



CITY OF  
**PALO  
ALTO**

# ADOPTED CAPITAL BUDGET

**FISCAL YEAR 2023**

COMMUNITY  
HEALTH AND  
SAFETY

CLIMATE  
CHANGE:  
PROTECTION &  
ADAPTATION



ECONOMIC  
RECOVERY &  
TRANSITION



HOUSING  
FOR SOCIAL  
AND ECONOMIC  
BALANCE





# OVERVIEW







CITY OF  
**PALO  
ALTO**

# TRANSMITTAL LETTER

July 1, 2022

To the Honorable Mayor and City Council

2023 Fiscal Year Adopted Operating & Capital Budget Transmittal

Dear Mayor and Council Members:

In accordance with the City Charter, I am presenting the City of Palo Alto's Fiscal Year 2023 Adopted Operating Budget and Fiscal Year 2023 Adopted Capital Budget along with the 2023-2027 Capital Improvement Plan (CIP).

This transmittal letter outlines a two-year budget balancing strategy that continues to reflect a recovery period in the wake of the pandemic and transition into an endemic state. The City regularly reevaluated the financial status of the City, every three months or sooner, and made significant adjustments during FY 2022 including the restoration of over 20 positions prior to this FY 2023 Adopted Budget. This continuous evaluation has enabled the organization and the City Council to remain agile and responsive to the rapidly changing environment.

This budget reflects continued cautious optimism, consistent with the conservative financial assumptions used to develop the FY 2022 Adopted Budget as directed by the City Council. This budget builds on the Council approved reinvestments and recommends additional investments focusing on: 1) the community's immediate health and safety-related service needs, 2) reinvesting in a range of services with the use of one-time funding, in anticipation of continued fiscal sustainability conversations including identification of ongoing revenues and 3) investments to support the City Council's priorities.

Both the Adopted Operating and Capital Budgets are based on the City Council review of the FY 2023-2032 Long-Range Financial Forecast (LRFF), balancing the base case scenario and two alternative scenarios, and reviewing and adjusting both Proposed Budget documents as discussed with the City Council and Finance Committee. The changes from the Proposed documents to the Adopted Documents are outlined in the budget adoption memo approved by the Council, and can be referenced on the City's website under the June 20, 2022 Meeting Agenda. The LRFF reflects an extended community recovery from the current pandemic over a three to five-year period, projecting both revenue and services levels remaining below pre-pandemic levels. Recommendations in



## TRANSMITTAL LETTER

this budget aggressively reinvest to the best extent possible and use one-time funds for priority service restorations, in parallel with advancing work on longer-term fiscal sustainability.

As recognized in the FY 2021 and FY 2022 budgets, the service reductions necessary to address the significant financial disruptions of the pandemic and other challenges were operationally unsustainable for the long-term health of Palo Alto. These prior budgets reflected the organizational repositioning needed for emergency conditions. Since then, however, additional forces have continued to challenge the City's recovery. Supply chain delays, significant employee vacancies, institutional knowledge loss and disruption of the Great Resignation, have significantly impacted the capacity of the organization and its ability to deliver priority services and projects. These challenges were highlighted in the Q1 Preliminary Financial Status Report discussed by the Council in October 2021 and reiterated in the FY 2022 Mid-Year Budget Report in February 2022.

Although the City's fiscal recovery outlook remains cautiously optimistic, the City's long-term fiscal health requires additional sustainable revenue to meet community service priorities. With the rising cost of services in a period of significant inflation and workforce competition, coupled with the services reduced over the prior two years, long-term sustainability is not achieved with existing revenue sources alone. This Adopted Budget reflects a transitional budget as Council contemplates major changes for funding of programs and services such as affordable housing and grade separating train crossings.

While creating and developing this adopted budget, staff and the Council have actively pursued Fiscal Sustainability: A Community Conversation. In parallel with the City's annual budget process, the City Council has been reviewing potential revenue ballot measures for the November 2022 election. If the Council chooses to place these measures before the voters, and voters support, sustained revenues can restore services to pre-pandemic levels and support investments in the community's future, expand priority services, and build on Palo Alto's services as community needs evolve. The two ballot measures include affirming the practice of transferring proceeds from the natural gas utility and establishing a new business tax. As part of the engagement for these ballot measures, an extensive effort has been underway to provide community members an opportunity to engage and provide feedback on priority services. *At the time of the printing of this adopted budget, the City Council approved two ballot measures for voter consideration during the November 2022 election; the two ballot measures include affirming the practice of transferring proceeds from the natural gas utility and establishing a new business tax.*

### Reflections on Recovery Efforts and the Continued Challenges

In reflecting over the past two years and the adversity that came with it, the work of the City provides a testament to our team's ability to remain nimble and think strategically when navigating rapidly changing challenges. Every step of the way, the City team has demonstrated continued adaptation and this budget is yet another step in our progress. Staff was challenged to re-imagine how services might be delivered most effectively based on learning from the past two years and reinvesting where possible in new adjusted service models. In other areas, this budget simply reinvests to return to prior levels where needed for safety or basic service levels.

It is hard to imagine that just over 12 months ago, the City and State of California were operating under California's 'Blueprint for a Safer Economy' and its color-coded tier system for lifting restrictions which were ultimately lifted on June 15, 2021. Since then, additional waves of the pandemic have hit, reminding us all to remain agile and continually adjust to protect the safety of all while ensuring continuity of services.

As the City managed through the pandemic, the City Council closely monitored and provided direction to staff on the LRFF and assumptions for financial planning. This enabled the City to proactively address the impacts of the pandemic and other challenges to date, and to position the organization to recommend the reinvestments described in this budget.

## Budget Transmittal Letter Elements

This Budget Message outlines the major Budget elements for the City Council's consideration including:

1. Summary of FY 2023 Adopted Budgets
2. City Council Priorities
3. Fiscal Status and Fiscal Sustainability Community Conversation
4. FY 2023 Adopted Budget Strategies and Service Recommendations
5. Acknowledgments

### Summary of FY 2023 Adopted Budgets

The operating budget totals \$965.9 million and the capital budget totals \$379.5 million in FY 2023 and \$821.9 million over the five-year CIP. As required by the City Municipal Code, the Planning and Transportation Commission (PTC) reviewed the 2023-2027 CIP on May 11, 2022 to evaluate the program's compliance with the Comprehensive Plan adopted by City Council in November 2017. This adopted budget addresses near term fiscal issues, supports economic recovery and other priority workplan activities, and positions the City to continue its agile approach to addressing the needs of the community. It also reflects significant growth in capital investments, particularly in alignment with the Water Quality Control Plant (WQCP) long range facility plan.

The FY 2023 budget recommends ongoing reinvestments for urgent, critical needs for health, safety, and prior council direction (\$2.6 million, including \$1 million for Project Homekey) and recommends approximately \$4 million in reinvestment in services previously reduced with the use of one-time funds. Building on fiscal reports reviewed by the City Council throughout FY 2022 including the FY 2022 Preliminary Q1 Financial Status, the FY 2022 Mid-Year Budget Review, and the FY 2023-2032 Long Range Financial Forecast, revenues are expected to exceed budgeted estimates by approximately \$14 million (previously reported as \$10.6 million). These one-time funds are therefore recommended in part to assist in the restoration of services for a two year, or 24-month period. This approach allows the City to continue its ambitious plans to rebuild community services. However, to sustain these reinvestments beyond the limited term, ongoing revenues will be needed.

This budget relies on use of the General Fund Budget Stabilization Reserve (BSR) funds totaling \$9.1 million, \$5.5 million in American Rescue Plan Act of 2021 (ARPA) funding, and \$0.6 in program specific reserves (e.g. Development Center) to maintain and enhance service levels for the upcoming year. The sec-



## TRANSMITTAL LETTER

ond installment of the ARPA funding will exhaust the City's full allocation of \$13.7 million, received over a two-year period (FY 2022 and FY 2023) as revenue replacement, that has assisted in mitigating the severity of reductions necessary until supported by economic recovery. The remaining one-time funds from revenues exceeding FY 2022 budgeted levels are necessary to maintain the BSR at 18.4 percent, slightly below the City Council target of 18.5 percent of expenses, and within the City Reserve Policy, which identifies a range of 15 to 20 percent.

### **City Council Priorities**

In February of this year, the City Council held a retreat and selected four priorities to focus on in this year. While recognizing the devastating impacts of the pandemic both economically and from a sense of community, the City Council adjusted its priorities to the following:

- Economic Recovery & Transition
- Climate Change - Protection & Adaptation
- Housing for Social & Economic Balance (continued from 2020)
- Community Health & Safety

Visit the City's website for the <https://www.cityofpaloalto.org/Departments/City-Clerk/City-Council/City-Council-Priorities> staff report highlighting the results of the 2022 City Council Priorities Ranking Survey Responses as well as the status of the workplans for the priorities ([City Council Agenda Item 15 on April 4, 2022](#)).

### **Fiscal Status and Fiscal Sustainability Community Conversation**

The FY 2023 slight surplus of \$2.4 million identified in the LRFF base case stemmed from continuing significant, unsustainable service reductions due to a combination of impacts resulting from the pandemic and a legal challenge related to the City's Utility Transfer. As outlined in the LRFF alternative scenarios, if the City were to restore services to pre-pandemic levels, the City would be facing approximately a \$10 million gap, as the loss of revenues historically transferred from the City's Utility and the pace of recovery would be insufficient. New investments needed and desired, such as funding to match local funds for investment in train crossings and affordable housing, are not assumed in the alternative scenario. Therefore, the Council has directed staff to approach this adaptive environment working towards fiscal sustainability in two core ways:

- Work towards an iterative reinvestment cycle, where the Council, community and staff routinely evaluate the financial projections and nimbly adjust to the pace of recovery.
- Evaluate ways to stabilize existing revenue and seek to raise new revenues, which has been established and is ongoing through the City's Fiscal Sustainability efforts looking at local ballot measures.

### **Proactive and Iterative Reinvestment**

To address the adaptive nature on the recovery period, routine reports including budget adjustments are brought at least every three months for update and action by the City Council. Three significant financial reports, informing of projected revenues and expenses as well as adjusting resource levels, discuss reinvesting at an ambitious pace in alignment with evolving financial projections and challenges faced by the organization during FY 2022.

The Council's actions as part of the FY 2022 Preliminary Q1 Financial Status Report ([Council Agenda Item 5](#)), the FY 2022 Mid-Year Budget Review ([Council Agenda Item 10](#)), and other subsequent actions, included the addition of 20 full time positions of which a majority were filled in FY 2022. Innovative new methods for recruiting have been implemented, and staff are hiring at a record pace, increasing capacity across the City; however, overall staffing levels remain unchanged due to attrition. In the wake of the pandemic, employees everywhere are re-evaluating decisions with new perspectives. Inherent in turnover is lost capacity to train new staff, which can be a significant period as long-tenured employees are replaced with new hires.

The Council has made significant strides to support the workforce including the award of Employee Appreciation days during the holidays as well agreeing to 4 percent increases in March 2022 to proactively address the increase in inflation and to show appreciation and support retention efforts. While the market continues to reflect unprecedented levels of change and competition, staff appreciate these actions.

In total, subsequent to the adoption of the FY 2022 Budget, additional investments of \$6.6 million Citywide (\$3.2 million in the General Fund) in ongoing services were approved and incorporated in the FY 2023 Base Budget. Additional details on the staffing investments that have been approved are included in detail in attachment B to this letter as well as in each department's Budget Reconciliation.

### **Fiscal Sustainability Community Conversation Context**

Work on Fiscal Sustainability was highlighted as part of the City Council 2019 priorities, and again returned as a key area of focus as the economic impacts of the pandemic were realized. As part of the "Fiscal Sustainability" efforts in 2019 staff resumed working on local tax ballot measure(s) which were put on pause during the pandemic. At that time, staff began efforts with the "Uplift Local" initiative and convening a panel of experts to discuss national and local revenue trends, the future of workplaces, and initial reactions to staff's ongoing workplan. The Community and Economic Recovery workplan was developed that identified priority projects through emphasis in four key areas: Manage through the Pandemic; Community Well-being and Welfare; Focused Business Support; and City Priority Initiatives. A summary of the focus areas, including specific priority projects can be found [here](#) including quarterly status updates.

The global pandemic and economic shifts have impacted the City's ability to provide services such as library, recreation, and public safety programs at all levels residents expect and deserve. Even with improved service delivery, without additional revenues City services will remain below pre-pandemic levels. Potential revenue measures can help invest in the community's future, enhance priority services, to the community, and help build on Palo Alto's high-quality services as the community evolves and grows.

As we all recover from the fiscal and health impacts of the pandemic together, the City has invited the Community to join a conversation about the City's future, and how to maintain and deliver services the community needs and expects. Thus far, community feedback to prioritize unfunded community needs and City service gaps have indicated:

- "Maintaining basic services" was one of the top three priorities
- "Repairing streets/roads" and "Investing in community-owned assets like roads and community centers" were each one of the top three for about 55 percent of respondents



## TRANSMITTAL LETTER

- “Adding public safety services such as police, fire, and emergency medical” was a top three priority for 46 percent of respondents
- This was followed by “Funding affordable housing and homeless services” (34 percent)

These priorities are reflected in this adopted budget. Investing in fire and emergency services, affordable housing and support for the unhoused, parks and recreation, transportation and other public services have been identified by community members as being foundational to allowing Palo Alto to meet the future needs of our community. *At the time of the printing of this adopted budget, the City Council approved two ballot measures for voter consideration during the November 2022 election; the two ballot measures include affirming the practice of transferring proceeds from the natural gas utility and establishing a business tax.*

The community is encouraged to continue to engage with this effort and can find information including the ability to sign up for updates here: <http://cityofpaloalto.org/fiscalsustainability>.

### **FY 2023 Adopted Budget Strategies and Service Recommendations**

As noted previously, this is a transitional budget providing a bridge as Council contemplates major changes for funding of programs and services; it is bridging a period of significant reductions in the pandemic to a new phase as we rebuild. Overall, the City’s General Fund is estimated to collect \$237.8 million in revenues against \$247.4 million in expenses. A net use of reserves totaling \$9.7 million produces a balanced budget for FY 2023, with some funds remaining in the City’s Budget Stabilization Reserve for allocation by the City Council. These funding levels reflect a significant increase of \$38.2 million, or 18.3 percent, compared to the FY 2022 Adopted Budget; however, when compared to current projections for FY 2022, it reflects a more modest increase of approximately 9%, or \$19 million. Of the year-over-year increase, approximately \$11 million is recommended to be set aside into reserve for specific potential spending needs as outlined in greater detail in the Non-Departmental section of the Operating Budget. The City’s Capital Improvement Plan reflects a \$379.5 million FY 2023 budget, and a 821.9 million plan over the 2023-2027 five-year CIP. Of this, the General Capital Improvement Fund reflects expected expenses of \$91.8 million in the FY 2023 budget and \$238.8 million over the five-year CIP.

To balance General Fund revenues and expenses, this Budget includes use of General Fund Budget Stabilization Reserve (BSR) funds totaling \$9.1 million, \$5.5 million in ARPA funds, and \$0.6 in program specific reserves (e.g. Development Center) to maintain and reinvest in reduced services, allocate resources to move the City through the next phase of recovery, and strategically address the City’s future fiscal sustainability. With these actions, the Budget Stabilization Reserve will be slightly below the Council directed target of 18.5% of \$45.6 million by \$200,000, however, when adjusted for appropriate reserves, the BSR is approximately \$500,000 above the target level of 18.5% of expenses.

This year’s budget continues the City Council’s hard work accomplished in FY 2020 – FY 2022 to address the loss of \$40 million in revenue in the General Fund in FY 2021 and the overall reduction of approximately \$20 million in services in the General Fund. These reductions eliminated 86 full-time staff (equivalent of 78.85 FTE) and 102 part-time staff (equivalent of 24.73 FTE) resulting in a workforce of 956.00 FTE full-time positions and 81.59 FTE part-time positions, the lowest in a decade. These difficult reductions positioned the FY 2023 budget to transition to a new phase reflecting some breathing room for investment in

services. Year over year, this budget reflects recommended Citywide staffing levels to increase by 61.85 FTE for a total authorized staffing of 1,017.85 in FY 2023 (20 FTE were previously authorized by the Council during FY 2022). This total full-time staffing remains below pre-pandemic levels. Of the recommended 41.85 FTE included in this Adopted Budget, approximately 23 FTE are only funded for two years pending ongoing funding sources.

Below are overviews of the Citywide Strategies, both in the long-term and specific to this adopted budget, and Department Specific Strategies. Details of specific department actions can be found in each department section of this document.

### **Citywide Strategies**

Departments have re-evaluated and recommended investment in critical and key services areas, those needing additional support, or simply resources as demands for services increase. From an operating budget standpoint, strategies include use of one-time Federal relief funding and General Fund Budget Stabilization Reserves to both address urgent, critical needs for health, safety, and prior council direction as well as the restoration of resources and services for a limited term. From a Capital infrastructure standpoint, the level of reductions seen in prior years have also transitioned to a recovery and restorative period. As outlined in the LRFF, the General Fund transfer for CIP investments is being phased in over a period of four years and expected to return to pre-pandemic levels in FY 2026.

Overall, these two budgets pivot in alignment with initial trends during FY 2022. After two years of reduced expenses, revenue estimates reflecting the optimism in the recovery have allowed for some breathing room, and all departments have and continue to evaluate needs and services with recommended areas for investment. These investments will only be sustainable with the multi-solution strategies outlined above including a continued recovery, and consideration of potential new revenues as the Council contemplates major changes for funding of programs and services.

Use of American Rescue Program Act (ARPA) Funding: The American Rescue Plan Act of 2021 (ARPA) signed into law in March 2021 provides over \$350 billion of relief funds to state and local governments. This amount represents approximately one-fifth of the bill's total allocation and will be deployed to state and local government agencies in two distributions and use of these funds is broadly defined in the bill. The City expects to receive \$13.7 million over two years.

The Adopted Budget balancing strategy uses the remaining 40 percent, or \$5.5 million in FY 2023, the remainder of the City's \$13.7 million total funding allocation. Use of these funds has allowed the City to abate additional significant service reductions. The use of the remaining funds remains in alignment with the Council direction in FY 2022 to continue to use the funding for the provision of government services offsetting the reduction in revenue due to the pandemic in the most recent full fiscal year and assisting in a two-year bridge as the recovery period continues.

Limited Term, Two Year Transition: A core and significant portion of this Adopted Budget reflects a two-to-three-year horizon in the General Fund including the restoration of services with one-time funds. As noted previously, revenues are expected to exceed the conservative estimate for FY 2022, which has allowed for some room for investing in services; however, to invest in ongoing services to the community, a stable rev-



## TRANSMITTAL LETTER

enue source will be necessary. This budget recommends \$4 million in restoration of services across the organization and recommends establishing a reserve for the second year of these expenses in FY 2024; however, if an ongoing revenue is not established by the end of FY 2024, these services would sunset. This strategy ensures sufficient time for the City Council to continue exploration of Fiscal Sustainability.

City Council Priorities Workplan: Council adopted priorities for 2022 focus in four key areas – Economic Recovery & Transition, Climate Change – Protection & Adaptation, Housing for Social & Economic Balance, and Community Health & Safety. Where feasible, investments in supporting these priorities are recommended in this budget including significant investment in Climate Change – Protection & Adaptation. However, some projects, as approved in the workplans, remain unsourced and accordingly either will not begin or will be delayed.

Proactive Funding of Long-Term Liabilities: This FY 2023 Budget includes approximately \$8.1 million (\$4.5 million in the General Fund) in supplemental contributions. This includes a one-time action to add a \$550,000 “catch-up” contribution from Other Funds, consistent with actions in FY 2022 to contribute an additional \$1.0 million above adopted budget levels from the BSR. Additionally, this FY 2023 Adopted Budget begins a two-year plan to transition from a 6.2 percent discount rate to a 5.3 percent rate for supplemental contributions to the Pension Trust, in alignment with the most recent Cal PERS Asset Liability Management (ALM) study. Through FY 2022, a total of \$41.3 million in principal contributions will have been made to the Pension Trust (approximately 65 percent from the General Fund).

Council adopted the Pension Funding Policy (City Manager’s Report #11722) with a target goal of reaching a 90 percent funded status with CalPERS in 15 years.

Budget Stabilization Reserve (BSR): This FY 2023 Budget anticipates a BSR balance of \$45.6 million, or 18.4 percent of General Fund expenses. This is slightly below the City Council target level of 18.5 percent by \$200,000, or \$500,000 above target levels once adjusted for reserves. This adjustment reflects the exclusion of the reserve for the two-year funding strategy noted above for FY 2024 services; this has been calculated to avoid unintentional inflation of the BSR. These funds may be allocated at the discretion of the City Council. The BSR remains within the targeted range of 15 percent to 20 percent of General Fund expenses.

### **Department Specific Service Recommendations**

Public Safety: Resource training and recruiting activities to ensure continued workforce recruitment and retention. Invest significantly in Fire Prevention Programming including exploration of both sworn and non-sworn resources. Restore police officer staffing to support re-establishing the special problems detail, support PERT, and begin rebuilding the detective bureau.

Community & Library Services: Implementation of phased reopening of library branches as vacant positions are filled, which will ultimately result in an increase in library branch hours to four days a week for small branches and six days per week for large branches. Additional staff resources to manage community center customer support, open space (Baylands) preserve, and reservations and ticketing for facilities. In addition, investments in programming and availability of it for public art, twilight concert services, Junior Museum and Zoo, and the arts center will assist in making continued progress in available programming to

the community as well as acknowledgment of some adaptation of service delivery when deploying the benefits and lessons learned from the fully virtual environment.

Planning, Transportation & Infrastructure: Significant investments in the development center and support for important economic recovery efforts will assist in the City working on critical projects such as housing for social and economic balance, movement from temporary to permanent parklets and street closures, and reinstating resources to support and sustain reasonable cycle times for inspections and review as requested by applicants. Investment of resources here also reflects continued investment in the Council's priority Climate Change - Protection & Adaptation and Sustainability and Climate Action Plan (S/CAP) work, positioning the City to continue to advance key projects such as electrification.

Citywide Internal Support, Administration, and Council Appointed Officers: Select restorations are reflected throughout these departments to assist in alleviating service delays across the organization and continue to support and scale with the size and complexity of the organization.

Once again, many of these budget balancing strategies are limited in term and remain unsustainable over the long term. However, these strategies and adjustments seek to support the transition of the organization while allowing for time for the Council to continue consideration of major changes for funding of programs and services.

### **Summary of Other Funds**

The City's Enterprise and other funds, including the Capital Improvement Fund reflect the priorities from the FY 2023 budget development process with moderate adjustments for rate increases recommended for FY 2023. The capital budgets have been updated for the current status and cost estimates of projects based on engineering designs and the need to prioritize investments of limited resources. The main goals of developing the five-year Capital Improvement Plan (CIP) are to maintain sufficient reserves to address emergencies as they arise, ensure projects that address health and safety issues are programmed and funded as early in the CIP as possible, and balance projects and staff workload capacity across the five-year plan in order to ensure that projects are able to be completed when they are planned. The City will continue to maintain services and facilities for the community and the region, such as Utilities, the Palo Alto Airport, and the Regional Water Quality Control Plant. FY 2023 financial plans for the City's utilities are developed to provide sufficient funding to cover increasing expenses for commodities, replenish lower reserves, and repair and replace the City's aging utility infrastructure. The average monthly utility bill is expected to increase by 3.5 percent.

The City's Capital Improvement Plan reflects a \$379.5 million budget in FY 2023 and \$821.9 million plan over the 2023-2027 five-year CIP. Major investments continue in the Regional Water Quality Control Plant (WQCP) capital program which has \$193.2 million budgeted in FY 2023 and \$289.0 million over the five-year CIP for projects such as Secondary Treatment Upgrades, an Advanced Water Purification Facility, and Outfall Line Construction. Approximately 64 percent of the expenses for the WQCP are reimbursed by five contributing partner agencies outside of the City of Palo Alto, and a majority of these projects are anticipated to be funded by debt-financed revenue, such as bonds or State Revolving Fund loans. After the Wastewater Treatment Fund, the Capital Improvement Fund is the second largest single fund in the 2023-

## TRANSMITTAL LETTER

2027 CIP with \$238.8 million planned for 82 projects. Responsible investments and essential infrastructure are prioritized in this budget and will be necessary as the economically sensitive Transient Occupancy Tax (TOT) revenue begins to increase from the large impacts of the COVID-19 pandemic.

The FY 2023 Capital Budget was developed based on direction in the 2023-2032 LRFF that continued the incremental increase of the base transfer from the General Fund to the Capital Improvement Fund to return to a pre-pandemic level by FY 2026, as well as the positive trends being seen in TOT revenue. In FY 2023, the base transfer amount, including interest earnings, is estimated to be \$9.9 million, and dedicated TOT funding is estimated to be \$9.7 million for a total transfer \$19.6 million. Capital projects were reviewed with the following specific objectives:

- Reduce carryover funding to “keep up” spending on essential infrastructure rather than fall behind and require new funding sources or levels to “catch up” in upcoming years;
- Position shovel-ready projects to take advantage of the favorable construction market pricing;
- Program projects that address health and safety issues as soon as possible; and
- Ensure a steady flow of projects that minimizes peaks and valleys in project delivery staffing needs, as this would reduce efficiency and introduce bottlenecks in productivity.

One of the City Council’s goals for calendar year 2022 is Climate Change – Protection and Adaptation, which ties into the Sustainability and Climate Action Plan S/CAP that was developed to help the City achieve aggressive sustainability targets. Efforts to increase S/CAP resources across the City were approved as part of the FY 2022 Mid-Year Budget Review ([CMR 13801](#)), and the City’s commitment to a sustainable future is reflected in the FY 2023 Budget, which increases resources for the continued refinement and initial implementation of the S/CAP across various City funds.



**Acknowledgments**

I would like to thank the City Council for your leadership and our Executive Leadership Team and the entire staff of the City for providing outstanding services to our community. It is through the support of this team that we have overcome the challenges faced last year, and through this resiliency, our experiences have prepared us for the challenges ahead. Together, we must take action to address issues in the near term to best position the organization for the long-term so that we can meet the needs of the community today and beyond. The Palo Alto community should be proud of your leadership and commitment to service.

A budget document takes countless hours of teamwork, collaboration, and patience to produce. I would like to offer special thanks to Kiely Nose, our Interim Assistant City Manager and Chief Financial Officer and the dedicated Office of Management and Budget Team - Paul Harper, Jessie Deschamps, Kayla Shapiro, Naomi Hsu, Oscar Murillo, Joseph Shin, Alyssa Ching, Chaitali Paliwal, and Joshua Martinez, and special support from Steve Guagliardo, Christine Paras, and Maria Lagman. Completing this budget could not have been accomplished without the dedication, and expertise of this team. Their willingness to continue to adapt to evolving circumstances is a testament to their commitment to this organization and to the community. I am also grateful to our Executive Leadership Team especially our Department Directors and Meghan Horrigan-Taylor our Chief Communications Officer who worked on the budget materials and the leadership they have demonstrated. There are too many to list here by name, but the budget could not have been produced without the senior/management analysts, division managers, administrative assistants, and others throughout the organization who helped produce this budget.

Respectfully Submitted,



Ed Shikada

City Manager



CITY OF  
**PALO  
ALTO**

# CAPITAL IMPROVEMENT FUNDS

The Capital Improvement Funds category includes two funds, the Capital Improvement Fund and the Cubberley Property Infrastructure Fund. This fund category is the second largest section of the 2023-2027 Capital Improvement Program (CIP) in terms of cost and number of projects. At a cost of \$246.8 million spread over 86 projects, the Capital Improvement Funds category is comprised of capital projects that do not directly benefit the Enterprise Funds, support technology improvements, or provide vehicle maintenance and replacement. Capital projects funded in the Capital Improvement Fund account for repairs to the City's roads, parks and open space, and most City facilities. The Cubberley Property Infrastructure Fund supports repair and renovation of facilities at the Cubberley Community Center.

## **SOURCES OF FUNDING**

The Capital Improvement Fund is supported primarily through two categories of sources from the General Fund: a base amount and dedicated funding from Transient Occupancy Tax (TOT) revenue. The TOT revenue was designated by City Council policy to fund the Infrastructure Plan by voter-approved TOT rate increases totaling 3.5 percent (the first 2.0 percent in 2014 and the second 1.5 percent in 2018) and all TOT revenue from new hotels built after January 2015 is transferred annually to support capital investments. Beginning in FY 2013 and in a typical year, the base transfer is increased annually by an amount equal to the consumer price index (CPI). Prior to the impacts of the pandemic, the total transfers from the General Fund were approximately \$30.0 million at the beginning of the five-year CIP. However, as the COVID-19 pandemic unfolded, efforts were made to mitigate the economic impacts and the total transfer in FY 2021 was reduced to \$8.5 million. Current FY 2022 estimates indicate that the total transfer from the General Fund to the Capital Improvement Fund will increase to \$11.0 million in FY 2022. Of this amount, \$3.8 million is the base transfer, including interest earnings, and \$7.2 million is from dedicated TOT revenue.

In February 2022, the City Council adopted the Long-Range Financial Forecast (LRFF) and the financial balancing scenario for staff to use in development of this budget. The LRFF continued the prior year direction to gradually restore the base General Fund transfer to pre-pandemic levels by FY 2026. TOT revenue has seen a rebound in FY 2022, and this trend is expected to continue through the five-year CIP, although major tax revenues, including TOT, are not expected to return to pre-COVID levels until FY 2025 at the earliest. In FY 2023, the base transfer amount, including interest earnings, is estimated to be \$9.9 million and dedicated TOT funding is estimated to be \$9.7 million for a total transfer of \$19.6 million. In order to restore funding to the capital improvement program, the total will increase to \$35.0 million by FY 2027. As mentioned above, the base transfer of \$16.7 million in FY 2026 matches the pre-pandemic level for this portion of the transfer.

## CAPITAL IMPROVEMENT FUNDS

The City will continue to revisit forecasts and monitor the economy as impacts from the COVID-19 pandemic seem to be lessening, but longer-term effects on major tax revenues are anticipated to continue for the next several years.

Other major sources of funding for the Capital Improvement Fund include grants from Federal, State, and other local agencies, and transfers from the Stanford University Medical Center (SUMC) Development Agreement, the Gas Tax Fund, and various Impact Fee Funds and Enterprise Funds. Further discussion of these revenue sources can be found in the Summary of CIP Program Revenue section of this document.

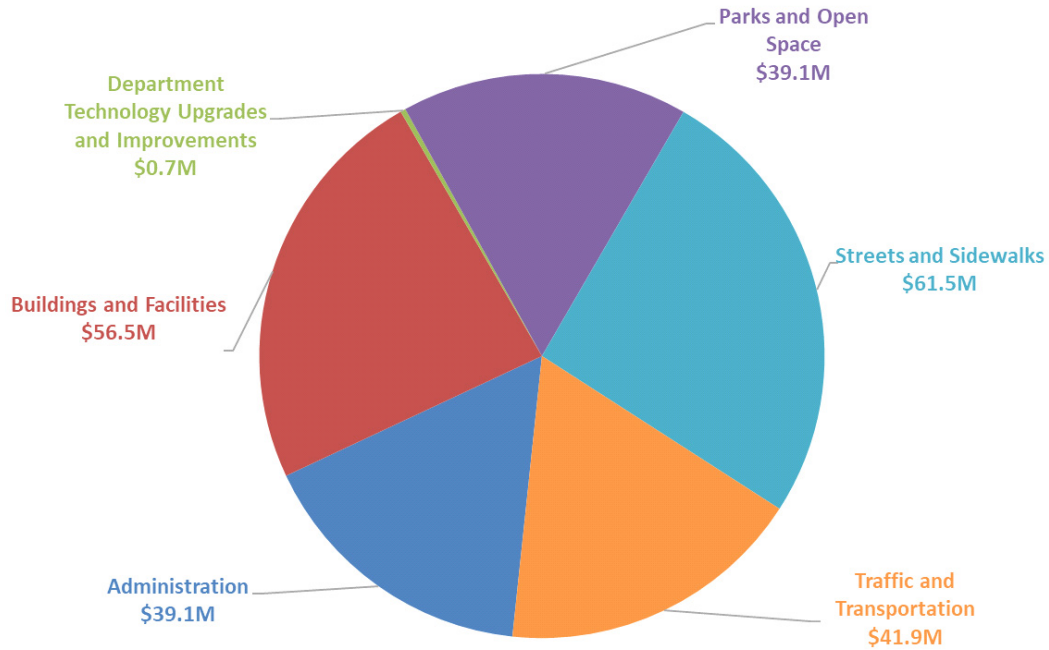
The Cubberley Property Infrastructure Fund is funded solely through a transfer from the General Fund based on the November 2014 change to the lease with the Palo Alto Unified School District. The revised lease reallocated an ongoing annual \$1.8 million "Covenant Not to Develop" payment that previously went to the school district to establish the Cubberley Property Infrastructure Fund and support infrastructure repair and renovation for the Cubberley Community Center. Due to significant service delivery impacts from COVID-19, a new five-year lease agreement was negotiated with the Palo Alto Unified School District (PAUSD), starting June 30, 2020. The new agreement reduced the space leased by the City at the Cubberley facility; however, operating and maintenance costs continue at current levels for the City-owned portion of the property with reimbursements from PAUSD for their share of maintenance and repair work done by the City.

### EXPENDITURES

The 2023-2027 CIP for the Capital Improvement Fund includes 82 projects at a cost of \$238.8 million, with \$91.8 million budgeted in FY 2023, of which \$33.3 million comes from previously allocated funds reappropriated from FY 2022 for projects continuing into FY 2023. When developing the five-year CIP for the Capital Improvement Fund, the main goals are: 1) keep a positive Infrastructure Reserve (available fund balance) above \$3.0 million annually to address emergency needs 2) ensure that projects that address health and safety issues are programmed and funded as early in the CIP as possible and 3) balance projects and staff workload capacity across the five-year plan in order to ensure that projects are able to be completed when they are planned. As a result of funding reductions in this fund over the past couple years, projects were deferred or had their scope reduced. The impacts from these actions contributed to a growing backlog of work for the City's infrastructure. This CIP begins to address some of these increased backlogs; however, as labor and material costs continue to increase annually it will become more costly to catch up on deferred maintenance.

The Capital Improvement Fund budget is divided into six categories: Buildings and Facilities, Department Technology Upgrades and Improvements, Parks and Open Space, Streets and Sidewalks, Traffic and Transportation, and Administration. Additional details on each of these categories can be found in their respective Capital Project Fund Overview sections.

**2023-2027 CAPITAL IMPROVEMENT FUND EXPENDITURES BY CATEGORY**  
**\$238.8 MILLION**



**INFRASTRUCTURE MANAGEMENT SYSTEM AND STATUS OF THE “CATCH-UP” BACKLOG**

A key recommendation of the Infrastructure Blue Ribbon Committee (IBRC) report was the establishment of an Infrastructure Management System (IMS) that will maintain an inventory of the City’s infrastructure and track and budget for “catch-up” and “keep-up” needs. The IMS has been implemented utilizing two software applications, Maintenance Connection, which is the repository for the infrastructure asset inventory information, and Questica, the City’s budget system, which is used for long-term capital planning. The combined use of both applications allows the City to plan and report on long term capital funding needs and deferred maintenance, or “catch-up” balances for both operating and capital maintenance. The initial asset inventory and capital planning information has been transferred to the IMS and reporting from the IMS began in FY 2019.

The December 2011 IBRC Report identified a backlog of “catch-up” projects totaling \$41.2 million. The 2023-2027 CIP includes a total of \$17.8 million in catch-up projects, reducing the backlog amount to \$23.4 million at the end of the five-year period as outlined in the table below.



# CAPITAL IMPROVEMENT FUNDS

## IBRC “Catch-Up” Backlog Status

IBRC "CATCH-UP" CATEGORY	IBRC FINAL REPORT "CATCH-UP" BACKLOG	"CATCH-UP" AMOUNT FUNDED TO DATE OR INCLUDED IN THE CIP	FISCAL YEAR 2023-2027 BACKLOG
Buildings	\$5.0M	\$2.2M	\$2.8M
Cubberley Community Center*	\$6.9M	\$1.2M	\$5.7M
Parks	\$14.4M	\$8.1M	\$6.3M
Surface	\$14.9M	\$6.3M	\$8.6M
<b>Total</b>	<b>\$41.2M</b>	<b>\$17.8M</b>	<b>\$23.4M</b>

\* New Facilities Condition Assessment will provide new catch-up figures for FY 2024.

The 2023-2027 Capital Improvement Program reestablishes funding that was previously reduced in the FY 2021 and 2022 budgets in the ‘Surface’ category of the table above due to economic impacts from the COVID-19 pandemic. Reductions to ongoing “keep-up” maintenance work, such as sidewalk repairs and street maintenance work, led to an increase in the Surface catch-up backlog.

In November 2016, Santa Clara County passed Measure B, a 30-year half-cent county wide sales tax to enhance transit, highways, expressways and active transportation (bicycles, pedestrians and complete streets). Measure B revenue for Palo Alto is anticipated to be \$1.3 million annually and has been split as follows in FY 2023:

- Railroad Grade Separation project (PL-17001), \$1.0 million
- Traffic Signal and Intelligent Transportation System Upgrades project (PL-05030), \$0.3 million

Similarly, SB1 funding for Road Maintenance and Rehabilitation from the State of approximately \$1.4 million annually is recommended to fund Street Maintenance (PE-86070). In future years the addition of this funding to the City’s street maintenance program could potentially allow some funds to be reallocated to other capital projects with City Council approval.

### CITY COUNCIL INFRASTRUCTURE PLAN

In 2013 the City Council established the Council Infrastructure Committee and tasked the Committee with identifying a funding plan for infrastructure projects requiring funding above and beyond the base annual General Fund transfer to the Capital Improvement Fund. After meeting regularly for more than a year, the Committee arrived at a list of nine recommended projects and an associated funding plan, which was approved by the City Council in June 2014. At the time the plan was adopted, the total cost of Infrastructure Plan (IP) projects was estimated at \$125.8 million and did not include staff salary and benefit costs. It is important to note that project costs for two of the projects only included the amounts that were unfunded in June 2014.

## CAPITAL IMPROVEMENT FUNDS

As part of the 2020-2024 CIP, a tenth project was approved to be added to the Infrastructure Plan: the Downtown Automated Parking Guidance Systems, Access Controls & Revenue Collection Equipment (PL-15002). Due to the City Council's decision to defer the New Downtown Parking Garage Project (PE-15007) in February 2019, the estimated completion of PL-15002 in Summer 2023 will mitigate parking congestion in downtown while plans for the Downtown Garage are reevaluated.

Based on known estimates and including the tenth project, the total cost of the Infrastructure Plan is currently \$261.8 million with \$27.3 million (10.4 percent) programmed in the 2023-2027 CIP. These costs are detailed by project below:

Project Name (Number)	2023-2027 CIP Budget	Total Project Budget
Public Safety Building (PE-15001)	\$0.4M	<b>\$118.0M</b>
California Avenue Parking Garage (PE-18000)	\$0.8M	<b>\$50.2M</b>
Highway 101 Pedestrian/Bicycle Overpass (PE-11011)	\$0.0M	<b>\$23.3M</b>
Charleston/Arastradero Corridor Project (PE-13011)	\$0.0M	<b>\$20.8M</b>
Bicycle and Pedestrian Transportation Plan Implementation (PL-04010)	\$5.2M	<b>\$15.0M</b>
Fire Station 3 Replacement (PE-15003)	\$0.0M	<b>\$10.6M</b>
Fire Station 4 Replacement (PE-18004)	\$9.4M	<b>\$10.2M</b>
Downtown Parking Garage (PE-15007)	\$5.7M	<b>\$7.2M</b>
Byxbee Park Completion (PE-18006)	\$3.3M	<b>\$3.7M</b>
Downtown Automated Parking Guidance Systems (PL-15002)	\$2.5M	<b>\$2.8M</b>
<b>Total</b>	<b>\$27.3M</b>	<b>\$261.8M</b>

The IP relies on the two ballot measures approved by voters to increase the Transient Occupancy Tax (TOT) in November 2014 and November 2018 for a total 3.5 percent of TOT revenue which the City Council identified as a funding source to aid in infrastructure needs, including the Infrastructure Plan projects and the associated debt service payments from the Certificate of Participation (COP) issuances. The City Council also identified TOT funding from new hotels built after January 2015 for infrastructure needs. In March 2019, COPs were issued for the California Avenue Garage, with an annual debt service cost of \$2.4 million. In April 2021, COPs were issued for the Public Safety Building, with an annual debt service cost starting at a prorated \$1.5 million in FY 2023 and reaching \$5.0 million annually by FY 2024, bringing the total annual debt service to \$7.4 million by FY 2024. A portion of the TOT revenues will be allocated to pay for the debt service. In addition to the TOT funding, there are other funding sources dedicated towards IP projects as outlined in the table below. For more information regarding the funding sources per IP project, please see the individual project pages in this document.

## CAPITAL IMPROVEMENT FUNDS

Funding Source	2023-2027 CIP Funding	Total Project Funding
Certificates of Participation (COP) Bond Proceeds	\$0.0M	<b>\$144.0M</b>
Stanford University Medical Center (SUMC) Development Agreement	\$9.8M	<b>\$34.9M</b>
Grant Funding from Other Local Agencies	\$0.0M	<b>\$11.5M</b>
Downtown Parking In-Lieu Fees	\$5.5M	<b>\$6.8M</b>
Parks Dedication Fees	\$2.9M	<b>\$3.3M</b>
SB1 Gas Tax Funding	\$0.0M	<b>\$2.5M</b>
Reimbursement from Google	\$0.0M	<b>\$1.0M</b>
Charleston/Arastradero Impact Fees	\$0.0M	<b>\$0.8M</b>
Stormwater Management Fund	\$0.0M	<b>\$0.7M</b>
Public Safety Facility Impact Fees	\$0.0M	<b>\$0.5M</b>
<b>Total</b>	<b>\$18.2M</b>	<b>206.0M</b>

All ten projects, except for the New Downtown Parking Garage Project (PE-15007), are scheduled to be complete within the 2023-2027 CIP. The Fire Station #3 Replacement project was awarded for construction in FY 2018 and it was opened in Spring 2020. Construction on phases 1 and 2 of the Charleston/Arastradero Corridor (PE-13011) project were completed in early 2020. The final phase will be completed in Fall 2022. In addition, the California Avenue Garage (PE-18000) started construction in Spring 2019 and was opened in Fall 2020. A construction contract for the Highway 101 Pedestrian/Bicycle Overpass (PE-11011) was awarded in Fall 2019 and it opened in Fall 2021. The construction contract for the New Public Safety Building (PE-15001) was awarded in early 2021 with completion anticipated in Fall 2023. The Downtown Automated Parking Guidance Systems is anticipated to start design and construction in FY 2023. Additional information on the status of all of the IP projects can be found on the City's website: [www.infrastructure.cityofpaloalto.org/](http://www.infrastructure.cityofpaloalto.org/).

In addition to the Council Infrastructure Plan, there are a number of other potentially necessary, significant capital projects that do not have a funding source identified. While successful completion of the Council Infrastructure Plan has been identified as the highest infrastructure priority, the following are some other potential competing community asset projects:

- Animal Shelter replacement or renovation
- Comprehensive Conservation Plan for Foothills Nature Preserve
- Junior Museum and Zoo rebuild (Phase II)
- Parks Master Plan implementation

To align with the City Council's Fiscal Sustainability priority and set aside funding for community asset projects like these, a Reserve for Debt Service was established starting in FY 2022 at \$2.4 million and increasing to \$7.4 million by FY 2025. This will enable the Fund to better withstand revenue fluctuations in the future while maintaining funds to pay the current debt service costs.

## NEW PROJECTS

There are five new projects in the Capital Improvement Fund for the 2023-2027 CIP with three projects under the Buildings and Facilities category:

- Electric Charger Infrastructure Installation (PF-23000): FY 2023 and 2023-2027 CIP: \$0.3 million
- Fire Training Facility Replacement (FD-24000); FY 2023: \$0; 2023-2027 CIP: \$0.1 million
- Roth Building Rehabilitation Phase 1 (PF-23001): FY 2023 and 2023-2027 CIP: \$11.0 million

One project is under the Parks and Open Spaces category:

- Bol Park Pathway Repaving and Repair: (PE-25000); FY 2023: \$0; 2023-2027 CIP: \$1.4 million

One project is under the Traffic and Transportation category:

- California Avenue Streetscape Update: (PL-23000); FY 2023 and 2023-2027 CIP: \$0.1 million

More information about this project can be found on its project page under the Capital Improvement Fund section in this document.

## INFRASTRUCTURE RESERVE

The ending fund balance in the Capital Improvement Fund is referred to as the Infrastructure Reserve (IR). The IR is used to provide cash flow for reimbursable grants, address unanticipated cost increases, and provide funding for urgent and unanticipated projects. As seen in the Source and Use chart in the Capital Improvement Fund section of this document, the projected IR balance at the end of FY 2023 is estimated to be \$5.9 million. The five-year CIP assumes keeping the Infrastructure Plan COP funding at a debt to TOT revenue ratio under 60 percent. The ability to attain this ratio is largely assisted by the voter-approved additional 1.5 percent increase in TOT funding that Council directed towards funding infrastructure. The current plan maintains a positive IR through all five years of the 2023-20267 CIP, with FY 2024 having the lowest IR of \$3.8 million. It is important to note that the City Council only approves the FY 2023 portion of the five-year CIP as part of the FY 2023 budget development process. These assumptions will continue to be evaluated throughout FY 2023 and will again be considered as part of the development and ultimate adoption of the 2024-2028 CIP through the FY 2024 budget process.

## CUBBERLEY PROPERTY INFRASTRUCTURE FUND

The 2023-2027 CIP includes funding for infrastructure improvements at the Cubberley Community Center in accordance with the November 2014 change to the lease with the Palo Alto Unified School District (PAUSD), which reallocated an annual \$1.8 million "Covenant Not to Develop" payment benefiting the school district to infrastructure repair and renovation for the Cubberley Community Center. A new Cubberley Community Center Redevelopment (CB-26000) project has been established to provide funding for design of a new community center on the Cubberley Community Center site owned by the City. Cubberley is a valuable community resource, and the plan includes site investigative and funding feasibility studies to inform project scope and design. Construction would occur beyond the current five-year CIP and would be dependent on future funding. This project builds upon the Cubberley Concept Plan completed in 2019.

The 2023-2027 CIP for the Cubberley Community Center includes funding for emergency repairs at the site, scheduled roof replacements, and completion of the field restroom. The emergency repair and roof

## CAPITAL IMPROVEMENT FUNDS

replacement work is needed to maintain safe building conditions for current use of the site. Completion of the field restroom will provide facilities near the fields that are heavily used for athletic events.

On June 23, 2020 the City entered a new lease with PAUSD. Due to the negative impacts to the City's budget from the events surrounding COVID-19, and the request by PAUSD to retain portions of Cubberley, the new lease was negotiated to reduce the City's use of the premises and the corresponding cost. However, PAUSD will continue to reimburse the City for their share of the operating and maintenance costs as stipulated in the lease agreement. Estimated amounts for PAUSD's portion of Cubberley Roof Replacements have been programmed into the 2023-2027 CIP.

### **NEW PROJECTS**

There is one new project in the Cubberley Property Infrastructure Fund for the 2023-2027 CIP under the Buildings and Facilities category:

- Cubberley Community Center Redevelopment (CB-26000): FY 2023: \$0; 2023-2027 CIP: \$0.3 million  
More information about this project can be found on its project page under the Cubberley Property Infrastructure Fund section in this document.

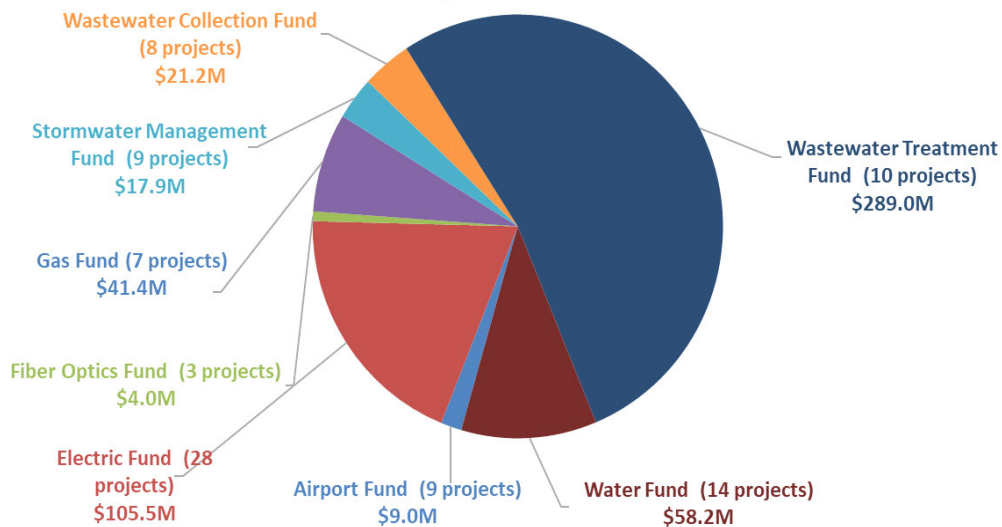


# ENTERPRISE AND INTERNAL SERVICE FUNDS

## ENTERPRISE FUND CAPITAL IMPROVEMENT PROJECTS

Enterprise Funds account for financial activities that are associated with a broad range of municipal services. Each year a significant investment is made from the City's Enterprise Funds (Airport, Electric, Fiber Optics, Gas, Stormwater Management, Wastewater Collection, Wastewater Treatment, and Water). In FY 2023, a total of \$271.7 million will be allocated towards the capital program for the Enterprise Funds, with \$546.2 million allocated over the five-year CIP, representing 66.5 percent of CIP expenditures for all funds. Of the \$271.7 million allocated in FY 2023, \$42.7 million was funding previously approved by the City Council, and recommended to be reappropriated from FY 2022 to FY 2023 for continuation of the projects. The Utilities Department manages the Electric, Water, Gas, Fiber Optics, and Wastewater Collection Funds, while the Public Works Department manages the Airport, Stormwater Management, and Wastewater Treatment Funds. Following is a brief discussion of the City's largest Enterprise Fund capital improvement programs. Additional information on each of these funds can be found in the fund summary sections of this document.

### 2023-2027 ENTERPRISE CIP PROJECTS BY FUND (89 TOTAL) \$546.2 MILLION



## ENTERPRISE AND INTERNAL SERVICE FUNDS

### **Electric Fund**

Over the next several years, the Electric Utility will continue to execute its regular maintenance, repair and replacement plan for the distribution system, and also begin the rollout of advanced metering infrastructure and various smart grid technologies. A total of \$105.5 million is allocated towards capital infrastructure over the 2023-2027 CIP, with \$33.0 million allocated in FY 2023. The five-year CIP projects include 4/12kV conversion, substation physical security upgrades, deteriorated wood pole replacements, underground rebuilds, distribution system upgrades, foothills fire mitigation, smart grid installation, electric intertie, and electric customer connections. With the City's progress on the strategies for the Sustainability and Climate Action Plan's (S/CAP) goal of reducing 1990 greenhouse gas emissions 80 percent by 2030, it has become apparent that a rapid shift from natural gas to electric appliances and from gasoline to electric vehicles is needed, and that the electric distribution system is currently a constraint on this progress. In coordination with the S/CAP Ad Hoc Committee and the Utilities Advisory Commission, the Electric Utility is developing plans to upgrade the distribution system in parallel with the community's electrification efforts.

### **Fiber Fund**

After having been temporarily on hold, the Fiber Network Rebuild Project is now progressing through engineering design of the fiber backbone expansion and fiber-to-the-home (FTTH). The new fiber backbone will provide high-capacity fiber to City departments (Utilities, Public Works, Office of Emergency Services, Transportation, Information Technology, and Community Services), extend through neighborhoods and business districts, provide new commercial dark fiber leasing opportunities, and serve as a springboard to FTTH. A total of \$4.0 million is allocated towards capital infrastructure over the 2023-2027 CIP, with \$1.8 million allocated in FY 2023.

### **Water, Gas, and Wastewater Collection Program**

In FY 2020, Utilities implemented a new replacement schedule for gas, water, and wastewater main construction projects to limit these types of projects from occurring simultaneously. The coordinated schedule helped smooth out construction and inspection levels, distributing costs more evenly instead of spiking when these projects occur simultaneously. Capital workload was also realigned for staffing resources shared commonly among the three utilities to help increase the operational efficiency. Over the last several years, prior to COVID-19, market conditions were at a peak with few bidders and higher prices on construction projects due to the increased demand for construction services. As a result, costs per foot for main replacement increased substantially between 50% - 100%. The COVID-19 pandemic exacerbated the situation, with the number of bids received coming in slightly lower than anticipated.

A total of \$120.8 million is allocated towards capital infrastructure for these three funds over the 2023-2027 CIP, with \$33.8 million allocated in FY 2023. In an effort to mitigate impact from COVID-19 by avoiding rate increases from capital needs, the last few CIPs kept projects at a minimum of replacement and emergency needs. Future WGW CIP investment may be lower than in the past if construction costs continue to increase with minimal rate increases. If these austerity measures continue in the next few years, it will be difficult to maintain the existing 40-50-year main replacement schedule. The City may need to consider alternative cost reduction and financing strategies, such as applying for bond financing to accelerate some of the large construction projects during a time of lower construction costs.

## **Airport Fund**

The Airport receives most of its funding through grants from the Federal Aviation Administration (FAA) and the City is required to match ten percent of the award. A total of \$9.0 million is allocated towards capital infrastructure over the 2023-2027 CIP, with \$2.3 million allocated in FY 2023. Major projects in the 2023-2027 CIP include Airport Access Road Reconstruction (AP-24000), Airfield Electrical Improvements (AP-19001), and Airport Layout Plan (AP-21000). There are three new projects programmed in the Airport Fund for the 2023-2027 CIP under the category of Airport Facilities:

- Airport Zero Emission Vehicle Fleet Replacement Program (AP-23000): FY 2023 and 2023-2027 CIP: \$0.3 million
- Airport Access Road Reconstruction (AP-24000): FY 2023: \$0; 2023-2027 CIP: \$3.8 million
- Airport Parking Lot Electric Vehicle Charger Installation (AP-24001): FY 2023: \$0; 2023-2027 CIP: \$32,000

More information about this project can be found on its project page under the Airport Fund section in this document.

## **Stormwater Management Fund**

The Stormwater Management Fee ballot measure was approved by voters in April 2017, providing funding for the Storm Drain Blue Ribbon Committee's recommendations for capital projects related to maintenance and upgrades to the City's stormwater management system. The 2023-2027 Capital Improvement Program includes expenditures of \$17.9 million, with \$7.5 million allocated in FY 2023. With the passage of the 2017 Stormwater Management Fee ballot measure, 13 drainage improvement projects will be recommended over the next 14 years, eight of which have been programmed in the 2023-2027 CIP, and the first was completed in FY 2021. Major projects in the 2023-2027 CIP include Louis Road System Upgrades (SD-24000), Corporation Way System Upgrades and Pump Station (SD-21000), and West Bayshore Road Trunk Line Improvements (SD-23000).

There is one new project programmed in the Stormwater Management Fund for the 2023-2027 CIP under the category of System Improvements:

- East Meadow Circle Connection to Adobe Creek Pump Station (SD-26000): FY 2023: \$0; 2023-2027 CIP: \$0.7 million

More information about these projects can be found on their respective project pages under the Stormwater Management Fund section in this document.

## **Wastewater Treatment Fund**

The Wastewater Treatment Fund accounts for activities related to the replacement and rehabilitation of the Regional Water Quality Control Plant infrastructure. The 2023-2027 CIP includes expenditures of \$289.0 million, with \$193.2 million allocated in FY 2023. Approximately 64 percent of expenditures within this fund are reimbursed by five contributing partner agencies (Cities of Mountain View and Los Altos, Town of Los Altos Hills, Stanford University, and East Palo Alto Sanitary District). Many of the Plant's major systems are reaching the end of their useful life, and new technology for systems such as advanced water purification and secondary treatment upgrades are available and need to be integrated into the Plant while older systems are phased out. Staff has been exploring funding options for low-interest state revolving fund loans or

# ENTERPRISE AND INTERNAL SERVICE FUNDS

revenue bonds to mitigate the costs to the City and partner agencies for these large infrastructure investments. Major projects in the 2023-2027 CIP include Secondary Treatment Upgrades (WQ-19001), Headworks Facility Replacement (WQ-16002), and New Laboratory and Environmental Services Building (WQ-14002).

There is one new project programmed in the Wastewater Treatment Fund for the 2023-2027 CIP under the category of System Improvements:

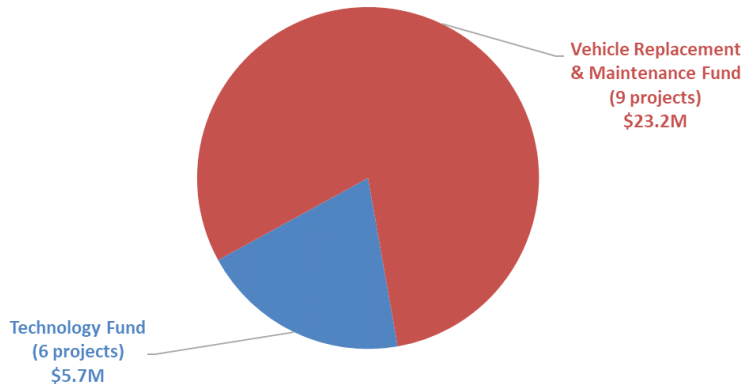
- Joint Intercepting Sewer Rehabilitation (Phase 1) (WQ-24000): FY 2023: \$0; 2023-2026 CIP: \$12.6 million

More information about this project can be found on the project's page under the Wastewater Treatment Fund section of this document.

## INTERNAL SERVICE FUND CAPITAL IMPROVEMENT PROJECTS

Internal Service Funds account for activity that provides goods or services to other funds, departments, or agencies within the City. Of the City's Internal Service Funds, the Technology Fund and Vehicle Replacement and Maintenance Fund have capital projects programmed in the 2023-2027 CIP. The 2023-2027 CIP expenditures in the Technology Fund totals \$5.7 million, with \$5.3 million allocated in FY 2023. The 2023-2027 CIP expenditures in the Vehicle Replacement Fund totals \$23.2 million, with \$6.9 million allocated in FY 2023. To mitigate the impacts of COVID-19, reductions were made in internal services funds to reflect both service level adjustments as well as citywide adjustments to assist in the balancing of the General Fund.

**2023-2027 INTERNAL SERVICE FUNDS CIP PROJECTS BY FUND (15 TOTAL)  
\$28.9 MILLION**



## **Technology Fund**

Technology Fund projects enhance service delivery to the community and to City staff through efficient and effective implementation of information technology solutions. Of the \$5.3 million in funding for FY 2023, \$4.1 million is recommended to be reappropriated from FY 2022 for continuation of the projects in FY 2023. Major projects in the 2023-2027 CIP include Enterprise Resource Planning Upgrade (TE-19000), City Council Chambers Upgrade (TE-19001), and Utilities Customer Bill System Improvements (TE-10001).

## **Vehicle Replacement Fund**

Vehicle Replacement and Maintenance Projects provide funding for the maintenance and replacement of City vehicles and heavy equipment to ensure safe, reliable, and efficient use of resources. Of the \$6.9 million in funding for FY 2023, \$2.7 million is recommended to be reappropriated from FY 2022 for continuation of the projects in FY 2023. To maintain a regular replacement schedule efficiently, staff has been standardizing the process for determining the replacement value and timing.

There is one new project programmed in the Vehicle Replacement Fund for the 2023-2027 CIP under the category of Vehicle and Equipment Replacement:

- Scheduled Vehicle and Equipment Replacement – Fiscal Year 2027 (VR-27000): 2023-2027 CIP: \$3.6 million

More information about this project can be found on the project's page under the Vehicle Replacement Fund section of this document.





CITY OF  
**PALO  
ALTO**



CITY OF  
**PALO  
ALTO**

# Fiscal Year 2023 Adopted Capital Budget

## City Council

Patrick Burt, Mayor

Lydia Kou, Vice Mayor

Alison Cormack

Tom DuBois

Eric Filseth

Greer Stone

Greg Tanaka

**Ed Shikada**, City Manager

**Kiely Nose**, Interim Assistant City Manager/Director of Administrative Services/  
Chief Financial Officer

**Jessie Deschamps**, Budget Manager, Office of Management and Budget

**Paul Harper**, Budget Manager, Office of Management and Budget

**Tom DuBois**, Finance Committee Chair

# CITY OF PALO ALTO

The government of the City of Palo Alto exists to promote and sustain a superior quality of life in Palo Alto. In partnership with our community, our goal is to deliver cost-effective services in a personal, responsive and innovative manner.



