to clarify that the 25 percent reference above only applies to changing services that already have operating funding to be fare-free to the riders. For instance, if VTA already operates a Community Bus route to an area and charges a fare, VTA can arrange for that service to be fare-free if a public or private partner guarantees the target farebox ratio for the service (25 percent) by providing an equivalent financial contribution. However, it is not sufficient for a partner to provide 25 percent of the operating cost for a new service, since this formula would require VTA to fund the remaining 75 percent of the cost, and VTA does not have this funding available.

Transportation Mitigation Measures – El Camino Real/Page Mill Intersection

The discussion of transportation mitigation measures in the DEIR presents a series of possible intersection modifications and classifies them as either Feasible or Infeasible based on right-of-way constraints, physical barriers, and other considerations. The DEIR currently identifies a vehicular Level of Service impact at the El Camino Real and Page Mill Road intersection, proposes modifications to the intersection, including the addition of a turn lane on one approach and signal retiming, and classifies these changes as Feasible.

We understand that the classification of the proposed intersection modifications as Feasible is a reflection of the fact that these modifications were included in the City's 1998 Comprehensive Plan. We also recognize that these improvements were included in the 2003 Comprehensive County Expressway Planning Study; in the 2008 Update to the Expressway Study, this intersection improvement was removed, but the document noted that the project will be pursued by the city of Palo Alto.

However, VTA believes that the modifications proposed in the TIA may have a negative impact on bus operations along El Camino Real (the busiest route in the county) by creating a conflict between automobiles turning from Oregon Expressway onto El Camino and buses merging in and out of the bus stop just west of the intersection. In addition, the addition of a separate right-turn lane, if it is established as a free-right turn, may negatively impact pedestrian and bicycle access and safety. This would conflict with Policy TR-27 in the City's Comprehensive Plan, which states that the City should "Avoid major increases in street capacity unless necessary to remedy severe traffic congestion or critical neighborhood traffic problems. Where capacity is increased, balance the needs of motor vehicles with those of pedestrians and bicyclists." It is also worthwhile to note that VTA owns the parcel on the northwest corner of this intersection, directly adjacent to the proposed new right-turn lane, and operates a Park & Ride facility on this site. Any intersection modification that would require widening of Oregon Expressway or El Camino in this area would diminish the size, configuration and access to this facility.

VTA therefore requests that only the improvements that will not have negative impacts on bus operations and bicycle and pedestrian safety be classified as Feasible in the EIR. VTA believes that any improvements that will require widening of the ROW, create a conflict with bus

operations, or negatively impact bicycle and pedestrian safety should be classified as Infeasible. If no feasible improvements can be implemented at this location, other off-setting mitigation measures should be included instead.

Transportation Mitigation Measures – Improvements to Bus Stop Facilities

As noted above, this project is expected to generate a significant increase in demand for transit services. In order to provide convenient access to bus transit service and as an off-setting mitigation measure, VTA staff recommends that bus stops in the vicinity of the SUMC Project be improved to meet VTA bus stop standards. VTA staff has reviewed the condition of the bus stops within the project site as well as on nearby segments of El Camino Real, within the area of transportation analysis in the TIA and DEIR. We found that the bus stops within the project site have already been improved to meet VTA's standards, but a number of stops nearby on El Camino Real have not been improved. We recommend that the project provide improvements to the following four higher-volume bus stops on El Camino Real:

Southbound El Camino, south of Galvez

- 10' X 75' PCC bus stop pavement pad
- Install 8' X 40' sidewalk adjacent to bus stop, extend sidewalk to corner, install curb cut, install pedestrian crossing

Northbound El Camino, north of Embarcadero

- 10' X 75' PCC bus stop pavement pad
- Westbound El Camino, west of California
- 10' X 75' PCC bus stop pavement pad
- Westbound El Camino, west of Page Mill
- 10' X 75' PCC bus stop pavement pad

Transportation Mitigation Measures – Traffic Adaptive Signals

Mitigation Measure TR-2.1 calls for the SUMC Project to contribute to the cost of installing Traffic Adaptive Signal technology on a number of roadways in the vicinity of the project site. VTA requests that the City ensure that the implementation of this technology take into account pedestrian and bicycle access (including wait times at traffic signals) as well as bus operations at the affected intersections. In particular, we note that Bus Signal Priority is currently in place at intersections along El Camino Real in Santa Clara County to improve the travel times of the VTA Rapid 522 service. The City should coordinate with Caltrans and VTA when proceeding with Traffic Adaptive Signals on El Camino Real to ensure that bus operations, emergency vehicle operations, and pedestrian and bicycle access are not negatively impacted.

Transportation Mitigation Measures – Pedestrian and Bicycle Accommodations

VTA commends the City and the project sponsor for including significant design features and mitigation measures to improve pedestrian and bicycle access and safety within and near the project site. In particular, we support efforts to improve pedestrian safety between the SUMC area, the Stanford Shopping Center, and the Palo Alto Transit Center, such as those described in Mitigation Measure TR-6.1.

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3a.10  
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In addition, we would like to note that VTA is in the process of establishing a Bike Sharing Pilot Program, which could help manage transportation demand between the SUMC and the Palo Alto Transit Center as well as improve bicycle access in the area in general. Stanford University Parking & Transportation Services staff has participated in the study, which identified Palo Alto to be one potential hub for the bike sharing program. VTA encourages the City and the project sponsor, as a way of furthering the project's auto trip reduction goals, to consider supporting the bike-sharing program by providing bike share "pods" at several strategic locations around the project site. VTA staff would be happy to discuss this idea with the City or the project sponsor in greater detail.

3a.11

**CMP Intersection Analysis**  
In addition to the Congestion Management Program (CMP) intersections analyzed in TIA report, VTA recommends the inclusion of the following CMP intersection in the TIA:

- Oregon Expressway / Middlefield Road
- This recommendation is based on the VTA TIA Guidelines that state a CMP intersection shall be included in a TIA if the proposed development project is expected to add ten or more peak hour vehicles per lane to any intersection movement.

3a.12

**Regional Trip Distribution Figure**  
Figure 3.4-9 of the DEIR, and the accompanying figure in the TIA, shows 21 percent of the regional trips to the SUMC project site coming from US 101 to the south. It is our understanding that this 21 percent figure reflects the percentage on US 101 south of the San Antonio/Charleston interchange and that some percentage of project trips exit at this interchange. We understand that the actual trip distribution from the model has been used in the freeway analysis in Table 3.4-23, so this table and accompanying findings will not change, but we suggest that Figure 3.4-9 be revised to make it clearer that the 21 percent figure applies to US 101 south of the San Antonio/Charleston interchange.

**3a. Santa Clara Valley Transportation Authority (VTA) CMA Planning Department, Robert Swierk, AICP (letter dated July 27, 2010)**

3a.1 *The commentor notes that VTA has begun conceptual engineering to introduce bus rapid transit (BRT) in the El Camino Real corridor and asks why the Draft EIR does not specifically mention VTA's future transit plans for the El Camino Real corridor. The Draft EIR notes that the project area is served by VTA's 522 Rapid bus service. The 522 Rapid is the initial improvement for implementing BRT in the El Camino Real corridor. Additional improvements would improve transit access to the SUMC Project and would provide improved non-automobile access for the communities along El Camino Real, the Alameda, Santa Clara/Alum Rock, and Capitol Expressway.*

Draft EIR text on page 3.4-33, third paragraph under Future Conditions, is revised as follows to provide additional information regarding proposed VTA BRT service between the Palo Alto Transit Center and the Eastridge Transit Center in San Jose:

**2025 No Project.** This scenario includes all of the growth in population and employment that is projected to occur between Existing Conditions and the year 2025. It also includes all of the highway and transit improvements that have dedicated sources of funding that are scheduled to be completed between Existing Conditions and 2025. Expected transit improvements include the proposed VTA BRT service between the Palo Alto Transit Center and the Eastridge Transit Center in San Jose. ¶ This scenario does not include the SUMC Project.

3a.2 *The commentor notes that VTA supports the establishment of mini transit centers within the SUMC Project as described in Mitigation Measure TR-7.1. The commentor further notes that this measure would provide an attractive, convenient, and safe location for passenger activity, but notes VTA is not planning to serve the transit centers unless they receive additional operating funding to cover the cost of modifying their routes and schedules. A quantified transit service analysis completed for the Final EIR determined that existing VTA bus service is sufficient to accommodate transit demand created by the SUMC Project. Any expansion of transit service needed for the SUMC Project is confined to the Marguerite shuttles and the U-Line. The SUMC Project sponsors have incorporated enhanced bus stops into the Project to accommodate the Marguerite shuttles. Please refer to Staff-Initiated Change 1 for the quantified transit analysis.*

3a.3 *The commentor notes the importance of the Palo Alto Intermodal Transit Station (PAITS) as the node for several transit lines and recommends that the City require the SUMC Project to fund any necessary expansion required to serve the increase in transit trips due to the SUMC Project. Any expansion of transit service needed for the SUMC Project would be limited to the Marguerite shuttles and to the U-Line and would not require expansions of existing VTA routes. With regard to VTA's concern regarding the capacity of the PAITS*



to handle increased shuttle service, Stanford and VTA regularly communicate to coordinate shuttle space at PAITS and would continue to do so.

The City appreciates the support and cooperation of VTA and looks forward to cooperatively working together. Please refer to Staff-Initiated Change 1 for a calculation of new VTA riders resulting from the SUMC Project.

- 3a.4 *The commentor expresses concern regarding the current lease between the City and VTA at the PAITS. Please refer to Staff-Initiated Change 1 for further analysis of the SUMC Project's impact on transit services. As explained in this response, the SUMC Project would not have a significant impact on transit services. Therefore, no mitigation measures for such impacts would be required under CEQA. It should be further noted that the City's existing lease with Stanford does not expire until June 30, 2033 (unless the City terminates it sooner); therefore, unless the City chooses, at its option, to terminate its lease with Stanford sooner (February 26, 2013), it would be the City that would be negotiating any extension or lease with VTA. Please refer to Master Response 10 for a discussion of non-CEQA issues.*
- 3a.5 *The commentor states that Transportation Impact TR-11 indicates that transit providers would adjust service frequencies and distribution to meet demand trends, but that VTA is not in the position to expand bus service to serve increased demand created by the SUMC Project. Additional transit service analysis has been completed for the Final EIR regarding impacts to transit. This analysis determined that the existing bus service along VTA routes is sufficient to accommodate transit demand created by the SUMC Project. Any expansion of transit service needed for the SUMC Project is confined to Marguerite shuttles and to the U-Line. For further information, please refer to Staff-Initiated Change 1.*
- 3a.6 *The commentor states that Mitigation Measure TR-7.2 requires the SUMC Project Sponsors to contribute to fund the project's fair share of Palo Alto's share of expanded Community Bus service. Please refer to Staff-Initiated Change 1 for the discussion and revision of Mitigation Measure TR-7.2.*
- 3a.7 *The commentor notes that the proposed right turn lane at the El Camino Real/Page Mill Road-Oregon Expressway intersection may have negative impacts on bus operations on El Camino Real for buses pulling in and out of the bus stop located just north of the intersection. The commentor also notes that a free right turn lane would have negative impacts on pedestrians and bicyclists and would require right-of-way from the VTA parking lot located on the corner. This acquisition would diminish the size, configuration, and access to this facility. The right turn volume at this intersection from Oregon Expressway to El Camino Real is over 300 vehicles per hour in the peak hours. A right turn lane would greatly improve the operation of this intersection. The suggested right turn lane would not be a free right turn, but would be controlled by the traffic signal. Therefore, the new lane would not conflict with bus movements on El Camino Real nor would it have a*

negative effect on pedestrians and bicyclists. The design of the right turn lane would take into account the impact on the adjacent park and ride lot. The existing curb lane is approximately 18 feet wide. By using some of this excess width to accommodate the added lane, impacts on the park-and-ride lot can be minimized. However, with implementation of other higher priority mitigation measures described in the Draft EIR (such as transportation demand management [TDM] measures, bicycle and pedestrian undercrossings, and traffic-adaptive signal technology), the right-turn lane would not be required to mitigate SUMC Project impacts.

- 3a.8 *The commentor notes that the SUMC Project is expected to generate a significant increase in demand for transit services and that an off-setting mitigation measure would be to improve deficient bus stops. Please see Staff-Initiated Change 1 for a revised and quantified analysis of SUMC Project impact on transit. No mitigation is required.*
- 3a.9 *The commentor requests that Mitigation Measure TR-2.1 takes into account pedestrian and bicycle access, as well as bus operations. The City would ensure that the implementation of adaptive signal technology (ADT) would consider bicycle and pedestrian access (including wait times at traffic signals) as well as bus operations at the affected intersections. The City would also coordinate with Caltrans and VTA when proceeding with traffic-adaptive signals on El Camino Real to ensure that bus operations, emergency vehicle operations, and bicycle and pedestrian access are not negatively impacted.*
- 3a.10 *The comment encourages the City and the SUMC Project sponsors to consider providing bike share pods at several strategic locations around the SUMC Sites. During public hearings on the SUMC Project, the Palo Alto City Council also suggested bike sharing as an appropriate way to expand the Hospital's TDM program. Please refer to Master Response 2 for a discussion of bike-sharing.*
- 3a.11 *The commentor requests that the Oregon Expressway/Middlefield Road intersection be added to the Transportation Impact Analysis because the SUMC Project is expected to add ten or more peak hour vehicles per lane to any movement at this intersection, which is a requirement of VTA's TIA Guideline for Congestion Management Program (CMP) intersections. Per the comment, this intersection has been analyzed and the results are presented in Table 4-1 below:*

**Table 4-1**  
**Intersection LOS Analysis of the Oregon Expressway / Middlefield Road Intersection**

			LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)
<b>AM Scenario</b>						
Existing			D	47.1	0.665	53.0
Existing + Project		Oregon Expressway /	D	47.1	0.677	53.0
2025 No Build	#67	Middlefield Road	E	61.5	0.856	67.8
2025 with Project		(CMP)	E	62.2	0.867	68.7
Village Concept			E	62.0	0.864	68.4
<b>PM Scenario</b>						
Existing			E+	56.1	0.660	60.4
Existing + Project		Oregon Expressway /	E+	56.4	0.665	60.4
2025 No Build	#67	Middlefield Road	E-	77.9	0.992	90.7
2025 with Project		(CMP)	E-	79.5	1.002	93.3
Village Concept			E-	78.6	0.996	91.9

Source: AECOM, 2011.

As shown in Table 4-1, the SUMC Project would result in a less-than-significant impact at the Oregon Expressway/Middlefield Road intersection. For all scenarios analyzed, the intersection would operate at LOS E or better and the average critical delay would not increase by four seconds or more, which is acceptable for a CMP intersection. LOS E is also considered acceptable under City of Palo Alto significance criteria.

- 3a.12 *The commentor states that Figure 3.4-9 in the Draft EIR shows 21 percent of the regional traffic for the SUMC Project would use US 101 to and from the south and that this 21 percent occurs south of the San Antonio/Charleston interchange even though the graphic shows the 21 percent figure north of the interchange. The commentor is correct. Draft EIR Figure 3.4-9 on page 3.4-48 has been revised to show 21 percent of regional SUMC Project traffic occurs south of the San Antonio/Charleston interchange. Please refer to Staff-Initiated Change 2 for an explanation of the revisions and Appendix T of this document for the revised figure.*





Letter 4

June 17, 2010

Steven Turner, Advanced Planning Manager  
Department of Planning and Community Environment  
250 Hamilton Avenue  
5th Floor  
Palo Alto, CA 94301

Re: Stanford University Medical Center Facilities Renewal and Replacement Project Draft Environmental Impact Report (DEIR)

Mr. Turner:

Thank you for providing the Santa Clara County Local Agency Formation Commission (LAFCO) with an opportunity to comment on the City of Palo Alto's Draft EIR for the Stanford University Medical Center Facilities Renewal and Replacement Project. We have completed a preliminary review of the document and have identified a few areas of the document which require revisions and or clarification in terms of the role of the Local Agency Formation Commission of Santa Clara (LAFCO) and the annexation process. The DEIR indicates that the project includes the annexation of an unincorporated 0.75-acre portion of the SoM area to the City of Palo Alto.

According to LAFCO's records the 0.75 acre area is located within the City of Palo Alto's Urban Service Area boundary. Government Code Section 5657 prohibits LAFCO from reviewing a "reorganization that includes annexation to any city in Santa Clara County of unincorporated territory that is within the urban service area of the city if the reorganization is initiated by resolution of the legislative body of the city." Therefore, the City of Palo Alto will be the conducting authority for the annexation or reorganization and will determine whether or not to approve the proposed annexation/reorganization.

The DEIR (see Page 2-62) identifies "Annexation and pre-zoning of the property at the northwest corner of the Main SUMC Site, which is currently unincorporated, to the new zone." Government Code Section 56375(a)(7) requires that the City to pre-zone the territory prior to annexing it. Furthermore, information concerning the City's pre-zoning designation should also be included in the City's adopted resolution approving the reorganization. Once the City approves an annexation, the pre-zoning becomes effective and must remain in place for a minimum of 2 years.

Similarly, the DEIR (see Page 2-63) incorrectly identifies LAFCO as being responsible for approving the annexation. While it is accurate that LAFCO is a Responsible Agency for this project, the City is the conducting authority for the proposed annexation because the territory in question is already located within the City's Urban Service Area. LAFCO's role in this instance is limited to issuing and recording a Certificate of Completion for the annexation or reorganization, providing the required documentation to the State Board of Equalization, and

4.3 **Cont** notifying the affected agencies and departments about the City's approval of the annexation/reorganization.

I hope this information is helpful in clarifying certain aspects of the annexation process and in ensuring that the DEIR contains accurate information. Should you have any questions or concerns, please feel free to contact me at (408) 299-5148 or [dunia.noel@ceo.sccgov.org](mailto:dunia.noel@ceo.sccgov.org). Thank you.

Sincerely,

Dunia Noel  
LAFCO Analyst

**4. Local Agency Formation Commission of Santa Clara County (LAFCO), Dunia Noel (letter dated June 17, 2010)**

4.1 *The commentor states that the 0.75-acre area that would be annexed to the City under the SUMC Project is actually in the City of Palo Alto's Urban Service Area boundary. Because the 0.75-acre portion of the Main SUMC Site is within the City's Urban Service Area,<sup>1</sup> then the City will be the conducting authority for the annexation and will determine whether or not to approve the proposed annexation. In response to Comment 4.1, Draft EIR text on page S-10, second bullet, and on page 2-23, second bullet, is revised as follows:*

- Annexation to Palo Alto of a 0.75-acre property within Santa Clara County jurisdiction, but within the City's Urban Service Area, with a Major Institution/Special Facilities land use designation to be applied to this property.

Draft EIR text on page 2-2, the fourth sentence of the first paragraph, is revised as follows:

A 0.75-acre portion of the SoM area within the Main SUMC Site is located in unincorporated Santa Clara County, but within the City's Urban Service Area, and is proposed for annexation to the City of Palo Alto.

Draft EIR text on page 3.2-9, first bullet, is revised as follows:

- SoM proposes annexation of the 0.75-acre parcel within Santa Clara County jurisdiction but within the City's Urban Service Area. This area would be annexed under the Major Institution/Special Facilities land use designation. The proposed FIM 1 building would be consistent with this designation.

Draft EIR text on page 3.2-31, the first sentence of the last paragraph, is revised as follows:

The SUMC Project would require the annexation of a small (approximately 0.75-acre) area, within the City's Urban Service Area, from Santa Clara County.

4.2 *The commentor states that the City is required to pre-zone territory prior to annexation. Page S-12, first paragraph, and page 2-27, first sentence, of the Draft EIR state, "Prior to annexation, the 0.75-acre area to be annexed would first need to be pre-zoned to be consistent with the rest of the Main SUMC Site." If the City approves the annexation, the City would include the pre-zoning designation in its adopted resolution approving the annexation. The City would comply with the requirement to keep the pre-zoning in place for a minimum of two years.*

In addition, Government Code Section 56757 provides that no subsequent change may be made to the Comprehensive Plan designation or zoning for the annexed territory that is not

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<sup>1</sup> City of Palo Alto, Palo Alto Comprehensive Plan, Land Use and Community Design, Map L-2, "Sphere of Influence Urban Service Area," 1998.

in conformance to the pre-zoning designation for a period of two years after the completion of the annexation. However, the City Council could make a finding at a public hearing that a substantial change has occurred in circumstances that necessitate a departure from the pre-zoning designation.

4.3 *The commentor defines the role of LAFCO in the annexation process.* In response to Comment 4.3, Draft EIR text on page 2-63, last bullet, is revised as follows:

- Local Agency Formation Commission (LAFCO) ~~approval of annexation,~~ issuing and recording a Certificate of Completion for the annexation, providing the required documentation of the State Board of Equalization, and notifying the affected agencies and departments about the City's approval of the annexation.





County of San Mateo

**Planning & Building Department**

455 County Center, 2nd Floor  
Redwood City, California 94063  
650/363-4161 Fax: 650/363-4849

Letter 5

Mail Drop PLM122  
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**RECEIVED**

July 27, 2010

JUL 29 2010

**Department of Planning and  
Community Environment**

Mr. Steven Turner, Advance Planning Manager  
Planning and Community Environment Department  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301

Dear Mr. Turner:

**SUBJECT:** San Mateo County Comments on the Stanford University Medical Center  
(SUMC) Facilities Renewal and Replacement Project DEIR

San Mateo County appreciates the opportunity to review the Stanford University Medical Center (SUMC) Facilities Renewal and Replacement Project DEIR, and offers the following questions and comments.

San Mateo County staff and elected officials have heard from residents of the unincorporated Weekend Acres area on more than one occasion about the commute period traffic conditions on Alpine Road, including the difficulty of turning left onto Alpine Road from local streets, the difficulty for pedestrians and bicyclists to both cross and travel along Alpine Road, and congestion at the Alpine Road/I-280 intersection. We have also received complaints from unincorporated West Menlo Park residents concerning the heavy commute-period traffic on Santa Cruz Avenue/Sand Hill Road, as well as traffic on local streets such as Leland Avenue.

As the DEIR states, full buildout of the project is projected to result in over 10,000 additional daily trips by 2025. Based on current employee demographics, the trip distribution onto San Mateo County roadways is projected to be as follows:

- About 8%, or 800, of these trips are expected to be distributed on Sand Hill Road
- About 6%, or 600, trips on Alpine Road
- Between 5 and 8%, 500-800, trips on the Alameda de las Pulgas, depending on the segment

The DEIR identifies a significant and unavoidable traffic impact on Alpine Road. Without mitigation, the projected increase would be about 514 vehicles per day. With mitigation, ADT is expected to increase from 25,120 to 25,260 (an increase of 140 vehicles). Proposed mitigation measures include:

1. Additional bicycle and pedestrian under-crossings of Caltrain tracks at Everett Avenue in Palo Alto and Middle Avenue in Menlo Park.

Mr. Steven Turner  
Advance Planning Manager  
July 27, 2010

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2. An enhanced TDM (Transportation Demand Management) program, including GO passes for Caltrain, buses and shuttles, and other measures.

3. Contribution to fees for the Menlo Park shuttle bus (which does not run on Alpine Road).

Please explain and/or provide more detail if necessary on how these proposed mitigation measures would realistically reduce the number of trips on Alpine Road by approximately 375. It appears likely to us that only the TDM measure would appear to have much of a potential impact on Alpine Road trips. San Mateo County is concerned that the mitigation measures proposed would not realistically result in the reductions in trips that are forecast in the DEIR. The analysis presented raises the following specific questions, which we would like to see explored in a revised EIR:

1. Does Caltrain have sufficient parking spaces at their existing lots to handle the additional vehicles? If not, what will be the impact to on street parking near these stations?

2. Does the existing transportation system service areas where Medical Center employees originate their trips? Will this project provide additional shuttle service to meet the additional demand? The DEIR referenced San Trans bus services for 280 and 281 service areas east of El Camino Real only. We believe that employees using Alpine Road will likely not benefit from enhanced services along these bus routes.

3. If Stanford plans to extend the Marguerite Shuttle to accommodate employees using Alpine Road, will additional parking be developed to accommodate them, and if so, where will it be located?

4. The existing study (in Appendix C of the DEIR) shows that about 77% of employees drive alone. Moreover, the Fehr and Peers report assumed that patient/visitor trip distribution was equal to employee trip distribution. This project adds 2,400 employees. Therefore, the remaining number of trips by patients/visitors may be more than those added by employees. Can a trip distribution for patient/visitor trips be generated based on current patient demographics?

The DEIR discusses impacts in terms of Menlo Park Standards of Significance, but not in terms of San Mateo County standards. We recommend that the report be revised to include San Mateo County Level of Service Standards (similar to the inclusion of standards for adjacent impacted agencies). Level of Service Standards (LOS) measure roadway congestion and must be established for all State highways and principal arterials included in the San Mateo County Congestion Management Plan's (CMP) Roadway System. Level of service is a qualitative description of roadway operations ranging from LOS A, or free flow conditions, to LOS F, or completely jammed conditions. The Congestion Management Program may not establish any standard below LOS E unless the LOS was F at the time that the standard was established (from San Mateo City/County Association of Governments' (C/CAG) 2005 CMP).

Mr. Steven Turner  
Advance Planning Manager

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July 27, 2010

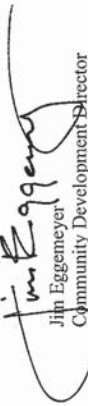
The DEIR identifies significant impacts at two intersections in the unincorporated County:

- 5.7 1. Santa Cruz (Alpine)/Sand Hill (AM peak). LOS would change from D to E. Intersection improvements could mitigate this impact (NB Santa Cruz needs an additional right turn lane), but are identified as infeasible due to right-of-way acquisition requirements and cost. This intersection is under the combined jurisdictions of Menlo Park and the County of San Mateo, and improvements would require their approval. Please note that this intersection was reconstructed in 2005-2006.
- 5.8 2. Alpine/I-280 (NB and SB off-ramps, both AM and PM), currently unsignalized (with stop signs) could be signalized to mitigate impacts. (Existing LOS is F in SB AM/PM and C in NB PM.) The DEIR states that the project is feasible and signal warrants are already currently met. While the ramps are under CalTrans jurisdiction, this section of Alpine is also within San Mateo County jurisdiction. A joint project would need to be developed and San Mateo County would be looking to the developers to fund this project.

5.9 No intersections along Alameda de las Pulgas in West Menlo Park were analyzed. Please add intersections from Valparaiso Avenue to Sand Hill Road along the Alameda de las Pulgas into the traffic study. In addition, please add Middlefield and Marsh Roads into the analysis.

Thank you again for the opportunity to review and comment on the Stanford University Medical Center (SUMC) Facilities Renewal and Replacement Project DEIR. Please contact me at 650/363-1861 should you have any questions.

Sincerely,

  
Jim Eggemeier  
Community Development Director

JE:MAT:fc - MATU0532\_WFN.DOC

cc: San Mateo County Board of Supervisors Members  
David Boesch, San Mateo County Manager  
Jim Porter, San Mateo County Department of Public Works Director  
Joe Lo Coco, San Mateo County Department of Public Works, Deputy Director  
Arlinda Heineck, Menlo Park Community Development Director  
Virginia Shefchick  
Lennie Roberts, Committee for Green Foothills

**5. County of San Mateo Planning and Building Department, Jim Eggemeyer (letter dated July 27, 2010)**

- 5.1 *The commentor requests additional detail on how the proposed mitigation measures could reduce trips on Alpine Road by 375 vehicle trips per day and states that only transportation demand management (TDM) measures could account for this reduction. The 375-trip reduction is obtained from the Average Daily Trips (ADT) data (Table 3-9 and Table 4-8 of Appendix C, Transportation Impact Analysis, of the Draft EIR). The location on Alpine Road where the ADT is calculated is just south of the Junipero Serra Boulevard/Alpine-Santa Cruz (intersection #27) intersection. Volumes at this segment include traffic from Alpine Road, south of I-280, as well as from I-280. The commentor is correct that the only effective trip reduction measure along Alpine Road is the TDM program. The reduction is due to the proposed GO Pass measure that would result in less traffic from the freeway. Using the project volumes at the Alpine Road/I-280 northbound off-ramp (intersection #62), the total project volume along Alpine Road during both the AM and PM Peak Hours is 79 vehicles. Each peak hour is approximately 7 percent of the daily traffic. Therefore, the daily project traffic on Alpine Road is approximately 610. The reduction in project traffic due to implementation of the TDM program, including provision of the GO Pass, is about 100 vehicles. In addition, the GO Pass is expected to reduce existing traffic by about 275 vehicles, bringing the total reduction along Alpine Road to about 375 vehicle trips per day.*
- 5.2 *The commentor questions whether Caltrain has sufficient parking spaces to handle additional vehicles associated with the implementation of GO Passes for SUMC employees. The GO Pass program is a Caltrain initiative to increase ridership, allow employers to provide a benefit to their employees, and to eliminate drive-alone trips to their place of employment. Since the program is available to all employers, the Hospitals and the City of Palo Alto have identified this measure as a possible TDM component for the SUMC Project. Caltrain is responsible for providing the facilities necessary to accommodate any increase in ridership. Please see Master Response 1 for a discussion on the effectiveness of the GO Pass and provision of parking at Caltrain stations.*
- 5.3 *The commentor questions whether the existing transportation system serves areas where SUMC employees' trips originate, whether the project sponsors would provide expanded service to meet the additional demand, and states employees using Alpine Road would not benefit from Mitigation Measure TR-7.2 Provide Expanded Transit Service, because none of the transit routes targeted for improvement serve the Alpine Road area. There is currently no transit service traveling along Alpine Road as noted on Draft EIR Figure 3.4-5 on page 3.4-24: Existing Transit Route Network. There is no proposal to add additional transit service to Alpine Road as part of the SUMC Project. The SUMC Project Transportation Impact Analysis considered all additional travel demand on Alpine Road to be automobile trips and assessed the project's impacts accordingly.*



- 5.4 *The commentor asks whether Stanford plans to extend the Marguerite shuttle to accommodate new employees using Alpine Road, whether additional parking would be provided to accommodate them, and where that parking would be located. Although the Hospitals would be required to expand the frequency of service by the Marguerite shuttle to accommodate increased Caltrain ridership (Mitigation Measure TR-7.2), the purpose of this measure would be to improve the level of transit service between the SUMC Project and the Palo Alto Intermodal Transit Station (PAITS). Stanford does not propose to expand Marguerite service onto Alpine Road and does not propose a park-and-ride lot on Alpine Road. Please refer to Staff-Initiated Change 1 for the revised TR-7.2.*
- 5.5 *The commentor requests that a trip distribution pattern be established for patients and visitors. Following standard methodologies, the Transportation Impact Analysis (Appendix C of the Draft EIR) focused on the AM and PM Peak Hours (the periods between 7:00 a.m. and 9:00 p.m. and 4:00 p.m. and 6:00 p.m., respectively). During these times, the majority of travel is by employees. However, the trip generation rates also include patient and visitor trips. Moreover, the trip distribution patterns of patients and visitors during the AM and PM Peak Hours would be similar to employees. A separate analysis of patient and visitor travel patterns is not expected to yield results different from that contained in the Transportation Impact Analysis.*
- 5.6 *The commentor requests that San Mateo County standards of significance be included in the Transportation Impact Analysis. The San Mateo County Congestion Management Program (CMP) significance criteria state that a traffic impact would be considered significant if the project would:*
- Cause a signalized CMP intersection to operate at a LOS that violates the standard adopted in the current CMP;
  - Result in a signalized CMP intersection to operate at a LOS that violates the standard adopted in the current CMP and the proposed project increases average control delay at the intersection by four seconds or more under the cumulative conditions;
  - Add any additional traffic to a signalized CMP intersection that is currently not in compliance with its adopted LOS standard as established in the CMP;
  - Cause a freeway segment to operate at a LOS that violates the standard adopted in the current CMP;
  - Result in a freeway segment to operate at a LOS that violates the standard adopted in the current CMP and the proposed project increases the V/C ratio by one percent under the cumulative conditions; or
  - Result in one percent increase in the V/C ratio if the freeway segment is currently not in compliance with the adopted LOS standard.

The San Mateo County CMP intersections were analyzed in the Draft EIR using City of Menlo Park criteria. The analysis determined that the Bayfront Expressway/Willow Road intersection and the Bayfront Expressway/University Avenue intersection would be considered significantly impacted under these criteria. No freeway or roadway segments are considered significantly impacted under these criteria and no new impacts have been identified.

- 5.7 *The commentor notes that the intersection of Santa Cruz Avenue/Sand Hill Road would experience a change in level of service from LOS D to LOS E during the AM Peak Hour and notes that implementation of intersection modifications would require the approval and concurrence of both Menlo Park and San Mateo County.* The Transportation Impact Analysis determined the type of physical improvements that would be necessary at every intersection significantly impacted by the SUMC Project. The Transportation Impact Analysis further analyzed other potential mitigation measures in advance of physical roadway improvements; including traffic-adaptive signal technology, transportation demand management strategies, and bicycle and pedestrian facility improvements. The combined implementation of these other strategies would mitigate the impact to the Santa Cruz Avenue/Sand Hill Road intersection to a less-than-significant level, and physical roadway improvements at this intersection would not be required.
- 5.8 *The commentor states that signalization of the Alpine Road/I-280 NB Off-Ramp intersection and the Alpine Road/I-280 SB Off-Ramp intersection would reduce project impacts and that the SUMC Project should help fund this improvement.* Draft EIR page 3.4-16, Table 3.4-6 states that these intersections operate at unsatisfactory LOS under existing conditions. Because of the deficient traffic operations that currently occur at these intersections, the SUMC Project would result in a significant traffic impact. However, prior to making any physical improvements at impacted intersections, the Draft EIR considers mitigation measures such as expanded TDM measures, traffic-adaptive signal technology, and bicycle and pedestrian improvements. Implementation of these measures would reduce the SUMC Project impacts to a less-than-significant level and no physical improvements, such as signalization, would be necessary at the Alpine Road/I-280 SB Off-Ramp intersection and at the Alpine Road/I-280 NB Off-Ramp intersection.
- 5.9 *The commentor requests that intersections along Alameda de las Pulgas in West Menlo Park and the Middlefield Road/Marsh Road intersection be added to the Transportation Impact Analysis.* The parameters of the Transportation Impact Analysis were reviewed with Menlo Park engineering staff and the scope of the Transportation Impact Analysis study area is considered adequate to address the likely impacts of the SUMC Project. The Transportation Impact Analysis included the analysis of 66 intersections, eight residential roadway segments, and eight roadway segments along major corridors within and surrounding Menlo Park. However per the comment, the Middlefield Road/Marsh Road intersection has been added to the analysis. On the other hand, based on the Menlo Park



significance criteria, the SUMC Project is unlikely to have an impact on Alameda de las Pulgas, classified as minor arterial street within the City of Menlo Park, as the project ADT is expected to be less than 100 vehicles. As such, Alameda de las Pulgas has not been included within the Study Area.

As shown in Table 4-2 below, the Transportation Impact Analysis determined that the Middlefield Road/Marsh Road intersection would operate within an acceptable LOS D or better under all scenarios analyzed.

**Table 4-2  
Level of Service Analysis for the Middlefield Road/ Marsh Road Intersection**

			LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)
<b>AM Scenario</b>						
Existing			C	24.1	0.711	34.3
Existing + Project			C	24.6	0.727	34.8
2025 No Build	#69	Middlefield Road/ Marsh Road	C	31.9	0.882	48.3
2025 with Project			C-	33.2	0.899	50.4
Village Concept			C-	32.9	0.894	49.8
<b>PM Scenario</b>						
Existing			C	26.6	0.766	41.0
Existing + Project			C	26.8	0.775	41.5
2025 No Build	#69	Middlefield Road/Marsh Road	D	43.0	0.978	70.4
2025 with Project			D	44.1	0.987	72.7
Village Concept			D	44.3	0.988	72.9

Source: AECOM, 2011.

Letter 6

**Chapman, Kirsten R**

**From:** Matthew Seubert [MSeubert@co.sanmateo.ca.us]  
**Sent:** Wednesday, August 04, 2010 11:23 AM  
**To:** Stanford Project; Turner, Steven  
**Cc:** Jim Eggemeier; whitney@mcplanning.com  
**Subject:** Additional comment on Stanford U. Med. Ctr. DEIR

Dear Mr. Turner,

San Mateo County had provided written comments on the Stanford University Medical Center DEIR on July 27. I have subsequently received an additional comment (below) from our County Manager, which I am forwarding to you for your consideration. Please let me know if you have any questions. Thank you.

Sincerely,

Matt Seubert  
San Mateo County Planning Department

 Save Paper. Think Before You Print.

>>> David Boesch 8/2/2010 9:00 AM >>>

Jim-

The letter on the Stanford Medical Center expansion project is well done. If serious discussions ensue regarding the Alpine Road/I-280 intersection and its potential signalization, I suggest that the experts also look at the potential alternative of a roundabout. There are a number of new designs and fairly recent examples where their performance surpasses standard traffic signal technology.

Thanks.  
David

6.1

**6. County of San Mateo County Manager, David Boesch (letter dated August, 2010)**

- 6.1 *The commentor states that if serious discussions ensue regarding the signalization of the Alpine Road/I-280 NB Off-Ramp intersection and the Alpine Road/I-280 SB Off-Ramp intersection, that a roundabout may be a viable alternative to a signal, because new designs of roundabouts surpass the performance of standard traffic signal technology. A roundabout, if properly designed, could provide more capacity than a standard traffic signal. The trade-off would include the availability of right-of-way as roundabouts generally require more area. The final decision with respect to the most appropriate traffic control at this intersection would be made by both Caltrans and San Mateo County. However, with implementation of the other mitigation measures identified in the Draft EIR, the SUMC Project would not have a significant impact at this intersection and would not be required to help fund a traffic signal or roundabout.*

Signal warrants are currently met at the Alpine Road/I-280 NB Off-Ramp intersection and the Alpine Road/I-280 SB Off-Ramp intersection. Because of the deficient traffic operations that currently occur at this intersection, the SUMC Project would cause a significant traffic impact. However, prior to adopting mitigation measures that include physical improvements at impacted intersections, the Draft EIR considers expanded transportation demand management (TDM) measures, traffic-adaptive signal technology, and bicycle and pedestrian improvements. Implementation of these measures would reduce the SUMC Project impacts to a less-than-significant level and no physical improvements, such as signalization or a roundabout, would be necessary at the Alpine Road/I-280 NB Off-Ramp intersection or the Alpine Road/I-280 SB Off-Ramp intersection.

July 27, 2010  
Page -3-



**CITY OF EAST PALO ALTO**  
Community Development Department— Planning Division  
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**CITY OF EAST PALO ALTO**  
Community Development Department, Planning Division  
1960 Tate Street, East Palo Alto, California 94303

RECEIVED

Steven Turner  
Advanced Planning Manager  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301

July 26, 2010

AUG 3 2010

Department of Planning and  
Community Environment

Trixie Martelino, Project Manager  
Post, Buckley, Schuh and Jernigan (PBS&J)  
353 Sacramento Avenue, Suite 1000  
San Francisco, California 94111

RE: Stanford University Medical Center Facilities Renewal and Replacement Project  
Draft Environmental Impact Report ("EIR")

Dear Mr. Steven Turner:

On behalf of the City of East Palo Alto, the Honorable Mayor David Woods and members of the East Palo Alto City Council, the Planning Division graciously thanks Stanford University Medical Center and the City of Palo Alto for delivering a televised presentation on the Draft Environmental Impact Statement on the Stanford University Medical Center Facilities Renewal and Replacement Project. The City especially wishes to express their continued appreciation to the Stanford University Medical Center and the Lucile Packard Children's Hospital for the ongoing support provided many of the city's non-profits dedicated to improving the health of local residents.

These formal comments to the draft Environmental Impact Report entitled "Stanford University Medical Center Facilities Renewal and Replacement" - SCH # 2007082130, prepared by PBS & J and their various sub consultants, include the collective response of the various agencies of the City of East Palo Alto and the City Council.

Inquiries should be directed to the Planning Division.

Very truly yours,

Brent Butler,  
CEQA Reviewer, AICP, CFM  
  
Brad Tarr,  
Senior Planner, AICP

REVISED EDITION

JULY 27, 2010

LEAD AGENCY:  
PROJECT APPLICANT:  
RESPONSIBLE AGENCY:

City of Palo Alto  
Stanford University Medical Center  
City of East Palo Alto

REVIEWING AGENCY:  
CONTACT

City of East Palo Alto  
Brent A. Butler, Planning Director  
PLANNING DIVISION  
1960 Tate Street, East Palo Alto, California 94303

SUBJECT:

Comments on the Stanford University Medical  
Center Facilities Renewal and Replacement  
SCH # 2007082130

These comments are arranged in the order by which the appendices were drafted. With the exception of the proposed mitigations listed in the summary Section III, the comments refer specifically to the technical appendices, and the accompanying Draft EIR.

**APPENDIX A**

*No comment.*

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## Section I

### Comments on Draft Environmental Impact Statement



APPENDIX C

Part I  
Comments on the Transportation

AIR QUALITY IMPACTS

CEQA Guidelines section 15064, subdivision (d) mandates that both primary (direct) and "reasonably foreseeable" secondary (indirect) consequences be considered in determining the significance of a project's environmental effect. Concerns expressed by the legislative body of the City, including the Honorable Mayor David Woods and Councilmember Ruben Abrica, echoed by the City's Planning Division and Public Works Department, suggest that the Draft Environmental Impact Report for the Stanford University Medical Center Facilities Renewal and Replacement ("SUMC") does not consider reasonably foreseeable secondary (indirect) consequences, such as transportation impacts on local air quality and mobility in the City of East Palo Alto.

The Draft EIR omits specific relevant information denoted thus:

- While the EIR approximates that 26% of the SUMC's 10,061<sup>1</sup> daily trips will use the highways within the City of East Palo<sup>2</sup> or access Hwy 101 through the local arterials, such as University and West Bayshore, no mention of trip contribution to air pollution outside of the immediate project vicinity appears to have been investigated in any of the report's appendices, or accompanying Draft EIR.
- The EIR implies that since there is little or no change in the intersection Level of Service (LOS) in the City of East Palo Alto that there is no impact on public health.

The City disagrees. To the contrary, based on many reports on congestion and traffic (1, 2, 3, 9, 23, 24, 25, 27, 29, 30, 31, 32, 33, 34, 41, 45, 47, 51, 52, 54, 55, 70, 75, 76, 79, 83), local and regional hearings, and specific findings by the Public Works Department for the City of East Palo Alto, and C/COG of San Mateo, it is anticipated that the SUMC may increase the negative health outcomes of East Palo Alto residents, if not adequately mitigated.

ENVIRONMENTAL JUSTICE

The City of East Palo Alto is an environmental justice community based on local household characteristics; approximately 79 percent of East Palo Alto households have incomes defined as low-income, and 74% of the City is Latino and African-American. Moreover, the City of East Palo Alto has been disproportionately burdened by regional traffic and hazardous air, soil and ground water contaminants leading to the City's designation as a brownfields community. The depth and breadth of this burden and the consistency with which the community has borne unwanted land uses is clearly expressed in the East Palo Alto documentary entitled *Dreams of Our City*.

<sup>1</sup> Table 3-2 in AECOM's March 2010 Traffic Impact Analysis ("TIA")

<sup>2</sup> 26% of trips are distributed in the direction eastward, where East Palo Alto is located (see Appendix C, Fehr and Peers November 14, 2007 memorandum).

APPENDIX B

Comments on the Cumulative Projects within Palo Alto

The City of East Palo Alto acknowledges the list of projects in the pipeline, and notes that many of the sixty (60) projects identified employ workers identified by the North American Industrial Classification System as wage earners that do not earn enough to afford rental or for-purchase housing in Palo Alto. For those residential housing units contained in the list, it is also anticipated that increased demand for goods and services require the hiring of new workers in Palo Alto, some of whom cannot afford housing within the city boundaries.

Palo Alto is the number one employment center for East Palo Alto residents; Menlo Park is the second, as documented in the *Ravenswood/4 Corners TOD Specific Plan Market and Economic Analysis* prepared by Bay Area Economics, dated February 2, 2010 (see Table 13 Commute Patterns). A failure to mitigate both residential and non-residential development will result in increased affordable housing demand. If the construction of affordable housing within the City of Palo Alto does not meet demand, there would likely be increased demand for affordable housing in East Palo Alto. This unmet demand could force displacement of existing East Palo Alto families, as employees seeking housing close to work look for low cost housing in East Palo Alto. Indeed, the City of East Palo Alto may provide housing for those ranges of income not accommodated by the sixty projects in Palo Alto's pipeline.

Mobility Issues

Producing housing that matches wages may improve air quality by those who no longer need to 'drive to qualify' for housing that is within their means. Efforts to reduce these impacts through improved non-motorized connections to East Palo Alto in accordance with SB 32 and SB 375, and affordable housing production in Palo Alto commensurate with the new housing demand would be welcome.

### POTENTIAL FOR INCREASED CANCER INCIDENCE

Congestion related impacts of the Stanford University Medical Center ("SUMC") could be exacerbated at peak hour, especially PM peak hour when the 'heat island effect' is greatest and the traffic counts are the highest. Toxic Air Contaminant (TAC) increases in the afternoon could be especially significant since this coincides with after school activities, when children are active and respire at higher levels, thereby creating an exposure pathway that could be particularly decisive for increased cancer incidence. With sparsely planted trees, the urban canopy to mitigate air impacts is virtually non-existent. With among the lowest median age of any City in the Bay Area (27 years of age in East Palo Alto<sup>3</sup>, versus 40 years for San Mateo County), the potential for significant adverse health impacts by those sensitive receptors is very real, and unfortunately documented by statistics.

These impacts are magnified by ramp metering and cut-through traffic, which is a roadblock to exercise such as walking and bicycling. The proximity of the Caltrans ramps and highways to dense housing allows TACs, especially from those trucks accessing the SUMC project area to impact open space and schools. Even with ramp metering, intersection levels of service at the SUMC's studied streets suggest that road capacity is limited. As trucks are known contributors of PM 2.5, which correlates with increased cancer incidence, analysis of these impacts in the Draft EIR is necessary but entirely omitted. Unfortunately, other than a statement that the adopted truck routes of the adjacent municipalities will be used, there is virtually no spatial data or discussion about the proximity of the schools and housing to these approved truck routes and roads, which must carry roughly 26% of all of the SUMC operational, not to mention construction-related, trips.

Cut-through traffic has been widely discussed by the City of East Palo Alto's advisory bodies, the 2020 Peninsula Study, and the C/COG's Willow and University Corridor Project, which is currently underway. A material omission, which calls into question the completeness of the EIR, is how the cut-through traffic, long queues along University during peak hour, and clogged residential roads impact health in an environmental justice community with one of the smallest ratios of open space per 1,000 persons in the region.

### DURATION OF CONCERN

Since speculation should be excluded from the EIR, the number of years that higher levels of TACs would be anticipated is irrelevant because of uncertainty with regard to the impact of the Corporate Average Fuel Economy (CAFE). For this reason, the EIR should mitigate increased levels of TACs until local monitoring documents that TACs are no longer a concern.

While the CAFE program, originally adopted by Congress in 1975, would argue that local air quality would improve over time, several economists have noted otherwise. The CAFE program

<sup>3</sup> City of East Palo Alto Housing Element adopted June 15, 2010

requires automobile manufacturers to meet a 'sales-weighted average of 18 miles per gallon by truck... increasing steadily to 27.5 mpg for Model year 1985 and beyond. ....for light-duty truck... manufacturer's fleet must average at least 20.7 mpg.' Based on the CAFE program, it might be assumed that increased fuel efficiency would translate into improved air quality.

However, some economists note that 'tighter fuel economy standards will make it less expensive to drive an additional mile, and that to the extent people respond by driving more, local pollution could actual increase (Rebound Effect). Moreover, if tighter fuel economy standards drive up the cost of new cars, and light-duty trucks, the retirement of older vehicles will be delayed because these later vehicles meet less stringent emissions standards'.<sup>4</sup> The foregoing discussion highlights the complexity of the relationship between air quality regulations and emissions of carbon monoxide, the hydrocarbons and oxides of nitrogen that create smog and other TACs.

### JUSTIFICATION TO INCLUDE HEALTH IMPACTS

Justification to include public health impacts in an Environmental Impact Report (EIR) exists. For example:

"In *Bakersfield Citizens v. City of Bakersfield* (2004), the court found an EIR inadequate because of its failure to analyze the respiratory health impacts caused by the impacts of the projects on air quality. In the court's opinion, 'After reading the EIRs, the public would have no idea of the health consequences that result when more pollutants are added to a non-attainment basin.' In another case, the court found a California Department of Food and Agriculture (CDFA) EIR deficient because it did not adequately evaluate the health impacts of authorizing pesticide use, including impacts on people in nonagricultural areas'<sup>5</sup>

### RELEVANT FACTS

- i. CALTRANS - Deployment by Caltrans of the metered ramps may contribute to the backups experienced on the City's main arterials and residential streets in five designated areas (see attached *Areas of Impact* map). For example, the standard of discontinuing ramp metering when local roads or arterials are backed up, as adopted by the State of Washington as a SOP - standard operating procedure - to mitigate local community impacts, does not appear to be an adopted practice in California, since longer than anticipated queues have been noted.<sup>6</sup> The Peninsula Corridor Ramp Metering Study recommends a host of improvements including ramp metering at University Avenue, which Caltrans implemented (staff is not aware of any baseline air quality data taken before ramp metering was started); and

<sup>4</sup> Paul Portney, Ian Parry, Policy Watch. The Economics of Fuel Economy Standards, *Journal of Economic Perspectives*, Volume 17, Number 4, Fall 2003, page 203-217

<sup>5</sup> Rajiv Bhatia and Aaron, Integrating Human Health into Environmental Impact Assessment: An Unrealized Opportunity for Environmental Health and Justice, *Environmental Health Perspectives*, Vol. 116, No. 8 (Aug., 2008), pp. 991-1000

<sup>6</sup> See Public Works and Transportation Commission meeting, July 21, 2010

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- ii. **ADVISORY BODIES** - Numerous stakeholders complained of cut-through traffic at meetings of the Planning Commission, Public Works and Transportation Commission and the Areas of Impact listed above correlate to these findings; and
- iii. **AIR QUALITY** - While the Bay Area Air Quality Management District identifies the City of East Palo Alto as an "Impacted Area"<sup>7</sup>, the American Lung Association has rated the 94303 area with an F for air quality. By comparison, areas of San Mateo County outside of the City of East Palo Alto and Redwood City received a C, which indicates that there is better air quality overall. In accordance with the findings in select journals that are peer reviewed (see attachments), the combination of environmental factors prevalent in the local area suggest that increased cancer incidence or other negative health outcomes would reasonably be expected, as a result of the impaired air quality; and given that nearly 3,000 cars (26 percent of 10,061) will release TAC, much of this during the peak hour, to the City's roadway network already at capacity. Based on the foregoing, the City reasonably anticipates localized impacts; and
- iv. **OBESITY** - The San Mateo Department of Public Health identifies an explosion of obesity in local youth based on an analysis of schools (see health impact area 2 for a discussion on this topic)
- v. **MORBIDITY** - The California Department of Public Health's Office of Statewide Health Planning and Development identifies that residents of the City of East Palo Alto have significantly shorter life expectancies, which could be partially attributable to a failure to identify, quantify, and mitigate health impacts of major projects, and
- vi. **CONGESTION** - Given that the existing conditions in the EIR illustrate that many of East Palo Alto's intersection segments have a LOS of D or worse, it is reasonable to assume that a percentage of the 26% of the project's traffic will spillover onto local roads that impact the local community. For example, congestion on Hwy 101 causes traffic to divert into East Palo Alto neighborhoods (e.g., Pulgas and Clarke Avenue), and congestion on University Avenue diverts traffic to Woodland Road (see Peninsula Corridor Gateway Study Figure 3 - Traffic Issues Within Study Area); several of these designated areas of congestion, i.e., areas experiencing cut-through traffic may be creating microclimates loaded with TACs based on the findings outlined under viii below; and
- vii. **SENSITIVE RECEPTORS** - Given the proximity of these congested areas to the schools, recreational areas, and multifamily apartment buildings<sup>8</sup> that house possibly as much as 45% of the Ravenswood School District's 4,700 school children, the increase in cancer risk could be considerable, and is omitted in the discussion.

<sup>7</sup> Bay Area Air Quality Management District's June 2010 report entitled Assessing and Mitigating Local Community Risk and Hazard Impacts, page 5-4

<sup>8</sup> Sensitive receptors approximately 1000 feet from emitters (off-ramps) and in low-lying areas impacted by spillover effects from congestion are identified by Areas of Impact map

- viii. **MICROCLIMATES POTENTIAL FOR TAC LOADING** - TREES - ortho-rectified GIS maps document that the urban canopy (the density of trees available to adsorb, mitigate, or reduce TAC impacts) would be minimal, therefore exacerbating impacts.
- a. **HEAT ISLAND EFFECT** - local data related to roadway design, and material content suggest that darker pavement increases the localized impact of the heat island effect and potentially exacerbates TAC loadings, and
- b. **GEOLOGY** - Dispersion models identify that terrain is a factor in that TACs may disperse to the low-lying areas abutting intersections impacted by congestion. The Flood Insurance Rate Map identifies that almost 40 percent of the City is in the special flood hazard area, meaning that the heavy air particulates have a greater opportunity to disperse in low-lying areas where sensitive receptors are located.

7.8  
Con't

**MODELING**

Findings by the National Institutes of Statistical Sciences identify three core considerations specific to transportation modeling that raise serious questions about the analysis in the Draft EIR, or lack thereof, including

- "a) Designing and collecting field data is critical, difficult.... (b) Robustness in the "simulator" world is not necessarily robustness in reality. .... (c) The use of visualization is important because it can quickly provide insight into difficulties and also assist in uncovering sources of trouble."

7.9

First, no relevant data specific to the City of East Palo Alto's health concerns appear to have been collected for the purpose of modeling air quality impacts. Concerns related to this encouraged City staff to meet with the Caltrans Environmental Engineering Branch Manager, District Four, and Caltrans staff in Oakland, California on July 23, 2010 for the purpose of gathering the 'best available science' related to modeling techniques. Based on this conversation, the City borrowed a technical report<sup>9</sup> and also became aware that CALINE 4, which is used in the Draft EIR Appendix would likely underreport a host of TACs and that this model has not been used by Caltrans in almost a decade. Furthermore, when used it has been exclusively limited to carbon monoxide (CO). Second, no notation appears in the appendix to support a finding that the simulator's robustness mimics that of reality, since investigations related to the impacts of spillover traffic is omitted entirely from the Draft. Thirdly, congestion related delays at intersection not investigated in the Draft EIR, and which were referred to in public meetings by Public Works and Transportation Commissioner Tso, PE, extend from the metered off ramp at the University Avenue overpass all of the way up and over the freeway. Visualization of these

7.10

7.11

<sup>9</sup> Richard A. Berk et al. Workshop on Statistical Approaches for the Evaluation of Complex Computer Models, Statistical Science, Vol. 17, No. 2 (May, 2002), pp. 173-192  
<sup>10</sup> ACUMEN Industrial Hygiene, Inc., Vehicle Emissions Ambient Air Monitoring Report - West Grand Avenue Detour West Oakland, Oakland, California, 24 May 2007

7.11 Cong't congestion related impacts might improve the model's robustness, and enable the proper positioning of air collection filters so that the most appropriate field data is collected, and an appropriate risk reduction program crafted.

POTENTIAL FOR AN UNDERESTIMATION

The Stanford Medical Center Pre-application Traffic and Parking Study map identifies estimated trip distribution based on employee residences, and extrapolates from this base sample to estimated total trips as highlighted below.

"The trip distribution, being based on employee residences, does not directly reflect the origins/ destinations of patient trips. However, it is a good basis for distributing peak hour trips, because (1) employee commute trips make up the largest component of peak hour travel for medical centers, and (2) the geographic distribution of patients served by the medical center is similar to housing patterns within the communities served by the medical center, which is also correlated with the employee population."

7.12 While the City agrees with the methodology, the decision expressly stated in Appendix K, "not to use a multiplier", and therefore to exclude some of the indirect and cumulative impacts from the study create a potential for an underestimation of trip generation.

<sup>11</sup> See Keyser Marston on multiplier effect - Appendix F

APPENDIX B -

Part 2  
Comments on the Transportation

MOBILITY IMPACTS  
Comments Related to Non-motorized Transit and Public Transportation

The SUMC project could inhibit the use of public streets for bicycling or walking, as increased congestion on the major pathways to recreation, schools, and neighborhood servicing retail would be impacted by higher traffic counts, reduced air quality, and a perception that the streets are clogged, and unsafe for non-motorized mobility. A careful review of the traffic counts and accident data for the City obtained by the Statewide Integrated Telecommunications System (Switers) suggest that there are very real health impacts, and that the public perception of these impacts might exacerbate the explosion of obesity currently underway within the City of East Palo Alto.

IMPACT CHAIN

The Stanford University Medical Center project will create 10,061 trips, which will lead to more spillover/cut-through traffic as 26% of the trips distributed to the east access SUMC through two major routes that divide the City. Mobility impacts related to traffic is abundant in the literature, as are the associated health effect. The SUMC project is expected to impact all of the categories identified below by reducing physical activity, connectivity, including

Studies show that:

- 1) children who expend fewer calories through physical activity are more likely to be obese than other children (4);
- 2) the most effective programs to reduce obesity carried out by academic centers combine diet, behavior, activity, and parental involvement (15);
- 3) that a disproportionate share of bicycling occurs on well-connected neighborhood streets with a network of bicycle specific infrastructure to encourage more bicycle among adults (28);
- 4) having recreational space within one kilometer of home was the strongest urban form predictor of walking (39);
- 5) Increase in the prevalence of obesity appears to be attributable to environmental conditions that implicitly discourage physical activity while explicitly encouraging consumption of greater quantities of energy-dense, low nutrient foods (46);

Study number four is significant since nearly 42% of the City of East Palo Alto has access to recreation by way of a four-foot wide path on the University bridge overpass leading to one of the City's highest collision rates. Given that this intersection would have to accommodate more traffic as a result of this project, mitigation is warranted. Study number five highlights the City's efforts to improve local health through access to healthy foods available in new stores such as



7.13  
Cont't

Mi Pueblo, could be offset by SUMC project traffic because it is a barrier that discourages physical activity.

*North/South Barrier for Pedestrian and Bicycle Mobility*

**University Avenue**, which divides the City into two distinct halves, has been the focus of the Willow University Corridor Study for the purpose of decreasing delays along the arterial. At the City of East Palo Alto's Public Works and Transportation Commission during meetings in the spring and summer of 2010, the advisory body members expressed concern that more traffic would lead to very real impacts, and questioned whether reducing the four existing lanes on University Avenue to two could accomplish a reduction in pass-through traffic. These comments were in response to concerns about speed and cut-through traffic.

7.14

*East/West Barrier for Pedestrian and Bicycle Mobility*

**Highway 101** divides the densely populated western part of the City of East Palo Alto, which is significant because more than 70% of the City is zoned for single family, low density residential uses (1-7 dwelling units per acre (du/ac)). However, the density of the western portion of the City, west of US 101, ranges as high as 28-38 du/ac where several apartment/condo buildings are located.

7.15

**NOTEWORTHY OMISSIONS**

Review of the Transportation Appendix B identifies that East Palo Alto's Comprehensive Plan, thresholds of significance and shuttle service are entirely omitted. The East Palo Alto Comprehensive Plan ("Plan"), truck routing and non-motorized transportation is rarely referenced in the Appendix, which is relevant given the City's Plan implements SB 32 and SB 375 through the bikeways/pedestrian projects highlighted below.

7.16

"...two major bikeway/pedestrian projects ... the University Avenue Bicycle Lanes, and the Bayfront Bicycle Trail. The University Avenue Bicycle Lanes Project involves the design and construction of pavement rehabilitation, street lighting, striping, and signage to provide bicycle lanes on University Avenue from Donohoe Street to the north City limit. This project will be constructed as part of the University Avenue Reconstruction Project to create a regional bikeway that connects bicycle lanes in the cities of East Palo Alto, Palo Alto and Menlo Park." (See East Palo Alto Circulation Element, December 20, 1999)

**INITIAL STUDY – Aspire Public School**

7.10

A review of the two initial studies by the City of East Palo Alto prepared for the purpose of constructing schools documents that non motorized mobility, such as walking and bicycle riding is less than would be typically expected. In fact, several issues are noteworthy, including:

7.17

- > the comments from local parents to the Public Works and Transportation Commission and the City Council expressing concern about speeding and cut through traffic,
- > the Aspire survey included in the Initial Study which identifies a lower than average rate of walking and bicycling riding in the local area, and
- > the overlap of areas with locations where cut-through traffic has been identified

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Cont't

These taken together support a finding that congestion on the residential streets may be a contributor to the city's declining non-motorized mobility and therefore would be a factor in the city's explosion of obesity. Data collected by the National Nonprofit known as Safe Route to Schools document that traffic safety is a factor on whether children walk or ride their bicycles to school.

**FINDING 3:** Analysis should incorporate the 'best available science' and incorporate local planning, thresholds and existing conditions since public health impacts should be identified in advance, so that an appropriate mitigation can be incorporated in the Final EIR. Based on the foregoing, it is anticipated that contribution to the City of East Palo Alto Shuttle service, or expansion of the existing service, might reduce impacts.

7.18

**Appendix D - Analysis with Provision of Remote Parking Lots**

The City of East Palo Alto accepts the findings in the appendix without comment.

**Appendix E - Calculation of Vehicle Miles Travelled**

The City of East Palo Alto accepts the findings in the appendix without comment.

**Appendix G - URBEMIS Models**

The City of East Palo Alto acknowledges the report, and recognizes a material omission by including health impacts.

7.21

**APPENDIX - F Health Risk Assessment**

The EIR section on the health risk assessment should address the air pollutant loading at intersections in the City of East Palo Alto, in addition to the operational and construction related issues identified. At the very least, the EIR should identify the areas where science is uncertain. A review of the assessment indicates that areas already impacted by LOS of D or worse, would experience increased congestion, and therefore increased pollutant loading as a result of the incomplete combustion. Since these areas correspond to locations where sensitive receptors would be located, the omission is significant. For example, the Ravenswood School District which serves both Menlo Park's Belle Haven neighborhood, and the City of East Palo Alto documents that a large percentage of the 5,000 school children in the district are in the immediate vicinity of these impacts. Possibly as much as 40% of the City of East Palo Alto's population resides in the Woodland and Willow neighborhoods, which are west of Hwy 101. No quantification of the potential pollutant loading appears in the report.

7.19

**QUANTIFY THE HEALTH RISK**

The final EIR should have some quantification of the Health Risk associated with hazardous air pollutants, such as TACs, particulate matter less than 10 micrometers in diameter, diesel particulate matter (DPM) for those populations near the interchanges, which will be burdened with the largest volumes of increased traffic, such as East Palo Alto's University and Hwy 101 interchange. The EIR should also identify appropriate mitigation for these impacts.

7.20

Referring to the November 14, 2007 memorandum from Ellen Polling, Fehr and Peers with the subject: *Recommendation for SUMC Traffic Distribution*, the area identified with the largest numbers of trips is east of the medical center in Table 3, since 26% of the trip distribution is the largest number of trips in any category and those go from Palo Alto to the East/Dumbarton Bridge/Hayward. Given the disproportionate percentage of the population that would qualify as sensitive receptors in East Palo Alto as it has the most youthful population in the area (see Housing Element adopted June 15, 2010, median age of East Palo Alto residents is 27 years, versus 40 for San Mateo County), mitigations must be included in the Final EIR.

**Appendix H – Climate Change**

The City of East Palo Alto acknowledges the appendix on climate change, and recognizes a material omission by not including health impacts, especially those related to truck routing through the City, as TACs from trucks are harmful for adults in general, and sensitive receptors in particular. Moreover, traffic-related air pollution is associated with cardiovascular morbidity and mortality (2); furthermore, the American Lung Association notes that achieving cleaner environments requires intervention based on scientific data. No data relevant to the concerns of an environmental justice-sensitive community are available in this study (3).

**Appendix I – ARG Peer Review**

The City of East Palo Alto acknowledges the appendix, and has no comment.

Appendix J – ARG Hoover Pavilion

The City of East Palo Alto acknowledges the appendix, and has no comment.



Appendix K – Housing

City of East Palo Alto  
Housing Services Department  
2277 University Avenue  
East Palo Alto, CA 94303  
Telephone: 650-853-3109 Facsimile: 650-853-5928

DATE: July 14, 2010  
TO: Brent Butler, Planning Manager  
FROM: Wilbert Lee, Housing Services Director  
SUBJECT: Stanford University Medical Center EIR

The purpose of the memorandum is to offer some comments in response to the EIR prepared for the Stanford University Medical Center Renewal Project. The proposed expansion will increase the total square footage of the Stanford Hospital and Clinics, Lucille Packard Children's Hospital, replace 415,000 sq. ft. for the School of medicine and add an additional 46,000 sq. ft. to the Hoover Pavilion.

7.23

The project (SUMC) is projecting an increase in employment of approximately 2,242 employees, "which is an increase of 23% in the hospital's employment at build out."

The Mitigation Measures does not specifically state how the additional employees will be housed or where they will live. There is no breakdown regarding the specific jobs interim construction jobs or long term permanent jobs that will be created as a result of the SUMC Renewal Project.

7.24

Also, the Mitigation Measures do not specify a specific target number of housing units that will be developed for SUMC employees, i.e. the proposed zoning code amendment, ad hoc housing fee, or the inclusionary housing requirement within the newly created Hospital District.

7.25

The Guide to Community Issues prepared for the SUMC Renewal Project suggests "there is already a sufficient supply of housing planned for Palo Alto and other communities to accommodate this indirect housing demand." (page 24) Given the recent downward trends in the housing market and the number of proposed housing development projects on hold for financing reasons, it is really questionable whether the "so called surrounding communities" will absorb the pending demand for affordable housing.

7.26



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7.26  
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It is quite possible that some of the employees seeking affordable housing will actually cross the boundary line between Santa Clara County and San Mateo County and seek affordable housing in East Palo Alto, as well as other cities in San Mateo County.

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**Appendices L through R**

The City of East Palo Alto acknowledges these appendices, and has no comment.

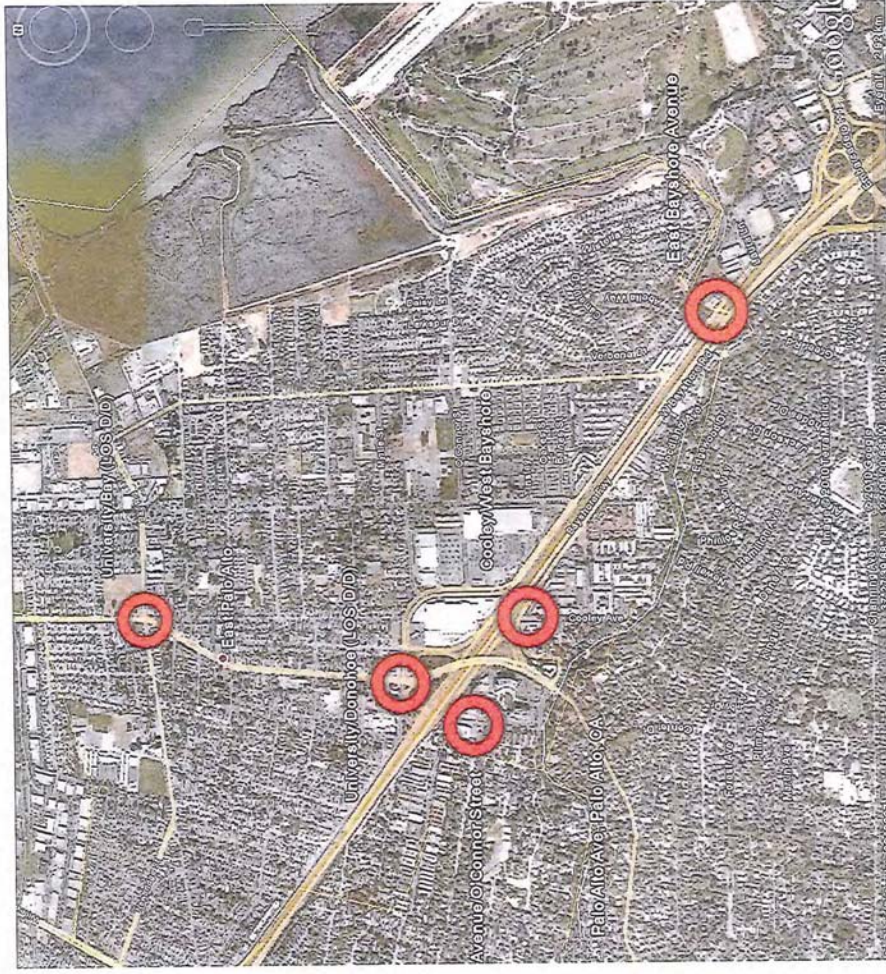
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## SECTION II

Map of Impacted Areas



### SECTION III

#### Recommended Monitoring Protocol and Mitigation Measures



East Palo Alto Pedestrian Collision Frequency and Severity (2004-2009)  
Figure 1

**MITIGATION MEASURES**

Consideration of amending the mitigation measures as follows is suggested based on concerns related to air quality and mobility impacts associated with the project. Furthermore, SUMC should facilitate ongoing consultation with City staff and the legislative body for the purpose of reducing negative health outcomes not only for sensitive receptors, but for all City residents within the City's boundaries.

7.27

**MITIGATION AREA 1:**

**Bay Area Air Quality Management District Approved Risk Reduction Plan**

The SUMC should fund a community risk reduction plan for the City of East Palo in accordance with guidelines developed by the Bay Area Air Quality Management District, as this activity would be completely within the SUMC's core mission, and address serious environmental justice concerns raised by the project. Through such a plan, specific infrastructure improvements that reduce impacts may be identified given that these outcomes are real and immediate.

7.28

**MITIGATION AREA 2**

**TR 2.2 Fund Pedestrian and Bicycle Undercrossing**

The Lead Agency should amend TR 2-2 so that funds are provided to the City of East Palo Alto for bike and pedestrian undercrossing improvements to be realized for the purpose of offsetting decreases in air quality and mobility by providing alternatives to vehicular travel.

7.29

**MITIGATION AREA 3**

**TR 4.2 Signage and Striping**

The Lead Agency should amend the TR 4.2 so that efforts to reduce motor vehicular travel are adopted in accordance with 'best practices' to reduce public health concerns in the adjacent environmental justice community.

7.30

**MITIGATION AREA 4**

**TR 6.1 Bike and Pedestrian Infrastructure**

The Lead Agency should amend the mitigation measures outlined therein, so that funds are provided to reduce impacts associated with increased air pollutants and declining non-motorized mobility.

7.31

**MITIGATION AREA 5**

**TR 7.2 - Transit Service Expansion**

The Lead Agency should provide expanded transit service, recognizing the omission of the City of East Palo Alto free shuttle, whose ridership base of nearly 60,000 persons is one of the largest for a city of its size.

7.32

**MITIGATION AREA 6**

**AQ-3 - CO and TAC Impact Monitoring Program**

7.33

The Lead Agency should add a monitoring protocol that evaluates the impacts of increased congestion on EPA's and the surrounding roadways. This is especially significant since the City's recently adopted Housing Element identifies that the median age is one of the lowest in the Bay Area, and also that TACs related to automobiles and, especially, trucks, may be exacerbated by congestion and ramp metering that tends to occur in proximate vicinity to, respectively, the City's senior citizen center and the largest cluster of high density housing that includes youth, both identified sensitive receptor populations.

7.33

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**MITIGATION AREA 7**

**Toxic Air Contaminant Reduction Program**

A program that funds the planting of trees as well as their ongoing maintenance for the purpose of reducing toxic air contaminants and the heat island effect should be implemented either directly or indirectly such as through the funding of Palo Alto's Canopy non-profit.

7.34



## Section IV

### References

	Source	Abstract (if available)
1	<p>Alberti, Marina, John M. Marzhuft, Eric Shulenberg, Gordon Bradley, Clare Ryan, and Craig Zumbrennen. "Integrating Humans into Ecology: Opportunities and Challenges for Studying Urban Ecosystems" <i>BioScience</i> 53, no. 12 (December 2003): 1169-1179.</p>	<p>Our central paradigm for urban ecology is that cities are emergent phenomena of local-scale, dynamic interactions among socioeconomic and biophysical forces. These complex interactions give rise to a distinctive ecology and to distinctive ecological forcing functions. Separately, both the natural and the social sciences have adopted complex system theory to study emergent phenomena, but attempts to integrate the natural and social sciences to understand human-dominated systems remain reductionist-these disciplines generally study humans and ecological processes as separate phenomena. Here we argue that if the natural and social sciences remain within their separate domains, they cannot explain how human-dominated ecosystems emerge from interactions between humans and ecological processes. We propose an integrated framework to test formal hypotheses about how human-dominated ecosystems evolve from those interactions.</p>
2	<p>Alon Peretz, Jeffrey H. Sullivan, Daniel F. Leotta, Carol A. Trenga, Fiona N. Sands, Jason Allen, Chris Carlsten, Charles W. Wilkinson, Edward A. Gill and Joel D. Kaufman. "Diesel Exhaust Inhalation Elicits Acute Vasoconstriction in Vivo" <i>Environmental Health Perspectives</i> 116, no. 7 (July 2008): 937-942.</p>	<p>Background: Traffic-related air pollution is consistently associated with cardiovascular morbidity and mortality. Recent human and animal studies suggest that exposure to air pollutants affects vascular function. Diesel exhaust (DE) is a major source of traffic-related air pollution. Objectives: Our goal was to study the effects of short-term exposure to DE on vascular reactivity and on mediators of vascular tone. Methods: In a double-blind, crossover, controlled exposure study, 27 adult volunteers (10 healthy and 17 with metabolic syndrome) were exposed in randomized order to filtered air (FA) and each of two levels of diluted DE (100 or 200 <math>\mu\text{m g}/(\text{m}^3 \cdot \text{h})</math> of fine particulate matter) in 2-hr sessions. Before and after each exposure, we assessed the brachial artery diameter (BAD) by B-mode ultrasound and collected blood samples for endothelin-1 (ET-1).</p>

<p>1) and catecholamines. Postexposure we also assessed endothelium-dependent flow-mediated dilation (FMD). Results: Compared with FA, DE at <math>2000 \mu\text{m}^3/\text{vm}</math> (0.11 mm; <math>m^3</math>) elicited a decrease in BA<sub>d</sub> (0.11 mm; 95% confidence interval, 0.02-0.18), and the effect appeared linearly dose related with a smaller effect at <math>1000 \mu\text{m}^3/\text{vm}</math> (0.05 mm; <math>m^3</math>). Plasma levels of ET-1 increased after <math>2000 \mu\text{m}^3/\text{vm}</math> (3) DE but not after FA (<math>p = 0.01</math>). There was no consistent impact of DE on plasma catecholamines or FMD. Conclusions: These results demonstrate that short-term exposure to DE is associated with acute endothelial response and vasoconstriction of a conduit artery. Elucidation of the signaling pathways controlling vascular tone that underlie this observation requires further study.</p>	<p>3</p> <p>The American Lung Association. "Urban Air Pollution and Health Inequities: A Workshop Report" <i>Environmental Health Perspectives</i> 109 (June, 2001): 357-374.</p> <p>Over the past three decades, an array of legislation with attendant regulations has been implemented to enhance the quality of the environment and thereby improve the public's health. Despite the many beneficial changes that have followed, there remains a disproportionately higher prevalence of harmful environmental exposures, particularly air pollution, for certain populations. These populations most often reside in urban settings, have low socioeconomic status, and include a large proportion of ethnic minorities. The disparities between racial/ethnic minority and/or low-income populations in cities and the general population in terms of environmental exposures and related health risks have prompted the "environmental justice" or "environmental equity" movement, which strives to create cleaner environments for the most polluted communities. Achieving cleaner environments will require interventions based on scientific data specific to the populations at risk; however, research in this area has been relatively limited. To assess the current scientific information on urban air pollution</p>
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<p>and its health impacts and to help set the agenda for immediate intervention and future research, the American Lung Association organized an invited workshop on Urban Air Pollution and Health Inequities held 22-24 October 1999 in Washington, DC. This report builds on literature reviews and summarizes the discussions of working groups charged with addressing key areas relevant to air pollution and health effects in urban environments. An overview was provided of the state of the science for health impacts of air pollution and technologies available for air quality monitoring and exposure assessment. The working groups then prioritized research needs to address the knowledge gaps and developed recommendations for community interventions and public policy to begin to remedy the exposure and health inequities.</p>	<p>4</p> <p>Anderson, Patricia M. and Kristin F. Butcher. "Childhood Obesity: Trends and Potential Causes" <i>The Future of Children</i> 16, no. 1 (Spring 2006):19-45.</p> <p>The increase in childhood obesity over the past several decades, together with the associated health problems and costs, is raising grave concern among health care professionals, policy experts, children's advocates, and parents. Patricia Anderson and Kristin Butcher document trends in children's obesity and examine the possible underlying causes of the obesity epidemic. They begin by reviewing research on energy intake, energy expenditure, and "energy balance," noting that children who eat more "empty calories" and expend fewer calories through physical activity are more likely to be obese than other children. Next they ask what has changed in children's environment over the past three decades to upset this energy balance equation. In particular, they examine changes in the food market, in the built environment, in schools and child care settings, and in the role of parents-paying attention to the timing of these changes. Among the changes that affect children's energy intake are the increasing availability of energy-dense, high-calorie foods and drinks through schools. Changes in the</p>
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<p>family, particularly an increase in dual-career or single-parent working families, may also have increased demand for food away from home or pre-prepared foods. A host of factors have also contributed to reductions in energy expenditure. In particular, children today seem less likely to walk to school and to be traveling more in cars than they were during the early 1970s, perhaps because of changes in the built environment. Finally, children spend more time viewing television and using computers. Anderson and Butcher find no one factor that has led to increases in children's obesity. Rather, many complementary changes have simultaneously increased children's energy intake and decreased their energy expenditure. The challenge in formulating policies to address children's obesity is to learn how best to change the environment that affects children's energy balance.</p>	<p>5 Bailey, Trevor C. and Paul J. Hewson. "Simultaneous Modelling of Multiple Traffic Safety Performance Indicators by Using a Multivariate Generalized Linear Mixed Model" <i>Journal of the Royal Statistical Society</i> 167, no. 3 (2004): 501-517.</p>
<p>Traffic safety in the UK is one of the increasing number of areas where central government sets targets based on 'outcome-focused' performance indicators (PIs). Judgments about such PIs are often based solely on rankings of raw indicators and simple league tables dominate centrally published analyses. There is a considerable statistical literature examining health and education issues which has tended to use the generalized linear mixed model (GLMM) to address variability in the data when drawing inferences about relative performance from headline PIs. This methodology could obviously be applied in contexts such as traffic safety. However, when such models are applied to the fairly crude data sets that are currently available, the interval estimates generated, e.g. in respect of rankings, are often too broad to allow much real differentiation between the traffic safety performance of the units that are being considered. Such results sit uncomfortably with the ethos of 'performance management' and raise the question of whether the inference</p>	<p>6 Bay Area Air Quality Management District. <i>California Environmental Quality Act Air Quality Guidelines</i>. Bay Area Air Quality Management District, December 2009, <a href="http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/Draft%20BAAQMD%20CEQA%20Guidelines_Dec%2009.asx">http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/Draft%20BAAQMD%20CEQA%20Guidelines_Dec%2009.asx</a></p> <p>7 Bay Area Economics, "City of East Palo Alto Ravenswood/4 Corners TOD Specific Plan Market and Economic Analysis," Bay Area Economics, January 15, 2010, <a href="http://www.ci.east-palo-alto.ca.us/economicdev/pdf/121110_CAC_BAE_Presentation.pdf">http://www.ci.east-palo-alto.ca.us/economicdev/pdf/121110_CAC_BAE_Presentation.pdf</a>.</p> <p>8 Bazelmans C., Y. Coppieeters, I. Godin, F. Parent, L. Berghmans, M. Dramaix, and A. Levéque. "Is Obesity Associated with Injuries among Young People?" <i>European Journal of Epidemiology</i> 19, no. 11 (2004):1037-</p>

<p>from such data sets about relative performance can be improved in some way. Motivated by consideration of a set of nine road safety performance indicators measured on English local authorities in the year 2000, the paper considers methods to strengthen the weak inference that is obtained from GLMMs of individual indicators by simultaneous, multivariate modelling of a range of related indicators. The correlation structure between indicators is used to reduce the uncertainty that is associated with rankings of any one of the individual indicators. The results demonstrate that credible intervals can be substantially narrowed by the use of the multivariate GLMM approach and that multivariate modelling of multiple PIs may therefore have considerable potential for introducing more robust and realistic assessments of differential performance in some contexts.</p>	<p>6 Bay Area Air Quality Management District. <i>California Environmental Quality Act Air Quality Guidelines</i>. Bay Area Air Quality Management District, December 2009, <a href="http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/Draft%20BAAQMD%20CEQA%20Guidelines_Dec%2009.asx">http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/Draft%20BAAQMD%20CEQA%20Guidelines_Dec%2009.asx</a></p> <p>7 Bay Area Economics, "City of East Palo Alto Ravenswood/4 Corners TOD Specific Plan Market and Economic Analysis," Bay Area Economics, January 15, 2010, <a href="http://www.ci.east-palo-alto.ca.us/economicdev/pdf/121110_CAC_BAE_Presentation.pdf">http://www.ci.east-palo-alto.ca.us/economicdev/pdf/121110_CAC_BAE_Presentation.pdf</a>.</p> <p>8 Bazelmans C., Y. Coppieeters, I. Godin, F. Parent, L. Berghmans, M. Dramaix, and A. Levéque. "Is Obesity Associated with Injuries among Young People?" <i>European Journal of Epidemiology</i> 19, no. 11 (2004):1037-</p>
<p>Objectives: To look at the relationship between obesity and trauma among young people in the Hainaut Province in Belgium. Design: A cross-sectional study (questionnaire and physical examination) was conducted among a sample of 2363 children of 9- to 17-</p>	<p>Objectives: To look at the relationship between obesity and trauma among young people in the Hainaut Province in Belgium. Design: A cross-sectional study (questionnaire and physical examination) was conducted among a sample of 2363 children of 9- to 17-</p>



1042.	<p>year-olds (n = 2363) in 1998. Results: In the past 12 months prior to the survey, 37% of the sample had at least one injury requiring treatment (with or without hospitalization), and 5% had a severe injury (with at least one night at the hospital). More than 15% were classified to be obese according to the WHO definition. We observed a significantly higher frequency of injury in obese people, in boys, in subjects playing sport intensively, with members of a sports club and in those reporting more than one physical activity per week. In multivariate analysis for injury, gender, physical activity, playing sport in a club and obesity were significant. For severe injuries, only gender and physical activity remained significant in the multivariate analysis. Conclusion: Our analysis shows that childhood obesity and physical activity increase the occurrence of injuries. However, we did not observe an association between obesity and severe injuries. Obesity as a risk factor for the occurrence of injuries has to be confirmed by other studies, and the understanding of the mechanism for the observed association needs more investigation.</p>	<p>This article develops and assesses novel indicators of respiratory and other morbidity and mortality following London's lethal smog in the winter of 1952. Public health insurance claims, hospital admission rates for cardiac and respiratory disease, pneumonia cases, mortality records, influenza reports, temperature, and air pollutant concentrations are analyzed for December-February 1952-1953 and compared with those for the previous year or years. Mortality rates for the smog episode from December 1952 to February 1953 were 50-300% higher than the previous year. Claims that the smog only elevated health risks during December 1952 and that an influenza epidemic accounted fully for persisting mortality increases in the first 2 months of 1953 are rejected. We estimate about 12,000 excess</p>
9	<p>Bell, Michelle L., Devra Lee Davis. "Reassessment of the Lethal London Fog of 1952: Novel Indicators of Acute and Chronic Consequences of Acute Exposure to Air Pollution" <i>Environmental Health Perspectives</i> 109 (June 2001): 389-394.</p>	<p>Stanford Environmental Impact Report July 27, 2010 Page -39-</p>

<p>deaths occurred from December 1952 through February 1953 because of acute and persisting effects of the 1952 London smog. Pollution levels during the London smog were 5-19 times above current regulatory standards and guidelines and approximate current levels in some rapidly developing regions. Ambient pollution in many regions poses serious risks to public health.</p>	<p>As decision- and policy-makers come to rely increasingly on estimates and simulations produced by computerized models of the world, in areas as diverse as climate prediction, transportation planning, economic policy and civil engineering, the need for objective evaluation of the accuracy and utility of such models likewise becomes more urgent. This article summarizes a two-day workshop that took place in Santa Fe, New Mexico in December 1999, whose focus was the evaluation of complex computer models. Approximately half of the workshop was taken up with formal presentation of four computer models by their creators, each paired with an initial assessment by a statistician. These prepared papers are presented, in shortened form, in Section 3 of this paper. The remainder of the workshop was devoted to introductory and summary comments, short contributed descriptions of related models and a great deal of floor discussion, which was recorded by assigned rapporteurs. These are presented in Sections 2 and 4 in the paper. In the introductory and concluding sections we attempt to summarize the progress made by the workshop and suggest next steps.</p>	<p>10</p> <p>Berk, Richard A., Peter Bickel, Katherine Campbell, Robert Fovell, Sallie Keller-McNulty, Elizabeth Kelly, Rodman Linn, Byungkyu Park, Alan Perelson, Nagui Rounphail, Jerome Sacks, and Frederic Schoenberg. "Workshop on Statistical Approaches for the Evaluation of Complex Computer Models" <i>Statistical Science</i> 17, no. 2 (May 2002): 173-192.</p>	<p>Objectives: The National Environmental Policy Act and related state laws require many public agencies to analyze and disclose potentially significant environmental effects of agency actions, including effects on human health. In this paper we review the purpose and procedures of</p>
11	<p>Bhattia, Rajiv and Aaron Werhham. "Integrating Human Health into Environmental Impact Assessment: An Unrealized Opportunity for Environmental Health and Justice" <i>Environmental Health Perspectives</i> 116, no. 8 (August 2008):</p>	<p>Stanford Environmental Impact Report July 27, 2010 Page -40-</p>	

<p>991-1000.</p>	<p>environmental impact assessment (EIA), existing regulatory requirements for health effects analysis, and potential barriers to and opportunities for improving integration of human health concerns within the EIA process. Data sources: We use statutes, regulations, guidelines, court opinions, and empirical research on EIA along with recent case examples of integrated health impact assessment (HIA)/EIA at both the state and federal level. Data synthesis: We extract lessons and recommendations for integrated HIA/EIA practice from both existing practices as well as case studies. Conclusions: The case studies demonstrate the adequacy, scope, and power of existing statutory requirements for health analysis within EIA. The following support the success of integrated HIA/EIA: a proponent recognizing EIA as an available regulatory strategy for public health; the openness of the agency conducting the EIA; involvement of public health institutions; and complementary objectives among community stakeholders and health practitioners. We recommend greater collaboration among institutions responsible for EIA, public health institutions, and affected stakeholders along with guidance, resources, and training for integrated HIA/EIA practice.</p>
<p>12</p> <p>The British Medical Journal. "Traffic In Human Hair" <i>The British Medical Journal</i> 2, no. 2592 (September 1910):641.</p>	<p>We present a new statistical model for linking spatial variation in ambient air pollution to mortality. The model incorporates risk factors measured at the individual level, such as smoking, and at the spatial level, such as air pollution. We demonstrate that the spatial autocorrelation in community mortality rates, an indication of not fully characterizing potentially confounding risk factors to the air pollution-mortality association, can be</p>
<p>13</p> <p>Burnett, Richard, Renjun Ma, Michael Jerrett, Mark S. Goldberg, Sabit Cakmak, C. Arden Pope, III and Daniel Krewski. "The Spatial Association between Community Air Pollution and Mortality: A New Method of Analyzing Correlated Geographic Cohort Data" <i>Environmental Health Perspectives</i> 109, (June 2001): 375-380.</p>	<p>With American children on course to grow into the most obese generation of adults in history, Sonia Caprio argues that it is critical</p>

<p>accounted for through the inclusion of location in the model assessing the effects of air pollution on mortality. Our methods are illustrated with an analysis of the American Cancer Society cohort to determine whether all cause mortality is associated with concentrations of sulfate particles. The relative risk associated with a 4.2 µg/m<sup>3</sup> interquartile range of sulfate distribution for all causes of death was 1.051 (95% confidence interval 1.036-1.066) based on the Cox proportional hazards survival model, assuming subjects were statistically independent. Inclusion of community-based random effects yielded a relative risk of 1.055 (1.033, 1.077), which represented a doubling in the residual variance compared to that estimated by the Cox model. Residuals from the random-effects model displayed strong evidence of spatial autocorrelation (p = 0.0052). Further inclusion of a location surface reduced the sulfate relative risk and the evidence for autocorrelation as the complexity of the location surface increased, with a range in relative risks of 1.055-1.035. We conclude that these data display both extravariation and spatial autocorrelation, characteristics not captured by the Cox survival model. Failure to account for extravariation and spatial autocorrelation can lead to an understatement of the uncertainty of the air pollution association with mortality.</p>	<p>14</p> <p>Campbell, Carol, Russell Viner, Rachel Bryant-Waugh, Dasha Nicholls, Deborah Christie, Colin Guthrie, Joyce Carter, Annette Lyons, Yasily Vlassov, Gemma Frithbeck, J. F. Comaish, C. Gorman, and N. R. Galloway. "Childhood Obesity" <i>British Medical Journal</i> 320, no. 7246 (May 2000): 1401-1403.</p>
<p>15</p> <p>Caprio, Sonia. "Treating Child Obesity and Associated Medical Conditions" <i>The Future of Children</i> 16, no.</p>	<p>With American children on course to grow into the most obese generation of adults in history, Sonia Caprio argues that it is critical</p>



1 (Spring 2006): 209-224.

to develop more effective strategies for preventing childhood obesity and treating serious obesity-related health complications. She notes that although pediatricians are concerned about the obesity problem, most are ineffective in addressing it. Treatment should begin, Caprio explains, with a thorough medical exam, an assessment of nutrition and physical activity, an appraisal of the degree of obesity and associated health complications, a family history, and full information about current medications. Caprio also summarizes the current use of medications and surgery in treating child obesity and argues that for severe forms of obesity, the future lies in developing new and more effective drugs. Caprio explains that today's most effective obesity treatment programs have been carried out in academic centers through an approach that combines a dietary component, behavioral modification, physical activity, and parental involvement. Such programs, however, have yet to be translated to primary pediatric care centers. Successfully treating obesity, she argues, will require a major shift in pediatric care that builds on the findings of these academic centers regarding structured intervention programs. To ensure that pediatricians are well trained in implementing such programs, the American Medical Association is working with federal agencies, medical specialty societies, and public health organizations to teach doctors how to prevent and manage obesity in both children and adults. Such training should be a part of undergraduate and graduate medical education and of continuing medical education programs. Caprio also addresses the problem of reimbursement for obesity treatment. Despite the health risks of obesity, patients get little support from health insurers, thus putting long-term weight-management programs beyond the reach of most. Caprio argues that obesity should be recognized as a disease and receive coverage for its treatment just as other diseases

		do.
16	City of East Palo Alto. <i>General Plan's Land Use Capacity Summary, Table LU-4</i> . City of East Palo Alto, 1999.	
17	City of East Palo Alto. Capital Improvement Program. City of East Palo Alto, 2009.	
18	City of East Palo Alto Redevelopment Agency. <i>East Palo Alto Bay Access Master Plan</i> . East Palo Alto Redevelopment Agency, 2007.	
19	City of Palo Alto. <i>Baylands Master Plan, 4<sup>th</sup> Edition</i> . City of Palo Alto, 2008.	
20	City of Palo Alto, Palo Alto Community Profile. City of Palo Alto, July 2005.	
21	Conrad, Klaus. "Competition in Transport Models and the Provision of Infrastructure Services" <i>Journal of Transport Economics and Policy</i> 34, no. 3 (September 2000): 333-358.	The purpose of this paper is to model competition in freight transport and to work out the role of government in providing infrastructure for the competitors. Freight transport could in principle be provided by the firm itself by using firm-owned trucks, or transport services could be out-sourced by purchasing these services from rail and/or truck transport firms. We link production in the rest of the economy to transport demand, provided by two competing modes of transport. Given infrastructure, a fuel tax, and the stock of vehicles, we first derive the conditional demand functions of the economy for truck and rail services. The two transport firms know these demand functions and compete in prices. We then propose a transport policy that chooses two types of infrastructure, highways and the railway system, and a fuel tax in order to maximise welfare. The economic aspects for an optimal provision of the two types of infrastructure can be expressed by a set of unknown elasticities that measure the impact of infrastructure services on price and quantity

	<p>variables in transport industries. With time-series data for the German economy we measure these impacts on prices in the rail and truck industries, on the volume of transport, on congestion, and on the utilisation of the stock of transport equipment.</p>
22	<p>Covington, Chandice Y., Marisa J. Cybulski, Tawnya L. Davis, Grace E. Duca, Erinn B. Farrell, Michelle L. Kasgorgis, Carrie L. Kator, and Thor L. Sell. "Kids on the Move Preventing Obesity among Urban Children" <i>The American Journal of Nursing</i> 101, no. 3 (March 2001): 73-75, 71, 79, 81-82.</p>
23	<p>Cramer, James C. and Robin P. Cheney. "Lost in the Ozone: Population Growth and Ozone in California" <i>Population and Environment</i> 21, no. 3 (January 2000): 315-338.</p> <p>Demographers usually study population and environment in preindustrial settings where "environment" means food, forest, or land. California, in contrast, is an advanced industrial state with rapid population growth and complex environmental stresses. In this paper I examine the effects of population growth on carbon monoxide (CO) and ozone, the principal ingredient of smog. Ozone and CO are monitored at numerous local sites throughout California. Wind currents are strong, so the level of ozone or CO at a site may depend on population size and other factors upwind as well as at that site. I use longitudinal data for a sample of sites to estimate panel models of trends in ozone and CO. Population growth is measured at three levels: site, county, and upwind; and trends in per capita income and air pollution regulations are controlled. Local population growth has a substantial impact on CO; in contrast, population growth at any level has a very small or even negative impact on ozone. The methodological and policy implications of this implausible finding are discussed.</p>
24	<p>de Hartog, Jeroen J., Timo Lanki, Kirsi L. Timonen, Gerard Hoek, Nicole A. H. Janssen, Angela Ibalid-Mulli, Annette</p> <p>Abstract: Background: It has been hypothesized that ambient particulate air pollution is able to modify the autonomic</p>

<p>Peters, Joachim Heinrich, Tuula H. Tarkiainen, Rene van Grieken, Joop H. van Wijnen, Bert Brunekreef and Julia Pekkanen. "Associations between <math>\text{PM}_{2.5}</math> and HRV Variability Are Modified by Particle Composition and Beta-Blocker Use in Patients with Coronary Heart Disease" <i>Environmental Health Perspectives</i> 117, no. 1 (January 2009):105-111.</p>	<p>nervous control of the heart, measured as heart rate variability (HRV). Previously we reported heterogeneous associations between particulate matter with aerodynamic diameter <math>&lt; 2.5</math> micrometers (<math>\text{PM}_{2.5}</math>) and HRV across three study centers. Objective: We evaluated whether exposure misclassification, effect modification by medication, or differences in particle composition could explain the inconsistencies. Methods: Subjects with coronary heart disease visited clinics biweekly in Amsterdam, the Netherlands; Erfurt, Germany, and Helsinki, Finland for 6-8 months. The standard deviation (SD) of NN intervals on an electrocardiogram (ECG; SDNN) and high frequency (HF) power of HRV was measured with ambulatory ECG during paced breathing. Outdoor levels of <math>\text{PM}_{2.5}</math> were measured at a central site. In Amsterdam and Helsinki, indoor and personal <math>\text{PM}_{2.5}</math> were measured at the clinic visit. <math>\text{PM}_{2.5}</math> was approximated between sources using principal component analyses. We analyzed associations of indoor/personal <math>\text{PM}_{2.5}</math>, and source-elements of <math>\text{PM}_{2.5}</math>, and source-specific <math>\text{PM}_{2.5}</math> with HRV using linear regression. Results: Indoor and personal <math>\text{PM}_{2.5}</math> were not associated with HRV. Increased outdoor <math>\text{PM}_{2.5}</math> and HF was associated with decreased SDNN and HF at lags of 2 and 3 days only among persons not using beta-blocker medication. Traffic-related <math>\text{PM}_{2.5}</math> was associated with decreased SDNN, and long-range transported <math>\text{PM}_{2.5}</math> with decreased SDNN and HF, most strongly among persons not using beta blockers. Indicators for range transport were also associated with <math>\text{PM}_{2.5}</math> from traffic and long-range transport were also associated with decreased HRV. Conclusions: Our results suggest that differences in the composition of particles, beta-blocker use, and obesity of study subjects may explain some inconsistencies</p>
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25	<p>Delfino, Ralph J. "Epidemiologic Evidence for Asthma and Exposure to Air Toxins: Linkages between Occupational, Indoor, and Community Air Pollution Research" <i>Environmental Health Perspectives</i> 110, (August 2002): 573-589.</p>	<p>among previous studies on HRV.</p> <p>Outdoor ambient air pollutant exposures in communities are relevant to the acute exacerbation and possibly the onset of asthma. However, the complexity of pollutant mixtures and etiologic heterogeneity of asthma has made it difficult to identify causal components in those mixtures. Occupational exposures associated with asthma may yield clues to causal components in ambient air pollution because such exposures are often identifiable as single-chemical agents (e.g., metal compounds). However, translating occupational to community exposure-response relationships is limited. Of the air toxics found to cause occupational asthma, only formaldehyde has been frequently investigated in epidemiologic studies of allergic respiratory responses to indoor air, where general consistency can be shown despite lower ambient exposures. The specific volatile organic compounds (VOCs) identified in association with occupational asthma are generally not the same as those in studies showing respiratory effects of VOC mixtures on nonoccupational adult and pediatric asthma. In addition, experimental evidence indicates that airborne polycyclic aromatic hydrocarbon (PAH) exposures linked to diesel exhaust particles (DEPs) have proinflammatory effects on airways, but there is insufficient supporting evidence from the occupational literature of effects of DEPs on asthma or lung function. In contrast, nonoccupational epidemiologic studies have frequently shown associations between allergic responses or asthma with exposures to ambient air pollutant mixtures with PAH components, including black smoke, high home or school traffic density (particularly truck traffic), and environmental tobacco smoke. Other particle-phase and gaseous co-pollutants are likely causal in these associations as well. Epidemiologic research on the relationship of both asthma onset and</p>
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26	<p>Delucchi, Mark, A. "Environmental Externalities of Motor-Vehicle Use in the US" <i>Journal of Transport Economics and Policy</i> 34, no. 2 (May 2000): 135-168.</p>	<p>exacerbation to air pollution is needed to disentangle effects of air toxics from monitored criteria air pollutants such as particle mass. Community studies should focus on air toxics expected to have adverse respiratory effects based on biological mechanisms, particularly irritant and immunological pathways to asthma onset and exacerbation.</p> <p>This paper reviews the methods, data, results, uses, and limitations of several recent studies of the external environmental damage costs of motor-vehicle use in the US. Although there remains considerable uncertainty in all stages of the damage-cost modeling approach, the results can nevertheless enrich cost-benefit and pricing analyses. Towards these ends, estimates of external costs have been used in comparisons of the social costs of different transport technologies or modes, in evaluations of the trade-offs between different kinds of environmental impacts, and in analyses of motor-vehicle pricing and land-use policies.</p>
27	<p>de Medeiros, Andréa Paula Peneluppi, Nelson Gouveia, Reinaldo Paul Pérez Machado, Miriam Regina de Souza, Gizelton Pereira Alencar, Hillelegonda, Maria Dutilh Novaes and Márcia Furquim de Almeida. "Traffic-Related Air Pollution and Perinatal Mortality: A Case: Control Study" <i>Environmental Health Perspectives</i> 117, No. 1 (January 2009):127-132.</p>	<p>Background: Ambient levels of air pollution may affect the health of children, as indicated by studies of infant and perinatal mortality. Scientific evidence has also correlated low birth weight and preterm birth, which are important determinants of perinatal death, with air pollution. However, most of these studies used ambient concentrations measured at monitoring sites, which may not consider differential exposure to pollutants found at elevated concentrations near heavy-traffic roadways. Objectives: Our goal was to examine the association between traffic-related pollution and perinatal mortality. Methods: We used the information collected for a case-control study conducted in 14 districts in the City of São Paulo, Brazil, regarding risk factors for perinatal deaths. We geocoded the residential addresses of cases (fetal and early neonatal deaths) and controls (children who survived the 28th day of life) and calculated a</p>

<p>distance-weighted traffic density (DWTD) measure considering all roads contained in a buffer surrounding these homes. Results: Logistic regression revealed a gradient of increasing risk of early neonatal death with higher exposure to traffic-related air pollution. Mothers exposed to the highest quartile of the DWTD compared with those less exposed exhibited approximately 50% increased risk (adjusted odds ratio = 1.47; 95% confidence interval, 0.67-3.19). Associations for fetal mortality were less consistent. Conclusions: These results suggest that motor vehicle exhaust exposures may be a risk factor for perinatal mortality.</p>	<p>28 Dill, Jennifer. "Bicycling for Transportation and Health: The Role of Infrastructure" <i>Journal of Public Health Policy</i> 30 (2009): S95-S110.</p> <p>This paper aims to provide insight on whether bicycling for everyday travel can help US adults meet the recommended levels of physical activity and what role public infrastructure may play in encouraging this activity. The study collected data on bicycling behavior from 166 regular cyclists in the Portland, Oregon metropolitan area using global positioning system (GPS) devices. Sixty percent of the cyclists rode for more than 150 minutes per week during the study and nearly all of the bicycling was for utilitarian purposes, not exercise. A disproportionate share of the bicycling occurred on streets with bicycle lanes, separate paths, or bicycle boulevards. The data support the need for well-connected neighborhood streets and a network of bicycle-specific infrastructure to encourage more bicycling among adults. This can be accomplished through comprehensive planning, regulation, and funding.</p>	<p>29 Duarte-Davidson, R., C. Courage, L. Rushon and L. Levy. "Benzene in the Environment: An Assessment of the Potential Risks to the Health of the Population" <i>Occupational and Environmental Medicine</i> 58, no. 1 (January 2001): 2-13.</p> <p>Objectives—Benzene has long been recognized as a carcinogen and recent concern has centred on the effects of continuous exposure to low concentrations of benzene both occupationally and environmentally. This paper presents an overview of the current knowledge about human exposure to benzene in the United</p>
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<p>Kingdom population based on recently published data, summarises the known human health effects, and uses this information to provide a risk evaluation for sections of the general United Kingdom population. Method—Given the minor contribution that non-inhalation sources make to the overall daily intake of benzene to humans, only exposure from inhalation has been considered when estimating the daily exposure of the general population to benzene. Exposure of adults, children, and infants to benzene has been estimated for different exposure scenarios with time-activity patterns and inhalation and absorption rates in conjunction with measured benzene concentrations for a range of relevant microenvironments. Exposures during refuelling and driving, as well as the contribution of active and passive tobacco smoke, have been considered as part of the characterisation of risk of the general population. Results—Infants (&lt;1 years old), the average child (11 years old), and non-occupationally exposed adults, receive average daily doses in the range of 15–26, 29–50, and 75–522 µg of benzene, respectively, which correspond to average ranges to benzene in air of 3.40–5.76 µg/m<sup>3</sup>, 3.37–5.67 µg/m<sup>3</sup>, and 3.7–41 µg/m<sup>3</sup> for infants, children, and adults, respectively. Infants and children exposed to environmental tobacco smoke have concentrations of exposure to benzene comparable with those of an adult passive smoker. This is a significant source of exposure as a 1995 United Kingdom survey has shown that 47% of children aged 2–15 years live in households where at least one person smokes. The consequence of exposure to benzene in infants is more significant than for children or adults owing to their lower body weight, resulting in a higher daily intake for infants compared with children or non-smoking adults. A worst case scenario for exposure to benzene in the general population is that of an urban smoker who works adjacent to a busy road for</p>
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	<p>8 hours/day—for example, a maintenance worker—who can receive a mean daily exposure of about 820 µg (equal to an estimated exposure of 41 µg/m<sup>3</sup>). The major health risk associated with low concentrations of exposure to benzene has been shown to be leukaemia, in particular acute non-lymphocytic leukaemia. The lowest concentration of exposure at which an increased incidence of acute non-lymphocytic leukaemia among occupationally exposed workers has been reliably detected, has been estimated to be in the range of 32–80 mg/m<sup>3</sup>. Although some studies have suggested that effects may occur at lower concentrations, clear estimates of risk have not been determined, partly because of the inadequacy of exposure data and the few cases.</p> <p>Conclusions—Overall the evidence from human studies suggests that any risk of leukaemia at concentrations of exposure in the general population of 3.7–42 µg/m<sup>3</sup>—that is at concentrations three orders of magnitude less than the occupational lowest observed effect level—is likely to be exceedingly small and probably not detectable with current methods. This is also likely to be true for infants and children who may be exposed continuously to concentrations of 3.4–5.7 µg/m<sup>3</sup>. As yet there is no evidence to suggest that continuous exposures to these environmental concentrations of benzene manifest as any other adverse health effect.</p>
<p>30</p> <p>Dubowsky, Sara D., Helen Suh, Joel Schwartz, Brent A. Coull and Diane R. Gold. "Diabetes, Obesity, and Hypertension May Enhance Associations between Air Pollution and Markers of Systemic Inflammation" <i>Environmental Health Perspectives</i> 114, no. 7 (July 2006): 992-998.</p>	<p>Airborne particulate matter (PM) may lead to increased cardiac risk through an inflammatory pathway. Therefore, we investigated associations between ambient PM and markers of systemic inflammation among repeated measures from 44 senior citizens (≥ 60 years of age) and examined susceptibility by conditions linked to chronic inflammation. Mixed models were used to identify associations between concentrations of fine PM [aerodynamic diameter ≤ 2.5 µm m<sup>3</sup> (PM<sub>2.5</sub>)] averaged over 1-7 days and measures</p>

	<p>of C-reactive protein (CRP), interleukin-6 (IL-6), and white blood cells (WBCs). Effect modification was investigated for diabetes, obesity, hypertension, and elevated mean inflammatory markers. We found positive associations between longer moving averages of PM<sub>2.5</sub> and WBCs across all participants, with a 5.5% [95% confidence interval (CI), 0.10 to 11%] increase per interquartile increase (\$5.4 µm g/m<sup>3</sup>) of PM<sub>2.5</sub> averaged over the previous week. PM<sub>2.5</sub> and CRP also exhibited positive associations among all individuals for averages longer than 1 day, with the largest associations for persons with diabetes, obesity, and hypertension. For example, an interquartile increase in the 5-day mean PM<sub>2.5</sub> (\$6.1 µm g/m<sup>3</sup>) was associated with a 14% increase in CRP (95% CI -5.4 to 37%) for all individuals and an 81% (95% CI, 21 to 172%) increase for persons with diabetes, obesity, and hypertension. Persons with diabetes, obesity, and hypertension also exhibited positive associations between PM<sub>2.5</sub> and IL-6. Individuals with elevated mean inflammatory markers exhibited enhanced associations with CRP, IL-6, and WBCs. We found modest positive associations between PM<sub>2.5</sub> and indicators of systemic inflammation, with larger associations suggested for individuals with diabetes, obesity, hypertension, and elevated mean inflammatory markers.</p>
<p>31</p> <p>Dye, Janice A., James R. Lehmann, John K. McGee, Darrell W. Winsett, Allen D. Ledbetter, Jeffrey L. Everitt, Andrew J. Ghio and Daniel L. Costa. "Acute Pulmonary Toxicity of Particulate Matter Filter Extracts in Rats: Coherence with Epidemiologic Studies in Utah Valley Residents" <i>Environmental Health Perspectives</i> 109 (June 2001): 395-403.</p>	<p>Epidemiologic reports by C.A. Pope III et al. demonstrated that in the Utah Valley, closure of an open-hearth steel mill over the winter of 1987 was associated with reductions in respiratory disease and related hospital admissions in valley residents. To better examine the relationship between plant-associated changes in ambient particulate matter (PM) and respiratory health effects, we obtained total suspended particulate filters originally collected near the steel mill during the winter of 1986 (before closure), 1987 (during closure), and 1988 (after plant</p>

<p>reopening). PM subcomponents were water-extracted from these filters and Sprague-Dawley rats were intratracheally instilled with equivalent masses of extract. Data indicated that 24 hr later, rats exposed to 1986 or 1988 extracts developed significant pulmonary injury and neutrophilic inflammation. Additionally, 50% of rats exposed to 1986 or 1988 extracts had increased airway responsiveness to acetylcholine, compared to 17 and 25% of rats exposed to saline or the 1987 extract, respectively. By 96 hr, these effects were largely resolved except for increases in lung lavage fluid neutrophils and lymphocytes in 1986 extract-exposed rats. Analogous effects were observed with lung histologic assessment. Extract analysis using inductively coupled plasma-mass spectroscopy demonstrated in all three extracts nearly 70% of the mass appeared to be sodium-based salts derived from the glass filter matrix. Interestingly, relative to the 1987 extract, the 1986/1988 extracts contained more sulfate, cationic salts (i.e., calcium, potassium, magnesium), and certain metals (i.e., copper, zinc, iron, lead, strontium, arsenic, manganese, nickel). Although total metal content was <math>\leq 1\%</math> of the extracts by mass, the greater quantity detected in the 1986 and 1988 extracts suggests metals may be important determinants of the pulmonary toxicity observed. In conclusion, the pulmonary effects induced by exposure of rats to water-based extracts of local ambient PM filters were in good accord with the cross-sectional epidemiologic reports of adverse respiratory health effects in Utah Valley residents.</p>	<p>32</p> <p>Epidemiology. "Program and Abstracts: Thirteenth Conference of the International Society for Environmental Epidemiology, Garmisch-Partenkirchen, Germany, September 2-5, 2001" <i>Epidemiology</i> 12, no. 4 (July 2001): S1.</p>
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<p>33</p> <p>S3-S99.</p> <p>Epidemiology. "Program and Abstracts: 12th Conference of the International Society of Exposure Analysis (ISEA) [and] 14th Conference of the International Society for Environmental Epidemiology (ISEE), August 11-15, 2002, Vancouver, BC Canada" <i>Epidemiology</i> 13, no. 4 (July 2002): S53, S55-S259.</p>	<p>34</p> <p>Epidemiology. "[Program and Abstracts]: 15th Conference of the International Society for Environmental Epidemiology 2003" <i>Epidemiology</i> 14, no. 5. (September 2003): S1, S3-S140.</p>	<p>In the conventional four-step travel demand modeling process, the number of trips made by a household is modeled in terms of household size, income, and other sociodemographic variables; any effect of location, land use, or transportation service level is discounted. This is the same as discounting any effect of household accessibility to out-of-home activities as a factor in trip generation (accessibility depending on all three: location, land use, and transportation service level). In contrast to the practice of trip generation, theory tells us that trip rates must vary with accessibility, and some (not all) empirical studies have found that they do. In light of conflicting empirical studies, and the obvious need for more precise and policy-sensitive travel forecasts, this issue is revisited. The independent effects of land use and accessibility variables on household trip rates were tested for using data from Florida travel surveys. It was found that, after controlling for sociodemographic variables, residential density, mixed use, and accessibility do not have significant, independent effects on household trip rates. Conventional trip generation models, which generate person trips</p>
<p>35</p> <p>Ewing, Reid, Marybeth Deanna, and Shi-Chiang Li. "Land Use Impacts on Trip Generation Rates." <i>Transportation Research Record: Journal of the Transportation Research Board</i> 1518 (1996).</p>		



36	Federal Emergency Management Agency. <i>Flood Insurance Rate Map, Community Map Number 0607080001B, City of East Palo Alto.</i> August 23, 1999.	by vehicle (not by all modes) and do so without regard to residential location, may not be as bad as one would imagine a priori.
37	Fenn, Mark E., Jill S. Baron, Edith B. Allen, Heather M. Rueth, Koren R. Nydick, Linda Geiser, William D. Bowman, James O. Sickman, Thomas Meixner, Dale W. Johnson, and Peter Neidlich. "Ecological Effects of Nitrogen Deposition in the Western United States" <i>BioScience</i> 53, no. 4 (April 2003): 404-420.	In the western United States vast acreages of land are exposed to low levels of atmospheric nitrogen (N) deposition, with interspersed hotspots of elevated N deposition downwind of large, expanding metropolitan centers or large agricultural operations. Biological response studies in western North America demonstrate that some aquatic and terrestrial plant and microbial communities are significantly altered by N deposition. Greater plant productivity is counterbalanced by biotic community changes and deleterious effects on sensitive organisms (lichens and phytoplankton) that respond to low inputs of N (3 to 8 kilograms N per hectare per year). Streamwater nitrate concentrations are elevated in high-elevation catchments in Colorado and are unusually high in southern California and in some chaparral catchments in the southwestern Sierra Nevada. Chronic N deposition in the West is implicated in increased fire frequency in some areas and habitat alteration for threatened species. Between hotspots, N deposition is too low to cause noticeable effects or has not been studied
38	Fenn, Mark E., Richard Haeuber, Gail S. Tomtesen, Jill S. Baron, Susanne Grossman-Clarke, Diane Hope, Daniel A. Jaffe, Scott Copeland, Linda Geiser, Heather M. Rueth, and James O. Sickman. "Nitrogen Emissions, Deposition, and Monitoring in the Western United States" <i>BioScience</i> 53, no. 4 (April 2003): 391-403.	Nitrogen (N) deposition in the western United States ranges from 1 to 4 kilograms (kg) per hectare (ha) per year over much of the region to as high as 30 to 90 kg per ha per year downwind of major urban and agricultural areas. Primary N emissions sources are transportation, agriculture, and industry. Emissions of N as ammonia are about 50% as great as emissions of N as nitrogen oxides. An unknown amount of N deposition to the West Coast originates from Asia. Nitrogen

39	Frank, Lawrence, Jacqueline Kerr, Jim Chapman, and James Sallis. "Urban Form Relationships With Walk Trip Frequency and Distance Among Youth" <i>American Journal of Health Promotion</i> 21 (2007): 305-11.	deposition has increased in the West because of rapid increases in urbanization, population, distance driven, and large concentrated animal feeding operations. Studies of ecological effects suggest that emissions reductions are needed to protect sensitive ecosystem components. Deposition rates are unknown for most areas in the West, although reasonable estimates are available for sites in California, the Colorado Front Range, and central Arizona. National monitoring networks provide long-term wet deposition data and, more recently, estimated dry deposition data at remote sites. However, there is little information for many areas near emissions sources.
		This study investigates whether the association seen in research on adults between urban form characteristics and walking for transportation also applies in a sample of five- to 20-year-olds. Analysis of travel survey data from 3,161 children and adolescents in the Atlanta area revealed that only 14 percent walked at least once a day and only 6 percent walked half a mile or more. Twelve- to 15-year-olds walked most frequently and furthest, and low-income children were significantly more likely to walk. In addition, walking was more likely among those in smaller households and those with no or fewer cars. A key finding was that the same indicators of walkability that are related to active transportation and physical activity in adults—street connectivity, residential density and mixed land use—are related in similar ways to walking for transportation in children and especially adolescents. Having recreation space within one kilometer of home was the strongest urban form predictor of walking in this sample. Therefore, the authors recommend that future research should investigate the attributes of parks and recreation spaces that may encourage greater use, leading to significant health benefits.