# OUR VALUES



## Quality

Superior delivery of services

## Courtesy

Providing service with respect and concern

## Efficiency

Productive, effective use of resources

## Integrity

Straight-forward, honest and fair relations

## Innovation

Excellence in creative thought and implementation



# TABLE OF CONTENTS





CITY OF  
**PALO  
ALTO**

# Table of Contents

- I Introduction..... 13**
  - Budget Acknowledgments..... 15
  - CIP Organizational Chart ..... 16
  - The Budget Process and Document ..... 17
  - Budget Award.....25
  
- II Financial Summary.....27**
  - Summary of CIP Program Revenue .....29
  - Summary Information .....35
  - Debt Policy and Obligations .....45
  
- III Capital Fund Projects .....55**
  - Capital Improvement Fund.....57**
    - Administration.....75
      - Capital Improvement Fund Administration..... 76
    - Buildings and Facilities .....79
      - Americans With Disabilities Act Compliance..... 80
      - Animal Shelter Renovation..... 82
      - Building Systems Improvements ..... 84
      - City Facility Parking Lot Maintenance..... 88
      - City Hall Space Planning.....90
      - Civic Center Electrical Upgrade & EV Charger Installation ..... 92
      - Civic Center Fire Life Safety Upgrades..... 94
      - Civic Center Waterproofing Study and Repairs ..... 96
      - Electric Charger Infrastructure Installation ..... 98
      - Facility Interior Finishes Replacement ..... 100
      - Fire Station 4 Replacement..... 104
      - Fire Training Facility Replacement..... 106
      - JMZ Renovation ..... 108
      - Library Automated Material Handling.....110
      - Municipal Service Center A, B, & C Roof Replacement..... 112
      - Municipal Service Center Lighting, Mechanical, and Electrical Improvements ..... 116
      - New California Avenue Area Parking Garage ..... 118
      - New Downtown Parking Garage ..... 120
      - New Public Safety Building .....122
      - Performing Arts Venues Seat Replacement ..... 126
      - Roofing Replacement ..... 128
      - Roth Building Rehabilitation Phase 1..... 130
      - University Avenue Parking Improvements.....132
      - Water, Gas, Wastewater Office Remodel..... 134



# TABLE OF CONTENTS

Department Technology Upgrades and Improvements . . . . .	137
Extrication Tool Replacement . . . . .	138
Police Video Recording Systems Replacement . . . . .	140
Parks and Open Space . . . . .	143
Art In Public Spaces . . . . .	144
Athletic Courts Resurfacing . . . . .	146
Baylands Comprehensive Conservation Plan . . . . .	148
Baylands Levee Repair for Public Safety Access . . . . .	150
Benches, Signage, Walkways, Perimeter Landscaping, and Site Amenities . . . . .	152
Bol Park Improvements . . . . .	154
Bol Park Pathway Repaving and Repair . . . . .	156
Boulevard Park Improvements . . . . .	158
Byxbee Park Completion . . . . .	162
Cameron Park Improvements . . . . .	164
Dog Park Installation and Renovation . . . . .	166
Foothills Nature Preserve Boronda Lake Dock Replacement . . . . .	168
Foothills Nature Preserve Improvements . . . . .	170
Foothills Nature Preserve Dam Seepage Investigation and Repairs . . . . .	174
Golf Course Net and Artificial Turf Replacement . . . . .	176
Golf Reconfiguration & Baylands Athletic Center Improvements . . . . .	178
Heritage Park Site Amenities Replacement . . . . .	182
Hoover Park Improvements . . . . .	184
Johnson Park Renovation . . . . .	186
Magical Bridge Playground Rubber and Synthetic Turf Resurfacing . . . . .	188
Mitchell Park Improvements . . . . .	190
Off-Road Pathway Resurfacing And Repair . . . . .	192
Open Space Lakes And Pond Maintenance . . . . .	194
Open Space Trails and Amenities . . . . .	196
Park and Open Space Emergency Repairs . . . . .	198
Park Restroom Installation . . . . .	200
Pearson Arastradero Improvement Project . . . . .	202
Peers Park Improvements . . . . .	204
Ramos Park Improvements . . . . .	206
Rinconada Park Improvements . . . . .	208
Robles Park Improvements . . . . .	212
Seale Park Improvements . . . . .	214
Werry Park Playground Improvements . . . . .	216
Streets and Sidewalks . . . . .	219
City Bridge Improvements . . . . .	220
Curb and Gutter Repairs . . . . .	222
Newell Road/San Francisquito Creek Bridge Replacement . . . . .	224
San Francisquito Creek Joint Powers Authority Ongoing Creek Projects . . . . .	228
Sidewalk Repairs . . . . .	230
Sign Reflectivity Upgrade . . . . .	232

# TABLE OF CONTENTS

- Street Lights Condition Assessment ..... 234
- Street Lights Improvements ..... 236
- Street Maintenance ..... 238
- Thermoplastic Lane Marking and Striping ..... 242
- Traffic and Transportation ..... 245
  - Bicycle and Pedestrian Transportation Plan Implementation ..... 246
  - California Avenue Streetscape Update ..... 248
  - Churchill Avenue Enhanced Bikeway ..... 250
  - Churchill Avenue/Alma Street Railroad Crossing Safety Improvements ..... 252
  - Downtown Automated Parking Guidance Systems, Access Controls & Revenue Collection Equip. .... 254
  - Parking District Implementation ..... 256
  - Parking Management and System Implementation ..... 258
  - Quarry Road Improvements and Transit Center Access ..... 260
  - Railroad Grade Separation and Safety Improvements ..... 264
  - Safe Routes To School ..... 266
  - Traffic Signal and Intelligent Transportation Systems ..... 268
  - Transportation and Parking Improvements ..... 270
- Cubberley Property Infrastructure Fund ..... 273**
  - Buildings and Facilities ..... 277
    - Cubberley Community Center Redevelopment ..... 278
    - Cubberley Repairs ..... 280
    - Cubberley Roof Replacements ..... 284
  - Parks and Open Space ..... 287
    - Cubberley Field Restroom ..... 288
- IV Enterprise Fund Projects ..... 291**
- Airport Fund ..... 293**
  - Airport Apron, Runways, and Taxiways ..... 299
    - Airfield Electrical Improvements ..... 300
    - Airport Apron Reconstruction ..... 302
    - Runway and Taxiway Reconstruction and Drainage Improvements ..... 306
  - Airport Facilities ..... 309
    - Airport Access Road Reconstruction ..... 310
    - Airport Layout Plan ..... 312
    - Airport Parking Lot Electric Vehicle Charger Installation ..... 314
    - Airport Temporary Office Buildings ..... 316
    - Airport Zero Emission Vehicle Fleet Replacement Program ..... 318
    - Automated Weather Observation System (AWOS) ..... 320
- Electric Fund ..... 323**
  - Customer Connections ..... 331
    - Electric Customer Connections ..... 332
  - System Improvements ..... 335

# TABLE OF CONTENTS

115 kV Electric Intertie . . . . .	336
Capacitor Bank Installation . . . . .	338
Coleridge/Cowper/Tennyson 4/12kV Conversion . . . . .	340
Colorado Distribution Feeder Outlet Replacement . . . . .	342
Colorado Power Station Equipment Upgrades . . . . .	344
Colorado Substation Site Improvements . . . . .	346
Communications System Improvements . . . . .	348
East Meadow Circles 4/12kV Conversion . . . . .	350
Electric System Improvements . . . . .	352
Electric Utility Geographic Information System . . . . .	354
Foothills Rebuild (Fire Mitigation) . . . . .	356
Inter-substation Line Protection Relay . . . . .	360
Rebuild Underground District 16 . . . . .	362
Rebuild Underground District 20 . . . . .	364
Rebuild Underground District 23 . . . . .	366
Rebuild Underground District 26 . . . . .	368
Rebuild Underground District 30 . . . . .	370
SCADA System Upgrades . . . . .	372
Smart Grid Technology Installation . . . . .	374
Substation Breaker Replacement . . . . .	378
Substation Facility Improvements . . . . .	380
Substation Physical Security . . . . .	382
Substation Protection Improvements . . . . .	384
Underground System Rebuild . . . . .	386
Wood Pole Replacement . . . . .	388
Undergrounding Projects . . . . .	391
Underground District 42 - Embarcadero Road, Emerson, Middlefield . . . . .	392
Underground District 43 - Alma/Embarcadero . . . . .	394
<b>Fiber Optics Fund . . . . .</b>	<b>397</b>
Capacity Improvements . . . . .	403
Fiber Optics Network - System Improvements . . . . .	404
Fiber Optics Network - System Rebuild . . . . .	406
Customer Connections . . . . .	409
Fiber Optics Customer Connections . . . . .	410
<b>Gas Fund . . . . .</b>	<b>413</b>
Customer Connections . . . . .	421
Gas System, Customer Connections . . . . .	422
Gas Main Replacements . . . . .	425
Gas Main Replacement - Project 23 . . . . .	426
Gas Main Replacement - Project 24 . . . . .	428
Gas Main Replacement - Project 25 . . . . .	430
Gas Main Replacement - Project 26 . . . . .	432
System Improvements . . . . .	435

# TABLE OF CONTENTS

- Gas Distribution System Improvements ..... 436
- Gas Equipment and Tools ..... 438
- Gas Meters and Regulators ..... 440
- Stormwater Management Fund ..... 443**
- Capacity Improvements ..... 451
- Corporation Way System Upgrades and Pump Station ..... 452
- East Meadow Circle Connection to Adobe Creek Pump Station ..... 454
- East Meadow Drive System Upgrades ..... 456
- Louis Road System Upgrades ..... 458
- West Bayshore Road Pump Station ..... 460
- West Bayshore Road Trunk Line Improvements ..... 462
- System Improvements ..... 465
- Green Stormwater Infrastructure ..... 466
- Trash Capture Device Installation ..... 468
- System Rehabilitation ..... 471
- Storm Drainage System Replacement And Rehabilitation ..... 472
- Wastewater Collection Fund ..... 475**
- Customer Connections ..... 481
- Sewer System, Customer Connections ..... 482
- System Improvements ..... 485
- Sewer Lateral/Manhole Rehabilitation and Replacement ..... 486
- Wastewater Collection System Rehabilitation/Augmentation Project 30 ..... 488
- Wastewater Collection System Rehabilitation/Augmentation Project 31 ..... 490
- Wastewater Collection System Rehabilitation/Augmentation Project 32 ..... 492
- Wastewater Collection System Rehabilitation/Augmentation Project 33 ..... 494
- Wastewater General Equipment and Tools ..... 496
- Wastewater System Improvements ..... 498
- Wastewater Treatment Fund ..... 501**
- Buildings and Facilities ..... 507
- New Laboratory And Environmental Services Building ..... 508
- Plant Master Plan ..... 512
- System Improvements ..... 515
- Advanced Water Purification Facility ..... 516
- Headworks Facility Replacement ..... 518
- Horizontal Levee Pilot ..... 520
- Joint Intercepting Sewer Rehabilitation (Phase 1) ..... 524
- Outfall Line Construction ..... 526
- Plant Repair, Retrofit, and Equipment Replacement ..... 528
- Primary Sedimentation Tank Rehabilitation ..... 530
- Secondary Treatment Upgrades ..... 534
- Water Fund ..... 537**
- Customer Connections ..... 545

# TABLE OF CONTENTS

Water System Customer Connections . . . . .	546
System Improvements . . . . .	549
Water Distribution System Improvements . . . . .	550
Water General Equipment/Tools . . . . .	552
Water Meters . . . . .	554
Water Recycling Facilities . . . . .	556
Water Regulation Station Improvements . . . . .	560
Water Service and Hydrant Replacement . . . . .	562
Water System Supply Improvements . . . . .	564
Water Tank Seismic Upgrade and Rehabilitation . . . . .	566
Water, Gas, Wastewater Utility GIS Data . . . . .	568
Water Main Replacements . . . . .	571
Water Main Replacement - Project 28 . . . . .	572
Water Main Replacement - Project 29 . . . . .	574
Water Main Replacement - Project 30 . . . . .	576
Water Main Replacement - Project 31 . . . . .	578
<b>V Internal Service Fund Projects . . . . .</b>	<b>581</b>
<b>Technology Fund . . . . .</b>	<b>583</b>
Citywide Technology Upgrades and Improvements . . . . .	589
City Council Chambers Upgrade . . . . .	590
Enterprise Resource Planning Upgrade . . . . .	594
Infrastructure Management System . . . . .	598
Radio Infrastructure Replacement . . . . .	602
Department Technology Upgrades and Improvements . . . . .	605
Computer Aided Dispatch (CAD) Upgrade . . . . .	606
Utilities Customer Bill System Improvements . . . . .	608
<b>Vehicle Replacement and Maintenance Fund . . . . .</b>	<b>611</b>
Vehicle and Equipment Replacement . . . . .	617
Emergency Repair and Replacement . . . . .	618
Scheduled Vehicle and Equipment Replacement - Fiscal Year 2020 . . . . .	620
Scheduled Vehicle and Equipment Replacement - Fiscal Year 2021 . . . . .	622
Scheduled Vehicle and Equipment Replacement - Fiscal Year 2022 . . . . .	624
Scheduled Vehicle and Equipment Replacement - Fiscal Year 2023 . . . . .	626
Scheduled Vehicle and Equipment Replacement - Fiscal Year 2024 . . . . .	628
Scheduled Vehicle and Equipment Replacement - Fiscal Year 2025 . . . . .	630
Scheduled Vehicle and Equipment Replacement - Fiscal Year 2026 . . . . .	632
Scheduled Vehicle and Equipment Replacement - Fiscal Year 2027 . . . . .	634
<b>VI Supplemental Information . . . . .</b>	<b>637</b>
Glossary . . . . .	639
Americans with Disabilities Act . . . . .	642

TABLE OF CONTENTS

Project Name Index . . . . . 643  
Project Number Index . . . . . 647



CITY OF  
**PALO  
ALTO**





# INTRODUCTION





CITY OF  
**PALO  
ALTO**

# Budget Acknowledgments

## Department Budget Coordinators

### Community Services

Lam Do  
Karina Alvarez

### Fire

Amber Cameron

### Information Technology

Sherrie Wong

### Library

Sarah Wilson

### Office of Transportation

Elizabeth Egli  
Chitra Moitra (Special Assistance)

### Police

Eric Jensen

### Public Works

Michelle Nelson  
Dinaa Alcocer (Special Assistance)  
Holly Boyd (Special Assistance)  
Erica Ledesma (Special Assistance)  
Loretta Olmos (Special Assistance)

### Utilities

Anna Vuong  
Alexandra Harris  
Dave Yuan (Special Assistance)

### Office of Management & Budget Staff

Kiely Nose  
Paul Harper  
Jessie Deschamps  
Kayla Shapiro  
Naomi Hsu  
Oscar Murillo  
Joseph Shin  
Chaitali Paliwal  
Alyssa Ching  
Josh Martinez  
Steve Guagliardo (Special Assistance)

## Capital Improvement Plan Review Committee

Ed Shikada  
Kiely Nose  
Brad Eggleston  
Holly Boyd  
Kristen O'Kane  
Philip Kamhi  
Paul Harper

# CIP ORGANIZATIONAL CHART



# THE BUDGET PROCESS AND DOCUMENT

## Capital Budget and Five-Year Capital Improvement Plan

The annual capital budget and five-year Capital Improvement Plan (CIP) is a spending plan for the City's infrastructure needs, which is based on the City Council priorities listed below. The City Council approved multi-year funding plans, such as the infrastructure keep-up and catch-up plan recommended by the Infrastructure Blue Ribbon Commission (December 2011), as well as the City Council 2014 Infrastructure Plan (June 2014). The review of the capital budget and five-year CIP is structured around public hearings conducted prior to City Council adoption.

## City Council Top Priorities

At the start of the City's budget process, the City Council determines its main priorities for the upcoming budget period. The priorities guide both budget development and department priority-setting. The public has the opportunity to provide input into this process as well as during the budget review by the Finance Committee and City Council. The following are the City Council's Top Priorities for 2022, adopted in February 2022:

- Economic Recovery and Transition
- Climate Change – Protection and Adaptation
- Housing for Social and Economic Balance
- Community Health and Safety

## Budget Preparation

The City's annual budget process begins in September with the development of the base budget and concludes in August with the release of the adopted budget. The operating and capital budgets are developed on behalf of the City Manager, in consultation with senior management and the Director of Administrative Services, by the Administrative Services Department's Office of Management and Budget (OMB) utilizing the following main sources of information:

- The City Council's top priorities and other City Council directives, such as the 2014 Infrastructure Plan
- Organizational financial status and budgetary guidelines
- Service level and infrastructure prioritization, as identified by the City Manager
- Community input (e.g. Infrastructure Blue Ribbon Commission)
- The City's policies regarding land use and community design, transportation, housing, natural environment, business, and economics, as outlined in the Comprehensive Plan.

## Capital Budget Calendar

### SEPTEMBER

The capital budget process begins with the preparation of the capital budget guidelines and calendar by the Administrative Services Department's Office of Management and Budget (OMB). The budget guidelines are then distributed to all departments.

### OCTOBER/NOVEMBER

Departments review the prior year five-year CIP. Based on the previously outlined information sources, changes to the prior year budgets are developed by the respective departments managing the City's infrastructure assets: Utilities, Information Technology, Community Services, Public Works, Office of Transportation, and Administrative Services. Changes to the CIP might include: addition of new projects, deletion of planned projects, reprioritization of planned projects, alternative funding strategies, and revision of project costs or timelines. Revisions of project costs reflect a review of potential variables such as, but not limited to, revised construction estimates, annual Consumer Price Index (CPI) increases, and known contractual increased costs.

### DECEMBER/JANUARY

Departments submit capital infrastructure funding requests to the OMB. For General Fund funded project requests, OMB, in conjunction with Public Works, prepares an initial prioritization of requests based on the previously outlined information sources for consideration by the General Fund CIP Review Committee consisting of senior managers in Public Works, Community Services, Administrative Services, and the Office of Transportation.

### JANUARY/FEBRUARY

The General Fund CIP Committee reviews the General Fund capital budget submissions to ensure that the proposed projects align with the City Council's Top Priorities and other City Council directives, can be funded with available resources, and are aligned in the five-year plan to maximize City resources.

### MARCH

The City Manager reviews and makes final decisions on the proposed capital budget and five-year Capital Improvement Program.

### APRIL/MAY

Staff solicits input from the Planning and Transportation Commission on the proposed CIP, which reviews the CIP as it relates to the Comprehensive Plan. Comments from the PTC and staff response to comments from the PTC are reported during the public budget hearings.

### MAY/JUNE

The City Manager releases and presents the proposed CIP to the City Council and posts the budget documents on the City's website. Through a series of public hearings the budget is discussed and amendments are proposed. Final adoption occurs at a public hearing in June. All changes made during the public hearings are incorporated into the adopted budget document, which is distributed to City libraries and posted on the City's website.

## Capital Project Criteria

The following are criteria for qualification as a capital expenditure:

- Must have a minimum cost of \$50,000 for each stand-alone unit or combined project.
- Must have a useful life of at least five to seven years (the purchase or project will still be functioning and not be obsolete at least five to seven years after implementation).
- Must extend the life of an existing asset or provide a new functional use for an existing asset for at least five years, for example extensive roof rehabilitations. These improvements are distinguished from ongoing maintenance work that may extend the life of the asset but is done on a routine basis.

### Project Prioritization Selection Criteria

As part of developing the capital budget, staff must prioritize how to allocate limited resources over a variety of competing needs and demands. Projects and funding levels are prioritized utilizing several criteria, including:

- City Council priorities;
- Alignment with the City's Infrastructure Blue Ribbon Commission (IBRC) report and Infrastructure Plan;
- Health and safety implications;
- Historical spending levels; and
- Certainty over the feasibility, scope, and level of resources required.

In addition to the criteria outlined above, the prioritization of Enterprise Fund CIP projects is determined by the department that manages the Enterprise Fund, and planned using several more factors such as the department's operational needs, funding availability, CIP strategic plan, oversight committee direction, and specific City Council direction.

### Continuing Projects

A change to the mechanism for previously approved projects that are continuing into the new fiscal year was approved during Fiscal Year 2015. Previously, unspent funding for capital projects carried forward automatically from one year to the next as long as funds were spent within a two-year period. In September 2014, the City Council approved an amendment to Municipal Code Section 2.28.090, eliminating the provision allowing for the "reappropriations." Effective Fiscal Year 2016, City Council authorization is required for Capital funds to be carried forward from one fiscal year to the next.

There are several opportunities for departments to request funds to be carried over from one fiscal year to the next. First, departments have the opportunity to request funds to be carried over from one year to the next through the budget process. By estimating lower than budgeted expenditures in the current year, funds not anticipated to be spent in the current year but still required for the completion of the project are reflected in the first year of the five-year CIP. The Fund Narrative for each fund indicates the total amount of reappropriations included in this budget. Additionally, as part of the year-end closing actions, anticipated to be brought forward for City Council approval in the Fall, all projects will be reviewed to determine if additional adjustments to reappropriations are required.

### Operating Budget Impact

The City uses the life cycle costing principle in planning for capital projects. All costs associated with a capital project, including operations and maintenance, will be included in the operating budget at the



# THE BUDGET PROCESS AND DOCUMENT

time of release of the applicable annual operating budget. Where applicable, the CIP budget document identifies the amount of operating expense associated with the project.

## Changes to the Adopted Budget

Administrative policies and the Palo Alto Municipal Code provide guidelines on budget transfers, the authorization necessary to implement transfers, and appropriations after the budget is adopted.

## Budget Amendment

This is an adjustment to the total project appropriated amount which was not included in the original adopted budget. These supplemental appropriations are presented to City Council in an agenda report and must be approved by the City Council.

Reasons for initiating a Budget Amendment include:

- Recognizing unanticipated revenue, which was not projected in the budget, and appropriating related expenditure in the year received (requires 2/3 City Council approval)
- Changes in scope of work
- Higher than estimated costs
- Adding new projects to the budget due to an urgent need or City Council direction

## Budgetary Basis

The budget is prepared in accordance with Generally Accepted Accounting Principles. The budget for governmental funds has been prepared on a modified accrual basis. The modified accrual basis recognizes expenditures when the related fund liability is incurred. Revenues are recognized when they become both measurable and available. “Measurable” means the amount of the transaction can be determined and “available” means collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period.

## Fund Structure and Accounting Basis

The accounts of the City are made up of funds that help organize and account for restricted resources. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts (comprised of assets, liabilities, fund equity, revenues, and expenditures), which are segregated for the purpose of carrying out specific activities or attaining certain objectives in accordance with regulatory requirements. The City has the following fund type categories:

### Governmental Fund Types

The Governmental Funds include the General, Special Revenue, Debt Service, and Capital Project Funds. Governmental Funds are reported using the current financial resources measurement focus and the modified accrual basis of accounting.

### Proprietary Fund Types

The Proprietary Funds, which include the Enterprise and Internal Service Funds, are used to account for the City’s business-type activities. Proprietary funds are reported using the economic resources measurement focus and the full accrual basis of accounting. Revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place.

## Fiduciary Fund Types

The Fiduciary Funds account for assets held by the City in trust or as an agent for various assessment and community facilities districts. The City budget process does not include fiduciary funds.

## Agency Fund Types

The Agency Funds are custodial in nature and do not involve measurement of results of operations. The City maintains three agency funds. The City budget process does not include agency funds.

## Document Layout

The Capital Budget document provides readers with cost estimates, methods of financing, and project schedules for the City of Palo Alto's CIP for the next five years as well as estimates for current year activity.

The document is organized by fund with each fund section containing the following elements:

- Capital Projects Fund Overview : A narrative for every fund is included in this document, which includes historical expenditure levels, budget comparisons to prior years, a summary of the infrastructure related to that particular fund, and a discussion of major capital projects grouped by category. Additionally, this section includes statistical information regarding the program such as miles of gas mains or number of vehicles in the City fleet.
- Project Detail Pages : After each fund summary, the reader finds information for each capital project, both recurring and non-recurring projects. The project pages include information regarding the project completion schedules (initial and revised), descriptions, justifications, a summary of significant changes to the cost or schedule of a project, revenue and expense information by fiscal year, and operating budget impacts for each project. This allows for the total cost of a project to be detailed. The information in the project detail pages is discussed further below.
- Project Maps : For the Adopted Capital Improvement Fund and the various Enterprise Funds, a map is included which shows the location of projects, for projects that have a singular defined location.

At the end of the document, the reader will find a Glossary which defines frequently used terms.

## Understanding the Details

### Project Numbering Sequence

The project number contains seven characters. The first two are letters related to the managing department or fund. The next two digits relate to the fiscal year in which the project first received funding or was identified. The final three numbers are system-generated. For example, with project PE-17006, the "PE" denotes Public Works Engineering, the "17" indicates Fiscal Year 2017 funding, and the "006" is the sequential project number. The "Managing Department or Fund" table can be used as a reference for the two-character alpha portion of the project number.

# THE BUDGET PROCESS AND DOCUMENT

Project Code	Managing Department or Fund
AC	Arts & Culture
AP	Airport Fund
AS	Administrative Services
CB	Cubberley Fund
EL	Electric Fund
FD	Fire Department
FO	Fiber Optics Fund
GS	Gas Fund
LB	Library Department
OS	Open Space
PD	Police Department
PE	Public Works Engineering
PF	Public Works Facilities
PG	Parks & Golf Course
PL	Office of Transportation
PO	Public Works Operations
SD	Stormwater Management Fund
TE	Technology Fund
VR	Vehicle Fund
WC	Wastewater Collection Fund
WQ	Wastewater Treatment Fund
WS	Water Fund

## Project Information

The project detail pages include the following information:

- Fund - refers to the fund where the project is budgeted.
- Category - describes the type of activity that the project aligns to within the fund. A table at the end of this section provides a summary of the categories assigned to the various funds.
- Project Location - describes the location or area that will be improved as a result of the project.
- Managing Department - refers to the department or office that is responsible for the delivery of the project.
- IBRC Reference - refers to nomenclature devised by the Infrastructure Blue Ribbon Commission (IBRC) for certain General Fund projects; “keep-up” refers to projects which address the annual maintenance of existing infrastructure; “catch-up” refers to projects which address deferred maintenance needs; “new” refers to projects which address needs not identified by “keep-up” or “catch-up.” This category only applies to General Fund projects after the release of the Final IBRC report in 2011.
- Initial/Revised Project Start/Completion - indicates what the initial schedule for the project was, as well as any subsequent changes.

## THE BUDGET PROCESS AND DOCUMENT

- Project Description – provides the scope of work for the project.
- Project Justification – outlines the reasons why funding is required.
- Supplemental Information – provides additional information that may enhance the project description and justification.
- Significant Changes – provides an explanation of the changes to the initial schedule or budget for a project.
- Funding Sources Schedule – outlines the sources of funding for the project by fiscal year. Generally projects are not funded by a particular grant, fee, or transfer, but in instances where they are, these sources are indicated. In most cases, this section indicates the amount that the fund where the project is budgeted will contribute towards the project. This table also includes prior year revenues, a current year estimate, anticipated revenue beyond the five years of the CIP, and total revenue for the project.
- Expenditure Schedule – outlines the projected costs, by year for each project. Costs are broken into phases, such as design and construction, to indicate how the funds will be spent each year. Where applicable, salary and benefit estimates are included in the individual phases for a project, rather than reflected separately as in prior years. Salary and benefit costs are estimated for all five years of the CIP. In prior years, salary and benefit costs were reflected within the project for the first year of the CIP only. This table also includes prior year expenditures, a current year estimate, anticipated expenditures beyond the five years of the CIP, and the total cost of the project.
- Operating Impacts – describes estimated annual maintenance and operating costs associated with the project. Efforts have been made to include the operating cost impacts wherever possible. Maintenance costs include utilities, equipment maintenance or service, facilities maintenance or service, grounds/landscape maintenance or service, custodial maintenance and others.
- Relationship to Comprehensive Plan – indicates how the project furthers the implementation of the Comprehensive Plan, citing specific Comprehensive Plan policies and programs. In instances where a secondary relationship to the Comprehensive Plan exists, this is notated as well.
- Potential Board/Commission Review – City Council-appointed advisory board, commission or ad hoc committee that has oversight responsibility on a project. A project may be reviewed by more than one board or commission. This body (bodies) provides the City Council input as to the merits of a project.
- Environmental Impact Analysis – indicates the California Environmental Quality Act (CEQA) status of the project and LEED status, if applicable.

# THE BUDGET PROCESS AND DOCUMENT

<b>CAPITAL FUNDS</b>	
<p><b>Capital Improvement Fund</b></p> <ul style="list-style-type: none"> <li>• Administration</li> <li>• Buildings and Facilities</li> <li>• Department Technology Upgrades</li> <li>• Parks and Open Space</li> <li>• Streets and Sidewalks</li> <li>• Traffic and Transportation</li> </ul>	<p><b>Cubberley Property Infrastructure Fund</b></p> <ul style="list-style-type: none"> <li>• Buildings and Facilities</li> <li>• Parks and Open Space</li> </ul>
<b>ENTERPRISE FUNDS</b>	
<p><b>Airport Fund</b></p> <ul style="list-style-type: none"> <li>• Airport Apron, Runways, and Taxiways</li> <li>• Airport Facilities</li> </ul> <p><b>Electric Fund</b></p> <ul style="list-style-type: none"> <li>• Customer Connections</li> <li>• System Improvements</li> <li>• Undergrounding Projects</li> </ul> <p><b>Fiber Optics Fund</b></p> <ul style="list-style-type: none"> <li>• Capacity Improvements</li> <li>• Customer Connections</li> </ul> <p><b>Gas Fund</b></p> <ul style="list-style-type: none"> <li>• Customer Connections</li> <li>• Gas Main Replacements</li> <li>• System Improvements</li> </ul>	<p><b>Stormwater Management Fund</b></p> <ul style="list-style-type: none"> <li>• Capacity Improvements</li> <li>• System Improvements</li> <li>• System Rehabilitation</li> </ul> <p><b>Wastewater Collection Fund</b></p> <ul style="list-style-type: none"> <li>• Customer Connections</li> <li>• System Improvements</li> </ul> <p><b>Wastewater Treatment Fund</b></p> <ul style="list-style-type: none"> <li>• Buildings and Facilities</li> <li>• System Improvements</li> </ul> <p><b>Water Fund</b></p> <ul style="list-style-type: none"> <li>• Customer Connections</li> <li>• System Improvements</li> <li>• Water Main Replacements</li> </ul>
<b>INTERNAL SERVICE FUNDS</b>	
<p><b>Technology Fund</b></p> <ul style="list-style-type: none"> <li>• Citywide Technology Upgrades and Improvements</li> <li>• Department Technology Upgrades and Improvements</li> </ul>	<p><b>Vehicle Replacement Fund</b></p> <ul style="list-style-type: none"> <li>• Fleet Infrastructure Improvements</li> <li>• Vehicle and Equipment Replacement</li> </ul>

*California Society of  
Municipal Finance Officers*

*Certificate of Award*

***Capital Budget Excellence Award  
Fiscal Year 2021-2022***

*Presented to the*

***City of Palo Alto***

For meeting the criteria established to achieve the CSMFO Excellence Award in Capital Budgeting.

*February 28, 2022*



*Marcus Pimentel*

*Marcus Pimentel  
CSMFO President*

*Michael Manno*

*Michael Manno, Chair  
Recognition Committee*

*Dedicated Excellence in Municipal Financial Reporting*



CITY OF  
**PALO  
ALTO**





# FINANCIAL SUMMARY





CITY OF  
**PALO  
ALTO**

# SUMMARY OF CIP PROGRAM REVENUE

## Summary of CIP Revenue

Revenue Source (\$000's)	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027	Total CIP 2023-2027
<b>Capital Improvement Funds</b>						
Transfer from General Fund	\$ 21,472	\$ 26,734	\$ 31,703	\$ 35,971	\$ 36,872	\$ 152,752
Gas Tax	3,180	3,180	3,180	3,180	3,180	15,901
Impact Fees/In-Lieu Fees	11,157	3,745	395	895	395	16,587
Federal, State, and Local Agencies	21,914	1,765	1,765	2,272	3,075	30,791
Stanford University Medical Center Fund	4,400	4,819	4,075	-	-	13,294
Transfer from Parking Funds	-	-	-	87	247	334
Transfer from Other Funds	2,889	-	-	167	206	3,262
<b>TOTAL CAPITAL IMPROVEMENT FUNDS</b>	<b>\$ 65,012</b>	<b>\$ 40,242</b>	<b>\$ 41,118</b>	<b>\$ 42,571</b>	<b>\$ 43,976</b>	<b>\$ 232,920</b>
<b>Enterprise Funds</b>						
Utility User Fees and Charges	\$ 4,305	\$ 4,332	\$ 4,361	\$ 4,372	\$ 4,384	\$ 21,753
Debt Financing	197,802	33,400	-	43,607	-	274,809
Federal, State, and Local Agencies	1,729	604	1,333	900	2,520	7,087
Transfers from Other Funds	332	342	353	362	373	1,762
<b>TOTAL ENTERPRISE FUNDS</b>	<b>\$ 204,168</b>	<b>\$ 38,679</b>	<b>\$ 6,046</b>	<b>\$ 49,241</b>	<b>\$ 7,277</b>	<b>\$ 305,411</b>
<b>Internal Services Funds</b>						
Transfer from General Fund	\$ 2,295	\$ 2,215	\$ 2,215	\$ 2,215	\$ 2,215	\$ 11,155
Transfer from Other Funds	2,022	1,606	1,606	1,606	1,606	8,447
Other Agencies	104	-	-	-	-	104
<b>TOTAL INTERNAL SERVICE FUNDS</b>	<b>\$ 4,421</b>	<b>\$ 3,821</b>	<b>\$ 3,821</b>	<b>\$ 3,821</b>	<b>\$ 3,821</b>	<b>\$ 19,705</b>
<b>TOTAL CAPITAL IMPROVEMENT PROGRAM</b>	<b>\$ 273,602</b>	<b>\$ 82,742</b>	<b>\$ 50,985</b>	<b>\$ 95,633</b>	<b>\$ 55,073</b>	<b>\$ 558,036</b>

## Transfer From General Fund

The Capital Improvement Funds category includes two funds: the Capital Improvement Fund and the Cubberley Property Infrastructure Fund. To support essential infrastructure such as repairs to the City's roads, parks and open space, and facilities, the Capital Improvement Fund receives an annual base General Fund transfer, and revenue from Transient Occupancy Taxes (TOT). The two voter-approved increases to the TOT, November 2014 and November 2018, totaling 3.5 percent of TOT revenue, were identified by the City Council as a funding source to support infrastructure needs. Revenue generated from TOT is transferred to support budgeted Infrastructure Plan projects and repayment of debt financing used to fund two of the Infrastructure Plan projects, the California Avenue Parking Garage and the New Public Safety Building.

In response to the immediate impact of the COVID-19 pandemic, the General Fund transfer to the Capital Improvement Fund was reduced from a pre-pandemic estimate of \$30.7 million to an actual transfer of \$8.5 million in FY 2021. In order to balance liabilities while maintaining a responsible level of investment in the City's essential infrastructure, projects were reprioritized and deferred. The FY 2022 budget continued efforts to mitigate the economic impacts of COVID-19, with \$11.0 million estimated in

## SUMMARY OF CIP PROGRAM REVENUE

General Fund transfers to the Capital Improvement Fund in FY 2022 and \$113.8 million in the 2022-2026 CIP. The FY 2023 budget reflects cautious optimism about the economic outlook as the pandemic situation evolves, with \$19.6 million of General Fund transfers to the Capital Improvement Fund in FY 2023 and \$143.4 million in the 2023-2027 CIP. The FY 2023 figure includes the General Fund base transfer of \$8.8 million to the Capital Improvement Fund, revenue anticipated from the Council directed TOT funding of \$9.7 million, and estimated interest earnings in the Capital Improvement Fund of \$1.1 million annually. The Cubberley Property Infrastructure Fund will continue to be supported by an annual transfer of \$1.8 million from the General Fund, approved by the City Council as part of the new Cubberley Lease Agreement (CMR #11460).

Transfers from the General Fund to the Internal Service Funds are comprised mostly of funding for vehicle replacement costs in the Vehicle Replacement and Maintenance Fund. In reflection of service delivery impacts from COVID-19, the City limited replacements to only regulatory or serious maintenance issues in FY 2021 and FY 2022, allowing transfers to occur at a decreased level of \$0.9 million. Funding of \$2.3 million in FY 2023 initiates a return to pre-pandemic levels. In the 2023-2027 CIP, the total General Fund transfer to the Vehicle Replacement and Maintenance fund is \$11.2 million, or an average of \$2.2 million annually.

### Certificates of Participation/Debt Financing

The Infrastructure Plan (IP), as approved by the City Council in June 2014 (CMR #4889), relied upon a borrowing mechanism known as Certificates of Participation (COP) to fund a portion of the improvements outlined in the plan (\$63.3 million). By pledging future revenues generated by voter-approved increases to the TOT (discussed in the Transfer from General Fund section), the City financed, through issuance of debt, the cost of construction of the California Avenue Area Parking Garage (PE-18000) and a New Public Safety Building (PE-15001). The total debt financing for these two IP projects came to \$144.0 million with an estimated annual debt service cost of \$7.4 million.

In 2012, the Regional Water Quality Control Plant (RWQCP) created a Long-Range Facilities Plan to evaluate the infrastructure needs at the RWQCP with regards to future regulations, replacement and rehabilitation needs, site planning, and flow and load projections. Due to the large expense of the major projects included in the 2023-2027 CIP, the RWQCP will require debt financing. Some of these projects in the earlier years of the five-year CIP include the Secondary Treatment Upgrades (WQ-19001) with estimated financing needs of \$148.8 million, a New Laboratory and Environmental Services Building (WQ-14002) with estimated financing needs of \$23.0 million, and an Advanced Water Purification Facility (WQ-19003) with estimated financing needs of \$18.5 million. Staff received approval from the City Council to pursue revenue bonds for these projects (CMR #10011) and will return to Council once the debt financing mechanism, State Revolving Fund (SRF) Loan, revenue bonds, or a blend of both, is determined.

### Gas Tax Fund

The Gas Tax Fund accounts for revenues received from the State gas tax and Federal and State grants earmarked for street improvements. Use of these funds is restricted to maintenance of the road network system of the City, including sidewalks. Transfers from the Gas Tax Fund support the Street Maintenance (PE-86070) and Safe Routes to School (PL-00026) projects. The passage of S.B. 1 for Road Maintenance and Rehabilitation is estimated to provide an additional \$1.4 million annually for street

maintenance. This funding assists with the City's street maintenance program, allowing some funds to be reallocated to other capital projects with City Council approval.

### Community Development Funds

Community development funds are collected from developers and provide funding for the City's infrastructure related to community centers, libraries, parks, public facilities, and transportation. The City Attorney provides guidance on whether a project qualifies for funding. In the 2023-2027 CIP, three projects are supported by the Parkland Dedication Fees collected accordingly under the Quimby Act: Boulware Park (PE-17005), Byxbee Park (PE-18006), and Rinconada Park Improvements (PE-08001); and five projects are supported by Parks Impact Fees collected to fund the acquisition of land and improvements for neighborhood and district parks: Boulware Park (PE-17005), Dog Park Installation and Renovation (PG-18001), Park Restroom Installation (PG-19000), Rinconada Park Improvements (PE-08001), and Roth Building Rehabilitation (PF-23001).

Based on previous Council direction, funding of \$1.65 million that was previously transferred from Community Center Impact Fees to support Rinconada Park Improvements (PE-08001) has been shifted to support Roth Building Rehabilitation (PF-23001).

Traffic Impact Fees are programmed to support the Traffic Signal and Intelligent Transportation Systems project (PL-05030), which maintains traffic safety and improves roadway operations including the reduction of roadway congestion with traffic signal retiming projects. Funding from the Library Impact Fees are programmed to fund the Library Automated Material Handling (LB-21000) and Roth Building Rehabilitation (PF-23001) projects. Lastly, \$5.5 million in transfers from the Downtown Parking In-Lieu Fund to the Capital Improvement Fund supports the costs associated with the Downtown Parking Garage (PE-15007) project.

### Federal, State, & Local Agencies

The City partners with local agencies to provide support to certain capital projects. This revenue is typically provided as reimbursement grants or direct transfer payments. In Fiscal Year 2023, the City is expected to receive approximately \$21.9 million from other agencies in support of projects in the Capital Improvement Fund. In the remaining years of the Capital Improvement Program (Fiscal Years 2024 through 2027), it is anticipated that the City will receive an additional \$8.9 million in funds from other agencies for projects programmed in the Capital Improvement Fund.

This revenue category includes Measure B funding for transportation enhancements from the Santa Clara Valley Transportation Authority (VTA), which is programmed to fund costs associated with Railroad Grade Separation (PL-17001), Traffic Signal and Intelligent Transportation Systems (PL-05030), and Transportation and Parking Improvements (PL-12000). In addition, funding from the Federal Aviation Administration (FAA) is recorded in the Airport Fund, with further details provided in the Airport Fund section of this document.

### Stanford University Medical Center Development Agreement

In 2011, a development agreement was established between the City of Palo Alto and the Stanford University Medical Center Parties. The funds received by the City from this development agreement repre-

## SUMMARY OF CIP PROGRAM REVENUE

sent a significant portion of the funding for the Infrastructure Plan projects. Over the course of the 2023-2027 CIP, transfers to the Capital Improvement Fund totaling \$13.3 million are anticipated. This funding will support a variety of projects, including the Bicycle and Pedestrian Transportation Implementation Plan (PL-04010), the reconstruction of Fire Station #4 (PE-18004), the Quarry Road Improvements and Transit Center (PL-16000), and the Roth Building Rehabilitation (PF-23001). For additional information about the development agreement, please refer to the Special Revenue Funds section of the Fiscal Year 2023 Operating Budget document.

### Parking Funds

Over the 2023-2027 CIP, \$0.3 million is expected to be transferred from the City's parking funds for the University Avenue Parking Improvements project (PF-14003). Funding for parking related capital investments beyond FY 2023 is contingent upon continued availability of revenues generated from parking permits within the respective parking districts.

### Transfers From Enterprise Funds

The City of Palo Alto has nine Enterprise Funds that are managed by the Public Works Department and the Utilities Department. The Airport Fund, Refuse Fund, Stormwater Management Fund, and Wastewater Treatment Fund are collectively referred to as the "Public Works Funds," while the Electric Fund, Fiber Optics Fund, Gas Fund, Water Fund, and Wastewater Collection Fund are collectively referred to as the "Utilities Funds." For further information, please refer to The Budget Process and Document section of this book. In instances where the Enterprise Funds would benefit from a General Fund or Internal Service Fund project, the Enterprise Funds are charged for their proportional share. Several examples are included in the 2023-2027 CIP, such as Building Systems Improvements (PF-01003); Electric Charger Infrastructure Installation (PF-23000); MSC Lighting, Mechanical, and Electric Improvements (PF-16006); and Water, Gas, Wastewater Office Remodel (PE-19001) projects. A portion of the cost of these projects will be split among the various Enterprise Funds according to the proportional use by the various funds.

### Enterprise Funds Utility Rate Changes

Enterprise Funds operate on a full cost recovery basis. Accordingly, all costs related to operations and capital projects are recovered through utility rate charges. The Fiscal Year 2023 Operating Budget document contains a detailed discussion regarding the Fiscal Year 2023 utility rate increases.

### Transfers Within Enterprise Funds

Most of the Enterprise Funds are supported by rates, and the revenue is used for specific services provided by each fund. When a capital project supports multiple Enterprise Funds, the fund that manages the project is reimbursed through transfers from other funds to ensure the project's costs are proportionally shared. An example of this type of project is the application of the Geographic Information System (GIS) (WS-02014) that benefits the Water, Gas and Wastewater Collection Funds. The Water Fund manages the GIS project, and the Gas and Wastewater Collection Funds reimburse the Water Fund for their share of the project cost.

## User Fees and Charges

Certain CIP projects in the Enterprise Funds are supported by user fees. Included in this category are certain charges to telecommunication and cable television companies pertaining to undergrounding projects. The list of projects funded by user fees and the description of each user fee are summarized in the table below.

Enterprise Fund	Project Name	User Fee	CIP Plan Revenues	Description
<b>Electric Fund</b>	Electric Customer Connections (EL-89028)	Connection Fees	\$8,500,000	Cover services for installation, transformers, meters for new customers, upgrading of existing customers and temporary service connection. For a list of other services refer to Utility Rate Schedule E-15.
<b>Electric Fund</b>	Wood Pole Replacement (EL-19004)	Telecommunication Rental Fees	\$750,000	Shared cost for telecommunication access to utility poles.
<b>Fiber Optics Fund</b>	Fiber Optic Customer Connections (FO-10000)	Fiber Optic License Fees	\$1,000,000	Cover installation of fiber optic infrastructure for new service connections. For a list of other services refer to Utility Rate Schedule EDF-1.
<b>Gas Fund</b>	Gas System, Customer Connections (GS-80017)	Connection Fees	\$4,500,000	Cover services for distribution system extension, service connection, meter charges and relocation. For a list of other services refer to Utility Rate Schedule G-5.
<b>Wastewater Collection Fund</b>	Sewer System, Customer Connections (WC-80020)	Connection Fees	\$2,250,000	Cover services for collection system extension, service connection, relocation of facilities and manholes. For a list of other services refer to Utility Rate Schedule S-5.
<b>Water Fund</b>	Water System, Customer Connections (WS-80013)	Connection Fees	\$4,753,200	Cover services for distribution system extension, service connection, meter charges, capacity fees and fire hydrants. For a list of other services refer to Utility Rate Schedule W-5.

## Stormwater Management Fee

In April 2005, property owners approved an increase in the Storm Drainage Fee through a mail ballot process conducted in accordance with Proposition 218. Under the provisions of the 2005 ballot measure, the base rate of \$13.05 was scheduled to sunset on June 1, 2017, reverting to the pre-election rate of \$4.25. To reauthorize the fee through another ballot measure, staff worked with a City Manager-appointed Blue-Ribbon Committee to generate a recommendation for stormwater management funding beyond Fiscal Year 2017 and a joint committee/staff funding recommendation was presented to City Council in Spring 2016. In April 2017, the Stormwater Management Fee was approved by a majority of property owners via a ballot-by mail process, establishing a base rate of \$13.65 per Equivalent Residential Unit (ERU) per month along with a provision that the City Council could increase the rate on an annual basis by the local inflation rate, as measured by the Consumer Price Index (CPI), or six percent, whichever is less. Under the provisions of the ballot measure, the fee is recommended to increase by 4.2 percent, based on the local CPI increase, to \$15.98 per ERU for Fiscal Year 2023.

## Partner Agencies

The Cities of Palo Alto, Mountain View, and Los Altos, along with the Town of Los Altos Hills, Stanford University, and the East Palo Alto Sanitary District (the partners) participate jointly in the cost of maintaining and operating the City of Palo Alto Regional Water Quality Control Plant (RWQCP). The City of Palo Alto is the owner and the administrator of the RWQCP, and the partners reimburse the City for their share of the cost of capital projects programmed to maintain or upgrade the RWQCP facilities.

### Internal Service Funds

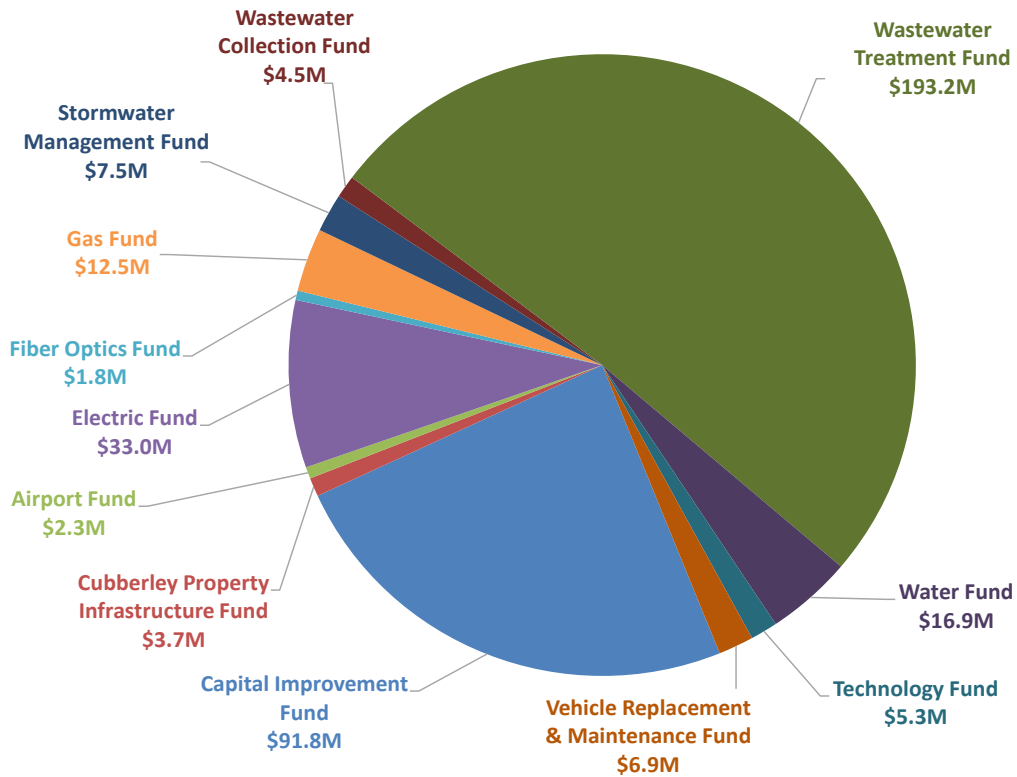
The General Fund, Capital Improvement Funds, and Enterprise Funds provide funding for their share of capital projects in the Internal Service Funds (ISF) through a cost allocation mechanism. Costs are allocated to the various funds based on proportional use of Vehicle Replacement and Technology related capital projects.



# Summary Information

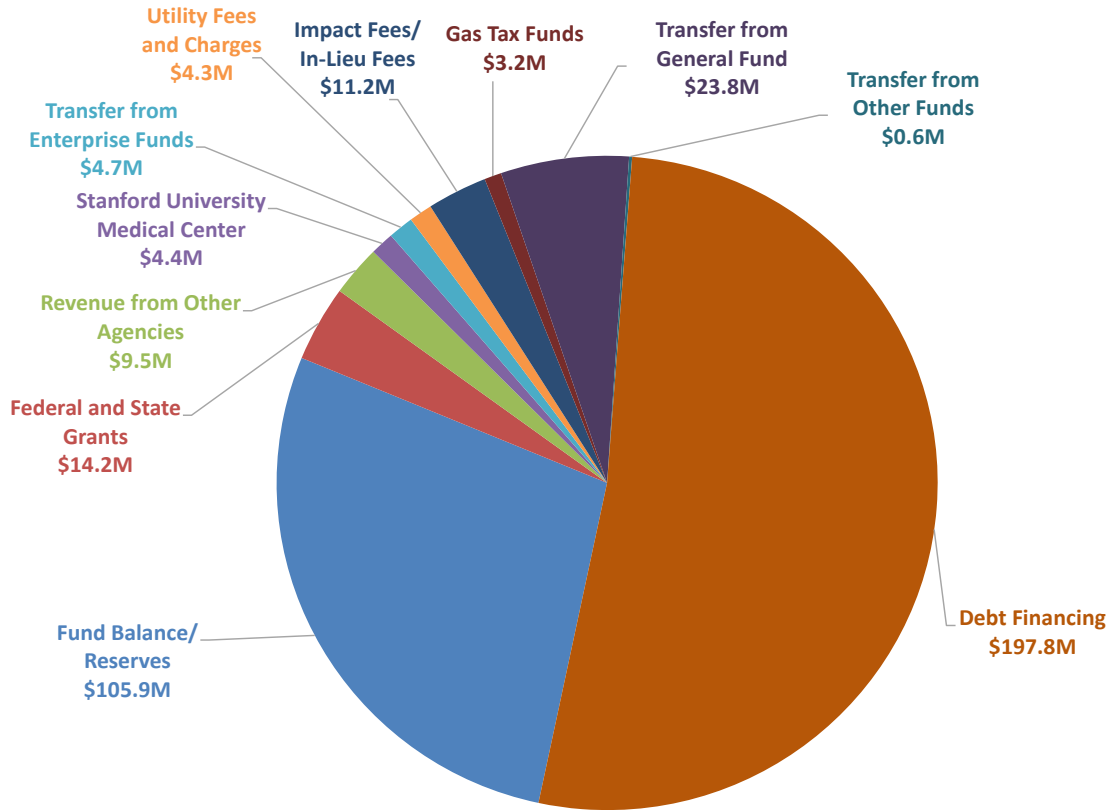
# 2023 Capital Budget Expenditures by Fund

2023 CAPITAL BUDGET EXPENDITURES BY FUND - \$379.5 MILLION



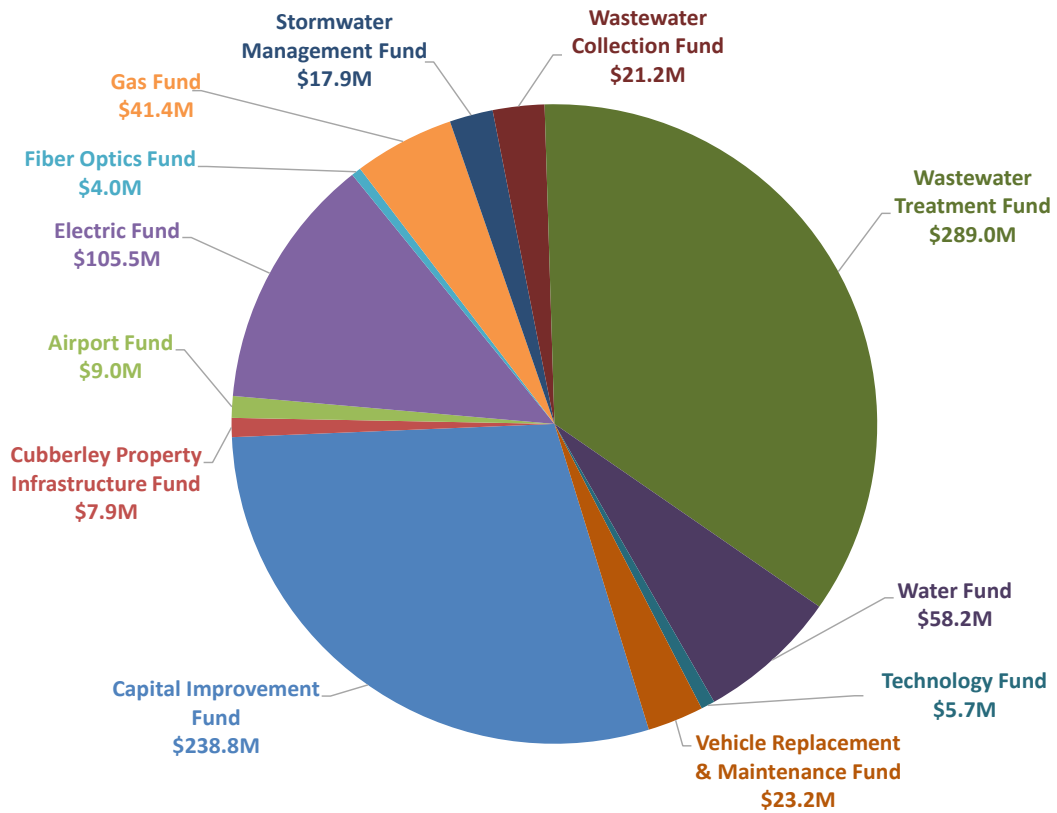
# 2023 Capital Budget Revenues by Source

**2023 CAPITAL BUDGET REVENUES BY SOURCE - \$379.5 MILLION**



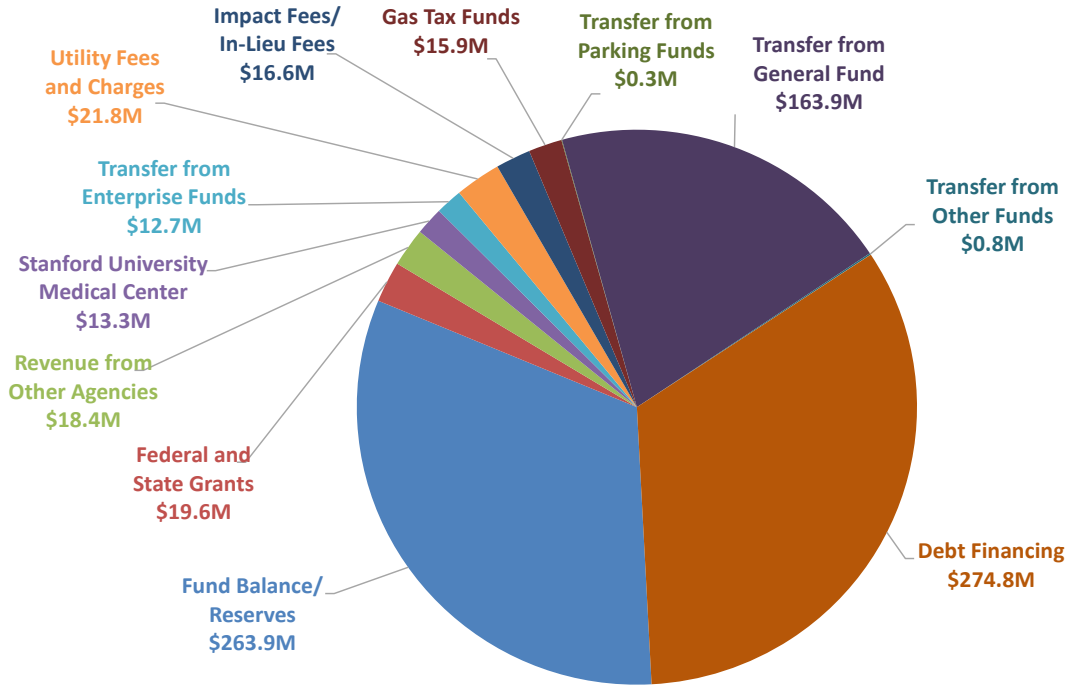
# 2023-2027 Capital Improvement Plan Expenditures by Fund

**2023-2027 CAPITAL IMPROVEMENT PLAN EXPENDITURES BY FUND**  
**\$821.9 MILLION**



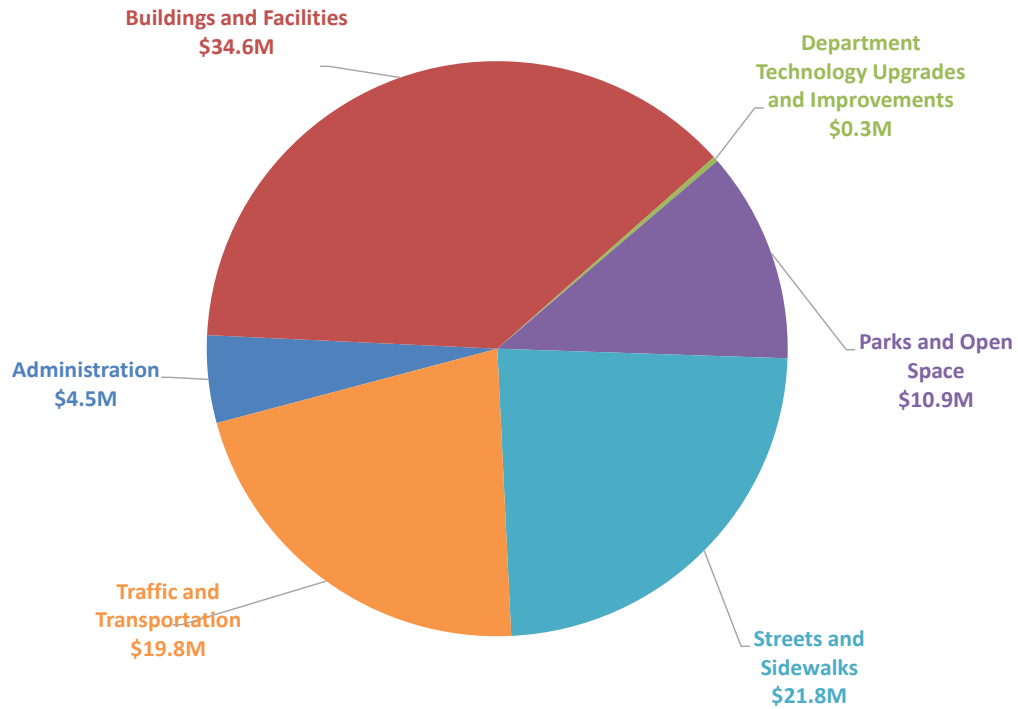
# 2023-2027 Capital Improvement Plan Revenues by Source

**2023-2027 CAPITAL IMPROVEMENT PLAN REVENUES BY SOURCE**  
**\$821.9 MILLION**



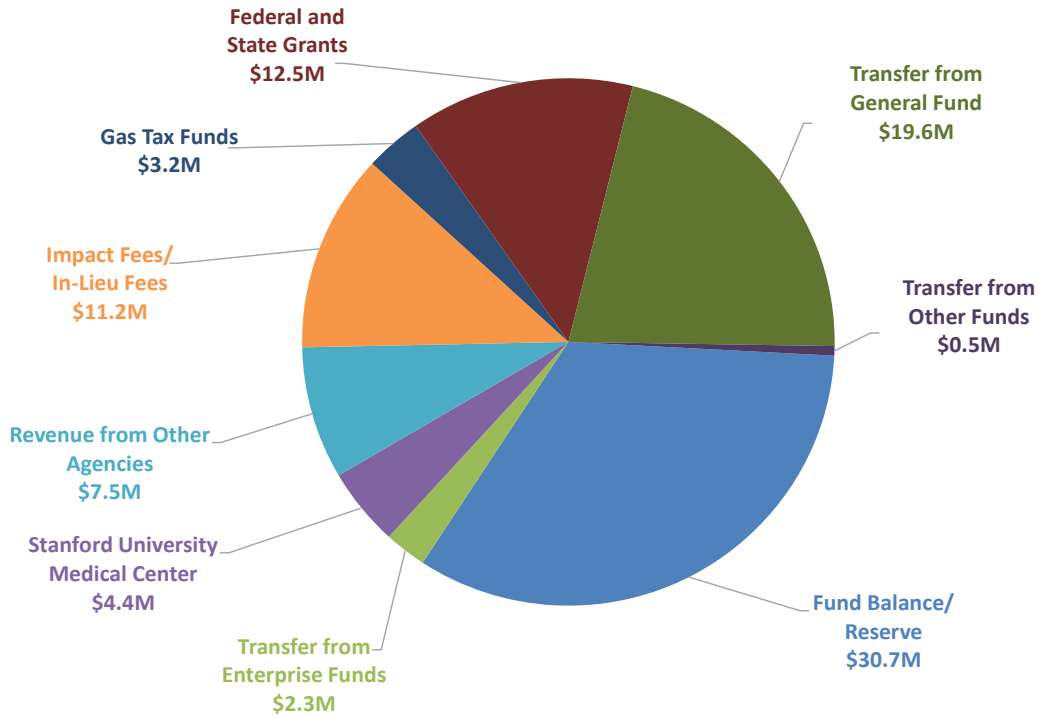
# 2023 Capital Improvement Fund Expenditures by Category

**2023 CAPITAL IMPROVEMENT FUND EXPENDITURES BY CATEGORY**  
**\$91.8 MILLION**



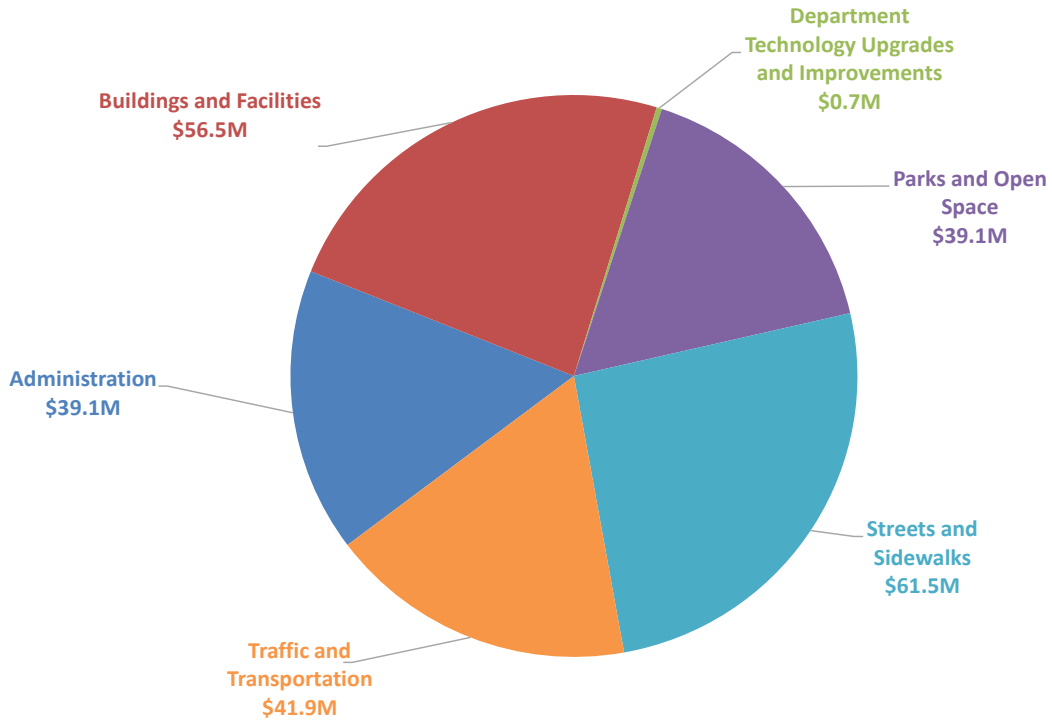
# 2023 Capital Improvement Fund Revenues by Source

**2023 CAPITAL IMPROVEMENT FUND REVENUES BY SOURCE**  
**\$91.8 MILLION**



# 2023-2027 Capital Improvement Fund Expenditures by Category

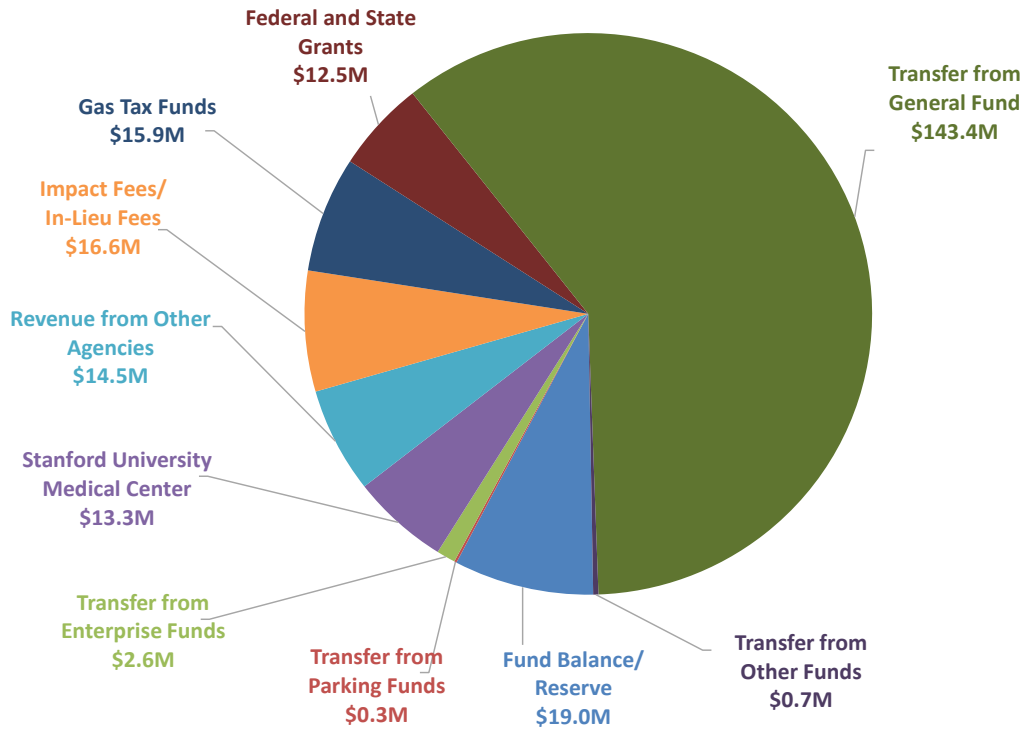
**2023-2027 CAPITAL IMPROVEMENT FUND EXPENDITURES BY CATEGORY**  
**\$238.8 MILLION**





# 2023-2027 Capital Improvement Fund Revenues by Source

**2023-2027 CAPITAL IMPROVEMENT FUND REVENUES BY SOURCE**  
**\$238.8 MILLION**





CITY OF  
**PALO  
ALTO**

# Debt Policy and Obligations

# DEBT POLICY AND OBLIGATIONS

## Summary of Debt Obligations

	Original Issue Amount	Balance June 30, 2021	Additions	Retirements	Balance June 30, 2022	Current Portion
<b>Governmental Activity Debt:</b>						
<b>General Long Term Obligations:</b>						
<b>2010A General Obligation Bonds</b>						
2.00-5.00%, due 08/01/2040	55,305	41,965	-	41,965	-	-
Add: Unamortized Premium		2,385	-	2,385	-	-
<b>2013A General Obligation Bonds</b>						
2.00-5.00%, due 08/01/2041	20,695	15,030	-	2,860	12,170	485
Add: Unamortized Premium		751	-	165	586	33
<b>2022A General Obligation Bonds</b>						
5.00%, due 08/01/2040	34,435	-	34,435	-	34,435	1,105
Add: Unamortized Premium		-	4,725	-	4,725	263
<b>2022B General Obligation Bonds</b>						
4.00%, due 08/01/2028	2,110	-	2,110	-	2,110	-
Add: Unamortized Premium		-	56	-	56	9
<b>2018 Capital Improvement Project and Refinancing Certificates of Participation</b>						
2.20-4.22%, due 11/1/2047	8,970	8,570	-	190	8,380	195
<b>2019 California Avenue Parking Garage Certificates of Participation, Series A &amp; B</b>						
2.5-5%, due 11/1/2048	37,370	36,365	-	645	35,720	665
Add: Unamortized Premium		4,493	-	193	4,300	193
<b>2021 Public Safety Building Certificates of Participation</b>						
2.125-5.00%, due 11/1/2050	101,505	101,505	-	-	101,505	-
Add: Unamortized Premium		6,470	-	216	6,254	216
<b>Total Governmental Activity Debt</b>	<b>\$260,390</b>	<b>\$217,534</b>	<b>\$41,326</b>	<b>\$48,619</b>	<b>\$210,241</b>	<b>\$3,164</b>
<b>Business-type Activity Debt:</b>						
<b>Enterprise Long Term Obligations:</b>						
<b>Utility Revenue Bonds,</b>						
1999 Refunding, 3.25-5.25%, due 06/01/2024	17,735	5,120	-	1,620	3,500	1,705
2009 Series A, 1.80 - 4.65%, due 06/02/2035	35,015	24,330	-	1,235	23,095	1,295
2011 Series A, 3.00-4.00%, due 06/01/2026	17,225	6,680	-	1,260	5,420	1,300
Add: Unamortized Premium		397	-	82	315	82
<b>Energy Tax Credit Bonds</b>						
2007 Series A, 0%, due 12/15/2021	1,500	100	-	100	-	-
Less: Unamortized Premium		(6)	-	(6)	-	-
<b>State Water Resources Loan</b>						
2007, 0%, due 6/30/2029	9,000	3,600	-	450	3,150	450
2009, 2.6%, due 11/30/2030	8,500	4,839	-	430	4,409	441
2017, 1.8% due 3/30/2049	29,684	23,850	-	663	23,187	674
2021, 0.9% due 2/15/2053	17,484	-	1,203	-	1,203	-
2022, 0.8% due 12/31/2056	168,659	-	-	-	-	-
<b>Total Business-type Activity Debt</b>	<b>\$304,802</b>	<b>\$68,910</b>	<b>\$1,203</b>	<b>\$5,834</b>	<b>\$64,279</b>	<b>\$5,947</b>

## City of Palo Alto Debt Policy

The City of Palo Alto recognizes the need for spending a prudent amount every year for ongoing capital replacement and rehabilitation needs. An ongoing capital improvement plan is vital to ensuring the future viability of services. To achieve this priority, the City funds its regular and ongoing capital needs primarily on a “pay-as-you-go” basis. There are, however, special or extraordinary capital improvement projects, refinancing of existing debt, and purchase of major and multiple pieces of equipment in which it is appropriate to consider debt financing. The City’s Debt Policy establishes the guidelines to support the decision-making process for issuing debt.

## DEBT POLICY GUIDELINES

The City's Debt Policy provides guidelines for refinancing existing debt; detailing the responsibilities of City staff engaged in issuing debt; delineating the debt instruments or vehicles (e.g. General Obligation Bonds or Certificates of Participation) the City can utilize; and describing situations in which tax-exempt and taxable debt can be used. The depth and breadth of the policy serve to guide current and future staff. Below are highlights of the Debt Policy guidelines for the use of debt and other financing.

A. Debt may be judiciously used when some or all of the following conditions exist:

- Estimated future revenue is sufficient to ensure the payment of annual debt service.
- Other financing options have been explored and are not viable for the timely or economic acquisition or completion of a capital project.
- A capital project is mandated by federal or state authorities with no other viable funding option available.
- The capital project or asset lends itself to debt financing rather than pay-as-you-go funding based on the expected useful life of the project.
- Debt will not be used to fund ongoing operating expenses of the City except for situations in which cash flow problems arise and the City may need to issue short-term Tax or Revenue Anticipation Notes.
- Annual debt service shall not exceed 10 percent of annual operating expenses for the General Fund unless an exception is approved by City Council. For all other City funds annual debt service shall not exceed 15 percent of annual operating expenses unless an exception is approved by City Council.

B. Minimize borrowing costs by:

- Maximizing the use of existing resources for capital projects and equipment needs.
- Issuing tax-exempt debt except in instances where IRS regulations require taxable bonds.
- Striving to obtain the highest credit ratings possible.
- Maintaining a competitive bid process on bond sales except for situations in which negotiated or private placement sales meet City objectives. In negotiated or private placement sales, City staff will work with its Municipal Advisor (aka Financial Advisor) to review proposed interest rates and proposed fees.
- Ensuring that the type of debt and debt structure developed ensure advantageous marketing of each issue.

C. Linking debt to appropriate revenue sources and project users:

- When possible, tie project financing directly to users of a specific facility or use. Examples include renovation of the Golf Course where user fees can offset debt service or replacing gas mains where gas rates can be increased to cover debt expense.
- Debt financing in the Enterprise Funds so as to avoid significant spikes in user rates by smoothing out costs over time.

In addition to capital projects, the City can finance essential equipment and vehicles. These assets range from public safety vehicles to utility equipment. The underlying asset must have a minimum useful life of three years. Short-term financings, including loans and capital lease purchase agreements, are

## DEBT POLICY AND OBLIGATIONS

executed to meet such needs. It has been the City's practice to fund these purchases with existing resources; however, debt financing flexibility for future needs remains an option.

Also, the Chief Financial Officer or Director of Administrative Services, supported by the Treasury Division, will periodically evaluate its existing debt and execute refinancing when economically beneficial. A refinance may include the issuance of bonds to refund existing bonds or the issuance of bonds in order to refund other obligations. A net present value analysis, both in dollar and percentage terms, will be conducted to determine whether a refinancing is optimal. As a "rule of thumb," a minimum three percent net present value savings will be used as a basis to begin refinancing efforts. As with new debt, all refinancing must be approved by City Council.

In September 2016, the state legislature adopted Senate Bill (SB) 1029 (Hertzberg), amending Government Code section 8855 to place additional reporting obligations on issuers of public debt, effective January 1, 2017. The amendments require an issuer to certify that they have adopted a debt policy concerning the use of debt and that the proposed debt issuance is consistent with that Policy. Though the City's Debt Policy prior to this legislation and practice substantially complied with the new requirements, minor updates to the Debt Policy were approved by the City Council in April 2017 to explicitly comply with SB 1029 requirements. This statute also added additional reporting requirements to the California Debt and Investment Advisory Commission (CDIAC) such as the submission of annual report for any issue of debt.

### Legal Debt Limit

Based upon the assessed valuation of \$44.0 billion for the fiscal year ending June 30, 2021, the City is limited to general obligation indebtedness of \$1.7 billion per State law. As of June 30, 2021, the amount of debt applicable to the debt limit was \$55.1 million, which is well below the City's legal debt limit. The debt limit is applicable to voter-approved general obligation (GO) bonds that have been approved in prior years to fund capital improvement projects to renovate and build out the City's libraries including the Mitchell Park Library and Community Center.

## DEBT OBLIGATION DESCRIPTIONS

### **2010A AND 2013A GENERAL OBLIGATION (GO) BONDS (MITCHELL PARK LIBRARY AND COMMUNITY CENTER)**

On June 30, 2010, the City issued the first series of \$55.3 million and on June 26, 2013 the second series of \$20.6 million of GO bonds to finance costs for constructing a new Mitchell Park Library and Community Center, as well as substantial improvements to the Main Library and the Downtown Library. Principal payments are due annually on August 1 and interest payments semi-annually on February 1 and August 1, from 2.0 percent to 5.0 percent, and are payable from property tax revenues.

On March 2, 2022, the City Council approved refinancing the \$40.6 million outstanding balance of the 2010A bonds as a tax-exempt bonds, and \$2.4 million of the 2013A bonds as taxable bonds. The tax reform bill passed by Congress in December 2017 prohibits the issuance of tax-exempt advance refunding bonds during the ten-year call protection period. The call protection period passed on the Series 2010A Bonds, but not for the Series 2013A Bonds, so only the portions of the Series 2013A bonds that had realized savings were refinanced as taxable bonds. The refinancing resulted in savings, for the Palo Alto property owners, of \$4.5 million in net present value savings or 10.6 percent over the life of the bonds.

As of June 30, 2022, the 2010A Series have been fully refinanced and the remaining balance is described in the 2022A bond section below. For the 2013A Series, \$12.2 million principal and \$6.0 million interest will be the remaining debt service on the bonds with final payment occurring in Fiscal Year 2042.

## **2022A AND 2022B GENERAL OBLIGATION (GO) BONDS (MITCHELL PARK LIBRARY AND COMMUNITY CENTER)**

On March 2, 2022, the City Council approved refinancing the \$40.6 million outstanding balance of the 2010A bonds as a tax-exempt bonds, and \$2.4 million of the 2013A bonds as taxable bonds. The refinanced bonds are now categorized as the 2022A and 2022B respectively. The refinancing resulted in savings, for the Palo Alto property owners, of \$4.5 million in net present value savings or 10.6 percent over the life of the bonds.

As of June 30, 2022, for the 2022A and 2022B refinanced bonds, \$34.4 million and \$2.1 million in principal and \$18.1 million and \$0.4 million interest will be the remaining debt service on the bonds with the final payment occurring in Fiscal Year 2041 and Fiscal Year 2029 respectively.

## **2018 CAPITAL IMPROVEMENT (GOLF COURSE) PROJECT AND 2002B (CIVIC CENTER REFINANCING AND DOWNTOWN PARKING IMPROVEMENTS PROJECT) REFINANCING CERTIFICATES OF PARTICIPATION (COPS)**

On June 5, 2018, the City issued taxable (Green Bonds) COPS of \$8.4 million for the renovation of Palo Alto's Municipal Golf Course and \$0.6 million to refinance the 2002B COPS. Debt service payments are due semi-annually on May 1 and November 1 with true interest costs of 4.14 percent and 3.11 percent, respectively.

As of June 30, 2022, for the 2018 COPS Series and 2002B refinanced bonds, \$8.2 million and \$0.2 million principal and \$5.3 million and \$2,000 interest will be the remaining debt service on the bonds with the final payment occurring in Fiscal Year 2048 and Fiscal Year 2023, respectively.

## **2019 CALIFORNIA AVENUE PARKING GARAGE CERTIFICATES OF PARTICIPATION (COPS)**

On March 21, 2019, the City issued \$26.8 million tax-exempt and \$10.6 million taxable COPS for the construction of a six story (four above ground levels and two below ground levels) parking garage in the California Avenue Business District. The new garage replaced existing surface parking lots at two locations and provided 310 additional parking spaces, totaling 636 parking spaces in the new garage.

Debt service payments on the \$37.4 million COPS are due semi-annually on May 1 and November 1 and have a combined true interest cost (TIC) of 3.75 percent with the tax-exempt bonds' TIC being 3.52 percent and taxable bonds' TIC being 4.32 percent. As of June 30, 2022, for the above tax-exempt and taxable bonds, \$26.8 million and \$8.9 million principal and \$18.4 million and \$9.4 million interest will be the remaining debt service on the bonds with the final payment occurring in Fiscal Year 2049 when the COPS mature.

## **2021 PUBLIC SAFETY BUILDING CERTIFICATES OF PARTICIPATION (COPS)**

On April 7, 2021, the City issued \$101.5 million tax-exempt COPS for the construction of a new Public Safety Building (PSB) to be built at 250 Sherman Avenue. The building is approximately 56,000 square feet and will house the Police Department, 911 Emergency Dispatch Center, the Emergency Operations Center, the Office of Emergency Services, the administration needs of the Fire Department, and include

## DEBT POLICY AND OBLIGATIONS

external support spaces in the basement and operational yard. The PSB will include three levels above grade, two levels below grade, and a one-store operational accessory structure.

The sale proceeds of the COPs, including bond premium, totals \$108.0 million and will be used to construct the PSB and pay for issuance costs and capitalized interest incurred during construction of the building. Debt service payments on the COPs are due semi-annually on May 1 and November 1, with the first payment due in Fiscal Year 2023. The COPs mature in Fiscal Year 2051 and have a TIC of 2.13 percent.

### **1999 UTILITY REVENUE AND REFUNDING BONDS, SERIES A**

On June 1, 1999 the City issued Utility Revenue Bonds to refund the 1990 Utility Revenue Refunding Bonds, Series A and the 1992 Utility Revenue Bonds, Series A, and to finance rehabilitation of the Wastewater Treatment System's two sludge incinerators. The 1990 Utility Revenue Refunding Bonds, Series A and the 1992 Utility Revenue Bonds, Series A, were subsequently retired. The 1999 Bonds are special obligations of the City payable solely from and secured by a pledge of, and lien upon, certain net revenues derived by the City's sewer system and its storm and surface water system, the Stormwater Management System. As of June 30, 2001, the 1999 Bonds had been allocated to and were repayable from net revenues of the following Enterprise Funds: Wastewater Collection (10.2 percent), Wastewater Treatment (64.6 percent) and Stormwater Management (25.2 percent). Principal payments are payable annually on June 1, and interest payments semi-annually on June 1 and December 1. In lieu of a reserve fund, the bonds are secured by a Surety Bond issued by AMBAC Indemnity Corporation. The pledge of future net revenues for the above funds ends upon repayment of the \$3.5 million principal and \$0.3 million interest as the remaining debt service on the bonds as of June 30, 2022, with final payment occurring in Fiscal Year 2024

### **2009 WATER REVENUE BONDS, SERIES A**

On October 6, 2009, the City issued Water Revenue Bonds in the amount of \$35.5 million to finance certain improvements to the City's Water utility system. Principal payments are due annually on June 1, and interest payments are due semi-annually on June 1 and December 1, from 1.8 percent to 6.0 percent. The final debt service payment will be made in 2035. When these bonds were issued, they were designated as Direct Payment Build America Bonds under the provisions of the American Recovery and Reinvestment Act of 2009 Build America Bonds. The City expected to receive a cash subsidy payment from the United States Treasury equal to 35.0 percent of the interest payable on the 2009 bonds, however, due to the United States federal government budget (sequestration) cuts in calendar year 2013, the receipts declined to 32.5 percent in 2013 and were 33.3 percent in calendar year 2018. The lien on the 1995 Bonds on the net revenues is senior to the lien on net revenues securing the 2009 Bonds and the 2002 Bonds. The City received subsidy payments amounting to \$0.5 million, which represents 33.3 percent of the two interest payments due on June 1 and December 1 annually.

The pledge of future net revenues of the above funds ends upon repayment of the \$23.1 million principal and \$10.2 million interest as the remaining debt service on the bonds as of June 30, 2022 with final payment occurring in Fiscal Year 2035.

### **2011 UTILITY REVENUE BONDS, SERIES A**

On September 22, 2011 the City issued Utility Revenue Bonds to refinance the 2002 Utility Revenue Bonds, which were issued for certain improvements to the City's Water and Natural Gas utility system. The refinancing resulted in net present value savings of 16.9 percent and cash savings over 15 years of



\$4.0 million. Principal payments are due annually on June 1, and interest payments are due semi-annually on June 1 and December 1 from 3.0 percent to 4.0 percent. The Revenue Bonds are secured by net revenues generated by the Water and Gas Funds.

The pledge of future net revenues ends upon repayment of the \$5.4 million principal and \$0.4 million interest remaining debt service on the bonds as of June 30, 2022 with final payment occurring in Fiscal Year 2026.

### **2007 STATE WATER RESOURCES LOAN**

In October 2007, the City approved the \$9.0 million loan agreement with State Water Resources Control Board (SWRCB) to finance the City's Mountain View/Moffett Area Reclaimed Water Pipeline Project. Under the terms of the contract, the City agreed to repay \$9.0 million to the State in exchange for receiving \$7.5 million in proceeds to be used to fund the project. The difference between the repayment obligation and proceeds amounts to \$1.5 million and represents in-substance interest on the outstanding balance. Loan proceeds are drawn down as the project progresses and debt service payments commenced on June 30, 2010. Concurrently with the loan, the City entered into various other agreements including a cost sharing arrangement with the City of Mountain View. Pursuant to that agreement, the City of Mountain View agreed to finance a portion of the project with a \$5.0 million loan repayable to the City. This loan has been recorded as Due from Other Government Agencies in the financial statements.

The pledge of future net revenues of the above funds ends upon repayment of the \$2.6 million principal and \$0.5 million in-substance interest as the remaining debt service on the bonds as of June 30, 2022 with final payment occurring in Fiscal Year 2029.

### **2009 STATE WATER RESOURCES LOAN**

In October 2009, the City approved an \$8.5 million loan agreement with the State Water Resources Control Board (SWRCB) to finance the City's Ultraviolet Disinfection Project. As of June 30, 2011, the full loan in the amount of \$8.5 million was drawn down and became outstanding. Interest in the amount of \$96,000 was accrued and added to the outstanding balance.

The pledge of future net revenues of the above funds ends upon repayment of the \$4.4 million principal and \$0.2 million interest as the remaining debt service on the bonds as of June 30, 2022 with final payment occurring in Fiscal Year 2031.

### **2017 STATE WATER RESOURCES LOAN**

In June 2017, the State Water Resources Control Board (SWRCB) and the City executed an agreement for an award up to \$30.0 million at a rate of 1.8 percent, payable over 30 years, with the first annual installment due May 31, 2020 to finance the replacement of sewage sludge bio-solids incinerators at the City's Regional Water Quality Control Plant (RWQCP). In September 2017, due to the projected lower project costs, the agreement was amended to reduce the SWRCB loan amount to \$29.7 million. Under the terms of the contract, a portion of the loan amount, \$4.0 million, is a federally funded grant (by the U.S. Environmental Protection Agency).

The new facility will dewater the bio-solids and allow the material to be loaded onto trucks and taken to a separate facility for further treatment. The RWQCP provides treatment and disposal of wastewater for Palo Alto, Mountain View, Los Altos, Los Altos Hills, East Palo Alto Sanitary District, and Stanford University. Though Palo Alto is the recipient of the loan, the City's agreement with the partner agencies

## DEBT POLICY AND OBLIGATIONS

obliges them to pay their proportionate share of the principal and interest of this loan. Palo Alto's share of the loan payment is 38.2 percent with the partner agencies paying 61.8 percent. The pledge of future net revenues of the above funds ends upon repayment of the \$23.2 million principal and \$6.3 million interest and service charge as the remaining debt service on the bonds as of June 30, 2022 with final payment occurring in Fiscal Year 2049.

### **2021 STATE WATER RESOURCES LOAN**

In June 2021, the State Water Resources Control Board (SWRCB) and the City executed an agreement for an award up to \$17.5 million at a rate of 0.9 percent, payable over 30 years, with the first annual installment due February 15, 2024 to finance the rehabilitation of the primary sedimentation tanks and upgrade the equipment room electrical systems at the City's Regional Water Quality Control Plant (RWQCP). This project provides funding for new protective coatings on each of the four concrete primary sedimentation tanks and replacement of worn rotating parts and aging power distribution equipment.

The RWQCP provides treatment and disposal of wastewater for Palo Alto, Mountain View, Los Altos, Los Altos Hills, East Palo Alto Sanitary District, and Stanford University. Though Palo Alto is the recipient of the loan, the City's agreement with the partner agencies obliges them to pay their proportionate share of the principal and interest of this loan. Palo Alto's share of the loan payment is 38.2 percent with the partner agencies paying 61.8 percent. The pledge of future net revenues of the above funds ends upon repayment of the \$17.5 million principal and \$2.5 million interest with final payment occurring in Fiscal Year 2053.

### **2022 STATE WATER RESOURCES LOAN**

In May 2022, the State Water Resources Control Board (SWRCB) and the City executed an agreement for an award up to \$168.7 million at a rate of 0.8 percent, payable over 30 years, with the first annual installment due December 31, 2027 to finance the replacement of biological treatment process (secondary treatment process) at the City's Regional Water Quality Control Plant (RWQCP). The secondary treatment process is being upgraded to meet new, more stringent regulations in conjunction with increased influent flow and wastewater loading due to projected increased population in the RWQCP's service area. The project will also replace aging equipment that is beyond its useful life and in danger of failing.

The RWQCP provides treatment and disposal of wastewater for Palo Alto, Mountain View, Los Altos, Los Altos Hills, East Palo Alto Sanitary District, and Stanford University. Though Palo Alto is the recipient of the loan, the City's agreement with the partner agencies obliges them to pay their proportionate share of the principal and interest of this loan. Palo Alto's share of the loan payment is 38.2 percent with the partner agencies paying 61.8 percent. The pledge of future net revenues of the above funds ends upon repayment of the \$168.7 million principal and \$21.7 million interest with final payment occurring in Fiscal Year 2057. Should the project cost be less than the awarded loan amount of \$168.7 million, the final loan amount will be reduced based on the actual construction cost of the secondary treatment process.

## CREDIT RATING AGENCIES

Credit rating is a critical component of strong municipal management. According to Moody's Investors Service, reserves are an important factor in the analysis of a municipality's fiscal health and, therefore, a jurisdiction's fiscal policies should include a plan for maintaining reserves. Rating agencies view sound reserves favorably, thus improving a municipality's rating and its ability to obtain low-cost financing for important projects. The City is proud to report that both Moody's and Standard and Poor's (S&P) awarded their highest credit ratings, Triple A, to the City's General Obligation Bonds for library and community center capital improvements in 2010 and 2013 and reaffirmed these ratings a few times, the last one being in March 2021 by Moody's and S&P. The COPS were also rated AA+ and Aa1 by both Moody's and S&P at this time. COPS are rated on a sliding scale, and this is the highest rating possible for these bonds. These ratings demonstrate that Palo Alto's prudent financial management and fiscal strength are viewed favorably by credit agencies. The three Utility bonds (1999, 2009, & 2011) that are rated also received S&P's highest credit rating of Triple A. Moody's has rated these Utility bonds with their second highest (Aa1) or third highest (Aa2) ratings.



CITY OF  
**PALO  
ALTO**



# CAPITAL FUND PROJECTS



CITY OF  
PALO  
ALTO



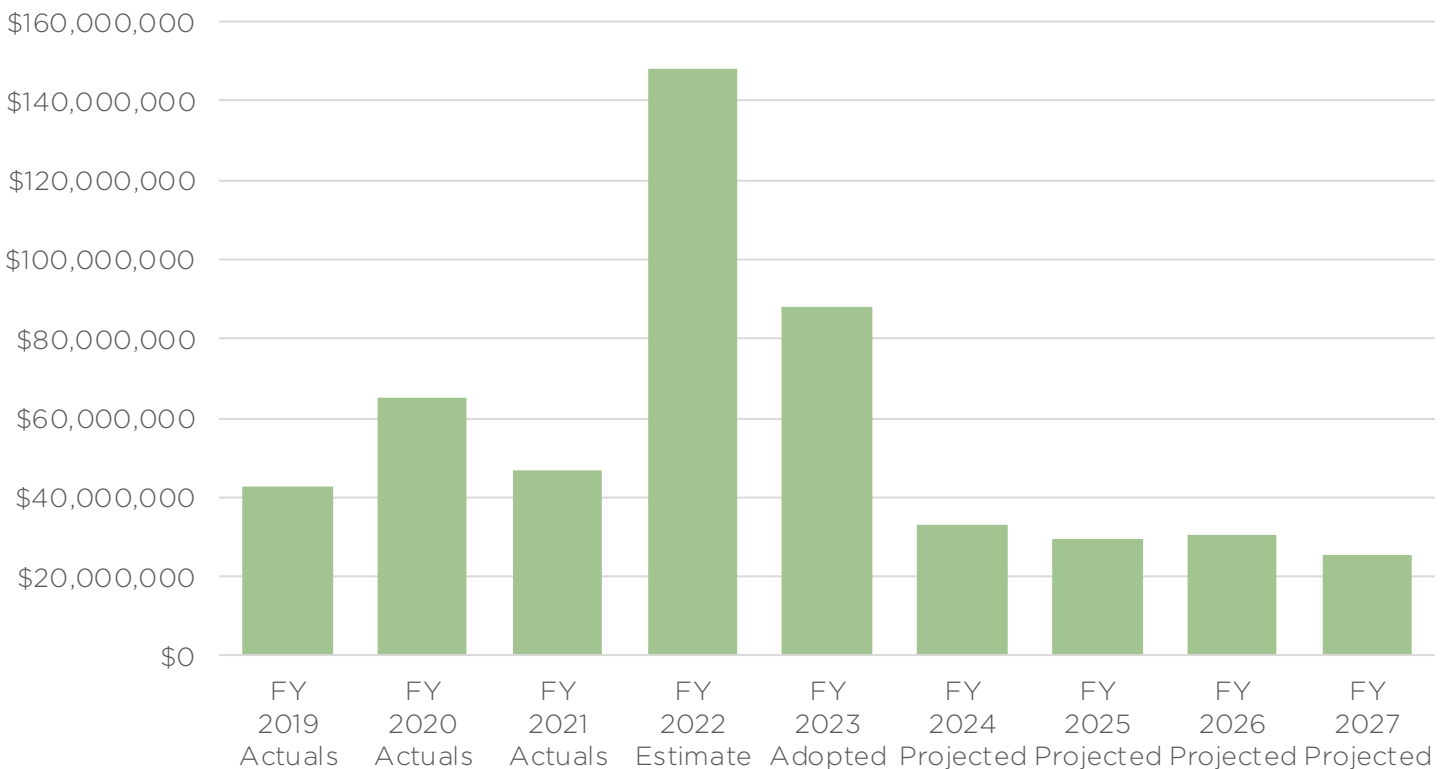
CITY OF  
**PALO  
ALTO**

# CAPITAL IMPROVEMENT FUND

# Overview

The Capital Improvements Fund, supported by the General Fund and grants and reimbursements from other agencies, accounts for general capital investments around Palo Alto that are not funded through Enterprise or Internal Service Fund activities. This fund is equivalent to the General Fund Operating Budget; however, it is focused on capital investments. Examples of projects accounted for within the Capital Improvement Fund include street maintenance, traffic signal and sidewalk modifications, park renovations, and improvements to libraries, community centers, and public safety facilities. Projects to improve the Cubberley Community Center are discussed in the Cubberley Property Infrastructure Fund section of this document. For the entire Capital Improvement Fund, 82 projects are programmed over the 2023-2027 CIP, with a cumulative total cost of \$205.5 million. Of this amount, \$88.0 million is appropriated for Fiscal Year 2023 which includes \$33.3 million recommended to be reappropriated for the continuation of projects approved by the City Council in prior fiscal years. The budget for the Capital Improvement Fund is divided into six categories: Buildings and Facilities, Department Technology Upgrades and Improvements, Parks and Open Space, Streets and Sidewalks, Traffic and Transportation, and Administration. The primary funding source for the Capital Improvement Fund is the annual transfer from the General Fund. In Fiscal Year 2023, this transfer will be \$19.6 million, which includes the annual base transfer of \$8.8 million, the City Council approved Transient Occupancy Tax transfer of \$9.7 million to support the City Council approved Infrastructure Plan, and estimated interest earnings of \$1.1 million.

## Capital Improvement Fund Expenditures





The Infrastructure Plan (IP), consists of ten top priority capital projects accounted for within the Capital Improvement Fund. The first nine were recommended by the Council Infrastructure Committee and approved by the Council in June 2014, with a tenth project, the Downtown Automated Parking Guidance Systems, Access Controls & Revenue Collection Equipment (PL-15002), approved and added as part of the 2020-2024 CIP. The Infrastructure Plan is estimated at \$261.8 million, with \$27.3 million programmed over the 2023-2027 CIP.

The Infrastructure Plan includes the following projects:

- New public safety building
- Two fire station replacements
- Charleston/Arastradero Corridor Improvements
- Bicycle and Pedestrian Transportation Plan
- Highway 101 Pedestrian/Bicycle Bridge
- New parking garage in the downtown area
- New garage in the California Avenue area
- Completion of Byxbee Park
- Enhanced parking systems and revenue collections equipment in the Downtown area

The Fire Station #3 Replacement Project (PE-15003) was the first of the IP projects to begin construction in Fiscal Year 2018 and was completed in March 2020. The construction of Phases 1 and 2 of the Charleston/Arastradero Corridor Project (PE-13011) began in Summer 2018 and were completed in December 2019. The final phase of the Charleston/Arastradero Corridor Project is currently under construction and expected to be completed in Fall 2022. The New California Avenue Area Parking Garage (PE-18000) project began construction in Fiscal Year 2019 and was completed in December 2020, although funding is budgeted in FY 2023 for completion of final punch list items. The Highway 101 Pedestrian/Bicycle Bridge (PE-11011) construction started in January 2020 and was completed in November 2021. Construction started in 2021 on the New Public Safety Building (PE-15001) with completion anticipated in Fall 2023, and the Downtown Automated Parking Guidance Systems (PL-15002) is anticipated to start design and complete construction in Fiscal Year 2023. Additional information on the status of all the IP projects can be found on the City's website: [www.infrastructure.cityofpaloalto.org/](http://www.infrastructure.cityofpaloalto.org/)

## Buildings and Facilities

The Buildings and Facilities category includes projects to maintain the City's existing buildings and facilities as well as projects that provide funding for new facilities. Buildings and facilities include City Hall, other City staff office locations, community centers, libraries, theaters, fire stations, park restrooms, parking garages, and City-owned facilities leased to private parties. Projects to improve the Cubberley Community Center are included separately within the Cubberley Property Infrastructure Fund and discussed elsewhere in this document. The 2023-2027 CIP includes projects totaling \$56.5 million in this category, with \$34.6 million allocated in Fiscal Year 2023. Of this amount, \$12.5 million is recommended to be reappropriated for the continuation of projects approved by the City Council in prior fiscal years. The Buildings and Facilities category includes the following Council Infrastructure Plan projects: Public Safety Building, Fire Station #3 Replacement, Fire Station #4 Replacement, Downtown Parking Garage, and California Avenue Area Parking Garage. These projects account for \$16.3 million in the 2023-2027 CIP or 59.8 percent of the

# CAPITAL IMPROVEMENT FUND

remaining Infrastructure Plan costs. The total funding amount of \$56.5 million for Building and Facilities over the 2023-2027 CIP represents approximately 27.5 percent of the total Capital Improvement Fund CIP.

## Infrastructure Inventory - Summary of Buildings & Facilities

CLASSIFICATION	QUANTITY	SQUARE FOOTAGE
Civic Center & Municipal Services Center	2	239,534
Community Centers	3	146,435
Libraries	5	91,916
Fire Stations	7	34,898
Parking Garages	8	1,245,786

### Recent Accomplishments

- Construction on the New Public Safety Building Project (PE-15001) on schedule to be complete in Fall 2023.
- Completion of the Highway 101 Pedestrian/Bicycle Bridge (PE-11011) in November 2021.

## 2023-2027 Capital Improvement Program

### Recurring Projects

There are seven recurring projects in the Buildings and Facilities category:

- Americans With Disabilities Act Compliance (Fiscal Year 2023: \$0.8 million, 5-Year CIP: \$2.9 million)
- Building Systems Improvements (Fiscal Year 2023: \$1.2 million, 5-Year CIP: \$2.7 million)
- City Facility Parking Lot Maintenance (Fiscal Year 2023: \$0.2 million, 5-Year CIP: \$1.4 million)
- Electric Charger Infrastructure Installation (Fiscal Year 2023: \$0.3 million, 5-Year CIP: \$0.3 million)
- Facility Interior Finishes Replacement (Fiscal Year 2023: \$0.5 million, 5-Year CIP: \$2.4 million)
- Roofing Replacement (Fiscal Year 2023: \$1.4 million, 5-Year CIP: \$6.2 million)
- University Avenue Parking Improvements (Fiscal Year 2023: \$0.1 million, 5-Year CIP: \$0.6 million)

Activities planned for Fiscal Year 2023 under these projects include work on the City Hall fire pump control system, design for the new stationary generator at Fire Station #8, re-plastering of the Rinconada lap pool and kiddie pool, re-roofing at the Lucie Stern Community Center, and remodeling of Revenue Collections in the Civic Center lobby. Finally, the Americans with Disabilities Act (ADA) Compliance project will begin to implement the updates recommended in the ADA Transition Plan.

### Non-Recurring Projects

Major activities planned for Fiscal Year 2023 include the continuation of construction on the Public Safety Building project, funding for phase one of the Roth Building Rehabilitation project, and completion of the Municipal Service Center (MSC) Electrical and Mechanical Upgrade project.

## Department Technology Upgrades and Improvements

The Department Technology Upgrades and Improvements category includes projects to replace public safety related technology equipment based on its useful life and standard replacement schedule. In the 2023-2027 CIP there are two projects in this category, one for the Fire Department and one for the Police Department. The total funding amount of \$0.7 million for Department Technology Upgrades and Improvements over the 5-Year CIP represents 0.3 percent of the total Capital Improvement Fund CIP.

### 2023-2027 Capital Improvement Program

#### Recurring Projects

The equipment replaced by these projects will be programmed on a regular replacement schedule to ensure equipment remains within its useful life.

- Police Video Recording Systems Replacement (Fiscal Year 2023: \$0.1 million, 5-Year CIP: \$0.6 million)

#### Non-Recurring Projects

The Fire Department’s Extrication Tool Replacement Project will replace all extrication tools that are used by first responders to rescue patients involved in car accidents.

## Parks and Open Space

Maintenance, repair, and replacement of parks and open space amenities are managed jointly by the Community Services and Public Works Departments. Generally, Community Services oversees smaller projects as well as recurring projects while Public Works Engineering Services facilitates major one-time projects. The 2023-2027 CIP includes funding totaling \$39.1 million in this category, with \$10.9 million allocated in Fiscal Year 2023. Of this amount, \$6.0 million is recommended to be reappropriated for the continuation of projects approved by the City Council in prior fiscal years. The Parks and Open Space category includes the Council Infrastructure Plan project for Byxbee Park Completion. This project accounts for \$3.3 million or 12.2 percent of the remaining Infrastructure Plan costs. The total funding amount of \$39.1 million for Parks and Open Space over the 5-Year CIP represents approximately 19.0 percent of the total Capital Improvement Fund CIP.

### Infrastructure Inventory - Summary of Parks & Open Space

CLASSIFICATION	QUANTITY
Parks	32
City Open Space/Conservation Lands	4
Parks, Preserves, and Open Space Acreage	4,385
Picnic Areas	39
Athletic Fields	33

#### Recent Accomplishments

- Completion of Rinconada Park Improvement Phase 1.

## CAPITAL IMPROVEMENT FUND

- Conversion of the dry season overflow parking lot to year round use at Pearson Arastradero Preserve.
- Repairs to surfacing of tennis courts and basketball court at Peers Park and resurfacing of basketball court at Briones Park.
- Replacement of picnic tables and seating at Johnson Park and Hopkins Park.
- Replacement of temporary fencing at El Camino Park's baseball field with permanent fencing.
- Repair of rubber surfacing at Boulware Park playground.

### 2023-2027 Capital Improvement Program

#### Recurring Projects

There are nine recurring projects in the Parks and Open Space category:

- Art in Public Spaces (Fiscal Year 2023: \$2.0 million; 5-Year CIP: \$2.6 million)
- Athletic Courts Resurfacing (Fiscal Year 2023: \$0.3 million; 5-Year CIP: \$1.6 million)
- Benches, Signage, Fencing, Walkways, Perimeter Landscaping, and Site Amenities (Fiscal Year 2023: \$0.2 million; 5-Year CIP: \$1.2 million)
- Dog Park Installation and Renovation (Fiscal Year 2023: \$0.2 million; 5-Year CIP: \$0.6 million)
- Off Road Pathway Resurfacing and Repair (Fiscal Year 2023: \$0.2 million; 5-Year CIP: \$0.8 million)
- Open Space Lakes and Ponds Maintenance (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.3 million)
- Open Space Trails and Amenities (Fiscal Year 2023: \$0.2 million; 5-Year CIP: \$1.2 million)
- Parks and Open Space Emergency Repairs (Fiscal Year 2023: \$0.3 million; 5-Year CIP: \$1.6 million)
- Park Restroom Installation (Fiscal Year 2023: \$0.4 million; 5-Year CIP: \$1.3 million)

#### Non-Recurring Projects

Significant projects in this category during the 2023-2027 CIP include improvements at various parks (Bol, Boulware, Johnson, Hoover, Ramos, Rinconada). Other investments in open space areas are also included in the CIP plan, such as phase two improvements at Rinconada Park, Golf Course Driving Range Net and Artificial Turf Replacement, and Byxbee Park Completion. Funding in the 5-Year CIP includes \$3.3 million for the Byxbee Park Completion project, which is part of the Infrastructure Plan and mostly offset with funds from park dedication impact fees.

## Streets and Sidewalks

The Streets and Sidewalks category includes projects to maintain and repair the City's streets, sidewalks, bridges, streetlights, and other related infrastructure such as curbs and gutters, medians, and thermoplastic lane markings. The 2023-2027 CIP includes funding totaling \$61.5 million in this category, with \$21.8 million allocated in Fiscal Year 2023. In 2011, the City Council increased funding for the Street Maintenance program and set a goal of raising the citywide average Pavement Condition Index (PCI) score from 72 to 85 by 2021. A PCI score of 85 represents "very good" to "excellent" pavement conditions and the goal was reached in 2018, three years earlier than anticipated. The funding level for Sidewalk Repairs was also increased to allow the Sidewalks program to eliminate its accumulation of deferred maintenance or "catch-up" work and to achieve its 1986 goal of completing work in all 23 sidewalk districts by 2016. An assessment study for sidewalk repairs was completed in early 2019 and offered suggestions for establishing goals and priorities for the sidewalk repair project moving forward. The increased funding for streets and side-

walk projects over the last decade allowed these goals to be met. It also allowed for reduced funding in Fiscal Years 2021 and 2022 to meet pandemic financial impacts and budgetary needs without greatly impacting programs. A slight reduction of the PCI score is anticipated over the next few years as a result of the funding reduction to these programs. The total funding amount of \$61.5 million for Streets and Sidewalks over the 5-Year CIP represents approximately 29.9 percent of the total Capital Improvement Fund CIP.

## Infrastructure Inventory - Summary of Streets and Sidewalks

CLASSIFICATION	QUANTITY
Streets maintained	471 lane miles
Sidewalks maintained	7.5 million square feet
Streetlights maintained	6,500
Bridges maintained	110

### Recurring Projects

There are eight recurring projects in the Streets and Sidewalks category:

- City Bridge Improvements (Fiscal Year 2023: \$0.5 million; 5-Year CIP: \$2.2 million)
- Curb and Gutter Repairs (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.7 million)
- San Francisquito Creek Joint Powers Authority Ongoing Creek Projects (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.7 million)
- Sidewalk Repairs (Fiscal Year 2023: \$1.5 million; 5-Year CIP: \$8.9 million)
- Sign Reflectivity Upgrade (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.4 million)
- Street Lights Improvements (Fiscal Year 2023: \$0.4 million; 5-Year CIP: \$1.9 million)
- Street Maintenance (Fiscal Year 2023: \$5.3 million; 5-Year CIP: \$32.5 million)
- Thermoplastic Lane Marking and Striping (Fiscal Year 2023: \$0.2 million; 5-Year CIP: \$0.6 million)

Activities for Fiscal Year 2023 under these projects consist of ongoing planned repair activities, as well as providing funding for unplanned needs that may arise. The Street Maintenance project will continue to implement its five-year plan in close coordination with Utilities and Transportation projects. With the Pavement Condition Index (PCI) goal met in 2018, the annual Street Maintenance project budget is funded at a level sufficient to maintain the new street conditions while continuing to focus on streets that have a PCI score of less than 60. The passage of SB1 for Road Maintenance and Rehabilitation provides an additional \$1.4 million annually to supplement and enhance the City’s Street Maintenance program, possibly allowing some funds to be reallocated to other capital projects with Council approval.

### Non-Recurring Projects

While most Streets and Sidewalks work is completed through recurring projects, there are non-recurring projects with activities planned for Fiscal Year 2023, such as the Street Lights Condition Assessment project, which will compile an inventory of the City’s entire lighting system to determine the best approach to prolong the life of the system; and the Newell Road/San Francisquito Creek Bridge Replacement project, which will remove and replace the Newell Road bridge over San Francisquito Creek.

### Traffic and Transportation

Projects in this category support the development and implementation of a sustainable transportation system, including walking, biking, ridesharing, transit, and other methods of non-single occupancy vehicle (SOV) transportation. Planning, design, and construction of Traffic and Transportation projects are managed jointly by the Office of Transportation and the Public Works Department. The 2023-2027 CIP includes funding totaling \$41.9 million in this category, with \$19.8 million allocated in Fiscal Year 2023. Of this amount, \$11.9 million is recommended to be reappropriated from Fiscal Year 2022 for projects continuing into Fiscal Year 2023. The Traffic and Transportation category includes the following Council Infrastructure Plan projects: Bicycle and Pedestrian Transportation Plan Implementation project; Charleston/Arastradero Corridor project; Downtown Automated Parking Guidance Systems, Access Controls & Revenue Collection Equipment project; and the Highway 101 Pedestrian/Bicycle Overpass project. These projects account for \$7.7 million or 28.0 percent of the remaining Infrastructure Plan costs. The total funding amount of \$41.9 million for Traffic and Transportation over the 5-Year CIP represents approximately 20.4 percent of the total Capital Improvement Fund CIP.

#### Recent Accomplishments

- Completed construction on the Highway 101 Pedestrian/Bicycle Overpass project.

### 2023-2027 Capital Improvement Program

#### Recurring Projects

There are five recurring projects within the Traffic and Transportation category.

- Bicycle and Pedestrian Transportation Plan Implementation (Fiscal Year 2023: \$3.1 million; 5-Year CIP: \$5.2 million)
- Parking District Implementation (Fiscal Year 2023: \$0.2; 5-Year CIP: \$1.2 million)
- Safe Routes to Schools (Fiscal Year 2023: \$0.8 million; 5-Year CIP: \$1.5 million)
- Traffic Signal and Intelligent Transportation Systems (Fiscal Year 2023: \$0.7 million; 5-Year CIP: \$4.4 million)
- Transportation and Parking Improvements (Fiscal Year 2023: \$1.4 million; 5-Year CIP: \$3.7 million)

Together, these projects improve transportation and safety and implement the Palo Alto Bicycle and Pedestrian Plan, which represents the majority of funding within this category. The Bicycle and Pedestrian Transportation Plan Implementation project provides funding for the design and construction of bicycle boulevards, enhanced bikeways, shared-use paths, bicycle parking, and a citywide bicycle sharing system. This project is part of the Infrastructure Plan, and partially funded through transfers from the Stanford University Medical Center Development Agreement Fund.

#### Non-Recurring Projects

Non-recurring projects within this category include parking, intersection, and street projects. These projects account for discrete activities such as parking signage, parking wayfinding, intersection improvements, railroad grade separation, or projects outside of the Bicycle and Pedestrian Transportation Plan such as:

- Churchill Avenue Enhanced Bikeway (Fiscal Year 2023: \$3.1 million; 5-Year CIP: \$3.1 million)
- Churchill Avenue/Alma Street Railroad Crossing (Fiscal Year 2023: \$4.3 million; 5-Year CIP: \$4.3 million)

# CAPITAL IMPROVEMENT FUND

- Quarry Road Improvements and Transit Center Access (5-Year CIP: \$2.1 million)
- Railroad Grade Separation (Fiscal Year 2022: \$3.6 million; 5-Year \$13.8 million)

## Capital Improvement Fund

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>Beginning Fund Balance</b>									
	Infrastructure Reserve - Beginning Fund Balance	58,054,246	58,054,246	34,003,575	5,895,067	3,839,088	4,092,936	6,751,475	34,003,575
	Reserve: Debt Service	0	0	2,400,000	5,000,000	5,000,000	7,400,000	7,400,000	2,400,000
	Reserve: Infrastructure Plan	105,868,237	105,868,237	0	0	0	0	0	0
	Reserve: Library Bonds Proceeds	597,817	597,817	400,367	400,367	400,367	400,367	400,367	400,367
	Reserve: Roth Building TDRs	5,146,086	5,146,086	5,146,086	0	0	0	0	5,146,086
<b>Total Beginning Fund Balance</b>		<b>169,666,387</b>	<b>169,666,387</b>	<b>41,950,029</b>	<b>11,295,435</b>	<b>9,239,456</b>	<b>11,893,204</b>	<b>14,551,843</b>	<b>41,950,029</b>
<b>General Fund Contributions</b>									
	Base General Fund Capital Transfer	2,642,000	2,642,000	8,809,000	11,776,000	14,743,000	17,711,000	18,145,000	71,184,000
	Transfer from General Fund- TOT Funding (12%)	3,354,400	3,967,400	5,470,483	6,847,601	8,034,313	8,895,288	9,166,671	38,414,356
	Transfer from General Fund- TOT Funding (3.5%)	2,554,000	3,195,000	4,256,269	5,173,420	5,988,935	6,427,851	6,624,147	28,470,622
	Interest Income	1,189,600	1,189,600	1,072,300	1,072,300	1,072,300	1,072,300	1,072,300	5,361,500
<b>Total General Fund Contributions</b>		<b>\$9,731,000</b>	<b>\$10,994,000</b>	<b>\$19,608,052</b>	<b>\$24,869,321</b>	<b>\$29,838,548</b>	<b>\$34,106,439</b>	<b>\$35,008,118</b>	<b>\$143,430,478</b>
<b>SOURCE OF FUNDS</b>									
<b>Revenue from Other Agencies</b>									
<b>FD-21000</b>	Automated External Defibrillator Replacement	38,000	38,000	0	0	0	0	0	0
<b>PL-20000</b>	Churchill Avenue/Alma Street Railroad Crossing Safety Improvements	3,996,000	150,100	3,845,900	0	0	0	0	3,845,900
<b>PE-17010</b>	Civic Center Electrical Upgrade & EV Charger Installation	240,000	0	240,000	0	0	0	0	240,000
<b>FD-22000</b>	Extrication Tool Replacement	42,700	42,700	0	0	0	0	0	0
<b>PE-11011</b>	Highway 101 Pedestrian/Bicycle Overpass Project	2,407,648	2,407,648	0	0	0	0	0	0
<b>PL-17001</b>	Railroad Grade Separation and Safety Improvements	500,000	500,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
<b>PF-23001</b>	Roth Building Rehabilitation Phase 1	0	0	1,100,000	0	0	0	0	1,100,000
<b>PL-00026</b>	Safe Routes To School	459,677	0	0	0	0	0	0	0
<b>PE-86070</b>	Street Maintenance	965,000	965,000	465,000	465,000	465,000	465,000	465,000	2,325,000
<b>PL-05030</b>	Traffic Signal and Intelligent Transportation Systems	1,000,000	500,000	300,000	300,000	300,000	300,000	300,000	1,500,000
<b>PL-12000</b>	Transportation and Parking Improvements	0	0	500,000	0	0	0	0	500,000
<b>Revenue from Other Agencies Total</b>		<b>\$9,649,025</b>	<b>\$4,603,448</b>	<b>\$7,450,900</b>	<b>\$1,765,000</b>	<b>\$1,765,000</b>	<b>\$1,765,000</b>	<b>\$1,765,000</b>	<b>\$14,510,900</b>
<b>Revenue from the Federal Government</b>									
<b>AC-18001</b>	JMZ Renovation	332,100	332,100	0	0	0	0	0	0
<b>Revenue from the Federal Government Total</b>		<b>\$332,100</b>	<b>\$332,100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

# CAPITAL IMPROVEMENT FUND

## Capital Improvement Fund *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>Revenue from the State of California</b>									
PE-12011	Newell Road/San Francisquito Creek Bridge Replacement	608,330	608,330	12,500,000	0	0	0	0	12,500,000
<b>Revenue from the State of California Total</b>		<b>\$608,330</b>	<b>\$608,330</b>	<b>\$12,500,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$12,500,000</b>
<b>Transfer from Community Center Impact Fee Fund</b>									
PE-08001	Rinconada Park Improvements	0	0	(1,650,000)	0	0	0	0	(1,650,000)
PF-23001	Roth Building Rehabilitation Phase 1	0	0	1,650,000	0	0	0	0	1,650,000
<b>Transfer from Community Center Impact Fee Fund Total</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Transfer from Electric Fund</b>									
PF-01003	Building Systems Improvements	0	0	500,000	0	0	0	0	500,000
PE-20002	City Facilities Assessment	29,887	29,887	0	0	0	0	0	0
PF-23000	Electric Charger Infrastructure Installation	0	0	280,000	0	0	0	0	280,000
PE-11011	Highway 101 Pedestrian/Bicycle Overpass Project	10,255	10,255	0	0	0	0	0	0
<b>Transfer from Electric Fund Total</b>		<b>\$40,142</b>	<b>\$40,142</b>	<b>\$780,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$780,000</b>
<b>Transfer from Fiber Optics Fund</b>									
PE-11011	Highway 101 Pedestrian/Bicycle Overpass Project	54,290	54,290	0	0	0	0	0	0
<b>Transfer from Fiber Optics Fund Total</b>		<b>\$54,290</b>	<b>\$54,290</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Transfer from Gas Tax Fund</b>									
PE-13011	Charleston/Arastradero Corridor Project	1,300,000	1,300,000	0	0	0	0	0	0
PL-00026	Safe Routes To School	100,000	100,000	100,000	100,000	100,000	100,000	100,000	500,000
PE-86070	Street Maintenance	1,192,117	1,192,117	3,080,200	3,080,200	3,080,200	3,080,200	3,080,200	15,401,000
<b>Transfer from Gas Tax Fund Total</b>		<b>\$2,592,117</b>	<b>\$2,592,117</b>	<b>\$3,180,200</b>	<b>\$3,180,200</b>	<b>\$3,180,200</b>	<b>\$3,180,200</b>	<b>\$3,180,200</b>	<b>\$15,901,000</b>
<b>Transfer from Library Development Impact Fee Fund</b>									
LB-21000	Library Automated Material Handling	350,000	0	540,000	0	0	0	0	540,000
PF-23001	Roth Building Rehabilitation Phase 1	0	0	300,000	0	0	0	0	300,000
<b>Transfer from Library Development Impact Fee Fund Total</b>		<b>\$350,000</b>	<b>\$0</b>	<b>\$840,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$840,000</b>
<b>Transfer from Parks Dedication Fund</b>									
PE-17005	Boulware Park Improvements	1,100,000	0	1,100,000	0	0	0	0	1,100,000
PE-18006	Byxbee Park Completion	2,400,000	0	0	2,850,000	0	0	0	2,850,000
PE-08001	Rinconada Park Improvements	0	0	1,650,000	0	0	0	0	1,650,000
<b>Transfer from Parks Dedication Fund Total</b>		<b>\$3,500,000</b>	<b>\$0</b>	<b>\$2,750,000</b>	<b>\$2,850,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,600,000</b>
<b>Transfer from Parks Development Impact Fee Fund</b>									
PE-17005	Boulware Park Improvements	400,000	0	400,000	0	0	0	0	400,000
PG-18001	Dog Park Installation and Renovation	150,000	5,500	144,500	150,000	0	150,000	0	444,500
PG-19000	Park Restroom Installation	350,000	13,300	336,700	350,000	0	350,000	0	1,036,700
PE-08001	Rinconada Park Improvements	0	0	400,000	0	0	0	0	400,000



# CAPITAL IMPROVEMENT FUND

## Capital Improvement Fund *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
PF-23001	Roth Building Rehabilitation Phase 1	0	0	350,000	0	0	0	0	350,000
<b>Transfer from Parks Development Impact Fee Fund Total</b>		<b>\$900,000</b>	<b>\$18,800</b>	<b>\$1,631,200</b>	<b>\$500,000</b>	<b>\$0</b>	<b>\$500,000</b>	<b>\$0</b>	<b>\$2,631,200</b>
<b>Transfer from Refuse Fund</b>									
PF-16006	Municipal Service Center Lighting, Mechanical, and Electrical Improvements	27,000	0	27,000	0	0	0	0	27,000
<b>Transfer from Refuse Fund Total</b>		<b>\$27,000</b>	<b>\$0</b>	<b>\$27,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$27,000</b>
<b>Transfer from Stanford University Medical Ctr Fund</b>									
PL-04010	Bicycle and Pedestrian Transportation Plan Implementation	0	0	2,400,000	0	0	0	0	2,400,000
PE-13011	Charleston/Arastradero Corridor Project	1,200,000	1,200,000	0	0	0	0	0	0
PE-18004	Fire Station 4 Replacement	750,000	750,000	0	3,325,000	4,075,000	0	0	7,400,000
PL-16000	Quarry Road Improvements and Transit Center Access	0	0	0	1,493,500	0	0	0	1,493,500
PL-17001	Railroad Grade Separation and Safety Improvements	500,000	500,000	0	0	0	0	0	0
PF-23001	Roth Building Rehabilitation Phase 1	0	0	2,000,000	0	0	0	0	2,000,000
PE-21004	University Avenue Streetscape Update	25,000	25,000	0	0	0	0	0	0
<b>Transfer from Stanford University Medical Ctr Fund Total</b>		<b>\$2,475,000</b>	<b>\$2,475,000</b>	<b>\$4,400,000</b>	<b>\$4,818,500</b>	<b>\$4,075,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,293,500</b>
<b>Transfer from Traffic Impact Fee Fund</b>									
PL-05030	Traffic Signal and Intelligent Transportation Systems	395,000	395,000	395,000	395,000	395,000	395,000	395,000	1,975,000
<b>Transfer from Traffic Impact Fee Fund Total</b>		<b>\$395,000</b>	<b>\$395,000</b>	<b>\$395,000</b>	<b>\$395,000</b>	<b>\$395,000</b>	<b>\$395,000</b>	<b>\$395,000</b>	<b>\$1,975,000</b>
<b>Transfer from University Ave Parking In Lieu Fund</b>									
PE-15007	New Downtown Parking Garage	0	0	5,541,000	0	0	0	0	5,541,000
<b>Transfer from University Ave Parking In Lieu Fund Total</b>		<b>\$0</b>	<b>\$0</b>	<b>\$5,541,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,541,000</b>
<b>Transfer from University Ave Parking Permit Fund</b>									
PF-14003	University Avenue Parking Improvements	187,400	187,400	0	0	0	87,000	247,000	334,000
<b>Transfer from University Ave Parking Permit Fund Total</b>		<b>\$187,400</b>	<b>\$187,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$87,000</b>	<b>\$247,000</b>	<b>\$334,000</b>
<b>Transfer from Utilities Administration Fund</b>									
PF-01003	Building Systems Improvements	200,000	0	0	0	0	0	0	0
PF-02022	Facility Interior Finishes Replacement	169,000	169,000	0	0	0	0	206,000	206,000
PF-16006	Municipal Service Center Lighting, Mechanical, and Electrical Improvements	972,000	0	972,000	0	0	0	0	972,000
PE-19001	Water, Gas, Wastewater Office Remodel	654,000	84,000	570,000	0	0	0	0	570,000
<b>Transfer from Utilities Administration Fund Total</b>		<b>\$1,995,000</b>	<b>\$253,000</b>	<b>\$1,542,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$206,000</b>	<b>\$1,748,000</b>
<b>Transfer from Vehicle Replacement and Maintenance</b>									
PF-02022	Facility Interior Finishes Replacement	0	0	0	0	0	166,500	0	166,500
PF-16006	Municipal Service Center Lighting, Mechanical, and Electrical Improvements	540,000	0	540,000	0	0	0	0	540,000
<b>Transfer from Vehicle Replacement and Maintenance Total</b>		<b>\$540,000</b>	<b>\$0</b>	<b>\$540,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$166,500</b>	<b>\$0</b>	<b>\$706,500</b>
<b>Total Sources</b>		<b>\$203,042,791</b>	<b>\$192,220,014</b>	<b>\$103,135,381</b>	<b>\$49,673,456</b>	<b>\$48,493,204</b>	<b>\$52,093,343</b>	<b>\$55,353,161</b>	<b>\$261,768,607</b>

# CAPITAL IMPROVEMENT FUND

## Capital Improvement Fund *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>USE OF FUNDS</b>									
<b>Administration</b>									
<b>AS-10000</b>	Capital Improvement Fund Administration	1,033,507	971,725	710,700	1,110,800	1,210,800	1,310,800	1,410,800	5,753,900
<b>Administration Total</b>		<b>\$1,033,507</b>	<b>\$971,725</b>	<b>\$710,700</b>	<b>\$1,110,800</b>	<b>\$1,210,800</b>	<b>\$1,310,800</b>	<b>\$1,410,800</b>	<b>\$5,753,900</b>
<b>Buildings and Facilities</b>									
<b>PF-93009</b>	Americans With Disabilities Act Compliance	800,328	362,328	774,900	424,200	498,300	541,200	657,200	2,895,800
<b>PE-19002</b>	Animal Shelter Renovation	1,259,647	341,947	991,100	0	0	0	0	991,100
<b>PE-14018</b>	Baylands Boardwalk Improvements	8,630	0	0	0	0	0	0	0
<b>PF-01003</b>	Building Systems Improvements	1,060,734	960,734	1,165,800	565,700	391,500	270,600	328,600	2,722,200
<b>PE-20002</b>	City Facilities Assessment	329,889	329,889	0	0	0	0	0	0
<b>PE-09003</b>	City Facility Parking Lot Maintenance	346,938	147,938	247,400	247,400	355,900	263,800	292,100	1,406,600
<b>PE-12017</b>	City Hall First Floor Renovations	2	0	0	0	0	0	0	0
<b>PE-19000</b>	City Hall Space Planning	626,200	51,200	616,400	0	0	0	0	616,400
<b>PE-17010</b>	Civic Center Electrical Upgrade & EV Charger Installation	600,775	115,375	816,500	0	0	0	0	816,500
<b>PE-18016</b>	Civic Center Fire Life Safety Upgrades	451,407	246,307	222,900	0	0	0	0	222,900
<b>PE-15020</b>	Civic Center Waterproofing Study and Repairs	648,018	347,018	331,200	0	0	0	0	331,200
<b>PF-23000</b>	Electric Charger Infrastructure Installation	0	0	310,900	0	0	0	0	310,900
<b>PF-02022</b>	Facility Interior Finishes Replacement	749,959	546,159	504,500	523,200	363,100	484,400	550,600	2,425,800
<b>PE-15003</b>	Fire Station 3 Replacement	730,769	815,998	0	0	0	0	0	0
<b>PE-18004</b>	Fire Station 4 Replacement	674,589	479,589	195,000	4,575,000	4,625,000	0	0	9,395,000
<b>FD-24000</b>	Fire Training Facility Replacement	0	0	0	70,700	0	0	0	70,700
<b>PE-18002</b>	High and Bryant Street Garages Waterproofing and Repairs	27,372	27,372	0	0	0	0	0	0
<b>AC-18001</b>	JMZ Renovation	1,935,121	655,921	1,279,200	0	0	0	0	1,279,200
<b>LB-21000</b>	Library Automated Material Handling	737,603	162,510	846,693	0	0	0	0	846,693
<b>PF-17000</b>	Municipal Service Center A, B, & C Roof Replacement	2,049,533	1,777,019	131,000	0	0	0	0	131,000
<b>PF-16006</b>	Municipal Service Center Lighting, Mechanical, and Electrical Improvements	6,498,914	632,814	6,496,700	0	0	0	0	6,496,700
<b>PE-18000</b>	New California Avenue Area Parking Garage	1,747,184	932,784	844,400	0	0	0	0	844,400
<b>PE-15007</b>	New Downtown Parking Garage	10,605	0	5,748,600	0	0	0	0	5,748,600
<b>PE-15001</b>	New Public Safety Building	102,892,674	102,892,674	400,000	0	0	0	0	400,000
<b>AC-18000</b>	Performing Arts Venues Seat Replacement	427,200	427,200	50,000	650,000	0	0	0	700,000
<b>PF-00006</b>	Roofing Replacement	910,745	810,745	1,423,000	379,000	1,708,500	1,780,500	885,100	6,176,100
<b>PF-23001</b>	Roth Building Rehabilitation Phase 1	0	0	11,000,000	0	0	0	0	11,000,000
<b>PF-14003</b>	University Avenue Parking Improvements	252,935	152,935	111,000	0	0	117,700	360,800	589,500
<b>PE-19001</b>	Water, Gas, Wastewater Office Remodel	717,206	717,206	62,900	0	0	0	0	62,900
<b>Buildings and Facilities Total</b>		<b>\$126,494,977</b>	<b>\$113,933,662</b>	<b>\$34,570,093</b>	<b>\$7,435,200</b>	<b>\$7,942,300</b>	<b>\$3,458,200</b>	<b>\$3,074,400</b>	<b>\$56,480,193</b>