40	<p>Frühbeck, Gema. "Childhood Obesity: Time for Action, Not Complacency: Definitions Are Unclear, but Effective Interventions Exist" <i>British Medical Journal</i> 320, no. 7231 (February 2000): 328-329.</p>	<p>The National Children's Study is considering a wide spectrum of airborne pollutants that are hypothesized to potentially influence pregnancy outcomes, neurodevelopment, asthma, atopy, immune development, obesity and pubertal development. In this article we summarize six applicable exposure assessment lessons learned from the Centers for Children's Environmental Health and Disease Prevention Research that may enhance the National Children's Study: a) Selecting individual study subjects with a wide range of pollution exposure profiles maximizes spatial-scale exposure contrasts for key pollutants of study interest. b) In studies with large sample sizes, long duration, and diverse outcomes and exposures, exposure assessment efforts should rely on modeling to provide estimates for the entire cohort, supported by subject-derived questionnaire data. c) Assessment of some exposures of interest requires individual measurements of exposures using snapshots of personal and microenvironmental exposures over short periods and/or in selected microenvironments. d) Understanding issues of the surrogacy of correlations of air pollutants, spatial-temporal correlations of pollutants for components of the complex mixture, and the exposure misclassification inherent in exposure estimates is critical in analysis and interpretation. e) "Usual" temporal, spatial, and physical patterns of activity can be used as modifiers of the exposure/outcome relationships. f) Biomarkers of exposure are useful for evaluation of specific exposures that have multiple routes of exposure. If these lessons are applied, the National Children's Study offers a unique opportunity to assess the</p>
41	<p>Gilliland, Frank, Ed Avol, Patrick Kinney, Michael Jerrett, Timothy Dvonch, Frederick Lurmann, Timothy Buckley, Patrick Breyse, Gerald Keeler, Tracy de Villiers and Rob McConnell. "Air Pollution Exposure Assessment for Epidemiologic Studies of Pregnant Women and Children: Lessons Learned from the Centers for Children's Environmental Health and Disease Prevention Research" <i>Environmental Health Perspectives</i> 113, no. 10 (October 2005): 1447-1454.</p>	<p>The author contends that healthy communities must be both environmentally and socially sustainable, given that health depends on the quality of the built and natural environments, and that global change resulting from the industrial economy is affecting the web of life. He argues that suburban sprawl wastes scarce resources and disproportionately places those resources in the hands of suburban dwellers. Urban areas can be made more environmentally sustainable, especially with respect to energy consumption, which will help reduce air pollution and climate change and contribute in other ways to improved health.</p>

42	<p>Gonzalez, George A. "Urban Growth and the Politics of Air Pollution: The Establishment of California's Automobile Emission Standards" <i>Polity</i> 35, no. 2 (Winter 2002): 213-236.</p>	<p>The state of California has been the nation's leader in the formulation of automobile emission standards. Given that California is at the center of policymaking in the U.S. with regard to automobile emission standards, this study analyzes the factors that have historically shaped the formulation of California's standards. Policy analysis in this area, to explain the development of the state's pollution abatement policies, largely concentrate on the role of public officials, scientists, policy specialists, and interest group competition. The author of this study, however, centers his analysis on economic elites. He specifically holds that central to the effort to regulate automobile emissions in California are business elites whose economic interests lie in rising property values and an expanding local consumer base. These locally oriented elites are at the core of what Harvey Molotch refers to as a "growth coalition."</p>
43	<p>Hancock, Trevor. "Healthy Communities Must Also Be Sustainable" <i>Public Health Reports</i> 115, no. 2/3 (March - June 2000): 151-156.</p>	<p>The author contends that healthy communities must be both environmentally and socially sustainable, given that health depends on the quality of the built and natural environments, and that global change resulting from the industrial economy is affecting the web of life. He argues that suburban sprawl wastes scarce resources and disproportionately places those resources in the hands of suburban dwellers. Urban areas can be made more environmentally sustainable, especially with respect to energy consumption, which will help reduce air pollution and climate change and contribute in other ways to improved health.</p>
44	<p>Harder, Ben. "Weighing in on City Planning" <i>Science News</i> 171, no. 3 (January</p>	<p>The author contends that healthy communities must be both environmentally and socially sustainable, given that health depends on the quality of the built and natural environments, and that global change resulting from the industrial economy is affecting the web of life. He argues that suburban sprawl wastes scarce resources and disproportionately places those resources in the hands of suburban dwellers. Urban areas can be made more environmentally sustainable, especially with respect to energy consumption, which will help reduce air pollution and climate change and contribute in other ways to improved health.</p>



45	<p>2007). 43-45. Hart, Jaime E., Francine Laden, Robin C. Puetf, Karen H. Costenbader and Elizabeth W. Karlson. "Exposure to Traffic Pollution and Increased Risk of Rheumatoid Arthritis" <i>Environmental Health Perspectives</i> 117, no. 7 (July 2009): 1065-1069.</p>	<p>Rheumatoid arthritis (RA) is a chronic systemic inflammatory disease that affects approximately 1% of the adult population, and to date, genetic factors explain &lt; 50% of the risk. Particulate air pollution, especially of traffic origin, has been linked to systemic inflammation in many studies. Objectives: We examined the association of distance to road, a marker of traffic pollution exposure, and incidence of RA in a prospective cohort study. Methods: We studied 90,297 U.S. women in the Nurses' Health Study. We used a geographic information system to determine distance to road at the residence in 2000 as a measure of traffic exposure. Using Cox proportional hazard models, we examined the association of distance to road and incident RA (1976-2004) with adjustment for a large number of potential confounders. Results: In models adjusted for age, calendar year, race, cigarette smoking, parity, lactation, menopausal status and hormone use, oral contraceptive use, body mass index, physical activity, and census-tract-level median income and house value, we observed an elevated risk of RA [hazard ratio (HR) = 1.31; 95% confidence interval (CI), 0.98-1.74] in women living within 50 m of a road, compared with those women living 200 m or farther away. We also observed this association in analyses among nonsmokers (HR = 1.62; 95% CI, 1.04-2.52), nonsmokers with rheumatoid factor (RF)-negative RA (HR = 1.77; 95% CI, 0.93-3.38), and nonsmokers with RF-positive RA (HR = 1.51; 95% CI, 0.82-2.77). We saw no elevations in risk in women living 50-200 m from the road. Conclusions: The observed association between exposure to traffic pollution and RA suggests that pollution from traffic in adulthood may be a newly identified environmental risk factor for RA.</p>
46	Hayne, Cheryl L., Patricia A.	<p>The marked increase in the prevalence</p>

47	<p>Moran and Mary M. Ford. "Regulating Environments to Reduce Obesity" <i>Journal of Public Health Policy</i> 25, no. 3/4 (2004): 391-407.</p>	<p>of obesity appears to be attributable to environmental conditions that implicitly discourage physical activity while explicitly encouraging the consumption of greater quantities of energy-dense, low-nutrient foods. In the United States food environment, consumers are bombarded with advertising for unhealthy food, and receive inadequate nutritional information, especially at restaurants. In the US school environment children have access to sugary sodas and unhealthy à la carte foods in their cafeterias, at the same time getting inadequate physical activity and nutrition education. In the built environment, sprawl has reduced active living. We describe these environments and explore the potential effects of regulatory measures on these environments. In the United States, regulatory opportunities exist at the national, state and local levels to mandate action and to allocate funds for promising health-promoting strategies. Regulatory approaches, much like litigation, can transform the entire environment in which corporations operate. Even with incomplete enforcement of rules, they send a public message about what is acceptable behavior for corporations and individuals. Additionally, because the United States is party to many multilateral and bilateral trade agreements and is an active participant in the GATT/WTO framework, US regulatory actions promise to have a beneficial impact both domestically and globally.</p>
47	<p>Hoffmann, Barbara, Susanne Moebus, Nico Dragano, Andreas Stang, Stefan Möhlenkamp, Axel Schmermund, Michael Memmesheimer, Martina Bröcker-Preuss, Klaus Mann, Raimund Erbel and Karl-Heinz Jöckel "Chronic Residential Exposure to Particulate Matter Air Pollution and Systemic Inflammatory Markers" <i>Environmental Health Perspectives</i> 117, no. 8 (August 2009):</p>	<p>Abstract: Background: Long-term exposure to urban air pollution may accelerate atherogenesis, but mechanisms are still unclear. The induction of a low-grade systemic inflammatory state is a plausible mechanistic pathway. Objectives: We analyzed the association of residential long-term exposure to particulate matter (PM) and high traffic with systemic inflammatory markers. Methods: We used baseline data from the German Heinz Nixdorf Recall Study, a population-based,</p>

1302-1308.	<p>prospective cohort study of 4,814 participants that started in 2000. Fine PM [aerodynamic diameter <math>\leq 2.5 \mu\text{m}</math> (<math>\text{PM}_{2.5}</math>) ] exposure based on a small-scale dispersion and chemistry transport model was assigned to each home address. We calculated distances between residences and major roads. Long-term exposure to air pollution (annual <math>\text{PM}_{2.5}</math> ) and distance to high traffic) and concentration of inflammatory markers [high-sensitivity C-reactive protein (hs-CRP) and fibrinogen] on the day of the baseline visit were analyzed with sex-stratified multiple linear regression, controlling for individual-level risk factors. Results: In the adjusted analysis, a cross-sectional exposure difference of <math>3.91 \mu\text{g}/\text{m}^3</math> in <math>\text{PM}_{2.5}</math> (interdecile range) was associated with increases in hs-CRP of 23.9% [95% confidence interval (CI), 4.1 to 47.4%] and fibrinogen of 3.9% (95% CI, 0.3 to 7.7%) in men, whereas we found no association in women. Chronic traffic exposure was not associated with inflammatory markers. Short-term exposures to air pollutants and temperature did not influence the results markedly. Conclusions: Our study indicates that long-term residential exposure to high levels of <math>\text{PM}_{2.5}</math> is associated with systemic inflammatory markers in men. This might provide a link between air pollution and coronary atherosclerosis.</p>	<p>48 Hricko, Andrea M. "Ships, Trucks, and Trains: Effects of Goods Movement on Environmental Health" <i>Environmental Health Perspectives</i> 114, no. 4 (April 2006): A204-A205.</p> <p>49 Jacobs, David E., Jonathan Wilson, Sherry L. Dixon, Janet Smith and Anne Evens. "The Relationship of Housing and Population Health: A 30-Year Retrospective Analysis" <i>Environmental Health Perspectives</i> 117, no. 4 (April</p>
<p>Objective: We analyzed the relationship between health status and housing quality over time. Methods: We combined data from two nationally representative longitudinal surveys of the U.S. population and its housing, the National Health and Nutrition Examination Survey and the American Housing Survey.</p>		

2009): 597-604.	<p>respectively. We identified housing and health trends from approximately 1970 to 2000, after excluding those trends for which data were missing or where we found no plausible association or change in trend. Results: Changes in housing include construction type, proportion of rental versus home ownership, age, density, size, moisture, pests, broken windows, ventilation and air conditioning, and water leaks. Changes in health measures include asthma, respiratory illness, obesity and diabetes, and lead poisoning, among others. The results suggest ecologic trends in childhood lead poisoning follow housing age, water leaks, and ventilation; asthma follows ventilation, windows, and age; overweight trends follow ventilation; blood pressure trends follow community measures; and health disparities have not changed greatly. Conclusions: Housing trends are consistent with certain health trends over time. Future national longitudinal surveys should include health, housing, and community metrics within a single integrated design, instead of separate surveys, in order to develop reliable indicators of how housing changes affect population health and how to best target resources. Little progress has been made in reducing the health and housing disparities of disadvantaged groups, with the notable exception of childhood lead poisoning caused by exposure to lead-based paint hazards. Use of these and other data sets to create reliable integrated indicators of health and housing quality are needed.</p>	50
Jara-Díaz, Sergio R., Tristán Gálvez and Cristián Vergara. "Social Valuation of Road Accident Reductions Using Subjective Perceptions" <i>Journal of Transport Economics and Policy</i> 34, no. 2 (May 2000): 215-232.	<p>A method to calculate social prices for traffic accident reductions is proposed and applied experimentally, using the social appraisal approach developed by Gálvez and Jara-Díaz (1998). The approach requires the estimation of marginal utilities of attributes to be valued, and the calculation of a social utility of money. A stated preference experiment was designed to capture the perception of an objective measure</p>	



51	<p>of accidents. Two types of models were estimated: one that includes income explicitly; and an income-stratified model (two groups). Using the obtained parameters, social values for accident reductions were calculated, showing little variation across income groups. Private values were also obtained, and compared with those previously reported.</p> <p>Background: Chronic exposure to traffic-related air pollution (TRAP) may contribute to premature mortality, but few studies to date have addressed this topic. Objectives: In this study we assessed the association between TRAP and mortality in Toronto, Ontario, Canada. Methods: We collected nitrogen dioxide samples over two seasons using duplicate two-sided Ogawa passive diffusion samplers at 143 locations across Toronto. We calibrated land use regressions to predict NO<sub>2</sub> exposure on a fine scale within Toronto. We used interpolations to predict levels of particulate matter with aerodynamic diameter <math>\leq 2.5 \mu\text{m}</math> (<math>\text{PM}_{2.5}</math>) and ozone levels. We assigned predicted pollution exposures to 2,360 subjects from a respiratory clinic, and abstracted health data on these subjects from medical billings, lung function tests, and diagnoses by pulmonologists. We tracked mortality between 1992 and 2002. We used standard and multilevel Cox proportional hazard models to test associations between air pollution and mortality. Results: After controlling for age, sex, lung function, obesity, smoking, and neighborhood deprivation, we observed a 17% increase in all-cause mortality and a 40% increase in circulatory mortality from an exposure contrast across the interquartile range of 4 ppb NO<sub>2</sub>. We observed no significant associations with other pollutants. Conclusions: Exposure to TRAP was significantly associated with increased all-cause and circulatory mortality in this cohort. A high prevalence of cardiopulmonary disease in the cohort probably limits inference of the</p>	<p>Jerrett, Michael, Murray M. Finkelstein, Jeffrey R. Brook, M. Altaf Arain, Palvos Kanaroglou, Dave M. Sitch, Nicolas L. Gilbert, Dave Verma, Norm Finkelstein, Kenneth R. Chapman, Malcolm R. Sears. "A Cohort Study of Traffic-Related Air Pollution and Mortality in Toronto, Ontario, Canada" <i>Environmental Health Perspectives</i> 117, no. 5 (May 2009): 772-777.</p>
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52	<p>Jerrett, Michael, Ketan Shankardass, Kiros Berhane, W. James Gauderman, Nino Kunzli, Edward Avol, Frank Gilliland, Fred Lurmann, Jassy N. Molitor, John T. Molitor, Duncan C. Thomas, John Peters and Rob McConnell. "Traffic-Related Air Pollution and Asthma Onset in Children: A Prospective Cohort Study with Individual Exposure Measurement" <i>Environmental Health Perspectives</i> 116, no. 10 (October 2008): 1433-1438.</p>	<p>findings to populations with a substantial proportion of susceptible individuals.</p> <p>Background: The question of whether air pollution contributes to asthma onset remains unresolved. Objectives: In this study, we assessed the association between asthma onset in children and traffic-related air pollution. Methods: We selected a sample of 217 children from participants in the Southern California Children's Health Study, a prospective cohort designed to investigate associations between air pollution and respiratory health in children 10-18 years of age. Individual covariates and new asthma incidence (30 cases) were reported annually through questionnaires during 8 years of follow-up. Children had nitrogen dioxide monitors placed outside their home for 2 weeks in the summer and 2 weeks in the fall-winter season as a marker of traffic-related air pollution. We used multilevel Cox models to test the associations between asthma and air pollution. Results: In models controlling for confounders, incident asthma was positively associated with traffic pollution, with a hazard ratio (HR) of 1.29 [95% confidence interval (CI), 1.07-1.56] across the average within-community interquartile range of 6.2 ppb in annual residential <math>\text{PM}_{2.5}</math>. Using the total interquartile range for all measurements of 28.9 ppb increased the HR to 3.25 (95% CI, 1.35-7.85). Conclusions: In this cohort, markers of traffic-related air pollution were associated with the onset of asthma. The risks observed suggest that air pollution exposure contributes to new-onset asthma.</p>
53	<p>Kearns, Robin A., Damian C. A. Collins and Patricia M. Neuwelt. "The Walking School Bus: Extending Children's Geographies?" <i>Area</i> 35, no. 3 (September 2003): 285-292.</p>	<p>In many Western cities, the journey between home and school has become problematic, due to intensifying traffic and growing fears for children's safety. Accordingly, many parents now chauffeur their children to and from school. This situation has compounded congestion, prompting efforts to identify safe</p>

54	<p>Kim, Janice J., Karen Huen, Sara Adams, Svetlana Smorodinsky, Abby Hoats, Brian Malig, Michael Lipsett and Bart Ostro. "Residential Traffic and Children's Respiratory Health" <i>Environmental Health Perspectives</i> 116, no. 9 (September 2008): 1274-1279.</p>	<p>alternatives. One recent innovation is the walking school bus (WSB). In this paper we report on the development of this initiative, and its adoption at a primary school in Auckland, New Zealand. We conclude that although WSBs extend children's geographies they are, at best, an ambivalent response to the hegemony of motorized transport.</p>	<p>Background: Living near traffic has been associated with asthma and other respiratory symptoms. Most studies, however, have been conducted in areas with high background levels of ambient air pollution, making it challenging to isolate an independent effect of traffic. Additionally, most investigations have used surrogates of exposure, and few have measured traffic pollutants directly as part of the study. Objective: We conducted a cross-sectional study of current asthma and other respiratory symptoms in children (n = 1,080) living at varying distances from high-traffic roads in the San Francisco Bay Area, California, a highly urbanized region characterized by good regional air quality due to coastal breezes. Methods: We obtained health information and home environmental factors by parental questionnaire. We assessed exposure with several measures of residential proximity to traffic calculated using geographic information systems, including traffic within a given radius and distance to major roads. We also measured traffic-related pollutants (nitrogen oxides and nitrogen dioxide) for a subset of households to determine how well traffic metrics correlated with measured traffic pollutants. Results: Using multivariate logistic regression analyses, we found associations between current asthma and residential proximity to traffic. For several traffic metrics, children whose residences were in the highest quintile of exposure had approximately twice the adjusted odds of current asthma (i.e., asthma episode in the</p>
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55	<p>Lanki, T., J. Pekkanen, P. Aalto, R. Elosua, N. Berglind, D. D'ippoliti, M. Kulmala, F. Nyberg, A. Peters, S. Picciotto, V. Salomaa, J. Sunyer, P. Tiittanen, S. von Klot, and F. Forastiere. "Associations of Traffic Related Air Pollutants with Hospitalisation for First Acute Myocardial Infarction: The HEAPSS Study" <i>Occupational and Environmental Medicine</i> 63, no. 12 (December 2006): 844-851.</p>	<p>preceding 12 months) compared with children whose residences were within the lowest quintile. The highest risks were among those living within 75 m of a freeway/highway. Most traffic metrics correlated moderately well with actual pollutant measurements. Conclusion: Our findings provide evidence that even in an area with good regional air quality, proximity to traffic is associated with adverse respiratory health effects in children.</p>	<p>Background: Acute myocardial infarction (AMI) is the leading cause of death attributed to cardiovascular diseases. An association between traffic related air pollution and AMI has been suggested, but the evidence is still limited. Objectives: To evaluate in a multicentre study association between hospitalisation for first AMI and daily levels of traffic related air pollution. Methods: The authors collected data on first AMI hospitalisations in five European cities. AMI registers were available in Augsburg and Barcelona; hospital discharge registers (HDRs) were used in Helsinki, Rome and Stockholm. NO<sub>2</sub>, CO, PM10 (particles &lt;10 µm), and O<sub>3</sub> were measured at central monitoring sites. Particle number concentration (PNC), a proxy for ultrafine particles (&lt;0.1 µm), was measured for a year in each centre, and then modelled retrospectively for the whole study period. Generalised additive models were used for statistical analyses. Age and 28 day fatality and season were considered as potential effect modifiers in the three HDR centres. Results: Nearly 27 000 cases of first AMI were recorded. There was a suggestion of an association of the same day CO and PNC levels with AMI: RR=1.005 (95% CI 1.000 to 1.010) per 0.2 mg/m<sup>3</sup> and RR=1.005 (95% CI 0.996 to 1.015) per 10000 particles/cm<sup>3</sup>, respectively. However, associations were only observed in the three cities with HDR, where power for city-specific analyses was higher. The authors observed in these cities the most consistent</p>
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<p>associations among fatal cases aged &lt;75 years: RR at 1 day lag for CO=1.021 (95% CI 1.000 to 1.048) per 0.2 mg/m<sup>3</sup>, for PNC=1.058 (95% CI 1.012 to 1.107) per 10000 particles/cm<sup>3</sup>, and for NO<sub>2</sub>=1.032 (95% CI 0.998 to 1.066) per 8 µg/m<sup>3</sup>. Effects of air pollution were more pronounced during the warm than the cold season. Conclusions: The authors found support for the hypothesis that exposure to traffic related air pollution increases the risk of AMI. Most consistent associations were observed among fatal cases aged &lt;75 years and in the warm season.</p>	<p>56 Lee, Charles. "Environmental Justice: Building a Unified Vision of Health and the Environment" <i>Environmental Health Perspectives</i> 110 (April 2002):141-144.</p> <p>The assorted and multidimensional concerns that give rise to the issue of environmental justice have proved to be intellectually daunting and highly resistant to positive change. Low-income, people of color, and tribal communities confronting environmental stressors are beset by stressors in both the physical and social environments. For this reason, while the bifurcation of the public health and environmental fields taking place over the past several decades has yielded generally negative impacts in areas of public health, environment, and planning, the consequences for low-income and disadvantaged communities have been especially grievous. This commentary builds on the recent Institute of Medicine workshop titled "Rebuilding the Unity of Health and the Environment: A New Vision of Environmental Health for the 21st Century." The workshop organizers posited that only by thinking about environmental health on multiple levels will it be possible to merge various strategies to protect both the environment and health. In this commentary we examine how such a new vision of uniting public health and the environment can contribute to attaining environmental justice for all populations.</p>
<p>57 Li, Fuzhong, K. John Fisher, Ross C. Brownson and Mark Bosworth. "Multilevel</p>	<p>Objective: To examine the relation between built environment factors (representing several</p>

<p>58</p> <p>Lindsay, Ana C., Katarina M. Sussner, Juliee Kim and Steven Gortmaker. "The Role of Parents in Preventing Childhood Obesity" <i>The Future of Children</i> 16, no. 1 (Spring 2006): 169-186.</p>	<p>Modelling of Built Environment Characteristics Related to Neighbourhood Walking Activity in Older Adults" <i>Journal of Epidemiology and Community Health</i> 59, no. 7 (July 2005): 558-564.</p> <p>dimensions of urban form of neighbourhoods) and walking activity at both the neighbourhood level and the resident level, in an older adult sample. Design, setting, participants: A cross sectional, multilevel design with neighbourhoods as the primary sampling unit and senior residents as the secondary unit. Five hundred and seventy seven residents (mean age = 74 years, SD = 6.3 years) participated in the survey, which was conducted among 56 city defined neighbourhoods in Portland, Oregon, USA. Neighbourhood level variables were constructed using geographical information systems. Resident level variables consisted of a mix of self reports and geocoded data on the built environment. Main outcome measure: Self reported neighbourhood walking. Main results: A positive relation was found between built environment factors (density of places of employment, household density, green and open spaces for recreation, number of street intersections) and walking activity at the neighbourhood level. At the resident level, perceptions of safety for walking and number of nearby recreational facilities were positively related to high levels of walking activity. A significant interaction was observed between number of street intersections and perceptions of safety from traffic. Conclusions: Certain neighbourhood built environment characteristics related to urban form were positively associated with walking activity in the neighbourhoods of senior residents. Public health promotion of walking activity/urban mobility and the design of interventions need to consider the contribution of neighbourhood level built environment influences.</p> <p>As researchers continue to analyze the role of parenting both in the development of childhood overweight and in obesity prevention, studies of child nutrition and growth are detailing the ways in which parents affect their children's development of food- and activity-related behaviors. Ana Lindsay,</p>
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<p>Katrina Sussner, Juhee Kim, and Steven Gortmaker argue that interventions aimed at preventing childhood overweight and obesity should involve parents as important forces for change in their children's behaviors. The authors begin by reviewing evidence on how parents can help their children develop and maintain healthful eating and physical activity habits, thereby ultimately helping prevent childhood overweight and obesity. They show how important it is for parents to understand how their roles in preventing obesity change as their children move through critical developmental periods, from before birth and through adolescence. They point out that researchers, policymakers, and practitioners should also make use of such information to develop more effective interventions and educational programs that address childhood obesity right where it starts-at home. The authors review research evaluating school-based obesity-prevention interventions that include components targeted at parents. Although much research has been done on how parents shape their children's eating and physical activity habits, surprisingly few high-quality data exist on the effectiveness of such programs. The authors call for more programs and cost-effectiveness studies aimed at improving parents' ability to shape healthful eating and physical activity behaviors in their children. The authors conclude that preventing and controlling childhood obesity will require multifaceted and community-wide programs and policies, with parents having a critical role to play. Successful intervention efforts, they argue, must involve and work directly with parents from the earliest stages of child development to support healthful practices both in and outside of the home.</p>	<p>59 Loureiro Maria L. and Rodolfo M. Nayga, Jr. "International Dimensions of Obesity and Overweight Related Problems: An Economics Perspective" <i>American</i></p>
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<p>60</p>	<p><i>Journal of Agricultural Economics</i> 87, no. 5 (December 2005): 1147-1153.  <i>The Iowa Review</i> 31, no. 1 (Summer 2001): 37-59.</p>	<p>Background: The built environment may influence health in part through the promotion of physical activity and exposure to pollution. To date, no studies have explored interactions between neighborhood walkability and air pollution exposure. Methods: We estimated concentrations of nitric oxide (NO), a marker for direct vehicle emissions), and ozone (O<sub>3</sub>) and a neighborhood walkability score, for 49,702 (89% of total) postal codes in Vancouver, British Columbia, Canada. NO concentrations were estimated from a land-use regression model, O<sub>3</sub> was estimated from ambient monitoring data, walkability was calculated based on geographic attributes such as land-use mix, street connectivity, and residential density. Results: All three attributes exhibit an urban-rural gradient, with high walkability and NO concentrations, and low O<sub>3</sub> concentrations, near the city center. Lower-income areas tend to have higher NO concentrations and walkability and lower O<sub>3</sub> concentrations. Higher-income areas tend to have lower pollution (NO and O<sub>3</sub>). "Sweet-spot" neighborhoods (low pollution, high walkability) are generally located near but not at the city center and are almost exclusively higher income. Policy Implications: Increased concentration of activities in urban settings yields both health costs and benefits. Our research identifies neighborhoods that do especially well (and especially poorly) for walkability and air pollution exposure. Work is needed to ensure that the poor do not bear an undue burden of urban air pollution and that neighborhoods designed for walking, bicycling, or mass transit do not adversely affect resident's exposure to air pollution. Analyses</p>
<p>61</p>	<p>Marshall, Julian D., Michael Brauer and Lawrence D. Frank. "Healthy Neighborhoods: Walkability and Air Pollution" <i>Environmental Health Perspectives</i> 117, no. 11 (November 2009): 1752-1759.</p>	<p></p>



<p>presented here could be replicated in other cities and tracked over time to better understand interactions among neighborhood walkability, air pollution exposure, and income level.</p>	<p>Physical inactivity is a serious public health problem that is associated with numerous preventable diseases. Public health concerns, particularly those related to the increased prevalence of overweight, obesity, and diabetes, call for schools to become proactive in the promotion of healthy, physically active lifestyles. This article begins by differentiating physical activity from associated concepts (e.g., physical education, physical fitness) and then summarizes the literature related to the importance of physical activity for children and the need for its promotion in elementary schools. We describe numerous opportunities for children to accrue physical activity in elementary schools (e.g., physical education classes, program integration with other subject areas, recess, extracurricular programs, and active transport to school) and provide recommendations for sound educational practice.</p>
<p>62</p> <p>McKenzie, Thomas L. and David Kahan. "Physical Activity, Public Health, and Elementary Schools". <i>The Elementary School Journal</i> 108, no. 3. (January 2008): 171-180.</p>	<p>Study objective: To review systematic review literature that describes the effectiveness of transport interventions in improving population health. Methods: Systematic review methodology was used to evaluate published and unpublished systematic reviews in any language that described the measured health effects of any mode of transport intervention. Main results: 28 systematic reviews were identified. The highest quality reviews indicate that the most effective transport interventions to improve health are health promotion campaigns (to prevent childhood injuries, to increase bicycle and motorcycle helmet use, and to promote children's care seat and seatbelt use), traffic calming, and specific legislation against drink driving. Driver improvement and</p>
<p>63</p> <p>Morrison, D.S., M. Pettierew and H. Thomson. "What Are the Most Effective Ways of Improving Population Health through Transport Interventions? Evidence from Systematic Reviews". <i>Journal of Epidemiology and Community Health</i> 57, no. 5 (May 2003): 327-333.</p>	<p>Morrison, D.S., M. Pettierew and H. Thomson. "What Are the Most Effective Ways of Improving Population Health through Transport Interventions? Evidence from Systematic Reviews". <i>Journal of Epidemiology and Community Health</i> 57, no. 5 (May 2003): 327-333.</p>

<p>education courses are associated with increases in crash involvement and violations. Conclusions: Systematic reviews are able to provide evidence about effective ways of improving health through transport related interventions and also identify well intentioned but harmful interventions. Valuable additional information may exist in primary studies and systematic reviews have a role in evaluating and synthesising their findings.</p>	<p>Traditional ways of preventing and treating overweight and obesity have almost invariably focused on changing the behavior of individuals, an approach that has proven woefully inadequate, as indicated by the rising rates of both conditions. Considering the many aspects of American culture that promote obesity, from the proliferation of fast-food outlets to almost universal reliance on automobiles, reversing current trends will require a multifaceted public health policy approach as well as considerable funding. National leadership is needed to ensure the participation of health officials and researchers, educators and legislators, transportation experts and urban planners, and businesses and nonprofit groups in formulating a public health campaign with a better chance of success. The authors outline a broad range of policy recommendations and suggest that an obesity prevention campaign might be funded, in part, with revenues from small taxes on selected products that provide "empty" calories--such as soft drinks--or that reduce physical activity--such as automobiles.</p>
<p>64</p> <p>Nestle, Marion and Michael F. Jacobson. "Halting the Obesity Epidemic: A Public Health Policy Approach". <i>Public Health Reports</i> 115, no. 1 (January - February 2000):12-24.</p>	<p>Ogitive, David and Neil Hamlet. "Obesity: The Elephant in The Corner". <i>British Medical Journal</i> 331, no. 7531 (December 2005): 1545-1548.</p>
<p>66</p> <p>Parry, Ian W. H., Margaret Walls, Winston Harrington. "Automobile Externalities and Policies". <i>Journal of</i></p>	<p>This paper discusses the nature, and magnitude, of externalities associated with automobile use, including local and global pollution, oil</p>

70	<p>Reynolds, Peggy, Julie von Behren, Robert B. Gunier, Debbie E. Goldberg, Andrew Hertz, and Daniel F. Smith. "Childhood Cancer Incidence Rates and Hazardous Air Pollutants in California: An Exploratory Analysis" <i>Environmental Health Perspectives</i> 111, no. 4 (April 2003): 663-668.</p> <p>Hazardous air pollutants (HAPs) are compounds shown to cause cancer or other adverse health effects. We analyzed population-based childhood cancer incidence rates in California (USA) from 1988 to 1994, by HAP exposure scores, for all California census tracts. For each census tract, we calculated exposure scores by combining cancer potency factors with outdoor HAP concentrations modeled by the U.S. Environmental Protection Agency. We evaluated the relationship between childhood cancer rates and exposure scores for 25 potentially carcinogenic HAPs emitted from mobile, area, and point sources and from all sources combined. Our study period saw 7,143 newly diagnosed cancer cases in California; of these, 6,989 (97.8%) could be assigned to census tracts and included in our analysis. Using Poisson regression, we estimated rate ratios (RRs) adjusted for age, race/ethnicity, and sex. We found little evidence for elevated cancer RRs for all sites or for gliomas among children living in high-ranking combined-source exposure areas. We found elevated RRs and a significant trend with increasing exposure level for childhood leukemia in tracts ranked highest for exposure to the combined group of 25 HAPs (RR = 1.21; 95% confidence interval, 1.03, 1.42) and in tracts ranked highest for point-source HAP exposure (RR = 1.32; 95% confidence interval, 1.11, 1.57). Our findings suggest an association between increased childhood leukemia rates and high HAP exposure, but studies involving more comprehensive exposure assessment and individual-level exposure data will be important for elucidating this relationship.</p>
71	<p>Roberts, Jan. "Congestion Charging And The Walking Classes: New Charge Tackles Road Danger At Its Source"</p>

<p>dependence, traffic congestion and traffic accidents. It then discusses current federal policies affecting these externalities, including fuel taxes, fuel economy and emissions standards, and alternative fuel policies, summarizing, insofar as possible, the welfare effects of those policies. Finally, we discuss emerging pricing policies, including congestion tolls, and insurance reform, and summarize the appropriate combination of policies to address automobile externalities.</p>	<p>In urban transportation planning, it has become critical (1) to determine the travel time of a traveler and how it is affected by congestion, and (2) to understand how traffic distributes in a transportation network. In the first part of this paper, we derive an analytical function of travel time, based on the theory of kinematic waves. This travel-time function integrates the traffic dynamics as well as the effects of shocks. Numerical examples demonstrate the quality of the analytical function, in comparison with simulated travel times. In the second part of this paper, we incorporate the travel-time model within a dynamic user equilibrium (DUE) setting. We prove that the travel-time function is continuous and strictly monotone if the flow varies smoothly. We illustrate how the model applies to solve a large network assignment problem through a numerical example.</p>
68	<p>Perakis, Georgia and Guillaume Roels. "An Analytical Model for Traffic Delays and the Dynamic User Equilibrium Problem" <i>Operations Research</i> 54, no. 6 (November - December 2006): 1151-1171.</p> <p>Plantinga, Andrew J. and Stephanie Bernell. "Can Urban Planning Reduce Obesity? The Role of Self-Selection in Explaining the Link between Weight and Urban Sprawl" <i>Review of Agricultural Economics</i> 29, no. 3 (Autumn 2007): 557-563.</p>
69	<p>Portney Paul R., Jan W. H. Parry, Howard K. Gruenspecht and Winston Harrington. "Policy Watch: The Economics of Fuel Economy Standards"</p>



	<p><i>British Medical Journal</i> 326, no. 7385 (February 2003): 345-346.</p>	
72	<p>Roberts, Ian. "Reducing Road Traffic: Would Improve Quality of Life as Well as Preventing Injury" <i>British Medical Journal</i> 316, no. 7127 (January 1998): 242-243.</p>	
73	<p>Ruhm, Christopher J. "Are Recessions Good for Your Health?" <i>The Quarterly Journal of Economics</i> 115, no. 2 (May 2000): 617-650</p>	<p>This study investigates the relationship between economic conditions and health. Total mortality and eight of the ten sources of fatalities examined are shown to exhibit a procyclical fluctuation, with suicides representing an important exception. The variations are largest for those causes and age groups where behavioral responses are most plausible, and there is some evidence that the unfavorable health effects of temporary upturns are partially or fully offset if the economic growth is long-lasting. An accompanying analysis of microdata indicates that smoking and obesity increase when the economy strengthens, whereas physical activity is reduced and diet becomes less healthy.</p>
74	<p>Sallis, James F. and Karen Glanz. "The Role of Built Environments in Physical Activity, Eating, and Obesity in Childhood" <i>The Future of Children</i> 16, no. 1 (Spring 2006): 89-108.</p>	<p>Over the past forty years various changes in the U.S. "built environment" have promoted sedentary lifestyles and less healthful diets. James Sallis and Karen Glanz investigate whether these changes have had a direct effect on childhood obesity and whether improvements to encourage more physical activity and more healthful diets are likely to lower rates of childhood obesity. Researchers, say Sallis and Glanz, have found many links between the built environment and children's physical activity, but they have yet to find conclusive evidence that aspects of the built environment promote obesity. For example, certain development patterns, such as a lack of sidewalks, long distances to schools, and the need to cross busy streets, discourage walking and biking to school. Eliminating such barriers can increase rates of active commuting. But</p>

	<p>researchers cannot yet prove that more active commuting would reduce rates of obesity. Sallis and Glanz note that recent changes in the nutrition environment, including greater reliance on convenience foods and fast foods, a lack of access to fruits and vegetables, and expanding portion sizes, are also widely believed to contribute to the epidemic of childhood obesity. But again, conclusive evidence that changes in the nutrition environment will reduce rates of obesity does not yet exist. Research into the link between the built environment and childhood obesity is still in its infancy. Analysts do not know whether changes in the built environment have increased rates of obesity or whether improvements to the built environment will decrease them. Nevertheless, say Sallis and Glanz, the policy implications are clear. People who have access to safe places to be active, neighborhoods that are walkable, and local markets that offer healthful food are likely to be more active and to eat more healthful food—two types of behavior that can lead to good health and may help avoid obesity.</p>
75	<p>Schwartz, Joel. "Air Pollution and Blood Markers of Cardiovascular Risk" <i>Environmental Health Perspectives</i> 109 (June 2001): 405-409.</p> <p>Recent studies have linked air pollution to tens of thousands of premature cardiovascular deaths per year. The mechanisms of such associations remain unclear. In this study we examine the association between blood markers of cardiovascular risk and air pollution in a national sample of the U.S. population. Air pollution concentrations were merged to subjects in the Third National Health and Nutrition Examination Survey (NHANES III) in the United States, and the association with fibrinogen levels and counts of platelets and white blood cells were examined. The subjects in NHANES III are a representative sample of the U.S. population. Regressions controlled for age, race, sex, body mass index, current smoking, and number of cigarettes per day. The complex survey design was dealt with using mixed models with a random sampling</p>

<p>site effect. In single-pollutant models, PM10 (particulate matter with a mass median aerodynamic diameter less than 10 µm) was associated with all three outcomes (p &lt; 0.05): Sulfur dioxide (SO2) was significantly associated only with white cell counts, nitrogen dioxide NO2 with platelet counts and fibrinogen, and ozone with none of the outcomes. In two-pollutant models, PM10 remained a significant predictor of white cell counts controlling for SO2 but not vice versa. PM10 was marginally significant in a model for platelet counts with NO2, and the sign of the NO2 coefficient was reversed. These results were stable with control for indoor exposures (wood stoves, environmental tobacco smoke, gas stoves, fireplaces), dietary risk factors (saturated fat, alcohol, caffeine intake, n-3 fatty acids), and serum cholesterol. The magnitude of the effects are modest [e.g., 13 µg/dL fibrinogen for an interquartile range (IQR) change in PM10, 95% confidence interval (CI) 4.6-22.1 mg/dL]. However, the odds ratio of being in the top 10% of fibrinogen for the same IQR change was 1.77 (95% CI 1.26-2.49). These effects provide considerable biologic plausibility to the mortality studies. PM10, but not gaseous air pollutants, is associated with blood markers of cardiovascular risk, and this may explain epidemiologic associations with early deaths.</p>	<p>Slama, Rémy, Verena Morgenstern, Josef Cyrys, Anne Zutavern, Olf Herbarth, Heinz-Erich Wichmann, Joachim Heinrich and The LISA Study Group. "Traffic-Related Atmospheric Pollutants Levels during Pregnancy and Offspring's Term Birth Weight: A Study Relying on a Land-Use Regression Exposure Model" <i>Environmental Health Perspectives</i> 115, no. 9 (September 2007): 1283-1292.</p>
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<p>who delivered a non-premature baby with a birth weight &gt; 2,500 g in Munich metropolitan area were included. We assessed PM2.5, PM2.5 absorbance (which depends on the blackness of PM2.5, a marker of traffic-related air pollution), and nitrogen dioxide levels using a land-use regression model, taking into account the type and length of roads, population density, land coverage around the home address, and temporal variations in pollution during pregnancy. Using Poisson regression, we estimated prevalence ratios (PR) of birth weight &lt; 3,000 g, adjusted for gestational duration, sex, maternal smoking, height, weight, and education. Results: Exposure was defined for 1,016 births. Taking the lowest quartile of exposure during pregnancy as a reference, the PR of birth weight &lt; 3,000 g associated with the highest quartile was 1.7 for PM2.5 [95% confidence interval (CI), 1.2-2.7], 1.8 for PM2.5 absorbance (95% CI, 1.1-2.7), and 1.2 for NO2 (95% CI, 0.7-1.7). The PR associated with an increase of \$1 \mu\text{mug}/\text{m}^3\$ in PM2.5 levels was 1.13 (95% CI, 1.00-1.29). Conclusion: Increases in PM2.5 levels and PM2.5 absorbance were associated with decreases in term birth weight. Traffic-related air pollutants may have adverse effects on birth weight</p>	<p>Mary Story, Karen Kaphingst, and Simone French argue that U.S. schools offer many opportunities for developing obesity-prevention strategies by providing more nutritious food, offering greater opportunities for physical activity, and providing obesity-related health services. Meals at school are available both through the U.S. Department of Agriculture's school breakfast and lunch programs and through "competitive foods" sold à la carte in cafeterias, vending machines, and snack bars. School breakfasts and school lunches must meet federal nutrition standards, but competitive foods are exempt from such requirements. And budget pressures force</p>
<p>77</p>	<p>Story, Mary, Karen M. Kaphingst and Simone French. "The Role of Schools in Obesity Prevention" <i>The Future of Children</i> 16, no. 1 (Spring 2006): 109-142.</p>



<p>schools to sell the popular but nutritionally poor foods à la carte. Public discomfort with the school food environment is growing. But can schools provide more healthful food options without losing money? Limited evidence shows that they can. Although federal nutrition regulations are inadequate, they permit state and local authorities to impose additional restrictions. And many are doing so. Some states limit sales of nonnutritious foods, and many large school districts restrict competitive foods. Several interventions have changed school food environments, for example, by reducing fat content of food in vending machines and making more fruits and vegetables available. Interventions are just beginning to target the availability of competitive foods. Other pressures can also compromise schools' efforts to encourage physical activity. As states use standardized tests to hold schools and students academically accountable, physical education and recess have become a lower priority. But some states are now mandating and promoting more physical activity in schools. School health services can also help address obesity by providing screening, health information, and referrals to students, especially low-income students, who are at high risk of obesity, tend to be underinsured, and may not receive health services elsewhere.</p>	<p>78 Trasande, Leonardo, Chris Cronk, Maureen Durkin, Marianne Weiss, Dale A. Schoeller, Elizabeth A. Gall, Jeanne B. Hewitt, Aaron L. Carrel, Philip J. Landrigan and Matthew W. Gillman. "Environment and Obesity in the National Children's Study" <i>Environmental Health Perspectives</i> 117, no. 2 (February 2009):159-166.</p> <p>Objective: In this review we describe the approach taken by the National Children's Study (NCS), a 21-year prospective study of 100,000 American children, to understand the role of environmental factors in the development of obesity. Data sources and extraction: We review the literature with regard to the two core hypotheses in the NCS that relate to environmental origins of obesity and describe strategies that will be used to test each hypothesis. Data synthesis: Although it is clear that obesity in an individual results from an imbalance between energy intake and</p>
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<p>expenditure, control of the obesity epidemic will require understanding of factors in the modern built environment and chemical exposures that may have the capacity to disrupt the link between energy intake and expenditure. The NCS is the largest prospective birth cohort study ever undertaken in the United States that is explicitly designed to seek information on the environmental causes of pediatric disease. Conclusions: Through its embrace of the life-course approach to epidemiology, the NCS will be able to study the origins of obesity from preconception through late adolescence, including factors ranging from genetic inheritance to individual behaviors to the social, built, and natural environment and chemical exposures. It will have sufficient statistical power to examine interactions among these multiple influences, including gene-environment and gene-obesity interactions. A major secondary benefit will derive from the banking of specimens for future analysis.</p>	<p>79 Vichit-Vadakan, Nuntavarn, Bart D. Ostro, Lauraine G. Chestnut, David M. Mills, Wichai Aekplakorn, Supat Wangwongwatana and Noppaporn Panich. "Air Pollution and Respiratory Symptoms: Results from Three Panel Studies in Bangkok, Thailand" <i>Environmental Health Perspectives</i> 109, (June 2001): 381-387.</p> <p>Several studies in North American cities have reported associations between air pollution and respiratory symptoms. Replicating these studies in cities with very different population and weather characteristics is a useful way of addressing uncertainties and strengthening inferences of causality. To this end we examined the responses of three different panels to particulate matter (PM) air pollution in Bangkok, Thailand, a tropical city characterized by a very warm and humid climate. Panels of schoolchildren, nurses, and adults were asked to report daily upper and lower respiratory symptoms for 3 months. Concentrations of daily PM10 (PM with a mass median aerodynamic diameter less than 10 µm) and PM2.5 (airborne particles with aerodynamic diameters less than 2.5 µm) were collected at two sites. Generally, associations were found between these pollution metrics and the daily occurrence of both upper and</p>
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<p>lower respiratory symptoms in each of the panels. For example, an interquartile increase of 45 µg/m<sup>3</sup> in PM10 was associated with about a 50% increase in lower respiratory symptoms in the panel of highly exposed adults, about 30% in the children, and about 15% in the nurses. These estimates were not appreciably altered by changes in the specification of weather variables, stratification by temperature, or inclusion of individual characteristics in the models; however, time trends in the data cause some uncertainty about the magnitude of the effect of PM on respiratory symptoms. These pollutants were also associated with the first day of a symptom episode in both adult panels but not in children. The estimated odds ratios are generally consistent with and slightly higher than the findings of previous studies conducted in the United States.</p>	<p>Viner, Russell and Robert Booy. "Abc Of Adolescence: Epidemiology Of Health And Illness" <i>British Medical Journal</i> 330, no. 7488 (February 2005):411-414.</p>	<p>The objective of this paper is to make explicit the linkages between specific characteristics in the urban built environment, moderate physical activity (in particular walking and cycling), and public health. The review will take place at three different scales - the region, the city and the city-block. At all three scales, the main interest is placed on accessibility, with the recognition that if distances are short enough and there is high connectivity within neighbourhoods, people might be encouraged to walk or cycle. The paper will draw on urban built environment characteristics from a number of Michigan municipalities, including Detroit, Ann Arbor, Birmingham, East Lansing and Okemos.</p>
<p>80</p>	<p>81</p>	<p>82</p>

<p>83</p>	<p>Drive? Pollutants Lurk inside Vehicles" <i>Environmental Health Perspectives</i> 109, no. 9 (September 2001): A422-A427.</p> <p>Williams, Lori A., Cornelia M. Ulrich, Timothy Larson, Mark H. Wener, Brent Wood, Peter T. Campbell, John D. Potter, Anne McTiernan and Anneclaire J. De Roos. "Proximity to Traffic: Inflammation, and Immune Function among Women in the Seattle, Washington, Area" <i>Environmental Health Perspectives</i> 117, no. 3 (March 2009):373-378.</p>	<p>Background: Traffic-related air pollution has been associated with adverse health outcomes, and the immune system may be a biologic mediator of health effects. Objectives: We analyzed associations between living near major roads and immune status as measured by five immune assays. We hypothesized that living near a freeway, arterial, or truck route would be associated with increased inflammation and decreased immune function. Methods: We used a geographic information system (GIS) to determine residential proximity to major roads among 115 postmenopausal, overweight women in the greater Seattle, Washington (USA), area whose immunity was assessed at the baseline visit of an exercise intervention trial. We evaluated three inflammatory markers (C-reactive protein, serum amyloid A, and interleukin-6) and two functional assays of cellular immunity [natural killer (NK) cell cytotoxicity and T-lymphocyte proliferation]. Results: Women living within 150 m of arterial roads had 21% lower NK cytotoxicity compared with women who lived farther from an arterial [mean cytotoxicity, 19.5%; 95% confidence interval (CI), 15.6-23.5%; vs. mean cytotoxicity, 24.8%; 95% CI, 22.0-27.5%], after adjustment for both individual-level and census tract-level demographic characteristics. This association was limited to women who reported exercising near traffic. Fewer women lived near freeways and truck routes. Markers of inflammation and lymphocyte proliferation did not consistently differ according to proximity to major roads. Conclusions: If the observed association between residential proximity to traffic and decreased NK cytotoxicity is confirmed in other populations, our results may have implications for local land use policy.</p>
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84	Woodcock, Ashley and Patricia Stone. "Should Obesity Be Treated?" <i>British Medical Journal</i> 309, no. 6966 (November 1994): 1442.	
85	Zanobetti, Antonella, Diane R. Gold, Peter H. Stone, Helen H. Suh, Joel Schwartz, Brent A. Coull and Frank E. Speizer. "Reduction in Heart Rate Variability with Traffic and Air Pollution in Patients with Coronary Artery Disease" <i>Environmental Health Perspectives</i> . 118, no. 3 (March 2010): 324-330.	<p>Introduction: Ambient particulate pollution and traffic have been linked to myocardial infarction and cardiac death risk. Possible mechanisms include autonomic cardiac dysfunction. Methods: In a repeated-measures study of 46 patients 43-75 years of age, we investigated associations of central-site ambient particulate pollution, including black carbon (BC) (a marker for regional and local traffic), and report of traffic exposure with changes in half-hourly averaged heart rate variability (HRV), a marker of autonomic function measured by 24-hr Holler electrocardiogram monitoring. Each patient was observed up to four times within 1 year after a percutaneous intervention for myocardial infarction, acute coronary syndrome without infarction, or stable coronary artery disease (4,955 half-hour observations). For each half-hour period, diary data defined whether the patient was home or not home, or in traffic. Results: A decrease in high frequency (HF; an HRV marker of vagal tone) of -16.4% [95% confidence interval (CI), -20.7 to -11.8%] was associated with an interquartile range of 0.3-<math>\mu\text{g}/\text{m}^3</math> increase in prior 5-day averaged ambient BC. Decreases in HF were independently associated both with the previous 2-hr averaged BC (-10.4%, 95% CI, -15.4 to -5.2%) and with being in traffic in the previous 2 hr (-38.5%, 95% CI, -57.4 to -11.1%). We also observed independent responses for particulate air matter with aerodynamic diameter <math>\leq 2.5 \mu\text{m}</math> and for gases (ozone or nitrogen dioxide). Conclusion: After hospitalization for coronary artery disease, both particulate pollution and being in traffic, a marker of stress and pollution, were associated with decreased HRV.</p>



**7. City of East Palo Alto Community Development Department – Planning Division, Brent Butler (letter dated July 26, 2010)**

7.1 *This comment pertains to demand for affordable housing resulting from cumulative development within the City of Palo Alto. The commentor states, “A failure to mitigate both residential and non-residential development will result in increased housing demand. If the construction of affordable housing within Palo Alto does not meet demand [from cumulative development], there would likely be increased demand for affordable housing in East Palo Alto. This unmet demand could force displacement of East Palo Alto families...”*

Please see Master Response 7 for a discussion of affordable housing demand in East Palo Alto from the SUMC Project.

7.2 *The commentor suggests and welcomes measures to reduce air quality impacts through provisions of non-motorized connections to East Palo Alto and affordable housing in East Palo Alto. Please see Master Response 7 for a discussion of affordable housing demand in East Palo Alto from the SUMC Project. The SUMC Project would not create substantial demand for affordable housing in East Palo Alto. In addition, the Study Area for the Transportation Impact Analysis (Appendix C of the Draft EIR) included three East Palo Alto intersections, along University Avenue (see Figure 3.4-1 and Table 3.4-1). As indicated in Draft EIR Section 3.4, Transportation, no significant intersection or roadway level of service (LOS) impacts would occur in East Palo Alto as a result of the SUMC Project. See also Responses 7.3 and 7.5, below, regarding health risk from project-related vehicular emissions within East Palo Alto. The SUMC Project would not result in exposure of sensitive receptors in East Palo Alto to significant health risks. Per Section 15126.4 of the CEQA Guidelines, mitigation measures are not required for effects that are not found to be significant. Also, mitigation measures must be “roughly proportional” to the impacts of the SUMC Project. Since no significant impacts would occur in East Palo Alto due to the SUMC Project, mitigation measures involving non-motorized connections to East Palo Alto and affordable housing in East Palo Alto would not be warranted.*

7.3 *The commentor states that the EIR does not consider reasonably foreseeable secondary (indirect) consequences, such as transportation impacts on local air quality and mobility in the City of East Palo Alto. The potential human health impact associated with increased traffic on the sections of University Avenue and US 101 traveling through the City of East Palo Alto that could be attributable to the SUMC Project is considered in a supplemental health risk assessment (HRA) entitled Traffic Impacts in the Vicinity of East Palo Alto – Proposed Stanford University Medical Center Facilities Renewal and Replacement Project (East Palo Alto HRA), as included as Appendix BB of this document. The East Palo Alto HRA analysis was conducted using the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans (2010). The analysis in the HRA evaluated free flow and queue traffic data in East Palo Alto for both non-SUMC Project and SUMC Project traffic in 2025 (the projected full*

occupancy year) as estimated by AECOM. The analysis was completed using CAL3QHCR (a Gaussian air dispersion model approved by the United States Environmental Protection Agency [US EPA] and the California Air Resources Board [CARB] for use in the environmental documentation of transportation projects) to estimate toxic air contaminant and fine particulate matter (PM<sub>2.5</sub>) concentrations.

The results of the air dispersion modeling were combined with BAAQMD default human exposure assumptions to estimate cancer risk, noncancer hazard indices (acute and chronic), and PM<sub>2.5</sub> concentrations as a result of the exhaust from SUMC Project-related traffic on the sections of University Avenue and US 101 traveling through the East Palo Alto. Exposures to occupants of day care centers, schools, parks, residents (adults and children), senior living/recreational facilities, and housing shelters were also evaluated. The findings of the HRA indicate that incremental cancer risks, noncancer hazard indices (acute and chronic), and PM<sub>2.5</sub> concentrations are well below BAAQMD CEQA thresholds of significance. Therefore, based on the methods specified by the BAAQMD, emissions from the traffic generated as a result of the SUMC Project do not pose a significant health risk to East Palo Alto residents. With regard to mobility effects, please see Response 7.2, which explains that the SUMC Project would not result in significant traffic congestion in East Palo Alto.

7.4 *The commentor identifies the City of East Palo Alto as an environmental justice community that experiences disproportionate adverse environmental effects.* The City of Palo Alto and SUMC Project sponsors commissioned the supplemental HRA, described above in Response 7.3, in recognition of these facts, in order to ensure that the residents of East Palo Alto would not be disproportionately affected by the SUMC Project. The City of East Palo Alto's comments are important, and substantial efforts have been made to address the comments thoroughly.

7.5 *The commentor states that the Draft EIR does not adequately address the effects of toxic air contaminants (TACs), in particular PM<sub>2.5</sub>, along SUMC Project access routes, in particular within the East Palo Alto Community.* The East Palo Alto HRA, included as Appendix BB of this document, estimates the potential human health impacts associated with increased traffic related to the SUMC Project, including diesel truck traffic, on the sections of University Avenue and US 101 traveling through the City of East Palo Alto. The findings of the analysis, which include application of a conservative age sensitivity factor that accounts for childhood exposure, indicate that incremental cancer risks, noncancer hazard indices (acute and chronic), and PM<sub>2.5</sub> concentrations are well below BAAQMD CEQA thresholds of significance. Therefore, based on the methods specified by the BAAQMD, the traffic generated as a result of the SUMC Project does not pose a significant health risk to East Palo Alto residents. Please refer to Response 7.3, above, for additional discussion of the analysis of PM<sub>2.5</sub>.

The air quality analysis uses traffic data for East Palo Alto estimated by AECOM for 2025 for non-SUMC Project and SUMC Project traffic. This considered all vehicle classes, including trucks. Although 26 percent of SUMC Project traffic would travel through East Palo Alto (11 percent from the Dumbarton Bridge and 15 percent from US 101), the actual increase in traffic from the SUMC Project along the modeled road segments would be relatively small. The average increase in traffic along University Avenue US 101 and the entrance and exit ramps would be approximately 3 percent. The analysis considers the impact on health from traffic along University Avenue, US 101, and the entrance and exit ramps. Of the roadways in East Palo Alto, these roadways would experience the largest increase in SUMC Project-related traffic, and therefore, adjacent areas would experience the largest impact on human health as they would carry the majority of SUMC Project traffic passing through the East Palo Alto area. To the extent cut through, or other traffic, would occur elsewhere in East Palo Alto, it would be at lower volumes, and therefore lower emissions than those modeled on University Avenue, US 101, and the entrance and exit ramps. Since the impact of the modeled SUMC Project traffic is well below the thresholds, it can be reasonably assumed that the TAC and PM<sub>2.5</sub> impacts around other roads in the area would also be less than significant because SUMC Project cut-through traffic volumes would be even less than on the identified roadways.

The health impact of the queues along University Avenue during all hours of the day was also analyzed. According to the analysis, the addition of SUMC Project-related traffic to queues along University Avenue would not significantly impact human health.

- 7.6 *The commentor states that the Draft EIR analysis of TACs is irrelevant because of uncertainty with regard to the impact of the Corporate Average Fuel Economy (CAFE) Standards and the EIR should mitigate TAC impacts accordingly. Please refer to Response 7.5, above, for additional discussion of traffic-related air quality impacts and Response 7.7, below, for a discussion of CAFE Standards.*
- 7.7 *The commentor identifies concerns with the CAFE Program and the assumption that increased fuel efficiency would translate into improved air quality. According to the US EPA and the National Highway Traffic Safety Administration's Joint Technical Support Document,<sup>1</sup> a driver's vehicle use is weakly affected by per mile cost of driving as the rebound effect is estimated to be in the range of 3 to 16 percent over the period from 2010 through 2030. While improved CAFE standards may reduce the cost of driving, criteria pollutant (including carbon monoxide, hydrocarbons, and oxides of nitrogen) emission standards promulgated on a per mile basis have been reduced significantly since the inception of the CAFE standard, more than offsetting any marginal increase in driving due to the rebound effect.*

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<sup>1</sup> United States Environmental Protection Agency, Final Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, EPA-420-R-10-901, April 2010.



7.8 *The commentor presents justification for inclusion of public health impacts in the EIR.* The health risks of the SUMC Project have been evaluated as part of the East Palo Alto HRA, in Appendix BB of this document. Please refer to Responses 7.3 and 7.5, above, for additional discussion of the health risk analysis.

7.9 *The commentor identifies concerns with the air quality model used to support conclusions for air quality impacts in the Draft EIR.* The air quality analysis in the East Palo Alto HRA, Appendix BB of this document, does not use CALINE 4, but instead uses CAL3QHCR, a Gaussian air dispersion model approved by the US EPA, ARB, and BAAQMD for use in the environmental documentation of impacts from transportation sources. CAL3QHCR is a refined version of US EPA's CAL3QHC, which is a multi-source model developed in 1990 to estimate air concentrations of vehicle emissions near roadway intersections. CAL3QHCR is used to estimate air concentrations at receptors located adjacent to freeways or other high traffic volume roads. The CAL3QHCR model is recommended in US EPA's Guideline on Air Quality Models (also published as Appendix W of 40 CFR Part 51) to determine air pollution concentrations from motor vehicles emissions at receptor locations downwind of freeways located in relatively uncomplicated terrain. With CAL3QHCR, the analysis also uses a representative meteorological data set for the City of East Palo Alto that incorporated hourly surface and twice-daily upper air data for estimating the dispersion of emissions through the atmosphere.

In addition, the analysis also applies hourly data that are reflective of the change in traffic conditions throughout the day; where uncertain, a more conservative approach for the model setup was adopted. Additionally, the analysis specifically evaluated TACs associated with vehicle exhaust, including diesel particulate matter (DPM), acetaldehyde, benzene, 1,3-butadiene, formaldehyde, and acrolein; and fine particulate matter, PM<sub>2.5</sub>, from both exhaust and non-exhaust sources (i.e., tire and brake wear). Thus, the methodology used in the HRA, and the resulting analysis, were specifically tailored to reflect environmental conditions existing in East Palo Alto.

7.10 *The commentor expresses concern that the air quality model did not measure spillover traffic.* Please refer to Response 7.9 regarding the air quality model used in the East Palo Alto HRA. The East Palo Alto HRA analyzes the impacts on health from traffic along University Avenue and US 101. Of the roadways in East Palo Alto, these roadways would have the largest impact on human health as the majority of SUMC Project traffic passing through the City is anticipated to use these roadways. Although 26 percent of SUMC Project traffic would travel through East Palo Alto (11 percent from the Dumbarton Bridge and 15 percent from US 101), there would be only a small increase in traffic from the SUMC Project along the modeled road segments as stated in Response 7.5, above. The findings indicate that the SUMC Project's incremental health risks would be below the BAAQMD CEQA thresholds of significance for the roadways analyzed. Since the impact

of the modeled SUMC Project traffic would be well below the thresholds, it can be reasonably assumed that the TAC impacts around other roads in the area would also be less than significant because SUMC Project cut-through traffic volumes would be even less than on the identified roadways.

7.11 *The commentor identifies concerns that the Draft EIR does not adequately address congestion related delays at intersections.* The East Palo Alto HRA evaluates the health risks from the University Avenue ramps from total and SUMC Project traffic and determines that the SUMC Project's incremental health risks would be below the BAAQMD thresholds of significance.

7.12 *The commentor refers to the Housing Needs Analysis (Appendix K of the Draft EIR), points out that this study omits multiplier effects (see page 39 of the Housing Needs Analysis), and indicates that the trip generation in the transportation analysis may be underestimated because the multiplier effect was not included.* The Housing Needs Analysis identified the increased employment that would be generated by the SUMC Project. As explained on pages 38 and 39 of the Housing Needs Analysis, multipliers refer to the concept that income generated by certain types of jobs recycles through the economy, resulting in additional jobs. The Housing Needs Analysis does not include other types of indirect employment and multipliers that could result from the purchase of supplies, food, equipment, pharmaceutical products, etc. by the expanded SUMC.

The Housing Needs Analysis methodology for determining increased employment is a separate issue from the Transportation Impact Analysis (Appendix C of the Draft EIR) methodology for determining trip generation from the SUMC Project. As explained on page 3.4-45 of the Draft EIR, trip generation rates for the SUMC Project were determined using data collected from existing facilities. Driveway counts were conducted at 20 parking areas serving the SUMC Sites during the AM (7:00-9:00) and PM (4:00-6:00) Peak Hours. Trip generation rates were then calculated based on the traffic volumes and the size of existing and proposed buildings. Trips generated for the full build-out (100 percent) of the SUMC Project in 2025 are shown in Table 3.4-16 of the Draft EIR. The Traffic Impact Analysis contains details of the review and validation of the hospital trip generation statistics. The trip distribution patterns were based on existing employee residential locations because they represent the best indicator of the location of future employees. The Draft EIR's methodology for determining trip generation, as well as trip distribution, is appropriate.

7.13 *The commentor asserts that roadway congestion and poor access to recreational opportunities could inhibit bicycling or walking, which in turn could exacerbate obesity in East Palo Alto.* Increased obesity is not an environmental issue under CEQA. Please refer to Master Response 10 for a discussion of non-CEQA issues. Also, the Study Area for the Transportation Impact Analysis in the Draft EIR included three East Palo Alto

intersections, along University Avenue (see Figure 3.4-1 and Table 3.4-1). As indicated in Draft EIR Section 3.4, Transportation, no significant intersection or roadway level of service impacts would occur in East Palo Alto as a result of the SUMC Project. Accordingly, the SUMC Project would not substantially affect access to recreation, bicycling or walking in East Palo Alto.

Given that no significant congestion-related impact would occur, mitigation to address obesity, such as providing access to healthy foods in East Palo Alto stores, is not a required mitigation measure under CEQA.

- 7.14 *The commentor notes that an option considered at the Willow/University Corridor Study advisory committee meetings was to reduce University Avenue from four lanes to two lanes and whether that would reduce speed and cut through traffic.* Changing the cross section of University Avenue from four lanes to two lanes is not a consideration for the SUMC Project and would need to be evaluated through a separate process. However, reducing the width to two lanes would probably reduce driving speed since drivers would not have the opportunity to pass other vehicles in the adjacent lane. As to reducing traffic that drives through East Palo Alto, the amount of that reduction is difficult to gauge. Because of increased congestion as a result of only a two-lane roadway, some traffic would be diverted onto other available parallel corridors such as the San Mateo Bridge, Willow Road, and SR 237. Other traffic would continue to use University Avenue but at a different time and the Peak Period would be expanded from two to three hours to possibly three to four hours.
- 7.15 *The commentor states that US 101 divides the City of East Palo Alto, and identifies US 101 as an east/west barrier for pedestrian and bicycle mobility.* US 101 is an existing condition that does not result from the SUMC Project. As discussed on page 3.1-7 of the Draft EIR, CEQA Guidelines Section 15126.2(a) explains that, in assessing the impact of a SUMC Project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.
- 7.16 *The commentor states that the Transportation Impact Analysis omits reference to the East Palo Alto General Plan.* Given that the SUMC Project would occur within the City of Palo Alto, the City of East Palo Alto General Plan would not be applicable to the SUMC Project. The City has nonetheless opted to apply the significance criteria for intersection level of service of Menlo Park and East Palo Alto in Appendix C to the Draft EIR, Transportation Impact Analysis. In analyzing the SUMC Project's impacts on three East Palo Alto intersections along University Avenue against East Palo Alto's significance criteria, no significant impacts have been identified. Additionally, Impact TR-1 on pages 3.4-40 through 3.4-44 of the Draft EIR identifies various construction-period mitigation measures that would ensure that construction trucks would have less-than-significant

impacts. These measures include Mitigation Measures TR-1.5, which involves restriction of truck routes to designated roadways; TR-1.6, which requires the SUMC Project sponsors to protect streets from damage and repair any structural damage to public roadways; and TR-1.8, which in lieu of the previous measures, requires the SUMC Project sponsors to provide a construction impact mitigation plan that identifies an acceptable method of reducing or eliminating significant transportation impacts due to routing and scheduling of materials deliveries, and construction employee arrival and departure schedules, among other construction activities. As indicated in Appendix BB of this document, the SUMC Project would have less-than-significant health effects from traffic emissions in East Palo Alto.

- 7.17 *The commentor states that increased traffic leads to a decrease in non-motorized mobility and an increase in childhood obesity. Please see Response 7.13, above, and Master Response 10 for a discussion of non-CEQA issues.*
- 7.18 *The commentor suggests that the analysis should incorporate local planning, thresholds, and existing conditions. In particular, the analysis should consider the City of East Palo Alto Shuttle service, or expansion of the existing service to reduce potential public health impacts. The analysis presented in the East Palo Alto HRA, Appendix BB of this document, evaluates the impacts of SUMC Project-related traffic when traveling on streets in the City of East Palo Alto on sensitive receptors adjacent to those roadways. This analysis applies current approaches recommended by the BAAQMD, CARB, California Office of Environmental Health Hazard Assessment, and US EPA. Since the SUMC Project would not result in a significant health risk or significant traffic effects in East Palo Alto, no mitigation is required.*
- 7.19 *The commentor suggests that the air quality analysis in the Draft EIR should address air pollutant loading at intersections in the City of East Palo Alto in addition to the operational and construction-related effects. The air quality analysis in the East Palo Alto HRA estimates the potential human health impact associated with increased traffic on the sections of University Avenue and US 101 traveling through East Palo Alto that could be attributed to the SUMC Project. The findings of the analysis indicate that incremental cancer risks, noncancer hazard indices (acute and chronic), and PM<sub>2.5</sub> concentrations are well below BAAQMD CEQA thresholds of significance. Therefore, based on the methods specified by the BAAQMD, the traffic generated as a result of the SUMC Project would not result in a significant health risk to East Palo Alto residents. Please refer to Response 7.3, above, for additional discussion of the analysis of PM<sub>2.5</sub>.*
- 7.20 *The commentor suggests that the Final EIR should include quantification of the human health risk associated with hazardous air pollutants including TACs. The air quality analysis in the East Palo Alto HRA (Appendix BB) estimates the potential human health impact associated with the SUMC Project in East Palo Alto. Please refer to Response 7.3,*

above, for discussion of the analysis of TACs and PM<sub>2.5</sub>. As discussed under Response 7.3, the traffic generated as a result of the SUMC Project would not result in a significant health risk to East Palo Alto residents and mitigation is not necessary.

7.21 *The commentor “recognizes a material omission by not including health impacts” in the URBEMIS model.* The URBEMIS model outputs in Appendix G of the Draft EIR are intended to address the SUMC Project’s regional emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, as well as localized concentrations of CO. The calculations in Appendix G of the Draft EIR are not intended to address local health risk implications of SUMC Project-related emissions. Please see Response 7.3 of this document regarding health effects of SUMC Project-related vehicular traffic.

7.22 *The commentor recognizes a material omission by not including health impacts related to truck routing through East Palo Alto.* The climate change calculations in Appendix H of the Draft EIR are intended to address the SUMC Project’s greenhouse gas emissions that would contribute to global climate change. The calculations in Appendix H of the Draft EIR are not intended to address local health risk implications of SUMC Project-related truck trips. Please see Response 7.3 regarding health effects of project-related vehicular traffic. Please also see Appendix V of this Responses to Comments document for revised climate change calculations.

7.23 *The comment states that the EIR’s mitigation measures do not specifically state how additional employees generated by the SUMC Project would be housed or where they would live.* Please see Master Response 7. Table 3.13-8 of the Draft EIR, as revised in Staff-Initiated Change 7, identifies the estimated distribution of where new employees of the SUMC Project are expected to live. As discussed in pages 3.13-8 through 3.13-14 of the Draft EIR, the comparatively small housing needs of future employees are expected to be accommodated by the housing already forecasted to be built in each of the jurisdictions, and the SUMC Project’s impacts on housing demand would be less than significant and would thus not require mitigation.

7.24 *The commentor states that there is no breakdown regarding interim construction jobs and long term permanent jobs.* Pages 2-55 through 2-61 of the Draft EIR indicate the number of temporary construction workers that would be employed under the SUMC Project through various stages of the approximately 12-year construction period. As indicated:

- During the four-year construction of the Stanford Hospital and Clinics (SHC) component on the Main SUMC Site, the average number of construction workers on site would range from 500 to 800 workers;
- During the four-year construction of the Lucile Packard Children’s Hospital (LPCH) component, the average number of construction workers on site would range from 270 to 450 workers;

- During the approximately 10-year construction of the Stanford School of Medicine (SoM) component, an average of 150 to 225 construction workers would be on site during construction of the FIM buildings, and 50 workers would be on site for the subsequent demolitions;
- During the two-year construction on the Hoover Pavilion Site, an average of 140 construction workers would be on site.

As indicated on page 4-4 of the Draft EIR, given the limited duration and standard nature of the construction anticipated, the demand for construction employment would likely be met within the existing and future labor market in the City of Palo Alto, in Santa Clara County, or within the Bay Area. It is not relevant for the analysis to determine the specific job titles or categories of construction workers.

As indicated in various portions of the Draft EIR and as pointed out by the commentor, the SUMC Project would result in 2,242 additional employees. Appendix K of the Draft EIR, the Housing Needs Analysis by Keyser Marston Associates, provides a breakdown of existing SUMC employment by compensation range as background information for determining the affordable and market-rate housing demand from new employment (see Appendix 5 to the Housing Needs Analysis). Providing a breakdown by compensation range rather than job titles or categories is more relevant for determining the new employment's demand for affordable housing.

7.25 *The commentor states that Mitigation Measure PH-3.1 does not specify a target number of housing units that will be developed for SUMC employees. No housing is proposed as part of the SUMC Project and the City is not recommending that housing be provided for employees under the main SUMC Project. The Village Concept Alternative recommends 490 housing units be provided for SUMC employees. Please see Master Response 7 for a discussion of Mitigation Measure PH-3.1.*

7.26 *The commentor expresses concern regarding the availability of housing necessary to accommodate indirect housing demand. Please see Master Response 7 for a discussion of resulting affordable housing demand in East Palo Alto.*

7.27 *The commentor requests changes to some of the mitigation measures presented in Section 3.4, Transportation, and Section 3.5, Air Quality and requests ongoing consultation with City staff and the legislative body. Please see Responses 7.28 through 7.34, below, for responses to the specific requested changes. The City of Palo Alto believes that it is appropriate to have ongoing consultations with neighboring jurisdictions for the purpose of reducing negative health outcomes not only for sensitive receptors, but for all residents.*

7.28 *The commentor suggests that the SUMC Project sponsors should fund a community risk reduction plan for the City of East Palo in accordance BAAQMD Guidelines. As noted*



under Response 7.3, the air quality analysis in the East Palo Alto HRA (Appendix BB of this document) indicates that incremental cancer risks, noncancer hazard indices (acute and chronic), and PM<sub>2.5</sub> concentrations would be well below BAAQMD CEQA thresholds of significance and mitigation would not be required.

7.29 *The commentor states that the Lead Agency should amend TR-2.2 so that funds are provided to the City of East Palo Alto for bicycle and pedestrian undercrossing improvements to be realized for the purpose of offsetting decreases in air quality and mobility by providing alternatives to vehicular travel. Mitigation Measure TR-2.2 was developed to mitigate the SUMC Project's traffic impacts at intersections. The following three intersections in East Palo Alto were analyzed:*

- Woodland Avenue/University Avenue (intersection #17)
- Donohoe Street/University Avenue (#55)
- Bay Road/University Avenue (#54)

The Transportation Impact Analysis (Appendix C of the Draft EIR) indicates that the SUMC Project traffic would not result in a significant impact at any of the intersections in East Palo Alto. Therefore, there is no requirement for the SUMC Project sponsors to fund bike and pedestrian improvements in East Palo Alto as mitigation for traffic impacts at intersections.

7.30 *The commentor states that the Lead Agency should amend TR-4.2 so that efforts to reduce motor vehicular travel are adopted in accordance with "best practices" to reduce public health concerns in the adjacent environmental justice community. Mitigation Measure TR-4.2 was developed to mitigate the SUMC Project's traffic impacts at the Durand Way/Sand Hill Road intersection due to construction of a new road segment in that location. No new road segments are proposed in East Palo Alto as part of the SUMC Project and no local circulation impacts would be caused by the SUMC Project.*

7.31 *The commentor states that the Lead Agency should amend Mitigation Measure TR-6.1 so that funds are provided to reduce impacts associated with increased air pollutants and declining non-motorized mobility. Mitigation Measure TR-6.1 identifies measures for bicycle and pedestrian infrastructure improvements in the vicinity of the SUMC Project. As noted on page 3.4-76 of the Draft EIR, the intent of the improvements is to:*

- reduce auto related traffic by providing the infrastructure for alternative travel modes;
- improve the bicycle and pedestrian linkages between the SUMC Project and Downtown Palo Alto, and between the SUMC Project and the surrounding residential neighborhoods; and

- mitigate the safety hazards to pedestrians and cyclists that would result from the SUMC Project related increase in vehicular traffic and congestion.

As noted, these measures would reduce auto-related traffic, and as such would also reduce vehicular air emissions. The measures would also improve the infrastructure allowing for more non-vehicular travel within the surrounding community.

7.32 *The commentor states that the Draft EIR did not include the City of East Palo Alto free shuttle with a base ridership of 60,000 persons and that transit service to East Palo Alto should be expanded. Please refer to Master Response 2 for information on expanded shuttle service and the existing East Palo Alto Shuttle.*

7.33 *The commentor states that the Lead Agency should add a monitoring protocol that evaluates the impacts of increased congestion on East Palo Alto roadways and other surrounding roadways. Please refer to Responses 7.3 and 7.5 regarding traffic congestion in East Palo Alto and the potential for air quality impacts to sensitive receptors in these areas. Because the SUMC Project would not result in significant impacts related to traffic congestion and health effects in East Palo Alto, the addition of mitigation for a monitoring protocol would not be warranted.*

7.34 *The commentor states that the Lead Agency should add a mitigation measure to reduce TACs and the heat island effect. As noted in Response 7.3 and Staff-Initiated Change 3 of this document, the health risk analyses did not identify any significant health effects from TACs. In addition, the SUMC Project would not increase impervious surfaces compared with existing conditions, so no new heat island effect would occur. Further, the SUMC Project includes green roofs where feasible, which minimizes heat island effects. Therefore, no mitigation would be required to mitigate public health impacts or heat island effects associated with the SUMC Project.*



RICHARD CLINE  
MAYOR  
JOHN BOYLE  
VICE MAYOR  
ANDREW COHEN  
COUNCIL MEMBER  
HEYWARD ROBINSON  
COUNCIL MEMBER  
KELLY FERGUSSON  
COUNCIL MEMBER



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July 27, 2010

Steven Turner  
Advance Planning Manager  
City of Palo Alto  
Department of Planning & Community Environment  
250 Hamilton Avenue  
Palo Alto, CA 94301

Dear Mr. Turner,

The City of Menlo Park would like to take this opportunity to provide comments on the draft Environmental Impact Report (EIR) for the Stanford University Medical Center (SUMC) Facilities Renewal and Replacement Project.

The City of Menlo Park supports improvements to the SUMC Facilities in the City of Palo Alto and recognizes the value that world-class medical facilities bring to the community. Nevertheless concerns related to the current information provided in the draft EIR need to be addressed. Menlo Park would like to engage in an open dialogue with the City of Palo Alto regarding this project and move forward to resolve all concerns related to it. However, additional information and further consideration of several issues is necessary for this project due to the impacts on the City of Menlo Park. The following items should be considered as items of concern and thoroughly addressed before proceeding forward with the project:

**A. Transportation**

A1) Numerous mitigation measures for improvements in Menlo Park mention "fair share" contributions towards various improvements. These mitigation measures are deficient in that they do not include cost estimates or indicate how the fair share will be calculated. Menlo Park is also unable to determine if these mitigation measures are adequate. Specific contribution amounts should be established and subject to adjustment for inflation. A fair share formula should be developed and discussed with Menlo Park prior to publication of the final EIR. Menlo Park has used similar formulas for its projects and would propose the fair share be as follows: project trips divided by the expected growth in trips from now to the project build out year would be the fair share percentage.

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This percentage would be applied to current estimated construction costs adjusted for inflation to the year of construction.

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A2) Mitigation Measure **TR-1.4 Restrict Construction Hours**. The draft EIR states that the SUMC shall be required to prohibit or limit the number of construction workers from arriving or departing the site from the hours of 4:30 PM to 6:00 PM. This mitigation measure should also include the hours of 7:00 AM to 9:00 AM. There should be enforcement mechanisms for the material delivery times and worker arrival and departure times outside the peak AM and PM hours. It is not indicated in the draft EIR where the off-site parking for construction workers will be located and how many shuttle trips would be required to bring the workers to the job sites.

8.5

A3) Mitigation Measure **TR-1.8 Prepare and Implement Construction Impact Mitigation Plan**. The draft EIR states that SUMC shall submit a detailed construction impact mitigation plan to the City of Palo Alto for approval prior to commencing any construction activities. Since truck routes are also through Menlo Park, the SUMC should also submit this plan to the City of Menlo Park for approval.

8.6

A4) Mitigation Measure **TR-2.1 Install Traffic Adaptive Signal Technology**. The draft EIR proposes the implementation of traffic adaptive signal technology as mitigation measures for El Camino Real between the northern city limits of Menlo Park to southern city limits of Palo Alto as well as for the intersection of Sand Hill Road with Santa Cruz Avenue. However, since the El Camino corridor in Menlo Park as well as Sand Hill Road and Santa Cruz Avenue are already operating on a traffic adaptive signal technology, this is not a mitigation feature. Palo Alto should require a fair share contribution towards the Menlo Park Transportation Impact Fee (TIF) fund.

8.7

A5) Mitigation Measure **TR-2.2 Fund Additional Bicycle and Pedestrian Undercrossing**. The draft EIR identifies constructing a new bicycle and pedestrian undercrossing near Menlo Avenue in Menlo Park as a mitigation feature. It is indicated that SUMC shall contribute its fair share to the construction of the Middle Avenue undercrossing in Menlo Park. The fair share contribution should be based on the formula as proposed by Menlo Park in A1).

8.8

A6) Mitigation Measure **TR-2.3 Enhance Stanford University Travel Demand Management (TDM) Program**. One of the initial enhancements to the TDM program that the draft EIR suggests is that SUMC should perform annual TDM monitoring and submit report to the City of Palo Alto. That same report should also be submitted to the City of Menlo Park for its review.

The TDM Program mitigation measure as currently proposed is inadequate because there is no enforcement mechanism to ensure that estimates trip reductions are actually achieved. This measure includes a reporting mechanism but currently does not require alternative TDM measures be implemented if the proposed measures prove to be ineffective. The TDM program relies heavily on the use of Caltrain GO passes as a way of reducing trips. The frequency of Caltrain service is currently in flux due to financial difficulties and will be uncertain over the life of the project. Transit services will inevitably change over the life of the project. Ideally new and better public transportation systems



8.8 Cont	will serve the project site. The TDM program should include flexibility to require universal transit passes to whatever transit system serves the region.	8.14	<u>Bayfront Expressway/Willow Road</u> Even with the additional pedestrian and bicycle crossings and enhanced TDM, the project impacts at this intersection will remain significant. However, the draft EIR identifies potentially feasible intersection improvements that will mitigate the project impacts at the intersection, similar to the improvements identified in the Menlo Park TIF study. Palo Alto should require a fair share contribution towards the cost of constructing these improvements estimated at \$470,000.
8.9	Palo Alto should establish a specific trip limit for the project that ensures the estimates of trip generation from the project are not exceeded and reductions from TDM measures are actually achieved. The entire transportation section of the draft EIR relies on estimates of future trips and includes trip reduction credits from the TDM program. If the estimated number of trips is exceeded, other mitigation measures will fail to mitigate impacts as proposed, in Menlo Park and Palo Alto. Fair share contributions towards transportation improvements that are used in other mitigation measures will not be calculated accurately if the actual number of trips exceeds estimates in the draft EIR.	8.15	<u>Bayfront Expressway/University Avenue</u> Even with the additional pedestrian and bicycle undercrossings and enhanced TDM, the project impacts at this intersection will remain significant. Intersection improvements are also considered for this intersection but determined not feasible. The Menlo Park TIF has identified alternative feasible intersection improvements that could alleviate the impacts at this intersection to less than significant. Palo Alto should require a fair share contribution towards the costs for implementing these improvements, estimated at \$2,500,000.
8.10	The Mitigation Monitoring Plan should require annual traffic counts with specific daily trip limits. It should be enforceable with requirements to supplement the TDM program as needed to meet trip limits, or be subject to monetary penalties. Project phasing requirements would be another potential enforcement mechanism that could limit the square footage of future project phases if trip reduction targets are not met.	8.16	<u>Middlefield Road/Ravenswood Avenue</u> The draft EIR identifies potentially feasible intersection improvements for this intersection. Palo Alto should require a fair share contribution towards the cost of implementing the potentially feasible intersection improvements identified in this draft EIR, which are similar to the improvements recommended in the Menlo Park TIF, estimated at \$1,520,000.
8.11	A7) Mitigation Measure <b>TR-2.3 Enhance Stanford University Travel/Demand Management (TDM) Program.</b> Another initial enhancement to the TDM program suggested in the draft EIR is that SUMC should make arrangements to lease 75 spaces at the Ardenwood Park and Ride Lot. It is not clear whether these are new parking spaces. If not, are there 75 unused parking spaces that can be guaranteed for use by SUMC employees? Otherwise, current users of the Ardenwood Park and Ride lot would just be displaced to accommodate the SUMC employees.	8.17	A9) Mitigation Measure <b>TR-7.2. Provide Expanded Transit Service.</b> The draft EIR states that SUMC's contribution to the Menlo Park shuttle bus services expansion shall be at \$0.105 per square foot of new development annually or a percentage agreed between Menlo Park and SUMC. Menlo Park would propose the fair share percentage to be calculated as follows: project trips divided by the expected growth in trips from now to the project build out year. The \$0.105 unit price should be adjusted for inflation to the year of implementation of the shuttle service expansion.
8.12	A8) Mitigation Measure <b>TR-2.5 Coordinate with Other Jurisdictions for Potentially Feasible Roadway Improvements.</b>	8.18	In addition to Menlo Park shuttle bus service expansion, Palo Alto should require SUMC to consider expansion of the Marguerite Shuttle services to Menlo Park. Service enhancements to the Dumbarton Express buses should also be evaluated as a way to reduce project trips.
8.13	<u>El Camino Real at Ravenswood Avenue</u> The draft EIR determines that a traffic signal adaptive technology implementation will make the project impacts at this intersection to be less than significant. The draft EIR also identifies potentially feasible intersection improvements for this intersection. Since this intersection is already operating on a traffic signal adaptive technology, Palo Alto should require a fair share contribution towards the cost of implementing the potentially feasible intersection improvements for this intersection identified in this draft EIR, which are similar to the improvements recommended in the Menlo Park TIF study.	8.19	A10) Mitigation Measure <b>TR-9.1. Pay Fair Share towards Opticom Installation.</b> The draft EIR states that SUMC shall pay its fair-share financial contribution towards the City of Palo Alto for the installation of Opticom at all significantly impacted intersections. This mitigation measure should also include all significantly impacted intersections and roadway segments in Menlo Park, specifically, on El Camino Real between Encinal Avenue and Cambridge Avenue, on Sand Hill Road between I-280 and Santa Cruz Avenue, and on Marsh Road between Bayfront Expressway and Bay Road. Palo Alto should require a fair share contribution towards the installation of Opticom at these impacted intersections and roadway segments.
3 of 9	A11) Although the DEIR states that Menlo Park's Traffic Impact Analysis Guidelines were used to analyze intersections and roadway segments in Menlo Park, it appears there were significant deviations which would understate the amount of traffic on existing	8.20	4 of 9



roadways. Menlo Park's comment letter on the Notice of Preparation for the SUMC project (dated September 27, 2007) included a copy of Menlo Park Transportation Impact Analysis Guidelines. These guidelines require that traffic from planned and approved projects be added to traffic counts when performing the cumulative analysis. It does not appear that this was done. The traffic analysis should be updated. A list of planned and approved projects is available from our traffic engineer.

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A12) Additional traffic analysis should be performed to evaluate the potential for increased trips between SUMC and Stanford's Redwood City medical offices. Since all of the trips between these facilities will go through Menlo Park, the general trip distributions used for the traffic study may not accurately reflect this. The nature of trips between the facilities should be factored into the traffic analysis.

8.21

A13) The trip distribution used for the intersection of El Camino Real (ECR) and Cambridge Avenue in Menlo Park should be re-evaluated. The traffic analysis compared year 2025 traffic conditions with 2025 plus project conditions and indicated that in the PM peak hour trips on northbound ECR will increase from 2501 to 2608. However, projected trips for the northbound ECR left turn movement to Cambridge remain constant at 260. The analysis fails to consider the high percentage of u-turns at this intersection. Many of the left turners actually make a u-turn and head southbound on ECR towards the project site.

8.22

A14) Comment A13 illustrates the traffic problem created by the limited turn movements at the intersection of Alma and ECR in Palo Alto. Traffic on Alma Street in Palo Alto, which is destined for the project site or other destinations via Sand Hill Road, is forced into Menlo Park. This creates added congestion and delay at ECR and Cambridge Avenue, increases emergency vehicle response times, and results in out of direction travel which increases greenhouse gas emissions. Added traffic to and from SUMC will exacerbate these problems. Additional traffic modeling should be performed to evaluate conditions with full movement allowed at the ECR/Alma/Sand Hill Road intersection.

8.23

A15) Additional traffic analysis should be performed to evaluate whether trips will increase on Oak Avenue near Sand Hill Road, including the intersection of Oak and Sand Hill Road and tributary streets. Oak Avenue is a residential street that is sometimes used as a cut-through route to avoid congestion on Sand Hill Road. Motorists who want to avoid congestion on Sand Hill Road between ECR and Oak Ave (near the project site) can use Cambridge or Middle Avenue, then various routes through Menlo Park residential neighborhoods, and ultimately use Oak Avenue to reconnect to Sand Hill Road. Any increases in congestion on Sand Hill Road will make this a more attractive cut-through route. The EIR should evaluate this potential problem and develop specific mitigation measures that will prevent cut-through traffic in Menlo Park neighborhoods.

8.24

A16) The final EIR should include analysis of whether there are traffic impacts at the intersection of Willow Road and Durham Street in Menlo Park.

8.25

A17) The final EIR should include analysis of whether there are traffic impacts on Valparaiso Avenue in Menlo Park.

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A18) The DEIR indicates that there would be a significant traffic impact on Alpine Road west of Juniper Serra Boulevard. However, the DEIR failed to adequately discuss potential mitigation measures that could mitigate the impact. Would road widening and/or added turn lanes at selected locations be effective? Would park and ride lots and shuttles from I-280 be effective? These or other mitigation measures should be considered for this roadway segment.

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### **B. Housing**

B1) Page 3.13-17, first full paragraph: Middle line quotes a number of 1,052 (just over 1) households above the 0.01 threshold representing the impact of additional housing needs. That number should actually be 1,052 (over a thousand). While it is shown correctly in Table 3.13-8 and elsewhere in the narrative, the casual reader might not catch the significance of the error here and assume a lesser impact than the authors are acknowledging.

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B2) The report acknowledges that changes to the ratio of jobs to employed residents, used as the key to determining an impact on the housing market, are significantly beyond the threshold of 0.01. The analysis shown in Table 3.13-10 shows a change of 0.05. The report also acknowledges that this impact is likely to be felt in Menlo Park, with a projected 53 units (Table 3.13-8) needed to house new employees given the housing pattern of the current workforce. What the report does not acknowledge, however, is that a significant portion of the residential areas of Menlo Park are within a closer proximity to the development site than most of the residential areas of Palo Alto. And a smart shopper will likely try to avoid high traffic commute patterns, which may direct them away from El Camino Real or significant travel along Sand Hill Road, both of which have significant traffic during commute hours. The housing needs analysis should include more information on housing need impacts in Menlo Park, given that residential neighborhoods in Menlo Park are closer geographically to the project than residential neighborhoods in Palo Alto. An increase of housing units to meet the demand may also create impacts to schools and park usage from increased population which should be analyzed in the final EIR.

8.29

B3) Areas of Menlo Park west of El Camino Real are likely to be the neighborhoods of choice for new employees who can afford the housing stock located there. These new employees will find, however, that the new housing development potential of these parts of Menlo Park is relatively low, which will most likely result in those employees bidding up the price of that housing, making it more expensive for all homebuyers looking to live in Menlo Park. This applies not only to single-family housing, but to multifamily housing as well. Some of the multifamily units located west of El Camino Real in Menlo Park currently house families associated with Stanford, whether student, faculty, or staff. An influx of lower income hospital staff will likely also bid up the price of that housing. The analysis should include information on the impacts of this effect on affordable housing in Menlo Park.

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B4) The provision of in-lieu fees to the City of Palo Alto will be of great benefit in helping them (the City of Palo Alto) combat the impact of this project on their housing market, but leaves Menlo Park to fend for itself. Some in Menlo Park will benefit from this impact as they sell their homes for inflated prices and move on to presumably lower cost housing markets. But overall, the impact is likely to be negative and last for well into the future without some means of alleviating that impact within Menlo Park. The creation of new housing units as part of the project as contemplated in the Village Concept Alternative would be a good way to potentially mitigate housing impacts. If this alternative is not selected, other ways to address housing impacts in Menlo Park should be developed and considered.

8.31

#### **C. Land Use**

C1) On page 3.2-23, policy N-26 requires that the project support regional, state and federal programs that improve air quality in the Bay Area. The draft EIR concludes that because the policy does not prohibit a project from exceeding BAAQMD standards, the SUMC project complies with this policy. However, exceeding standards does not "improve air quality" and the EIR should more carefully consider compliance with this policy.

8.32

C2) On page 3.2-25, policy N-41 provides that the noise impact on existing residential land uses should be evaluated based on the following criteria and considered a significant degradation if the project causes an increase of 3 decibels or more in an existing residential area thereby causing the area to exceed 60 decibels. In considering compliance along Sand Hill Road, an existing residential area, the draft EIR concludes that the noise levels would rise by at least 8 decibels raising the noise level above 60 decibels. Nevertheless, the conclusion is that the project can be approved under this policy because it is below the 75 decibel maximum noise guideline. The conclusion appears inconsistent with the text of the policy and more consideration/analysis/explanation should be given to whether there is a significant impact on existing residences.

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C3) On page 3.2-30, the draft EIR concludes that there is no conflict with residential, recreational, educational, religious or scientific uses. With respect to construction, the draft EIR justifies the no impact conclusion on the basis that the construction is temporary. However, twelve years of construction are planned with associated construction traffic and noise impacts. The draft EIR should not consider such a lengthy construction as temporary and should more fully consider the impacts on surrounding land uses.

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#### **D. Climate Change**

D1) Page 3.6-21 concludes that because at the time of preparation of the draft EIR the Bay Area Air Quality Management District (BAAQMD) guidelines for quantitatively determining whether greenhouse gas (GHG) emissions are significant were not yet adopted and will not be retroactive that they need not be applied to the SUMC project. However, because the final EIR and the SUMC project have not been approved, the BAAQMD guidelines are applicable and should be employed to provide the decision

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7 of 9

maker with information as to whether this project will meet the BAAQMD threshold for large project of 4.6 tonnes CO<sub>2</sub>e per service population per year. Evaluating the SUMC project for consistency with Palo Alto's Climate Protection Plan, which is five years old and does not consider reduction targets past 2020 (at least five years before the project will be complete) does not provide the decision makers adequate information on the project's climate change impacts. Accordingly, a quantitative analysis using the BAAQMD guidelines should be undertaken and the standards of significance should include consideration of whether this project meets or exceeds the BAAQMD threshold.

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D2) In determining whether the SUMC project complies with Palo Alto's Climate Protection Plan policies, the draft EIR considers that the project would perform better than 90-95 percent of similar hospitals and would use 35 percent less energy than typical hospitals. It is unclear what this means in terms of emissions and how this is quantified. Furthermore, compliance with Palo Alto's Climate Protection Plan policies does not actually result in a reduction in emissions as the policies merely include tracking and monitoring. Instead of mitigation measures that simply require auditing and reporting, the project should be required to comply with measurable and enforceable standards existing at the time of permitting

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#### **E. Noise**

E1) Section 3.7 of the draft EIR estimates that helicopter trips from the project will increase from 2,120 per year to 2,714 per year by the year 2025 (a 28% increase). Ambulance trips to the emergency department are estimated to increase from 23 trips per day to 39 trips per day (an increase of 70%). These activities increase noise levels in sensitive residential neighborhoods north of the project site in Menlo Park. The draft EIR failed to evaluate whether impacts to Menlo Park residents would be significant based on the Menlo Park General Plan Noise Element. The draft EIR did find that noise impacts would be significant in Palo Alto (Page 3.7-33) but did not investigate or propose any mitigation measures to reduce the impacts. Additional work is needed to evaluate whether noise impacts are significant in Menlo Park. Additional work is also needed to identify mitigation measures for noise impacts. For example, could sound walls, landscape berms, or additional trees be planted along Sand Hill Road to reduce ambulance noise? Can sound walls or sound insulating materials be placed at the helipad?

8.37

#### **F. Project Alternatives**

F1) The draft EIR considers a Village Concept Alternative that includes the provision of 490 low income housing units designated for employees in very close proximity to the SUMC. This alternative would reduce vehicle miles traveled, traffic congestion and vehicular air and noise emissions. Although these units were previously approved for graduate students and post doctoral fellows, one might expect that the use of this housing for employees would not simply result in a shift of trips (graduate students commuting rather than employees), but a reduction in trips as it is more likely a graduate student would choose to reside closer to the campus than employees who require lower cost housing and are willing to drive great distances for affordable housing. The draft EIR concludes that this alternative will have similar impacts to the project; however,

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8 of 9

given the potential for reduction in commuting that would impact traffic and air quality/climate change, the EIR should make an effort to quantify the change in impacts that would result from the implementation of this alternative and re-consider whether it is environmentally superior to the project as proposed.

The City of Menlo Park requests consideration and cooperation to address the above mentioned items. The City of Menlo Park requests a response on the items described in this letter from the City of Palo Alto.

Sincerely,



Richard Cline  
Mayor

cc: Members of the City Council  
City Manager

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**8. City of Menlo Park, Richard Cline, Mayor (letter dated July 27, 2010)**

- 8.1 *The commentor expresses support for the SUMC Project. Please refer to Master Response 9 for a discussion of SUMC Project merit in the CEQA process.*
- 8.2 *The commentor requests to engage in open dialogue with the City of Palo Alto regarding the SUMC Project and moves to resolve all related concerns. The City of Palo Alto has engaged with the City of Menlo Park throughout the environmental review process. In particular, the City of Menlo Park reviewed the draft Transportation Impact Analysis (Appendix C to the Draft EIR) prior to inclusion in the Draft EIR. The City of Palo Alto has prepared responses to these comments, which are included in Response 8a. As of the preparation of this Responses to Comments document, the City of Palo Alto and its transportation consultant are conducting ongoing coordination efforts with the City of Menlo Park regarding the SUMC Project and its mitigation measures.*
- 8.3 *The commentor notes that the mitigation improvements contained in the Draft EIR need to include construction cost estimates and a determination of the fair share cost attributable to the SUMC Project. The commentor suggests that fair share be calculated as project trips divided by the expected growth in trips from now to the project build out year. Please refer to Master Response 6 for a complete discussion on the SUMC Project's fair share contributions.*
- 8.4 *The commentor requests that Mitigation Measure TR-1.4, which limits the number of construction workers arriving and departing between 4:30 p.m. and 6:00 p.m., be expanded to include limitations between the hours of 7:00 a.m. and 9:00 a.m. and notes that the location of remote parking areas and the number of shuttles between the remote parking area and the project site for construction workers have not been identified. Please refer to Master Response 4 for the revised TR-1.4 on the arrival and departure hours of the construction workers. TR-1.1 of the Draft EIR stipulates that the remote parking area shall be provided with a shuttle bus to transport construction workers to and from the project site if adequate off-street parking for the construction workers cannot be provided. The SUMC Project sponsors are required to adhere to city and/or agency rules and regulations when determining the locations of the remote parking. The SUMC Project sponsors will coordinate the locations and shuttle frequency with the City of Palo Alto and, if located in other jurisdictions, with the jurisdiction where the parking would be located.*
- 8.5 *The commentor requests that the Construction Impact Mitigation Plan that the SUMC Project sponsor is required to submit to the City of Palo Alto also be submitted to the City of Menlo Park for approval, since truck routes also include Menlo Park streets. Please refer to Master Response 4 for the revised TR-1.8 regarding submission of a construction impact mitigation plan to Menlo Park.*



- 8.6 *The commentor notes that traffic-adaptive signal technology suggested in the Draft EIR for all Menlo Park intersections on El Camino Real and for the Santa Cruz/Sand Hill Road Avenue intersection has already been accomplished by the City of Menlo Park. As a replacement for this mitigation measure, the City of Menlo Park requests that the project contribute a fair share contribution towards the City's Transit Impact Fee (TIF). Please refer to Master Response 6 for a discussion on SUMC Project's fair share contributions to Menlo Park. Also, please refer to Staff-Initiated Change 2 for revisions to the Draft EIR's analysis to address existing traffic-adaptive signal technology in Menlo Park and to identify new locations for such technology.*
- 8.7 *The commentor notes that the Draft EIR identifies a fair share contribution to the construction of a bicycle and pedestrian undercrossing of the Caltrain tracks in the vicinity of Middle Avenue and that the fair share should be calculated in a manner consistent with Comment 8.3. Please refer to Master Response 6 for a discussion on SUMC Project's fair share contribution.*
- 8.8 *The commentor requests that the annual monitoring report on transportation demand management (TDM) measures also be submitted to the City of Menlo Park. Additionally, the commentor notes that the proposed TDM mitigation relies heavily on Caltrain GO Passes and by the time the SUMC Project is constructed, there may be considerable changes to transit along the Peninsula. Please refer to Master Response 1 for a discussion of the effectiveness of GO Pass and provision of the annual monitoring report to Menlo Park.*
- 8.9 *The commentor states that the City of Palo Alto should establish a limit on traffic that the SUMC Project cannot exceed and that if actual trips exceed the trip estimates in the Draft EIR, the mitigation measures would not achieve their intended effect. Please refer to Master Response 2 for a discussion of a No Net New Trips requirement and similar requirements based on traffic counts.*
- 8.10 *The commentor provides suggestions to include in the Mitigation Monitoring Plan; a requirement for annual traffic counting that is tied to daily limits, with enforcement required to increase TDM measures or face monetary penalties. Please refer to Master Response 2 for a discussion of a No Net New Trips requirement and similar requirements based on traffic counts.*
- 8.11 *The commentor notes that Mitigation Measure TR-2.3 requires the SUMC Project sponsors to lease 75 parking spaces at the Ardenwood Park-and-Ride lot and questions if these are new spaces or whether these would displace existing users. The Ardenwood Park-and-Ride lot was recently expanded from just over 100 spaces to about 350 spaces. Currently, approximately 40 of these spaces are vacant on a typical day. It cannot be determined at this time what the usage of this lot would be at the time the SUMC Project is constructed and occupied. However, the intent of this measure is not to displace other, existing users.*

Please refer to Master Response 2 for a discussion on feasibility and effectiveness of other TDM measures.

- 8.12 *The commentor requests that the SUMC Project provide a fair share contribution to the improvements at the El Camino Real/Ravenswood Avenue intersection which are contained in Menlo Park's TIF study (City of Menlo Park's 2009 Transportation Impact Fee Study Report) and which are consistent with the mitigation improvements noted in the Draft EIR. Please see Staff-Initiated Change 2 for a discussion of revisions to the intersection analysis. With implementation of higher priority mitigation, impacts at the El Camino Real/Ravenswood Avenue intersection would be reduced to a less-than-significant level and no roadway improvements at this location are required as mitigation for the SUMC Project.*
- 8.13 *The commentor notes that the Draft EIR identifies physical improvements at the Middlefield Road/Willow Road intersection but finds these improvements to be infeasible. The commentor further states that the City of Menlo Park TIF program identifies improvements at this intersection that the City of Menlo Park finds to be feasible, estimating the cost at \$1,700,000, and states that the SUMC Project should contribute its fair share to the cost of these improvements. Please refer to Staff-Initiated Change 2 for a discussion of intersection impacts and Master Response 6 for a discussion on SUMC Project's contribution. This intersection would not be significantly affected by the SUMC Project with implementation of higher priority mitigation measures. Nevertheless, the SUMC Project sponsors have offered funding for this intersection in their Development Agreement proposal.*
- 8.14 *The commentor notes that the Draft EIR identifies improvements at the Willow Road/Bayfront Expressway intersection and identifies these improvements as potentially feasible and estimates the cost to be \$470,000. The commentor further states that the City of Menlo Park desires a fair share contribution from the SUMC Project to make these improvements. Please refer to Staff-Initiated Change 2 for a discussion of intersection impacts and Master Response 6 for a discussion on SUMC Project's fair share contribution.*
- 8.15 *The commentor states that the Draft EIR identifies improvements at the Bayfront Expressway/University Avenue intersection, which were considered infeasible. The commentor further states that the Menlo Park TIF has identified improvements at this intersection that the City feels are feasible, and the City desires a fair share contribution to the cost from the SUMC Project. Please refer to Master Response 6 for a discussion on SUMC Project's fair share contribution.*
- 8.16 *The commentor states the Draft EIR identifies a potentially feasible improvement at the Middlefield Road/Ravenswood Avenue intersection, similar to improvements noted in the Menlo Park TIF with an estimated cost of \$1,520,000. The commentor suggests that the SUMC Project contribute its fair share cost of this improvement. The SUMC Project's*



impact at this intersection would be mitigated by enhanced TDM measures and additional bicycle and pedestrian undercrossing improvements. Therefore, a fair share contribution to the physical improvements at this intersection is not needed.

- 8.17 *The commentor provides an alternative method for calculating the SUMC Project's fair share payments. Please refer to Master Response 6 for a discussion on SUMC Project's fair share contribution.*
- 8.18 *The commentor suggests that the SUMC Project should be required to expand Marguerite shuttle service into Menlo Park and also make enhancements to the Dumbarton Express, provided by Santa Clara Valley Transportation Authority (VTA). Mitigation Measure TR-7.2 requires the SUMC Project to expand Marguerite transit service between the SUMC and PAITS and use reasonable efforts to assure that the transit service provider achieves a load factor of less than 1.0 on the U-Line. Further mitigation of transit impacts is not warranted. Please see Staff-Initiated Change 1 for a discussion of the SUMC Project transit trips. Because transit impacts would be less-than-significant, payment toward shuttle service in Menlo Park is no longer included in Mitigation Measure 7.2. Nevertheless, the SUMC Project sponsors have included such a payment in their Development Agreement proposal. Please refer to Master Response 6 for the calculation of the funding contribution.*
- 8.19 *The commentor requests that a fair share financial contribution for the installation of Opticom be required of the SUMC Project to all significantly impacted intersections in Menlo Park, specifically, on El Camino Real between Encinal Avenue and Cambridge Avenue, on Sand Hill Road between I-280 and Santa Cruz Avenue, and on Marsh Road between Bayfront Expressway and Bay Road. Please refer to Master Response 6 for a discussion on SUMC Project's fair share contribution.*
- 8.20 *The commentor states that the Transportation Impact Analysis is deficient in that it did not include traffic from planned and approved projects in the City of Menlo Park. Menlo Park requests that the Transportation Impact Analysis be redone. Please refer to Master Response 3 for a complete discussion on the Background Growth.*
- 8.21 *The commentor requests that additional traffic analyses be performed to assess the potential for increased traffic between the SUMC Project and Stanford's Redwood City medical offices. The basis of the Transportation Impact Analysis for trip generation was the existing SUMC facility. Traffic counts were collected at the existing facility and trip generation rates were developed from those counts and the existing facility size. These rates were then used to determine the additional traffic generated by the expanded SUMC facility.*

The clinics that were relocated to Redwood City are self-contained. Patients do not travel between Redwood City and Palo Alto for treatment. Some faculty members or researchers

may travel between the two sites on some days, but this is not expected to be frequent. The faculty tends to have clinic days and teaching days so they normally go to one facility or the other. The number of intercampus trips would likely be relatively small on a given day.

- 8.22 *The commentor requests that the traffic analysis trip distribution be re-evaluated to reflect the fact that traffic uses the Cambridge Avenue/El Camino Real intersection to make a U-turn to access the project site because the traffic movement from Palo Alto Avenue to Sand Hill Road is not allowed. The Transportation Impact Analysis added one vehicle trip in the AM Peak Hour to this left-turn movement to reflect a U-turn. Most of the added U-turns that could occur at this location would happen during the AM Peak Hour when the SUMC Project creates mostly inbound traffic. However, if all of the inbound traffic traveling through Downtown North during the AM Peak Hour made this U-turn, the LOS at El Camino Real/Cambridge Avenue would still remain at LOS B. Therefore, a new significant impact would not result from this change. The Table 4-3 below shows the results of adding all project traffic through Downtown North making a U-turn at Cambridge Avenue. Please also see Staff-Initiated Change 2 for a revised analysis of intersection LOS impacts.*

**Table 4-3**  
**Level of Service Analysis for the El Camino Real / Cambridge Avenue Intersection**

AM Scenario	LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)		
Existing	B	13.4	0.561	14.8		
Existing + Project	B	15.4	0.616	17.6		
2025 No Build	#6	El Camino Real / Cambridge Avenue	B	15.3	0.687	18.6
2025 with Project	B	17.5	0.742	21.8		
Village Concept Alternative	B	16.9	0.727	21.0		

Source: AECOM Transportation, 2011.

- 8.23 *The commentor notes that the configuration of the El Camino Real/Sand Hill Road/Alma Street intersection causes some SUMC Project traffic to spill over into Menlo Park and requests additional traffic analysis be undertaken to evaluate the conditions if all traffic movements were permitted at El Camino Real/Sand Hill Road/Alma Street. The City of Palo Alto designed the El Camino Real/Sand Hill Road/Alma Street intersection as part of the Sand Hill Road Corridor Projects. Modifications to this intersection design were not identified as part of the SUMC Project. Any such modifications would be addressed through a separate process.*
- 8.24 *The commentor requests that additional analysis be undertaken to address potential project impacts on Oak Avenue, because some motorists use Oak Avenue to avoid traffic on Sand Hill Road and as traffic increases on Sand Hill Road as a result of the SUMC Project or*

other growth in traffic, cut through traffic using Oak Avenue may increase. The Transportation Impact Analysis considered the possibility of cut through traffic in the West Menlo Park area. Several streets were evaluated, including Santa Cruz Avenue, Sharon Road, Stanford Avenue, Leland Avenue, and Vine Street. The Transportation Impact Analysis did not identify a significant impact on any of these residential streets in West Menlo Park. In response to this comment and others, daily traffic volumes were collected on Oak Avenue in September 2010. Using City of Palo Alto criteria, a significant impact would result if the TIRE index for a local or collector residential street increased by 0.1 or more. The existing TIRE Index for Oak Avenue is 3.4, the Future No Project TIRE Index is 3.4, and the Future With Project TIRE Index remains at 3.4. An increase of 650 daily vehicles is needed to trigger an increase in the TIRE Index. The SUMC Project would not contribute more than 100 daily trips (before mitigation). As such, the SUMC Project traffic would not cause a change in the TIRE Index. Therefore, the SUMC Project would not negatively impact Oak Avenue and this increase in trips would not constitute a significant impact according to the City of Palo Alto standards of significance.

- 8.25 *The commentor requests that the Transportation Impact Analysis be expanded to include the intersection of Willow Road/Durham Street.* In response to this comment, traffic volumes at the intersection of Willow Road/Durham Street were collected in September 2010. As shown in Table 4-4, the existing LOS was found to be B in the AM and PM Peak Hour. The 2025 No Project LOS would be B in the AM and PM Peak Hour. The 2025 with Project LOS would be B in the AM and PM Peak Hour. Therefore, the SUMC Project would not negatively affect the intersection of Willow Road/Durham Street, based on the criteria established in the Draft EIR. See also Staff-Initiated Change 2.

**Table 4-4**  
**Level of Service Analysis for the Willow Road / Durham Road Intersection**

AM Scenario			LOS	Avg Del (Sec)	Crit V/C	Avg Crit Del (sec)
Existing			B	15.3	0.649	16.0
Existing + Project			B	15.4	0.687	18.1
2025 No Build	#68	Willow Road / Durham Road	B	15.6	0.674	16.7
2025 with Project			B	15.8	0.711	17.4
Village Concept Alternative			B	15.7	0.70	17.2
PM Scenario						
Existing			B	13.8	0.595	12.8
Existing + Project			B	13.7	0.608	13.0
2025 No Build	#68	Willow Road / Durham Road	B	15.3	0.703	16.0
2025 with Project			B	15.3	0.716	16.3
Village Concept Alternative			B	15.5	0.723	16.6

Source: AECOM Transportation, 2011.

- 8.26 *The commentor requests that the Transportation Impact Analysis be expanded to include potential traffic impacts on Valparaiso Avenue.* The Transportation Impact Analysis considered the potential impacts on Valparaiso Avenue. As noted in Table 3.4-22: 2025 Roadway Average Daily Trips (ADT) Analysis, with Enhanced TDM and Additional Undercrossing on page 3.4-72, the project is not expected to significantly impact Valparaiso Avenue.
- 8.27 *The commentor notes that the Draft EIR found that the project would have a significant impact on Alpine Road west of Junipero Serra Boulevard. The commentor questions whether roadway widening and/or added turn lanes would mitigate this impact or whether remote parking with shuttles or some mitigation measure would mitigate the impact.* The Draft EIR found the impact on Alpine Road would be significant and unavoidable because the thresholds of the City of Menlo Park's Roadway ADT were exceeded. It is noted that Menlo Park's thresholds of significance for roadway segments are very conservative, as they are triggered in this case by an increase in ADT of 100 trips per day. As explained in the Draft EIR, this segment of Alpine Road is projected to experience an ADT of 25,120 without the SUMC Project, and 25,634 with the SUMC Project, an increase in 514 trips per day. With implementation of TDM mitigation measures identified in the Draft EIR (Mitigation Measure TR-2.3), the total ADT is expected to be reduced to 25,260. Thus, even with this mitigation, the increase in ADT is still 140 trips, 40 trips above the 100 trip threshold. Widening the road or adding turn lanes would not reduce the number of vehicle trips using this roadway, and thus would not reduce ADT or mitigate this particular impact – in fact, such improvements that increase roadway capacity might make Alpine Road a more desirable route and actually increase the number of motorists who use this roadway, thereby increasing the impact. The only way to further mitigate this impact would be to further reduce the number of trips added to this roadway. However, the TDM measures that are already proposed in the Draft EIR would already reduce the number of trips by 374, which is a 73 percent reduction. The implementation of additional TDM measures would have incrementally smaller effects, since there is a limit to the number of employees who would actually use alternate travel modes. For example, there would be a certain redundancy in requiring both use of GO Pass and use of remote parking and shuttles, since these TDM measures would largely compete with each other for the same users.
- 8.28 *The commentor notes a punctuation error in the text.* The text on page 3.13-17, third sentence of second paragraph, is revised as follows:
- Table 3.13-11 converts the jobs to housing ratio to a jobs to employed residents per household ratio and shows that the SUMC Project would result in a total demand of approximately 1,303 new households in the region and ~~1,052~~ 1,052 households above the 0.01 threshold.
- 8.29 *The commentor requests more information regarding housing need impacts in Menlo Park.* Please see Master Response 7. Also, the SUMC Project would not include housing that

- would generate students. As indicated on page 3.14-17 of the Draft EIR, the actual generation of new students would be a tertiary impact of the SUMC Project. As also indicated on page 3.14-17, the new residential development that may indirectly result from the increase in employment and that would generate students would be subject to separate CEQA review and would also be subject to residential school impact fees per SB 50. As a result, the tertiary demand for school services, including tertiary school demand in Menlo Park, would be less than significant. With regard to park use, please see Response 20.10.
- 8.30 *The commentor requests an analysis of project impacts on affordable housing.* Please see Master Response 7.
- 8.31 *The commentor notes a negative impact on the housing market in Menlo Park.* Please see Master Response 7 for a discussion of housing demand in Menlo Park. Also, the impact of a project on housing prices is not a physical environmental impact. See Master Response 10 for a discussion of non-CEQA issues.
- 8.32 *As noted by the commentor, the Draft EIR notes that the project would exceed Bay Area Air Quality Management District (BAAQMD) CEQA significance standards.* Policy N-26 states that the City should support programs that improve air quality in the Bay Area. While the project does exceed the BAAQMD CEQA standards of significance, the BAAQMD does not recommend denying approval for projects that would exceed these thresholds, but rather provides recommended mitigation measures to be implemented in order to reduce the emissions associated with individual projects. The SUMC Project sponsors' TDM program, as well as Mitigation Measures AQ-1.1 and AQ-1.2, provided in Section 3.5, Air Quality, would be consistent with the BAAQMD's recommendations for projects with a significant air quality impact. If the SUMC Project were approved, that approval would not indicate a lack of support for programs that improve air quality.
- 8.33 *The commentor notes that there would be a significant noise level increase along Sand Hill Road.* This impact is identified on pages 3.7-30 and 3.7-33 in the Draft EIR, and referenced in the policy discussion on page 3.2-25 regarding land use policy consistency. Policy N-41 provides guidelines for evaluating when a project would have a significant noise level increase. These criteria were used in Section 3.7, Noise, to evaluate the project's impacts. However, as discussed on page 3.7-33 of the Draft EIR, while the Comprehensive Plan threshold is triggered, the Noise Ordinance Section 9.10.050 exempts noise associated with "emergencies" from its standards and penalties. The analysis included in Section 3.7 and referenced on page 3.2-25 conservatively includes ambulance noise in the noise calculations, even though this noise source would be considered exempt under the Noise Ordinance. In addition, as noted on page 3.2-25, the project would not exceed the City's maximum noise guideline of 75 dBA, and as such would be within the City's guidelines for conditionally acceptable uses.

8.34 *The commentor requests more review under Impact LU-2 during construction since it would occur over a 12-year period. As stated on page 3.2-30 of the Draft EIR, Section 3.2, Land Use, a land use conflict would occur if a project, after construction, would significantly impede the function of surrounding uses. Therefore, since construction-period activities are not land use-specific and are temporary, these impacts are not analyzed as a land use impact under Impact LU-2.*

However, construction-related impacts on the surrounding areas are analyzed by topic in their respective sections. Significant impacts that would occur as a result of the construction of the SUMC Project include temporary degradation of visual character (Impact VQ-1); traffic-related impacts (TR-1); cumulative traffic-related impacts (TR-10); criteria air pollutant emissions (AQ-1); cumulative emissions (AQ-6); cumulative toxic air contaminants (AQ-8); noise (NO-1); cumulative noise (NO-5); hazardous materials disturbance (HM-2); exposure to contaminated soil and/or groundwater (HM-3); cumulative hazardous materials disturbance (HM-12); and cumulative exposure to contaminated soil and/or groundwater (HM-13). Most of these construction-related impacts would be mitigated to a level of less than significant with the incorporation of mitigation measures. However, Impacts AQ-1, AQ-6, NO-1, and NO-5 would not be reduced to a less-than-significant level with mitigation, and therefore would result in a significant and unavoidable impact. Please refer to the respective sections in the Draft EIR for a full analysis of the construction-related impacts and a list of mitigation measures to reduce these impacts.

8.35 *The commentor states that since the BAAQMD CEQA Guidelines have been approved, the Final EIR should use these guidelines as the significance threshold for the SUMC Project analysis. At the time of the CEQA analysis for the SUMC Project, thresholds of significance for greenhouse gas emissions did not exist. Therefore, as explained on page 3.6-25 of the Draft EIR and as required under the statewide CEQA Guidelines adopted in December 2009, the lead agency must develop its own significance criteria based on local conditions, data, and guidance from public agencies and other sources. As the Lead Agency, the City of Palo Alto has decided to use compliance with the City's Climate Protection Plan as the significance criteria for the SUMC Project, which necessitates a reduction of 30 percent beyond business-as-usual emissions.*

The commentor notes that the City's plan extends only until 2020; however, the 30 percent reduction compared to Business As Usual (BAU) is consistent with the climate change goals adopted by the State of California. Further, much of the reduction achieved by the SUMC Project would be implemented immediately upon building occupancy, and would not be delayed until full buildout and full occupancy. The adoption of the BAAQMD CEQA Guidelines and a numerical threshold after publication of the Draft EIR for the SUMC Project does not supersede the City of Palo Alto's authority to determine another



threshold. For consistency, the threshold chosen by the City and applied to the Draft EIR will remain as is and continue to be applied in this document.

- 8.36 *The commentor states that it is unclear how the SUMC Project's energy efficiency was used to determine the emissions reductions.* Energy efficiency of the SUMC Project is detailed in Table 3.6-5 of the Draft EIR, page 3.6-31. As described, the energy efficiency measures results in a 30 percent reduction in energy usage for non-hospital buildings as compared to the 2004 Title 24 standard and a 15 percent reduction as compared to the 2008 Title 24 standards. The SUMC Project's energy efficiency with respect to the hospital buildings has been re-evaluated based on Staff-Initiated Changes. Please see Staff-Initiated Change 4 (under the subheading "Energy Efficiency Rating of the SUMC Project") for complete details.

*Further, the commentor states that compliance with the Palo Alto Climate Protection Plan policies does not result in a reduction in emissions and that mitigation measures should be required to comply with measureable and enforceable standards.* Mitigation Measure CC-1.1, as described on page 3.6-32 and page 3.6-54 of the Draft EIR, documents the commissioning of the energy systems for the new buildings. The systems commissioning would guarantee that the system has been designed to ensure that the energy efficiencies stipulated by the EIR are achieved. However, to clarify the commissioning procedures, Table 3.6-5 on page 3.6-32, first row, under the column titled "SUMC Measure" has been revised as detailed in Staff-Initiated Change 4.

While the Palo Alto Climate Protection Plan policies may not correlate with a quantifiable reduction in greenhouse gas emissions, the Draft EIR describes the design features associated with the Climate Protection Plan policies that would be implemented and result in a reduction of greenhouse gas emissions (as included in Table 3.6-5, pages 3.6-31 through 3.6-49, of the Draft EIR). Where the quantification of reductions is not possible, a qualitative discussion of compliance with the Palo Alto Climate Protection Plan policies is provided in the Draft EIR. Where quantifiable reductions are obtainable, these reductions are included in the quantification of greenhouse gas emissions in Table 3.6-8 on page 3.6-56. The SUMC Project emission reductions associated with compliance with the Palo Alto Climate Protection Plan were quantified based upon project-specific information. While it is understood that the non-quantified measures would reduce greenhouse gas emissions, their potential reductions are not included, and therefore, the Draft EIR as analyzed represents a conservative estimate of emissions.



8.37 *The commentor states that the Draft EIR does not include evaluation of noise impacts to Menlo Park residents from helicopter and/or ambulance noise.* The Draft EIR includes noise contours for existing and future noise levels with the helipad, as shown in Figure 3.7-3 and 3.7-5 of the Draft EIR. These contours include all the surrounding areas, including residents of Menlo Park. However, because noise levels from helicopters would be greatest for areas closest to the landing area, only impacts to residents closest to the site are discussed. Impacts to residents within the City of Menlo Park would be less than for those residents closest to the SUMC Sites, such as the residents at 1100 Welch Road. The helicopter noise would not result in a significant impact, so no mitigation pertaining to that source is required.

Ambulance noise would also be greatest for residents closest to the access points to the replacement SHC Hospital. Noise impacts identified in the Draft EIR from ambulance sirens are primarily related to the rerouting of ambulance routes onto Sand Hill Road between El Camino Real and Durand Way. These areas currently do not experience ambulance noise from the existing Hospital, and as such would have a significant increase in noise levels as a result of relocation of the Emergency Department (as discussed in Section 3.7 of the Draft EIR). The Draft EIR also shows that there would be no comparable project-related ambulance noise impact at the 1100 Welch Road apartments because this portion of Welch Road is an existing ambulance route and the ambulance noise impacts would occur here regardless of whether the SUMC Project is approved. This is also true for residents within the City of Menlo Park that are also near an existing ambulance route. The Draft EIR also notes that it is likely that more of the future ambulance trips would use the routes connecting with El Camino Real because the population density in areas along El Camino Real is higher than areas along I-280/Sand Hill Road.

*The commentor asks whether mitigation such as a sound barrier could be designed to reduce the SUMC Project's adverse noise effects.* To reduce noise from ambulances, a barrier would need to be erected between Sand Hill Road and the residences located along Sand Hill Road from El Camino to Durand Way. To construct an effective barrier in this area, the barrier would need to be sufficiently high to block ambulance noise to the upper floor residents; this was considered to be infeasible. In addition, a sound barrier in this area could result in significant visual impacts. For these reasons, mitigation is not proposed.

8.38 *The commentor requests a quantification of traffic and air quality impacts associated with the Village Concept Alternative.* Please see Staff-Initiated Changes 4 and 8.

8.39 *The commentor requests a response to the concerns raised in their letter.* Please see Responses 8.1 through 8.38, above, for the responses prepared by the City of Palo Alto to the comments provided by the City of Menlo Park.

**Letter 8a**

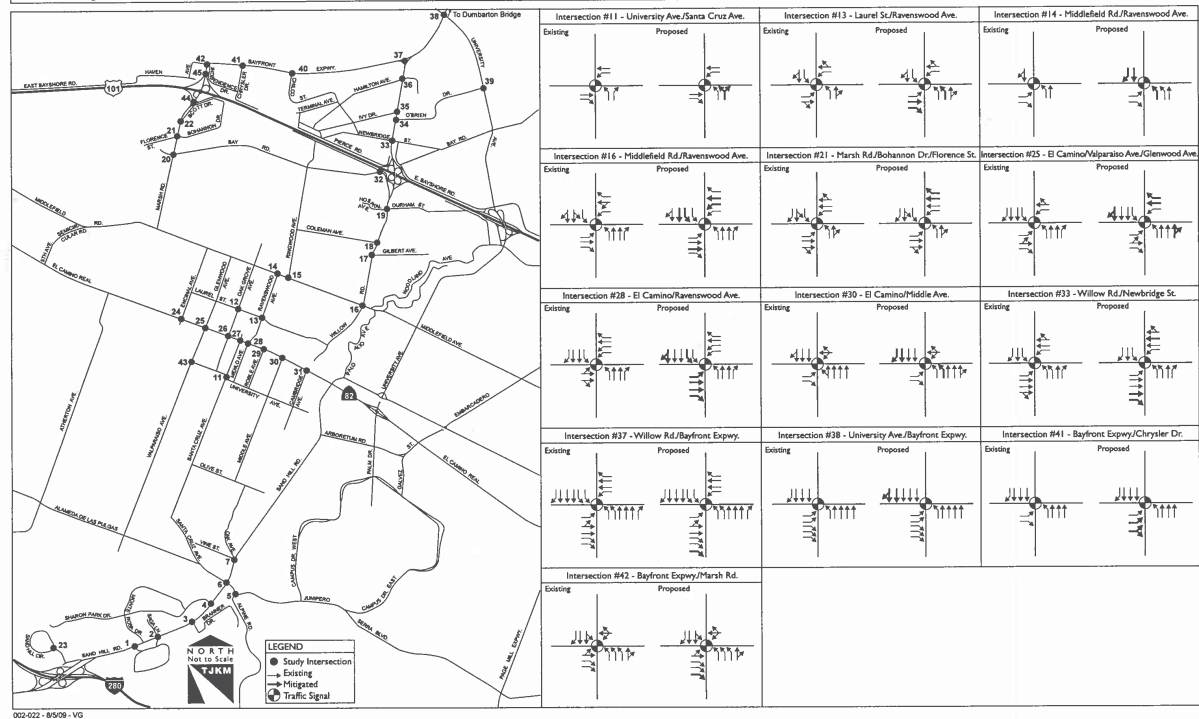
**Comments on the Main Report:**

- 1. On Figure 2-1a, Existing Intersection Geometry, there appear to be discrepancies in the lane geometry with the actual lane configuration as follows:
  - a. Intersection #1, El Camino Real at Valparaiso, the actual lane configuration shows the middle eastbound lane as a shared through and left turn lane (not exclusive left turn lane).
  - b. Intersection #49, US 101 SB Off-Ramp at Marsh Road, the actual lane configuration shows the southbound middle lane as exclusive left turn lane (not shared right and left turn lane).
- 2. On Page 3-11, last paragraph, show Bayfront Expressway/Willow Road and Bayfront Expressway/University Avenue to be in Menlo Park
- 3. On Page 3-47, Section 3-13, include that Menlo Park requires truck route permits for truck travel on Menlo Park streets.
- 4. On Section 4-1, Traffic Adaptive Signal Technology Modification, page 4-1, also indicate that the traffic signals on El Camino Real between Erncinal Avenue and Quarry Road (ten signals) and the traffic signals at Sand Hill Road/Oak Avenue, Sand Hill Road/Santa Cruz Avenue, and Santa Cruz Avenue/Junipero Serra Blvd./Alpine Road (3 signals) are currently operating on a traffic-adaptive technology. LOS analysis for these intersections should, therefore, be modified to reflect these existing conditions ("intersection delay will be reduced up to 12%".)
  - Add "The City of Menlo Park has identified the following corridors for implementation of a traffic-adaptive technology:
    - a. Sand Hill Road between I-280 and Santa Cruz Avenue (5-signals) (Continuation of adaptive system that currently operates the signals at Oak and at Santa Cruz Avenue on Sand Hill Road)
    - b. Willow Road between Middlefield Road and Hamilton Avenue (9 signals)
    - c. Marsh Road between Middlefield Road and Bayfront Expressway (7 signals)
    - d. Middlefield Road between Willow Road and Oak Grove Avenue (4 signals) "
- 5. On Section 4-2, New Pedestrian and Bicycle Under crossings, it was indicated that SUMC's contribution to the construction of the Middle Avenue under crossing in Menlo Park should be tied to the amount of traffic added to the analyzed intersections by the project. This needs to be expanded or clarified as how to how much of the contribution would amount to.
- 6. For Section 4-5, Intersection Improvements, attached is the Menlo Park's recommended Intersection Improvements from its 2009 Transportation Impact Fee (TIF) Study. This would supersede the recommended intersection improvements in the Menlo Park General Plan. Additional comments on Table 4-4 are as follows:
  - a) Bayfront Expressway/Willow Road (Intersection # 52) – In conjunction with the Menlo Gateway development project, the City is currently negotiating with the developer for a third EB right turn lane on Willow Road at Bayfront Expressway as project mitigation. This mitigation improvement is also

- 8a.1
  - 8a.2
  - 8a.3
  - 8a.6  
Con't
  - 8a.7
  - 8a.8
- b) El Camino Real/Ravenswood Avenue (Intersection #3) – The City would like SUMC to consider contributing to the cost of adding a northbound through lane at the intersection.
  - c) Middlefield Road/Willow Road (Intersection #18) – The Menlo Park TIF study recommend "feasible" improvements which the City would like SUMC to consider as potential mitigation measures and participate in the implementation costs. The costs for implementing these improvements were estimated to be \$1,700,000.
  - d) Bayfront Expressway/University Avenue (Intersection # 53) - The Menlo Park TIF study recommend "feasible" improvements which the City would like SUMC to consider as potential mitigation measures and participate in the implementation costs. The costs for implementing these improvements were estimated to be \$2,500,000.
  - e) Santa Cruz Avenue/Sand Hill Road (Intersection #30) – The City adaptive technology on Sand Hill Road between I-280 and Santa Cruz Avenue.
  - 7. On Section 4-11, Emergency Vehicle Access Mitigation, it was stated that Opticomms should be installed at all intersections significantly impacted under the project scenario. Should be mitigation be in terms of emergency corridors or routes such as El Camino Real in lieu of individual intersections (El Camino Real at Ravenswood)? Will SUMC contribute to the Opticom installation?

**Comments on the Village Concept-Alternative Analysis:**

- 1. Based on the trip generation tables, the village concept SUMC would generate less traffic than the 2025 Full Build SUMC. It does not appear that the village concept SUMC is the preferred alternative. Why?



### Chapter 3. Project Lists and Cost Estimates

In this project, LOS analyses were conducted for all signalized intersections (42 intersections) within the City of Menlo Park. At 15 of the study intersections, the future LOS is expected to be at unacceptable levels of E or F, after anticipated future growth has been added to the roadway network. At 11 of these locations, the LOS deteriorated to E or F as a result of the anticipated growth. These 11 locations were therefore candidates to be included in the TIF program for 100 percent funding. The four intersections that are currently deficient would be partially funded by the TIF program. The percentage of capital costs for each project that is expected to be paid by new development is based on the assumptions of a future development's perceived contribution to the need for a given project.

Recommended intersection improvements are shown in Table VIII and illustrated in Figure 5. The intersection improvements for Middlefield Road/Willow Road, El Camino Real/Ravenswood Avenue, Bayfront Expressway/Willow Road and Bayfront Expressway/University Avenue will be partially funded by the TIF program.

Table VIII: Recommended Intersection Improvements

No.	Intersection	Improvement Measure
11	University Dr. & Santa Cruz Ave.	Re-stripe NB exclusive RT lane to a shared Left and Right Turn lane; Widen Santa Cruz Ave. to accommodate the second WB receiving lane. Modify signal phasing to include an EB right turn overlap.
13	Laurel St. & Ravenswood Ave.	Widen NB approach to include a left turn lane and EB approach to include a right turn lane. Restripe the existing EB shared through right turn lane to an exclusive through lane. Widen WB Ravenswood Avenue to include a receiving lane for the second NB left turn lane and re-install the existing bike lanes.
14	Middlefield Rd. & Ravenswood Ave.	Widen NB to add a second NB left turn lane and widen SB approach to include an exclusive RT lane. Re-configure the intersection to remove n/s offset issue.
16	Middlefield Rd. & Willow Rd.	Widen EB approach to include an additional through lane. Widen WB approach to include an additional left turn lane and re-stripe shared through left turn lane to a through only lane. Widen SB approach to include an exclusive through lane. Re-stripe SB shared through left turn lane to left turn only lane.
21	Bohannon/Florence & Marsh Rd.	Widen the existing WB approach to include an exclusive right-turn only (350 feet) lane and re-stripe the shared through right turn lane to an exclusive through lane.
25	El Camino Real & Valparaiso/Glenwood	Restripe NB right turn lane to shared NB through/right and SBR to shared SB through/right; Widen WB approach to add exclusive RT lane. Widen El Camino Real to provide additional receiving lanes in both NB and SB directions.
28	El Camino Real & Ravenswood Ave.	Widen EB approach to provide an exclusive left turn lane and a right turn lane; Widen NB approach to provide additional through lane. Widen SB approach to provide an additional left turn lane and re-stripe right turn only lane to shared through right turn lane. Additional mitigations are required but they are not feasible - additional NB left turn lane and WB through lane with corresponding receiving lanes.
30	El Camino Real & Pittidge Ave.	Add an exclusive SB RT lane and widen NB approach to include an additional left-turn lane.
33	Newbridge St. & Willow Rd.	Widen Willow to add an exclusive EB right turn lane; Widen Willow to add third WB thru lane. This requires an additional receiving lane on Willow Road in the WB direction.
37	Bayfront Expy. & Willow Rd.	Widen EB approach to include an additional right turn lane; Gateway study recommends adaptive signal timing.
38	Bayfront Expy. & University Ave.	Widen SB approach to include an additional through lane and modify right turn only lane to be a shared through right turn lane. This requires two additional receiving lanes on Bayfront Expy. in the southbound direction.
41	Bayfront Expy. & Chrysler Dr.	Add a second EB left turn lane and restripe the existing RT only lane to shared left turn and right turn lane.
42	Bayfront Expy. & Marsh Rd.	Widen EB approach to provide an additional right turn lane.

**8a City of Menlo Park, Rene C. Baile (Email dated April 1, 2010)**

8a.1 *The commentor states that the existing intersection geometry of the intersections of El Camino Real/Valparaiso Avenue (intersection #1) and Marsh Road/US 101 Southbound off-ramp (#49) needs to be updated in Figure 2-1 of Appendix C (Transportation Impact Analysis) of the Draft EIR. Figure 2-1 of Appendix C of the Draft EIR that shows the existing intersection geometry has been updated for intersections #1 and #49. The traffic analysis was also updated to reflect these changes. No new impacts resulted from the updated analysis. Please refer to Staff-Initiated Change 2.*

8a.2 *The commentor states that additional text should be added to page 3-11 of Appendix C of the Draft EIR, to identify the intersections that are located in Menlo Park (Bayfront Expressway/Willow Road (#52) and Bayfront Expressway/University Avenue (#53)). In response to the comment, lines 4 and 5 of the last paragraph on page 3-11 of Appendix C of the Draft EIR has been changed as follows:*

- Bayfront Expressway/Willow Road (#52) (Menlo Park)
- Bayfront Expressway/University Avenue (#53) (Menlo Park)

8a.3 *The commentor states that Menlo Park requires truck route permits for truck travel on Menlo Park streets. Please refer to Master Response 4 for additional information about truck route permits in the City of Menlo Park.*

8a.4 *The commentor states that traffic-adaptive signal technology has already been implemented at and is planned for several intersections. The intersection LOS analysis has been modified to account for updated information regarding traffic-adaptive signal technology. Please see Staff-Initiated Change 2 for a full discussion of these changes.*

8a.5 *The commentor states that the SUMC Project's fair share financial contribution to the construction of the Middle Avenue under crossing in Menlo Park should be identified in the Draft EIR. Please refer to Master Response 6 for a discussion on SUMC Project's fair share contribution.*

8a.6 *The commentor states that the City of Menlo Park's recommended intersection improvements from its 2009 Transportation Impact Fee (TIF) Study should supersede the recommended intersection improvements in the Menlo Park General Plan for the following intersections:*

- *Bayfront Expressway / Willow Road (intersection #52) - On the mitigation measure proposed for the Bayfront Expressway/Willow Road, the City of Menlo Park is currently negotiating with the Menlo Gateway developer for a third EB right turn lane on Willow Road. In the Menlo Park TIF study, the total cost to construct the third eastbound right turn lane on Willow Road was estimated to be approximately*

\$470,000. However, there is some uncertainty as to when the Menlo Gateway development project will commence or when this mitigation improvement will be implemented. As a condition or requirement, Menlo Park would like SUMC to consider implementing this mitigation improvement as part of its project if scheduling shows that the SUMC would be constructed prior to the Menlo Gateway project. In the event, though, that it appears that the Menlo Gateway would be completed first along with this mitigation measure, Menlo Park would like SUMC, instead, to contribute to the costs of a traffic signal adaptive technology on Willow Road between Hamilton Avenue and Middlefield Road, El Camino Real and Ravenswood Avenue, as recommended in the Menlo Park TIF study and also, the Peninsula Gateway project.

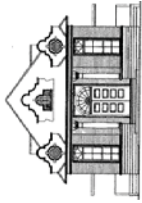
- *El Camino Real/Ravenswood Avenue (intersection #3) - Menlo Park would like SUMC to consider contributing to the cost of adding a northbound through lane at the intersection.*
- *Middlefield Road / Willow Road (intersection #18) - Menlo Park would like SUMC to consider the improvements in the Traffic Impact Fee (TIF) for the intersection of Middlefield Road / Willow Road as feasible potential mitigation measures and participate in the estimated implementation cost of \$1,700,000.*
- *Bayfront Expressway / University Avenue (intersection #53) - Menlo Park would like SUMC to consider the improvements in the TIF for the intersection of Bayfront Expressway/University Avenue (intersection #53) as feasible potential mitigation measures and participate in the estimated implementation cost of \$2,500,000. Menlo Park would like SUMC to consider participating in the costs of a traffic-adaptive signal technology on Sand Hill Road between I-280 and Santa Cruz Avenue.*

In response to the comment, Table 3.4-18 on pages 3.4-63, 64, and 65 of the Draft EIR has been updated to include the improvements from the TIF for intersections #52, and #53. In addition, no contribution to intersection improvements is necessary when the impact is less than significant (intersection #3) or where other mitigation reduces the impact to less than significant (intersection #18). Please see Staff-Initiated Change 2. In addition, please refer to Master Response 6 for a discussion on SUMC Project's fair share contribution.

8a.7 *The commentor states that the proposed installation of Opticom as a mitigation measure for emergency vehicle access should be in terms of emergency corridors or routes such as El Camino Real in lieu of individual intersections (El Camino Real at Ravenswood). The SUMC Project would provide fair share contribution to the installation of Opticom at all study intersections impacted by the SUMC Project. Please refer to Master Response 6 for a discussion on SUMC Project's fair share contribution.*

8a.8 *The commentor states that, based on the trip generation tables, the Village Concept Alternative would generate less traffic than the SUMC Project and asks why it does not appear that the Village Concept Alternative is the preferred alternative. Please refer to Staff-Initiated Change 8 for a discussion of the traffic effect of Village Concept Housing.*





# TOWN OF PORTOLA VALLEY

Letter 9

July 21, 2010

Mr. Steven Turner, Senior Planner  
Department of Planning and Community Environment  
250 Hamilton Avenue, 5<sup>th</sup> Floor  
Palo Alto, CA 94301

Subject: Comments on the Draft Environmental Impact Report,  
Stanford University Medical Center Facilities Renewal and  
Replacement Project (SCH#2007082130)

Dear Mr. Turner:

Thank you for referring the DEIS regarding the Stanford University Medical Center Project to the Town of Portola Valley for review and comment. Our town council reviewed the DEIS at its meeting on July 14, 2010. The hospital project will have many impacts on the campus itself as well as surrounding communities, particularly Palo Alto and Menlo Park. It will, however, in addition have noticeable impacts on the Town of Portola Valley. The town council restricted its review to the impacts that will be of most importance to town residents.

We have identified three categories of impacts that are of most concern to the town: traffic congestion at intersections, traffic capacity of Alpine Road and the visual impacts on the Sand Hill Road corridor. We also have concern about impacts on housing demand and conformance with climate change requirements. Each of these categories are discussed below. In all instances our recommendations are shown in **bold italics**.

### Traffic Congestion at Intersections

The DEIR identifies four intersections that impact Portola Valley residents each of which is discussed below. The data cited come from Tables 3.4-4 to 3.4-6 (existing traffic), 3.4 – 17 (projected traffic with and without the hospital project), 3.4 – 18 (mitigation measures).

#### **Intersection 27 - Junipero Serra Blvd. and Alpine Rd. - Santa Cruz Ave.**

This intersection currently operates at LOS C in both AM and PM Peak Hours, **without** the SMUC project the intersection will **deteriorate** to LOS D+ in AM Peak Hour and D in PM Peak Hours, and **with** the SMUC project will stay at D+ in the AM Peak Hour but **deteriorate** to D- in PM Peak Hour.

DEIR Mitigation - No improvements are proposed at this intersection, consequently PV residents will be faced with D+ LOS in AM Peak Hour and D- LOS in PM Peak Hour.

9.1

9.1  
Cont

**Recommendation - Backups occur in part because there is no free right hand turn lane for traffic on Santa Cruz turning into Alpine Rd. There used to be a free right hand turn lane but it was eliminated as part of the redesign of the intersection. Some reevaluation of the possible need for such a lane may be warranted.**

**Intersection 30 - Santa Cruz Ave. and Sand Hill Rd.** This intersection operates at LOS C- in AM Peak Hour and D+ in PM Peak Hour, **without** the SMUC project the intersection will **deteriorate** to LOS D- in AM Peak Hour and D in PM Peak Hour and **with** the SMUC project will stay at D in the PM Peak Hour but **deteriorate** to E in AM Peak Hour.

DEIR Mitigation - Intersection improvements are deemed "Not Feasible." The intersection is described as "fully built-out" and that "improvements would be difficult to implement." "Northbound Santa Cruz Avenue needs an additional right turn lane. The right-of-way requirements and cost of improvements make the improvements infeasible." Accordingly, PV residents will be faced with LOS of D in the AM Peak Hours and E in the PM Peak Hours.

**Recommendation - The DEIR states that the intersection of Santa Cruz and Sand Hill Rd., even with Adaptive Signal Technology "...would remain significantly impacted." The DEIR also states that a right turn lane is needed on north-bound Santa Cruz but that it is not feasible. The DEIR should further investigate the feasibility of adding this turn lane and not simply conclude it is not feasible. Certainly an improved design is feasible and if so, the only issue is cost.**

**Intersection 62, IS 280 NB Off-Ramp and Alpine Rd.** This intersection operates at LOS F in AM and PM Peak Hours and will continue at LOS F by 2025 with or without the SMUC project.

DEIR Mitigation - The DEIR recommends that Caltrans signalize this intersection. Table 3.4-1 incorrectly indicates the City/Jurisdiction as Palo Alto whereas San Mateo County has jurisdiction. Those people who travel on Alpine Rd. in the morning headed east of IS 280 toward Stanford and Palo Alto are surely aware of the backup on the north bound off ramp from the freeway. It appears there will be considerable pressure to install a traffic signal to ease that situation. It is not clear how much of the Alpine Rd. - IS 280 intersection would need to be signalized. Signals at this location would significantly affect the visual pleasure of those headed to Portola Valley but at the same time might help ease PM traffic congestion for those traveling west from the Alpine Rd. - Junipero Serra Blvd. intersection with the off and on ramps of IS 280.

**Recommendation - While the DEIR recommends signalizing the intersection of the north-bound off ramp from IS 280, there is no description of how that would be designed. At least a preliminary design should be included that would clearly show how the on and off ramps on both sides of the freeway would be affected as well as how the through traffic on Alpine Road would be affected. Without this design, there is no adequate way to judge its acceptability. Also, the DEIR should be corrected to indicate the intersection is in unincorporated San Mateo County and not in Palo Alto.**

**Intersection 63 - IS 280 SB Off-Ramp and Alpine Rd.** This intersection operates at LOS F in AM Peak Hour and C in PM Peak Hour, **without** the SMUC project LOS will not change and **with** the SMUC project, the AM Peak Hour will remain at F and the PM Peak Hour will **deteriorate** to D.

9.4



9.4 Cont't  
 DEIR Mitigation - No improvements are proposed for this off-ramp even though the LOS for AM Peak Hour is F and for the PM Peak Hour is D. It is not clear whether the signalization for Intersection 62 would include this off-ramp.

**Recommendation – Given that the traffic projections indicate AM Peak Hour at LOS F and PM Peak Hour at D, solutions to this problem should be included in the EIR.**

Traffic Capacity of Alpine Road

9.5 Those people who travel west on Alpine Road in the PM Peak Hour know that traffic can back up almost to the Junipero Serra Blvd. and Alpine Rd. - the Santa Cruz Ave. intersection.

**Recommendation - This problem should be studied as part of the EIR.**

Visual Impacts on the Sand Hill Road Corridor

9.6 The new hospital buildings will be by far the highest and most massive of any existing buildings along the entire Sand Hill Corridor from Santa Cruz Ave. to El Camino Road. They will dwarf all nearby buildings. The sense of the corridor as including considerable open space and of a consistent scale will change. The driver on Sand Hill Road will have a much more urban scale experience that is foreign to the locality. The plan of the hospital project shows four building segments, each reaching 130 feet. By comparison, the highest nearby building, the Children's Hospital, reaches only 50 feet. This is simply the result of trying to accommodate the floor area needs of the hospital while still trying to keep some open spaces between the buildings. This is not dissimilar to what happens in central city areas, such as in San Francisco, where there is a constant push for more floor area on a limited amount of land. We are told by Stanford, however, that the trend is for hospitals to be built vertically for efficiency purposes.

The DEIR includes some visual simulations that help put the project in the context of the site and surrounding area. With respect to "Visual Quality" on pages S -27 to S-28, the Mitigation Measures spell out in some detail how the Architectural Review Board (ARB) will review and approve the final building plans. It is indicated that the ARB review will reduce visual impacts to a less than significant level because the ARB "...would address massing, layout, landscaping and architectural design impacts of the SUMC Project..." Under VQ-2.1 the DEIR states: "Architectural Review shall assess the appropriateness of proposed demolitions, proposed building heights and massing, siting of buildings and structures, architecture and façade treatments, landscaping, circulation plans and parking."

9.7 Also, under VQ-3, it is stated that the recommendations of the ARB are to be forwarded to the City Council for "consideration." Presumably, the final approval would be given by the City Council.

It appears that the project addressed in the DEIR is rather specific as to the amount of development to be allowed since it shows building outlines, locations and heights. Once the project is approved, it is not clear to what extent the scope of the project can be modified by the ARB and the City Council. If the scope is limited by what is described in the DEIR, that needs to be recognized in the DEIR. Subsequent changes by the ARB would then appear to need to be within that scope. In other words, the major decisions as to maximum bulk, etc. will appear to have been made prior the subsequent detailed review by the ARB and City Council. If the foregoing is accurate, then it is difficult to conclude that adequate design review has occurred as a part of the DEIR.

9.7 Cont't  
**Recommendation – In order to ensure public participation in the review of the design, the EIR should include provisions for review of the final or near final design as a part of the EIR or subject the final design to a separate CEQA analysis.**

Impacts on Housing Demand

The DEIR notes that there will be a 23% increase in full-time equivalent employees over the 2007 number. The DEIR recognizes this increase but then states that "...the percentage of regional housing demand resulting from the SUMC Project would be relatively small in comparison with projected housing growth in the region, and would comprise a less-than-significant environmental impact."

**Recommendation - It is impossible that the increase in the labor force will not put a burden on nearby communities including Palo Alto, Menlo Park and possibly even Portola Valley. It also appears that Stanford should be required to provide some of this housing and that this should be evaluated in the EIR. This impact clearly needs more study.**

Conformance with Climate Change Requirements

9.9 Climate change is addressed in Section 3.6 of the SMUC Project Summary of Impacts and Mitigation Measures. The project is gauged against the Goals and Policies of the Palo Alto Climate Protection Plan and specifically with respect to emitting "Significant Greenhouse Gas Emissions." With respect to Mitigation Measures, the DEIR states "...even with these measures the SUMC Project would contravene the goals in the City's Climate Protection Plan and would have a cumulatively considerable contribution to global climate change.

**Recommendation – We question whether this issue has been adequately addressed given the lack of compliance with Palo Alto's Climate Protection Plan.**

We appreciate the opportunity to submit the foregoing comments. We look forward to responses to our recommendations in the final EIR.

Sincerely,

B. Stephen Toben, Mayor

**9. Town of Portola Valley, Stephen Toben, Mayor (letter dated July 21, 2010)**

9.1 *The commentor states that the intersection of Junipero Serra Boulevard/Alpine Road/Santa Cruz Avenue (intersection #27) operates at level of service (LOS) C without the SUMC Project and deteriorates to LOS D with the SUMC Project traffic added, but, no improvements for this intersection are contained in the Draft EIR. The commentor suggests that a free right turn lane for traffic from Santa Cruz Avenue onto Alpine Road, which was previously available, may need to be restored. The Transportation Impact Analysis (Appendix C of the Draft EIR) did not identify a significant impact for the SUMC Project at this intersection. The intersection operates at LOS D both with and without the SUMC Project. Therefore, the SUMC Project would not result in the deterioration in LOS and no improvements would be warranted. As part of a separate process, this intersection could be evaluated and the right turn lane restored if the traffic analysis indicated it is warranted and a funding source is identified.*

9.2 *The commentor states that the LOS at the intersection of Santa Cruz Avenue/Sand Hill Road (intersection #30) would change from LOS D in the AM Peak Hour without the SUMC Project to LOS E with the SUMC Project and suggests that the Draft EIR should further evaluate this intersection. The Transportation Impact Analysis for the Draft EIR followed a structured process. First, the traffic operations analysis was completed to determine if any significance thresholds were exceeded when SUMC Project traffic was added to the future No Project condition. If so, intersection improvements were identified to mitigate those impacts. A significant impact was determined to occur at Sand Hill Road/Santa Cruz Road because of SUMC Project traffic. The right turn lane was determined to be the appropriate physical improvement mitigation measure, but field observation determined that this physical improvement would be difficult to accomplish. Therefore, the analysis process evaluated traffic-adaptive signal technology, bicycle and pedestrian undercrossings, and travel demand management (TDM) strategies (Mitigation Measures TR-2.1 through TR-2.3, respectively) to determine if these measures would mitigate the SUMC Project impact at this intersection. As noted on page 3.4-61 of the Draft EIR, these three mitigation measures would eliminate the traffic impact at Sand Hill Road/Santa Cruz Avenue without the need for physical improvements.*

9.3 *The commentor states that details of the signal design at the northbound off-ramp from I-280 at Alpine Road (intersection #62) are not provided and it cannot be determined how the signal would affect through traffic on Alpine Road. The Transportation Impact Analysis for the Draft EIR found that the SUMC Project would cause a significant impact at the northbound I-280 off-ramp intersection at Alpine Road. The Transportation Impact Analysis also identified signalization as a potentially feasible mitigation measure. However, prior to making physical improvements, other mitigation measures were tested. These measures, including traffic-adaptive signal technology, bicycle and pedestrian improvements, and an expanded TDM program (Mitigation Measures TR-2.1 through TR-*

2.3, respectively), were found to mitigate the SUMC Project impacts to a less-than-significant level and signalization of the intersection would not be necessary. In response to this comment, Draft EIR text on page 3.4-9, Table 3.4-1, has been revised as follows:

Intersection #	Intersection	City / Jurisdiction	Source and Date of Count
62	I-280 NB Off-Ramp and Alpine Road	<del>Palo Alto</del> <u>San Mateo County</u>	AECOM Transportation, October 2008
63	I-280 SB Off-Ramp and Alpine Road	<del>Palo Alto</del> <u>San Mateo County</u>	AECOM Transportation, October 2008

9.4 *The commentor notes that the intersection of the southbound off-ramp from I-280 at Alpine Road (intersection #63) would operate at LOS F in the AM Peak Hour and D in the PM Peak Hour with the SUMC Project and states that improvements to traffic operations at this intersection should be included in the Draft EIR. The SUMC Project would not significantly impact the southbound I-280 off-ramp intersection at Alpine Road because most of the traffic traveling to and from SUMC via I-280 would not use the southbound off-ramp at Alpine Road. For example, traffic coming from the north to SUMC would probably use the Sand Hill Road interchange instead of the Alpine Road interchange. Likewise, traffic coming from SUMC and traveling south on I-280 would probably use Alpine Road and the loop on-ramp to southbound I-280. While signalization of the I-280 southbound off-ramp at Alpine Road be warranted for existing reasons, the SUMC Project would not significantly impact this intersection and, therefore, this EIR for the SUMC Project does not identify such signalization as a mitigation measure.*

9.5 *The commentor notes that in the PM Peak Hour, westbound traffic on Alpine Road backs up to the Junipero Serra Boulevard/Alpine Road/Santa Cruz Avenue intersection (intersection #27) and that this condition should be evaluated in the Draft EIR. The intersection of Junipero Serra Boulevard/Alpine Road/Santa Cruz Avenue was evaluated in the Draft EIR and no significant SUMC Project impacts were identified. The intersection of Alpine Road with the northbound I-280 off-ramp was also evaluated in the Draft EIR and found to warrant the installation of a traffic signal. However, as noted in Response 9.3, above, other mitigation measures would reduce the SUMC Project’s impact to a less-than-significant level, so signalization would not be needed. If a traffic signal were installed as an improvement by San Mateo County and/or Caltrans, the traffic operations and queuing along Alpine Road would be improved.*

9.6 *The commentor expresses concern regarding the height of the proposed SHC Hospital building modules and how they will conflict with the overall visual character along Sand Hill Road. The following is a description of the SHC Hospital tower height, as explained by the SUMC Project sponsors. The Building Code itself does not specify the height or square footage of hospitals; these details are dictated by the hospital program envisioned by the SUMC Project sponsors in order to meet the future demands. As stated by the commentor, the SHC Hospital would need to be built vertically for efficiency purposes,*

thereby requiring the heights as proposed. The upright alignment of the new SHC Hospital would allow for vertical circulation in the form of elevators, rather than requiring patients to move through lengthy public corridors. The immediate adjacency between the floors would organize patient movement privately and safely in the most efficient way possible through vertical transportation.<sup>1</sup> In addition, Building Code ventilation and structural requirements result in a greater floor-to-floor height for a hospital than a commercial office building. The typical floor-to-floor height of an office building is 10-12 feet, while in a modern hospital it is 16-20 feet.<sup>2</sup> As such, the height of the SHC Hospital building is necessary for the functionality of the hospital.

The SHC Hospital building would include five modules at 130 feet in height, which could degrade the existing visual character, resulting in a significant impact if not properly addressed through the City's Architectural Review process. As described in the Draft EIR on page 3.3-40, the SUMC Project would alter some intermittent views along Sand Hill Road, but would not substantially change its character and visual quality. The Main SUMC Site, which would contain the 130-foot modules, is separated from Sand Hill Road by properties along Welch Road and the only direct views of the SUMC Sites are at the Pasteur Drive/Sand Hill Road intersection (as illustrated in Figure 3.3-9 for the SUMC Project and Figure 5-6 for the Tree Preservation Alternative). Due to the set-back from Sand Hill Road, the SUMC Project would not disturb the broad setbacks and rural, oak-dominated landscaping that characterizes this route.

In addition, as noted on page 3.3-29 of the Draft EIR, several buildings of similar height are located within the surrounding areas, including City Hall (127 feet), the Stanford University Hoover Tower (285 feet), and the Hoover Pavilion (110 feet). As such, the proposed building heights would be similar to existing massing in the area. Nonetheless, as outlined on page 3.3-39, Mitigation Measure VQ-2.1 would be implemented to reduce the impacts to visual character at the SUMC Sites. This mitigation measure would require the SUMC Project sponsors to adhere to the City's Architectural Review process and would reduce the impacts to less than significant.

9.7 *The commentor requests that the final or near final design of the project be subject to public review.* The visual simulations and analysis in the Draft EIR is based on June 2009 site plans. As discussed on page 3.3-27 of the Draft EIR, SUMC Project design is still in progress and may continue to be altered. It is typical and acceptable for EIRs to address site plans as they are in process of being refined. However, the building program and envelope defined in Section 2, Project Description, of the Draft EIR are anticipated to remain constant.

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<sup>1</sup> Mark Tortorich, Vice President of Facilities Planning, Design and Construction for Stanford University Medical Center and Lucile Packard Children's Hospital, City Council Hearing, June 14, 2010.

<sup>2</sup> Stanford University Medical Center, "Guide to Key Community Issues for the Stanford University Medical Center Renewal Project," June 2010, accessed on October 14, 2010 at: [http://www.stanfordpackard.org/sites/default/files/pdfs/report\\_0610.pdf](http://www.stanfordpackard.org/sites/default/files/pdfs/report_0610.pdf)

As indicated In Section 3.3, Visual Resources, of the Draft EIR, adherence to the City's Architectural Review process would ensure that impacts on on-site visual character and quality, and views, would be less than significant because the architectural review approvals would address *massing, layout, landscaping, and architectural design impacts from the SUMC Project*. The Architecture Review Board (ARB's) recommendations regarding these factors will be forwarded to the City Council for consideration for approval. Architectural Review approval cannot be granted by the City Council unless the SUMC Project meets stringent criteria. As stated in Palo Alto Municipal Code Section 18.76.020, neither the Director, nor the City Council, shall grant Architectural Review approval, unless it is found that:

- (1) The design is consistent and compatible with applicable elements of the Palo Alto Comprehensive Plan;
- (2) The design is compatible with the immediate environment of the site;
- (3) The design is appropriate to the function of the project;
- (4) In areas considered by the board as having a unified design character or historical character, the design is compatible with such character;
- (5) The design promotes harmonious transitions in scale and character in areas between different designated land uses;
- (6) The design is compatible with approved improvements both on and off the site;
- (7) The planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;
- (8) The amount and arrangement of open space are appropriate to the design and the function of the structures;
- (9) Sufficient ancillary functions are provided to support the main functions of the project and the same are compatible with the project's design concept;
- (10) Access to the property and circulation thereon are safe and convenient for pedestrians, cyclists and vehicles;
- (11) Natural features are appropriately preserved and integrated with the project;
- (12) The materials, textures, colors and details of construction and plant material are an appropriate expression to the design and function and whether the same

are compatible with the adjacent and neighboring structures, landscape elements and functions;

- (13) The landscape design for the site, as shown by the relationship of plant masses, open space, scale, plant form, and foliage textures and color create a desirable and functional environment whether that landscape concept depicts an appropriate unity with the various buildings on site;
- (14) Plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety that would tend to be drought resistant and to reduce the consumption of water in its installation and maintenance;
- (15) The design is energy efficient and incorporates renewable energy design elements; and
- (16) The design is consistent and compatible with the purpose of Architectural Review.

Please refer to Master Responses 10 and 11 for additional information regarding SUMC Project design.

9.8 *The commentor recommends workforce housing.* Please see Master Response 7.

9.9 *The commentor questions the adequacy of the Climate Change analysis.* The Draft EIR states that the SUMC Project would contravene the goals of the City's Climate Protection Plan because the Draft EIR concluded the SUMC Project would not achieve a 30 percent reduction from Business as Usual (BAU) emissions.

Staff-Initiated Change 4 updates the greenhouse gas emissions inventory based on revisions to methodology used to estimate SUMC Project and BAU emissions associated with energy use and transportation. With the incorporation of the revisions to the greenhouse gas emissions analysis and mitigation, the SUMC Project would be in compliance with the City's Climate Protection Plan. Details of the revisions to the climate change emissions inventories are detailed in Staff-Initiated Change 4.





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OFFICE OF THE SUPERINTENDENT

July 27, 2010

Mr. Steven Turner  
City of Palo Alto,  
Department of Planning and Community Environment  
250 Hamilton Ave.  
Palo Alto, CA 94301

**RE: Comments on the Draft Environmental Impact Report for the Stanford University Medical Center Facilities Renewal and Replacement**

Dear Mr. Turner

We support Stanford University and City of Palo Alto efforts to optimize the quality of the proposed Medical Center (SUMC) and all related planning decisions. We have a shared interest in considering the impacts to Palo Alto Unified School District (PAUSD) schools, to ensure a continuing high standard of service for future residents, employers, employees, and students.

As the report makes clear, SUMC project-related decisions will unfold over many years. Mitigations designed to reduce the jobs-to-employed-residents ratio that increase population and housing growth will increase student enrollment growth and impact the financial condition of PAUSD. These impacts will become clearer in the SUMC Development Agreement between the City and Stanford, and in updates to the Comprehensive Plan and Housing Element. We respectfully submit these questions on the draft Environmental Impact Report for the SUMC Project to understand the principles that will guide these project-related mitigation agreements:

**1. Educational Services:** 78% of PAUSD general fund revenue comes from local property and parcel taxes, unlike most California school districts, which receive state funding on a per-pupil basis. With regard to project-related mitigations, will all housing units within PAUSD be subject to property tax assessments? If there is property that doesn't generate this standard local form of annual operating revenue for public school services, how will this negative impact be mitigated?

**2. School Facilities:** In the past, local developer fees have not covered the cost of expanding school facilities to serve growing enrollment. Local voter-funded bonds have paid for most of this added capacity, although at some point, existing school sites may reach capacity.

10.3

**a. Enrollment Increases.** Given the objective to "address project-induced school impacts not mitigated by school impact fees" (S.2 Project Objectives), and the suggested mitigations to promote additional housing (S.5 Impacts and Mitigation Measures), how would this objective be accomplished, particularly if the extent of new housing will require opening new schools?

10.4

**b. Planning Efforts.** The 2008 local voter-funded facilities bond program accounts for PAUSD facility needs based on the 5-year enrollment growth data and projections at that time. The report states the "cumulative development in the City can be expected to necessitate expansion of school facilities" to a projected enrollment increase of 3,860 more students by 2021, and the existing general obligation bond funds the facilities that will be needed to accommodate this growth impact. Although the EIR states in Impact PS-3 that there is sufficient capacity for the projected increase of 73 students under existing conditions, the existing facilities plan is based on population growth projections that didn't include SUMC project. Should PAUSD experience significant SUMC project-related enrollment growth beyond the payment of school impact fees established by SB 50, how would these planning and facilities expenses be mitigated?

10.5

**3. Traffic Generation:** The report comments the "expansion of school facilities could result in adverse environmental impacts," but does not specifically comment on increased traffic generation on neighboring streets nor the impacts to the safe routes to school program. What are the projected environmental impacts and mitigations on PAUSD school sites?

10.6

**4. Children's Hospital School:** With plans for 104 new inpatient beds at Lucille Packard Children's Hospital (S.4 Changes Proposed), how will the staffing levels and expenses at the Children's Hospital School be impacted, and how will PAUSD services be funded?

We look forward to your thoughtful review and response.

Sincerely

Kevin Skelly, Ph.D.  
Superintendent

10.1

10.2



**10. Palo Alto Unified School District (PAUSD), Kevin Skelly, Ph.D. (letter dated July 27, 2010)**

10.1 *The commentor asks if housing units within the PAUSD would be subject to property tax assessments.* The SUMC Project does not include construction of new housing units. As such, this comment is inapplicable to the SUMC Project as proposed. However, the Village Concept Alternative includes a recommendation by the City that 490 previously approved housing units, which fall within the Palo Alto School District (PAUSD) service area, be dedicated to SUMC Project employees. As explained on pages 5-32 through 5-33 of the Draft EIR, all 490 have been analyzed under previous CEQA documentation, including the Stanford University 2000 Community Plan and General Use Permit (CP/GUP) EIR and the Sand Hill Road Corridor Projects (Sand Hill Road) EIR. The CP/GUP EIR determined that the housing developed under the CP/GUP would result in a potentially significant impact to public schools. The identified mitigation required that Stanford pay the statutory school impact fees for its housing development. As such, all of the housing that would be constructed under the Village Concept Alternative would be subject to school impact fees. In addition, if and when these units are constructed, regardless of who constructs or occupies the units, these units would be subject to property tax assessments by Santa Clara County, as required by State law; however, if built as rental units for students, faculty, or staff of the University or the SUMC, the units may qualify for an annual property tax exemption.

10.2 *The commentor notes that local developer fees have historically not covered the cost of expanding school facilities to serve growing enrollment.* As stated on page 3.14-17 of the Draft EIR, the SUMC Project would pay non-residential development fees subject to SB 50 School Impact Fees. According to Section 65996 of the State Government Code, payment of school impact fees is deemed to constitute full and complete mitigation.

As explained on page 3.14.17 of the Draft EIR, the SUMC Project would not directly impact enrollment and school capacity. Instead, the actual generation of new students would be a tertiary impact. The SUMC Project would increase employment, which could induce more housing, a secondary impact. Construction of additional housing units would generate more students, a tertiary impact. The new residential development that may indirectly result from the increase in employment under the SUMC Project would be subject to separate CEQA review and would be required to pay separate residential school impact fees.

*The commentor also states that at some point, existing schools may reach capacity.* The analysis in the Draft EIR for the SUMC Project is based on existing conditions, and not on future, projected capacity. As shown in Table 3.14-1, the additional capacity available in the PAUSD during the 2008-2009 school year was 457 students. Therefore, the tertiary

impacts of the SUMC Project on the PAUSD were based on this existing capacity information.

However, the Draft EIR also discusses the cumulative impacts of future development in the City. As stated on pages 3.14-23 to 3.14-24 of the Draft EIR, school facilities would need to be expanded to serve the projected increase in students plus additional students that were not accounted for in the projections. Therefore, an expansion of school facilities is assumed by 2025, which could result in adverse environmental impacts. However, as with the SUMC Project, the cumulative projects would be required to pay school impact fees, which are based on the amount of proposed residential and commercial space. Additionally, the SUMC Project would not directly contribute new students to the cumulative enrollment growth. The contribution of 73 students would not be a considerable contribution to the cumulative enrollment growth that is assumed to necessitate construction of new facilities, resulting in a less than cumulatively considerable contribution.

- 10.3 *The commentor questions how the City plans to meet the objective of “address[ing] project-induced school impacts not mitigated by school impact fees” while the SUMC Project promotes additional housing.* As explained on page 3.14-16 of the Draft EIR, the SUMC Project would have an impact on schools by indirectly generating up to 73 students. However, the existing capacity within the school district is 457 students; therefore, the SUMC Project would not directly or indirectly trigger the need for new school facilities. In addition, as discussed above in Response 10.2, the analysis in the Draft EIR states that with the school impact fee, the impact from the SUMC Project on the PAUSD would be less than significant. As such, the project-induced school impacts would be mitigated and no additional measures would be warranted under CEQA.
- 10.4 *The commentor questions how the planning and facilities expenses would be mitigated if the SUMC Project-related enrollment growth extends beyond the payment of school impact fees established by SB 50.* As stated in Response 10.2, above, payment of school impact fees is deemed to constitute full and complete mitigation. As such, no other mitigation is required.
- 10.5 *The commentor requests an analysis of the environmental impacts and mitigations that increased traffic from the SUMC Project would have on schools.* It is important to note that the discussion and analysis of traffic impacts are separate from the discussion and analysis of school impacts. According to CEQA, a proposed project would have an impact on schools if it increased enrollment to such an extent that new school facilities would need to be constructed, resulting in a significant environmental impact. That topic is addressed in Section 3.14 of the Draft EIR.

Section 3.4 of the Draft EIR, Transportation, examines the roadways and intersections that would be affected by the SUMC Project. All impacts from the SUMC Project to roadways

and intersections within the City of Palo Alto would be mitigated to less than significant with implementation of mitigation measures. Please refer to Section 3.4 of the Draft EIR for more information.

*Additionally, the commentor mentions that the Draft EIR states that the “expansion of school facilities could result in adverse environmental impacts.”* This statement is included on page 3.14-23 of the Draft EIR and is in regards to cumulative impacts, not project-level impacts. As discussed in the document, and in Response 10.2, above, cumulative development in the City could necessitate the expansion of school facilities; however, the SUMC Project’s contribution to this cumulative impact would be less than cumulatively considerable. In addition, it is important to note that the “adverse physical impacts” from cumulative development would occur due to the construction and operation of new school facilities, rather than the impact from the SUMC Project itself. Although these significant impacts could occur with the construction of new school structures, a separate CEQA review would be required for these potential future projects.

10.6 *The commentor questions the staffing levels and expenses at the LPCH School under the SUMC Project.* The current understanding between the PAUSD and the LPCH is that the PAUSD would continue to provide the existing level of school staffing, and the LPCH would provide the funds for the incremental staff required as a result of the SUMC Project.<sup>1</sup> Nonetheless, the commentor’s concern is an issue outside the scope of CEQA. This comment does not address the adequacy of the Draft EIR or the SUMC Project’s compliance with CEQA. Please refer to Master Response 10 for a discussion of non-CEQA issues.

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<sup>1</sup> Stanford University Medical Center, correspondence with PBS&J, October 12, 2010.



CITY OF PALO ALTO  
**UTILITIES**

CITY OF PALO ALTO UTILITIES DEPARTMENT  
WATER - GAS - WASTEWATER ENGINEERING  
1007 ELWELL COURT, PALO ALTO, CA 94301  
MAIN PHONE: 650/566-4501; FAX: 650/566-4536

Subject Address: Stanford University Medical Center Facilities Renewal and Replacement Project Draft EIR, Application #2007082130

Reviewed By: Roland Ekstrand, WG/W Util. Eng. Phone: 650/566-4511

Reviewed date: August 6, 2010

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**WATER, GAS & WASTEWATER UTILITIES DEPARTMENT**  
**DRAFT EIR REVIEW COMMENTS**

- 11.1 CPAU WG/W will need a final copy of the PBS&J 2010 water and wastewater utility analysis quoted in table S-5 for our files.
- 11.2 CPAU needs the final analysis of the long-term utility and public infrastructure demand generated by the SUMC project (page 2-8).
- 11.3 CPAU will require a signed agreement regarding the existing emergency CPAU water interconnects with Stanford water including the activation conditions for these interties.
- 11.4 Add **Utilities review to "Other City Approvals"** on page 2-28/2-29 and add **Utilities approval** to section 2.8 page 2-62.
- 11.5 On page 3.3-22 add to Utilities section (third paragraph from bottom) **locations shall comply with CPAU Rules and Regulations, and the Utility Standards.**
- 11.6 Page 3.15-5 some statements under "Emergency Water Supply and Storage" (EWSS) are not accurate. The EWSS wells will be used only on an emergency basis and are not permitted to be used on a more frequent basis. Submit water CAD hydraulic analysis with assumption documentation for CPAU review and approval. Include the Water Demand calculations on page 3.15-18 in the water CAD analysis.

**11. City of Palo Alto Utilities Department, Roland Ekstrand (letter dated August 2, 2010)**

11.1 *The commentor requests a final copy of the EIR for the Palo Alto Utilities Department (PAUD) files, along with the associated water and wastewater calculations. A Water Supply Analysis (WSA) was prepared for the SUMC Project and was adopted by the Palo Alto City Council on March 16, 2010. The WSA is provided as Appendix M to the Draft EIR. The City’s Planning and Community Environment Department will provide a copy of the EIR and records of wastewater calculations to the City of Palo Alto Utilities Department.*

11.2 *The commentor requests the final analysis of the long-term utility and public infrastructure demand generated by the SUMC Project. As stated on page 2-8 of the Draft EIR, one of the City’s objectives is to “provide for the long-term utility and public infrastructure demand generated by the SUMC Project.” Although the SUMC Project would increase the demand for public utilities during construction and operation, the City has made it a goal to provide the SUMC Project with the utility infrastructure that they need.*

The analysis of this long-term utility and public infrastructure demand is included in Section 3.15, Utilities. As stated on page 3.15-18, the SUMC Project would result in a less-than-significant water supply impact because it would not result in the need for new or expanded entitlements for water supplies. The long-term horizon for this analysis is 2025, which is considered full occupancy of the SUMC Project. As such, the City would be able to meet its objective of providing long-term water supplies to meet the increased demand from the SUMC Project.

In addition, the SUMC Project would have less-than-significant impacts on wastewater, stormwater, solid waste generation, and energy demand at full occupancy in 2025. The SUMC Project would not trigger the need for the expansion or construction of new public infrastructure facilities. Therefore, the City’s objective of providing for the long-term utility demand generate by the SUMC Project would be met.

Please refer to Section 3.15, Utilities, for a more detailed analysis of the long-term utility and public infrastructure demand generated by the SUMC Project.

11.3 *The commentor requests a signed agreement regarding the existing emergency City of Palo Alto Utilities (CPAU) water interconnects with Stanford water, including the activation conditions for these interties. As requested by the commentor, Stanford will provide the Utilities Department with the signed agreement separate from approval of the SUMC Project. This comment does not address the adequacy of the Draft EIR or the SUMC Project’s compliance with CEQA. Accordingly, no further response is necessary.*

- 11.4 *The commentor asks that “Utilities Review” be included under the subheading “Other City Approvals” in Section 2, Project Description, of the Draft EIR.* The list of City approvals generally includes discretionary approvals requested as part of the entitlement process, and does not include reviews conducted by City departments, though the need for those reviews is acknowledged here. Consequently, the review by CPAU is not included on page 2-29 or 2-62. The list of “Other City Approvals” on pages 2-28 and 2-29 outlines the permits or approvals that the SUMC Project sponsors have requested.
- 11.5 *The commentor requests an addition to the Utilities section.* In response to this comment, the following text has been added to the first bullet point after subheader “Section 18.40.130” on page 3.3-22 of the Draft EIR:
- Utilities (e.g., transformer cabinets, pads, fiber optic trenching and above ground cabinets, large water check valves) and underground utilities shall not be placed within required landscaped areas, except where they will not preclude appropriate planting of trees and will be predominantly screened from public view. These locations shall comply with City of Palo Alto Utilities Department (CPAU) Rules and Regulations, and the Utility Standards.
- 11.6 *The commentor states that there are inaccuracies under the discussion of Emergency Water Supply and Storage.* The Draft EIR correctly assumes that Emergency Water Supply and Storage (EWSS) would be utilized only in multiple dry year events. As stated on page 2-11 of the WSA (Appendix M of the Draft EIR), the City has approved the EWSS, which provides the City with the ability to use groundwater for emergency purposes during multiple dry years. An EIR for the EWSS was prepared and certified by the City in March 2007. The commentor should refer to that separate EIR and its supporting technical studies for all analyses required to approve and implement the separate EWSS project.



**COUNCIL MEETING**  
Placed Before Meeting  
Received at Meeting

**14**

**CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE**

**10 JUN 14 PM 2:27**

**Minor, Beth**

**From:** Morariu, Kelly  
**Sent:** Monday, June 14, 2010 2:19 PM  
**To:** Council, City: councilagenda@mail@cityofpaloalto.org  
**Cc:** Keene, James; Baum, Gary; Antil, Pamela; Emslie, Steve; Williams, Curtis; Silver, Cara; Grider, Donna  
**Subject:** CM Holman Agenda Questions: Item #14 Stanford

Good afternoon-

The City Manager asked me to forward responses to Councilmember Holman's questions on item 14 prepared in coordination with Planning and City Attorney staff. Please let us know if you have any other questions.

Thank you-

Kelly McAdoo Morariu  
Assistant to the City Manager  
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650-325-5025 fax  
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**Question:** Has Stanford formally changed their application to the tree Preservation Alternative?

**Staff Response:** Yes, on March 8, 2010, Stanford submitted Application Amendment No. 8 to clarify Stanford's discussion of the Tree Preservation Alternative. The Tree Preservation alternative relocates and reconfigures the Main Hospital and FIM 1, while the other project components do not change from the original application. The amendment clarified that the Tree Preservation alternative was the applicants' preferred alternative and also indicated that they had stopped further design plans for the Main Hospital and FIM 1 as originally proposed and instead were pursuing more detailed design on the Tree Preservation alternative. Specifically, the March 8 Amendment provided: "This amendment contains additional information on the Tree Preservation Alternative. This information is being submitted as an amendment to the project application because the applicants intend to seek City staff, Planning Commission and Architectural Review Board review and consideration of the Tree Preservation Alternative in anticipation of potential final approval by the City Council. The alternative preserves several protected trees within the SUMC that otherwise would be removed by construction of the adult hospital and FIM 1. While we understand from our conversations with the City staff that the Tree Preservation Alternative would not reduce the tree removal impact to a less-than-significant level, the applicants believe that the alternative would substantially reduce the impact as compared to the proposed Project. Under this circumstance, if the Tree Preservation Alternative is found to fully accomplish the project objectives and to be otherwise feasible, then the California Environmental Quality Act will mandate its approval as compared to approval of the proposed project. [Para.] In order to confirm that the Tree Preservation Alternative is in fact feasible and capable of fully accomplishing the project objectives, the applicants seek City review and consideration of the Tree Preservation Alternative. The applicants request that the EIR alternatives chapter include a project level analysis of the Tree Preservation Alternative. In light of its environmental benefits, the applicants also request that the Tree Preservation alternative be referenced in public meetings as the Applicant's preferred alternative." Ultimately, it will be up to the Council to decide whether

6/14/2010

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The Tree Preservation alternative in fact reduces biological impacts as compared to the original project and if so whether it is feasible.

**Biological Resources:**

**Question:** BR-1, BR-3, BR-4, for instance, do not describe the impacts that are identified as significant, but rather use general language to say there may be or is an impact. For example, what species or wildlife, number and kind of impacted trees are not included in the description of the impact? Without knowing the impact, how can a mitigation be evaluated as adequate?

**Staff Response:** The information in the Draft EIR does identify species of wildlife and species and number of protected trees. The mitigations for BR-1 are specifically for protection of bat species whose likelihood of occurrence on the SUMC sites as listed Table 3.9-1 Special Status Species Potentially Occurring on the SUMC Sites. The mitigation also specifically identifies the Cooper's hawk as a species that could be affected by habitat loss and thus could benefit from mitigation measures. The mitigations for BR-3 are targeted specifically at nursery sites of bird species (including the special status Cooper hawk and by inference other non-special status species), in that it has been determined that the Project would not interfere with wildlife movement or migratory patterns. Finally, for BR-4 the discussion includes counts of the number of oaks and redwoods on the SUMC Sites, including those that would be "protected" per the City's Tree Protection Regulations. This level of detail is typically satisfactory to determine the adequacy of mitigations.

**Question:** Mitigation BR-4.5 references replacement of only Publicly owned trees. It does not reference adherence to/consistency with the City's Tree Ordinance regarding replacements of all protected trees on the site. This mitigation also only references City-owned protected trees. Where are other protected trees mitigated consistent with the City's Tree Ordinance?

**Staff Response:** Mitigations BR-4.1, BR-4.2, BR-4.3, BR-4.4, and BR-4.6 are mitigations to address public and private trees on the SUMC Sites. BR-4.5 is a specific mitigation for public trees on or adjacent to the SUMC sites.

**Comment:** Financial contribution to the City's tree fund could/should be included as a mitigation for trees lost to demolition at a rate based on the City's regulations or at a rate determined by Council.

**Staff Response:** Comment acknowledged for review for the Final EIR. Mitigation BR-4.4 would require security bonds and/or guarantees for relocated or unsuccessfully transplanted trees. Council has the ability to further refine this mitigation measure.

**Question:** Specifically, what mechanism allows the demolition of trees to be allowed inconsistent with the City's Tree Ordinance?

**Staff Response:** Removal of some of the trees would require an amendment to the City's Tree Ordinance. The proposed mechanism developed in consultation with the Planning Arborist is a narrow exception to be contained in the proposed new Hospital District ordinance for the SUMC Sites. This exception would preserve the most significant trees, while permitting the removal of others provided certain mitigations are complied with. The Draft EIR introduces the proposed Hospital District approach to protected trees. City Council would review the tree regulations in the proposed Hospital District during the entitlement review for the SUMC Project.

**Tree Preservation Alternative**

**Question:** Based on the Figure 5-1, 10 of the 23 biologically and esthetically significant trees would be removed. So 58 of the 71 protected trees on site would be removed. Do the mitigations for removed trees in

6/14/2010



the main section apply?

Staff Response: Yes, the same mitigations in the main section would apply to the Tree Preservation Alternative. 12.6  
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Comment: As a note, the CMR does not make clear that 58 of the 71 protected trees would be removed.

Staff Response: There was a typo on page 5 of the Staff Report. In the original project, 71 Protected Trees (of a total of 176 on the site) would be removed. Under the Tree Preservation Alternative, 58 protected trees (of a total of 176 on the site) would be removed. Thus, the Tree Preservation alternative focuses on saving a total of an additional 13 of the most biologically and aesthetically significant trees. 12.7

Visual quality:

Question: I continue to have concerns about the ARB review occurring at this stage of the project and prior to entitlements. Additionally, in the absence of the FEIR, how can any body review to eliminate impacts (stated as numerous mitigation measures in the DEIR) as impacts and mitigation are not finally determined nor are the mitigations? Reliance on the DEIR for ARB review to mitigate impacts would appear to be premature to address the concerns not yet even stated by the HRB, PTC, Council or public.

Staff Response: Mitigation for design impacts is proposed through the Architectural Review process, which in this case includes review and recommendations by the ARB and Planning and Transportation Commission (PTC), and final review and action by the City Council. The schedule has been updated to clarify that the final ARB recommendation comes after certification of the FEIR (prior to entitlements) and that both the PTC and Council will review the final ARB recommendation with the Council taking the final action on entitlements. The Draft EIR is intended to review and propose mitigations to the project as proposed, not to determine whether the various entitlements and design should be approved. 12.8

6/14/2010

**12. Councilmember Karen Holman, City Council (letter dated June 14, 2010)**

12.1 *The commentor asks if the SUMC Project sponsors have formally changed their application to the Tree Preservation Alternative. As explained in the Staff Response, the SUMC Project sponsors submitted Application Amendment 8 on March 8, 2010 to clarify that the Tree Preservation Alternative is the SUMC Project sponsors' preferred alternative. This amendment also indicated that they have stopped further design plans for the SHC Hospital building and the FIM 1 as originally proposed and instead are pursuing a more detailed site plan of the Tree Preservation Alternative.*

Although the Tree Preservation Alternative is considered the SUMC Project sponsors' preferred alternative, the SUMC Project as described and analyzed in the Draft EIR is considered the proposed project for the purposes of this document.

According to the analysis in Section 5 of the Draft EIR, Alternatives, most of the impacts would be the same under this alternative compared to the SUMC Project. However, exceptions include that the Tree Preservation Alternative would preserve more aesthetic tree resources than the SUMC Project (although still resulting in a significant and unavoidable impact); the Tree Preservation Alternative would result in less-than-significant construction criteria air pollutant emissions; the Tree Preservation Alternative would have greater significant and unavoidable noise impacts during construction due to pile driving; and the Tree Preservation Alternative could have less-than-significant impacts with mitigation regarding stormwater generation, runoff, and erosion due to the conservative assumption that there could potentially be more impervious surfaces. Please refer to pages 5-135 through 5-166 for a discussion and analysis of these issues and how the impacts under the Tree Preservation Alternative would differ from those of the SUMC Project.

Ultimately it will be up to the City Council to decide whether the Tree Preservation Alternative would reduce impacts as compared to the SUMC Project and whether to adopt it as the proposed project. It is at the discretion of City Council whether to approve portions of the proposed alternatives that would mitigate or avoid significant environmental impacts, while rejecting the alternatives that are deemed to be infeasible. As such, the Final SUMC Project could be the SUMC Project as proposed in the Draft EIR, an alternative to the SUMC Project (such as the Tree Preservation Alternative), or a combination of the SUMC Project and different alternatives. Please see Master Response 11 for more details about the review process.

12.2 *The commentor states that Impacts BR-1, BR-3, and BR-4, in Section 3.9, Biological Resources, are not specific and do not properly address the impacts. As discussed in the Staff Response, the Draft EIR identifies impacted wildlife and plant species and the number of Protected Trees. Specifically, Table 3.9-1, on pages 3.9-3 to 3.9-10 of the Draft EIR, lists the special-status species potentially occurring on the SUMC Sites.*

Impact BR-1 describes the significant impacts that the SUMC Project would have on special-status plant or wildlife resources. Although the impact statement is general, the more detailed analysis beneath the statement states that there would be a significant impact on special-status bat species and Cooper's hawks. However, none of the other species listed in Table 3.9-1 would be impacted. As a result of the significant impacts on special-status bat species and Cooper's hawks, Mitigation Measures BR-1.1 through BR-1.5 are required in order to reduce the impacts to less-than-significant.

Impact BR-3 explains that the SUMC Project would have no impact on the movement of any native resident or migratory fish or wildlife species, but could impede the use of native wildlife nursery sites, resulting in a significant impact. The analysis states that the SUMC Sites could provide nesting habitat for a wide variety of native birds, including non-special-status birds and raptors, which are protected by the California Department of Fish and Game (CDFG). However, the removal of buildings, trees, and shrubs would disrupt the nursery sites of these birds. Therefore, Mitigation Measures BR-3.1 and BR-3.2 are presented to reduce the impacts to less-than-significant.

Impact BR-4 includes an analysis of the Protected Trees at the SUMC Sites and states that implementation of the SUMC Project would have a significant impact on these trees. The Draft EIR defines Protected Trees as being coast live oaks or coast redwoods with specific diameters. In addition, the number of other tree species that were observed at the SUMC Sites is also provided. Since the publication of the Draft EIR, the mitigation measures regarding tree removal have been revised and further enhanced. In addition, the descriptions of Protected Trees to be removed and retained have been updated. Please refer to Staff-Initiated Change 6 for revisions to the mitigation measures and Protected Tree numbers.

In addition, please refer to Section 3.9, Biological Resources, of the Draft EIR for more analysis regarding impacts on special-status species, nursery sites, and Protected Trees.

12.3 *The commentor expresses concern that Mitigation Measure BR-4.5 in Section 3.9, Biological Resources, only focuses on publicly-owned trees and not all Protected Trees at the SUMC Sites. Mitigation Measures regarding tree removal are presented on pages 3.9-26 through 3.9-28 of the Draft EIR. Since the publication of the Draft EIR, the mitigation measures regarding tree removal have been revised and further enhanced. As a result of these edits, tree replacement for loss of privately-owned Protected Trees is required under Mitigation Measures BR-4.4B. In addition, as included in the Draft EIR, tree replacement for loss of publicly-owned trees is included in Mitigation Measure BR-4.5. For the new Mitigation Measure BR-4.4B, please refer to Staff-Initiated Change 6 for revisions to the mitigation measures.*

12.4 *The commentor requests that financial contribution to the City's tree fund be included as mitigation for trees lost to demolition at a rate based on the City's regulations or as*

*determined by City Council.* Mitigation Measure BR-4.4B, as outlined in Staff-Initiated Change 6, would require replacement for privately-owned Protected Trees in accordance with the Tree Technical Manual. The measure specifies that such replacement can be accomplished through payment to the City's Forestry Fund. The SUMC Sites do not have sufficient space to accommodate all of the replacement trees that would be required under the replacement ratios specified in the Tree Technical Manual. Rather than reduce the ratios, payment into the Forestry Fund would enable trees to be planted throughout Palo Alto, which would benefit the urban tree canopy as a whole. Please refer to Staff-Initiated Change 6 for revisions to the mitigation measures as included in the Draft EIR.

- 12.5 *The commentor asks what mechanisms allow the demolition of trees in violation of the City's Tree Ordinance.* As explained in the Staff Response, removal of Protected Trees would require an amendment to the City's Tree Ordinance. The proposed mechanism developed in consultation with the City Arborist is an exception to be contained in the proposed new Hospital District zoning for the SUMC Sites. This exception would preserve the most aesthetically significant Protected Trees, while permitting the removal of others, provided certain mitigations are implemented.

As first described on page 2-28, Section 2, Project Description, the new Hospital District zoning ordinance would allow for the removal of the majority of the Protected Trees at the SUMC Sites while preserving the "aesthetic tree resources." These trees are considered to be protected category oaks or redwoods per the Municipal Code *and* are trees that possess prominent features, contribute to a landscape theme, or possess unique character. The Hospital District zoning ordinance would include provisions for specific Protected Tree retention and preservation through development standards and regulations.

The Draft EIR introduces the proposed Hospital District zoning approach to preserve Protected Trees. However, as explained in Staff-Initiated Change 6, the number of Protected Trees has been corrected since the publication of the Draft EIR. For the updated Protected Tree numbers, please refer to Staff-Initiated Change 6. City Council would review the tree regulations as proposed for the Hospital District zoning during the entitlement review for the SUMC Project.

- 12.6 *The commentor questions if the mitigations for removed trees for the SUMC Project also apply to the Tree Preservation Alternative.* As discussed on page 5-153 in Section 5, Alternatives, Mitigation Measures BR-4.1 through BR-4.5 would apply to the Tree Preservation Alternative as well. Since the publication of the Draft EIR, the mitigation measures regarding tree removal have been revised and further enhanced, as outlined in Staff-Initiated Change 6. The revised tree mitigation measures would still apply to the Tree Preservation Alternative. However, these measures would not be able to avoid the removal of 59 Protected Trees (or the relocation of three biological and aesthetic tree resources) and therefore, even with the implementation of the mitigation measures, the

Tree Preservation Alternative would result in a significant and unavoidable impact. Please refer to Staff-Initiated Change 6 for the updated Protected Tree numbers and edits to the mitigation measures.

12.7 *The commentor questions the inconsistency between the number of Protected Trees to be retained or removed as outlined in the Draft EIR versus those outlined in the Staff Report that was prepared for City Council. As discussed above, since the publication of the Draft EIR, the numbers of Protected Trees have been corrected. Please refer to Staff-Initiated Change 6 for the corrected Protected Tree numbers.*

12.8 *The commentor has concerns about the City's Architectural Review Board (ARB) process. This comment pertains to the general process of certification and entitlements and not to the adequacy of the Draft EIR. Please refer to Master Response 11 for a detailed description of the City's review process and the next steps in the EIR review.*

**COUNCIL MEETING**

7/12/10

Placed Before Meeting  
 Received at Meeting

CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

**4**

10 JUL 12 PM 1:47

**Minor, Beth**

**From:** Morariu, Kelly  
**Sent:** Monday, July 12, 2010 12:53 PM  
**To:** Council, City, councilagenda@mail@cityofpaloalto.org  
**Cc:** Keene, James; Baum, Gary; Silver, Pamela; Williams, Curtis; Grider, Donna  
**Subject:** CM Shepherd Agenda Questions: Item #4: Stanford Transportation, Climate Change and Air Quality

Good afternoon-

The City Manager asked me to forward responses to Councilmember Shepherd's questions on Item 4 prepared in coordination with Planning staff. Please let us know if you have any other questions.

Thank you-

Kelly McAdeco Morariu  
Assistant to the City Manager  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301  
650-329-2452 office  
650-335-5025 fax  
kelly.morariu@cityofpaloalto.org

**Question:** There is a projected 2022 new jobs created by the SUMC project: Can you confirm that this includes the private sector employees. Private doctors renting office space at Hoover Pavilion, shopkeepers and rented spaces in the Hospital, etc.

**Staff Response:** The net new employment (projected at 2,242 employees per the Draft EIR) includes private medical doctors who would lease newly created space at SUMC, part-time SUMC employees, contracted nursing services, food prep staff, service staff, security staff, landscaping staff, and other similar staff. Specialized contractors needed on a project-by-project basis are not included in the employment figures.

**Question:** In the Planning minutes from 6.11, page 11, Mr. Struecker says there is a table in Appendix H that lists the hospital employees and the city they are from. I cannot find that list, can you please direct me to this information with a page number.

**Staff Response:** The table referred to was Table 2 on page 8 of 14 in Appendix H of the Traffic Report. The Traffic Report is Appendix C of the EIR.

**Question:** What percentage of the University employees live on campus, and what percent of the hospital employees live on campus. Can this explain the commute difference of drive-alone commuters. (77% university v 54% hospital).

**Staff Response:** Very few (0.7%) of the total number of SUMC employees live within the Stanford zip codes. The City does not have zip code data for University employees. The primary explanation for the difference in drive alone trips for the hospital (77%) and the University (54%) is that the University workers are provided free Go Passes and the hospital workers are not.

13.1

13.2

13.3



**13. Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010)**

- 13.1 *The commentor requests clarification on the number of new jobs.* The estimated new employment includes new SUMC employees and non-SUMC community health care provider employment. As indicated on page 8 of the Housing Needs Analysis (Appendix K of the Draft EIR), the estimated new employment accounts for new Hospital employees and non-SUMC community health care provider employment based on the additional space that would be made available for lease to community health care providers.
- 13.2 *The commentor asks the location of a table that lists the employees of the Hospitals and the city that these employees are from.* As explained in the staff response as shown in the City Council minutes of July 12, 2010, the requested table is Table 2 on page 8 of 14 in Appendix H of the Transportation Impact Analysis, which was prepared by AECOM. The Transportation Impact Analysis is included as Appendix C of the Draft EIR.
- 13.3 *The commentor asks how many SUMC employees and how many Stanford University employees live on the Stanford campus.* As presented in Appendix L of the Draft EIR, 93 Hospital employees live on the Stanford University campus, which is equivalent to approximately one percent. Table 3.13-8 on page 3.13-12 of the Draft EIR shows the existing employee distribution by zip code and the projected distribution of the SUMC Project at full buildout.

Approximately 1,046 Stanford University employees lived on campus in 2008. This represents slightly less than 10 percent of the total 11,000 campus employees. As of 2006, 1,769 employees, approximately 16 percent, lived in the City of Palo Alto.<sup>1</sup>

*The commentor also asks why the drive-alone rates for University and SUMC employees differ.* As explained in the staff response, the primary explanation for the difference in drive-alone rates for the Hospitals (77 percent) and the University (55 percent) is that the University workers are provided free GO Passes and the hospital workers are not.

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<sup>1</sup> Stanford University Medical Center, correspondence with PBS&J, October 12, 2010.



Minor, Beth | CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

From: Shepherd, Nancy (internal)  
Sent: 10 JUL 12 PM 5:01  
To: Brewer, Cathy; Burt, Patrick; Espinosa, Sid; Holman, Karen; Klein, Larry; Price, Gail; Scharff, Greg; Schmid, Greg; Yeh, Yiaway; Council Agenda Email  
Cc: Minor, Beth; Keene, James; Baum, Gary; Williams, Curtis; Grider, Donna; Antil, Pamela; Emslie, Steve; Silver, Cara  
Subject: RE: CM Shepherd Agenda Questions: Item #4: Stanford Transportation, Climate Change and Air Quality

Thank you for getting these numbers. Does this mean that the University has had a 20% increase in staff (9,156 to 11,000) since 2006. Or does the employee count from Table 2 of page 8 from appendix H in Appendix C not include employees that live on campus.

This makes me interested in more recent data than these transportation analysis offers (2004-2006). Is it available? 14.1

Nancy Shepherd  
Council Member

-----Original Message-----  
From: Brewer, Cathy  
Sent: Mon 07/12/2010 4:23 PM  
To: Burt, Patrick; Espinosa, Sid; Holman, Karen; Klein, Larry; Price, Gail; Scharff, Greg; Schmid, Greg; Shepherd, Nancy (internal); Yeh, Yiaway; Council Agenda Email  
Cc: Minor, Beth; Keene, James; Baum, Gary; Williams, Curtis; Grider, Donna; Antil, Pamela; Emslie, Steve; Silver, Cara  
Subject: CM Shepherd Agenda Questions: Item #4: Stanford Transportation, Climate Change and Air Quality

Good afternoon-

The City Manager asked me to forward responses to Councilmember Shepherd's questions on Item 4 prepared in coordination with Planning staff. Please let us know if you have any other questions.

Thank you-

-----  
Cathy Brewer  
Executive Assistant to the City Manager  
City of Palo Alto  
650-329-2105 (office)  
650-325-5025 (fax)  
cathy.brewer@cityofpaloalto.org

**14. Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010)**

14.1 *The commentor asks if Stanford University had a 20 percent increase in staff from 9,156 to 11,000 since 2006, or if the employee count in Table 2 of the Traffic Impact Analysis' Appendix H (Appendix C of the Draft EIR) do not include employees that live on campus. Stanford University employment has not increased by 20 percent since 2006. Stanford University has 11,000 employees. The 9,156 figure in Appendix H of the Traffic Impact Analysis is the number of Stanford University employees who live in cities on the Peninsula that are served by Caltrain, between San Francisco and Gilroy.*

*The commentor also asks whether more recent transportation data are available. The EIR's analysis is based upon data available at the time environmental review commenced. It would be impractical to collect new data, take new traffic counts, and update the traffic model repeatedly during preparation of the EIR.*

COUNCIL MEETING

7-12-10  
Placed Before Meeting  
CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

4

10 JUL 12 PM 4:29

Minor: Beth

From: Brewer, Cathy  
Sent: Monday, July 12, 2010 4:24 PM  
To: Burt, Patrick; Espinosa, Sid; Holman, Karen; Klein, Larry; Price, Gail; Schaff, Greg; Schmid, Greg; Shepherd, Nancy (internal); Yeh, Yiaway; Council Agenda Email  
Cc: Minor, Beth; Keene, James; Baum, Gary; Williams, Curtis; Grider, Donna; Antil, Pamela; Emslie, Steve; Silver, Cara  
Subject: CM Shepherd Agenda Questions: Item #4: Stanford Transportation, Climate Change and Air Quality

Good afternoon-

The City Manager asked me to forward responses to Councilmember Shepherd's questions on Item 4 prepared in coordination with Planning staff. Please let us know if you have any other questions.

Thank you-

Cathy Brewer  
Executive Assistant to the City Manager  
City of Palo Alto  
650-329-2105 (office)  
650-325-5025 (fax)  
cathy.brewer@cityofpaloalto.org

Question: Can you tell me how many University employees live on campus?

Staff Response: About 1,046 University employees lived on campus in 2008. This represents somewhat less than 10% of the total 11,000 campus employees. Another 1,700 (15%) University employees live in Palo Alto.

15.1

7/12/2010

Minor, Beth

From: Morariu, Kelly  
Sent: Monday, July 12, 2010 3:37 PM  
To: Shepherd, Nancy (internal)  
Cc: Keene, James; Williams, Curtis; Grider, Donna; Antil, Pamela; Emslie, Steve  
Subject: RE: CM Shepherd Agenda Questions: Item #4: Stanford Transportation, Climate Change and Air Quality

Nancy-

Planning is researching this - it is not an easy response. Hopefully, we will be able to get something out this afternoon or at the meeting this evening.

Thanks-  
Kelly

Kelly McAdoo Morariu  
Assistant to the City Manager  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301  
650-329-2452 office  
650-325-5025 fax  
kelly.morariu@cityofpaloalto.org

-----Original Message-----

From: Shepherd, Nancy (internal)  
Sent: Monday, July 12, 2010 2:21 PM  
To: Morariu, Kelly; Council, City; Council Agenda Email  
Cc: Keene, James; Baum, Gary; Silver, Steve; Antil, Pamela; Williams, Curtis; Grider, Donna  
Subject: RE: CM Shepherd Agenda Questions: Item #4: Stanford Transportation, Climate Change and Air Quality

Can you tell me how many University employees live on campus?

I understand about the go-passes.

Nancy Shepherd  
Council Member

-----Original Message-----

From: Morariu, Kelly  
Sent: Mon 07/12/2010 12:52 PM  
To: Council, City; Council Agenda Email  
Cc: Keene, James; Baum, Gary; Silver, Steve; Antil, Pamela; Williams, Curtis; Grider, Donna  
Subject: CM Shepherd Agenda Questions: Item #4: Stanford Transportation, Climate Change and Air Quality

Good afternoon-

The City Manager asked me to forward responses to Councilmember Shepherd's questions on Item 4 prepared in coordination with Planning staff. Please let us know if you have any other questions.

Thank you-

Kelly McAdoo Morariu  
Assistant to the City Manager  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301  
650-329-2452 office  
650-325-5025 fax  
kelly.morariu@cityofpaloalto.org

Question: There is a projected 2022 new jobs created by the SUMC project: Can you confirm that this includes the private sector employees. Private doctors renting office space at Hoover Pavilion, shopkeepers and rented spaces in the Hospital, etc.

Staff Response: The net new employment (projected at 2,242 employees per the Draft EIR) includes private medical doctors who would lease newly created space at SUMC, part-time SUMC employees, contracted nursing services, food prep staff, service staff, security staff, landscaping staff, and other similar staff. Specialized contractors needed on a project-by-project basis are not included in the employment figures.

Question: In the Planning minutes from 6.11, page 11: Mr. Struecker says there is a table in Appendix H that lists the hospital employees and the city they are from. I cannot find that list, can you please direct me to this information with a page number.

Staff Response: The table referred to was Table 2 on page 8 of 14 in Appendix H of the Traffic Report. The Traffic Report is Appendix C of the EIR.

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Staff Response: Very few (0.7%) of the total number of SUMC employees live within the Stanford zip codes. The City does not have zip code data for University employees. The primary explanation for the difference in drive alone trips for the hospital (77%) and the University (54%) is that the University workers are provided free Go Passes and the hospital workers are not.

**15. Councilmember Nancy Shepherd, City Council (letter dated July 12, 2010)**

15.1 *The commentor asks how many Stanford University employees live on the Stanford campus. Approximately 1,046 Stanford University employees lived on campus in 2008. This represents slightly less than 10 percent of the total 11,000 campus employees. As of 2006, 1,769 employees, approximately 16 percent, lived in the City of Palo Alto.*<sup>1</sup>

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<sup>1</sup> Stanford University Medical Center, correspondence with PBS&J, October 12, 2010.



To: Curtis Williams

From: Greg Schmid

Subject: Question on Stanford's DEIR

Date: June 30, 2010

**GOAL:**

To understand the methodologies that are used to generate the traffic impacts of the Stanford University Medical Center in 2025.

**PROBLEM:**

The forecasted traffic data presented in the SUMC's DEIR (Stanford University Medical Center Facilities Renewal and Replacement, Draft Environmental Impact Report, May 2010) seems to challenge common sense. Most of the intersections that are closest to major entry routes to the SUMC show substantial increases in traffic between 2005 and 2025 but the bulk of the increase seems to come from "other baseline traffic volumes" not from the SUMC project. To cite a few examples:

Table 1  
CHANGES IN CRITICAL VOLUME TO CAPACITY RATIO (AM) 2005-2025

INTERSECTION	2005	2025 w/o SUMC	2025 with SUMC	Percent due to SUMC
#10: ECR/Univ-Palm	0.714	1.107	1.165	13
#11: ECR/Embar-Gal	0.729	0.853	0.875	15
#26: Junipero/CampW	0.611	0.687	0.697	12
#30: Santa Cruz/Sand Hill	0.900	1.067	1.120	24
#37: Arboretum/Galvez	0.643	0.772	0.819	27
#42: Alma/Hamilton	0.503	0.590	0.618	24
#59: Durand/Sand Hill	0.315	0.662	0.698	9
#60: Durand/Welch	N/A	0.732	0.772	8

Source: DEIR, Tables 3.4-6 and 3.4-17

If I am reading these tables correctly, this seems to say that the SUMC project will account for only from 8% to 27% of the increased traffic in intersections close to the project. In the most questionable case it seems to say that in intersection #60 (Durand and Welch Road) an intersection that does not exist at the moment and will be opened to serve the SUMC, only 8% of the increase in traffic will be accounted for by the expanded project. Yet the project is expected to increase employment by 24% (DEIR, p 2-48) and patient visits by 41% (DEIR, p 2-47). Parking spaces on-site will increase from 932 to 2,985 (DEIR, p 2-35). Yet all this added traffic activity at this site will account for only a small portion of the increased traffic leading to it. This leaves one with the question--Where does all the other new traffic come from?

SOURCES OF BASELINE TRAFFIC GROWTH—THE PALO ALTO MODEL

The 'increased baseline traffic' numbers were developed using the City of Palo Alto Travel Demand Forecast Model. This model is used to include "all of the growth in population and employment that is projected to occur between Existing Conditions and the year 2025" (DEIR, p 3.4-33). Explicitly, though, the DEIR claims "it does not include the SUMC project". In fact, the Palo Alto Model already includes several assumptions that decrease traffic counts in the noted intersections—Peak Hour Spreading (that pushes some through traffic on El Camino to I280) and Constraints on Gateways (that keeps some traffic from exiting currently crowded Freeway exits).

What, then, accounts for the baseline traffic growth projections at the intersections noted above? The Palo Alto Forecast Model gets its growth forecasts assumptions from ABAG through the VTA. The starting assumption of the Palo Alto model states:

"This model was developed based on the Santa Clara County regional Valley Transportation Authority (VTA) travel demand forecasting model, with Association of Bay Area Government (ABAG) projections of housing and employment data." (DEIR, Appendix C, p 3.1)

ABAG GROWTH MODEL

Thus, it's the ABAG model that provides the crucial assumptions on 'baseline growth' to the Palo Alto Traffic Demand model. But ABAG does not so much forecast as allocate and distribute. Let's look at how the ABAG model generate jobs and housing forecast. There are at least six steps to ABAG's growth projections. These projections start with several state agencies:

1. The Demographic Research Unit of the California Department of Finance has a state-wide extrapolative cohort-based model that forecasts California Population Growth based on existing and projected births, longevity and migration patterns. Their long-term forecasts are based on a continuance of very long term historical trends and forecasts growth much like we have seen in past decades.
2. The California Department of Housing and Community Development takes the DOF's population numbers and calculates the number and types of housing needed statewide to meet the projected growth in population (as well as new jobs to support that increased population). It allocates these statewide totals to regional Councils of Governments (ABAG being the representative Bay Area Council). The allocation formula is based on statewide goals that emphasize existing population concentrations, transportation goals and 'an improved intraregional relationship between jobs and housing'.
3. Given a state-determined share of expected total state-wide population and job growth, ABAG then allocates these future numbers to cities and counties within the Bay Area through the Regional Housing Need Plan (RHNP). The RHNP Allocation process is based upon the current shares of jobs and housing with a housing premium given to communities with current jobs/housing imbalances and transit options.

for those impacts of the SUMC project that are already embedded in the ABAG forecasts and for the premiums on the jobs and housing numbers that ABAG incorporates.”

4. ABAG projects future population, jobs, employed residents and new housing units by census tract. These projections are based on Census Bureau data on existing relationships and extrapolated into the future with modifications to achieve a more equal balance between jobs and housing while absorbing the population growth projected by the state. Thus ABAG is distributing the state's population, jobs and housing forecasts provided by a statewide allocation formula.

5. Palo Alto has a unique role in the allocation process. Stanford University lands are included in Palo Alto's 'sphere of influence'. Because of the surplus of jobs to housing on Stanford lands, Stanford accounts for about 90% of the City's sphere of influence jobs/housing imbalance (approximately 45K of the City's 50K excess of daytime jobs over employed residents are on Stanford owned lands). Thus, Palo Alto's baseline forecasted numbers include growth based on extrapolating from the existing job/housing ratios plus a housing premium to reduce current imbalances, plus a housing premium for its busy CalTrain stops.

6. The result is that the ABAG allocation already have embedded in them an extrapolation of existing relationships—that is, most new ABAG-extrapolated jobs will be in the Stanford core and in the professional and business services that grow with them (using the traditional multiplier effect that regional jobs provide). And most of the new housing will be in direct response to this job growth plus the re-enforced housing growth that comes from ABAG's job/housing imbalance premium.

7. There are two longer-term identified sources for growth in the intersections near the SUMC project—the project itself and the expansion of the main campus toward Sand Hill Road. But since the main campus is under a 'no net new trips' agreement with the county, there should be little traffic generated from that source.

RESTATEMENT OF CONCLUSION

Thus, the SUMC growth and its impact on the community around it is already embedded in ABAG's numbers that underlie the Palo Alto Traffic Model. In fact, the Traffic Model has already been dampened by two key assumptions—the Peak Hour Spreading' and 'the Constraints on Gateways'—that net out some of the impact of SUMC.

This would seem to call for a restatement of the conclusions in the DEIR. The current DEIR concludes that:

"If the following four mitigation measures... were to be implemented together, they would completely mitigate the SUMC Project's intersection impacts during the AM Peak Hour." (DEIR, p. 3.4-65)

Actually it should read:

"If the following four mitigation measure... were to be implemented together, they would completely mitigate the SUMC Project's intersection impacts during the AM Peak Hour **except**



**16. Councilmember Greg Schmid, City Council (letter dated June 30, 2010)**

- 16.1 *The commentor questions the accuracy of the future traffic projections and questions the conclusion that only 8 to 27 percent of the traffic increases are associated with the SUMC Project. Please refer to Master Response 3 for a discussion on background growth and cumulative traffic impacts.*
- 16.2 *The commentor notes that the increased baseline traffic numbers were developed using the City of Palo Alto Travel Demand Forecast Model, but that the SUMC Project was not included in the base model. The commentor questions the method in which Association of Bay Area Governments (ABAG) assumptions have been incorporated into the City's model. Please refer to Master Response 3.*

COUNCIL MEETING

CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

4

7/12/10

Placed Before Meeting  
 Received at Meeting

10 JUL 12 PM 2:42

Minor, Beth

From: Morariu, Kelly

Sent: Monday, July 12, 2010 2:34 PM

To: councilagenda@mail@cityofpaloalto.org; Council, City

Cc: Keene, James; Baum, Gary; Antili, Pamela; Grider, Donna; Silver, Cara; Williams, Curtis; Emslie, Steve

Subject: Stanford University Medical Center DEIR Traffic (Item #4) - Council Questions

Attachments: Clipper and Go Pass Evaluation.pdf; Schmid\_Stanford DEIR traffic June 2010.doc

Good afternoon-

The City Manager asked me to forward responses to questions on Item 4 (the EIR traffic analysis for the SUMC project) from the Mayor and Councilmembers Schmid and Shepherd prepared in coordination with Planning staff. Please let us know if you have any other questions.

Thank you-

Kelly McAdoo Morariu  
Assistant to the City Manager  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301  
650-329-2452 office  
650-325-5025 fax  
kelly.morariu@cityofpaloalto.org

Question: What is the comparative benefit (trip reduction) and cost of using the Clipper multi-transit pass to the GoPass from Caltrain?

Staff Response: The City's traffic consultant has evaluated the two transit pass approaches and has generally concluded that, so long as Caltrain ridership exceeds 10.3% of SUMC employees, the GoPass is the least costly option. The campus use of the GoPass is currently estimated at 15.8%, a figure used in the DEIR as an assumed benefit of the GoPass mitigation. A brief analysis of the two approaches is attached.

Question: The forecasted traffic data presented in the SUMC's DEIR (Stanford University Medical Center Facilities Renewal and Replacement, Draft Environmental Impact Report, May 2010) seems to challenge common sense. Most of the intersections that are closest to major entry routes to the SUMC show substantial increases in traffic between 2005 and 2025 but the bulk of the increase seems to come from "other baseline traffic volumes" not from the SUMC project. To cite a few examples:

Table 1  
CHANGES IN CRITICAL VOLUME/CAPACITY RATIO (AM) 2005-2025

INTERSECTION	2005	2025 w/o SUMC	2025 w/SUMC	Percent due to SUMC
#10: ECR/Univ-Palrm	0.714	1.107	1.165	13
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7/12/2010

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#37: Arboretum/Galvez	0.643	0.772	0.819	27
#42: Alma/Hamilton	0.503	0.590	0.618	24
#59: Durand/Sand Hill	0.315	0.662	0.698	9
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Source: DEIR, Tables 3.4-6 and 3.4-17

If I am reading these tables correctly, this seems to say that the SUMC project will account for only from 8% to 27% of the increased traffic in intersections close to the project. In the most questionable case it seems to say that in intersection #60 (Durand and Welch Road) an intersection that does not exist at the moment and will be opened to serve the SUMC, only 8% of the increase in traffic will be accounted for by the expanded project. Yet the project is expected to increase employment by 24% (DEIR, p 2-48) and patient visits by 41% (DEIR, p 2-47). Parking spaces on-site will increase from 932 to 2,985 (DEIR, p 2-35). Yet all this added traffic activity at this site will account for only a small portion of the increased traffic leading to it. This leaves one with the question--Where does all the other new traffic come from?

[note: the full text of Councilmember Schmid's questions and comments is attached].

Staff Response: The other new traffic generally comes from employment and housing elsewhere in the city, on the Stanford campus, or from "through" traffic with origins and destinations outside Palo Alto. The City's traffic model projects the estimated traffic impacts of future development based on a combination of ABAG forecasts and staff refinements by traffic analysis zones (TAZs). The TAZs are modified by staff based on knowledge of where likely development will occur. About 18% of the employment growth in Palo Alto from 2005-2025 is estimated to be generated by the SUMC project, and none of the housing growth in that period is directly linked to the project. The remaining trips are expected to be generated from a combination of Stanford campus housing and non-residential growth, plus employment growth in the Embarcadero Road East, downtown, Research Park, San Antonio Road/101, and other areas. A substantial amount of growth outside of Palo Alto will also contribute to the traffic numbers. Staff has evaluated the model outputs and determined, for example, that on El Camino Real near Embarcadero approximately 41% of AM peak trips are from outside Palo Alto and are intended for destinations outside Palo Alto. So for north-south connectors such as El Camino Real, Middlefield, and Junipero Serra/Foothill, the impact of the SUMC project at peak hours is minimal (12-15%), while for the streets in closer proximity to the project, the impacts are somewhat greater (25%). Also, while the model constrains some intersections and spreads peak hour traffic, the model output for the 2005-2025 background may still be somewhat conservative (high), since a) the base ABAG forecasts for 2025 represent higher job growth than subsequent 2007 and 2009 ABAG Projections, and b) the model does not reflect the "no new net trips" policy for new development on the Stanford campus (that policy also only applies to inbound AM and outbound PM trips).

Question: What studies have been prepared regarding improvements along Embarcadero Road, particularly between Alma and El Camino Real, that could enhance traffic flow and improve safety? Can we condition the SUMC project to make improvements or to contribute to a study of this corridor or a broader traffic analysis to account for the cumulative land use impacts throughout the city?

Staff Response: Staff notes that no "significant" impacts are identified for Embarcadero Road (after mitigation), so additional mitigations are not required by the EIR. Prior project environmental reviews have recommended improvements to Embarcadero Road or an increased number of turn lanes from El Camino onto Embarcadero, but have not been accepted by Council as they would be inconsistent with Comprehensive Plan policies to protect the residential and neighborhood character of the road. A corridor study of Embarcadero evaluated the potential for roundabouts on the road, but that did not move forward either. This was part of the a series of potential studies of residential arterials (Charleston/Arastradero, Middlefield, etc.),

7/12/2010



but has not been revisited. There is, however a major Caltrans traffic signal upgrade planned for the El Camino/Embarcadero intersection in the next few months. Caltrans will be putting in protected left turns on the Galvez and Embarcadero approaches (all within the existing ROW, no widening). This will result in an 8-phase signal operation that will be more efficient and improve level of service.

**Question:** Is mitigation for traffic impacts in the City of Menlo Park included in our Development Agreement or elsewhere in the DEIR?

**Staff Response:** The physical roadway improvements are contained in Table 3.4-18 on page 3.4-63 to 65 of the DEIR, although some are noted as being "infeasible" mitigation. Menlo Park staff has indicated, however, after the Draft EIR was published, that physical roadway improvements to the three affected Menlo Park intersections (Middlefield/Willow, Bayfront/Willow, and Bayfront/University) as described in the EIR are feasible. If the improvements are made, there would be no intersection impacts in Menlo Park. The Final EIR will reflect this change to require contributions to the City of Menlo Park to assure these mitigation measures are implemented. When projects are located close to another jurisdiction it is common practice for the permitting city (Palo Alto) to impose conditions that would mitigate impacts in neighboring jurisdictions. This is generally done upon request of the neighboring city and upon agreement that the mitigation is feasible. The City has not yet finally determined how these mitigation measures will be implemented. The vehicle for implementing these measures may be as part of the Development Agreement, or may be part of the conditions of approval for a Conditional Use Permit for the hospital (though SUMC opposes the imposition of a CUP process with the zoning).

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**Clipper Transit Card**

The Clipper transit card, formerly known as TransLink, is a 'cash card' that can now be used on Muni, BART, AC Transit, Caltrain, and Golden Gate Transit and Ferry. Eventually, all of the following Bay Area transit agencies will also accept Clipper:

- Alameda/Oakland Ferry, American Canyon Transit, Benicia Breeze, Cloverdale Transit, County Connection, Dixon Transit, Fairfield-Suisun Transit, Healdsburg In-City Transit, Petaluma Transit, Rio Vista Delta Breeze, SamTrans, Santa Clara VTA, Santa Rosa CityBus, Sonoma County Transit, Tri Delta Transit, Union City Transit, Vacaville City Coach, Vallejo Transit, VINE (Napa County), WestCAT, WHEELS and Yountville Shuttle.

Each Clipper transit card is registered to an individual and employees can manage their transit benefits conveniently online with Clipper. For those who receive paper vouchers, commuter debit cards or redeem transit benefits online through another benefits provider, they can use the benefits to add value to the Clipper card.

- Commuter Check®
- WageWorks®
- TranBen®
- TransitCenter®
- eTrac®

It costs \$5 to buy a Clipper transit card. For the initial period starting June 16, 2010, the Metropolitan Transportation Commission will be offering free Clipper cards, suspending the \$5 card acquisition fee, for a limited time. This offer is available for a limited time and may be subject to change without notice.

**Go Pass**

The Caltrain GO Pass is an employer-sponsored annual pass that offers unlimited rides on Caltrain through all zones, seven days a week for one low annual cost. The Go Pass, currently a small sticker affixed to an employee photo ID badge, is purchased by employers for all of their regular, full-time employees. The Go Pass is not available for purchase by individuals and does not cover parking at Caltrain stations or travel on other transit systems. The Go Pass is valid for a calendar year and expires on Dec 31 each year. Participating companies pay an annual fee (currently \$140/year) to provide the Go Pass to each and every regular, full-time employee, regardless of how many will use the transit pass.

**Cost Comparison Scenarios**

The following table compares cost scenarios between the Clipper Transit Card and the GO Pass. The detailed calculations are attached. The following data and assumptions are included in the calculations:

- The future employment base at the hospital is 10,615 employees (provided by Stanford)
- The assumed mode split to Caltrain is 15.8% of employee trips (mode split percentage used in EIR calculations)
- The average number of Caltrain zones traversed by a commuting employee is 2 (captures all commuters from the Millbrae station on the north to the Tamien station on the south)
- Employees work 230 days per year (assumes 10 holidays and 20 vacation/sick days)
- 80 percent of employees work regular weekdays (weekday factor provided by Stanford's traffic engineer)

As shown on the following table and supported by the attached calculations, the annual cost of GO Passes for every employee is \$1,486,000. The annual cost of daily Caltrain ridership for the 15.8% desired mode split to Caltrain is \$2,269,211 assuming all riders buy a monthly pass. This cost would be reduced to \$1,815,369 if only the 80 percent of employees working a typical weekday receive reimbursement of their Caltrain cost.

P:\6027814\_Stanford EIR\600 Technical\450 Reports\Clipper Transit Card.docx



Annual Cost Comparison  
Go Pass or Clipper Card

TDM Measure	Cost Per Year
Go Pass	\$1,486,100
Clipper Card	\$2,269,211
Monthly Pass for Weekday employees only	\$1,815,369

**GO Pass**  
 Cost of 1 GO Pass = \$140 / year today (Caltrain website, 2010)  
 Total # of SUNIC employees at build-out = 10,615  
 Cost of providing GO Pass for ALL employees = \$ (140 x 10615)  
 Annual Cost = \$1,486,100

**Clipper Transit Card**  
 Assume usage = 15.80% of ALL employee  
 # of employees = 15.8% x 10615 = 1677

Assume average travel zones = 2  
 Cost of one-way trip = \$4.25 today  
 Cost of 2-way = \$8.50 (also equivalent of cost of Day Pass)  
 # of work days / year = 230  
 Total cost of using Clipper Card = 1677 x \$8.50 x 230  
 Annual Cost = \$3,278,867  
 (this excludes cost of the Card @ \$5 each)

If monthly pass is used instead of paying per trip, the cost would be reduced.

Cost of monthly pass within 2 zones = \$112.75 today  
 Total cost of using Clipper Card = 1677 x \$112.75 x 12  
 Annual Cost = \$2,269,211  
 (this excludes cost of the Card @ \$5 each)

If reimbursement is only for weekday travellers, which constitutes 80% of the employees,  
 Total cost of using Clipper Card = 80% x \$2,269,211  
 Annual Cost = \$1,815,368.81  
 (this excludes cost of the Card @ \$5 each)

P:\60027814- Stanford EIR\400 Technical\491.TDM\GO Pass v Clipper.xlsx

6/29/2010

**17. Mayor Patrick Burt, Councilmember Greg Schmid, and Councilmember Nancy Shepherd, City Council (letter dated June 30, 2010)**

- 17.1 *The commentors ask for the comparative benefit (trip reduction) and cost of using the Clipper multi-transit pass instead of the GO Pass from Caltrain. Either pass would be expected to attract the same number of ridership if the SUMC Project covered the cost. The decision to ride Caltrain by SUMC Project employees would be based on several factors, such as the cost to the employee, the location of their place of residence, and personal factors such as dropping children off at school on the way to work, etc. An evaluation of the two options shows that as long as Caltrain ridership exceeds 10.3 percent of Hospital employees, the GO Pass is the least costly option. The campus population's use of the GO Pass was 15.8 percent in 2006, a figure used in the Draft EIR as an assumed benefit of the GO Pass mitigation.*
- 17.2 *The commentors question the accuracy of the future traffic projections and questions the conclusion that only 8 to 27 percent of the traffic increases are associated with the SUMC Project. Please refer to Master Response 3 for a discussion on background growth and cumulative traffic impacts.*
- 17.3 *The commentors question what studies have been prepared regarding improvements along Embarcadero Road between Alma Street and El Camino Real to improve traffic flow and safety and if the SUMC Project could be conditioned to study of this corridor. No significant impacts are identified for Embarcadero Road (after mitigation), so additional mitigations are not required by the EIR. Prior project environmental reviews have recommended improvements to Embarcadero Road or an increased number of turn lanes from El Camino Real onto Embarcadero Road, but have not been accepted by City Council as they would be inconsistent with Comprehensive Plan policies to protect the residential and neighborhood character of the road. A corridor study of Embarcadero Road evaluated the potential for roundabouts on the road, but the roundabouts were not implemented. The corridor study was part of a series of potential studies of residential arterials (Charleston/Arastradero, Middlefield, etc), which have not been revisited. There is, however, a major Caltrans traffic signal upgrade planned for the El Camino Real/Embarcadero Road intersection in the next few months. Caltrans will be putting in protected left turns on the Galvez Street and Embarcadero Road approaches (all within the existing right of way, without widening). These improvements would result in an 8-phase signal operation that would be more efficient and improve level of service. The Draft EIR assumed these improvements in its analysis of the Future Conditions both with and without the SUMC Project.*
- 17.4 *The commentors question whether mitigation for traffic impacts in the City of Menlo Park were included in the Development Agreement or elsewhere in the Draft EIR. Please see Staff-Initiated Change 2 for an updated discussion of intersection impacts in Menlo Park*

and corresponding mitigation measures involving fair share contributions towards traffic-adaptive signal technology, pedestrian and bicycle undercrossings, and roadway improvements in Menlo Park (mitigation Measures TR-2.1, TR-2.3, and TR-2.4, respectively). See Master Response 6 for a calculation of fair share contributions that the SUMC Project sponsors will make.

**Ruchita Kadakia**

**From:** Karen Holman [kcholman@sbcglobal.net]  
**Sent:** Tuesday, July 27, 2010 3:38 PM  
**To:** Williams, Curtis; Turner, Steven  
**Subject:** Stanford DEIR comments

Hi, Curtis and Steven.

There were several references to the "future" Stanford Shopping Center expansion in the text of the visual provided in the last Council packet.

18.1  
To what do these comments refer? By extracting the Stanford Shopping Center from the DEIR, is the document not inclusive of all anticipated impacts that are reasonably anticipated? Has consideration of such an expansion been revisited by the applicant?

18.2  
In viewing the pedestrian and bike connections that are indicated in the DEIR, last night, and in the previously referenced inclusion in the last Council packet, are the connections that are represented intended to indicate the applicant's intention to build the connections, or indicate them anticipating that other entities will build them, or indicating they are possibilities with no certainty as to construction? To the extent that these may be considered mitigations to vehicle traffic, this information is relevant.

18.3  
Traffic impacts analysis at the intersections of I-280 at Page Mill and 101 at Oregon appear to be inadequate.  
Traffic especially in the AM peak hours already heavily impacts these intersections.  
Increased traffic impacts due to the SJWC project can be reasonably anticipated and requires further analysis.

Thanks, Curtis.

Karen



**18. Councilmember Karen Holman, City Council (letter dated July 27, 2010)**

- 18.1 *The commentor questions why the Stanford Shopping Center expansion was referred to as a future project in the City Council packet and if it is included in the analysis of the Draft EIR. As explained on pages 3.1-3 to 3.1-4 in Section 3.1, Environmental Analysis, the Stanford Shopping Center expansion is not considered a reasonably foreseeable project in the City and is, therefore, not included in the cumulative project analysis in the Draft EIR. As described in the Draft EIR, the Simon Property Group submitted an application in 2007 to expand the Stanford Shopping Center and construct a boutique hotel.<sup>1</sup> However, this application was withdrawn in April 2009. Given Stanford University's statement that it intends to focus its development efforts on the SUMC Project, and due to the current economic downturn and changing retail trends, the scope of any future development at the Stanford Shopping Center is too speculative to analyze at this point. As stated by Stanford, the Shopping Center expansion is no longer before the City for its consideration and there are no foreseeable plans, proposals, or programs in place that would bring the Shopping Center expansion back to the City for approval at a later time.<sup>2</sup> Therefore, the Stanford Shopping Center expansion is not considered a probable future project for the purposes of the discussion of cumulative impacts, per CEQA Guidelines Section 15130. Nevertheless, some background traffic growth at the Stanford Shopping Center is assumed in the City's traffic model, consistent with regional growth projections.*
- 18.2 *The commentor enquired as to whether the pedestrian and bike connections shown in Figure 3.4-10 on page 3.4-75 of the Draft EIR will be funded and built, and by whom. The new pedestrian and bike connections shown in Figure 3.4-10, within the SUMC Sites, would be funded and constructed by the SUMC Project sponsors as part of the SUMC Project.*
- 18.3 *The commentor states that, with regard to the traffic impact analysis at the intersections of I-280/Page Mill Road and at US 101 at Oregon Expressway, the SUMC Project could reasonably be expected to cause a significant impact on traffic. Both the northbound off-ramp intersection and southbound off-ramp intersection on Page Mill Road at I-280 were analyzed in Section 3.4, Transportation, of the Draft EIR. During the AM Peak Hour, the southbound off-ramp intersection is projected to operate at LOS F and the northbound off-ramp intersection is projected to operate at LOS E. However, the SUMC Project traffic would not result in a significant impact. Therefore, no mitigation is required from the SUMC Project. Traffic signalization would improve traffic operations at these two intersections. The Oregon Expressway and Embarcadero Road northbound ramps from US 101 contain very short weaving sections between the loop ramps. These short weaving*

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<sup>1</sup> Simon Property Group, "Simon Properties – Stanford Shopping Center Expansion Application," August 20, 2007.

<sup>2</sup> Barbara Schussman, Bingham McCutchen LLP, Letter to Cara Silver, Senior Assistant City Attorney, April 16, 2009.

segments are a result of the outdated design of the interchange. The SUMC project is expected to add approximately 55 AM Peak Hour vehicle trips to this interchange without transportation demand management (TDM) mitigation and less than 10 vehicle trips with TDM mitigation (see Mitigation Measure TR-2.3, as revised in Master Response 1). While additional traffic would contribute to the poor weaving through the interchange, no improvement has been proposed to advance the traffic operations through this interchange. Therefore, there is no place for the SUMC Project sponsor to contribute a fair share contribution and, even if such an improvement were proposed, requiring the SUMC Project sponsors to fund the entire improvement with very minor traffic volume increases is beyond reasonable expectations for a single project.

**Letter 19**

**Ruchita Kadakia**

**From:** Karen Holman [kcholman@sbcglobal.net]  
**Sent:** Tuesday, July 27, 2010 4:45 PM  
**To:** Turner, Steven  
**Cc:** Williams, Curtis  
**Subject:** Stanford DEIR

I believe this has been previously asked by others, but

Housing analysis:

Can the DEIR assumptions of housing demand resulting from the SUMC project  
a) be practically based on a 10% Palo Alto residency as a predictor?  
b) when ABAG does not use such calculations, but rather its own criteria as to jobs  
creation and housing demand?  
c) accurately analyze the physical environmental impacts of housing development in Palo  
Alto proper? 19.1

The analysis of amount of fill and distribution of fill from the project are under estimated. 19.2

There appears not adequate analysis of the toxicity levels of excavated fill  
disposal/relocation. 19.3

Best,

Karen

**19. Councilmember Karen Holman, City Council (letter dated July 27, 2010)**

- 19.1 *The commentor questions the housing demand assumptions.* Please see Master Response 7 for a discussion of the Draft EIR's methodology of estimating the location of future employees.

The assumption that eight percent of SUMC employees would seek to live in Palo Alto is based on historical evidence, comprised of SUMC's data on the residential distribution of their employees. As indicated on page 3.13-11 of the Draft EIR, the distribution of housing for SUMC Project employees is based on existing SUMC employee zip code data provided by the SUMC Project sponsors (see Appendix L of the Draft EIR).<sup>1</sup> No basis for a ten percent Palo Alto residency has been provided by the commentor; as such, the eight percent assumption is appropriate. Also, see Master Response 7 for a discussion of the rationale for developing the criteria for determining the impact on the City's jobs to employed residents ratio.

Accurately analyzing the physical environmental effects of housing development in Palo Alto would require an identification of the housing sites, housing density at each site, and building mass of the housing at each site. Please see Master Response 7 for a discussion of Mitigation Measure PH-3.1. The 70 housing units at the Pasteur Drive/Sand Hill Road site under the Village Concept Alternative would fall within Palo Alto limits. These 70 units have been analyzed and environmentally cleared under the Sand Hill Road Corridor Projects EIR.<sup>2</sup>

- 19.2 *The commentor states that the amount and distribution of fill is underestimated.* The Draft EIR does not provide a quantified amount or distribution of fill under the SUMC Project. Sections 3.10, Geology, Soils, and Seismicity, and 3.11, Hydrology, of the Draft EIR identify the various federal, State, and local regulations that would apply to excavated soils and fill. As indicated in these sections, the required compliance with these regulations would ensure that impacts associated with excavated soils and fill would be less than significant.

- 19.3 *The commentor requests information on the toxicity levels of excavated soil and the disposal location for such soils.* Please see pages 3.12-10 through 3.12-20 of the Draft EIR for a discussion of the known levels of contamination based on previous site sampling conducted on the SUMC Sites. As noted on page 3.12-5 of the Draft EIR, the properties and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. As described on pages 3.12-40 through 3.12-41 of the Draft EIR, implementation of Mitigation Measures HM-3.2 through HM-3.4 would

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<sup>1</sup> Stanford University Medical Center, Stanford University Medical Center Facilities Renewal and Replacement Project Application, August 2007, as amended; Tab 5, Figure 5-5.

<sup>2</sup> City of Palo Alto, *Sand Hill Road Corridor Projects Final Environmental Impact Report*, certified by the City of Palo Alto, July 1998.

remediate the potentially contaminated soils at 703 Welch and the Hoover Pavilion Site. Specifically, Mitigation Measure HM-3.2 calls for conducting soils testing for mercury, silver, and pH levels in the 4- to 9-square-foot area near every discharge point from the building located at 703 Welch. Mitigation Measure HM-3.2 calls for excavating, removing, and transporting contaminated soil to an approved disposal site (which would be in compliance with Occupation Safety and Health Administration [OSHA]). The SUMC Project sponsors would consult with the Santa Clara County Department of Environmental Health (DEH) on all results and remediation actions.

Additionally, Mitigation Measure HM-3.3 calls for conducting a soil excavation program at the Hoover Pavilion Site. Specifically, under Mitigation Measure HM-3.3, a qualified consultant would remove all underground storage tanks from the property; conduct additional soil sampling to the extent necessary; if warranted, excavate and remove contaminated soils; and prepare a Site Health and Safety Plan. Please refer to Response 2.2 for an additional discussion of these mitigation measures.



July 27, 2010

Steven Turner  
Department of Planning and Community Environment

Re: **Stanford University Medical Center Facilities Renewal and Replacement Draft Environmental Impact Report, SCH #2007082130**

Dear Steven,

The Committee for Green Foothills ("Committee") submits the following comments on the Stanford University Medical Center Draft Environmental Impact Report ("SUMC DEIR", or "DEIR").

**General Comments:**

**Length of review period.** We are aware of complaints that the review period for this project is taking too long and is too close to the statutory deadline for seismic upgrades, and therefore further review should be truncated, no new mitigations should be requested, and Stanford's project should be approved without modifications. These objections fail to account for two reasons that are related to Stanford's own actions.

20.1

First, Stanford began the process much later than other hospital systems like the Santa Clara Valley Medical Center. This strategy by Stanford, of beginning a process late and then claiming their proposal needs to be approved as is because there's no time to change it, is an oft-used procedure. Stanford used the identical strategy for obtaining approval of its Sustainable Development Study from Santa Clara County, without incorporating any changes suggested by Palo Alto. Giving into this strategy is self-defeating, so neither the City nor the County should let Stanford's delay function as a reason for giving in to its demands.

Second, the review was delayed for a period when Stanford was given unannounced access to preliminary versions of the DEIR. This access contravenes a statement by the City several years earlier (which was the last that we had heard from the City) that the City would not share preliminary versions of DEIRs with applicants, a practice that biases the review process and gives applicants inappropriate opportunities to influence what is supposed to be a neutral evaluation. While exactly what happened is unclear, it appears Stanford took advantage of its access to argue for changes in the DEIR that delayed its publication. Again the fault for delay lies with Stanford (although also in part with the City for its mistaken decision). These delays do not justify short-changing environmental review.

20.2

**DEIR inadequately addressed issues raised in our scoping letter.** On October 1, 2007, the Committee submitted scoping comments for the DEIR (attached). Several of our comments, reproduced below, have not been addressed adequately:

20.3

- Any relaxing of existing zoning standards will violate thresholds for environmental significance that the standards are meant to protect, unless compensatory environmental mitigation is required. This is especially true given the large size of the project. For example, easing density restrictions should be compensated with open space protection.

20.4

- Increased building height and density should be compensated with open space protection. Decreasing views of hillsides and of natural areas are visual impacts that can be appropriately compensated for by open space protection.

20.5

- Increase utilization of recreational resources must be analyzed in the EIR for direct, indirect, and cumulative impacts. The City should compare the analysis used for the Stanford GUP in Santa Clara Clount's EIR for comparison. Increased utilization is a significant impact unless mitigated.

20.6

- The impact on housing will be significant unless mitigated and must be analyzed. The impact will also affect open space and traffic, because if new housing is not constructed by Stanford, it will be constructed mostly in Central Valley and elsewhere, with workers commuting in on area highways. The City must do its own calculations about the number of jobs generated by the amount of space created. Secondary (off-site) economic impacts must also be considered in determining the net demand for housing created by this project.

20.7

- All newly-created housing demand should be fully mitigated with housing creation that matches the income level of housing demand generated.

20.8

- Any analysis that concludes a "no net increase" mitigation standard for transportation is not feasible, must also determine why it is feasible for the much larger Stanford GUP expansion but not for this project.

20.9

**Raising height limits, visual impacts, and the recreational impacts justify and require open space mitigation.** The Committee disagrees that simple compliance with undefined ARB recommendations for final design (DEIR at S-28) will suffice to convert an admittedly-significant impact before mitigation into one that is less-than-significant. The loss of open views and a "big sky" means that the ability to travel around the City and surrounding area and not find it dominated by structures is reduced. An appropriate mitigation for this impact is to secure nearby open space, and Stanford could appropriately do that by providing open space access or paying funds that could be used to secure open space access.

20.10

Similarly, increased recreational use in an area that the DEIR acknowledges has insufficient parkland (DEIR at 3.14-8) is a significant impact. The analysis of employee use fails to include overall increased population pressure, as the people who will be brought to work at SUMC will have to live somewhere with their families, despite the City's disinterest in requiring housing as part of the project. The failure to account for housing impacts means payment of the Community Facility Fee for non-residential development is insufficient to fully mitigate the project's impacts. Even if these people cannot live in Palo Alto, living elsewhere means they will place pressure on recreational uses elsewhere. That effect on recreational uses elsewhere is unanalyzed, as is the lost opportunity of Palo Alto residents to use these out-of-city facilities, thereby placing more pressure on City facilities. Finally, the analysis fails to consider the recreational impacts to areas immediately outside of Palo Alto such as the main campus area of Stanford and in San Mateo County, where the Community Facility Fee would not provide mitigation.

20.11

The cumulative recreational impact of this project together with other recreational population pressures is significant. Combined with visual impacts, the DEIR should require mitigation that creates recreational access to open space to mitigate the lost open sky and diminished recreational opportunities. One possibility which was included in the Stanford GUP DEIR was the construction of two trails from the main campus into the Foothills. The same could be done in this case, either from SUMC or from portions of the main campus easily accessible from SUMC into the Foothills. Alignments of the C1 Trail near the north side of Stanford Foothills and outside of the golf course would be ideal, or alternative versions of the S1 Trail that run along the Stanford Foothills and eventually connect to the trail under construction could work as well.

20.12

An alternative to dedication of a trail is payment of equivalent funds into a grant program that would mitigate Stanford's recreational impacts. Stanford has essentially agreed to do just that regarding its proposed sidewalk expansion along Alpine Road. If San Mateo County continues to reject the sidewalk expansion as it has, then Stanford will pay the money it would have spent on that massive project into a fund run by Santa Clara County Parks Department that could mitigate the recreational impacts of the Stanford GUP. Given that was Stanford's own agreement with the County, it should meet the same standard with the City.

Attachment: Letter of October 1, 2007, from Committee for Green Foothills to City of Palo Alto

**20.13** **Transportation issues.** Given the conclusion that transportation, air quality, and climate change impacts will be significant, the DEIR should have included either of the following feasible mitigations to reduce those impacts: 1. a No-Net-New Trips standard, based on the standard used in the Stanford County GUP EIR, requiring Stanford to either avoid the creation of net new trips or install the traffic mitigations required in this DEIR; or 2. the equivalent of No-Net-New Trips that would require SUMC to match every incentive and disincentive used by Stanford in the core campus, but without requiring actual measurement of traffic. This would not exempt Stanford from traffic mitigations required in the DEIR. This second alternative would adjust over time, "ratcheting" up to match changes in the program used on the core campus to avoid increased trips.

In developing a No-Net-New Trips standard, patient trips should also be taken into account, and Stanford should provide similar incentives to patients and guests to avoid increased trips. If this is seen as infeasible, however, the no net new trips standard could exempt patients and guests and still provide partial mitigation to the significant impacts from this project.

**20.14** It should be noted that one traffic mitigation, improvements to Intersection #3 (El Camino/Ravenswood) (DEIR at 3.4-61), appears to be at least partially the same listed mitigation as that found in the Stanford GUP DEIR to mitigate for that separate and different Stanford project (Stanford GUP DEIR at 4.4-98). While the SUMC DEIR does not count the improvement of Intersection #3 towards the post-mitigation conclusion (DEIR at 3.4-65), it does count it here as potential mitigation for this project, and that could be double-counting of a mitigation that will not be effective because it could be "used up" for another Stanford project. It would be disturbing and inadequate if this same intersection keeps getting listed in still more environmental reviews as potential mitigation for still more projects. Similarly, Intersections #10, #18, and #23 are listed in both DEIRs, although they raise fewer issues as they are not considered feasible. The failure to discuss the potential double-counting in the DEIR is disturbing.

**20.15** The DEIR states "The three feasible intersection improvements in Table 3.4-18" were combined with other mitigations to assess overall impact mitigation. In fact, only two feasible improvements are listed in Table 3.4-18. If the overall analysis counted on a third intersection mitigation that is now only considered "Potentially Feasible" or "Not Feasible", then the analysis exaggerates the effectiveness of the mitigation.

**20.16** The impact of the SUMC expansion to traffic on Alpine Road between Juniper Serra and Highway 280 is likely to be especially severe. For this reason as well, a No-Net-New Trips standard should be applied.

**Additional comments:**

**20.17** The Tree Replacement Mitigation Measure BR-4.5 should emphasize the use of native trees and that provide maximum benefits to wildlife as replacement trees for the ones that would be removed if this project is approved.

**20.18** PH-1 impact analysis states the percentage of regional housing demand from the project is relatively small. DEIR at S-85. Given the tremendous total housing demand on this area, the cumulative is considerable and should be mitigated by the provision of on-site housing or paying into a fund for the construction of housing, especially housing that is affordable according to the type of demand generated by the new jobs at SUMC. Mitigation Measure PH-3.1 should be mandatory and should expressly apply to the SUMC project.

Please contact me with any questions.

Sincerely,



Brian A. Schmidt  
Legislative Advocate, Santa Clara County





October 1, 2007

Steven Turner  
City of Palo Alto

**Re: Scoping comments for the Stanford Medical Center and Shopping Center Expansion EIR**

Dear Steven:

The Committee for Green Foothills submits the following comments for scoping the EIR for the Stanford Medical Center and Shopping Center:

- The purpose of the approval for this project must be defined by the City, not by the applicant. If the purpose that the permissions the applicants seeks (such as improving medical care) can be done in a way that the applicant does not seek, that option remains within the purpose of the City. Legally, the applicant cannot define the purpose in a way that artificially narrows the scope of the project and its alternatives. Because the City is deciding whether to approve the agreement, it has to define the purpose.
- The EIR must consider a “no expansion/seismic only upgrade” alternative for the Medical Center.
- A “no increase in medical office space” alternative should be included. Conditions should be placed defining what type of activity or organization may use “medical office space.”
- Any relaxing of existing zoning standards will violate thresholds for environmental significance that the standards are meant to protect, unless compensatory environmental mitigation is required. This is especially true given the large size of the project. For example, easing density restrictions should be compensated with open space protection.)
- Increased building height and density should be compensated with open space protection. Decreasing views of hillsides and of natural areas are visual impacts that can be appropriately compensated for by open space protection.
- Increase utilization of recreational resources must be analyzed in the EIR for direct, indirect, and cumulative impacts. The City should compare the analysis used for the Stanford GUP in Santa Clara Clount’s EIR for comparison. Increased utilization is a significant impact unless mitigated.
- The EIR process should analyze the phasing and mitigation monitoring used in the Stanford GUP EIR to avoid similar problems. For the Stanford GUP, six years after the impacts have occurred, the promised trails have not yet been constructed. Mitigations should not just be begun before the impacts have occurred, they should be completed, or at least a schedule established with clear stop dates.
- The hospital opening should be in phases, with none the medical office space opening until all environmental mitigations have been completed with. This will make mitigation monitoring and enforcement more credible if it stops use of medical office space until environmental conditions are complied with as opposed to stopping use of the hospital.
- Any net increases in greenhouse gas emissions are cumulatively significant.
- “Green building” standards should be required.

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20.19  
Cont

- The impact on housing will be significant unless mitigated and must be analyzed. The impact will also affect open space and traffic, because if new housing is not constructed by Stanford, it will be constructed mostly in Central Valley and elsewhere, with workers commuting in on area highways. The City must do its own calculations about the number of jobs generated by the amount of space created. Secondary (off-site) economic impacts must also be considered in determining the net demand for housing created by this project.
- All newly-created housing demand should be fully mitigated with housing creation that matches the income level of housing demand generated.
- Any analysis that concludes a “no net increase” mitigation standard for transportation is not feasible, must also determine why it is feasible for the much larger Stanford GUP expansion but not for this project.
- Significant and unavoidable impacts must be compensated for in a comparable manner. For example, the visual impact of Medical Center skyscraper will be unavoidable, but rather than simply accept that as the cost the community must bear, it should be compensated for with open space protection where buildings do not predominate views.
- Eliminate Stanford’s “plateau bargaining” through the use of binding promises in the process. For example, Stanford has made promises on where it would agree to place the S1 Trail on its property, and then after much work had been done by the County so it could accept the offer, Stanford reneged on the promises unless dramatic new concessions were added. This problem can be stopped by spelling out in advance when and which parts of a promise are binding.

Please contact us if you have any questions.

Sincerely,

Brian A. Schmidt  
Legislative Advocate, Santa Clara County

20.19

**20. Committee for Green Foothills, Brian A. Schmidt (letter dated July 27, 2010)**

20.1 *The commentor questions the reasons why the publication of the Draft EIR was delayed.* As stated by the commentor, the publication of the Draft EIR was delayed; however, this was due to several unanticipated factors rather than the SUMC Project sponsors' noncompliance, as suggested by the commentor. Reasons for the delay include site plan modifications and application updates by the SUMC Project sponsors in order to fulfill Office of Statewide Health Planning and Development (OSHPD) requirements; withdrawal of the Stanford Shopping Center Project from the analysis of the Draft EIR; and changes in the Traffic Model. This comment does not concern the adequacy of the Draft EIR analysis or the SUMC Project's compliance with CEQA. Please refer to Master Response 11 for a detailed description of the City's review process and the next steps in the EIR review.

20.2 *The commentor states additional delays were the result of the SUMC Project sponsors' review of preliminary versions of the Draft EIR.* The SUMC Project sponsors were initially allowed to review administrative drafts of the Draft EIR in order to provide technical expertise. The City permitted this review in recognition of the complexity of the SUMC Project and the need to verify the accuracy of information regarding hospital functions and the requirements of SB 1953. Although the SUMC Project sponsors had access to preliminary drafts, the public was also able to review the document prior to its publication. An early version of the Draft EIR was available in 2009 at the Palo Alto City Library upon request. After early 2009, neither the SUMC Project sponsors nor the public had access to the updated drafts of the document until publication of the Draft EIR in May 2010. Preliminary review by the SUMC Project sponsors and the public did not cause additional delays in the release of the Draft EIR.

20.3 *The commentor states that the Draft EIR does not adequately address issues raised in their scoping letter submitted October 1, 2007.* As discussed in Section 1 of the Draft EIR, Introduction, on page 1-3, the City provided a 41-day comment period for review of the Notice of Preparation (NOP). All written comments were reviewed and the Introduction to each environmental topic within Section 3 of the Draft EIR provides a summary of the relevant NOP scoping comments. All comments were considered in the analysis of each topic.

*The commentor also observes that their NOP comment regarding existing zoning standards was not addressed in the Draft EIR.* As noted on page 3.2-1 of the Land Use Section of the Draft EIR, "applicable land use issues that were identified during the scoping period pertain to the modification of existing zoning and land use designations and to mitigation of the environmental impacts that might result from such actions. These issues are considered in this section."