# CAPITAL IMPROVEMENT FUND

## Capital Improvement Fund *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>Department Technology Upgrades and Improvements</b>									
FD-21000	Automated External Defibrillator Replacement	217,801	185,715	0	0	0	0	0	0
FD-22000	Extrication Tool Replacement	298,200	180,013	118,187	0	0	0	0	118,187
PD-20000	Police Video Recording Systems Replacement	245,600	230,600	133,200	0	187,900	0	271,700	592,800
<b>Department Technology Upgrades and Improvements Total</b>		<b>\$761,601</b>	<b>\$596,328</b>	<b>\$251,387</b>	<b>\$0</b>	<b>\$187,900</b>	<b>\$0</b>	<b>\$271,700</b>	<b>\$710,987</b>
<b>Parks and Open Space</b>									
AC-86017	Art In Public Spaces	2,162,806	685,606	2,004,800	196,800	163,400	150,300	88,700	2,604,000
PG-06001	Athletic Courts Resurfacing	323,843	248,043	314,500	304,000	313,800	305,600	338,100	1,576,000
PG-19001	Baylands Athletic Center 10.5 Acre Expansion Plan	139	0	0	0	0	0	0	0
PG-17000	Baylands Comprehensive Conservation Plan	43,055	35,955	7,100	0	0	0	0	7,100
OS-09002	Baylands Levee Repair for Public Safety Access	0	0	0	0	0	389,600	0	389,600
PG-06003	Benches, Signage, Walkways, Perimeter Landscaping, and Site Amenities	278,079	278,079	194,300	247,500	255,400	248,800	275,300	1,221,300
PE-16000	Bol Park Improvements	0	0	0	0	0	0	797,500	797,500
PE-25000	Bol Park Pathway Repaving and Repair	0	0	0	0	222,100	1,170,300	0	1,392,400
PE-17005	Boulware Park Improvements	3,720,833	596,833	3,468,600	0	0	0	0	3,468,600
PE-18006	Byxbee Park Completion	2,881,146	0	0	3,331,000	0	0	0	3,331,000
PG-14002	Cameron Park Improvements	108,754	7,254	101,500	0	0	0	0	101,500
PG-18001	Dog Park Installation and Renovation	163,400	18,900	161,000	212,100	0	202,900	0	576,000
OS-18000	Foothills Nature Preserve Boronda Lake Dock Replacement	210,000	0	233,200	0	0	0	0	233,200
PE-20000	Foothills Nature Preserve Dam Seepage Investigation and Repairs	0	0	33,300	0	0	0	0	33,300
PE-21000	Foothills Nature Preserve Improvements	0	0	555,200	459,600	0	2,272,900	0	3,287,700
PG-18000	Golf Course Net and Artificial Turf Replacement	0	0	854,900	0	0	0	0	854,900
PG-13003	Golf Reconfiguration & Baylands Athletic Center Improvements	200,000	0	200,000	0	0	0	0	200,000
PG-21000	Heritage Park Site Amenities Replacement	0	0	0	0	185,100	0	0	185,100
PE-18012	Hoover Park Improvements	0	0	0	0	0	0	1,372,900	1,372,900
PE-21002	Johnson Park Renovation	0	0	0	261,600	1,806,800	0	0	2,068,400
PE-21003	Magical Bridge Playground Rubber and Synthetic Turf Resurfacing	855,303	692,303	163,000	0	0	0	0	163,000
PE-18010	Mitchell Park Improvements	0	0	0	0	307,500	1,236,600	0	1,544,100
OS-09001	Off-Road Pathway Resurfacing And Repair	335,953	278,953	168,000	141,400	148,100	146,100	163,600	767,200
OS-00002	Open Space Lakes And Pond Maintenance	92,500	92,500	50,000	63,600	65,800	64,000	70,800	314,200
OS-00001	Open Space Trails and Amenities	236,116	223,116	207,300	247,500	255,400	248,800	275,300	1,234,300
PG-09002	Park and Open Space Emergency Repairs	198,653	115,353	305,400	318,200	328,300	319,800	353,900	1,625,600
PG-19000	Park Restroom Installation	446,438	120,138	363,800	494,900	0	473,500	0	1,332,200
PE-21001	Pearson Arastradero Improvement Project	0	0	0	0	0	36,500	410,400	446,900
PG-14001	Peers Park Improvements	0	0	0	289,900	0	0	0	289,900

# CAPITAL IMPROVEMENT FUND

## Capital Improvement Fund *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>PG-14000</b>	Ramos Park Improvements	17,361	8,461	308,900	0	0	0	0	308,900
<b>PE-08001</b>	Rinconada Park Improvements	2,141,879	2,141,879	444,100	353,500	1,423,800	3,822,000	0	6,043,400
<b>PE-18015</b>	Robles Park Improvements	0	0	749,500	0	0	0	0	749,500
<b>PG-14003</b>	Seale Park Improvements	0	0	0	0	469,800	0	0	469,800
<b>PG-22000</b>	Werry Park Playground Improvements	0	0	0	141,400	0	0	0	141,400
<b>Parks and Open Space Total</b>		<b>\$14,416,258</b>	<b>\$5,543,373</b>	<b>\$10,888,400</b>	<b>\$7,063,000</b>	<b>\$5,945,300</b>	<b>\$11,087,700</b>	<b>\$4,146,500</b>	<b>\$39,130,900</b>
<b>Streets and Sidewalks</b>									
<b>PE-17004</b>	California Avenue District Gateway Signs	130,328	130,328	0	0	0	0	0	0
<b>PE-20001</b>	City Bridge Improvements	223,401	153,401	503,000	176,800	481,200	511,400	574,000	2,246,400
<b>PO-12001</b>	Curb and Gutter Repairs	285,240	273,640	122,600	141,400	148,100	146,100	163,600	721,800
<b>PE-12011</b>	Newell Road/San Francisquito Creek Bridge Replacement	3,635,166	1,506,166	13,397,500	0	0	0	0	13,397,500
<b>PE-22000</b>	San Francisquito Creek Joint Powers Authority Ongoing Creek Projects	61,000	61,000	113,900	145,100	146,100	138,800	149,900	693,800
<b>PO-89003</b>	Sidewalk Repairs	656,717	591,717	1,452,900	1,767,700	1,850,900	1,761,500	2,053,500	8,886,500
<b>PO-11000</b>	Sign Reflectivity Upgrade	117,320	70,320	106,400	70,700	71,200	67,600	73,000	388,900
<b>PE-13014</b>	Street Lights Condition Assessment	0	0	244,300	0	0	0	0	244,300
<b>PO-05054</b>	Street Lights Improvements	187,400	187,400	388,600	353,500	370,200	365,300	410,400	1,888,000
<b>PE-86070</b>	Street Maintenance	5,605,820	5,291,820	5,274,700	6,318,000	6,737,300	6,657,800	7,475,100	32,462,900
<b>PO-11001</b>	Thermoplastic Lane Marking and Striping	153,332	75,332	166,800	106,100	106,800	101,500	109,500	590,700
<b>Streets and Sidewalks Total</b>		<b>\$11,055,724</b>	<b>\$8,341,124</b>	<b>\$21,770,700</b>	<b>\$9,079,300</b>	<b>\$9,911,800</b>	<b>\$9,750,000</b>	<b>\$11,009,000</b>	<b>\$61,520,800</b>
<b>Traffic and Transportation</b>									
<b>PL-04010</b>	Bicycle and Pedestrian Transportation Plan Implementation	791,271	791,271	3,050,000	2,100,000	0	0	0	5,150,000
<b>PL-23000</b>	California Avenue Streetscape Update	0	0	111,000	0	0	0	0	111,000
<b>PE-13011</b>	Charleston/Arastradero Corridor Project	7,652,611	7,652,611	0	0	0	0	0	0
<b>PL-14000</b>	Churchill Avenue Enhanced Bikeway	3,400,377	624,277	3,082,300	0	0	0	0	3,082,300
<b>PL-20000</b>	Churchill Avenue/Alma Street Railroad Crossing Safety Improvements	4,572,531	726,631	4,270,100	0	0	0	0	4,270,100
<b>PL-15002</b>	Downtown Automated Parking Guidance Systems, Access Controls & Revenue Collection Equip.	2,517,121	98,021	2,519,100	0	0	0	0	2,519,100
<b>PL-15004</b>	Downtown Parking Wayfinding	42,096	0	0	0	0	0	0	0
<b>PL-19000</b>	Emergency Vehicle Traffic Signal Preemption System Pilot	199,900	199,900	0	0	0	0	0	0
<b>PE-11011</b>	Highway 101 Pedestrian/Bicycle Overpass Project	4,828,873	4,828,873	0	0	0	0	0	0
<b>PL-15003</b>	Parking District Implementation	0	0	182,000	238,700	247,600	242,300	273,700	1,184,300
<b>PL-16002</b>	Parking Management and System Implementation	625,794	515,794	110,000	0	0	0	0	110,000
<b>PL-16000</b>	Quarry Road Improvements and Transit Center Access	0	0	0	2,112,000	0	0	0	2,112,000
<b>PL-17001</b>	Railroad Grade Separation and Safety Improvements	2,359,970	1,214,107	3,583,163	2,298,700	2,135,700	2,705,900	3,055,500	13,778,963

# CAPITAL IMPROVEMENT FUND

## Capital Improvement Fund *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
PL-00026	Safe Routes To School	1,249,434	549,434	849,900	190,900	142,400	139,400	157,400	1,480,000
PL-05030	Traffic Signal and Intelligent Transportation Systems	1,327,470	827,470	673,300	896,700	929,900	910,100	1,027,800	4,437,800
PL-12000	Transportation and Parking Improvements	735,260	300,357	1,406,403	530,300	572,400	560,300	632,600	3,702,003
PE-21004	University Avenue Streetscape Update	175,000	175,000	0	0	0	0	0	0
<b>Traffic and Transportation Total</b>		<b>\$30,435,612</b>	<b>\$18,503,746</b>	<b>\$19,837,266</b>	<b>\$8,367,300</b>	<b>\$4,028,000</b>	<b>\$4,558,000</b>	<b>\$5,147,000</b>	<b>\$41,937,566</b>
<b>Total Capital Project Expenses</b>		<b>\$184,239,775</b>	<b>\$147,889,958</b>	<b>\$88,028,546</b>	<b>\$33,055,600</b>	<b>\$29,226,100</b>	<b>\$30,164,700</b>	<b>\$25,059,400</b>	<b>\$205,534,346</b>
<b>Transfers to Other Funds</b>									
	Transfer to Debt Service Fund (California Avenue Garage)	2,380,000	2,380,000	2,375,000	2,370,000	2,365,000	2,368,000	2,364,000	11,842,000
	Transfer to Debt Service Fund (Public Safety Building)	0	0	1,463,400	5,008,400	5,008,900	5,008,800	5,007,700	21,470,200
<b>Total Transfers to Other Funds</b>		<b>\$2,380,000</b>	<b>\$2,380,000</b>	<b>\$3,811,400</b>	<b>\$7,378,400</b>	<b>\$7,373,900</b>	<b>\$7,376,800</b>	<b>\$7,371,700</b>	<b>\$33,312,200</b>
<b>Total Expenses</b>		<b>\$186,619,775</b>	<b>\$150,269,958</b>	<b>\$91,839,946</b>	<b>\$40,434,000</b>	<b>\$36,600,000</b>	<b>\$37,541,500</b>	<b>\$32,431,100</b>	<b>\$238,846,546</b>
<b>Reserves</b>									
	Reserve: Debt Service	2,400,000	2,400,000	5,000,000	5,000,000	7,400,000	7,400,000	7,400,000	7,400,000
	Reserve: Infrastructure Plan	0	0	0	0	0	0	0	0
	Reserve: Library Bonds Proceeds	400,367	400,367	400,367	400,367	400,367	400,367	400,367	400,367
	Reserve: Roth Building TDRs	5,146,086	5,146,086	0	0	0	0	0	0
<b>Total Reserves</b>		<b>\$7,946,453</b>	<b>\$7,946,453</b>	<b>\$5,400,367</b>	<b>\$5,400,367</b>	<b>\$7,800,367</b>	<b>\$7,800,367</b>	<b>\$7,800,367</b>	<b>\$7,800,367</b>
<b>Total Ending Fund Balance - Infrastructure Reserve</b>		<b>\$8,476,563</b>	<b>\$34,003,575</b>	<b>\$5,895,067</b>	<b>\$3,839,088</b>	<b>\$4,092,836</b>	<b>\$6,751,475</b>	<b>\$15,121,693</b>	<b>\$15,121,693</b>
<b>Total Uses</b>		<b>\$203,042,791</b>	<b>\$192,220,014</b>	<b>\$103,135,381</b>	<b>\$49,673,456</b>	<b>\$48,493,204</b>	<b>\$52,093,343</b>	<b>\$55,353,161</b>	<b>\$261,768,607</b>



CITY OF  
**PALO  
ALTO**



# City of Palo Alto

## 2023—2027 Capital Improvement Program, General Fund

### BUILDINGS AND FACILITIES

- 1 PE-19002 Animal Shelter Renovation
- 2 PE-19000 City Hall Space Planning
- 3 PE-17010 Civic Center Electrical Upgrade & EV Charger Installation
- 4 PE-18016 Civic Center Fire Life Safety Upgrades
- 5 PE-15020 Civic Center Waterproofing Study and Repairs
- 6 PE-18004 Fire Station 4 Replacement
- 7 FD-24000 Fire Training Facility Replacement
- 8 AC-18001 JMZ Renovation
- 9 PF-17000 Municipal Service Center A, B, & C Roof Replacement
- 10 PF-16006 Municipal Service Center Lighting, Mechanical, and Electrical Improvements
- 11 PE-18000 New California Avenue Area Parking Garage
- 12 PE-15007 New Downtown Parking Garage
- 13 PE-15001 New Public Safety Building
- 14 AC-18000 Performing Arts Venues Seat Replacement
- 15 PF-23001 Roth Building Rehabilitation Phase 1
- 16 PF-14003 University Avenue Parking Improvements
- 17 PE-19001 Water, Gas, Wastewater Office Remodel

#### Projects in various locations not shown on the map

- 18 PF-93009 Americans With Disabilities Act Compliance
- 19 PF-01003 Building Systems Improvements
- 20 PE-09003 City Facility Parking Lot Maintenance
- 21 PF-23000 Electric Charger Infrastructure Installation
- 22 PF-02022 Facility Interior Finishes Replacement
- 23 LB-21000 Library Automated Material Handling
- 24 PF-00006 Roofing Replacement

### PARKS AND OPEN SPACE

- 1 PG-17000 Baylands Comprehensive Conservation Plan
- 2 OS-09002 Baylands Levee Repair for Public Safety Access
- 3 PE-16000 Bol Park Improvements
- 4 PE-25000 Bol Park Pathway Repaving and Repair
- 5 PE-17005 Boulware Park Improvements
- 6 PE-18006 Byxbee Park Completion
- 7 PG-14002 Cameron Park Improvements
- 8 OS-18000 Foothills Nature Preserve Boronda Lake Dock Replacement
- 9 PE-21000 Foothills Nature Preserve Improvement Project
- 10 PE-20000 Foothills Park Dam Seepage Investigation and Repairs
- 11 PG-18000 Golf Course Net and Artificial Turf Replacement
- 12 PG-13003 Golf Reconfiguration & Baylands Athletic Center Improvements
- 13 PG-21000 Heritage Park Site Amenities Replacement
- 14 PE-18012 Hoover Park Improvements
- 15 PE-21002 Johnson Park Renovation
- 16 PE-21003 Magical Bridge Playground Rubber and Synthetic Turf Resurfacing
- 17 PE-18010 Mitchell Park Improvements
- 18 PE-21001 Pearson Arastradero Improvement Project
- 19 PG-14001 Peers Park Improvements
- 20 PG-14000 Ramos Park Improvements
- 21 PE-08001 Rinconada Park Improvements
- 22 PE-18015 Robles Park Improvements
- 23 PG-14003 Seale Park Improvements
- 24 PG-22000 Werry Park Playground Improvements

#### Projects in various locations not shown on the map

- 25 AC-86017 Art In Public Spaces
- 26 PG-06001 Athletic Courts Resurfacing
- 27 PG-06003 Benches, Signage, Walkways, Perimeter Landscaping, and Site Amenities
- 28 PG-18001 Dog Park Installation and Renovation
- 29 OS-09001 Off-Road Pathway Resurfacing And Repair
- 30 OS-00002 Open Space Lakes And Pond Maintenance
- 31 OS-00001 Open Space Trails and Amenities
- 32 PG-09002 Park and Open Space Emergency Repairs
- 33 PG-19000 Park Restroom Installation

### STREETS AND SIDEWALKS

- 1 PE-12011 Newell Road/San Francisquito Creek Bridge Replacement
- #### Projects in various locations not shown on the map
- 2 PE-20001 City Bridge Improvements
  - 3 PO-12001 Curb and Gutter Repairs
  - 4 PE-22000 San Francisquito Creek JPA Ongoing Creek Projects
  - 5 PO-89003 Sidewalk Repairs
  - 6 PO-11000 Sign Reflectivity Upgrade
  - 7 PE-13014 Street Lights Condition Assessment
  - 8 PO-05054 Street Lights Improvements
  - 9 PE-86070 Street Maintenance
  - 10 PO-11001 Thermoplastic Lane Marking and Striping

### TRAFFIC AND TRANSPORTATION

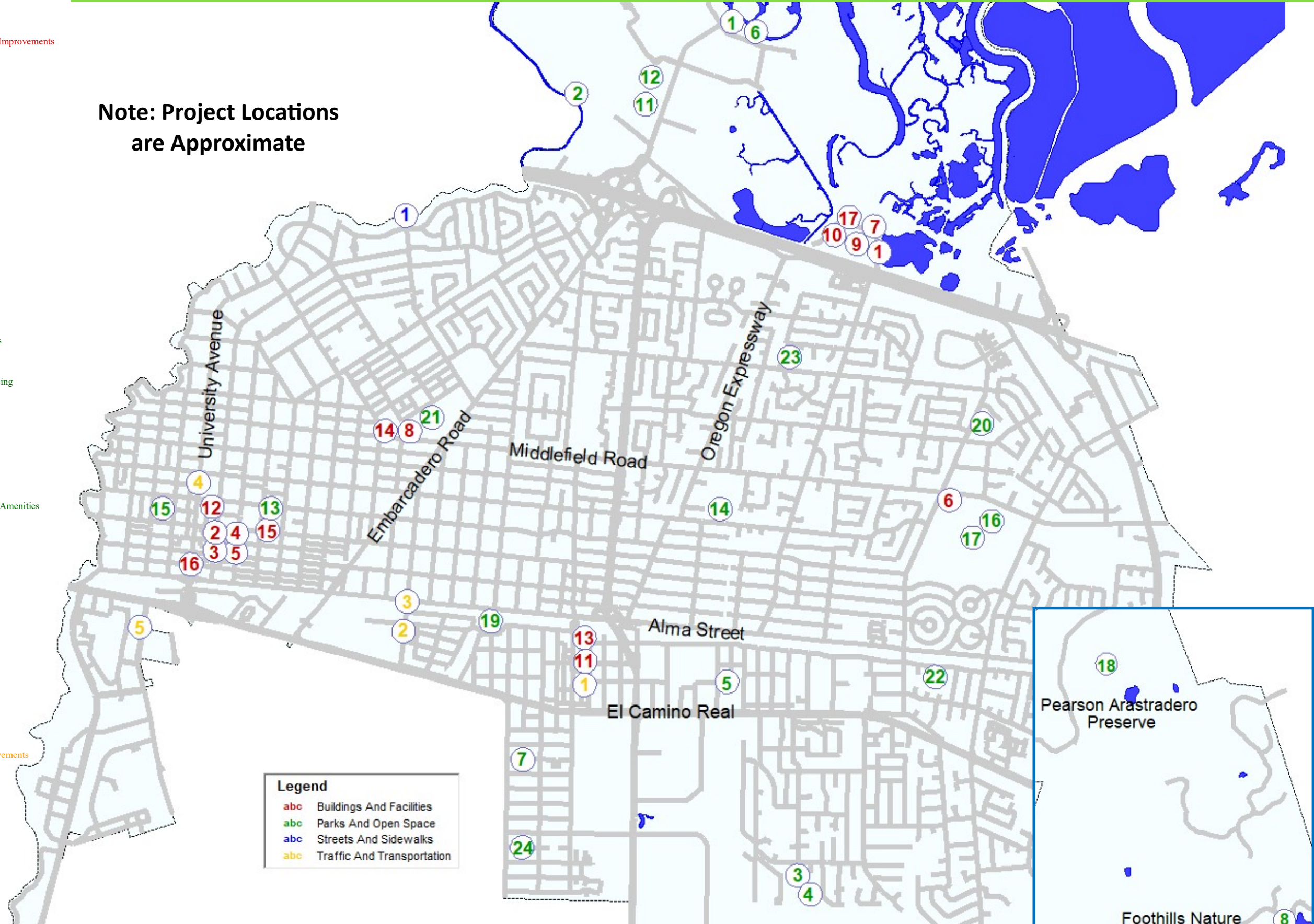
- 1 PL-23000 California Avenue Streetscape Update
  - 2 PL-14000 Churchill Avenue Enhanced Bikeway
  - 3 PL-20000 Churchill Avenue/Alma Street Railroad Crossing Safety Improvements
  - 4 PL-15002 Downtown Automated Parking Guidance Systems
  - 5 PL-16000 Quarry Road Improvements and Transit Center Access
- #### Projects in various locations not shown on the map
- 6 PL-04010 Bicycle and Pedestrian Transportation Plan Implementation
  - 7 PL-15003 Parking District Implementation
  - 8 PL-16002 Parking Management and System Implementation
  - 9 PL-17001 Railroad Grade Separation and Safety Improvements
  - 10 PL-00026 Safe Routes To School
  - 11 PL-05030 Traffic Signal and Intelligent Transportation Systems
  - 12 PL-12000 Transportation and Parking Improvements

### DEPARTMENT TECHNOLOGY UPGRADES AND IMPROVEMENTS

#### Projects in various locations not shown on the map

- 1 FD-22000 Extrication Tool Replacement
- 2 PD-20000 Police Video Recording Systems Replacement

**Note: Project Locations are Approximate**



**Legend**

- abc Buildings And Facilities
- abc Parks And Open Space
- abc Streets And Sidewalks
- abc Traffic And Transportation



CITY OF  
**PALO  
ALTO**



# Administration

## CAPITAL IMPROVEMENT FUND



Capital Management Team

**Fund:** Capital Improvement Fund  
**Category:** Unallocated Salaries and Benefits  
**Project Location:** N/A  
**Managing Department:** Administrative Services  
**IBRC Reference:** N/A  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** AS-10000

# Capital Improvement Fund Administration

## Description

This project provides funding for estimated administrative costs, including salaries and benefits costs of City staff assigned to manage the oversight of the General Fund Capital Improvement Program (CIP).

## Justification

Administrative costs are associated with the completion of CIP projects. As such, these costs are capitalized and are added to the total costs of projects.

## Supplemental Information

Salaries and benefits have been included in CIP projects where appropriate and possible, in all fiscal years. The amounts included in this project represent salaries and benefits expense not associated with any particular project (for example, administration and oversight of the CIP process).

As part of the annual year-end process, the annually incurred amount will be allocated to all projects in the Capital Improvement Fund, on a proportional basis, and any unused balance will be returned to the Infrastructure Reserve.

## Significant Changes

**2019-2023 CIP:** Salary and benefit expenses have been allocated to capital projects in all years of the CIP. In prior years, costs were allocated only in the first year of the CIP.

# CAPITAL IMPROVEMENT FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	1,033,507	971,725	710,700	1,110,800	1,210,800	1,310,800	1,410,800	5,753,900	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,033,507</b>	<b>971,725</b>	<b>710,700</b>	<b>1,110,800</b>	<b>1,210,800</b>	<b>1,310,800</b>	<b>1,410,800</b>	<b>5,753,900</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	N/A	1,033,507	971,725	710,700	1,110,800	1,210,800	1,310,800	1,410,800	5,753,900	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,033,507</b>	<b>971,725</b>	<b>710,700</b>	<b>1,110,800</b>	<b>1,210,800</b>	<b>1,310,800</b>	<b>1,410,800</b>	<b>5,753,900</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no operating or maintenance expenses associated with this project.



CITY OF  
**PALO  
ALTO**

## Buildings and Facilities

## CAPITAL IMPROVEMENT FUND



Palo Alto Airport Terminal, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PF-93009

# Americans With Disabilities Act Compliance

## Description

This project provides funding for accessibility upgrades to City facilities and equipment. It includes continued funding for improvements such as path of travel, restroom upgrades, drinking fountains, and counters. This funding will also be utilized for other CIP project design or construction phases where accessibility improvements are identified.

## Justification

In order to comply with the Americans with Disabilities Act (ADA) of 1990 and related regulations, the City prepared a Transition Plan and Self-Evaluation Final Study that identified physical obstacles and described improvements to make facilities, programs, and services accessible. Implementation of this program is ongoing.

## Supplemental Information

The recently updated ADA Transition Plan established a schedule for accessibility upgrades to City facilities.

## Significant Changes

**2023-2027 CIP:** Continuing work on ADA Transition Plan. Projects for outer years to be determined.

**2021-2025 CIP:** Funding reduced pending Council approval of updated ADA Transition Plan.

**2020-2024 CIP:** Funding added to begin implementation of updated ADA Transition Plan that identified additional needs for City facilities.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	800,328	362,328	774,900	424,200	498,300	541,200	657,200	2,895,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>800,328</b>	<b>362,328</b>	<b>774,900</b>	<b>424,200</b>	<b>498,300</b>	<b>541,200</b>	<b>657,200</b>	<b>2,895,800</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	745,731	307,731	774,900	424,200	498,300	541,200	657,200	2,895,800	0	N/A
<b>Design</b>	N/A	54,597	54,597	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>800,328</b>	<b>362,328</b>	<b>774,900</b>	<b>424,200</b>	<b>498,300</b>	<b>541,200</b>	<b>657,200</b>	<b>2,895,800</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Efficient and Effective Service                  Delivery                  Goal: C-1                  Policy: C-1.8</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Historic Resources Board                  Planning and Transportation Commission                  Architectural Review Board</p>
--	--

## CAPITAL IMPROVEMENT FUND



City of Palo Alto Animal Shelter

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** 3281 East Bayshore Road  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2018  
**Initial Project Completion:** Winter 2018  
**Revised Project Start:** N/A  
**Revised Project Completion:** Summer 2023  
**Project Number:** PE-19002

# Animal Shelter Renovation

## Description

This project provides funding for interim facility improvements to the Animal Shelter that accompany operation of the shelter by a contractor. The improvements include expanding and remodeling the medical suite to provide a new 900 square foot modular building for office space, public educational programs, and expanded kennels.

## Justification

The Animal Shelter, built in 1972, is outdated and does not meet modern standards for medical care. Fundraising for construction of a new, modern animal shelter will be needed but interim improvements to the current shelter are required for Pets In Need to successfully operate the facility.

## Significant Changes

**2023-2027 CIP:** The current agreement with Pets in Need is in the process of being renegotiated. The new agreement will focus on priority improvements as well as fundraising plans for additional costs.

**2020-2024 CIP:** The agreement with Pets In Need was approved by Council in November 2018 and included an increase of \$2.8 million in this project. This project was originally intended to fund work managed by Pets In Need but the work will now be managed by Public Works.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	2,708,119	1,259,647	341,947	991,100	0	0	0	0	991,100	0	4,041,166
<b>Total</b>	<b>2,708,119</b>	<b>1,259,647</b>	<b>341,947</b>	<b>991,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>991,100</b>	<b>0</b>	<b>4,041,166</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	2,708,109	1,259,647	341,947	991,100	0	0	0	0	991,100	0	4,041,156
<b>Total</b>	<b>2,708,109</b>	<b>1,259,647</b>	<b>341,947</b>	<b>991,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>991,100</b>	<b>0</b>	<b>4,041,156</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. At this time it is assumed that maintenance costs at the facility will be covered by Pets In Need as part of a renegotiated agreement with the City.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
--	--

## CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PF-01003

AC gas package unit Municipal Services Center Building C, January 2015

# Building Systems Improvements

## Description

This project provides funding for electrical, mechanical, plumbing, structural, and security upgrades as required at various City facilities. Upgrades may include main and emergency power sources, light fixtures, fire alarm systems, heating and ventilation equipment, Building Management System (BMS) controls, structural reinforcements or repair, security card access, and camera systems.

## Justification

This project provides funding for system upgrades in facilities with systems that are overloaded or no longer efficient. Heating and air-conditioning units in many older buildings are at the end of their useful life and require replacement. BMS control systems in some facilities are outdated and have limited or no vendor support. Structural systems have become damaged or fatigued due to heavier equipment requirements or increased loading. Increased security for facilities and IT network systems require the installation of card access and camera systems. This project also provides funding for replacement of unforeseen equipment failures. While upgrading equipment, staff selects the most energy efficient options, including premium efficiency motors, and incorporates the use of energy saving technologies, such as variable frequency drives, whenever possible.

## Supplemental Information

The Department of Public Works uses a computerized asset management tracking software to assist in identifying the maintenance and replacement needs addressed through this project. Upcoming work includes:

**Fiscal Year 2023:** Replace City Hall fire pump control system. Replace emergency generator, generator transfer switch, and fuel storage tank at Utility Control Center (UCC). Re-plaster Rinconada Lap Pool and Kiddie Pool.

# CAPITAL IMPROVEMENT FUND

**Fiscal Year 2024:** Replace BMS controls for Lucie Stern Community Theater. Replace fill media in the City Hall cooling tower. Install new stationary generator at Fire Station #8.

**Fiscal Year 2025:** Replace electrical panel boards at Fire Station #5. Replace domestic water control system at City Hall.

**Fiscal Year 2026:** Upgrade LED lighting in City parks. Replace roof top furnaces, exhaust fans, and dehumidifiers.

**Fiscal Year 2027:** Replace electrical panels at the Golf Club House and Cafe.

## Significant Changes

**2023-2027 CIP:** All projects are delayed by one year, and the re-plastering of Rinconada Lap Pool and Kid-die Pool was added to FY 2023.

**2022-2026 CIP:** Staff vacancies have delayed all programmed projects by one year including lighting for Tennis/Pickle Ball Courts which was extended to FY 2022 and UCC generator added to FY 2022 resulting in an increase of funding needed. Cost estimates for planned work have been adjusted for accuracy based on other similar recent bids received.

**2021-2025 CIP:** Funding was reduced as part of the FY 2021 Capital Improvement Program budget strategy and all programmed projects have been delayed a year.

**2020-2024 CIP:** All programmed projects were pushed out a year since FY 2019 funding was needed for a new chiller located at City Hall.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Capital Improvement Fund	N/A	860,734	960,734	665,800	565,700	391,500	270,600	328,600	2,222,200	0	N/A
Transfer from Electric Fund	N/A	0	0	500,000	0	0	0	0	500,000	0	N/A
Transfer from Utilities Administration Fund	N/A	200,000	0	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,060,734</b>	<b>960,734</b>	<b>1,165,800</b>	<b>565,700</b>	<b>391,500</b>	<b>270,600</b>	<b>328,600</b>	<b>2,722,200</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	N/A	1,025,204	925,204	1,165,800	565,700	391,500	270,600	328,600	2,722,200	0	N/A
Design	N/A	35,530	35,530	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,060,734</b>	<b>960,734</b>	<b>1,165,800</b>	<b>565,700</b>	<b>391,500</b>	<b>270,600</b>	<b>328,600</b>	<b>2,722,200</b>	<b>0</b>	<b>N/A</b>

# CAPITAL IMPROVEMENT FUND

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.2

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PE-09003

Lucie Stern Parking Lot, February 2015

# City Facility Parking Lot Maintenance

## Description

This project provides funding for the repair, resurfacing, or reconstruction of parking lots and walkways at various City facilities, including restriping and signage.

## Justification

Uneven paved surfaces are a safety hazard and shorten the useful life of walkways and parking lots. Repairing the paved walkways and parking lots at various City facilities will eliminate these safety hazards and extend useful life.

## Supplemental Information

Work programmed for this project includes parking lot resurfacing for the following locations:

**Fiscal Year 2023:** No new work planned, but funding in FY 2023 is reappropriated to complete work from FY 2022.

**Fiscal Year 2024:** Hopkins & Newell Tennis Courts Parking Lot, Foothills Nature Preserve Water Tower Lots 1 & 2.

**Fiscal Year 2025:** Animal Service Center Parking Lot, Byxbee Park Parking Lot, Municipal Golf Course Service Parking Lot, Terman Center Parking Lot.

**Fiscal Year 2026:** Art Center Middle Parking Lot, Eleanor Pardee Garden Center Access, Municipal Service Center (MSC) North Parking Lot.

**Fiscal Year 2027:** Adobe Loop Trail Parking Lot.

## Significant Changes

**2023-2027 CIP:** Parking lots were inspected in October 2021 and cost estimates were updated based on current pavement conditions.

# CAPITAL IMPROVEMENT FUND

**2021-2025 CIP:** Funding was reduced as part of the FY 2021 Capital Improvement Program budget strategy. Foothills Park parking lot work was moved to FY 2022 to coordinate with Foothills Park Roadway Paving Project.

**2020-2022 CIP:** Parking lots were inspected in October 2018 and cost estimates were updated based on current pavement conditions.

**2018-2022 CIP:** A \$215,000 increase in FY 2018 funding is for the Midtown Shopping Center.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Capital Improvement Fund	N/A	346,938	147,938	247,400	247,400	355,900	263,800	292,100	1,406,600	0	N/A
<b>Total</b>	<b>N/A</b>	<b>346,938</b>	<b>147,938</b>	<b>247,400</b>	<b>247,400</b>	<b>355,900</b>	<b>263,800</b>	<b>292,100</b>	<b>1,406,600</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	N/A	346,938	147,938	247,400	247,400	355,900	263,800	292,100	1,406,600	0	N/A
<b>Total</b>	<b>N/A</b>	<b>346,938</b>	<b>147,938</b>	<b>247,400</b>	<b>247,400</b>	<b>355,900</b>	<b>263,800</b>	<b>292,100</b>	<b>1,406,600</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Maintenance of Parks and Community Facilities  
Goal: C-3  
Policy: C-3.2

#### Potential Board/Commission Review:

Planning and Transportation Commission

#### Environmental Impact Analysis:

Worked performed under this project is typically categorically exempt from CEQA under Section 15301.

## CAPITAL IMPROVEMENT FUND



City Hall A Level Lobby

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Palo Alto City Hall (250 Hamilton Avenue)  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Fall 2018  
**Initial Project Completion:** Fall 2019  
**Revised Project Start:** Spring 2022  
**Revised Project Completion:** Fall 2024  
**Project Number:** PE-19000

# City Hall Space Planning

## Description

This project provides funding for space planning to determine future workgroup space needs and programming for the City Hall office building.

## Justification

Upon completion of the new Public Safety Building in 2023, the Police wing of City Hall and the Fire Administration group on the 6th floor will move into the new building. The departure of these workgroups provides an opportunity to plan for the best use of the newly available City Hall space and to consider other potential improvements such as reconfiguration of the A level cafeteria space. Additionally, a potential opportunity has been identified to reduce the size of the Information Technology Department's 2nd floor data center and make the space available for other uses.

## Supplemental Information

The scope of this project includes the initial space planning and preliminary design of the improvements. Following completion of space planning and preliminary design, additional funding will be required to complete the design and construct renovations to the affected areas.

## Significant Changes

**2023-2027 CIP:** Project start extended to spring 2022 due to staff prioritizing other projects.

**2022-2026 CIP:** Project start extended to spring 2021 to follow the beginning of the construction phase in the Public Safety Building Project (PE-15001).

**2021-2025 CIP:** Project extended to FY 2021 as a result of staffing constraints and funding increased to reflect increased scope needed to study and plan for the space availability and needs at City Hall resulting from the completion of the Public Safety Building in FY 2023.



# CAPITAL IMPROVEMENT FUND

**2020-2024 CIP:** Project completion extended to reflect staffing constraints and the revised expected completion of the Public Safety Building.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	626,200	51,200	616,400	0	0	0	0	616,400	0	667,600
<b>Total</b>	<b>0</b>	<b>626,200</b>	<b>51,200</b>	<b>616,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>616,400</b>	<b>0</b>	<b>667,600</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	51,200	51,200	0	0	0	0	0	0	0	51,200
<b>Design</b>	0	575,000	0	616,400	0	0	0	0	616,400	0	616,400
<b>Total</b>	<b>0</b>	<b>626,200</b>	<b>51,200</b>	<b>616,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>616,400</b>	<b>0</b>	<b>667,600</b>

### Operating Impact

Operating impacts of potential space uses will be assessed as part of the planning process.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
 Section: Maintenance of Parks and Community Facilities  
 Goal: C-3  
 Policy: C-3.2

#### Potential Board/Commission Review:

Planning and Transportation Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## CAPITAL IMPROVEMENT FUND



Electrical System Access Door at City Hall

**Fund:** Capital Improvement Fund

**Category:** Buildings and Facilities

**Project Location:** Palo Alto City Hall (250 Hamilton Avenue), Various

**Managing Department:** Public Works

**IBRC Reference:** Keep-up

**Initial Project Start:** Summer 2016

**Initial Project Completion:** Fall 2017

**Revised Project Start:** Spring 2017

**Revised Project Completion:** Spring 2023

**Project Number:** PE-17010

# Civic Center Electrical Upgrade & EV Charger Installation

## Description

This project provides funding to replace the aging Civic Center electrical switchgear and motor control centers and to purchase and install approximately 43 new Level 2 electric vehicle (EV) charging stations at City parking garages, including the Civic Center garage.

## Justification

The main electrical switch gear is over 50 years old and must be replaced and upgraded to ensure the reliability of electrical power at City Hall. Other parts of the electrical system have been recently upgraded, leaving this as one of the last remaining items. With increased ownership of electric vehicles, additional public spaces with EV chargers are needed. Funding in this project allows the City to leverage grants that substantially cover the costs of EV charger purchases and installation on a reimbursement basis.

## Supplemental Information

Funding for the electrical upgrade work (\$0.35 million) was moved from the Civic Center Fire Life Safety Upgrades Project (PE-18016) to this project. At the time this project was established, approximately 90 percent of the EV charger costs were expected to be reimbursed by Bay Area Air Quality Management District grants.

## Significant Changes

**2023-2027 CIP:** Project budget increased by approximately \$0.3 million due to construction cost escalation and the construction complexity of swapping out the main switch gear without significant downtime for City Hall. Project completion date extended to Spring 2023 due to expected scheduling difficulties related to minimizing downtime of City Hall.

**2022-2026 CIP:** Project completion date extended to Fall 2021 due to delays in procuring design services.

# CAPITAL IMPROVEMENT FUND

**2020-2024 CIP:** In FY 2018, an invitation for Design-Build proposals received no response. Staff began the process for a traditional Design-Bid Build approach. Timing of the project was extended to accommodate this approach and allow for a new window of opportunity to perform construction when City Hall can be closed for a brief time duration. Funding added to account for the complexity of construction and replacement of both motor control centers (MCC) on Levels A and 8.

**2019-2023 CIP:** Anticipated project completion date adjusted to reflect delays due to staff workload and available options for scheduling a full shutdown of City Hall for construction work.

**2018-2022 CIP:** Project start was delayed due to staff workload. Staff plans to use Design-Build project delivery method for Civic Center switchgear and motor control center replacements.

**2017-2021 CIP:** Project established.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	395,751	360,775	115,375	576,500	0	0	0	0	576,500	0	1,087,626
<b>Revenue from Other Agencies</b>	20,000	240,000	0	240,000	0	0	0	0	240,000	0	260,000
<b>Total</b>	<b>415,751</b>	<b>600,775</b>	<b>115,375</b>	<b>816,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>816,500</b>	<b>0</b>	<b>1,347,626</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	329,018	520,775	35,375	816,500	0	0	0	0	816,500	0	1,180,893
<b>Design</b>	86,722	80,000	80,000	0	0	0	0	0	0	0	166,722
<b>Total</b>	<b>415,740</b>	<b>600,775</b>	<b>115,375</b>	<b>816,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>816,500</b>	<b>0</b>	<b>1,347,615</b>

### Operating Impact

This project is anticipated to impact operating expenses in the future. As these costs are quantified, adjustments will be brought forward in the future budget cycles, as necessary.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Air Quality  
Goal: N-5  
Policy: N-5.2

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Palo Alto City Hall (250 Hamilton Avenue)  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Summer 2018  
**Initial Project Completion:** Spring 2019  
**Revised Project Start:** Fall 2020  
**Revised Project Completion:** Fall 2022  
**Project Number:** PE-18016

Civic Center Fire Life Safety and Electrical Upgrades

# Civic Center Fire Life Safety Upgrades

## Description

This project provides funding for an assessment and upgrade of the fire life safety systems in City Hall.

## Justification

The fire life safety system is approaching the end of its useful life. The fire alarm panels and associated equipment are in need of upgrade in order to meet current code requirements. City Hall is a vital facility for all functions and departments.

## Significant Changes

**2022-2026 CIP:** Project completion schedule revised due to delays with procurement.

**2021-2025 CIP:** Project completion schedule revised due to re-evaluation of the procurement methodology for the system.

**2019-2023 CIP:** Project schedule and scope revised to reflect staff workload.

**2017-2021 CIP:** The scope and budget (\$0.35 million) for the City Hall electrical upgrade portion of this project have been moved to a new project, PE-17010, Civic Center Electrical Upgrade & EV Charger Installation.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	(145,322)	451,407	246,307	222,900	0	0	0	0	222,900	0	323,885
<b>Transfer frm Gen. Gov't Fac. Impact Fee Fund</b>	356,956	0	0	0	0	0	0	0	0	0	356,956
<b>Total</b>	<b>211,634</b>	<b>451,407</b>	<b>246,307</b>	<b>222,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>222,900</b>	<b>0</b>	<b>680,841</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	189,700	451,407	246,307	222,900	0	0	0	0	222,900	0	658,907
<b>Design</b>	21,930	0	0	0	0	0	0	0	0	0	21,930
<b>Total</b>	<b>211,630</b>	<b>451,407</b>	<b>246,307</b>	<b>222,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>222,900</b>	<b>0</b>	<b>680,837</b>

#### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b>                  Planning and Transportation Commission</p>
--	--

## CAPITAL IMPROVEMENT FUND



Civic Center Parking Garage, February 2015

**Fund:** Capital Improvement Fund

**Category:** Buildings and Facilities

**Project Location:** Palo Alto City Hall (250 Hamilton Avenue)

**Managing Department:** Public Works

**IBRC Reference:** New

**Initial Project Start:** Summer 2015

**Initial Project Completion:** Summer 2017

**Revised Project Start:** Summer 2016

**Revised Project Completion:** Fall 2023

**Project Number:** PE-15020

# Civic Center Waterproofing Study and Repairs

## Description

This project provides funding to address the condition assessment and repair method for the Civic Center Plaza planter boxes' waterproofing membranes and drainage piping system along the Civic Center Plaza perimeter.

## Justification

Water has been leaking from the planter boxes to the parking level below when it rains. The planter waterproofing membranes and drainpipes were found to be in poor condition and most likely at the end of their service life. The waterproofing membranes and drainpipes require immediate replacement.

## Significant Changes

**2023-2027 CIP:** Project completion date extended to Fall 2023 due to staff prioritizing other projects.

**2020-2024 CIP:** Additional funding and time added to restore waterproofing membrane within planter boxes along the Civic Center plaza perimeter.

**2019-2023 CIP:** Anticipated completion date adjusted to reflect delays due to staff workload.

**2018-2022 CIP:** Additional funding added for implementation of the repairs.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	67,931	648,018	347,018	331,200	0	0	0	0	331,200	0	746,149
<b>Total</b>	<b>67,931</b>	<b>648,018</b>	<b>347,018</b>	<b>331,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>331,200</b>	<b>0</b>	<b>746,149</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	2,684	611,658	310,658	331,200	0	0	0	0	331,200	0	644,542
<b>Design</b>	65,246	36,360	36,360	0	0	0	0	0	0	0	101,606
<b>Total</b>	<b>67,930</b>	<b>648,018</b>	<b>347,018</b>	<b>331,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>331,200</b>	<b>0</b>	<b>746,148</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
 Section: Maintenance of Parks and  
 Community Facilities  
 Goal: C-3  
 Policy: C-3.2

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.





Electric Charger

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Various City Facilities  
**Managing Department:** Public Works  
**IBRC Reference:** N/A  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PF-23000

# Electric Charger Infrastructure Installation

## Description

This project provides design and construction funding for the installation of electric vehicle chargers at various City facilities. The primary use of the electric vehicle chargers will be for City fleet vehicles.

## Justification

The City is progressively moving towards replacing the City's fleet with electric vehicles; however, most City facilities do not have existing electric vehicle chargers dedicated to City vehicles. This project will fund the installation of electric vehicle chargers in advance of receiving new electric fleet vehicles in alignment with the electrification goals of the Sustainability and Climate Action Plan (S/CAP). The City has been accumulating Low Carbon Fuel Standard (LCFS) funding that will help fund the initial stages of this work.

## Supplemental Information

The City contracted with a consultant firm in FY 2022 to perform a study called "City of Palo Alto Electric Vehicle Charging Infrastructure Study," which provided short and long term electric vehicle charging infrastructure needs for the City. Staff will use this report to assist in the development of future phases of the installation of electric vehicle chargers at various City facilities.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	0	0	30,900	0	0	0	0	30,900	0	N/A
<b>Transfer from Electric Fund</b>	N/A	0	0	280,000	0	0	0	0	280,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>0</b>	<b>0</b>	<b>310,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>310,900</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	N/A	0	0	310,900	0	0	0	0	310,900	0	N/A
<b>Total</b>	<b>N/A</b>	<b>0</b>	<b>0</b>	<b>310,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>310,900</b>	<b>0</b>	<b>N/A</b>

#### Operating Impact

This project is anticipated to impact operating expenses in the future. As these costs are quantified, adjustments will be brought forward in the future budget cycles, as necessary.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Air Quality                  Goal: N-5                  Policy: N-5.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to require a CEQA Environmental Impact Report.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
---	--

## CAPITAL IMPROVEMENT FUND



Lucie Stern Community Center Ballroom

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PF-02022

# Facility Interior Finishes Replacement

## Description

This project provides funding for replacement of or improvements to interior finishes such as flooring, walls, ceiling tiles, doors, windows, paint, lighting, soundproofing, cabinets, and fixed office furniture, as well as associated electrical, mechanical, plumbing, and fire/life safety code compliance requirements at various City facilities.

## Justification

Interior finishes throughout City facilities are designated for replacement as part of an ongoing capital maintenance plan. Finishes are typically coordinated and upgraded as other renovation projects are undertaken.

## Supplemental Information

Planned carpet replacement and other interior finishes projects include:

**Fiscal Year 2023:** Revenue Collections remodel

**Fiscal Year 2024:** Children's Library carpet and Mitchell Park Library furniture

**Fiscal Year 2025:** Lucie Stern Community Theater kitchen and furniture at the Rinconada, Children's, Downtown, and College Terrace Libraries

**Fiscal Year 2026:** Municipal Services Center (MSC) Building B shower and locker room

**Fiscal Year 2027:** MSC Building C lunchroom and hallways

## Significant Changes

**2023-2027 CIP:** Revenue Collections remodel was added to FY 2023; MSC Building C lunchrooms and hallways was moved to FY 2027; Lucie Stern Community Theater kitchen was moved from FY 2026 to FY 2025; MSC Building B shower and locker room were moved to FY 2026; MSC Building C WGW locker room was moved

## CAPITAL IMPROVEMENT FUND

outside of the five-year plan; and furniture replacement at library facilities was included as noted in Supplemental Information.

**2022-2026 CIP:** The project has been delayed due to staffing constraints. Projects programmed in FY 2021 through FY 2023 were pushed out to FY 2023 through FY 2025. The Children’s Library carpet replacement was pushed out from FY 2020 to FY 2024. Funding was added to cover anticipated increases.

**2021-2025 CIP:** Funding was reduced as part of the FY 2021 Capital Improvement Program budget strategy, some work may be deferred to future years accordingly.

**2020-2024 CIP:** MSC Building C Lunchrooms and Hallways was moved to FY 2021 from FY 2022. The Golf Course Club House Restrooms, previously programmed in FY 2021, were completed as part of the Golf Course Reconfiguration project (PG-13003).

**2019-2023 CIP:** Elwell Court has moved from FY 2022 to FY 2019, Children’s Library will be added for FY 2020, and MSC Building C will be moved to FY 2022.

**2018-2022 CIP:** MSC Building C Water-Gas-Wastewater, Lucie Stern Community Theatre will be replacing Municipal Services Center Building A, Parks Department and Stores in FY 2020.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	580,959	377,159	504,500	523,200	363,100	317,900	344,600	2,053,300	0	N/A
<b>Transfer from Utilities Administration Fund</b>	N/A	169,000	169,000	0	0	0	0	206,000	206,000	0	N/A
<b>Transfer from Vehicle Replacement and Maintenance</b>	N/A	0	0	0	0	0	166,500	0	166,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>749,959</b>	<b>546,159</b>	<b>504,500</b>	<b>523,200</b>	<b>363,100</b>	<b>484,400</b>	<b>550,600</b>	<b>2,425,800</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	708,100	504,300	504,500	523,200	363,100	484,400	550,600	2,425,800	0	N/A
<b>Design</b>	N/A	41,859	41,859	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>749,959</b>	<b>546,159</b>	<b>504,500</b>	<b>523,200</b>	<b>363,100</b>	<b>484,400</b>	<b>550,600</b>	<b>2,425,800</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# CAPITAL IMPROVEMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.2

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



Fire Station #4, April 2015

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** 3600 Middlefield Road  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Winter 2020  
**Revised Project Start:** Spring 2022  
**Revised Project Completion:** Summer 2026  
**Project Number:** PE-18004

# Fire Station 4 Replacement

## Description

This project provides funding to replace Fire Station 4 at the corner of Middlefield Road and East Meadow Drive. The replacement facility will be based on the prior replacement study and needs assessment prepared in 2005.

## Justification

The current Fire Station 4 facility is operationally and technologically deficient. This project will provide a new facility built to essential services standards with a high likelihood of being fully operational after a major disaster such as a significant earthquake.

## Supplemental Information

The Fire Station 4 Replacement project is included in the Council Infrastructure Plan. The cost estimate for this project was increased from the amount derived during the Council Infrastructure Plan's development because older estimates were not aligned with the years when construction would actually occur.

## Significant Changes

**2023-2027 CIP:** Staff will explore the implementation of an electrical distribution system microgrid in conjunction with this project, which may increase the funding required for this project. Federal grant funding may become available for the construction phase.

**2022-2026 CIP:** Project start and end dates delayed; this reflects the revised project start date to contribute to cost containment strategies in FY 2022 and timing of the design contract award.

**2021-2025 CIP:** Project start and end dates delayed; this reflects the revised project start date following completion of Fire Station 3 due to staff workload.

# CAPITAL IMPROVEMENT FUND

**2020-2024 CIP:** Project end date adjusted to reflect expected construction timeline based on construction starting in the beginning of FY 2021.

**2019-2023 CIP:** Project increased by \$0.3 million and the timeline was pushed out to begin construction in FY 2021.

**2018-2022 CIP:** Timeline adjusted to reflect initial funding availability.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	293,191	(75,411)	(270,411)	195,000	1,250,000	550,000	0	0	1,995,000	0	2,017,780
<b>Transfer from Stanford University Medical Ctr Fund</b>	0	750,000	750,000	0	3,325,000	4,075,000	0	0	7,400,000	0	8,150,000
<b>Total</b>	<b>293,191</b>	<b>674,589</b>	<b>479,589</b>	<b>195,000</b>	<b>4,575,000</b>	<b>4,625,000</b>	<b>0</b>	<b>0</b>	<b>9,395,000</b>	<b>0</b>	<b>10,167,780</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	7,950	100,000	100,000	0	4,575,000	4,625,000	0	0	9,200,000	0	9,307,950
<b>Design</b>	285,240	574,589	379,589	195,000	0	0	0	0	195,000	0	859,829
<b>Total</b>	<b>293,190</b>	<b>674,589</b>	<b>479,589</b>	<b>195,000</b>	<b>4,575,000</b>	<b>4,625,000</b>	<b>0</b>	<b>0</b>	<b>9,395,000</b>	<b>0</b>	<b>10,167,779</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>General Fund-Operating</b>	0	0	9,500	9,800	10,100

### Operating Impact

This project is anticipated to impact operating expenses in the future. Maintenance is estimated to increase from the maintenance costs for the current fire station by \$9,500 in FY 2025 and increase by 3 percent annually thereafter.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Maintenance of Parks and Community Facilities  
Goal: C-3  
Policy: C-3.2

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## CAPITAL IMPROVEMENT FUND



Old Training Tower on Stanford Campus

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** TBD Based on Feasibility Study  
**Managing Department:** Fire  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2003  
**Initial Project Completion:** Summer 2026  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** FD-24000

# Fire Training Facility Replacement

## Description

This project will identify an appropriate site and construct a new fire training facility in Palo Alto. This will be the first City-owned and City-maintained permanent fire training facility, and it will allow training to be conducted within City limits and therefore reduce the downtime associated with the need for staff to travel for training and when responding to calls.

## Justification

The current training facility is located on the Stanford University campus and is not owned by the City; moreover, it has fallen into a state of disrepair and is currently unsafe for use. It is estimated that the costs to maintain and upkeep the current facility are comparable to building a new, City-owned facility. The Fire Department purchased a temporary training trailer in FY 2022; however, that is not a permanent or long-term solution.

## Supplemental Information

A feasibility study will be conducted in FY 2024 to determine the facility needs as well as an appropriate and available location for the new facility. This study will also inform the cost estimate for the construction of the facility, which will be included in a future five-year Capital Improvement Plan.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	70,700	0	0	0	70,700	0	70,700
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70,700</b>	<b>0</b>	<b>70,700</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	0	0	0	0	70,700	0	0	0	70,700	0	70,700
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>70,700</b>	<b>0</b>	<b>70,700</b>

### Operating Impact

This project will have ongoing operating expenses related to the new facility. As these costs are quantified, adjustments will be brought forward in future budgets as necessary.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Safety                  Section: Natural Hazards                  Goal: S-2                  Policy: S-2.13                  Program: S2.13.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to require a CEQA Environmental Impact Report</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
--	--

## CAPITAL IMPROVEMENT FUND



Junior Museum Exhibit, March 2017

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** 1451 Middlefield Road  
**Managing Department:** Community Services  
**IBRC Reference:** N/A  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Summer 2019  
**Revised Project Start:** Summer 2018  
**Revised Project Completion:** Fall 2023  
**Project Number:** AC-18001

# JMZ Renovation

## Description

This project provides funding to relocate the Palo Alto Junior Museum & Zoo (JMZ) for two years to the Cubberley Community Center to facilitate construction of a new JMZ at the current site. This project also includes funding for permit and inspection fees related to the JMZ rebuild project, new exhibitions (including temporary staffing for design and prototyping), deck construction costs (partial), park signage (partial), furniture and equipment costs, payment and performance bonds, and re-opening marketing and outreach expenses.

## Justification

The Cubberley campus provides a suitable temporary location for JMZ operations to remain open to the public. Classrooms will be used for programming, exhibits, education, and summer camps. The Auditorium provides space for staff, teachers, administration, collections, and indoor animals. The nearby parking lot would be converted to an animal compound to house outdoor animals unable to be placed at another zoo or facility.

## Supplemental Information

An agreement between the City of Palo Alto and the Friends of the Palo Alto Junior Museum and Zoo to replace the existing JMZ with a new building and facilities requires City contributions.

## Significant Changes

**2023-2027 CIP:** The project was extended and funds were re-appropriated for exterior exhibit and completion of various project features.

**2019-2023 CIP:** The budget for this project increased by \$2.8 million, with the majority of funding for new educational exhibits. Other costs include the temporary relocation of the JMZ to the Cubberley Community Center, permit costs, and electrical and plumbing work.

# CAPITAL IMPROVEMENT FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	(325,619)	1,603,021	323,821	1,279,200	0	0	0	0	1,279,200	0	1,277,402
<b>Revenue from Other Agencies</b>	34,325	0	0	0	0	0	0	0	0	0	34,325
<b>Revenue from the Federal Government</b>	178,926	332,100	332,100	0	0	0	0	0	0	0	511,026
<b>Transfer frm Gen. Gov't Fac. Impact Fee Fund</b>	217,162	0	0	0	0	0	0	0	0	0	217,162
<b>Transfer from Parks Development Impact Fee Fund</b>	2,823,075	0	0	0	0	0	0	0	0	0	2,823,075
<b>Total</b>	<b>2,927,869</b>	<b>1,935,121</b>	<b>655,921</b>	<b>1,279,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,279,200</b>	<b>0</b>	<b>4,862,990</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	2,615,800	1,935,121	655,921	1,279,200	0	0	0	0	1,279,200	0	4,550,921
<b>Design</b>	312,054	0	0	0	0	0	0	0	0	0	312,054
<b>Total</b>	<b>2,927,854</b>	<b>1,935,121</b>	<b>655,921</b>	<b>1,279,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,279,200</b>	<b>0</b>	<b>4,862,975</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>General Fund-Operating</b>	340,000	340,000	340,000	340,000	340,000

### Operating Impact

Anticipated ongoing operating costs have been incorporated into the Community Service Department's operating budget and include new staffing and exhibits, as well as custodial and maintenance costs. New ticketed entry and membership revenues are budgeted to partially offset the increased operating costs.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Maintenance of Parks and Community Facilities  
Goal: C-3  
Policy: C-3.2

#### Potential Board/Commission Review:

Historic Resources Board  
Parks and Recreation Commission  
Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

Relocation portion of this project is CEQA Exempt under 15301 and 15303. A separate Initial Study/Mitigated Negative Declaration is being prepared for the renovation portion of this project.

## CAPITAL IMPROVEMENT FUND



Library Material Handling System

**Fund:** Capital Improvement Fund

**Category:** Buildings and Facilities

**Project Location:** Various Libraries: College Terrace, Children's, and Downtown Libraries.

**Managing Department:** Library

**IBRC Reference:** N/A

**Initial Project Start:** Summer 2021

**Initial Project Completion:** Summer 2023

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** LB-21000

# Library Automated Material Handling

## Description

The scope of this project is to provide the design and construction of three new Automated Material Handling (AMH) systems for the College Terrace, Children's, and Downtown Libraries. AMH systems efficiently sort returned library materials based on the Radio Frequency Identification Devices (RFID) on the materials. This project has been approved for use of Library Impact Fees. In FY 2021, funds from Library Impact Fees were added to the project to include contactless library equipment, such as holds machines and book vending machines, at smaller branches to further increase efficiency and offset reductions in service hours.

## Justification

The Library has made a significant investment in RFID tagging of the entire collection. This project leverages the existing RFID investment to improve overall library system efficiency and improve the speed at which materials can be moved to shelves for library patron hold requests.

These machines increase the speed of materials processing by 200-400 percent. Expanded circulation in the past five years has increased the burden on staff while staff FTE have decreased. Each machine will reduce the amount of staff time needed for processing books (from 41 hours per week currently down to an estimated 20 hours per week), which will increase staff efficiencies in the libraries. Increased automated handling of materials allows staff time to be freed up to focus on public projects (public programs and services) and revenue-generating projects (space rentals and grant-writing).

## Supplemental Information

The project timeline has been spread over 3 years. Year 1: design of all three libraries and installation at Children's Library; Year 2: Downtown Library; Year 3: College Terrace Library. Staff capacity can handle implementing multiple libraries at a time. The highest priority is the Children's Library due to the high number of returns

# CAPITAL IMPROVEMENT FUND

(second highest circulation out of the five libraries) and current number of staff needed there to respond to high circulation.

## Significant Changes

**2022-2026 CIP:** Implementation sequence changed so Downtown Library will be installed second, and College Terrace will be installed last.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Capital Improvement Fund	(265,286)	387,603	162,510	306,693	0	0	0	0	306,693	0	203,917
Transfer from Library Development Impact Fee Fund	310,000	350,000	0	540,000	0	0	0	0	540,000	0	850,000
<b>Total</b>	<b>44,714</b>	<b>737,603</b>	<b>162,510</b>	<b>846,693</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>846,693</b>	<b>0</b>	<b>1,053,917</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	737,603	162,510	846,693	0	0	0	0	846,693	0	1,009,203
Design	44,714	0	0	0	0	0	0	0	0	0	44,714
<b>Total</b>	<b>44,714</b>	<b>737,603</b>	<b>162,510</b>	<b>846,693</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>846,693</b>	<b>0</b>	<b>1,053,917</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
General Fund-Operating	45,000	46,000	47,000	48,000	50,000

## Operating Impact

The equipment will cause a slight increase in electric bills and will also require annual equipment maintenance. Ongoing operating costs include annual maintenance of about \$10,000 to \$20,000 per machine and these costs are anticipated to increase by 3 percent annually thereafter.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Community Services & Facilities Section: Planning for Parks and Community Facilities Goal: C-4 Policy: C-4.4	Element: Governance Section: Public Participation Goal: G-1 Policy: G-1.2 Program: G1.2.4	Library Advisory Commission Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15302.		



Municipal Service Center Building C Roof, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** 3201 East Bayshore Road  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Summer 2016  
**Initial Project Completion:** Spring 2017  
**Revised Project Start:** Fall 2020  
**Revised Project Completion:** Fall 2022  
**Project Number:** PF-17000

# Municipal Service Center A, B, & C Roof Replacement

## Description

This project provides funding for a fluid, reinforced waterproofing application over the existing roof. The existing asphalt and gravel roof is nearing the end of its useful life and needs to be rehabilitated. If the existing roof is allowed to deteriorate beyond a certain point, the fluid applied system cannot be used and a full replacement of the roofing system would be required. The application will meet current cool roofing codes to optimize energy efficiency.

## Justification

This project provides the means to rehabilitate the existing roof to avoid further deterioration of the roofing system, which would cause failure and structural damage to the building. Compared to rehabilitation costs, structural repairs and a full roof replacement would be more expensive.

## Supplemental Information

Transfers from various funding sources will support this project. The various transfers were calculated based on the anticipated benefit to each fund, according to square footage.

## Significant Changes

**2023-2027 CIP:** Materials that are needed to finish the project have been delayed, so the completion timeline has been extended.

**2022-2026 CIP:** Project dates adjusted due to staffing workload constraints.

**2021-2025 CIP:** Project dates adjusted due to staffing workload constraints.

# CAPITAL IMPROVEMENT FUND

**2020-2024 CIP:** Project dates adjusted to coordinate with the Municipal Service Center Lighting, Mechanical, and Electrical Improvements project (PF-16006). Roof replacement will be done before the installation of new rooftop equipment due to the condition of the roofs. Funding added to account for cost escalation.