The analysis in the Land Use Section notes that the SUMC Project would conflict with the existing development restrictions, such as floor-area-ratio (FAR) and height limits. However, the proposed zoning changes would resolve the potential zoning inconsistencies associated with the SUMC Project. As noted by the commentor, these changes to existing zoning could have impacts, particularly to visual quality. As such, Mitigation Measure VQ-2.1, presented in Section 3.2, Visual Quality, would mandate compliance with the City's Architectural Review process. As stated on page 3.3-39, the Architectural Review Board (ARB) shall assess proposed building heights, massing, and siting of buildings and structures. Any recommendations made by the ARB with respect to the design of the SUMC Project, as adopted by the Council or Planning Director, would be implemented by the SUMC Project sponsors.

20.4 *The commentor requests that building height and density increases, along with decreasing views of hillsides, should be compensated with open space protection.* As stated above, the significant impact related to building height and density would be mitigated to a less-than-significant level by Mitigation Measure VQ-2.1, as discussed on page 3.3-39 of the Draft EIR. The City's Architectural Review process would address, among other factors, whether the SUMC Project has a coherent composition and whether its bulk and mass are harmonious with surrounding development. The City Council will then determine if the design promotes consistent transitions in scale and character and that the amount and arrangement of open space are appropriate to the design and function of the structures. Mitigation Measure VQ-2.1 would also address impacts on hillside views from local streets and other vantage points, as discussed on pages 3.3-40 through 3.3-42. Mitigation Measure VQ-2.1 would reduce visual quality impacts to less than significant. Additionally, open space protection in areas other than the SUMC Sites would not further mitigate the increased density impacts to the SUMC Sites. Protection or development of off-site open space would not alter the visual character of the SUMC Sites and would, therefore, have no mitigating effect on the height of the buildings on the SUMC Sites.

In addition, as stated on page 3.14-9 of the Public Services Section, the SUMC Project proposes to expand the existing open space at the SUMC Sites. The open space would include walkways, open plazas, and landscaped areas for employees, patients, and visitors. The SUMC Project would also incorporate new sections of open space and small grass fields, increasing pervious surfaces by 23 percent over existing conditions. Several of these proposed open spaces would be visible from public areas, such as the landscaped gateway at the corner of Welch Road/ Quarry Road, the LPCH/Shopping Center connection along Welch Road, the Hoover Pavilion entry lawn, and the refurbished Pasteur Mall. In addition, the SUMC Project sponsors would provide access to Stanford University's fields for SUMC employees. This access would offset the potential deterioration new SUMC employees could cause on City parks. Therefore, even though the SUMC Project would increase height and bulk at the SUMC Sites, additional open space would be included and access to other open space areas would be available.

20.5 *The commentor requests an analysis of increased utilization of recreational resources.* Impacts on park and recreational facilities are discussed in Section 3.14, Public Services. As stated on pages 3.14-17 through 3.14-18, per the City’s Municipal Code, Section 16.58, the SUMC Project would be required to pay a City “Community Facility Fee”<sup>1</sup> to mitigate potential park impacts. In addition, as explained above under Response 20.4, the SUMC Project would supply ample open space amenities for its employees and patients. Because open space amenities are currently provided at the SUMC Sites and would be expanded as part of the proposed facilities, it is not expected that a large number of SUMC employees and patients would use nearby parks. Therefore, with the required City Community Facility Fee, impacts on parks would be less than significant. Refer to Impacts PS-4 and PS-5 in Section 3.14 of the Draft EIR for more details regarding SUMC Project impacts on parks and Impact PS-9 for the cumulative impacts on parks and recreational facilities.

*The commentor also requests a comparison of the analysis used in the Stanford University 2000 Community Plan and General Use Permit (CP/GUP) regarding recreational areas.* Comparing the impacts of the SUMC Project on park facilities to the impacts of the CP/GUP is unwarranted. As stated on page 4.2-23 of the CP/GUP Final EIR, “the CP/GUP will reduce the availability of recreational facilities while increasing the demand for such facilities.” As explained in the CP/GUP Final EIR, the CP/GUP proposes development of housing at several sites that are currently used for recreation. Therefore, construction of the housing under the CP/GUP would displace these recreational areas. In addition, because the CP/GUP includes housing, the residential population in the area would increase, thereby contributing to deterioration of nearby parks.<sup>2</sup> Since the SUMC Project does not include the construction of housing and would not displace existing or proposed parks, the impacts of the SUMC Project are not similar to the CP/GUP and therefore, further comparison is not warranted.

20.6 *The commentor requests an analysis of impacts on housing.* Please see Master Response 7. The SUMC Project sponsors are not proposing to construct housing as part of the SUMC Project; as such, the SUMC Project would not directly result in environmental impacts due to housing construction. As indicated in Section 3.13 of the Draft EIR and in Master Response 7, the indirect housing demand due to new SUMC employment would be within housing growth projections in the region, and as such would be less than significant. The distribution of indirect housing demand in Table 3.13-8 of the Draft EIR is based on historical evidence, comprised of SUMC’s data on the residential distribution of their employees. As indicated on page 3.13-11 of the Draft EIR, the distribution of where SUMC Project employees would live is based on existing SUMC employee zip code data

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<sup>1</sup> The Community Facility Fee is a mix of the Park fee (\$4.234 per net new square foot) + Community Center fee (\$0.239 per net new square foot) + Libraries fee (\$0.228 per net new square foot). Hence, the Parks line item of the fee is just part of the Community Facility fee.

<sup>2</sup> County of Santa Clara, Stanford University Draft Community Plan and General Use Permit Application, Final Environmental Impact Report, Certified by the Santa Clara County Board of Supervisors, December 2000.

provided by the SUMC Project sponsors (see Appendix L of the Draft EIR).<sup>3</sup> Also, housing to accommodate additional demand throughout the region would be subject to separate environmental review and mitigation, as warranted. Lastly, to state that housing due to the SUMC Project would be constructed mostly in the Central Valley is speculative. As indicated in Table 3.13-8, a small 4.8 percent of new SUMC employees would demand 64 housing units outside the San Francisco Bay Area.

Economic impacts due to housing demand is not an environmental impact that requires discussion under CEQA. Please see Master Response 10 for a discussion of non-CEQA issues.

20.7 *The commentor requests mitigation for housing demand.* Please see Master Response 7 for a discussion of housing demand due to the SUMC Project.

20.8 *The commentor refers to Stanford's "No Net Increase" mitigation standard for transportation, and asks why it was considered feasible for the CP/GUP but not for the SUMC Project.* Please see Master Response 2 for a discussion of imposing a No Net New Trips requirement. Also, per CEQA Guidelines Section 15126.4(4)(B), mitigation measures must be roughly proportional to the impacts of the project. The standards of significance applied in the transportation analysis are listed on Draft EIR pages 3.4-30 through 3.4-32. Based on these criteria, there could be some increase in traffic that would not result in a significant impact. As such, requiring No Net New Trips as a mitigation measure would be beyond the requirements of CEQA. See Staff-Initiated Change 2, which provides the revised analysis of level of service (LOS) impacts, and the updated mitigation measures for significant LOS impacts. The mitigation measures identified in Staff-Initiated Change 2 are appropriate.

20.9 *The commentor expresses concern about the height of the SUMC Project towers and the associated visual impacts.* Please refer to Response 20.4, above.

*The commentor also requests open space mitigation for visual impacts.* Although not proposed as a mitigation measure because it is required for all projects in the City of Palo Alto per the Municipal Code, the Community Facility Fee would be required. As explained above under Response 20.5, the SUMC Project sponsors would be required to pay these fees to reduce park impacts. In particular, the Community Facility Fee would go towards new neighborhood and district parklands acquisition, community center development, and the local library system. Per the fee rates, the SUMC Project sponsors

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<sup>3</sup> Stanford University Medical Center, Stanford University Medical Center Facilities Renewal and Replacement Project Application, August 2007, as amended; Tab 5, Figure 5-5.

would contribute approximately \$6.2 million to this fee, \$5.6 million of which would be dedicated to the parks portion.<sup>4</sup>

20.10 *The commentor states that the analysis of the park and recreational impacts from the SUMC Project does not take into account population growth.* Increases in residential population within the City due to the SUMC Project are considered to be a tertiary impact. That is, the SUMC Project would directly increase employment, which is expected to generate housing demand, and thus induce more housing, a secondary impact. These additional housing units would generate a greater demand for parks, a tertiary impact. Tertiary impacts are generally acknowledged in the Draft EIR; however, these impacts would not occur as a direct impact from the SUMC Project. The new residential development that may indirectly result from the increase in employment under the SUMC Project would be subject to separate CEQA review and would be required to pay separate Community Facility Fees.

*The commentor also states that the Draft EIR does not include an analysis of the parks and recreational impacts in adjacent cities and/or San Mateo County.* As explained above, while the Draft EIR acknowledges the potential effects of growth induced by the SUMC Projects, the impacts analysis in the Draft EIR focuses on the direct impacts of the SUMC Project. It is anticipated that increased employment at the SUMC Sites would result in increased use of existing nearby neighborhood parks, particularly during the lunch hour or before or after shifts. However, due to various shifts, employees would have lunch breaks at different times and only a fraction of the daytime employees would potentially use park grounds during lunch or after work. This type of use – walking or eating lunch – would not result in substantial deterioration of park facilities. In addition, due the limited time during their breaks, it is unlikely that the employees would travel to adjacent cities to use the park facilities. Therefore, the increase in park use by new SUMC employees would not be such that it would result in substantial deterioration of park facilities in adjacent jurisdictions.

Although the SUMC Project sponsors would allow access to open spaces and fields at the Stanford University campus, the increase of 2,242 employees at the SUMC Sites is not expected to significantly impact these areas. In addition, visitors and patients are not expected to utilize nearby parks since their visits to the SUMC Sites would be focused on the healthcare services offered by the SUMC Project. Since there is existing ample open space at the Stanford University campus and additional open space is proposed under the SUMC Project, an increase of employees would not result in deterioration of these resources, whether in the City of Palo Alto or neighboring jurisdictions.

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<sup>4</sup> The Community Facility Fee is a mix of the Park fee (\$4.234 per net new square foot \* 1,311,411 square feet = 5,552,514 = ~\$5.6 million) + Community Center fee (\$0.239 per net new square foot \* 1,311,411 square feet = \$313,427) + Libraries fee (\$0.228 per net new square foot \* 1,311,411 square feet = \$299,001) = \$6,164,943 = ~\$6.2 million.



20.11 *The commentor suggests mitigation from the CP/GUP EIR to mitigate cumulative park impacts. As discussed on pages 3.14-24 through 3.14-25, under Impact PS-9 of the Public Services section, cumulative growth in the City would necessitate acquisition or development of new parklands. However, the contribution of the SUMC Project to this cumulative impact would be less than cumulatively considerable. Since the SUMC Project and all other projects proposed within the City would pay a Community Facility Fee, impacts are not considered to be significant.*

As explained under Response 20.5, a comparison to the CP/GUP EIR is not warranted. Unlike the CP/GUP, the SUMC Project would not include the development of housing units. The increase in population due to the housing units proposed under the CP/GUP would have a significant direct impact on parks and the development of new housing would convert existing parks and open spaces, thereby reducing park acreage in the area. Because of these significant impacts resulting from the CP/GUP, additional mitigation was proposed to lessen the impacts, including two trails. However, since the SUMC Project would have less-than-significant impacts on parks with the payment of the Community Facility Fee, the SUMC Project would not be subject to additional mitigation measures.

20.12 *The commentor states that an alternative to dedicating trails as mitigation, payment of equivalent funds would mitigate impacts. Please refer to Responses 20.5 and 20.11. As explained above, the payment of the Community Facility Fee would mitigate park impacts. Therefore, no other mitigations or fees are required.*

20.13 *The commentor states that the Draft EIR should have included a No Net New Trips standard. Please see Response 20.8 and Staff-Initiated Change 2 for a discussion on Changes to Intersection Conclusions, and Master Response 2 for the feasibility of imposing a No Net New Trips requirement.*

20.14 *The commentor states that the intersection of El Camino Real and Ravenswood Avenue (intersection #3) is being double counted as mitigation in the CP/GUP and the current Draft EIR for the SUMC Project. The commentor notes that the mitigation is required for another project and there are three other intersections that are common to both environmental documents. Many times the traffic analyses for projects consider identical intersections and arrive at the same mitigation for those projects. When a project is required to fund its fair share of an improvement to mitigate the impact, it only covers a percentage of the total cost. As other projects contribute, and when full funding is available, the improvement can be made. Therefore, the SUMC Project EIR is not double counting or using mitigation from a prior project. Also, Stanford did not make the intersection improvements noted in the CP/GUP Draft EIR. Instead, the County imposed a No Net New Trips policy that stated that the physical improvements to intersections could be deferred as long as traffic monitoring determined that Stanford was not increasing their traffic levels. In any event, as explained in Staff-Initiated Change 2, physical roadway*



improvements are not needed at this intersection to reduce SUMC Project impacts to a less-than-significant level.

- 20.15 *The commentor states that there appears to be an error on page 3.4-65 of the Draft EIR. The Draft EIR refers to “three feasible intersection improvements.” This is because several of the other intersections listed on Table 3.4-18 would not experience a significant impact due to the SUMC Project after implementation of traffic adaptive signal technology and an enhanced TDM program. Please see Staff-Initiated Change 2 for a revised discussion of roadway improvements and intersection LOS impacts.*
- 20.16 *The commentor states that the impact of the SUMC expansion to traffic on Alpine Road between Junipero Serra Boulevard and I-280 is likely to be especially severe, so a No Net New Trips standard should be applied. Please see Response 20.8, above, and Staff-Initiated Change 2 for a more detailed discussion on changes to intersections, and Master Response 2 for the feasibility of imposing a No Net New Trips requirement.*
- 20.17 *The commentor requests that Mitigation Measure BR-4.5 on page 3.9-28 of the Draft EIR include the replacement of removed trees with native trees. Tree replacement pursuant to this measure will be consistent with the City of Palo Alto Public Works Department Street Tree Management Plan. As such, street tree replacement would include native species to the maximum extent possible and appropriate species include California black oak, red maple, toyon, and flax leaf paperbark.*
- 20.18 *The commentor states that regional housing demand would be great. As shown in Table 3.13-8 of the Draft EIR, the additional housing demand from the SUMC Project would be within projected housing growth for each community within the region. As such, impacts would be less than significant. On page 3.13-20, the Draft EIR states “Table 3.13-8 demonstrates that the indirect housing demand from the SUMC Project would represent a small percentage of the cumulative housing development at 2025 for all jurisdictions.” Because the SUMC Project would not result in a cumulatively considerable effect, mitigation for housing demand would not be required. Per CEQA Guidelines Section 15126.4(3), mitigation measures are not required for effects that are not found to be significant. Also, please refer to Master Response 10 for a discussion of non-CEQA issues. Lastly, see Master Response 7 for a discussion of Mitigation Measure PH-3.1.*
- 20.19 *The commentor resubmitted the NOP comments. Please see Responses 20.1 through 20.18, above.*

I look forward to hearing from you when the error is corrected and with your view of these questions about the impact on Middlefield Road.

Subject: FW: Error on Stanford Hospital Project EIR

From: John Guislin [mailto:jguislin@gmail.com]  
Sent: Friday, May 21, 2010 1:07 PM  
To: Williams, Curtis; Council, City  
Cc: jguislin@gmail.com  
Subject: Error on Stanford Hospital Project EIR

Mr. Williams, Council Members:

I have begun reading through the EIR for the Stanford Medical Center Renewal and Replacement Project and I find a error of fact that impacts some conclusions. In the Transportation Appendix C, Middlefield Road is listed as an arterial.

*Middlefield Road within Palo Alto is classified as an arterial. Under the City of Menlo Park guidelines, it is considered as a minor arterial. Page 1-5*

21.1

In fact, Middlefield in Palo Alto is classified as a residential arterial. This impacts conclusions about whether an increase in traffic is significant or not.

For example:

*3.7.1 Palo Alto Residential Street Analysis*

*A street is considered impacted if the TIRE Index increases by 0.1. An increase in the TIRE Index of 0.1 or more indicates that residents would notice an increase in traffic on the street. The 'With Project' scenario is compared to the 'No Build' scenario to determine any project impact. No residential roadway segments would be significantly impacted by the project in 2025 as seen in Table 3-8.*

Further, the report finds that the Middlefield/Willow Road intersection will be impacted but that the Middlefield/Lytton and Middlefield/University intersections will not. Middlefield Road / Willow Road (#18) LOS remains at E but the average critical movements exceeded 0.8 seconds for this Menlo Park intersection. This intersection is significantly affected by the project.

21.2

This is highly unlikely if the increased traffic is heading to the Stanford Hospital as these intersections provide the most direct route from Willow Road to Stanford.

And here is another example:

For Marsh Road, Sand Hill Road, Willow Road and Ravenswood Avenue that are classified as minor arterials with No Build volumes greater than 18,000, adding more than 100 trips in ADT would be considered an impact. The proposed SUMC expansion is expected to add more than 300 trips on these roadway segments. As such, the project would impact these roadway segments in Menlo Park according to the City's significance criteria.

Again if 300 additional cars on Willow Road are headed to Stanford, the most likely route is on Middlefield to Lytton and University.

21.3

Thank you,

John Guislin  
Middlefield North Neighborhood Association

**21. Middlefield North Neighborhood Association, John Guislin (letter dated May 21, 2010)**

21.1 *The commentor states that Middlefield Road is identified as an arterial in the Draft EIR when in fact it is a residential arterial and therefore should have been analyzed by the TIRE index to determine if the SUMC Project has an impact to this residential street. The TIRE index analysis was conducted for Middlefield Road in Palo Alto. The existing TIRE Index is 4.2, the Future No Project TIRE Index is 4.3, and the Future With Project TIRE Index would also be 4.3. An increase of 5,200 daily vehicles is needed to trigger an increase in the TIRE Index. The SUMC Project is not expected to contribute more than 1,000 daily trips without implementation of enhanced transportation demand management (TDM) measures (Mitigation Measure TR-2.3). As such, SUMC Project-generated traffic would not cause a change in the TIRE Index and, therefore, would not have a significant impact according to the City of Palo Alto standards of significance. The SUMC Project would not result in a significant impact on Middlefield Road at Lytton Avenue.*

21.2 *The commentor states that the Transportation Impact Analysis for the Draft EIR found that Middlefield Road/Willow Road (intersection #18) was identified as an intersection impacted by the SUMC Project, but Middlefield Road/Lytton Avenue (intersection #19) and Middlefield Road/University Avenue (intersection #20) were not. The commentor notes that if one intersection is impacted all adjacent intersections would experience similar amounts of SUMC Project traffic and should also be impacted. The Transportation Impact Analysis (see Appendix C of the Draft EIR) found that both Middlefield Road/Willow Road and Middlefield Road/Lytton Avenue would be significantly impacted by the SUMC Project but, University Avenue/Middlefield Road would not. Similar amounts of SUMC Project traffic travel through the Middlefield Road/Willow Road and Middlefield Road/Lytton Avenue intersections, but lesser amounts of SUMC Project traffic travels through the University Avenue/Middlefield Road intersection. A large proportion of project traffic is expected to turn off Middlefield Road at Lytton Avenue and uses Lytton Avenue to traverse downtown Palo Alto, because of the slow travel speeds along University Avenue. Middlefield Road/Lytton Avenue and Middlefield Road/Willow Road would not require physical improvements to mitigate SUMC Project traffic because the higher priority mitigation involving traffic-adaptive signal technology would mitigate the effect of SUMC Project traffic. See Staff-Initiated Change 2.*

21.3 *The commentor states that Marsh Road, Sand Hill Road, Willow Road, and Ravenswood Avenue are all classified as minor arterials with no build traffic volumes over 18,000. The commentor further states that project traffic on these streets of 100 or more vehicles per day would constitute a significant impact according to the City of Menlo Park's criteria; if 300 additional cars on Willow Road are headed to Stanford University the most likely route is on Middlefield Road, to Lytton Avenue, and University Avenue. Draft EIR page 3.4-71 Table 3.4-21 lists the roadway Average Daily Trip (ADT) analysis for streets in Menlo*

Park. The analysis examined Middlefield Road in Menlo Park and found that SUMC Project-generated traffic would not have a significant impact according to Menlo Park's criteria. The City of Palo Alto uses a different analysis methodology (TIRE Index) to evaluate SUMC Project impacts on roadway segments. For Middlefield Road, the existing TIRE Index is 4.2, the 2025 Future Without Project TIRE Index is 4.3, and the 2025 with project TIRE Index would also be 4.3. An increase of 5,200 daily vehicles is needed to trigger an increase in the TIRE Index. The SUMC Project is not expected to contribute more than 1,000 daily trips without implementation of enhanced TDM measures. As such, the SUMC Project traffic would not cause a change in the TIRE Index and, therefore, does not constitute a significant impact according to the City of Palo Alto standards of significance.

**Letter 22**



*Hospital & Clinics • School of Medicine  
Lucile Salter Packard Children's Hospital*

July 27, 2010

Steven Turner  
Department of Planning and Community Environment  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94303

Re: Stanford University Medical Center Facilities Renewal and Replacement Project  
Comments on DEIR

Dear Mr. Turner:

Stanford Hospital and Clinics, Lucile Packard Children's Hospital, and the Stanford University School of Medicine appreciate the time and effort expended by staff and its consultants in preparing the Draft Environmental Impact Report for the Stanford University Medical Center Facilities Renewal and Replacement Project. The Project sponsors recognize the complexity of evaluating a project with multiple components, to be built over an extended period in a location that is proximate to multiple types of land uses, including transit, residential, commercial, and campus uses. In our view, the Draft EIR satisfies the goals of the California Environmental Quality Act by disclosing the potential environmental consequences of approving the proposed SUMC Project and the project alternatives.

The Project sponsors have worked cooperatively with City staff to design a project that enables the delivery of high quality health care and the performance of life-saving medical research, while fitting within the surrounding community as a good neighbor. The Draft EIR demonstrates that the project can achieve these mutual benefits:

- With appropriate attention to architectural design, the project's height and mass will not result in significant adverse impacts to visual quality or scenic views. With review and input by the City's Architectural Review Board, the project architects are designing visually appealing structures, courtyards, streets and landscaping that will enhance the Quarry Road corridor and SUMC Sites.
- The Project will restore the Hoover Pavilion building, an important historic resource to the citizens of Palo Alto. New, architecturally compatible buildings on the Hoover Pavilion site will be designed with sensitivity to views and context of the historic structure.

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2

- The Project will provide seismically safe buildings, designed to prevent disruptions in hospital service during or after a major earthquake.
- The SUMC Project's energy conservation, water conservation and green building features will reflect the extraordinary commitment by the Hospitals, Stanford University, and the City of Palo Alto to promoting sustainable practices in building construction and operations.
- By providing the Caltrain Go Pass to existing and future Hospital workers, along with increased Marguerite shuttle service, the SUMC Project's peak period trips will be reduced from approximately 750 trips in the morning and evening to about 250 trips during each period. After mitigation (including the Go Pass, signalization adjustments and improvements to four intersections), the SUMC Project will result in no significant impacts to intersection congestion in Palo Alto and nearby cities.
- The linkage improvements presented in the Village Concept Alternative will provide amenities to encourage walking, bicycling and transit use by SUMC employees, and the surrounding community. As part of a Development Agreement, the Project sponsors have offered to fund safe and attractive pathways through the Palo Alto Transit Center, along Quarry Road, and through the Stanford Barn area between the medical center and the Stanford Shopping Center.
- The Project design presented in the Tree Preservation Alternative will save all of the oaks that the City has identified as important biological and aesthetic tree resources within the SUMC Sites. Most biological and aesthetic tree resources will be preserved in place; three will be relocated to visually prominent sites. The Project sponsors support City approval of this alternative.

Overall, we believe the Draft EIR is well-drafted and informative. We present the following technical comments in order to provide clarifications and to ensure that the EIR identifies technically feasible mitigation to avoid or reduce adverse effects. The comments follow the order of the chapters of the Draft EIR.

Project Description

The project description provides accurate information regarding the proposed SUMC Project and the anticipated employee and patient population. We noticed a few minor discrepancies in the summary chapter, all of which are correctly presented in other text.

22.1 On page S-7, the size of the annexation acre should be described as 0.75 acres, as reflected elsewhere.

22.2 On page S-12, the text should state that the Development Agreement terms have been proposed by the Project sponsors, rather than by the City. The Supplemental Development Agreement terms are those proposed by City staff.

A/73447592.1

22.3 On page S-23, the size of the Emergency Department in footnote 20 should be corrected to match the ED size identified in the project description chapter (e.g., footnote 29 on page 2-39).

22.4 We also note that the Draft EIR states in several locations, including on pages S-13 and S-28, that the zoning ordinance proposed for the Hospital District would include an Inclusionary Housing Requirement. The Draft EIR states that this component of the zoning ordinance is analyzed in the Village Concept Alternative. However, the Village Concept Alternative does not present inclusionary housing. Rather, the Village Concept analyzes housing at three locations outside of the project boundaries, two of which are not located within the City of Palo Alto. The zoning proposed by the Project sponsors does not include an inclusionary housing element, and to date, such zoning provisions have not been presented to the Palo Alto City Council.

Land Use

22.5 The Project sponsors understand that staff concluded uses throughout the Stanford University Medical Center were not intended to have been included as “non-residential development” for purposes of Comprehensive Plan Policy L-8. Accordingly, we ask that the Final EIR clarify (on page 3.2-29) that Policy L-8 would be amended to state: “Stanford University Medical Center hospital, clinic and medical school uses are not intended to be treated as ‘non-residential development’ for the purposes of this policy; thus, additional growth within the Stanford University Medical Center is exempt from this policy.”

Visual Quality (Aesthetics)

22.6 On page 3.3-27, the Draft EIR describes Mitigation Measure VQ-1.1, which would require a Construction Visual Improvements Plan. The potential components of the Plan are identified in subsections (a) through (c). However, the text of Measure VQ-1.1 states that the intent of the plan is to “screen the construction zone from view by passersby along the public streets and sidewalks.” While it would be feasible to screen construction staging areas (as described in subsection (a)), it would not be feasible to screen from view the entire construction area.

22.7 On page 3.3-39, the Draft EIR describes Mitigation Measure VQ-2.1, which would require the SUMC Project sponsors to adhere to the City’s Architectural Review Process. The last sentence of this measure states: “Any recommendations made by the ARB with respect to the design of the SUMC Project shall be implemented by the SUMC Project sponsors.” Elsewhere, the Draft EIR (p. 3.3-38) states: “The ARB’s recommendations will be forwarded to the City Council for consideration. The City Council would then review the recommendations and make findings, as appropriate . . .” The Final EIR should clarify that the City Council has the final authority over architectural review conditions. We suggest that the measure be revised to state: “Any conditions required by the City Council as a result of the Architectural Review Process with respect to the design of the SUMC Project shall be implemented by the SUMC Project sponsors.”

Transportation

On page 3.4-27, the Draft EIR states that a State law passed in 1995 prohibits public agencies from requiring mandatory transportation demand management. The Draft EIR then states that the City has concluded that, notwithstanding this State law, the City nonetheless can effectively require the applicant to include TDM measures in the SUMC Project.

While the SUMC Project sponsors remain committed to providing the Caltrain Go Pass to existing and future Hospital employees, as well as associated Marguerite shuttle service, through a Development Agreement, we disagree with the City’s legal position that these or other TDM measures could be required absent the Project sponsors’ agreement.

Section 40717.9 of the Health and Safety Code provides: “a district, congestion management agency, . . . or any other public agency shall not require an employer to implement an employee trip reduction program unless the program is expressly required by federal law and the elimination of the program will result in the imposition of federal sanctions, including, but not limited to, the loss of federal funds for transportation purposes.” Federal law does not require an employee trip reduction program; therefore, State law prohibits the City from requiring the SUMC Project sponsors to implement TDM measures.

We have attached a memorandum from our legal counsel explaining our position. [Attachment 1] We also have reviewed the memorandum prepared by the City’s outside counsel concluding that, because Palo Alto is a charter city, it need not comply with State law. The memorandum argues that reduction of traffic congestion is a municipal matter; therefore, State law addressing this topic does not apply to a charter city. While a charter city can avoid statewide regulation when the subject is purely municipal in nature, the Legislature adopted the relevant section of the Health and Safety Code to address cost concerns by businesses throughout the state, primarily in response to conditions imposed to address regional air quality. These statutory purposes are not purely municipal. Further, while traffic congestion may be a municipal concern, it cannot reasonably be argued that traffic congestion is not also a matter of concern outside of a city’s jurisdictional limits. Note that the Health and Safety Code applies to a “congestion management agency,” indicating that the Legislature understood that TDM measures address traffic congestion as well as air quality. There can be little debate that the Legislature is entitled to regulate the imposition of travel demand management provisions, and that the restrictions apply to Palo Alto.

The memorandum prepared by the City’s outside counsel also concludes that, because the SUMC Project requires legislative approvals, the City is not bound by State law. However, cities and counties cannot use their legislative powers to violate statewide prohibitions. If otherwise valid local legislation conflicts with state law, it is void. *Sherwin-Williams Co. v. City of Los Angeles*, 4 Cal.4th 893, 897 (1993). Project conditions that are imposed via legislation cannot contradict state law. *Palmer/Sixth Street Properties, L.P. v. City of Los Angeles*, 175 Cal.App.4th 1396, 1411 (2009).

For these reasons, Palo Alto historically has recognized that TDM measures are voluntary. In approving the Cancer Center, which was the most recent project at the SUMC, the City’s permit



stated in Condition of Approval 12: "Any modification of this permit will acknowledge that Stanford has voluntarily agreed to this supplemental employee trip reduction program and that state law currently prevents the City from imposing employee trip reduction programs without Stanford's consent."

22.8  
Cont t

Similarly, the City's EIR for the Cancer Center stated on page 3.5-9: "Transportation demand management refers to actions that reduce work-related, drive-alone vehicle trips. Although a state law was passed in 1995 that prohibited agencies and cities from TDM Stanford University requiring mandatory TDM, the City of Palo Alto and Stanford still voluntarily provide TDM programs for their employees."

A similar acknowledgment should be provided here. The Hospitals and School of Medicine are committed to maintaining robust TDM programs. As part of a Development Agreement, the Hospitals have offered to enhance their TDM program by providing Go Passes to existing and future employees at a cost of millions of dollars. This offer reflects the Hospitals' commitment to sustainability, and recognizes the importance of reducing congestion on Palo Alto roadways.

In addition, the Project sponsors have the following comments on the Transportation chapter's impact analysis and mitigation:

On pages 3.4-44, the Draft EIR identifies Mitigation Measure TR-1.6, which is intended to protect public roadways during construction. The measure requires the Project sponsors to survey road conditions before and after project construction, and to repair any structural damage. Given the duration of project construction, we are concerned that the measure does not provide adequate safeguards to ensure that damage revealed during post-construction surveys was actually due to SUMC Project construction and not ordinary wear and tear and other construction projects during this period. During the 12-year construction period, normal wear and tear on area roadways would be expected to lead to deterioration, and vehicles unrelated to project construction vehicles could cause additional damage.

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On pages 3.4-44 and 4.4-45, the Draft EIR identifies Mitigation Measure TR-1.9, which applies to diminished roadway capacity during special events. The only project component that might temporarily decrease roadway capacity during construction would be work in and along Welch Road. Welch Road is not used for access to athletic events or other special events that would attract a substantial number of visitors. This measure appears to be unwarranted.

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On pages 3.4-66 and 3.4-67, the Draft EIR identifies Mitigation Measure TR-2.1, which would require the SUMC Project sponsors to contribute to traffic adaptive signal timing in Palo Alto and Menlo Park. The Draft EIR (pp. 3.4-66) recognizes that the Citywide Traffic Impact Fee program provides funding for adaptive signal timing in Palo Alto. However, the Draft EIR (pp. 3.4-67 and 3.4-67) states that "an additional fee could be imposed by the City on the SUMC Project to mitigate the remaining share of the SUMC Project impacts." The Final EIR should specify the additional fee, if any, that would be required and demonstrate that the fee is proportionate to SUMC Project impacts.

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In addition, the Draft EIR (p. 3.4-67) identifies locations for installation of traffic adaptive signals in Menlo Park. We understand that traffic adaptive signals already have been installed at Sand Hill/Santa Cruz, Junipero Serra/Alpine, Sand Hill Road/Oak, and on El Camino Real from Encinal to Quarry Road (10 signals). The Final EIR should specify the SUMC Project's fair-share contribution to traffic adaptive signals in Menlo Park.

On pages 3.4-67, the Draft EIR identifies Mitigation Measure TR-2.2, which would require the SUMC Project sponsors to contribute their fair share of the cost of construction of the Everett Avenue undercrossing in Palo Alto and the Middle Avenue undercrossing in Menlo Park. The Final EIR should specify the additional fee beyond the Citywide Traffic Impact Fee, if any, that would be required and demonstrate that the fee is proportionate to SUMC Project impacts. In addition, the Final EIR should specify the SUMC Project's fair-share contribution to this measure in Menlo Park

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On pages 3.4-67 to 3.4-69, the Draft EIR identifies Mitigation Measure TR-2.3, which would require enhanced TDM programs. As explained above, any such requirements can be imposed only to the extent that the Hospitals voluntarily agree to them. The Project sponsors anticipate that the specifics of this measure will be the subject of Development Agreement negotiations.

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On page 3.4-69, the Draft EIR identifies Mitigation Measure TR-2.4, which would require the SUMC Project sponsors to implement intersection improvements at El Camino Real/ Page Mill Road/Oregon Expressway and at Arboretum Road/ Galvez Street. However, on page 3.4-56, the Draft EIR states that, with implementation of traffic adaptive signal technology, the SUMC Project would not result in a significant impact to the El Camino Real/ Page Mill Road-Oregon Expressway intersection. A contribution to further improvements to this intersection does not appear to be warranted.

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On pages 3.4-69 and 3.4-70, the Draft EIR identifies Mitigation Measure TR-2.5, which would require the SUMC Project sponsors to implement additional intersection improvements if such improvements are determined to be feasible. However, on page 3.4-61, the Draft EIR states that after implementation of traffic signal adaptive technology, funding of a proportionate share of two undercrossings, and an enhanced TDM program, the SUMC Project would result in significant impacts to only four intersections. One of the intersections, Arboretum Road/ Galvez Street is addressed under Mitigation Measure TR-2.4. Mitigation Measure TR-2.5 should be limited to the remaining three intersections: Middlefield Road/ Willow Road; Bayfront Expressway/ Willow Road; and University Avenue/ Bayfront Expressway. We understand that Menlo Park City staff has informed Palo Alto that improvements at each of these intersections are feasible. The Final EIR should specify the SUMC Project's fair-share contribution to these intersection improvements in Menlo Park

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Appendix K of the Traffic Impact Study identifies potential remote parking lots as an alternative to provision of enhanced TDM programs. Remote parking lots are a type of employee trip reduction program, which cannot be required absent the Project sponsors' voluntary agreement. The SUMC Project sponsors have not agreed to provide remote parking lots. Such lots encourage travel by single-occupant vehicles for most of the commute trip, unlike provision of the Go Pass which encourages use of public transit. In addition, remote parking lots would

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create many issues related to recruitment and retention of employees in a competitive environment, capital and operational costs, spillover effects in adjacent neighborhoods, and personal and vehicle safety. Please see the attached information from Fehr & Peers discussing the critical issues associated with providing remote parking for Hospital workers, as well as a discussion of the feasibility of each of the potential remote parking lots. [Attachment 2]

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On pages 3.4-72, the Draft EIR evaluates impacts to local circulation. The Draft EIR identifies a potential impact due to the length of the proposed new road at Durand Way, and identifies Mitigation Measure TR-4.2, which would ensure that queues from the Durand Way/ Sand Hill Road intersection do not spill back onto the Durand Way/ Welch Road intersection. The mitigation measure for this identified impact appears to be feasible.

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However, the Draft EIR (p. 3.4-72) also identifies a potential impact to safety on Welch Road, which does not appear to be warranted. According to the Draft EIR, the projected traffic volumes are "approaching the capacity" of the roadway. The Draft EIR states that the traffic volumes, combined with turning movements, pedestrian and bicycle travel could create a safety hazard on Welch Road. Fehr & Peers, the Project sponsors' traffic consultants, presented simulations of localized traffic conditions. The simulations show that Welch Road would interfere with pedestrian and bicycle travel. The Project will consolidate crosswalks on Welch Road, and add a traffic signal, which will improve pedestrian and bicycle safety compared with existing conditions.

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The Draft EIR (p. 3.4-73) identifies Mitigation Measure TR-4.1, which would require the Project sponsors to fund another localized traffic study after project construction. The measure states: "If the independent traffic study demonstrates that the connection between Roth Way and Pasteur Drive as a public street would improve circulation, then the connection shall be designated as a public street for all vehicular, bicycle, pedestrian and transit traffic." The Project sponsors have submitted a detailed traffic simulation study; a further post-construction study is not warranted. The Roth Way and Pasteur Drive connection is not intended to function as a public street. The connection, as designed, would provide pedestrian and bicycle linkages between the campus, Hospitals, and School of Medicine. In addition, the connection could be used for Marguerite shuttle service. Creating a roadway for general vehicle traffic would interfere with pedestrian and bicycle linkages, and place a barrier between the Hospitals and School of Medicine. This would be detrimental to the linkages and programmatic relationships within the SUMC. Further, requiring a change to the roadway after Project construction would entail additional construction work and expense to re-build the road. Moreover, the mitigation measure's requirement to construct the road if it "would improve circulation" is not tied to a determination in the future traffic study that a significant adverse effect has in fact occurred, nor is there any standard for measuring the effect or the degree to which conditions must be "improved."

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On page 3.4-73, the Draft EIR recognizes that the project vicinity is conducive to bicycle and pedestrian travel, and that an extensive bicycle and pedestrian network currently exists around the SUMC sites. The Draft EIR does not identify any Project component that would impede these existing pedestrian and bicycle facilities. Nor does the Draft EIR identify any Project component that would impede future, planned pedestrian and bicycle facilities. To the contrary,

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the Draft EIR recognizes that the Project includes future bicycle and pedestrian facilities throughout the Project sites. (See Draft EIR at Figure 3.4-10)

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On pages 3.4-76, the Draft EIR then states that an increase in bicycle and pedestrian travel, together with increased traffic volumes, "could result in increased traffic-related hazards to pedestrians and cyclists." Such an impact does not appear to relate to the City's significance standard, which evaluates whether a project will impede planned bicycle and pedestrian facilities. Generally, increasing use of bicycle and pedestrian modes of transportation is viewed as positive, and the Draft EIR shows that the Project sites and surrounding areas provide robust pedestrian and bicycle facilities. The impact on pedestrian and bicycle facilities does not appear to be warranted.

On pages 3.4-76 and 3.4-77, the Draft EIR identifies Mitigation Measure TR-6.1, which would require the SUMC Project sponsors to fund seven categories of pedestrian and bicycle improvements. The Project sponsors provide the following comments on the feasibility of the improvements:

- Measure TR 6.1 suggests that the Project sponsors provide an enhanced, 12-foot-wide pedestrian crossing at Quarry Road/ El Camino Real. Any improvements to El Camino Real would be subject to Caltrans approval. Further, on page 5-200, the Draft EIR analyzes changes to the pedestrian crossing at Quarry Road/ El Camino Real. According to the Draft EIR, if pedestrian crossing times were increased, a new significant impact would occur in the AM Peak Hour.
- Measure TR-6.1 suggests that the Project sponsors create a bicycle and pedestrian connection between the Stanford Shopping Center and the SUMC. The Project sponsors have offered to fund such a connection, through the Stanford Barn area, as part of a Development Agreement.
- Measure TR-6.1 suggests that the Project sponsors provide a connection from the planned Everett Avenue bicycle and pedestrian undercrossing to the El Camino Real/ Quarry Road intersection. The Project sponsors have offered to fund such a connection, including landscaping and other amenities, as part of a Development Agreement.
- Measure TR-6.1 suggests that the Project sponsors provide a bicycle and pedestrian trail through the Arboretum as part of future campus planning in the SUMC area. The Arboretum is not located in Palo Alto, and the planned pathway is not subject to the City's jurisdiction. Provision of the pathway is not necessitated by the SUMC Project and, if implemented, would be the subject of a separate County approval process. The Hospitals do not own or control the land in the Arboretum.
- Measure TR-6.1 suggests that the Project sponsors incorporate into the Quarry Road corridor continuous sidewalks according to the SUMC Project's Design Guidelines. Continuous sidewalks already exist along Quarry Road. The Project sponsors have offered to fund enhancements to bus stops along Quarry Road as part of a Development

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Agreement.

- Measure TR-6.1 suggests that the Project sponsors enhance all signalized intersections in the Project vicinity to include 12-foot-wide pedestrian crosswalks and other improvements. Marked pedestrian crosswalks exist throughout the project vicinity. The Draft EIR does not provide sufficient information to assess whether these improvements would be feasible, or desirable.
- Measure TR-6.1 suggests that the Project sponsors install Class I and Class III bicycle parking spaces. The SUMC Project will include installation of bicycle parking spaces.

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Pavilion would be designed as on-street stops, and also explains why three to four buses would not queue at the bus stops. Existing transit centers are located nearby at PAITS and Stanford's Parking Structure 5 on Oak Road. In order to accommodate additional ridership in the SUMC, the proposed Project includes "enhanced bus stops," providing riders with shelter, seating, lighting, signage, maps, bus lines served, bus schedules, and bike parking as necessary. The requirement for two "transit centers" as defined in this mitigation measure is not warranted.

On pages 3.4-80 and 3.4-81, the Draft EIR identifies Mitigation Measure TR-7.2, which would require the SUMC Project sponsors to make fair-share contributions to a variety of transit providers. The Project sponsors provide the following comments on the feasibility of these measures:

- Measure TR-7.2 suggests that the SUMC Project sponsors make a financial contribution to expand Marguerite shuttle service "into Palo Alto." The Marguerite shuttle service links the campus, SUMC, and Palo Alto intermodal transit center in Palo Alto. The Project sponsor's Development Agreement proposal to provide Caltrain Go Passes to Hospital employees includes an offer to expand Marguerite shuttle service between the SUMC and the Palo Alto intermodal transit center.
- Measure TR-7.2 suggests that the SUMC Project sponsors make a financial contribution toward the operation of the U-Line. Stanford already makes a financial contribution toward operation of the U-Line and works with AC Transit to ensure service is sufficient.
- Measure TR-7.2 suggests that the SUMC Project sponsors participate in the Palo Alto Crosstown Shuttle service by contributing to the Citywide Traffic Impact Fee, which would include the cost of covering this service. We intend to pay the applicable Citywide Traffic Impact Fee.
- Measure TR-7.2 suggests that the SUMC Project sponsors contribute the Project's fair share of Palo Alto's share of expanded VTA Community Bus Service. The mitigation measure does not reveal how the Project's fair share could or would be calculated. Because the VTA Community Bus Service does not serve the SUMC, the SUMC Project would not result in any increase in ridership on this bus line.
- Measure TR-7.2 suggests that the SUMC Project sponsors pay into the Menlo Park shuttle fee. The SUMC Project sponsors will explore the amount and feasibility of such a payment with Menlo Park.

On pages 3.4-83 and 3.4-84, the Draft EIR identifies an impact related to emergency access. Mitigation Measure TR-9.1 would require the Project sponsors to pay a fair-share contribution to the City of Palo Alto for an Opticom system at all significantly impacted intersections. The Final EIR should clarify that this measure is only required to the extent intersections would be significantly affected after mitigation. As we understand it, no intersections in the City of Palo Alto would have significant effects after implementation of adaptive signal timing, fair-share payment toward undercrossings, and enhanced TDM measures.

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On pages 3.4-77 and 3.4-78, the Draft EIR evaluates effects on transit. The Draft EIR (p. 3.4-77) recognizes that the Project vicinity is served by Marguerite shuttles, Sam Trans, VTA, the U-Line and Palo Alto shuttles. The Draft EIR (p. 3.4-78) states that SUMC Project would increase transit ridership, and concludes this would result in a significant impact on transit. Increasing transit travel mode is considered to be a positive step in reducing traffic congestion, air pollution and greenhouse gases. The Draft EIR's conclusion that such an increase results in a significant adverse impact does not appear to be warranted.

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The Draft EIR (p. 3.4-78) states that provision of Caltrain Go Passes to Hospital employees would require increased Marguerite shuttle service. The SUMC Project sponsors have offered to provide increased Marguerite shuttle service as part of a Development Agreement.

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The Draft EIR (p. 3.4-78) states that provision of parking spaces at an expanded Ardenwood park-and-ride lot would increase ridership on the U-Line such that ridership could be higher than a 1.0 load factor. Stanford provides funding toward operation of the U-Line and works with AC Transit to increase service as needed. In 2007, the University created two afternoon Ardenwood express buses that run between the campus and the Ardenwood park-n-ride lot in order to supplement the AC Transit U-Line operations.

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The Draft EIR (p. 3.4-79) states that the increase in transit ridership resulting from issuance of Caltrain Go Passes could be a significant impact without facility improvements that accommodate several bus routes simultaneously and that also provide queuing areas for the passengers. Please see the attached response to the City's data request regarding transit centers, which we provided on January 8, 2010. [Attachment 3] As explained in the attachment, traditional transit centers are commonly provided where there are multiple service providers and a need for vehicles to layover to accommodate transfers or schedule. These conditions do not occur at the SUMC. Stanford directly controls the vehicles using the bus stops in the SUMC and there are few transfers that occur at these bus stops. That, combined with the high frequency of service, minimizes the number of passengers queued at any stop. In addition, Stanford monitors shuttle operations and adjusts or adds service when demand exceeds capacity.

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On page 3.4-80, the Draft EIR identifies Mitigation Measure TR-7.1, which would require the SUMC Project sponsors to incorporate "transit centers", which must be off-street facilities that accommodate three to four buses simultaneously. The attached response to the City's data request regarding transit centers explains why bus stops at the new Hospital and at the Hoover

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request regarding transit centers explains why bus stops at the new Hospital and at the Hoover

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request regarding transit centers explains why bus stops at the new Hospital and at the Hoover

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Air Quality

22.40 The Draft EIR describes the significance threshold proposed for approval by the Bay Area Air Quality Management District. On June 2, 2010, the BAAQMD adopted significance thresholds for evaluating air quality impacts under CEQA. On its website, the BAAQMD states: "It is the Air District's policy that the adopted thresholds apply to projects for which a Notice of Preparation is published, or environmental analysis begins, on or after the applicable effective date." Thus, the new thresholds are not intended to apply to the SUMC Project.

22.41 On page 3.5-20, the Draft EIR concludes that provision of the Caltrain Go Pass to Hospital employees would not be sufficient to reduce emissions of criteria pollutants to less-than-significant levels. The Final EIR should clarify that provision of the Caltrain Go Pass would reduce emissions from employee vehicle trips by 44.5 percent. The significant impacts on air quality would be due to trips by patients and visitors, which the Draft EIR recognizes (p. 3.5-18) may occur somewhere in the Air Basin whether or not the Project is constructed. (Patients would be expected to seek medical care elsewhere if these hospitals were not expanded.)

22.42 The Draft EIR (p. 3.5-20) states that "the City shall consider the feasibility of Mitigation Measure PH-3.1," as identified in the Population and Housing chapter. Please see our comments below regarding this mitigation measure. Provision of housing for Hospital employees would not reduce vehicle emissions from patient and visitor trips. Further, dedicating housing on the Stanford campus to Hospital workers rather than to the campus population would not substantially reduce vehicle miles traveled and associated vehicle emissions.

22.43 On page 3.5-26, the Draft EIR states that because the SUMC Sites are near East Palo Alto, where cancer risk has been found to be higher than average, cancer risk from the Project was considered cumulatively considerable even though the health risk that the Project poses on the local population is relatively small (10 in a million) in comparison to the background risk from toxic air contaminants of more than 700 in a million. Since publication of the Draft EIR, the BAAQMD has published a methodology for evaluating cumulative health risks. We ask that the City use the BAAQMD's published methodology to provide an assessment of cumulative health risk given that the Draft EIR did not use a quantitative method to assess cumulative health risk.

Climate Change

22.44 Please see the attached memorandum from our legal counsel regarding the calculation of business-as-usual and SUMC Project emissions. We ask that the City's consultants recalculate business-as-usual and Project greenhouse gas emissions as described in the attached memorandum. [Attachment 4]

22.45 On page 3.6-31, the Draft EIR recognizes that the SUMC Project sponsors would design the new Hospital buildings to use 35 percent less energy than typical hospitals, and would design the new School of Medicine to use 30 percent less energy than buildings constructed to 2004 Title 24 energy efficiency standards. These are extraordinary measures given the difficulty in conserving energy in buildings that are in operation 24 hours per day. The Project sponsors are leaders in

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sustainable construction and operation, and are designing the Project components to be as energy efficient as feasible.

Nevertheless, the Draft EIR states that these measures do not comply with the City Climate Protection Plan Policies because an audit would be necessary to verify compliance. While the Project sponsors do not object to a commissioning audit to verify that new buildings are operating as designed, the Draft EIR should clarify that the energy efficiency Project design features are consistent with the Climate Protection Plan policies and further the City's goals.

22.46 On pages 3.6-32 and 3.6-54, the Draft EIR identifies Mitigation Measure CC-1.1, which would require new buildings to undergo commissioning of energy and HVAC systems during construction and on an annual basis during the first five years of operation. The industry standard practice is to conduct a commissioning audit one year after construction is complete. The audit is intended to determine whether the building's energy and HVAC systems are operating as designed. Adjustments to the systems are then implemented based on the results of the commissioning audit. Commissioning is not performed during construction, nor is it necessary to repeat the commissioning process annually for five years. Once the building systems are operating as designed, they would continue to do so. Commissioning would cost several million dollars. We ask that the measure be revised to specify the commissioning would occur once, one year after each new building has been constructed.

22.47 On page 3.6-33, the Draft EIR identifies a City Climate Protection Plan Policy to expand use of renewable energy installed or purchased directly by customers. The City has a goal of reducing the carbon intensity of its energy supply. The Draft EIR states that the SUMC Project sponsors must participate in the Palo Alto Green Energy Program in order to be consistent with this policy. However, participation in the Palo Alto Green Energy Program is voluntary. Participation by an individual project applicant is not required by the City's Climate Protection Plan.

22.48 Further, on page 3.6-55, the Draft EIR identifies Mitigation Measure CC-1.2, which would require the SUMC Project sponsors to participate in Palo Alto Green or otherwise provide renewable power such that a minimum of 54,640 MWh of electricity usage is offset annually. As explained in the attached memorandum, we believe the Draft EIR overstates Project energy usage. Further, this measure does not recognize the extraordinary steps that the Project sponsors are taking to reduce energy use at new buildings compared with a business-as-usual scenario.

22.49 On page 3.6-33, the Draft EIR explains that the City Climate Protection Plan has a policy to participate in and promote greenhouse gas emissions inventory tracking and reporting. The Draft EIR recognizes that the SUMC Project sponsors have prepared an inventory of existing and future greenhouse gas emissions. The Draft EIR states that an annual inventory of greenhouse gases is necessary for the Project to be consistent with the Climate Protection Plan. The Climate Protection Plan does not appear to require annual reporting by individual Project applicants in order to achieve consistency.

22.50 On page 3.6-35, the Draft EIR states that the City Climate Protection Plan includes a policy to offer additional public shuttles. This provision appears to apply to the City rather than to the

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Community. In any event, Stanford provides an extensive public shuttle system and expands the system as needed to serve demand. The SUMC Project sponsors have offered as part of a Development Agreement to expand the Marguerite shuttle service to correspond to the increase in ridership generated by provision of Caltrain Go Passes to Hospital employees.

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On page 3.6-45, the Draft EIR states that the City Climate Protection Plan includes a policy to expand implementation of Zero Waste programs. The Draft EIR recognizes that the SUMC Project includes extensive waste reduction programs. However, the Draft EIR states that an audit would be necessary to ensure compliance with this policy. The City Climate Protection Plan does not appear to require individual businesses to prepare and submit waste reduction audits.

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On pages 3.6-45 and 3.6-55, the Draft EIR identifies Mitigation Measure CC-1.4, which would require the SUMC Project sponsors to conduct a waste reduction audit annually. Annual audits are unwarranted. The Hospitals and School of Medicine are leaders in waste reduction and recycling programs. While the Project sponsors do not object to a one-time audit once Project construction is complete, repeated audits on an annual basis would be unnecessarily costly.

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On page 3.6-57, the Draft EIR states that Population and Housing Mitigation Measure PH-3.1 identifies further measures that would reduce vehicle miles traveled by improving the city jobs-to-employed-residents ratio. Please see our comments on this mitigation measure, below. Most of the greenhouse gas emissions associated with vehicle miles traveled are from patient and visitor trips. Such trips likely would occur whether or not the proposed Project is approved, and would not be reduced by providing housing in Palo Alto. Provision of the Caltrain Go Pass would reduce employee vehicle miles traveled by 44.5 percent. If housing were provided as suggested under the Village Concept Alternative, vehicle miles traveled and associated greenhouse gas emissions would decrease by less than one percent.

**Biological Resources**

Please see the attached spreadsheet and diagrams identifying Protected Trees and trees that the City has determined are biological and aesthetic tree resources. [Attachment 5]

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We have worked closely with City staff to identify Protected Trees on the SUMC Project sites and to design a Tree Preservation Alternative to protect all of the trees identified by the City as important biological and aesthetic resources. The Project sponsors have a long track record of tree protection and preservation, as evidenced by the large number of mature trees on the Project sites and on the Stanford campus. Our comments on the Draft EIR's tree protection process and mitigation measures are provided in the context of our mutual commitment to tree protection.

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On page 3.9-25, the Draft EIR describes the components of the Hospital District zoning that City staff proposes in order to address protected trees. The new zoning district would create two categories of trees within the SUMC. As we understand it, a biological tree resource would be a tree that meets the existing tree ordinance's definition of a Protected Tree. An aesthetic tree resource would be a tree that also has a substantial aesthetic value as determined by the City.

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We suggest that the Final EIR identify the trees within the SUMC Project sites that the City has determined to be biological and aesthetic tree resources.

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We understand that under the new zoning district, the SUMC Project sponsors would be allowed to relocate a tree that is both a biological and aesthetic tree resource to a site that is visually prominent. We also understand that under the new zoning district, the SUMC Project sponsors would be allowed to relocate or remove a tree that is a biological tree resource, but not an aesthetic tree resource. If such a tree is removed, the new zoning would require replacement in conformance with the City's Tree Technical Manual. Due to the constraints of the SUMC Sites, such replacement could be accomplished through payment into a Tree Fund.

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On pages 3.9-26 to 3.9-29, the Draft EIR identifies Mitigation Measures BR-4.1 through BR-4.5, which would require preservation and replacement of Protected Trees. Please see the attached suggested revisions to these measures. [Attachment 6] We have suggested clarifications that would identify the process to be followed to obtain City approval of tree preservation plans, relocation, and removal. In each case, we suggest that the City Planning Director retain approval authority after consultation with the City Urban Forester.

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On page 3.9-26, the Draft EIR identifies Mitigation Measure BR-4.1, which would require implementation of tree preservation measures for Protected Trees that will be retained on site. The Project sponsors will take all necessary steps to preserve Protected Trees. However, the measure includes the following sentence: "The SUMC Project shall be modified to address recommendations identified to reduce impacts to existing ordinance-regulated trees." In the context of this measure, we understand that the potential modifications would be those pertaining to the method for conducting work in dripline areas and ensuring that landscaping does not adversely affect the health of preserved trees. Such measures are addressed elsewhere in the mitigation measure. Accordingly, we ask that the Final EIR omit the sentence quoted above.

22.59  
On pages 3.9-26 and 3.9-27, the Draft EIR identifies Mitigation Measure BR-4.2, which would require the SUMC Project sponsors to prepare Solar Access Studies on Protected Oaks. We understand that this measure was intended to address trees that would be preserved in their existing locations, and which the City determines are biological and aesthetic tree resources. We have submitted Solar Access Studies for Tree 608 and the grove of trees near FIM1. We had understood that the City Urban Forester considered the Solar Access Studies to be acceptable. Accordingly, we have suggested modifications to this measure to identify the applicable trees and to recognize that the content of the Solar Access Studies should be similar to the study prepared for Tree 608. We also have proposed revisions to the approval procedure, given the SUMC Project review process. Finally, we have proposed that if the Solar Access Study shows that a tree that is a biological and aesthetic tree resource is likely to be lost due to reduction in solar access, the Project sponsors will be required to relocate the tree.

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On page 3.9-27, the Draft EIR identifies Mitigation Measure BR-4.3, which requires implementation of a tree relocation plan for Protected Trees that will be relocated. Based upon meetings with City staff, the Project sponsors have agreed to relocate Protected Trees that are much larger than the trees that Stanford normally relocates. Relocation of these trees will require specialized equipment, at a cost of approximately \$100,000. The tree relocation specialist



recommended by the City has stated that he cannot guarantee that the relocated trees will survive; however, the tree relocation specialist will specify protective measures to increase the likelihood of success. The Project sponsors are willing to bear the cost estimated by the tree relocation specialist and take the steps recommended to protect the relocated trees. However, it is unreasonable to require that the Project sponsors expand extraordinary sums relocating Protected Trees, only to be required to spend large sums yet again should the tree fail to survive despite implementation of all recommended protective measures. We have suggested a revision to the measure to require that, should a relocated tree fail to survive despite implementation of all recommended measures, the Project sponsors must replace the tree with a 24" box tree of the same variety.

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On page 3.9-27, the Draft EIR identifies Mitigation Measure BR-4.4, which would require a tree security deposit. Given the ongoing control that the City will have under the Project conditions of approval, as well as the fact that the Project sponsors will continue to operate the proposed Project after construction (as compared to a developer who may sell the project to others), we do not believe that the posting of a security bond is warranted. The City will be able to enforce the tree protection conditions and requirements through the Project conditions.

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On page 3.9-27, the Draft EIR identifies Mitigation Measure BR-4.5, which would require replacement for the loss of publicly owned trees. We suggest that an additional measure be added in place of the tree security deposit, above, that would require replacement for the loss of any Protected Tree within the Project sites. We have included a proposed measure in our suggested revisions.

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On page 3.9-28, the Draft EIR identifies Mitigation Measure BR-4.6, which would require design modifications to preserve trees that are biological and aesthetic resources. As drafted this measure is unclear. We have suggested revisions to clarify that it applies to trees that are biological and aesthetic tree resources near FIM 1 and Tree # 608. The Tree Preservation Alternative includes the necessary modifications, and also preserves trees on Kaplan Lawn.

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On page 3.9-29, the Draft EIR states that the Santa Clara Valley HCP is the nearest adopted HCP/INCCP in the region. Please note that the Santa Clara Valley HCP has not yet been adopted.

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Population and Housing

On page 3.13-15, the Draft EIR points out that an increase in the City's jobs to employed residents ratio is not, itself, an environmental impact. While we agree with this general statement, we would like to clarify some of the statements in the Draft EIR text regarding the jobs to employed residents analysis.

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The Draft EIR (p. 3.13-15) states that the SUMC Project would generate employment in excess of what is currently contemplated by the City. While it is correct that the Project would generate higher employment on the Project sites than might be anticipated under current zoning, facts in the record also support a conclusion that the Project would not generate higher citywide

employment than is contemplated in the City's Comprehensive Plan and the Association of Bay Area Governments employment projections for Palo Alto.

As explained on pages 3.2-6 and 3.2-7 of the Draft EIR, Comprehensive Plan Policy L-8 directs the City to maintain a limit of 3,257,900 square feet of new non-residential development based on a 1989 Transportation Study that analyzed employment growth throughout the City. The Draft EIR (p. 3.2-7) explains that non-residential development in the particular area in which the SUMC Project is located "has exceeded the anticipated growth by 6,966 square feet."<sup>1</sup> However, the Draft EIR (pp. 3.2-6 and 3.2-7) states that "on a citywide basis, there is 2,367,442 square feet of development potential remaining under the Comprehensive Plan development cap ..."

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On page 3.13-6, the Draft EIR presents the Association of Bay Area Governments projections for employment growth in the City of Palo Alto sphere of influence. Based on the City's Comprehensive Plan, ABAAG's Projections 2005 predicted 13,210 new jobs by 2025. The Draft EIR (p. 2-48) estimates that the SUMC Project would generate 2,242 new jobs by 2025.

In addition to quantifying job creation resulting from the proposed Project, the Draft EIR (p. 3.13-17) refers to a "0.01 threshold" for assessing an increase in jobs to employed residents. We ask that the Final EIR note that the City's Comprehensive Plan does not contain a numeric goal for the City's jobs to employed residents ratio. To our knowledge such a numeric threshold is not found in any formally adopted City of Palo Alto policy document. Further, to arrive at a conclusion that the SUMC Project increases the City's jobs to employed residents ratio, the Draft EIR compares conditions in 2025 without the Project to conditions with the SUMC Project. If the comparison were to existing conditions, the jobs to employed residents ratio would decrease in 2025.

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The Draft EIR (p. 3.13-15) states that if the City's planning goals are not obtained, environmental impacts could result such as increased vehicle miles traveled, increased traffic congestion within interjurisdictional roadways, and increased vehicular air and noise emissions. We offer the following clarifications with regard to the specifics of the SUMC Project:

- Provision of the Caltrain Go Pass to both existing and future Hospital employees, along with associated expansion of the Marguerite shuttle, signal timing improvements, and intersection improvements at four intersections, will reduce traffic congestion at all interjurisdictional intersections to less-than-significant levels.
- The majority of vehicular air emissions resulting from the SUMC Project are from patient and visitor trips, rather than from employee trips. Provision of the Caltrain Go Pass will reduce employee trips and associated air emissions by 44.5% compared to Project conditions without the Go Pass.

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<sup>1</sup> Based on its review of the legislative history of Comprehensive Plan Policy L-8, City planning staff has concluded the policy was not intended to limit growth at the SUMC.

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- After taking the Go Pass into account, provision of housing for Hospital workers would decrease vehicle miles traveled by less than 1%.
- The SUMC Project does not result in significant noise impacts associated with workers commuting to and from the Project sites. The only significant noise impact from vehicular traffic is due to ambulance trips, which would not be addressed by providing housing.

We also point out that while jobs to employed residents may be one metric to assess effectiveness of smart growth principles, other factors also come into play. In this case, the Project sites are located near a Caltrain station, and the sites are served by an extensive free shuttle network, with shuttles timed to meet arriving and departing trains. The Hospitals provide a robust travel demand management program, which would be enhanced by provision of the Caltrain Go Pass. A large number of Hospital workers live in close proximity to transit. Increasing density at sites proximate to, and linked to transit, is consistent with smart growth principles.

The Draft EIR identifies Mitigation Measure PH-3.1 for consideration as possible additional mitigation for impacts to air quality and climate change. The Draft EIR (p. 3.13-19) recognizes that the mitigation "is not directly required in order to mitigate a significant environmental impact" of the SUMC Project. The Project sponsors offer the following comments on the feasibility of the mitigation measures:

- Measure PH-3.1 suggests the City could explore amending the Zoning Code to permit more residential uses, particularly multifamily residential use. We understand that the City is in the process of updating the Housing Element of its Comprehensive Plan. Zoning revisions generally would follow adoption of an updated Housing Element.
- Measure PH-3.1 suggests that the SUMC Project sponsors could ensure that a specified number of housing units in the County be dedicated to SUMC employees. The Hospitals, which are the only Project sponsors proposing Project components that would increase employment, do not own or control any sites within the County upon which housing units could be constructed or dedicated. Further, to the extent housing sites on the Stanford campus were dedicated to Hospital employees, an amendment to Stanford's General Use Permit would be required. The General Use Permit does not authorize Stanford to house Hospital employees who are not Stanford students or staff on the Stanford campus. In addition, if housing on the Stanford campus were dedicated to Hospital employees rather than the University population, fewer housing units would be available under the General Use Permit for University faculty, staff, and students. As explained further, under our comments on the Village Concept Alternative, displacement of housing for the University population would not result in substantial environmental benefits. This measure also would not change the jobs to employed residents ratio in the City of Palo Alto.
- Measure PH-3.1 suggests that the City could amend the Zoning Code to remove the Hospital exemption from payment of the affordable housing fee. The existing exemption reflects a legislative policy determination that certain uses (churches, hospitals,

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convalescent facilities, and public facilities) provide community benefits that are on par with the provision of affordable housing. Such an exemption is consistent with policies in other jurisdictions. In this case, as part of a Development Agreement, the Hospitals have offered \$23 million to the City for affordable housing, which would be the amount they would have to pay if they were subject to the City's affordable housing fee.

- Measure PH-3.1 suggests that the City could impose an additional ad-hoc housing fee on development to ensure development of required affordable housing. By contrast, the Comprehensive Plan provides that the means to address the jobs/housing imbalance with respect to non-residential development is to periodically review and update the fee contained in the citywide housing impacts ordinance, in order to ensure that commercial and industrial developments "will continue to contribute a consistent amount toward their low and moderate-income housing demand." Palo Alto 1998-2010 Comprehensive Plan, Housing Element at p. 31 (Program H-51); see also Revised Housing Element (adopted Dec. 2 2002) at p. v (housing fee "should be periodically re-evaluated to ensure that new commercial/industrial development contributes its share to the City's efforts to produce affordable housing"); p. 39 (explaining that Program H-51 proposes that "the formula for calculating the commercial and industrial housing in-lieu fee for projects with impacts be periodically reviewed as required under Chapter 16.47 of the Municipal Code to better reflect the impact of new jobs on housing demand and cost"); p. 82 (calling for evaluation and adjustment of in-lieu fee "to ensure it reflects the impact of commercial and industrial development on housing needs").

The Comprehensive Plan establishes that the City's process for addressing the housing needs that result from non-residential development projects is to make periodic legislative adjustments to its citywide housing impacts fee. The Comprehensive Plan does not call for extending the affordable housing fee to hospitals or imposing ad-hoc fees on individual projects.

The Comprehensive Plan recognizes that economic growth can bring many benefits to the community, including greater tax revenues, local job opportunities, increased diversity and physical improvements. Comprehensive Plan at p. B-6 (Goal B-3). With respect to providing local job opportunities, the Comprehensive Plan recognizes that not all new jobs bring new residents to Palo Alto (discussion under Impact PH-4, under heading "Jobs to Employed Residents Ratio"). The Comprehensive Plan also encourages regulations and operating procedures that provide certainty and predictability for development projects. *Id.* at p. B-8 (Goal B-4). With respect to effects on housing, consistent application of the City's housing impacts fee creates the certainty and predictability envisioned by the Comprehensive Plan.

Further, under constitutional principles of equal protection, the City cannot impose on the SUMC Project any housing requirements that exceed the requirements that apply citywide to other developers under the City's housing impacts ordinance. There is no rational basis for singling out the SUMC Project for more demanding treatment. To the contrary, the data in the June 2008 KMA Housing Needs Analysis demonstrate that, on a per square-footage basis, the affordable housing demands resulting from the SUMC

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decrease vehicle miles traveled by less than 1%.

The SUMC Project does not result in significant noise impacts associated with workers commuting to and from the Project sites. The only significant noise impact from vehicular traffic is due to ambulance trips, which would not be addressed by providing housing.

We also point out that while jobs to employed residents may be one metric to assess effectiveness of smart growth principles, other factors also come into play. In this case, the Project sites are located near a Caltrain station, and the sites are served by an extensive free shuttle network, with shuttles timed to meet arriving and departing trains. The Hospitals provide a robust travel demand management program, which would be enhanced by provision of the Caltrain Go Pass. A large number of Hospital workers live in close proximity to transit. Increasing density at sites proximate to, and linked to transit, is consistent with smart growth principles.

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- Measure PH-3.1 suggests that the City could amend the Zoning Code to remove the Hospital exemption from payment of the affordable housing fee. The existing exemption reflects a legislative policy determination that certain uses (churches, hospitals,

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convalescent facilities, and public facilities) provide community benefits that are on par with the provision of affordable housing. Such an exemption is consistent with policies in other jurisdictions. In this case, as part of a Development Agreement, the Hospitals have offered \$23 million to the City for affordable housing, which would be the amount they would have to pay if they were subject to the City's affordable housing fee.

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Further, under constitutional principles of equal protection, the City cannot impose on the SUMC Project any housing requirements that exceed the requirements that apply citywide to other developers under the City's housing impacts ordinance. There is no rational basis for singling out the SUMC Project for more demanding treatment. To the contrary, the data in the June 2008 KMA Housing Needs Analysis demonstrate that, on a per square-footage basis, the affordable housing demands resulting from the SUMC

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Project are substantially less than the affordable housing demands resulting from other developments citywide. The affordable housing demand citywide, as calculated in KMA's 2001 Housing Linkage Update Analysis, would be 38 units per 100,000 square feet of new building area. Assuming eight percent of Hospital employees would choose to live in Palo Alto, the SUMC project would result in a need for 29 affordable housing units in Palo Alto. This equates to slightly more than two units per 100,000 square feet of new building area.

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Finally, if the City were to impose an ad hoc housing fee on the SUMC Project, it would have to meet constitutional requirements for nexus and rough proportionality. The Draft EIR does not provide a factual record that establishes the amount of such a fee or its relationship to SUMC Project impacts. To the contrary, the SUMC Project sponsors' offer to pay \$23 million toward the provision of affordable housing appears to more than offset the anticipated Project-related demand of 29 affordable housing units in Palo Alto.

- Measure PH-3.1 suggests that the City could provide an inclusionary housing requirement in the newly created Hospital District. The Draft EIR (p. 3.13-20) states that the requirement would provide a number of options for development of additional housing with an emphasis on affordable housing. Without further description, it is impossible to ascertain what the Draft EIR contemplates. On page S-28, the Draft EIR states that this component of the zoning ordinance is analyzed in the Village Concept Alternative. However, the Village Concept Alternative does not present inclusionary housing. Rather, the Village Concept Alternative analyzes housing at three locations outside of the Project boundaries, two of which are not located within the City of Palo Alto. The site in Palo Alto already has been zoned for the number of housing units contemplated under the Village Concept Alternative.

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Public Services

On page 3.14-10, the Draft EIR states that approximately 30 percent (4,763 acres) of the City's land area consists of open space preserves. The Draft EIR then lists the acreages of each of these preserves. The listed preserves total 6,396 acres.

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On page 3.14-13, the Draft EIR recognizes that the SUMC Project would not result in a significant impact to fire protection services because it would not necessitate construction of fire protection facilities to maintain performance standards. However, on pages 3.14-13 and 3.14-14, the Draft EIR identifies "improvement measures" that the Palo Alto Fire District has identified as potential conditions of approval. One of these improvement measures would require the SUMC Project sponsors to provide funding to the PAFD to increase the 12-hour Medical unit to a 24-hour unit and add three full-time employees. This request appears to be based upon a misunderstanding of the Project's effects. Expansion of Hospital facilities would not increase the number of people in Palo Alto who experience medical emergencies requiring PAFD response. The same number of Palo Alto residents would need assistance regardless of whether the Hospital is expanded. Within the SUMC, Hospital employees, patients and visitors would be treated by Hospital staff rather than the PAFD Medical unit. It is unlikely that the PAFD Medical unit would experience any increased demand due to the SUMC Project.

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Alternatives

The Draft EIR has identified a range of alternatives that provide the information necessary to weigh the potential environmental benefits of Project alternatives against the extent to which an alternative may not fully accomplish the Project objectives. We agree with information provided by City staff that, because the alternatives bracket the range of potential environmental impacts and benefits, City decision makers could approve modifications to Project alternatives that mix and match components of the alternatives or that do not precisely match an alternative.

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As explained in the Draft EIR, none of the No Project or Reduced Project Alternatives would fully accomplish the Project objectives. The City's hospital peer reviewer confirmed that the SUMC Project has been sized appropriately to meet the community's health care needs in facilities designed to meet state-of-the-art design standards for infection control and patient service. Reduction in the size of the Project would impair the Hospitals' ability to provide high quality health care services, and the School of Medicine's ability to perform life-saving research.

22.76

Our comments focus on the Tree Preservation Alternative, Historic Preservation Alternative, and Village Concept Alternative.

*Tree Preservation Alternative.* The City has identified Protected Trees on the SUMC Project Site that are most important from both a biological and aesthetic perspective. Under the Tree Preservation Alternative, no trees that are both biological and aesthetic tree resources would be removed. Most of the biological and aesthetic tree resources would be preserved in place. Three would be relocated. The SUMC Project sponsors support City Council approval of this alternative.

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*Historic Preservation Alternative.* The SUMC Project includes demolition of the 856,178-square-foot building complex designed by Edward Durrell Stone and constructed in 1959. The Historic Preservation Alternative would retain the Stone building complex, which would be used as medical clinics and research facilities. The 429,000 square feet of new medical clinic space proposed by SHC and the 414,977 square feet of new Foundations in Medicine Buildings proposed by the School of Medicine would not be constructed. Thus, the Historic Preservation Alternative would result in similar square footage as the proposed SUMC Project.

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On page 5-25, the Draft EIR states that under this alternative the underground parking structure proposed at the site of the new SHC clinics would have to be constructed elsewhere. The Draft EIR identifies expansion of the parking structure at Pasteur Drive as a potential location. However, expansion of that parking structure would require removal of Protected Trees that the City has identified as aesthetic and biological tree resources at Kaplan Lawn.

On page 5-45, the Draft EIR recognizes that the provision of state-of-the-art facilities to deliver high quality health care would be significantly compromised given the significant design inefficiencies that reuse of the Stone building complex would entail. The Draft EIR states "In

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addition, the Historic Preservation Alternative would not meet the SoM objectives of providing a state-of-the-art facility to support contemporary research and optimizing the SoM's ability to translate medical research discoveries into treatments and cures." On pages 5-45 to 5-48, the Draft EIR details the reasons this alternative would not adequately accomplish the Project objectives.

During public meetings on the Draft EIR, suggestions have been made that rather than reuse of the Stone building complex for clinics and research facilities, the buildings could be used as office space. The SUMC Project includes only a small amount of office space within medical office and clinic buildings. There is no programmatic need to fill the 856,178-square-foot Stone building complex with offices. As explained by the City's hospital peer reviewer, the Hospitals already have moved most administrative functions offsite. The Project does not include facilities to bring administrative functions back to the SUMC Sites. Thus, use of the Stone building complex as office space would not address the Project's programmatic needs for new clinic and research square footage. As a result, use of the Stone building complex for office space would necessitate construction of approximately 800,000 more net new square feet than has been proposed under the SUMC Project. Under such a conceptual alternative, the 429,000 square feet of new clinic facilities for SHC and the 414,977 square feet of new research facilities for the School of Medicine that are proposed to replace the Stone building complex would need to be constructed elsewhere. This would increase impacts to visual quality, impacts associated with impervious surfaces, energy use, and traffic due to additional trips by office workers.

The same reasoning applies to the suggestion that the Stone building complex could be used for community physicians. Under the proposed SUMC Project, community physicians occupying a 40,100-square-foot building at 1101 Welch Road would be offered space at the existing Hoover Pavilion. In addition, a new 60,000-square-foot building on the Hoover Pavilion site is proposed for use by community physicians and SHC clinics. Combined, these Project components would fill only 100,000 out of the 856,178-square-foot Stone building complex. If the new 60,000-square-foot building were used exclusively for clinics, there still would be a programmatic need for an additional 369,000 square feet of new SHC clinic space and 414,977 square feet of new research facilities. This would expand the Project by 783,977 square feet, resulting in the same increased impacts listed above.

Further, use of the Stone building complex for offices or for community physicians would be detrimental to the functional site relationships at the SUMC. The Stone building complex is centrally located, adjacent to the portion of the adult Hospital to be retained, as well as to the new adult hospital. To operate a functional hospital complex, that site should be used for outpatient clinics that rely on proximity to the Hospital. Research facilities also should be proximate to the Hospital in order to promote synergies between the researchers and physicians. The community physicians who would be located at the Hoover Pavilion site are those that do not need to be located directly adjacent to the Hospital. Administrative staff can be located even farther away, as demonstrated by the current Hospital operations.

*Village Concept Alternative.* The Village Concept Alternative adds two components to the proposed SUMC Project-- linkages between the SUMC and downtown Palo Alto, and housing for SUMC workers. The SUMC Project sponsors support the linkages component as part of a

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Development Agreement. The SUMC Project sponsors do not support the housing component. Instead, the SUMC Project sponsors have offered to provide \$23 million to be used to provide affordable housing in Palo Alto.

On pages 5-30 and 5-32, the Draft EIR states that the Quarry Road/ Arboretum Drive and Quarry Road/EI Camino Real housing sites on the Stanford campus in unincorporated Santa Clara County are zoned AI-20S, Academic Reserve and Open Space. This is incorrect. The Stanford Community Plan designates the sites "Academic Campus." Under Stanford Community Policy LU-1:

The Academic Campus designation applies to lands in current or intended academic use. Academic use includes both facilities used for teaching or research activities and the wide range of uses which support academic activity, such as administrative offices, athletic facilities, student housing, and student and administrative support services. This designation is meant to provide Stanford with the opportunity to locate these uses in relation to one another according to the University's programmatic needs.

The sites are zoned A-1, which allows university uses pursuant to a use permit. Stanford's General Use Permit places the sites in the Quarry Development District.

General Use Permit Condition F.1 allows construction of 200 housing units on the Quarry Road/Arboretum Drive and 150 housing units on the Quarry Road/EI Camino Real site for postdoctoral fellows and medical residents. Under General Use Permit Condition F.4.b, the housing units on these sites can be increased by 20 percent so long as a commensurate reduction in units is made in another campus development district. An increase in units beyond 20 percent would require an environmental assessment, along with further reduction in units elsewhere on the campus.

The General Use Permit does not allow housing on the Stanford campus where at least one of the occupants is not a member of the University faculty, staff or student population. The Final EIR should clarify that these sites are designated for postdoctoral fellows and medical residents.

On page 5-32, the Draft EIR states that the housing site at Pasteur Drive/ Sand Hill Road in the City of Palo Alto is zoned PF, Public Facilities. We understand that, as part of the Sand Hill Road Project, the City zoned this Site RM-40, allowing multiple family residential units at a residential density of 40 units per acre.

On page 5-34, the Draft EIR states that it is not expected that dedication of housing at the Quarry sites on the Stanford campus to SUMC employees would displace post-doctoral fellows and graduate students off campus. This is incorrect. General Use Permit Condition F.1 authorizes construction of 3,018 housing units on the Stanford campus and allocates those units to campus population types. General Use Permit Condition F.3 provides that the distribution of housing units by type or number may deviate from the allocation in Condition F.1, but absent further environmental review and Planning Commission approval, the total number of units cannot exceed the number specified by the General Use Permit. Thus, if the Quarry housing sites were

used for Hospital employees, fewer approved housing units would be available for use by the University population.

On page 5-34, the Draft EIR states that the 420 units at the Quarry Road sites would be within the 20 percent additional allowance. The meaning of this statement is unclear. The General Use Permit allows a 20 percent deviation in housing units in a campus development district as long as a corresponding reduction is taken in another development district. General Use Permit Condition F.8 also imposes a timing requirement such that specified numbers of new housing units are constructed in sync with specified amounts of academic square footage. This requirement ensures that housing and academic square footage are constructed at a similar pace. It does not mean that the University does not have a programmatic need for housing beyond the amount needed to fulfill the timing requirement. Based on its assessment of its programmatic needs, the University applied for and received approval for 3,018 housing units. All of those units are allocated to University populations under the General Use Permit.

On page 5-34, the Draft EIR recognizes that the Community Plan and General Use Permit EIR transportation analysis applied trip generation rates specific to campus residents, including rates for postdoctoral fellows. The Draft EIR states that the trip rate of SUMC employee occupants of the housing units would differ from the trip rate for the postdoctoral fellows. We understand that SUMC employees and other household members would generate more local trips than postdoctoral fellows and other household members.

On page 5-34, the Draft EIR states that the change in trip rate for the Quarry Road housing sites is addressed in the Draft EIR. We understand that is not the case. The traffic evaluation for the Village Concept Alternative treated the housing for SUMC employees at the Quarry Road housing sites as new housing, rather than identifying the incremental difference in trip generation between housing for the campus population and housing for Hospital employees. We also understand that the traffic evaluation for the Village Concept Alternative deducted trips by the Hospital employee member of the household who could walk or take a shuttle to work. The traffic evaluation should have added a corresponding trip by the postdoctoral fellows and medical residents who would be forced to commute to campus.

On page 5-34, the Draft EIR states that the corresponding vehicle miles traveled (VMT), and air quality and noise emissions are also captured. However, the Village Concept Alternative traffic analysis fails to recognize that if members of the University population were displaced, their VMT and associated emissions would increase compared with the assumptions in the General Use Permit. The benefit of housing Hospital employees rather than the campus population is limited to a slight reduction in VMT because, on average, Hospital employees commute a slightly longer distance than University employees. This benefit may be offset by the increased trip generation from housing dedicated to Hospital employees compared with housing dedicated to the University population.

On pages 5-35 to 5-38, the Draft EIR identifies the linkage components of the Village Concept Alternative. The Project sponsors provide the following comments regarding these components:

- The Village Concept Alternative includes a new Class I bicycle and pedestrian path extending from the planned Everett undercrossing to El Camino Real. The SUMC Project sponsors have offered to fund such improvements, including landscape, lighting and signage improvements, as part of a Development Agreement.
- The Village Concept Alternative includes crosswalk markings, painting of a bike route, new paving, an ADA-accessible median refuge, and potential signal timing changes at the El Camino Real and Quarry Road intersection. All of these improvements are subject to Caltrans jurisdiction and approval. On page 5-200, the Draft EIR shows that a change in signal timing at this intersection could result in a new significant impact in the AM Peak Hour.
- The Village Concept Alternative includes new pedestrian crossings at the Stanford Barn area. The SUMC Project sponsors have offered to fund such improvements, as well as new pedestrian and bicycle pathways through the Stanford Barn area, as part of a Development Agreement.
- The Village Concept Alternative includes new and improved shuttle stops at the SUMC Sites and in the project vicinity. The SUMC Project sponsors have offered to fund such improvements, including improved bus stops on Quarry Road, as part of a Development Agreement. Please note that the transit centers described under the Village Concept Alternative correct the descriptions found under Mitigation Measure TR 7.1.

On page 5-49, the Draft EIR states that the Village Concept Alternative would meet all of the objectives of the SUMC sponsors. The SUMC Project sponsors' objectives focus on seismic safety and the provision of high quality health care and medical research facilities. The addition of the linkage component under a Development Agreement would further the Project sponsors' objectives to provide efficient access to the SUMC for healthcare providers and staff, and to enhance the pedestrian and bicycle connections between the SUMC, the Stanford Shopping Center, PAITS, and nearby open space areas. The addition of the Village Concept Alternative's housing component would not further any of the SUMC Project sponsors' objectives and would be inconsistent with the Project sponsors' cost objective.

On page 5-149, the Draft EIR identifies Mitigation Measure NO-1.1, which would require steps to reduce the effects of pile-driving noise. The SUMC Project sponsors are evaluating the feasibility of this measure and will provide further information to City staff.

On page 5-199, the Draft EIR states that under the Village Concept Alternative a greater number of SUMC employees would be within walking distance of the SUMC Sites. The Final EIR should also recognize that under this alternative, fewer University postdoctoral fellows and medical residents would be within walking distance of the campus as compared with the assumptions and analysis in the General Use Permit EIR.

On page 5-200, the Draft EIR states that vehicle trip generation under this alternative would be lower than for the SUMC Project. The Final EIR should recognize that a corresponding increase in vehicle trip generation by the campus population would occur. In addition, we understand that

Michael J. Peterson  
Vice President, Special Projects  
Stanford Hospital & Clinics

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housing for SUMC employees would generate more trips by non-SUMC employees than housing for the campus population.

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On page 5-203, the Draft EIR identifies Mitigation Measure TR-6.1 as mitigation for impacts of the Village Concept Alternative on pedestrian and bicycle facilities. However, Mitigation Measure TR-6.1 largely duplicates the components of the Village Concept Alternative. With the linkages component, the Village Concept Alternative would not result in significant adverse impacts to pedestrian and bicycle facilities.

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On page 5-203, the Draft EIR states that the Village Concept Alternative would provide the same amount of parking on SUMC Sites as the proposed Project. The Final EIR should recognize that, by displacing members of the campus population, this alternative could result in the need for additional parking for campus commuters.

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On page 5-206, the Draft EIR states that the "main difference between the SUMC Project and the Village Concept Alternative is the vehicle miles traveled associated with this alternative." The first row of Table 5-13 on page 5-206 presents VMT from the SUMC Project as 306,098 because trips by non-employee household members have been added to the Project. The SUMC Project does not include housing, therefore the figure on this row should be 275,566. With the inclusion of non-employee household members, VMT from the Village Concept Alternative would be higher than VMT from the SUMC Project.

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Table 5-13 on page 5-206 shows that, with provision of the Go Pass, the Village Concept Alternative reduces employee and patient trips by less than 1% compared with the proposed Project. Similarly, Table 5-15 shows that, with provision of the Go Pass, the Village Concept Alternative reduces greenhouse gas emissions by less than 1% compared with the proposed Project.

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Table 5-16 on page 5-209 incorrectly applies trips by non-employee household members to the proposed SUMC Project. This table should be revised to show that SUMC Project VMT would be 275,566.

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On page 5-222, the Draft EIR recognizes that dedication of campus housing to Hospital employees under the Village Concept Alternative would not address the City's jobs to employed residents ratio. The housing sites are in unincorporated Santa Clara County, not in Palo Alto. The Draft EIR also states that the housing site at Pasteur Drive/Sand Hill Road already would have been included in the ABAG projections. Therefore, provision of housing at this site "would not affect the SUMC Project's impact on the jobs to employed residents ratio."

\* \* \* \* \*

We appreciate the opportunity to provide comments on the Draft EIR for the SUMC Project, and look forward to the City's continued consideration of this important project.

Sincerely,

**22. Stanford University Medical Center, Michael J. Peterson (letter dated July 27, 2010)**

22.1 *The commentor requests that on page S-7, the size of the annexation parcel should be described as 0.75 acres.* The following edit has been made to the fourth sentence of the second paragraph on page S-7 in the Summary section of the Draft EIR.

A ~~half~~0.75-acre area at the northwest corner of the Main SUMC Site, just west of Pasteur Drive, is located in unincorporated Santa Clara County, and falls within the A-1 district in the County of Santa Clara Zoning Code.

22.2 *The commentor requests a text change on page S-12 to state that the Development Agreement terms were proposed by the SUMC Project sponsors.* The following edit has been made to the first full paragraph under the subheader “Development Agreement” on page S-12 in the Summary Section of the Draft EIR. Please note that the terms that follow the below paragraph are those proposed by the SUMC Project sponsors; the City’s supplemental terms are provided separately.

**Development Agreement.** A Development Agreement would be approved as part of the SUMC Project if the terms of such an agreement could be mutually agreed upon. The terms proposed by ~~the City~~ the SUMC Project sponsors and amended by the City to be included in the Development Agreement are as follows:

22.3 *The commentor requests a revision to page S-23 to correct the size of the Emergency Department.* Footnote 20 on page S-23 has been revised as follows:

<sup>20</sup> The 36,192-square-foot increase in ED size includes 25,000 square feet of “right-sizing” or decompression space, which refers to expanded floor area to serve as treatment space. The right-sizing or decompression trend is typically seen in modernizing hospitals as modern treatment standards require increased floor area per bed or treatment space, compared to older hospital facilities. As such, only ~~5,600~~ 11,192 square feet of the ED expansion would be associated with an increased level of operations.

22.4 *The commentor disagrees that the Hospital District would include an inclusionary housing element.* Please refer to Master Response 7 for a discussion on inclusionary housing.

22.5 *The commentor requests a text change to the amendment of Policy L-8 of the Comprehensive Plan.* The City has proposed to modify Policy L-8 to allow for a greater amount of square footage development at the SUMC Project Sites. As outlined on page 3.2-29 of the Draft EIR, Land Use, the policy would be amended to state that the SUMC hospital uses would not be treated as “non-residential development.” It should be noted that the EIR analyzes the effects of the square footage proposed under the SUMC Project.

Therefore, the change to Policy L-8 would not result in impacts beyond that identified in the EIR.

Not only would the area devoted to urban development remain constant, but new non-residential growth from 1989 forward would be limited to just over 3.25 million square feet. The total non-residential development in the City in 1996 was in the range of 25 million square feet. This amount of growth was analyzed in the Citywide 1989 Land Use and Transportation Study and was largely implemented through commercial downzoning. This growth limit would be observed Citywide for the term of the Comprehensive Plan. Traffic will be monitored to ensure that the intent of the limit is being achieved, though it is recognized that traffic counts are affected by both residential and non-residential growth and also by auto use behavior. Any uses identified in Map L-6 as exempt from monitoring would not count towards the area specific or citywide caps.

The following edits have been made to the first paragraph on page 3.2-29 of Section 3.2, Land Use. Please note that the last sentence in the text below is already underlined in the Draft EIR and so the additional text here is bolded and double underlined.

In addition, the City has proposed to modify Policy L-8 as follows (underlined text would be added):

Maintain a limit of 3,257,900 square feet of new non-residential development for the nine planning areas evaluated in the 1989 Citywide Land Use and Transportation Study, with the understanding that the City Council may make modifications for specific properties that allow modest additional growth. Such additional growth will count towards the 3,257,900 maximum. Stanford University Medical Center hospital, **clinic, and medical school** uses are not intended to be treated as “non-residential development” for the purposes of this policy; thus, additional growth in areas zoned “Hospital District” is exempt from this policy.

22.6 *The commentor states that it would not be feasible to screen all construction activities from view, as required by Mitigation Measure VQ-1.1 in Section 3.3, Visual Quality. As stated on page 3.3-27 of the Draft EIR under Mitigation Measure VQ-1.1, “The intent of the [Construction Visual Improvement] plan is to aesthetically improve portions of the project site that would remain unimproved for an extended period and screen the construction zone from view by passersby along the public streets and sidewalks.” As noted by the commentor, not all areas would be completely blocked from view; however, the SUMC Project sponsors are expected to install barriers, such as fencing materials, along public sidewalks and streets. These fences, along with the other visual improvements outlined in Mitigation Measure VQ-1.1, would screen direct street views of the SUMC Sites during construction. The specifics of the Construction Visual Improvements Plan would be developed and implemented by the SUMC Project contractor(s) and approved by the*



Planning Director. The City believes that construction area screening is feasible; therefore, no changes to the text are warranted.

- 22.7 *The commentor requests a text revision to Mitigation Measure VQ-2.1. As correctly stated by the commentor, recommendations from the Architectural Review Board (ARB) regarding the final building and site plans of the SUMC Project would be forwarded to City Council for consideration.*

As a result of this comment, Mitigation Measure VQ-2.1 on Table S-4 on page S-28 of the Draft EIR, and on page 3.3-39 of the Draft EIR has been revised as follows:

*VQ-2.1 Adhere to City's Architectural Review Process and Recommendations.* The SUMC Project sponsors shall submit final building and site plans to the ARB prior to issuance of any development permits. Architectural Review shall assess the appropriateness of proposed demolitions, proposed building heights and massing, siting of buildings and structures, architecture and façade treatments, landscaping, circulation plans, and parking. The ARB may ~~require~~ recommend alterations to any of the above project features, or the ARB may suggest new features, such as new landscaping or public art, to improve the proposed SUMC Project design. Any ~~recommendations made by the ARB~~ conditions required by the City Council as a result of the Architectural Review Process with respect to the design of the SUMC Project shall be implemented by the SUMC Project sponsors.

- 22.8 *The commentor states that the City cannot require the SUMC Project sponsors to implement transportation demand management (TDM) measures without the SUMC Project sponsors' agreement. The comment is noted. As the Draft EIR acknowledges, there is legal uncertainty as to whether the City has the authority to directly require the SUMC Project sponsors to implement traffic demand management measures, given the apparent prohibition in Health and Safety Code Section 40717.9. Notwithstanding this apparent prohibition, the City's legal counsel has determined that the City still retains such authority (see Appendix CC of this document).<sup>1</sup> The City's legal counsel reached this conclusion after reviewing and considering the February 24, 2009 memorandum from SUMC's legal counsel.*

This EIR cannot resolve this legal disagreement over whether the City has the authority to implement such TDM measures. Should the City choose to exercise such authority, it is

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<sup>1</sup> Jarvis, Rick W., and Benjamin P. Fay, "Stanford University Medical Center Proposed Expansion – City Authority to Impose Employee Trip Reduction Programs," Memo to Cara Silver, City of Palo Alto Senior Assistant City Attorney, July 2, 2010. See Appendix CC of this document for full memo.

possible that the SUMC Project sponsors could file a lawsuit challenging such exercise, and it would then be for a court to resolve this legal dispute. For the purposes of this EIR, it is adequate to acknowledge this legal uncertainty. In cases where SUMC Project sponsors object to the imposition of a particular proposed TDM requirement (such as the identified potential requirement for employee use of off-site remote parking lots), the City Council should take into account this legal uncertainty as one factor in assessing the overall feasibility of imposing such a requirement as a mitigation measure. However, in cases where SUMC affirmatively proposes or otherwise agrees to a particular TDM requirement (such as implementation of the GO Pass measure), the existence of this legal uncertainty is essentially irrelevant for the purposes of CEQA. The GO Pass measure is obviously a feasible mitigation measure given SUMC's strong statements agreeing to such a measure, even if the City does not have the legal authority to impose it without the SUMC Project sponsors' agreement.

The comment cites language in a prior condition of approval and a prior EIR for the Stanford Cancer Center (SCC), which suggested that the City did not have authority to impose TDM measures.<sup>2</sup> The comment suggests that the same language should be used in the present EIR. However, that earlier language predates the legal opinion from the City's legal counsel that concludes that the City does have such authority.

22.9 *The commentor expresses concerns about the requirement under Mitigation Measure TR-1.6 to survey roads and repair damage during the construction period.* It is anticipated that the required survey of damages would identify those damages reasonably attributable to construction activities. Periodically during construction, at an interval determined by the City of Palo Alto, roadway surveying would be conducted, the amount of deterioration and damage that is attributable to the SUMC Project construction would be estimated, and repairs would need to be made by the SUMC Project.

22.10 *The commentor contests Mitigation Measure TR-1.9, which addresses maintaining roadway capacity during special events.* The types of special events and their location could change between now and the time that construction of the SUMC Project is completed. The mitigation measure should be maintained. If the proposed construction would not restrict roadways for accessing special events, then this measure would not be triggered. As a result of this comment, Draft EIR text on page S-33 and on page 3.4-44, Mitigation Measure TR-1.9, is revised as follows:

*TR-1.9 Conduct Additional Measures During Special Events. During major athletic events or other special events which attract a substantial number of visitors to the campus, the SUMC Project sponsors shall implement a mechanism to prevent roadway*

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<sup>2</sup> City of Palo Alto, "Stanford Center for Cancer Treatment and Prevention/Ambulatory Care Pavilion EIR," 2000.



construction activities from reducing roadway capacity ~~during major athletic events or other special events which attract a substantial number of visitors to the campus~~ along those roadways that would be affected by the SUMC Project and that would provide access to the athletic or other special events. This measure may require a special supplemental permit to be approved by either Santa Clara County or the City of Palo Alto prior to hosting such events during significant construction phases.

- 22.11 *The commentor requests clarification of the “additional fee” under Mitigation Measure TR-2.1, and indicates that traffic-adaptive signal technology is already installed at specified intersections.* Please refer to Master Response 6 a discussion on SUMC Project’s fair share contribution. Please also see Staff-Initiated Change 2 for a corrected discussion of the traffic-adaptive signal technology requirement.
- 22.12 *The commentor requests clarification of the fair share costs and fees required under Mitigation Measure TR-2.2.* Please refer to Master Response 6 for a discussion on SUMC Project’s fair share contribution under Mitigation Measure TR-2.2.
- 22.13 *The commentor questions Mitigation Measure TR-2.3 and states that the specifics of this measure would be the subject of the Development Agreement since it is a voluntary measure.* Please refer to Response 22.8, above. The City and the SUMC Project sponsors are negotiating Development Agreement terms to implement and clarify this measure.
- 22.14 *The commentor questions the list of required roadway improvements under Mitigation Measure TR-2.4.* Please see Staff-Initiated Change 2 for a revised discussion of the roadway improvements. The Draft EIR and Staff-Initiated Change 2 also evaluate ways to mitigate SUMC Project impacts without making physical roadway improvements. The SUMC Project impact at the El Camino Real/Page Mill Road intersection can be mitigated through traffic-adaptive signal technology and, therefore, physical roadway improvements at this intersection would not be necessary or warranted.
- 22.15 *The commentor questions the list of the roadway improvement required under Mitigation Measure TR-2.5.* Please see Staff-Initiated Change 2 for a revised discussion of the roadway improvements and intersection LOS conclusions. Also, please refer to Master Response 6 for a discussion on the SUMC Project’s fair share contribution.
- 22.16 *The commentor objects to the imposition of remote parking lots.* The comment is noted. The Draft EIR does not propose the actual imposition of a mitigation measure which would require use of remote parking by employees, although Appendix K of the Draft EIR presents remote parking facilities as a potential alternative to the proposed GO Pass measure. The comment, including its attachments (as included in this section as Letter 22b), presents various arguments as to why a remote parking mitigation measure would not

be feasible. Such arguments would only need to be considered if the City Council considers imposing such a measure, which the EIR does not propose.

With respect to the commentor's statement that the City does not have the legal authority to impose such a mitigation measure without the SUMC Project sponsors' agreement, refer to Response 22.8 above. For the same reasons as is set forth in a memorandum from July 2, 2010, counsel for the City is of the opinion that the City has the legal authority to require use of remote parking lots as a form of TDM.<sup>3</sup> Also, please refer to Master Response 2 for a discussion of remote parking.

- 22.17 *The commentor supports Mitigation Measure TR-4.2, as presented on page 3.4-72 of Section 3.4, Transportation.* The comment is noted and no further response is necessary.
- 22.18 *The commentor contests the conclusion that the SUMC Project would result in a traffic hazard on Welch Road.* Please refer to Master Response 5 for a detailed discussion of the connection between Pasteur Drive and Roth Way.
- 22.19 *The commentor contests the requirement under Mitigation Measure TR-4.1 to conduct further studies for the connection between Pasteur Drive and Roth Way.* Please refer to Master Response 5 for a detail discussion of Mitigation Measure TR-4.1.
- 22.20 *The commentor states that the Draft EIR does not identify any SUMC Project component that would impede existing or planned bicycle and pedestrian facilities.* As indicated on page 3.4-76 of the Draft EIR, the SUMC Project would result in increased bicycle and pedestrian activity in and around the SUMC Sites. In addition, the SUMC Project would generate 10,061 daily vehicular trips, before mitigation. An increase in bicycle and pedestrian travel, and traffic volumes, plus the associated intersection congestion caused by higher traffic levels, could result in increased traffic-related hazards to pedestrians and cyclists.
- 22.21 *The commentor states that the Draft EIR on page 3.4-76, under Impact TR-6, does not relate to the City's significance standard.* The City's standard on page 3.4-31 of the Draft EIR states that the SUMC Project would result in the significant impact if it would "result in increased traffic related hazards to pedestrians and bicyclists as a result of increased congestion." As indicated on page 3.4-76 of the Draft EIR, the SUMC Project would result in increased bicycle and pedestrian activity in and around the SUMC Sites. In addition, the SUMC Project would generate 10,061 daily vehicular trips, before mitigation. An increase in bicycle and pedestrian travel, and traffic volumes, plus the associated intersection congestion caused by higher traffic levels, could result in increased traffic-related hazards to pedestrians and cyclists. As such, the conclusion is related to the significance standard.

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<sup>3</sup> Jarvis, Rick W., and Benjamin P. Fay, "Stanford University Medical Center Proposed Expansion – City Authority to Impose Employee Trip Reduction Programs," Memo to Cara Silver, City of Palo Alto Senior Assistant City Attorney, July 2, 2010. See Appendix CC of this document for full memo.

- 22.22 *The commentor notes that aspects of Mitigation Measure TR-6.1 would be subject to Caltrans approval and would result in a new significant impact in the AM Peak Hour. Please refer to Master Response 6 for revisions to this measure.*
- 22.23 *The commentor states that the SUMC Project sponsors have offered to fund a bicycle and pedestrian connection between the SUMC Sites and Stanford Shopping Center. While the SUMC Project sponsors have offered to fund a bicycle and pedestrian connection between the SUMC Sites and Stanford Shopping Center, the City is nonetheless retaining this provision as a mitigation measure to ensure its implementation. Final Development Agreement terms have yet to be negotiated. Please refer to Master Response 12 for further discussion of the purpose of the Development Agreement and the process for its adoption.*
- 22.24 *The commentor states that the SUMC Project sponsors have offered to fund a connection from the planned Everett Avenue bicycle and pedestrian undercrossing to the El Camino Real/Quarry Road intersection. While the SUMC Project sponsors have offered to fund a connection from the planed Everett Avenue bicycle and pedestrian undercrossing to the El Camino Real/Quarry Road intersection, the City is nonetheless retaining this provision as a mitigation measure to ensure its implementation. Final Development Agreement terms have yet to be negotiated. Please refer to Master Response 12 for further discussion of the purpose of the Development Agreement and the process for its adoption as well as Master Response 6 for a discussion of fair share calculations to the cost of transportation-related mitigation measures.*
- 22.25 *The commentor points out that the requirement under Mitigation Measure TR-6.1 for a bicycle and pedestrian route through the Arboretum is beyond the City's jurisdiction. Mitigation Measure TR-6.1 identifies measures to reduce the hazards from the SUMC Project's impacts on bicyclists and pedestrians. These measures include installing a variety of improvements to the bicycle and pedestrian network in the immediate vicinity of the SUMC Sites. One identified improvement would be to provide a bicycle and pedestrian trail through the Arboretum Drive as part of future campus planning in the vicinity of the SUMC Sites. Upon further review, the City has determined that this measure would not be necessary to mitigate the SUMC Project's impacts. Under existing conditions, there is already bicycle and pedestrian access through this portion of the campus, although not formally designated as such. It should be noted that Stanford's bike plan does call for making similar improvements, and such improvements may make sense from a general planning perspective, but those improvements are not necessary to mitigate any impact of the SUMC Project. Given the above discussion, Draft EIR text has been revised, as shown in Master Response 6.*
- 22.26 *The commentor points out that continuous sidewalks exist along Quarry Road and that the SUMC Project sponsors have offered to fund enhancements to bus stops along Quarry Road. Please refer to Master Response 6 for changes to Mitigation Measure TR-6.1.*

- 22.27 *The commentor questions whether the 12-foot-wide crosswalks and other improvements under the second to last bullet under Mitigation Measure TR-6.1 are feasible or desirable. Mitigation Measure TR-6.1 requires that 12-foot-wide crosswalks be provided at El Camino Real/Quarry Road and other intersections along Vineyard Lane, Quarry Road, and Welch Road, along with color concrete or diagonal striping, pedestrian pushbuttons, and countdown pedestrian signals. All of these improvements are considered feasible and desirable to maximize pedestrian travel in and around the SUMC Project. Other improvements, such as median refuge areas and advance warning devices, are suggested to be installed on a case-by-case basis during the design process.*
- 22.28 *The commentor indicates that the SUMC Project sponsors will include installation of Class I and Class III bicycle parking spaces. While the SUMC Project sponsors have indicated that they will include installation of Class I and Class III bicycle parking spaces, the City is nonetheless retaining this measure as a mitigation measure to ensure its implementation.*
- 22.29 *The commentor questions the validity of the Draft EIR's conclusion regarding transit. Please see Staff-Initiated Change 1 for discussion of the quantified transit analysis.*
- 22.30 *The commentor states that the SUMC Project sponsors have offered to provide increased Marguerite shuttle service as part of the Development Agreement. Refer to Master Response 1 for a discussion of the GO Pass mitigation measure and required steps in the event that mode splits are not accomplished. In addition, please refer to Master Response 12 for a description of the Development Agreement.*
- 22.31 *The commentor notes the Draft EIR on page 3.4-78 identifies the maximum load factor for the U-Line from Ardenwood to the Stanford campus at 1.0. The commentor indicates that Stanford provides funding for this service. The Draft EIR evaluates the existing U-Line service and finds the current load factor (comparison of the number of riders to the number of seats) to be 0.94. The attractiveness of transit for long trips, such as across the Bay to the Stanford campus, is partially based on every passenger having a seat. The use of U-Line service could be negatively impacted if the load factor were allowed to exceed 1.0.*
- 22.32 *The commentor indicates that conditions for transit centers do not occur at the SUMC. Please refer to Staff-Initiated Change 1 for a discussion of transit facilities.*
- 22.33 *The commentor disputes the requirement for transit centers as mitigation and points out that the SUMC Project would provide enhanced bus stops. Please refer to Staff-Initiated Change 1 for a revised discussion on transit facilities.*
- 22.34 *The commentor questions the requirement under Mitigation Measure TR-7.2 that would require a financial contribution to expand Marguerite shuttles into Palo Alto. It is essential that Marguerite shuttle service be expanded between SUMC and PAITS as part of the GO*

Pass mitigation. Please refer to Staff-Initiated Change 1 for the discussion and revision of Mitigation Measure TR-7.2.

- 22.35 *The commentor references Mitigation Measure TR-7.2, which suggests the SUMC Project sponsors make a financial contribution to the operation of the U-Line; however, Stanford currently funds the U-Line service and works with AC Transit to ensure adequate service. The Transportation Impact Analysis (Appendix C of the Draft EIR) suggests that the appropriate mitigation for the U-Line service would be to maintain a load factor of 1.0 or less. An additional financial contribution above and beyond what Stanford already contributes would only be necessary in the event that the U-Line load factors were consistently above 1.0.*
- 22.36 *The commentor indicates that the SUMC Project sponsors intend to pay the Citywide Traffic Impact Fee under Mitigation Measure TR-7-2. The comment is noted and no response is warranted.*
- 22.37 *The commentor indicates that the SUMC Project would not result in an increase in ridership on the VTA bus line and questions the fair share contribution as required under Mitigation Measure TR-7.2. Please refer to Staff-Initiated Change 1, which concludes that contribution to the VTA service and Crosstown Shuttle would not be warranted.*
- 22.38 *The commentor indicates that they will explore payment towards Menlo Park's shuttle fee as required under Mitigation Measure TR-7.2. Please see Staff-Initiated Change 1 for revisions to Mitigation Measure 7.2.*
- 22.39 *The commentor indicates that Mitigation Measure TR-9.1 should be clarified to specify that contribution toward an Opticom system would only be required for intersections that would be significantly impacted after mitigation. Contrary to the comment, Mitigation Measure TR-9.1 would be required for all significantly impacted intersections prior to mitigation. There would be 11 intersections that would be significantly impacted prior to mitigation. Please refer to Master Response 6 for more discussions on the SUMC Project's fair share contribution.*
- 22.40 *The commentor correctly notes that the recently adopted Bay Area Air Quality Management District (BAAQMD) significance thresholds would not apply to the SUMC Project since the Notice of Preparation for the SUMC Project was released prior to the adoption date for the new thresholds. The Draft EIR only provides a comparison of the SUMC Project's emissions to these new thresholds for informational purposes, and the conclusions in the EIR are based on the previously adopted BAAQMD CEQA Guidelines with the exception of cumulative impacts from TACs and fine particulate matter.*
- 22.41 *The commentor correctly notes that the provision of a Caltrain GO Pass for SUMC employees would not reduce SUMC Project emissions to a less-than-significant level, as*

- described on page 3.5-19 of the Draft EIR. The commentor also correctly notes that the reduction in trips associated with this measure would only apply to SUMC employee trips and not trips by patients or visitors. Patient and visitor trips are estimated to be approximately 60 percent of the SUMC Project trips. The commentor also correctly notes that these patient and visitor trips would likely occur with or without the SUMC Project, as those in need of medical treatment likely would seek treatment elsewhere in the Bay Area if the SUMC facilities were not expanded.*
- 22.42 *The commentor disputes the efficacy of Mitigation Measure PH-3.1. Please see Master Response 7 regarding the feasibility of Mitigation Measure PH-3.1. Also, as shown in Table 3.5-7 of the Draft EIR, mobile source emissions of NO<sub>x</sub> and PM<sub>10</sub> would be significant and unavoidable. That is, with mitigation, SUMC Project trips would emit 95.69 pounds per day or 16.30 tons per year of NO<sub>x</sub> and 407.91 pounds per day or 74.44 tons per year of PM<sub>10</sub>. These emissions would exceed the applicable BAAQMD thresholds of 80 pounds per day or 15 tons per year. As such, an alternative to reduce or avoid the significant and unavoidable mobile source emissions from the SUMC Project has been evaluated. The Village Concept Alternative provides an alternative development scenario that involves nearby employee housing, which was evaluated to determine whether it could reduce the SUMC Project's mobile-source emissions of NO<sub>x</sub> and PM<sub>10</sub>. However, as shown in the Staff Initiated Change 4, the Village Concept Alternative would result in an increase in emissions over the SUMC Project and therefore would not reduce impacts with respect to greenhouse gas emissions or NO<sub>x</sub> and PM<sub>10</sub>.*
- 22.43 *The commentor requests that a cumulative analysis of the potential health risks associated with the SUMC Project using the BAAQMD's published methodology for cumulative health risks. Please refer to Staff-Initiated Change 3 and Appendix U of this document for a discussion of the cumulative health risks associated with the SUMC Project.*
- 22.44 *The commentor has requested that the calculations of business-as-usual (BAU) and SUMC Project emissions be revised as described in an attachment, included as Letter 22d of this section. Revisions have been made to the emission inventories as described in Staff-Initiated Change 4.*
- 22.45 *The commentor disagrees with the conclusion that the SUMC Project energy-consuming features are inconsistent with the Climate Protection Plan policies with respect to energy efficiency. Table 3.6-5 on page 3.6-31 of the Draft EIR outlines the energy efficiency measures that would be incorporated as design features under the SUMC Project. The Draft EIR concludes that an audit is necessary to verify the reductions obtained. The text in Table 3.6-5 on pages 3.6-31 and 3.6-32 has been revised as indicated in Staff-Initiated Change 4. In addition, Mitigation Measure CC-1.1 on page 3.6-54 of the Draft EIR has been revised as indicated in Staff-Initiated Change 4.*



22.46 *The commentor requests that Mitigation Measure CC-1.1 be revised to specify that the commissioning would occur once for each new building, the year following its construction.* The purpose of Mitigation Measure CC-1.1 is to ensure that the buildings are operating at the intended design efficiency. This can be accomplished through an initial commissioning and then subsequent annual reports and does not require repeated commissioning. Therefore, Mitigation Measure CC-1.1 has been revised as indicated in Staff-Initiated Change 4.

22.47 *The commentor states that the City's Climate Protection Plan indicates that participation in the Palo Alto Green Energy Program is voluntary and not, as indicated in the Draft EIR, a requirement for the SUMC Project.* Mitigation Measure CC-1.2 on page 3.6-55 of the Draft EIR, which required participation by the SUMC Project in the Palo Alto Green Energy Program, has been revised as indicated in Staff-Initiated Change 4. Under the revised Mitigation Measure CC-1.2, the SUMC Project sponsors would be required to participate in a renewable energy program, but not necessarily the City's Palo Alto Green renewable energy program.

22.48 *The commentor states that the Draft EIR overestimates the SUMC Project energy usage, and further states that the Draft EIR does not adequately recognize the efforts that the SUMC Project sponsors are taking to reduce energy use.* As discussed in more detail in Staff-Initiated Change 4, the electricity usage and emissions estimates for the SUMC Project have been revised. See Staff-Initiated Change 4 for complete details. Due to these revisions, there is a reduction in estimated electrical usage for the SUMC Project from 54,640 MWh to 32,147 MWh annually.

While the Draft EIR acknowledges the energy efficiency measures applied to the SUMC Project, the SUMC Project must be compliant with each of the City's Climate Protection Plan individual policies in order to result in less-than-significant impacts. Mitigation Measure CC-1.2, on page 3.6-55 of the Draft EIR, has been revised to require that the SUMC Project participate in a renewable energy program, but not necessarily the City's Palo Alto Green renewable energy program, as indicated in Staff-Initiated Change 4.

22.49 *The commentor indicates that the City's Climate Protection Plan promotes inventorying and reporting of greenhouse gas emissions and does not make reporting mandatory.* The Climate Protection Plan does not mandate that individual businesses inventory or report greenhouse gas emissions. However, the City has indicated that annual greenhouse gas emissions inventories for the Hospitals should be included as mitigation in order to enable the City to more accurately monitor the Citywide emissions and the effects of the Climate Protection Plan policies.



- 22.50 *The commentor indicates that the City's Climate Protection Plan's policy for offering additional public shuttles appears to apply to the City rather than the community. The additional public shuttle mitigation in the City's Climate Protection Plan applies to the City. However, the SUMC Project sponsors currently provide an extensive public shuttle system that is expanded as demand increases. Further, the SUMC Project sponsors have offered to expand the Marguerite shuttle service where increased demand would result from the implementation of the Caltrain GO Pass. Because of the SUMC Project's potential expansion of the Marguerite shuttle service, the Draft EIR includes this policy to further demonstrate the SUMC Project's compliance with the goals of the City's Climate Protection Plan.*
- 22.51 *The commentor indicates that the City's Climate Protection Plan does not appear to require individual businesses to prepare and submit waste reduction audits, while the mitigation implemented in the Draft EIR requires annual waste reduction audits. The City's Climate Protection Plan does not require that individual businesses prepare or submit waste reduction audits. With the City's commitment to minimizing waste generation with the ultimate goal of Zero Waste, the inclusion of the mitigation requiring an initial audit is to show that the waste reduction due to SUMC Project efficiencies is warranted. As waste reduction audits are not mandated by the City's Climate Protection Plan, Table 3.6-5 on page 3.6-45 of the Draft EIR has been revised such that compliance with the plan is indicated; however mitigation is proposed to ensure that an audit is performed to verify the anticipated reductions are met, as shown in Staff-Initiated Change 4.*
- 22.52 *The commentor objects to the SUMC Project sponsors requirements to conduct annual waste reduction audits. Mitigation Measure CC-1.4 has been revised to remove the annual waste reduction audits, as shown in Staff-Initiated Change 4.*
- 22.53 *The commentor states that vehicle miles traveled would not be substantially reduced by providing housing in Palo Alto. Please see Master Response 7 regarding Mitigation Measure PH-3.1. Please see Staff-Initiated Change 4 for revisions to the calculation of greenhouse gas emissions and conclusions in the climate change analysis. As indicated, the SUMC Project's greenhouse gas emissions would be more than the 30 percent below BAU, and as such, the SUMC Project would have a less than cumulatively considerable contribution to global climate change due to quantified greenhouse gas emissions. As shown in the Staff-Initiated Change 4, the Village Concept Alternative would result in an increase in emissions over the SUMC Project and therefore would not reduce impacts with respect to greenhouse gas emissions. However, both the SUMC Project and the Village Concept Alternative would have less than cumulatively considerable contributions to global climate change with mitigation. In making its decision on the SUMC Project and its alternatives, the City Council will take into consideration the benefits of the Village Concept Alternative, including the level to which this alternative would or would not reduce mobile source emissions (see Master Response 8).*

- 22.54 *The commentor states that the SUMC Project sponsors have a long track record of tree protection and preservation.* The comment is noted and acknowledged by the City. Please refer to Staff-Initiated Change 6 for a description of the corrected Protected Tree numbers.
- 22.55 *The commentor suggests that the Final EIR identify the trees within the SUMC Project Sites that the City has determined to be biological and aesthetic tree resources.* Figure 5-1 in the Draft EIR has been replaced with new figures (Figures 5-1a through 5-1d), as indicated in Staff-Initiated Change 6. These figures depict the aesthetic tree resources that would be removed, retained, and relocated. Figures 5-1a through 5-1d in Staff-Initiated Change 6 compares tree removal, retention, and relocation under the Tree Preservation Alternative with the SUMC Project. Please refer to Staff-Initiated Change 6 for corrected aesthetic tree resource numbers.
- 22.56 *The commentor summarizes their understanding of the tree replacement requirements.* Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22.57 *The commentor requests edits to Mitigation Measures BR-4.1 through BR-4.5 on pages 3.9-26 through 3.9-29 of the Draft EIR.* Edits have been made to these mitigation measures, with the exception of Mitigation Measure BR-4.5. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22.58 *The commentor requests edits to Mitigation Measure BR-4.1, as presented on page 3.9-26 of the Draft EIR.* Edits have been made to Mitigation Measure BR-4.1. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22.59 *The commentor requests edits to Mitigation Measure BR-4.2, as presented on pages 3.9-26 through 3.9-27 of the Draft EIR.* Edits have been made to Mitigation Measure BR-4.2. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22.60 *The commentor requests edits to Mitigation Measure BR-4.3, as presented on page 3.9-27 of the Draft EIR.* Edits have been made to Mitigation Measure BR-4.3. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22.61 *The commentor requests the deletion of Mitigation Measure BR-4.4 as presented in the Draft EIR on pages 3.9-27 through 3.9-28.* Although the City has decided not to delete the mitigation measure in its entirety, edits have been made to Mitigation Measure BR-4.4 (now Mitigation Measure BR-4.4A). Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22.62 *The commentor suggests an additional mitigation measure, which would require the replacement for the loss of any Protected Trees within the SUMC Sites.* This mitigation measure has been added as Mitigation Measure BR-4.4B. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.

22.63 *The commentor requests edits to Mitigation Measure BR-4.6, as presented on page 3.9-28 of the Draft EIR. Edits have been made to Mitigation Measure BR-4.6. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.*

22.64 *The commentor requests a revision to the Draft EIR to reflect that the Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) has not yet been adopted. According to the Santa Clara County, the Draft EIR/EIS for the Draft Habitat Plan was released on December 17, 2010 and the certification of the Environmental Review and the completion of the Final HCP/NCCP is expected to occur in 2011.<sup>4</sup> Therefore, the following text edit has been made to fifth sentence of the discussion under Impact BR-5 on page 3.9-29 of Section 3.9, Biological Resources:*

In September 2006, Stanford University initiated the development of the Stanford University HCP with USFWS and NOAA Fisheries. However, because the Stanford University HCP is currently out for public review and has not been adopted, it is not a currently applicable Habitat Conservation Plan or Natural Community Conservation Plan (NCCP). Until such time that the HCP is adopted, there is no requirement to comply with its provisions. In addition, ~~the~~ Santa Clara Valley HCP/NCCP is the nearest adopted HCP/NCCP in the region but is also in development and has not yet been adopted. Nonetheless, the SUMC Sites are not included within ~~it's~~ the boundaries of the Santa Clara Valley HCP/NCCP and it would not apply to the SUMC Project. Because no applicable adopted HCP or NCCP currently exists for the SUMC Sites, and no habitat for special-status plant or wildlife species occurs in the SUMC Sites, the SUMC Project would have no impact on any applicable HCP or NCCP.

22.65 *The commentor questions whether the SUMC Project would increase jobs compared to the City's projections. Please see Master Response 7 for a discussion of the analysis of the SUMC Project's contribution to the City's jobs to employed residents ratio.*

22.66 *The commentor questions whether the project would increase the City's jobs to employed residents ratio. The SUMC Project can only increase the jobs to employed residents ratio because the SUMC Project does not propose to increase housing stock and the SUMC Project does not propose to increase the City's projected employed residents. The SUMC Project only proposes to increase the "jobs" portion of the ratio. The methodology of comparing increased employment against a future scenario is appropriate under CEQA; it is comparable to the methodology in Section 3.4, Transportation, which applies a future year scenario both with and without the SUMC Project for more accurately determining impacts.*

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<sup>4</sup> County of Santa Clara, Santa Clara Valley Habitat Plan, "Santa Clara Valley HCP/NCCP," accessed on January 14, 2011 at: [http://scv-habitatplan.org/www/site/alias\\_\\_default/1/home.aspx](http://scv-habitatplan.org/www/site/alias__default/1/home.aspx).

- 22.67 *The commentor offers clarifications regarding specifics of the SUMC Project.* The clarifications pointed out by the commentor are correct. Please see Master Response 7, which explains that Mitigation Measure PH-3.1 is presented in the Draft EIR for informational purposes as an alternative mitigation measure to those identified in Section 3.4, Transportation, and Section 3.5, Air Quality.
- 22.68 *The commentor discusses the feasibility of mitigation measures.* Please see Master Response 7 for a discussion of Mitigation Measure PH-3.1.
- 22.69 *The commentor discusses the feasibility of mitigation measures.* Please see Master Response 7 for a discussion of Mitigation Measure PH-3.1.
- 22.70 *The commentor discusses the feasibility of mitigation measures.* Please see Master Response 7 for a discussion of Mitigation Measure PH-3.1.
- 22.71 *The commentor discusses the feasibility of mitigation measures.* Please see Master Response 7 for a discussion of Mitigation Measure PH-3.1.
- 22.72 *The commentor discusses the feasibility of mitigation measures.* Please see Master Response 7 for a discussion of Mitigation Measure PH-3.1.
- 22.73 *The commentor states that the amount of City open spaces outlined in the Draft EIR does not correctly add to the total.* According to the *City of Palo Alto Comprehensive Plan*, there is a total of 16,627 acres of land in the City, approximately 40 percent of which is dedicated as parks and open space preserves.<sup>5</sup> The open space preserves that are owned and operated by the City are the Baylands Nature Preserve, Esther Clark Nature Preserve, Foothills Park, and the Pearson-Arastradero Preserve.<sup>6</sup> In addition, the open space preserves that are within City lands, but are operated by the Mid-Peninsula Open Space District, include Montebello Open Space Preserve and Montebello Open Space Preserve.<sup>7</sup> Although the Draft EIR correctly identified the open space areas, the total acreages and percentages did not add to the correct sum, as noted by the commentor. As such, the third full paragraph on page 3.14-10, which continues to the beginning of page 3.14-11, has been revised, as shown below. These changes do not affect the analysis or the impact conclusions regarding park and open space facilities.

Approximately ~~30~~ 38 percent<sup>54</sup> (~~4,763~~ 6,372 acres) of the City's land area consists of open space preserves.<sup>54,55,56</sup> Open space preserves provide opportunities for hiking, biking, fishing, picnicking, camping, nature study, and non-motorized boating. They also have significant ecological and aesthetic value, providing important habitat for wildlife and scenic areas.<sup>55,57</sup> These major ~~foothill~~ open spaces that are owned and

<sup>5</sup> City of Palo Alto, *Palo Alto Comprehensive Plan, Land Use and Community Design*, 1998, pg. L-4.

<sup>6</sup> City of Palo Alto, "Open Space & Parks, Preserves and Open Space," accessed on August 25, 2010 at: [http://www.cityofpaloalto.org/depts/csd/parks\\_and\\_open\\_space/preserves\\_and\\_open\\_spaces/default.asp](http://www.cityofpaloalto.org/depts/csd/parks_and_open_space/preserves_and_open_spaces/default.asp)

<sup>7</sup> City of Palo Alto, *Palo Alto Comprehensive Plan, Natural Environment*, 1998, pg. N-2.

operated by the City include: the 1,940-acre ~~John Fletcher Byxbee Recreational Area~~ Baylands Nature Preserve; the 1,400-acre Foothills Park; the ~~622~~ 610-acre Pearson-Arastradero Preserve; and the 22-acre Esther Clark Park Nature Preserve.<sup>58,59</sup> ~~the 12.4-acre Timothy Hopkins Creekside Park~~; In addition, the open space preserves that are within City lands, but are operated by the Mid-Peninsula Open Space District, include the 2,200 acres of Montebello Open Space Preserve; and the 200-acre Los Trancos Open Space Preserve.<sup>60</sup> ~~The Byxbee, Foothill, Arastradero, Clark, and Hopkins Parks are owned and operated by the City, while Montebello and Los Trancos are operated by the Mid Peninsula Open Space District.~~<sup>56</sup>

<sup>54</sup> ~~Greg Betts, Director of Community Services, City of Palo Alto Community Service. Electronic communication, October 25, 2007. 6,372 acres of open space preserves/16,627 acres of land within the City of Palo Alto = 38.3 percent = ~ 38 percent~~

<sup>55</sup> City of Palo Alto, Palo Alto Comprehensive Plan, Land Use and Community Design, 1998.

<sup>56</sup> City of Palo Alto, Palo Alto Comprehensive Plan, Natural Environment, 1998.

<sup>5557</sup> City of Palo Alto. 1997. Palo Alto Comprehensive Plan EIR, Natural Environment, September.

<sup>56</sup> ~~Greg Betts, Director of Community Services, City of Palo Alto Community Service. Electronic communication, October 25, 2007.~~

<sup>58</sup> City of Palo Alto, Palo Alto Comprehensive Plan, Natural Environment, 1998.

<sup>59</sup> City of Palo Alto, "Open Space & Parks, Preserves and Open Space," accessed on August 25, 2010 at: [http://www.cityofpaloalto.org/depts/csd/parks\\_and\\_open\\_space/preserves\\_and\\_open\\_spaces/default.asp](http://www.cityofpaloalto.org/depts/csd/parks_and_open_space/preserves_and_open_spaces/default.asp).

<sup>60</sup> City of Palo Alto, Palo Alto Comprehensive Plan, Natural Environment, 1998.

22.74 *The commentor agrees with the impact conclusions and analysis of the impacts related to fire protection due to the implementation of the SUMC Project, but disagrees with the suggested improvement measures.* Under CEQA, the need for additional equipment and/or staff to support a public service is not considered a significant impact unless new facilities would need to be constructed to house them, resulting in physical impacts. For example, if a project would require an increase in the level of staffing at the fire department, and the existing fire house would not be not large enough to support this increase, a new, larger fire facility would have to be constructed. This new construction would result in potentially significant environmental impacts. However, the SUMC Project would not increase the need for fire services to the extent that new fire facilities would need to be constructed, therefore resulting in a less-than-significant impact.

Nonetheless, the SUMC Project would require additional fire services, just not to the degree that would result in the construction of new buildings. These additional services would have an impact on the Palo Alto Fire Department (PAFD) itself; however, under CEQA, this is not considered a physical environmental impact. As stated on page 3.14-13, the impacts to the PAFD include the need for a new ladder to serve the increased building heights at the SUMC Sites and the need for three additional full time employees.

Improvement measures are identified in the Draft EIR as a potential way to reduce the less-than-significant impacts to the PAFD, as presented on page 3.14-14. Since the impacts are not large enough to trigger the construction of new facilities, the construction of which could result in a significant impact, mitigation measures would not be warranted under CEQA. However, the City could encourage the SUMC Project sponsors to implement these improvement measures or consider imposing them as Conditions of Approval. Consideration over whether to include the improvement measures as Conditions of Approval would occur during the entitlement process rather than the environmental review process. Therefore, for the purposes of CEQA review in the Draft EIR, the improvement measures are provided as supplemental information and are not mandated, but encouraged.

One of the improvement measures, as outlined on page 3.14-14 of the Draft EIR, includes providing the PAFD with a 100-foot ladder to replace the existing 75-foot ladder. The 130-foot SHC Hospital towers would be significantly taller than the existing buildings at the SUMC Sites. Therefore, in order for the PAFD to reach the upper floors of the buildings in the event of an emergency, the PAFD has indicated that a new ladder would need to be purchased. Although more space would be needed at the fire station to house a 100-ladder truck, the PAFD has looked at the apparatus-housing capabilities at the fire stations and has determined that the current facilities are capable of handling any new equipment.<sup>8</sup>

The other improvement measure would increase the 12-hour Medical unit to a 24-hour unit and add three full time employees. *The commentor questions the need for these additional medical unit employees.* The calculations to determine how many new PAFD employees would be needed are based on the existing call volumes from the SUMC and square footages. The PAFD received 64 calls per year from the SUMC Sites in 2007 (the baseline condition). Based on the increase of square footage, the calls would increase to 99 calls per year. Although it is expected that many emergencies would be treated by hospital staff rather than the PAFD Medical unit, there is still a current demand for the PAFD (64 calls) and an increase in square footage, which would result in an increase of patients, employees, and visitors, is expected to result in a higher demand for PAFD staff. Therefore, as stated on page 3.14-13 of the Draft EIR, Dan Firth, former Fire Marshal of the PAFD, confirmed that three new full time employees would need to be hired.<sup>9</sup> Although additional staff would be needed as a result of the SUMC Project, the PAFD acknowledges that the existing fire stations are capable of handling the increase in employment.<sup>10</sup> Therefore, the need for new fire facilities would not be triggered and a less-than-significant physical environmental impact would occur.

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<sup>8</sup> Gordon Simpkinson, Acting Fire Marshal, Palo Alto Fire Department, Planning and Transportation Commission Hearing, June 2, 2010.

<sup>9</sup> Dan Firth, Fire Marshal, Palo Alto Fire Department, electronic communication May 9, 2008.

<sup>10</sup> Gordon Simpkinson, Acting Fire Marshal, Palo Alto Fire Department, Planning and Transportation Commission Hearing, June 2, 2010.



22.75 *The commentor acknowledges that City decision-makers could approve modifications to the SUMC Project alternatives that combine components of certain alternatives.* The Palo Alto City Council must ultimately certify that it has reviewed and considered the information in the EIR and that the EIR has been completed in conformity with CEQA. Following certification, it is at the discretion of the City Council whether to approve the SUMC Project as proposed, or portions of the proposed SUMC Project alternatives that would mitigate or avoid significant environmental impacts, while rejecting the alternatives that are deemed to be infeasible. Nonetheless, if it is determined that any impacts would be significant and unavoidable, a Statement of Overriding Considerations would be prepared. Refer to Master Response 8 for a description of the alternatives and variations to the proposed alternatives. Also refer to Master Response 11 for a detailed description of the City’s review process and the next steps in the EIR review.

22.76 *The commentor does not support the No Project or Reduced Project Alternatives.* Per CEQA Guidelines Section 15126.6, an EIR must include a range of feasible alternatives that obtain most of the project objectives and reduce the significant and unavoidable impacts of the proposed project. In addition, CEQA Guidelines Section 15126.6(e) requires the inclusion of a “no project” alternative in order to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Therefore, the SUMC Project Draft EIR analyzes seven alternatives, including two No Project and two Reduced Intensity Alternatives. This comment concerns the merits and feasibility of the SUMC Project alternatives and does not address the adequacy of the Draft EIR or the SUMC Project’s compliance with CEQA. Please refer to Master Response 9 regarding the merits of the SUMC Project and its alternatives.

22.77 *The commentor states that no trees that are both biological and aesthetic tree resources would be removed under the Tree Preservation Alternative.* Please see Staff-Initiated Change 6 for corrected numbers under the SUMC Project and Tree Preservation Alternative. The Tree Preservation Alternative would result in the relocation of three aesthetic tree resources (while retaining 15 of these trees). No Protected Trees that are aesthetic tree resources would be removed under this alternative. Up to 59 Protected Trees (which are not aesthetic tree resources) would be removed, which is less than the 74 Protected Trees removed under the SUMC Project.

*In addition, the commentor expresses support for the Tree Preservation Alternative.* It is acknowledged that the Tree Preservation Alternative is the SUMC Project sponsors’ preferred alternative. Nonetheless, this comment concerns the merits of the SUMC Project alternatives and does not address the adequacy of the Draft EIR or the SUMC Project’s compliance with CEQA. Please refer to Master Response 9 regarding the merits of the SUMC Project and its alternatives.



22.78 *The commentor states that extending the parking garage below Kaplan Lawn under the Historic Preservation Alternative would impact aesthetic tree resources Protected Trees.* As stated on page 5-25 in Section 5 of the Draft EIR, Alternatives, the Historic Preservation Alternative would need to relocate the underground parking lot proposed at the site of the new SHC clinics (under the SUMC Project) to a different location. This parking could potentially be accommodated by expanding the existing Pasteur Drive garage and/or increasing the size of the proposed SHC parking structure at the corner of Welch Road and Pasteur Drive.

Since the exact site plans for the Historic Preservation Alternative are unknown at this time, it is too speculative to determine the exact location of the parking garage. As stated by the commentor, expanding the existing Pasteur Drive garage would require the removal of the Protected Trees in Kaplan Lawn. Although this would result in a further significant and unavoidable impact to Protected Trees, it would more importantly, for the purposes of the Historic Preservation Alternative, affect the historic integrity of the area. This would result in a significant, and potentially unavoidable, impact to the Stone Building complex and its surroundings. Therefore, the efforts of the Historic Preservation Alternative would not succeed in retaining the historic integrity of the building.

As explained on page 5-178 of the Draft EIR, the Pasteur Drive configuration and landscaping were an important part of E.D Stone's original Master Plan. The construction of the subterranean parking structure below the Pasteur Mall would likely require dismantling and reconstruction of the fountain in the western forecourt, which has been identified as a character-defining feature. In addition, the parking garage would require the removal of the biological and aesthetic tree resources in Kaplan Lawn. The vehicular and pedestrian approach to the Stone Building complex along Pasteur Drive contributes to the overall feel and integrity of the area. Therefore, removal of the fountain and the Kaplan Lawn trees would significantly compromise E.D. Stone's Master Plan layout, existing open spaces, landscape features, and the immediate setting of the Stone Building complex.<sup>11</sup>

Due to the potentially significant and unavoidable cultural and biological resource impacts, the following edit has been made to the last sentence of the last bullet on page 5-25:

The parking lots proposed under the SUMC Project that would be constructed under the Historic Preservation Alternative would include the SHC parking structure as proposed under the Tree Preservation Alternative (with three levels underground and four levels aboveground) at the corner of Welch Road and Pasteur Drive, the underground LPCH parking structure at the corner of Welch Road and Quarry Road, and the Hoover Pavilion parking structure. However, the underground parking lot proposed at the site of the new SHC clinics would have to be constructed elsewhere

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<sup>11</sup> Architectural Resources Group, Inc., Stanford Medical Center Project: ARG Project Number 07030, Memo to PBS&J, March 17, 2010.

since it would be located under the 1959 Hospital Building complex. This parking would instead be accommodated elsewhere at the Main SUMC Site, including potentially ~~expanding the existing Pasteur Drive garage and/or~~ increasing the size of the proposed SHC parking structure at the Welch Road/Pasteur Drive intersection.

22.79 *The commentor argues that reusing the Stone Building complex as office space, instead of clinics and research facilities as proposed in the Draft EIR, is not feasible. This statement pertains to a comment submitted at a public hearing. Please Refer to Master Response 8 for the range of alternatives analyzed and variations to the proposed alternatives.*

22.80 *The commentor argues that reusing the Stone Building complex for community physicians, instead of clinics and research facilities as proposed in the Draft EIR, is not feasible. This statement pertains to a comment submitted at a public hearing. Please Refer to Master Response 8 for the range of alternatives analyzed and variations to the proposed alternatives.*

22.81 *The commentor supports the pedestrian linkages under the Village Concept Alternative but does not support the housing component. This comment concerns the merits of the Village Concept Alternative and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.*

*The commentor also states that the SUMC Project sponsors have offered to provide \$23 million to be used towards affordable housing in the City of Palo Alto. As explained on page 2-27 of the Draft EIR, Project Description, a Development Agreement would be approved as part of the SUMC Project if the terms of such an agreement could be mutually agreed upon. One term proposed by the SUMC Project sponsors to be included in the Development Agreement is the payment of housing in-lieu fees in the amount of \$23.1 million, which is equivalent to what a commercial project would pay. The Village Concept Alternative was included in the Draft EIR as an alternative to paying this in-lieu fee. See Master Response 12 for further discussion of the purpose of the Development Agreement and the process for its adoption.*

22.82 *The commentor corrects the land use designation for the Village Concept Housing Sites, as outlined in Section 5 of the Draft EIR, Alternatives. On pages 5-30 and 5-32, the Draft EIR states that the Quarry Road/Arboretum Drive and the Quarry Road/El Camino Real housing sites are zoned A1-20S. According to the 2007 Santa Clara Zoning Atlas, these sites are zoned A1-20S, A1 with Combining District.<sup>12</sup> However, the Land Use Designation for these sites, as outlined in the Stanford University 2000 Community Plan and General Use Permit (CP/GUP), is Academic Campus. The Academic Campus designation applies to lands in current or intended academic use and allows for the*

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<sup>12</sup> County of Santa Clara, Santa Clara County Zoning Atlas, Map 16, August 2007.

construction of student housing. Although the zoning was included in the Draft EIR, the Land Use Designation for the sites were not stated or explained. Therefore, the following text has been revised in the fourth paragraph on page 5-30:

The Quarry Road/Arboretum Drive site is zoned as A1-20S, ~~Academic Reserve and Open Space~~ A1 with Combining District, per the ~~approved Stanford Community Plan/General Use Permit~~ Santa Clara County Zoning Atlas.<sup>10</sup> Zone A1-20S is ~~defined as lands outside of the core campus area that currently have an open space character or use, or low intensity academic use~~ a slope density combining district with the same allowed uses as the A1 Zoning District, General Use. ~~These lands are identified as important for their scenic beauty, visual relief, grazing, and wildlife values, as well as their academic potential.~~ Permitted uses in the A1 Zoning District include, but are not limited to, agricultural uses, single-family residences, parks and playgrounds, home occupations, and accessory buildings to permitted uses. University uses are conditionally permitted uses. The 20S refers to the 20S Slope-Density Combining District, which regulates density of development through provisions that determine the maximum number of lots and dwelling units permitted through subdivision based on the average slope of the lot.<sup>1011</sup> This site is within unincorporated Santa Clara County, and any changes to the previously approved housing therein would require County approval.

In addition to the zoning, the Stanford Community Plan/General Use Permit has assigned the Quarry Road/Arboretum Drive Site with the land use designation of “Academic Campus.” According to Policy LU-1 of the Stanford Community Plan, “the Academic Campus designation applies to lands in current or intended academic use.” These academic uses support the academic activity of the University, including, but not limited to, student housing and administrative offices.<sup>12</sup> In addition, the Stanford General Use Permit places the sites in the Quarry Development District.<sup>13</sup>

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<sup>10</sup> County of Santa Clara, Santa Clara County Zoning Atlas, Map 16, August 2007.

<sup>1011</sup> County of Santa Clara, Stanford University Draft Community Plan and General Use Permit Application, Final Environmental Impact Report, Certified by the Santa Clara County Board of Supervisors, December 2000.

<sup>12</sup> Santa Clara County Planning Office, *Stanford University Community Plan*, adopted by the Santa Clara County Board of Supervisors December 12, 2000.

<sup>13</sup> County of Santa Clara, Stanford University 2000 General Use Permit, approved December 12, 2000.

In addition, the following text has been revised in the first sentence on page 5-32 of the Draft EIR:

The Quarry Road/El Camino Real site is also zoned as A1-20S, ~~Academic Reserve and Open Space~~ A1 with Combining District, per the ~~approved Stanford Community~~

~~Plan/General Use Permit Santa Clara County Zoning Atlas<sup>14</sup> and has a land use designation of Academic Campus per the Community Plan.<sup>15</sup>~~

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<sup>14</sup> County of Santa Clara, Santa Clara County Zoning Atlas, Map 16, August 2007.

<sup>15</sup> ~~County of Santa Clara, Stanford University Draft Community Plan and General Use Permit Application, Final Environmental Impact Report, Certified by the Santa Clara County Board of Supervisors, December 2000.~~ County of Santa Clara, Stanford University Community Plan, approved December 12, 2000.

22.83 *The commentor describes housing units allowed under General Use Permit Condition F.1. The comment is noted. Please see Response 22.86, below.*

22.84 *The comment requests clarification on allowance of housing on the Stanford campus. In response to Comment 22.84, the following sentence is added as the last sentence to the first bullet on page 5-33 of the Draft EIR:*

These two sites were approved in December 2000<sup>16</sup> to provide a total of 420 units (350 units plus a 20 percent overage of 70 units<sup>17</sup>) for postgraduates and/or hospital residents. More specifically, these sites are designated for postdoctoral fellows and medical residents.

22.85 *The commentor states that the Pasteur Drive/Sand Hill Road housing site under the Village Concept Alternative is zoned RM-40, rather than PF (Public Facilities), as stated in the Draft EIR. The revisions suggested by the commentor are correct. As such, the second paragraph under the bullet titled “Pasteur Drive/Sand Hill Road Site” on page 5-32 of the Draft EIR has been revised as follows:*

This site consists of 2.5 acres and is located on the southeast corner of Pasteur Drive and Sand Hill Road. The site is just north of the Main SUMC Site, and Sand Hill Fields is located across Pasteur Drive, to the east of the site. Currently, this site is open space and no buildings are located on the property. This site is within City of Palo Alto jurisdiction and is zoned ~~PF, Public Facilities. A zone change to RM-40,~~<sup>12</sup> which allows multiple-family residential units at a maximum residential density of 40 dwelling units/acre.<sup>13</sup> ~~would be required for this site.~~

22.86 *The comment discusses the CP/GUP as it relates to on-campus housing. The CP/GUP allows up to 3,018 units, but only requires that 2,420 of those units be constructed as a condition to full academic build out. As there is no regulatory requirement to build 598 units, up to 598 CP/GUP units have been identified by the City as excess units that could be the subject of a housing agreement if mutually agreed upon. Stanford asserts that the units have been “programmed” for other uses, but the CP/GUP does permit the units to be used for postdoctoral fellows and medical residents.*

While the CP/GUP provides strict limits on non-residential development, including a specific development cap, it provides greater latitude for residential development. The Framework section of the CP/GUP clarifies that additional housing is exempt from the development cap. The Housing section of the CP/GUP also expressly provides that upon approval of the Santa Clara County Planning Commission and subject to further environmental assessment, additional housing beyond 3,018 units may be constructed. Read together, if the parties mutually agree, the housing can be used for hospital housing.

As stated on pages 5-34 through 5-35 of the Draft EIR, recommendations to dedicate the housing to SUMC employees would have some implications on the analysis in the CP/GUP EIR. Specifically, the CP/GUP EIR transportation analysis applied trip generation rates specific to campus residents, including graduate students and post doctoral fellows. However, the trip rate of SUMC employee occupants of the housing, as proposed under the Village Concept Alternative, would differ from the trip generation rate for graduate students and post doctoral fellows. The change in the trip rate and the corresponding vehicle miles traveled (VMT), air quality, climate change, and noise emissions are also analyzed on pages 5-198 through 5-210 of the Draft EIR.

In light of Stanford's assertion that the units have been “programmed” for other uses, the trip generation and LOS analysis of the Village Concept Alternative has been revised since the publication of the Draft EIR. For the revisions to the analysis, refer to Staff-Initiated Change 8, which assumes displacement of the campus population could occur if GUP housing were allocated to SUMC employees. In addition, the associated changes to the climate change analysis due to adjustments of VMT have also been applied to this EIR under Staff-Initiated Change 4.

- 22.87 *The commentor contests the approach for analyzing trip generation and intersection impacts under the Village Concept Alternative. Please refer to Staff-Initiated Change 8 for a revised trip generation analysis under the Village Concept Alternative.*
- 22.88 *The commentor states that vehicle miles traveled may increase under the Village Concept Alternative. Please see Staff-Initiated Change 4.*
- 22.89 *The commentor states that the SUMC Project sponsors have offered as part of the Development Agreement to fund a new Class I bicycle and pedestrian path extending from the planned Everett undercrossing to El Camino Real. The City is nonetheless retaining this feature as part of the Village Concept Alternative for the Council’s consideration. See Master Response 8, which discusses how the City may opt to approve components of various project alternatives in its final decision on the SUMC Project. Final Development Agreement terms have yet to be negotiated. In addition, see Master Response 12 for further discussion of the purpose of the Development Agreement and the process for its adoption.*

22.90 *The comment describes Caltrans approval of roadway improvements.* As indicated on page 5-35, colored bike lanes [along El Camino Real] would require Caltrans approval. The following sentence is added as the last sentence of the third paragraph on page 5-35 of the Draft EIR:

Figures 5-4 and 5-5 show the sequence of public spaces and connections. All modifications within the El Camino Real right-of-way would require Caltrans approval.

Also, the following text is added to the last sentence to the last bullet on page 5-35 of the Draft EIR:

- Evaluate ~~of the~~ adequacy of bicycle and pedestrian signal crossing times, and if deficient (greater than 4 feet per second crossing speed), increase time (decrease walking speed to 3.5 to 4 feet per second) and evaluate impact on peak hour intersection LOS and vehicle delay; Changes in crossing times within the El Camino Real right-of-way would require Caltrans approval;

Please refer to Master Response 6 for changes to the El Camino Real/ Quarry Road intersection component.

22.91 *The commentor states that the SUMC Project sponsors have offered to include new pedestrian crossings at the Stanford Barn area as part of the Development Agreement.* The City is nonetheless retaining this feature as part of the Village Concept Alternative for the Council's consideration. See Master Response 8, which discusses how the City may opt to approve components of various project alternatives in its final decision on the SUMC Project. Final Development Agreement terms have yet to be negotiated. See Master Response 12 for further discussion of the purpose of the Development Agreement and the process for its adoption.

22.92 *The commentor indicates that the SUMC Project sponsors plan to fund improved bus stops on Quarry Road, which are part of the components of the Village Concept Alternative.* The commentor also points out that the transit centers described under the Village Concept Alternative correct the descriptions found under Mitigation Measure TR-7.1. Please refer to Staff-Initiated Change 1 for revisions to the requirement regarding transit centers. Please refer to Master Response 6 for revisions to the Quarry Road linkage component.

22.93 *The commentor provides information regarding consistency of the SUMC Project sponsors objectives relative to the Village Concept Alternative.* As such, the following revisions have been made to the first paragraph on page 5-49 of the Draft EIR:

**Project Sponsors Objectives.** The Village Concept Alternative would meet ~~all~~ most of the objectives of the SUMC Project sponsors because this alternative would include the SUMC Project as proposed. Development of the Village Concept Alternative would construct new hospital and medical office buildings, allowing each hospital to meet SB 1953's criteria and to maintain its position as a leading provider of health



care. Under this alternative, SHC and LPCH would provide sufficient beds and other facilities to meet projected future growth in demand. All regional needs for emergency and disaster preparedness would be met through maintenance of SHC and LPCH. In addition, the existing SoM buildings would be replaced by the new FIM buildings; therefore, this alternative would achieve the objective of replacing outmoded research facilities with state-of-the-art research facilities to support contemporary translational research. The Village Concept Alternative also would provide sufficient faculty offices, research laboratories, and administrative support space to meet the SoM's projected needs would maintain the opportunity to provide responsible and sustainable design for the SoM's operating systems, water systems, and use of physical materials. ~~In addition, t~~The alternative could allow sufficient design and entitlement flexibility to be able to adapt to changes in medical research needs and changes in technology. In addition to meeting the objectives at the SHC, LPCH, and SoM, the Village Concept Alternative would also include pedestrian linkages, which would enhance the bicycle and pedestrian connections between the SUMC Sites, the Stanford Shopping Center, PAITS, and nearby open space areas. These linkages would further the SUMC Project sponsors' objectives of providing efficient access to the SUMC Sites for healthcare providers and staff. As such, the Village Concept Alternative would attain all of the SUMC Project sponsors objectives.

However, the Village Concept Alternative would not meet the SUMC Project sponsors' cost objective. Due to the housing unit component of this alternative, the cost of construction would be higher than proposed under the SUMC Project. The Village Concept Alternative would meet the majority of the SUMC Project sponsors' objectives, but would not minimize the initial cost to the greatest extent feasible.

22.94 *The commentor indicates that the SUMC Project sponsors are evaluating the feasibility of identified mitigation measures for pile driving noise under the Tree Preservation Alternative. The SUMC Project sponsors have indicated that if the Tree Preservation Alternative was selected and pile driving is used, the identified mitigation measures for pile driving are generally feasible. The SUMC Project sponsors provided suggestions for text modification to subsection (a), which are acceptable. Therefore, the additional mitigation measure for pile driving under the Tree Preservation Alternative has been revised as follows.*

Draft EIR text on page 5-149, second bullet, subsection (a), has been revised as follows:

- a. Require construction contractors to use noise-reducing pile driving techniques, including pre-drilling pile holes (if feasible, based on soils) to the maximum feasible depth, ~~installing~~ verify that manufacturer-provided intake and exhaust mufflers on pile driving equipment are present, vibrating piles into place when feasible, and installing shrouds around the pile driving hammer where feasible.



- 22.95 *The commentor indicates that under the Village Concept Alternative, fewer University postdoctoral fellows and medical residents would be within walking distance of the campus compared to development under the CP/GUP. Please see Response 22.86. Please also see Staff-Initiated Change 8, which considers displacement of postdoctoral fellows and medical residents off campus under the Village Concept Alternative.*
- 22.96 *The commentor indicates that housing for SUMC employees would generate more trips than housing for non-SUMC employees. Please see Staff-Initiated Change 8 for a revised analysis of the Village Concept Alternative.*
- 22.97 *The commentor notes that Mitigation Measure TR-6.1 largely duplicates the components of the Village Concept Alternative. Several elements of Mitigation Measure TR-6.1 are also components of the Village Concept Alternative; however, Mitigation Measure TR-6.1 and the pedestrian linkages under the Village Concept Alternative differ slightly and have their own unique characteristics. The Village Concept Alternative would not have significant impacts to bicycle and pedestrian facilities. Please refer to CC2.26 in Section 5 of this document for a comparison of the requirements of Mitigation Measure TR-6.1 and the bicycle and pedestrian connections proposed under the Village Concept Alternative.*
- 22.98 *The commentor indicates that the Village Concept Alternative could result in the need for additional parking for campus commuters by displacing members of the campus population. The Village Concept Alternative would eliminate the need for some SUMC Project parking because hospital employees would be housed near the SUMC Sites. The savings would be approximately 250 spaces (490 x 64.9 percent x 0.8, where 64.9 percent is the SUMC's drive alone population, and 0.8 is the weekday factor). Likewise, displacing a portion of the campus population would result in an increase in the need for on-campus parking. The increase would be approximately 230 spaces (420 x 54.4 percent, where 54.4 percent is the University's drive-alone population).*
- 22.99 *The commentor states that the vehicle miles traveled (VMT) associated with the SUMC Project without the traffic demand measures should be 275,566 annually, and would be less than the Village Concept Alternative because the SUMC Project does not include a residential component. The VMT associated with the SUMC Project and the Village Concept Alternative has been revised. Please refer to Staff Initiated Changes 4 and 8 for changes in the VMT analysis for the Village Concept Alternative.*
- 22.100 *The commentor states that Table 5-13 and Table 5-15 of the Draft EIR (pages 5-206 and 5-209 respectively) show that with the GO Pass implementation, greenhouse gas emissions of the Village Concept Alternative are reduced by less than 1 percent from the emissions of the SUMC Project. The VMT associated with the Village Concept Alternative has been revised. Please refer to Staff Initiated Changes 4 and 8 for changes in the VMT analysis for the Village Concept Alternative.*

- 22.101 *The commentor states that Table 5-16 on page 5-209 incorrectly applies trips by non-employee household members to the proposed SUMC Project. Please refer to Staff Initiated Changes 4 and 8 for changes in the VMT analysis for the Village Concept Alternative.*
- 22.102 *The comment reiterates some points made in the Draft EIR. No response is necessary.*

BINGHAM

# Memorandum

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DATE: February 24, 2009  
TO: Ms. Cara Silver, Senior Assistant City Attorney  
Mr. Rick Jarvis, Jarvis, Fay, Doportto & Gibson, LLP  
FROM: Barbara J. Schussman  
RE: **Prohibition Against Cities and Counties Requiring Employee Trip Reduction Programs.**

## I. SUMMARY

State law prohibits all public agencies, including cities and counties, from requiring programs for the reduction of employee trips as mitigation without the employer's assent. Because the prohibition arises out of matters of statewide concern, and because the prohibition is reasonably related to its objective and also narrowly tailored, it applies to charter cities.

Accordingly, measures that require the SUMC Project sponsors to reduce employee trips may not be required as mitigation measures in the SUMC Project EIR.

## II. ALL PUBLIC AGENCIES ARE PROHIBITED FROM REQUIRING EMPLOYERS TO ADOPT EMPLOYEE TRIP REDUCTION PROGRAMS

In 1995, the State Legislature passed S.B. 437, which severely limited the ability of public agencies to require employee trip reduction programs. Section 40717.9 of the Health and Safety Code provides:

a district, congestion management agency, . . . or any other public agency shall not require an employer to implement an employee trip reduction program unless the program is expressly required by federal law and the elimination of the program will result in the imposition

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- Hartford
- Hong Kong
- London
- Los Angeles
- New York
- Orange County
- San Francisco
- Santa Monica
- Silicon Valley
- Tokyo
- Walnut Creek
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Attachment 1

of federal sanctions, including, but not limited to, the loss of federal funds for transportation purposes.

Health and Safety Code § 40717.9 (emphasis supplied).<sup>1</sup>

Under this statute, the only time that an agency could require trip reduction would be in circumstances when such a program is expressly required by federal law. That exception does not apply.

When S.B. 437 was passed federal law required employee trip reduction programs for some jurisdictions, but the EPA had adopted a policy of non-enforcement of the requirement. See generally Cal. EPA Enrolled Bill Report, Sept. 18, 1995 (recommending the Governor's signature on S.B. 437). Shortly after the passage of S.B. 437, Congress enacted H.R. 325, which made the implementation of employee trip reduction plans a discretionary component of federal Clean Air Act compliance. See 42 U.S.C. § 7511a(d)(1)(B); H.R. 325, Pub.L.No. 104-70 (Dec. 23 1995). Accordingly, trip reduction programs are not required by federal law.

A. The Term "Employee Trip Reduction Program"

Transportation Demand Management measures that are designed to reduce employee trips fall within the scope of requirements that cannot be imposed on employers pursuant to section 40717.9. The author and original proponent of S.B. 437, Senator John Lewis, stated the following in a letter entered in the Senate Journal on September 15, 1995:

In response to inquiries our office has received, I would like to clarify the intended scope of SB 437. The term "employee trip reduction program" is to be interpreted in its broadest sense to include any mandated measure to reduce employee vehicle trips to the workplace for the purpose of increasing vehicle occupancy, improving air quality, and/or reducing vehicle congestion. [¶] ... This bill would relieve employers from any state or local mandate to prepare a trip reduction [sic], to implement

<sup>1</sup> Section 40717.9 was originally codified as Health and Safety Code section 40929. No substantive change was made in the provision when it was recodified. S.B. 772 was also enacted in 1995, which applies a similar prohibition specifically to the South Coast Air Quality Management District.

an employee ridesharing and carpool program, an employee parking cash-out program, or any other program designed to reduce the number of employee vehicle trips to the workplace.<sup>2</sup>

Senate Journal, 1995-1996 Sess. v. 2, at 2930. Prohibited requirements that cannot be imposed on employers include, for example, requirements for public transit subsidies, flexible work hours, car and vanpooling, and ridesharing. See generally Michael Remy et al., *Guide to CEQA*, 1103-1104 (11th ed. 2006) (discussing programs that were eliminated by S.B. 437 and S.B. 772); 79 Ops. Cal. Atty. Gen. 214, WL 531537, at \*5-6 (Sept. 16, 1996) (opining that parking subsidy and parking cash-out programs may not be required).

B. The Term "Public Agency" Encompasses Cities and Counties

The prohibition applies to "any ... public agency." Health and Safety Code § 40717.9. In light of the conventional usage of the term "public agency" in California law, the Legislature was aware that the term "public agency" would include cities and counties. See Pub. Resources Code § 21063; CEQA Guidelines 15379. This awareness is made abundantly clear in the legislative history.

The League of Cities sought an amendment to the bill that would have, among other things, stated "[n]othing in this section shall be construed as a limitation on the land use of authority of cities and counties." Core Leg. Hist. of Cal. Statutes of 1995, Ch. 607, S.B. 437, part 2, at 175 ("Leg. Hist.").<sup>2</sup> The analysis of this proposed amendment from the Assembly Floor made it clear that the requested amendment was intended to allow cities and counties to require trip reduction as CEQA mitigation:

Under current law, cities and counties possess broad powers to impose conditions on development projects under land use laws and ordinances. As presently

<sup>2</sup> A letter, such as this one, addressed to the Legislature as a whole is cognizable legislative history. See *Kaufman v. Broad Communities, Inc. v. Performance Plastering, Inc.*, 133 Cal.App.4th 26, 31-32 (3d Dist. 2005).

<sup>3</sup> References to the Legislative History are to the Bates Stamp of the legislative history provided to us by Legislative History Incorporated.

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drafted, this measure effectively precludes such powers from being exercised as project mitigation under California Environmental Quality Act or under mechanisms such as developer agreements. The sponsor has indicated that this was not his intent. As such, language in the bill should be modified to reflect the sponsor's intent.

Assembly Floor Analysis of Senate 3d Reading of S.B. No. 437 (Sept. 5, 1995), at 3; *see also* Assembly Committee on Natural Resource Analysis (July 10, 1995), at 3 (making the same legal observation and the same un-adopted recommendation). An amendment in line with the League of Cities' proposal was proposed by Assembly Member Knox on September 14, 1995, Leg. Hist., part 1 at 17 & 213, but was tabled and was not adopted. In sum, the Legislature's decision to apply the prohibition to cities and counties, including in the CEQA context, was anything but inadvertent.

### III. CHARTER CITIES ARE NOT EXEMPT FROM THE PROHIBITION

The prohibition applies to "any" public agency. Health and Safety Code § 40717.9. Nothing in the Health and Safety Code indicates any intent to exempt charter cities. Indeed, the legislative history reveals that several charter cities -- San Francisco, Stockton, and Berkeley -- recognized that they would be subject to the prohibition and publically opposed it. Furthermore, the Legislature clearly intended that all public agencies be subject to the same prohibition. S.B. 437 was amended on May 10, 1995 to exempt the "bay district" (i.e. BAAQMD) from the prohibition, but this amendment was subsequently stricken after Bay Area businesses raised objections to their disparate treatment.

The Legislature's intent to create a uniform prohibition is clear. The question thus becomes whether the prohibition can be applied to charter cities as a matter of California constitutional law notwithstanding the Legislature's intent. *See Baron v. City of Los Angeles*, 2 Cal.3d 535, 539 (1970) (in a charter city, "ordinances relating to matters which are purely 'municipal affairs' are not invalid because they are in conflict with general state laws or because state laws have been enacted to cover the same subject").

- A. The "Municipal Affairs" Doctrine for Charter Cities

Article XI, Section 5 of the California Constitution provides that charter cities "may make and enforce all ordinances and regulations in respect to municipal affairs, subject only to restrictions and limitations provided in their several

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charters and in respect to other matters they shall be subject to general laws." The provision articulates the principle that charter cities are entitled to "home rule"; they have exclusive power over purely "municipal affairs." *See generally*, 8 Witkin, Summary of Cal. Law (10th ed. 2005), Constitutional Law § 993. In other words, charter cities may enact provisions that contradict state law so long as those provisions address purely municipal affairs.

Section 5 enumerates a non-exclusive list of "four 'core' categories that are, by definition 'municipal affairs'": (1) regulation of the police force, (2) "subgovernment in all or part of a city," (3) conduct of city elections, and (4) "the manner in which ... municipal officers [are] elected." Cal. Const. art XI, § 5; *Johnson v. Bradley*, 4 Cal.4th 389, 398 (1992). Beyond these four core categories, it is up to the courts to determine whether an enactment concerns a municipal affair or a matter of "statewide concern." *Johnson*, 4 Cal.4th at 399.

It should be noted that the California Supreme Court has recurrently (and somewhat colorfully) described the distinction between "municipal affairs" and "statewide concerns" as uncertain and difficult. *See Cal. Fed.*, 54 Cal. 3d 1, 14, 16, 25 (1991) ("*Cal. Fed.*") (stating that the distinction is "dialectical" rather than "static and compartmentalized"; and that the court has an "ineluctable duty under the 'municipal affairs' clause to allocate political supremacy between the Legislature and the charter cities 'without the benefit of guidance from history, constitutional tradition, or sharply delineated principle'") (some internal quotation marks omitted).

In place of a clear rule for parsing the jurisdictions of the Legislature and the charter cities, the Supreme Court has outlined a three-step process:

1. First, a court will inquire into whether there is an actual conflict between state law and an enactment of a charter city. *Johnson*, 4 Cal.4th at 399.
2. Second, a court will evaluate whether there is a matter of statewide concern. *Id.* at 400.
3. Third, if the subject matter of the state statute involves a matter of statewide concern, the next inquiry is whether the state enactment is "(i) reasonably related to the resolution of that concern, and (ii) 'narrowly tailored' to limit incursion into legitimate municipal interests." *Id.* at 404.

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1. A Municipal Action in Contravention of the Prohibition Creates an Actual Conflict

Although the California Supreme Court has required courts to seriously consider whether there is an actual conflict, and many cases have been resolved with a finding of no actual conflict, the court has never said that this requirement amounts to a canon of interpretation to avoid conflicts where possible; it has certainly not stated that there is a canon of interpretation that would destroy conflicts where they clearly exist. See *Sherwin-Williams Co. v. City of Los Angeles*, 4 Cal.4th 893, 897 (1993) (“A conflict exists if the local legislation duplicates, contradicts, or enters an area fully occupied by general law, either expressly or by legislative implication.”) (internal quotation omitted); *Cal. Veterinary Medical Ass’n v. City of West Hollywood*, 152 Cal.App.4th 536, 548 (2d Dist. 2007) (“it is well settled that local regulation is invalid if it attempts to impose additional requirements in a field which is fully occupied by statute”) (internal punctuation omitted); see generally *Barajas v. City of Anaheim*, 15 Cal.App.4th 1808, 1813-14 (4th Dist. 1993).

Here, there can be no real dispute that a “public agency” that “require[d] an employer to implement an employee trip reduction program” would be acting in conflict with state law. See Health and Safety Code § 40717.9.

2. The Prohibition Addresses Matters of Statewide Concern

A court reviewing the matter would then inquire whether the state law addresses a matter that is “extramunicipal” in nature – meaning not one that is purely a matter of local law and concern. *Cal. Fed.*, 54 Cal. 3d at 17. “[T]he hinge of the decision is the identification of a convincing basis for legislative action originating in extramunicipal concerns, one justifying legislative supersession based on sensible, pragmatic considerations.” *Id.* at 18. The fact that a matter is, in part, a municipal affair or traditionally one left solely to municipal legislation, does not mean that the state cannot preempt local regulation, even if the local agency is a charter city. *Cal. Fed.*, 54 Cal.3d at 13.

A court evaluating an alleged incursion into purely municipal affairs will exercise its independent judgment. *Cal. Fed.*, 54 Cal.3d at 24 n.21. “[T]he fact, standing alone, that the Legislature has attempted to deal with a particular subject on a statewide basis is not determinative of the issue as between state and municipal affairs . . . ; stated otherwise, the Legislature is empowered neither to determine what constitutes a municipal affair nor to change such an affair into a matter of statewide concern.” *Johnson*, 4 Cal.4th at 405 (internal quotation marks omitted).

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In deciding whether a matter of concern to both municipalities and the state is of sufficient concern to justify intruding into home rule, doubt must be resolved in favor of the legislative authority of the state. *Cal. Fed.*, 54 Cal.3d at 24. The Legislature’s determination that an issue is a matter of statewide concern is entitled to “great weight.” *Baggett v. Gates*, 32 Cal.3d 128 (1982); *City of Watsonville v. State Department of Health Services*, 133 Cal.App.4th 875, 886 (6th Dist. 2005).

Here, there the legislative history of S.B. 437 reveals that the principle reason for abolishing employee trip reduction measures was the legislative judgment that they are a costly and inefficient means of achieving reductions in emissions. See Senate Transportation Committee Analysis (April 26, 1995), Leg. Hist., part 1 at 44. (“Proponents argue that trip reduction plans have not proven to be an effective strategy for reducing pollution. They contend that these plans are costly for the industry [sic] and, as a strategy, have a relatively high cost per ton of emissions reduced.”) The Legislature therefore concluded that trip reduction programs are categorically unwarranted mandates for employers. Senator Lewis’ statement on the Senate floor, which mirrored his statements in committee and his letter to the Governor, stated:

Mr. President and members, in 1987 the South Coast Air Quality Management District instituted Regulation 15, a mandatory employee trip reduction requirement. Since then, Regulation 15 has become the district’s costliest and least effective environmental mandate. [¶] The price tag of employer trip reductions is staggering. Complying with Regulation 15 cost Southern California employers \$160 million in 1992 alone -- making it the single most expensive component of the District’s air quality management plan. The South Coast District admits that Regulation 15 is costing the local economy 60,000 jobs per year. [¶] Employer trip reductions aren’t even cost effective. Using the South Coast District’s own figures, Regulation 15 costs \$27,064 per ton of reduced air emissions -- that’s 30 times more costly than an automobile scrap program. [¶] It’s time to stop forcing businesses to spend valuable dollars on such an ineffective environmental policy. S.B. 437 would prohibit mandatory trip reduction requirements in California unless they are specifically required by the federal government. [¶] This bill received unanimous support in the Senate Transportation Committee and I ask for your AYE vote.



Leg. Hist., part 1 at 42-43. The California EPA's recommendation to Governor Wilson to sign S.B. 437 stated:

There are few who will disagree that employer trip reduction rules are costly, although cost estimates do vary widely . . . . Given the costs of employer trip reduction programs and the negative response from many employers, it is obvious that changes are necessary.

Leg. Hist., part 1 at 22.

There is no question that the Legislature is entitled to reduce and regulate statewide economic impacts. See *Cal. Fed.*, 54 Cal.3d at 24. It is also self evident that the potential economic impact of employee trip reduction requirements imposed by a municipality would generally be felt beyond the confines of that municipality. The Legislature's judgment that a uniform rule is required to eliminate the possibility of unfair regional disadvantages carries with it a judgment that the economic issues raised by a local prohibition cannot be considered purely local concerns. This judgment is entitled to deference. See *Cal. Fed.*, 54 Cal.3d at 24 ("we defer to legislative estimates regarding the significance of a given problem and the responsive measures that should be taken towards its resolution").

At core, the rationale behind S.B. 437 is an economic judgment that trip reduction programs are inefficient. That said, the statewide interest is not simply a generic need for deregulation, but rather a need for effective regulation to reduce air pollution.<sup>4</sup> The matter of statewide concern addressed by the provision thus is, in general terms, the transportation policy tools available to public agencies in addressing air pollution.<sup>5</sup>

<sup>4</sup> S.B. 437 also enacted Health and Safety Code section 40717.9(b), which states: "Nothing in this section shall preclude a public agency from regulating indirect sources in any manner that is not specifically prohibited by this section, where otherwise authorized by law."

<sup>5</sup> The prohibition is set out in Division 26 of the Health and Safety Code addressing air resources. Specifically, the provision is found in Division 26, Part 3, Chapter 6 of the Health and Safety Code, outlining the "general powers and duties" of air control districts.

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The nature of the regional and statewide economic compromises that must be struck to ensure compliance with the federal Clean Air Act are matters of statewide concern. Indeed, in light of the state's current comprehensive plans to significantly ratchet down greenhouse gas emissions to a statewide target, it can hardly be said that the permissible means of doing so is a matter of purely local import.

This is not to say that the city has no interest in traffic or air quality; the city has an interest in reducing *municipal* traffic congestion, although this interest must end, unlike many if not most employee trips, at the city's boundary. See *City of Oakland v. Brock*, 8 Cal.2d 639, 642 (1937) ("A municipal corporation has generally no extraterritorial powers of regulation. It may not exercise its governmental functions beyond its corporate boundaries;"). This interest does not entitle the city to act in a manner contrary to state law. *O'Connell v. City of Stockton* 41 Cal.4th 1061, 1076 (2007) ("Although traffic congestion is a local problem that cities ordinarily are authorized to address, they may not do so by means of an ordinance that . . . impinges on an area fully occupied or exclusively covered by state law;"). Notwithstanding the city's interest in reducing traffic impacts, a very long line of cases holds that travel and traffic are ultimately matters of statewide concern. See *Ex parte Daniels*, 183 Cal. 636, 639 (1920) ("While it is true that the regulation of traffic upon a public street is of special interest to the people of a municipality, it does not follow that such regulation is a municipal affair, and if there is a doubt as to whether or not such regulation is a municipal affair, that doubt must be resolved in favor of the legislative authority of the state;"). *Los Angeles Railway Corp. v. City of Los Angeles*, 16 Cal.2d 779, 786 (1940) ("regulation controlling travel and traffic on public streets . . . are not matters of purely local concern") (quoting *Key System Transit Co. v. City of Oakland*, 124 Cal.App.2d 733, 742 (1932)); *Barajas*, 15 Cal.App.4th at 1818 (charter city has no power to prohibit street vendors in a manner that contradicts state law because ordinance impacts traffic); *Brierton v. Dep't of Motor Vehicles*, 130 Cal.App.4th 499, 514 (4th Dist. 2005) (quoting and following *Ex parte Daniels*); *Citizens Against Gated Enclaves v. Whitley Heights Civic Ass'n*, 23 Cal.App.4th 812, 820 (2d Dist 1994) ("Regulating the use of the public roads and highways by whatever means is outside the 'municipal affairs' constitutional grant of authority to chartered cities.") (quoting 68 Ops.Cal.Atty.Gen. 101, 102 n.2 (1985)); 8 Wilkin, Summary of Cal. Law (10th ed. 2005), Constitutional Law § 1003 ("Traffic, even within a city, is of statewide concern;").

In sum, an argument that the prohibition in S.B. 437 is a municipal affair, such that state law could not preempt home rule, would be implausible.

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3. The Enactment is Reasonably Related to Resolution of the Statewide Concern and Narrowly Tailored to Address that Concern

With respect to the reasonable relationship test, a court would not find that the Legislature's prohibition on imposing trip reduction measures is unrelated to its objective of eliminating costly burdens on business. In determining whether a matter is one of statewide concern as opposed to a municipal affair, the courts do not entertain arguments as to whether the statewide legislation is prudent public policy, advisable or effective. *Cal Fed.*, 54 Cal. 3d at 23.

With respect to tailoring, courts have deferred to the Legislature's judgment as to the scope of the measure required to accomplish the Legislature's objective. *See Cobb v. O'Connell*, 134 Cal.App.4th 91, 98 (1st Dist. 2005) (review denied Feb. 1, 2006) (state's emergency take-over of school district for two years was narrowly tailored; court is "unable to second-guess the Legislature's judgment" with respect to proposed alternative measures that would allegedly be effective and less intrusive). Further, "in articulating the [tailoring] test for preemption the Supreme Court was concerned with ensuring that a state law does not infringe legitimate municipal interests *other than* that which the state law purports to regulate as a statewide interest." *City of Watsonville v. State Department of Health Services*, 133 Cal.App.4th 875, 889 (6th Dist. 2005) (modification and emphasis supplied). For example, an argument that S.B. 437 is overbroad in terms of precluding the mitigation of traffic and air impacts would likely be categorically irrelevant insofar as these matters are also matters of statewide concern. *See id.*

In the final analysis, where a particular type of regulatory burden is deemed an inefficient economic burden on the state's businesses, eliminating that burden is a "narrowly tailored" remedy.

#### IV. TREATMENT OF TRANSPORTATION DEMAND MANAGEMENT MEASURES IN PRIOR STANFORD ENVIRONMENTAL IMPACT REPORTS IN PALO ALTO

The analysis presented above demonstrates that Palo Alto cannot require trip reduction as mitigation. For this reason, the City historically has recognized that the Legislature's prohibition on imposition of traffic reduction measures on employers applies to Palo Alto. The 2000 DEIR for the SUMC Center for Cancer Treatment and Prevention states:

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Transportation demand management refers to actions that reduce work-related, drive-alone vehicle trips. Although a state law was passed in 1995 that prohibited agencies and cities from requiring mandatory TDM, the City of Palo Alto and Stanford University still voluntarily provide TDM programs for their employees.

DEIR 3.5-9.

**22a. Stanford University Medical Center, Barbara Schussman (letter dated February 24, 2009)**

22a.1 *The commentor disagrees with the statement on page 3.4-27 of the Draft EIR that the City can effectively require the applicant to include TDM measures in the SUMC Project. Please see Response 22.8.*

**MANDATORY REMOTE SUMC EMPLOYEE PARKING**

Stanford University and the Hospitals currently participate in voluntary remote employee parking through the Stanford/AC Transit U-Line. This service is provided as one of the choices employees have within the Parking and Transportation Services (P&TS) transportation demand management program.

The implementation of a mandatory remote parking program for a portion of the Hospitals employees raises several critical issues related to employee recruitment/retention, operation of the remote lots, feasibility, and environmental sustainability. These are discussed below:

## Attachment 2

- **Competitive Workforce Environment** - Mandatory remote parking (located several miles from the facility) is not used at the other hospitals located on the peninsula and in the south bay region. In the highly competitive healthcare employment environment, mandatory remote parking would create serious recruitment and retention challenges. Many employees correctly perceive remote parking as inconvenient because it increases commute time for employees who drive to work. Employees also could have concerns about their personal safety and the safety of their vehicles.
- **Employee Personal & Vehicle Safety** - Safety of employees, as well as the security of unattended vehicles in remote and distant parking lots are critical concerns. The Hospitals would need to provide security measures at a remote lot if employees were not parking there voluntarily. The cost to provide personal and vehicle security at the locations identified by the City would be high. Some of the locations are not in heavily traveled areas, so there would be no one to see or report suspicious behavior or actual crime, especially if lots have been sited to reduce visual impacts.
- **Designation of parking as Stanford parking** – Any parking provided as mandatory parking would need to be available for SUMC hospital employees. Therefore, other parkers would need to be excluded from the lots, which would require development of separate facilities that could be gated. This would be particularly true for any lots that were developed adjacent to other park-and-ride lots.
- **Employee Assignment** - Maintaining equitable and fair employment practices would be problematic when requiring and assigning remote parking for one group of employees and allowing others to park at, or closer to, the Medical Center. Even under the current parking situation, parking accessibility and cost have been major negotiating points with the unions that represent hospital employees. Mandatory remote parking would make union negotiation much more contentious.
- **Capital & Operation Costs** - Costs associated with construction and operation of the remote lots would be substantial. Capital costs include acquisition of the property (purchase or lease), design and permitting of the lots, construction (and demolition) costs, and purchase of additional shuttle buses. The closer remote lots would require one bus each to provide approximately 30-minute headways, or two buses each for 15-minute headways. Shuttle bus requirements would double for a farther

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site, such as Redwood City. Given the five lots proposed by the City (see below), six new buses would be required to provide 30-minute headways or 12 new buses would be required to provide 15-minute headways. Current shuttle bus costs range from \$125,000 for a small, non-hybrid bus to \$500,000 for a hybrid diesel electric bus. Operational expenses such as provision of drivers and security personnel also would be significant because of additional requirements for security at many lots, and due to the need to provide a high frequency of shuttle service at the beginning and end of each shift as well as the need for some minimum level of shuttle service throughout the day to allow employees to access their cars for emergency, business, or personal needs. Other operational costs include maintenance of the buses and parking areas, and utilities.

- **Remote Parking Promotes Use of Personal Vehicles** - Use of mandatory remote parking is based on commuters driving personal vehicles for much of their commute, rather than using alternative transportation modes. The Hospitals believe that expenditures related to traffic reduction should be focused on reducing the number of single-occupancy vehicle trips, rather than redistributing trips made by solo drivers.

Further, in order to compensate for the increased travel times experienced by employees, it is likely that parking permits for remote lots would have to be low- or no-cost permits, as compared to the current permit pricing at SUMC. This is in direct conflict with the Stanford and SUMC practice of providing incentives not to drive cars at all, rather than to drive most of the distance and then park offsite.

- **Carbon Footprint** - The type of remote parking program proposed by the City is not effective in minimizing criteria pollutant and greenhouse gas emissions. Employees drive their single occupant vehicles to and from remote lots. Shuttles between the lots and the SUMC would have to operate throughout the day, making two-way trips each time whether empty or full. While there *might* be some small overall emissions reduction from shuttling employees for a part of their commute, a much larger emissions reduction can be achieved by taking employees out of their cars altogether.

- **Spillover Effect in adjacent neighborhoods** - While the City's suggested mandatory remote parking program could prevent an employee from acquiring a SUMC parking permit on-site and "require" employees to use certain remote parking lots, the reality is that people will seek more convenient parking solutions. It is highly likely that employees would park on public streets in nearby neighborhoods, for example, Downtown North or Allied Arts, rather than park in their assigned remote lot. This spillover effect would likely result in the neighborhood demand for residential parking permit programs in areas adjacent to SUMC. Based on recent experience with College Terrace, nearby neighbors would strongly oppose a City imposed condition that knowingly "underparks" the SUMC campus and creates local spillover impacts.

## DISCUSSION OF CITY'S PROPOSED REMOTE PARKING LOCATIONS

**Ardenwood Farms** (for employees approaching from East Bay via Dumbarton Bridge)  
Distance from SUMC: Approximately 10.5 miles

The existing park-and-ride lot at Ardenwood Farms was recently expanded to 350 parking spaces. This lot is used by visitors to the Ardenwood Farms as well as Transbay transit riders during the weekdays. The Stanford/AC Transit U Line is currently served by this park and ride lot and Stanford currently spends about \$140,000 per year to subsidize the route.

SUMC does not have specific traffic data on the operation of the SR84/Ardenwood Boulevard interchange or the signalized intersection that provides access to Ardenwood Farms.

Stanford and the Hospitals do not own or control land at this location.

**Page Mill/I-280 Interchange** (for employees approaching on I-280 from the South)

Distance from SUMC: Approximately 4.5 miles

The City's proposal is to increase the size of the existing Caltrans rideshare parking lot at the corner on Page Mill Road and Arastradero Road. The existing lot accommodates approximately 50 vehicles. Under the City's initial draft mitigation plan for the SUMC Project, over 200 spaces would be located in the I-280 corridor. It is not known how many of these 200 + spaces would be in the Page Mill area. It is fair to assume that the existing capacity of this lot would need to be at least double.

Increasing the capacity of this site would add traffic at the Southbound I-280 off-ramp intersection. This stop sign controlled intersection is currently experiencing poor operation during the AM peak period due to the high volume of southbound off-ramp traffic (>2,000 vehicles in the peak hour). Also, the southbound off-ramp traffic, which must pass through this intersection, backs up onto I-280 during the morning peak period. Trips destined to the City's proposed remote parking area would conflict with, and add to, this off-ramp traffic and exacerbate the existing operational problems. Shuttle buses would also have to pass through the intersection to carry SUMC employees to the Medical Center.

The existing parking area is adjacent to several large, single-family homes. There appears to be an area that is within the Caltrans right-of-way to the east of the existing parking area. However, this area is sloped and would require extensive grading to be used as parking. This vacant area also backs up to more large homes. It is anticipated that any expansion of this lot would be controversial with adjacent residential neighbors.

This site would be partially visible from I-280, which is a State Scenic Corridor.

Stanford and the Hospitals do not own or control land at this site.

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**SLAC – I-280/Sand Hill Road Interchange** (for employees approaching from north on I-280)

Distance from SUMC: Approximately 3.25 miles

Two locations have been suggested by the City for a "SLAC" remote lot which would be located near the I-280/Sand Hill Road interchange: One location is along and accessed from Lawler Ranch Road and the other location is on the former Christmas Tree Farm site along Sand Hill Road, west of I-280.

Construction and operation of remote lots on either of these sites would require approvals from San Mateo County.

From a practical standpoint, the use of these sites for remote lots would be opposed by environmental organizations and/or local residents on a variety of issues related to potential traffic, visual and environmental impacts. Phillips Brooks' proposal for a school site at the end of Lawler Ranch Road was stymied and eventually withdrawn due, in part, to traffic and visual concerns. Stanford's recent proposal at the former Christmas Tree Farm area to dispose dirt on the site temporarily and then restore the area to a condition better than exists today was withdrawn due to neighborhood and environmental group opposition based on traffic and visual effects. These two sites could be visible from I-280, which is a State Scenic Corridor, depending where the site were located.

Stanford may or may not own the site along Lawler Ranch Road, depending on the specific location. The Hospitals do not own or control land at either location.

**Embarcadero Road** (for employees approaching from south on US 101)

Distance from SUMC: Approximately 4.0 miles

The City's proposed site on Embarcadero Road is an existing office complex which is currently vacant. It is assumed that the building would have to be razed and the entire parcel would be used for parking. If we have the correct building, the site is approximately 200 feet by 200 feet (40,000 sq. ft.), which would support a surface parking lot of approximately 120-130 parking spaces.

This site would add traffic to the intersection of Embarcadero Road and Bayshore Road. This intersection already operates very poorly due to the traffic volumes and roadway geometry. If the site were converted from an office use to a remote lot, it would likely generate more peak hour trips. Therefore, there would be a potential secondary impact at the intersection of Embarcadero Road and Bayshore Road during the peak hours.

Stanford and the Hospitals do not own or control this site.

**Stanford in Redwood City** (for employees approaching from north on US 101)

Distance from SUMC: Approximately 4.5 miles

The City's proposal would be to add parking to the Stanford in Redwood City project and operate shuttles between the site and the SUMC campus in Palo Alto. It should be

noted that any additional parking added to the Stanford in Redwood City project would be structured parking because there isn't land available for additional surface parking. This addition of parking to the site would require approvals by the City of Redwood City.

From a traffic perspective, this remote lot would place more vehicle traffic on Woodside Road and at the Woodside Road/US 101 interchange. This corridor and interchange have been a problem for the City of Redwood City and Caltrans for over two decades. The operation of the interchanges within, and adjacent to, the US 101/Woodside Road interchange area currently operate at Level of Service E or F during the AM and PM peak periods. Substantial study has gone into finding solutions to the corridor's operational problems, but they are yet to be resolved. Creating a remote lot at the Stanford in Redwood City site would add significantly to these affected intersections in Redwood City. It is highly unlikely that Redwood City would approve such a use.

Remote parking at this location also would be very inconvenient for employees destined for Palo Alto due to distance between the site and the freeway, and impeded access due to the already congested intersections and interchange. In addition, shuttle service between Redwood City and Palo Alto would be relatively slow because shuttles would most likely not utilize US 101 due to distance, congestion, and increased insurance costs to run shuttles on freeways. Instead, shuttles would likely use El Camino Real where there are numerous traffic signals and congested intersections. Menlo Park has already expressed concern about Stanford traffic between Palo Alto and Redwood City – it is anticipated they would also have concerns about additional shuttle trips due to this remote lot.

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Figure 1 – Remote Parking Locations Proposed by City of Palo Alto

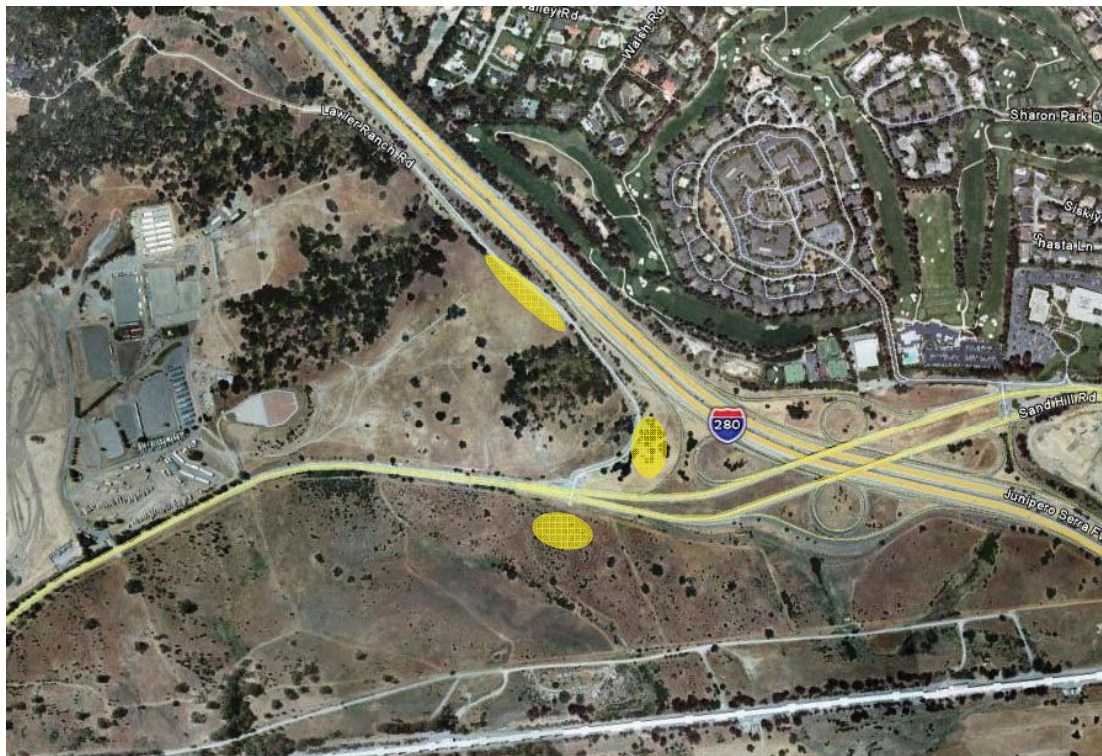


Figure 2 – Sand Hill Road / I-280 Locations





Figure 3 – Page Mill Road / I-280 Location

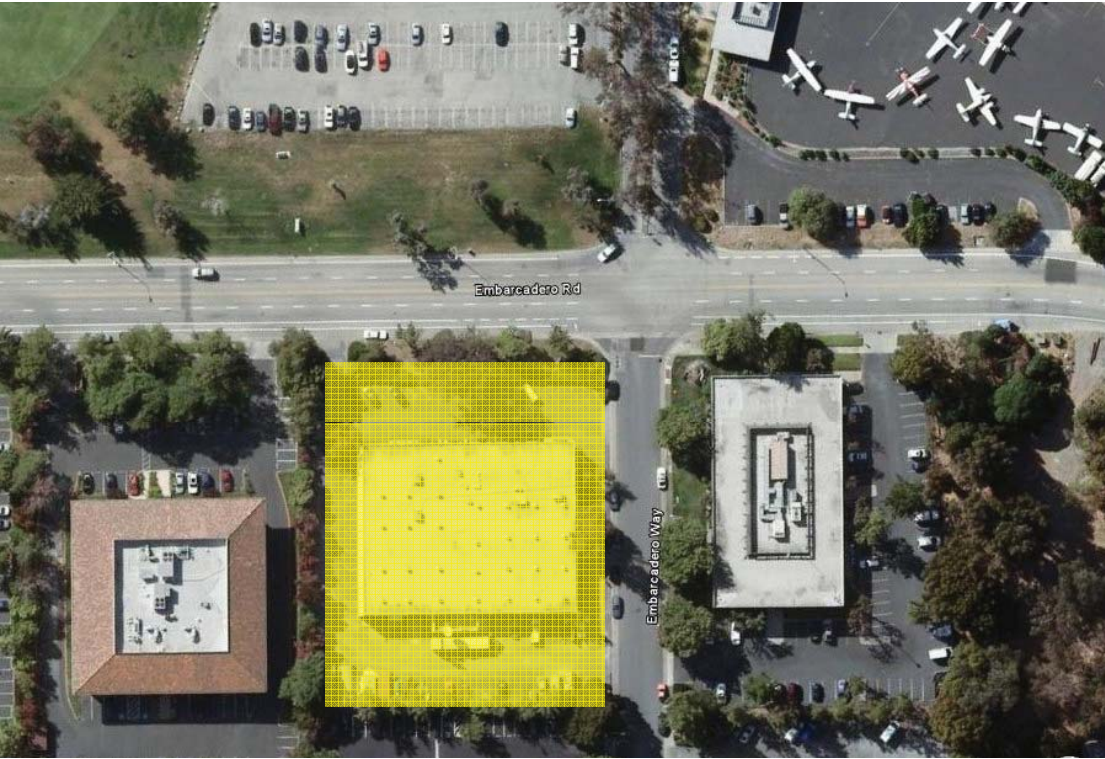


Figure 4 – Embarcadero Road Location (across from Palo Alto Golf Course / Airport)





Figure 5 – Ardenwood Parking (Existing Park and Ride Lot)

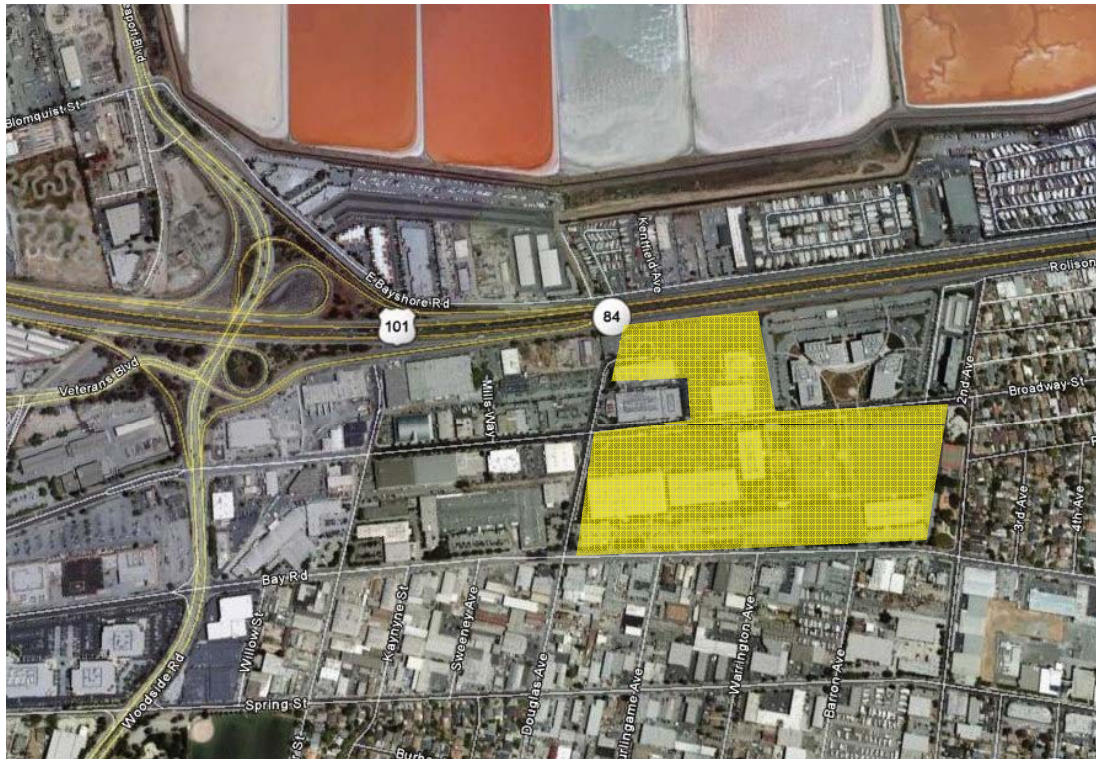


Figure 6 – Redwood City Mid-Point Technology Center Location

**22b. Stanford University Medical Center, Michael J. Peterson (letter dated July 27, 2010)**

22b.1 *The commentor points out the disadvantages of implementing a mandatory remote parking program. Please refer to Master Response 2 for a discussion on remote parking.*

22b.2 *The commentor provides background information on the Ardenwood park-and-ride lot. The information provided by the commentor is correct. If remote parking were implemented using the Ardenwood park-and-ride lot, the SUMC Project sponsors would need to lease the appropriate number of spaces from AC Transit, the operator of the park-and-ride lot. In addition, additional environmental review would be required if the lot were expanded beyond its current size. Please refer to Master Response 2 for more discussion on remote parking.*

22b.3 *The commentor provides background information on the parking lot at Page Mill Road/I-280 interchange. Please refer to Master Response 2 for a discussion of remote parking.*

22b.4 *The commentor provides background information on the parking lot at I-280/Sand Hill Road interchange. Please refer to Master Response 2 for a discussion of remote parking.*

22b.5 *The commentor provides background information on the parking lot along Embarcadero Road. Please refer to Master Response 2 for a discussion of remote parking.*

22b.6 *The commentor provides background information on the parking lot in Redwood City. Please refer to Master Response 2 for a discussion of remote parking.*

### Attachment 3

#### Stanford Hospital Transit Center Data Request (request shown in red)

City comments provided on December 2, 2009 are addressed at end of document (City comments in *blue*). Responses to the original Data Request have been modified slightly to address City comments.

The following information is needed to prepare a conceptual design of a transit center at Stanford Hospital.

The Marguerite is a well-established bus/shuttle transit system at the University and SUMC, and the information below describes some of the key operational features of the system pertaining to bus stops, including “enhanced” bus stops that are proposed at selected locations within the SUMC area. These enhanced bus stops are locations where we anticipate a high-volume of employee and/or patient ridership during peak times. At these enhanced locations we will provide shelters, benches, and other amenities to encourage transit use and improve the experience for passengers when waiting for the Marguerite.

We note that these enhanced bus stops do not function like traditional transit centers such as the Palo Alto Transit Center. Features of a traditional transit center commonly include the following characteristics:

- Multiple service providers and/or modes of transit
- “Cross-platform” transfers between different providers and modes
- Need for vehicles to layover to accommodate transfers or schedule
- Amenities (restrooms, vending machines, etc.) for passengers who are waiting long periods or related to the operation of the transit vehicles

With the exception of the bus stops located in front of Hoover Pavilion, the bus stops within the SUMC area are only used by vehicles operated by or for Stanford, including the Marguerite and the Line U (which is an AC Transit express bus partially subsidized by Stanford, with service from the East Bay and limited stops at the University and SUMC). Therefore, Stanford directly controls how these vehicles use the bus stops. Since most of the trips are commuter work trips, with SUMC as the destination, there are few transfers that occur at these bus stops. That, combined with the high frequency of service, minimizes the number of passengers queued at any stop. Stanford regularly monitors boarding patterns and will continue to add shuttle service at locations where demand exceeds capacity.

Figure 1 shows the location of the anticipated future Marguerite routes and stops (for A-line, B-line, and MC (Medical Center loop) routes) within the SUMC. These routes are essentially the same as the existing Marguerite routes, with slight modifications to adjust for the proposed project. Figure 1 includes stops in the SUMC that are shared with the Line U. It should also be noted that the route and bus stop locations would be the same under the Tree Preservation Alternative.

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Figure 2 shows the existing VTA and SamTrans routes that loop around the Stanford Shopping Center, with a primary stop along Arboretum Road which serves several lines and providing significant bus layover. Figure 2 also shows the existing route of the smaller Menlo Park Midday Shuttle, which extends into the SUMC.

- 1) **Size of Facility.** Number of bus bays and the size (length of bus) and mix of fleet. This should encompass both existing and future use. The mix of the fleet would need to include designated stops at specific locations. For example, if the U-Line served the transit center it may need to have an exclusive stop so that riders would know where to stand to catch the bus. This would pertain to other routes as well.

**Response:** The standards for designing Marguerite shuttle stops in the SUMC and Shopping Center areas are as follows:

- A basic bus stop consists of a red painted curb for loading and a bus stop sign indicating which buses (including Line U, if applicable, are served and also providing schedule information posted in a tube on the sign post. Also, the stops should meet the following requirements:
  - A single bus stop where there is no on-street parking allowed is 40-ft long (to accommodate a 40-foot Gilling bus)
  - A single bus stop where there is on-street parking is a minimum of 60-ft long
  - At high volume stops or where transfers occur, the bus stop is at least 100-ft long to allow for two vehicles
- Shuttles have side-loading and rear-loading wheelchair lifts; therefore, 8 feet of concrete way (i.e., sidewalk) is provided for the side-loading lifts at bus stops.
- Duck-outs for bus stops should only be used if they allow the bus to fully clear the vehicle travel lane and the bike lane; otherwise, bus stops should be along the curb. This standard has resulted in the following guidelines:
  - When a roadway has two lanes of traffic in each direction and bike lanes, bus duck-outs typically are not installed. When a bus makes a stop, it pulls to the curb to occupy the bike lane and part of the travel lane. Bicyclists can pass the bus on the left (in the space remaining of the travel lane unoccupied by the bus). Other traffic can continue in the remaining travel lane. Having the bus remain at the curb allows the bus an easier re-entrance to traffic, which can be very important along heavily traveled streets.
  - When a roadway has only one lane of traffic in each direction, a bus duck out is recommended to allow vehicle and bike traffic to continue while the bus is loading/unloading.
- Shelters will be provided at the *enhanced* bus stops in accordance with the SUMC Design Guidelines (see page 141 of the draft Design Guidelines)

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The criteria for locating Marguerite shuttle stops are as follows:

- Avoid locating bus stops closer than intervals of ¼ mile
- Where possible, locate stops on the far side of intersections to minimize conflicts with off-loading pedestrians

Currently, the Line U and the Marguerite system share stops at numerous locations at Stanford. Each shared stop has both Marguerite and AC Transit Line U signs to inform riders of the service at these stops (a standard practice with transit agencies that share stops). With this arrangement, there is no need to have separate stops for each service provider.

- 2) **Alternative Sites.** Where in Stanford's opinion are two or three locations for the transit center?

**Response:** Figure 1 shows the locations of the proposed enhanced bus stops in the SUMC area at Hoover Pavilion, Quarry Road, and Pasteur Drive. These locations were selected as the optimal loading locations for SUMC employees. However, the enhanced bus stops would also be used by patients and visitors, and signage will be provided to direct such riders to the front doors of the hospitals and Hoover facilities.

- 3) **Base Aerial.** Is aerial photography available that is better than Google?

**Response:** Yes, provided in original transmittal on November 11, 2009.

- 4) **Amenities.** What amenities should be included, both for the public (benches, bus schedule information, shelters, etc) and for operators (restrooms, layover facilities)?

**Response:** Enhanced bus stops will provide riders with shelter, seating, lighting, signage, maps, bus lines served, bus schedule, and bike parking as necessary. No other passenger facilities are needed due to the high frequency of Marguerite service.

Marguerite operators do not take breaks in the middle of the route so no services will be provided in the SUMC. Services for operators (e.g., restroom, break room) are available at the ends of the routes at the Palo Alto Transit Center and Stanford's Parking Structure 5 on Oak Road.

- 5) **Ridership.** Estimates of ridership demand to size the waiting areas.

**Response:** Ridership is not used to size the waiting areas. The Marguerite system is planned with a physical capacity of up to 100 feet of curb to accommodate up to one full-size bus and a smaller bus at the same time. Then, as the sole operator of these routes, Stanford adjusts for additional demand by adding buses to decrease the headways and

January 9, 2010

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increase capacity. The schedule prevents the potential conflict of more than two buses at a stop at a given time.

*Comment: The Menlo Park midday shuttle also serves the hospital and Blake Wilbur Clinic. It has a 7 minute layover.  
<http://www.menlopark.org/departments/trn/tran shut.pdf>*

The Menlo Park Midday Shuttle route is depicted in Figure 2. The hospitals have not approved the use of a layover at Blake Wilbur Clinic and will require that the shuttle operator modify the layover as needed to ensure it does not delay other shuttle services or result in congestion.

*Are there other non-Stanford shuttles that would need to be accommodated at the enhanced bus stops? Do buses/shuttles from senior housing facilities in the area use the current bus stop with or without layovers?*

The revised Figure 2 provides information on other transit services in the area. The enhanced stop at Stanford Shopping Center along Quarry Road is the only enhanced bus stop that would need to accommodate non-Stanford services (i.e., SamTrans and VTA).

Nearby senior facilities (Classic Residence by Hyatt, The Sequoias – Portola Valley, Channing House) provide resident shuttle service to and from the medical center. Residents are dropped off for their appointments and later call when they are ready to be picked up. Drop-offs are at front doors, rather than at shuttle stops (which are not designed to provide front door services). There is no layover requirement.

*It would be helpful if there are projected numbers of shuttle users, and the peak demand for U-line transit to the hospital.*

The Line U, operated by AC Transit, provides transit service between Stamford and the East Bay. If AC Transit cannot accommodate all of the future demand for this connection to the East Bay (anticipated to be an additional 15 to 20 riders), the demand can be accommodated by the Dumbarton Express, which provides many more trip options than the Line U and connects with the Marguerite shuttle at the Palo Alto Intermodal Transit Station. See trip/connection summary at [http://transportation.stanford.edu/images/EastBay-Stanford\\_transit\\_guide.pdf](http://transportation.stanford.edu/images/EastBay-Stanford_transit_guide.pdf).

Table 1 presents the estimated Marguerite riders in the peak hour resulting from increased uses of Caltrain and other transit. This future train and other transit ridership would be 380 peak hour riders if the Go Pass triples the existing Caltrain ridership and 588 peak hour riders if the Go Pass achieves the University level of Caltrain ridership. Stanford's June 2009 proposal letter to the City offered to provide the Go Pass to SHC and LPHC existing and future employees and to fund the additional Marguerite shuttles necessary to serve the future increase in Caltrain riders resulting from institution of the Go Pass. Stanford University's Director of Parking & Transportation Services has been actively involved with the planning surrounding the supply of additional Marguerite

shuttles and is confident that the additional riders can be served through provision of these additional shuttles.

In addition, Table 1 indicates that there would be approximately 264 employees in the peak hour that would park at the Hoover Pavilion. Some of these employees would walk to the Main Medical Center and the others would require a Marguerite shuttle. This additional demand could be served through capacity on the Marguerite A and B lines or through dedicated shuttles to and from the parking structure and the SUMC (as occurs today on the MC line to and from Parking Structure 5).

While confident of its ability to provide bus stops that can accommodate the additional Marguerite shuttles on its property, Stanford recognizes that there will likely be a need for staging additional buses in the vicinity of the existing Transit Center. Stanford and the City will work cooperatively with VTA and others to provide staging solutions.

*Comment: Please provide information on which Marguerite shuttles will use each stop. Do the routes change with the construction of the new hospital buildings? Bill Phillips should recall what we did for the SHR projects. Something similar would be helpful in reviewing this transit stop proposal.*

Figure 1 has been revised to indicate which Marguerite routes utilize each stop. The routes will not change as a result of the project. Routes will need to be maintained during construction to provide access to the existing SUMC buildings. At this time, before a construction manager has been hired, it has not been determined whether access on Welch Road would be constrained for transit vehicles during the Welch Road construction activities that will occur early in the project. If Welch Road construction requires temporary blockage, alternative transit routes would be established using Sand Hill Road and/or Quarry Road (east of the SUMC). Route determination would likely involve an assessment of traffic volumes and route schedule impacts related to these alternative routes.

Prior to commencement of any construction phase which impacts transit access or movement, a Construction Traffic Management Plan will be provided to the City of Palo Alto for review and approval.

*Comment: Will this [100-foot length] suffice for the peak periods of bus activity?*

Yes. As mentioned above, based on Stanford's experience operating the bus/shuttle service, the 100-foot length is sufficient to support two buses at the same time. Stanford manages the system to address higher demand with reduced headways and more frequent buses, rather than running additional buses at the same time.

*Comment: There are bike lanes along Pasteur. It would be best to have a duck out at this enhanced bus stop. The design used for the bus stops (without layover around the shopping center (on Quarry and Sand Hill) or with layover stops (on Arboretum) could be considered.*

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The guidelines for the use of duck-outs are provided above in Response #1. The existing duck-outs located in SUMC along Quarry Road are identified in Figure 1.

The proposed project removes curb-side parking along Pasteur Drive, creating enough width for two lanes of traffic and a bike lane. Following the guidelines above, the SUMC Project sponsors do not plan to provide a duck-out at the enhanced bus stop along Pasteur Drive.

*The enhanced bus stop on Quarry west of Welch should also have duck-outs similar to those provided on Quarry by the shopping center.*

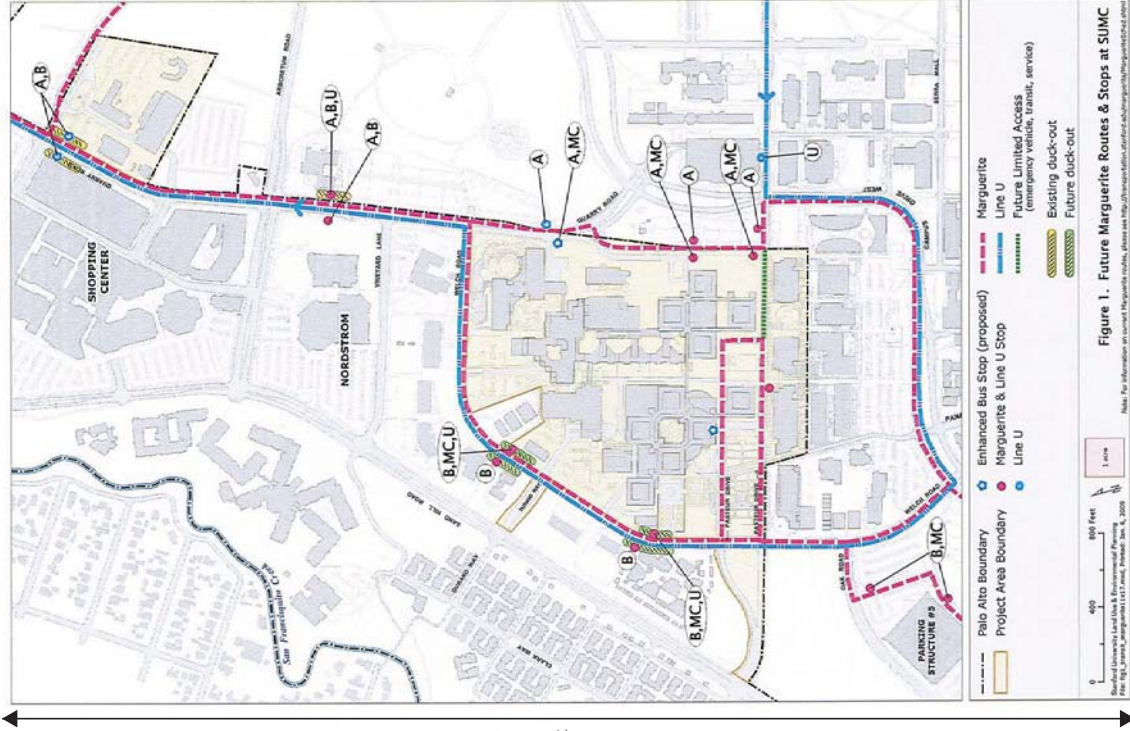
Following its guidelines, the SUMC Project sponsors do not plan to provide a duck-out at the enhanced bus stop on Quarry south of Welch Road because there are two lanes of traffic and a bike lane at this location.

*Comment: Why is the main stop for the LPCH on Quarry and not on Welch? I do not see a bus stop on Welch for LPCH. The distance between the Psych Clinic shuttle stop and first shuttle stop on Welch is quite long.*

As mentioned in Response #2 above, Marguerite stops are located optimally for the employees, who are the primary commuters. The enhanced bus stop for LPCH is located on Quarry rather than Welch because a LPCH staff entrance will be located along Quarry (as it is today). Visitors and patients coming to LPCH can also utilize this stop, which connects to a short path through the garden to the front public entrance.

The area in front of LPCH and 730 Welch is very busy with automobiles, bicycles, and the pedestrian crossings. The SUMC Project sponsors do not have the room to create a bus duck-out on the LPCH side of Welch Road due to the parking structure and entry areas.

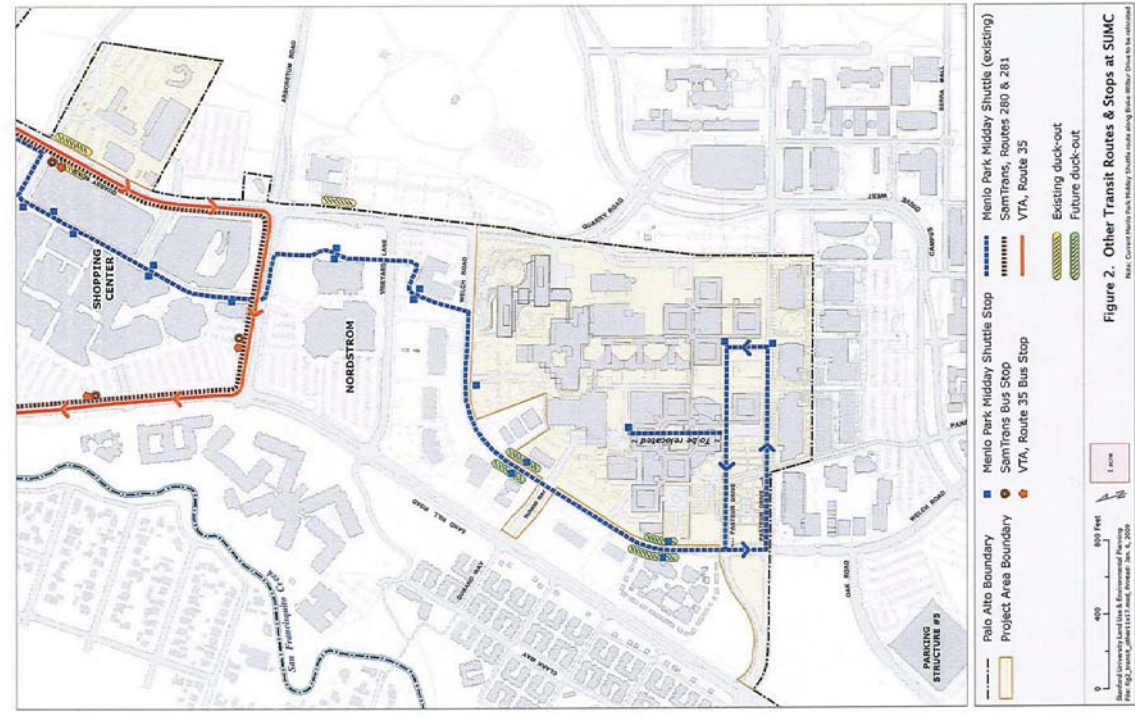
It should be noted that, following the guidelines described above in Response #1, duck-outs will be added to the existing Welch Road bus stops at approximately 1101 Welch Road and 801 Welch Road (see Figure 1).



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January 9, 2010





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Table 1. Estimated additional Marguerite ridership with various Go-Pass participation level:  
 Existing Employees: 8,304 From Go-Pass Memo  
 Future Employees: 1,048 From Go-Pass Memo

	Existing Employees		Future Conditions	
	Percent	New Riders	Percent	New Riders
Caltrain (1)	3.6%	299	3.6%	382
Bus	4.7%	390	4.7%	499
Marguerite (no transfers)	0.6%	50	0.6%	64
Total Ridership		739		206
Weekday Trips (2)		891		165
Peak Period Trips (2)		526		147
Peak Hour Trips (2)		289		81
Hoover Pavilion Parking Shuttle				264
Total Peak Hour Riders				345

(1) - Caltrain shuttle ridership is calculated as the absolute increase in ridership due to increase number of employees plus implementation of Go-Pass.  
 (2) - Weekday, Peak Period and Peak Hour factors taken from Go-pass memo.

**Hoover Pavilion**  
 Total Parking: 1,174  
 Hoover MOB Spaces: 635  
 Childcare Spaces: 0  
 Hospital Spaces: 530  
 Parking Spaces: 389  
 Peak Hour Trips: 264  
 Assumes 144,230 at 4 per 1,000 if with 10% turnover  
 Assumes 89% during peak period arrivals  
 Assumes 55% during peak hour

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**22c. Stanford University Medical Center (letter dated January 9, 2010)**

22c.1 *The commentor provides information to prepare a conceptual design of enhanced bus stops at Stanford Hospital and at the Hoover Pavilion. Please refer to Staff-Initiated Change 1 for more discussion of provision of on-site enhanced bus stops.*

# Memorandum

Direct Phone: 415.393.2380  
Direct Fax: 415.393.2286  
Barbara.schussman@bingham.com  
Our File No.: 0000310626

DATE: July 27, 2010  
TO: City of Palo Alto  
FROM: Barbara Schussman  
RE: **Greenhouse Gas Evaluation Methodology**

The SUMC DEIR uses a significance threshold for greenhouse gas emissions that is tied to "business as usual" projections. Specifically, the DEIR evaluates whether project emissions would "reach a 30 percent reduction of 2020 BAU emissions." To properly apply this threshold it is important to understand how the 30 percent figure is derived.

AB 32 requires the State to reduce greenhouse gas emissions to 1990 levels by 2020. To implement AB 32, the California Air Resources Board set a numeric emissions target equal to greenhouse gas emissions in 1990.<sup>1</sup> CARB also calculated the future emissions in 2020 assuming anticipated population and economic growth occurred and no regulatory changes were implemented. This projected future level of emissions in 2020 is called the "business-as-usual" scenario. CARB's AB 32 Scoping Plan states that "[r]educing greenhouse gas emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 15 percent from today's [2008] levels."

Note that if the 30 percent significance threshold were divorced from CARB's concept of "business as usual," then it would be arbitrary. As regulatory changes are made and implemented, the reduction in anticipated future emissions is expected to decrease over time.

<sup>1</sup> AB 32 requires CARB to "determine what the statewide greenhouse gas emissions level was in 1990, and approve in a public hearing, a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020." Health & Safety Code § 38550.

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- Boston
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- Santa Monica
- Silicon Valley
- Tokyo
- Washington

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**The Starting Point for Evaluating Business-As-Usual Projections for 2020 is Regulatory Conditions in 2002-2004**

CARB used the term "business-as-usual" in the Scoping Plan to describe future GHG emissions estimates based on regulatory requirements from 2002 to 2004, with population and economic growth projections for 2020. In order to calculate business-as-usual, CARB estimated growth rates sector by sector. The exponential formula that CARB used to make projections is as follows:

$$2020 \text{ BAU Emissions} = [(2003 \text{ emissions}) * (\text{average growth factor per year})^{(2020-2003)}]$$

CARB used 2003 because it was the center point of the three-year (2002-2004) evaluation period. CARB assumed that the Mohave coal plant would shut down (which it did in 2005), but otherwise made projections based on regulatory conditions that existed in 2003. CARB also assumed that there would be no expansion of renewable energy in California.<sup>2</sup>

**The Comparison Point for Evaluating Project Emissions for 2020 is Conditions Anticipated in 2020 (Based on Current Enactments)**

CARB's adopted Scoping Plan anticipates that, to reduce emissions by 30 percent compared to business-as-usual emissions in 2020, much of the reduction will come from statewide regulations. Accordingly, when using a BAU methodology, the effect of statewide regulations adopted since 2003 should be included in the calculations of non-BAU emissions.

**I. Energy Consumption Rates-- BAU v. Project**

**Current Requirements of Title 24 are Not Part of Business-As-Usual**

As explained above, CARB's calculations that resulted in the 30 percent figure, were based on the assumption that the elements of CARB's subsequently adopted Scoping Plan (which included improvements to Title 24 energy efficiency standards<sup>3</sup>) are *not* part of Business As Usual. Therefore, improvements beyond the version of Title 24 that existed in 2003 are not part of Business As Usual.

<sup>2</sup> See explanatory paper embedded in [http://www.arb.ca.gov/cc/inventory/data/tables/arb\\_ghg\\_inventory\\_forecast\\_2008\\_06\\_26.xls](http://www.arb.ca.gov/cc/inventory/data/tables/arb_ghg_inventory_forecast_2008_06_26.xls).

<sup>3</sup> See CARB Scoping Plan at 17.

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Moreover, Title 24 energy efficiency requirements do not apply to hospitals. OSHPD does not require compliance with the California Energy Code (which is codified at Title 24, Part 6, of the California Code of Regulations). Because hospitals are not subject to the energy efficiency requirements of Title 24, it would be inappropriate to treat Title 24 energy efficiency requirements as part of business-as-usual for hospital buildings.

The SUMC DEIR quantifies energy consumption rates for the new Hospital buildings (without the proposed energy conservation measures) based on the information provided by Mazzetti & Associates in the Project Application. The DEIR treats those calculations as its business-as-usual scenario. The calculations provided by Mazzetti & Associates do not apply Title 24 energy efficiency standards to hospital buildings. Thus, the DEIR appropriately calculates business-as-usual energy consumption rates for the proposed hospital buildings.

However, in the text, the SUMC EIR states that current Title 24 energy efficiency standards are treated as part of the business-as-usual for calculating energy consumption for hospital buildings. (DEIR p. 3.6-52) This statement should be corrected in the FEIR.

**Future Energy Consumption For Hospital Buildings Should Be 30 Percent Lower Than Business-as-Usual**

The SUMC EIR assumes that, due to the energy efficiency measures included in the SUMC Project, electrical energy consumption at the new hospital buildings would be 20 percent lower than business-as-usual emissions. It appears that the 20 percent estimate is based upon the incorrect assumption that Title 24 standards already are included in the business-as-usual projections. The project description states that new hospital buildings would be designed to use 20 percent less energy than buildings designed to meet ASHRAE 90.1 standards.

The reduction from business-as-usual should be linked to the project design goal that the hospital buildings would use 35 percent less energy than typical hospitals. To be conservative, in the technical report dated December 9, 2008, Mazzetti & Associates estimated that greenhouse gas emissions associated with energy consumption at the hospital buildings would be reduced by 30 percent compared to estimates that did not take into account the energy conservation features.

In addition, the SUMC EIR should reduce emissions associated with production of steam and chilled water at the Central Energy Facility due to the SUMC Project's energy efficiency measures in both the hospital and School of Medicine buildings. The SUMC EIR does not explain why emissions associated with production of steam and chilled water were not reduced as a result of the energy conservation features included in the project description for the hospitals. The hospitals will use chilled water for its cooling system and steam (or hot water) for heating and sterilization. The hospitals' energy efficiency features will reduce the

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need for steam and chilled water. With regard to the School of Medicine buildings, the SUMC EIR states that natural gas consumed within the SoM buildings is from consumption by the boilers/steam plant and would not be affected by the energy efficiency of the building. (DEIR p. 3.6-52) This statement seems to confuse emissions from the offsite Central Energy Facility, which are tied to steam and chilled water production, with use of natural gas inside the SUMC project buildings. Consumption of steam and chilled water from the Central Energy Facility would be reduced due to energy efficiency measures. Natural gas used inside the buildings is not linked to the Central Energy Facility or its emissions. Accordingly, the Final EIR should show that, with the SUMC Project's conservation features, project emissions associated with production of steam and chilled water would be reduced by 30 percent.

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**II. Vehicular Emissions**

**State Regulatory Initiatives Under the Scoping Plan are Not Part of Business As Usual**

The SUMC EIR states that it uses URBEMIS 2007 for its estimates of emissions from non-fleet vehicles (cars and light trucks transporting employees, patients and visitors). (DEIR p. 3.6-30) We understand that the emissions assumptions in URBEMIS 2007 are consistent with the assumptions CARB used in estimating BAU emissions from cars and light trucks. Therefore, the DEIR methodology for calculating BAU emissions associated with non-fleet vehicles is appropriate.

**Adopted State Laws Should Be Incorporated Into The Calculation of 2020 Project Emissions**

Non-BAU projections should take into account state-level actions to reduce greenhouse gas emissions that have been adopted since 2002-2004. In its recent technical guidance on calculating project-level GHG emissions, the Bay Area Air Quality Management District notes that: "Several measures included in the AB 32 Scoping Plan will impact local GHG emissions and may be taken into account in the GHG emission projection. Of particular importance are the Renewable Portfolio Standard and the Pavley I and II regulations."<sup>4</sup>

<sup>4</sup> See GHG Quantification Guidance  
[http://www.baaqmd.gov/~media/Files/Planningpercent20andpercent20Research/CEQA/GHGpercent20Quantificationpercent20Guidance\\_5\\_3\\_10.asbx](http://www.baaqmd.gov/~media/Files/Planningpercent20andpercent20Research/CEQA/GHGpercent20Quantificationpercent20Guidance_5_3_10.asbx).

22d.4

Accordingly, the FEIR should be revised to account for emissions reductions associated with Pavley and the Low Carbon Fuel Standard in calculating non-BAU vehicular emissions.

22d.4  
Con't

**Inclusion of Patient/ Visitors Trips in GHG Calculations**

The DEIR separately quantifies Vehicle Miles Traveled for employee trips and for trips by patients and visitors. We ask that the City and its consultants consider whether it is appropriate to attribute greenhouse gases from patient and visitor trips to the proposed project for purposes of performing a BAU comparison. As the DEIR recognizes, a substantial portion of emissions from patient and visitor trips could occur whether or not the SUMC Project is approved. "This is because people are likely to seek the type of medical services provided by the SHC and hospital." (DEIR p. 3.6-29) While we agree that it was appropriate to include such trips in the overall GHG inventory, it is not clear to us that it is appropriate to include them when performing a BAU comparison. At a minimum, we suggest that the FEIR separately present emissions associated with employee trips, and indicate that the Go Pass would reduce employee VMT (and associated greenhouse gas emissions) by 44.5 percent.

22d.5

**22d. Stanford University Medical Center, Barbara Schussman (letter dated July 27, 2010)**

- 22d.1 *The commentor states that the California Air Resources Board's (CARB) adopted Scoping Plan anticipates that in order to reduce emissions by 30 percent compared to business-as-usual (BAU) emissions in 2020, much of the reductions will come from Statewide regulations. Accordingly, when using a BAU methodology, the effect of Statewide regulations adopted since 2003 should be included in the calculations of non-BAU emissions, but not BAU emissions.* The calculation of non-BAU emissions of the SUMC Project has been revised to include the State-adopted regulations when estimating project-specific emissions. Revisions to the greenhouse gas inventory based on Statewide standards are discussed in detail in the Staff-Initiated Change 4 (State Adopted AB 32 Scoping Plan Measures).
- 22d.2 *The commentor states that the Draft EIR incorrectly adds current Title 24 efficiency standards to the assumptions for BAU emissions quantifications on page 3.6-52; however the emissions are accurately calculated without the incorporation of the current Title 24 efficiency standards.* In order to address this comment, the second sentence of the first paragraph on page 3.6-52 of the Draft EIR has been revised to clearly define the assumptions used in the BAU calculations with respect to energy efficiency, as shown in Staff-Initiated Change 4.
- 22d.3 *The commentor states that the future energy consumption for the SUMC Project hospital buildings should be 30 percent lower than BAU and that the production of steam and chilled water from the Central Energy Facility should also be reduced due to the increased energy efficiency of the hospital buildings.* The calculations of greenhouse gas emissions from future energy consumption of the hospital buildings and the reduction of steam and chilled water from the Central Energy Facility have been revised to more accurately portray the energy efficiencies of the SUMC Project. The revisions to the greenhouse gas inventory based on changes to the energy efficiencies from those presented in the Draft EIR are discussed in detail in the Staff-Initiated Change 4.
- 22d.4 *The commentor agrees that the methodology for the BAU emissions associated with non-fleet vehicle emissions is appropriate. However, the commentor states that the adopted State laws should be incorporated into the calculation of 2020 SUMC Project emissions.* The adopted State laws, such as Paveley and the Low Carbon Fuel Standard are now incorporated into the non-BAU vehicular emissions. This assumption, and the resulting revisions to the Draft EIR, is discussed in detail in the Staff-Initiated Change 4.
- 22d.5 *The commentor asks that the City consider whether it is appropriate to attribute greenhouse gases from patient and visitor trips to the SUMC Project for purposes of performing a BAU*

*comparison.* See Staff-Initiated Change 4 (Patient and Visitor Trips) for a full discussion of patient and visitor trips with respect to the revised greenhouse gas analysis.



SUMC Protected Tree Survey

July 20, 2010

Attachment 5

Tree #	Botanical Name / Name Common	dbh	Construction Area	Protected Tree in Construction Area	Removed in Proposed Project	Removed in Tree Preservation Alternative	Aesthetic Tree Resource	Notes
316	<i>Quercus agrifolia</i> / Oak, Coast Live	11.2"	FMS				+	Not Protected
317	<i>Quercus agrifolia</i> / Oak, Coast Live	15.3"	FMS	+			+	
318	<i>Quercus agrifolia</i> / Oak, Coast Live	21.7"	FMS	+			+	
319	<i>Quercus agrifolia</i> / Oak, Coast Live	30.3" @ 2'	FMS	+	+		+	
320	<i>Quercus agrifolia</i> / Oak, Coast Live	22.0"	FMS	+			+	
321	<i>Quercus agrifolia</i> / Oak, Coast Live	11.2"	FMS				+	Not Protected
322	<i>Quercus agrifolia</i> / Oak, Coast Live	15.1"	FMS	+			+	
323	<i>Quercus agrifolia</i> / Oak, Coast Live	22.4"	FMS	+	+		+	Relocated as Part of Tree Preservation Alternative
324	<i>Quercus agrifolia</i> / Oak, Coast Live	38.1"	FMS	+	+		+	Relocated as Part of Tree Preservation Alternative
325	<i>Quercus laevis</i> / Oak, Valley Coast Live	12.3"	FMS	+	+		+	
326	<i>Quercus agrifolia</i> / Oak, Coast Live	14.4"	FMS	+	+		+	
327	<i>Quercus agrifolia</i> / Oak, Coast Live	62.6" @ 3.5'	FMS	+	+		+	
328	<i>Quercus agrifolia</i> / Oak, Coast Live	53.8" @ 2'	FMS	+			+	
<b>SUBTOTAL</b>			<b>FMS</b>	<b>11</b>	<b>5</b>	<b>5</b>	<b>9</b>	
33	<i>Quercus laevis</i> / Oak, Valley	30.7" @ 4'	SHC	+	+		+	
34	<i>Quercus agrifolia</i> / Oak, Coast Live	37.3" @ 3"	SHC	+	+		+	
35	<i>Quercus agrifolia</i> / Oak, Coast Live	20.4"	SHC	+	+		+	
36	<i>Quercus laevis</i> / Oak, Valley	20.7"	SHC	+	+		+	
37	<i>Quercus laevis</i> / Oak, Valley	26.1"	SHC	+	+		+	
38	<i>Quercus agrifolia</i> / Oak, Coast Live	46.3"	SHC	+	+		+	
39	<i>Quercus agrifolia</i> / Oak, Coast Live	26.1"	SHC	+	+		+	
40	<i>Quercus agrifolia</i> / Oak, Coast Live	26.2"	SHC	+	+		+	
41	<i>Quercus agrifolia</i> / Oak, Coast Live	26.7"	SHC	+	+		+	
333	<i>Quercus agrifolia</i> / Oak, Coast Live	20.2" @ 2'	SHC	+	+		+	
373	<i>Quercus agrifolia</i> / Oak, Coast Live	15.0"	SHC	+	+		+	
374	<i>Quercus agrifolia</i> / Oak, Coast Live	13.4"	SHC	+	+		+	
375	<i>Quercus agrifolia</i> / Oak, Coast Live	14.2"	SHC	+	+		+	
383	<i>Quercus agrifolia</i> / Oak, Coast Live	16.9"	SHC	+	+		+	
387	<i>Quercus agrifolia</i> / Oak, Coast Live	19.3"	SHC	+	+		+	
388	<i>Quercus agrifolia</i> / Oak, Coast Live	12.0"	SHC	+	+		+	
410	<i>Quercus agrifolia</i> / Oak, Coast Live	12.1"	SHC	+	+		+	
425	<i>Quercus agrifolia</i> / Oak, Coast Live	33.3"	SHC	+	+		+	
428	<i>Quercus agrifolia</i> / Oak, Coast Live	19.4" @ 3'	SHC	+	+		+	Not included in February 8, 2010 drawings

433	Quercus agrifolia / Oak, Coast Live	19.4"	SHC	+	+	+	+	+	+
436	Quercus agrifolia / Oak, Coast Live	19.9"	SHC	+	+	+	+	+	+
438	Quercus agrifolia / Oak, Coast Live	19.8" @ 2'	SHC	+	+	+	+	+	+
439	Quercus agrifolia / Oak, Coast Live	18.8"	SHC	+	+	+	+	+	+
440	Quercus agrifolia / Oak, Coast Live	12.5"	SHC	+	+	+	+	+	+
441	Quercus agrifolia / Oak, Coast Live	17.9" @ 2'	SHC	+	+	+	+	+	+
448	Quercus agrifolia / Oak, Coast Live	23.4" @ 3'	SHC	+	+	+	+	+	+
450	Quercus agrifolia / Oak, Coast Live	25.8" @ 4'	SHC	+	+	+	+	+	+
473	Quercus agrifolia / Oak, Coast Live	12.3"	SHC	+	+	+	+	+	+
479	Quercus agrifolia / Oak, Coast Live	12.8"	SHC	+	+	+	+	+	+
538	Quercus agrifolia / Oak, Coast Live	16.4"	SHC	+	+	+	+	+	+
544	Quercus agrifolia / Oak, Coast Live	20.7" @ 1'	SHC	+	+	+	+	+	+
603	Quercus lobata / Oak, Valley	41.5"	SHC	+	+	+	+	+	+

<b>SUBTOTAL</b>			<b>SHC</b>	<b>32</b>	<b>31</b>	<b>19</b>	<b>19</b>	<b>10</b>	
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87	Quercus agrifolia / Oak, Coast Live	12.7"	LPCH	+	+	+	+	+	+
90	Quercus agrifolia / Oak, Coast Live	15.0"	LPCH	+	+	+	+	+	+
91	Quercus agrifolia / Oak, Coast Live	11.5"	LPCH	+	+	+	+	+	+
96	Quercus agrifolia / Oak, Coast Live	12.9"	LPCH	+	+	+	+	+	+
97	Quercus agrifolia / Oak, Coast Live	15.2"	LPCH	+	+	+	+	+	+
98	Quercus agrifolia / Oak, Coast Live	15.4"	LPCH	+	+	+	+	+	+
98	Quercus agrifolia / Oak, Coast Live	12.4"	LPCH	+	+	+	+	+	+
99	Quercus agrifolia / Oak, Coast Live	15.0"	LPCH	+	+	+	+	+	+
996	Quercus agrifolia / Oak, Coast Live	47.1"	LPCH	+	+	+	+	+	+
1010	Sequoia sempervirens / Redwood, Coast	18.8"	LPCH	+	+	+	+	+	+
1011	Sequoia sempervirens / Redwood, Coast	18.9"	LPCH	+	+	+	+	+	+
1016	Sequoia sempervirens / Redwood, Coast	18.1"	LPCH	+	+	+	+	+	+
1017	Sequoia sempervirens / Redwood, Coast	18.3"	LPCH	+	+	+	+	+	+
1082	Quercus agrifolia / Oak, Coast Live	15.5" @ 4'	LPCH	+	+	+	+	+	+
1086	Quercus lobata / Oak, Valley	12.7"	LPCH	+	+	+	+	+	+
1097	Quercus lobata / Oak, Valley	29.0"	LPCH	+	+	+	+	+	+
1098	Quercus lobata / Oak, Valley	15.9"	LPCH	+	+	+	+	+	+
1102	Quercus agrifolia / Oak, Coast Live	14.1"	LPCH	+	+	+	+	+	+
1104	Quercus agrifolia / Oak, Coast Live	15.9"	LPCH	+	+	+	+	+	+
1104	Sequoia sempervirens / Redwood, Coast	22.9"	LPCH	+	+	+	+	+	+
1108	Sequoia sempervirens / Redwood, Coast	26.5"	LPCH	+	+	+	+	+	+
1109	Sequoia sempervirens / Redwood, Coast	21.8"	LPCH	+	+	+	+	+	+
1111	Sequoia sempervirens / Redwood, Coast	27.1"	LPCH	+	+	+	+	+	+
1119	Sequoia sempervirens / Redwood, Coast	19.7"	LPCH	+	+	+	+	+	+
1170	Sequoia sempervirens / Redwood, Coast	24.3"	LPCH	+	+	+	+	+	+
1172	Sequoia sempervirens / Redwood, Coast	19.2"	LPCH	+	+	+	+	+	+

Relocated as Part of Tree Preservation Alternative. Was not identified as meeting Aesthetic criteria in July 28, 2009 memo, but subsequently added.

1174	Sequoia sempervirens / Redwood, Coast	21.7"	LPCH	+	+	+	+	+	+
1175	Sequoia sempervirens / Redwood, Coast	22.8"	LPCH	+	+	+	+	+	+
1176	Sequoia sempervirens / Redwood, Coast	19.8"	LPCH	+	+	+	+	+	+
1177	Sequoia sempervirens / Redwood, Coast	28.1"	LPCH	+	+	+	+	+	+

<b>SUBTOTAL</b>			<b>LPCH</b>	<b>31</b>	<b>27</b>	<b>27</b>	<b>20</b>	<b>1</b>	
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1449	Quercus agrifolia / Oak, Coast Live	15.7"	Hoover	+	+	+	+	+	+
1350	Quercus agrifolia / Oak, Coast Live	16.1"	Hoover	+	+	+	+	+	+
1351	Quercus agrifolia / Oak, Coast Live	17.8"	Hoover	+	+	+	+	+	+
1352	Quercus agrifolia / Oak, Coast Live	22.2"	Hoover	+	+	+	+	+	+
1355	Quercus agrifolia / Oak, Coast Live	21.3"	Hoover	+	+	+	+	+	+
1366	Quercus agrifolia / Oak, Coast Live	14.8"	Hoover	+	+	+	+	+	+
1388	Quercus agrifolia / Oak, Coast Live	21.8"	Hoover	+	+	+	+	+	+
1389	Quercus agrifolia / Oak, Coast Live	18.8", 14.0"	Hoover	+	+	+	+	+	+
1390	Quercus agrifolia / Oak, Coast Live	25.5" @ 4'	Hoover	+	+	+	+	+	+
1391	Quercus agrifolia / Oak, Coast Live	14.0", 11.5"	Hoover	+	+	+	+	+	+
1393	Quercus agrifolia / Oak, Coast Live	12.4"	Hoover	+	+	+	+	+	+
1399	Sequoia sempervirens / Redwood, Coast	24.0"	Hoover	+	+	+	+	+	+
1400	Sequoia sempervirens / Redwood, Coast	36.9"	Hoover	+	+	+	+	+	+
1420	Quercus agrifolia / Oak, Coast Live	19.7" @ 1'	Hoover	+	+	+	+	+	+
1435	Sequoia sempervirens / Redwood, Coast	19.8"	Hoover	+	+	+	+	+	+
1438	Sequoia sempervirens / Redwood, Coast	19.2"	Hoover	+	+	+	+	+	+
1439	Sequoia sempervirens / Redwood, Coast	18.7"	Hoover	+	+	+	+	+	+
1442	Sequoia sempervirens / Redwood, Coast	21.2"	Hoover	+	+	+	+	+	+
1469	Sequoia sempervirens / Redwood, Coast	22.2"	Hoover	+	+	+	+	+	+
1481	Sequoia sempervirens / Redwood, Coast	34.8"	Hoover	+	+	+	+	+	+
1483	Sequoia sempervirens / Redwood, Coast	26.5"	Hoover	+	+	+	+	+	+
1485	Quercus agrifolia / Oak, Coast Live	22.8"	Hoover	+	+	+	+	+	+
1500	Quercus agrifolia / Oak, Coast Live	20.1"	Hoover	+	+	+	+	+	+
1503	Sequoia sempervirens / Redwood, Coast	19.9"	Hoover	+	+	+	+	+	+
1506	Quercus agrifolia / Oak, Coast Live	14.2"	Hoover	+	+	+	+	+	+

Was identified as meeting Aesthetic criteria in July 28, 2009 memo, but subsequently removed.

Was identified as meeting Aesthetic criteria in July 28, 2009 memo, but subsequently removed.

Was identified as meeting Aesthetic criteria in July 28, 2009 memo, but subsequently removed.

Was identified as meeting Aesthetic criteria in July 28, 2009 memo, but subsequently removed.