**2019-2023 CIP:** Project start adjusted to reflect current schedule of the Municipal Service Center Lighting, Mechanical, and Electrical Improvements project (PF-16006).

**2018-2022 CIP:** Project start adjusted to immediately follow the "Municipal Service Center Lighting, Mechanical, and Electrical Improvements" project (PF-16006) so roof replacement will follow installation of new rooftop equipment.

**2017-2021 CIP:** Timeline extended to reflect direction from Finance Committee and City Council during budget approval process.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	(478,794)	2,049,533	1,777,019	131,000	0	0	0	0	131,000	0	1,429,225
<b>Transfer from Refuse Fund</b>	10,250	0	0	0	0	0	0	0	0	0	10,250
<b>Transfer from Utilities Administration Fund</b>	369,000	0	0	0	0	0	0	0	0	0	369,000
<b>Transfer from Vehicle Replacement and Maintenance</b>	205,000	0	0	0	0	0	0	0	0	0	205,000
<b>Total</b>	<b>105,456</b>	<b>2,049,533</b>	<b>1,777,019</b>	<b>131,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>131,000</b>	<b>0</b>	<b>2,013,475</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	105,456	2,049,533	1,777,019	131,000	0	0	0	0	131,000	0	2,013,475
<b>Total</b>	<b>105,456</b>	<b>2,049,533</b>	<b>1,777,019</b>	<b>131,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>131,000</b>	<b>0</b>	<b>2,013,475</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# CAPITAL IMPROVEMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.2  
Program: C3.2.1

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.





CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



Municipal Services Center Building C, March 2015

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** 3201 East Bayshore Road  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Summer 2016  
**Initial Project Completion:** Spring 2018  
**Revised Project Start:** N/A  
**Revised Project Completion:** Spring 2023  
**Project Number:** PF-16006

# Municipal Service Center Lighting, Mechanical, and Electrical Improvements

## Description

This project provides funding for the replacement of original mechanical and electrical systems and lighting installed in 1966 in the Municipal Service Center's (MSC) Buildings A, B, and C. The project also includes the renovation of office space and shop areas in Building C.

## Justification

Mechanical, electrical, and lighting equipment in the MSC is inefficient and outdated. Various remodels have occurred in the administrative and shop areas, adding load to the mechanical and electrical systems, and the use of many other areas has changed over the years without adequate upgrades to the building systems. For these reasons, the systems no longer support the current operation of the site.

## Supplemental Information

The Refuse Fund, Vehicle Replacement and Maintenance Fund, and Utilities Administration Fund will reimburse the Capital Improvement Fund for a portion of this project, as fund-related operations benefit from the building improvements.

## Significant Changes

**2023-2027 CIP:** Project timeline extended due to coordination with the Fleet Electric Vehicle strategic planning process.

**2022-2026 CIP:** Project timeline extended due to project reprioritization.

**2021-2025 CIP:** Project timeline extended to reflect additional project redesign work to allow for more Electric Vehicle (EV) chargers and future electrification of the newer mechanical systems at the MSC.

# CAPITAL IMPROVEMENT FUND

**2020-2024 CIP:** Bids received were rejected due to budget exceedance. Funding added to account for severe construction cost escalation and partial redesign to provide additional infrastructure for future electrification of vehicle fleet. Project end date adjusted due to the redesign and rebidding required.

**2019-2023 CIP:** Project cost estimates indicate mechanical and electrical work in Building B require additional funding of \$0.8 million.

**2017-2021 CIP:** Additional funding of \$0.4 million added for Building C office space renovation.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	116,678	4,959,914	632,814	4,957,700	0	0	0	0	4,957,700	0	5,707,192
<b>Transfer from Refuse Fund</b>	28,070	27,000	0	27,000	0	0	0	0	27,000	0	55,070
<b>Transfer from Utilities Administration Fund</b>	530,835	972,000	0	972,000	0	0	0	0	972,000	0	1,502,835
<b>Transfer from Vehicle Replacement and Maintenance</b>	294,909	540,000	0	540,000	0	0	0	0	540,000	0	834,909
<b>Total</b>	<b>970,492</b>	<b>6,498,914</b>	<b>632,814</b>	<b>6,496,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,496,700</b>	<b>0</b>	<b>8,100,006</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	446,099	6,498,626	632,526	6,496,700	0	0	0	0	6,496,700	0	7,575,325
<b>Design</b>	524,378	288	288	0	0	0	0	0	0	0	524,666
<b>Total</b>	<b>970,477</b>	<b>6,498,914</b>	<b>632,814</b>	<b>6,496,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,496,700</b>	<b>0</b>	<b>8,099,991</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Maintenance of Parks and Community Facilities  
Goal: C-3  
Policy: C-3.2

#### Potential Board/Commission Review:

Planning and Transportation Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** 350 Sherman Avenue  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Fall 2020  
**Revised Project Start:** Fall 2016  
**Revised Project Completion:** Winter 2020  
**Project Number:** PE-18000

New California Avenue Area Garage Design Option Rendering

# New California Avenue Area Parking Garage

## Description

This project provides funding for the design and construction of a new public parking garage on the existing Lot C-7 in the California Avenue commercial area. The project will include approximately 636 parking stalls and will have two below-ground and four above-ground levels.

## Justification

A new parking garage is needed in the California Avenue commercial area. A new garage will increase parking supply and reduce parking spillover into nearby residential neighborhoods. Additionally, the new garage will replace the parking spaces that will be lost when the new Public Safety Building is constructed on the adjacent Lot C-6. Construction of the new garage must be completed before construction of the Public Safety Building can begin.

## Supplemental Information

The New California Avenue Area Parking Garage project is included in the Council Infrastructure Plan and is supported through debt financing. The garage was completed in December 2020; however, funding is budgeted in FY 2023 for completion of final punch list items with the contractor.

## Significant Changes

**2023-2027 CIP:** The garage was completed in December 2020, but \$0.8 million is budgeted in FY 2023 for completion of final punch list items.

**2020-2024 CIP:** Project completion revised to reflect additional design and construction time for groundwater exclusionary techniques (i.e. installation of cut-off walls).

# CAPITAL IMPROVEMENT FUND

**2019-2023 CIP:** Budget increased to reflect total project cost estimate of \$47.9 million. Anticipated completion date adjusted due to design delays resulting from the Architectural Review Board (ARB) and Environmental Impact Report (EIR) processes.

**2017-2021 CIP:** Project schedule adjusted to begin and end earlier, reflecting need for phasing of garage and Public Safety Building projects.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Bond Proceeds</b>	41,995,000	0	0	0	0	0	0	0	0	0	41,995,000
<b>Capital Improvement Fund</b>	6,407,785	1,747,186	932,786	844,400	0	0	0	0	844,400	0	8,184,971
<b>Total</b>	<b>48,402,785</b>	<b>1,747,186</b>	<b>932,786</b>	<b>844,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>844,400</b>	<b>0</b>	<b>50,179,971</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	45,632,259	1,726,382	911,982	844,400	0	0	0	0	844,400	0	47,388,641
<b>Design</b>	2,770,509	20,802	20,802	0	0	0	0	0	0	0	2,791,311
<b>Total</b>	<b>48,402,768</b>	<b>1,747,184</b>	<b>932,784</b>	<b>844,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>844,400</b>	<b>0</b>	<b>50,179,952</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>California Avenue Parking Permits</b>	120,200	124,000	128,000	131,000	135,000

### Operating Impact

Custodial and maintenance costs were budgeted for this project starting in FY 2021 and increase by 3% annually thereafter.

#### Relationship to Comprehensive Plan Primary Connection

Element: Transportation  
Section: Parking  
Goal: T-5  
Policy: T-5.6

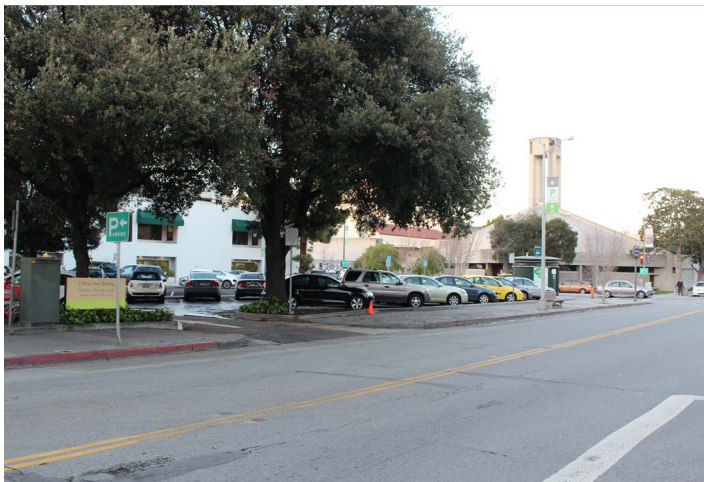
#### Potential Board/Commission Review:

Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project will require an environmental impact report, combined with the Public Safety Building Project, in accordance with CEQA guidelines.

## CAPITAL IMPROVEMENT FUND



Hamilton Avenue/Waverley Street, March 2015

**Fund:** Capital Improvement Fund

**Category:** Buildings and Facilities

**Project Location:** Parking Lot D (Hamilton Avenue/  
Waverley Street)

**Managing Department:** Public Works

**IBRC Reference:** New

**Initial Project Start:** Spring 2015

**Initial Project Completion:** Fall 2018

**Revised Project Start:** Winter 2017

**Revised Project Completion:** Spring 2024

**Project Number:** PE-15007

# New Downtown Parking Garage

## Description

This project provides funding for a new public parking garage in the University Avenue commercial area at existing Parking Lot D at the corner of Hamilton Avenue and Waverley Street. The project will evaluate the feasibility of including retail and stacked parking as part of the new structure. Design and environmental consultant services will be needed, including the development of preliminary plans and cost estimates, and completion of the project's environmental review.

## Justification

A new parking garage is part of a multi-pronged strategy to address excessive spillover parking from the University Avenue commercial area into nearby residential neighborhoods.

## Supplemental Information

The New Downtown Parking Garage project is included in the City Council Infrastructure Plan. In Fiscal Year 2023, a transfer of \$5.5 million from the University In-Lieu Parking Fund is scheduled to fund a portion of the construction of the new garage. The cost estimate for this project will likely need to be adjusted based on estimated construction costs in future years.

## Significant Changes

**2022-2026 CIP:** The design contract was canceled and funding was returned to the Capital Improvement Fund to contribute to cost containment strategies in FY 2022. The \$5.5 million funding from the University In-Lieu Parking Fund remains in FY 2023 to support costs associated with this project.

**2021-2025 CIP:** As part of the FY 2021 budget strategy all Capital Improvement Fund funding has been removed and only the downtown parking in-lieu fee funding remains for this project. Potential opportunities to

# CAPITAL IMPROVEMENT FUND

use the remaining funding include public/private partnerships that may result in an increase in public parking spaces.

**2020-2024 CIP:** Funding for this project has been moved out per City Council direction in February 2019 to postpone the project until downtown parking initiatives are determined.

**2019-2023 CIP:** Budget increased to reflect total project cost estimate of \$29.1 million.

**2018-2022 CIP:** In December 2016, a design contract was awarded to Watry Design, Inc. Funding was included in FY 2017 for Phase I of the design work, including environmental review and design through design development. Additional funding is required in FY 2018 to complete the design and construction documents and in FY 2019 for construction administration and project close out.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	140,309	10,605	0	207,600	0	0	0	0	207,600	0	347,909
<b>Transfer from University Ave Parking In Lieu Fund</b>	1,300,000	0	0	5,541,000	0	0	0	0	5,541,000	0	6,841,000
<b>Total</b>	<b>1,440,309</b>	<b>10,605</b>	<b>0</b>	<b>5,748,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,748,600</b>	<b>0</b>	<b>7,188,909</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	238,861	0	0	0	0	0	0	0	0	0	238,861
<b>Design</b>	1,201,438	10,605	0	5,748,600	0	0	0	0	5,748,600	0	6,950,038
<b>Total</b>	<b>1,440,299</b>	<b>10,605</b>	<b>0</b>	<b>5,748,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,748,600</b>	<b>0</b>	<b>7,188,899</b>

### Operating Impact

This project is anticipated to impact operating expenses in the future. As these costs are quantified, adjustments will be brought forward in future budgets as necessary.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Planning for Parks and Community Facilities  
Goal: C-4  
Policy: C-4.2

#### Potential Board/Commission Review:

Historic Resources Board  
Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project is expected to require a CEQA Environmental Impact Report.



## CAPITAL IMPROVEMENT FUND



New Public Safety Building Rendering

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Parking Lot C-6 (250 Sherman Avenue)  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Spring 2015  
**Initial Project Completion:** Fall 2020  
**Revised Project Start:** N/A  
**Revised Project Completion:** Fall 2023  
**Project Number:** PE-15001

# New Public Safety Building

## Description

This project provides funding for the design and construction of a new Public Safety Building on Lot C-6 in the California Avenue commercial area. Site evaluation and design and environmental consultant services will be needed for the approximately 44,500 square foot facility, including the development of preliminary plans, cost estimates, and special studies as part of an Environmental Impact Report (EIR). The size and programming of the new facility were developed by the 2006 Blue Ribbon Task Force.

## Justification

The current Police Department facility is structurally, operationally, and technologically deficient. This project will provide a new facility for the Police Department, Office of Emergency Services, Emergency Operations Center, Emergency Dispatch, and Fire Department Administration. It will be built to essential services standards with a high likelihood of being fully operational after a major disaster such as a significant earthquake.

## Supplemental Information

The new Public Safety Building has been identified as the top priority project in the City Council Infrastructure Plan. The majority of the expenses will be financed using Certificates of Participation, with Transient Occupancy Tax (TOT) revenues used to fund the debt service.

## Significant Changes

**2023-2027 CIP:** The anticipated completion date has been revised to Fall 2023.

**2022-2026 CIP:** The anticipated completion date has been revised to Summer 2023 due to delays in the bidding process.

**2021-2025 CIP:** The anticipated completion date has been revised to Spring 2023 to reflect the construction complexity needed to complete the building.



## CAPITAL IMPROVEMENT FUND

**2020-2024 CIP:** Project construction will begin after the new California Avenue Area Parking Garage is complete. Anticipated completion of the Public Safety Building is revised to Fall 2022.

**2019-2023 CIP:** Budget increased to reflect total project cost estimate of \$92.2 million. Construction funding and expenditures moved to FY 2020 due to design delays relating the Architectural Review Board (ARB) and EIR processes. Anticipated project completion also revised to summer 2021.

**2018-2022 CIP:** Timeline adjusted to reflect sequential construction to follow the California Avenue Area Parking Garage (CIP PE-18000).

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Bond Proceeds</b>	102,000,000	0	0	0	0	0	0	0	0	0	102,000,000
<b>Capital Improvement Fund</b>	(93,310,766)	102,892,675	102,892,675	400,000	0	0	0	0	400,000	0	9,981,909
<b>Transfer frm New Pub. Safety Fac. Impact Fee Fund</b>	455,912	0	0	0	0	0	0	0	0	0	455,912
<b>Transfer from Stanford University Medical Ctr Fund</b>	5,600,000	0	0	0	0	0	0	0	0	0	5,600,000
<b>Total</b>	<b>14,745,146</b>	<b>102,892,675</b>	<b>102,892,675</b>	<b>400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>118,037,821</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	5,301,627	99,889,114	99,889,114	400,000	0	0	0	0	400,000	0	105,590,741
<b>Design</b>	9,443,503	3,003,560	3,003,560	0	0	0	0	0	0	0	12,447,063
<b>Total</b>	<b>14,745,130</b>	<b>102,892,674</b>	<b>102,892,674</b>	<b>400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>118,037,804</b>

### Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>General Fund-Operating</b>	0	355,000	366,000	377,000	388,000

#### Operating Impact

This project is anticipated to impact operating expenses in the future. Custodial and maintenance costs are estimated to be \$355,000 in FY 2024 and increase by 3 percent annually thereafter.

# CAPITAL IMPROVEMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Safety  
Section: Community Safety  
Goal: S-1  
Policy: S-1.7  
Program: S1.7.2

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

This project will require an environmental impact report, combined with the California Avenue Area Parking Garage Project, in accordance with CEQA guidelines.



CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



Children's Theatre, January 2016

**Fund:** Capital Improvement Fund

**Category:** Buildings and Facilities

**Project Location:** Children's Theatre, Community Theatre, and Cubberley Theatre

**Managing Department:** Community Services

**IBRC Reference:** New

**Initial Project Start:** Summer 2017

**Initial Project Completion:** Summer 2018

**Revised Project Start:** Summer 2020

**Revised Project Completion:** Summer 2025

**Project Number:** AC-18000

# Performing Arts Venues Seat Replacement

## Description

This project provides funding for the replacement of damaged or non-functioning seats at two of the City's performing arts venues: Children's Theater and Lucie Stern Community Theater.

## Justification

The seats at the City's three theater sites are beyond their useful life and due for replacement based on their age and condition.

## Supplemental Information

Beginning July 1, 2019, the resident theater companies that use the Lucie Stern Community Theatre (West Bay Opera, Palo Alto Players, and TheatreWorks) signed a contract with the City to collect a fee of \$2.00 for each ticket sold for events with paid admission. This fee will be used to offset the costs of enhancements, upgrades, improvements, repairs, preservation, and new equipment and furnishings for the Lucie Stern Community Theatre. The seating upgrade project qualifies for use of this funding source to partially reimburse the costs of the project.

## Significant Changes

**2023-2027 CIP:** Funding increased by \$0.7 million to replace the seats at the Lucie Stern Community Theater and implement ADA compliance design. Prior funding was used for Children's Theatre seat replacement and Cubberley Theater was removed from the scope of the project.

**2020-2024 CIP:** Project scope changed from replacing damaged and non-functioning seats to replacing all seats and funding increased by \$0.3 million.

**2017-2021 CIP:** Project established.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	43,400	427,200	427,200	50,000	650,000	0	0	0	700,000	0	1,170,600
<b>Total</b>	<b>43,400</b>	<b>427,200</b>	<b>427,200</b>	<b>50,000</b>	<b>650,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>700,000</b>	<b>0</b>	<b>1,170,600</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	43,399	378,230	378,230	0	650,000	0	0	0	650,000	0	1,071,629
<b>Design</b>	0	48,970	48,970	50,000	0	0	0	0	50,000	0	98,970
<b>Total</b>	<b>43,399</b>	<b>427,200</b>	<b>427,200</b>	<b>50,000</b>	<b>650,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>700,000</b>	<b>0</b>	<b>1,170,599</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
 Section: Maintenance of Parks and  
 Community Facilities  
 Goal: C-3  
 Policy: C-3.2

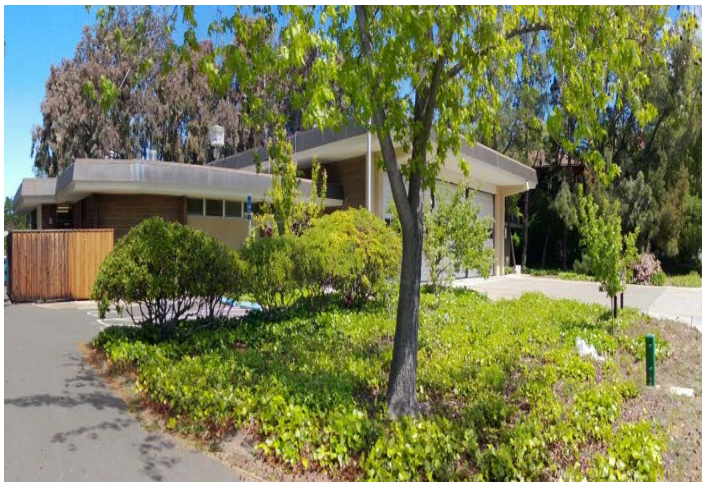
**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15302.

## CAPITAL IMPROVEMENT FUND



Fire Station 2, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PF-00006

# Roofing Replacement

## Description

This project provides funding for ongoing roofing maintenance at various City facilities. Services include major repairs, rehabilitation, and replacement, and components include roof decks, drainage systems, and sheet metal. Roofs scheduled for replacement are based on an annual evaluation of their condition.

## Justification

The life expectancy of most roofs at City facilities is 20 to 25 years. There are facilities in the inventory with roof systems that are beyond or near the end of their useful life.

## Supplemental Information

Facilities scheduled for re-roofing are as follows:

**Fiscal Year 2023:** Lucie Stern Community Theater (flat roof) and Peers Park Club House

**Fiscal Year 2024:** Animal Services Shelter

**Fiscal Year 2025:** Lucie Stern Community Theater (pitch roof)

**Fiscal Year 2026:** Police Department (lower roof) and Avenidas Building

**Fiscal Year 2027:** Foothills Nature Preserve Equipment Storage, Garage, and Maintenance & Equipment Shops

## Significant Changes

**2023-2027 CIP:** Funding was increased and reprogrammed to accommodate the addition of Animal Services in FY 2024, the Community Theater (pitch roof) in FY 2025, and the Avenidas Building in FY 2026. The Police Department (lower roof) moved from FY 2024 to FY 2026, and the Foothills Nature Preserve buildings moved from FY 2026 to FY 2027. All together, the 5-year CIP total increased by \$3.2 million to \$6.2 million.

# CAPITAL IMPROVEMENT FUND

**2022-2026 CIP:** Project costs aligned to meet prevailing wage, with a small portion related to gutter/drain replacement for Lucie Stern Community Center. No roofs are currently being proposed in FY 2025, however there are roofs proposed in FY 2026.

**2021-2025 CIP:** Funding was reduced as part of the FY 2021 Capital Improvement Program budget strategy. Baylands Athletic Center Snack Bar & Restrooms and Mitchell Park Tiny Tots Restroom added for FY 2021 and all other projects moved out a year.

**2020-2024 CIP:** Avenidas Senior Center moved to FY 2020 from FY 2021 and Lucie Stern Community Center

**2019-2023 CIP:** Mitchell Park Storage Pool Filter Facility and Arastradero Gate Way will replace the animal shelter in FY 2019.

**2018-2022 CIP:** Funding for Ventura Unit 3 has been moved from FY 2021 to 2018 due to its condition and the scheduled work on other Ventura units. The Avenidas Senior Center has been added to FY 2021.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	910,745	810,745	1,423,000	379,000	1,708,500	1,780,500	885,100	6,176,100	0	N/A
<b>Total</b>	<b>N/A</b>	<b>910,745</b>	<b>810,745</b>	<b>1,423,000</b>	<b>379,000</b>	<b>1,708,500</b>	<b>1,780,500</b>	<b>885,100</b>	<b>6,176,100</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	910,745	810,745	1,423,000	379,000	1,708,500	1,780,500	885,100	6,176,100	0	N/A
<b>Total</b>	<b>N/A</b>	<b>910,745</b>	<b>810,745</b>	<b>1,423,000</b>	<b>379,000</b>	<b>1,708,500</b>	<b>1,780,500</b>	<b>885,100</b>	<b>6,176,100</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Maintenance of Parks and Community Facilities  
Goal: C-3  
Policy: C-3.2

#### Potential Board/Commission Review:

Historic Resources Board  
Parks and Recreation Commission  
Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301 except for historic buildings.



## CAPITAL IMPROVEMENT FUND



Roth Building

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** 300 Homer Avenue  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Winter 2022  
**Initial Project Completion:** Summer 2024  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PF-23001

# Roth Building Rehabilitation Phase 1

## Description

This project provides funding for Phase 1 of the rehabilitation and build-out of the Roth Building facility. Phase I will make the building suitable for occupancy, also known as a “warm shell.” Phase II of the rehabilitation includes the interior build-out of the museum and exhibits, readying the facility to welcome visitors, and will be fully funded by the Palo Alto Museum (PAM).

## Justification

The Roth Building is a historic City-owned facility that is currently vacant and in disrepair. Extensive work is needed to repair and secure the building exterior and to update the interior for use. Discussions have occurred over the last several years with the PAM to rehabilitate the building in order to make it habitable (Phase 1) and to convert the interior into a museum (Phase 2).

## Supplemental Information

Funding for this project comes from several sources, including the following: Transfer of Development Rights Fund that must be used for the rehabilitation of a City-owned building in the historic or seismic categories listed in Palo Alto Municipal Code Section 18.28.060 (\$5.1 million); Stanford University Medical Center (SUMC) Fund (\$2.0 million); Community Center Development Impact Fee Fund for a community room (\$1.65 million); PAM donations (\$1.0 million); Parks Development Impact Fee Fund for a restroom to serve Heritage Park (\$0.35 million); Library Development Impact Fee Fund for City archives (\$0.3 million); and a County of Santa Clara grant for roof repairs (\$0.3 million). Use of Impact Fee Funds will be confirmed once the scope of the Phase I portion of the project is complete.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Capital Improvement Fund	0	0	0	5,600,000	0	0	0	0	5,600,000	0	5,600,000
Revenue from Other Agencies	0	0	0	1,100,000	0	0	0	0	1,100,000	0	1,100,000
Transfer from Community Center Impact Fee Fund	0	0	0	1,650,000	0	0	0	0	1,650,000	0	1,650,000
Transfer from Library Development Impact Fee Fund	0	0	0	300,000	0	0	0	0	300,000	0	300,000
Transfer from Parks Development Impact Fee Fund	0	0	0	350,000	0	0	0	0	350,000	0	350,000
Transfer from Stanford University Medical Ctr Fund	0	0	0	2,000,000	0	0	0	0	2,000,000	0	2,000,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,000,000</b>	<b>0</b>	<b>11,000,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	0	0	11,000,000	0	0	0	0	11,000,000	0	11,000,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,000,000</b>	<b>0</b>	<b>11,000,000</b>

### Operating Impact

This project will have ongoing operating expenses related to the new facility, and a cost sharing agreement will need to be developed between the City and the Palo Alto Museum. As these costs are quantified and the agreement finalized, adjustments will be brought forward in future budgets as necessary.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Historic Resources Board                  Planning and Transportation Commission                  Architectural Review Board</p>
--	--

## CAPITAL IMPROVEMENT FUND



Lot N, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Buildings and Facilities  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** N/A  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PF-14003

# University Avenue Parking Improvements

## Description

This project provides funding for improvements in the University Avenue Parking District, including parking lot resurfacing; striping and signing; parking structure painting or staining; electrical system upgrades needed to support improved lighting; and security system and/or other system upgrades.

## Justification

This project is intended to maintain the existing parking lots and garages in the University Avenue Parking District to extend the useful life of their pavement surfaces, buildings, and systems.

## Supplemental Information

This project is dependent on the availability of funding in the University Avenue Parking Permit Fund.

**Fiscal Year 2023:** No new work planned, but funding from FY 2022 was reappropriated to FY 2023 to complete work from FY 2022.

**Fiscal Year 2024:** No work planned.

**Fiscal Year 2025:** No work planned.

**Fiscal Year 2026:** Scheduled to resurface Lot N

**Fiscal Year 2027:** Scheduled to resurface and restripe Lot D (Hamilton/Waverley) and Lot K(Lytton/Waverley)

## Significant Changes

**2023-2027 CIP:** Parking lots were inspected in October 2021 and cost estimates were updated based on current pavement condition. Construction expenses were increased to account for cost escalation. All together, the 5-year CIP has increased by \$0.4 million to \$0.6 million.

# CAPITAL IMPROVEMENT FUND

**2022-2026 CIP:** Scheduled work reduced to maintenance of existing parking lots and garages in the University Avenue parking district and deferred beyond FY 2026 to contribute to cost containment strategies in FY 2022.

**2019-2023 CIP:** Parking Lot C resurfacing will be coordinated with the Avenidas project. With the exception of Lot C, all University Avenue parking district lots were resurfaced and no additional work is needed at this time.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	65,535	(34,465)	111,000	0	0	30,700	113,800	255,500	0	N/A
<b>Transfer from University Ave Parking Permit Fund</b>	N/A	187,400	187,400	0	0	0	87,000	247,000	334,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>252,935</b>	<b>152,935</b>	<b>111,000</b>	<b>0</b>	<b>0</b>	<b>117,700</b>	<b>360,800</b>	<b>589,500</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	252,935	152,935	111,000	0	0	117,700	360,800	589,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>252,935</b>	<b>152,935</b>	<b>111,000</b>	<b>0</b>	<b>0</b>	<b>117,700</b>	<b>360,800</b>	<b>589,500</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Transportation  
Section: Parking  
Goal: T-5  
Policy: T-5.9

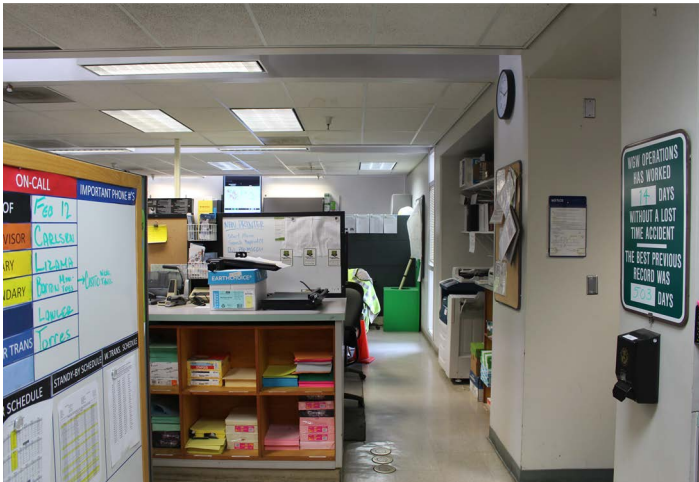
#### Potential Board/Commission Review:

Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## CAPITAL IMPROVEMENT FUND



Entryway to the Water, Gas, Wastewater Offices

**Fund:** Capital Improvement Fund

**Category:** Buildings and Facilities

**Project Location:** MSC Building C

**Managing Department:** Public Works

**IBRC Reference:** N/A

**Initial Project Start:** Fall 2018

**Initial Project Completion:** Fall 2019

**Revised Project Start:** Fall 2020

**Revised Project Completion:** Summer 2023

**Project Number:** PE-19001

# Water, Gas, Wastewater Office Remodel

## Description

This project provides funding for minor renovations to the Water Gas Wastewater (WGW) office space at the Municipal Services Center (MSC). The current space no longer meets the operational needs of the Utilities Department. This project will reconfigure the space so it is more efficient for departmental operations, and will include the replacement of aging furniture and finishes such as cubicle furniture, carpet, paint, and lighting. Enclosed offices may be demolished and relocated. Additionally, electrical, mechanical (HVAC), and fire systems work will be required.

## Justification

The current office space configuration and furnishings have been in place for about 20 years. Reconfiguring the space will allow staff from the same work groups to be located together and next to their supervisors/managers, and create additional offices and other space for new staff. The WGW kitchen/lunchroom size will be reduced to further allow for more office space, and the project will also add a small reception/waiting area for visitors.

## Significant Changes

**2023-2027 CIP:** Project completion extended from Summer 2021 to Summer 2023 due to delays experienced during the design phase.

**2022-2026 CIP:** Project timeline extended due to delays in procuring design services.

**2021-2025 CIP:** Project timeline extended to reflect coordination with the additional redesign work for PF-16006, Municipal Service Center Lighting, Mechanical, and Electrical Improvements, and staffing workload constraints.

**2020-2024 CIP:** Project timeline extended due to staffing constraints.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	87,186	63,207	633,207	(507,100)	0	0	0	0	(507,100)	0	213,293
<b>Transfer from Utilities Administration Fund</b>	70,000	654,000	84,000	570,000	0	0	0	0	570,000	0	724,000
<b>Total</b>	<b>157,186</b>	<b>717,207</b>	<b>717,207</b>	<b>62,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>62,900</b>	<b>0</b>	<b>937,293</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	7,391	653,665	653,665	62,900	0	0	0	0	62,900	0	723,956
<b>Design</b>	149,790	63,541	63,541	0	0	0	0	0	0	0	213,331
<b>Total</b>	<b>157,181</b>	<b>717,206</b>	<b>717,206</b>	<b>62,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>62,900</b>	<b>0</b>	<b>937,287</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
 Section: Maintenance of Parks and  
 Community Facilities  
 Goal: C-3  
 Policy: C-3.2

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**

# Department Technology Upgrades and Improvements

# CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Department Technology Upgrades and Improvements  
**Project Location:** Various  
**Managing Department:** Fire  
**IBRC Reference:** N/A  
**Initial Project Start:** Fall 2021  
**Initial Project Completion:** Summer 2022  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** FD-22000

Extrication tools stored on the fire engine

## Extrication Tool Replacement

### Description

This project provides funding for the replacement of all extrication tools for the Fire Department. Extrication tools, also known as "Jaws of Life," are used to rescue victims of car accidents and other emergencies where the victims are trapped in confined spaces.

### Justification

Extrication tools are used for large-scale rescue incidents, such as car accidents. These tools allow first responders to cut through most materials in order to rescue patients. These tools require replacement every 8-10 years. The current fleet was purchased in 2012.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Capital Improvement Fund	0	255,500	137,313	118,187	0	0	0	0	118,187	0	255,500
Revenue from Other Agencies	0	42,700	42,700	0	0	0	0	0	0	0	42,700
<b>Total</b>	<b>0</b>	<b>298,200</b>	<b>180,013</b>	<b>118,187</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>118,187</b>	<b>0</b>	<b>298,200</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Other	0	298,200	180,013	118,187	0	0	0	0	118,187	0	298,200
<b>Total</b>	<b>0</b>	<b>298,200</b>	<b>180,013</b>	<b>118,187</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>118,187</b>	<b>0</b>	<b>298,200</b>



**Operating Impact**

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget. Costs for future replacements will be budgeted according to a replacement cycle of 8-10 years.

<b>Relationship to Comprehensive Plan Primary Connection</b>	<b>Potential Board/Commission Review:</b>
Element: Safety Section: Natural Hazards Goal: S-2 Policy: S-1.13	Planning and Transportation Commission
<b>Environmental Impact Analysis:</b>	
None Required	

## CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Department Technology Upgrades and Improvements  
**Project Location:** Palo Alto Police Department (275 Forest Ave)  
**Managing Department:** Police  
**IBRC Reference:** N/A  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PD-20000

Police In-Field Audio/Video System

# Police Video Recording Systems Replacement

## Description

This project provides funding for the replacement of the Palo Alto Police Department's video recording systems used to record events in the field with in-car cameras as well as Body-Worn Cameras (BWC). The in-car camera technology was introduced in 2013 while BWCs were implemented in Fiscal Year 2019 after a one-year pilot program. In-car systems are fixed in the vehicles and include five cameras with BWCs operating on rechargeable batteries for up to six hours, secured to officers' uniforms. Images captured by in-car systems and BWCs are stored both locally and in the cloud on a secure platform.

## Justification

The useful life is approximately five years for in-car systems and four years for BWCs. Public requests for more access to police video, particularly of "critical incidents," has increased with the passage of state laws that hold agencies accountable for a higher level of transparency. The adoption of these technologies, along with the desire of the public for more accountability, prioritizes the need for police departments to maintain video recording systems. While video does not replace a written report, video can be helpful for reconstructing an incident for both criminal investigations and internal investigations.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	245,600	230,600	133,200	0	187,900	0	271,700	592,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>245,600</b>	<b>230,600</b>	<b>133,200</b>	<b>0</b>	<b>187,900</b>	<b>0</b>	<b>271,700</b>	<b>592,800</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	N/A	245,600	230,600	133,200	0	187,900	0	271,700	592,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>245,600</b>	<b>230,600</b>	<b>133,200</b>	<b>0</b>	<b>187,900</b>	<b>0</b>	<b>271,700</b>	<b>592,800</b>	<b>0</b>	<b>N/A</b>

#### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget. Costs for future replacements will be budgeted according to a replacement cycle of five years for in-car systems and four years for BWCs.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Safety                  Section: Community Safety                  Goal: S-1                  Policy: S-1.6                  Program: S1.6.2</p> <p><b>Environmental Impact Analysis:</b>                  Not Applicable</p>	<p><b>Potential Board/Commission Review:</b>                  Planning and Transportation Commission</p>
---	--



CITY OF  
**PALO  
ALTO**

## Parks and Open Space

## CAPITAL IMPROVEMENT FUND



Brilliance, by Joe O'Connell and Blessing Hancock

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Various  
**Managing Department:** Community Services  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** AC-86017

# Art In Public Spaces

## Description

This project provides funding for innovative temporary and permanent public art for both interior and exterior public spaces in accordance with the City Council-approved Art in City Capital Improvement Projects ordinance.

## Justification

This project places art in public buildings, plazas, gateways, parks, and other sites frequented by residents and visitors alike. It is expected that public art will enhance community pride and ownership in the City of Palo Alto. Public art preserves the long-term viability of the built environment and helps set a standard for aesthetic variety and creativity in the community.

## Supplemental Information

The Art in the City Capital Improvement Projects ordinance states that the City will budget one percent of its CIP budget for public art, with certain exceptions. A base level of funding in the amount of \$50,000 is included each year, and a portion of this funding pays for staff to install and replace temporary and rotating art pieces around the City.

Prior to Fiscal Year 2015, one percent for public art was included in the budget for each applicable project. Beginning in Fiscal Year 2015, public art funding is accounted for within this capital project. This change provides a clearer picture of how much funding is available for public art, allows for the pooling of funds for more impactful projects, and ensures that the funds are preserved for public art.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	2,162,806	685,606	2,004,800	196,800	163,400	150,300	88,700	2,604,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>2,162,806</b>	<b>685,606</b>	<b>2,004,800</b>	<b>196,800</b>	<b>163,400</b>	<b>150,300</b>	<b>88,700</b>	<b>2,604,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	2,162,806	685,606	2,004,800	196,800	163,400	150,300	88,700	2,604,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>2,162,806</b>	<b>685,606</b>	<b>2,004,800</b>	<b>196,800</b>	<b>163,400</b>	<b>150,300</b>	<b>88,700</b>	<b>2,604,000</b>	<b>0</b>	<b>N/A</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Capital Improvement Fund</b>	36,000	37,000	38,000	39,000	40,000

### Operating Impact

Annual funding for public art maintenance citywide is allocated to the Community Services Department in the General Fund, as noted in the Operating Impacts table above.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Land Use and Community Design Section: Parks and Gathering Places Goal: L-8 Policy: L-8-5	Element: Land Use and Community Design Section: Commercial Centers Goal: L-4 Policy: L-4.4	Parks and Recreation Commission Planning and Transportation Commission Architectural Review Board
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15301.		

## CAPITAL IMPROVEMENT FUND



Rinconada Tennis Courts, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Various  
**Managing Department:** Community Services  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PG-06001

# Athletic Courts Resurfacing

## Description

This project provides funding for repair and resurfacing of various athletic courts such as tennis, pickleball, and basketball courts and gathering bowls in Palo Alto parks.

## Justification

Athletic courts and gathering bowls in Palo Alto parks require ongoing repairs and resurfacing due to wear and tear. Resurfacing of courts will enhance the safety, quality, and condition of these athletic facilities.

## Supplemental Information

Work to be completed under this project is scheduled as follows:

**Fiscal Year 2023:** Greer Park, Hoover Park, Johnson Park, Ramos Park, Robles Park, Seale Park and Scott Park basketball court resurfacing or reconstruction

**Fiscal Year 2024:** Hopkins Park tennis courts resurfacing or reconstruction

**Fiscal Year 2025:** Terman Park basketball courts reconstruction

**Fiscal Year 2026:** Terman Park and Weisshaar Park tennis court resurfacing

**Fiscal Year 2027:** Mitchell Park tennis courts and pickleball courts resurfacing

## Significant Changes

**2020-2024 CIP:** The project name was changed from Tennis and Basketball Court Resurfacing to broaden the scope of the project and include more types of athletic courts such as tennis, basketball, pickleball, and gathering bowls in Palo Alto parks.



# CAPITAL IMPROVEMENT FUND

**2017-2021 CIP:** Tennis courts at Cubberley Community Center have been removed from this project and now are covered in a separate project within the Cubberley Infrastructure Fund.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	323,843	248,043	314,500	304,000	313,800	305,600	338,100	1,576,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>323,843</b>	<b>248,043</b>	<b>314,500</b>	<b>304,000</b>	<b>313,800</b>	<b>305,600</b>	<b>338,100</b>	<b>1,576,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	323,843	248,043	314,500	304,000	313,800	305,600	338,100	1,576,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>323,843</b>	<b>248,043</b>	<b>314,500</b>	<b>304,000</b>	<b>313,800</b>	<b>305,600</b>	<b>338,100</b>	<b>1,576,000</b>	<b>0</b>	<b>N/A</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.2 Program: C3.2.1	Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.3 Program: C3.3.1	Parks and Recreation Commission Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15301.		

## CAPITAL IMPROVEMENT FUND



Baylands, July 2014

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Baylands Nature Preserve (2500 Embarcadero Road)  
**Managing Department:** Community Services  
**IBRC Reference:** Catch-up  
**Initial Project Start:** Fall 2016  
**Initial Project Completion:** Winter 2018  
**Revised Project Start:** N/A  
**Revised Project Completion:** Fall 2023  
**Project Number:** PG-17000

# Baylands Comprehensive Conservation Plan

## Description

This project provides funding for a conservation plan that will examine the native vegetation, wildlife habitat resources, and wildlife-appropriate public access for the entire Baylands, including Byxbee Park. This plan will provide needed information on best areas to maintain wildlife habitat and appropriate areas to develop trails or other recreation amenities; provide a design overlay for appropriate types and locations of public art in the Baylands; and design an interpretive messaging throughout the Baylands. The plan seeks to optimize opportunities for low impact recreation ensuring that these are compatible with the Baylands Master Plan direction for a passive park and nature preserve. The Conservation Plan will also provide input to the Byxbee Park Completion project.

## Justification

Staff needs a guiding plan to provide insight on best management practices for wildlife, habitat, vegetation, and recreation management. The plan will also provide priorities, which will help staff and volunteers guide resources to the most important projects. With numerous changes taking place in environmentally significant areas, it is vital to have a holistic vision for the corridor that will balance the diverse needs of stakeholders.

## Supplemental Information

A prior project to create a Baylands Comprehensive Conservation Plan was initiated in June 2006 but due to funding cuts the project was not completed. This project will involve hiring a consultant to complete the plan.

## Significant Changes

**2023-2027 CIP:** Project extended and funds re-appropriated to consider additional recommendation from stakeholders that may require additional funding.

**2021-2025 CIP:** CEQA work has been extended to FY 2021.

# CAPITAL IMPROVEMENT FUND

**2019-2023 CIP:** Additional funding of \$90,000 added for CEQA. Completion date revised to FY 2019.

**2017-2021 CIP:** Additional funding of \$60,000 was added to include design for interpretive messaging and design overlay for appropriate types and locations of public art.

**2016-2020 CIP:** Project established.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	386,399	43,055	35,955	7,100	0	0	0	0	7,100	0	429,454
<b>Total</b>	<b>386,399</b>	<b>43,055</b>	<b>35,955</b>	<b>7,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,100</b>	<b>0</b>	<b>429,454</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	386,398	43,055	35,955	7,100	0	0	0	0	7,100	0	429,453
<b>Total</b>	<b>386,398</b>	<b>43,055</b>	<b>35,955</b>	<b>7,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,100</b>	<b>0</b>	<b>429,453</b>

### Operating Impact

This project is anticipated to impact operating expenses in the future. As these costs are quantified, adjustments will be brought forward in future budgets, as necessary.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Open Space  
Goal: N-3  
Policy: N-3.4

#### Potential Board/Commission Review:

Parks and Recreation Commission  
Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project may be subject to CEQA review.

## CAPITAL IMPROVEMENT FUND



Baylands Levee, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Harbor Road near Baylands Nature Interpretive Center (2775 Embarcadero Road)  
**Managing Department:** Community Services  
**IBRC Reference:** New  
**Initial Project Start:** Spring 2012  
**Initial Project Completion:** Summer 2014  
**Revised Project Start:** Summer 2026  
**Revised Project Completion:** Summer 2028  
**Project Number:** OS-09002

# Baylands Levee Repair for Public Safety Access

## Description

This project provides funding to restore the width and height of the earthen flood levee between Harbor Road near the Baylands Interpretive Center and the perimeter levee of the airport to six inches above its original height.

## Justification

This section of City-maintained levee has significantly subsided since it was built in the early 1960s. High winter tides now overflow the top of the levee, causing significant erosion along both edges of the levee. This levee is important not only for flood control of the Baylands, but also for emergency response by fire and paramedic vehicles for fires, plane crashes and rescue of injured trail users. The section of levee between the road and the Nature Center is essential for public access.

## Supplemental Information

Information from the Bay Conservation and Development Commission on sea level rise projections will be incorporated into the design of the restoration of the levee in order for the structure to function against increasing tide levels. This project is pending a cost estimate update as regulatory agencies have informed staff this project will require mitigation.

## Significant Changes

**2023-2027 CIP:** Project funding has been pushed out to FY 2026 and is pending an updated cost estimate.

**2020-2024 CIP:** Project funding has been pushed out to FY 2024 and is pending an updated cost estimate.

**2019-2023 CIP:** Project funding has been pushed out to FY 2021 and is pending an updated cost estimate.

**2018-2022 CIP:** Securing the regulatory permits remain delayed and now may require mitigation.

# CAPITAL IMPROVEMENT FUND

**2016-2020 CIP:** Project completion has been extended by 2 1/2 years due to delays in securing the regulatory permits needed to construct the project.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	54,298	0	0	0	0	0	389,600	0	389,600	0	443,898
<b>Total</b>	<b>54,298</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>389,600</b>	<b>0</b>	<b>389,600</b>	<b>0</b>	<b>443,898</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	54,298	0	0	0	0	0	0	0	0	0	54,298
<b>Design</b>	0	0	0	0	0	0	389,600	0	389,600	0	389,600
<b>Total</b>	<b>54,298</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>389,600</b>	<b>0</b>	<b>389,600</b>	<b>0</b>	<b>443,898</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment          Section: Open Space          Goal: N-1          Policy: N-1.5          Program: N1.5.1</p> <p><b>Environmental Impact Analysis:</b>          This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission          San Francisquito Creek Joint Powers Authority</p>
--	---

## CAPITAL IMPROVEMENT FUND



Greer Park, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Various  
**Managing Department:** Community Services  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PG-06003

# Benches, Signage, Walkways, Perimeter Landscaping, and Site Amenities

## Description

This project provides funding for the restoration and replacement of existing benches, signage, fencing, walkways, and landscaping at various City facilities.

## Justification

Benches, signage, fencing, walkways, and perimeter landscaping at various sites are due for replacement or upgrade based on their age and/or condition.

## Supplemental Information

Replacements will be evaluated and recommended by the Community Services Department on a per park basis with actual work dependent upon bid results.

## Significant Changes

**2022-2026 CIP:** This project was reduced by approximately \$40,000 in FY 2022 to contribute to cost containment strategies in FY 2022.

**2020-2024 CIP:** Ongoing project budget increased by \$25,000 annually, reaching approximately \$0.2 million.



## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	278,079	278,079	194,300	247,500	255,400	248,800	275,300	1,221,300	0	N/A
<b>Total</b>	<b>N/A</b>	<b>278,079</b>	<b>278,079</b>	<b>194,300</b>	<b>247,500</b>	<b>255,400</b>	<b>248,800</b>	<b>275,300</b>	<b>1,221,300</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	278,079	278,079	194,300	247,500	255,400	248,800	275,300	1,221,300	0	N/A
<b>Total</b>	<b>N/A</b>	<b>278,079</b>	<b>278,079</b>	<b>194,300</b>	<b>247,500</b>	<b>255,400</b>	<b>248,800</b>	<b>275,300</b>	<b>1,221,300</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

This project is not anticipated to impact operating expenses and if any maintenance costs increase, costs will be absorbed with the available maintenance funding in the annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2                  Program: C3.2.1</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3                  Program: C3.3.1</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>		

## CAPITAL IMPROVEMENT FUND



Bol Park, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 3590 Laguna Avenue  
**Managing Department:** Public Works  
**IBRC Reference:** Catch-up  
**Initial Project Start:** Summer 2019  
**Initial Project Completion:** Summer 2020  
**Revised Project Start:** Summer 2026  
**Revised Project Completion:** Summer 2027  
**Project Number:** PE-16000

# Bol Park Improvements

## Description

This project provides funding for safety renovations and accessibility improvements, including repairs to the decomposed granite pathways, park lighting, and replacement of the playground equipment. Irrigation renovations and turf restoration are also included in this project, as well as the replacement of site amenities.

## Justification

The decomposed granite pathway needs regrading and resurfacing. The children's playground equipment will reach its 20 years life expectancy by 2024 and will need replacement. Park lighting and other site amenities including benches, tables and trash receptacles are very old and need to be replaced.

## Significant Changes

**2023-2027 CIP:** Park improvements have been deferred from FY 2024 to FY 2027 due to staffing constraints. Design and Construction expenses were increased to account for cost escalation.

**2021-2025 CIP:** Playground replacement added to the scope of the project, as it will reach its 20-year life expectancy in 2024.

**2020-2024 CIP:** Project moved from FY 2020 to FY 2024 due to some interim improvements that were made, prolonging the remaining park structures to last until FY 2024. This allows for work at other projects with more immediate needs.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	0	0	0	797,500	797,500	0	797,500
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>797,500</b>	<b>797,500</b>	<b>0</b>	<b>797,500</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	0	751,500	751,500	0	751,500
<b>Design</b>	0	0	0	0	0	0	0	46,000	46,000	0	46,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>797,500</b>	<b>797,500</b>	<b>0</b>	<b>797,500</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                  Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3</p>	<p><b>Potential Board/Commission Review:</b>                  Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	

## CAPITAL IMPROVEMENT FUND



Bol Park Bike Path, April 2022

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 3590 Laguna Avenue  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2024  
**Initial Project Completion:** Summer 2026  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PE-25000

# Bol Park Pathway Repaving and Repair

## Description

The Bol Park pathway which extends from the north at Hanover Drive at the Stanford Technological Park to the south at Arastadero Road is approximately 1.2 miles in length. The pathway is a key link in the local and regional bike system and is heavily utilized by both Gunn High School and the Veterans facility.

## Justification

The Bol Park Pathway is a heavily used path for local and regional connections. The pathway currently is in need of repaving. Sections of the pathway have decreased in width due to path deterioration and pathway signage needs updating. The overall layout of the path needs further review to eliminate a current blind spot due to a change in pathway elevation. The funding proposed for this project assumes widening and resurfacing the pathway.

## Supplemental Information

The Barron Park community has formed the Bol Park Pathway Committee to work with the City to improve the pathway and the city has performed a user survey that supports the findings of a larger user group of the pathway.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	0	222,100	1,170,300	0	1,392,400	0	1,392,400
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>222,100</b>	<b>1,170,300</b>	<b>0</b>	<b>1,392,400</b>	<b>0</b>	<b>1,392,400</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	1,170,300	0	1,170,300	0	1,170,300
<b>Design</b>	0	0	0	0	0	222,100	0	0	222,100	0	222,100
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>222,100</b>	<b>1,170,300</b>	<b>0</b>	<b>1,392,400</b>	<b>0</b>	<b>1,392,400</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                  Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3</p>	<p><b>Potential Board/Commission Review:</b>                  Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	

## CAPITAL IMPROVEMENT FUND



Boulware Park, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 410 Fernando Avenue/3350 Birch Street  
**Managing Department:** Public Works  
**IBRC Reference:** Catch-up  
**Initial Project Start:** Fall 2017  
**Initial Project Completion:** Fall 2018  
**Revised Project Start:** Spring 2020  
**Revised Project Completion:** Summer 2023  
**Project Number:** PE-17005

# Boulware Park Improvements

## Description

This project provides funding for improvements to the existing Boulware Park, conversion of the Birch Street property purchased by the City in FY 2019 into a park facility, and connecting the existing park to the Birch Street property by removing Ash Street and reconfiguring Chestnut Avenue. The park improvements include development of the existing Boulware Park and Birch Street property; installation of a new play structure; replacement of existing lighting, drinking fountains, benches, trash receptacles, and rubberized surfacing; accessibility upgrades; addition of a new restroom; new park facilities; and streets improvements.

## Justification

The existing playground equipment, installed in 1993, is approaching the end of its useful life and needs to be replaced. In addition, light poles and site amenities, including drinking fountains, benches and trash/recycle receptacles are aged and need replacing. The City purchased an undeveloped lot from Pacific Bell Telephone Company in FY 2019, located at 3350 Birch Street (previously PE-19003), across a public street from Boulware Park, to use as additional parkland in the Ventura neighborhood. This neighborhood is a densely populated area of the City with minimal parkland. Additionally, the Parks Master Plan, adopted in 2017, included a goal to add more open space in the Ventura Neighborhood.

## Supplemental Information

The City conducted a community-based review process to develop a cohesive design to determine what new amenities will be added in the final design of the park. The project was determined to be CEQA exempt and a notice of determination has been filed.

# CAPITAL IMPROVEMENT FUND

## Significant Changes

**2023-2027 CIP:** Project completion extended from Summer 2022 to Summer 2023 due to staffing constraints and prioritization of other projects.

**2022-2026 CIP:** Funding for Birch Street Improvements (PE-19003) was consolidated into the Boulware Park Improvements project (PE-17005) to develop both properties as one park facility. Additional funding is requested to include additional design features and streets improvements based on community input and design development.

**2021-2025 CIP:** Depending on the funding and timeline for Birch Street Improvements (PE-19003), work to update the playground equipment may be coordinated, as the two properties are adjacent to each other.

**2019-2023 CIP:** Project construction funding moved to FY 2020 to address workload plus project priorities.

**2018-2022 CIP:** Project shifted back to FY 2018 following consideration of staff workload and park priorities.

**2017-2021 CIP:** Project shifted from FY 2018 to FY 2021 pending completion of the Parks Master Plan and a reprioritization of parks projects.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	362,272	2,220,833	596,833	1,968,600	0	0	0	0	1,968,600	0	2,927,705
<b>Transfer from Parks Dedication Fund</b>	0	1,100,000	0	1,100,000	0	0	0	0	1,100,000	0	1,100,000
<b>Transfer from Parks Development Impact Fee Fund</b>	0	400,000	0	400,000	0	0	0	0	400,000	0	400,000
<b>Total</b>	<b>362,272</b>	<b>3,720,833</b>	<b>596,833</b>	<b>3,468,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,468,600</b>	<b>0</b>	<b>4,427,705</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	27,396	3,720,833	596,833	3,468,600	0	0	0	0	3,468,600	0	4,092,829
<b>Design</b>	334,869	0	0	0	0	0	0	0	0	0	334,869
<b>Total</b>	<b>362,265</b>	<b>3,720,833</b>	<b>596,833</b>	<b>3,468,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,468,600</b>	<b>0</b>	<b>4,427,698</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Capital Improvement Fund</b>	0	45,000	46,000	48,000	49,000

## Operating Impact

The maintenance cost of this project will be approximately \$45,000 annually, starting in FY 2024, for landscaping and custodial expenses and budgeted to increase by 3 percent annually thereafter.

# CAPITAL IMPROVEMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.3

**Potential Board/Commission Review:**

Parks and Recreation Commission  
Planning and Transportation Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15302.



CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



Byxbee Park, March 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 2500 Embarcadero Road  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Fall 2019  
**Revised Project Start:** Fall 2023  
**Revised Project Completion:** Summer 2025  
**Project Number:** PE-18006

# Byxbee Park Completion

## Description

This project provides funding for the remaining improvements to Byxbee Park per the conceptual plan developed in the Baylands Comprehensive Conservation Plan. The conceptual plan calls for additional native planting islands, park seating, interpretive signage, and an expanded parking lot.

## Justification

While some improvements and amenities have already been provided through the Byxbee Park Trails Project, this project will revisit the vision for the entire park, and implement the plan for the final park. Design of the project will incorporate recommendations from the Baylands Comprehensive Conservation Plan Project.

## Supplemental Information

The Byxbee Park Completion Project is included in the Council Infrastructure Plan. Funds for the project are provided by the Parks Development Impact Fee Fund. The Parks, Trails, Natural Open Space and Recreational Master Plan projects were reviewed and adjusted according to staff availability as well as community and Infrastructure Blue Ribbon Committee (IBRC) needs.

## Significant Changes

**2023-2027 CIP:** Project moved to FY 2024 due to staffing constraints. Design funding of approximately \$0.5 million added in FY 2024 and offset by additional Parks Dedication funding.

**2022-2026 CIP:** Project moved to FY 2022 due to staffing constraints.

**2020-2024 CIP:** A majority of the funding, including the transfer from the Parks Dedication Fund, has been moved to FY 2021 to coordinate with the Baylands Comprehensive Conservation Plan and the Byxbee Park Master Plan.



# CAPITAL IMPROVEMENT FUND

**2019-2023 CIP:** Budget increased to reflect total project cost estimate of \$3.6 million.

**2018-2022 CIP:** Funding has been moved to FY 2019 to coordinate with the findings from the Baylands Comprehensive Conservation Plan project.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	(31,808)	481,146	0	0	481,000	0	0	0	481,000	0	449,192
<b>Transfer from Parks Dedication Fund</b>	400,000	2,400,000	0	0	2,850,000	0	0	0	2,850,000	0	3,250,000
<b>Total</b>	<b>368,192</b>	<b>2,881,146</b>	<b>0</b>	<b>0</b>	<b>3,331,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,331,000</b>	<b>0</b>	<b>3,699,192</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	368,189	2,881,146	0	0	2,881,000	0	0	0	2,881,000	0	3,249,189
<b>Design</b>	0	0	0	0	450,000	0	0	0	450,000	0	450,000
<b>Total</b>	<b>368,189</b>	<b>2,881,146</b>	<b>0</b>	<b>0</b>	<b>3,331,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,331,000</b>	<b>0</b>	<b>3,699,189</b>

### Operating Impact

This project is anticipated to impact operating expenses in the future. Byxbee Park is maintained under a large parks maintenance contract which will be bid out for services. As these costs are quantified, adjustments will be brought forward in future budget cycles.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Maintenance of Parks and Community Facilities  
Goal: C-3  
Policy: C-3.3

#### Potential Board/Commission Review:

Parks and Recreation Commission  
Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project is anticipated to require an environmental assessment in accordance with CEQA guidelines.

## CAPITAL IMPROVEMENT FUND



Cameron Park, January 2015

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** 2101 Wellesley Street between College and Stanford Avenues

**Managing Department:** Community Services

**IBRC Reference:** Catch-up

**Initial Project Start:** Summer 2017

**Initial Project Completion:** Summer 2018

**Revised Project Start:** Summer 2022

**Revised Project Completion:** Fall 2022

**Project Number:** PG-14002

# Cameron Park Improvements

## Description

This project provides funding to upgrade and renovate safety and accessibility features at Cameron Park with a primary focus on the park playground.

## Justification

As park infrastructure ages, safety and compliance issues need to be addressed. This project will ensure compliance and address accessibility needs as well as safety issues.

## Significant Changes

**2022-2026 CIP:** Project moved to FY 2022 due to staffing constraints and other high priority projects.

**2021-2025 CIP:** Project moved to FY 2021 due to staffing constraints and other high priority projects.

**2020-2024 CIP:** Project shifted from FY 2022 to FY 2020 due to acceleration of playground damage, aging, and replacements needs. Also, funding increased by \$95,000 to account for construction cost increases.

**2018-2022 CIP:** Project shifted from FY 2020 to FY 2022 due to a reprioritization of parks projects.

**2017-2021 CIP:** Project shifted from FY 2018 to FY 2020 pending completion of the Parks Master Plan and a reprioritization of parks projects.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	127,665	108,754	7,254	101,500	0	0	0	0	101,500	0	236,419
<b>Total</b>	<b>127,665</b>	<b>108,754</b>	<b>7,254</b>	<b>101,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>101,500</b>	<b>0</b>	<b>236,419</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	108,754	7,254	101,500	0	0	0	0	101,500	0	108,754
<b>Design</b>	127,664	0	0	0	0	0	0	0	0	0	127,664
<b>Total</b>	<b>127,664</b>	<b>108,754</b>	<b>7,254</b>	<b>101,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>101,500</b>	<b>0</b>	<b>236,418</b>

### Operating Impact

This project is not anticipated to impact operating expenses and if any maintenance costs increase, costs will be absorbed with the available maintenance funding in the annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.3 Program: C3.3.1	Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.2 Program: C3.2.1	Parks and Recreation Commission Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15301.		

## CAPITAL IMPROVEMENT FUND



Mitchell Park Dog Run, March 2017

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Various  
**Managing Department:** Community Services  
**IBRC Reference:** New  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PG-18001

# Dog Park Installation and Renovation

## Description

This project provides funding for building dog parks at various City parks and facilities that currently do not have dog parks, as well as renovating existing dog parks.

## Justification

The Parks, Trails, Natural Open Space, and Recreation Master Plan provides guidance on dog parks. The policy states that Palo Alto should actively pursue adding dedicated, fenced dog parks in multiple neighborhoods, equitably distributed between North and South Palo Alto. The size of the dog parks will vary, but should strive to be at least 0.25 acres and each new dog park installation will require a Park Improvement Ordinance.

When this project was established, Palo Alto had three dog parks at Mitchell Park, Hoover Park, and Greer Park. These dog parks were undersized and located only in the south side of the City. Funding from this project expanded the dog parks and provided a fourth dog park to serve the north side of the City, at Peers Park. Continued funding from this project allows additional dog parks to be built throughout Palo Alto.

## Significant Changes

**2023-2027 CIP:** FY 2022 funding has been deferred to FY 2023 due to staffing constraints, but future installations will remain in the even fiscal years.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	13,400	13,400	16,500	62,100	0	52,900	0	131,500	0	N/A
<b>Transfer from Parks Development Impact Fee Fund</b>	N/A	150,000	5,500	144,500	150,000	0	150,000	0	444,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>163,400</b>	<b>18,900</b>	<b>161,000</b>	<b>212,100</b>	<b>0</b>	<b>202,900</b>	<b>0</b>	<b>576,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	163,400	13,400	156,500	202,100	0	192,900	0	551,500	0	N/A
<b>Design</b>	N/A	0	5,500	4,500	10,000	0	10,000	0	24,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>163,400</b>	<b>18,900</b>	<b>161,000</b>	<b>212,100</b>	<b>0</b>	<b>202,900</b>	<b>0</b>	<b>576,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Capital Improvement Fund</b>	2,000	4,200	4,300	6,600	6,800

#### Operating Impact

Custodial costs are approximately \$2,000 per year per dog park, which are currently in the operating budget for existing dog parks; however, the addition of more dog parks and annual cost escalations will cause the budget to increase.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.3 Program: C3.3.1	Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.2 Program: C3.2.1	Parks and Recreation Commission Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project is expected to have possible exemption from CEQA under Section 15301		



Boronda Lake Dock, February 2017

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** Foothills Nature Preserve Boronda Lake  
(3300 Page Mill Road between Central and Moody)

**Managing Department:** Community Services

**IBRC Reference:** Keep-up

**Initial Project Start:** Fall 2017

**Initial Project Completion:** Spring 2018

**Revised Project Start:** Fall 2022

**Revised Project Completion:** Fall 2023

**Project Number:** OS-18000

# Foothills Nature Preserve Boronda Lake Dock Replacement

## Description

This project provides funding for the replacement of an aged and deteriorating Boronda Lake Dock.

## Justification

The dock was originally built in 1965 and was last refurbished in 2010 with repairs to the wood decking. The current condition of the dock is declining and now requires a complete replacement of the dock with new decking, ramp, floats, and pilings.

## Significant Changes

**2023-2027 CIP:** Project moved to FY 2023 due to staffing constraints and other high priority projects.

**2022-2026 CIP:** Project construction anticipated to start upon issuance of contract in the summer of calendar year 2021.

**2021-2025 CIP:** Project funding increased due to escalation of repair/construction costs.

**2019-2023 CIP:** Project funding has been pushed out to FY 2021.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	210,000	0	233,200	0	0	0	0	233,200	0	233,200
<b>Total</b>	<b>0</b>	<b>210,000</b>	<b>0</b>	<b>233,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>233,200</b>	<b>0</b>	<b>233,200</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	210,000	0	233,200	0	0	0	0	233,200	0	233,200
<b>Total</b>	<b>0</b>	<b>210,000</b>	<b>0</b>	<b>233,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>233,200</b>	<b>0</b>	<b>233,200</b>

### Operating Impact

This project is not anticipated to impact operating expenses and if any maintenance costs increase, costs will be absorbed with the available maintenance funding in the annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
 Section: Maintenance of Parks and Community Facilities  
 Goal: C-3  
 Policy: C-3.2  
 Program: C3.2.1

#### Potential Board/Commission Review:

Parks and Recreation Commission  
 Planning and Transportation Commission  
 Architectural Review Board

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.



## CAPITAL IMPROVEMENT FUND



Foothills Park Orchard Glen picnic area, January 2016

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** 3300 Page Mill Road between Central and Moody

**Managing Department:** Public Works

**IBRC Reference:** Keep-up

**Initial Project Start:** Summer 2021

**Initial Project Completion:** Fall 2022

**Revised Project Start:** Fall 2023

**Revised Project Completion:** Summer 2026

**Project Number:** PE-21000

# Foothills Nature Preserve Improvements

## Description

This project provides funding to repair the bridge to Sunfish Island; design and permitting costs to replace the footbridge in Los Trancos Valley; to replace the grade control structures along Buckeye Creek, and to provide new split rail fencing to protect sensitive areas, new pedestrian pathways to keep park visitors safe while walking along the park road, and improvements to some of the existing parking areas to make them safer and more efficient.

## Justification

The Sunfish Island Bridge (located at Boronda Lake) needs to be repaired per an assessment completed in Fall 2021. The footbridge in Los Trancos Valley and grade control structures along Buckeye Creek are deteriorating and approaching the end of their useful life. If no action is taken, the footbridge and grade control structures will likely fail in the next five years. This would lead to severe erosion in several areas of Foothills Nature Preserve, especially Wild Horse Valley where the existing utility corridors would be threatened.

Since Foothills Nature Preserve opened to the general public on December 17, 2020, visitation has increased by approximately 100% compared to the historical average. The increase in visitors highlighted the need for several infrastructure improvements. One of the impacts from the increased visitation was people walking into sensitive off trail areas. Temporary measures (stakes and rope) to ensure people stay on trail have been effective, but a long-term solution is to add split rail fencing to protect sensitive areas. Another impact from the increased visitation has been more vehicles, pedestrians, and bicyclists on the narrow preserve roads. A new pedestrian pathway along the road would provide a safe place for pedestrians. Some of the existing parking areas in the preserve, in particular the parking around Vista Hill, need to be renovated and improved to make it safe and efficient for the increased number of vehicles in the preserve.



**Supplemental Information**

Sunfish Island Bridge was built in the early 1960s and significant exterior wear and erosion have deteriorated the condition of this bridge as well as the Los Trancos Valley footbridge. The City completed a hydrology study of Buckeye Creek to provide recommendations to reduce erosion, sediment deposition, and flooding conditions in Foothills Nature Preserve. The study recommended options to resolve the current erosion issues and to restore the creek channel, including replacement of the footbridge and grade control structures along Buckeye Creek.

**Fiscal Year 2023:** Sunfish Island Bridge Repair, design for pathways, fencing and design/permitting for footbridge and grade control structures.

**Fiscal Year 2024:** Pathways and fencing construction.

**Fiscal Year 2026:** Footbridge replacement and grade control construction.

**Significant Changes**

**2023-2027 CIP:** Project design and construction funding increased by approximately \$3.0 million to include updated cost estimates for the footbridge and Buckeye Creek grade control structures replacement, and pathways and fencing improvements.

**2021-2025 CIP:** Project design and construction funding delayed from FY 2021 to FY 2023 for design and FY 2024 for construction due to staffing constraints and other high priority projects.

**2019-2023 CIP:** The Los Trancos Valley footbridge and Buckeye Creek grade control structures replacement has been added to the scope of this project.

**2018-2022 CIP:** Funding has been moved from FY 2020 to FY 2021 to coordinate with the findings from the Foothills Park, Pearson Arastradero Preserve, and Esther Clark Park Comprehensive Conservation Plan project.

Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	555,200	459,600	0	2,272,900	0	3,287,700	0	3,287,700
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>555,200</b>	<b>459,600</b>	<b>0</b>	<b>2,272,900</b>	<b>0</b>	<b>3,287,700</b>	<b>0</b>	<b>3,287,700</b>

Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	49,500	405,300	0	2,272,900	0	2,727,700	0	2,727,700
<b>Design</b>	0	0	0	505,700	54,300	0	0	0	560,000	0	560,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>555,200</b>	<b>459,600</b>	<b>0</b>	<b>2,272,900</b>	<b>0</b>	<b>3,287,700</b>	<b>0</b>	<b>3,287,700</b>

# CAPITAL IMPROVEMENT FUND

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<b>Relationship to Comprehensive Plan Primary Connection</b>	<b>Potential Board/Commission Review:</b>
Element: Community Services & Facilities	Parks and Recreation Commission
Section: Maintenance of Parks and Community Facilities	Planning and Transportation Commission
Goal: C-3	Architectural Review Board
Policy: C-3.3	
<b>Environmental Impact Analysis:</b>	
This project is expected to have a possible exemption from CEQA under Section 15301.	



CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



Foothills Park

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** Foothills Park (3300 Page Mill Road between Central and Moody)

**Managing Department:** Public Works

**IBRC Reference:** New

**Initial Project Start:** Spring 2020

**Initial Project Completion:** Fall 2020

**Revised Project Start:** Fall 2022

**Revised Project Completion:** Summer 2023

**Project Number:** PE-20000

# Foothills Nature Preserve Dam Seepage Investigation and Repairs

## Description

This project provides funding to study a location of historic seepage from the Foothills Nature Preserve Dam at the sharp bend in the road on the face of the dam. The seepage is very minor, but it appears to be slowly worsening. The source of the seepage is suspected to be the trench backfill around the pipe that returns shallow groundwater to Boronda Lake. This project will locate and investigate the pipe and trench backfill material. If an engineered solution can be found, this project will also fund construction to slow or stop the seepage as part of a future 5 year CIP plan. The anticipated solution is excavation of a portion of the pipe and backfill with material that is more impervious to water transmissivity.

## Justification

Repairing the Foothills Nature Preserve Dam is the key to maintaining the Boronda Lake recreational facility. It is a cherished gateway feature of the park.

## Significant Changes

**2023-2027 CIP:** Project timeline moved to coincide with work on the Foothills Nature Preserve Improvements (PE-21000) project.

**2022-2026 CIP:** Project timeline moved out to coincide with work on the Foothills Nature Preserve Improvements (PE-21000) project.

**2021-2025 CIP:** Project start and completion dates extended due to workload of other projects in progress.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	33,300	0	0	0	0	33,300	0	33,300
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33,300</b>	<b>0</b>	<b>33,300</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	0	0	0	33,300	0	0	0	0	33,300	0	33,300
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33,300</b>	<b>0</b>	<b>33,300</b>

### Operating Impact

This project is not anticipated to impact operating expenses as it is only to study seepage from the dam. Once a solution is determined, additional maintenance expenses may be incurred and will be brought forward as part of a future budget cycle.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission                  Architectural Review Board</p>
--	---

## CAPITAL IMPROVEMENT FUND



Golf Course Net and Artificial Turf

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Palo Alto Municipal Golf Course (1875 Embarcadero Road)  
**Managing Department:** Community Services  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Spring 2018  
**Initial Project Completion:** Summer 2018  
**Revised Project Start:** Summer 2022  
**Revised Project Completion:** Summer 2023  
**Project Number:** PG-18000

# Golf Course Net and Artificial Turf Replacement

## Description

This project provides funding for the removal and replacement of golf course driving range netting and synthetic turf.

## Justification

Based on age, condition, and useful life expectancy, replacement golf course driving range netting and synthetic turf will be needed. The golf course driving range is a popular facility, and is used as a teaching area. The facility is an important source of revenue to the City, and keeping it in a state of good repair will aid in maintaining this revenue stream.

## Supplemental Information

The City and First Tee Silicon Valley are exploring a potential public private partnership for access to facility use which would include improvements to practice facilities such as the netting of the driving range. The most recent cost estimate for this capital project was performed in FY 2013.

## Significant Changes

**2021-2025 CIP:** Project shifted from FY 2022 to FY 2023 due to a reprioritization of parks projects.

**2020-2024 CIP:** Project shifted from FY 2020 to FY 2022 due to a reprioritization of parks projects.

**2018-2022 CIP:** Project shifted from FY 2018 to FY 2020 due to a reprioritization of parks projects.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	854,900	0	0	0	0	854,900	0	854,900
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>854,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>854,900</b>	<b>0</b>	<b>854,900</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	829,900	0	0	0	0	829,900	0	829,900
<b>Design</b>	0	0	0	25,000	0	0	0	0	25,000	0	25,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>854,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>854,900</b>	<b>0</b>	<b>854,900</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.2 Program: C3.2.1	Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.3 Program: C3.3.1	Parks and Recreation Commission Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15301.		

## CAPITAL IMPROVEMENT FUND



Palo Alto Golf Course, March 2015

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** Palo Alto Municipal Golf Course (1875 Embarcadero Road)

**Managing Department:** Public Works

**IBRC Reference:** New

**Initial Project Start:** Summer 2012

**Initial Project Completion:** Spring 2015

**Revised Project Start:** Summer 2012

**Revised Project Completion:** Winter 2028

**Project Number:** PG-13003

# Golf Reconfiguration & Baylands Athletic Center Improvements

## Description

This project provides funding for the renovation of the Municipal Golf Course in accordance with the Council-approved conceptual plan. The project includes less turf, raising the elevation of the course with imported soil, replacement of the irrigation and drainage systems and space for athletic fields. The project will also fund five years of required environmental monitoring of the golf course.

## Justification

The need for this project was triggered by the San Francisquito Creek flood control improvements being implemented by the Creek Joint Powers Authority, which will encroach on the existing golf course. This creates an opportunity to resolve existing issues with the golf course, including the deteriorated irrigation system, high water consumption, poor soil, and the shortage of playing fields in Palo Alto. The course design will accentuate the natural Baylands setting and is expected to attract new users, increasing revenue.

## Supplemental Information

This project is partially funded through the San Francisquito Creek JPA (\$3.0 million) as mitigation for the impacts of its flood control project. The balance of the project cost will be financed through certificates of participation (COPs) issued by the city and repaid via golf course revenues over a period of 30 years. A financial analysis prepared by the National Golf Foundation projected revenues from the improved golf course will support repayment of the COPs.

## Significant Changes

**2023-2027 CIP:** Construction of the golf course was completed in FY 2018, funds reappropriated for required environmental monitoring.



## CAPITAL IMPROVEMENT FUND

**2021-2025 CIP:** Construction funding reappropriations from FY 2020 to FY 2021 for this project will complete required monitoring.

**2016-2020 CIP:** Timeline extended to reflect full delay in construction phase due to difficulties in securing regulatory permits for the project. Additionally, project was reduced by \$24,450, which represents the amount that was previously budgeted for public art. In FY 2015, the City Council approved a new Public Art policy, which dedicated an amount equal to one percent of capital projects, with certain exclusions, for public art. Public Art expenses are accounted for within the Art in Public Places capital project. The reduction of \$24,450 represents the amount that was previously earmarked in this project for public art. Public Art funding of approximately \$100,000 (representing one percent of the total anticipated cost for this project) was added to the Art in Public Places project as part of this budget.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Bond Proceeds</b>	8,375,000	0	0	0	0	0	0	0	0	0	8,375,000
<b>Capital Improvement Fund</b>	1,545,317	200,000	0	200,000	0	0	0	0	200,000	0	1,745,317
<b>Revenue from Other Agencies</b>	4,081,888	0	0	0	0	0	0	0	0	0	4,081,888
<b>Total</b>	<b>14,002,205</b>	<b>200,000</b>	<b>0</b>	<b>200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200,000</b>	<b>0</b>	<b>14,202,205</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	12,491,343	200,000	0	200,000	0	0	0	0	200,000	0	12,691,343
<b>Design</b>	1,510,848	0	0	0	0	0	0	0	0	0	1,510,848
<b>Total</b>	<b>14,002,191</b>	<b>200,000</b>	<b>0</b>	<b>200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200,000</b>	<b>0</b>	<b>14,202,191</b>

### Operating Impact

Operating and maintenance costs for the golf course are budgeted in the Community Services Department through a contract with a golf management company that is reviewed and updated based on the terms of the contract.

# CAPITAL IMPROVEMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.2

**Potential Board/Commission Review:**

Parks and Recreation Commission  
Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

An Environmental Impact Report has been completed for this project.



CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



Heritage Park Bench, March 2017

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** 300 Homer Avenue (bounded by Waverley, Homer, and Bryant)

**Managing Department:** Community Services

**IBRC Reference:** Keep-up

**Initial Project Start:** Summer 2020

**Initial Project Completion:** Summer 2022

**Revised Project Start:** Summer 2024

**Revised Project Completion:** Summer 2025

**Project Number:** PG-21000

# Heritage Park Site Amenities Replacement

## Description

The project provides funding for replacement of select walkways and all of the site amenities in Heritage Park including: benches, picnic tables, trash receptacles, playground arbor, bicycle racks and drinking fountain.

## Justification

Installed in 2005, the current site amenities have reached the use expectancy and need replacement. As park infrastructure ages, safety and compliance issues need to be addressed. This project will ensure compliance and address accessibility needs as well as safety issues.

## Significant Changes

**2021-2025 CIP:** Project shifted from FY 2022 to FY 2025 due to a reprioritization of parks projects.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	0	185,100	0	0	185,100	0	185,100
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>185,100</b>	<b>0</b>	<b>0</b>	<b>185,100</b>	<b>0</b>	<b>185,100</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	155,100	0	0	155,100	0	155,100
<b>Design</b>	0	0	0	0	0	30,000	0	0	30,000	0	30,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>185,100</b>	<b>0</b>	<b>0</b>	<b>185,100</b>	<b>0</b>	<b>185,100</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3                  Program: C3.3.1</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2                  Program: C3.2.1</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have possible exemption from CEQA under Section 15301</p>		

## CAPITAL IMPROVEMENT FUND



Hoover Park, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 2901 Cowper Street  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Fall 2018  
**Initial Project Completion:** Spring 2019  
**Revised Project Start:** Summer 2026  
**Revised Project Completion:** Summer 2027  
**Project Number:** PE-18012

# Hoover Park Improvements

## Description

This project provides funding for the repair of existing features including the decomposed granite walkway and brick wall surrounding the children's playground. It also includes the replacement of amenities such as the concrete walkway, playground, playfield backstops, benches, drinking fountains, tables and trash receptacles.

## Justification

The concrete walkway and decomposed granite pathway are cracked and/or uneven, creating safety hazards. The playground was installed in 2005 and will reach the end of its useful life by 2025. The brick wall at the playground and other site amenities, including the playfield backstops, are old or damaged.

## Significant Changes

**2023-2027 CIP:** This project has been deferred from FY 2025 to FY 2027 due to staffing constraints. Design and Construction expenses were increased to account for cost escalation.

**2021-2025 CIP:** Replacement of the children's playground and drinking fountains have been added to the scope of work and project shifted from FY 2022 to FY 2025 due to a reprioritization of parks projects.

**2020-2024 CIP:** Project shifted from FY 2022 to FY 2023 due to a reprioritization of parks projects.

**2018-2022 CIP:** The Parks, Trails, Natural Open Space and Recreational Master Plan projects were reviewed and adjusted according to staff availability as well as community and Infrastructure Blue Ribbon Commission (IBRC) needs.

**2017-2021 CIP:** Project shifted from FY 2018 to FY 2021 pending completion of the Parks Master Plan and a reprioritization of parks projects.

**2016-2020 CIP:** Project moved from 2018 to 2017 based on review of staff work load.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	0	0	0	1,372,900	1,372,900	0	1,372,900
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,372,900</b>	<b>1,372,900</b>	<b>0</b>	<b>1,372,900</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	0	1,276,900	1,276,900	0	1,276,900
<b>Design</b>	0	0	0	0	0	0	0	96,000	96,000	0	96,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,372,900</b>	<b>1,372,900</b>	<b>0</b>	<b>1,372,900</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                  Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3</p>	<p><b>Potential Board/Commission Review:</b>                  Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	

## CAPITAL IMPROVEMENT FUND



Johnson Park

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 251 Waverley Street  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Spring 2021  
**Initial Project Completion:** Winter 2022  
**Revised Project Start:** Fall 2023  
**Revised Project Completion:** Summer 2025  
**Project Number:** PE-21002

# Johnson Park Renovation

## Description

This project provides funding for the renovation of existing park elements, including asphalt concrete and brick pathways, site furnishings, playground equipment and resurfacing, fencing, and improvements to irrigation and lighting.

## Justification

Pathways and park amenities are in need of repair or improvements to maintain functionality.

## Significant Changes

**2021-2025 CIP:** Design and construction costs increased to align with increased scope of work and project shifted from FY 2021/2022 to FY 2024/2025 due to reprioritization of parks projects.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	261,600	1,806,800	0	0	2,068,400	0	2,068,400
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>261,600</b>	<b>1,806,800</b>	<b>0</b>	<b>0</b>	<b>2,068,400</b>	<b>0</b>	<b>2,068,400</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	1,806,800	0	0	1,806,800	0	1,806,800
<b>Design</b>	0	0	0	0	261,600	0	0	0	261,600	0	261,600
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>261,600</b>	<b>1,806,800</b>	<b>0</b>	<b>0</b>	<b>2,068,400</b>	<b>0</b>	<b>2,068,400</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                  Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3</p>	<p><b>Potential Board/Commission Review:</b>                  Parks and Recreation Commission                  Planning and Transportation Commission                  Architectural Review Board</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	



Magical Bridge Playground

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** Mitchell Park: 600 E Meadow Drive, Palo Alto, CA 94306

**Managing Department:** Community Services

**IBRC Reference:** N/A

**Initial Project Start:** Spring 2021

**Initial Project Completion:** Summer 2021

**Revised Project Start:** N/A

**Revised Project Completion:** Fall 2023

**Project Number:** PE-21003

# Magical Bridge Playground Rubber and Synthetic Turf Resurfacing

## Description

This project provides funding for the replacement of all rubberized and synthetic turf surfacing in the playground and play equipment repairs and replacements.

## Justification

This project provides funding for the replacement of all rubberized and synthetic turf surfacing in the playground and play equipment, playhouse, planting, irrigation and site furnishing repairs and replacements. A shade structure will also be added to the spin zone and the replacement of the slide mound umbrella will also be performed with a match donation from the Magical Bridge Foundation.

## Supplemental Information

The City will work with internal and external stakeholders including the Friends of the Magical Bridge Playground to inform the community of the project schedule as the playground will need to be closed for a period of approximately six weeks to complete the work.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	2,078	855,303	692,303	163,000	0	0	0	0	163,000	0	857,381
<b>Total</b>	<b>2,078</b>	<b>855,303</b>	<b>692,303</b>	<b>163,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>163,000</b>	<b>0</b>	<b>857,381</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	795,302	632,302	163,000	0	0	0	0	163,000	0	795,302
<b>Design</b>	2,077	60,001	60,001	0	0	0	0	0	0	0	62,078
<b>Total</b>	<b>2,077</b>	<b>855,303</b>	<b>692,303</b>	<b>163,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>163,000</b>	<b>0</b>	<b>857,380</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission</p>
--	---

## CAPITAL IMPROVEMENT FUND



Mitchell Park, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 600 East Meadow Drive  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Fall 2018  
**Initial Project Completion:** Summer 2019  
**Revised Project Start:** Summer 2024  
**Revised Project Completion:** Summer 2026  
**Project Number:** PE-18010

# Mitchell Park Improvements

## Description

This project provides funding for repair and replacement of equipment and amenities throughout Mitchell Park. The improvements include replacement of the playground equipment located along East Meadow Drive, renovation of the water-play element, repair of the covered wood walkway structure, replacement of playground and water play area fencing, and new rubberized surfacing. Also included are irrigation renovations, turf restoration and replacement of site amenities and decomposed granite pathways.

## Justification

The playground equipment, water-play element, fencing, covered wood walkway structure, decomposed granite pathways and site amenities have surpassed their expected life cycle. Repair and/or replacement is necessary. Loss of vegetation has been linked to poor irrigation.

## Supplemental Information

Design of the new playground equipment will include outreach to nearby schools that have provided input regarding the playground equipment in the past. The Parks, Trails, Natural Open Space and Recreational Master Plan projects were reviewed and adjusted according to staff availability as well as community needs and recommendations from the Infrastructure Blue Ribbon Committee (IBRC).

## Significant Changes

**2023-2027 CIP:** This project has been deferred from FY 2023 to FY 2025 due to staffing constraints.

**2020-2024 CIP:** This project has been deferred due to staffing constraints.

**2019-2023 CIP:** This project has been deferred due to staffing constraints.

**2018-2022 CIP:** Design shifted from FY 2021 to FY 2020.

# CAPITAL IMPROVEMENT FUND

**2016-2020 CIP:** Based on the IBRC keep-up schedule for the park, irrigation renovations, turf restoration and park amenities replacement were added to the project’s scope with an additional budget allocation of \$946,000. This additional work was scheduled for FY 2020, and the project schedule was adjusted accordingly.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	0	307,500	1,236,600	0	1,544,100	0	1,544,100
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>307,500</b>	<b>1,236,600</b>	<b>0</b>	<b>1,544,100</b>	<b>0</b>	<b>1,544,100</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	1,236,600	0	1,236,600	0	1,236,600
<b>Design</b>	0	0	0	0	0	307,500	0	0	307,500	0	307,500
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>307,500</b>	<b>1,236,600</b>	<b>0</b>	<b>1,544,100</b>	<b>0</b>	<b>1,544,100</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3</p> <p><b>Environmental Impact Analysis:</b>                  This project may require an environmental assessment in accordance with CEQA guidelines.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission                  Architectural Review Board</p>
--	---

## CAPITAL IMPROVEMENT FUND



Byxbee Park pole field, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Various  
**Managing Department:** Community Services  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** OS-09001

# Off-Road Pathway Resurfacing And Repair

## Description

This project provides funding for the maintenance of Palo Alto's 9-miles of off-road paved trail system that is 35 years old and requires on-going, phased repairs. This project removes and replaces severely damaged sections of asphalt, repairs, cracks and base failures, and resurfaces worn or uneven surfaces of off-road asphalt pathways and bicycle trails. Priority will be given to the repair of the most uneven sections of pathway. Staff uses surface assessment data prepared by Public Works Engineering and input from the public to prioritize repair or replacement projects.

## Justification

This project is intended to maintain the existing system of off-road pathways and trails throughout Palo Alto in order to extend the useful life of pathway surfaces. The project will ensure safe, even and handicapped accessible surfaces for pedestrians, cyclists, and skaters. Repair of uneven trail surfaces will greatly reduce accidents.

## Significant Changes

**2021-2025 CIP:** Funding was reduced in FY 2021 as part of the FY 2021 Capital Improvement Program budget balancing strategy. Available funding will be used to perform emergency maintenance and spot repairs on pathways.

**2019-2023 CIP:** The Adobe Creek Reach Trail is a 600 foot long segment of the existing Santa Clara Valley Water District's maintenance road on the east side of Adobe Creek, between West Bayshore Road and East Meadow Drive. This trail will provide an off-road, more direct access to the Highway 101 Pedestrian and Bicycle Overpass. The project includes trail pavement, grading and drainage, and installation of safety railing and fencing.

# CAPITAL IMPROVEMENT FUND

**2018-2022 CIP:** In accordance with the Funding Agreement for the project, a payment of approximately \$170,000 will be made to the Joint Power Agreement (JPA) "Highway 101 to Bay Flood Control" project in FY 2018. The remaining balance will be used for off-road trail repairs.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	335,954	278,954	168,000	141,400	148,100	146,100	163,600	767,200	0	N/A
<b>Total</b>	<b>N/A</b>	<b>335,954</b>	<b>278,954</b>	<b>168,000</b>	<b>141,400</b>	<b>148,100</b>	<b>146,100</b>	<b>163,600</b>	<b>767,200</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	318,892	261,892	168,000	141,400	148,100	146,100	163,600	767,200	0	N/A
<b>Design</b>	N/A	17,061	17,061	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>335,953</b>	<b>278,953</b>	<b>168,000</b>	<b>141,400</b>	<b>148,100</b>	<b>146,100</b>	<b>163,600</b>	<b>767,200</b>	<b>0</b>	<b>N/A</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Maintenance of Parks and Community Facilities  
Goal: C-3  
Policy: C-3.2

### Potential Board/Commission Review:

Parks and Recreation Commission  
Planning and Transportation Commission

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.



## CAPITAL IMPROVEMENT FUND



Boronda Lake, January 2015

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** Foothills Park Boronda Lake (3300 Page Mill Road between Central and Moody)

**Managing Department:** Community Services

**IBRC Reference:** Keep-up

**Initial Project Start:** Recurring

**Initial Project Completion:** Recurring

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** OS-00002

# Open Space Lakes And Pond Maintenance

## Description

This project rehabilitates lakes and ponds in open space nature preserves to protect wildlife habitat and recreational safety and to meet State Division of Safety of Dams requirements. The project funds annual harvesting of non-native pond weeds and cattails at Boronda Lake in Foothills Park. The project also funds maintenance of the Duck Pond aerator for improved water quality.

## Justification

Pond weeds and cattails must be regularly removed from Boronda Lake to prevent non-native plants from displacing native plants that are essential to the survival of fish and foraging animals. This also will provide access for recreational fishing and boating safety. The State Division of Safety of Dams mandates cattail removal to maintain the Boronda Dam. The Baylands Duck Pond aeration system maintains water quality for wildlife.

## Significant Changes

**2016-2020 CIP:** This project was converted to annual recurring status, rather than past practice of receiving additional funding every other year. The change addressed the changing needs of Boronda Lake. The aquatic weeds that are harvested need to be cleared more thoroughly every year.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	92,500	92,500	50,000	63,600	65,800	64,000	70,800	314,200	0	N/A
<b>Total</b>	<b>N/A</b>	<b>92,500</b>	<b>92,500</b>	<b>50,000</b>	<b>63,600</b>	<b>65,800</b>	<b>64,000</b>	<b>70,800</b>	<b>314,200</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	92,500	92,500	50,000	63,600	65,800	64,000	70,800	314,200	0	N/A
<b>Total</b>	<b>N/A</b>	<b>92,500</b>	<b>92,500</b>	<b>50,000</b>	<b>63,600</b>	<b>65,800</b>	<b>64,000</b>	<b>70,800</b>	<b>314,200</b>	<b>0</b>	<b>N/A</b>

#### Operating Impact

This project is not anticipated to impact operating expenses and if any maintenance costs increase, costs will be absorbed with the available maintenance funding in the annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Open Space                  Goal: N-1                  Policy: N-1.5                  Program: N1.5.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission</p>
--	---

## CAPITAL IMPROVEMENT FUND



Baylands Bench, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Various  
**Managing Department:** Community Services  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** OS-00001

# Open Space Trails and Amenities

## Description

This project provides funding to restore unpaved trails, fences, picnic areas, and campgrounds at Foothills Park, the Baylands, and the Pearson-Arastradero Nature Preserves. The project also provides habitat protection by guiding park users towards areas dedicated for hiking, biking, and assembling. Benches, tables, footbridges, and fences that are at the end of their useful life will systematically be replaced.

## Justification

Open Space trails require ongoing repair of natural erosion, storm damage, and control of aggressive plants, such as thistle and poison oak to ensure that facilities are safe, accessible, and maintained for recreational uses. These restoration projects are consistent with the Arastradero Preserve Trails Management Plan and the Foothills Park Trails Maintenance Plan.

## Supplemental Information

Improvements to the trails within Pearson-Arastradero Preserve move trails away from environmentally sensitive areas and correct steeply sloped trails, thereby reducing erosion and providing better access to park users with disabilities. These restoration projects are consistent with the Arastradero Preserve Trails Management Plan and the Foothills Park Trails Maintenance Plan.

## Significant Changes

**2017-2021 CIP:** Additional \$55,000 in funding added in FY 2017 for one-time repairs of the Los Trancos Trail.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	236,116	223,116	207,300	247,500	255,400	248,800	275,300	1,234,300	0	N/A
<b>Total</b>	<b>N/A</b>	<b>236,116</b>	<b>223,116</b>	<b>207,300</b>	<b>247,500</b>	<b>255,400</b>	<b>248,800</b>	<b>275,300</b>	<b>1,234,300</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	236,116	223,116	207,300	247,500	255,400	248,800	275,300	1,234,300	0	N/A
<b>Total</b>	<b>N/A</b>	<b>236,116</b>	<b>223,116</b>	<b>207,300</b>	<b>247,500</b>	<b>255,400</b>	<b>248,800</b>	<b>275,300</b>	<b>1,234,300</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Open Space  
Goal: N-1  
Policy: N-1.5  
Program: N1.5.1

#### Potential Board/Commission Review:

Parks and Recreation Commission  
Planning and Transportation Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## CAPITAL IMPROVEMENT FUND



Briones Park, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Various  
**Managing Department:** Community Services  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PG-09002

# Park and Open Space Emergency Repairs

## Description

This project provides funding for the replacement or extensive repair of playgrounds, play yard surfaces, wooden structures, park amenities, and play equipment in the event of storms, fire, vandalism or structural failure.

## Justification

This project allows for the replacement or repair of damaged equipment or play structures for the convenience of the public.

## Significant Changes

**2022-2026 CIP:** This project was reduced by approximately \$20,000 in FY 2022 to contribute to cost containment strategies in FY 2022.

**2019-2023 CIP:** Funding is gradually increasing from \$75,000 to \$0.2 million annually over the 5-Year CIP. The project is used to address unpredicted issues like trails closed due to strong storm damage, failing infrastructure that can be repaired (the Baylands Sailing Station), and premature failure of playground equipment and surfacing.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	198,653	115,353	305,400	318,200	328,300	319,800	353,900	1,625,600	0	N/A
<b>Total</b>	<b>N/A</b>	<b>198,653</b>	<b>115,353</b>	<b>305,400</b>	<b>318,200</b>	<b>328,300</b>	<b>319,800</b>	<b>353,900</b>	<b>1,625,600</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	198,653	115,353	305,400	318,200	328,300	319,800	353,900	1,625,600	0	N/A
<b>Total</b>	<b>N/A</b>	<b>198,653</b>	<b>115,353</b>	<b>305,400</b>	<b>318,200</b>	<b>328,300</b>	<b>319,800</b>	<b>353,900</b>	<b>1,625,600</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.2 Program: C3.2.1	Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.3 Program: C3.3.1	Parks and Recreation Commission Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15301.		

## CAPITAL IMPROVEMENT FUND



Park Restroom, February 2017

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** Various  
**Managing Department:** Community Services  
**IBRC Reference:** New  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PG-19000

# Park Restroom Installation

## Description

This project provides funding for installation of restrooms at City parks that currently do not have restroom facilities. The restrooms may be prefabricated and each installation will require a Park Improvement Ordinance.

## Justification

Many parks in the City have no restroom facilities within the park boundaries. This project will provide for one park restroom installation every other year in parks that are approximately two acres or larger, have amenities that encourage visitors to stay in the park, have high level of use, and where there are no nearby public restrooms available. The Parks, Trails, Natural Open Space, and Recreation Master Plan provides guidance on potential restroom locations.

## Supplemental Information

Public outreach will occur as specific parks are considered for restroom installation.

## Significant Changes

**2023-2027 CIP:** FY 2022 funding has been deferred to FY 2023 due to staffing constraints, but future installations will remain in the even fiscal years.

**2022-2026 CIP:** FY 2021 funding moved to FY 2022 to coincide with other park projects. FY 2022 funding moved to FY 2024 for funding every other year.

**2021-2025 CIP:** FY 2020 funding moved to FY 2021 due to staffing constraints and other high priority projects. FY 2021 funding moved to FY 2022 to coincide with other park projects.

**2020-2024 CIP:** FY 2019 funding moved to FY 2020 as next restroom installation is being coordinated with other park renovation projects.

# CAPITAL IMPROVEMENT FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	96,438	106,838	27,100	144,900	0	123,500	0	295,500	0	N/A
<b>Transfer from Parks Development Impact Fee Fund</b>	N/A	350,000	13,300	336,700	350,000	0	350,000	0	1,036,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>446,438</b>	<b>120,138</b>	<b>363,800</b>	<b>494,900</b>	<b>0</b>	<b>473,500</b>	<b>0</b>	<b>1,332,200</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	446,438	120,138	363,800	464,900	0	443,500	0	1,272,200	0	N/A
<b>Design</b>	N/A	0	0	0	30,000	0	30,000	0	60,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>446,438</b>	<b>120,138</b>	<b>363,800</b>	<b>494,900</b>	<b>0</b>	<b>473,500</b>	<b>0</b>	<b>1,332,200</b>	<b>0</b>	<b>N/A</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Capital Improvement Fund</b>	9,000	18,600	19,200	29,700	30,600

### Operating Impact

Custodial costs are approximately \$9,000 per year per restroom, which are currently in the operating budget for existing restrooms; however, the addition of more restrooms and annual cost escalations will cause the budget to increase.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.3 Program: C3.3.1	Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.2 Program: C3.2.1	Parks and Recreation Commission Planning and Transportation Commission Architectural Review Board
<b>Environmental Impact Analysis:</b> This project is expected to have possible exemption from CEQA under Section 15303		



## CAPITAL IMPROVEMENT FUND



Pearson Arastradero Preserve

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 1530 Arastradero Road  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Summer 2020  
**Initial Project Completion:** Fall 2021  
**Revised Project Start:** Fall 2025  
**Revised Project Completion:** Fall 2027  
**Project Number:** PE-21001

# Pearson Arastradero Improvement Project

## Description

This project provides funds for replacing fencing, signs, gates, bridge decking, and making improvements to some of the seasonal trails to help reduce winter trail closures.

## Justification

The fencing, signs, gates, and bridge decking have exceeded their useful lifespans, and need to be replaced. There are a number of seasonal trails that must be closed during the rainy season. The Parks, Trails, Natural Open Space and Recreational Master Plan projects were reviewed and adjusted according to staff availability as well as community needs and Infrastructure Blue Ribbon Committee recommendations.

## Significant Changes

**2023-2027 CIP:** Project construction deferred from FY 2024 to FY 2027 due to a reprioritization of parks projects and staffing constraints. Design and Construction expenses were increased to account for cost escalation.

**2020-2024 CIP:** Project construction shifted from FY 2021 to FY 2023 due to a reprioritization of parks projects.

**2018-2022 CIP:** Design was advanced from FY 2021 to FY 2020.

**2017-2021 CIP:** Project established.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	0	0	36,500	410,400	446,900	0	446,900
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36,500</b>	<b>410,400</b>	<b>446,900</b>	<b>0</b>	<b>446,900</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	0	410,400	410,400	0	410,400
<b>Design</b>	0	0	0	0	0	0	36,500	0	36,500	0	36,500
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36,500</b>	<b>410,400</b>	<b>446,900</b>	<b>0</b>	<b>446,900</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                   Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2                  Program: C3.2.1</p>	<p><b>Potential Board/Commission Review:</b>                   Parks and Recreation Commission                  Planning and Transportation Commission                  Architectural Review Board</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	

## CAPITAL IMPROVEMENT FUND



Peers Park, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 1899 Park Boulevard  
**Managing Department:** Community Services  
**IBRC Reference:** Catch-up  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Summer 2018  
**Revised Project Start:** Summer 2023  
**Revised Project Completion:** Summer 2024  
**Project Number:** PG-14001

# Peers Park Improvements

## Description

This project provides funding for upgrades and renovations of the irrigation system and turf at Peers Park. The project will also replace the park benches and drinking fountains, resurface the basketball and tennis court playing surfaces, and repair court fencing.

## Justification

The existing irrigation system, benches, and drinking fountains have exceeded their useful lives.

## Significant Changes

**2021-2025 CIP:** Project shifted from FY 2023 to FY 2024 due to reprioritization of parks projects.

**2019-2023 CIP:** Project shifted from FY 2021 to FY 2023 due to reprioritization of parks projects.

**2018-2022 CIP:** Project shifted from FY 2020 to FY 2021 due to reprioritization of parks projects.

**2017-2021 CIP:** Project shifted from FY 2018 to FY 2020 pending completion of the Parks Master Plan and a reprioritization of parks projects.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	289,900	0	0	0	289,900	0	289,900
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>289,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>289,900</b>	<b>0</b>	<b>289,900</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	289,900	0	0	0	289,900	0	289,900
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>289,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>289,900</b>	<b>0</b>	<b>289,900</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3                  Program: C3.3.1</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2                  Program: C3.2.1</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>		

## CAPITAL IMPROVEMENT FUND



Ramos Park, January 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 800 East Meadow Drive  
**Managing Department:** Community Services  
**IBRC Reference:** Catch-up  
**Initial Project Start:** Summer 2015  
**Initial Project Completion:** Summer 2015  
**Revised Project Start:** Summer 2022  
**Revised Project Completion:** Summer 2023  
**Project Number:** PG-14000

# Ramos Park Improvements

## Description

This project provides funding for safety and accessibility improvements at Ramos Park including replacing the existing park playground, benches, and drinking fountain, as well as resurfacing the basketball court playing surface.

## Justification

The existing playground, benches, basketball court surfaces, and drinking fountains have exceeded their useful lives. As park infrastructure ages, safety and compliance issues need to be addressed. This project will ensure compliance and address accessibility needs as well as safety issues.

## Significant Changes

**2023-2027 CIP:** Project funding increased by approximately \$0.3 million to a total of \$0.5 million to account for increased bid prices for the scope of work.

**2022-2026 CIP:** Project shifted from FY 2021 to FY 2022 to contribute to cost containment strategies in FY 2022.

**2018-2022 CIP:** Project shifted from FY 2018 to FY 2020 due to reprioritization of parks projects. Also, additional funding requested to address Infrastructure Blue Ribbon Committee (IBRC) recommendations.

**2017-2021 CIP:** Timeline extended to reflect direction from Finance Committee and City Council during budget approval process.

**2016-2020 CIP:** The project completion originally referred only to the pre-design phase and was modified to represent completion of the full project, including construction.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	210,410	17,361	8,461	308,900	0	0	0	0	308,900	0	527,771
<b>Total</b>	<b>210,410</b>	<b>17,361</b>	<b>8,461</b>	<b>308,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>308,900</b>	<b>0</b>	<b>527,771</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	19,304	17,361	8,461	308,900	0	0	0	0	308,900	0	336,665
<b>Design</b>	191,104	0	0	0	0	0	0	0	0	0	191,104
<b>Total</b>	<b>210,408</b>	<b>17,361</b>	<b>8,461</b>	<b>308,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>308,900</b>	<b>0</b>	<b>527,769</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3                  Program: C3.3.1</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2                  Program: C3.2.1</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>		

## CAPITAL IMPROVEMENT FUND



Rinconada Park February 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 777 Embarcadero Road  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2015  
**Initial Project Completion:** Spring 2019  
**Revised Project Start:** Summer 2019  
**Revised Project Completion:** Fall 2026  
**Project Number:** PE-08001

# Rinconada Park Improvements

## Description

Upon completion of the Rinconada Park Long Range Plan (LRP) adopted in 2017, funding was secured to begin these park improvements. Phase 1 improvements at Rinconada Park in the western half of the park began in fall 2021 which included funding for upgrades to safety, site amenities, playground facilities, irrigation, drainage, and accessibility improvements. The restroom that was removed from Phase 1 Improvements due to funding constraints has been added in Fiscal Year 2023 to complete all Phase 1 Improvements.

Phase 2 improvements would include renovation of the eastern half of the park by 2026 including pathway improvements; a new restroom facility, and a new family changing room and restroom in the pool; renovated and expanded group picnic areas; native and habitat planting; irrigation improvements; ADA upgrades; directional signage; site furnishing; lighting; and green infrastructure elements.

According to the LRP, future improvement phases would include renovation to the arbor area, development around the electrical substation, and renovation to the pool area.

## Justification

Rinconada Park has not been renovated for several decades with pathways in poor condition, aging playgrounds and site amenities. The Rinconada Park Long Range Plan outlined new restroom and improvements related to deferred maintenance items at the park, such as installing wider pathways rather than repairing the existing pathways.

## Supplemental Information

The City will conduct a community based design process to determine the final scope of work for Rinconada Park Phase 2 improvements. Phase 1 improvements construction started in fall 2021 and was completed in April 2022.



Work on this project will be scheduled as follows:

**Fiscal Year 2023:** Installation of new bathroom to complete Phase 1 Improvements

**Fiscal Year 2024:** Design of family changing room/locker room/restroom building

**Fiscal Year 2025:** Construction of family changing room/locker room/restroom building

**Fiscal Year 2026:** Construction of remaining Phase 2 park improvements

## Significant Changes

**2023-2027 CIP:** Funding of approximately \$0.4 million for a park restroom that was removed from Phase 1 improvements in FY 2021 has been added in FY 2023 and funded by Parks Impact Fee funds. Phase 2 improvements are now planned to begin design in FY 2024 and construction in FY 2026. As part of the Council approved plan to fund the Roth Building Rehabilitation project (PE-23001), \$1.65 million of Community Center Impact Fee funding that was previously transferred for this project will be used to partially fund PE-23001. Parks Dedication funding of \$1.65 million will be transferred for this project.

**2022-2026 CIP:** Rinconada Park Phase 2 design is scheduled in FY 2025 and construction in FY 2026.

**2021-2025 CIP:** Rinconada Park Phase 2 design is scheduled in FY 2024 and construction in FY 2025.

**2021-2025 CIP:** Rinconada Park Phase 2 design is scheduled in FY 2023 and construction in FY 2025.

**2020-2024 CIP:** Funding moved from FY 2019 to FY 2020 to align with work being done in the JMZ Renovation project (AC-18001).

**2019-2023 CIP:** The project increased by \$1.3 million to reconstruct the parking lot, update park signage, and renovate the playground and reconstruct the paths on the west end of the park. Funding from the Community Center Impact Fee Fund will be used for these items.

**2018-2022 CIP:** The project was delayed to coordinate with environmental assessments for the Junior Museum and Zoo (JMZ), Rinconada Park Long Range Plan and the Parks, Trails, Natural Open Space and Recreation Master Plan Parks (Master Plan), to be complete by FY 2018. Park construction will be coordinated to follow the proposed JMZ rebuilding. \$706,000 of the construction phase funding will be utilized for costs associated with relocation of the existing JMZ operation to Cubberley and permit & inspection fees needed for the JMZ rebuilding.

**2017-2021 CIP:** Timeline extended to reflect direction from Finance Committee and City Council during budget approval process.

**2016-2020 CIP:** Project was delayed to await the completion of the Rinconada Park Long Range Plan and environmental review. Funding for construction was advanced from FY 2018 to 2017 and combined with funding from FY 2015 to implement a single phase project. The total budget has been reduced by \$600,000 from the budget shown in the 2015-2019 CIP to focus on deferred maintenance items. Funding to enhance the park will be considered as part of the funding needs for the entire City park system once the Rinconada Park Long Range Plan and the Parks Master Plan are completed.

# CAPITAL IMPROVEMENT FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	294,371	2,141,879	2,141,879	44,100	353,500	1,423,800	3,822,000	0	5,643,400	0	8,079,650
<b>Transfer from Community Center Impact Fee Fund</b>	2,073,846	0	0	(1,650,000)	0	0	0	0	(1,650,000)	0	423,846
<b>Transfer from Parks Dedication Fund</b>	0	0	0	1,650,000	0	0	0	0	1,650,000	0	1,650,000
<b>Transfer from Parks Development Impact Fee Fund</b>	0	0	0	400,000	0	0	0	0	400,000	0	400,000
<b>Transfer From Stormwater Management Fund</b>	149,600	0	0	0	0	0	0	0	0	0	149,600
<b>Total</b>	<b>2,517,817</b>	<b>2,141,879</b>	<b>2,141,879</b>	<b>444,100</b>	<b>353,500</b>	<b>1,423,800</b>	<b>3,822,000</b>	<b>0</b>	<b>6,043,400</b>	<b>0</b>	<b>10,703,096</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	1,865,865	2,141,879	2,141,879	444,100	0	1,423,800	3,822,000	0	5,689,900	0	9,697,644
<b>Design</b>	651,943	0	0	0	353,500	0	0	0	353,500	0	1,005,443
<b>Total</b>	<b>2,517,808</b>	<b>2,141,879</b>	<b>2,141,879</b>	<b>444,100</b>	<b>353,500</b>	<b>1,423,800</b>	<b>3,822,000</b>	<b>0</b>	<b>6,043,400</b>	<b>0</b>	<b>10,703,087</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Capital Improvement Fund</b>	0	15,000	15,500	16,000	16,500

### Operating Impact

This project is anticipated to impact operating expenses in the future. Custodial and maintenance costs are estimated to be \$15,000 in FY 2024 and increase by three percent annually thereafter. These costs will be included as part of the City's custodial contract.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission</p>
--	---





CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



Robles Park, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 4116 Park Boulevard  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Fall 2018  
**Initial Project Completion:** Summer 2019  
**Revised Project Start:** Summer 2022  
**Revised Project Completion:** Summer 2023  
**Project Number:** PE-18015

# Robles Park Improvements

## Description

This project provides funding for the replacement of play equipment and resurfacing in two children's playground areas; repairs to a basketball court and adjacent concrete wall; and replacement of perimeter fencing, pathways and other site amenities. Irrigation renovations and turf restoration are also included in this project.

## Justification

The playground areas, backstop, basketball court, concrete pathways and site amenities have surpassed their intended useful lives and are in need of replacement or repairs. Damaged and/or dead vegetation necessitates irrigation renovation as well as turf restoration.

## Supplemental Information

The Parks, Trails, Natural Open Space and Recreational Master Plan projects were reviewed and adjusted according to staff availability as well as community and Infrastructure Blue Ribbon Committee (IBRC) needs.

## Significant Changes

**2023-2027 CIP:** The project construction has been moved from FY 2024 to FY 2023 because the playground is aging and has reached its useful life.

**2021-2025 CIP:** Design and construction for this project shifted to FY 2024 due to reprioritization of parks projects.

**2020-2024 CIP:** Design and construction for this project was shifted to FY 2022.

**2018-2022 CIP:** Design was shifted from FY 2020 to FY 2021. Construction was shifted from FY 2020 to FY 2022.

# CAPITAL IMPROVEMENT FUND

**2017-2021 CIP:** Project shifted from FY 2018 to FY 2021 pending completion of the Parks Master Plan and a reprioritization of parks projects.

**2016-2020 CIP:** Project schedule moved forward by one year based on review of staff workload and resources.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	749,500	0	0	0	0	749,500	0	749,500
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>749,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>749,500</b>	<b>0</b>	<b>749,500</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	669,500	0	0	0	0	669,500	0	669,500
<b>Design</b>	0	0	0	80,000	0	0	0	0	80,000	0	80,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>749,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>749,500</b>	<b>0</b>	<b>749,500</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities          Section: Maintenance of Parks and Community Facilities          Goal: C-3          Policy: C-3.3</p> <p><b>Environmental Impact Analysis:</b>          This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission          Planning and Transportation Commission</p>
--	---

## CAPITAL IMPROVEMENT FUND



Seale Park, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Parks and Open Space  
**Project Location:** 3100 Stockton Place  
**Managing Department:** Community Services  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Summer 2018  
**Initial Project Completion:** Winter 2018  
**Revised Project Start:** Summer 2024  
**Revised Project Completion:** Summer 2025  
**Project Number:** PG-14003

# Seale Park Improvements

## Description

This project provides funding for upgrades and renovations for safety and accessibility improvements at Seale Park. The project will replace existing park amenities, picnic tables, and playground structures including a playhouse and swings; refinish the playground perimeter fencing; and repair damaged decomposed granite and concrete pathways. Turf restoration and irrigation renovations will also be included as well as replacement of bollards at the park entrances, the park sign, and a small stone wall located in the middle of the park.

## Justification

As park infrastructure ages, safety and compliance issues need to be addressed. This project will ensure compliance and address accessibility needs as well as safety issues. Drainage issues will be resolved with repairs to the damaged pathways. Irrigation renovations and turf restoration is required where existing areas are damaged or dead.

## Significant Changes

**2021-2025 CIP:** Project shifted from FY 2021 to FY 2025 due to a reprioritization of parks projects.

**2018-2022 CIP:** Project shifted from FY 2020 to FY 2021 due to a reprioritization of parks projects.

**2017-2021 CIP:** Project shifted from FY 2018 to FY 2020 pending completion of the Parks Master Plan and a reprioritization of parks projects.

**2016-2020 CIP:** Based on the Infrastructure Blue Ribbon Committee (IBRC) keep-up schedule for the park, replacement of the playground structure has been added to the project's scope with an additional budget allocation of \$209,000.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	0	469,800	0	0	469,800	0	469,800
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>469,800</b>	<b>0</b>	<b>0</b>	<b>469,800</b>	<b>0</b>	<b>469,800</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	444,800	0	0	444,800	0	444,800
<b>Design</b>	0	0	0	0	0	25,000	0	0	25,000	0	25,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>469,800</b>	<b>0</b>	<b>0</b>	<b>469,800</b>	<b>0</b>	<b>469,800</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3                  Program: C3.3.1</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2                  Program: C3.2.1</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>		

## CAPITAL IMPROVEMENT FUND



Werry Playground, March 2017

**Fund:** Capital Improvement Fund

**Category:** Parks and Open Space

**Project Location:** 2100 Dartmouth Street between College and Stanford Avenues

**Managing Department:** Community Services

**IBRC Reference:** Keep-up

**Initial Project Start:** Fall 2021

**Initial Project Completion:** Spring 2022

**Revised Project Start:** Fall 2023

**Revised Project Completion:** Spring 2024

**Project Number:** PG-22000

# Werry Park Playground Improvements

## Description

This project provides funding for the replacement and ADA upgrades of the existing playground. The benches, tables, trash receptacles, bicycle rack and drinking fountain have reached the end of their useful life and need replacement as well. Perimeter landscaping will be replaced as part of this project.

## Justification

Built in 2002, the existing playground equipment has reached its use expectancy with limited accessibility. As park infrastructure ages, safety and compliance issues need to be addressed. This project will ensure compliance and address accessibility needs as well as safety issues.

## Significant Changes

**2022-2026 CIP:** Project shifted from FY 2022 to FY 2024 due to a reprioritization of parks projects.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	0	141,400	0	0	0	141,400	0	141,400
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>141,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>141,400</b>	<b>0</b>	<b>141,400</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	131,400	0	0	0	131,400	0	131,400
<b>Design</b>	0	0	0	0	10,000	0	0	0	10,000	0	10,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>141,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>141,400</b>	<b>0</b>	<b>141,400</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.3 Program: C3.3.1	Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.2 Program: C3.2.1	Parks and Recreation Commission Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project is expected to have possible exemption from CEQA under Section 15301		



CITY OF  
**PALO  
ALTO**



## Streets and Sidewalks

## CAPITAL IMPROVEMENT FUND



Laguna Avenue Bridge

**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PE-20001

# City Bridge Improvements

## Description

A structural consulting firm inspected 50 City-owned bridges in a structural bridge assessment study completed in 2017. Through a recurring inspection and repair program, a bridge maintenance, repair, and improvement program was defined over the following five years. This program includes on-going inspections to report physical changes to structures, recommendations for work to be done, and additional information to meet functional and structural standards in accordance with industry standards. Recurring inspections vary from two to five years depending on age and structural conditions, and estimates are developed at a conceptual level and adjusted in the design phase.

## Justification

This project will allow bridges maintained by the City to meet functional and structural standards in accordance with industry standards.

## Supplemental Information

There are 110 bridges maintained by the City of Palo Alto and by local agencies. Of these, 80 are City-owned. Fifty of the City-owned culvert and bridge structures are inspected by the City and 30 are inspected by Caltrans. Of the remaining 30 bridges, three are private and the others are owned by local agencies.

## Significant Changes

**2023-2027 CIP:** Funding has been increased by approximately \$1.3 million to \$2.2 million over the 5-year CIP to address increased needs for maintenance, repairs, and improvements to bridges around the City.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	223,401	153,401	503,000	176,800	481,200	511,400	574,000	2,246,400	0	N/A
<b>Total</b>	<b>N/A</b>	<b>223,401</b>	<b>153,401</b>	<b>503,000</b>	<b>176,800</b>	<b>481,200</b>	<b>511,400</b>	<b>574,000</b>	<b>2,246,400</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	84,377	84,377	348,000	126,800	403,200	430,400	490,000	1,798,400	0	N/A
<b>Design</b>	N/A	139,024	69,024	155,000	50,000	78,000	81,000	84,000	448,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>223,401</b>	<b>153,401</b>	<b>503,000</b>	<b>176,800</b>	<b>481,200</b>	<b>511,400</b>	<b>574,000</b>	<b>2,246,400</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

This project may impact operating expenses in the future as the bridges are assessed and maintenance costs are determined. As these costs are quantified, adjustments will be brought forward in future budgets as necessary.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Land Use and Community Design                  Section: Public Streets and Public Spaces                  Goal: L-9                  Policy: L-9.10</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
--	---	--

## CAPITAL IMPROVEMENT FUND



Byron Street (1200 Block), January 2013

**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PO-12001

# Curb and Gutter Repairs

## Description

This project provides funding to repair curbs and gutters that have been uplifted by tree roots, and allows for the installation of valley gutters in the Barron Park neighborhood to address ponding and poor drainage.

## Justification

Ponding related to curb and gutter problems is a health hazard. Standing water can be a breeding ground for mosquitoes and encourage algae growth, becoming a hazard for bicyclists and pedestrians. The annual street maintenance project does not address these problems on small isolated sections of curb and gutter found on streets with good road surfaces.

## Significant Changes

**2020-2024 CIP:** Additional funding in the amount of \$150,000 for FY 2020 to continue installing valley gutters as needed in the Barron Park neighborhood in coordination with Street Resurfacing Program work occurring in Barron Park.

**2018-2022 CIP:** Additional funding in the amount of \$250,000 for FY 2018 to install valley gutters as needed in the Barron Park neighborhood in coordination with Street Resurfacing Program work occurring in Barron Park.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	285,240	273,640	122,600	141,400	148,100	146,100	163,600	721,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>285,240</b>	<b>273,640</b>	<b>122,600</b>	<b>141,400</b>	<b>148,100</b>	<b>146,100</b>	<b>163,600</b>	<b>721,800</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	279,336	267,736	116,000	141,400	148,100	146,100	163,600	715,200	0	N/A
<b>Design</b>	N/A	5,904	5,904	6,600	0	0	0	0	6,600	0	N/A
<b>Total</b>	<b>N/A</b>	<b>285,240</b>	<b>273,640</b>	<b>122,600</b>	<b>141,400</b>	<b>148,100</b>	<b>146,100</b>	<b>163,600</b>	<b>721,800</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Land Use and Community Design                  Section: Public Streets and Public Spaces                  Goal: L-9                  Policy: L-9.10</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
--	--



Newell Road Bridge, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Project Location:** Newell Rd at San Francisquito Creek  
**Managing Department:** Public Works  
**IBRC Reference:** New  
**Initial Project Start:** Spring 2012  
**Initial Project Completion:** Spring 2015  
**Revised Project Start:** Winter 2022  
**Revised Project Completion:** Summer 2024  
**Project Number:** PE-12011

# Newell Road/San Francisquito Creek Bridge Replacement

## Description

This project will provide funding to remove and replace the Newell Road bridge over San Francisquito Creek. Design considerations include a clear span over the creek to allow the channel to convey a flow consistent with the San Francisquito Creek Joint Powers Authority's (JPA) initial flood protection project located downstream, as well as accommodate bicycle and pedestrian traffic.

## Justification

The existing bridge, constructed in 1911, restricts the flow of San Francisquito Creek as its abutments encroach into the channel. Removal of the existing bridge is a necessary element of the San Francisquito Creek Joint Powers Authority (JPA) comprehensive flood management program. Additionally, the existing bridge does not have accommodations for pedestrians or bicyclists.

## Supplemental Information

Staff has secured grant funding from the Caltrans Highway Bridge Program (HBP) for the design and environmental assessment/permitting of the project. HBP funds will likely be approved to pay for 88.53 percent of project construction costs. As the bridge links to East Palo Alto and is part of the JPA's comprehensive flood management plan, staff from all three agencies will coordinate closely on the design and public outreach elements of this project.

Due to community concerns regarding traffic and the visual impacts of a replacement bridge, the scope of the project was expanded to include a California Environmental Quality Act (CEQA) Environmental Impact Report/NEPA Environmental Assessment (EIR/EA) process that evaluated multiple project alternatives and addressed flood control, traffic, aesthetics, and other potential impacts of the project. The EIR was certified and the project was approved in June 2020. Costs may increase from originally anticipated amounts due to escalation, project delays, and the need to coordinate with other agencies.

## Significant Changes

**2023-2027 CIP:** This project is now included with the San Francisquito Creek JPA's regulatory permitting application for the Reach 2 flood protection project. Project construction is scheduled to start in 2023.

**2022-2026 CIP:** State funding has been approved for construction and project funding has been aligned accordingly, including a \$125,000 increase for regulatory permits. Staff will explore amending the agreement with Caltrans and Valley Water to include the permitting fees.

**2021-2025 CIP:** The design and construction cost increases include additional scope of work for street conforms, wall along adjacent properties, utility replacement and relocation, tree removal, landscape and in-creek restoration.

**2020-2024 CIP:** The project completion date has been revised to Winter 2022. This delay is a result of changes to Caltrans environmental assessment format and comments provided by others regarding the Draft Environmental Impact Report.

**2017-2021 CIP:** The project completion date has been extended to Fall 2018 to account for the expanded environmental analysis and project permitting requirements.

**2016-2020 CIP:** Construction funding moved to FY 2017 to reflect delays in securing State funding for environmental work. Timeline extended to reflect project duration through construction phase.

**2015-2020 CIP:** Construction funding moved to FY 2016 to reflect the time needed to complete the additional CEQA work.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	1,190,206	3,026,837	897,837	897,500	0	0	0	0	897,500	0	2,985,543
<b>Revenue from Other Agencies</b>	132,353	0	0	0	0	0	0	0	0	0	132,353
<b>Revenue from the Federal Government</b>	8,630	0	0	0	0	0	0	0	0	0	8,630
<b>Revenue from the State of California</b>	392,796	608,330	608,330	12,500,000	0	0	0	0	12,500,000	0	13,501,126
<b>Total</b>	<b>1,723,985</b>	<b>3,635,167</b>	<b>1,506,167</b>	<b>13,397,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,397,500</b>	<b>0</b>	<b>16,627,652</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	550,282	2,141,412	12,412	13,397,500	0	0	0	0	13,397,500	0	13,960,194
<b>Design</b>	1,173,695	1,493,754	1,493,754	0	0	0	0	0	0	0	2,667,449
<b>Total</b>	<b>1,723,977</b>	<b>3,635,166</b>	<b>1,506,166</b>	<b>13,397,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,397,500</b>	<b>0</b>	<b>16,627,643</b>



# CAPITAL IMPROVEMENT FUND

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<b>Relationship to Comprehensive Plan Primary Connection</b>	<b>Relationship to Comprehensive Plan Secondary Connection</b>	<b>Potential Board/Commission Review:</b>
Element: Safety Section: Natural Hazards Goal: S-2 Policy: S-2.8 Program: S2.8.4	Element: Community Services & Facilities Section: Maintenance of Parks and Community Facilities Goal: C-3 Policy: C-3.2	Historic Resources Board Planning and Transportation Commission Architectural Review Board
<b>Environmental Impact Analysis:</b> An Environmental Impact Report and CEQA/NEPA analysis was completed for this project.		





CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



San Francisquito Creek at Pope Chaucer Bridge, February 2017

**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Managing Department:** Public Works  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PE-22000

# San Francisquito Creek Joint Powers Authority Ongoing Creek Projects

## Description

This project provides funding for studies and completion of the the San Francisquito Creek Joint Powers Authority (JPA) upstream project, including channel widening and the Continuing Authority Program Section 205 (CAP 205) study. Completion of the CAP 205 study will make the channel widening components eligible for federal funding and will help fund the construction of the upstream project and address elements of the JPA's comprehensive flood management program.

## Justification

The City of Palo Alto is a contributing member of the JPA. Palo Alto's support, along with equal contributions from four other agencies, including the City of East Palo Alto, the City of Menlo Park, the San Mateo County Flooding and Sea Level Resiliency District, and the Santa Clara Valley Water District, is used to complete projects that protect residents from flooding that could occur if San Francisquito Creek were to overtop.

## Significant Changes

**2023-2027 CIP:** Funding has increased by \$0.4 million to \$0.7 million over the 5-year CIP due to member contribution increases for all members of the JPA.

**2022-2026 CIP:** Project established during FY 2022.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	61,000	61,000	113,900	145,100	146,100	138,800	149,900	693,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>61,000</b>	<b>61,000</b>	<b>113,900</b>	<b>145,100</b>	<b>146,100</b>	<b>138,800</b>	<b>149,900</b>	<b>693,800</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	61,000	61,000	113,900	145,100	146,100	138,800	149,900	693,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>61,000</b>	<b>61,000</b>	<b>113,900</b>	<b>145,100</b>	<b>146,100</b>	<b>138,800</b>	<b>149,900</b>	<b>693,800</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Safety                  Section: Natural Hazards                  Goal: S-2                  Policy: S-2.8                  Program: S2.8.4</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  San Francisco Creek Joint Powers Authority                  Architectural Review Board</p>
<p><b>Environmental Impact Analysis:</b>                  An EIR and was completed for the downstream and upstream projects</p>		

## CAPITAL IMPROVEMENT FUND



Middlefield Road (1500 Block), January 2013

**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PO-89003

# Sidewalk Repairs

## Description

This project provides funding for sidewalk repairs as part of an annual district-based rehabilitation program, alleviating the backlog of sidewalk repairs and enhancing pedestrian comfort and safety. Additionally, a sidewalk program assessment to evaluate options for improving the City's Sidewalk Repair Program was completed in Spring 2019 and provided suggestions for establishing goals and priorities related to repairs and replacements throughout the City.

## Justification

The result of this project is better sidewalk conditions and a potential reduction in sidewalk-related injuries.

## Supplemental Information

There are 23 sidewalk districts throughout the City. The district program began in 1986 with the goal of completing work in all 23 districts within 30 years. Work for all 23 districts was completed in early 2017 and the sidewalk program assessment was completed in 2019.

## Significant Changes

**2023-2027 CIP:** Funding has been restored to resume work that aligns with pre-pandemic maintenance schedules, thus the 5-year CIP has increased by \$1.7 million to \$8.9 million.

**2021-2025 CIP:** Funding was reduced for FY 2021 and FY 2022 by approximately \$2.0 million over the five-year CIP as part of the FY 2021 Capital Improvement Program budget strategy. Remaining funding will be used to perform emergency maintenance and spot repairs.