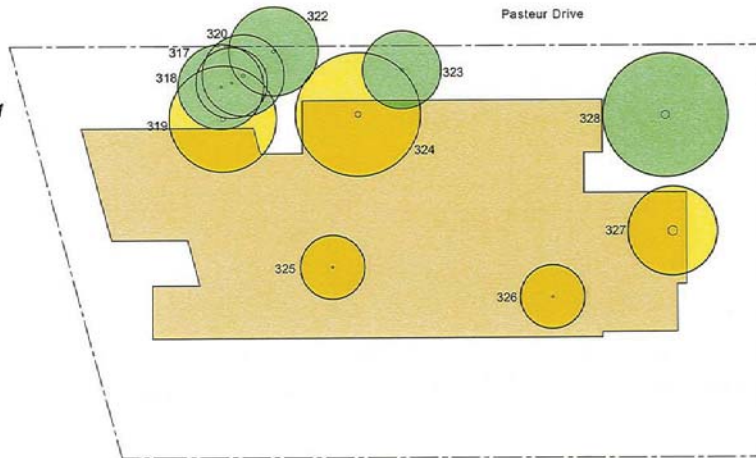
<b>SUBTOTAL</b>			<b>Hoover</b>	<b>25</b>	<b>11</b>	<b>11</b>	<b>0</b>	<b>0</b>	
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<b>TOTAL</b>				<b>99</b>	<b>74</b>	<b>62</b>	<b>20</b>	<b>18</b>	<b>Biologically Significant Resources</b>
									<b>Aesthetic Tree Resource</b>
									<b>Preservation Alternative</b>
									<b>Removed in Proposed Project</b>
									<b>Protected Tree in Construction Area</b>

SUMC Facilities Renewal & Replacement Project

**Foundations In Medicine - Building 1**  
Affected Protected Trees

-  = Protected Tree to Be Removed (5)
-  = Protected Tree to Remain (6)
-  = Existing Building
-  = Proposed Building



Scale = 1:500

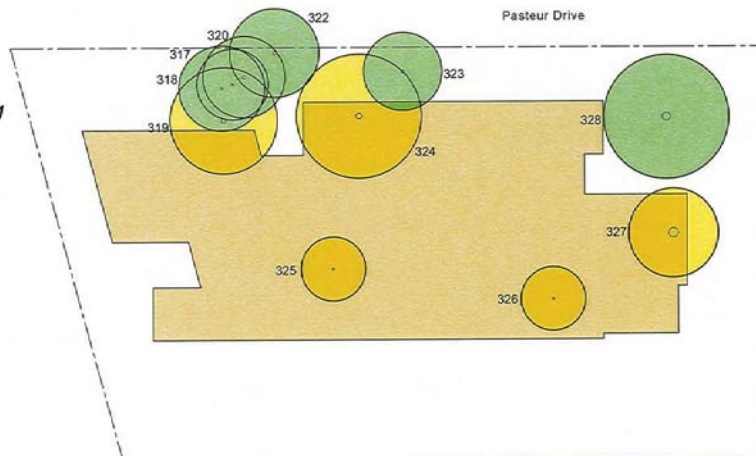
02/08/10



SUMC Facilities Renewal & Replacement Project

**Foundations In Medicine - Building 1**  
Affected Protected Trees

-  = Protected Tree to Be Removed (5)
-  = Protected Tree to Remain (6)
-  = Existing Building
-  = Proposed Building



Scale = 1:500

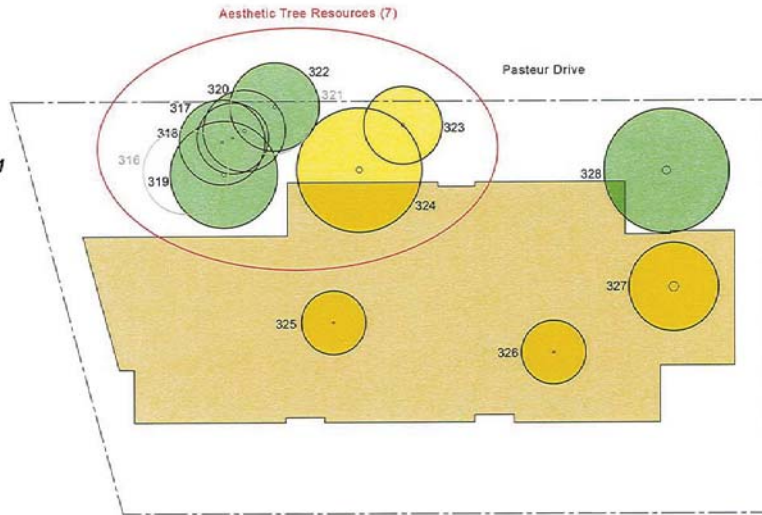
07/20/10



SUMC Facilities Renewal & Replacement Project

**Foundations In Medicine - Building 1**  
Tree Preservation Alternative  
Affected Protected Trees

- = Protected Tree to Be Removed (5)  
323 & 324 to Be Relocated
- = Protected Tree to Remain (6)
- = Existing Building
- = Proposed Building



Scale = 1:500

07/20/10



SUMC Facilities Renewal & Replacement Project

**Hoover Pavilion Site**  
Affected Protected Trees

- = Protected Tree to Be Removed (11)
- = Protected Tree to Remain (14)
- = Existing Building
- = Proposed Building



Scale = 1:1,000

02/08/10



SUMC Facilities Renewal & Replacement Project

**Hoover Pavilion Site**  
Affected Protected Trees

- = Protected Tree to Be Removed (11)
- = Protected Tree to Remain (14)
- = Existing Building
- = Proposed Building

Scale = 1:1,000  
07/20/10



SUMC Facilities Renewal & Replacement Project

**Hoover Pavilion Site**  
**Tree Preservation Alternative**  
Affected Protected Trees

- = Protected Tree to Be Removed (11)
- = Protected Tree to Remain (14)
- = Existing Building
- = Proposed Building

Scale = 1:1,000  
02/08/10







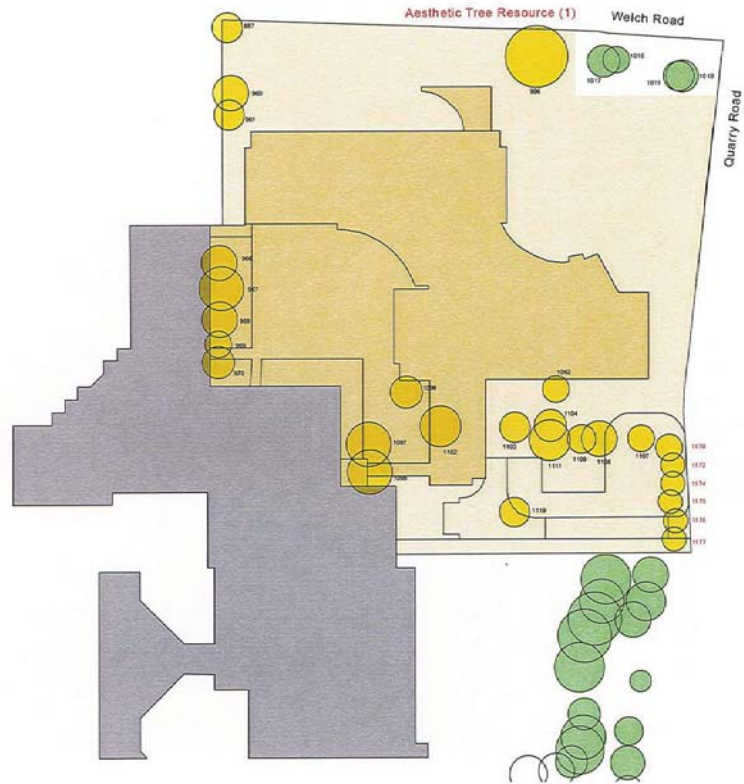
SUMC Facilities Renewal & Replacement Project

**Lucile Packard Children's Hospital  
Tree Preservation Alternative  
Affected Protected Trees**

-  = Protected Tree to Be Removed (27)
-  = Protected Tree to Remain (4)  
996 to Be Relocated
-  = Existing Building
-  = Proposed Building
-  = Proposed Site Work

Scale = 1:1,000

07/20/10



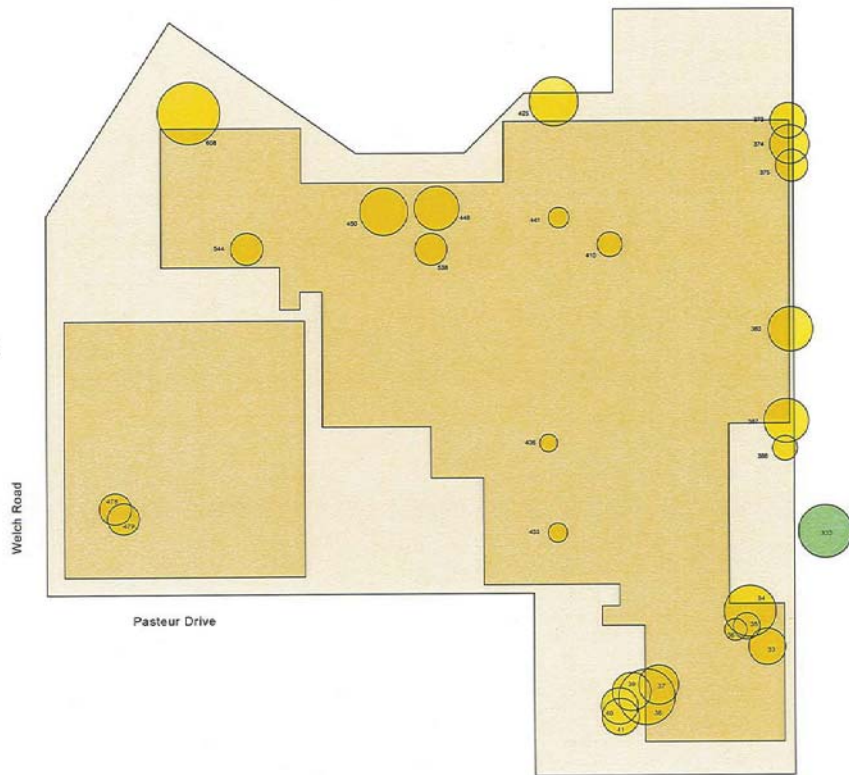
SUMC Facilities Renewal & Replacement Project

**Stanford Hospital  
Affected Protected Trees**

-  = Protected Tree to Be Removed (27)
-  = Protected Tree to Remain (1)
-  = Existing Building
-  = Proposed Building
-  = Proposed Site Work

Scale = 1:1,000

02/08/10





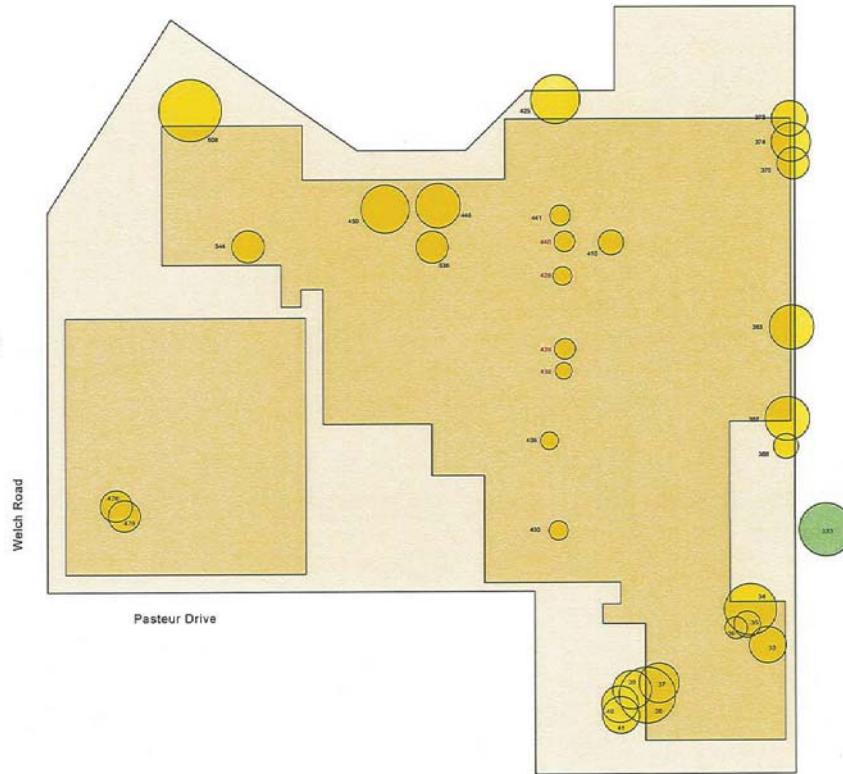
SUMC Facilities Renewal & Replacement Project

**Stanford Hospital**  
Affected Protected Trees

- = Protected Tree to Be Removed (31)
- = Protected Tree to Remain (1)
- = Existing Building
- = Proposed Building
- = Proposed Site Work

Scale = 1:1,000

07/20/10



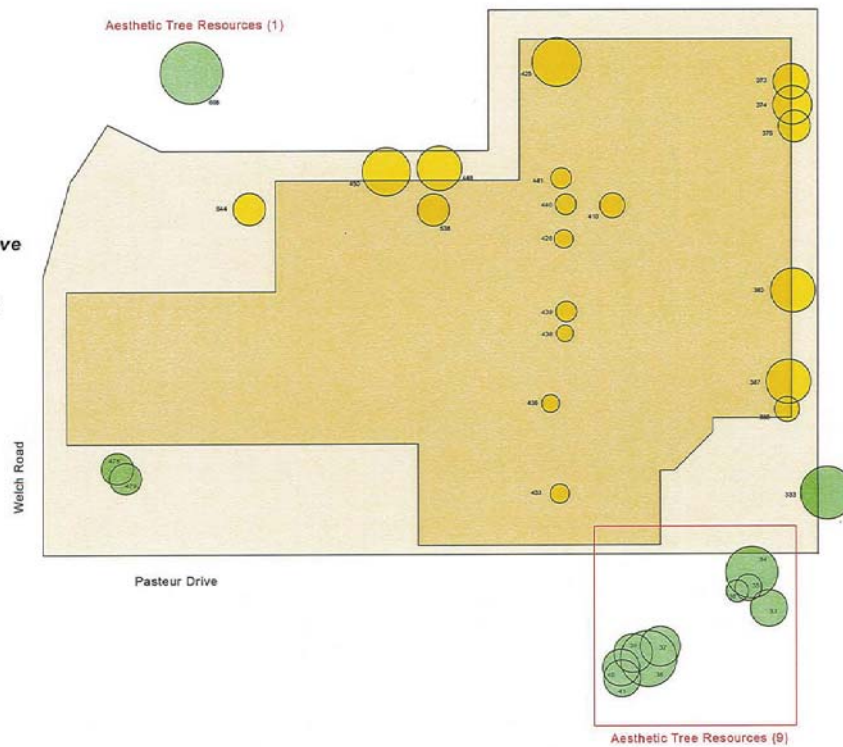
SUMC Facilities Renewal & Replacement Project

**Stanford Hospital**  
*Tree Preservation Alternative*  
Affected Protected Trees

- = Protected Tree to Be Removed (19)
- = Protected Tree to Remain (13)
- = Existing Building
- = Proposed Building
- = Proposed Site Work

Scale = 1:1,000

07/20/10



Suggested Revisions to Tree Mitigation Measures

BR-4.1 Prepare a Tree Preservation Report for all Trees to be Retained. An updated tree survey and tree preservation report (TPR) prepared by a certified arborist shall be submitted for review and approval by the Director of Planning and Community Environment in consultation with the City Urban Forester. For reference clarity, the tree survey shall include (list and field tag) all existing trees within the SUMC Sites, including adjacent trees overhanging the SUMC Sites. The approved TPR shall be implemented in full, including mandatory inspections and monthly reporting to City Urban Forester. The TPR shall be based on latest SUMC plans and amended as needed to address activity within the dripline area of any existing Protected tree to be preserved, including incidental work (utilities trenching, street work, lighting, irrigation, etc.) that may affect the health of a preserved Protected tree. The TPR shall be consistent with the

criteria set forth in the Tree Preservation Ordinance, Palo Alto Municipal Code Section 8.10.030, and the City Tree Technical Manual, Section 3.00, 4.00 and 6.30. To avoid improvements that may be detrimental to the health of Protected trees, the Director of Planning and Community Environment in consultation with the City Urban Forester shall review the SUMC Project sponsors' landscape plan to ensure the new landscape is consistent with Tree Technical Manual, Section 5.45 and Appendix L, Landscaping under Native Oaks.

BR-4.2 Prepare a Solar Access Study (SAS) of Short and Long Term Effects on Protected Oaks. The SUMC Project sponsors shall prepare a SAS of Short and Long Term Effects on Protected Oaks that are Visual Tree Resources for review and approval by the Director of Planning and Community Environment in consultation with the City Urban Forester.

The SAS shall be prepared by a qualified expert team (horticulturalist, architect designer, consulting arborist) capable of determining effects, if any, to foliage, health, disease susceptibility and also prognosis for longevity. The SAS shall contain the same information as the SAS for Tree #608 that the Project Sponsors provided to the City on IDAITEI. If the Director of Planning and Community Environment in consultation with the City Urban Forester determines that the Project will have an adverse effect on solar access to a Protected Oak that is a Visual Tree Resource such that the tree is unlikely to survive, then the Project Sponsors shall relocate the tree to a site with sufficient solar access, as determined by the Director of Planning and Community Environment in consultation with the City Urban Forester.

BR-4.3 Prepare a Tree Relocation Feasibility Plan for Any Protected Tree Proposed for Relocation and Retention. Relocation of Protected trees within the SUMC Sites shall be allowed only upon issuance of a protected tree relocation permit from the Director of Planning and Community Environment in consultation with the Urban Forester. Because of inherent mortality associated with the process of moving mature trees, the Project Sponsors shall prepare a Tree Relocation and Maintenance Plan (TRMP) to be reviewed in connection with the protected tree relocation permit.

The TRMP shall evaluate the feasibility of moving the Protected Trees to an appropriate location on site. Feasibility shall consider current site and tree conditions, a tree's ability to tolerate moving, relocation measures, optimum needs for the new location, aftercare, irrigation, and other long-term needs. The tree relocation permit shall specify that if the relocated trees do not survive after a period of five years, the relocated trees shall be replaced at the same site with a 24" box tree of the same variety. The

22e.3  
Cont'

TRMP shall be inclusive of the following minimum information: appropriate irrigation, monitoring inspections, post relocation tree maintenance, and for an annual arborist report of the condition of the relocated trees. If a tree is disfigured, leaning with supports needed, in decline with a dead top or dieback of more than 25 percent, the tree shall be considered a total loss and replaced as described above.

BR-4.4-- Removal of Protected Trees shall be allowed only upon issuance of a protected tree removal permit from the Director of Planning and Community Environment in consultation with the Urban Forester. Protected Trees that are removed without being relocated shall be replaced in accordance with the ratios set forth in Table 3-1 of the City of Palo Alto Tree Technical Manual in the following way, in order to maintain the appropriate landscape approach at the SUMC, which has limited opportunities to plant the required replacement of trees:

- The protected tree removal permit issued shall stipulate the tree replacement requirements for the removed tree, including number of trees, location, and irrigation.
- A minimum of 1:1 tree replacement would occur within SUMC. Onsite replacement shall occur at a ratio of no less than one 24" tree of the same variety for each tree removed.
- The difference between the required tree replacement and the number of trees planted at SUMC would be mitigated through contribution to a Tree Fund in the City of Palo Alto. Payment to the Tree Fund would be in the amount representing the value of the replacement trees that would be required under the ITM standard.

BR-4.5 Provide Optimum Tree Replacement for Loss of Publicly-Owned Trees Regulated Tree Category. There are many publicly owned trees growing in the right-of-way along various frontages (Welch Road, Pasteur Drive, Quarry Road, Sand Hill Road, etc.). These trees provide an important visual and aesthetic value to the streetscape and represent a significant investment from years of public resources to maintain them. As mitigation to offset the net benefits loss from removal of mature trees, and to minimize the future years to achieve parity with visual and infrastructure service benefits (CO<sub>2</sub> reduction, extended asphalt life, water runoff management, etc.) currently provided by the trees, the new public trees on all roadway frontages shall be provided with best practices design and materials, including, but not limited to, the following elements:

- Consistency with the City of Palo Alto Public Works Department Street Tree Management Plan, in consultation with Canopy, Inc.<sup>15</sup>
- Provide adequate room for natural tree canopy growth and adequate root growing volume. For large trees, a target goal of 1,200 cubic feet of soil shall be used.
- For pedestrian and roadway areas that are to include tree planting or adjacent to existing trees to be retained, utilize City-approved best management practices for sustainability products, such as permeable ADA sidewalk surfaces, Silva Cell base support planters, engineered soil mix base, and other

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**Deleted:** BR-4.4 Provide a Tree Preservation Ordinance Guarantee. The initial tree removal on the SUMC Site include significant Protected Trees and those that provide significant tree benefits proposed for relocation. Project Sponsors building permit submittal, the Tree Security Deposit for the total value of the Protected Trees. The Tree Security Deposit shall be in a form acceptable to the City of Palo Alto. The SUMC Project sponsors shall be subject to a Memorandum of Understanding (MOU) between the City of Palo Alto and the SUMC Project sponsors that will ensure, the criteria and timeline for return of security, and conditions as stated in the Record of Decision. The SUMC Project sponsors and SUMC Project arborist, to be retained by the SUMC Project sponsors, shall coordinate the amount of bonding required to determine the guarantee the protection and/or replacement of the regulated trees on the site during the occupancy. The SUMC Project sponsors shall bond for 150 percent of the value for the relocated trees, and 50 percent off during construction. The amount of bonding required for the protected trees shall be determined by the Project Sponsors and the SUMC Project arborist. The amount of bonding required for the protected trees shall be determined by the Project Sponsors and the SUMC Project arborist. The amount of bonding required for the protected trees shall be determined by the Project Sponsors and the SUMC Project arborist. The amount of bonding required for the protected trees shall be determined by the Project Sponsors and the SUMC Project arborist.

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**Deleted:** The SAS shall provide alternative missing scenarios to provide tree shading detriment at different thresholds of tree health/decline, as provided for in the SAS. The SAS adequacy shall be subject to City review as determined necessary by the City.

**Deleted:** The SAS design alternatives shall be the subject of specific discussion at all levels of ARB, Planning Commission, and public review in Project sponsors, the City Urban Forester, and Director of the Planning and Community Environment Department, until a final design is approved.

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BR-4.1 Prepare a Tree Preservation Report for all Trees to be Retained. An updated tree survey and tree preservation report (TPR) prepared by a certified arborist shall be submitted for review and approval by the Director of Planning and Community Environment in consultation with the City Urban Forester. For reference clarity, the tree survey shall include (list and field tag) all existing trees within the SUMC Sites, including adjacent trees overhanging the SUMC Sites. The approved TPR shall be implemented in full, including mandatory inspections and monthly reporting to City Urban Forester. The TPR shall be based on latest SUMC plans and amended as needed to address activity within the dripline area of any existing Protected tree to be preserved, including incidental work (utilities trenching, street work, lighting, irrigation, etc.) that may affect the health of a preserved Protected tree. The TPR shall be consistent with the

criteria set forth in the Tree Preservation Ordinance, Palo Alto Municipal Code Section 8.10.030, and the City Tree Technical Manual, Section 3.00, 4.00 and 6.30. To avoid improvements that may be detrimental to the health of Protected trees, the Director of Planning and Community Environment in consultation with the City Urban Forester shall review the SUMC Project sponsors' landscape plan to ensure the new landscape is consistent with Tree Technical Manual, Section 5.45 and Appendix L, Landscaping under Native Oaks.

BR-4.2 Prepare a Solar Access Study (SAS) of Short and Long Term Effects on Protected Oaks. The SUMC Project sponsors shall prepare a SAS of Short and Long Term Effects on Protected Oaks that are Visual Tree Resources for review and approval by the Director of Planning and Community Environment in consultation with the City Urban Forester.

The SAS shall be prepared by a qualified expert team (horticulturalist, architect designer, consulting arborist) capable of determining effects, if any, to foliage, health, disease susceptibility and also prognosis for longevity. The SAS shall contain the same information as the SAS for Tree #608 that the Project Sponsors provided to the City on IDAITEI. If the Director of Planning and Community Environment in consultation with the City Urban Forester determines that the Project will have an adverse effect on solar access to a Protected Oak that is a Visual Tree Resource such that the tree is unlikely to survive, then the Project Sponsors shall relocate the tree to a site with sufficient solar access, as determined by the Director of Planning and Community Environment in consultation with the City Urban Forester.

BR-4.3 Prepare a Tree Relocation Feasibility Plan for Any Protected Tree Proposed for Relocation and Retention. Relocation of Protected trees within the SUMC Sites shall be allowed only upon issuance of a protected tree relocation permit from the Director of Planning and Community Environment in consultation with the Urban Forester. Because of inherent mortality associated with the process of moving mature trees, the Project Sponsors shall prepare a Tree Relocation and Maintenance Plan (TRMP) to be reviewed in connection with the protected tree relocation permit.

The TRMP shall evaluate the feasibility of moving the Protected Trees to an appropriate location on site. Feasibility shall consider current site and tree conditions, a tree's ability to tolerate moving, relocation measures, optimum needs for the new location, aftercare, irrigation, and other long-term needs. The tree relocation permit shall specify that if the relocated trees do not survive after a period of five years, the relocated trees shall be replaced at the same site with a 24" box tree of the same variety. The

advantage methods.

**22c.5** BR-4.6 Implement Minor Site Modifications to Preserve Biologically and Aesthetically Significant Protected Trees. The SUMC Project sponsors shall design and implement modifications to building design, hardscape, and landscape to incorporate the below and above ground area needed to preserve the following trees that are both Biological and Aesthetic Tree Resources: list applicable trees at FIM 1 and Tree 608.

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biologically and aesthetically significant  
Protected Trees as possible.

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**22e. Stanford University Medical Center (letter dated July 20, 2010)**

- 22e.1 *The commentor requests edits to Mitigation Measure BR-4.1, as presented on page 3.9-26 of the Draft EIR.* Edits have been made to Mitigation Measure BR-4.1. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22e.2 *The commentor requests edits to Mitigation Measure BR-4.2, as presented on pages 3.9-26 through 3.9-27 of the Draft EIR.* Edits have been made to Mitigation Measure BR-4.2. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22e.3 *The commentor requests edits to Mitigation Measure BR-4.3, as presented on page 3.9-27 of the Draft EIR.* Edits have been made to Mitigation Measure BR-4.3. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22e.4 *The commentor requests the deletion of Mitigation Measure BR-4.4 as presented in the Draft EIR on pages 3.9-27 through 3.9-28, and suggests a replacement mitigation measure.* Although the City has decided not to delete the mitigation measure in its entirety, edits have been made to Mitigation Measure BR-4.4 (now Mitigation Measure BR-4.4A). In addition, the City has included the commentor's suggested mitigation measure as Mitigation Measure BR-4.4B. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.
- 22e.5 *The commentor requests edits to Mitigation Measure BR-4.6, as presented on page 3.9-28 of the Draft EIR.* Edits have been made to Mitigation Measure BR-4.6. Please refer to Staff-Initiated Change 6 for edits to the Protected Tree mitigation measures.

**Letter 23**

**From:** BAS designs [basdesigns@earthlink.net]  
**Sent:** Tuesday, July 27, 2010 1:04 PM  
**To:** Council, City; Planning Commission; Architectural Review Board; Williams, Curtis; Turner, Steven  
**Subject:** Stanford University Medical Center Renewal Project- response to the DEIR

To: City Council members & City Review Board members,

23.1 ■ As the Stanford Hospital continues its review for development, representatives of the city must now put its ill conceived financial hurdles away and address this review without 'incentives' being part of the approval conditions. Both Council & Board members can determine the difference between 'costs due to development' and 'costs due to the city's fiscal operations'. Do not use this review process as a way of balancing the city's budgetary failures.

23.2 ■ We support the Stanford University Medical Center Renewal Project and ask the city to bring this project forward by supporting and approving the DEIR.

23.3 ■ The Stanford Hospital and the Lucile Packard Children's Hospital will bring 21st century facilities to its patients and make this available to all patients and families in Palo Alto while providing care to *all* those who seek medical care from outside the local community.

23.4 ■ Please focus on the benefits that these two hospitals bring as the reason why we must not use this review process for any outside issues that the city needs to address independently.

23.5 ■ The quality of this review process will be reflective as to who we are as a community when asked to perform as a professional and unbiased review body.

Brian & Susan Anuskewicz  
Palo Alto

**23. Brian and Susan Anuskewicz (letter dated July 27, 2010)**

- 23.1 *The commentor is concerned that the City is using the SUMC Project as a way to balance the City's budget.* A Fiscal Impact Analysis was prepared by CBRE Consulting, Inc. in February 2009 to determine the potential tax and fee revenues that would be generated by the SUMC Project. These fees would be required to sufficiently fund the anticipated costs of providing municipal services to the SUMC Project. The analysis used a time horizon of thirty years (2010-2040), consistent with the proposed Development Agreement, which is outlined on pages 2-27 through 2-28 of the Draft EIR. For the monetary impacts of the SUMC Project and the required fees to be paid by the SUMC Project sponsors, please refer to the Fiscal Impact Analysis, which is available at the City's website.<sup>1</sup>
- 23.2 *The commentor expresses support for the SUMC Project.* The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Accordingly, no further response is necessary. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.
- 23.3 *The commentor questions the review process of the EIR.* This comment pertains to the review process and the SUMC Project in general and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 11 for a detailed description of the City's review process and the next steps in the EIR review.

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<sup>1</sup> City of Palo Alto, "City Manager's Report," Memo to City Council, May 24, 2010, accessed on September 3, 2010 at: <http://www.cityofpaloalto.org/knowzone/news/details.asp?NewsID=1316&TargetID=219>.



Letter 24

To: Mayor Pat Burt and Honorable Members of the Palo Alto City Council  
From: Dorothy Bender  
Date: July 23, 2010  
Subject: Comments on the Stanford University Medical Center Facilities Renewal and Replacement DEIR

ITEM 1: The DEIR should insure that any of the mitigations proposed in Stamford's Developers Agreement are not redundant with the mitigations proposed in the DEIR.

Discussion:

In the June 15, 2009 memo to City Manager James Keene from Michael J. Peterson, Vice President, Special Projects, Stanford Hospital & Clinics (see page 6), Additional Offered Community Benefits lists the following linkages to encourage use of Caltrain, bus and other transit services, and to enhance bicycle connections between the hospitals and downtown Palo Alto:

- \$2.25 million for improvements to enhance the pedestrian and bicycle connection from the Palo Alto Intermodal Transit Center to the existing intersection at El Camino Real and Quarry Road. (It is stated that "the City will be responsible for constructing these improvements.")
- \$400,000 for improvements to the public right-of-way to enhance the pedestrian and bicycle connection from El Camino Real to Welch Road along Quarry Road. (It is stated that "the City will be responsible for constructing these improvements.")
- Up to \$700,000 for improvements to enhance the pedestrian connection between the Medical Center and the Stanford Shopping Center.

The DEIR also lists mitigation measures to manage the significant impacts to intersections during Peak Hour conditions. (See TR-2 of Table S-34 – S40.)

See:

TR-1. Construction Impacts. Construction activity associated with the SUMC Project could result in significant traffic impacts and its Mitigation Measures.

TR-2. Intersection Level of Service. Implementation of the SUMC Project would result in significant impacts to intersections during Peak Hour conditions and its Mitigation Measures

TR-4. Local Circulation Impacts. The SUMC Project could result in significant traffic impact to the local circulation network in the immediate vicinity of the SUMC Sites and its Mitigation Measures.

Comments on Stanford University Medical Center Facilities Renewal and Replacement Draft EIR July 23, 2010 Page 1 of 2

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The City of Palo Alto should insure that the proposed linkages in the Development Agreement and mitigation measures in the EIR are not redundant.

ITEM 2: The Map in Figure 3.4-10 of the DEIR Showing Future Bicycle and Pedestrian Facilities Is Inadequate since it does not include ALL the mitigations.

Discussion:

See

TR-6. Bicycle and Pedestrian Impacts. The SUMC Project could impede the development or function of planned bicycle or pedestrian facilities, and result in a significant impact and its mitigation measures:

TR-6.1 Bicycle and Pedestrian Infrastructure Improvements, The SUMC Project sponsors shall fund the expansion and improvement of the bicycle and pedestrian network in the immediate vicinity of the SUMC Project. (See page 3.4-76)

The DEIR should add new pages as necessary to the map in Figure 3.4-10 of the DEIR to show all mitigations proposed in TR-6.1 on pages 3.4-76-3.4-77.

Respectfully Submitted,

Dorothy Bender  
591 Military Way  
Palo Alto, CA  
dbender@gmail.com

Comments on Stanford University Medical Center Facilities Renewal and Replacement Draft EIR July 23, 2010 Page 2 of 2

**24. Dorothy Bender (letter dated July 23, 2010)**

24.1 *The commentor requests that the City ensure that the bicycle and pedestrian linkages included in the Development Agreement and the mitigation measures presented in the Draft EIR are not redundant.* The Development Agreement is not yet finalized and the City and the SUMC Project sponsors are still in the negotiation process. All comments submitted during the EIR review process, including this comment, will be considered by the City during the finalization of the Development Agreement. Please refer to Master Response 12 for a description of the Development Agreement process and terms.

24.2 *The commentor cites Figure 3.4-10 of the Draft EIR concerning bicycle and pedestrian improvements in the immediate vicinity of the SUMC Project and suggests that all mitigation measures suggested by Mitigation Measure TR-6.1 be added to that graphic.* The bicycle and pedestrian mitigation measures required by TR-6.1 are described in detail on Draft EIR pages 3.4-76 to 3.4-77. This detailed description adequately conveys the requirements of this mitigation measure.

2010 JULY 27

Letter 25

TO: PALO ALTO CITY COUNCIL  
C/O: STEVEN TURNER, PLANNING DEPT.  
RE: PROPOSED STANFORD HOSPITAL EXPANSION

WE/I OBJECT TO THE MAGNITUDE OF  
THE PROPOSED Stanford Hospital Expansion  
We do favor improvements to make  
facilities earthquake safe and to  
modernize.

But the sumptuous nature of what  
is planned is too much.

We are sure Stanford and the  
community will benefit from changes  
and additions much smaller than those  
being pushed

I thank you for taking our views  
into account

Sincerely

Melvin & Gina Benstein

726 LOMA VERDE AVE.  
PALO ALTO 94303

**25. Melvin and Aviva Bernstein (letter dated July 27, 2010)**

25.1 *The commentor expresses opposition to the SUMC Project.* The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.

*The commentor also states that the building program proposed for the SUMC Project is too large.* As explained on page 2-22 in Section 2 of the Draft EIR, Project Description, the SUMC Project requires additional floor area due to existing spatial constraints and the growing demand for outpatient services. Current spatial constraints at the SHC and LPCH facilities restrict the SUMC's ability to serve new patients; therefore, expansions are necessary to provide the optimal level of care for new and existing patients. At both hospitals, the number of patients turned away will increase unless additional patient beds are provided. In addition, hospital expansion is necessary because the American Academy of Healthcare Architects recommends that all beds be in private rooms, which require 'right-sizing' under the SUMC Project. With regards to outpatient services, in order to accommodate the growing demand, the hospitals propose to construct new and replacement clinics on the Main SUMC Site, as well as renovate the existing Hoover Pavilion building and construct a new building for use as clinics and medical office space.

Several SUMC Project alternatives are discussed and analyzed in Section 5 of the Draft EIR, Alternatives, that seek to reduce the size of the SUMC Project. No Project Alternative A, No Project Alternative B, Reduced Intensity Alternative A, and Reduced Intensity Alternative B, all propose to reduce the building floor area and construction of the SUMC Project. Please refer to Master Response 8 for an explanation of alternatives to the SUMC Project.

**Letter 26**

To: Steven Turner, Dept. Planning  
250 Hamilton Ave. 5th Floor  
Palo Alto, CA 94301  
24 July 2010

From: Charlie Bourne, 1619 Santa Cruz Ave., Menlo Park, CA 94025

Re: Comments for Stanford Medical Center Draft EIR

The following comments should be added to the City's response to Stanford/Palo Alto SUMC Draft EIR.

**1. Insufficient attention given to traffic impact on Menlo Park streets and intersections**

Insufficient attention is given to roadway segments in Menlo Park that funnel traffic from through, or around, Menlo Park to the Stanford Medical Center (SUMC) complex. We can expect a significant impact from some of the expected incremental work force, Clinic patients/visitors, and others. Examples of such road segments would include the following:

- **Oak Ave.** The recent EIR for Oak Knoll School identified this segment as a very busy choke point that funnels traffic between Sand Hill Rd. and West Menlo. This location has been the subject of several studies and attempts by the City's Transportation Dept. to improve a dangerous traffic situation there. The recent Oak Knoll School EIR noted that this segment was already at a critical level of service; consequently, the extra SUMC traffic would only make this an impossible situation for this residential neighborhood. This new traffic adds to an already dangerous situation with many elementary school children and parents with small children walking on this street.

And because Oak subsequently splits into other streets, those tributaries should also be examined. All of these streets should be examined.

- **Valparaiso Ave. and others.** Incremental traffic southbound on 101 headed for SUMC is likely to turn off at Marsh Rd., continue left on Middlefield, turn right to get to Valparaiso Ave., and then continue to the Alameda, or take a choice of cut-through streets at Elder, Hillview, Orange, or others to get to Sand Hill. All of the streets associated with a round-about route to SUMC should be examined.

- **Willow Rd. and others.** Some incremental southbound traffic on 101 may turn off at Willow Rd., an already choked road with a low level of service for most of its intersections west of 101, and on the street itself. The recent report for the C/CAG Peninsula Gateway Corridor 2020 Project showed existing problems with that street and its intersections. The intersection of Willow and Newbridge was identified as already having an F-level of service at peak hours, even without considering the Bohannon or SUMC projects or future growth. This intersection wasn't even mentioned in the SUMC presentations.

26.4 The intersection at Willow and Bayfront Expressway already has an F-level of service of service at PM peak, but the Stanford presentation treated it very lightly.

26.5 The recent EIR for the Bohannon Menlo Gateway project estimated that it would decrease service levels in the Willow region. Furthermore, the impacts from that project have not been included in the SUMC DEIR for the Willow area as well as the Marsh Rd. and Middlefield areas.

- **El Camino Real (ECR).** Given the recent development and expansion of the new Stanford medical campus in Redwood City, it is reasonable to expect that there will be a considerable amount of traffic through Menlo Park on ECR between these two campuses. This traffic should be identified and considered.

The plans for future development on the several acres of Stanford property on ECR have not been publicly disclosed. Stanford knows what it most likely will do, and not do; that information should also be disclosed and incorporated into this EIR because it has a cumulative impact with this project. High density office space, for example would add significantly to ECR traffic.

**2. No consideration given to cumulative impact from other projects.** This DEIR did not consider several other relevant projects, including:

- **Bohannon Gateway project.** If this project is approved by Menlo Park voters in November, this will then become a real project that must be considered in the SUMC EIR.
- **Downtown Menlo Park and El Camino Vision Project.** Major traffic issues have already been identified as potential impacts as a result of the changes proposed by new zoning and development for this part of Menlo Park.
- **Stanford Shopping Center expansion.** The expansion proposed some time ago, and then withdrawn, would have an extremely damaging effect on Menlo Park traffic, noise, and other quality of life considerations. Stanford noted when that proposal was withdrawn, that they wanted to concentrate on the hospital first, and bring the shopping center back later. We thus face the possibility that after the current proposal is approved, the Shopping Center proposal will be brought forward. Given that admitted planning, Stanford should be required to include the Shopping Center project in this EIR.

**3. Traffic mitigations.**

- As another traffic mitigation, plans should be made for building parking areas or structures off campus, with frequent bus service from the parking locations to the SUMC and campus. A location on Stanford property adjacent to the 280/Sand Hill interchange is a prime candidate for such a location. Another location is the new Stanford medical campus in Redwood City. The Marguerite bus service already goes to both locations.
- Much of the traffic mitigation depends upon the significant increase in the use of Caltrain. But with its current financial difficulties, there is a real possibility that Caltrain may not be around at

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some point during the course of this project build-out. What is the backup plan for that possibility?

- Open Sand Hill at ECR for thru traffic from Sand Hill to continue across ECR into Palo Alto. This would remove some of the Menlo Park ECR traffic that turns left from Sand Hill and then makes a U-turn at the first signal light in Menlo Park to return back to that S.H./ECR intersection where a left turn from ECR into Palo Alto is permitted.
- Change the signal at Sand Hill to prevent left turns from east-bound Sand Hill traffic into Oak.

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**26. Charlie Bourne (letter dated July 24, 2010)**

26.1 *The commentor states that insufficient attention is given to roadway segments in Menlo Park that funnel traffic to and from the SUMC Project. Daily traffic volumes were collected on Oak Avenue in September 2010. Using City of Palo Alto criteria, a significant impact would result if the TIRE index for a local or collector residential street increased by 0.1 or more. The existing TIRE Index for Oak Avenue is 3.4, the 2025 Future Without Project TIRE Index is 3.4, and the 2025 Future With Project TIRE Index would also be 3.4. An increase of 650 daily vehicles is needed to trigger an increase in the TIRE Index. Before the implementation of mitigation, the SUMC Project is expected to contribute no more than 100 daily trips. As such, the SUMC Project traffic would not cause a change in the TIRE Index and, therefore, does not constitute a significant impact according to the City of Palo Alto standards of significance. The SUMC Project would not negatively impact Oak Avenue.*

Using City of Menlo Park criteria, an increase of 25 trips or more per day would be a significant impact. However, with implementation of enhanced transportation demand management (TDM) measures, the SUMC Project would add fewer than 25 trips per day in this location. Therefore, both the City of Palo Alto and Menlo Park's significance criteria indicate that the SUMC Project would have a less than significant impact to Oak Avenue. As such, the amount of project trips along the "tributaries" of Oak Ave is not expected to cause a significant impact as well.

26.2 *The commentor states that SUMC Project traffic traveling southbound on US 101 is likely to exit on Marsh Road, and use various side streets to get to Sand Hill Road. The Transportation Impact Analysis (Appendix C of the Draft EIR) evaluated SUMC Project traffic that exited US 101 at Marsh Road and travelled various routes through Menlo Park. Specifically in West Menlo Park, the Transportation Impact Analysis evaluated Santa Cruz Avenue, Sharon Road, Stanford Avenue, Leland Avenue, and Vine Street. SUMC Project-specific traffic impacts were not found to occur for any of these streets. Therefore, other adjacent streets would not experience a significant SUMC Project impact.*

26.3 *The commentor states that there may be an increase in southbound traffic exiting US 101 at Willow Road, which could impact the intersection of Willow Road/Newbridge Street. The analysis of impacts to the Willow Road/Newbridge Street intersection has been included in Staff-Initiated Change 2 (see intersection #70).*

26.4 *The commentor states that the Willow Road/Bayfront Expressway intersection already operates at LOS F, but the SUMC Project sponsor's presentation was not adequate to reflect the seriousness of the situation. The Transportation Impact Analysis found that the Willow Road/Bayfront Expressway intersection currently operates at LOS E. The analysis also found that the SUMC Project would have a significant impact at this intersection. The*

SUMC Project would be required to contribute a fair share financial contribution to this intersection to implement the improvements noted in the City of Menlo Park's Traffic Impact Fee program. See Staff-Initiated Change 2.

- 26.5 *The commentor states that the recent EIR for the Bohannon Menlo Gateway project estimated it would decrease the service levels in the Willow Road region. Furthermore, the impacts from that project have not been included in the SUMC Draft EIR. Please refer to Master Response 3 for a discussion on background growth.*
- 26.6 *The commentor notes that the new Stanford Medical Campus in Redwood City was recently developed and expanded and, as such, there would be traffic traveling between the Redwood City campus and SUMC. The basis of the Transportation Impact Analysis for trip generation was the existing SUMC facility. Traffic counts were collected at the existing facility. As discussed on page 3.4-45 of the Draft EIR, trip generation rates were developed from those counts and the existing facility size. These rates were then used to determine the additional traffic generated by the expanded SUMC facility. The clinics that were relocated to Redwood City are self-contained. Patients do not travel between Redwood City and Palo Alto for treatment. Some faculty members or researchers may travel between the two sites on some days, but this is not expected to be frequent. The faculty tends to have clinic days and teaching days so they normally go to one facility or the other. The number of inter-campus trips would likely be relatively small on a given day.*
- 26.7 *The commentor states that future development plans for several acres of Stanford property on El Camino Real have not been disclosed and they should be included in the SUMC Draft EIR as a cumulative impact. There are currently no plans for the Stanford land located in Menlo Park. The City of Menlo Park is considering a Specific Plan that would govern these lands, but the City has not completed its EIR for the Specific Plan and the plan has not been approved. Please refer to Master Response 3 for a discussion on background growth.*
- 26.8 *The commentor notes that the Draft EIR does not consider several other relevant projects in the cumulative analysis, including projects in Menlo Park and the Stanford Shopping Center Project. Please refer to Master Response 3 for a discussion on background growth and cumulative impacts pertaining to traffic impacts. Per CEQA Guidelines Section 15355, cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. According to CEQA Guidelines Section 15130(b)(3), "Lead agencies should define the geographic scope [or context] of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." The geographic context is typically tailored to the nature of the environmental issue/impact and resource or population being affected. Each discussion of cumulative impacts in Sections 3.2 through*

3.15 of the Draft EIR includes an explanation of the relevant geographic context. Depending on the topic, the geographic context could be localized or regional. For example, the cumulative context for air quality would include the larger regional air basin.

As stated on page 3.1-2 of the Draft EIR, CEQA Guidelines Section 15130(b) requires that an EIR's analysis of cumulative impacts should be based on either a list of past, present, and probable future projects producing related impacts or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document. The cumulative projects analyzed in the Draft EIR rely on both a list of projects within Palo Alto and regional growth projections. The list of foreseeable projects within the City of Palo Alto was provided by City staff and included in the analysis (see Appendix B to the Draft EIR). Growth projections applied to the cumulative analysis in the Draft EIR include forecasted growth in adjacent cities other than Palo Alto. Growth projections also include growth allowed under the Stanford University 2000 CP/GUP, the Association of Bay Area Governments (ABAG) Projections 2005, the Bay Area Air Quality Management District's (BAAQMD) air quality projections, the City of Palo Alto's Travel Demand Forecasting Model, and projections of various public service and utility providers for the SUMC Project. See pages 3.1-2 through 3.1-6 for a discussion of the cumulative scenario.

*In regards to the Shopping Center Project, the commentor states that when Stanford withdrew the application for the Stanford Shopping Center expansion, Stanford affirmed that it wanted to consider the Shopping Center Project at a later date. However, this is incorrect. As explained on pages 3.1-3 to 3.1-4 in Section 3.1, Environmental Analysis, the Stanford Shopping Center expansion is not considered a reasonably foreseeable project in the City and is, therefore, not included in the cumulative project list assumed in the Draft EIR. As described in the Draft EIR, the Simon Property Group submitted an application in 2007 to expand the Stanford Shopping Center and construct a boutique hotel.<sup>1</sup> However, this application was withdrawn in April 2009. Given Stanford University's statement that it intends to focus its development efforts on the SUMC Project, and due to the current economic downturn and changing retail trends, the scope of any future development at the Stanford Shopping Center is too speculative to analyze at this point. As stated by Stanford, the Shopping Center expansion is no longer before the City for its consideration and there are no foreseeable plans, proposals, or programs in place that would bring the Shopping Center expansion back to the City for approval at a later time.<sup>2</sup> Therefore, the Stanford Shopping Center expansion is not considered a probable future project for the purposes of the cumulative impact discussion, per CEQA Guidelines*

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<sup>1</sup> Simon Property Group, "Simon Properties – Stanford Shopping Center Expansion Application," August 20, 2007.

<sup>2</sup> Barbara Schussman, Bingham McCutchen LLP, Letter to Cara Silver, Senior Assistant City Attorney, April 16, 2009.

Section 15130. Nevertheless, some background growth at the Stanford Shopping Center is included in the City's regional traffic model.

- 26.9 *The commentor states that traffic mitigation for the SUMC Project should include parking areas near I-280 and Sand Hill Road and the new Stanford Medical Campus in Redwood City with shuttle buses carrying passengers between the remote parking areas and the SUMC site. Please refer to Master Response 2 for a discussion on remote parking.*
- 26.10 *The commentor states that the traffic mitigation for the SUMC Project relies heavily on the expanded use of Caltrain. However, the commentor states that Caltrain is having financial difficulties and may not be able to provide the service anticipated. Please refer to Master Response 1 for a more detailed discussion on the viability of the GO Pass mitigation measure.*
- 26.11 *The commentor requests that the Sand Hill Road/El Camino Real intersection be modified to allow traffic to travel east/west across this intersection. The intersection geometrics and permitted movements at the Sand Hill Road/El Camino Real/Alma Street intersection have been established by the City of Palo Alto. Modifications of these geometrics would not change the impacts associated with the SUMC Project. Changing the travel patterns through this intersection is not an improvement that is tied to the SUMC Project.*
- 26.12 *The commentor requests that the traffic signal at the Sand Hill Road/Oak Avenue intersection be modified to eliminate the eastbound left turn from Sand Hill Road onto Oak Avenue. The eastbound left turn from Sand Hill Road to Oak Avenue is not a traffic movement that would be used by traffic traveling to and from the SUMC Project site. The modification of this intersection as suggested in the comment is not part of the SUMC Project and would need to be addressed through a separate transportation and environmental analysis.*

**Letter 27**

**From:** Inv [irvb@pacbell.net]  
**Sent:** Wednesday, July 21, 2010 6:06 PM  
**To:** Stanford Project  
**Subject:** Stanford Project Neighborhood Traffic

Dear Commissioner/Council Member:

27.1 The traffic impact at key intersections, including Middlefield/Willow, will seriously impact the Palo Alto North neighborhood streets Everett and Hawthorne. These two streets currently have the highest cut-through traffic in the city, based on traffic counts prior to the 'barrier' uproar in 2004, and has increased considerably since then. A 2004 traffic survey indicated Stanford as the destination for much of this traffic. These streets have become extremely hazardous to cyclists and pedestrians, and the additional car trips to Stanford Hospital will become disastrous for the neighborhood's safety.

27.2 Lytton Avenue's traffic lights and turn lanes were improved as a result of the Downtown North study and the avenue was repaved, but drivers still prefer to avoid stoplights by using Everett and Hawthorne on their way to Stanford and other destinations. Have you considered the situation in North Palo and if so, how would you plan on mitigating the effects of this traffic?

Respectfully,

Inv Brenner  
250 Byron Street  
Palo Alto

327-3981

**27. Irv Brenner (letter dated July 21, 2010)**

27.1 *The commentor states that the traffic impact at key intersections such as at Willow Road/Middlefield Road will impact the Palo Alto North neighborhood streets such as Everett Avenue and Hawthorne Avenue. Turn restrictions at Middlefield Road and at Alma Street (southbound Middlefield Road has right-turn restrictions at Hawthorne Avenue and Everett Avenue from 7:00 to 10:00 a.m.; southbound Alma Street has left-turn restrictions at Hawthorne Avenue and Everett Avenue from 7:00 to 10:00 a.m. and 3:00 to 6:00 p.m.) reduce the use of these streets as cut-through routes. However, once on Lytton Avenue, traffic can divert over to Everett Avenue and Hawthorne Avenue. Both Everett Avenue and Hawthorne Avenue were included in the Transportation Impact Analysis. The City uses the TIRE Index to determine if a residential street is impacted by a project. A 0.1 change in the TIRE Index constitutes a significant impact. As noted in Draft EIR Table 3.4-20, on page 3.4-71, the SUMC Project did not constitute a 0.1 change in the TIRE Index. Although the SUMC Project is expected to add traffic to Everett Avenue and Hawthorne Avenue, the added traffic is not projected to be large enough to constitute a significant impact.*

27.2 *The commentor notes that the Lytton Avenue traffic signals and turn lanes were improved as part of the Downtown North study, but drivers continue to use Everett Avenue and Hawthorne Avenue on their way to Stanford and is concerned how this traffic would be mitigated. Cut-through traffic through North Palo Alto has been an on-going issue. Turn restrictions have been implemented at both the Middlefield Road end and the Alma Street end to help control traffic. However, drivers continue to use both Everett Avenue and Hawthorne Avenue to travel to and from the Stanford area, either by ignoring the turn restrictions or by initially turning onto Lytton Avenue and then back to Everett Avenue and Hawthorne Avenue. The Draft EIR considered the effect of the SUMC Project expansion on North Palo Alto streets. Draft EIR Table 3.4-20 on page 3.4-71 shows the results of the TIRE analysis. While the SUMC Project may add approximately 125 vehicle trips per day to these two streets, it would not result in a significant impact according to City of Palo Alto standards of significance.*



Letter 28

To: Palo Alto City Council  
and Steven Turner, Palo Alto Planning Department  
From: Beth Bunnenberg, writing as an individual  
2351 Ramona St, Palo Alto, CA 94301  
Re: Response to Draft EIR Stanford University Medical  
Center Plans: Hoover Pavilion and the 1959 Stanford  
Hospital designed by Edward Durrell Stone (Cultural Resources)

The City of Palo Alto has accepted the Secretary of Interior Standards as the standard for reviewing historic properties and proposed changes.  
Plans for the Hoover Pavilion (1930-39) appear appropriate with perhaps a little more definition of the treatment of the entry facade where the new windows replace the recessed stairs. Preservation of all the original windows in the building is a more desired preservation alternative. The original Ziggurat Art Deco style is well maintained in the submitted plans.  
Plans for the 1959 Stanford Hospital designed by Edward Durrell Stone call for its demolition. Please refer to the Architectural Resources Board peer review, September 2009 for full assessment of this project with reviews of Federal and state CEQA standards. ARG finds the Stone designed Hospital appears eligible for listing on the California Register of Historic Resources under criteria:

- A. Event - the first heart transplant in the United States in 1968 was a milestone in medicine
- B. Person - Dr. Norman Shumway for his outstanding research and body of work in the field of heart transplant

28.1

28.2

To: Steven Turner and City Council From: Beth Bunnenberg P.2

C. Architecture - The 1959 Stone designed Main Medical Center appears eligible for listing on the California Register as a pivotal work of an internationally

28.2  
Cont

known architect (Edward Durrell Stone). This building merits serious consideration under CEQA. Demolition of the Stone building would be a very significant adverse impact which could not be mitigated. Additionally please consider the cumulative adverse effect of Palo Alto's loosing one of the two remaining intact Edward Durrell Stone buildings from his major period of work in Palo Alto. The Architectural Resources Group - peer review suggests an Historic Preservation Alternative

28.3

to save the Stone building. This alternative proposes to not use this as a hospital but instead to use it as the medical office space which Stanford Medical Center says it needs. Suggestions for retrofitting the building to office building standards are included in the ARG peer review report. This would avoid the SMC Project's significant and unavoidable impact of the demolition of the 1959 Hospital Building and greatly diminish the demolition debris which would reduce the huge number of dump truck loads needed to transport the debris to landfill and toxic dump sites.

28.4

RECEIVED

JUL 22 2010

Department of Planning & Community Environment

Beth Bunnenberg

7/23/2010 ~~No~~ I do not support the Stanford University Medical Center Plans - Comment  
Att: Draft EIR Stanford Medical Center Plans - Comment

~~No~~ you have permission to list me as a supporter of the project.

Please keep me informed about the project.

28.5

I have the following comments: The 1959 E.D. Stone Main Hospital Building has been evaluated by ARG as being historic. CEQA rules apply. This building is the work of an internationally known architect, and the first heart transplant was done in this building. It should not be demolished. The Preservation Alternative from ARG provides solutions to retrofit the 1959 building for reuse as medical offices.

28.6

Name: Beth Bunnenberg  
Address: 2351 Ramona, Palo Alto, CA 94301

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

**28. Beth Bunnenberg (letter dated July 22, 2010)**

- 28.1 *The commentor expresses support for the renovation of Hoover Pavilion as proposed under the SUMC Project, but requests more definition of the treatment of the entry façade. In response to this request, the Architectural Resources Group (ARG) has provided a further analysis of the Hoover Pavilion renovation. Please refer to Staff-Initiated Change 5 for more details regarding the Hoover Pavilion renovation.*
- 28.2 *The commentor believes that the demolition of the Stone Building complex would result in significant and unavoidable impacts and refers to ARG's peer review. This statement is consistent with the findings in the Draft EIR under Impact CR-1 on pages 3.8-18 through 3.8-23. As noted on page 3.8-21 of the Draft EIR, implementation of Mitigation Measures CR-1.2 through CR-1.4 would reduce the impacts from the loss of the Stone Building complex; however, the impact would remain significant and unavoidable due to the demolition of the buildings. The analysis in the Cultural Resources section, Section 3.8 of the Draft EIR, considers the findings from ARG's peer review in reaching this significance conclusion. Because the City has concluded the Stone Building complex is eligible for listing on the California Register of Historic Resources (CRHR), the Stone Building complex is considered an historic resource for the purposes of the Draft EIR.*
- 28.3 *The commentor requests consideration of the cumulative impacts of demolishing an E.D. Stone building within Palo Alto. As described on page 3.8-27 of the Draft EIR, Cultural Resources, E.D. Stone constructed three other buildings within the City in addition to the Stone Building complex. However, according to an evaluation by ARG, only one of these buildings, the Palo Alto Main Library, has been determined eligible for the National Register of Historic Places. The library is planned to undergo renovation and expansion, which could impact its historical integrity. In combination with the SUMC Project, development at the Main Library and other historic buildings in the City would have cumulatively significant impacts on historic resources. As stated on page 3.8-27 of the Draft EIR, the demolition of the Stone Building complex would have a cumulatively considerable significant and unavoidable impact due to the small body of E.D. Stone's work present in the City that retains sufficient integrity to be eligible as historical resources. Therefore, the conclusions in the Draft EIR are consistent with the commentor's remarks.*
- 28.4 *The commentor expresses support for the Historic Preservation Alternative and supports using the Stone Building complex for medical office space. Please refer to Master Response 9 regarding the merits of the SUMC Project and its alternatives. In addition, please refer to Master Response 8 for the range of alternatives analyzed and considered in the approval process, along with an analysis of the variation on the Historic Preservation Alternative suggested by the commentor.*

- 28.5 *The commentor states that the Stone Building complex has been evaluated by ARG as being historic. Please refer to Response 28.2, above.*
- 28.6 *The commentor expresses support for the Historic Preservation Alternative. Please refer to Master Response 9 regarding the merits of the SUMC Project and its alternatives. In addition, please refer to Master Response 8 for the range of alternatives analyzed and considered in the approval process.*



**COUNCIL MEETING**  
 June 14, 2010  
 Placed Before Meeting  
 Received at Meeting

Page **14**

CITY OF PALO ALTO, CA  
 CITY CLERK'S OFFICE

Minor, Beth

**From:** Churchill, Diane [DChurchill@stanfordmed.org]  
**Sent:** Thursday, June 10, 2010 11:50 AM  
**To:** Council, City  
**Cc:** Wilson, Kay; Coe, Andy  
**Subject:** comments re: hospital renewal  
**Attachments:** I attended the City Council meeting on Monday.doc

10 JUN 10 PM 12: 52

I attended the City Council meeting on Monday, June 7, 2010 but was unable to stay late enough to present my comments concerning the hospitals renewal project so I am sending them to you via email.

My name is Diane Churchill, I am a resident of Midtown and I am here to show support for the hospitals' renewal plan. I have two comments.

For the last several years I have watched in dismay as the application and approval process has dragged on. It seems to me that the city council would not want to delay in getting the project moving since this is not Stanford's hospital that is being debated – it is the city's community hospital – it is the overcrowded emergency room you would go to in a medical emergency and the out of date hospital your family will use for serious health care. It is in your best interest and the best interest of the Palo Alto community to move forward without delay so we have a seismically safe, modern, community hospital.

Secondly, I'd like to speak to the public service and generosity of Stanford Hospital. I am the director of the Stanford Hospital Lifeline program – an emergency in-home response system that saves lives and helps people live at home safely. Each year, Stanford Hospital contributes more than \$30,000 to the community by subsidizing those in our community who cannot afford the cost of this service – anyone who needs the Lifeline service will have it thanks to the generosity of Stanford Hospital. I believe it is with the same generosity that the hospital has responded to the mitigation issues.

I urge you to move forward without further delays to a timely approval of the renewal plan.

Diane Churchill, Lifeline Director  
 Stanford Hospital & Clinics, Aging Adult Services  
 1101 Welch Road, C-1, Palo Alto, CA 94304  
 t: 650.723.6906, f: 650.736.7186  
 dchurchill@stanfordmed.org  
 www.geriatric.stanfordhospital.com

6/10/2010

**29. Diane Churchill (letter dated June 10, 2010)**

- 29.1 *The commentor supports the SUMC Project and requests no further delays in the SUMC Project approval process. Reasons for the publication delay of the Draft EIR include site plan modifications and application updates by the SUMC Project sponsors in order to meet Office of Statewide Health and Planning Development (OSHPD) requirements; the withdrawal of the Stanford Shopping Center Project from the analysis of the Draft EIR; and changes in the City's Traffic Model. The comment concerns the EIR process and does not relate to the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 11 for a detailed description of the City's review process and the next steps in the SUMC Project and EIR review process.*
- 29.2 *The commentor expresses support for the SUMC Project. The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.*



Letter 30

**From:** Katrina Currier [katrina.currier@gmail.com]  
**Sent:** Wednesday, July 21, 2010 7:12 PM  
**To:** Council, City, Stanford Project  
**Cc:** kurrier@oogalabs.com; Ken Hake: khake@pausd.org; kenneth.hake@hp.com; lorimer@meer.net; david@solnick.net; christina.raes@earthlink.net; pvdolkas@ps.net; mariodei@earthlink.net; estherze@gmail.com; corrie sid; Jennifer Laugier; Sally-Ann Rudd  
**Subject:** Re: Stanford Expansion Project - Traffic in Downtown North

Dear Steven Turner,

My husband and I heartily agree with Ken Hake in his recent letter to you regarding his concern for traffic in North Palo Alto. We live on Hawthorne Avenue between Cowper and Webster and have four young boys who are always playing on the sidewalks in front of our house. My husband commutes daily on his scooter to the train station, and I frequently ride bikes with the children to school. All of us in our block appreciate the congenial nature of a neighborhood where our children can play on the street sides of our homes. An increase in commuter traffic on our already highly trafficked street would greatly affect our children's safety.

Please let us know what we can do to help maintain safe and quiet streets in North Palo Alto.

Thank you!

Katrina and James Currier  
558 Hawthorne Avenue  
415-254-1626

On Wed, Jul 21, 2010 at 2:01 PM, Ken Hake <khake@sbcglobal.net> wrote:  
To Steven Turner - Department of Planning and Community Environment,

For the record: I am a homeowner and resident living at 575 Everett Ave in the Downtown North neighborhood. I have three children who play outside everyday in front of our house. I bike to work most days and am a fervent supporter of having walkable, bikable, livable neighborhoods. I have been watching the progress of the discussions with Stanford and am concerned about the impact to traffic for the Downtown North neighborhood. I am deeply concerned that the project will increase the amount of commuter traffic running through our neighborhood. Historically, our neighborhood has fought hard to decrease the amount of traffic in our neighborhood. A few years back, we were successful in getting some traffic mitigating devices in the neighborhood and this has helped. I don't want to see us take a step backward in this effort. Do we have any projections as part of the impact report that show what will happen on the residential roads in our neighborhood. I read recently that the intersection at Middlefield and Willow road will see a dramatic increase. I can imagine that there is a high probability that our neighborhood will also see an increase. If so, this is not an acceptable outcome.

What are the options for implementing stronger traffic calming devices in the neighborhood to make sure we aren't adversely affected. Right now we have "No Turn" signs during peak periods. I continually see cars ignore the signs and we don't have the police resources to adequately monitor this. I have called the department a few times on this point and they will send an officer out once in a while, but can't do it everyday. Is it possible to block off the entry points for Everett & Hawthorne in some workable traffic calming configuration? Similar to what they have done in the College Terrace and Evergreen Park neighborhoods?

Please let me know what I can do to ensure there is no increase to the traffic in our neighborhood.

Regards,

Ken Hake  
575 Everett Ave  
Palo Alto, CA 94301

**30. Katrina and James Currier (letter dated July 21, 2010)**

- 30.1 *The commentors state that they agree with Ken Hake's letter concerning traffic in North Palo Alto and believe an increase in traffic in this area would greatly affect the safety of children.* The Transportation Impact Analysis for the Draft EIR considered the two primary streets in Downtown North: Everett Avenue and Hawthorne Avenue. Draft EIR Table 3.4-20 on page 3.4-71 shows the results of that analysis. As shown in the table, both Hawthorne Avenue and Everett Avenue are expected to see an increase in traffic as a result of the SUMC Project (before mitigation) of 127 vehicle trips per day. The City of Palo Alto uses the TIRE index to determine if an increase in traffic on a residential street results in a significant impact. The increase projected for Everett Avenue and Hawthorne Avenue would not result in a significant impact.

Letter 31

**From:** Janet Davis [mailto:jadjad@sbglobal.net]  
**Sent:** Saturday, May 22, 2010 9:21 AM  
**To:** city.council@menlopark.org; Council, City  
**Cc:** Rich Gordon; Lennie Roberts  
**Subject:** SUMC EIR

- 31.1 I have just started looking at this and the very first thing I looked at was downright wrong. Figure 3.4.3. showed a class I bike path along the entire length of Alpine Road. Not so! The study did show that the on and off ramps at Alpine and I-280 would be at "F." This is a no-brainer since they are already beyond that, and traffic is often backed up for long stretches along the freeway until quite late in the morning. The study failed to address the intersections of Stowe Lane, Bishop Lane, Ansel Lane, the "Dish" parking problems or the difficulties (TIRE analysis) that the residents of Stanford Weekend Acres already experience trying to access (let alone cross!) Alpine Road. The study was also in error in its calculation of what constitutes "rush" hour along Alpine Road. That starts before 7 a.m. at which time around more than 90% of the traffic heads to Stanford. There is a minor "rush" at lunch time and a more extensive rush when the medical staff change shifts at the hospital around 3 p.m. It did not address the level of accidents, the blind corners, the problems with speeding that occurs in off-hours, the minor landslides and the winter flooding.
- 31.2 I live on Alpine and usually come and go by car, bike or foot several times a day. I have never seen any traffic engineers doing a study anywhere in the vicinity and have no confidence that one was actually done.
- 31.3
- 31.4
- 31.5

**31. Janet Davis (letter dated May 22, 2010)**

- 31.1 *The commentor notes that Draft EIR Figure 3.4-3 is incorrect in that the figure shows a Class I bike path on Alpine Road from Junipero Serra Boulevard to the I-280 interchange. Draft EIR page 3.4-21, Figure 3.4-3, is revised as described in Staff-Initiated Change 2 and shown in Appendix T to this document. The Class I bike path along Alpine Road ends north of Stowe Lane. There is also a designated bike trail from Piers Lane going into San Mateo County but it does not meet the width requirements set out in the Caltrans Highway Design Manual for Class I bike path and is not reflected in the revised figure.*
- 31.2 *The commentor states that the Transportation Impact Analysis identified the existing conditions for the I-280 off-ramps at Alpine Road, but the analysis failed to address other intersection, parking, and access issues. The commentor further states that the Transportation Impact Analysis for the SUMC Project did not address Stowe Lane, Bishop Lane, Ansel Lane, the “Dish” parking problem, or the difficulties accessing Alpine Road with the TIRE analysis. The Transportation Impact Analysis followed the requirements for traffic studies established by the Santa Clara County Congestion Management Agency (CMA). The analysis of minor, unsignalized intersections is not required by the CMA. For the Final EIR, the TIRE analysis was conducted for Alpine Road. The results of the analysis indicate that no impact from the SUMC Project would occur. The existing TIRE Index is 4.3, the 2025 without project TIRE Index is 4.4, and the 2025 with project TIRE Index would remain at 4.4. An increase of 6,600 daily vehicles is needed to trigger an increase in the TIRE Index. The project is expected to contribute no more than 600 daily trips at this location before the implementation of mitigation measures. As such, the project traffic would not cause a change in the TIRE Index and, therefore, does not constitute a significant impact according to the City of Palo Alto standards of significance. The project would not negatively impact Alpine Road between Junipero Serra Boulevard and the I-280 interchange; nor would it contribute to parking problems at the “Dish.”*
- 31.3 *The commentor states that the Transportation Impact Analysis did not consider the appropriate Peak Hours for Alpine Road. The Transportation Impact Analysis considered both the AM (7:00 to 9:00 a.m.) and PM (4:00 to 6:00 p.m.) Peak Periods. Within these Peak Periods the Peak Hour was established. A common Peak Hour was selected for study area intersections, such as 7:30 a.m. to 8:30 a.m. and from 4:45 p.m. to 5:45 p.m. Traffic analysis procedures are based on the hour during the a.m. and again during the p.m. when the greatest amount of traffic is present on the transportation network. Even though the Peak Period may begin before 7:00 a.m., the greatest amount of traffic during a one-hour period occurs after 7:00 a.m. and that is the hour that was addressed in the Transportation Impact Analysis. In addition, a typical traffic analysis only considers the weekday AM and PM Peak Hours. Even though an individual intersection may have a concentration of traffic during some other period, the analysis addresses the traffic levels that occur when the overall transportation network experiences the greatest traffic loads.*

- 31.4 *The commentor notes that the Transportation Impact Analysis did not address the level of accidents, blind corners, problems with speeding that occurs in off hours, minor landslides, and winter flooding.* The issues identified in the comment are not typical issues addressed in a Transportation Impact Analysis for a development project such as the SUMC Project. Accident issues are typically associated with inadequate geometric roadway design or traffic control facilities. The blind corners, speeding, landslides, and flooding on Alpine Road are not associated uniquely or specifically with the SUMC Project.
- 31.5 *The commentor questions whether a traffic study was completed since they did not notice anyone in the field.* The Transportation Impact Analysis for the SUMC Project was initiated in 2007 and continued into 2010. The typical types of field investigations that occur when traffic engineers are present are traffic volume counts during the AM and PM Peak Periods, collection of traffic control and roadway geometrics, and observation of general traffic conditions. Some of this information may be collected from other recent studies and not re-collected in the field.

Letter 32

>>> "Janet Davis" <lsldjad@sbctglobal.net> 7/22/2010 11:09 AM >>>  
This morning at 9:30 I tried to leave my driveway on Alpine Road to go to the post office. At the same time, the Cal Water truck and the PG&E meter reader were all trying to get onto the road. We were all stuck there for many minutes with traffic absolutely refusing to let any of us in. Coming back 15 minutes later I moved into the turn lane to enter my driveway. A long line of cars heading to I-280 were backed up behind a large SUV whose driver was on her cell phone honking at me. Between I-280 (on both sides of the road) are cautionary signs alerting people to drive at 25 or 30 mph. However, the speed sign at the Buck Estate (corner of Alpine and Santa Cruz) states 40 m.p.h. This is a totally ridiculous speed limit for the traffic conditions - especially in view of all the driveways and cross roads. Even with the 40 mph limit, outside of rush hours, traffic careens down Alpine around 50+ mph endangering residents and cyclists. The situation is even more dire in winter when Stanford is in session. The situation is only going to get worse with the hospital expansion and possible shopping center expansion.  
So far, the county (and possibly Menlo Park) has not responded to the impact on this area of the expansion, and needs to asap. Stanford is about to narrow Junipero Serra which will throw more traffic onto Alpine Road. Traffic lights are needed near I-280 to meter the flow and some alternative route needs to be explored - possibly a tunnel.  
Of immediate concern is the reduction of the posted speed limit from 40 to 30 mph since this area is a medium density residential enclave nestled between several blind curves. Also more traffic enforcement is needed.  
One area that the city of Menlo Park needs to address is the frequent use of the back entrance to the Buck estate as a turn around site. People constantly make U-turns across all the traffic to head back to Stanford.  
Janet Davis

32.1

32.2

32.3



**32. Janet Davis (letter dated June 22, 2010)**

32.1 *The commentor is concerned with the speed limits on Alpine Road. The SUMC Project sponsors do not establish the speed limit on Alpine Road nor are they charged with its enforcement. These issues are enforcement issues rather than SUMC Project impacts, and are under the jurisdiction of Menlo Park and San Mateo County.*

32.2 *The commentor states that the County and Menlo Park have not responded to the SUMC expansion project, and is concerned about various traffic issues on or near Junipero Serra Boulevard and I-280. Both San Mateo County (as included in Letters 5 and 6 of this document) and Menlo Park (as included in Letter 8 of this document) commented on the Draft EIR for the SUMC Project. There are no plans by Stanford to reduce the traffic capacity of Junipero Serra Boulevard. As currently contemplated, the Junipero Serra Boulevard roadwork (which is not part of the SUMC Project) would include a median and bulb-outs in three locations. The Junipero Serra Boulevard (JSB) roadwork is intended to slow traffic to the posted speed and eliminate unsafe left-turns onto and off of the road. Santa Clara County would be the lead agency for the roadwork project.*

The specifics of a tunnel, where it would start and stop, and other features are not included in the comment. The construction of a tunnel in the vicinity of Alpine Road is beyond the scope of the SUMC Project.

32.3 *The commentor states several issues with speed limits on Alpine Road and traffic concerns with Buck Estates. These issues are enforcement issues rather than SUMC Project impacts.*

Letter 33

**From:** Janet Davis [mailto:jdjad@sbcbglobal.net]  
**Sent:** Tuesday, July 27, 2010 1:52 PM  
**To:** Council, City  
**Cc:** Rich Gordon; Lennie Roberts  
**Subject:** Hospital expansion - EIR INPUT

33.1 I haven't heard a peep out of the County of San Mateo with respect to input, which is not unusual, since they never seem to get around to interacting with other jurisdictions to solve problems. However, I live on Alpine Road and use Santa Cruz Ave in the unincorporated part of Menlo Park. The Stanford traffic is already beyond what these roads can bear. It is unconscionable to further burden them with the inevitable traffic to the hospital. Stanford has to do more than put a traffic light at I-280. It needs to dig a tunnel from 280 to the main area of campus to carry a good part of the traffic that gets dumped on residents in other jurisdictions, and also open up some of the feeder routes like Stanford Ave. I live within walking distance of the hospital. However, going by car (and finding parking) at times could take almost as long, without yet more traffic. Also, you have to bear in mind that Stanford plans to expand the shopping center. I'm all for an improved hospital, but people have to get there before they die waiting in a grid locked traffic jam. Palo Alto also needs to allow Sand Hill Road traffic go through to Alma instead of turning left at El Camino and making a U turn in Menlo Park to go to Alma in Palo Alto. Janet Davis Alpine Road MP

**33. Janet Davis (letter dated July 27, 2010)**

33.1 *The commentor states that she is not aware that the County of San Mateo has provided input on the SUMC Project. Since the SUMC Project is located in close proximity to the County of San Mateo, the County was encouraged to submit comments on the Notice of Preparation (NOP) and the Draft EIR.*

In August 2007, the City distributed the NOP and announced its intent to prepare an EIR analyzing potential impacts of the SUMC Project. No comment letters were received from the County of San Mateo during the NOP scoping period. However, the County of San Mateo Planning and Building Department submitted a comment letter on the Draft EIR on July 27, 2010 (see Letter 5 of this document). The County's comment letter pertains to traffic impacts to intersections in the unincorporated County and transit impacts to Caltrain, SamTrans, and the Marguerite Shuttle. In addition, the letter requests that the Draft EIR be revised to include the San Mateo County Level of Service Standards. Please see Letter 5 for comments from the County of San Mateo and Responses 5.1 through 5.9.

33.2 *The commentor is concerned with the level of traffic on Alpine Road and Santa Cruz Avenue and suggests that the SUMC Project sponsors build a tunnel from I-280 to the central part of campus to remove traffic that affects residents in adjacent jurisdictions. The construction of a tunnel from I-280 to the central part of the Stanford University campus is not required to reduce to significant traffic effects of the SUMC Project.*

33.3 *The commentor states she lives within walking distance of the hospital, but that traveling to the hospital by car and finding parking at times takes just as long as walking. The Transportation Impact Analysis addressed the existing levels of congestion surrounding the SUMC Project site. In addition, the availability of parking and future parking demand was addressed in the Transportation Impact Analysis. An additional 10 percent of parking supply was added to reduce, to the extent feasible, recirculation to find a vacant parking space. The SUMC Project is making bicycle, pedestrian, and transit improvements that encourage trips to be made by non-automobile modes if possible.*

33.4 *The commentor notes that Stanford plans to expand the Stanford Shopping Center. As explained on pages 3.1-3 to 3.1-4 in Section 3.1, Environmental Analysis, the Stanford Shopping Center expansion is not considered a reasonably foreseeable project in the City and is, therefore, not included in the cumulative project list assumed in the Draft EIR. As described in the Draft EIR, the Simon Property Group submitted an application in 2007 to expand the Stanford Shopping Center and construct a boutique hotel.<sup>1</sup> However, this application was withdrawn in April 2009. Given Stanford University's statement that it intends to focus its development efforts on the SUMC Project, and due to the current*

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<sup>1</sup> Simon Property Group, "Simon Properties – Stanford Shopping Center Expansion Application," August 20, 2007.

economic downturn and changing retail trends, the scope of any future development at the Stanford Shopping Center is too speculative to analyze at this point. As stated by Stanford, the Shopping Center expansion is no longer before the City for its consideration and there are no foreseeable plans, proposals, or programs in place that would bring the Shopping Center expansion back to the City for approval at a later time.<sup>2</sup> Therefore, the Stanford Shopping Center expansion is not considered a probable future project for the purposes of the discussion of cumulative impacts, per CEQA Guidelines Section 15130. Nevertheless, some background growth at the Stanford Shopping Center is included in the City's regional traffic model.

- 33.5 *The commentor states that Palo Alto needs to allow Sand Hill Road traffic to go through to Alma Street, instead of turning left onto El Camino Real and making a U-turn in Menlo Park to return to Palo Alto.* The intersection geometrics and permitted movements at the Sand Hill Road/El Camino Real/Alma Street intersection have been established by the City of Palo Alto. Modifications of these geometrics is not required to reduce the impacts associated with the SUMC Project. Changing the travel patterns through this intersection is not an improvement that is tied to the SUMC Project.

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<sup>2</sup> Barbara Schussman, Bingham McCutchen LLP, Letter to Cara Silver, Senior Assistant City Attorney, April 16, 2009.

Minor, Beth

CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

From: Nat Fisher [suikiroo@hotmail.com]  
Sent: Tuesday, May 25, 2010 11:35 AM  
To: Holman, Karen  
Cc: Council, City; Keene, James  
Subject: retention basin on Stanford land

10 MAY 25 PM 12:45

If Stanford is required to provide a public benefit to the City, nothing would be more valuable than the flood retention basin. The City has asked Stanford for one for many years and was always turned down. This may be the opportunity we have been waiting for. Let's seize it!

Natalie Fisher

The New Busy is not the old busy. Search, chat and e-mail from your inbox. Get started.

5/25/2010

**34. Natalie Fisher (letter dated May 25, 2010)**

- 34.1 *The commentor states that if Stanford is required to provide a public benefit to the City, then Stanford should provide a flood retention basin. Please refer to Master Response 12 for a discussion of the Development Agreement.*

As explained in Impact HWY-4, pages 3.11-37 through 3.11-41 of the Draft EIR, the SUMC Project would have a less-than-significant impact on stormwater runoff and erosion. The SUMC Project would be required to comply with existing regulations and implementation of these requirements would prevent substantial on-site erosion by requiring erosion and sediment controls during construction and operation. In addition, as discussed on page 3.11-41 of the Draft EIR, on-site stormwater detention may be required by the Public Works Department to lessen the SUMC Project's impact on City storm drains, which would further reduce the less-than-significant runoff and erosion impacts. The SUMC Project sponsors would be required to adhere to the requirements of the Public Works Department.

According to CEQA Guidelines Section 15126.4(a)(3), mitigation measures are not required for impacts that are not found to be significant. Per CEQA Guidelines Section 15126.4(a)(4), mitigation measures must be "roughly proportional" to the impacts of the project. Therefore, since less-than-significant stormwater runoff and erosion impacts would occur under the SUMC Project, and since the suggested retention pond is located away from the SUMC Sites, mitigation measures such as the retention pond are not required under CEQA.



Letter 35

Chapman, Kirsten R

From: M. Fruth [mailto:matfruth@yahoo.com]
Sent: Thursday, August 26, 2010 5:44 PM
To: Council, City; Menlo Park City Council; mhudson@cityofepa.com
Cc: Turner, Steven
Subject: Stanford SUMC Review of the Draft Environmental Report

Mr. Turner, please acknowledge receipt of these comments by return email.

These are my comments about the Draft Environmental Impact Report for the Stanford Hospital Projects. Please respond with positive plans for action. Merely noting public comments is inadequate. Any Stanford University response that does not suggest any viable solutions to the problems identified by any commentator is prima facie insufficient, inadequate, and does not meet the minimum requirements of CEQA.

Stanford University and Stanford University Medical Center are essentially the same entity, since Stanford University Medical Center is subordinate to Stanford University and functions as if it is a tenant, with all of its activities subject to Stanford University approval.

I am amazed that officially it is claimed that there are no impacts, and therefore no mitigations, for East Palo Alto. Impacts in Redwood City and Mountain View were not studied either. Comparing University Avenue, the most direct link between Stanford University Medical Center and Bayfront Expressway, and the high and unavoidable impacts at Willow Road and Bayfront Expressway, this needs explaining and justifying in detail. Willow Road and Bayfront Expressway is already the most dangerous intersection in Menlo Park. Stanford University Medical Center can pay for complete mitigation, not just political "fair share." This will make unavoidable impacts easier to justify politically, and expedite the approval process.

The question is not whether to construct new medical facilities, including a full-service community hospital while maintaining a level one trauma center. The question is how to do so in the most productive, proactive way, with Stanford University Medical Center meeting its responsibility to locate all of the funding for all of the necessary mitigations for its project.

For example, it is not clear whether the increases in the sizes of the Emergency Rooms are sufficiently large. Please expand on your analysis and explain how the vague term on page 2-22, "modest overall projected population growth," was estimated, particularly given the different populations served: the surrounding community, the regional patient base, and the worldwide "complex cases."

Please update all timelines. For example, the draft environmental impact report still states that demolition will begin mid-2009(sic). Stanford should not expect to speed up the process to make up time lost through administrative delays, particularly its own delays. For example, for the record, I did not receive the draft environmental impact report until June 18, 2010, due to misdirection. I did not receive all of the supporting documents, which I requested multiple times, until July 19, 2010. I would also note that Stanford University Medical Center's public relations efforts have been soliciting community input, but welcoming only positive comments.

35.8 This appears to be a useful time for Palo Alto and Menlo Park to annex all unincorporated Stanford lands within their respective spheres of influence.

35.9 Impacts of traffic, housing, & environmental quality are all co-mingled. See, for example, considering the analysis on page 3.13-2, please mitigate all---one hundred percent---of the impacts.

35.10 Before accepting and certifying the draft environmental impact report, please locate and allocate all the money needed for mitigations, as required and mandated by the California Environmental Quality Act. If you haven't found the money for mitigations, you don't have a viable project. If Stanford provides all mitigations in full, rather than negotiating about what "Fair Share" means, this would streamline action on the projects. If Stanford pays for complete mitigation, not just political "fair share," this will make unavoidable impacts easier to justify politically, and expedite the approval process. Stanford should be prepared to pay for full mitigation of all intersections with LOS D or worse, in all locations on the Midpeninsula, notably including Menlo Park and East Palo Alto, not just Palo Alto. The requirements for all mitigations of any kind should be permanently embedded in project approvals.

35.11 The draft environmental impact report is too vague about exactly what are considered to be "Stanford University Medical Center uses." The proposed change in Policy L-8 is too broad: a one-time exception to this policy would preserve Palo Alto planning flexibility for the future, instead of creating a zoning change that would apply to all of Palo Alto. Any zoning changes proposed, including the change in Policy L-8, are only defensible if all of the resulting impacts are fully mitigated.

35.12 The scoping documents did not address the increase in impacts, particularly the interaction of the "right-sizing" with all impacts. "Right-sizing" does not preclude more intensive future use. Stanford initially claimed that their one-patient-per-room model would virtually eliminate impacts, but the draft environmental impact report acknowledges that the project objective is "increased space for both medical offices and support services". The draft environmental impact report makes clear that population impacts in all categories studied are significant, so please evaluate all impacts using the current nationwide standards about hospital sizing, and since future flexibility is crucial, please assume maximum density of both patients and employees. As Stanford University Medical Center itself admits in Stanford Medicine News, procedures change every two to three years. Please include terms in the project approval requiring Palo Alto City Council review of any internal changes to more intensive uses.

35.13 Since the proposed project is much more dense than the structures it will replace, please explain how & why you allege that the CA Building Code requires additional height and square footage. The proposed increase in density and height can be compensated by the proposed mitigations and by a density transfer from other areas of Stanford land, e.g., some or all of the Stanford land west of 280 permanent, this would also help to meet the Stanford University's responsibility to provide open space and recreational facilities.

35.14 It would be nice to preserve the Stone building facade, possibly by relocating it or reconstructing it before the Certificate of Occupancy is issued. This would partially mitigate the cumulative impact to this landmark cultural resource.

35.15	Please complete full critical review of all options - both no-project & full build out, evaluating all mitigation measures.	35.23 Cont't	intersection. Ideal ambulance routing needs two routes to the same hospital. If the University Avenue/El Camino intersection is blocked by flood or an accident, especially the underpass, the Sand Hill/Alma/El Camino intersection becomes crucial for emergency access. Please clarify and explain all secondary ambulance routes, particularly since the government standard requires at least two independent routes. The inadequate emergency access must be fully mitigated.
35.16	An environmental impact report is a model, not a perfect prediction of reality. To estimate cumulative expanding impacts' domino effect as precisely as possible, all analyses should evaluate the impacts of all estimated consequential increases in both oncampus populations, and also consequent collateral increases in surrounding communities' populations. Increases in economic activity due to this project will increase impacts, and therefore necessitate additional mitigations.	35.24	Similarly, please add 101 from Marsh to Woodside Road to your analysis and to Table 3.4-23.
35.17	Please include cumulative impacts of full buildout of all existing zoning. Also, other offsite projects considered under cumulative impacts should include all projects in progress, both on Stanford lands and in Palo Alto, East Palo Alto, Menlo Park, and Mountain View. The Bohannon project is an example; by late November, 2010, we should know whether that project will be built.	35.25	in addition to evaluating the impacts of adding new Stanford University Medical Center employees, please review related consequential impacts, including, but not limited to, impacts on community services and on schools. Please include the impact and review of population increases.
35.18	The draft Environmental Impact Report does not mention buses other than Marguerite, the AC Transit U Line, and VTA Community bus lines. Shuttle buses services to be enhanced include the Menlo Park shuttle as well as the Palo Alto shuttle. In addition to the mitigations identified in the draft Environmental Impact Report, employees' transit mitigations should include free bus passes for all employees on any public transit routes, including, but not limited to, bus passes on Sam Trans and VTA, not just Community bus lines. Marguerite and/or guaranteed ride home could be expanded to all shifts.	35.26	I disagree with the conclusions that housing impacts would be less than significant, and that no additional housing is needed. The draft Environmental Impact Report admits that this deficiency contributes to other environmental impacts, but proposes no effective remedy. The proposed in lieu housing fee is incredibly insufficient to meet the need for non-exempt housing; instead of twenty-six percent, Stanford should fund one hundred percent of the increase in housing demand it will cause. Please evaluate the financial impact of meeting actual needs without any taxpayer subsidies. The dedicated housing can be met by in an increase in oncampus housing stock.
35.19	Your traffic impact numbers should reflect the fact that parttime employees usually generate as many trips as fulltime.	35.27	I agree that it's a good idea that four hundred ninety previously approved, below market rate units be dedicated to Stanford University Medical Center employees including current employees and new hires.
35.20	The impact of patient trips can be provided through the same mitigations as for employees above.	35.28	Please fully locate land near Lucille Packard Children's Hospital, construction funds and operating funds to meet the full need for McDonald Houses, including the currently existing shortage.
35.21	Please define parking which would be "performance based" and would meet projected needs," as reported on page 2-25. Implementation of all traffic mitigations may reduce the need for parking, but the approximately fourteen hundred spaces saved should be placed in landscaped parking reserve, not just eliminated.	35.29	Meeting the housing need and consequent Palo Alto Unified School District needs will make it easier to recruit qualified staff, notably addressing the shortage of nurses.
35.22	Please provide full funding for all traffic mitigations, including those listed in TABLE 3.4-18 and on page 3.4-62.	35.30	Any Stanford University Medical Center response that does not suggest any viable solutions to the problems identified by any commentator is prima facie insufficient. Therefore, currently this draft environmental impact report is deficient, inadequate, and does not meet the minimum requirements of CEQA. Most of the impacts described in Chapter 4 can be mitigated. If Stanford University Medical Center provides complete mitigation, not just political "fair share," this will make unavoidable impacts easier to justify politically, and expedite the approval process. All of the proposed mitigations will reduce or eliminate the need for a Statement of Overriding Considerations, and complete mitigation would qualify as partial justification for any Statement of Overriding Considerations, and could reduce Stanford University's liability for the consequences of traffic congestion. If all of the proposed mitigations are completed, there may be no need for a Statement of Overriding Considerations. Please evaluate the financial impact of meeting actual needs without any taxpayer subsidies. Full mitigation could be considered to be a "public benefit."
35.23	The traffic estimates for El Camino Real Sand Hill Road/Alma intersection seem low, especially during peak use/commute hours. In particular, please explain how the ambulance route from North Palo Alto to the new Emergency Room will be direct enough and the quickest possible, without traveling around the block nor making any U-turns. Ambulances cannot travel from Alma Street into Menlo Park and make a U-turn at Cambridge; therefore the traffic island at the El Camino/Sand Hill/Alma must be removed and full four-way traffic allowed with no restrictions on four-way traffic flow at this	35.31	All mitigations should have specific deadlines for completion, preferably before any Certificates of Occupancy are issued.  Respectfully submitted, Margaret Fruth

**35. Margaret Fruth (letter dated August 26, 2010)**

35.1 *The commentor makes the statement that the City must provide responses to any and all comments received and requests responses be provided to her comments. Please see Responses 35.2 through 35.31, below, in response to the commentor’s specific questions and concerns.*

35.2 *The commentor states that Stanford University and the Stanford University Medical Center are the same entity. This statement is incorrect. SHC and LPCH are nonprofit corporations. While they are owned by Stanford University, they are separate legal entities with their own Boards of Directors, budgets, and corporate documents. The Stanford School of Medicine, by contrast, is part of Stanford University. The “SUMC” is a location, not an entity.*

35.3 *The commentor is surprised at the results of the intersection impact analysis in East Palo Alto, Redwood City, and Mountain View, and believes that the SUMC Project should pay for full mitigation at the Willow Road/Bayfront Expressway intersection, not just fair share. The Transportation Impact Analysis assessed the traffic operations of several intersections on University Avenue through East Palo Alto. Although traffic congestion currently occurs on University Avenue, the addition of SUMC Project traffic would not cause a significant impact according to the established thresholds.*

The study area included 66 intersections in Menlo Park, Palo Alto, East Palo Alto, and portions of unincorporated San Mateo County. The study area captured the impact of the SUMC Project on local intersections and adjacent freeways. Any project traffic on streets within Redwood City or Mountain View would be locally generated and would not cause degradation in traffic operations.

The Transportation Impact Analysis assessed the traffic operations at the Willow Road/Bayfront Expressway intersection and found that the SUMC Project caused a significant transportation impact. However, SUMC Project impacts would be mitigated to less than significant through a payment of a fair share contribution based on the amount of project traffic in relation to the amount of growth in traffic over existing levels.

35.4 *The commentor indicates that the SUMC Project sponsors should construct and operate the SUMC Project in a productive way and meet its responsibility to fund identified mitigation measures. As outlined throughout the Draft EIR, mitigation measures are identified to reduce impacts that are deemed to be significant. Table S-4 in the Summary Section of the Draft EIR lists all the mitigation measures that would need to be implemented during construction and operation of the SUMC Project.*

As explained in the Introduction Section on page 1-5 of the Draft EIR, if the SUMC Project is approved, then the City of Palo Alto must adopt a Mitigation Monitoring and Reporting Program (MMRP), which would ensure that the mitigation measures presented in the Draft EIR are implemented. Additionally, the Conditions of Approval would identify payment responsibility for required mitigation measures. The SUMC Project sponsors would be required to fund all mitigation measures, as identified in the Conditions of Approval, which would be developed during the approval stage of the SUMC Project process. In addition, as part of the SUMC Project, a Development Agreement is proposed that would outline funds and specific fees that the SUMC Project sponsors would be required to pay. As such, before approval of the SUMC Project, the City and the SUMC Project sponsors would determine specific mitigation and Development Agreement payment responsibilities. Please see Master Response 11 for a description of an MMRP, Conditions of Approval, and the Development Agreement and how these would be implemented during the SUMC Project review and approval process.

35.5 *The commentor requests to know the increase in size of the Emergency Department (ED) under the SUMC Project.* As stated on pages S-22 and 2-49 of the Draft EIR, Summary and Project Description respectively, the ED would be expanded from 11,700 square feet to 47,892 square feet and the number of treatment spaces would increase from 38 to 51. The 36,192-square-foot increase in ED size includes 25,000 square feet of “right-sizing” or decompression space, which refers to expanded floor area to serve as treatment space. The right-sizing or decompression trend is typically seen in modernizing hospitals as modern treatment standards require increased floor area per bed or treatment space, compared to older hospital facilities. As such, only 11,192 square feet of the ED expansion would be associated with an increased level of operations. Based on this increase in size and treatment spaces, SUMC anticipates annual ED visits would increase from the current 42,522 (116 per day) to 61,200 (168 per day) by 2015 and to 72,675 (199 per day) by full occupancy of the hospitals in 2025.

*The commentor also questions how the term “modest overall projected population growth” was estimated, as used on page 2-22 of the Draft EIR.* The projected growth of SUMC patients is shown in Table 2-8 on page 2-47 of the Draft EIR, which projects the number of annual patient visits at the SHC and the LPCH (no patient activity is induced by SoM research/laboratory functions). These estimates are based on current market trends, specific data collected from competing modern healthcare institutions, and knowledge of delivery of complex care. As shown in Table 2-8, annual SHC outpatient visits would increase from 403,885 to 470,923 at 2015 (an increase of 67,038) and to 572,949 at 2025 (an additional increase of 102,026). Annual LPCH outpatient visits would increase from 107,363 to 138,893 in 2015 (an increase of 31,530) and to 153,349 at 2025 (an additional increase of 14,456). In total, the SUMC Project would increase annual outpatient visits by 215,050 upon full occupancy at 2025. The proposed increase in ED functions and



capabilities under the SUMC Project would be able to serve the future needs of the LPCH and SHC Hospitals. These increases form the basis of the analysis in the Draft EIR.

35.6 *The commentor questions the SUMC Project construction schedule as outlined in Section 2, Project Description, of the Draft EIR. As noted on page 2-53, the mid-2009 approval date for the SUMC Project serves as a conservative assumption to ensure that mitigation would be in place when warranted and not at a later date. Although the Draft EIR was published in May 2010, after the assumed approval date, this date was retained in order to guarantee that the mitigation measures would be implemented during construction. As such, the construction timeline as outlined in Section 2 of the Draft EIR will remain as is and the analysis in the Draft EIR remains adequate for the purposes of CEQA.*

35.7 *The commentor states that she did not receive requested Draft EIR information until a later date. The Draft EIR and the associated appendices have been available online on the City's website ([www.cityofpaloalto.org/sumc](http://www.cityofpaloalto.org/sumc)) since publication of the Draft EIR on May 20, 2010. In addition, the Draft EIR is available at the Palo Alto Main Library, the City of Palo Alto's Development Center, and City Hall at the Department of Planning and Community Environment. As such, the materials related to the SUMC Project Draft EIR were available to the public and the City accepted comments until July 27, 2010. The City extended the required 45 day review period to a 60+ day public review period through July 27, 2010, for a total of 69 days. The public had adequate time to review and comment on the Draft EIR and all associated documentation.*

*In addition, the commentor claims that the SUMC public relations team welcomes only positive feedback. During the Draft EIR public review period, several public hearings were held for individuals to express their comments and concerns about the SUMC Project and the Draft EIR. The public review period included six Planning and Transportation Commission (Commission) hearings, six City Council hearings, one Architectural Review Board hearing, and one Historic Resources Board hearing. The Commission and City Council hearings were open to the public and individuals were invited to voice their opinions on the SUMC Project and the Draft EIR. In addition to the public hearings, members of the public were encouraged to submit written comments. As demonstrated in this document, comments received on the SUMC Project and Draft EIR reflect both positive and negative opinions on the SUMC Project.*

35.8 *The commentor states that the cities of Palo Alto and Menlo Park should annex all unincorporated Stanford lands within their respective spheres of influence. As explained in Section 2 of the Draft EIR, Project Description, the SUMC Project proposes City of Palo Alto annexation of a 0.75 acre parcel of land adjacent to the Main SUMC Site in order to expand the SoM buildings into this area. However, the annexation of other Stanford lands is not proposed under the SUMC Project. Therefore, this comment does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA.*

- 35.9 *The commentor requests that all traffic, housing, and environmental quality impacts be mitigated.* Please see Master Response 7 regarding Mitigation Measure PH-3.1. Also, it should be noted that it is not the intent of CEQA to mitigate 100 percent of impacts; rather, CEQA requires mitigation for impacts that are determined to be significant, based on the significance criteria established by the lead agency. Per CEQA Guidelines 15126.4, mitigation measures are not required for effects which are not found to be significant. Where an EIR concludes that it is not feasible to mitigate a particular impact, CEQA allows the project to nonetheless be approved if the lead agency adopts a statement of overriding considerations explaining what considerations warrant approval of the project notwithstanding its significant and unavoidable impacts.
- 35.10 *The commentor requests that the SUMC Project sponsors ensure that any funding requirements to implement specific mitigation measures be determined and assigned prior to SUMC Project approval.* Please refer to Response 35.4, above.
- 35.11 *The commentor states that the term “Stanford University Medical Center uses” is not specific.* This exact term is not applied in the Draft EIR. However, page 2-22 of the Draft EIR explains, “the hospitals propose approximately 60,000 square feet of medical office/clinics for community practitioners and SUMC uses at the Hoover Pavilion Site.” In this reference, “SUMC uses” is meant to include clinic and medical office uses by the SUMC, which exclude the community practitioners that are not affiliated with the SUMC. This can be inferred by the information provided in the Project Description; therefore, no changes will be made to the Draft EIR. Other than this one use, the terms “Stanford University Medical Center uses” or “SUMC uses” are not applied in the Draft EIR.

*The commentor also states that the proposed changes in Policy L-8 of the Comprehensive Plan are too broad.* All land uses proposed under the SUMC Project are provided in Section 2, Project Description, of the Draft EIR. The change to Policy L-8 is a clarification that this policy was not intended to limit growth of hospital, clinic, and research uses. The City planning staff has concluded this based on review of the legislative history.

Considering the changes made in Sections 3 and 6 of this document, the SUMC Project would result in significant and unavoidable impacts related to traffic generation, emission of criteria air pollutants, construction noise, ambulance noise, demolition of the historical 1959 Hospital Building complex, and removal of Protected Trees. The City may approve the proposed changes to Policy L-8, as well as all components of the SUMC Project, even with its significant and unavoidable impacts. As indicated in pages 1-5 and 1-6 of the Draft EIR, if the City of Palo Alto decides to approve the SUMC Project, and if the SUMC Project would result in significant impacts that cannot be mitigated to less-than-significant levels, then the City must indicate that any such unavoidable significant impacts are acceptable due to overriding considerations as described in CEQA Guidelines Section

15093. This is known as a “Statement of Overriding Considerations.” In preparing this statement, CEQA requires the City to balance the benefits of the SUMC Project against its unavoidable environmental effects. If the City finds that the benefits of the SUMC Project being considered outweigh the project’s unavoidable adverse environmental effects, then the adverse environmental effects may be considered acceptable (CEQA Guidelines Section 15093).

- 35.12 *The commentor states that the scoping documents did not address the increase in impact, particularly the impacts associated with right-sizing. This EIR, including the Draft EIR, addresses environmental impacts of the SUMC Project in its entirety, as defined in Section 2 of the Draft EIR. As described on page 2-44 of the Draft EIR, right-sizing refers to increasing floor area per inpatient bed or service without substantially increasing the number of patients or employees. Right-sizing is a trend that many hospitals undergo to conform to modern healthcare standards. Approximately 34 percent of the building program would be attributable to right-sizing, and 66 percent would be attributable to increased operations. This EIR addresses impacts of increased space due to both right-sizing and increased operations.*

As indicated in Section 3.13, Population and housing, of the Draft EIR, there would be no significant impacts related to direct or indirect population growth. The Draft EIR does identify an adverse impact on the City’s jobs to employed residents ratio, but this impact is not labeled as a significant impact under CEQA.

*The commentor also asks that the City Council require its approval for changes in medical procedures that would result in more intensive uses. From a land use perspective, hospital uses are considered as a whole. The City does not weigh in on the individual procedures performed inside the hospitals.*

- 35.13 *The commentor questions why the SUMC Project would need additional height and square footage. This comment pertains to the design of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project’s compliance with CEQA. Please refer to Master Response 10 for a discussion of SUMC Project design and other non-CEQA issues.*

The following is a description of the SHC Hospital tower height, as explained by the SUMC Project sponsors. The Building Code itself does not specify the height or square footage of hospitals; these details are dictated by the hospital program envisioned by the SUMC Project sponsors in order to meet the future demands. The SHC Hospital building would need to be built vertically for efficiency purposes, thereby requiring the building heights as proposed. The upright alignment of the new SHC Hospital building would allow for vertical circulation in the form of elevators, rather than requiring patients to move through lengthy public corridors. The immediate adjacency between the floors would organize patient movement privately and safely in the most efficient way possible through



vertical transportation.<sup>1</sup> In addition, Building Code ventilation and structural requirements result in a greater floor-to-floor height for a hospital than a commercial office building. The typical floor-to-floor height of an office building is 10-12 feet, while in a modern hospital it is 16-20 feet.<sup>2</sup> As such, the height of the SHC Hospital building is necessary for the functionality of the hospital.

As outlined on page 3.3-39, Mitigation Measure VQ-2.1 would be implemented to reduce the impacts to visual character and quality at the SUMC Sites. This mitigation measure would require the SUMC Project sponsors to adhere to the City's Architectural Review process and would reduce the impacts to less than significant.

In addition to the height increases, the SUMC Project would require an expansion of square footage. As explained on page 2-22 in Section 2, Project Description of the Draft EIR, the SUMC Project requires additional floor area over what is currently at the SUMC Sites due to existing spatial constraints and the growing demand for outpatient services. Current spatial constraints at the SHC and LPCH restrict the SUMC's ability to serve new patients and expansions needed to provide the optimal level of care for existing patients. At both hospitals, the number of patients turned away will increase unless additional patient beds are provided. In addition, the hospitals need to expand because the American Academy of Healthcare Architects recommends that all beds be in private rooms, which require right-sizing under the SUMC Project. With regards to outpatient services, in order to accommodate the growing demand, the hospitals propose to construct new and replacement clinics on the Main SUMC Site, as well as renovate the existing Hoover Pavilion building and construct a new building for use as clinics and medical offices.

*The commentor also requests open space dedication as a way to mitigate the height and bulk increases.* As stated on page 3.14-9 of the Draft EIR, Public Services, the SUMC Project proposes to expand the existing open space at the SUMC Sites. The expanded open spaces would include walkways, open plazas, and landscaped areas for employees, patients, and visitors. The SUMC Project would also incorporate new sections of open spaces and small grass fields, increasing pervious surfaces by 23 percent over existing conditions. Several of these proposed open spaces would be visible from public areas, such as the landscaped gateway at the corner of Welch Road/Quarry Road, the LPCH/Shopping Center connection along Welch Road, the Hoover Pavilion entry lawn, and the refurbished Pasteur Mall. In addition, the SUMC Project sponsors would provide access to Stanford University's fields for SUMC employees. This access would offset the potential deterioration new SUMC employees could cause on City parks. Therefore, even

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<sup>1</sup> Mark Tortorich, Vice President of Facilities Planning, Design and Construction for Stanford University Medical Center and Lucile Packard Children's Hospital, City Council Hearing, June 14, 2010.

<sup>2</sup> Stanford University Medical Center, "Guide to Key Community Issues for the Stanford University Medical Center Renewal Project," June 2010, accessed on October 14, 2010 at: [http://www.stanfordpackard.org/sites/default/files/pdfs/report\\_0610.pdf](http://www.stanfordpackard.org/sites/default/files/pdfs/report_0610.pdf)

though the SUMC Project would increase height and bulk at the SUMC Sites, additional open space would be included and access to other open space areas would be available.

Similarly, there is no need for a density transfer from other Stanford land. The land west of I-280 does not have entitlements for building square footage that could be transferred to the SUMC Sites, even if such a transfer were desirable.

35.14 *The comment expresses a preference to preserve the façade of the Stone Building complex.* At this time, the SUMC Project sponsors do not anticipate using portions of the Stone Building complex façade in the design of the new buildings. If any part of the Stone Building complex were retained, it would have to be physically separated from the remaining hospital buildings in order to comply with the requirements of Office of Statewide Health Planning and Development (OSHPD). This would necessitate demolition of the 1973 Core Expansion Building and separation of utility systems. In addition, any portion of the Stone Building complex that would remain in place would need to undergo substantial seismic retrofit work because the buildings in the Stone Building complex do not meet current standards for fire separations, air exchange, and ventilation. Upgrading these systems would require duct work that would reduce available interior space, diminishing the functionality of the interior space.<sup>3</sup>

In addition to the functional obstacles, preservation of a portion of the Stone Building complex would not substantially reduce the effect on historic resources caused by demolishing the rest of the building complex. CEQA Guidelines Section 15064.5(b)(2) states that the significance of a historical resources is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register of Historic Resources (CRHR). The primary façade of the Stone Building complex faces the main entry and its fountain plaza on Pasteur Drive. Three sections of the Stone Building Complex are visible from the Pasteur Drive entry: the Boswell, Edwards, and West Pavilion buildings. This represents about 1,050 linear feet of façade and the complex as a whole has approximately 3,000 linear feet of unobstructed façade. Even if one of the buildings facing the front entry, the West Pavilion, were preserved and re-used, the Stone Building complex would no longer retain sufficient physical characteristics to justify its eligibility for the CRHR.

Re-use of the West Pavilion would preserve approximately 560 linear feet (18.6 percent) of the total façade for the Stone Building complex façade, only 325 feet (10.8 percent) of which would be visible from Pasteur Drive. While retaining the West Pavilion would preserve some of the architectural features of the building, the scale and proportion would be severely compromised and, at less than 20 percent of the original complex and less than

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<sup>3</sup> Barbara Schussman, Bingham McCutchen LLP, Memorandum: "Historic Preservation Alternative," November 12, 2008.

a third of the front façade, the surviving element would not retain enough integrity to qualify as a historic resource. In addition, the West Pavilion displays some incompatible rooftop additions and lacks the interior courtyard that is one of the essential features of the Stone Building complex.<sup>4</sup> Accordingly, preservation of the West Pavilion would not avoid or substantially lessen the significant effects of the SUMC Project and, therefore, it is not analyzed in the Draft EIR.

Mitigation Measures CR-1.2 through CR-1.4, as presented on pages 3.8-22 through 3.8-23 of the Draft EIR, would be required as part of the SUMC Project. Mitigation Measure CR-1.2 would require HABS documentation with site-specific history, accurate mapping of all buildings, architecture descriptions, and photographic documentation. As included in Mitigation Measure CR-1.3, all written and photographic documentation regarding the Stone Building complex would be submitted to applicable agencies. In addition, Mitigation Measure CR-1.4 requires the SUMC Project sponsors to install interpretive displays within the SUMC Sites that provide information to visitors and residents regarding the history of the Stone Building complex. The displays, signs, and/or plaques would be installed in highly visible areas. Therefore, although the SUMC Project would require the demolition of the Stone Building complex, these mitigation measures would lessen the significant and unavoidable impacts associated with the loss of this historic structure.

35.15 *The commentor requests a review of the full build-out of the SUMC Project and a review of forgoing development or No Project Alternatives.* A discussion and analysis of the SUMC Project full build-out is included in Section 3 of the Draft EIR. Please refer to Sections 3.2 through 3.15 for a complete analysis of the anticipated SUMC Project impacts associated with full project buildout. In addition, Section 5 of the Draft EIR, Alternatives, provides an analysis of seven alternatives, including two No Project and two Reduced Intensity Alternatives. In addition, please refer to Master Response 8 for a discussion of the full range of alternatives analyzed in the Draft EIR.

35.16 *The commentor describes an approach to an analysis of cumulative impacts.* Each cumulative analysis throughout Section 3, Environmental Analysis, of the Draft EIR provides the definition of the geographic context of each resource being addressed in the cumulative scenario. Per CEQA Guidelines Section 15130(b)(3), lead agencies should define the geographic scope (or context) of the area being affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used. The geographic contexts for this analysis have been tailored to the location of the resources or populations that would experience a cumulative impact from the SUMC Project as well as other foreseeable development. For example, for cumulative emissions of criteria air pollutants, the geographic context includes the entire, nine-county San Francisco Bay Area Air Basin. For cumulative impacts on archaeological resources, the geographic context includes the

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<sup>4</sup> Stanford University Medical Center, correspondence with PBS&J, October 12, 2010.

300-foot archaeologically sensitive zone along San Francisquito Creek, which comprises a geographically distinct cluster of resources. This approach is appropriate under CEQA.

Section 4.3, Growth-Inducing Impacts, of the Draft EIR addresses the ways in which the SUMC Project could foster economic growth, either directly or indirectly, in the surrounding environment. As explained on page 4-3 of the Draft EIR, in accordance with the CEQA Guidelines Section 15126.2, this discussion of growth inducement is not intended to characterize growth induced by the SUMC Project as necessarily beneficial, detrimental, or of little significance to the environment. The growth inducement discussion is provided for informational purposes so that the public and local decision-makers have an appreciation of the potential long-term growth implications of the SUMC Project. As such, no mitigation measures for increased economic growth are warranted.

35.17 *The commentor requests the inclusion of all future projects within the City of Palo Alto and neighboring jurisdictions in the cumulative analysis of the SUMC Project. Per CEQA Guidelines Section 15355, cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. According to CEQA Guidelines Section 15130(b)(3), “Lead agencies should define the geographic scope [or context] of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.” The geographic context is typically tailored to the nature of the environmental issue/impact and resource or population being affected. Each discussion of cumulative impacts in Sections 3.2 through 3.15 of the Draft EIR includes an explanation of the relevant geographic context. Depending on the topic, the geographic context could be localized or regional. For example, the cumulative context for air quality would include the larger regional air basin.*

As stated on page 3.1-2 of the Draft EIR, CEQA Guidelines Section 15130(b)(A) requires that an EIR’s analysis of cumulative impacts should be based on either a list of past, present, and probable future projects producing related impacts or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document. The cumulative projects analyzed in the Draft EIR rely on both a list of projects within Palo Alto and regional growth projections. The list of foreseeable projects within the City of Palo Alto was provided by City staff and included in the analysis (see Appendix B to the Draft EIR). Growth projections applied to the cumulative analysis in the Draft EIR and include forecasted growth in adjacent cities other than Palo Alto. Growth projections also include growth allowed by the Stanford University 2000 Community Plan and General Use Permit (CP/GUP), the Association of Bay Area Governments (ABAG) Projections 2005, the Bay Area Air Quality Management District’s (BAAQMD) air quality projections, the City of Palo Alto’s Travel Demand Forecasting Model, and projections of various public service and utility providers for the SUMC Project.

Please refer to Master Response 3 for a discussion on background growth and cumulative traffic impacts.

- 35.18 *The commentor states that the Draft EIR only mentions Marguerite shuttles, Alameda-Contra Costa Transit District (AC Transit), U Line, and Santa Clara Valley Transportation Authority (VTA) Community buses, and does not account for all shuttles in the area. Additionally, the commentor states transportation mitigations should expand transit benefits.* The Transportation Impact Analysis evaluated all public transit routes that serve the area in proximity to the SUMC Project including regular VTA and SamTrans service. It also included Menlo Park and Palo Alto shuttles and contained mitigation measures to improve those services. Consideration was given to provide a Clipper transit pass to all SUMC employees which allows travel on most transit routes, but it was determined that GO Passes provide a more cost effective means of traffic mitigation, and combined with other measures mitigate all SUMC Project intersection impacts. The SUMC transportation demand management (TDM) Program includes a guaranteed ride home regardless of shift. Please refer to Master Response 2 for a discussion of other TDM measures.
- 35.19 *The commentor states that the traffic impact numbers should reflect the fact that part-time employees usually generate as many trips as full time.* The Transportation Impact Analysis for the SUMC Project based trip generation on project-specific data. The amount of traffic generated by the existing facilities was measured and future traffic volumes were expanded based on the expansion of the facilities. Existing part-time employee trip generating characteristics were captured in the existing data collection and were expanded in relation to the SUMC Project.
- 35.20 *The commentor requests that the impact of patient trips be expanded.* SUMC Project trip generation was based on project-specific data. All existing patient trip generation was captured in the data collection and these values were expanded to reflect the future patient traffic volumes. The growth in patient traffic has been accurately represented in the Transportation Impact Analysis.
- 35.21 *The commentor requests clarification on which parking would be “Performance Based Parking,” as shown on page 2-25 and requests that reduced spaces be placed in a landscape reserve and not eliminated.* As described in Master Response 11, the SUMC Project would conflict with existing development restrictions in the existing Public Facilities (PF zoning district). Therefore, the project approval would include creation of a new zoning district. The SUMC Project sponsors have proposed "performance-based parking" as the parking requirement in the new district, rather than a parking requirement based on square footage or number of housing units, as traditionally occurs in zoning regulations. Parking would be provided to meet projected needs, with consideration given to the potential for reduced parking demand due to the proximity of the Palo Alto Intermodal Transit Station (PAITS) and demonstrated effective TDM programs. The

performance-based parking requirements would be established by the applicable conditional use permit. The SUMC Project sponsors have proposed parking spaces for employees, patients, and visitors, with consideration to the possible utilization of PAITS and other TDM programs.

35.22 *The commentor asks that full funding be required for all traffic mitigations, including those listed in Table 3.4-18 and on page 3.4-62. Please refer to Master Response 6 for fair share calculations.*

35.23 *The commentor states that any improvements to ambulance service should be paid in full by the project and modifications should be made to the El Camino Real/Sand Hill Road/Alma Street intersection to allow travel across El Camino Real for emergency access. The information provided on page 2-49 of the Draft EIR states that the SUMC Project sponsors estimate that ambulance trips would increase from the current total of 8,331 trips (23 per day) to 11,995 trips (33 per day) by 2015 and 14,244 trips (39 per day) by full occupancy of the hospitals in 2025. Figure 3.7-6 shows existing ambulance routes and Figure 3.7-7 shows ambulance routes with the SUMC Project. Ambulance trips from San Mateo County traveling down I-280 would use Sand Hill Road today and with the SUMC Project to access the emergency room. Ambulance trips from San Mateo County traveling on El Camino Real or US 101 would use Quarry Road today and Sand Hill Road with the SUMC Project. The roadway network surrounding the SUMC is a grid network which allows ambulances several options to access the emergency room if one specific route is blocked. The proposed ambulance routes shown on Figure 3.7-9 of the Draft EIR are the preferred routes which will be used most of the time. However, variations on these routes are available and will be used as necessary.*

The SUMC Project is required by Mitigation Measure TR-9.1 to pay a fair share contribution to the installation of Opticom traffic signal sensors at all intersections significantly impacted by the project even if through other mitigation measures these intersections are fully mitigated. There is not a nexus to expand this mitigation measure to other intersections or to require more than a “fair share” contribution from the SUMC Project sponsors. The traffic volumes for El Camino Real/Sand Hill Road/Alma Street intersection reflect the expected 2025 condition without the project and the 2025 condition with the project. The City of Palo Alto has designed the El Camino Real/Sand Hill Road/Alma Street intersection to prohibit east/west travel to/from Sand Hill Road and Alma Street. An ambulance from North Palo Alto to the emergency room could either turn right at Alma Street and travel up El Camino Real and make a U-turn at Cambridge Avenue, a right turn onto Sand Hill Road, and a left on Durand to reach the emergency room or alternatively turn left on Alma Street, travel through the University Avenue/Alma Street interchange, turn right onto El Camino Real, turn left onto Sand Hill Road, and turn left onto Durand to reach the emergency room.



35.24 *The commentor requests that US 101 from Marsh Road to Woodside Road be included in the analysis and included in Table 3.4-23. The following freeway analysis, included in Table 4-5, below, indicates that the project trips would be less than one percent of the segment capacity and would not significantly impact the US 101 segment.*

**Table 4-5  
Freeway Analysis Under the SUMC Project**

US 101 Segment	Direction	# of Mixed Lanes	Peak Hour	Total Capacity	Total Project Trips	Project Trips with HOV Adjusted	Percent Capacity Added with HOV Adjusted
Marsh Road to Woodside Road	NB	4	AM	9,200	21	17	0.18 percent
			PM	9,200	61	49	0.53 percent
Woodside Road to Marsh Road	SB	3	AM	6,900	65	49	0.71 percent
			PM	6,900	23	17	0.33 percent

Source: AECOM Transportation, 2010.

35.25 *The commentor requests the Draft EIR to include an impact analysis of the increase in employees under the SUMC Project in relation to community services, schools, and population.* Section 3.14 of the Draft EIR, Public Services, addresses the potential environmental effects of the SUMC Project on public services, including police and fire protection, schools, and parks and recreational services. As discussed in the Public Services section, an increase in demand for public services due to employment and/or population increases could lead to potentially significant environmental impacts only if construction or expansion of a new facility would be triggered and the construction or operation of the new facility might adversely affect the physical environment. Therefore, increases in public service demand alone do not constitute a significant environmental effect. As determined in the impact analysis in the Draft EIR, employment increases under the SUMC Project would result in less-than-significant impacts on public services.

Section 3.13 of the Draft EIR, Population and Housing, documents current and forecasted population, housing, and employment statistics in the Bay Area region and City of Palo Alto, and estimates how the SUMC Project would fit within or exceed the current and forecasted statistics. As concluded in this section, the SUMC Project would result in less-than-significant impacts related to population and housing.

35.26 *The commentor disagrees with the impact conclusions in the Population and Housing Section of the Draft EIR.* Impact PH-1 in Section 3.13, Population and Housing, of the Draft EIR indicates that the SUMC Project would result in indirect additional housing demand within the region. However, as shown in Table 3.13-8, the additional housing demand would be within projected housing growth for each community within the region. As such, impacts would be less than significant. The data in Table 3.13-8 are based on

historical evidence, comprised of SUMC's data on the residential distribution of their employees. As indicated on page 3.13-11 of the Draft EIR, the distribution of where SUMC Project employees would live is based on existing SUMC employee zip code data provided by the SUMC Project sponsors (see Appendix L of the Draft EIR).<sup>5</sup> Per CEQA Guidelines Section 15126.4(3), mitigation measures are not required for effects which are not found to be significant. Also, fiscal implications of the indirect housing demand are not environmental impacts that require discussion under CEQA. Please see Master Response 10 for a discussion of non-CEQA issues.

- 35.27 *The commentor expresses support for the construction of 490 housing units to be dedicated to SUMC Project employees. It is important to note that the SUMC Project does not propose the construction of these housing units. Rather, these housing units are evaluated as an alternative to the SUMC Project, the Village Concept Alternative. Please refer to Master Response 9 regarding the merits of the SUMC Project and its alternatives.*
- 35.28 *The commentor requests that the SUMC Project sponsors locate land near the LPCH to meet the needs of the Ronald McDonald House. The SUMC Project does not include additions to or expansions of the Ronald McDonald House, which provides temporary housing for families of children needing medical care at little or no cost. The Ronald McDonald House is a not-for-profit entity that is separate from the SUMC Project. This comment does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please see Master Response 10 for a description of non-CEQA issues.*
- 35.29 *The commentor states that meeting the housing need and Palo Alto Unified School District needs would make it easier to recruit qualified staff at the SUMC. This comment does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please see Master Response 10 for a discussion of non-CEQA issues.*
- 35.30 *The commentor states that the Draft EIR is insufficient because it does not suggest viable solutions to the significant and unavoidable impacts identified for the SUMC Project. The Draft EIR identifies feasible mitigation measures to reduce the significant impacts of the SUMC Project. Some of the impacts can be reduced to less than significant with the implementation of mitigation measures; however, several impacts cannot be reduced to a less-than-significant level with feasible mitigation. Refer to Table S-4 in the Draft EIR for a summary of the SUMC Project impacts and the proposed mitigation measures.*

The Draft EIR describes and analyzes the SUMC Project as proposed by the SUMC Project sponsors in the SUMC Project Application from 2007 and last amended in March 2010. The main analysis in the Draft EIR, as described in Section 3, does not propose

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<sup>5</sup> Stanford University Medical Center, Stanford University Medical Center Facilities Renewal and Replacement Project Application, August 2007, as amended; Tab 5, Figure 5-5.

alternative site plans that could reduce the significant and unavoidable impacts. However, per CEQA Guidelines Section 15126.6, an EIR must include a range of feasible alternatives that obtains most of the project objectives and reduces the impacts of the proposed project. The Draft EIR addresses a reasonable range of SUMC Project alternatives in Section 5, Alternatives, which analyzes seven different alternatives to the SUMC Project that seek to avoid or lessen the severity of the significant and unavoidable impacts identified in the analysis of the SUMC Project.

The Palo Alto City Council must ultimately certify that it has reviewed and considered the information in the EIR and that the EIR has been completed in conformity with CEQA. Following certification, it is at the discretion of the City Council whether to deny the SUMC Project, or to approve the SUMC Project as proposed, or portions of the proposed SUMC Project alternatives that would mitigate or avoid significant environmental impacts, while rejecting the alternatives that are deemed to be infeasible. Nonetheless, if it is determined that any impacts would be significant and unavoidable, a Statement of Overriding Considerations would be prepared. Please refer to Master Response 11 for a description of the SUMC Project review process for more details.

- 35.31 *The commentor requests that all mitigation measures have specific deadlines.* Deadlines for the mitigation measures required under the SUMC Project would be outlined in the MMRP. Please refer to Response 35.4 for more specifics regarding the MMRP.

*for minutes of mtg. 6.24.10  
David  
PTC mtg*

Letter 36

PTC mtg. 6/24/10

Michael Griffin, 344 Poe Street, Palo Alto

I have several questions concerning the adequacy of the Medical Center DEIR, relating to traffic impacts:

1) While the DEIR acknowledges Stanford knows the home location of all it's employees by zip code, there appears to be no attempt to correlate that data with the development of the project's TDM scheme. The TDM proposal is Caltrain centric, which will help employees living in a city served by Caltrain. Why then is there not a similar solution for east bay employees, to encourage and financially assist them in riding BART, and then U Line and Dumbarton Express busses?

2) Why is there no analysis on the probability that Caltrain can and will have the wherewithal to deliver sufficient new capacity making the GoPass solution a valid one, producing the mitigations promised in the DEIR? Will there in fact even BE a Caltrain when we need it? And, considering the uncertainty, why then is there no discussion of a back-up plan should Caltrain, for whatever reason, be unable to perform its role as the primary service provider for making a reality of the TDM scheme, with it's reliance on the GoPass?

3) The Trip Distribution map on pg 3.4-48 shows that the vast majority of regional traffic attempts to access the Stanford projects from the East, basically exiting off 101 and then sifting westward through the neighborhoods until finally reaching Stanford. Why doesn't the DEIR analyze methods of incentivizing motorists to access Stanford off 280 in the West? Why was there no discussion of encouraging this western access, thereby avoiding traffic impacts throughout Palo Alto between 101 and El

36.3  
Con't  
Camino Real? Why wouldn't off site park & ride lots at SJLAC and behind the Berry Farm be of benefit in accomplishing this goal?

36.4  
4) Why is there no discussion of No New Net Trips? No New Net Trips is a requirement of Stanford's Santa Clara County General Use Permit. Why doesn't the DEIR discuss the applicability of this County requirement to the SUMC?