**2018-2022 CIP:** Funding for this project has been reduced by \$0.5 million per year pending completion of the assessment study.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	656,718	591,718	1,452,900	1,767,700	1,850,900	1,761,500	2,053,500	8,886,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>656,718</b>	<b>591,718</b>	<b>1,452,900</b>	<b>1,767,700</b>	<b>1,850,900</b>	<b>1,761,500</b>	<b>2,053,500</b>	<b>8,886,500</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	625,600	560,600	1,420,700	1,767,700	1,850,900	1,761,500	2,053,500	8,854,300	0	N/A
<b>Design</b>	N/A	31,117	31,117	32,200	0	0	0	0	32,200	0	N/A
<b>Total</b>	<b>N/A</b>	<b>656,717</b>	<b>591,717</b>	<b>1,452,900</b>	<b>1,767,700</b>	<b>1,850,900</b>	<b>1,761,500</b>	<b>2,053,500</b>	<b>8,886,500</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                   Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2</p>	<p><b>Potential Board/Commission Review:</b>                   Parks and Recreation Commission                  Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	

# CAPITAL IMPROVEMENT FUND



Traffic sign, April 2015

**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PO-11000

## Sign Reflectivity Upgrade

### Description

This project provides funding for inventorying, upgrading, and maintaining all traffic signs owned by the City of Palo Alto in order to comply with new federal requirements for sign reflectivity standards.

### Justification

The Federal Highway Administration (FHWA) passed regulations requiring minimum retroreflectivity levels for traffic signs. The new retroreflectivity regulations require regular annual sign inspections and replacement of signs not meeting the new minimum retroreflectivity standards.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	117,320	70,320	106,400	70,700	71,200	67,600	73,000	388,900	0	N/A
<b>Total</b>	<b>N/A</b>	<b>117,320</b>	<b>70,320</b>	<b>106,400</b>	<b>70,700</b>	<b>71,200</b>	<b>67,600</b>	<b>73,000</b>	<b>388,900</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	117,320	70,320	106,400	70,700	71,200	67,600	73,000	388,900	0	N/A
<b>Total</b>	<b>N/A</b>	<b>117,320</b>	<b>70,320</b>	<b>106,400</b>	<b>70,700</b>	<b>71,200</b>	<b>67,600</b>	<b>73,000</b>	<b>388,900</b>	<b>0</b>	<b>N/A</b>

**Operating Impact**

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<b>Relationship to Comprehensive Plan Primary Connection</b>	<b>Potential Board/Commission Review:</b>
Element: Land Use and Community Design Section: Public Streets and Public Spaces Goal: L-9 Policy: L-9.10	Planning and Transportation Commission
<b>Environmental Impact Analysis:</b>	
This project is expected to have a possible exemption from CEQA under Section 15301.	



## CAPITAL IMPROVEMENT FUND



Streetlight, Guinda Street, November 2014

**Fund:** Capital Improvement Fund

**Category:** Streets and Sidewalks

**Project Location:** Various

**Managing Department:** Public Works

**IBRC Reference:** N/A

**Initial Project Start:** Summer 2012

**Initial Project Completion:** Spring 2013

**Revised Project Start:** Summer 2022

**Revised Project Completion:** Summer 2023

**Project Number:** PE-13014

# Street Lights Condition Assessment

## Description

This project provides funding to assess the condition of the streetlight system. The assessment will include an inventory of the entire lighting system, including age and condition of conduit, wiring, street light poles, foundations, luminaires, and lighting coverage. Determining the inspection, maintenance, repair, and rehabilitation necessary to prolong the life of the City's streetlight system is also included in this project.

## Justification

There are over 6,000 streetlights in Palo Alto. In some areas, existing conduit is over 40 years old and in such poor condition that repairs are no longer possible. Streetlight systems are integral as they afford safe routes for motorists and pedestrians. An assessment is needed to evaluate the age and condition of each element of the streetlight system in order to plan cost-effective maintenance and replacement programs for the future.

## Supplemental Information

The Infrastructure Blue Ribbon Commission recommended that a streetlight system assessment be conducted to determine the condition of and replacement program for the City's streetlight infrastructure. The assessment will also consider appropriate recommendations for streetlights determined to be historic, or in neighborhoods with unique streetlights.

## Significant Changes

**2021-2025 CIP:** This project has been delayed to FY 2023 due to staffing and budgetary priorities.

**2020-2024 CIP:** Due to other high priority projects, this project has been delayed until Summer 2019.

**2019-2023 CIP:** Due to other high priority projects, this project has been delayed until Spring 2018.

**2018-2022 CIP:** Due to other high priority projects, this project has been delayed until Summer 2017.



# CAPITAL IMPROVEMENT FUND

**2017-2021 CIP:** Due to other high priority projects, initiation of this project has been delayed until Spring 2016.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	8,798	0	0	244,300	0	0	0	0	244,300	0	253,098
<b>Total</b>	<b>8,798</b>	<b>0</b>	<b>0</b>	<b>244,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>244,300</b>	<b>0</b>	<b>253,098</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	8,798	0	0	244,300	0	0	0	0	244,300	0	253,098
<b>Total</b>	<b>8,798</b>	<b>0</b>	<b>0</b>	<b>244,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>244,300</b>	<b>0</b>	<b>253,098</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Land Use and Community  
Design  
Section: Public Streets and Public Spaces  
Goal: L-9  
Policy: L-9.3

#### Potential Board/Commission Review:

Planning and Transportation Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## CAPITAL IMPROVEMENT FUND



East Bayshore Road street lights, February 2015

**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PO-05054

# Street Lights Improvements

## Description

This project provides funding to replace street light poles, pole foundations, luminaires, and wiring as needed to restore or improve street lighting.

## Justification

There are over 6,000 street lights in Palo Alto. In some areas, existing concrete or cast iron street light poles are failing and no longer serviceable. Additionally, poles damaged due to accidents must be replaced immediately. Luminaires are replaced to improve lighting levels and therefore safety. The Electric Fund maintains the poles, luminaires, and circuits and installs new street lights as requested by the Public Works Department.

## Supplemental Information

The Street Lights Condition Assessment project (PE-13014) is expected to be completed in 2023 and will result in recommendations for replacement of street lights. Where desired, efforts to match existing streetlight design will be made.

## Significant Changes

**2023-2027 CIP:** Funding was increased by approximately \$0.2 million annually in FY 2023 and FY 2024 for work that can no longer be postponed. This includes substructure work for foundation repair and replacement, pole replacement, and painting. Construction expenses were increased annually beginning in FY 2025 to account for cost escalation. All together, funding over the 5-year CIP was increased by \$0.9 million to \$1.9 million.

**2021-2025 CIP:** Funding was reduced as part of the FY 2021 Capital Improvement Program budget strategy. Available funding will be used to perform emergency maintenance and repairs as needed.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	187,400	187,400	388,600	353,500	370,200	365,300	410,400	1,888,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>187,400</b>	<b>187,400</b>	<b>388,600</b>	<b>353,500</b>	<b>370,200</b>	<b>365,300</b>	<b>410,400</b>	<b>1,888,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	187,400	187,400	388,600	353,500	370,200	365,300	410,400	1,888,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>187,400</b>	<b>187,400</b>	<b>388,600</b>	<b>353,500</b>	<b>370,200</b>	<b>365,300</b>	<b>410,400</b>	<b>1,888,000</b>	<b>0</b>	<b>N/A</b>

#### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Land Use and Community Design                  Section: Public Streets and Public Spaces                  Goal: L-9                  Policy: L-9.3</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission</p>
---	--

## CAPITAL IMPROVEMENT FUND



Curtner Avenue (300 Block), February 2015

**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PE-86070

# Street Maintenance

## Description

This project provides funding for annual resurfacing, slurry sealing, crack sealing, and reconstruction of various City streets.

## Justification

The Pavement Maintenance Management System (PMMS) and the Metropolitan Transportation Agency's StreetSaver software are used to identify streets requiring maintenance, based on the biennial Pavement Condition Index (PCI) survey of all City streets. City Council established the goal of achieving an average citywide PCI of 85, indicating excellent pavement condition, by 2021, with no street below a PCI of 60. A citywide average PCI of 85 was achieved in December 2018.

## Supplemental Information

Staff is supplementing the City's PMMS with the Metropolitan Transportation Agency's StreetSaver software, whose modeling capabilities will be used to determine future funding levels to continue to work on streets with a PCI below 60 while still maintaining the citywide PCI average of 85.

The list of streets to be included in this project will be prioritized and coordinated with Utilities Department projects and the 2012 Bicycle and Pedestrian Transportation Plan. This project is partially funded by revenues from gas taxes and Santa Clara Valley Transportation Authority's Vehicle Registration Fee Program.

## Significant Changes

**2023-2027 CIP:** Funding has been restored to resume work that aligns with pre-pandemic maintenance schedules, thus the 5-year CIP has increased by \$6.5 million to \$32.5 million.

## CAPITAL IMPROVEMENT FUND

**2021-2025 CIP:** Funding was reduced for FY 2021 and FY 2022 by approximately \$10.0 million over the five-year CIP as part of the FY 2021 Capital Improvement Program budget strategy. Street resurfacing projects will have reduced scope, limiting the number of streets that can be resurfaced over the next two years.

**2020-2024 CIP:** The \$0.9 million from the San Antonio/W. Bayshore Impact Fee Fund will be moved to the Traffic Signal and Intelligent Transportation Systems project (PL-05053) for traffic signal improvements at San Antonio and Charleston in FY 2020.

**2019-2023 CIP:** FY 2019 costs are offset by One Bay Area Grant (OBAG) Cycle 2 guaranteed funding and San Antonio/W. Bayshore Impact Fee Fund in the amount of \$1.0 million and \$0.9 million, respectively. The impact fee funding will be used to make improvements on the San Antonio/Charleston intersection and repave the San Antonio overpass. Funding increased by \$1.2 million annually from Road Maintenance and Rehabilitation Account (RMRA - S.B.1 funding) from the State of California in FY 2020.

**2018-2022 CIP:** The last phase of work on Alma Street (Rinconada Avenue to Palo Alto Avenue) is postponed until FY 2018 to incorporate additional transportation improvements that are currently in design.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	3,448,703	3,134,703	1,729,500	2,772,800	3,192,100	3,112,600	3,929,900	14,736,900	0	N/A
<b>Revenue from Other Agencies</b>	N/A	965,000	965,000	465,000	465,000	465,000	465,000	465,000	2,325,000	0	N/A
<b>Transfer from Gas Tax Fund</b>	N/A	1,192,117	1,192,117	3,080,200	3,080,200	3,080,200	3,080,200	3,080,200	15,401,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>5,605,820</b>	<b>5,291,820</b>	<b>5,274,700</b>	<b>6,318,000</b>	<b>6,737,300</b>	<b>6,657,800</b>	<b>7,475,100</b>	<b>32,462,900</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	5,081,620	4,767,620	4,732,800	6,268,000	6,685,300	6,603,800	7,419,100	31,709,000	0	N/A
<b>Design</b>	N/A	524,200	524,200	541,900	50,000	52,000	54,000	56,000	753,900	0	N/A
<b>Total</b>	<b>N/A</b>	<b>5,605,820</b>	<b>5,291,820</b>	<b>5,274,700</b>	<b>6,318,000</b>	<b>6,737,300</b>	<b>6,657,800</b>	<b>7,475,100</b>	<b>32,462,900</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# CAPITAL IMPROVEMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.2

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**

# CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Streets and Sidewalks  
**Project Location:** Various  
**Managing Department:** Public Works  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PO-11001

Park and Oxford lane lines, February 2015

## Thermoplastic Lane Marking and Striping

### Description

This project provides funding for thermoplastic pavement markings on paved roadways to provide guidance and information to motorists, bicyclists, and pedestrians. By 2010, most pavement markings had been converted from paint to thermoplastic. While thermoplastic is a durable, long lasting pavement marking, most streets will require a second or third application of thermoplastic during the pavement’s useful lifespan.

### Justification

Upgrading all street painting to thermoplastic has improved roadway safety for motorists, pedestrians, and bicyclists as the reflectivity and durability of thermoplastic exceeds that of paint.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	153,332	75,332	166,800	106,100	106,800	101,500	109,500	590,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>153,332</b>	<b>75,332</b>	<b>166,800</b>	<b>106,100</b>	<b>106,800</b>	<b>101,500</b>	<b>109,500</b>	<b>590,700</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	153,332	75,332	166,800	106,100	106,800	101,500	109,500	590,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>153,332</b>	<b>75,332</b>	<b>166,800</b>	<b>106,100</b>	<b>106,800</b>	<b>101,500</b>	<b>109,500</b>	<b>590,700</b>	<b>0</b>	<b>N/A</b>



**Operating Impact**

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<b>Relationship to Comprehensive Plan Primary Connection</b>	<b>Potential Board/Commission Review:</b>
Element: Land Use and Community Design Section: Public Streets and Public Spaces Goal: L-9 Policy: L-9.10	Planning and Transportation Commission
<b>Environmental Impact Analysis:</b>	
This project is expected to have a possible exemption from CEQA under Section 15301.	



CITY OF  
**PALO  
ALTO**

## Traffic and Transportation

## CAPITAL IMPROVEMENT FUND



Upgraded bike lanes on Charleston Road, an important school route

**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Various  
**Managing Department:** Office of Transportation  
**IBRC Reference:** New  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PL-04010

# Bicycle and Pedestrian Transportation Plan Implementation

## Description

This project provides funding for the design and construction of bicycle boulevards, enhanced bikeways, shared-use paths, bicycle parking, and pedestrian improvements in accordance with the Palo Alto Bicycle and Pedestrian Transportation Plan, which was adopted by City Council in 2012.

## Justification

Projects identified in the Palo Alto Bicycle and Pedestrian Transportation Plan, as well as bicycle parking facilities and bicycle/pedestrian project planning activities, will facilitate safer, traffic calmed biking and walking routes and provide better commute alternatives.

## Supplemental Information

Elements of the neighborhood Traffic safety and boulevards project includes the implementation of improvements along Louis Road, Amarillo Avenue, Moreno Avenue, East Meadow Drive, and Ross Road. Improvements included widened sidewalks, roundabouts, a bicycle boulevard, and other traffic calming devices. The next phase of improvements on this project is being re-evaluated and will take place over the next five years. Staff will be updating the Bicycle and Pedestrian Transportation Plan in Fiscal Year 2023.

## Significant Changes

**2022-2026 CIP:** On May 17th, 2021, the City Council approved the Pedestrian and Bicycle Advisory Committee (PABAC)'s recommendation to utilize Transportation Development Act (TDA) Article III funding of up to \$334,852 for the Bicycle and Pedestrian Transportation Plan update. Additionally, \$1.5 million initially planned in FY 2022 in this project was approved by the City Council to be transferred to the Charleston/Arastradero Corridor Project (PE-13011), please see the Significant Changes for 2021-2026 CIP in the Charleston/Arastradero Corridor project pages for further details.

# CAPITAL IMPROVEMENT FUND

**2021-2025 CIP:** Funding for this project spread to FY 2024 due to funding constraints as well as to allow time for further planning related to implementing a citywide bicycle and pedestrian plan. Starting FY 2021, \$1.0 million dollars is reduced from the project budget each fiscal year through FY 2024 for a total reduction of \$4.0 million dollars.

**2020-2024 CIP:** The Neighborhood Traffic Safety and Bicycle Boulevards Project - Phase 1 has been partially implemented. The rest of Phase 1 of the project has been paused for additional review and evaluation. Upon direction to move forward, the project will resume with increased community engagement. The schedule for the initiation of Phase 2 will be determined at a later date.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	791,271	791,271	650,000	2,100,000	0	0	0	2,750,000	0	N/A
<b>Transfer from Stanford University Medical Ctr Fund</b>	N/A	0	0	2,400,000	0	0	0	0	2,400,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>791,271</b>	<b>791,271</b>	<b>3,050,000</b>	<b>2,100,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,150,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	681,000	681,000	3,050,000	2,100,000	0	0	0	5,150,000	0	N/A
<b>Design</b>	N/A	110,271	110,271	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>791,271</b>	<b>791,271</b>	<b>3,050,000</b>	<b>2,100,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,150,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

This project is anticipated to impact operating expenses in the future. As these costs are quantified, adjustments will be brought forward in future budgets, as necessary. There may be increased operating impacts due to ongoing maintenance of protected and separate bikeways. Certain types of bikeways may require special equipment or services to maintain them.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Transportation                  Section: Sustainable Transportation                  Goal: T-1                  Policy: T-1.19                  Program: T1.19.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Transportation                  Section: Streets                  Goal: T-3                  Policy: T-3-5                  Program: T3.5.1</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission</p>
---	---	--

## CAPITAL IMPROVEMENT FUND



California Avenue, July 2020

**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** California Avenue  
**Managing Department:** Office of Transportation  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2022  
**Initial Project Completion:** Summer 2023  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PL-23000

# California Avenue Streetscape Update

## Description

This project provides initial funding for conceptual design and community engagement to develop options for expanding pedestrian and outdoor spaces in the California Avenue retail core to facilitate car-free streets. The project also provides funding to provide flexible opening and closing of streets on a trial basis in the short term.

## Justification

The project will result in increased vibrancy by expanding pedestrian and outdoor spaces available for use by visitors and businesses while allowing for flexible opening and closing of vehicular lanes.

## Supplemental Information

Funding intended to begin design of options for parklets and other reconfigurable spaces in the retail cores to facilitate car-free streets.

## Significant Changes

**2023-2027 CIP:** Project established in FY 2023.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	0	0	0	111,000	0	0	0	0	111,000	0	111,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>111,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>111,000</b>	<b>0</b>	<b>111,000</b>

### Expenditure Schedule

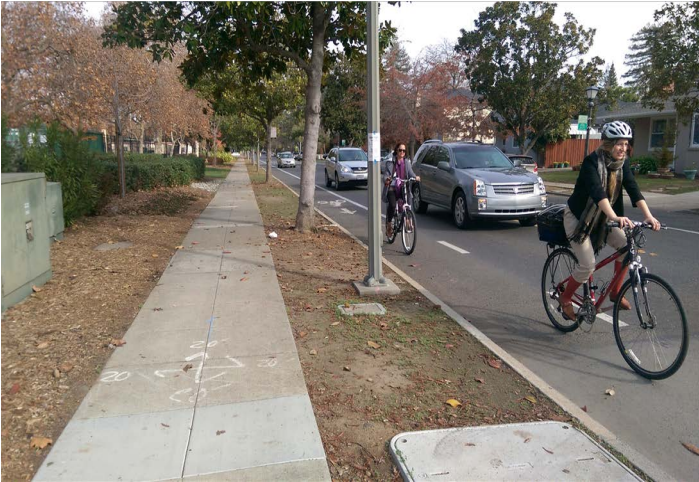
Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	0	0	0	111,000	0	0	0	0	111,000	0	111,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>111,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>111,000</b>	<b>0</b>	<b>111,000</b>

#### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Land Use and Community Design                  Section: Commercial Centers                  Goal: L-4                  Policy: L-4.3</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Land Use and Community Design                  Section: Commercial Centers                  Goal: L-4                  Policy: L-4.4</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
<p><b>Environmental Impact Analysis:</b>                  This project is anticipated to require an environmental assessment in accordance with CEQA guidelines.</p>		

## CAPITAL IMPROVEMENT FUND



Bicyclists on Churchill Ave, December 2015

**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** El Camino Real & Churchill Avenue  
**Managing Department:** Office of Transportation  
**IBRC Reference:** New  
**Initial Project Start:** Fall 2013  
**Initial Project Completion:** Fall 2015  
**Revised Project Start:** Summer 2019  
**Revised Project Completion:** Fall 2023  
**Project Number:** PL-14000

# Churchill Avenue Enhanced Bikeway

## Description

This project provides funding for the planning, design and construction of a shared-use path along the north side of Churchill Avenue between the existing shared-use path at Castilleja Avenue and the Stanford Perimeter Trail. It also includes intersection improvements at Churchill Avenue and El Camino Real, which will include a new dedicated westbound right-turn lane.

## Justification

As a priority project within the Palo Alto Bicycle and Pedestrian Transportation Plan, this project advances objective three (3), which develops a core network of shared paths, bikeways, and traffic-calmed streets that connect residential districts, schools, and parks. This project also proposes safety improvements at the Churchill Avenue and El Camino Real intersection.

## Significant Changes

**2023-2027 CIP:** Staff continue to seek a Memorandum of Understanding between the City and Palo Alto Unified School District (PAUSD) for the easement needs required for the project. Once the easement documents are finalized, staff will complete the design. The construction phase is anticipated to start with the Request for Proposal (RFP) process in Winter 2022.

**2022-2026 CIP:** Staff is seeking the necessary easement from the PAUSD in May 2021. Following this, completion of the design phase is anticipated by June of 2021, and staff will initiate a RFP as part of the construction phase of the project.

**2020-2024 CIP:** Project delays occurred mainly due to additional time needed for easement acquisitions. The project timeline has been adjusted to reflect those changes as well as allowing for more time for enhanced community engagement and Caltrans review.



# CAPITAL IMPROVEMENT FUND

**2019-2023 CIP:** Acquisition of necessary easements has been more time-consuming than was originally estimated. Project completion timeline has also been adjusted in light of project management staff departures and a focus on enhanced community engagement.

**2016-2020 CIP:** Possible delays to this project could occur as the design goes through the Caltrans permitting process.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	(692,829)	3,400,377	624,277	3,082,300	0	0	0	0	3,082,300	0	3,013,748
<b>Transfer from Traffic Impact Fee Fund</b>	1,000,000	0	0	0	0	0	0	0	0	0	1,000,000
<b>Total</b>	<b>307,171</b>	<b>3,400,377</b>	<b>624,277</b>	<b>3,082,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,082,300</b>	<b>0</b>	<b>4,013,748</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	300,528	3,400,377	624,277	3,082,300	0	0	0	0	3,082,300	0	4,007,105
<b>Design</b>	6,640	0	0	0	0	0	0	0	0	0	6,640
<b>Total</b>	<b>307,168</b>	<b>3,400,377</b>	<b>624,277</b>	<b>3,082,300</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,082,300</b>	<b>0</b>	<b>4,013,745</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Transportation Section: Road Safety Goal: T-6 Policy: T-6.1	Element: Transportation Section: Sustainable Transportation Goal: T-1 Policy: T-1.19	Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15301.		

## CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Churchill Avenue and Alma Street  
**Managing Department:** Office of Transportation  
**IBRC Reference:** N/A  
**Initial Project Start:** Fall 2019  
**Initial Project Completion:** Summer 2021  
**Revised Project Start:** N/A  
**Revised Project Completion:** Winter 2024  
**Project Number:** PL-20000

Churchill Avenue/Alma Street Railroad Crossing Safety Improvements: photo taken September 2018

# Churchill Avenue/Alma Street Railroad Crossing Safety Improvements

## Description

This project provides funding for the design and construction of pedestrian and bicycle safety improvements west of Churchill Avenue and Alma Street intersection at the railroad at-grade crossing. Design includes, but is not limited to, traffic signal modifications, street lighting improvements, roadway resurfacing, sidewalk realignment and/or widening, drainage improvements, utility re-locations, signage and striping, and way-finding improvements.

## Justification

The rail crossing at Alma Street and Churchill Avenue experiences a large amount of bicycle traffic for Palo Alto High School and Stanford during the morning and afternoon commute hours. It is difficult for the existing sidewalk and roadway intersection to accommodate the large number of pedestrians using this intersection. Capital improvements will help move bicyclists and pedestrians safely through the crossing.

## Supplemental Information

This project was formerly included in Railroad Grade Separation (PL-17001). However, this project was separated in FY 2020 to track the different funding sources for safety improvements at Churchill Avenue/Alma Street. This crossing was identified through the Federal Section 130 funds, a federally funded program administered by the State, for increasing safety at at-grade highway-rail crossings. All construction and design costs are fully reimbursable by Section 130 funding from Caltrans.

## Significant Changes

**2023-2027 CIP:** The design plans are complete. The City is in the process of receiving the necessary approvals from the California Public Utilities Commission (CPUC) and the Joint Powers Board (JPB). Staff anticipates ini-

# CAPITAL IMPROVEMENT FUND

tiating the procurement process for the project’s construction phase in Winter 2022. The project is estimated to be completed in Winter 2024.

**2022-2026 CIP:** The conceptual design and design phase of the project is nearing completion in FY 2021. Construction is anticipated to start in FY 2022.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	58,638	576,531	576,531	424,200	0	0	0	0	424,200	0	1,059,369
<b>Revenue from Other Agencies</b>	3,975	3,996,000	150,100	3,845,900	0	0	0	0	3,845,900	0	3,999,975
<b>Revenue from the State of California</b>	47,538	0	0	0	0	0	0	0	0	0	47,538
<b>Total</b>	<b>110,151</b>	<b>4,572,531</b>	<b>726,631</b>	<b>4,270,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,270,100</b>	<b>0</b>	<b>5,106,882</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	292	4,352,100	506,200	4,270,100	0	0	0	0	4,270,100	0	4,776,592
<b>Design</b>	109,858	220,431	220,431	0	0	0	0	0	0	0	330,289
<b>Total</b>	<b>110,150</b>	<b>4,572,531</b>	<b>726,631</b>	<b>4,270,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,270,100</b>	<b>0</b>	<b>5,106,881</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Transportation          Section: Road Safety          Goal: T-6          Policy: T-6.1          Program: T6.1.4</p> <p><b>Environmental Impact Analysis:</b>          This project requires Environmental Impact Review</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission          Architectural Review Board</p>
---	--

## CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Downtown  
**Managing Department:** Office of Transportation  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2015  
**Initial Project Completion:** Summer 2020  
**Revised Project Start:** N/A  
**Revised Project Completion:** Summer 2023  
**Project Number:** PL-15002

Parking Facility Management System

# Downtown Automated Parking Guidance Systems, Access Controls & Revenue Collection Equip.

## Description

This project provides funding to address infrastructure and capital improvements for parking facilities (Alma St., Bryant St., and Cowper/Webster garages). This project includes design and installation of new downtown parking guidance systems, access controls, and revenue collection equipment.

## Justification

This project is identified in the City's Comprehensive Plan as a means to reduce congestion, minimize air quality impacts from motorists, and provide live occupancy counts of open parking spaces.

## Supplemental Information

This Infrastructure Plan project facilitates parking congestion mitigation in downtown.

## Significant Changes

**2023-2027 CIP:** A new Design/Build RFP will be issued in Summer 2022.

**2022-2026 CIP:** Bids for the APGS were received in winter of 2020 and project will go into construction in FY 2022.

**2021-2025 CIP:** Due to workload capacity constraints, this project was not started in FY 2020 and will now be done solely in FY 2021.

**2020-2024 CIP:** This project was delayed as part of the work to develop a more comprehensive downtown parking plan and is now scheduled to go out to bid in the summer of 2020. Implementation will span Fiscal Years 2020 and 2021.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	198,348	2,517,121	98,021	2,519,100	0	0	0	0	2,519,100	0	2,815,469
<b>Total</b>	<b>198,348</b>	<b>2,517,121</b>	<b>98,021</b>	<b>2,519,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,519,100</b>	<b>0</b>	<b>2,815,469</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	2,517,121	98,021	2,519,100	0	0	0	0	2,519,100	0	2,617,121
<b>Design</b>	198,347	0	0	0	0	0	0	0	0	0	198,347
<b>Total</b>	<b>198,347</b>	<b>2,517,121</b>	<b>98,021</b>	<b>2,519,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,519,100</b>	<b>0</b>	<b>2,815,468</b>

### Operating Impact

The ongoing operating costs for cameras and other equipment is unknown at this time; however, as these costs are quantified, adjustments will be brought forward in the next budget cycle.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Transportation                  Section: Motor Vehicle and Bicycle                  Parking                  Goal: T-5                  Policy: T-5.2                  Program: T5.2.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission</p>
---	--

## CAPITAL IMPROVEMENT FUND



Parking Mitigation, March, 2019

**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Various  
**Managing Department:** Office of Transportation  
**IBRC Reference:** New  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PL-15003

# Parking District Implementation

## Description

This project will fund the introduction of additional parking permit programs throughout the city. One aspect of this project is the City Council approved Residential Preferential Parking (RPP) ordinance to establish uniform procedures to implement RPP districts through the process outlined in the Municipal Code 10.50.

## Justification

Implementing parking districts, including RPP, is a parking management strategy that regulates parking where it was previously unregulated. Parking management strategies are critical to maximizing the use of existing parking supply and prioritizing the "right space for the right use" concept. RPP prioritizes parking on residential streets for residents and business who reside within the boundaries of the district.

## Significant Changes

**2023-2027 CIP:** Project will commence in FY 2023 after a two (2) year deferral (FY 2021 and FY 2022). Requests for the formation of new Residential Preferential Parking districts are evaluated on annual basis.

**2021-2025 CIP:** Project deferred to FY 2023 and FY 2024 to contribute to cost containment strategies in FY 2021. Title of project changed from Residential Preferential Parking to Parking District Implementation in order to accommodate a broader parking district strategy, and updated to a recurring project in anticipation of implementing future parking districts.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	0	0	182,000	238,700	247,600	242,300	273,700	1,184,300	0	N/A
<b>Total</b>	<b>N/A</b>	<b>0</b>	<b>0</b>	<b>182,000</b>	<b>238,700</b>	<b>247,600</b>	<b>242,300</b>	<b>273,700</b>	<b>1,184,300</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	0	0	127,400	182,500	189,700	182,700	211,300	893,600	0	N/A
<b>Design</b>	N/A	0	0	54,600	56,200	57,900	59,600	62,400	290,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>0</b>	<b>0</b>	<b>182,000</b>	<b>238,700</b>	<b>247,600</b>	<b>242,300</b>	<b>273,700</b>	<b>1,184,300</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

RPPs and other City parking programs are expected to have operating impacts to maintain the programs. As these costs are quantified, adjustments will be brought forward in the future budget cycles, as necessary.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Transportation                  Section: Motor Vehicle and Bicycle                  Parking                  Goal: T-5                  Policy: T-5.1                  Program: T5.11.1</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	





**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Downtown, California Avenue, and RPP Districts  
**Managing Department:** Office of Transportation  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2016  
**Initial Project Completion:** Winter 2017  
**Revised Project Start:** Summer 2019  
**Revised Project Completion:** Fall 2022  
**Project Number:** PL-16002

Parking and Citation Management

## Parking Management and System Implementation

### Description

This project provides funding for the design and installation of the Comprehensive Parking Permit and Citation Management System. The all-inclusive system is a tool staff will utilize in the management of parking permits for eight parking permit programs and associated on and off-street parking citations.

### Justification

As part of the integrated strategy to address traffic and parking concerns, staff conducted a comprehensive study of parking management strategies, including paid parking and permit parking. The study included an evaluation on how to best use the City's existing parking supply and recommended comprehensive strategies in Palo Alto.

### Supplemental Information

This project is funded proportionally by parking revenues from all parking funds.

### Significant Changes

**2023-2027 CIP:** Project completion extended to Fall 2022.

**2022-2026 CIP:** Permit portals for College Terrace, Crescent Park, Southgate and Old Palo Alto districts in the Residential Preferential Parking area have been launched. The remaining are expected to be launched in the spring of 2022.

**2021-2025 CIP:** Complete system implementation expected by Fall 2021.

**2020-2024 CIP:** The project name was changed from Downtown Parking Management and System Implementation to broaden the scope of the project. The bid for the Comprehensive Parking Permit and Citation System was released in Spring 2018 with complete system implementation expected by September 2020.



# CAPITAL IMPROVEMENT FUND

**2019-2023 CIP:** Recent accomplishments include the completion of the Downtown Parking Management Plan and development of a finance and implementation plan. The bid for the Comprehensive Parking Permit and Citation System is expected to be released in Summer of 2018 with system implementation expected by September 2018.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	(630,767)	625,794	515,794	110,000	0	0	0	0	110,000	0	(4,973)
<b>Transfer from Parking District California Avenue</b>	76,183	0	0	0	0	0	0	0	0	0	76,183
<b>Transfer from Residential Parking Fund</b>	140,773	0	0	0	0	0	0	0	0	0	140,773
<b>Transfer from University Ave Parking Permit Fund</b>	415,264	0	0	0	0	0	0	0	0	0	415,264
<b>Total</b>	<b>1,453</b>	<b>625,794</b>	<b>515,794</b>	<b>110,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110,000</b>	<b>0</b>	<b>627,247</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	1,205	625,794	515,794	110,000	0	0	0	0	110,000	0	626,999
<b>Design</b>	248	0	0	0	0	0	0	0	0	0	248
<b>Total</b>	<b>1,453</b>	<b>625,794</b>	<b>515,794</b>	<b>110,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110,000</b>	<b>0</b>	<b>627,247</b>

### Operating Impact

The permit and citation system is designed to cover its own costs. No operating impacts are anticipated.

#### Relationship to Comprehensive Plan Primary Connection

Element: Transportation  
 Section: Motor Vehicle and Bicycle  
 Parking  
 Goal: T-5  
 Policy: T-5.2  
 Program: T5.2.3

#### Potential Board/Commission Review:

Planning and Transportation Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## CAPITAL IMPROVEMENT FUND



Quarry Road Multi-Use Path, December 2017

**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Quarry Road between El Camino Real and Welch Road  
**Managing Department:** Office of Transportation  
**IBRC Reference:** Catch-up  
**Initial Project Start:** Winter 2016  
**Initial Project Completion:** Spring 2017  
**Revised Project Start:** N/A  
**Revised Project Completion:** Fall 2025  
**Project Number:** PL-16000

# Quarry Road Improvements and Transit Center Access

## Description

This project provides funding for the planning, design, and construction of bicycle and pedestrian improvements along Quarry Road between El Camino Real and Welch Road, including, but not limited to, upgraded bicycle lanes and crosswalks, innovative intersection treatments for bicyclists, and improved access to transit stops. Planning, design, and construction of new bicycle and pedestrian paths between the Palo Alto Transit Center bus depot and the intersection of Quarry Road and El Camino Real has been completed.

## Justification

The August 2011 Development Agreement between Stanford Hospitals and Clinics, the Lucille Salter Packard Children's Hospital at Stanford, the Board of Trustees of the Leland Stanford Junior University, and the City of Palo Alto obligates the City to design and construct enhancements of various pedestrian and bicycle connections between the Palo Alto Intermodal Transit Center and the Stanford University Medical Center (SUMC) campus, and to provide a connection from the future Everett Avenue area bicycle and pedestrian undercrossing to the now completed Quarry Road improvements. Stanford provided funds for these projects. New to this project is a transit improvement element. The Comprehensive Plan Update 2030 identified the need for a transit, bicycle, and pedestrian linkage between the Palo Alto Transit Center bus depot and the Quarry Road and El Camino Real intersection to improve bus transit connectivity and service efficiency.

## Supplemental Information

This project is funded by the Stanford University Medical Center Development Agreement via transfer to the Capital Improvement Fund. Design and construction of the temporary bicycle and pedestrian Transit Center pathway was completed in Summer 2017. The pathway is accented with seating, decorative lighting, and new landscaping. Design and construction was also completed for bicycle and pedestrian improvements along the Quarry Road corridor between El Camino Real and Welch Road.

## Significant Changes

**2023-2027 CIP:** Stanford University is preparing to seek a ballot measure for modifications to parkland status that would be necessary to implement this project.

**2022-2026 CIP:** Funding for this project was reduced by \$3.2 million to align with the original pedestrian and bike path improvement scope of this project, as progress on the transit-way and Everett Avenue portions of the project are on hold while working through grade separation and other legal issues.

**2021-2025 CIP:** Funding for this project spread to FY 2023 due to funding constraints and capital project prioritization.

**2020-2024 CIP:** Project increased by \$1.1 million to account for increased construction costs, and construction moved to FY 2022 to better align the workload with staff availability.

**2019-2023 CIP:** Changes include planning, design, and construction for a new bicycle, pedestrian, and transitway between El Camino Real and Quarry Road and the Palo Alto Transit Center. The location, project characteristics, and funding source are consistent with the portion of the project already completed.

**2018-2022 CIP:** The construction of the Quarry Road improvements (signing and striping along Quarry Road) has been delayed due to underground (trenching) electrical work needed to be done by Stanford. The project delay will most likely increase the cost to complete construction due to increasing construction costs.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	(159,953)	0	0	0	618,500	0	0	0	618,500	0	458,547
<b>Transfer from Stanford University Medical Ctr Fund</b>	1,442,004	0	0	0	1,493,500	0	0	0	1,493,500	0	2,935,504
<b>Total</b>	<b>1,282,051</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,112,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,112,000</b>	<b>0</b>	<b>3,394,051</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	1,021,902	0	0	0	2,112,000	0	0	0	2,112,000	0	3,133,902
<b>Design</b>	260,144	0	0	0	0	0	0	0	0	0	260,144
<b>Total</b>	<b>1,282,046</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,112,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,112,000</b>	<b>0</b>	<b>3,394,046</b>

## Operating Impact

Street and landscaping maintenance costs are estimated to increase. As these costs are quantified, adjustments will be brought forward in future budgets, as necessary.

# CAPITAL IMPROVEMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Transportation  
Section: Road Safety  
Goal: T-3  
Policy: T-3-10  
Program: T3.10.4

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

May Require Environmental Review



CITY OF  
**PALO  
ALTO**

## CAPITAL IMPROVEMENT FUND



Caltrain Crossing at Charleston Road, July 2018

**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Various  
**Managing Department:** Office of Transportation  
**IBRC Reference:** New  
**Initial Project Start:** Summer 2016  
**Initial Project Completion:** Summer 2018  
**Revised Project Start:** N/A  
**Revised Project Completion:** TBD  
**Project Number:** PL-17001

# Railroad Grade Separation and Safety Improvements

## Description

This project is a community-based process to advance the railroad grade crossing circulation study and context sensitive solutions study envisioned by the City Council. It will also fund the preparation of a Project Study Report and environmental analysis that will be required for the City to realize its goals of advancing grade separations.

## Justification

This project is essential to support the City Council work related to the Council rail grade separation priority. It provides engineering support, circulation studies, community engagement efforts, and other subsequent tasks needed to advance the City's goal of grade separating railroad crossings in Palo Alto.

## Supplemental Information

Recent accomplishments include:

- Council selected partial underpass as the preferred alternative for the Churchill Avenue Crossing
- Council chose the closure with mitigations for Churchill Avenue grade separation as an alternative
- Council eliminated viaduct option for Meadow Drive/Charleston Road from further consideration

## Significant Changes

**2023-2027 CIP:** Council directed staff to perform additional studies to review geo-technical conditions, refine the underpass/partial underpass alternatives, and to reconvene the Rail Committee and discuss the financial considerations in FY 2023.

# CAPITAL IMPROVEMENT FUND

**2021-2025 CIP:** Funding of \$1.0 million from the Stanford University Medical Center Fund programmed in this project, spread over Fiscal Years 2021 and 2022. \$1.0 million of Measure B funding shifted to the Street Maintenance Project (PE-86070).

**2020-2024 CIP:** Three new alternatives, Churchill, Meadow, and Charleston, were added in early 2020.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	700,782	1,359,970	214,107	2,583,163	1,298,700	1,135,700	1,705,900	2,055,500	8,778,963	0	9,693,852
<b>Revenue from Other Agencies</b>	2,571,003	500,000	500,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	0	8,071,003
<b>Transfer from Stanford University Medical Ctr Fund</b>	500,000	500,000	500,000	0	0	0	0	0	0	0	1,000,000
<b>Total</b>	<b>3,771,785</b>	<b>2,359,970</b>	<b>1,214,107</b>	<b>3,583,163</b>	<b>2,298,700</b>	<b>2,135,700</b>	<b>2,705,900</b>	<b>3,055,500</b>	<b>13,778,963</b>	<b>0</b>	<b>18,764,855</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	40,637	2,313,088	1,167,225	3,583,163	2,298,700	2,135,700	2,705,900	3,055,500	13,778,963	0	14,986,825
<b>Design</b>	3,731,144	46,882	46,882	0	0	0	0	0	0	0	3,778,026
<b>Total</b>	<b>3,771,781</b>	<b>2,359,970</b>	<b>1,214,107</b>	<b>3,583,163</b>	<b>2,298,700</b>	<b>2,135,700</b>	<b>2,705,900</b>	<b>3,055,500</b>	<b>13,778,963</b>	<b>0</b>	<b>18,764,851</b>

### Operating Impact

Operating impacts will depend upon the grade separation alternative selected. As these costs are quantified, adjustments will be brought forward in future budgets cycles, as necessary.

#### Relationship to Comprehensive Plan Primary Connection

Element: Transportation  
Section: Streets  
Goal: T-3  
Policy: T-3-15  
Program: T3.15.1

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project includes the completion of the necessary environmental analysis.

## CAPITAL IMPROVEMENT FUND



Fletcher Students Using New Bike Box, April 2018

**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Streets serving students, including "Walk and Roll Routes" for PAUSD Schools  
**Managing Department:** Office of Transportation  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PL-00026

# Safe Routes To School

## Description

This project provides funding for the City's Safe Routes to Schools program, including school commute planning, education and encouragement activities, and capital improvements along local and collector streets that may be impacted by school commute activities. Typical capital improvements include traffic calming devices, enhanced crosswalks, and improved signage along suggested routes to school.

## Justification

In collaboration with the Palo Alto Unified School District (PAUSD) and Parent Teacher Associations, the City is leading the design and construction of capital improvements for suggested routes to school, helping to reduce risks to students and encouraging more families to use alternatives to driving. This program aligns with the City's sustainability and climate action goals by reducing daily greenhouse gas emissions and supports equity via compulsory programming in the public schools.

## Supplemental Information

The City was awarded a Vehicle Emissions Reductions Based at Schools (VERBS) grant of \$0.9 million for the South Palo Alto bikeway projects mentioned above. Due to project delays, the City relinquished the grant and reapplied in August 2022 to allow for more time for outreach, design, and environmental review.

## Significant Changes

**2023-2027 CIP:** The project maintains funds to design the South Palo Alto Bikeways project, conduct traffic studies, and implement traffic calming and other safety countermeasures on school routes.

**2022-2026 CIP:** Updated school speed limit signage, traffic calming projects from prior years, and traffic studies will be pursued in FY 2022 for locations in need of traffic calming and other safety countermeasures.



# CAPITAL IMPROVEMENT FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	689,757	449,434	749,900	90,900	42,400	39,400	57,400	980,000	0	N/A
<b>Revenue from Other Agencies</b>	N/A	459,677	0	0	0	0	0	0	0	0	N/A
<b>Transfer from Gas Tax Fund</b>	N/A	100,000	100,000	100,000	100,000	100,000	100,000	100,000	500,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,249,434</b>	<b>549,434</b>	<b>849,900</b>	<b>190,900</b>	<b>142,400</b>	<b>139,400</b>	<b>157,400</b>	<b>1,480,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	453,706	453,706	114,900	155,900	117,400	113,600	130,400	632,200	0	N/A
<b>Design</b>	N/A	795,728	95,728	735,000	35,000	25,000	25,800	27,000	847,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,249,434</b>	<b>549,434</b>	<b>849,900</b>	<b>190,900</b>	<b>142,400</b>	<b>139,400</b>	<b>157,400</b>	<b>1,480,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Transportation          Section: Road Safety          Goal: T-6          Policy: T-6.4          Program: T6.4.2</p> <p><b>Environmental Impact Analysis:</b>          This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Transportation          Section: Sustainable Transportation          Goal: T-1          Policy: T-1.16</p>	<p><b>Potential Board/Commission Review:</b>          Planning and Transportation Commission</p>
--	--	--

## CAPITAL IMPROVEMENT FUND



**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Various  
**Managing Department:** Office of Transportation  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PL-05030

Installation of new traffic signal equipment at Embarcadero Road and Middlefield Road, April 2018

# Traffic Signal and Intelligent Transportation Systems

## Description

This project provides funding for the design, construction, and upgrades of traffic signals, traffic signal communications networks, signal performance/surveillance projects for transportation use, and maintenance of the City's traffic signal central management system. The project includes the replacement of traffic signal controllers/cabinets, video detection systems, and other field equipment.

## Justification

Traffic signal upgrades are essential to maintaining traffic safety and improving roadway operations including the reduction of roadway congestion with traffic signal re-timing projects. To accomplish this, there is a need to add new traffic signal equipment at locations throughout the city. This project replaces or adds traffic signal controller inventory in the field with new controllers and expands the current central management system to allow for communications to all signalized intersections. The new controllers enable additional traffic signal timing strategies and improve the operations of the City's traffic signals.

## Supplemental Information

Funding from this project contributes to implementation of detection upgrades, accessible pedestrian buttons, adaptive signal timing, flashing pedestrian beacons, and electronic speed feedback signage. During FY 2022, this CIP has funded the San Antonio/Charleston Road intersection signal improvements project which is currently in the design phase.

## Significant Changes

**2023-2027 CIP:** \$0.5 million of the \$1.0 million Measure B revenue programmed in FY 2022 for this project will be shifted to the Transportation and Parking Improvements project (PL-12000) in FY 2023. This action

# CAPITAL IMPROVEMENT FUND

increases the range of projects that can be reimbursed by VTA's Measure B Local Streets and Roads grant to include traffic calming improvements, local traffic studies, and response to 311 requests.

**2020-2024 CIP:** Although anticipated last fiscal year, this project will not include a new signal at Hamilton and Waverly since construction of a new downtown garage at that site is not proceeding at this time. An additional \$900,000 from the San Antonio/West Bayshore Transportation Impact Fund has been added in FY 2020 for traffic signal improvements at San Antonio and E. Charleston.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	(67,530)	(67,530)	(21,700)	201,700	234,900	215,100	332,800	962,800	0	N/A
<b>Revenue from Other Agencies</b>	N/A	1,000,000	500,000	300,000	300,000	300,000	300,000	300,000	1,500,000	0	N/A
<b>Transfer from Traffic Impact Fee Fund</b>	N/A	395,000	395,000	395,000	395,000	395,000	395,000	395,000	1,975,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,327,470</b>	<b>827,470</b>	<b>673,300</b>	<b>896,700</b>	<b>929,900</b>	<b>910,100</b>	<b>1,027,800</b>	<b>4,437,800</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	1,263,770	763,770	607,700	829,100	860,300	838,400	952,800	4,088,300	0	N/A
<b>Design</b>	N/A	63,700	63,700	65,600	67,600	69,600	71,700	75,000	349,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,327,470</b>	<b>827,470</b>	<b>673,300</b>	<b>896,700</b>	<b>929,900</b>	<b>910,100</b>	<b>1,027,800</b>	<b>4,437,800</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Transportation Section: Traffic Delay and Congestion Goal: T-2 Policy: T-2.1 Program: T2.1.1</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Transportation Section: Streets Goal: T-3 Policy: T-3-6</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15302.</p>		

## CAPITAL IMPROVEMENT FUND



New Crosswalk at Colorado Ave and Sandra Place, June 2018

**Fund:** Capital Improvement Fund  
**Category:** Traffic and Transportation  
**Project Location:** Various  
**Managing Department:** Office of Transportation  
**IBRC Reference:** Keep-up  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** PL-12000

# Transportation and Parking Improvements

## Description

This project provides funding for the implementation of traffic safety projects including miscellaneous roadway neighborhood traffic calming improvements, local traffic studies, response to 311 requests, and parking improvements.

## Justification

Traffic calming is identified as a high priority in the adopted Transportation element of the Comprehensive Plan. Traffic studies and miscellaneous traffic calming improvements help to improve the quality of life for residents and visitors. Throughout the year, staff receives ongoing improvement requests that would be funded through this project.

## Supplemental Information

A few of the recent transportation and parking improvement accomplishments include:

- Continued to address Palo Alto 311 service requests submitted by constituents
- Installed traffic calming measures in Crescent Park for pilot phase
- Evaluated and implemented traffic calming measures and enhanced crosswalks utilizing signage and striping in other residential areas as requested
- Fulton, Seale, and Tennyson neighborhood area installation of stop signs as part of traffic calming program
- Alma Street/Meadow Drive signal pole replacement and median modification

## Significant Changes

**2023-2027 CIP:** \$0.5 million of the \$1.0 million Measure B revenue programmed in FY 2022 for the Traffic Signal and Intelligent Transportation Systems project (PL-05030) project will be shifted to this project in FY 2023.

# CAPITAL IMPROVEMENT FUND

This action increases the range of projects that can be reimbursed by VTA’s Measure B Local Streets and Roads grant to include traffic calming improvements, local traffic studies, and response to 311 requests.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Capital Improvement Fund</b>	N/A	735,260	300,357	906,403	530,300	572,400	560,300	632,600	3,202,003	0	N/A
<b>Revenue from Other Agencies</b>	N/A	0	0	500,000	0	0	0	0	500,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>735,260</b>	<b>300,357</b>	<b>1,406,403</b>	<b>530,300</b>	<b>572,400</b>	<b>560,300</b>	<b>632,600</b>	<b>3,702,003</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	556,310	121,407	1,331,403	155,300	197,400	174,000	228,600	2,086,703	0	N/A
<b>Design</b>	N/A	178,950	178,950	75,000	375,000	375,000	386,300	404,000	1,615,300	0	N/A
<b>Total</b>	<b>N/A</b>	<b>735,260</b>	<b>300,357</b>	<b>1,406,403</b>	<b>530,300</b>	<b>572,400</b>	<b>560,300</b>	<b>632,600</b>	<b>3,702,003</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Transportation          Section: Streets          Goal: T-4          Policy: T-4.2          Program: T4.2.1</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Transportation          Section: Road Safety          Goal: T-6</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission</p>
<p><b>Environmental Impact Analysis:</b>          This project is expected to have a possible exemption from CEQA under Section 15301.</p>		



CITY OF  
**PALO  
ALTO**

**CUBBERLEY  
PROPERTY  
INFRASTRUCTURE  
FUND**

# Overview

The Cubberley Property Infrastructure Fund accounts for expenditures related to the maintenance and renovation of the Cubberley Community Center property, which was formerly Cubberley High School from 1955 to 1979. Due to budget constraints resulting from the passage of Proposition 13 and declining enrollment, the Palo Alto Unified School District (PAUSD) was forced to close and sell school properties, including Ellen Fletcher Middle School (formerly Terman Middle School), which the City of Palo Alto acquired, while PAUSD retained ownership of the Cubberley site. In 1989, the City and PAUSD entered into a lease agreement with the City providing annual revenue to PAUSD in exchange for 1) a lease of the 35-acre Cubberley site; 2) a Covenant Not to Develop for five other neighborhood school sites; and 3) an agreement that PAUSD provide space for extended day care at each of the eleven remaining elementary school sites.

## Cubberley Fund Capital Expenditures



In 2001, the City relinquished ownership of the Ellen Fletcher (formerly Terman) site in exchange for ownership of eight acres of the Cubberley site. After several lease extensions and amendments in the years following, a restructured 5-year lease agreement was finalized in 2014. As part of the 2014 lease agreement, the 1989 Covenant Not to Develop clause, which required the City to transfer \$1.86 million to the school district, was eliminated and the funds were dedicated towards repairing, renovating and/or improving the Cubberley site, which is jointly owned by the City and PAUSD. On July 1, 2020 a new 54-month lease began



that reduced the amount of PAUSD building space leased by the City and included reimbursements from PAUSD for maintenance and repairs by the City.

The budget for the Cubberley Property Infrastructure Fund is divided into two project categories: Buildings and Facilities and Parks and Open Space. Additional categories may be established in future years once needs are identified through the Master Plan process.

## Buildings and Facilities

The Buildings and Facilities category accounts for the projects funded to maintain the facilities on the Cubberley Community Center campus.

### Facility Inventory

CLASSIFICATION	QUANTITY
City-owned acres	8
PAUSD-owned acres	27
Total square footage of buildings	175,540 (94,402 City-owned)
Parking spaces	750 (130 City-owned)
Artist studios	22
Dance studios	3
Schools	2
Childcare facilities	2

### Recent Accomplishments

- Completed Cubberley Wing F & FH roof replacement.

### 2023-2027 Capital Improvement Program

For the 2023-2027 Capital Improvement Program (CIP), \$7.4 million is budgeted, with \$3.2 million allocated in Fiscal Year 2023 for three projects in the Buildings and Facilities category.

### Recurring Projects

- Cubberley Roof Replacements (Fiscal Year 2023: \$2.1 million; 5-Year CIP: \$5.6 million)
- Cubberley Repairs (Fiscal Year 2023: \$1.1 million; 5-Year CIP: \$1.5 million)

### Non-Recurring Projects

- Cubberley Community Center Redevelopment (5-Year CIP: \$0.3 million)

## Parks and Open Space

The Parks and Open Space category accounts for projects that maintain Cubberley outdoor space and facilities improvements.

# CUBBERLEY PROPERTY INFRASTRUCTURE FUND

## 2023-2027 Capital Improvement Program

For the 2023-2027 CIP, \$0.5 million is budgeted and allocated in Fiscal Year 2023 for one project in the Parks and Open Space category.

### Non-Recurring Projects

- Cubberley Field Restroom (Fiscal Year 2023: \$0.5 million; 5-Year CIP: \$0.5 million)

## Cubberley Property Infrastructure Fund

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Revenue from Other Agencies</b>									
<b>CB-16002</b>	Cubberley Roof Replacements	0	0	1,962,800	0	0	507,000	1,310,000	3,779,800
<b>Revenue from Other Agencies Total</b>		<b>\$0</b>	<b>\$0</b>	<b>\$1,962,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$507,000</b>	<b>\$1,310,000</b>	<b>\$3,779,800</b>
<b>Total Sources</b>		<b>\$0</b>	<b>\$0</b>	<b>\$1,962,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$507,000</b>	<b>\$1,310,000</b>	<b>\$3,779,800</b>
<b>USE OF FUNDS</b>									
<b>Buildings and Facilities</b>									
<b>CB-19001</b>	Cubberley Building Management Systems	31,341	31,341	0	0	0	0	0	0
<b>CB-16001</b>	Cubberley Community Center Master Plan	24,900	24,900	0	0	0	0	0	0
<b>CB-26000</b>	Cubberley Community Center Redevelopment	0	0	0	0	0	314,000	0	314,000
<b>CB-17001</b>	Cubberley Repairs	420,392	33,392	1,082,000	105,000	109,000	113,000	115,000	1,524,000
<b>CB-16002</b>	Cubberley Roof Replacements	1,123,023	977,423	2,102,600	834,000	784,000	531,000	1,350,000	5,601,600
<b>Buildings and Facilities Total</b>		<b>\$1,599,656</b>	<b>\$1,067,056</b>	<b>\$3,184,600</b>	<b>\$939,000</b>	<b>\$893,000</b>	<b>\$958,000</b>	<b>\$1,465,000</b>	<b>\$7,439,600</b>
<b>Parks and Open Space</b>									
<b>CB-17002</b>	Cubberley Field Restroom	305,491	42,891	508,000	0	0	0	0	508,000
<b>Parks and Open Space Total</b>		<b>\$305,491</b>	<b>\$42,891</b>	<b>\$508,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$508,000</b>
<b>Total Uses</b>		<b>\$1,905,147</b>	<b>\$1,109,947</b>	<b>\$3,692,600</b>	<b>\$939,000</b>	<b>\$893,000</b>	<b>\$958,000</b>	<b>\$1,465,000</b>	<b>\$7,947,600</b>

## Buildings and Facilities

## CUBBERLEY PROPERTY INFRASTRUCTURE FUND



Cubberley Community Center, August 2019

**Fund:** Cubberley Property Infrastructure Fund

**Category:** Buildings and Facilities

**Project Location:** 4000 Middlefield Road

**Managing Department:** Public Works

**Initial Project Start:** Summer 2025

**Initial Project Completion:** Summer 2028

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** CB-26000

# Cubberley Community Center Redevelopment

## Description

This project provides funding for design of a new community center on the Cubberley Community Center site owned by the City. The Cubberley Community Center is a valuable community resource, and the plan includes site investigative and funding feasibility studies to inform project scope and design. Construction would occur beyond the current five-year CIP and would be dependent on future funding. This project builds upon the Cubberley Concept Plan completed in 2019.

## Justification

The City currently owns eight acres at the Cubberley Community Center site and the Palo Alto United School District (PAUSD) owns the adjacent 27 acres. The City leases a portion of PAUSD's spaces including the fields, gyms, Pavilion, and theatre. The City and PAUSD are exploring the transfer of a portion of PAUSD-owned land at Cubberley to the City either through a land swap or financial agreement. The buildings have not been improved for decades and require a significant amount of maintenance to keep the facility functional. This project is necessary to bring the facility up to current standards, meet the needs of the community and align with the City's sustainability goals.

## Supplemental Information

A feasibility study will be conducted in FY 2026 to determine the facility needs and scope of the entire redevelopment project. This study will also inform the cost estimate for the construction updates needed at the facility, which will be included in a future five-year capital improvement plan.

# CUBBERLEY PROPERTY INFRASTRUCTURE FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Cubberley Property Infrastructure Fund</b>	0	0	0	0	0	0	314,000	0	314,000	0	314,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>314,000</b>	<b>0</b>	<b>314,000</b>	<b>0</b>	<b>314,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	0	0	0	0	0	0	314,000	0	314,000	0	314,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>314,000</b>	<b>0</b>	<b>314,000</b>	<b>0</b>	<b>314,000</b>

### Operating Impact

This project will have ongoing operating expenses related to the new facility. As these costs are quantified, adjustments will be brought forward in future budgets as necessary.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Planning for Parks and Community Facilities                  Goal: C-4                  Policy: C-4.5                  Program: C4.5.1</p> <p><b>Environmental Impact Analysis:</b>                  This project may require an environmental impact report in accordance with CEQA guidelines.</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Policy: C-4.4</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission                  Architectural Review Board</p>
--	--	---

## CUBBERLEY PROPERTY INFRASTRUCTURE FUND



Cubberley Pavement, 2016

**Fund:** Cubberley Property Infrastructure Fund

**Category:** Buildings and Facilities

**Project Location:** 4000 Middlefield Road

**Managing Department:** Public Works

**Initial Project Start:** Recurring

**Initial Project Completion:** Recurring

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** CB-17001

# Cubberley Repairs

## Description

This project provides funding to make repairs and minor improvements at the Cubberley Community Center. Work completed under this project may include items such as painting, sidewalk repairs, breezeway pavement resurfacing, landscaping improvements, minor equipment replacement, and improvements to interior finishes.

## Justification

This project allows minor improvements to occur that will address safety concerns, functionality of building systems, and aesthetics.

## Supplemental Information

Repairs in various parts of the facility are scheduled annually. Funding is programmed for exterior maintenance, repairs to concrete and asphalt, tree removals, and interior maintenance and repairs including heating and ventilation, radiant floor heating, lighting, and painting.

Work programmed for this project in FY 2023 includes:

- Boiler replacements
- Field restroom walkway repairs
- Gyms A & B heater replacements
- Parking lot spot pavement repairs
- Pavilion ceiling tile replacement
- Theater lobby carpet replacement
- Tree removals/replacements as needed

# CUBBERLEY PROPERTY INFRASTRUCTURE FUND

- Wing M hallway floor rehabilitation

## Significant Changes

**2023-2027 CIP:** The project budget increased by \$0.6 million in FY 2023 to program the work plan outlined in Supplemental Information. Project expenses are adjusted annually to account for cost escalation.

**2022-2026 CIP:** Pavilion ceiling tile replacement, Theater lobby carpet replacement, and Wing M hallway floor rehabilitation remain major projects.

**2021-2025 CIP:** All projects pushed out one year due to staffing constraints.

**2020-2024 CIP:** Major projects for FY 2020 will include Pavilion ceiling tile replacement, Theater lobby carpet replacement, and Wing M hallway flooring and carpet replacement.

**2019-2023 CIP:** This project has shifted from non-recurring to recurring to address repairs needed annually throughout the property. Funding will continue to be allocated on an annual basis until completion of the Cubberley Master Plan.

**2017-2021 CIP:** Project established.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Cubberley Property Infrastructure Fund</b>	N/A	420,392	33,392	1,082,000	105,000	109,000	113,000	115,000	1,524,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>420,392</b>	<b>33,392</b>	<b>1,082,000</b>	<b>105,000</b>	<b>109,000</b>	<b>113,000</b>	<b>115,000</b>	<b>1,524,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	420,392	33,392	1,082,000	105,000	109,000	113,000	115,000	1,524,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>420,392</b>	<b>33,392</b>	<b>1,082,000</b>	<b>105,000</b>	<b>109,000</b>	<b>113,000</b>	<b>115,000</b>	<b>1,524,000</b>	<b>0</b>	<b>N/A</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# CUBBERLEY PROPERTY INFRASTRUCTURE FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.2

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.





CITY OF  
**PALO  
ALTO**

## CUBBERLEY PROPERTY INFRASTRUCTURE FUND



Cubberley Wing P, January 2015

**Fund:** Cubberley Property Infrastructure Fund

**Category:** Buildings and Facilities

**Project Location:** 4000 Middlefield Road

**Managing Department:** Public Works

**Initial Project Start:** Recurring

**Initial Project Completion:** Recurring

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** CB-16002

# Cubberley Roof Replacements

## Description

This project provides funding for the replacement or restoration of failing roofs at the Cubberley Community Center. The Palo Alto Unified School District (PAUSD) reimburses the City for work completed on PAUSD-owned buildings.

## Justification

Most of the existing mineral cap roofs at Cubberley have exceeded their useful lives and are in poor condition. Rehabilitation is needed to prevent significant problems that may cause structural damage to buildings. In some cases, a more cost-effective roof restoration process is planned while in other cases a full replacement is necessary. A fluid, reinforced waterproofing system can be applied over the existing roof that also meets current cool roofing codes to optimize energy efficiency.

## Supplemental Information

Facilities scheduled for re-roofing with a fluid applied system or for major repairs are:

**Fiscal Year 2023:** Cubberley Pavilion Flat Section and Breezeways (added)

**Fiscal Year 2024:** Cubberley Wings T1 & T2 and Wing U (all from FY 2025)

**Fiscal Year 2025:** Cubberley Wings C and D (both from FY 2024)

**Fiscal Year 2026:** Cubberley Wings E (from FY 2024) and V (from FY 2025)

**Fiscal Year 2027:** Cubberley Wings A (from FY 2026), B (from FY 2026), and I (from FY 2023)

# CUBBERLEY PROPERTY INFRASTRUCTURE FUND

## Significant Changes

**2023-2027 CIP:** Changes to scheduled roof replacement work are noted above, with additional work increasing the project budget by \$0.7 million over the 5-year CIP compared to the 2022-2026 CIP. Approximately \$3.8 million is anticipated to be reimbursed by PAUSD.

**2022-2026 CIP:** Additional work resulted in an increased expense of approximately \$2.7 million in this project over the 5-year CIP compared to the 2021-2025 CIP. Approximately \$1.1 million anticipated to be reimbursed by PAUSD. Funding for Cubberley Wing F/FH also extended to FY 2022 due to shortage of staff; this was originally slated for FY 2020.

**2021-2025 CIP:** Cubberley Wings H and D were moved to FY 2021 while Wings T1 and T2 were moved to FY 2023. Wing A was added for FY 2025.

**2020-2024 CIP:** Cubberley Wings F and FH were postponed to FY 2020 from FY 2019 to prioritize Wings J and K from FY 2021 to FY 2019.