**36. Michael Griffin (letter dated June 24, 2010)**

- 36.1 *The commentor states that while the SUMC Project sponsors know the zip code location of their employees, there is no attempt to correlate that data with the development of the project's transportation demand management (TDM) scheme. In addition, the enhanced TDM program is heavily weighted to Caltrain because the majority of the SUMC employees live on the peninsula. Currently, the SUMC has approximately 10,000 employees of which 6,200 live in cities on the peninsula served by Caltrain. However, part of the enhanced TDM program also serves East Bay employees. As part of the enhanced TDM program, the SUMC Project sponsors would be required to use reasonable efforts to lease 75 spaces from AC Transit at the Ardenwood park-and-ride lot or an equivalent lot. The employees from the East Bay would park their vehicles at Ardenwood and ride the U-Line to the SUMC Project sites. Employees could also catch the U-Line at other stops in the East Bay such as at the Fremont/Centerville Amtrak Station or the Fremont BART Station; however, parking would not be provided by SUMC at these locations. Please refer to Master Response 1 for a more detailed discussion on the effectiveness of the GO Pass.*
- 36.2 *The commentor states that there is no analysis of the probability that Caltrain can and will have the means to deliver the capacity necessary to make the GO Pass a valid solution. The commentor also states Caltrain may not even exist and given this uncertainty, there should be a backup plan to the GO Pass. Please refer to Master Response 1 regarding the ability of Caltrain to provide the capacity for the GO Pass TDM measure and the viability of Caltrain.*
- 36.3 *The commentor is concerned about increased traffic from US 101 and notes that the Draft EIR should find ways to reduce impacts by providing incentives to use I-280, such as providing park-and-ride lots at SLAC and behind the Berry Farm. Please refer to Master Response 2 for a discussion of remote parking and other mitigation.*
- 36.4 *The commentor asks why the Draft EIR does not mention Stanford University's goal of No New Net Trips, and its applicability to the SUMC Project. Please refer to Master Response 2 for a discussion of imposing a No Net New Trips requirement. Also, per CEQA Guidelines Section 15126.4(4)(B), mitigation measures must be roughly proportional to the impacts of the project. The standards of significance applied in the Transportation Impact Analysis are listed on pages 3.4-30 through 3.4-32 of this EIR. Based on these criteria, there could be some increase in traffic that would not result in a significant impact. As such, requiring no net new trips as a mitigation measure would be beyond the requirements of CEQA. Also, see Staff-Initiated Change 2, which provides the revised analysis of level of service (LOS) impacts, and the updated mitigation measures for significant LOS impacts. The mitigation measures identified in Staff-Initiated Change 2 are appropriate.*







**37. Michael Griffin (letter dated July 12, 2010)**

- 37.1 *The commentor states that while SUMC Project sponsor knows the zip code location of its employees, there is no attempt to correlate that data with the development of the project's transportation demand management (TDM) scheme. Please see Response 36.1. In addition, please refer to Master Response 1 for a more detailed discussion on the effectiveness of the GO Pass.*
- 37.2 *The commentor notes that there is no analysis of the probability that Caltrain can and will have the means to deliver the capacity necessary to make the GO Pass a valid solution. Caltrain may not even exist. Please see Response 36.2. In addition, please refer to Master Response 1 regarding the ability of Caltrain to provide the capacity for the GO Pass TDM measure and the viability of Caltrain.*
- 37.3 *The commentor is concerned about increased traffic from US 101 and notes that the Draft EIR should find ways to reduce impacts by providing incentives to those who use I-280 and the park-and-ride lots at SLAC and behind Berry Farm. Please see Response 36.3. In addition, please refer to Master Response 2 for a discussion of remote parking and other mitigation.*
- 37.4 *The commentor questions why the remote parking solution is considered an alternative to the GO Pass rather than as an adjunct to it, especially given the uncertainty of Caltrain in the future. Please refer to Master Response 2 for a discussion of remote parking.*
- 37.5 *The commentor asks why the Draft EIR does not mention Stanford's goal of No New Net Trips, and its applicability to the SUMC Project. Please see Response 36.4. In addition, please refer to Master Response 2 for a discussion of imposing a No Net New Trips requirement. Also, see Staff-Initiated Change 2, which provides the revised analysis of level of service (LOS) impacts, and the updated mitigation measures for significant LOS impacts.*

**From:** Ken Hake [khhake@sbcglobal.net]  
**Sent:** Wednesday, July 21, 2010 2:02 PM  
**To:** Stanford Project  
**Cc:** khake@pausd.org; kemeth hake@hp.com; lorimer@meer.net; david@solnick.net; christina.raas@earthlink.net; pvdolkas@jps.net; katrinacurrier@gmail.com; mairodel@earthlink.net; estherze@gmail.com; Council, City  
**Subject:** Stanford Expansion Project - Traffic in Downtown North

To Steven Turner - Department of Planning and Community Environment,

For the record: I am a homeowner and resident living at 575 Everett Ave in the Downtown North neighborhood. I have three children who play outside everyday in front of our house. I bike to work most days and am a fervent supporter of having walkable, bikable, livable neighborhoods. I have been watching the progress of the discussions with Stanford and am concerned about the impact to traffic for the Downtown North neighborhood. I am deeply concerned that the project will increase the amount of commuter traffic running through our neighborhood. Historically, our neighborhood has fought hard to decrease the amount of traffic in our neighborhood. A few years back, we were successful in getting some traffic mitigating devices in the neighborhood and this has helped. I don't want to see us take a step backward in this effort. Do we have any projections as part of the impact report that show what will happen on the residential roads in our neighborhood. I read recently that the intersection at Middlefield and Willow road will see a dramatic increase. I can imagine that there is a high probability that our neighborhood will also see an increase. If so, this is not an acceptable outcome.

38.1

What are the options for implementing stronger traffic calming devices in the neighborhood to make sure we aren't adversely affected. Right now we have "No Turn" signs during peak periods. I continually see cars ignore the signs and we don't have the police resources to adequately monitor this. I have called the department a few times on this point and they will send an officer out once in a while, but can't do it everyday. Is it possible to block off the entry points for Everett & Hawthorne in some workable traffic calming configuration? Similar to what they have done in the College Terrace and Evergreen Park neighborhoods?

38.2

Please let me know what I can do to ensure there is no increase to the traffic in our neighborhood.

Regards,

Ken Hake  
575 Everett Ave  
Palo Alto, CA 94301

**38. Ken Hake (letter dated July 21, 2010)**

- 38.1 *The commentor states that he is a homeowner and resident concerned about the impact to traffic for the Downtown North neighborhood as a result of the SUMC Project. The Transportation Impact Analysis for the Draft EIR considered the two primary streets in Downtown North: Everett Avenue and Hawthorne Avenue. Draft EIR Table 3.4-20 on page 3.4-71 shows the results of that analysis. As shown in the table, both Hawthorne Avenue and Everett Avenue are expected to see an increase in traffic as a result of the SUMC Project of 127 vehicle trips per day (before implementation of mitigation). The City of Palo Alto uses the TIRE index to determine if an increase in traffic on a residential street results in a significant impact. The increase projected for Everett Avenue and Hawthorne Avenue would not result in a significant impact. The SUMC Project would also add traffic to the Willow Road/Middlefield Road intersection. However, the combination of traffic-adaptive signal technology, bicycle and pedestrian tunnels, and enhanced TDM measures (Mitigation Measures TR2.1, TR-2.2, and TR-2.3, respectively) would reduce impacts at this location to a less-than-significant level.*
- 38.2 *The commentor questions what options are available for implementing stronger traffic calming devices. As noted in Response 38.1, while the SUMC Project would add traffic to both Everett Avenue and Hawthorne Avenue, the volume is not high enough to cause a significant traffic impact. Therefore, no requirement for the SUMC Project to install additional traffic calming devices would be warranted.*

Letter 39

David Haray  
622 Loma Verde Ave.  
Palo Alto, CA 94306



Mayor and fellow Council Members,

I am David Haray and live on Loma Verde Avenue. I work for the medical center, but I do not speak for the medical center. I am here as a Palo Alto resident.

I believe I have the best of both worlds, namely to work at a place that inspires and to retire every evening to a community by which I am able to renew myself for the next day's challenges.

I know this evening focuses on DEIR chapters relating to noise, geology, soils, & seismicity, and other environmental impacts. As you stated Mayor Burt in your State-of-the-City Address, "Stanford and the city share in a vision of sustainability and we have more in common than that which separates."

I am confident that, together, the medical centers and the city will find acceptable solutions to manage their way through.

I have been encouraged by the collaboration that is in evidence, and the positive comments made by the city manager and the planning staff.

I am also encouraged by the number of positive comments I hear from members of the City Council.

I am here to ask for your full support of the Stanford renewal project.

I agree with Council Member Holman on needing to have the necessary meetings so as to make informed decisions.

As you may have seen in a recent Palo Alto Weekly story, back in 1956 architect Durell Stone even grew frustrated in the protracted negotiations.

As you again stated Mayor Burt in your city address: "I am determined that we will move this project forward expeditiously this year through review by our relevant boards and commissions and finally the city council."

I ask all of you not to waiver. Conduct the necessary meetings. Do what is necessary to be informed, but to bring this to a vote by year end, so we can begin at last to build our shared vision. Thank you.

**39. David Haray (letter dated July 19, 2010)**

39.1 *The commentor expresses support for the SUMC Project.* This comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of the project merits in the CEQA process.

*The commentor also concurs that additional meetings are necessary to make informed decisions.* Please refer to Master Response 11 for a detailed description of the City's review process and the next steps in the EIR review process.

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July 26, 2010

Steven Turner  
Advance Planning Manager  
City of Palo Alto  
Planning and Community Environment Department  
250 Hamilton Avenue  
Palo Alto, CA 94301

Re: Stanford Hospital DEIR

Dear Mr. Turner:

The DEIR on Stanford Hospital inadequately addresses the historical significance of the existing building and its architect, Edward Durell Stone. These flaws undermine its conclusion that the building is not significant, and cause it to fail to comply with CEQA. The draft report as written would lead to the unnecessary loss of a tremendously significant historic resource. I am writing this letter *pro bono* as a historian; I represent only myself.

In fact, Stanford Hospital is an excellent and representative example of mid-century modern architecture worthy of preservation. It draws on the historical precedents of Stanford University, reinterpreted by an important aspect of Modern architecture which is today, unfortunately, endangered. Edward Durell Stone is a major and distinctive figure in Modern architecture, but his buildings are today threatened; locally his Santa Clara library has been demolished and his Palo Alto libraries have been in jeopardy; his museum for Huntington Hartford on Columbus Circle in New York City has been largely lost through remodeling. Stanford University holds in trust an important example of his work and local culture, and it must be preserved.

I strongly contest the DEIR's statement that demolition of the Stone building is unavoidable. I concur with the alternative assessments by city staff and by Architectural Resources Group, included in the DEIR; that the building is significant and that it can be fruitfully reused for other activities.

I speak from thirty years of experience researching and landmarking architecture of the recent past. I am very familiar professionally with the challenges of identifying and evaluating recent past resources. I have successfully qualified

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four buildings under fifty years of age (thereby requiring proof of Exceptional Significance) for the National Register of Historic Places. One of these buildings was Edward Durell Stone's 1958 Stuart Pharmaceutical Factory in Pasadena, so I am very familiar with his work and the importance of his Stanford Hospital design.

I am an architect and author of eighteen architectural history books, most of them on twentieth century architecture in California and the West. Since 1986 I have also been the architecture critic for the *San Jose Mercury News*. My resume is attached.

Specifically, the inadequacies of the report include the following:

1. **Outdated methodology:** The DEIR's conclusion relies on a SUMC report (Jones, *Cultural Resources and the Stanford University Medical Facilities Renewal and Replacement Project*, 2007) which uses outdated and inadequate research methodologies. For example, by stating that the Stone building "is out of keeping with the Modern period," the report exposes a limited and biased view of Modernism. In fact, Stone's Neo-Formalism (of which this is an excellent example) is one extremely important facet of the history of Modernism. For another example, by stating that the Stone building "was out of place in this suburban setting," the report is simply wrong. It fails to examine the character of suburban design, especially in the Palo Alto area, which contributed many significant buildings to the history of suburban architecture. The hospital is not properly assessed as a "Palace Hospital" as the report suggests, but as a large civic monument in a suburban setting. In this perspective, Stone's use of scale, textures, landscaping, color, and courtyards skillfully blends a large building into the suburban setting. These are but two examples of the building's significance to architectural history and Stone's career which the DEIR ignores.

2. **Inadequate assessment of Stone's architectural concepts:** Contrary to the DEIR's conclusions, Stanford Hospital is both representative of Stone's conceptual contributions to Modern architecture, and a notable expression of how those concepts could be adapted and applied in new ways to the specific requirements of a challenging program and unique site. The design typically embodies many of Stone's contributions to Modernism, including his expressive use of concrete, his respect for the scale and historic precedent of the surrounding context, his integral use of ornamental features (including the textured concrete walls and open filigree screens), and his integration of nature in the use of courtyards, landscaping, and hanging planters. But contrary to the report's conclusion, the building is indeed a "formative design." It uses and adapts these elements, showing the flexibility of Stone's vocabulary. This DEIR fails to properly assess the style of the hospital, its place in the development of Modern architecture (especially in California and the San Francisco peninsula), the innovations of its design, and its place in Stone's work.

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Thus its conclusion that the building should be demolished is unsubstantiated. In my opinion it would be eligible for the California Register of Historical Resources, as well as the City of Palo Alto historic inventory; I base this on my experience with similar mid-century Modern architecture.

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3. **Inadequate assessment of the landscape design:** The contribution of landscape architect Thomas Church is not sufficiently analyzed. The courtyard landscaping, though somewhat altered, still expresses the original architectural and spatial intent of the design, and is easily restored. Even more important, however, is the remarkable integration of landscaping and architecture into a seamless spatial unity. The bulk of this large building is successfully and creatively reduced through these efforts. This is one of the contributions of this design to Modernism.

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4. **Outdated bias against Stone:** The DEIR report relies on a biased and unexamined assessment of Stone's work. Stone is still a controversial architect in some quarters. This report reflects that bias in accepting, without further analysis, the statement that Stone "was more popular however with the public than with his fellow architects and architectural critics," continuing, "he is merely a rather engaging contemporary romantic." While this reflects one opinion of Stone in his day, it is not sufficient evidence for the historical perspective we need fifty years later. As for current scholarly opinion, the report uses a limited number of references. Though briefly noting Vincent Scully's recent defense of Stone's Huntington Hartford museum in New York, the report simply dismisses such valid support (and much other support by other noted historians) without further analysis. Thus the report does not accurately reflect the reassessment of Stone and his era now underway. In fact, the evidence, the buildings, and the opinions exist to show his significance in introducing new concepts that helped shape twentieth century architecture in the Bay Area, nationally, and internationally. They are a significant part of the history of Modern architecture, and the loss of Stanford Hospital would have a negative impact on the cultural resources of Palo Alto, California, and the nation. Biased assessments of Stone's work have already lead to the loss of important buildings. Stanford University must not further contribute to this decimation by allowing the hospital to be demolished.

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5. **Dismissal of alternative uses:** The DEIR peremptorily assumes the "unavoidable" demolition of this building. Though it cannot be used as a hospital, there is a wide range of other educational and campus uses to which it could be properly retro-fitted. The DEIR fails to adequately assess these when it inaccurately states its demolition is "unavoidable."

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The Stone building is one of the most gracious and original buildings on Stanford's campus from the mid century. Stone's powerful design makes courtyards, fresh air, landscaping, and promenades the major determinants of the design. The finely textured concrete blocks bring a lightness to the building – especially when they open up unexpectedly to reveal the open air courtyards that

are woven through the design, bringing light and air to patients, doctors, nurses, and visitors – and to pedestrians walking through the campus. The Stone hospital is large, but is scaled to suit its neighbors. It represents the qualities of humanity, nature, originality, and delight.

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It is not sufficient to dismiss a building simply because of its recent vintage. Current scholarship and available information make it possible to assess this building's concepts and techniques, its relationship to historical trends and context, its artistic merit, and to evaluate expert opinion. These high standards are required if historic preservation is to fulfill its purpose of protecting noteworthy buildings, especially when they are vulnerable. If we make that effort, however, the result is the enrichment of our cities for future generations, and the continuation of an ongoing tradition of California architecture.

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The DEIR's lax approach to a proper assessment of this building seems to indicate a lack of imagination or will on Stanford's part to value and protect our common culture and history. The City of Palo Alto and the citizens of California deserve a more thorough and fair analysis than they are offered in this draft report.

Sincerely,



Alan Hess

## RESUME OF ALAN HESS, ARCHITECT

4991 Corkwood Lane, Irvine, CA 92612 949/551 5343 alhess@aol.com

### WORK

1981-1986- Alan Hess, Architect  
Architecture critic, **San Jose Mercury-News**

### EDUCATION

1975-78 M.Arch. I, School of Architecture and Urban Planning,  
University of California, Los Angeles  
1970-74 B.A., Principia College, Elsieh, IL

### DESIGN

Jamm's Coffee Shop, Petersen Automotive Museum, Los Angeles County  
Museum of Natural History; principal contributor to interpretive exhibits  
Gordon Onslow-Ford guesthouse, Marin County, CA

### TEACHING

1989-91 Instructor, University of California, Los Angeles  
1986-90 Lecturer, Southern California Institute of Architecture

### PRESERVATION

Design Guidelines, Heatherstone Community, Mountain View, CA  
Honor Award 1997, National Trust for Historic Preservation  
President's Award, California Preservation Foundation  
Qualified for National Register of Historic Places:  
Bullock's Pasadena (Wurdeman and Becket 1947), Pasadena CA  
McDonald's Drive-In (Stanley C. Meston 1953), Downey, CA  
Valley Ho Hotel (Edward Varney, 1957), Scottsdale, AZ  
Stuart Pharmaceutical Factory (Edward Durell Stone 1958), Pasadena, CA  
Expert testimony on behalf of landmark designations for Century Plaza Hotel,  
Los Angeles (Minoru Yamasaki, 1966); Bob's Big Boy, Burbank (Wayne  
McAllister, 1949); Wichstand, Los Angeles (Armet and Davis, 1957), Columbia  
Savings, Los Angeles (1964), National Theater, Westwood (1969) and other  
mid-century modern structures

### FELLOWSHIPS

Fellow, National Arts Journalism Program, School of Journalism,  
Columbia University, 1997-98

### GRANTS

Graham Foundation for Advanced Studies in the Fine Arts,  
research on Brazilian landscape architect Roberto Burle Marx, 1990

### SELECTED PUBLICATIONS

#### BOOKS:

**Casa Modernista: A History of the Brazil Modern House** Rizzoli International, New York 2010  
**Oscar Niemeyer Buildings** Rizzoli International, New York 2009  
**Frank Lloyd Wright: The Buildings** Rizzoli International, New York 2008  
**Julius Shulman: Palm Springs** Rizzoli International, New York 2008  
**Forgotten Modern: California Houses 1940-1970** Gibbs Smith Publisher, Layton, UT 2007  
**Frank Lloyd Wright: Mid-Century Modern**, Rizzoli International, New York 2007  
**Organic Architecture: The Other Modernism** Gibbs Smith Publisher, Layton, UT 2007  
**Frank Lloyd Wright: Prairie Houses**, Rizzoli International, New York 2006  
**Oscar Niemeyer Houses**, Rizzoli International, New York 2006  
**Frank Lloyd Wright: The Houses**, Rizzoli International, New York 2005

**The Ranch House**, Harry Abrams, Inc., New York 2005  
**Google Redux: Ultramodern Roadside Architecture**, Chronicle Books, San Francisco 2004  
**Palm Springs Weekend: the Architecture and Design of a Midcentury Oasis**, Chronicle  
Books, San Francisco 2000

**Rancho Deluxe: Rustic Dreams and Real Western Living**, Chronicle Books, San Francisco 2000  
**The Architecture of John Lautner**, Rizzoli International, New York 1999  
**Hyperwest: American Residential Architecture on the Edge**, Thames & Hudson, London 1996  
**Viva Las Vegas**, Chronicle Books, San Francisco, CA 1993  
**The Car and the City**, "Styling the Strip," chap. 13, University of Michigan Press,  
Ann Arbor, MI 1991

**Google: Fifties Coffee Shop Architecture**, Chronicle Books, San Francisco, CA 1986

#### MAGAZINES AND NEWSPAPERS:

"How to/whether to Save the Sixties," **National Trust Forum**, Summer 2010  
"Color in the Suburban Metropolis," **New Geographies**, Harvard Graduate School of Design,  
May 2010  
"Steven Ehrlich house, Pacific Palisades," **Metropolitan Home**, Dec. 2005  
"Montalvo Artists' Village," **Architectural Digest**, June 2005  
"Cliff May's Romantic Mandalay," **Architectural Digest**, May 2005  
"Meeting the Horizon in California, Roscoe House by Helena Arahuete,"  
**Architectural Digest**, Jan. 2005  
"Historic Architecture: Oscar Niemeyer," **Architectural Digest**, May 2003  
"San Jose: A Downtown in the Making," **Places**, vol. 15, no. 2  
"Eine kurze Geschichte von Las Vegas," **Stadt Bauwelt** 143, Sept. 1999  
"City Center to Regional Mall," **Journal of Preservation Technology**, vol XXVII, no 4, 1997  
"New York, New York," **Architectural Record**, March 1997  
"John Lautner" **Progressive Architecture**, December 1994  
"The Origins of McDonald's Golden Arches," **Journal of the  
Society of Architectural Historians**, XLV: 60-67, March 1986  
"Technology Exposed," **Landscape Architecture**, May 1992, pp 38-48  
"Burle Marx: A Shaky Legacy," **Landscape Architecture**, April 1992 p 38  
"Back to Brasilia," **Progressive Architecture**, October 1991 pp 96-97  
"Greenwald house," **Los Angeles Times Magazine**, October 27, 1991, p 31  
"Of Cities and Their Halls," **San Francisco Examiner**, Aug. 7, 1991  
"American Style and Fifities Style: reviews," **Design Book Review**, Winter 1989  
"Schindler and Goff: Architectures," **L.A. Style**, March 1989  
"Monsanto House of the Future," **Fine Homebuilding**, August/September 1986, No. 34  
"The Eichler Homes," **Arts + Architecture**, Vol. 3, No. 3, 1984

#### SELECTED TALKS LECTURES:

Kansas City Modern; Dallas Modern; Arizona Preservation Conference Keynote; Nevada  
Museum of Art Symposium; Society of Architectural Historians Tour; Commonwealth Club  
of San Francisco; Society for Commercial Archeology Conference Keynote; Los Angeles  
Conservancy Welton Becket Centennial Keynote; Columbia University School of  
Architecture; Houston Modern; Phoenix Modern; Walker Art Museum; Chicago Humanities  
Festival; Cooper-Hewitt Museum of Design; Yale University School of Architecture; Graham  
Foundation for Advanced Studies in the Fine Arts; Greenwich (England) National Maritime  
Museum; Cliff May Lecture, Los Angeles Conservancy; Vancouver (B.C.) Alcan Lecture

Series: Architecture League; International Association of Shopping Center Owners; National Real Estate Editors Association; Colby College Southworth Lecture; Monterey Design Conference; University of British Columbia; National Trust for Historic Preservation Conference; AIA 2005 National Convention, Las Vegas; Getty/Hammer Museum Symposium; San Francisco AIA; California Preservation Foundation;

**BROADCAST MEDIA:**

"A Kick in the Head—The Lure of Las Vegas," BBC-TV January 2010  
The Late Show, BBC-TV January 16, 1995  
CBS Sunday Morning News with Charles Kuralt, January 23, 1994  
Good Morning America, August 3, 1993  
CBS Morning News, Jan. 17, 1990  
Videolog, KCET, Los Angeles, June 1985  
Patrick Monroe Show, CBC Radio, February 1987  
Morning Edition, NPR, May 2, 1986  
Smithsonian World, "Speaking Without Words," PBS, March 1984

**SELECTED REFERENCES TO WORK**

**PRINT MEDIA:**

"Las Vegas meets la-la land," **Smithsonian**, October 1995  
"In Los Angeles, a '50s Flameout," **New York Times**, September 7, 1995  
"Oldest McDonald's Closes," **New York Times**, March 6, 1994  
"Would Las Vegas Landmark Be an Oxymoron?," **New York Times**, Oct. 7, 1993  
"Restaurant Architecture," **Journal of the Society of Architectural Historians**, XLVIII:2, June 1989  
"Legacy of the Golden Arches," **TIME**, June 2, 1986  
"Books: Pop Style to Free Style," **Progressive Architecture**, December 1986  
"Google: Fifties Coffee Shop Architecture, a review," **Architectural Record**, May 1986  
"Who Says It's Not a Landmark?" **Historic Preservation**, November/December 1987  
"Google -- History Closing the Menu on a 1950s style," **Los Angeles Times**, June 9, 1986  
"Now let's hear it for Google style," **Vancouver Sun**, February 5, 1987  
"Architecture and Design reviews," **Philadelphia Inquirer**, November 30, 1986  
"Architecture To Go," David Dillon, **Dallas News**, June 22, 1986  
"Google: Fifties Coffee Shop Architecture," **Art and Design**, London, June 1986

July 2010

**40. Alan Hess (letter dated July 26, 2010)**

40.1 *The commentor states that the Draft EIR inadequately addresses the historical significance of the Stone Building complex by concluding that the building is not historically significant. This statement is incorrect. As stated on page 3.8-18 of the Draft EIR, Section 3.8, “The Stone Building complex is the only structure to be demolished that appears eligible for listing on the California Register of Historic Places (CRHR) (as described under Existing Conditions in this section) and is, therefore, considered by the City’s Historic Preservation Planner, in concurrence with Architectural Resources Group (ARG), to be a significant historic resource. The demolition of the Stone Building complex would result in a significant impact on an historical resource.”*

As described on page 3.8-15 of the Cultural Resources section, two studies were performed to evaluate the historical significance of the Stone Building complex. One study was conducted in 2007 by Stanford University’s Director of Heritage Services and University Archaeologist, who concluded that the complex is not one of E.D. Stone’s major achievements, but was historically significant for association with organ transplantation work. Nonetheless, the complex lacked integrity and was therefore not eligible for listing on the CRHR.<sup>1</sup> However, in 2008, the City hired ARG to perform a separate study, which included a peer review of Stanford University’s evaluation. ARG concluded that the Stone Building complex appears eligible for listing on the CRHR and should be considered an historical resource for the purposes of the CEQA review.<sup>2</sup> ARG’s complete peer review is included as Appendix I in the Draft EIR. In addition, the City’s Historic Preservation Planner concurred with ARG that the Stone Building complex is an historical resource pursuant to CEQA.<sup>3</sup>

Based on the findings by ARG, and the consensus of the City’s Historic Preservation Planner, the Draft EIR considers the Stone Building complex as a significant historic resource. As such, due to the demolition proposed under the SUMC Project, the Draft EIR concludes that the SUMC Project would result in significant and unavoidable impacts on the Stone Building complex. See Impact CR-1 on pages 3.8-18 through 3.8-23 for the impact analysis and proposed mitigation measures that would reduce the impacts on the Stone Building complex, but not to a level of less than significant.

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<sup>1</sup> Jones, L., *Cultural Resources and the Stanford University Medical Facilities Renewal and Replacement Project*, 2007.

<sup>2</sup> Architectural Resources Group, Inc., *Stanford University Medical Center Historic Resource Evaluation and Peer Review*, 2009.

<sup>3</sup> Dennis Backlund, Historic Preservation Planner, City of Palo Alto, *Staff Comments on the Stanford Shopping Center and University Medical Center: Historic Resource Evaluation and Peer Review*, prepared by Architectural Resources Group, Inc., memorandum to Julie Caporgno, Chief Planning and Transportation Official, and Steven Turner, Advance Planning Manager, May 15, 2008.

*In addition, the commentor states that other buildings designed by E.D. Stone in the area are threatened.* Please refer to Impact CR-5 on page 3.8-26 and 3.8-27 of the Draft EIR for a list and analysis of other E.D. Stone buildings within Palo Alto. As explained on pages 3.8-26 through 3.8-27 of the Draft EIR, E.D. Stone designed three other buildings in Palo Alto, in addition to the Stone Building complex. These buildings include the Palo Alto Civic Center, the Palo Alto Main Library, and Mitchell Park Library. The Palo Alto Civic Center and the Mitchell Park Library were evaluated by ARG, a historic consultant for the City. In this evaluation, it was determined that both of these buildings lacked sufficient integrity to qualify as historical resources. However, the Palo Alto Main Library has been determined eligible for the National Register of Historic Places (NRHP).

Projects have been proposed that would alter or demolish the other E.D. Stone buildings in the City. Currently, plans call for the renovation and expansion of the Main Library, which could affect the historic integrity of the building. In addition, due to the seismically unsafe conditions at the Palo Alto Civic Center, the freestanding part of the arcade would be removed and the City Police Department and Emergency Operations facilities would be relocated from this area of the building. The third building, Mitchell Park Library, is proposed to be demolished since the existing facility is too small to house the demand of the expanding neighborhood.<sup>4</sup> As stated on page 3.8-27 of the Draft EIR, the demolition of the Stone Building complex would have a cumulatively considerable significant and unavoidable impact due to the small body of E.D. Stone's work present in the City that retains sufficient integrity to be eligible as historical resources. Therefore, the conclusions in the Draft EIR are consistent with the commentor's remarks.

40.2 *The commentor contests that the demolition of the Stone Building complex is unavoidable and believes that it can be adaptively reused.* The Draft EIR describes and analyzes the SUMC Project site plan as proposed by the SUMC Project sponsors in the SUMC Project Application from 2007 and last amended in March 2010. Under the SUMC Project as proposed, the Stone Building complex would be demolished in order to construct the SHC clinic building and the SoM FIM buildings. The construction of these new buildings would help the SUMC Project sponsors achieve their project objectives, while the retention of the Stone Building complex would not meet several of the goals for the SUMC Project. The Draft EIR concludes demolition of the Stone Building complex results in a significant and unavoidable impact because mitigation would not be sufficient to reduce the impact to a less-than-significant level.

However, per CEQA Guidelines 15126.6, an EIR must identify a range of potentially feasible alternatives that attain most of the project objectives and reduce the impacts of the proposed project. Therefore, in response to this significant and unavoidable conclusion in Section 3.8, Cultural Resources, the Draft EIR includes an alternative to preserve and

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<sup>4</sup> Dennis Backlund, City of Palo Alto Historic Preservation Planner, Historic Resources Board hearing, July 7, 2010.



reuse the Stone Building complex, as reflected in the Historic Preservation Alternative. Although this alternative would succeed in preserving the Stone Building complex, the alternative would not meet several of the SUMC Project objectives, as discussed on pages 5-45 through 5-48 of the Draft EIR. Please refer to Master Response 8 for the range of alternatives analyzed and considered in the approval process.

40.3 *The commentor states that the Draft EIR's conclusions rely on the SUMC report.* This is incorrect. As explained above in Response 40.1, the Draft EIR derives its conclusions regarding the Stone Building complex from the 2009 ARG peer review of the 2007 SUMC report and the opinion of the City's Historic Preservation Planner. Contrary to the conclusions in the Stanford study, ARG considers the Stone Building complex as a significant historic resource. The City's Historic Preservation Planner concurs with ARG. The Draft EIR is consistent with the findings in the ARG peer review and does not base its analysis of the Stone Building complex on the SUMC report. Although the SUMC report is described and cited in the Draft EIR (page 3.8-15), the study is not used as the sole source of the analysis.

40.4 *The commentor believes that there is an inadequate assessment of Stone's architectural concepts in the Draft EIR.* Although Section 3.8, Cultural Resources, of the Draft EIR does not include a description of the architectural styles of the Stone Building complex, this is included in the ARG peer review, Appendix I of the Draft EIR.

The ARG peer review includes an analysis of E.D. Stone's work, summarized as follows: E.D. Stone's work during the second phase of his career has been called both Formalism and New Romanticism. The Stone Building complex at the Main SUMC Site, which was completed in 1959, was designed during this pivotal and innovative phase. The complex was designed after the American Embassy in New Delhi, India, which was another building by E.D. Stone during this same design phase, and symbolizes his departure from the International style to a Formalistic approach. The design of the Stone Building complex shares many of the character-defining features that E.D. Stone used on buildings from this period including: concrete grillework, symmetrical façade, massive overhanging eaves, loggias with tall slender columns, reflecting pools, and incorporated landscape elements such as gardens and courtyards. The Stone Building complex, along with the Palo Alto Libraries, was his first project out of his Northern California office in Palo Alto.<sup>5</sup>

As stated in the ARG peer review, E.D. Stone is considered by some to be one of the most outstanding midcentury architects. E.D. Stone influenced numerous architects and his grillework became popular nationwide mainly due to his work. In addition, E.D. Stone's architecture addressed two of the central issues facing post-war architecture: the representation of human scale in large buildings and the role of ornament formerly cast

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<sup>5</sup> Architectural Resources Group, Inc., Stanford University Medical Center Historic Resource Evaluation and Peer Review, 2009.



aside by modernists. Please refer to Appendix I of the Draft EIR for more details about the design and styles of the Stone Building complex, its place in the development of modern architecture, the innovations of its design, and its place in E.D. Stone's work.<sup>6</sup>

*A comment was also made that the Draft EIR concludes that the Stone Building complex should be demolished.* Per CEQA requirements, the Draft EIR does not advocate for specific building designs or site plan modifications, unless these changes would feasibly lessen significant impacts through mitigation measures. Therefore, the Draft EIR does not conclude that the Stone Building complex *should* be demolished. As explained in Response 40.2, the SUMC Project site plans, as submitted by the SUMC Project sponsors in 2007 and as supplemented in March 2010, propose the demolition of the Stone Building complex in order to construct new SHC and SoM buildings. Based on the proposed site plans, the Draft EIR analyzes the impact of the demolition of the Stone Building complex. Since the Stone Building complex is considered a significant historical resource and potentially eligible for the CRHR in the Draft EIR, the impact would be significant and unavoidable. The Draft EIR also identifies an alternative to its demolition.

40.5 *The commentor states that the Draft EIR does not sufficiently address the landscape design of the Stone Building complex.* Although Section 3.8, Cultural Resources, of the Draft EIR does not include a description of the landscape features of the Stone Building complex, this is included in the ARG peer review, Appendix I of the Draft EIR.

The ARG peer review includes an analysis of the landscaping at the Stone Building complex, summarized as follows: Landscape architect Thomas Church collaborated with E.D. Stone on a number of projects during their careers, including the Stone Building complex at the Main SUMC Site. The landscape features of the Stone Building complex comprise of geometric paving, geometric planting beds, circular water features, shrubberies, trees, and other plants. As stated in the peer review, nine of the ten original courtyards continue to function as courtyards. Only one has been completely infilled by a building addition and another is partially infilled. Despite the loss of plantings in some of the courtyards, Church's hardscaping generally remains intact. The most important landscaping feature, the forecourt in front of the Stone Building complex, has a high degree of integrity.<sup>7</sup>

However, as concluded by ARG, the landscaping in the courtyards is not a historic resource. Since more intact examples of Thomas Church's work remain, and since the collaboration between E.D. Stone and Church did not appear to be particularly acclaimed

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<sup>6</sup> Architectural Resources Group, Inc., Stanford University Medical Center Historic Resource Evaluation and Peer Review, 2009.

<sup>7</sup> Architectural Resources Group, Inc., Stanford University Medical Center Historic Resource Evaluation and Peer Review, 2009.

or influential, ARG found that the landscaping at the Main SUMC Site is not significant as an example of the work of Thomas Church.<sup>8</sup>

- 40.6 *The commentor states that the Draft EIR relies on a biased and unexamined assessment of E.D. Stone's work. The commentor goes on to quote the 2007 study conducted by Stanford. As explained under Response 40.1, the Draft EIR bases its conclusions on the ARG peer review of this study and the opinion of the City's Historic Preservation Planner. The Draft EIR considers the Stone Building complex a historic resource for the purposes of CEQA. The commentor's statement that the loss of the Stone Building complex would have a negative impact on cultural resources is consistent with the analysis in the Draft EIR. Please refer to Response 40.1 for more details.*
- 40.7 *The commentor states that the Draft EIR dismisses the potential alternative uses of the Stone Building complex. Please refer to Response 40.2, above. It should be noted, as discussed above, that the Draft EIR analyzes the SUMC Project as proposed, which includes demolition of the Stone Building complex. The analysis in the Draft EIR concludes that, if the SUMC Project is developed as proposed, the demolition of the Stone Building complex would be a significant and unavoidable impact. The Draft EIR also identifies an alternative under which the Stone Building complex would be preserved and adaptively reused. In addition, refer to Master Response 8 for the range of alternatives analyzed and considered in the approval process.*
- 40.8 *The commentor reiterates his point that the Stone Building complex is a significant historical resource and that it should be protected. Please refer to Responses 40.1 and 40.2, above.*
- 40.9 *The commentor requests a more thorough analysis of the impacts to the Stone Building complex. The findings by ARG in their peer review, and the consensus of the City's Historic Preservation Planner, are considered to be adequate for the purposes of CEQA. The ARG report, included as Appendix I in the Draft EIR, includes a review of the Stone Building complex and the contributions of E.D. Stone as an architect, as summarized above in Responses 40.4 and 40.5. The Draft EIR, which is consistent with the ARG report, concludes that the Stone Building complex is an historic resource. Therefore, the conclusions of the ARG report, the City's Historic Preservation Planner, and the Draft EIR are consistent with the comments raised by the commentor. No further study is warranted.*

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<sup>8</sup> Architectural Resources Group, Inc., Stanford University Medical Center Historic Resource Evaluation and Peer Review, 2009.

**Letter 41**

**From:** Richard Heydt [richard.heydt@sri.com]  
**Sent:** Friday, July 23, 2010 3:49 PM  
**To:** Stanford Project  
**Subject:** Comment on Stanford Hospital Project  
**Attachments:** richard\_heydt.vcf

41.1 I think it is important that traffic mitigation planning for the hospital project consider the (real) possibility that in the future Caltrain may either not be running or running at reduced capacity.

**41. Richard Heydt (letter dated July 23, 2010)**

41.1 *The commentor states that it is important that traffic mitigation planning for the hospital project consider the possibility that in the future Caltrain may either not be running or running at reduced capacity. Please refer to Master Response 1 for a discussion on the viability of Caltrain.*

Letter 42

CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

10 JUL 27 PM 4:45

From: John Hultgren [j\_hultgren@yahoo.com]  
Sent: Tuesday, July 27, 2010 4:14 PM

To: Subject: EIR comments on Stanford Medical Expansion Project

Dear City Council members, City Manager James Keene, and Commissioners,

With the deadline for comments on the EIR for the new Stanford Medical Center project approaching I am submitting my thoughts at this 11th hour. Having left our home at 7 Lincoln Ave. in Mill Valley in 1959, our family built a home on San Francisco Ct. on the Stanford campus, due to the Medical School moving down from San Francisco and the Medical Center opening where my father assumed the position of Chief of Cardiology. In 1967 he took the position of Chief of Cardiology at the Palo Alto VA Hospital, where he worked until his death in 1997 at the age of 80, (after chemotherapy).

I attended Bing Nursery School, we won the city basketball championship in 6th grade at Escondido by one point, then attended Terman Jr. High, where our 9th grade basketball team went 17-0 getting our picture in the Palo Alto Times with a caption that read *Perfect Season*. That summer, 1972, I went with a group of 17 students and counselors to Europe for 6 weeks, climbing the Briethorn in Zermatt Switzerland with Bill Moody, a fellow scout of Palo Alto's Troop 51. We ended our trip in Amsterdam with a 17 course Armenian dinner, honoring in a way my mother's mother, born on the same day as Herb 25 years earlier, he the son of Swedish Armenian immigrants. I was married 18 years to the day the Palo Alto Times photo came out, on Tennis Day 1990, also the day we raised the flag on Iwo Jima in 1945; my wife being an Iroquois Indian who was the platoon leader of her

7/27/2010

basic training unit in the U.S. Army, whom I proposed to on Valentines Day after breaking up with my Japanese girlfriend I'd met climbing in the Kita Alps of Japan in 1985. I played on Ernie Lydecker's undefeated tennis team at Gunn in 1972-'73 and married her at Cupid's Chaple of Love, in Reno Nevada.

Engraved on the outside of Stanford's Memorial Chaple are four words, Faith, Love, Hope and Charity. My comments reflect many years of struggle here in the Palo Alto area, living every year of my life in California where both of my parents were born. When I was in kindergarten our pediatrician at the Welsh Rd. Medical Clinic went out of his way to try and get me sick with the mumps, initially sending me to the home of a classmate who was contagious, the daughter of the men's gymnastic's coach and my first tennis instructor. I felt I was being abused with the same power and control I'd witnessed serving food and washing the dishes for parties my parents gave at our home for Stanford physicians and residents, and despite my friendship with Kelly (Gilmore) I refused to get the mumps from her because of the reality I saw, that if I did what he wanted this time he would want to do more, and I didn't feel this was fair nor did I want this doctoring of love hanging over my head in the years to come in a very competitive school environment. When our friendship ended, due to this loss, I wanted to get back at the doctors who so arrogantly felt they controlled human destiny. Sitting on the floor of their Escondido Village apartment I pledged that I would find the cure to cancer, something that they claimed was the only medical problem they hadn't yet solved.

The comments I have to make are not intended to influence specific decisions you are responsible for making, but to share what I have learned in the last 47 years, based on this objective I set for myself, and how it relates to Stanford's medical services in general. I am

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aware, as all of you should be by now that our city's payments for health coverage have skyrocketed from about 6 million a year in 2002 to about 24 million this year, and as a college town with one of the best teaching hospitals in the world next door this seems kind of absurd.

I think Stanford, just like our new neighbors of East Palo Alto have much to offer to the general community, and ought to be regarded more as a partner or a good neighbor. My comments reflect a perspective that I think has been lost in chaos that has swept across the country in the name of capitalism, and is particularly focused on what I have learned attending Foothill College, San Jose City College, West Valley, Canada and Cabrillo over a span of time from 1980 to 1994, when I also managed the home next door to the 2nd Mayor of East Palo Alto (from 1984-1990) for ten tenants, finished building our summer home in Los Gatos which was my goal upon finishing high school, travels to Japan and Sweden,, working for two of the best restaurants in Menlo Park and working as a carpenter on Hope St. in Mt. View (for Tim Taylor, who holds three master's degrees).

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Unlike my two closest friends as a young teenager, Larry Good and Douglas Whitcher, who graduated from Stanford, I was frankly sick of people with credentials whose goal seemed to be to become the best in their field, yet always had someone else do their work for them. My grandfather did get his degree at Harvard before completing law school there, my mother has a master's degree in education, my father finished first in his class at Stanford's School of Medicine--along with the father of my golf instructor--my uncle is a minister, his other sister has a master's degree in music, and both of my brothers have B.S. degrees, one from Stanford and the other from U.C. Davis. There wasn't a lot of room for me to do better in academics, so I chose to be a cabinet maker, a painter, a custodian in an elementary school,

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and do skilled trade work before deciding to major in Culinary Arts and Hospitality Management, which incidentally was taught by seasoned professionals, most of whom are still there, one a past member of the U.S. Olympic cooking team.

In the 60's and 70's overwhelming evidence was showing the medical community that cigarettes were causing cancer; it became their mission to find the 'cure' to cancer... During the Viet Nam War era, drugs of all kinds were popular, as you may recall. A typical concert at Frost on the campus was filled with the haze of marijuana smoke. And the medical position, although it being a felony by law, was rather neutral, in that no evidence showed that marijuana cause cancer. I personally couldn't live with myself breaking the law in this way, most all of the people I associated with being pot smokers and dealers. I tried to commit suicide twice, once landing me at Belmont Hills Hospital and from there at Kings View Hospital in Reedley.

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I was able to finish my high school education without marijuana, as the valedictorian of the class of 1975 at Feather River Preparatory School, owned my Mr. Long of Longs Drugs, who sat with my father for the ceremony. I skied jr. varsity and varsity on our ski team and won my girlfriend (from Hawaii) after beating her brother repeatedly in everything we did.

The search for the cure to cancer and other medical ills is predicated on what we allow in our capitalist driven economy; it applies not only to our health but to the environment, where money and profits are more important than health and land/resource

management. Corporations thrive on maximizing their gains at the expense of people and the land they use to extract their resources. As long as there are no restrictions on what is allowed, environmentalists and the medical community will have endless work to do.

I learned my health as a student at Foothill

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College in Health 101, 1985 and in Cabrillo College's Culinary Arts & Hospitality Management program, where I got my certificate in 1994, along with a lifetime interest as the last son in our family and my early childhood ambitions. In one short class on food borne illnesses at Cabrillo we were taught that there are two major diseases to contend with, one is infection and the other intoxication; viruses, molds and yeasts make up only a small part of food borne illnesses. Most are familiar with infections and the medical development of antibiotics to combat them; whenever a batch of spinach or tomatoes comes out that may have e-coli, the country goes berserk, recalling hugh shipments, or shutting down the plant. But intoxication, which includes botulism is quite different. It is not the rapid growth of bacteria that causes illness, but the toxins that are excreted from the cell walls that cause the problem. It is the accumulated waste that can not be effectively processed by normal body function, and it is really no different than at a macro level, a polluted river or a chemical waste dump. Just as there is no 'cure' for Hunters Point Naval Shipyard, there is no 'cure' for intoxication, which leads to cancer, although there is a lot of work to be done.

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commissioner of the F.D.A. and dean of two medical schools as well as being an attorney tells us how the food industry has figured out that by adding sugar, fat and salt to their products they sell much more, resulting in our larger than normal share of obesity, diabetes and heart disease. But more costly than the management of obesity, diabetes and heart disease is our growing prison and jail population, a system that houses a quarter of the world's population of locked up people, costing us something like \$45,000 a year per person, or more.. These are mostly people who buy tobacco products that their bodies can't stand for process the hundreds of inorganic chemical toxins they produce, and choose to do illegal drugs instead, like marijuana, cocaine, and more, even heroine the physically addicting drug we are emptying our financial reserves to try to control in Afghanistan.

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Building new and better hospitals and medical services or prisons and jails is not the answer, anymore than finding new lands to pollute with waste and geologically exploit. Our bodies are sensitive just like the earth is sensitive and in many ways we are what we eat; in computer terms, GIGO: the garbage we put in is the garbage we put out. Giving into the interests of the tobacco industry or the food industry in general is synonymous with what could have happened if Microsoft gained a complete monopoly in the information age. We need, as Steve Jobs figured out when he suggested we think differently, to *act differently*. Just turning our heads to the 400,000 Americans who die each year due to poison we allow to sell in the way of 'fags', as the British call our cigarettes, the same ones that took the life of people like Linda McCartney and countless others, to build new more expensive medical facilities is **not the answer**.

R.J. Renolds Co. nearly killed me back in 1981 when I was living in the only board and care

home in the county that would accept me, barely getting the nutrition I needed and smoking their products, which when they mailed me the list of ingredients I requested, astounded me. 599 additives, mostly inorganic chemicals, some that burn as hot as 300 degrees C., and they don't even include tobacco as an ingredient. I got open sores on my body that were increasing in number and not healing. Fortunately a guy by the name of Roberto Garcia, a community companion, had put me on another waiting list in Sunnyvale and I made it through.

Did I, like everyone else wants to do, according to the medical community, quit smoking? No. I started to smoke tobacco, the native American plant that our founding fathers smoked, Albert Einstein smoked, Winston Churchill smoked, Patton smoked and Michael Jordan smokes. In fact I smoke what George Burns smoked until he was 100, as a spokesperson for the company I buy mine from, and smoke twice as many as the five cigars he smoked a day. The only thing better than a cup of coffee from Starbucks or Peets is a *Phillies cigar* to go with it, and if the world knew this as I do, we would not have drug addicts or a drug (illegal drug) problem, for a chocolate or apricot cigar is 100% better than any pot you can buy in Oakland.

I don't need any psychotropic medicine for a marijuana problem, I take no medication and haven't for four years, from when I had to being conserved. I don't even have a doctor.

I feel strongly about two things having to do with the Stanford Medical Expansion Project, having grown up with Margaret Schulman, whose father really founded the Lucile Packard Children's Hospital, a common Stanford faculty family like ours who leased or leases the land their home is built on. One is that the Medical Center, (designed by Mr. Stone), **should be saved** and *might* be made into a convalescent home for retired faculty who want to stay close to the campus, and not turn over their life savings to

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private corporations like the Hyatt. To try and convert the hospitals to meet new medical standards is obviously impossible, but as an open air building that is nicely situated, beautiful in every way, it could be where faculty get cared for in their golden years...

Secondly, I think Stanford should practice medicine, not speed up the rat race to compete with corporate world which produces all the cases they get. They could, provide health care for our city employees at a stable and reasonable cost, so we as a city could plan and predict future costs, and extend their services to the community, as it is a great place for medical students to learn to become physicians.

I think every effort should be made to work with Stanford, negotiate with them, as George Schultz did for Ronald Reagan to wind down the cold war. This to me is more like a *frozen war*, reminding me of an early song Stevie Nicks and our native Palo Alto son Lyndsey Buckingham wrote, called *Frozen love* on their Buckingham Nicks album, (1974?) music I would encourage all of you to check out if you can find it.

**Races are run.**

Good luck,

John B. Hultgren, Palo Alto, Los Gatos

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**42. John Hultgren (letter dated July 27, 2010)**

42.1 *This comment does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA.* Please refer to Master Response 10 for a discussion of non-CEQA issues.

42.2 *The commentor opposes the demolition of the Stone Building complex and suggests alternative uses for the existing structure.* Please refer to Master Response 8 for the range of alternatives analyzed and a discussion of the suggested variation on the Historic Preservation Alternative.

42.3 *This comment does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA.* Please refer to Master Response 10 for a discussion of non-CEQA issues.



STEVEN TURNER

Letter 43

To: Palo Alto City Council, Palo Alto Planning & Transportation Commission, City Manager, Director of Planning and DEIR Manager of the Public Comments  
Re: Stanford Hospitals Expansion DEIR, Transportation Section  
From: Tom Jordan, 474 Churchill Ave, Palo Alto 94301  
Date: 15 July 2010



The DEIR section on Transportation is legally inadequate under the requirements of the California Environmental Quality Act ("CEQA") in that (a) it does not describe the significant ongoing Stanford project, immediately adjacent to the currently studied Project, which Stanford is constructing pursuant to the General Use Permit ("GUP") issued by the County of Santa Clara in December 2000 and the impact that 2000 GUP project will have on the currently studied Project as to transportation and all other matters, particularly since the 2000 GUP project is less than half way to completion and (b) it does not state the County's Traffic Standard set forth in the 2000 GUP, including the annual monitoring and required corrective actions by Stanford if the Traffic Standard is not met; all relevant because the two projects are adjacent and use interlocked roadways.

The Palo Alto Council should require Stanford to follow the same Traffic Standard that Santa Clara County required in granting to Stanford its 2000 GUP, which was for a development comparable in size to the one in the DEIR before you. Of course, the Palo Alto Council is not REQUIRED to do this -- being mandatory is NOT the issue --- but it is clearly the most effective and logical choice because:  
1) The Stanford Campus, covered by the 2000 GUP, and the Stanford Hospitals, covered in the DEIR before you (a) are owned and controlled by the same entity, Stanford University and (b) are immediately adjacent and share exactly the same interconnected road network with no separation or distinction that can be observed by any driver.

2) The intermingled traffic of the two areas, which it is impossible to separate, should be controlled by rules which are consistent and complementary, and the County 2000 GUP has led the way and the Palo Alto Council should now incorporate a parallel standard into its own permit to Stanford.

3) The County's 2000 GUP traffic standard (a) was accepted fully by Stanford without objection and (b) has been operating successfully for ten years, again without objection from Stanford or request for any modification.

4) The application of a Palo Alto Traffic Standard for the Stanford Hospitals application that is parallel to the 2000 GUP Traffic Standard will be easier for Stanford to achieve, not harder, than compliance under the 2000 GUP because (a) Stanford has more control over the numerous hospital employees (all 10,000+ of them, not just the new ones) as to where, if anywhere, they can park and the incentives and disincentives regarding how they commute to work than Stanford had or has over the many categories of new people coming to the campus under the 2000 GUP, which allowed 2,030,000 square feet of new academic buildings and over

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3,000 new residential units, about a third of which are sized for families. Such control over the hospital employees alone, with no attention at all needed to the difficult or impossible to control patients and visitors, will result in compliance, and, as with any employer, Stanford can exert substantial effective control over its own employees.

In quick summary, the Palo Alto Council has before its eyes a Traffic Standard already in place and working successfully for ten years, fully accepted at inception and throughout the entire ten years by the same Applicant now before the Council (even the Stanford President and Stanford's local government lobbyist are the same from 2000 to the present), and for land immediately adjacent and tied to the 2000 GUP land by the same interconnected road network. Why, on earth, would the Palo Alto Council not apply the same Traffic Standard to the current project as was applied in 2000 and which has worked successfully??? As of this time (late in the DEIR comment period but before any Palo Alto Council action), the answer is, simply put, because the DEIR ignored all of this, as did the Palo Alto Planning Department in its responsibility to inform the DEIR firm and to advise the Council. But the DEIR has not been accepted by the Council, so the Council still has full control of the outcome and can direct its Planning Department (and the DEIR firm if that is deemed legally necessary) to explain fully why the 2000 GUP Traffic Standard should NOT be a guide for Palo Alto for the Stanford Hospital Expansion. The logic for such adoption is so strong that the burden of proof should shift to have them -- including Stanford if it wishes to speak on the point -- explain why it should NOT be adopted. The issue of how Planning missed this can be, and should be, dealt with by the Council later, but the focus now is to move forward to approve this project with full proper protection of the public interest, both environmental and fiscal.

One fully stated example will demonstrate the above: You are driving your car to Stanford Hospital. You exited #101 at Embarcadero Road and drove down it toward Stanford. You have just crossed El Camino Real and have entered the Stanford Campus on Galvez. By doing so, you have left the Palo Alto Traffic Standard Area and have entered the County 2000 GUP Traffic Standard Area. From Galvez you bear right on Arboretum to Quarry Road. Somewhere along there, not sure exactly where, you left the County Traffic Standard and entered, again, Palo Alto Traffic Standard as you proceed to the front of the Hospital. If you had wanted to go to the back of the Hospital, where the Emergency Room is, you could have used different streets, but you would have, unavoidably, gone from Palo Alto to County and back again. Now consider that for the year 2005 Stanford came within 14 auto trips of exceeding its limit. The County Traffic Standard has, as it should, some flexibility built in and Stanford is given some time to return to compliance, and in 2005 Stanford obviously took steps to come back in to compliance. But, had compliance not been restored within the permitted time the County Traffic Standard specifies intersection improvements that Stanford must contribute toward, which must be done to the

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43.3  
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County's and the local jurisdiction's satisfaction, or the construction permitted to Stanford under the 2000 GUP will stop --- repeat, for emphasis, construction will stop. Can any thing be clearer than that there needs to be complementary Traffic Standard by the County and Palo Alto. To underline the close connections of Palo Alto traffic with the traffic on Campus, the intersection improvements specified in the 2000 GUP are five in Palo Alto, eight in Menlo Park and two in Santa Clara County, and the traffic studies referenced are for the entire urban area, not just Stanford lands or even the Campus. Of course, Palo Alto in adopting this Traffic Standard will add its own required traffic improvements to those already specified by the County, all to be done if Stanford Hospitals traffic does not comply. It will be consistent with, not destructive of, the County system.

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It is very important to note, that none of the above is in any way inconsistent with the steps that Stanford is currently proposing to deal with increased traffic. All of Stanford's proposals, every single one of them, come under the general label of Traffic Demand Management ("TDM") WHICH IS EXACTLY WHAT THE COUNTY TRAFFIC STANDARD CALLS FOR. TDM is the method that is to be used first, and which everyone hopes will be sufficient, but, if it is not, the County Traffic Standard moves on to other steps to control traffic, and intersection improvements come into play. The crucial difference between the County Traffic Standard and what is proposed in the DEIR is that the County Traffic Standard sets a pre construction traffic count which is the baseline and the ongoing goal, provides for annual traffic counts to be conducted by objective third parties, allows limited flexibility to give time to correct overages in the traffic count but, finally, goes to required physical improvements to control traffic if the count cannot be brought into compliance. In sharp contrast, the DEIR approach which is before the Council includes no baseline count, no objective annual monitoring and no physical improvements. The DEIR approach is simply that Stanford will do A and B and hope that it works. If it doesn't, "well, we tried and that is just the way life is - live with it." The County Traffic Standard leaves the risk of failure to control traffic with Stanford, where it should be because Stanford has created the traffic and has the knowledge, leverage and resources to control it. The DEIR approach puts the full risk of Stanford's failure on the public. Is that the Traffic standard the Council wants for this Project???

43.4

It is hard to believe that the five member Board of Supervisors, with only one of the five for whom Palo Alto voters can even vote, cares more about the traffic impact on Palo Alto streets of a large Stanford development project than Palo Alto's own nine member Council, all of whom live in Palo Alto and all of whom were elected by Palo Altans to protect the public interest of Palo Altans.

43.5

The Palo Alto Council should adopt for the Stanford Hospitals Project a parallel Traffic Standard to that set out in the 2000 GUP with appropriate additional traffic

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↑ improvements specified beyond those already stated by the County if compliance cannot be maintained.

For all addressees, I will put in your box at City Hall this Memo plus the relevant pages of the 2000 GUP that form the basis for this Memo. The Traffic Standard provisions are at pages 12 through 19 and some of the maps are helpful. I will also include a copy of the article from a Palo Alto newspaper in 2005 reporting that Stanford nearly exceeded its traffic cap. I will give a copy of these materials to the City Clerk as well and she can decide what, if anything, should be reproduced for the public.

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Department of Planning &  
Community Environment

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Community Plan. The County shall make every effort to adopt such zoning within nine months of GUP approval.

12. The housing linkage requirement in Condition F.8. may be suspended as follows:

- a. If the average rental housing vacancy rate in both Santa Clara and San Mateo Counties exceeds 8% for at least two consecutive quarters during the life of this GUP, Stanford may request suspension of the housing linkage requirement in Condition F.8 by submitting a written request to the County Planning Office. The decision to suspend the housing linkage requirement shall be made by the County Planning Commission. The Planning Commission's decision may be appealed to the County Board of Supervisors by any interested person.
- b. If the housing linkage requirement is suspended, it shall be reinstated if and when the average rental housing vacancy rate in both Santa Clara and San Mateo Counties falls below 8% and remains there for at least two consecutive quarters. The County Planning Office shall notify Stanford of the reinstatement of the housing linkage requirement by letter sent by certified mail.
- c. With respect to the housing units that would otherwise have been required under Condition F.8 but for a suspension granted pursuant to Condition F.12.b, Stanford shall apply for and commence construction of all such units within 18 months of reinstatement of the housing linkage. If Stanford fails to comply with these requirements, the County shall not accept any applications for academic development projects that would count toward the GUP building area cap.
- d. For purposes of this condition F.12, the source of vacancy rate information shall be the Real Estate Research Council of Northern California. A different source may be used if approved by a majority vote of the County Board of Supervisors.

**G. Transportation**

1. Stanford shall modify the following intersections as specified in the Community Plan/General Use Permit EIR Mitigation Monitoring and Reporting Program. Construction shall begin on intersection modifications within one year of approval of the General Use Permit and be completed within a reasonable time. At the time the modifications are to be constructed, alternative modifications which have equal or greater impact mitigation value may be proposed by Stanford and approved by the County.

- a. Arboretum Road and Palm Drive.
- b. Welch Road and Campus Drive West

**Stanford University General Use Permit**

**CONDITIONS OF APPROVAL**

The following conditions have been established for the Stanford University General Use Permit (GUP). The conditions describe the distribution of additional building area, procedures under which construction may occur, and associated measures which must be accomplished before, during and after construction.

**A. Building Area**

1. The General Use Permit allows the following on the portion of Stanford University-owned land located in unincorporated Santa Clara County:

- a. Continuation of all lawful existing uses in their present locations, including legal nonconforming uses.
- b. Construction of up to 2,035,000 net square feet of new academic and academic support uses. The definitions of permitted uses are provided in the Community Plan. This limit applies to all nonresidential development which occurs during the time that this use permit is in effect. This academic building area total shall be known as the "GUP building area cap."
- c. Construction of 2,000 net new student housing units.
- d. Construction of 350 net new housing units for postdoctoral fellows and medical residents.
- e. Construction of 668 net new housing units for faculty and staff.
- f. Construction of 2,300 net new parking spaces above the current campus base of 19,351 spaces. This parking total shall be known as the "GUP parking cap."

2. The following amount of building area may be available to Stanford in addition to the GUP building area cap:

- a. Any building area remaining under the 1989 General Use Permit which has not been developed at the time of approval of this General Use Permit shall not count toward the GUP building area cap. In addition, up to 212,218 square feet of building area credit for vacating of unreinforced masonry buildings may be granted. At such time as these unreinforced masonry buildings are rehabilitated for use, their building area shall be counted against the 2000 GUP building area cap, unless they are used for residential purposes.
- b. Any project for which a use permit application was filed prior to November 1, 2000 but which was not approved prior to approval of this 2000 GUP may continue to be processed as a separate use permit as provided by the 1989



2. Stanford shall continue to meet the transportation requirements established through the 1989 General Use Permit in order to continue mitigating for the population added to the campus under that use permit. Stanford shall also provide transportation alternatives for students, campus visitors, and other non-employees traveling to or residing on the campus.

3. Stanford shall mitigate the transportation impacts of its additional development and population growth either through a program of "no net new commute trips" or through proportional funding of mitigation measures for specified impacted intersections. If Stanford does not attain the no net new commute trips standard as defined in Condition G.4 below, mitigation of impacts to individual intersections as defined in Condition G.9 will be required.

4. The no net new commute trips standard is defined as no increase in automobile trips during peak commute times in the peak commute direction, as counted at a defined cordon location around the central campus.

5. The reasonable cost of all traffic counts conducted for determination of compliance with this condition shall be paid for by Stanford and the counts shall be performed by an independent consultant under the direction of the County Planning Office.

6. A baseline count (consisting of an average of three separate counts as described in Condition G.7) shall be established prior to construction of the first new non-residential structure to determine the existing level of commute trips entering the campus during the morning peak commute period and leaving the campus during the evening peak commute period. The "peak commute period" is defined as the one-hour period of time with the highest volume of traffic, as determined by the counts. The counting methodology is defined in Condition G.7 below. Monitoring counts shall be performed each year using the same methodology or any alternate methodology determined by the County Planning Office to be more accurate.

7. Traffic counts and determination of traffic volume shall occur as described below. Detailed methodology is contained in the Mitigation Monitoring and Reporting Program.

- a. Peak hour traffic for a single year shall be determined through counts taken at three times during the year. All counts shall be conducted during the regular academic year, which does not include academic breaks or end-of-quarter finals. Specific times for each count shall be determined by the County Planning Office. The three annual counts shall be averaged to determine the annual traffic level for the baseline and each monitoring year.
- b. All counts shall be taken at the campus entry and exit points shown in Figure 3, which together form the defined cordon line.
- c. Traffic counts shall include a license plate survey and matching to determine the rate of cut-through traffic.

d. Cordon volumes will be adjusted to account for use of parking lots within the cordon line by hospital-related traffic and use of lots outside the cordon line by campus-related traffic. These lots are identified in Figure 3 and in the Mitigation Monitoring and Reporting Program.

e. Based on the cordon counts, a peak hour will be identified for the campus. Peak hour traffic volume will be determined for the campus based on the cordon line count, adjusted for cut-through traffic and hospital parking as described above.

8. The County Planning Office will recognize participation by Stanford in off-campus trip reduction efforts and credit reduced trips towards Stanford's attainment of the no net new commute trips standard. Stanford shall receive credit commensurate with the predicted or actual number of trips reduced, and the proportion of the cost of the program that Stanford is contributing. Trip reduction must occur in the area between US 101, Vaiparaiso Avenue/Sand Hill Road, Interstate 280, and Arastradero Road/Charleston Road. The County Planning Office will determine the appropriate trip credit and monitoring methodology for each program in which Stanford proposes to participate. Such proposals shall be submitted to the Planning Office for review, modification, and consideration of approval. The proposals shall be presented to the CRG prior to any determination by the Planning Office.

9. The Planning Office shall monitor the cordon count volumes using the procedures described above. If the cordon counts, as modified by trip reduction credits, exceed the baseline volume as calculated under Condition G.6 by 1% or more for any two out of three consecutive years, mitigation of impacts to intersections will be required as described in Table 4.

**Table 4: Intersections Impact Mitigations**

Intersection	Jurisdiction	Modification
El Camino Real/Valparaiso	Menlo Park	Change NB and SB right turn lanes to shared through/right lanes
El Camino Real/Ravenswood	Menlo Park	Change NB and SB right turn lanes to shared through/right lanes
El Camino Real/Middle	Menlo Park	Add SB right turn lane
JSB/Alpine/Santa Cruz	Menlo Park	Add EB right turn lane
Sand Hill/I-280	Menlo Park	Add EB left turn lane
Sand Hill/Santa Cruz	Menlo Park	Add WB right turn lane
Sand Hill/Oak	Menlo Park	Add one EB and one WB through lane
Middlefield/Willow	Menlo Park	Add EB right turn lane
El Camino Real/Churchill	Palo Alto	Add WB right turn lane; change shared left/right turn to exclusive left turn lane
El Camino Real/Stanford	Palo Alto	Add EB right turn lane
Middlefield/University	Palo Alto	Add NB right turn lane
ECR/Palm/ University	Palo Alto	Add WB right turn lane
Junipero Serra/Page Mill	Palo Alto	Add second SB right turn lane
Junipero Serra/Stanford	Santa Clara	Add second WB left turn lane; widen SB
JSB/Campus Dr. West	County	JSB between Stanford and Page Mill
	Santa Clara Co.	Add second WB right turn lane

a. Stanford shall contribute funding proportional to the level of its impact from traffic associated with the GUP to the appropriate jurisdictions for modification of the intersections as described above. At the time the modifications are to be completed, alternative modifications or other efforts which have equal or greater impact mitigation value for the affected intersections may be identified, based on consultation between Stanford and the appropriate jurisdiction with approval by the County Planning Commission.

b. The appropriate proportional funding for the identified mitigations shall be determined by the County Planning Office, in consultation with the affected jurisdictions.

c. Stanford and the affected jurisdictions shall reach an agreement on mitigations and funding within twelve months of the time that the County has determined that intersection-based mitigation will be necessary. Stanford shall do one of the following alternatives: 1) allocate the proportionate funding for the project during this time, to be provided to the jurisdiction or placed in an independent escrow account, or 2) reach an agreement with the

affected jurisdictions for an alternate mitigation that achieves the same traffic result. If option 2 is proposed, the County Planning Commission must concur with the option and plan. If neither of these options is achieved, development at Stanford shall be suspended until an agreement is reached and funding is allocated or the no net new commute trips requirement is satisfied.

d. If the City of Menlo Park approves widening of Sand Hill Road and associated intersection modifications prior to the time that the intersection modifications described above are triggered, Stanford shall not be required to fund intersection modifications at Junipero Serra Boulevard/Campus Drive West, Junipero Serra/Alpine/Santa Cruz, Santa Cruz/Sand Hill, or Sand Hill/Oak intersections. If the City of Menlo Park does not approve widening of Sand Hill Road and associated intersection modifications prior to the time that the GUP-related intersection modifications are triggered, Stanford shall place its share of the funds for modification of these intersections into an independent escrow account until either the City of Menlo Park does approve the widening or the funding that Stanford has provided to the City of Menlo Park for that purpose expires. If the City of Menlo Park approves the widening and associated intersection modifications during the time that the funds for these GUP-related intersection modifications are in escrow, the funds shall be returned to Stanford. If the City of Menlo Park allows the funds for the widening of Sand Hill Road to expire, the GUP-related escrow funds shall remain in escrow until they are used by the appropriate jurisdiction.

e. Modifications to individual intersections either included or in addition to those in the above list may be required as the result of project-specific traffic studies, as described in Condition G.11.

10. **Neighborhood traffic studies.** Stanford shall participate in any future neighborhood traffic studies initiated by the County of Santa Clara, City of Palo Alto or City of Menlo Park in the area bounded by Middlefield Road, Willow Road/ Santa Cruz Avenue/Sand Hill Road, Interstate 280, and Page Mill Road/Oregon Expressway. Stanford shall not be required to fund more than 50% of the cost of any such study. Stanford shall not be required to pay more than a total of \$100,000 toward such neighborhood traffic studies over the GUP period, or more than \$50,000 for any single neighborhood traffic study. The purpose of Stanford's participation in such a study shall be to determine how much, if any, cut-through traffic in residential neighborhoods is attributable to traffic generated by the central campus. If impacts attributable to central campus traffic are identified in the studies, Stanford shall contribute to reasonable identified mitigation measures to a degree proportional to Stanford's impact from development associated with the GUP. It is the responsibility of the jurisdiction sponsoring the study to inform the County Planning Office of any such study and formally request enforcement of this condition. Stanford's participation in a study may be waived if:

a. The sponsoring jurisdiction has waived this requirement of Stanford for any individual study.



- b. On request by Stanford, the County Planning Commission has waived this requirement of Stanford for any individual study, or adjusted the proportion of the cost of the study that Stanford will be required to pay. The Planning Commission's action may be appealed to the County Board of Supervisors by any interested person.

**11. Project-specific traffic studies.** Stanford shall submit for review and approval by the Planning Office project-specific traffic studies for the projects identified below, as well as other projects of similar size and scale. These studies shall address trip distribution (to determine whether distribution would be substantially different from the distribution assumed in the CP/GUP EIR) project safety, effects of the project on nearby streets and intersections, pedestrian and bicycle facilities, parking, and transit. At the discretion of the County Planning Office, traffic studies may also be required for other proposed projects.

- a. Addition of housing in Escondido Village, including but not limited to housing along El Camino Real adjacent to Escondido Village, that exceeds 100 units
- b. West Campus and Lagunita faculty/staff housing development
- c. Performing Arts Center
- d. Expansion/replacement of basketball arena
- e. Stanford Avenue faculty/staff housing
- f. Parking lots or structures with a net increase in spaces of 400 or more

**12. Construction Traffic.** Stanford shall comply with the following conditions regarding management of traffic related to construction activities and submit a plan implementing the following standards for approval by the County Planning Office prior to the commencement of any new building construction:

- a. Stanford shall provide adequate off-street parking for all construction-related vehicles throughout the construction period. If adequate parking cannot be provided on the construction sites, a satellite parking area shall be designated, and a shuttle bus shall be operated.
- b. Stanford shall not substantially limit pedestrian circulation during construction of the project.
- c. Stanford shall not substantially reduce bicycle circulation while constructing the project.
- d. Stanford shall make feasible attempts to limit the number of construction material deliveries from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM on weekdays. Stanford shall be required to prohibit or limit the number of construction employees from arriving or departing the site between the hours of 4:30 PM and 6:00 PM.

- e. Stanford shall be prohibited from limiting access to public transit, and from limiting movement of public transit vehicles as a result of the construction activities.
- f. Stanford shall prevent roadway construction activities from reducing roadway capacity during major athletic events or other special events, which attract a substantial number of visitors to the campus.
- g. Stanford shall inform the Stanford Police and Palo Alto Fire Department of construction locations, and alternate evacuation and emergency routes shall be designated to maintain response times during construction periods.
- h. Stanford shall provide written notification to all contractors regarding appropriate routes to and from construction sites and weight and speed limits for local roads used to access construction sites. A copy of all such written notifications shall be submitted to the County Planning Office.
- i. Stanford shall post at least one sign no smaller than 1,296 square inches at all active construction sites. The sign shall contain the name and telephone number or e-mail address of the appropriate Stanford person the public may contact to report alleged violations of this Condition G.12 or to register complaints about construction traffic associated with building projects under this GUP. Stanford shall keep a written record of all such complaints and shall provide copies of these records to the County Planning Office as part of the annual report process.

**13. Special Events.** Within one year of GUP approval, Stanford shall submit a Special Events Traffic Management Plan to the County Planning Office. After the Plan is presented to the CRC, the Planning Office shall determine whether the Plan complies with this condition. The Plan shall include, but not be limited to, the following:

- a. Identification of appropriate traffic control mechanisms, personnel and procedures to ensure the orderly flow of traffic during special events.
- b. Public notification by Stanford at least 5 days prior to events where attendance is expected to meet or exceed 10,000 persons. Public notification shall include, but not be limited to, publication in two newspapers of general circulation in the Palo Alto and Menlo Park area (e.g., Palo Alto Weekly, Palo Alto Daily News). Information provided in the notice shall include but not be limited to the date, time and specific location of the event, identification of the public streets or other facilities that will be closed or otherwise substantially affected by the event, and suggested alternate transportation routes. If more than one such event is anticipated during a given week, the public notifications for all of the week's events may be combined. The notice shall be at least 1/8 of a page in size.
- c. Establishment and maintenance by Stanford of a special events telephone hotline and website accessible to the general public where information on

upcoming special events and associated traffic impacts as described in subsection (a) may be obtained.

14. Junipero Serra Boulevard/Stanford Avenue. Stanford shall convene regular meetings of a multi-jurisdictional group to address the existing traffic problems of volume, safety, and noise on Junipero Serra Boulevard and Stanford Avenue. The group shall include representatives from the University and the Stanford Campus Residential Leaseholders (or its successor organization), and may include representatives from the County's Fifth Supervisorial District Office, County Department of Roads and Airports, the City of Palo Alto, the Stanford Golf Club, the College Terrace Residents' Association, and/or the California Highway Patrol. The objective of these meetings is to identify and work toward implementation of feasible solutions to the existing problems of Stanford Avenue and the Junipero Serra Boulevard corridor. These problems include but are not limited to noise, access from residential driveways, and the safety of motorists, pedestrians, and bicyclists. If traffic mitigations affecting Stanford Avenue or Junipero Serra Boulevard are triggered by failure to achieve the "no net new commute trips" standard, Stanford and Santa Clara County will, in consultation with the multi-jurisdictional group, reevaluate the mitigation measures identified in the EIR prepared for the Community Plan and GUP and determine if equally effective mitigation measures or alternatives are preferable. In doing so, the members of the multi-jurisdictional group may help form solutions, comment on their feasibility, and participate in their prioritizing. This process will also facilitate the ability of participants to comment to the agency or agencies with jurisdiction over implementation of such mitigation measures. The annual report shall include information regarding the success or failure in addressing these concerns.

**H. Parking**

1. The total net additional parking spaces on the campus shall not exceed 2,300 spaces, with the exception of parking provided for any housing in excess of 3,018 units, which shall be considered by the County Planning Commission at the time of consideration of the housing proposal. Net additional parking in each development district shall not exceed the totals specified in Table 5, except with environmental assessment as specified in Condition D.6. Parking constructed as part of and to serve new faculty/staff housing in the areas designated Campus Residential-Low Density and Campus Residential-Medium Density shall not count toward the limits shown in Table 5.

**Table 5: Parking Distribution – Maximum Net Additional Parking per Development District**

Development District	Net additional parking spaces
West Campus	50
Lathrop	50
Foothills	0
Lagunita	700
Campus Center	200
Quarry	800
Arboretum	0
DAPER & Administrative	1,700
East Campus	900
San Juan	100

2. In addition to the neighborhood traffic study funding requirements in Condition G.10, Stanford shall participate in residential parking permit programs in neighborhoods within the City of Palo Alto that are immediately adjacent to the campus and have a demonstrated spillover parking impact from activities on Stanford lands in unincorporated Santa Clara County as specified below:

- a. Within twelve months of General Use Permit approval, Stanford shall allocate funding to the City of Palo Alto or to an escrow account for a residential parking permit program in the College Terrace neighborhood, bounded by Stanford Avenue, El Camino Real, California Avenue, and Amherst Street. The funding shall be for the purpose of consideration and initiation of a parking permit program and shall not be required to exceed \$100,000.
- b. If the cost of the consideration and initiation of a residential parking permit program for College Terrace is less than \$100,000, the remaining increment of the \$100,000 may be used by the City of Palo Alto to conduct a study of parking activity for the Southgate and Evergreen Park neighborhoods in the area bounded by the Caltrain tracks, Churchill Avenue, El Camino Real, and Cambridge Avenue. The purpose of the study would be to determine if there is a need for a residential parking permit program to be initiated in these neighborhoods due to activity on Stanford lands in unincorporated Santa Clara County. The funds may be used for this purpose at any time during the term of this General Use Permit, and shall remain in escrow until they are used by the City of Palo Alto. If the funds are not used by the City of Palo Alto during the term of the General Use Permit they shall revert to Stanford.



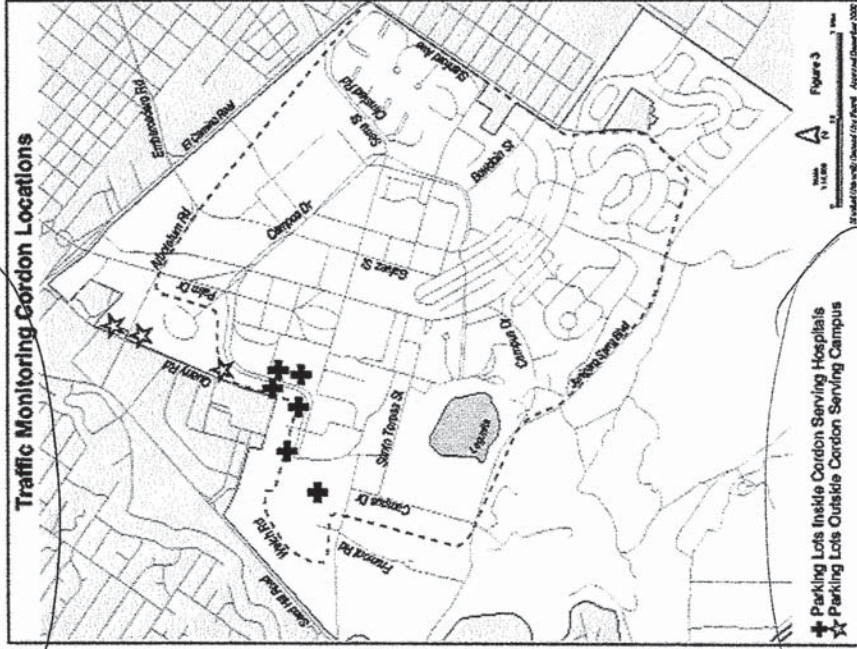
- c. All operational noise sources shall comply with the County Noise Ordinance.
- d. Noise from special events, including but not limited to fireworks displays and events where large numbers of people are gathered, shall comply with the County Noise Ordinance.
- 4. Fireworks displays will be permitted at no more than two events per calendar year unless an entertainment event license is obtained from the Planning Office.
- 5. Stanford shall maintain a hotline to which community members may report noise complaints. The hotline shall be staffed during all outdoor special events with attendance greater than 10,000 persons or where amplified sound is used. All calls to the hotline shall be reported to the County on an annual basis as part of the Annual Report process. Stanford may petition the County Planning Commission for removal of this hotline requirement after two years from the effective date of this GUP if there is no demonstrated need for the hotline.

S. Additional Conditions

1. Applicant's Acceptance of Conditions of Approval. Within 60 days after the final approval of the GUP by the Board of Supervisors, Stanford shall, in writing on a form provided by the County, accept the GUP and agree to be bound by, comply with, and do all things required of Stanford under the conditions of the GUP. The GUP shall not have any force or effect prior to the time that such signed acceptance has been submitted to the Planning Director. If such acceptance is not submitted before the expiration of the 60-day period, it shall not thereafter be accepted and the GUP shall thereupon lapse and be null and void, except with respect to those provisions and conditions of the GUP which authorize residential development and establish conditions with respect thereto, which shall remain valid and enforceable.

SIGNED  
BY JEFF  
-JOHN  
KENNEDY  
HITZEL

Figure 3. Traffic Monitoring Cordon Locations



**The Fireplace Element**  
a full service fireplace store  
650.938.2000

- Mantels
- Outdoor Fireplaces
- Accessories
- Limestone BBQ Islands
- Design
- Installation



1970 w. el camino, MV

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...the biggest difference you're likely to see is the price.

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www.TheTeakPatio.com 650.494.9020

Upfront

News Digest

'One percent for art' approved

To beautify the city, the Palo Alto City Council has approved a "one percent for art" program that guarantees funding for art in city-built places. Whenever the city undertakes a construction project that will have a visual impact on the environment, it will have to set aside 1 percent of the budget for artwork. Artists will be selected by a request-for-proposal process, and the work is expected to be integrated into the design as a whole, rather than as a last-minute addition. In the coming six years, the policy will cost about \$42,000, according to city estimates. Art in city spaces is nothing new; capital improvement projects such as the two downtown parking garages at Bryant and High streets have included art components. Decorated with birds and with haiku, they've come to be known as the "bird" and "word" garages. Future capital projects affected by the "one percent for art" program could include library renovations, a new police building, parks, gateways to the city and bridges, walls and tunnels. The new policy does not extend to private developers. Many private projects are already required to have a public-art element. ■

—Jocelyn Dong

Stanford on verge of traffic limit

Stanford University is close to the limit on the number of morning and evening automobile commutes by its employees permissible under its general use permit (GUP) granted by Santa Clara County in 2001. As a result, Provost John Etchemendy has asked all university managers to find ways to reduce the number of employees who are single-vehicle commuters by 10-15 percent, the Stanford Report newspaper reported Wednesday. The county allows Stanford 3,474 morning commute trips and 3,591 evening commute trips. In traffic surveys taken last fall, the university came within 14 trips of its evening limit. "The last traffic study shows us very close to the limit imposed by the GUP, and the trends suggest we will soon exceed it unless we act aggressively," Etchemendy wrote to university managers. He also wrote that the university may have to make "substantial changes" to its parking permit policies and prices to reduce single-car commuters. The university encourages its employees to take alternative means of transportation to work, paying for both train and bus passes and providing free shuttle buses from train stations, said Jean McCown, the university's director of community relations. The university also provides financial incentives to employees who car-pool to work. If Stanford exceeds its trip limits, it would then be liable to pay for modifying street intersections to improve traffic flow. ■

—Don Kazak

ON THE WEB: The latest local news headlines at [www.PaloAltoOnline.com](http://www.PaloAltoOnline.com)



**43. Tom Jordan (letter dated July 15, 2010)**

- 43.1 *The commentor states that the Draft EIR is inadequate because it does not include the Stanford University 2000 Community Plan and General Use Permit (CP/GUP) project, which is only half way completed. Please refer to Master Response 3 for a discussion of Background Growth/Cumulative Traffic Impacts.*
- 43.2 *The commentor states that the Draft EIR is inadequate because it does not state the County's Traffic Standard, including annual monitoring and required corrective action if the standard is not met. Please refer to Master Response 2 for a discussion of No New Net Trips and other mitigation based on trip counts.*
- 43.3 *The commentor states that the Palo Alto City Council should require SUMC Project sponsors to follow the No Net New Trips standard because the Stanford University campus and the SUMC are controlled by the same agency, and traffic from the two areas is intermingled and cannot be separated. Please refer to Master Response 2 for a discussion of No Net New Trips.*
- 43.4 *The commentor states that the TDM measures proposed as part of the mitigation measures for the SUMC Project is exactly what the County Traffic Standard calls for. If TDM measures do not work, as demonstrated by the annual monitoring, the commentor states other mitigation measures are required. Please refer to Master Response 2 for a detailed discussion of No Net New Trips and other mitigation based on trip counts.*
- 43.5 *The comment provides opinion regarding the County Board of Supervisors and the Palo Alto City Council. This comment does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 10 for a discussion of non-CEQA issues.*
- 43.6 *The commentor states that the Palo Alto City Council should adopt a policy similar to the CP/GUP Traffic Standard for the SUMC Project. Please refer to Master Response 2 for a detailed discussion of No Net New Trips.*

STEVEN TURNER

Letter 44

To: Palo Alto City Council, Palo Alto Planning & Transportation Commission, City Manager, Director of Planning and DEIR Manager of Public Comments  
Re: Stanford Hospitals Expansion DEIR, Population and Housing Section  
From: Tom Jordan, 474 Churchill Ave, Palo Alto CA 94301  
Date: 21 July 2010



The DEIR section on Population and Housing is legally inadequate under the requirements of the California Environmental Quality Act ("CEQA") in that (a) it assesses the impact on population and housing of all the construction from the Project as though it is all to be completed and occupied in the year 2025 -- comparing, as it does, those increases to ABAG projected growth for 2025 -- to the exclusion of looking to when the various buildings are to be completed as set forth in the DEIR in Tables 2-13 through 2-16, which Tables show completion dates of 2012 to 2015, ten to thirteen years earlier, (b) it takes the population and housing figures generated by Project construction and occupation and compares them to ABAG projections made in 2005 and concludes that ABAG projections have already taken the Project growth into account, even though, obviously, the ABAG projections made in 2005 could know nothing of the Project (which was unknown to the public until Stanford announced it two or three years later) so the Project growth projections must, logically, be ADDED TO THE ABAG 2005 projections, not be considered as already projected in them and (c) it ignores the clear fact, known to all except the DEIR firm, that ABAG will consider employment growth within Palo Alto City limits as the main factor in setting for 2015 - 2022 Palo Alto's share of Regional Housing Needs (under Government Code 65580 et seq, cited at page 3.13-5 of the DEIR but then ignored thereafter) and ABAG certainly will NOT accept, as the DEIR does, that only 8% of the new employees generated by the Project need be housed in Palo Alto. These clear mistakes and omissions in the DEIR are so basic and so blatant that it may be hard for the Council to accept that they are as bad as I state, but they are. I, therefore, urge the Council to trust its own common sense and knowledge of the matter in proceeding. The Council is still in full control of the CEQA process and should be fully satisfied on these points -- fully satisfied -- before acting on Stanford's Application. The DEIR's amazingly bad handling of these three issues is most likely traced to Stanford's own improper direct involvement in the preparation of the DEIR for many months at the beginning of the process. Only after citizen complaints to City Planning that it was improper for Stanford, the Applicant for the Project, to be in daily touch with the EIR firm in its preparation was the direct daily contact halted by City Planning, but it is impossible to unring a bell. Very likely the seeds for these clear mistakes were planted then. For whatever reason, there are mistakes, and they must be corrected before proceeding.

To expand somewhat on the three errors stated above: As to issue (a) it seems completely clear that the buildings in the Project will be occupied soon after completion -- not immediately, but soon -- and Tables 2-13 through 2-16 state when the buildings will be completed, which will for almost all will be 2012 through 2015. Those, then, become the dates for the increase in employment thus an increase in

daytime population thus an increase in people living in Palo Alto thus an increase in need for housing in Palo Alto and for increase in traffic in the area, either from new residents or new commuters. To use 2025 as the measure is simply absurd. The impact will come when the people come and they will be here ten years and more earlier than analyzed by the DEIR. All without any consideration for the increased employment and activity from the construction/demolition itself.

44.5  
Cont'

As to issue (b) look at when Stanford filed its application for this Project and compare that date to the release in 2005 by ABAG of its projections to 2025 in all categories relevant to this DEIR, which projections were probably based on data gathered for years prior to 2005, which was only the release date, not the baseline date. Even to the most informed people in the area who may have perhaps foreseen that Stanford would have to do seismic repairs to the hospitals, no one knew anything of the EXPANSION that would be requested, and it is the EXPANSION, not the seismic repairs that is causing the impacts. Even the title of the DEIR is wrong and distorted -- "Renewal and Replacement" indeed. If that were all that is to be done, the only impacts would come from the demolition/construction activities. It is the EXPANSION that causes the impacts and those cannot be said to have been foreseen by ABAG in 2005. The Project impacts must be added to the ABAG projections, not be said to be included in them. How wrong can you be???

44.6

As to issue (c) the DEIR reasons that because only 8% of the current employees of the Stanford Hospitals live in Palo Alto, a fact that was supplied by Stanford the Applicant, that only 8% of the additional 2,242 employees to be generated by the Project will live in Palo Alto. Now the City knows what the ABAG formula is for allocating Regional Housing Need because the City formally appealed to ABAG that the formula was unfair as applied to Palo Alto, and, as I read in the newspapers, ABAG did make a small adjustment. So the City knows the ABAG formula. Ask Staff whether ABAG will be satisfied if the City zones for additional housing for 8% of the 2,242 new employees. The ABAG 2015-2022 allocation for Palo Alto will be much much bigger than that. Everyone in the City knows it. Why does not the DEIR firm know it? ABAG is proceeding under State law, and the City Staff and the Council have treated that law as though it must be followed. What will be the environmental impact on the City of ABAG's next allocation of Regional Housing Need? The Fiscal impact, though beyond the scope of an EIR, is even more important, and the Council has no guidance on either. After all this time, how can that be???

44.7

Please do whatever is necessary to get the correct guidance on these three issues before acting on the Application.

RECEIVED

JUL 22 2010

Department of Planning & Community Environment

**44. Tom Jordan (letter dated July 21, 2010)**

44.1 *The commentator states that the Population and Housing section is inadequate. As stated on page 2-53 of the Draft EIR, the estimated timeline for construction is approximately 12 years. The Draft EIR conservatively assumes completion of construction in 2021, which ensures that mitigation would be in place when warranted and not later. Also, while construction is assumed to be completed in 2021, projected occupancy of the proposed structures would not occur immediately after construction and would require time to ramp up. Consequently, the SUMC Project sponsors project full occupancy of the proposed structures by 2025. Table 2-13 of the Draft EIR shows a completion date of 2021 for the construction of the Stanford Hospital and Clinics structures.*

44.2 *The commentator asserts that Association of Bay Area Governments (ABAG) Projections 2005 did not consider the SUMC Project (since the application for the SUMC Project was submitted in 2007), and that the growth from the SUMC Project should not be considered to be part of the ABAG Projections 2005. The commentator is correct in indicating that the ABAG Projections 2005 were prepared prior to the proposal of the SUMC Project. However, as stated on page 3.13-2 of the Draft EIR, “ABAG Projections 2005 are used here to compare future population and employment growth from the SUMC Project. Projections 2005 are applied in lieu of the more recent ABAG Projections 2007 because both the City’s and the Santa Clara Valley Transit Authority (VTA’s) traffic model data were based on the ABAG Projections 2005 and the City has determined that the ABAG Projections 2005 are more consistent with the City’s current Comprehensive Plan’s goals and policies. In addition, the City has disputed the ABAG Projections 2007 as aggressive in comparison with the ABAG Projections 2005. The ABAG projections of 2005 and 2007 are similar through the year 2020.”*

Numerous contacts with ABAG by City staff confirmed that ABAG was told of the SUMC’s and Stanford Shopping Center’s growth. In addition, in an email, City staff were told by ABAG “that (the SUMC Project) was included in their projections.”<sup>1</sup> Also, Julie Caporgno, in response to such concern from then-Commissioner Burt, indicated that ABAG Projections of jobs are not specific to hospital projects, but that given ABAG’s approach, “I don’t think we are going to be penalized in the next period, but . . . it is very general.”<sup>2</sup> Finally, by e-mail on December 19, 2008, from ABAG to Stanford, ABAG indicated that the ABAG forecast for jobs included assumptions for job growth at the Stanford Shopping Center and Stanford University Medical Center.<sup>3</sup>

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<sup>1</sup> Roland Rivera, Senior Planner, City of Palo Alto, minutes of City of Palo Alto Planning and Transportation Commission public meeting, September 19, 2007.

<sup>2</sup> Julie Caporgno, Chief Planning & Transportation Officer, City of Palo Alto, minutes of City of Palo Alto Planning and Transportation Commission public meeting, September 19, 2007.

<sup>3</sup> Christie Riviere, Association of Bay Area Governments, email correspondence to Judy Chan, Stanford, December 19, 2008.



The above notwithstanding, since preparation of the analysis in the Draft EIR, ABAG has released its Projections and Priorities 2009. According to ABAG’s Regional Planner Jason Munkres, “As far as the Stanford Medical Center is concerned, we believe that our Projections 2009 forecast adequately reflects the growth associated with the Medical Center project.”<sup>4</sup> A quantified comparison of the SUMC Project’s indirect housing demand against household growth in jurisdiction sphere of influences, per ABAG Projections and Priorities 2009, is provided in Table 4-6 below for informational purposes. Similar to the analysis in the Draft EIR, Table 4-6 shows that the indirect housing demand from the SUMC Project would comprise a small percentage of projected housing growth between 2010 and 2025. It should be noted that Table 4-6 provides a more conservative analysis than the Draft EIR since it applies housing growth from 2010 through 2025 rather than 2005 through 2025.

**Table 4-6  
Comparison of SUMC Project 2025 Indirect Housing Demand to Housing Growth per ABAG  
Projections and Priorities 2009**

	Residential Location of Existing SUMC Employees <sup>a</sup>	2010 to 2025 Housing Growth per ABAG Projections and Priorities 2009 <sup>b</sup>	SUMC Project Housing Demand in 2025	SUMC Project Housing Demand as Percent of Household Growth 2010-2025
<b>Santa Clara County</b>				
Palo Alto	8.0%	5,290	104	2.0%
Stanford University Campus <sup>c</sup>	1.1%	3,022 <sup>c</sup>	14	0.5%
Mountain View	5.9%	6,040	77	1.3%
Los Altos and Los Altos Hills	1.5%	650	20	3.1%
Sunnyvale, Santa Clara, Cupertino	11.0%	18,260	143	0.8%
San Jose	15.5%	80,440	202	0.3%
Milpitas	2.1%	6,530	27	0.4%
Campbell, Los Gatos, Saratoga, (+Monte Sereno, Alum Rock)	2.3%	~ 2,460	30	1.2%
Gilroy, San Martin, Morgan Hill	0.7%	~ 6,791	9	0.1%
<i>Subtotal</i>	<i>45.9%</i>	<i>130,683</i>	<i>626</i>	<i>0.5%</i>
<b>San Mateo County</b>				
Menlo Park (+ W. Menlo Park)	4.1%	1,630	53	3.3%
East Palo Alto	1.8%	1,520	24	1.6%
Atherton, Woodside, Portola Valley, Emerald Hills	0.9%	~ 684	12	1.8%

<sup>4</sup> Jason Munkres, Regional Planner, Association of Bay Area Governments, electronic communication with Matthew Berke, PBS&J, October 13, 2010.

**Table 4-6  
Comparison of SUMC Project 2025 Indirect Housing Demand to Housing Growth per ABAG  
Projections and Priorities 2009**

	Residential Location of Existing SUMC Employees <sup>a</sup>	2010 to 2025 Housing Growth per ABAG Projections and Priorities 2009 <sup>b</sup>	SUMC Project Housing Demand in 2025	SUMC Project Housing Demand as Percent of Household Growth 2010-2025
Redwood City	5.5%	~ 5,090	72	1.4%
Belmont, San Mateo, San Carlos, and Foster City	6.2%	10,290	81	0.8%
Hillsborough, Burlingame, Millbrae	1.1%	3,300	14	0.4%
South San Francisco, Brisbane, Daly City, Colma, San Bruno	2.9%	12,210	38	0.3%
Half Moon Bay and Coastal (Pacifica, Montara, El Granada, La Honda, Pescadero, Loma Mar, Moss Beach)	1.7%	~ 2,325	22	0.9%
<i>Subtotal</i>	<i>24.2%</i>	<i>37,049</i>	<i>316</i>	<i>0.9%</i>
<b>Alameda County</b>				
Fremont and Hayward	8.9%	14,940	116	0.8%
Newark, Union City, San Leandro, Castro Valley, San Lorenzo	6.1%	13,010	79	0.6%
Oakland, Berkeley, Alameda, Emeryville, Albany, Piedmont	1.0%	40,540	13	0.03%
Dublin, Pleasanton, Livermore, Sunol, and Mountain House	1.3%	~ 17,755	17	0.1%
<i>Subtotal</i>	<i>19.3%</i>	<i>86,245</i>	<i>225</i>	<i>0.3%</i>
<b>San Francisco County</b>	4.0%	40,120	52	0.1%
<b>Contra Costa County</b>	1.3%	49,650	17	0.03%
<b>Marin, Napa, and Sonoma Counties</b>	0.6%	19,970	8	0.04%
<b>TOTAL IN BAY AREA REGION</b>	<b>95.2%<sup>d</sup></b>	<b>372,570</b>	<b>1,241<sup>d</sup></b>	<b>0.33%</b>
<b>Outside the Bay Area Region</b>	4.8%	-	62	
<b>TOTAL</b>	<b>100%<sup>d</sup></b>		<b>1,303<sup>d</sup></b>	

*Sources:*

- a. Stanford University Medical Center, Stanford University Medical Center Facilities Renewal and Replacement Project Application, August 2007, as amended; Tab 5, Table 5-5. See Appendix L.
- b. Association of Bay Area Governments, Projections and Priorities 2009.
- c. Stanford University 2000 Community Plan and General Use Permit Draft Environmental Impact Report, Table 2-1, June 2000.

*Note:*

- d. Individual percentages and numbers of units may not sum to the totals due to rounding.

As shown in Table 4-6, applying ABAG Projections 2009, the housing demand from the SUMC Project would still comprise a small percentage of the anticipated housing growth in the various Bay Area communities. There is also a negligible difference between the percentages when applying the Projections 2005 versus Projections 2009. Pages 3.13-12 through 3.13-13 of the Draft EIR demonstrates that the indirect housing demand generated by the SUMC Project, using ABAG Projections 2005, would be: 0.28 percent of the projected household growth in the Bay Area region, 0.5 percent of household growth in Santa Clara County, 0.9 percent of household growth in San Mateo County, 1.7 percent of the projected household growth within the City of Palo Alto, and 2.8 percent of housing growth in Menlo Park, from 2005 to 2025. For comparison purposes, as shown in Table 4-6, the indirect housing demand generated by the SUMC Project, using ABAG Projections 2009, would be: 0.33 percent of the projected household growth in the Bay Area region (a difference of 0.05 percent), 0.5 percent of household growth in Santa Clara County (no difference), 0.9 percent of household growth in San Mateo County (no difference), 2 percent of the projected household growth within the City of Palo Alto (a difference of 0.3 percent), and 3.3 percent of housing growth in Menlo Park (a difference of 0.5 percent), from 2010 to 2025. Table 3.13-8 in the Draft EIR, which uses ABAG Projections 2005, reflects similar results as calculated for ABAG Projections 2009.

- 44.3 *The commentor indicates that ABAG will not accept that only 8 percent of SUMC employees would live in Palo Alto when developing the Regional Housing Needs Allocation (RHNA). As explained on page 3.13-1 of the Draft EIR, ABAG is the San Francisco Bay Area's regional council of governments. ABAG forecasts a certain amount of population growth through its projections, and subsequently coordinates with various agencies and municipalities the required housing stock and infrastructure to support the projected growth. ABAG also prepares the RHNA, which is a State-mandated process used for determining how many housing units, including affordable units, that each community must plan to accommodate. The City of Palo Alto's RHNA is not based solely on employment from SUMC facilities. The City's RHNA is determined by ABAG based on broader considerations such as water and sewer capacity, available suitable land, distribution of household growth and market demand for housing, housing costs, employment, and proximity to transit.<sup>5</sup>*

The RHNA requirements for the City of Palo Alto are included in Table 3.13-3 on page 3.13-5 of the Draft EIR. As shown in this table, the City has already issued building permits for 741 housing units and therefore has an unmet need of 2,119 housing units. This unmet need will be addressed in the Housing Element, as part of the Comprehensive Plan update. As discussed above, the SUMC Project would result in an indirect housing demand in the City of Palo Alto of 104 units.

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<sup>5</sup> Association of Bay Area Governments, San Francisco Bay Area Housing Needs Plan 2007-2014, pp. 21 – 23, June 2008. <http://www.abag.ca.gov/planning/pdfs/SFHousingNeedsPlan.pdf>, accessed October 4, 2010.



44.4 *The commentor requests that the City Council fully consider the additional information that includes the 2007 ABAG numbers, as discussed above in Response 44.3. The comment mainly pertains to the review process of the Draft EIR and consideration by City Council. Please refer to Master Response 11 for a detailed description of the City's review process and the next steps in the EIR review process.*

*The commentor also questions the SUMC Project sponsors' review of preliminary versions of the Draft EIR. The SUMC Project sponsors were initially allowed to review administrative drafts of the Draft EIR in order to provide technical expertise. The City permitted this review in recognition of the complexity of the SUMC Project and the need to verify the accuracy of information regarding hospital functions and the requirements of SB 1953. Although the SUMC Project sponsors had access to preliminary drafts, the public was also able to review the document prior to its publication. Early versions of the Draft EIR were available in 2009 at the Palo Alto City Library upon request. After early 2009, neither the SUMC Project sponsors nor the public had access to the updated drafts of the document until publication of the Draft EIR in May 2010. Preliminary review by the SUMC Project sponsors and the public did not influence the decision to use the ABAG Projections 2005 in the analysis contained in Section 3.13 of the Draft EIR, Population and Housing.*

44.5 *The commentor indicates that the analysis should not be based on 2025 occupancy. It is appropriate to base impacts on full operation and occupancy of the SUMC Project, which would occur in 2025, because this scenario captures the maximum impact from the SUMC Project. As indicated in the Draft EIR, construction of the SUMC Project would draw from local sources and thus would not trigger an increase in population.*

44.6 *The commentor objects to the use of ABAG 2005 Projections in the analysis. Please see Response 44.2.*

44.7 *The commentor indicates that ABAG will not accept that only 8 percent of SUMC employees would live in Palo Alto when developing the RHNA. Please see Response 44.3.*

**COUNCIL MEETING**  
 7-19-10  
 Placed Before Meeting  
 Received at Meeting  
 CITY OF PALO ALTO, CA  
 CITY CLERK'S OFFICE

**Minor, Beth**

**From:** Yoriko Kishimoto [ykishimoto@earthlink.net]  
**Sent:** Thursday, July 15, 2010 7:31 AM  
**To:** Council, City  
**Subject:** Stanford medical center DEIR

Mayor Burt and Honorable Members of the City Council:

As you know, I played a role in working with you all on this project over the past couple years. I would like to share some quick thoughts as I read through some of the DEIR.

Overall comments

\* We have noted many times that Palo Alto would not be Palo Alto without Stanford University, and that we are "joined at the hips" according to Dean Pizzo of the Medical school. That said, it is the project of the century and of a transformational scale. If we are to become "urban village" in our density, we need urban village infrastructure and policies. The Medical Center is projected to have more than 12,000 employees, equivalent to the number of employees at the university proper, and fully half of the Stanford Research Park (SRP). The SRP as you might remember led to the building of Oregon Expressway and continues to cause a huge tide of traffic in and out every day. Hopefully, the Medical Center is more compact and will have tight linkages to Cal train and other regional transit.

\* Besides the village concept, there are three other significant alternatives (tree preservation, historic preservation and reduced intensity Alternative B) analyzed in the DEIR which meet most of both the city and Stanford's goals perhaps with more open space and less impact on the environment. I hope the public and council study these alternatives seriously.

Specific comments

\* We have been long promised a 3-D model to help visualize the project from years ago. This would help us visualize and compare the alternatives as well.

\* concerned about the proposed modification of Policy L-8 of Comp Plan to exempt hospitals from non-residential cap. it doesn't make policy sense to exempt the major employer in our area.

\* Please keep the GO pass as a mitigation or benefit - it is a proven traffic reducer. Although it is difficult to be negotiating GO passes as Caltrain goes through its financial crisis, Stanford campus is already a pillar supporting Caltrain, and the new agreement will help provide some financial stability to Caltrain's future. (p. 3.4-59; University currently has a total employment of approximately 11,000 and purchases 9,400 GO Passes annually. It would seem that adding the built-out medical center will double the number of employees near the University Avenue station with GO passes and hopefully using Caltrain.)

\* Given the conceptual goal of no net new trips, adding 2000 new parking spaces seems contradictory. Are all these net new parking spaces for visitors?

\* I was pleased to see the requirement for transit hubs to be built into the medical center.

7/15/2010

7/15/2010

45.8 I will end by thanking our staff, the city council, Stanford, and the public for their attention and hard work on this important project. This is an opportunity to take positive advantage of this transformational moment in Palo Alto history.

Thank you for the opportunity to comment.

Yoriko Kishimoto  
 Former Mayor of Palo Alto  
 650-323-5590

**45. Yoriko Kishimoto (letter dated July 15, 2010)**

- 45.1 *The commentor expresses support for an “urban village” and transit linkages as part of the SUMC Project. To address these issues, the Draft EIR analyzes a Village Concept Alternative in Section 5, Alternatives. This comment concerns the merits of the SUMC Project and its alternatives and does not address the adequacy of the Draft EIR or the SUMC Project’s compliance with CEQA. Please refer to Master Response 9 regarding the merits of the SUMC Project and its alternatives.*
- 45.2 *The commentor expresses support for the Tree Preservation Alternative, the Historic Preservation Alternative, and Reduced Intensity Alternative B. This comment concerns the merits of the SUMC Project alternatives and does not address the adequacy of the Draft EIR or the SUMC Project’s compliance with CEQA. Please refer to Master Response 9 regarding the merits of the SUMC Project and its alternatives.*
- 45.3 *The commentor requests 3-D models of the SUMC Project site plan. The SUMC Project sponsors displayed the existing 3-D models for the Main SUMC Site (the SHC and LPCH buildings) prior to the start of the City Council hearing on July 19, 2010. These 3-D models depicted the Tree Preservation Alternative, which is the SUMC Project sponsors’ preferred alternative. The SUMC Project sponsors and City staff were available to answer questions during the viewing period. Following the City Council hearing, the models were removed from the City Hall lobby since they are working models that are under development and subject to change.*

Although it is not anticipated that supplementary 3-D models will be provided for public viewing, other forms of visual images that depict the SUMC Project are available. A computer simulation “fly through” of the site plans and visual simulations are available on the City website at: [www.cityofpaloalto.org/sumc](http://www.cityofpaloalto.org/sumc). In addition, the Draft EIR provides several visual simulations of the SUMC Project, as included in Section 3.3, Visual Resources.

Regarding the alternatives, as explained above, the 3-D models presented on July 19, 2010 and the computer simulations available at the City website illustrate the Tree Preservation Alternative. No site plans or simulations are available for the other alternatives proposed in the Draft EIR. Please refer to Master Response 10 for a discussion of SUMC Project design and other non-CEQA issues.

- 45.4 *The commentor expresses concern about the proposed modification of Policy L-8 of the Comprehensive plan to exempt hospitals from a non-residential cap. The effects of the exemption are considered in the Draft EIR, mainly in Section 3.2, Land Use. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.*

- 45.5 *The commentor requests that the GO Pass be retained as a mitigation measure. Although Caltrain is going through financial difficulties, the GO Pass mitigation can help provide some stability. Please refer to Master Response 1 for a detailed discussion on the effectiveness of the GO Pass.*
- 45.6 *The commentor states that given the conceptual goal of No Net New Trips, and adding 2,000 parking spaces seems contradictory. The commentor questions if these spaces are for visitors. The SUMC Project proposes to add 2,051 additional parking spaces which are based on automobile use for the SUMC expansion at current modal split percentages. If GO Passes were purchased for SUMC employees, the existing auto mode split of 77 percent would be reduced to 64.5 percent thereby eliminating the need for about 720 parking spaces (as stated in Section 4.8 of the Transportation Impact Analysis, Appendix C of the Draft EIR). The number of net new parking spaces to be provided could be about 1,331 spaces.*
- 45.7 *The commentor expresses support for transit hubs as part of the SUMC Project. Please see Staff-Initiated Change 1 for a revised transit analysis and revision to mitigation involving enhanced bus stops.*
- 45.8 *The commentor expresses support for the SUMC Project. This comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.*

46.4  
Cont  
student and faculty, medical school, academic occupants, commercial space and construction projects. You have at least two former council members who are expert on SFPUC water issues so do hope you are hearing from them on this matter. There is also "lake water" irrigation of campus which reflect diversions from Los Trancos and San Francisco Creeks of 1.90 mgd, I believe, and this is concern as these streams should be supply for underground aquifer in unconfined zone. Lake Lagunita was prime percolation pond but does not appear to be managed for that purpose anymore?

46.5  
~ Hydrology and wastewater sections need to be updated in regards to base data. San Francisco Creek hundred year flood, or 1% event flow is now estimated by COE at 9400 cfs rather than at 7600 cfs which was high flow of February 2-9, 1998 storm which overbanked San Francisco Creek to flood downtown Palo Alto and neighborhoods. Runoff down Stanford Avenue also flooded out the basement of Stanford's Green Library. Incidence of overland flow from San Francisco Creek and watershed needs to be re-evaluated for the DEIR. This increase in estimated flows and in intensity of storm events by COE, affects stormwater drain capacity, as well. Can this continue to accommodate 10 year events? Will redesign of outfalls to San Francisco Creek mitigate for increase in stormwater loading? These are aspects of hydrology in need of further DEIR review.

46.6  
~ The height and size of the new hospital building is a concern in regards aesthetics, but also I was unable to find reference as to an increase in fire fighting capability that will entail more sophisticated equipment and supplemental staff. There should be an analysis of toxic chemicals incorporated in the structure and stored on site in routine hospital operation. What additional volume will there be in regards medical waste?

46.7  
~ The underflow of groundwater is said to be at 30 feet so it is important that proposed deep basements and garages do not dig deeper and that electrical equipment is installed high and dry above ground. Not sure how this affects elevator shafts. This is doubly important in consideration of San Francisco Creek's sheet flows.

46.8  
46.9  
46.10  
46.11  
46.12  
~ The increase in traffic needs to evaluate nitrogen deposition on open space areas of biological importance such as Jasper Ridge biological preserve, and Edgewood Park, where serpentine communities will have a hard time surviving an onslaught of invasives. What impact will pollution from congested traffic on #280, on its way to Stanford campus employment, have on water quality in SFPUC's Crystal Springs and San Andreas Reservoirs? Will this increase in traffic negate any aspects of fire department's Palo Alto evacuation plan?  
~ In geology section there is no mention of the Stanford fault. Was it the San Andreas Fault or Stanford fault that caused such major damage to Stanford University buildings in 1906?

I apologize for getting this to you so late. Was unable to find the DEIR in Palo Alto libraries and finally got a loaner from your planning department on Wednesday. Then today when called City Clerk for e-mail address for submittal of comments find offices closed all Friday. You have a challenge in this DEIR document.

Airaid I will be out of town on Monday so will have to read about this meeting in the minutes.

Libby Lucas, 174 Yerba Santa Ave., Los Altos, CA 94022

From: [Lucas1099@aol.com](mailto:Lucas1099@aol.com)  
Date: July 23, 2010 4:58:21 PM PDT  
To: [KCHolman@scglobal.net](mailto:KCHolman@scglobal.net)  
Subject: **Stanford University Medical Facilities Renew & Repl. DEIR - July 26 Council Mtg.**

Karen Holman  
Palo Alto City Council  
Palo Alto, CA  
July 23

Dear Karen Holman,

In regards Stanford University's Medical Facilities Renewal and Replacement DEIR which you and Palo Alto City Councilmembers will be reviewing at a July 26 Council Meeting, rather belatedly I would submit following concerns.:

46.1  
~ Landscape plantings were evidently going to be obtained from a southern California native plant nursery but under separate cover I will submit Acterra's native plant species list appropriate for this San Francisco watershed. Palo Alto Foothills Park grown plantings will have better survival capability for Children's Hospital, proposed Discovery, Emerald, Healing, Rainbow, and Rain gardens, and nature pathway and entry court.

46.2  
~ There is confusion on plans and in text of DEIR as to which protected significant trees, especially oaks, are to be retained, transplanted or lost to development. On Plans ARB 011, #478, 479, 608, 425, and 333 are said to remain, but this is not guaranteed elsewhere. In text it states 71 protected trees will be removed, of which 23 are significant. While on ARB 009 plans, 19 protected trees are listed as 'good candidates for transplanting' and yet they are garage in center strip of Pasteur Drive which is far from ideal. It would be reassuring to have a work session with planners to establish tree preservation criteria. Alternative tree loss mitigation would be to establish oak conservation acreage in perpetuity on western campus land.

46.3  
~ Though EDAW consultants assure that harvester rainwater and subsurface reclaimed water will be used for irrigation on hospital landscaping, this is only a small component of Stanford University campus irrigation. In the California legislature at present is a bill that would mandate 50 % use of recycled water by the year 2030 so it would be good to see an integrated management plan for irrigation of all proposed campus development, to see what vegetation would best survive and perhaps thrive on continual recycled water use.

46.4  
~ In the water supply segment of this DEIR I can only find data on City of Palo Alto water use and SFPUC supply allocation. Stanford University has its own SFPUC allocation, and historical and projected use yet this is not in DEIR? Is not this a critical deficiency? In 2007 SFPUC documentation of present and future water demands, Stanford's 2030 projected demand was up 76%, from 3.00 mgd to 4.20 mgd, and that did not include employment growth, only residential

**46. Libby Lucas (letter dated July 23, 2010)**

46.1 *The commentor suggests plant species for the SUMC Sites.* The specific landscape requirements and plant species to be included at the SUMC Sites are outside the scope of CEQA and therefore are not included in the Draft EIR. Proposed landscaping is generally described on pages 3.3-34 and 3.3-37 of the Draft EIR, Section 3.3, Visual Quality. The Draft EIR describes proposed open spaces, walkways, lighting, vegetation, and other decorative features, but does not list the specific species of plants to be installed.

However, the SUMC Project draft Design Guidelines presents proposed tree species and their typical planting patterns that would be used to contribute to the visual quality of the SUMC Sites. Appropriate plant species would be included at the SUMC Sites as advised by a qualified arborist and street tree replacement will be consistent with the City of Palo Alto Public Works Department Street Tree Management Plan. As such, street tree replacement shall include native species to the maximum extent possible and appropriate species include California black oak, red maple, toyon, and flax leaf paperbark. The Architectural Review process would include consideration of whether the SUMC Project adequately incorporates landscaping. Please refer to Master Response 10 for a discussion of non-CEQA issues.

46.2 *The commentor questions the inconsistency between the number of Protected Trees to be retained or removed as outlined in the Draft EIR versus those outlined in the site plans prepared by the SUMC Project sponsors.* Since the publication of the Draft EIR, the number of Protected Trees to be removed and retained has been corrected. Refer to Staff-Initiated Change 6 for the corrected Protected Tree numbers.

*In addition, the commentor questions the ability to relocate large Protected Trees and questions the location of the potential tree relocation zone in the median of Pasteur Drive.* Mitigation Measure BR-4.3, as presented on page 3.9-27 of the Draft EIR and revised in Staff-Initiated Change 6, would require the preparation of a Tree Relocation and Maintenance Plan (TRMP). The TRMP should evaluate the feasibility of moving the Protected Trees to an appropriate location on site. Feasibility would consider current site and tree conditions, a tree's ability to tolerate moving, relocation measures, optimum needs for the new location, aftercare, irrigation, and other long-term needs. Although the commentor refers to tree protection zones in SUMC Project designs, as presented to the Architectural Resources Board (ARB), it is important to note that these designs are preliminary and subject to revisions. The tree relocation zones will not be determined until the completion of the TRMP, pursuant to Mitigation Measure BR-4.3.

46.3 *The commentor requests an integrated management plan for irrigation of all proposed campus development.* The SUMC Project sponsors considered a greywater system to be used for irrigation under the SUMC Project. However, based on discussions with the Office of Statewide Health Planning and Development (OSHPD), hospitals are not allowed



to use greywater systems. As such, greywater systems would not be installed under the SUMC Project.<sup>1</sup> The Draft EIR analyzed the SUMC Project as proposed. Therefore, the water demand analysis did not consider the use of a greywater system. The identified legislative bill that would mandate 50 percent use of recycled water by the year 2030 is under consideration and does not apply to the SUMC Project. Please refer to Master Response 10 for a discussion of non-CEQA issues.

46.4 *The commentor notes that Stanford University receives a separate water allocation from SFPUC and questions why this was not addressed in the Draft EIR.* Stanford University does operate as a water service provider and has an agreement with the San Francisco Public Utilities Commission (SFPUC) to receive potable water. However, the SUMC Sites operate separately from Stanford University and are located within the service jurisdiction of the City of Palo Alto, as shown in the service area boundary from the City of Palo Alto 2005 Urban Water Management Plan. The Draft EIR water supply discussion utilizes information from the August 2009 Water Supply Assessment for the SUMC Project (Draft EIR Appendix M) and summarized the findings from the report in the Utilities sections. Page 1-5 of the Water Supply Assessment states that the “City of Palo Alto Utilities (CPAU) is the public water system that serves the City of Palo Alto and the SUMC Sites.” As such, the Draft EIR addresses the supply and demand issues as they pertain to the City of Palo Alto, not the Stanford University water service provider.

46.5 *The commentor suggests that the hydrology and wastewater sections should be updated with regard to base flow data from the United States Army Corp of Engineers (USACE), which indicates higher flow rates for the one-percent flow event in San Francisquito Creek.* The commentor also suggests that the incidence of overland flow be re-evaluated in the Draft EIR, including the effect on storm drain system capacities and questions whether the 10-year storm event can continue to be accommodated and if redesign of outfalls to San Francisquito Creek would be implemented to mitigate for increases in stormwater loading.

In accordance with CEQA, the Draft EIR analysis is based on potential SUMC Project impacts as related to existing conditions. Regardless of the existing flood flow rates in San Francisquito Creek or storm drain system capacities, if the SUMC Project would increase runoff to these systems, then the impact could be potentially significant or significant. If the SUMC Project does not increase flow rates, then, even if the current system experiences flooding, the SUMC Project would not affect flooding. The City cannot speak to the potential for higher San Francisquito Creek flood flow rates suggested by the commentor, because no reference supporting this contention has been provided. However, the latest FEMA map revision (May 18, 2009) shows that the one-percent annual chance of flooding (100-year flood event) is still contained within the San Francisquito Creek channel upstream of El Camino Real. The Draft EIR analysis fully identifies and discusses

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<sup>1</sup> Mark Tortorich, Vice President, Design and Construction, Stanford University Medical Center, Planning and Transportation Commission Hearing, June 30, 2010.

potential SUMC Project effects on flooding and storm drain system capacity exceedances. No redesign of outlets to San Francisquito Creek would be implemented to mitigate increased flow rates, because the SUMC Project would not increase flow rates.

The Draft EIR analysis does not rely on a specific flow rate (e.g., 7,600 cfs or 9,400 cfs) for identifying potential flood effects from the SUMC Project; rather, in accordance with CEQA, the Draft EIR analysis evaluates whether or not the SUMC Project would likely increase flow rates to the off-site systems. Flow rates to San Francisquito Creek or the storm drain system could increase because of changes in drainage patterns, such as increased impervious surface or substantial alterations in flow conveyance (e.g., installing a storm drain system in an area dominated by overland runoff). As noted in the Draft EIR, on page 3.11-40 the off-site storm drain systems would not be altered and the on-site storm drain system and drainage characteristics would not be substantially altered. As presented on page 3.11-2, increasing impervious surfaces within an area would not greatly affect flood flows (one percent annual chance of flooding) within San Francisquito Creek because, during these events, rainfall saturates even natural, pervious surfaces and renders them effectively impervious. The Draft EIR states that the SUMC Project would actually increase the amount of effective pervious surfaces, not impervious surfaces, on the SUMC Sites by seven percent. Additionally, a no net-increase in directly-connected impervious surfaces is sufficient to prevent increases in runoff for the 2-year to 10-year storm events, in accordance with the Municipal Regional Permit. The Draft EIR further notes that the Public Works Department requires that existing drainage patterns must be maintained. Therefore, with no substantial alterations in drainage patterns on the SUMC Sites and no increases in effective impervious surfaces, the SUMC Project would not increase runoff to San Francisquito Creek or the storm drain systems and the impact level of significance is less than significant.

- 46.6 *The commentor is concerned about the increased height and size of the SUMC Project and how that would impact fire fighting capability.* As explained in Impact PS-1, on pages 3.14-12 through 3.14-14, the SUMC Project might require an increased level of fire and emergency services, but not to the degree that would result in the construction of new buildings. These additional services would have an impact on the Palo Alto Fire Department (PAFD) itself; however, under CEQA, this is not considered a physical environmental impact. As stated on page 3.14-13, the impacts on the PAFD include the need for a new ladder to serve the increased building heights at the SUMC Sites and the need for three additional full time employees.

Improvement measures are proposed in the Draft EIR to reduce the impacts on the PAFD, as presented on page 3.14-14. Since the impacts from the SUMC Project are not large enough to trigger the construction of new facilities, which would result in a significant impact, mitigation measures are not required through the environmental review process. However, the City could encourage the SUMC Project sponsors to implement these improvement measures or consider imposing them as Conditions of Approval. Therefore,

for the purposes of CEQA review in the Draft EIR, the improvement measures are not mandated, but encouraged.

One of the improvement measures, as outlined on page 3.14-14 of the Draft EIR, includes providing the PAFD with a 100-foot ladder truck to replace the existing 75-foot ladder truck. The 130-foot SHC Hospital towers would be significantly taller than the existing buildings at the SUMC Sites. Therefore, in order for the PAFD to reach the upper floors of the buildings in the event of an emergency, a new ladder would need to be purchased. Although more space would be needed at the fire station to house a 100-ladder truck, the PAFD has looked at the apparatus housing capabilities at the fire stations and has determined that the current facilities are capable of handling any new equipment.<sup>2</sup>

The other improvement measure would increase the 12-hour Medical unit to a 24-hour unit and would add three full time employees. Although additional staff would be needed as a result of the SUMC Project, the PAFD acknowledges that the existing fire stations are capable of handling the increase in employment.<sup>3</sup> Therefore, the need for new fire facilities would not be triggered and a less-than-significant physical environmental impact would occur.

46.7 *The commentor questions what toxic materials would be used and stored on the SUMC Sites and additional medical waste would be stored at the SUMC Sites as a result of the SUMC Projects.* The existing and projected amount of hazardous chemicals at the SUMC Sites is disclosed in Table 3.12-6 on page 3.12-29 of the Draft EIR. As discussed on pages 3.12-28 through 3.12-36 of the Draft EIR under Impact HM-1, the SUMC Project would not substantially increase exposure to hazardous materials use, handling, and disposal during operation, resulting in a less-than-significant impact.

The impacts of hazardous waste generation and disposal are discussed under Impact HM-4 on pages 3.12-41 through 3.12-46 of the Draft EIR. The Hazardous Materials section of the Draft EIR concludes that the SUMC Project would not substantially increase exposure risk related to hazardous waste generation. The existing and future annual hazardous chemical waste volumes at the SUMC Sites are presented in Tables 3.12-9 and 3.12-10 on page 3.12-43 of the Draft EIR. The existing and projected volumes of biohazardous materials treated at the SUMC Sites are presented in Table 3.12-11, page 3.12-45 of the Draft EIR. Please refer to Section 3.12 of the Draft EIR, Hazardous Materials, pages 3.12-28 through 3.12-36 and pages 3.12-41 through 3.12-46, for a complete discussion and analysis of the additional medical wastes to be used and stored at the SUMC Sites.

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<sup>2</sup> Gordon Simpkinson, Acting Fire Marshall, Palo Alto Fire Department, Planning and Transportation Commission Hearing, June 2, 2010.

<sup>3</sup> Gordon Simpkinson, Acting Fire Marshall, Palo Alto Fire Department, Planning and Transportation Commission Hearing, June 2, 2010.

46.8 *The commentor notes that groundwater is roughly 30 feet below ground surface and that it is important that proposed underground structures are not located below the groundwater level. The commentor also notes that this is particularly important because of San Francisquito Creek sheet flows. In accordance with CEQA, the Draft EIR analysis is based on potential SUMC Project impacts as related to existing conditions.*

*The commentor's specific concerns regarding San Francisquito Creek sheet flows are unclear. If concerns regard the potential for San Francisquito Creek over-topping channel banks and flooding adjacent areas during a flood event, as noted in the Draft EIR on page 3.11-7, San Francisquito Creek would not flood the SUMC Sites in the event of a one-percent annual chance of flood. If the commentor is concerned about general sheet flow runoff in the San Francisquito Creek watershed, the Draft EIR notes on page 3.11-41 that the City of Palo Alto Public Works Department requires that drainage patterns, including runoff from adjacent properties, must be maintained. In addition, proper conveyance to the nearest storm drain system must be shown. As presented in Section 3.11, page 3.11-2 of the Draft EIR, increasing impervious surfaces within an area would not greatly affect flood flows (one percent annual chance of flooding) within San Francisquito Creek. During these events, rainfall saturates natural pervious surfaces and renders them effectively impervious. The analysis also notes that the SUMC Project would actually increase the amount of effective pervious surfaces, not impervious surfaces, on the SUMC Sites by seven percent, as explained on page 3.11-41 of the Draft EIR. As such, overland runoff would be adequately routed through a storm drain system to San Francisquito Creek and the SUMC Project would not increase runoff to San Francisquito Creek or off-site storm drain systems. Overall, overland runoff in the San Francisquito Creek system would not be substantially affected nor would it affect the SUMC Project.*

As presented on page 3.11-18 of the Draft EIR, the depth to groundwater at the SUMC Site is more than 30 feet below ground surface. Because fluctuations in groundwater levels can occur, the design groundwater depth is recommended to be 30 feet below ground surface. The Draft EIR notes excavations and installation of underground structures more than 40 feet below ground surface would occur. These deep excavations could result in excursion into the local groundwater table. However, this would require flood-proofing of underground structures where they extend below the design groundwater depth of 30 feet below ground surface or measured groundwater depths. Flood-proofing practices would prevent underground structures from groundwater-induced flooding and potential flood impacts associated with deep excavations would be less than significant.

46.9 *The commentor requests an analysis of nitrogen deposition from increased SUMC Project traffic on open space areas such as the Jasper Ridge Biological Preserve and Edgewood Park. As stated on page 3.4-73 of the Draft EIR, the SUMC Project would not add a significant amount of traffic to the local freeways, resulting in less-than-significant freeway impacts. Jasper Ridge is located approximately one mile to the west of I-280 and immediately south of the western portion of Sand Hill Road (a segment that would not be*

impacted by the SUMC Project). Since the SUMC Project would result in a negligible amount of traffic on freeways relative to existing conditions, the SUMC Project would not substantially contribute to nitrogen deposition impacts at the Jasper Ridge Biological Preserve. Similarly, the SUMC Project would not substantially contribute to nitrogen deposition impacts at the Edgewood Park, located immediately adjacent to the eastern portion of I-280 in Redwood City.

- 46.10 *The commentor requests an analysis of water quality impacts to adjacent reservoirs from increased SUMC Project traffic on I-280.* As explained in Response 46.9, above, the SUMC Project would not add a significant amount of traffic to the local freeways, resulting in less-than-significant freeway impacts. The Crystal Springs Reservoir and the San Andreas Reservoir are located immediately adjacent to I-280. However, the small amount of traffic that would be added to I-280, resulting in less-than-significant traffic impacts from the SUMC Project, would not substantially affect the water quality of these reservoirs.
- 46.11 *The commentor questions if the increase in traffic would negate any aspects of the PAFD evacuation plan.* A discussion of the adopted emergency response and evacuation plans is included under Impact HM-10 in Section 3.12 of the Draft EIR, Hazardous Materials, pages 3.12-48 through 3.12-50. The SUMC Project would have a significant impact on emergency access routes due to truck traffic during construction and would degrade the level of service (LOS) at several intersections during operation. However, Mitigation Measure HM-10.1 requires advanced coordination with the City of Palo Alto on construction routes. When combined with Mitigation Measures TR-1.1, TR-1.4 through TR-1.6, and TR-1.8, presented in Section 3.4, Transportation, these measures would reduce the significant impacts to a less-than-significant level by implementing construction-period traffic controls. In addition, Mitigation Measure TR-9.1, also presented in Section 3.4, would involve the installation of emergency vehicle traffic signal priority (OptiCom) at all intersections significantly impacted by the operations of the SUMC Project. Therefore, implementation of these measures would reduce impacts on emergency evacuation and response plans to less than significant.
- 46.12 *The commentor states that the Draft EIR fails to mention the Stanford fault.* This statement is incorrect. The Draft EIR discusses the active and inactive faults in the area immediately surrounding the SUMC Sites. As stated on page 3.10-10 of the Draft EIR, the only known active fault in the area is the San Andreas fault system, which is about 4.2 miles to the southwest of the SUMC Sites. The Stanford fault, along with the other faults in the immediate vicinity, does not show evidence for recent surface displacements and therefore is considered inactive. The earthquake that resulted in significant damage throughout the Bay Area in 1906 was the San Andreas Fault. For a map of the geologic features in the vicinity of the SUMC Sites, which includes the location of the Stanford fault, see Figure 3.10-2 on page 3.10-11 of the Draft EIR.

**.PLANT LIST for ACTERRA NATIVE PLANT NURSERY**

**Definitions:** The following definitions for watering apply to established plants. All plants in containers require regular watering, preferably in the cool of the morning. Plants in the ground need deep watering for the first two summers in order to establish their deep root systems. Avoid frequently shallow watering.

**Irrigate:** Needs regular summer water once or twice a week depending temperature and planting environment.  
**Deep:** Water 20 to 30 minutes every 10-30 days during summer depending on temperature. In some situations, an established plant may do well without any additional water.  
**Fall:** Withhold water during the summer dormancy, begin watering infrequently in early fall.  
**STBL:** A good plant for bank stabilization.  
**GCVR:** A good ground cover plant.  
**DRN:** Requires good drainage.  
**ANN:** Annual.

Botanical Name	Common Name	Family	Water	Comments
<b>Ferns, Fern Allies</b>				
<i>Adiantum jordanii</i>	California Maiden-hair	Pteridaceae	Irrigate	Moist woods
<i>Athyrium filix-femina</i>	Lady Fern	Dryopteridaceae	Irrigate	Streamsides
<i>Blechnum spicant</i>	Deerfern	Blechnaceae	Irrigate	Streamsides
<i>Dryopteris arguta</i>	Wood Fern	Dryopteridaceae	Deep	Wooded slopes
<i>Equisetum telmateia</i> ssp. <i>braunii</i>	Giant Horsetail	Equisetaceae	Deep	Seeps
<i>Pellaea andromedifolia</i>	Coffee Fern	Pteridaceae	Deep	Rocky areas
<i>Pellaea mucronata</i>	Birds-foot Fern	Pteridaceae	Deep	Rocky areas
<i>Pentagramma triangularis</i>	Goldenback Fern	Pteridaceae	Deep	Rocky shaded slopes
<i>Polypodium californicum</i>	California Polypody	Polypodiaceae	Deep	Shaded canyons, rocks
<i>Polystichium munitum</i>	Western Swordfern	Dryopteridaceae	Deep	Wooded hillsides
<i>Woodwardia fimbriata</i>	Giant Chainfern	Blechnaceae	Irrigate	Streamsides
<b>Grasses, Sedges, Rushes</b>				
<i>Agrostis hallii</i>	Hall Bentgrass	Poaceae IV	Deep	GCVR; woodland, slopes
<i>Bromus carinatas</i>	California Brome	Poaceae IV	Deep	STBL; woodland, meadows
<i>Carex amplifolia</i>	Ampleleaf Rush	Cyperaceae	Irrigate	STBL; springs
<i>Carex barbarea</i>	Torrent Sedge	Cyperaceae	Irrigate	STBL; wet meadows

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**From:** JLucas1099@aol.com  
**Date:** July 23, 2010 5:06:57 PM PDT  
**To:** KCholman@sbcglobal.net  
**Subject:** Fwd: Acterra plant list

Karen,  
 Here is the complete Acterra plant list. This nursery is really amazing.  
 Libby .

**From:** "Acterra Nursery" <nursery@acterra.org>  
**Date:** July 23, 2010 9:44:12 AM PDT  
**To:** <jlucas1099@aol.com>  
**Subject:** Acterra plant list

Libby,  
 Attached four species list of plants we have grown.  
 We do not have all these available at once, but they can be contract grown.

Deanna Giuliano/Manager  
 Acterra Native plant Nursery  
 650 949-3158



Carex densa	Dense Sedge	Cyperaceae	Deep	Seasonal wet places
Carex echinata ssp phyllomanica	Coastal Sedge	Cyperaceae	Deep	STBL; wet places
Carex nudata	Sedge	Cyperaceae	Irrigate	Rocky or sandy streambeds
Carex praegracilis	Meadow sedge	Cyperaceae	Deep	STBL; meadows
Carex serratotens	Bifid Sedge	Cyperaceae	Irrigate	Moist places
Carex subbracteata	Small- Bracted Sedge	Cyperaceae	Deep	Grasslands, open forest
Carex tumulicola	Foothill Sedge	Cyperaceae	Deep	Meadows
Danthonia californica	California Oat Grass	Poaceae IV	Deep	STBL; meadows, forest
Eleocharis macrostachya	Beaked Spikerush	Cyperaceae	Irrigate	STBL; pond margins
Elymus elymoides	Big Squirreltail	Poaceae I	Deep	Dry open areas
Elymus glaucus	Blue Wildrye	Poaceae I	Deep	Grassland
Festuca californica	California Fescue	Poaceae IV	Deep	STBL; chaparral, forest
Festuca idahoensis	Idaho Fescue	Poaceae IV	Deep	STBL; dry open or shady areas
Festuca rubra	Red Fescue	Poaceae IV	Deep	GCVR, grasslands
Hierochloa occidentalis	Vanilla Grass	Poaceae IV	Irrigate	Coniferous forest
Hordeum brachyanthum	Meadow Barley	Poaceae IV	Deep	Meadows, stream banks
Juncus balticus	Baltic Rush	Poaceae IV	Deep	STBL; moist meadows
Juncus effusus	Bog rush	Juncaceae	Irrigate	Wet meadows, springs
Juncus occidentalis	Western Rush	Juncaceae	Deep	Meadows
Juncus patens	Rush	Juncaceae	Irrigate	STBL; moist areas
Juncus xiphioides	Irisleaf Rush	Juncaceae	Irrigate	STBL; wet meadows, springs
Koeleria macrantha	June Grass	Poaceae III	Deep	STBL; woodland, meadows
Leymus triticoides	Wet Meadow Wildrye	Poaceae I	Irrigate	GCVR; moist meadows
Luzula comosa	Woodrush	Juncaceae	Deep	Meadows, woodland
Melica californica	California Melic	Poaceae IV	Deep	STBL; hillsides
Melica imperfecta	Coast Range Melic	Poaceae IV	Deep	STBL; chaparral
Melica subulata	Alaska Onion Grass	Poaceae IV	Deep	STBL; moist areas, stream banks
Melica torreyana	Torrey Melic	Poaceae IV	Deep	Chaparral, forest
Nassella cernua	Nodding Needle Grass	Poaceae IV	Deep	STBL; grassland, chaparral
Nassella lepida	Foothill Needle Grass	Poaceae IV	Deep	STBL; dry slopes, chaparral
Nassella pulchra	Purple Needle Grass	Poaceae IV	Deep	STBL; grassland, chaparral

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Trisetum canescens	Tall Trisetum	Poaceae IV	Deep	Meadows, forest
<b>Wildflowers, Ground Covers</b>				
Achillea millefolium	Yarrow	Asteraceae	Deep	GCVR; STBL; many habitats
Achyrachaena mollis	Blow Wives	Asteraceae	Deep	ANN; Grassland
Actea rubra	Baneberry	Ranunculaceae	Irrigate	Moist forest
Agoseris grandiflora	California Dandelion	Asteraceae	Deep	Grassland
Allium amplexans	Paper Onion	Liliaceae	Fall	DRN; open areas
Amsinckia menziesii	Fiddleneck	Boraginaceae	Deep	ANN; Open areas
Angelica hendersonii	Henderson Angelica	Apiaceae	Deep	Coastal scrub
Aquilegia formosa	Columbine	Ranunculaceae	Deep	Moist woodland
Aralia californica	Elklover	Araliaceae	Irrigate	Moist shade, stream sides
Aristolochia californica	Pipevine	Aristolochiaceae	Deep	Streamsides, forests
Arnica discoidea	Rayless Arnica	Asteraceae	Deep	Foothill woodland
Arnica mollis	Hairy Arnica	Asteraceae	Deep	Meadows
Artemisia douglasiana	Mugwort	Asteraceae	Deep	STBL; many habitats
Asclepias californica	California Milkweed	Asclepiadaceae	Deep	Hillsides
Asclepias fascicularis	Narrowleaf Milkweed	Asclepiadaceae	Deep	Dry valleys, foothills
Asarum caudatum	Wild Ginger	Aristolochiaceae	Deep	GCVR; moist forests
Aster chilensis	California Aster	Asteraceae	Deep	STBL; grassland
Baccharis douglasii	Marsh Baccharis	Asteraceae	Deep	STBL; stream edges
Calochortus albus	Fairy lantern	Liliaceae	Fall	DRN; woodland
Calochortus luteus	Yellow Mariposa Lily	Liliaceae	Fall	DRN; grassland, woodland
Calochortus umbellatus	Oakland Star Tulip	Liliaceae	Fall	DRN; Open chaparral, woodland
Calochortus venustus	Butterfly Mariposa Lily	Liliaceae	Fall	DRN; Grassland, woodland
Calystegia occidentalis	Morning Glory	Convolvulaceae	Deep	Chaparral
Campanula prenanthoides	Hairbell	Campanulaceae	Deep	Redwood forest
Centaurium muhlenbergii	Monterey Centaury	Gentianaceae	Deep	ANN; moist woodland
Chlorogallum pomeridianum	Soap Plant	Liliaceae	Fall	DRN; grassland, chaparral
Cirsium occidentale var. venustum	Venus Thistle	Asteraceae	Deep	Grasslands

Clarkia amoena	Farewell to Spring	Onagraceae	Deep	ANN; Grasslands
Clarkia purpurea ssp. quadrivulnera	Winecup Clarkia	Onagraceae	Deep	ANN; Grasslands
Clarkia rubicunda	Godetia	Onagraceae	Deep	ANN; Grasslands
Clarkia unguiculata	Elegant Clarkia	Onagraceae	Deep	ANN; Grasslands
Clintonia andrewsiana	Red Bead Lily	Liliaceae	Fall	Redwood forest
Clematis lasiantha	Pipestems, Virgin's Bower	Ranunculaceae	Deep	Hillside, chaparral
Clematis ligusticifolia	Western Virgins Bower	Ranunculaceae	Deep	Streamsides
Colinsia heterophylla	Chinesehouses	Scrophulariaceae	Deep	ANN; moist hillside
Cynoglossum grande	Western Hound's-tongue	Boraginaceae	Deep	Woodland, chaparral
Datura wrightii	Jimson Weed	Solanaceae	Deep	Gravelly open areas
Delphinium californicum	California Larkspur	Ranunculaceae	Deep	Chaparral, woodland
Delphinium nudicaule	Red Larkspur	Ranunculaceae	Deep	DRN, wooded slopes
Delphinium variegatum	Royal Larkspur	Ranunculaceae	Deep	Grasslands
Dicentra chrysantha	Golden Eardrops	Papaveraceae	Deep	Dry slopes
Dicentra formosa	Bleeding Heart	Papaveraceae	Deep	Woodlands, streamsides
Dichelostemma capitatum	Blue Dick	Liliaceae	Fall	Grasslands
Disporum hookerii	Fairy Bell	Liliaceae	Fall	DRN; woodland
Dodecatheon hendersonii	Shooting Star	Primulaceae	Deep	Slopes
Dudleya caespitosa	Live Forever	Crassulaceae	Deep	DRN; coastal
Dudleya farinosa	Bluff Lettuce	Crassulaceae	Deep	DRN; coastal
Epilobium canum	California Fuchsia	Onagraceae	Deep	GCVR; dry slopes
Epilobium ciliatum	Willow Herb	Onagraceae	Deep	ANN STBL; dry slopes
Erigeron glaucus	Seaside Daisy	Asteraceae	Deep	Coastal bluffs
Eriogonum grande var. rubescens	San Miguel Island Buckwheat	Polygonaceae	Deep	Dry slopes
Eriogonum latifolium	Coast Buckwheat	Polygonaceae	Deep	Coastal scrub
Eriogonum nudum	Naked Stem Buckwheat	Polygonaceae	Deep	Dry slopes, washes
Eriogonum parvifolium	Cliff Buckwheat	Polygonaceae	Deep	DRN; coastal hillsides
Eriophyllum confertiflorum	Golden Yarrow	Asteraceae	Deep	STBL; dry habitats
Eriophyllum staechadifolium	Lizard Tail	Asteraceae	Deep	Coastal scrub

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Eschscholzia californica	California Poppy	Papaveraceae	Deep	Grassy open areas
Fragaria vesca	Wood Strawberry	Rosaceae	Irrigate	GCVR; forest
Fragaria chiloensis	Beach Strawberry	Rosaceae	Deep	GCVR; coastal, grasslands
Fritillaria affinis	Mission Bells	Liliaceae	Fall	Oak and pine grassland
Gnaphalium californicum	Everlasting	Asteraceae	Deep	Hillsides
Grindelia hirsutula	Hairy Gum Plant	Asteraceae	Deep	Sandy fields
Grindelia stricta var. platyphylla	Pacific Gumplant	Asteraceae	Deep	GCVR; coastal bluffs
Helenium puberulum	Sneezeweed	Asteraceae	Deep	ANN,STBL; streamsides
Helianthemum scoparium	Rock Rose	Cistaceae	Deep	Chaparral
Heracleum lanatum	Cow Parsnip	Apiaceae	Irrigate	Moist areas
Heterotheca sessiliflora	Golden Aster	Deep	Deep	Grasslands
Heuchera maxima	Island Alumroot	Saxifragaceae	Irrigate	Ciiffs
Heuchera micrantha	Alumroot	Saxifragaceae	Irrigate	GCVR; stream banks
Hoita macrostachya	Leather Root	Fabaceae	Deep	STBL; streamsides
Holodiscus discolor	Oceanspray	Rosaceae	Deep	DRN; woodland
Horkelia californica	California Horkelia	Rosaceae	Deep	Grassland
Iris douglasii	Douglas Iris	Iridaceae	Deep	GCVR; grassland, woodland
Iris fernaldii	Fernald Iris	Iridaceae	Deep	Forest
Lepichinia calycina	Pitcher Sage	Lamiaceae	Deep	Chaparral
Lilium pardalinum	Leopard Lily	Liliaceae	Fall	Moist areas
Lomatium dasycarpum	Wild Parsley	Apiaceae	Fall	Chaparral
Lupinus albifrons	Bush Lupine	Fabaceae	Deep	ANN; woodland
Lupinus albifrons var. collinus	Bay Area Silver Lupine	Fabaceae	Deep	Hillsides
Lupinus arboreus	Yellow Bush Lupine	Fabaceae	Deep	STBL; coastal bluffs
Lupinus bicolor	Miniature Lupine	Fabaceae	Deep	ANN; STBL; grassland
Lupinus latifolius	Broadleaved Lupine	Fabaceae	Deep	Woodland
Lupinus microcarpus	Gully Lupine	Fabaceae	Deep	ANN; open areas
Lupinus succulentus	Arroyo Lupine	Fabaceae	Deep	ANN,STBL; open areas
Maianthemum dilatatum	False Lily of the Valley	Liliaceae	Fall	Moist shaded areas
Marah fabaceus	Wild Cucumber	Cucurbitaceae	Fall	Streamsides, washes, shrubby areas
Mentzelia lindleyi	Lindley Blazing Star	Loasaceae	Deep	ANN; oak, pine woodland

Mimulus aurantiacus	Sticky Monkey Flower	Scrophulariaceae	Deep	Rocky hillsides
Mimulus cardinalis	Scarlet Monkey Flower	Scrophulariaceae	Irrigate	Stream banks
Mimulus guttatus	Common Monkeyflower	Scrophulariaceae	Deep	Moist areas
Monardella purpurea	Siskiyou Monardella	Lamiaceae	Deep	Hillsides, serpentine
Monardella villosa	Coyote Mint	Lamiaceae	Deep	Rocky slopes
Oenothera elata ssp. hookeri	Hooker Evening Primrose	Onagraceae	Deep	STBL; moist areas
Oxalis oregana	Redwood Sorrel	Oxalidaceae	Irrigate	Moist woodland
Penstemon centranthifolius	Scarlet Bugler	Scrophulariaceae	Deep	DRN; chaparral
Penstemon heterophyllus	Foothills Penstemon	Scrophulariaceae	Deep	Grassland, chaparral
Perideridia kelloggii	Yampah	Apiaceae	Deep	Grassland
Phacelia bolanderi	Bolanders Phacelia	Hydrophyllaceae	Deep	Canyons, woodlands
Phacelia californica	California Phacelia	Hydrophyllaceae	Deep	Chaparral, woodland
Phacelia grandiflora	Largeflower Phacelia	Hydrophyllaceae	Deep	ANN; chaparral
Phacelia imbricata	Phacelia	Hydrophyllaceae	Deep	Chaparral
Phacelia malvifolia	Stinging Phacelia	Hydrophyllaceae	Deep	ANN; shrubland
Plantago elongata	Coast Plantain	Plantaginaceae	Deep	ANN; saline places
Phacelia imbricata	Rock Phacelia	Hydrophyllaceae	Deep	Chaparral
Potentilla anserine ssp. pacifica	Pacific Cinquefoil	Rosaceae	Deep	Moist areas
Potentilla glandulosa	Sticky Cinquefoil	Rosaceae	Deep	Many habitats
Ranunculus californicus	California Buttercup	Ranunculaceae	Deep	Grassland, oak woodland
Salvia sonomensis	Creeping Sage	Lamiaceae	Deep	DRN,GCVR; chaparral
Salvia spathacea	Hummingbird Sage	Lamiaceae	Deep	Chaparral, woodland
Sanicula crassicaulis	Snakeroot	Apiaceae	Deep	Grassland
Satureja douglasii	Yerba Buena	Lamiaceae	Deep	GCVR; shady areas, chaparral
Sedum spathulifolium	Pacific Stonecrop	Crassulaceae	Deep	Outcrops
Scrophularia californica	Bee Plant	Scrophulariaceae	Deep	Moist areas, chaparral
Sidalcea malviflora	Checkerbloom	Malvaceae	Deep	Meadows
Sisyrinchium bellum	Blue-Eyed Grass	Iridaceae	Deep	Meadows
Sisyrinchium californicum	Yellow-Eyed Grass	Iridaceae	Deep	Moist areas
Smilacina stellata	False Solomon's Seal	Liliaceae	Fall	Woodland
Smilacina racemosa	Fat Solomon's Seal	Liliaceae	Fall	Woodland, stream banks

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Solanum umbelliferum	Blue Witch	Solanaceae	Deep	Woodland
Solidago californica	California Goldenrod	Asteraceae	Deep	Grassland
Stachys pycnantha	Hedge Nettle	Lamiaceae	Irrigate	STBL; moist areas
Streptanthus glandulosus	Common Jewelflower	Brassicaceae	Deep	ANN; chaparral, oak woodland
Symphoricarpos mollis	Creeping Snowberry	Caprifoliaceae	Deep	STBL; woodland
Symphoricarpos albus	Common Snowberry	Caprifoliaceae	Deep	Woodland, stream banks
Tauschia hartwegii	Hartweg Tauschia	Apiaceae	Deep	Chaparral
Tellima grandiflora	Fringe Cup	Saxifragaceae	Deep	GCVR; moist slopes
Thysocarpus radians	Ribbed Fringepod	Brassicaceae	Deep	ANN; meadows, moist slopes
Tiarella trifoliata var. unifoliata	Sugarscoop	Saxifragaceae	Deep	Moist areas
Tolmiea menziesii	Piggyback Plant	Saxifragaceae	Deep	Moist banks
Trillium chloropetalum	Giant Trillium	Liliaceae	Fall	Woodland
Trillium ovatum	Western Trillium	Liliaceae	Fall	Woodland
Triteleia laxa	Ithuriel's Spear	Liliaceae	Fall	Grassland
Verbena lasiostachys	Robust Verbena	Verbenaceae	Deep	Grassland
Viola glabella	Stream Violet	Violaceae	Irrigate	Stream banks
Viola sempervirens	Evergreen Violet	Violaceae	Deep	Moist woods
Whipplea modesta	Modesty	Philadelphaceae	Deep	GCVR; slopes, forest
Wyethia angustifolia	Narrowleaf Mule Ear's	Asteraceae	Deep	Grassland
Wyethia glabra	Smooth Mule Ear's	Asteraceae	Deep	Meadows
Zigadenus fremontii	Fremont's Camas	Liliaceae	Fall	Slopes

**Shrubs and Trees**

Artemisia californica	California Sagebrush	Asteraceae	Deep	Coastal scrub, chaparral
Artemisia pycnocephala	Coastal Sagewort	Asteraceae	Deep	Coastal strand
Adenostoma fasciculatum	Chamise	Rosaceae	Deep	DRN; Chaparral
Aesculus californica	Buckeye	Hippocastanaceae	Deep	Slopes, canyons, stream banks
Alnus rhombifolia	White Alder	Betulaceae	Deep	STBL; stream banks
Alnus rubra	Red Alder	Betulaceae	Deep	STBL; stream banks
Acer macrophyllum	Bigleaf Maple	Aceraceae	Deep	Stream banks, canyons
Acer negundo	Box Elder	Aceraceae	Deep	Stremsides

Arbutus menziesii	Madrone	Ericaceae	Deep	Coniferous, oak forests
Arctostaphylos andersonii	Santa Cruz Manzanita	Ericaceae	Deep	DRN; Open areas
Arctostaphylos crustacea var. crinita	Santa Cruz Mountains Manzanita	Ericaceae	Deep	DRN; chaparral
Arctostaphylos crustacea var. crustacea	Brittle Leaf Manzanita	Ericaceae	Deep	DRN; chaparral
Arctostaphylos glutinosa	Schreibers Manzanita	Ericaceae	Deep	DRN; chaparral
Arctostaphylos montaraensis	Montara Mtn Manzanita	Ericaceae	Deep	DRN; chaparral
Arctostaphylos regismontana	Kings Mtn Manzanita	Ericaceae	Deep	DRN; chaparral
Arctostaphylos sensitiva	Glossyleaf Manzanita	Ericaceae	Deep	DRN; woodland, chaparral
Arctostaphylos silvicola	Silverleaf Manzanita	Ericaceae	Deep	DRN; chaparral
Baccharis pilularis	Coyote brush	Asteraceae	Deep	GCVR; oak woodland
Ceanothus thyrsiflorus	Blue Blossom	Rhamnaceae	Deep	Wooded slopes and canyons
Ceanothus oliganthus var. sorediatus	Jimbrush	Rhamnaceae	Deep	DRN; dry slopes
Cercis occidentalis	Redbud	Fabaceae	Deep	STBL; chaparral, woodland
Cercocarpus betuloides	Mountain Mahogany	Rosaceae	Deep	DRN; chaparral, woodland
Cornus glabrata	Brown Dogwood	Cornaceae	Deep	Stream banks
Cornus sericea	Western Creek Dogwood	Cornaceae	Deep	Stream banks
Corylus californica	California Hazelnut	Betulaceae	Deep	STBL; forest
Dendromecon rigida	Bush Poppy	Papaveaceae	Deep	DRN; chaparral
Dirca occidentalis	Western Leatherwood	Thymelaeaceae	Deep	DRN; woodland slopes
Eriodictyon californicum	Yerba Santa	Hydrophyllaceae	Deep	DRN,STBL; chaparral
Eriogonum fasciculatum	California Buckwheat	Polygonaceae	Deep	Dry slopes
Eriogonum giganteum	Island Buckwheat	Polygonaceae	Deep	Dry slopes
Euonymus occidentalis	Burning Bush	Celastraceae	Deep	Streambanks
Fraxinus latifolia	Oregon Ash	Oleaceae	Deep	Canyons, stream banks
Fremontodendron californicum	Flannelbush	Sterculiaceae	Deep	DRN; chaparral
Garrya elliptica	Coast Silktassel	Garryaceae	Deep	Chaparral, woodland
Gaultheria shallon	Salal	Ericaceae	Deep	GCVR; forest margins
Heteromeles arbutifolia	Toyon	Rosaceae	Deep	Chaparral, oak woodland
Juglans californica	California Black Walnut	Juglandaceae	Deep	Canyons, valleys

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Keckiella cordifolia	Climbing Penstemon	Scrophulariaceae	Deep	Chaparral
Lithocarpus densiflorus	Tanbark Oak	Fagaceae	Deep	Redwood forest
Lonicera hispidula	Hairy Honeysuckle	Caprifoliaceae	Deep	STBL; canyons, stream banks
Lonicera involucrata	Twinberry Honeysuckle	Caprifoliaceae	Irrigate	Moist areas
Lotus scoparius	Deerweed	Fabaceae	Deep	STBL; chaparral
Malacothamnus arcuatus	Arcuate Bush Mallow	Malvaceae	Deep	Chaparral
Myrica californica	Wax Myrtle	Myricaceae	Irrigate	Redwood forest
Oemleria cerasiformis	Oso Berry	Rosaceae	Deep	Chaparral
Physocarpus capitatus	Ninebark	Rosaceae	Irrigate	Moist banks
Prunus ilicifolia	Hollyleaf Cherry	Rosaceae	Deep	Canyons, woodland
Pseudotsuga menziesii	Douglas Fir	Pinaceae	Deep	Mixed evergreen forest
Quercus agrifolia	Coast Live Oak	Fagaceae	Deep	Valleys, woodland
Quercus berberidifolia	Scrub Oak	Fagaceae	Deep	Chaparral
Quercus douglasii	Blue Oak	Fagaceae	Deep	Dry slopes, foothills
Quercus durata	Leather oak	Fagaceae	Deep	Chaparral
Quercus kelloggii	Black Oak	Fagaceae	Deep	Valleys, woodland
Quercus lobata	Valley Oak	Fagaceae	Deep	Slopes, valleys
Quercus parvula var. shrevei	Shreve Oak	Fagaceae	Deep	Woodland
Quercus wislizeni	Interior Live Oak	Fagaceae	Deep	Chaparral, woodland
Populus fremontii	Fremont Cottonwood	Salicaceae	Irrigate	STBL; stream banks
Rhamnus californica	Coffeeberry	Rhamnaceae	Deep	Chaparral, woodland
Rhamnus crocea	Redberry	Rhamnaceae	Deep	Chaparral, woodland
Rhus integrifolia	Lemonadberry	Anacardiaceae	Deep	Chaparral
Ribes aureum	Golden Currant	Grossulariaceae	Irrigate	Many habitats
Ribes californicum	Hillside gooseberry	Grossulariaceae	Deep	Woodlands, chaparral
Ribes divaricatum	Straggleberry	Grossulariaceae	Deep	Stream banks
Ribes malvaceum	Chaparral Currant	Grossulariaceae	Deep	Chaparral, oak woodland
Ribes menziesii	Canyon Gooseberry	Grossulariaceae	Deep	Forest
Ribes sanguinium	Pinkflower Currant	Grossulariaceae	Deep	Many habitats
Ribes speciosum	Fuschia-flower Currant	Grossulariaceae	Deep	Chaparral
Ribes vibrurnifolium	Evergreen Current	Grossulariaceae	Deep	Chaparral, canyon forests

Rosa californica	California Wild Rose	Rosaceae	Deep	STBL; stream banks
Rosa gymnocarpa	Wood Rose	Rosaceae	Deep	Forest
Rubus leucodermis	Western Raspberry	Rosaceae	Deep	Forest
Rubus parviflorus	Thimbleberry	Rosaceae	Deep	Woodland
Rubus spectabilis	Salmonberry	Rosaceae	Deep	STBL; streamsides
Rubus ursinus	Wild Blackberry	Rosaceae	Deep	STBL; shrubland, stream banks
Salix laevigata	Red Willow	Salicaceae	Irrigate	STBL; stream banks
Salix lucida var. lasiandra	Shinning Willow	Salicaceae	Deep	STBL; stream banks
Salix lasiolepis	Arroyo Willow	Salicaceae	Deep	STBL; springs, stream banks
Salix sitchensis	Sitka Willow	Salicaceae	Deep	STBL; stream banks
Salvia apiana	White Sage	Lamiaceae	Deep	DRN,STBL; chaparral
Salvia mellifera	Black Sage	Lamiaceae	Deep	Chaparral
Sambucus mexicana	Blue Elderberry	Caprifoliaceae	Deep	Stream banks, forest
Solanum umbelliferum	Blue Witch	Solanaceae	Deep	Woodland
Toxicodendron diversilobum	Poison Oak	Anacardiaceae	Deep	Canyons, chaparral
Umbellularia californica	California Bay	Lauraceae	Deep	Canyons, valleys
Vaccinium ovatum	Evergreen Huckleberry	Ericaceae	Deep	Forest edges
Vengasia carpesioides	Canyon Sunflower	Asteraceae	Deep	STBL; canyons
Vaccinium ovatum	Evergreen Huckleberry	Ericaceae	Deep	Forest edges

8/6/2010

**47. Libby Lucas (letter dated July 23, 2010)**

47.1 *The commentor submitted an Acterra plant list.* The specific landscape requirements and plant species to be included at the SUMC Sites are outside the scope of CEQA and therefore are not included in the Draft EIR. Proposed landscaping is generally described on page 3.3-34 through 3.3-35 of the Draft EIR, Section 3.3, Visual Quality. The Draft EIR describes proposed open spaces, walkways, lighting, vegetation, and other decorative features, but does not list the specific species of plants to be installed.

However, the SUMC Project design guidelines present proposed tree species and their typical planting patterns that would be used to contribute to the visual quality of the SUMC Sites. Appropriate plant species would be included at the SUMC Sites as advised by a qualified arborist and tree replacement for removal of public street trees would be consistent with the City of Palo Alto Public Works Department Street Tree Management Plan. As such, street tree replacement shall include native species to the maximum extent possible and appropriate species include California black oak, red maple, toyon, and flax leaf paperbark. The Architectural Review process would include consideration of whether the SUMC Project adequately incorporates landscaping. Please refer to Master Response 10 for a discussion of non-CEQA issues.



**Letter 48**

controversial revenue enhancements, all approved Tuesday by its Board of Directors, and the nearby San Mateo County Transit District (SamTrans) and Santa Clara Valley Transportation Authority (VTA) are in similarly desperate straits.

Those three agencies run Caltrain, and all have had to scale back their funding commitments in order to preserve bus and light rail services in their core communities. "We're rapidly approaching a cliff," Caltrain CEO Mike Scanlon told the Caltrain Board of Directors today, according to the San Mateo Times. "It's going to be very, very painful. It's probably going to force people back on congested freeways."

Caltrain spokesperson Mark Simon told the Guardian that the agency is fully funded through the current fiscal year that ends June 30, but after that, "I don't know how long we can survive."

"I don't think I need to tell someone at the San Francisco Bay Guardian how bad things are at the SFMTA," he said, adding that the situation is as bad or worse at the other two agencies, and that Caltrain has no other sources of operating revenue.

"That issue has come to a head and it's come to a head because the state has zeroed out how much money it gives to public transit," Simon told us. "What's really heartbreaking is that this is a time when we should be adding service."

Indeed, Caltrain has been moving ahead with plans to electrify its track, which would increase train speed and therefore system capacity while polluting less. But while it seeks federal grants for that capital project, the operating funds that have traditionally come from the state via SFMTA, VTA, and SamTrans have dried up (state and federal transportation funds are strictly divided between capital and operating funds).

Unlike Caltrain, SFMTA and many other transit agencies have the authority to put general tax measures on the ballot to fund transit services, but so far in San Francisco, neither Mayor Gavin Newsom nor the seven SFMTA board members he appointed have shown any leadership is doing so.

--

**From:** Wayne Martin [mailto:wmartin46@yahoo.com]

**Sent:** Sat 06/05/2010 9:22 AM

**To:** Council, City

**Cc:** Keene, James; Williams, Curtis

**Subject:** Stanford Hospital Traffic Mitigations In Light Of Possible CalTrain Closure

Palo Alto City Council

City of Palo Alto

Palo Alto, CA 94301

CC: James Keene

Subject: Impact of Stanford Hospital Transportation Mitigation Offer In The Event of CalTrain Closure.

Elected Council Members:

The article below suggests that CalTrain might cease operations in the not too distant future. That's wonderful news, given the massive black hole for public dollars that this agency has become. However, this closure has implications for Palo Alto, since Stanford has proposed paying about \$65M to Cal Train in the coming decades for rail passes for its employees (see attachment).

48.1

So ... this sets a problem for Palo Alto, which few in town have yet to sense. If CalTrain does close down, what becomes of this \$65M in terms of mitigating the traffic that the hospital expansion will cause. Some in the media have failed to notice that this \$92M was not to be paid to Palo Alto, and have included it in the total \$140M that Stanford is offering to "buy" the permission of the City to build this facility. The \$65M was a "cost" to Stanford, but not a "transfer" to Palo Alto.

48.2

So ... if Cal Train does shut down, what becomes of this \$65M commitment? Palo Alto could use grade separations at its rail crossings. If the HSR gets built, then this problem will be solved, one way or another—but not involving any direct expenditure by Stanford. The traffic mitigation issue will be different with grade separations, but what will it look like in 20-40 years, given the HSR, Stanford growth, and other possible factors? Has the City done any traffic simulation work to even consider this possibility?

So ... shouldn't the City be thinking about this?

Wayne Martin

Palo Alto, CA

[www.twitter.com/wmartin46](http://www.twitter.com/wmartin46)

[www.youtube.com/wmartin46](http://www.youtube.com/wmartin46)

--

<http://www.sfbg.com/politics/2010/04/01/caltrain-faces-deep-cuts-perhaps-even-closure#comment-15888>

Caltrain faces deep cuts, perhaps even closure

04.01.10 - 3:04 pm |

Caltrain's San Francisco station on Townsend is crucial to the regional transportation system. Serious doubt was cast over the future of Caltrain today, with this vital commuter rail link threatened by the same funding cutbacks that are hobbling other regional transit agencies. The joint-powers agency might be forced to cut its service in half this summer—probably by eliminating night and weekend service—or perhaps even shutting the system down.

San Francisco Municipal Transportation Agency is in a fiscal emergency and moving ahead with service cuts and small but

1

2

**48. Wayne Martin (letter dated June 5, 2010)**

48.1 *The commentor expresses concern regarding Caltrain closure.* Please see Master Response 1, which addresses the viability of Caltrain.

48.2 *The commentor expresses concern regarding Caltrain closure.* Please see Master Response 1, which addresses the viability of Caltrain.

Letter 49

From: Wayne Martin [wmartin46@yahoo.com]  
Sent: Tuesday, July 27, 2010 8:19 AM  
To: Turner, Steven  
Subject: Use of Robotics At Stanford Hospital Expansion

Mr. Turner:  
The following link is to an article about the use of robotics in a Scottish Hospital to reduce the actual number of workers needed to operate the facility:  
<http://www.bbc.co.uk/news/10344849>  
It would be nice if the Palo Alto EIR were to include some reference to robotics as a way to reduce staffing needs, which would have a clear impact on traffic of Staff going to/from their jobs.

Thanks.  
wayne martin  
palo alto, ca

**BBC NEWS**  
**TAYSIDE & CENTRAL**

17 June 2010 Last updated at 19:31 ET

**Forth Valley Royal Hospital to use robot 'workers'**

**A hospital in Scotland is to become the first in the UK to use a fleet of robots to carry out day-to-day tasks.**

The robots will carry clinical waste, deliver food, clean the operating theatre and dispense drugs.

They are currently undergoing final tests ahead of the August opening of the new £300m Forth Valley Royal Hospital in Lathbert, Stirlingshire.

The robots will have their own dedicated network of corridors underneath the hospital.

NHS Forth Valley chairman Ian Mullen said the new hospital would be "packed full of design features to improve patient care and improve the life of staff".

He added: "Members of staff will use a hand-held PDA to call up the robot to move meal trays, or linen, or whatever.

"The robot will come up in the service lift by itself, pick up the item and go back into the lift."

Tom McEwen, the project manager for manufacturer Serco, said a series of pre-programmed routes would be set out for the robots to follow.

"The robots will follow the system using a series of laser beams which will tell it exactly where it is," he explained.

Computers on board the robots will be able to tell doors to open, and sensors will tell the robots to stop if anything - or anyone - is in the way.

One of the most valuable aspects of using robots is in controlling infection.

"Traditionally clean and dirty tasks are carried out by the same person," infection control nurse Lesley Shepherd said.

"Here, you'll have the robots that do dirty tasks, so they may take dirty linen or clinical waste away, and you'll have robots that do clean tasks, such as bringing meals and clean linen to patients.

"They have separate lifts so there's no way they can cross, which is great."

Other robot models will clean theatre floors and even dispense drugs at the pharmacy.

Managers said the robots would not replace humans, but would free up more time for staff to spend with patients.

They will also have to keep at least one human on standby, should any of the robots break down.

<http://www.bbc.co.uk/news/10344849>

8/12/2010



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**49. Wayne Martin (letter dated July 27, 2010)**

49.1 *The commentor requests that the Draft EIR include an analysis of using robotic technology at the SHC and LPCH hospitals as a way to reduce the number of proposed employees under the SUMC Project. The Draft EIR analyzes the SUMC Project application submitted by the SUMC Project sponsors. Since the use of robotics is not proposed under the SUMC Project, it is not considered in the Draft EIR. In addition, this technology is speculative and uncertain; therefore, it is not a viable mitigation measure to reduce the impacts identified in the Draft EIR. Please refer to Master Response 10 for a discussion of non-CEQA issues.*

Letter 50

Ruchita Kadakia

From: Wayne Martin [wmartin46@yahoo.com]  
Sent: Tuesday, July 27, 2010 2:05 PM  
To: Turner, Steven  
Subject: Additional Links Documenting Robotics In A Hospital Setting

Mr. Turner:

While the world of surgical robots has developed some magnificent machines that are helping to increase surgical quality and reduce costs:  
[http://www.davincisurgery.com/?id=i&gclid=Cjpb\\_uTMjKMCFRxEgwodqW2QaA](http://www.davincisurgery.com/?id=i&gclid=Cjpb_uTMjKMCFRxEgwodqW2QaA)

I believe that commenting on their use in the Stanford Hospital EIR would not be appropriate.

However, the world of "service robots", which can reduce head count in an hospital, or other high head count facility, would be an appropriate topic for discussion:

- <http://www.used-robots.com/robot-education.php?page=robots+in+the+hospital>
- <http://singularityhub.com/2010/07/01/the-robot-hospital-of-the-future-coming-soon-to-scotland/>
- [http://www.youtube.com/watch?v=Alm\\_kmKaSpQ](http://www.youtube.com/watch?v=Alm_kmKaSpQ)
- <http://smart-machines.blogspot.com/2010/02/new-hospital-robot-helpers-speciminder.html>
- [http://en.wikipedia.org/wiki/Mobile\\_robot](http://en.wikipedia.org/wiki/Mobile_robot)
- [http://www.roboticstrends.com/service\\_robots/article/swisslog\\_enters\\_autonomous\\_mobile\\_robot\\_market\\_wit\\_h\\_speciminder\\_and\\_robotcou](http://www.roboticstrends.com/service_robots/article/swisslog_enters_autonomous_mobile_robot_market_wit_h_speciminder_and_robotcou)
- <http://www.hospitalmanagement.net/features/feature83720/>

Please include these links in the materials submitted by the public during the comment period for the Stanford Hospital Expansion EIR.

Wayne Martin  
Palo Alto, CA

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[Exclusive: I Used BlindType, Virtual Keyboard of the Future](#)

## The Robot Hospital of the Future, Coming Soon To Scotland

[No Comments](#)

July 1st, 2010 by [Aaron Saenz](#)  
Filed under [robots](#).



A fleet of hauling robots is just one of several automated systems at Forth Valley Royal Hospital.

From the first day the [Forth Valley Royal Hospital](#) opens in August it will be a shining example of the power of robotics. That's because the new £300 million Scottish hospital will feature a fleet of robots handling a variety of important tasks. Forklift-like "porter" bots will haul materials to and from rooms, summoned by staff members using PDAs. A robot pharmacy will dispense needed prescriptions. There will even be robotic cleaners for the operating rooms. This is in addition to the advanced MRI, CT scanning, and other semi-automated medical equipment now seen in hospitals all over the world. Forth Valley Royal is a new kind of facility, designed from the ground up to incorporate robotic systems. Click on the image below to see the porter robots in action in a clip from BBC News.

Individually, each of the robotic systems at Forth Valley Royal aren't new. We've seen [hauling robots in hospitals before](#), ditto for [robot pharmacists](#), and cleaning robots (even industrial sterilizing ones) are fairly common now. What is really impressive is the assembly of all of these great technologies in one facility from its inception. This is a new approach to automating the hospital and it could be replicated in locations all over the world. Robotic systems are likely to become a staple of medical centers, giving staffers more free time to handle the really important part of their job: healing patients.



[Click on the image to go to the video.](#)

The robot porters in Scotland, however, do more than simply free up time for orderlies and nurses. They go a long way to fighting infection and cross contamination. Because Forth Valley Royal was designed to incorporate the technology, the hospital comes equipped with special hallways for the robots – a sort of behind-the-scenes infrastructure to allow the machines to do their job without interfering with patients and staffers. The same infrastructure allows robots hauling waste, and robots hauling clean supplies to use completely different paths, elevators, and doors. Essentially the clean and dirty loads transported by the bots will never mix (and robots are only assigned one kind of task) so there's a much lower risk of transmitting infection.

The porter robots are a product of mega-corp [Sercro Group](#). A rotating laser sensor at their top helps guide them along their predetermined paths, which are also marked by sensors and beacons. On board communication devices allow automated doors to open and close for the bots, and can call for elevators as needed. I'm not as impressed with these Sercro porters as I have been with other systems because they do most of their hauling using special hallways without people. It's a little easier to get around when there's not a dozen moving objects walking past you every minute. Still, I should mention that the size of the porter fleet is considerably larger than other such systems we've seen in hospitals elsewhere. Dozens of the machines will be in use, including thirteen separate bots which will only come online during peak hours of operation. Coordinating that large of a fleet successfully is an impressive feat.

Of course, using robots for mundane tasks is just the first step towards the future of automated hospitals. For now Forth Valley Royal is simply pursuing greater efficiency, lower risks of infection, and fewer prescription filling errors. We should remember though, that we've already seen automated systems that actually [help doctors make medical decisions](#) and [perform surgeries](#). Those systems are only going to get better in the years ahead. Whether it happens in Scotland or elsewhere, we'll eventually see such systems enhance the performance of human medical professionals, allowing one to more and better work. That could lead to a loss of jobs, but it may also lead to doctors having more time to spend with each patient. I for one would welcome a medical professional that has more than five minutes to talk to me when I get sick. Maybe robots can make that happen.

<http://singularityhub.com/2010/07/01/the-robot-hospital-of-the-future-coming-soon-to-scot...> 8/12/2010

« Telepresence robot making a come back? Meet the Texas HUMAVIPS robot finds you in a party »  
robot.

## New Hospital Robot Helpers: SpecIMinder and RoboCourier

[CCS Robotics](#) have used the MobileRobots MT400 bases and Motivity autonomy technology to create two new robots for [Swisslong Healthcare](#), which can be used around major medical facilities and research stations.

The SpecIMinder is very good at moving important tools around, and can help workers in a laboratory distribute materials around several workstations in an organized and timely manner. This function is called INTRA-department material transport, while the other robot, RoboCourier, will be designed for INTER-department transport. While having basically the same capabilities as SpecIMinder, the RoboCourier will also be able to navigate elevators and hallways, greatly increasing its mobility and range.

The robots can attend to immediate tasks when commanded, or they can be scheduled to transport different loads at various times. They are very flexible and can pass through very narrow doorways or openings, and can carry up to 50 pounds worth of materials. Since they can sometimes be carrying very important tools, the robots have been designed to move at human walking speeds, chart out flexible routs and use collision-avoidance technology, all of which are said to make them very safe and reliable. Besides lending a helping hand, the SpecIMinder and RoboCourier allow employees to save a lot of time, which can be used for much more crucial activities than simply moving materials around. It allows the humans to do the thinking, while the robots do the heavy-lifting—a system which will be quite beneficial in increasing operational efficiency.

Swisslog are known for their automated material transport systems, which they have used in medical facilities around the world, but perhaps none have looked like the complete package as much as SpecIMinder and RoboCourier. Initially, they will only be available in North America, but plans are to eventually spread their application to other places as well.

Watch the SpecIMinder in action below.

<http://robotzeitgeist.com/2010/02/new-hospital-robot-helpers-speciminder.html>

8/12/2010

## Mobile robot

From Wikipedia, the free encyclopedia

A **mobile robot** is an automatic machine that is capable of movement in a given environment.

### Contents

- 1 Overview
- 2 Classification
- 3 Mobile robot navigation
  - 3.1 Manual remote or tele-op
  - 3.2 Guarded tele-op
  - 3.3 Line-following robot
  - 3.4 Autonomously randomized robot
  - 3.5 Autonomously guided robot
  - 3.6 Sliding autonomy
- 4 History
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- 6 References
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### Overview

Mobile robots have the capability to move around in their environment and are not fixed to one physical location. In contrast, industrial robots usually consist of a jointed arm (multi-linked manipulator) and gripper assembly (or end effector) that is attached to a fixed surface.

Mobile robots are the focus of a great deal of current research and almost every major university has one or more labs that focus on mobile robot research. Mobile robots are also found in industry, military and security environments. They also appear as consumer products, for entertainment or to perform certain tasks like vacuum

### Classification

Mobile robots may be classified by:

- The environment in which they travel:
  - Land or home robots. They are most commonly wheeled, but also include legged robots with two or more legs (humanoid, or resembling animals or insects).
  - Aerial robots are usually referred to as unmanned aerial vehicles (UAVs)
  - Underwater robots are usually called autonomous underwater vehicles (AUVs)
- The device they use to move, mainly:
  - Legged robot : human-like legs (i.e. an android) or animal-like legs.
  - Wheeled robot.
  - Tracks <sup>[1]</sup>.

### Mobile robot navigation

http://en.wikipedia.org/wiki/Mobile\_robot

8/12/2010

There are many types of mobile robot navigation:

#### Manual remote or tele-op

A manually tele-op'd robot is totally under control of a driver with a joystick or other control device. The device may be plugged directly into the robot, may be a wireless joystick, or may be an accessory to a wireless computer or other controller. A tele-op'd robot is typically used to keep the operator out of harm's way. Examples of manual remote robots include Robotics Design's ANATROLLER ARI-100 and ARI-50, Foster-Miller's Talon, iRobot's PackBot, and KumoTek's MK-705 Roosterbot.

#### Guarded tele-op

A guarded tele-op robot has the ability to sense and avoid obstacles but will otherwise navigate as driven, like a robot under manual tele-op. Few if any mobile robots offer only guarded tele-op. *(See Sliding Autonomy below.)*

#### Line-following robot

Some of the earliest Automated Guided Vehicles (AGVs) were line following mobile robots. They might follow a visual line painted or embedded in the floor or ceiling or an electrical wire in the floor. Most of these robots operated a simple "keep the line in the center sensor" algorithm. They could not circumnavigate obstacles; they just stopped and waited when something blocked their path. Many examples of such vehicles are still sold, by Transbotics, FMC, EgeMin, HK Systems and many other companies.

#### Autonomously randomized robot

Autonomous robots with random motion basically bounce off walls, whether those walls are sensed with physical bumpers like the Roomba cleaners or with electronic sensors like the Friendly Robotics lawn mower. The simple algorithm of bump and turn 30 degrees leads eventually to coverage of most or all of a floor or yard surface.

#### Autonomously guided robot

An autonomously guided robot knows at least some information about where it is and how to reach various goals and or waypoints along the way. "Localization" or knowledge of its current location, is calculated by one or more means, using sensors such motor encoders, vision, Stereopsis, lasers and global positioning systems. Positioning systems often use triangulation, relative position and/or Monte-Carlo/Markov localization to determine the location and orientation of the platform, from which it can plan a path to its next waypoint or goal. It can gather sensor readings that are time- and location-stamped, so that a hospital, for instance, can know exactly when and where radiation levels exceeded permissible levels. Such robots are often part of the wireless enterprise network, interfaced with other sensing and control systems in the building. For instance, the PatrolBot security robot responds to alarms, operates elevators and notifies the command center when an incident arises. Other autonomously guided robots include the SpecIMinder and the Tug delivery robots for hospital labs, though the latter actually has



Robot developers use ready-made autonomous bases and software to design robot applications quickly. Shells shaped like people or cartoon

http://en.wikipedia.org/wiki/Mobile\_robot

8/12/2010

people at the ready to drive the robot remotely when its autonomy fails. The Tug sends a letter to its tech support person, who then takes the helm and steers it over the Internet by looking through a camera low in the base of the robot.

**Sliding autonomy**

More capable robots combine multiple levels of navigation under a system called sliding autonomy. Most autonomously guided robots, such as the HelpMate hospital robot, also offer a manual mode. The Motivity autonomous robot operating system, which is used in the ADAM, PatrolBot, SpecMinder, MapperBot and a number of other robots, offers full sliding autonomy, from manual to guarded to autonomous modes.

*Main article: Robotic mapping*

Also see Autonomous robot

**History**

Date	Developments
1939–1945	During World War II the first mobile robots emerged as a result of technical advances on a number of relatively new research fields like computer science and cybernetics. They were mostly flying bombs. Examples are smart bombs that only detonate within a certain range of the target, the use of guiding systems and radar control. The V1 and V2 rockets had a crude 'autopilot' and automatic detonation systems. They were the predecessors of modern cruise missiles.
1948–1949	W. Grey Walter builds Elmer and Elsie, two autonomous robots that looked like turtles. Officially they were called <i>Machina Speculatrix</i> because these robots liked to explore their environment. Elmer and Elsie were equipped with a light sensor, if they found a light source they would move towards it, avoiding or moving obstacles on their way. These robots demonstrated that complex behaviour could arise from a simple design. Elmer and Elsie only had the equivalent of two nerve cells. [1]
1961–1963	The Johns Hopkins University develops 'Beast'. Beast used a sonar to move around. When its batteries ran low it would find a power socket and plug itself in.
1969	Mowbot was the very first robot that would automatically mow the lawn. [2]
	The Stanford Cart line follower was a mobile robot that was able to follow a white line, using a camera to see. It was radio linked to a large mainframe that made the calculations [3]
1970	At about the same time (1966–1972) the Stanford Research Institute is building and doing research on Shakey the Robot, a robot named after its jerky motion. Shakey had a camera, a rangefinder, bump sensors and a radio link. Shakey was the first robot that could reason about its actions. This means that Shakey could be given very general commands, and that the robot would figure out the necessary steps to accomplish the given task.
1976	The Soviet Union explores the surface of the Moon with Lunokhod 1, a lunar rover.
	In its Viking program the NASA sends two unmanned spacecrafts to Mars.
1980	The interest of the public in robots rises, resulting in robots that could be purchased for home use. These robots served entertainment or educational purposes. Examples include the RB5X [3], which still exists today and the HERO series.
	The Stanford Cart is now able to navigate its way through obstacle courses and make maps of its environment.
Early	The team of Ernst Diekmann at Bundeswehr University of Munich builds the first robot cars,

http://en.wikipedia.org/wiki/Mobile\_robot

8/12/2010

1980s	driving up to 55 mph on empty streets.
1987	Hughes Research Laboratories demonstrates the first cross-country map and sensor-based autonomous operation of a robotic vehicle. [4]
1989	Mark Tilden invents BEAM robotics.
1990s	Joseph Engelberger, father of the industrial robotic arm, works with colleagues to design the first commercially available autonomous mobile hospital robots, sold by Helpmate. The US Department of Defense funds the MDARS-I project, based on the Cybermotion indoor security robot.
1991	Edo. Franzl, André Guignard and Francesco Mondada developed Khepera, an autonomous small mobile robot intended for research activities. The project was supported by the LAMI-EPFL lab.
1993–1994	Dante I [4] and Dante II [5] were developed by Carnegie Mellon University. Both were walking robots used to explore live volcanoes.
1994	With guests onboard, the twin robot vehicles VaMP and VITA-2 of Daimler-Benz and Ernst Diekmann's UniBwM drive more than one thousand kilometers on a Paris three-lane highway in standard heavy traffic at speeds up to 130 km/h. They demonstrate autonomous driving in free lanes, convoy driving, and lane changes left and right with autonomous passing of other cars.
1995	Semi-autonomous ALVINN steered a car coast-to-coast under computer control for all but about 50 of the 2850 miles. Throttle and brakes, however, were controlled by a human driver.
1995	In the same year, one of Ernst Diekmann's robot cars (with robot-controlled throttle and brakes) drove more than 1000 miles from Munich to Copenhagen and back, in traffic, at up to 120 mph, occasionally executing maneuvers to pass other cars (only in a few critical situations a safety driver took over). Active vision was used to deal with rapidly changing street scenes.
1995	The Pioneer programmable mobile robot becomes commercially available at an affordable price, enabling a widespread increase in robotics research and university study over the next decade as mobile robotics becomes a standard part of the university curriculum.
1996–1997	NASA sends the Mars Pathfinder with its rover Sojourner to Mars. The rover explores the surface, commanded from earth. Sojourner was equipped with a hazard avoidance system. This enabled Sojourner to autonomously find it s way through unknown martian terrain.
1999	Sony introduces Aibo, a robotic dog capable of seeing, walking and interacting with its environment. The PackBot remote-controlled military mobile robot is introduced.
2001	Start of the Swarm-bots project. Swarm bots resemble insect colonies. Typically they consist of a large number of individual simple robots, that can interact with each other and together perform complex tasks. [6]
2002	Appears Roomba, a domestic autonomous mobile robot that cleans the floor.
2003	Axxon Robotics purchases Intellibot, manufacturer of a line of commercial robots that scrub, vacuum, and sweep floors in hospitals, office buildings and other commercial buildings. Floor care robots from Intellibot Robotics LLC operate completely autonomously, mapping their environment and using an array of sensors for navigation an obstacle avoidance.
2004	Robosapien, a biomorphic toy robot designed by Mark Tilden is commercially available. In 'The Centibots Project' 100 autonomous robots work together to make a map of an unknown environment and search for objects within the environment. [7]
	In the first DARPA Grand Challenge competition, fully autonomous vehicles compete against each other on a desert course.
2005	Boston Dynamics creates a quadruped robot intended to carry heavy loads across terrain too rough for vehicles.

http://en.wikipedia.org/wiki/Mobile\_robot

8/12/2010



2006	<p>Sony stops making Aibo and HelpMate halts production, but a lower-cost PatrolBot customizable autonomous service robot system becomes available as mobile robots continue the struggle to become commercially viable. The US Department of Defense drops the MDARS-I project, but funds MDARS-E, an autonomous field robot. TALON-Sword, the first commercially available robot with grenade launcher and other integrated weapons options, is released. [8]. Honda's Asimo learns to run and climb stairs.</p>
2007	<p>History is made with the DARPA Urban Grand Challenge, with six vehicles autonomously completing a complex course involving manned vehicles and obstacles.[5] Kiva Systems clever robots proliferate in distribution operations; these smart shelving units sort themselves according to the popularity of their contents. The Tug becomes a popular means for hospitals to move large cabinets of stock from place to place, while the Speci-Minder [9] with Motivity begins carrying blood and other patient samples from nurses' stations to various labs. Seekur, the first widely available, non-military outdoor service robot, pulls a 3-ton vehicle across a parking lot [10], drives autonomously indoors and begins learning how to navigate itself outside. Meanwhile, PatrolBot learns to follow people and detect doors that are ajar.</p>
2008	<p>Boston Dynamics released video footage of a new generation BigDog able to walk on icy terrain and recover its balance when kicked from the side.</p>

**See also**

- Ant robot
- Autonomous robot
- Autonomous Underwater Vehicle
- Domestic robot
- Humanoid robot
- Industrial robot
- Mobile manipulator
- Robot
- Robotic arm
- Robotic mapping
- Robot kinematics
- Ubiquitous robot
- Unmanned Aerial Vehicle

**References**

1. ↑ Rail track and Linear track (PDF)
2. ↑ http://mobilerobots.com/MT400\_autonomous\_robotic\_base.html
3. ↑ http://www.stanford.edu/~learnesf/cart.htm
4. ↑ Proceedings of IEEE Robotics and Automation, 1988
5. ↑ Welcome

**External links**

- A tutorial about line tracking sensors and algorithms
- BioRobotics Laboratory. Research in Mobile Robotics and Human-Robot Interaction
- Department of Production at Aalborg University in Denmark, Research in Mobile Robotics and Manipulation

http://en.wikipedia.org/wiki/Mobile\_robot

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Swisslog Enters Autonomous Mobile Robot Market with CCS Robotics' SpecIMinder and RoboCourier
Swisslog Extends Materials Transport Product Family with SpecIMinder and RoboCourier

By Robotics Trends Staff - Filed Feb 02, 2010
CCS Robotics to manufacture SpecIMinder and RoboCourier for Swisslog, a provider of integrated logistics solutions for warehouses, distribution centers and hospitals. SpecIMinder and RoboCourier are both built on MobileRobots' MT-400 running on MobileRobots' MotiVity autonomous robot operating system.

Swisslog, a leading provider of automated materials transport and pharmacy automation solutions for hospitals, announced that it has entered the autonomous mobile robot market with the introduction of SpecIMinder and Swisslog RoboCourier in North America. SpecIMinder and RoboCourier will be manufactured for Swisslog by CCS Robotics, Inc., widely recognized as a national leader in the development of autonomous mobile robots for commercial applications within hospitals and laboratories. SpecIMinder robots produced by CCS Robotics have been in use in major medical facilities for the past three years.

Autonomous mobile robots are a natural extension of Swisslog's Automated Materials Transport Systems (AMTS) product family. The AMTS product portfolio currently consists of a pneumatic tube system for rapid on-demand transport of light loads throughout a hospital and an automatic guided vehicle system for scheduled transport of heavy bulk loads. SpecIMinder and RoboCourier provide either on-demand or scheduled transport of batch loads weighing up to 50 pounds, thereby filling the void between the other AMTS products.

Both SpecIMinder and RoboCourier are highly-maneuverable, capable of passing through congested hallways and door openings as narrow as 27 inches. Their small footprint allows them to turn on their own axis. The robots, which move at normal walking speed, feature easy-to-use and flexible route generation technology and collision avoidance systems.

Swisslog SpecIMinder is available now and is designed exclusively for INTBA-departmental materials transport. For example, a large one-floor laboratory or pharmacy in which several workers frequently move goods among multiple workstations is an ideal environment for SpecIMinder. The primary benefit of SpecIMinder is a tremendous increase in operational efficiency. The robot significantly reduces the manual labor required to move materials around a large department, resulting in many man-hours being returned to the department for other work.

Swisslog RoboCourier will be available later this year and is designed for INTER-departmental materials transport. Like SpecIMinder, RoboCourier will be able to interface with floors, but it will be able to traverse multiple floors. The robot's design also allows it to be used in a facility that will allow RoboCourier to navigate multiple floors within a hospital. In addition, it can transport materials from one department to another. RoboCourier's primary benefit is the same as

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SpecMinder's increased operational efficiency.
Both SpecMinder and RoboCourier will be available for purchase or lease.

"With these new mobile robots, or self-guided autonomous vehicles, Swisslog can now offer hospitals and healthcare facilities throughout North America a complete suite of logistics solutions for materials transport," said Jim Patrician, senior vice president of Swisslog Healthcare Solutions. "As a company, we have a solid track-record of responding to marketplace demands with innovative solutions. By adding SpecMinder and RoboCourier to our AMTS product family, we continue that tradition."

Swisslog Healthcare Solutions is the leading supplier of logistics automation solutions for healthcare facilities. Swisslog has installed automated materials transport and pharmacy automation systems in more than 3,000 hospitals and pharmacies around the world, including more than 2,000 in North America. Swisslog offers total systems design, manufacturing, installation and customer support providing a complete supply-chain management approach to the logistics challenges of hospitals. The North American division of Swisslog Healthcare Solutions is based in Denver, CO.

About CCS Robotics
CCS Robotics is based in Lapeer, Michigan, and is recognized as a national leader in the development of autonomous mobile robots for commercial applications within hospitals and laboratory facilities. Tony DeBello, president and founder of CCS Robotics, is recognized as a pioneer in the field of service robots and a leader in the worldwide robotics industry. For more information, visit http://www.ccsrobotics.com.

About Swisslog
Swisslog is a global provider of integrated logistics solutions for warehouses, distribution centers and hospitals. Its comprehensive services portfolio ranges from building complex warehouses and distribution centers to implementing Swisslog's own software to intra-company logistics solutions for hospitals.

Swisslog's solutions optimize customers' production, logistics and distribution processes in order to increase flexibility, responsiveness and quality of service while minimizing logistics costs. With years of experience in the development and implementation of integrated logistics solutions, Swisslog provides the expertise that customers in more than 50 countries rely on. Headquartered in Buchs/Aarau, Switzerland, Swisslog currently employs over 2,000 staff in about 20 countries worldwide. The group's parent company, Swisslog Holding AG, is listed on the SIX Swiss Exchange (security number: 1232462, Telexkurs: SLOG, Reuters: SLOG.S). For more information, visit http://www.swisslog.com.

Tags: Robocourier, Swisslog, Pharmacy automation, SpecMinder, Ccs robotics, Materials transport,

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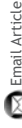
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## Hospital Robots of the Future

Robots are becoming ever-more useful to hospital staff, from supporting surgeons to paying bedside visits to patients. Chris Lo looks at how robotic assistants are changing the way our hospitals function.

Date: 29 Apr 2010



The word "robot" comes pre-loaded with its own set of unique connotations. To most, robots are a science fiction concept; a flight of fancy conjured by the vivid imaginations of Isaac Asimov, Arthur C Clarke and the like. In fact, robotics is a vibrant emerging field that is steadily building credibility as a method of making our lives safer and more convenient. From living rooms and factories to battlefields and operating theatres, robots are increasingly wheeling their way out of our imaginations and into our daily lives.

With busy medical professionals increasingly under pressure to make the best possible use of their time, hospitals often play host to the latest innovations in advanced robotics. From remotely operated surgical devices to simple drug dispensers, here we present some of the most significant developments in medical robotics and their potential for improving patient care and simplifying the daily tasks of hospital staff.

### neuroArm

One area in which the automated precision of robots has huge potential is surgery. While it may be some time before the technology is refined (and inexpensive) enough to become a part of surgeons' day-to-day lives, several new innovations have emerged in recent years that are bringing hospitals a step closer to a future where surgeons work in tandem with robotic counterparts to achieve better results.

The neuroArm, for example, was officially launched in April 2007. This robotic device was developed by Dr Gamette Sutherland at the University of Calgary in Canada. It is designed to perform remotely controlled neurosurgery in conjunction with an MRI. The surgeon controls the device's robotic appendages from a nearby workstation, which projects a 3D display of the surgical site and MRI data, with superimposed virtual tools allowing full control of the system. As the neuroArm is MR-compatible, it can actually perform stereotactic surgery from inside the bore of an MRI with near real-time image guidance.

But the robot that has proved to be the most pervasive presence in operating theatres is the da Vinci Surgical System. As of December 2009, nearly 1,400 of these devices have been sold worldwide, with the majority appearing in US hospitals. The da Vinci System has been used for a wide range of laparoscopic (keyhole) surgeries, and has been seen to reduce bleeding during operations and minimise post-operative pain, scarring and recovery time. This multilimbed surgical tool might resemble a menacing instrument from George Orwell's *Nineteen Eighty-Four*, but the da Vinci is designed to perform complex surgery with minimal invasiveness, and reduced

discomfort. A surgeon controls the limbs from a console to make incisions and tracks progress with a mounted 3D endoscope.

If such robot-assisted surgery has the potential to benefit surgeons and their patients, why haven't we seen more widespread adoption of these devices? Well, there are some obvious drawbacks that are keeping hospitals from reaching for their cheque books. The first is cost.

The da Vinci system, for example, retails at approximately \$1.5m, with significant annual maintenance costs. For hospitals with stretched budgets, more evidence must be presented showing that cost is justified by markedly improving results for the patient and creating financial savings from reduced recovery times.

On a practical level, the use of robots during surgery involves a steep learning curve for surgeons used to traditional surgical methods. Many practitioners have cited the lack of tactile feedback (the physical sensation of making an incision) as a major disadvantage, despite the sophistication of visual displays.

### Dr Robot will see you now - InTouch's Remote Presence robot

Robots are also making an impact outside the operating theatre. InTouch Health has developed a Remote Presence robot (RP-7), which allows physicians to visit patients while in another location, communicating with them in real time through a screen mounted on a remotely operated robot.

What the RP-7 lacks in style (it bears a somewhat unfortunate resemblance to a wheeie bin) it makes up for in sophisticated technology. As well as allowing doctors to conduct remote consultations with patients, the robot can connect to medical instruments such as electronic stethoscopes and wirelessly transmit data back to the remote physician.

The device, which costs between \$4,000 and \$7,000 a month to lease (depending on volume of orders and time commitment from hospitals), has been primarily used in fields where the ratio between medical professionals and patients is particularly high.

Take intensive care. The round-the-clock observation required to treat critically ill patients puts a serious strain on ICU doctors. The RP-7 allows them to make rounds during off-duty hours to maintain quality of care and stay up-to-date with patients' conditions.

As the healthcare demographic continues to morph, with increasing numbers of elderly patients requiring ongoing hospital treatment, Remote Presence robots could potentially form a vital part of the solution to the problem of understaffing.

Indeed, many hospitals, primarily in the US, are seeing positive results after introducing Remote Presence robots. Since the UCLA Medical Center became the world's first hospital to introduce these devices to its neurosurgery ICU in 2005, an increasing number of large hospitals have embraced this technology, including Johns Hopkins in Baltimore, the Detroit Medical Center and St. Mary's in London.

In February, InTouch announced that over 100,000 clinic sessions had been performed through its Remote Presence network, with 250 hospitals now on board. It is this success that led to US business magazine *Inc.* ranking InTouch 289th on its list of the 500 fastest-growing companies in the US in 2008, with a three-year sales growth rate of 958%.

### Developing the future - remote surgery and nanorobotics

<http://www.hospitalmanagement.net/features/feature83720/>

8/12/2010

8/12/2010

Scientists are also developing increasingly complex robotic devices in an effort to eventually make truly science fiction concepts a reality.

The da Vinci surgical system could theoretically allow remote surgery to take place over much larger distances than from one hospital room to another. Although this area is not currently a priority for manufacturer Intuitive Surgical, the system could theoretically facilitate remote surgery across oceans and continents. The would-be benefits of this development are clear, as it would allow patients in remote locations (or soldiers in combat zones) to receive remote surgery from half the world away.

Nanorobotics is much discussed as a potentially revolutionising force in modern medicine. While the development of nanorobots (microscopic devices measured in nanometres - one billionth of a metre) is still in the theoretical stages, researchers believe they could play a vital role in the future treatment of disease. Small enough to enter the blood stream, possible applications of nanorobots include targeted drug delivery to combat cancer (as an alternative to chemotherapy), advanced diagnostics and regenerative medicine.

Today, robots are just beginning to make their way into the wards and operating theatres of our hospitals. Advances in medical robotics are impressive but new technologies are still expensive to implement and often impractical in the current medical environment.

**"Advances in medical robotics are impressive but new technologies are still expensive to implement."**

Last year, a pilot scheme in the US replaced manual medicine delivery with self-guiding robots. This might have been a futuristic idea but results showed that nearly 10% of mechanised deliveries failed to reach their destination and patient satisfaction declined in comparison to traditional delivery methods.

Despite the stumbling blocks along the way, it is projects like this that foster greater awareness of the benefits of medical robotics. As hospitals begin to make planning decisions that integrate robotics with conventional human expertise, we may begin to see our hospitals transform into something worthy of the best science fiction.



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**50. Wayne Martin (letter dated July 27, 2010)**

50.1 *The commentor requests that the Draft EIR include an analysis of using service robotic technology at the SHC and LPCH Hospitals as a way to reduce the number of proposed employees under the SUMC Project. Please see response 49.1. Please refer to Master Response 10 for a discussion of non-CEQA issues.*

Minor, Beth

From: Stepheny [stephenymcgraw@att.net]  
Sent: Thursday, July 08, 2010 8:54 AM  
To: info@stanfordpackard.org  
Cc: Council City; Annette Glanckopf; Jeb Eddy; Jill Matzke; Karen H. Lawrence; Kerry Kenny; Peggy Kenny; Shanna; Furman, Sheri; Sylvia Gartner

CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

10 JUL -8 AM 9:39

Subject: What about health care efficiencies, costs?

At present, I cannot support this mega project for Stanford Packard. It is critically important that as a nation, we move to make health care more efficient and more affordable. Stanford Packard's expansion has a chance to model the way and yet there is NO mention of any such measures surrounding this project.

Local paying patients are expected to subsidize experimental and extraordinary medical efforts for those brought in from around the world and around the nation. What is being done to make Stanford medical care more efficient, more affordable and more effective?

51.1

At a neighborhood meeting in 2008 your representatives had nothing to offer on this subject. Since then, I have still heard no plans to reduce our out of control medical costs.

I look forward to hearing your response.

Sincerely,  
Stepheny McGraw

7/8/2010

**51. Stepheny McGraw (letter dated July 8, 2010)**

51.1 *The commentor expresses opposition to the SUMC Project.* The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.

Minor, Beth

From: Douglas Moran [dmoran@gmail.com] on behalf of Douglas B. Moran Clerk's Office  
[dmoran@dougimoran.com]  
Sent: Monday, May 24, 2010 2:37 PM  
To: Council, City  
Subject: Stanford Hospital DEIR discussion suggestion

CITY OF PALO ALTO, CA  
MARK CLERK'S OFFICE

10 MAY 24 PM 2: 55

Council members:

When discussing Stanford Hospital DEIR, I suggest that you discuss both the impacts and the offsets in similar measures (eg dollars, housing units). I have found that when one discusses costs and benefits in different measures--an easy trap to fall into--they often wind up being unintentionally far out of balance.

For the proposed Stanford offsets via payments, I would suggest that they be expressed not just dollars, but what those dollars could accomplish. For example, how many housing units does \$23M represent, and how does this compare to what the expansion is likely to add to PA's target?

Similarly, in discussing the impacts, it would be useful to include estimated costs. I realize that such estimates are difficult and that some of the impacts cannot be remediated, but it is still useful. For example, for increased traffic delays, translate those into person-hours per year and then assign a dollar cost based upon a valuation of the lost time (imprecise).

I expect that having such direct comparisons would be useful both to you (Council members) and to the community.

-- Doug Moran



**52. Doug Moran (letter dated May 24, 2010)**

52.1 *The commentor requests the analysis contain a cost benefit evaluation of the impacts and mitigation measures using measures that include estimated costs (dollars), number of housing units, etc.* The Draft EIR is not the appropriate forum for the type of cost/benefit analysis proposed by the commentor. However, as part of the project approval process, a Fiscal Impact was prepared by CBRE Consulting, Inc. in February 2009 to determine potential tax and fee revenues that would be generated by the SUMC Project. These fees would be required to sufficiently fund the anticipated costs of providing municipal services to the SUMC Project. The analysis used a time horizon of thirty years (2010-2040) to be consistent with the proposed Development Agreement, which is outlined on pages 2-27 through 2-28 of the Draft EIR. For the monetary impacts of the SUMC Project and the required fees to be paid by the SUMC Project sponsors, please refer to the Fiscal Impact Analysis, which is available at the City's website.<sup>1</sup>

This comment concerns financial issues and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 10 for a discussion of non-CEQA issues.

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<sup>1</sup> City of Palo Alto, "City Manager's Report," Memo to City Council, May 24, 2010, accessed on September 3, 2010 at: <http://www.cityofpaloalto.org/knowzone/news/details.asp?NewsID=1316&TargetID=219>.

Letter 53

53.1  
Con't

Passes and if not enough workers use them making it harder or more expensive to park and expanding the shuttle service. It does not mention expanding shuttle service to the East Bay, although this was mentioned by people during the hearings. However there are few other fall-back positions if those actions still fall short. Also it's unclear who will oversee and verify adequacy of mitigations and who will enforce failure to comply and how it will be enforced. Right now it appears that Stamford Medical will track compliance and decide when and how to impose changes and upgrades to the mitigations. There may be a better way.

53.2

Full buildout and completion of the project will take on the order of 20 years. Why not have regular reviews, say every 3 or 4 years, of the effectiveness of mitigations such as for traffic impacts? If reality falls short of plans, halt or significantly reduce any construction or expansion until the problems are corrected. Stamford has a similar arrangement with the County regarding traffic and campus expansion, and they have been pretty successful in keeping traffic counts at the allowed maximums, although there were a few times when they went over and had to stop construction activities for awhile. There should be clear City review and oversight of all mitigations, verify that they are performing as intended, and the ability to enforce corrective actions if the mitigations prove inadequate. It will take staff effort, so SUMC should pay some if not all of the staff expenses for on-going performance monitoring. I suspect it would be less than a full staff person, probably half or less, not too huge an expense.

Thanks for all your effort on the EIR and project. It has been a very major task, far bigger than anything we've ever had.

Regards, Bob Moss

**From:** Bob Moss [mailto:bmoss33@att.net]  
**Sent:** Tuesday, July 27, 2010 4:32 PM  
**To:** Enslie, Steve  
**Subject:** SMCU EIR

Steve:

I have been thinking again about some of the EIR mitigation measures and want to suggest some potential corrective actions. A number of mitigations are proposed for the various impacts. In some cases they are one-time or very short time actions that are fairly easy to monitor and require corrections if they are not done right or are incomplete. Others require rather extensive on-going measurement and can require future corrective actions. One that looms large is traffic. There have been many comments about the potential inadequacy of Go Pass distribution if CalTrain cuts back or ceases operation. The EIR talks some about monitoring use of Go

53.1

**53. Bob Moss (letter dated July 27, 2010)**

53.1 *The commentor states that he would like to suggest corrective actions to the EIR mitigation measures due to the potential inadequacy of the GO Passes if Caltrain reduces or ceases operation. Monitoring is a requirement of Mitigation Measure TR-2.3 to determine if the modal split away from single occupant vehicles is achieved. The SUMC Project is also required to use reasonable efforts to lease parking spaces in the East Bay and maintain adequate bus service from the East Bay to the hospital complex as part of Mitigation Measure TR-7.2. Please also see Master Response 1 concerning the viability of Caltrain.*

53.2 *The commentor is concerned about who will monitor and verify adequacy of the mitigations during the construction and operation of the SUMC Project. As explained on the Introduction Section on page 1-5 of the Draft EIR, if the SUMC Project is approved, then the City of Palo Alto must adopt a Mitigation Monitoring and Reporting Program (MMRP), which would ensure that the mitigation measures adopted from the Draft EIR are being implemented. Please see Master Response 11 for a description of an MMRP and the SUMC Project review and approval process.*

Regarding the City staff expenses that could be incurred during monitoring, this is a financial issue that is outside the scope of CEQA. Please refer to Master Response 10 for a discussion of non-CEQA issues.

COUNCIL MEETING

( ) Placed Before Meeting  
(x) Received at Meeting

Letter 54

June 13 2010

101 Alma, apt. 701

Palo Alto City Council

One time a friend of mine from the English speaking Mosquito Coast of Nicaragua married a young man from East Palo Alto, and he told me that he worked at Stanford, and added that he was approaching the end of his first year and he hoped they wouldn't fire him. "But why would they fire you?" I asked. "Because after that time they have to give you benefits, like health insurance, so they fire you so they can get somebody they don't have to give health insurance to." Stanford has many wonderful attributes, and it's grand to bask in the reflected glory of Nobel prizes and cutting edge research, and you could certainly recognize that a hospital is much more efficient adding space in a greater height, but you also have to recognize the increased cost/profit from having all private rooms, and you have to realize that part of their labor cost is borne by the community.

Even though it looks as if you're nickel and diming them to death, they're walking away with the store if you allow them to build all that commercial--and don't fool yourself, the health industry is commercial, big time-- and stick you with the cost of housing the estimated 2242 new employees, half of them 190w income.

ABAG, every 7 years, takes note of the new jobs and assigns the cities a commensurate low-income housing number. In San Mateo County it's county wide, but in Santa Clara county, it goes city by city. So Menlo Park, Redwood City, Mountain View and Cupertino aren't going to get stuck with the tariff, Palo Alto is.

Stanford's EIR is deficient in not recognizing the cost of the housing to Palo Alto. To hear them tell it, Palo Alto needs only zone parts of the city higher density, but that's by no means the end of the story. There was a time, about seven or eight years ago, when I stood here and said "If a 4,000 square foot house is selling for a million, then four 1,000 square foot apartments in the same volume building can sell for a quarter of a million each." The then Council didn't give me the time of day, and I as talking about market rate housing.

Now, each unit of low income housing built will cost, at a minimum, \$250,000, and many knowledgeable persons--I think Yoriko Kishimoto is one--estimate it as estimate it as closer to half a million. Each unit.

Just ask yourselves--really ask yourselves, the value of the electroc sub-station moved from Alma Street, which Palo Alto gave to the non-profit for low income housing. Why? Ask yourselves why.

Stephanie Munoz.

And you could also ask yourselves what the purpose of the State law that says if a structure changes occupancy use it has to upgrade to current seismic standard--a purely arbitrary demand, that the State, given the incentive, could easily change.

**54. Stephanie Munoz (letter dated June 29, 2010)**

54.1 *The commentor expresses fiscal concerns about the SUMC.* This comment does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 10 for a discussion of non-CEQA issues.

54.2 *The commentor raises the cost of providing affordable housing for new hospital employees.* A Fiscal Impact Analysis was prepared by CBRE Consulting, Inc. in February 2009 to determine potential tax and fee revenues that would be generated by the SUMC Project. For the monetary impacts of the SUMC Project and the required fees to be paid by the SUMC Project sponsors, please refer to the Fiscal Impact Analysis, which is available at the City's website.<sup>1</sup> In addition, one component of the Development Agreement between the City and the SUMC Project sponsors would be the payment of a housing in-lieu fee in the amount of \$23.1 million, which is equivalent to what a commercial project would pay. The terms of the Development Agreement are included in the Draft EIR on page 2-27, Section 2, Project Description.

One of the SUMC Project alternatives analyzed for the SUMC Project in Section 5, Alternatives, is the Village Concept Alternative, which would provide affordable housing. Under this alternative, housing would be provided at three sites within the vicinity of the SUMC Sites and would be dedicated to SUMC employees. For more information about the Village Concept Alternative, please refer to Section 5, Alternatives. Please refer to Master Response 10 for a discussion of non-CEQA issues.

54.3 *The commentor raises the issue of moving the electrical sub-station from Alma Street.* The electrical sub-station is not located at the SUMC Project Sites and is not included in the SUMC Project. As such, this comment does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 10 for a discussion of non-CEQA issues.

54.4 *The commentor questions the need for State seismic standards when a structure changes occupancy use.* The requirement for the SUMC hospitals to meet seismic standards was not triggered by the change in occupancy use, but by Senate Bill (SB) 1953. The Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1994 (SB 1953) requires all hospital facilities to meet new seismic standards and establishes a timeline for these improvements. SB 1953 requires that both structural and non-structural elements of existing hospitals meet the new standards either through retrofit or replacement. If a hospital does not comply with these regulations, the State can revoke the hospital's operating license.

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<sup>1</sup> City of Palo Alto, "City Manager's Report," Memo to City Council, May 24, 2010, accessed on September 3, 2010 at: <http://www.cityofpaloalto.org/knowzone/news/details.asp?NewsID=1316&TargetID=219>.

As described on pages S-8 through S-9 of the Draft EIR, Summary, the Stanford Hospital complex consists of buildings built in 1959, 1973, and 1989, some of which do not meet the current seismic safety requirements imposed by SB 1953. Therefore, a significant portion of its facilities must be replaced or renovated in order to meet current safety standards. The SUMC Project sponsors have determined that in many cases it is more cost efficient and physically practical to demolish older, noncompliant buildings and replace them with new facilities that meet the standards. Please refer to the Draft EIR for more details regarding seismic safety and changes proposed under the SUMC Project.



Letter 55

**From:** Diana Shu [dshu@co.sanmateo.ca.us]  
**Sent:** Thursday, July 22, 2010 12:50 PM  
**To:** Sidney Overland; Stanford Project  
**Cc:** Jim Porter; Joe Lo Coco  
**Subject:** Re: Alpine Rd.

Hi Sidney  
Sorry to hear about your close call with the Ambulance. You'd they would understand.  
I'm going to pass your comments over to the Stanford Project as part of a public comment. via this email.  
Thank you for your input and we hope you are feeling better.  
Diana



>>> "Sidney Overland" <sidneyoverland@yahoo.com> 7/22/2010 11:53 AM >>>  
I would like to add to Janet's comments about safety on Alpine Rd. This area is even more dangerous for pedestrian's.  
I have a shoulder injury and could not drive for quite some time. There were times that I had to walk to Sharon Heights or to the Bus Stop from our house on Bishop Lane.

The situation is unacceptable for pedestrians, especially those who are elderly, injured, or disabled in some way. The traffic lights and cross walks do not allow pedestrians to cross Alpine Rd. So, I was forced to walk farther to get to the pedestrian underpass. Adding the extra distance was very hard on me and took a lot of extra time. To get to Sharon Heights, I had to hike to Junipero Serra and hike under the street, come back up, cross Sandhill, and cross back over Alameda/SantaCruz. That is a lot of extra walking for an injured person in pain.

>in addition, when I had stepped into the crosswalk at Alameda Del Las Puigas and Sandhill Rd., an ambulance without lights or siren almost ran me over because they were wiping around the corner and they didn't notice me.

This intersection is too dangerous for pedestrians. It was pretty obvious to me.

Other times, I tried crossing Alpine at the back entrance to the Buck Estate; however, the speed of traffic makes it way to dangerous for pedestrians. The best way for pedestrians to get to Sharon Heights from Alpine is by walking through the Buck Estate because it is much safer, takes less time, and is physically easier on the pedestrian. However, the speed of traffic makes crossing Alpine close to impossible.

I was very upset that I while using the pedestrian route, I was almost run over by an ambulance while I was in a crosswalk with a green light.

I believe a senior citizen was killed in front of a retirement community very close to the bus stop that I was trying to reach.

The situation on Alpine is just unacceptable and an increase in traffic will only make it worse. It will also make the intersection at Alameda and Sandhill more dangerous.

Sidney Overland

**55. Sidney Overland (letter dated July 22, 2010)**

55.1 *The commentor conveys his difficulties crossing the street at multiple intersections in the area and believes that the increase in traffic would only make the situation worse. The Sand Hill Road/Santa Cruz Avenue intersection is under the jurisdiction of Menlo Park. If the current pedestrian signal phase is too short to allow pedestrians to safely cross, it could easily be lengthened by Menlo Park. The SUMC Project would add 147 AM Peak Hour vehicle trips and 152 PM Peak Hour vehicle trips to this intersection. Generally, accidents result from both poor design and traffic volumes. However, the SUMC Project does not contribute to the real or perceived unsafe conditions at the Sand Hill Road/Santa Cruz Avenue intersection.*

2

COUNCIL MEETING

MAY 24 2010

Received at Meeting

Placed Before Meeting

Minor, Beth  
From: Nancy Peterson (n.peterson@earthlink.net)  
Sent: Saturday, May 22, 2010 11:45 AM  
To: Council City  
Subject: Draft EIR

10 MAY 24 AM 7:19

Honorable Mayor Burt and Council Members,

Congratulations on the completion of the draft Environmental Impact Report for the Stanford Hospital renewal project. This is a great step forward toward the important goal of completing the project review in this calendar year. I urge you to remain focused and avoid making unrelated requests of Stanford in the development agreement.

In your deliberations, please consider the many positives of Stanford's behavior in the community. I hold up as an icon the Marguerite shuttle system. If you want to understand how Palo Alto transit can work optimally, look at the University of California, Santa Barbara Hospital and take the Marguerite A or B CounterClockwise shuttle to SAGE at Stanford Hospital and Packard Hospital (and other) employees are moved, quickly and efficiently from CalTrain to their places of work. The Marguerite is really a dream system, is environmentally responsible and actually builds community. It demonstrates how professionally and effectively Stanford consistently addresses issues.

As you move forward I hope you will address only matters directly related to the project. You've made great progress toward narrowing down a "wish list" that, among other negatives could have damaged the image and reputation of Palo Alto city government. It is essential for Palo Alto to manage our budget responsibly and relying on an external entity to fund projects unrelated to its operations and impact is neither sound nor sustainable fiscal policy.

Between now and July 27 I hope that you will focus on the innumerable win-wins of this project so that our community can continue to be served by top notch healthcare.

Sincere thanks to the entire Council for your service to our city.

Kind Regards,  
Nancy Peterson  
Ashton Avenue  
Palo Alto

**56. Nancy Peterson (letter dated May 22, 2010)**

- 56.1 *The commentor describes the benefits of the Marguerite shuttle that provides transit service from the Caltrain station on University Avenue to the SUMC Sites. The SUMC Project would encourage employees to use the Marguerite Shuttle. In addition, the Draft EIR includes Mitigation Measure TR-2.3, which would expand Marguerite shuttle service between the SUMC and Palo Alto Intermodal Transit Center (PAITS). Please refer to pages 3.4-68 and 3.4-79 of the Draft EIR, Transportation, for more details. Please see Master Response 2 regarding the feasibility of expanded shuttle service.*
- 56.2 *The commentor urges the City to make sound and sustainable fiscal decisions regarding the SUMC Project. The comment concerns financial issues and the Development Agreement, which do not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 10 for a discussion of non-CEQA issues and Master Response 12 for a discussion of the Development Agreement.*
- 56.3 *The commentor expresses support for the SUMC Project. The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.*

4

Letter 57

MINOR, BETH

CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

10 JUL 12 AM 7:30

From: Keene, James

Sent: Sunday, July 11, 2010 9:38 PM

To: Richard Placone

Cc: Council, City; Emslie, Steve; Price, Gail (internal); Schmid, Greg; Holman, Karen (internal); Klein, Larry; Shepherd, Nancy (internal); Burt, Patrick; Espinosa, Sid (internal); Yeh, Yirway

Subject: Re: Stanford Medical Center Expansion Project

Dick, thanks for your email. Council has set up a process and timeline that will move forward through CEQA and other requirements in an effective manner, in recognition of the significance of this critical project.

Jim

James Keene  
Palo Alto, California  
Sent from my iPad

On Jul 10, 2010, at 8:20 PM, "Richard Placone" <rcplacone@sbcglobal.net> wrote:

July 10, 2010

To: Palo Alto City Council  
Re: Proposed Stanford Medical Center Expansion Project

Full disclosure: *I was a full time employee of Stanford University from 1962 through 1985, the first four years at the School of Engineering, and the remaining 19 years as a senior manager at the Stanford University Medical School and Medical Center. I left Stanford in 1985. I then started my own company doing small medical clinic development and management, and then retired in 1998.*

Dear Council Members:

I believe that the most important decisions you will make during your respective terms on the city council, decisions that will determine the long term viability of our city, will be those decisions you make regarding the proposed Stanford Medical Center Expansion Project.

While I agree that council members need to carefully weigh the impact this project will have on the city's finances, its infrastructure and its physical and social environment, I believe it needs to give equal weight to the impact your decisions will have on the medical center and the university as well.

I strongly support this project. In this letter I will tell you why.

First, I ask you to consider exactly what Stanford University and its various activities and enterprises have meant and will continue to mean to Palo Alto and the entire south peninsula. But

For Stanford, our city would just be another small peninsula town. We would continue to enjoy the same climate, the same views of the coast range and proximity to the bay and the same cultural offerings of the City of San Francisco. But we would not be distinguished from any other town up and down the peninsula. In fact, it is very unlikely that there would be a Silicon Valley here, or another major city like San Jose with its growing business and cultural offerings to the area.

Second, consider that without Stanford, the PAUSD would be just another typical school district rather than one of the highest ranked districts in the country. And with a lesser school district, Palo Alto would not enjoy the consistently high property values and economic stability that so many of our residents enjoy today, even during this serious financial recession. Without the influence of the academic faculty and high caliber administrative and support staff who live and work in this area, Palo Alto would be an entirely different town and all the special services and amenities that many claim to not just enjoy but need, would likely not exist.

Third, give some thought to what Stanford offers to this community on a regular basis aside from the medical center: a superb museum including the Rodin sculpture garden; theater; musical concerts in several venues; lovely grounds generally open to the public for recreation and contemplation; access to educational programs for continued learning; the world famous Stanford Research Park and all that signifies; the beautiful Stanford Shopping Center, which exceeds in beauty and store offerings and successfully competes with the highly acclaimed Santana Row in San Jose and much more. In fact, the council's recent "Destination Palo Alto" PR project relied for success largely on the draw Stanford has to tourists and business travelers.

Fourth, just look what Stanford has done for the community in a variety of ways no other city enjoys: the playing fields at El Camino Real and Page Mill Road, given as a virtual gift to the city; the reconstruction of Sand Hill Road resulting in a much freer flow of traffic from Highway 280 to El Camino Real; the reconstructed El Camino Real at the main entrance to the Stanford Shopping Center; the lease at minimal cost of the small park across from the shopping center; the lease of vital lands at costs way below market value to the city utility department for use for its facilities.

Finally, consider that most of these activities bring much needed revenue to the city through shoppers who use the shopping center, business travelers who come to the university, the research park and other venues along San Hill Road, students and visiting faculty who make use of our rental properties, stores and other revenue generating services. In addition, I understand that Stanford participates in what I assume is its share of public safety services through the fire station on campus and in other ways during public events like major sports activities. Remember too, the Senior Games came to Palo Alto because of Stanford University.

All of this, and not one word yet about the medical center project

I believe I will not be alone when I say that my wife and I have benefitted in life saving ways because of the proximity of the Stanford medical center, its superb, world class medical faculty and staff and the advanced technology made available to us. Now that we are seniors and health care becomes more of an issue for us, having Stanford nearby is a great comfort. In fact, my late mother had the quality of her life and longevity extended (she died a year ago at age 97) because as a recent Palo Alto resident she was able to get to the Stanford hospital in a timely life saving manner. But there is another factor that many people in town may not consider. It is this. The presence of Stanford here has a direct relationship to the overall quality of medical care provided by the local medical community, who are not necessarily on the medical center faculty. The Palo Alto Medical Foundation exists here as it is today largely because of the influence of the university medical center ever since it moved here from San Francisco in 1959.

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This is quite a bill of positive particulars for one institution to bring to a community. While the university is not perfect, and while it brings with it its share of problems that the community has to work out and/or live with, I think the balance leans heavily in favor of positive benefits to Palo Alto and its residents. Stanford has been a good neighbor, and considering its global mission and responsibilities as the university sees them, I think the institution has bent over backwards trying to be a good and beneficial neighbor. I know of no other enterprise in the city that has done as much for us as the university and its world class medical center has done and will continue to do.

Yes, with the proposed medical center expansion, we will have to pay a price, but Stanford is showing its willingness to mediate traffic and housing problems that will arise. Its financial contributions to the city, both in direct payments and generated fees related to the project will amount to tens of millions of dollars. Ongoing tax and other revenues can only be good news to sadly depleted city coffers, and to local businesses who are feeling the pinch of the recession. To those who complain about increased traffic, I believe the community can resolve these issues and besides, traffic will increase as the city grows, in spite of Stanford - just look at the high density housing projects the council continues to approve. Some opponents criticize the high rise nature of the project. I would like to remind residents that these buildings will be located deep into Stanford property, and will not even be visible to nearby downtown or residential areas.

Stanford has been a Godsend to our community. The advantages are mostly ours. Now the university has come to the community to ask for approval to expand its medical center to meet not just local needs, but the needs of the entire south peninsula and beyond. But that is what a world class medical center does. I urge the council to respond positively, seeking a proper balance between protecting the city's legitimate concerns as related to this project, without expecting Stanford to solve every problem we can possibly think of. Do not kill the golden goose from which we derive such splendid gifts.

I have a personal friend dating back to the time we were boys together, who is now in a nursing home for the rest of his life, because he lives in an area where the kind of care we tend to take for granted was not available to him. And I know of other friends and family, who face the same situation, because they are not fortunate to have world class medical care available to them. Let's not hold Stanford back, possibly putting us in the same position.

Sincerely yours,

Richard and Jeanne Placone  
Chimalus Drive  
Palo Alto, 94306

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**57. Richard Placone (letter dated July 10, 2010)**

57.1 *The comment pertains to the review process of the EIR and the SUMC Project in general. Please refer to Master Response 11 for a detailed description of the City’s review process and the next steps in the EIR review process.*

57.2 *The commentor requests consideration of the services that the SUMC has provided for the City of Palo Alto currently and in the past. The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project’s compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.*

**Letter 58**

**From:** rich rollins [rollinsmp@sbcglobal.net]  
**Sent:** Tuesday, July 27, 2010 3:35 PM  
**To:** Turner, Steven  
**Cc:** bournepub@aol.com; thprop@earthlink.net  
**Subject:** Re: Stanford Hospital expansion DEIR comment letter

Thank you Mr. Turner.  
Forgot to mention that a significant number of Oak Creek Apt. residents use Oak Ave./Middle Ave. as a cut through to ECR when eastbound Sand Hill Road is jammed in the a.m.. They find it faster to turn right, go out Sand Hill over the bridge and hang a right on Oak Ave..  
Rich

Rich Rollins, Broker  
Rollins Realty and Management  
640 Menlo Ave.  
Menlo Park, Calif. 94025  
Ofc. 650-327-0375 Fax 650-327-0382  
Cell 415 999 7109



**From:** "Turner, Steven" <Steven.Turner@CityofPaloAlto.org>  
**To:** rich rollins <rollinsmp@sbcglobal.net>  
**Sent:** Tue, July 27, 2010 3:19:52 PM  
**Subject:** RE: Stanford Hospital expansion DEIR comment letter

Thank you. These comments will be entered into the record.  
--Steven Turner

**From:** rich rollins [mailto:rollinsmp@sbcglobal.net]  
**Sent:** Tuesday, July 27, 2010 10:14 AM  
**To:** Turner, Steven  
**Cc:** rdalle@menlopark.org; ksteffens@menlopark.org; bournepub@aol.com; thprop@earthlink.net  
**Subject:** Fw: Stanford Hospital expansion DEIR comment letter

Dear Mr. Turner, just wanted to make sure the email below to the MP City Council and staff made it into your record of comments on the draft EIR.

In particular, we would like further analysis on not only the current and projected origin and destination impact of the Hospital expansion on Oak Ave., which currently serves as a primary access route from West Menlo Park to the Hospital complex (i.e., staff, patients, visitors), but also the impact of diverted traffic that would continue to use the Middle/Oak Ave. corridor as a means to avoid the congestion on Sand Hill Road.

With the inability of drivers from downtown Palo Alto to get across El Camino from Alma, the stop and go pm peak commute pattern due to a restricted 2 lanes from ECR to Arboretum, and the dozen or so uncoordinated signals west from Arboretum to Santa Cruz, it appears that the Hospital expansion would exacerbate the limited access to, and congestion on, Sand Hill Road, thereby creating a significant impact on the Middle/Oak Ave. corridor and Oak Knoll Elementary School neighborhood in West Menlo Park.

Sincerely,  
Rich Rollins  
27 year resident of Oak Ave.  
Former Menlo Park Transportation and Planning Commissioner

58.1

----- Forwarded Message -----  
**From:** rich rollins <rollinsmp@sbcglobal.net>  
**To:** city:council@menlopark.org  
**Cc:** "nealaj@yahoo.com" <nealaj@yahoo.com>  
**Sent:** Mon, July 19, 2010 5:21:05 PM  
**Subject:** Stanford Hospital expansion DEIR comment letter

Dear Council, the proposed Hospital Expansion traffic impact analysis failed to study the potential substantial impact on Oak Ave. and the Oak Knoll School neighborhood.  
Oak Avenue, at 24 feet wide, and, now with a new school parking and delivery entrance to Oak Knoll School, is already suffering excessive traffic due to the 2 outbound lanes to Sand Hill Road and speeding cars making the sharp right turn from Sand Hill onto Oak.

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As you know, the signal at Oak and Sand Hill is a huge attractant to cut through traffic, and the safety of pedestrians and cyclists on Oak Ave. is compromised daily. The hospital expansion will undoubtedly create even more cut through traffic as drivers attempt to avoid the near gridlock on Sand Hill Road during commute hours. Residents of our neighborhood would appreciate that this oversight be noted in your comment letter to the City of Palo Alto, and strongly urge the City of Palo Alto to respond to this oversight.

Respectfully submitted,  
Rich

Rich Rollins, Broker  
Rollins Realty and Management  
640 Menlo Ave.  
Menlo Park, Calif. 94025  
O/c. 650-327-0375 Fax 650-327-0382  
Cell 415 999 7109

**58. Rich Rollins (letter dated July 27, 2010)**

58.1 *The commentor notes that a significant number of motorists use Oak Avenue and Middle Avenue as a cut through to El Camino Real when there is traffic on Sand Hill Road in the morning. The commentor would like further analysis on the current and projected origin and destination impact of the hospital expansion on Oak Avenue and the impact of diverted traffic that would continue to use the Middle Avenue/Oak Avenue corridor as a means to avoid the congestion on Sand Hill Road. Please refer to Response 8.24 concerning the analysis of Oak Avenue.*

**Letter 59**

**From:** steve schmidt [menloparksteve@gmail.com]  
**Sent:** Tuesday, July 06, 2010 9:32 PM  
**to:** Stanford Project;  
**Subject:** Comment on bike/pedestrian conditions & mitigations

Dear Steven: Below are my comments on the Medical Center DEIR:

**Comments on DEIR for Stanford Hospital Expansion**

**Transportation Section:**

1. Map showing bicycle facilities indicates a Class I facility on Alpine Road. Past the Menlo Park City Limit in San Mateo County, the side path does not meet the minimum standards for Class I facilities.
2. The discussion of bicycle/pedestrian facilities indicates that two new bicycle/pedestrian undercrossings of the Caltrain tracks will be built: one at Everett in Palo Alto and one at Middle Ave. in Menlo Park. It is stated that these improvements will "facilitate walking and bicycling from residential and commercial areas in North Palo Alto and South Menlo Park."

The choice of Middle as the site for an undercrossing is premature and impractical for several reasons:

1. the site has not yielded a design that has been approved by the Menlo Park City Council, the Menlo Park Bicycle Commission or the Menlo Park Transportation Commission;
2. the site is not contiguous with the Class II bicycle facility on Willow Road that serves neighborhoods east of the Caltrain tracks;
3. the site is nearly ¾ mile from Stanford and Sand Hill Road;
4. construction at the site is in conflict with a Caltrain vertical alignment required to accommodate future grade separations;
5. the site would require expensive below grade switchbacks on both sides;

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6. access to the eastern portal of an undercrossing at this site would create an unprotected mid-block T-intersection with Alma Street;
7. the site lacks direct and simple connection for users from east Menlo Park to Stanford Medical Center and Campus;
8. the intersection of Middle and El Camino is encumbered with commercial ingress and egress on Middle serving a Safeway superstore and a busy Shell gas station.

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An alternative site previously studied is at Willow and Cambridge, approximately ¼ mile from Sand Hill Road and possessing none of the problems outlined above. It would be considerably less costly to construct due to the uncomplicated approach and generous elevation of the railroad tracks. Because of this site's proximity to Stanford it would be more likely to attract Stanford trips to and from Menlo Park.

If Stanford were to share the costs of constructing an undercrossing at the Willow/Cambridge location, it would be a far more efficient use of limited resources for Stanford, Menlo Park and other potential funding partners.

Steve Schmidt  
Former Mayor, Menlo Park  
650-323 5546

[menloparksteve@gmail.com](mailto:menloparksteve@gmail.com)

**59. Steve Schmidt, Former Mayor of Menlo Park (letter dated July 6, 2010)**

- 59.1 *The commentor states that the Draft EIR indicates a Class I bicycle facility on Alpine Road past the Menlo Park city limit into San Mateo County; however, the side path does not meet the minimum standards for Class I facilities. Draft EIR Figure 3.4-2, which shows the existing bicycle facilities, has been revised for the Final EIR. Please refer to Staff-Initiated Change 2 for the revised Figure 3.4-2.*
- 59.2 *The commentor notes that in the discussion of bicycle and pedestrian facilities two new undercrossings of the Caltrain tracks would be built, one at Everett Avenue in Palo Alto and one at Middle Avenue in Menlo Park. The commentor notes that the choice of Middle Avenue for an undercrossing is premature and impractical. In discussion with City of Menlo Park staff, the City indicated that they planned to construct a bicycle and pedestrian undercrossing in the vicinity of Middle Avenue. The SUMC Project is required to contribute its fair share contribution to this undercrossing. Its exact location and design features would be determined by the City of Menlo Park.*
- 59.3 *The commentor notes that an alternative site previously studied at Willow Avenue and Cambridge Avenue exists approximately 0.25 miles from Sand Hill Road and possesses none of the problems outlined in Comment 59.2. Please refer to Response 59.2, above. The SUMC Project sponsors would pay their fair share toward the construction of a single undercrossing of the Caltrain tracks in Menlo Park, at a location determined by the City of Menlo Park.*



DR. AND MRS. ANTHONY E. SIEGMAN

Letter 60

550 Junipero Serra Blvd  
Stanford, CA 94305-8442

T 650-326-6669  
siegman@stanford.edu  
plegman@stanford.edu

July 25, 2010

Mr. Steven Turner  
City of Palo Alto  
Planning and Community Environment Dept.  
250 Hamilton Ave, 5th Floor  
Palo Alto, CA 94301  
Via email: [Stanford.project@cityofpaloalto.org](mailto:Stanford.project@cityofpaloalto.org)

Dear Mr. Turner:

This letter is to convey two comments on the SUMC DEIR:

1. General:  
As set forth in the DEIR, the project will result in numerous significant environmental impacts that cannot be mitigated to less-than-significant levels, even after the mitigations identified. Nevertheless, the beneficial aspects appear to override the impacts-- after effective mitigations. We therefore support the project and ask for diligent implementation of mitigations and openness to new ways of dealing with the impacts that may develop over the lifetime of the project.
2. Regarding Traffic Impacts and Mitigations:  
As you know, the credibility of mitigations overall in the SUH plan, and the actual outcomes, depend not only on statements of policy but on commitment to implementation of measures effective in the real world, and sustained enforcement.  
With respect to the management of trucking impacts, both during the years of construction and thereafter (ongoing provision of supplies for day to day operations):

We appreciate the inclusion of Figure 3.4-6, showing "Proposed SUMC Truck Routes."  
TR-1.5-8, S-32 ff. state:  
Restrict Construction Truck Routes. The SUMC Project sponsors shall be required to deliver and remove all construction-related equipment and materials on truck routes designated by the cities of Palo Alto, East Palo Alto and Menlo Park. Heavy construction vehicles shall be prohibited from accessing the site from other routes. Figure 3.4-6 and 3.4-7 of the EIR illustrates the Stanford Area Truck Routes which must be used by all trucks.

Prepare and Implement Construction Impact Mitigation Plan. In lieu of the above mitigation measures, the SUMC Project sponsors shall submit a detailed construction impact mitigation plan to the City of Palo Alto for approval by the Director of Public Works.

Please note in the paragraphs above that in addition to the cities named, Santa Clara County has jurisdiction over two of the roads prohibited in the map (Junipero Serra Blvd. and part of Stanford

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Avenue), and should be added to the list of jurisdictions. County residents as well as City residents and the vast numbers of the general public who use that area for recreation also have a stake in the outcome. If for whatever reason the mitigation measures outlined in the DEIR are not implemented, the alternate construction impact mitigation plan (TR-1-8) needs wider review than just the City of Palo Alto.

The clear policy on the the truck routes as set forth in the DEIR can serve as a very good start.

But local experience has shown that communication of, and enforcement of, a trucking limit policy can not be taken for granted. Both Junipero Serra Blvd. (JSB) and Stanford Avenue have had trucking limits as a matter of law (Santa Clara County ordinance) for years, yet compliance has been far from automatic. Santa Clara County has no budget for targeted enforcement, nor does CHP. The SUMC project must not assume these mitigations will be self-enforcing nor added to the University burden.

For its own construction projects and ongoing services, Stanford University has made significant efforts to support the JSB and Stanford Avenue policies (and the law), by a program of communication with contractors and through penalties written into their contracts. As a start, we ask that the SUH project do likewise. Each new contractor needs to be appraised of the policy and the law, and take responsibility for their drivers, their subcontractors, and, over time, their new hires. Prominent posting of the Truck Routes and prohibited routes at job site entry and exit should help to some degree, along with wide distribution of the Route map.

Still, "education" only goes so far. "Truck Route Map? Oh, I think that's the thing I tossed on the floor of my truck to mop up some coffee I spilled," said one driver, when quizzed why he'd chosen to use a prohibited route.

60.4

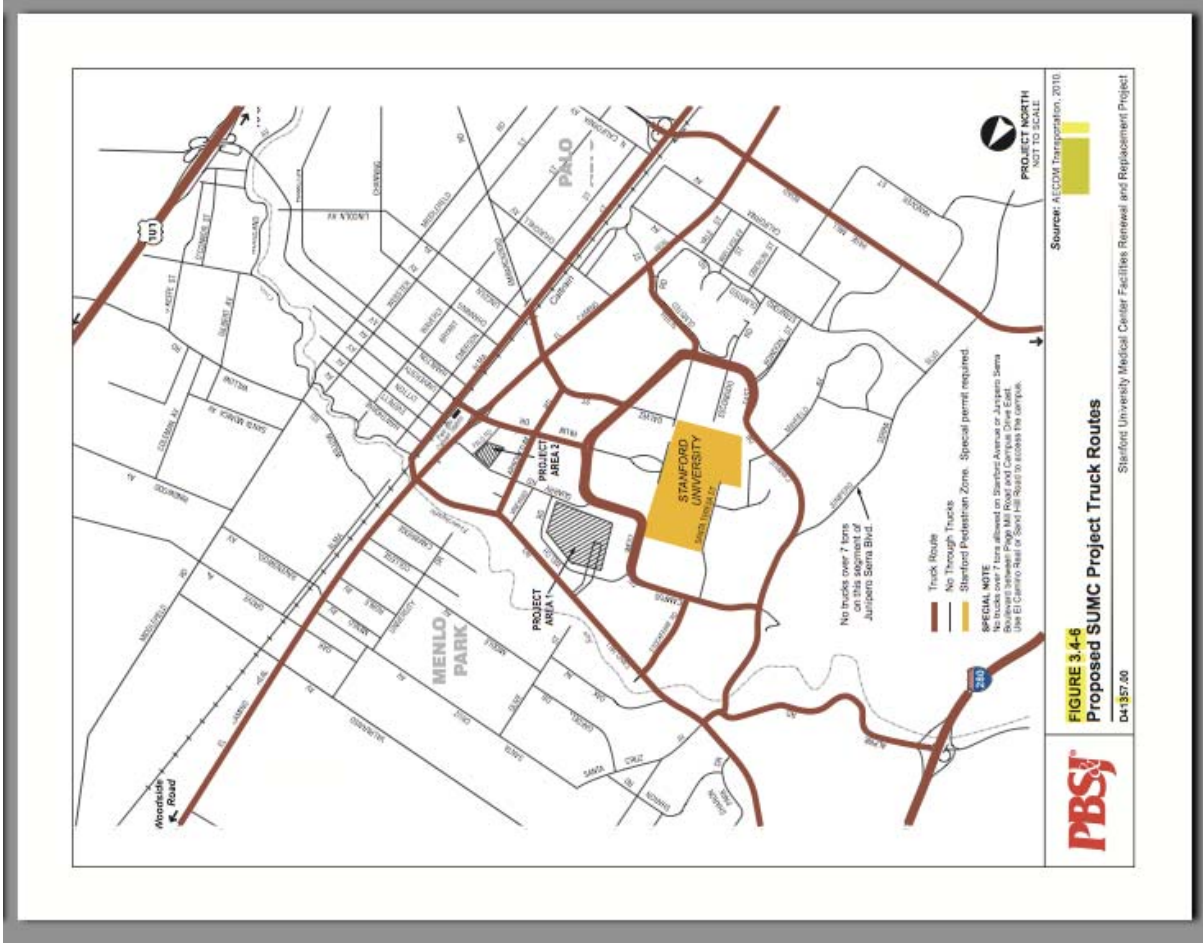
Beyond education, we ask for some proactive enforcement (as opposed to complaint-driven) during construction hours. One natural opportunity might exist to do this at minimal marginal cost by making an arrangement with Stanford Public Safety, through the Community Service officer already stationed at the intersection of Stanford Avenue and Junipero Serra Blvd. In this area, violations impact not only other traffic and homes, but also the daily throngs of recreational joggers, bicyclists, and hikers. And from this checkpoint, there is perfect visibility to identify any violating vehicles both inbound and outbound on both JSB and Stanford Ave. Since the current duties of the person in this position are monitoring, this could combine well.

In summary, we applaud the policy on limiting truck routes, and request that it be made meaningful by ongoing enforcement in addition to policy education.

Thank you for the opportunity to comment.

Sincerely,  
Jeannie Siegman  
Tony Siegman

cc: Charles Carter, Stanford Univ.  
Andy Coe, Stanford Hospital  
Jean McCown, Stanford Univ.  
Jim Sweeney, SCRL  
Scott Strickland, SCC



**60. Jeannie and Tony Siegman (letter dated July 25, 2010)**

60.1 *The commentor expresses support for the SUMC Project. The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.*

60.2 *The commentor states that a commitment to implementation of the SUMC Project's mitigation measures is required for effective mitigation. As explained in the Introduction Section on page 1-5 of the Draft EIR, if the SUMC Project is approved, the City of Palo Alto must adopt a Mitigation Monitoring and Reporting Program (MMRP), which would ensure that the mitigation measures presented in the Draft EIR are implemented. Please see Master Response 11 for a description of an MMRP and the SUMC Project review and approval process.*

60.3 *The commentor wants to ensure that the construction truck route mitigation measures, as outlined in the Draft EIR on page 3.4-44, are applied by the SUMC Project sponsors and enforced. As explained above in Response 60.2, the City would adopt an MMRP to confirm that all mitigation measures presented in the EIR are implemented. Please see Master Response 11 for a description of an MMRP and the SUMC Project review and approval process.*

*In addition, the commentor states that Mitigation Measure TR-1.8 should be revised to include review other than from the City of Palo Alto. As noted by the commentor, the construction truck routes would traverse Palo Alto, Menlo Park, and roads under the jurisdiction of Santa Clara County. However, as the lead agency of the SUMC Project, the City of Palo Alto would be responsible for reviewing and approving construction activities with potential transportation impacts. Nonetheless, Mitigation Measure TR-1.8 has been revised and requires that the City of Palo Alto provide a copy of the construction impact plan to the City of Menlo Park for review. Please refer to Master Response 4 for revisions to Mitigation Measure TR-1.8.*

60.4 *The commentor states that for its own construction projects and ongoing services, Stanford University has made significant efforts to support JSB and Stanford Avenue policies (and the law), by a program of communication with contractors and through penalties written into their contracts. The commentor would like the SUMC Project do likewise. Mitigation Measures TR-1.1 through TR-1.9 address impacts during construction. The ideas put forth in this comment can be considered as City staff reviews the construction traffic plans for the SUMC Project. Please refer to Master Response 4 for a discussion of construction traffic.*

**Letter 61**

8. David A. Stonestrom.txt  
From: Stonestroms [stones@igc.org]  
Sent: Tuesday, July 27, 2010 9:41 AM  
To: Stanford Project  
Subject: Draft EIS for Stanford Hospital Expansion + Seismic Upgrade

To whom it may concern,  
I am writing in support of allowing the expansion and upgrade to go forward despite the negative impacts on traffic congestion, etc.  
61.1 We live in a seismically high risk region. When the next large earthquake happens, having a fully functioning hospital will be vitally important.  
61.2 We live among a rapidly growing population. The number of hospital beds has not kept pace with this growth. Our hospitals must be allowed to grow with the population they serve.  
61.3 The devil is in the details, and adjustments to expansion plans can and should be made to minimize and distribute detrimental impacts on adjoining communities. But the EIS process should not be allowed to unnecessarily delay this urgently needed project.

Sincerely yours,  
David A. Stonestrom  
1000 S. California Ave.  
Palo Alto, CA 94306

**61. David A. Stonestrom (letter dated July 27, 2010)**

61.1 *The commentor expresses support for the SUMC Project.* The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.

61.2 *The commentor requests adjustments to the expansion plans in order to minimize impacts on adjoining communities.* The Draft EIR analyzes the SUMC Project as proposed by the SUMC Project sponsors in the 2007 application, and as last amended in March 2010. As such, the Draft EIR does not make recommendations for reduced building programs.

However, alternatives to the SUMC Project are included in Section 5, Alternatives, of the Draft EIR. Per CEQA Guidelines Section 15126.6, an EIR must include a range of feasible alternatives that obtain most of the project objectives and reduce the impacts of the proposed project. Therefore, the Draft EIR analyzes seven SUMC Project alternatives that make adjustments to the proposed expansion plans in order to minimize the significant and unavoidable impacts identified in the Draft EIR. Included in the alternatives analysis are two No Project and two Reduced Intensity alternatives, which reduce the building program of the SUMC Project. Please refer to Section 5, Alternatives, of the Draft EIR for a complete description and analysis of all seven alternatives. Also, please see Master Response 8 for a discussion of the range of alternatives.

61.3 *The commentor indicates that the delays in the EIR process should not delay approval of the SUMC Project.* Reasons for the delay in completing the Draft EIR include site plan modifications and application updates by the SUMC Project sponsors in order to fulfill Office of Statewide Health Planning and Development (OSHPD) requirements; the withdrawal of the Stanford Shopping Center Project from the analysis of the Draft EIR; and changes in the City's Traffic Model. This comment concerns the EIR process and does not concern the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 11 for a detailed description of the City's review process and the next steps in the EIR review process.

**Letter 62**

**From:** tv@sonic.net  
**Sent:** Friday, May 28, 2010 10:19 AM  
**To:** Stanford Project  
**Subject:** Draft EIR

As a physician and as a patient in the community, I support Stanford's Draft EIR because the community needs a great hospital. The facilities need upgrading per the State's seismic standards and the city of Palo Alto should be happy that Stanford is willing to foot the enormous bill to build a new hospital that will benefit the community of patients and healthcare workers but also bring business to the area. The increased traffic will not likely to be severe since Stanford is willing to pay for transport passes for all the workers that need them. Moreover, the area to be developed is already a commercial area. It is not being built in a middle of houses so really should not inconvenience anyone much.

We need a new hospital so the City of Palo Alto should support Stanford's efforts. The city should not forget that many of us live here because we have past or present ties to Stanford and our houses are worth more because of our proximity to Stanford!

Soa Tsung, MD

62.1



**62. Soa Tsung, MD (letter dated May 28, 2010)**

62.1 *The commentor expresses support for the SUMC Project.* The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.

**Minor, Beth**

CITY OF PALO ALTO, CA  
CITY CLERK'S OFFICE

10 JUN -1 AM 7:17

**From:** tv@sonic.net  
**Sent:** Friday, May 28, 2010 10:32 AM  
**To:** Council, City  
**Subject:** Stanford Hospital  
**Attachments:** untitled-2

As a physician and as a patient in the community, I support Stanford's Draft EIR because the community needs a great hospital. The facilities need upgrading per the State's seismic standards and the city of Palo Alto should be happy that Stanford is willing to foot the enormous bill to build a new hospital that will benefit the community of patients and healthcare workers but also bring business to the area. The increased traffic will not likely be severe since Stanford is willing to pay for transport passes for all the workers that need them. Moreover, the area to be developed is already a commercial area. It is not being built in a middle of houses so really should not inconvenience anyone much.

We need a new hospital so the City of Palo Alto should support Stanford's efforts. The city should not forget that many of us live here because we have past or present ties to Stanford and our houses are worth more because of our proximity to Stanford!

Jaya Virmani, MD

6/1/2010

**63. Jaya Virmani, MD (letter dated May 28, 2010)**

- 63.1 *The commentor expresses support for the SUMC Project.* The comment concerns the merits of the SUMC Project and does not address the adequacy of the Draft EIR or the SUMC Project's compliance with CEQA. Please refer to Master Response 9 for a discussion of project merit in the CEQA process.

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