**2016-2020 CIP:** Project established in the Cubberley Property Infrastructure Fund. Funding was allocated in prior years for roofing replacements at Cubberley Community Center in the Capital Improvement Fund. Funding is now recommended in the Cubberley Property Infrastructure Fund for this purpose, consistent with the revised lease agreement with the Palo Alto Unified School District, approved by the City Council in 2014.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Cubberley Property Infrastructure Fund</b>	N/A	1,123,023	977,423	139,800	834,000	784,000	24,000	40,000	1,821,800	0	N/A
<b>Revenue from Other Agencies</b>	N/A	0	0	1,962,800	0	0	507,000	1,310,000	3,779,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,123,023</b>	<b>977,423</b>	<b>2,102,600</b>	<b>834,000</b>	<b>784,000</b>	<b>531,000</b>	<b>1,350,000</b>	<b>5,601,600</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	1,123,023	977,423	2,102,600	834,000	784,000	531,000	1,350,000	5,601,600	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,123,023</b>	<b>977,423</b>	<b>2,102,600</b>	<b>834,000</b>	<b>784,000</b>	<b>531,000</b>	<b>1,350,000</b>	<b>5,601,600</b>	<b>0</b>	<b>N/A</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# CUBBERLEY PROPERTY INFRASTRUCTURE FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.2

**Potential Board/Commission Review:**

Historic Resources Board  
Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.

## Parks and Open Space

# CUBBERLEY PROPERTY INFRASTRUCTURE FUND



Cubberley Fields, February 2016

**Fund:** Cubberley Property Infrastructure Fund

**Category:** Parks and Open Space

**Project Location:** 4000 Middlefield Road

**Managing Department:** Public Works

**Initial Project Start:** Summer 2016

**Initial Project Completion:** Summer 2018

**Revised Project Start:** Winter 2022

**Revised Project Completion:** Winter 2023

**Project Number:** CB-17002

## Cubberley Field Restroom

### Description

This project provides the installation of a prefabricated restroom at the Cubberley Community Center Fields.

### Justification

This project will provide a restroom facility for the Cubberley Community Center Fields to accommodate intensive sports league and recreational usage. The facility consists of soccer and softball fields as well as tennis courts and a running track. It is the City's largest field complex without a restroom.

### Significant Changes

**2023-2027 CIP:** This project was delayed from being completed in FY 2022 to FY 2023 due to staffing constraints. Funding has been increased by \$0.2 million to a total of \$0.7 million due to higher cost of materials and delivery of the prefabricated restroom and associated utilities connections.

**2022-2026 CIP:** This project was delayed from being completed in FY 2021 to FY 2022 due to staffing constraints.

**2021-2025 CIP:** This project was delayed from being completed in FY 2020 to FY 2021 due to staffing constraints.

**2020-2024 CIP:** This project was delayed from being completed in FY 2019 to FY 2020 due to staffing constraints and issues purchasing the prefabricated restroom.

**2019-2023 CIP:** Funding has been increased by \$150,000 due to the placement, associated utility connections, and updated cost estimates.

**2017-2021 CIP:** Project established.

# CUBBERLEY PROPERTY INFRASTRUCTURE FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Cubberley Property Infrastructure Fund</b>	149,880	305,491	42,891	508,000	0	0	0	0	508,000	0	700,771
<b>Total</b>	<b>149,880</b>	<b>305,491</b>	<b>42,891</b>	<b>508,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>508,000</b>	<b>0</b>	<b>700,771</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	13,589	302,541	39,941	478,000	0	0	0	0	478,000	0	531,530
<b>Design</b>	136,285	2,950	2,950	30,000	0	0	0	0	30,000	0	169,235
<b>Total</b>	<b>149,874</b>	<b>305,491</b>	<b>42,891</b>	<b>508,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>508,000</b>	<b>0</b>	<b>700,765</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Cubberley Property Infrastructure Fund</b>	0	17,500	18,000	18,500	19,000

### Operating Impact

This project is anticipated to impact operating expenses in the future. Custodial and maintenance costs are estimated to be \$17,500 in FY 2024 and increase by three percent annually thereafter. These costs will be included as part of the City's custodial contract

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.3</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Parks and Recreation Commission                  Planning and Transportation Commission                  Architectural Review Board</p>
--	---



CITY OF  
**PALO  
ALTO**





# ENTERPRISE FUND PROJECTS





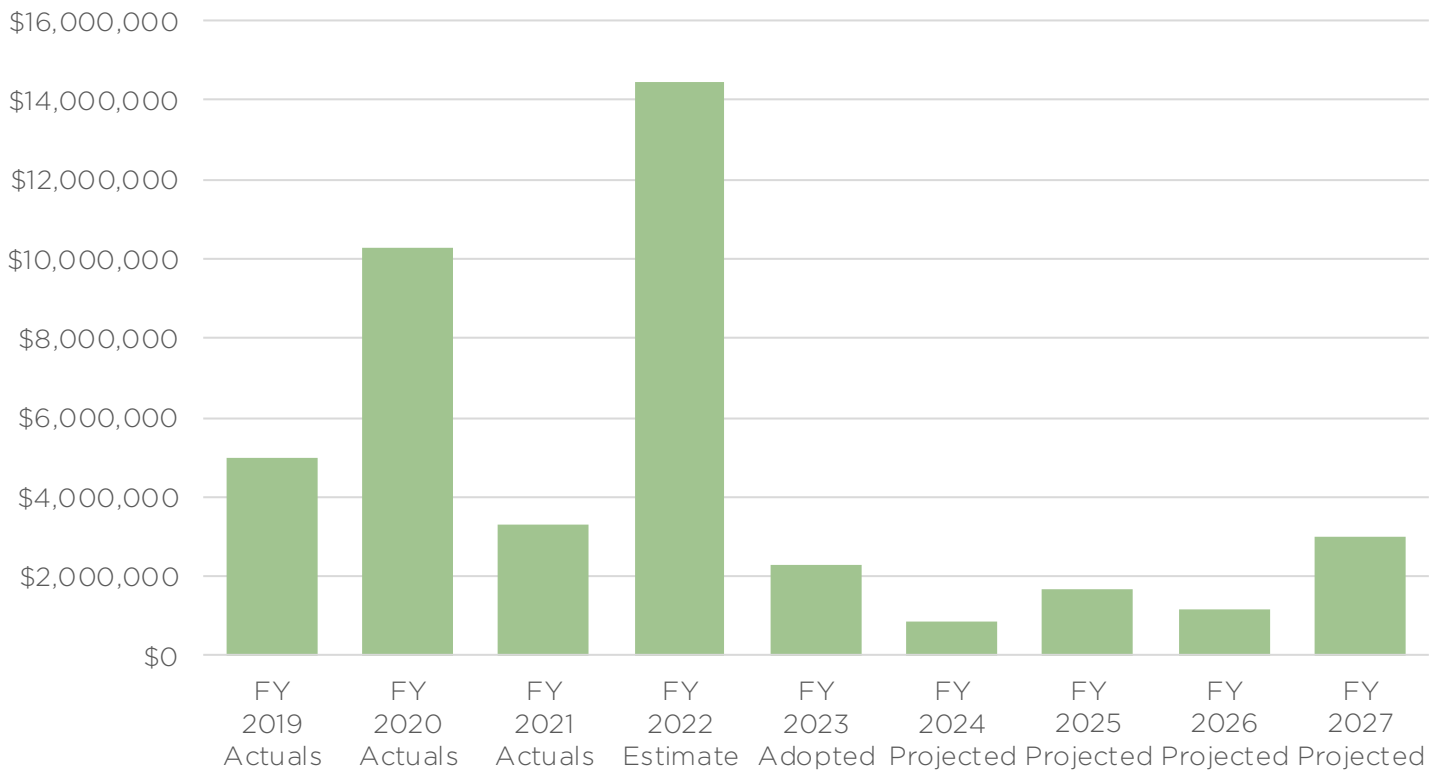
CITY OF  
**PALO  
ALTO**

# AIRPORT FUND

# Overview

The Airport Fund Capital Improvement Program (CIP) accounts for activities related to the construction and replacement of infrastructure necessary to operate and maintain the airport. The Palo Alto Airport (PAO) is a federally obligated airport, which receives federal funds for airport capital improvement projects based on Federal Aviation Administration (FAA) established grant assurances that airport operators must adhere to in order to receive funds. For detailed information on the maintenance and operations of the airport, please refer to the Airport Fund section in the Operating Budget.

## Airport Fund Capital Expenditures



The 2023-2027 CIP includes projects totaling \$9.0 million with Fiscal Year 2023 projects totaling \$2.3 million. The FAA provides grants to public agencies for the planning and development of public-use airports and reimburses up to 90 percent of the non-salary cost of eligible projects. Staff intends to continue applying for FAA grants for eligible capital improvement projects to ensure a safe and well-maintained airport. Staff will also apply for state grant-matching opportunities when available. The budget for the Airport Fund CIP is divided into two categories: Airport Apron, Runways, and Taxiways and Airport Facilities.

## Airport Apron, Runways, and Taxiways

The Airport Apron, Runways, and Taxiways category accounts for the design and construction of improvements and enhancements, which include pavement, lighting, drainage, and perimeter fencing. The Palo Alto Airport includes one runway of approximately 2,400 feet in length, one parallel taxiway of the same length, and four connector taxiways for entering and exiting the runway. In Fiscal Year 2015, staff conducted a survey to determine the pavement condition index (PCI) values for all airfield pavement. PCI values are rated as follows: 80+ = very good or excellent, 70-79 = good, 60-69 = fair, 50-59 = at risk, 25-49 = poor, 0-24 = failed. Based on visual inspection, the average apron PCI value was 36, indicating the need for full pavement reconstruction. The apron score of 36 is anticipated to improve when the next PCI evaluation is conducted with the completion of the Airport Apron Reconstruction (AP-16000) project in Fiscal Year 2023. The average PCI target range anticipated is a score between 75-80.

### Infrastructure Inventory - Summary of Airport Taxiways

CLASSIFICATION	QUANTITY	DESCRIPTION
Apron or Ramp	468	Tie-down spots
Runway	1	2443 x 70 feet
Taxiway	5	1 parallel taxiway 4 connector taxiways

## 2023-2027 Capital Improvement Program

### Recurring Projects

There are no recurring projects scheduled at this time.

### Non-Recurring Projects

There are three non-recurring projects scheduled in the 2023-2027 CIP:

- Airfield Electrical Improvements (5-Year CIP: \$1.9 million)
- Airport Apron Reconstruction (Fiscal Year 2023: \$0.5 million; 5-Year CIP: \$0.5 million)
- Runway and Taxiway Reconstruction and Drainage Improvements (5-Year CIP: \$0.5 million)

The FAA prioritized the Apron Reconstruction project to be completed before all other airport projects, deferring the Airfield Electrical Improvements project to Fiscal Year 2025 and the Runway and Taxiway Reconstruction and Drainage Improvements project to Fiscal Year 2027. In 2015, the FAA requested a Pavement Maintenance Management Plan (PMMP) to document conditions and prioritize future airport pavement projects. The completed PMMP showed all areas in disrepair, with the apron being most critical. In total, the Apron Reconstruction project will reconstruct 38 acres of pavement, and the final phase of construction costs and associated grant reimbursements for this multi-phased project is scheduled to be completed in Fiscal Year 2023.

The Airport will proceed with the Airfield Electrical Improvement and Runway and Taxiway Reconstruction and Drainage Improvements projects provided the Airport receives FAA funding in subsequent fiscal years. These projects will upgrade the taxiway and runway lighting to new FAA standards and include LED lights

## AIRPORT FUND

to reduce electrical usage as well as complete lower priority repairs and drainage improvements not included in the Apron Reconstruction.

### Airport Facilities

The Airport Facilities category accounts for buildings, security systems, parking lot and all other infrastructure improvements. Prior to April 2017, Fixed Base Operators (FBO) leased spaces at the Airport and were responsible for the maintenance of their structures, with the exception of the terminal. In April 2017, the FBO leases expired and the City became responsible for the maintenance of these structures. Interim lease agreements between the City and existing businesses were executed with the understanding that agreements will be renegotiated based on the completion of the Airport Layout Plan project (AP-21000). The Airport anticipates FAA grant funding for AP-21000 Phase II in Fiscal Year 2023.

The new Airport Temporary Office Building project (AP-22001) will install and furnish modular buildings donated to the Airport by the Palo Alto Unified School District (PAUSD) to provide office space for airport staff as well as terminal space for the public.

### Infrastructure Inventory - Summary of Airport Facilities

CLASSIFICATION	QUANTITY	DESCRIPTION
Buildings	2	Offices
Hangars	12	Medium Conventional Box Hangar
Hangars	2	Large Conventional Box Hangar
Hangars	45	Small Nested T-Hangar
Hangars	3	Large Conventional Multi-Aircraft Hangar
Trailers	2	Airport Terminal Building and Offices

#### Recent Accomplishments

- Phase 1 of the Airport Layout Plan began in Fall 2021.

### 2023-2027 Capital Improvement Program

#### Recurring Projects

There are no recurring projects scheduled at this time.

#### Non-Recurring Projects

There are six non-recurring projects during the 2023-2027 CIP:

- Airport Access Road Reconstruction (5-Year CIP: \$3.8 million)
- Airport Layout Plan (Fiscal Year 2023: \$0.9 million; 5-Year CIP: \$0.9 million)
- Airport Parking Lot Electric Vehicle Charger Installation (5-Year CIP: \$32,000)
- Airport Temporary Office Buildings (Fiscal Year 2023: \$0.4 million; 5-Year CIP: \$0.4 million)

- Airport Zero Emission Vehicle Fleet Replacement Program (Fiscal Year 2023: \$0.3 million; 5-Year CIP: \$0.3 million)
- Automated Weather Observation System (AWOS) (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.5 million)

The Airport Layout Plan is required by the FAA to ensure grant eligibility and will include an evaluation of the business and sustainability needs at the Airport to assess existing facilities and planned development, air traffic activity, noise contours, environmental documentation, sea-level rise adaptation, and 20-year demand forecasts.

The Airport Temporary Office Buildings project will install and refurbish existing modular buildings donated by the PAUSD and already on-site at the Airport. The site preparation, and a majority of utilities, are included in the Phase III Airport Apron Reconstruction project. Funding in this project will finalize installation of the buildings and the Furniture, Fixtures, & Equipment (FF&E) needed to provide adequate office space for airport staff as well as terminal space for the public.

The AWOS will provide accurate airport specific weather advisory to pilots 24 hours a day. Currently, airport weather is only provided by the Air Traffic Control Tower during operating hours.

The Airport Parking Lot Electric Vehicle Charger Installation Project will allow for the Airport to install electric vehicle charging stations in the customer parking lot.

## Airport

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Revenue from Other Agencies</b>									
<b>AP-16000</b>	Airport Apron Reconstruction	331,605	331,605	0	0	0	0	0	0
<b>Revenue from Other Agencies Total</b>		<b>\$331,605</b>	<b>\$331,605</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Revenue from the Federal Government</b>									
<b>AP-19001</b>	Airfield Electrical Improvements	0	0	0	0	433,350	0	1,170,000	1,603,350
<b>AP-24000</b>	Airport Access Road Reconstruction	0	0	0	270,000	900,000	900,000	900,000	2,970,000
<b>AP-16000</b>	Airport Apron Reconstruction	11,098,785	10,798,785	0	0	0	0	0	0
<b>AP-21000</b>	Airport Layout Plan	544,500	270,000	755,100	0	0	0	0	755,100
<b>AP-24001</b>	Airport Parking Lot Electric Vehicle Charger Installation	0	0	0	22,500	0	0	0	22,500
<b>AP-23000</b>	Airport Zero Emission Vehicle Fleet Replacement Program	0	0	281,700	0	0	0	0	281,700
<b>AP-19000</b>	Automated Weather Observation System (AWOS)	79,200	0	79,200	311,850	0	0	0	391,050
<b>AP-22000</b>	Runway and Taxiway Reconstruction and Drainage Improvements	0	0	0	0	0	0	450,000	450,000
<b>Revenue from the Federal Government Total</b>		<b>\$11,722,485</b>	<b>\$11,068,785</b>	<b>\$1,116,000</b>	<b>\$604,350</b>	<b>\$1,333,350</b>	<b>\$900,000</b>	<b>\$2,520,000</b>	<b>\$6,473,700</b>
<b>Total Sources</b>		<b>\$12,054,090</b>	<b>\$11,400,390</b>	<b>\$1,116,000</b>	<b>\$604,350</b>	<b>\$1,333,350</b>	<b>\$900,000</b>	<b>\$2,520,000</b>	<b>\$6,473,700</b>

# AIRPORT FUND

## Airport *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>USE OF FUNDS</b>									
<b>Airport Apron, Runways, and Taxiways</b>									
AP-19001	Airfield Electrical Improvements	0	0	0	0	542,500	0	1,389,200	1,931,700
AP-16000	Airport Apron Reconstruction	15,086,067	14,039,044	532,000	0	0	0	0	532,000
AP-22000	Runway and Taxiway Reconstruction and Drainage Improvements	0	0	0	0	0	0	534,300	534,300
<b>Airport Apron, Runways, and Taxiways Total</b>		<b>\$15,086,067</b>	<b>\$14,039,044</b>	<b>\$532,000</b>	<b>\$0</b>	<b>\$542,500</b>	<b>\$0</b>	<b>\$1,923,500</b>	<b>\$2,998,000</b>
<b>Airport Facilities</b>									
AP-24000	Airport Access Road Reconstruction	0	0	0	381,500	1,126,700	1,190,500	1,068,600	3,767,300
AP-20000	Airport Facilities Electrical Improvements	75,996	0	0	0	0	0	0	0
AP-21000	Airport Layout Plan	711,500	406,500	936,000	0	0	0	0	936,000
AP-24001	Airport Parking Lot Electric Vehicle Charger Installation	0	0	0	31,800	0	0	0	31,800
AP-22001	Airport Temporary Office Buildings	60,000	0	359,800	0	0	0	0	359,800
AP-23000	Airport Zero Emission Vehicle Fleet Replacement Program	0	0	349,200	0	0	0	0	349,200
AP-19000	Automated Weather Observation System (AWOS)	98,200	0	98,200	440,600	0	0	0	538,800
<b>Airport Facilities Total</b>		<b>\$945,696</b>	<b>\$406,500</b>	<b>\$1,743,200</b>	<b>\$853,900</b>	<b>\$1,126,700</b>	<b>\$1,190,500</b>	<b>\$1,068,600</b>	<b>\$5,982,900</b>
<b>Total Uses</b>		<b>\$16,031,763</b>	<b>\$14,445,544</b>	<b>\$2,275,200</b>	<b>\$853,900</b>	<b>\$1,669,200</b>	<b>\$1,190,500</b>	<b>\$2,992,100</b>	<b>\$8,980,900</b>



# Airport Apron, Runways, and Taxiways



Airfield Electrical, July 2017

**Fund:** Airport Enterprise Fund  
**Category:** Airport Apron, Runways, and Taxiways  
**Project Location:** 1925 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Fall 2019  
**Initial Project Completion:** Summer 2020  
**Revised Project Start:** Fall 2024  
**Revised Project Completion:** Spring 2029  
**Project Number:** AP-19001

# Airfield Electrical Improvements

## Description

This project provides funding for electrical and lighting improvements to the airfield.

## Justification

The last known airfield electrical improvements were performed in 1993. Results of the electrical assessment conducted as part of the Airport Apron Reconstruction project will inform the necessary above ground electrical infrastructure needs including lighting, signage, and possible vault modifications.

## Supplemental Information

The design and construction of underground infrastructure being utilized will be completed in the Airport Apron Reconstruction project. LED lighting may be installed for greater efficiency and to comply with City sustainability goals.

## Significant Changes

**2023-2027 CIP:** The FAA deferred initial grant funding for this project from FY 2024 to FY 2025. The cost of the project scope increased by approximately \$0.4 million due to project design, phasing cost and construction estimates.

**2021-2025 CIP:** The FAA deferred grant funding for this project from FY 2023 to FY 2024. Funding was increased due to project design cost estimates.

**2020-2024 CIP:** This project was changed from four phases to three phases and moved up from FY 2024 to FY 2023, in conjunction with the Airport Apron Reconstruction project (AP-16000). The project was increased to anticipate extra costs that are likely to result from the Airport Layout Plan in order to meet FAA design standards such as costs for the emergency generator, vault building, runway end identifier lights (REIL), precision approach path indicator (PAPI) units, and windcone installation.

**2019-2023 CIP:** The FAA deferred grant funding for this project from FY 2019 to FY 2024 to complete the Airport Apron Reconstruction project (AP-16000).

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Airport Fund</b>	0	0	0	0	0	109,150	0	219,200	328,350	350,000	678,350
<b>Revenue from the Federal Government</b>	0	0	0	0	0	433,350	0	1,170,000	1,603,350	3,150,000	4,753,350
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>542,500</b>	<b>0</b>	<b>1,389,200</b>	<b>1,931,700</b>	<b>3,500,000</b>	<b>5,431,700</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	245,000	0	1,389,200	1,634,200	3,500,000	5,134,200
<b>Design</b>	0	0	0	0	0	297,500	0	0	297,500	0	297,500
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>542,500</b>	<b>0</b>	<b>1,389,200</b>	<b>1,931,700</b>	<b>3,500,000</b>	<b>5,431,700</b>

### Operating Impact

This project is anticipated to have operating expenses related to pavement maintenance. As these costs are quantified, adjustments will be brought forward in future budgets, as necessary.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Land Use and Community                  Design                  Section: Airport                  Goal: L-10                  Policy: L-10.1</p> <p><b>Environmental Impact Analysis:</b>                  This project may be exempt from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
--	--



Airport Apron, March 2019

**Fund:** Airport Enterprise Fund  
**Category:** Airport Apron, Runways, and Taxiways  
**Project Location:** 1925 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2015  
**Initial Project Completion:** Spring 2020  
**Revised Project Start:** N/A  
**Revised Project Completion:** Summer 2022  
**Project Number:** AP-16000

# Airport Apron Reconstruction

## Description

This project provides funding for the design and reconstruction of the Palo Alto Airport apron in multiple phases within the existing footprint.

## Justification

The pavement surfaces at the airport are failing and uneven and the need to reconstruct the aircraft parking apron is critical to airport safety. The City conducted a Pavement Management Study in Fiscal Year 2015 to determine the pavement condition index (PCI) and to assist in prioritization of pavement improvement projects. The average apron PCI value from the study was 36, which indicated a need for full pavement reconstruction.

Additionally, the FAA will use the average apron PCI information to prioritize the Palo Alto Airport against other airport applicants. Due to the condition of the airport infrastructure, staff anticipates the Palo Alto Airport will rank high in eligibility for grant funding of this project.

## Supplemental Information

This project is being implemented in multiple phases. Design commenced in FY 2016 and was completed in FY 2017. Construction began in FY 2018 and is expected to be complete in FY 2023. Construction of Phase I was completed in June 2018 and Phase II was completed in June 2020. FAA grants funded 90 percent of design and construction costs for Phases I and II. Construction of Phase III began in Fall 2020 and receives 100 percent funding from the FAA for eligible project costs.

**Significant Changes**

**2021-2025 CIP:** Additional funding was added for construction to offset inflation of material prices and scope changes to meet new FAA subgrade treatment standards. The FAA is funding 100 percent of eligible project costs to complete Phase III.

**2020-2024 CIP:** Funding for the Airport Apron Reconstruction project was scheduled in FY 2019 for Phase III in FY 2020 and Phase IV in FY 2021. Now, both phases of the project have been combined into Phase III, with the final year of construction in FY 2021.

**2019-2023 CIP:** The apron reconstruction costs substantially increased from the previous estimate of \$18.0 million to \$39.3 million. Budget estimates for the project increased to include all remaining phases of the project as well as reconstruction design changes, solar infrastructure, and construction escalation costs identified while constructing Phase I.

**2018-2022 CIP:** Due to the findings of a geotechnical study, the subgrade requires more stabilization. The FAA recognizing the safety implications, has agreed to accelerate funding to expedite pavement corrections. Funding of \$17.3 million added to the project to account for the multiple phases of this project over the 5-year CIP.

**2017-2021 CIP:** Additional funding of \$715,845 in FY 2017 to complete Phase I.

**2016-2020 CIP:** Project established.

Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Airport Fund</b>	184,202	3,655,679	2,908,656	532,000	0	0	0	0	532,000	0	3,624,858
<b>Revenue from Other Agencies</b>	0	331,605	331,605	0	0	0	0	0	0	0	331,605
<b>Revenue from the Federal Government</b>	26,808,332	11,098,785	10,798,785	0	0	0	0	0	0	0	37,607,117
<b>Total</b>	<b>26,992,534</b>	<b>15,086,069</b>	<b>14,039,046</b>	<b>532,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>532,000</b>	<b>0</b>	<b>41,563,580</b>

Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	25,196,661	15,084,041	14,037,018	532,000	0	0	0	0	532,000	0	39,765,679
<b>Design</b>	1,795,865	2,026	2,026	0	0	0	0	0	0	0	1,797,891
<b>Total</b>	<b>26,992,526</b>	<b>15,086,067</b>	<b>14,039,044</b>	<b>532,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>532,000</b>	<b>0</b>	<b>41,563,570</b>

**Operating Impact**

This project will have operating expenses related to pavement maintenance for asphalt slurry seal estimated every five years. As these costs are quantified, adjustments will be brought forward in future budgets, as necessary.

# AIRPORT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Land Use and Community  
Design  
Section: Airport  
Goal: L-10  
Policy: L-10.1

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

This project may be exempt from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**



Runway and Taxiway, July 2017

**Fund:** Airport Enterprise Fund  
**Category:** Airport Apron, Runways, and Taxiways  
**Project Location:** 1925 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2014  
**Initial Project Completion:** Summer 2015  
**Revised Project Start:** Summer 2026  
**Revised Project Completion:** Summer 2029  
**Project Number:** AP-22000

# Runway and Taxiway Reconstruction and Drainage Improvements

## Description

This project will provide funding for the design and implementation of runway and taxiway reconstruction and drainage improvements for the Palo Alto Airport.

## Justification

In 2015, the Airport Pavement Management Plan identified integrity deficiencies beyond the immediate safety concerns addressed in the Airport Apron Reconstruction project (AP-16000). This project will address the lower priority repairs and drainage improvements after the Airport Apron Reconstruction project is completed in Fall 2022.

## Significant Changes

**2023-2027 CIP:** The FAA is deferring grant funding for this project from FY 2026 to FY 2027.

**2021-2025 CIP:** The FAA is deferring grant funding for this project from FY 2024 to FY 2026.

**2020-2024 CIP:** This CIP is pending FAA grant funding in FY 2024.

**2019-2023 CIP:** The FAA is deferring grant funding for this project from FY 2022 to FY 2024 to complete the Airport Apron Reconstruction project (AP-16000).



## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Airport Fund</b>	0	0	0	0	0	0	0	84,300	84,300	420,100	504,400
<b>Revenue from the Federal Government</b>	0	0	0	0	0	0	0	450,000	450,000	3,785,900	4,235,900
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>534,300</b>	<b>534,300</b>	<b>4,206,000</b>	<b>4,740,300</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	0	34,300	34,300	4,206,000	4,240,300
<b>Design</b>	0	0	0	0	0	0	0	500,000	500,000	0	500,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>534,300</b>	<b>534,300</b>	<b>4,206,000</b>	<b>4,740,300</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Land Use and Community  
Design  
Section: Airport  
Goal: L-10  
Policy: L-10.1

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

This project may be exempt from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**

# Airport Facilities



Deteriorating Condition of Airport Access Road

**Fund:** Airport Enterprise Fund  
**Category:** Airport Facilities  
**Project Location:** Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2023  
**Initial Project Completion:** Summer 2027  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** AP-24000

## Airport Access Road Reconstruction

### Description

This project is for the design & reconstruction of the pavement on Embarcadero Way, which is the main access road for airport businesses and the Air Traffic Control Tower at the Airport.

### Justification

The pavement on Embarcadero Way is currently in failing condition causing the road to narrow to a one lane road in several areas. This project will also improve infrastructure for both fire service access and the potential for future solar installation at the Airport.

### Significant Changes

**2023-2027 CIP:** Project established in FY 2023. The design work will be completed in FY 2024 with construction in three phases between FY 2025 and FY 2027. The cost of 90% of this project will be reimbursed by the FAA.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Airport Fund</b>	0	0	0	0	111,500	226,700	290,500	168,600	797,300	0	797,300
<b>Revenue from the Federal Government</b>	0	0	0	0	270,000	900,000	900,000	900,000	2,970,000	0	2,970,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>381,500</b>	<b>1,126,700</b>	<b>1,190,500</b>	<b>1,068,600</b>	<b>3,767,300</b>	<b>0</b>	<b>3,767,300</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	81,500	1,126,700	1,190,500	1,068,600	3,467,300	0	3,467,300
<b>Design</b>	0	0	0	0	300,000	0	0	0	300,000	0	300,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>381,500</b>	<b>1,126,700</b>	<b>1,190,500</b>	<b>1,068,600</b>	<b>3,767,300</b>	<b>0</b>	<b>3,767,300</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

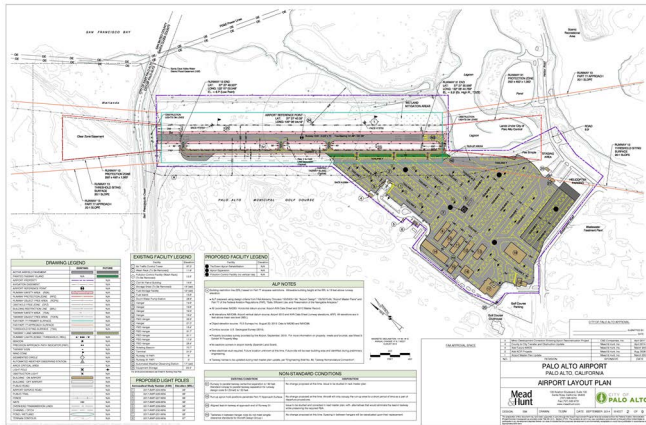
Element: Land Use and Community  
Design  
Section: Airport  
Goal: L-10  
Policy: L-10.1

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project may be exempt from CEQA under Section 15301.



Airport Layout, March 2019

**Fund:** Airport Enterprise Fund  
**Category:** Airport Facilities  
**Project Location:** 1925 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Fall 2021  
**Initial Project Completion:** Summer 2022  
**Revised Project Start:** Summer 2021  
**Revised Project Completion:** Spring 2025  
**Project Number:** AP-21000

## Airport Layout Plan

### Description

This project provides funding for an update to the Airport Layout Plan (ALP), including a narrative report and environmental study.

### Justification

The ALP serves as a critical planning tool that depicts both existing facilities and planned development for an airport and is required by the FAA to ensure eligibility for the highest level of grant funding available for construction of safety and infrastructure improvements. A key objective of airport planning is to assure the effective use of airport resources to satisfy aviation demand in a financially feasible manner. Additionally, the plan will include air traffic activity, noise contours, environmental documentation, and 20-year demand forecasts.

### Supplemental Information

Phase I of this project was completed in FY 2022 and consisted of an aerial survey, initial Airport inventory and overall preparation for Phase II. Phase II will be the major planning step in terms of public outreach and planning for the next 20 years, including financial forecasting for the Airport.

### Significant Changes

**2023-2027 CIP:** Funding for this project increased by approximately \$0.5 million for Phase II of the Layout Plan. This project is dependent on FAA funding for FY 2023.

**2021-2025 CIP:** Funding increased due to revised engineer estimate. This project is dependent on FAA funding for FY 2022.

**2020-2024 CIP:** Grant funding from the FAA was moved from FY 2023 to FY 2021. The anticipated increases in cost includes additional scope to complete a required airspace study identified by the FAA.

**2019-2023 CIP:** The FAA is deferring grant funding for this project from FY 2021 to FY 2023 to complete the Airport Apron Reconstruction project (AP-16000).

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Airport Fund</b>	0	167,000	136,500	180,900	0	0	0	0	180,900	0	317,400
<b>Revenue from the Federal Government</b>	0	544,500	270,000	755,100	0	0	0	0	755,100	0	1,025,100
<b>Total</b>	<b>0</b>	<b>711,500</b>	<b>406,500</b>	<b>936,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>936,000</b>	<b>0</b>	<b>1,342,500</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	0	711,500	406,500	936,000	0	0	0	0	936,000	0	1,342,500
<b>Total</b>	<b>0</b>	<b>711,500</b>	<b>406,500</b>	<b>936,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>936,000</b>	<b>0</b>	<b>1,342,500</b>

### Operating Impact

There are no operating or maintenance expenses associated with this project.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Land Use and Community                  Design                  Section: Airport                  Goal: L-10                  Policy: L-10.1                  Program: L10.1.2</p> <p><b>Environmental Impact Analysis:</b>                  Requires Environmental Review</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
--	--



**Fund:** Airport Enterprise Fund  
**Category:** Airport Facilities  
**Project Location:** 1925 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2023  
**Initial Project Completion:** Summer 2026  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** AP-24001

Proposed Location of Charging Station at Airport Terminal

# Airport Parking Lot Electric Vehicle Charger Installation

## Description

This project will install electric vehicle charging stations in the Airport customer parking lot. The Airport is currently unable to offer electric vehicle charging to its customers, but there is increasing demand for vehicle charging capability from Airport tenants.

## Justification

This project is part of the plan to modernize the Airport to represent a standard aviation facility, and it is in line with the Council's priority for Climate Change - Protection and Adaptation. This project could be funded by a new competitive federal grant program for airport terminal development projects.

## Significant Changes

**2023-2027 CIP:** Project established with funding to evaluate and design full needs and requirements for electric vehicle charging station installation. Additional funding will be added in subsequent years based on the needs identified in the design phase.



## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Airport Fund</b>	0	0	0	0	9,300	0	0	0	9,300	0	9,300
<b>Revenue from the Federal Government</b>	0	0	0	0	22,500	0	0	0	22,500	0	22,500
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,800</b>	<b>0</b>	<b>31,800</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	0	0	0	0	31,800	0	0	0	31,800	0	31,800
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31,800</b>	<b>0</b>	<b>31,800</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Air Quality                  Goal: N-5                  Policy: N-5.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
--	--



Modular office buildings at the Palo Alto Airport

**Fund:** Airport Enterprise Fund  
**Category:** Airport Facilities  
**Project Location:** 1925 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2021  
**Initial Project Completion:** Winter 2022  
**Revised Project Start:** Fall 2022  
**Revised Project Completion:** Spring 2023  
**Project Number:** AP-22001

# Airport Temporary Office Buildings

## Description

This project will provide funding for the installation and Furniture, Fixtures, & Equipment (FF&E) of existing temporary modular buildings at the airport to provide adequate office space for airport staff as well as terminal space for the public.

## Justification

The current terminal at the airport does not provide adequate space for staff or the flying public. The airport has also experienced an increase in chartered flights that are not expected to wane. The Civil Air Patrol, California Disaster Airlift Relief Team, and Palo Alto Pilots Association will also use this space for their meetings. Additionally, these modular buildings would also provide additional office space for airport staff.

This project would install and refurbish existing modular buildings already on-site at the airport. The site preparation, and a majority of utilities, are included in the Phase III Airport Apron Reconstruction project (AP-16000) that will be completed Fall 2022.

The funding in Fiscal Year 2022 was used to place one of these buildings at the terminal to be used by staff and Airport visitors. The funding in Fiscal Year 2023 will be used to place the other two buildings to provide space for non-profit organizations that provide services at the Airport.

## Supplemental Information

The Airport started a Sustainable Airport Comprehensive Plan in Fiscal Year 2022. This plan will guide the Airport's development over the next 20 years and will address permanent airport terminal needs to meet current and anticipated future demands of the Palo Alto Airport.

**Significant Changes**

**2023-2027 CIP:** Funding for this project increased by approximately \$0.2 million to purchase furniture and fund increased costs to install two of the three modular buildings.

**2022-2026 CIP:** Project established during FY 2022.

Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Airport Fund	0	60,000	0	359,800	0	0	0	0	359,800	0	359,800
<b>Total</b>	<b>0</b>	<b>60,000</b>	<b>0</b>	<b>359,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>359,800</b>	<b>0</b>	<b>359,800</b>

Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	60,000	0	359,800	0	0	0	0	359,800	0	359,800
<b>Total</b>	<b>0</b>	<b>60,000</b>	<b>0</b>	<b>359,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>359,800</b>	<b>0</b>	<b>359,800</b>

**Operating Impact**

This Project will have ongoing operating expenses related to the foundation and installation of the modular buildings. As these costs are quantified, adjustments will be brought forward in future budgets as necessary.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Land Use and Community Design                  Section: Airport                  Goal: L-10                  Policy: L-10.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission</p>
--	--

# AIRPORT FUND



**Fund:** Airport Enterprise Fund  
**Category:** Airport Facilities  
**Project Location:** 1925 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2023  
**Initial Project Completion:** Summer 2024  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** AP-23000

Current Airport Fleet to be replaced by ZEV

## Airport Zero Emission Vehicle Fleet Replacement Program

### Description

The Airport vehicle fleet will be replaced by three zero emissions vehicles (ZEV) and three electric charging stations. The van is used for the transportation of airport guests and passengers and improves safety by minimizing foot traffic on the airport apron. The truck is used as a maintenance, first response, and operations vehicle. The ZEV fleet will include one passenger vehicle and two trucks.

### Justification

The current Airport fleet is at the end of its useful life and requires replacement. The FAA has invited the Palo Alto Airport to apply for their Zero Emission Vehicle and Infrastructure (ZEV) funding program which will reimburse at least 90% of the project costs.

Currently Airport Operations Staff use one truck for various roles, which can increase response time during incidents. This truck will be replaced with two trucks, one as a first response vehicle, and the second as an operations and maintenance vehicle. Having two trucks will increase safety and reduce response time at the field since the first response vehicle will not need to be switched over from maintenance and can be ready for first response at all times.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Airport Fund</b>	0	0	0	67,500	0	0	0	0	67,500	0	67,500
<b>Revenue from the Federal Government</b>	0	0	0	281,700	0	0	0	0	281,700	0	281,700
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>349,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>349,200</b>	<b>0</b>	<b>349,200</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	0	0	349,200	0	0	0	0	349,200	0	349,200
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>349,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>349,200</b>	<b>0</b>	<b>349,200</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Air Quality                  Goal: N-5                  Policy: N-5.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Fleet Review Committee</p>
--	--



Automated Weather Observation System, July 2017

**Fund:** Airport Enterprise Fund  
**Category:** Airport Facilities  
**Project Location:** 1925 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Fall 2019  
**Initial Project Completion:** Summer 2020  
**Revised Project Start:** Fall 2024  
**Revised Project Completion:** Summer 2026  
**Project Number:** AP-19000

## Automated Weather Observation System (AWOS)

### Description

This project provides funding for a new weather information system to be installed at the Palo Alto Airport.

### Justification

The FAA tower is staffed from 7:00am to 9:00pm and uses ceilometers, wind indicators, altimeters, and known distances to communicate weather and visibility to users. The new Automated Weather Observation System (AWOS) will provide users more information about weather conditions, feed all weather services, and give present weather 24 hours a day, 7 days a week. Providing users with accurate and up-to-date weather information is essential to the safe and economic operation of the airport.

### Significant Changes

**2021-2025 CIP:** Project Funding was split between two phases. Phase I for design and Phase II for construction.

**2020-2024 CIP:** This project was moved from FY 2024 to FY 2022 by the FAA so that grant funding for 90 percent of the project cost will most likely be available. Design will begin in FY 2022 and construction will begin in FY 2023.

**2019-2023 CIP:** The FAA is deferring grant funding for this project from FY 2019 to FY 2024 to complete the Airport Apron Reconstruction project (AP-16000).

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Airport Fund</b>	0	19,000	0	19,000	128,750	0	0	0	147,750	0	147,750
<b>Revenue from the Federal Government</b>	0	79,200	0	79,200	311,850	0	0	0	391,050	0	391,050
<b>Total</b>	<b>0</b>	<b>98,200</b>	<b>0</b>	<b>98,200</b>	<b>440,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>538,800</b>	<b>0</b>	<b>538,800</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	440,600	0	0	0	440,600	0	440,600
<b>Design</b>	0	98,200	0	98,200	0	0	0	0	98,200	0	98,200
<b>Total</b>	<b>0</b>	<b>98,200</b>	<b>0</b>	<b>98,200</b>	<b>440,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>538,800</b>	<b>0</b>	<b>538,800</b>

### Operating Impact

This project is anticipated to have annual operating expenses related to maintenance and certification after project completion. These costs will be brought forward in future budgets, as necessary.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Land Use and Community                  Design                  Section: Airport                  Goal: L-10                  Policy: L-10.1</p> <p><b>Environmental Impact Analysis:</b>                  May Require Environmental Review</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Architectural Review Board</p>
---	--



CITY OF  
**PALO  
ALTO**

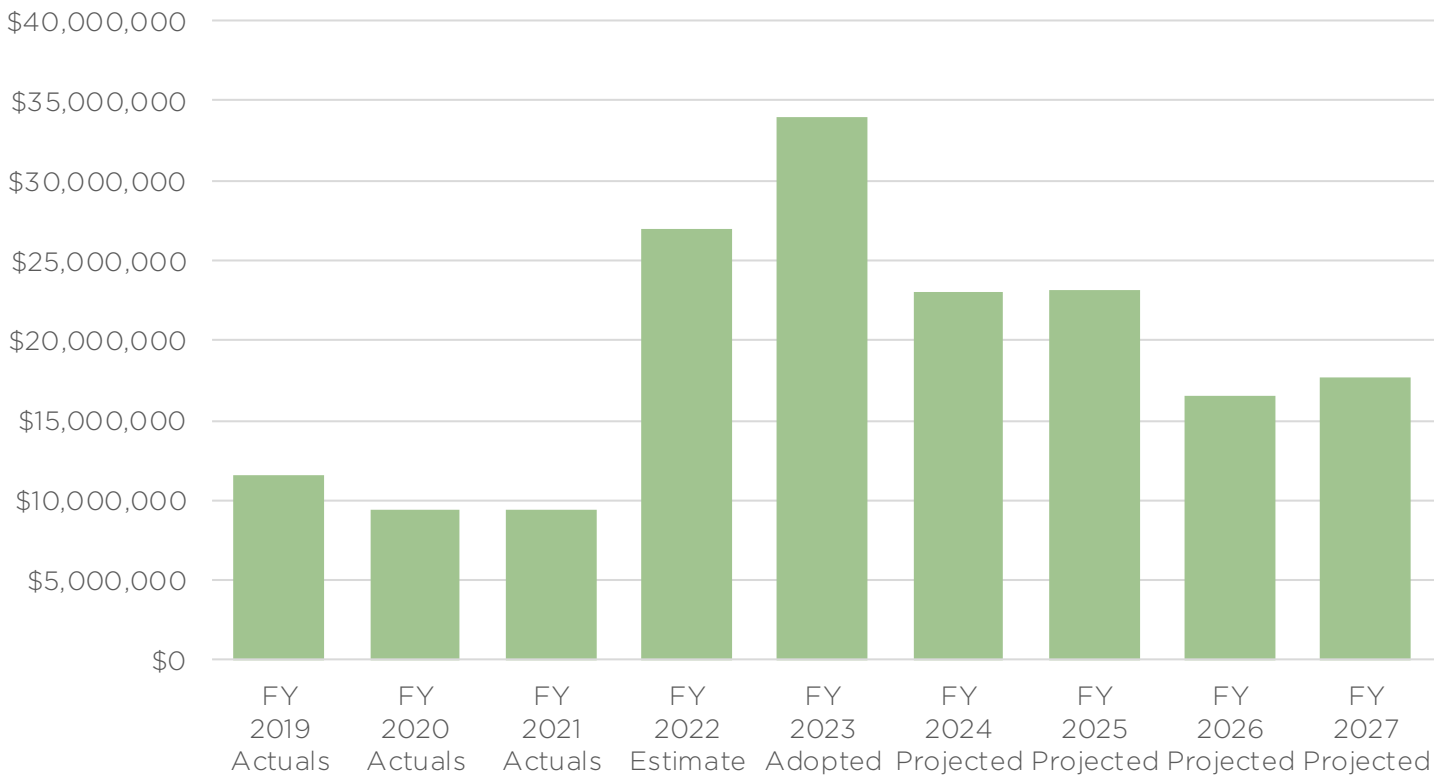


# ELECTRIC FUND

# Overview

The City of Palo Alto offers a full array of utility services to its citizens and businesses. The municipal electric power system began operation in 1900 and continues to provide safe, reliable, and cost effective electric service to residents and customers of Palo Alto. For the 2023-2027 Capital Improvement Program (CIP), approximately \$105.5 million is projected, with \$33.0 million budgeted in Fiscal Year 2023. Overall, a total of 28 projects are planned over the 5-year CIP.

## Electric Fund Capital Expenditures



Major projects funded in the 2023-2027 CIP include Foothills Rebuild Fire Mitigation (\$12.5 million), Smart Grid Technology Installation (\$10.0 million), Electric Customer Connections (\$13.5 million), 115 kV Electric Intertie (\$8.0 million), Wood Pole Replacement (\$7.5 million), various 4/12kV Conversion projects (\$3.7 million), Electric System Improvements (\$13.1 million), Underground System Rebuild projects (\$4.4 million), and Substation Improvement projects (\$23.7 million). The budget for the Electric Fund CIP is categorized into three types of projects: Customer Connections, System Improvements, and Undergrounding Projects.

## Infrastructure Inventory

CLASSIFICATION	QUANTITY
Miles of 60kV sub transmission lines	19 miles
Substations (w/300 MVA total capacity)	9
Traffic Signals (intersections) maintained	101
Streetlights maintained	7,033
Overhead Primary Distribution	116 miles
Underground Primary Distribution	199 miles
Overhead Secondary Distribution	93 miles
Underground Secondary Distribution	84 miles

## Customer Connections

As customers' electric power needs continually change due to equipment additions, new construction, building expansions, building remodels, teardowns and rebuilds, and new building occupancy types, the electric system must evolve to meet these needs. The Electric Customer Connections Project is the only project within this category (Fiscal Year 2023: \$2.7 million; 5-Year CIP: \$13.5 million). Projects range from new buildings associated with larger commercial buildings to residential electric panel upgrades. These projects allow for the completion of work required to meet the needs of customers who have applied for new or upgraded electric service, need temporary power for construction, or require other services. The Electric Fund pays for a portion of these projects, while remaining costs are supported by reimbursements from customers for project work performed by the City.

Electric Engineering received 19 applications for small cell attachments to Electric utility streetlight and wood poles in FY 2022. These applications are still under review. The Electric Utility has about 6,500 wood poles and 7,033 streetlight poles citywide, which are of interest to mobile phone companies. This trend of small cell applications is anticipated to rapidly increase in the next few years, which would increase both the workload and associated revenue in the Electric Customer Connections project.

### Recent Accomplishments

- Completed over 247 customer service projects at a cost of approximately \$0.9 million in Fiscal Year 2021.

## 2023-2027 Capital Improvement Program

### Recurring Projects

There is one recurring project in the Electric Customer Connections category in the 2023-2027 CIP (Fiscal Year 2023 \$2.7 million; 5-Year CIP: \$13.5 million), which is comprised of individual customer projects and budgeted based on historical customer applications for service.

## System Improvements

Key elements for ensuring reliable electric service to City of Palo Alto residents and customers include replacing electric system components before they reach their end of life; ensuring there is adequate capac-

## ELECTRIC FUND

ity for the projected electric load; and installing protective equipment to minimize the impact of system problems. Projects in the System Improvements category allow for a variety of improvements, including the replacement/upgrade of old cables and equipment and bringing designs up to current standards, installation of protective equipment and switches, conversion of the electric system from 4,160 Volts (4kV) to 12,470 Volts (12kV), and installation of capacitors to improve efficiency.

The 2023-2027 CIP includes total funding of \$88.9 million in this category, with \$30.3 million allocated in Fiscal Year 2023. Significant projects in this category include Smart Grid Technology Installation (\$10.0 million), 4/12kV conversion projects (\$3.7 million), Electric System Improvements (\$13.1 million), Wood Pole Replacements (\$7.5 million), Substation Breaker Replacements (\$5.9 million), and various projects to rebuild underground districts and substation components.

Colorado/Hopkins 4/12kV (EL-15000) and Hopkins Substation Conversion (EL-20000) that were included in the 2022-2026 CIP have been deferred to align with available staffing resources and current project priorities. Engineering staff will reassess these projects in the next budget cycle.

### Recent Accomplishments

- Completed 1.4 miles out of 11.0 miles of substructure work for the Foothill Fire Mitigation Project.
- Completed the nine electric substations electric grounding grid assessment and engineering report.
- Planning permits approved for security lighting at nine electric substations.
- Completed Phase 1 construction for the East Meadow Circles 4/12kV Conversion project.
- Completed Phase 1 of GIS Data Migration to ESRI's Utility Network Model including 20 electric feeders.

## 2023-2027 Capital Improvement Program

### Recurring Projects

A total of \$29.5 million is programmed for System Improvements recurring projects in the 2023-2027 CIP, with \$7.1 million allocated in Fiscal Year 2023. Recurring projects in this category include the following:

- Communication System Improvements (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.5 million)
- Electric System Improvements (Fiscal Year 2023: \$2.9 million; 5-Year CIP: \$13.1 million)
- Electric Utility Geographic Information System (Fiscal Year 2023: \$0.3 million; 5-Year CIP: \$1.0 million)
- SCADA System Upgrades (Fiscal Year 2023: \$0.3 million; 5-Year CIP: \$1.2 million)
- Substation Facility Improvements (Fiscal Year 2023: \$1.0 million; 5-Year CIP: \$2.6 million)
- Substation Protection Improvements (Fiscal Year 2023: \$0.6 million; 5-Year CIP: \$1.8 million)
- Underground System Rebuild (Fiscal Year 2023: \$0.4 million; 5-Year CIP: \$1.8 million)
- Wood Pole Replacements (Fiscal Year 2023: \$1.5 million; 5-Year CIP: \$7.5 million)

### Non-Recurring Projects

A total of \$59.4 million is programmed in the 2023-2027 CIP for non-recurring System Improvement projects, with \$23.3 million allocated in Fiscal Year 2023. Significant projects include:

- Rebuild Underground Districts: (Fiscal Year 2023: \$0.5 million; 5-Year CIP: \$4.4 million)
- Smart Grid Technology: (Fiscal Year 2023: \$7.0 million; 5-Year CIP: \$10.0 million)
- Foothills Rebuild Fire Mitigation (Fiscal Year 2023: \$3.5 million; 5-Year CIP: \$12.5 million)

## Undergrounding Projects

The City of Palo Alto began a program to underground overhead electric, telephone, and cable TV facilities in 1965 with a project along Oregon Expressway. Since that time, 47 Underground Districts have been formed. The undergrounding of electrical lines is a joint process between the City and AT&T, due to joint ownership of the poles, and Comcast, which leases pole space from AT&T. All three entities share the cost of the installation of underground conduit and boxes necessary to enclose and protect wires and equipment. The City typically takes the lead in the design, bidding, and construction processes with AT&T and Comcast reimbursing the City for construction and administrative costs. To align with current staffing levels and project priorities, underground districts 42 and 43 have been deferred to begin design in FY 2026.

### Recent Accomplishments

- Underground District 46 - Completed construction to convert the portion of the overhead lines near the intersection of El Camino Real and Arastradero Road/West Charleston Road.

## 2023-2027 Capital Improvement Program

### Non-Recurring Projects

A total of \$3.1 million is allocated in the 2023-2027 CIP for non-recurring Undergrounding Projects, with projects starting design in Fiscal Year 2026. Projects in this category include the following:

- Underground District 42 (5-Year CIP: \$1.6 million)
- Underground District 43 (5-Year CIP: \$1.6 million)

## Electric

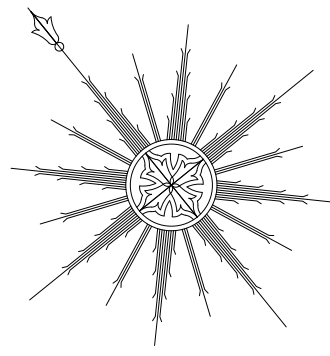
Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Other</b>									
EL-89028	Electric Customer Connections	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	8,500,000
EL-19004	Wood Pole Replacement	150,000	150,000	150,000	150,000	150,000	150,000	150,000	750,000
<b>Other Total</b>		<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$9,250,000</b>
<b>Total Sources</b>		<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$1,850,000</b>	<b>\$9,250,000</b>
<b>USE OF FUNDS</b>									
<b>Customer Connections</b>									
EL-89028	Electric Customer Connections	3,240,452	3,240,452	2,700,000	2,700,000	2,700,000	2,700,000	2,700,000	13,500,000
<b>Customer Connections Total</b>		<b>\$3,240,452</b>	<b>\$3,240,452</b>	<b>\$2,700,000</b>	<b>\$2,700,000</b>	<b>\$2,700,000</b>	<b>\$2,700,000</b>	<b>\$2,700,000</b>	<b>\$13,500,000</b>
<b>System Improvements</b>									
EL-06001	115 kV Electric Intertie	227,481	227,481	500,000	950,000	2,500,000	3,000,000	1,000,000	7,950,000
EL-16002	Capacitor Bank Installation	567,577	421,577	146,000	0	0	0	0	146,000
EL-14000	Coleridge/Cowper/Tennyson 4/12kV Conversion	1,250,000	0	2,500,000	0	0	0	0	2,500,000
EL-22002	Colorado Distribution Feeder Outlet Replacement	400,000	0	400,000	0	0	0	0	400,000

# ELECTRIC FUND

## Electric (Continued)

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
EL-19001	Colorado Power Station Equipment Upgrades	983,429	983,429	1,000,000	3,300,000	1,900,000	400,000	500,000	7,100,000
EL-19002	Colorado Substation Site Improvements	771,971	121,971	990,000	150,000	0	0	0	1,140,000
EL-89031	Communications System Improvements	200,370	200,370	100,000	100,000	100,000	100,000	103,000	503,000
EL-17001	East Meadow Circles 4/12kV Conversion	785,633	545,633	740,000	500,000	0	0	0	1,240,000
EL-98003	Electric System Improvements	3,275,844	3,275,844	2,906,000	2,500,000	2,550,000	2,550,000	2,626,500	13,132,500
EL-02011	Electric Utility Geographic Information System	602,701	442,701	325,000	165,000	165,000	165,000	170,000	990,000
EL-17007	Facility Relocation for Caltrain Modernization Project	655,497	13,653	0	0	0	0	0	0
EL-21001	Foothills Rebuild (Fire Mitigation)	3,814,615	2,314,615	3,500,000	3,000,000	6,000,000	0	0	12,500,000
EL-20000	Hopkins Substation 4/12kV Conversion	50,000	50,000	0	0	0	0	0	0
EL-17005	Inter-substation Line Protection Relay	453,983	303,983	300,000	154,000	175,000	175,000	200,000	1,004,000
EL-11003	Rebuild Underground District 15	1,250,000	58,700	0	0	0	0	0	0
EL-13003	Rebuild Underground District 16	357,884	357,884	0	0	350,000	350,000	0	700,000
EL-14002	Rebuild Underground District 20	0	0	0	0	0	0	50,000	50,000
EL-17000	Rebuild Underground District 23	0	0	0	0	50,000	1,100,000	0	1,150,000
EL-10006	Rebuild Underground District 24	526,294	526,294	0	0	0	0	0	0
EL-19000	Rebuild Underground District 25	7,125	7,125	0	0	0	0	0	0
EL-16000	Rebuild Underground District 26	281,644	98,644	533,000	350,000	350,000	0	0	1,233,000
EL-19003	Rebuild Underground District 30	0	0	0	0	0	50,000	1,200,000	1,250,000
EL-14005	Reconfigure Quarry Feeders	159,351	159,351	0	0	0	0	0	0
EL-02010	SCADA System Upgrades	416,374	296,374	325,999	220,000	225,000	185,000	220,000	1,175,999
EL-11014	Smart Grid Technology Installation	7,061,198	7,061,198	7,000,000	3,000,000	0	0	0	10,000,000
EL-17002	Substation Breaker Replacement	1,112,518	612,518	1,250,000	1,250,000	1,350,000	1,000,000	1,000,000	5,850,000
EL-89044	Substation Facility Improvements	860,858	860,858	950,000	400,000	400,000	400,000	412,000	2,562,000
EL-16003	Substation Physical Security	1,695,309	595,309	4,400,000	165,000	165,000	165,000	300,000	5,195,000
EL-89038	Substation Protection Improvements	563,208	563,208	600,000	300,000	300,000	300,000	309,000	1,809,000
EL-16001	Underground System Rebuild	349,999	349,999	349,999	350,000	350,000	350,000	350,000	1,749,999
EL-19004	Wood Pole Replacement	1,894,181	1,894,181	1,500,000	1,500,000	1,500,000	1,500,000	1,545,000	7,545,000
<b>System Improvements Total</b>		<b>\$30,575,044</b>	<b>\$22,342,900</b>	<b>\$30,315,998</b>	<b>\$18,354,000</b>	<b>\$18,430,000</b>	<b>\$11,790,000</b>	<b>\$9,985,500</b>	<b>\$88,875,498</b>
<b>Undergrounding Projects</b>									
EL-08001	Underground District 42 - Embarcadero Road, Emerson, Middlefield	0	0	0	0	0	50,000	1,500,000	1,550,000
EL-11009	Underground District 43 - Alma/Embarcadero	0	0	0	0	0	50,000	1,500,000	1,550,000
EL-12001	Underground District 46 - Charleston/El Camino Real	1,336,396	1,336,396	0	0	0	0	0	0
<b>Undergrounding Projects Total</b>		<b>\$1,336,396</b>	<b>\$1,336,396</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100,000</b>	<b>\$3,000,000</b>	<b>\$3,100,000</b>
<b>Total Uses</b>		<b>\$35,151,892</b>	<b>\$26,919,748</b>	<b>\$33,015,998</b>	<b>\$21,054,000</b>	<b>\$21,130,000</b>	<b>\$14,590,000</b>	<b>\$15,685,500</b>	<b>\$105,475,498</b>





MAY 2022

## LEGEND

### 42 PROPOSED UNDERGROUND PROJECTS

42	UG DISTRICT #42	(08001)	2024-2027
43	UG DISTRICT #43	(11009)	2026-2027
48	UG DISTRICT #48	(XXXXX)	2028-2031
49	UG DISTRICT #49	(XXXXX)	2032-2035
50	UG DISTRICT #50	(XXXXX)	2036-2039
51	UG DISTRICT #51	(XXXXX)	2040-2043
52	UG DISTRICT #52	(XXXXX)	2044-2047
53	UG DISTRICT #53	(XXXXX)	2048-2051

### A PROPOSED UNDERGROUND REBUILD

A11	REBUILD U.G. DISTRICT #16	(13003)	2017-2026
A12	REBUILD U.G. DISTRICT #20	(14002)	2026-2027
A14	REBUILD U.G. DISTRICT #26	(16000)	2023-2025
A16	REBUILD U.G. DISTRICT #30	(19003)	2026-2027
A17	REBUILD U.G. DISTRICT #23	(17000)	2025-2026
A19	REBUILD U.G. DISTRICT #24	(XXXXX)	2028-2031
A5	REBUILD U.G. DISTRICT #15	(XXXXX)	2028-2031

### D PROPOSED SYSTEM IMPROVEMENT

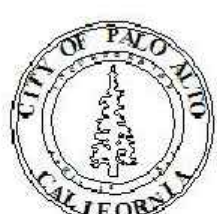
COLORADO POWER STATION EQUIPMENT UPGRADE	(19001)	2019-2027
COLORADO SUBSTATION IMPROVEMENTS	(19002)	2019-2024

### C PROPOSED 4/12KV CONVERSION

C9	COLORIDGE/ COWPER/ TENNYSON 4/12KV	(14000)	2021-2023
C11	EAST MEADOW - FAIRVIEW 4/12KV	(17001)	2021-2024

### MISCELLANEOUS PROJECTS NOT LABELED

CAPACITOR BANK INSTALLATION - VARIOUS AREAS	(16002)	2016-2023
SUBSTATION SECURITY - VARIOUS AREAS	(16003)	2016-2027
SUBSTATION 60KV BREAKER REPLACEMENT	(17002)	2017-2027
PILOT WIRE RELAY REPLACEMENT	(17005)	2017-2027
SMART GRID TECHNOLOGY INSTALLATION	(11014)	2019-2024
115 KV ELECTRIC INTERTIE	(06001)	2018-2027
FOOTHILLS SYSTEM REBUILD	(21001)	2021-2025
COLORADO DISTRIBUTION FEEDER OUTLETS	(2100Y)	2021-2023
UNDERGROUND SYSTEM REBUILD - VARIOUS AREAS	(16001)	RECURRING
ELECTRIC CUSTOMER CONNECTIONS	(89028)	RECURRING
COMMUNICATIONS SYSTEM IMPROVEMENTS	(89031)	RECURRING
UPGRADE ESTIMATING SOFTWARE	(13008)	RECURRING
ELECTRIC SYSTEM IMPROVEMENTS	(98003)	RECURRING
ELECTRIC UTILITY GEOGRAPHIC INFORMATION SYSTEM	(02011)	RECURRING
SCADA SYSTEM UPGRADES	(02010)	RECURRING
SUBSTATION FACILITY IMPROVEMENTS	(89044)	RECURRING
SUBSTATION PROTECTION IMPROVEMENTS	(89038)	RECURRING
WOOD POLE REPLACEMENT	(19004)	RECURRING

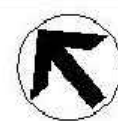


The City of Palo Alto



# ELECTRIC FUND 2023-2027 CAPITAL IMPROVEMENT PROGRAM

This map is a product of the City of Palo Alto GIS





CITY OF  
**PALO  
ALTO**



# Customer Connections

## ELECTRIC FUND



**Fund:** Electric Fund  
**Category:** Customer Connections  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-89028

Electric Troublemaker installing an electric meter to provide service to a customer

# Electric Customer Connections

## Description

This project allows for the installation of services, transformers, meters for new customers, upgrades of existing services, temporary service connections, and overhead/underground extensions for new/existing customers.

## Justification

The project provides funding for installing electric services for new customer connections and the upgrading of existing services. These are critical functions for providing electrical service to the City's customers. During a typical year, over 200 electric services are installed or upgraded in the City.

## Supplemental Information

Budget amounts requested for work covered by this project are based on historical expenditures and growth projections. The Electric Fund pays for a portion of this project while remaining costs are supported by reimbursements from customers, telephone, and cable television companies for project work performed by the City.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	1,540,453	1,540,453	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	0	N/A
<b>Other</b>	N/A	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	8,500,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>3,240,453</b>	<b>3,240,453</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>13,500,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	3,240,452	3,240,452	2,700,000	2,700,000	2,700,000	2,700,000	2,700,000	13,500,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>3,240,452</b>	<b>3,240,452</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>2,700,000</b>	<b>13,500,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



CITY OF  
**PALO  
ALTO**

# System Improvements

## ELECTRIC FUND



**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** National Accelerator Laboratory Substation  
**Managing Department:** Utilities  
**Initial Project Start:** Spring 2013  
**Initial Project Completion:** Fall 2015  
**Revised Project Start:** Spring 2021  
**Revised Project Completion:** Winter 2027  
**Project Number:** EL-06001

Possible electric substation connection point to existing 60 kV system

# 115 kV Electric Intertie

## Description

Funding for this project is used to perform technical feasibility studies to determine the general project requirements to establish another transmission line to the City of Palo Alto along a different transmission corridor. The City's discussions with Stanford University and Stanford Linear Accelerator Laboratory (SLAC), on sharing interest and benefits in a new 230kV intertie have come to an end with the decision by Stanford to withdraw from the project. Staff is seeking funding for an alternative solution to provide a second 115kV transmission source to Palo Alto.

## Justification

This transmission line will provide the City with an alternate source of power during emergencies, such as the plane crash in 2010 that impacted electric power to the entire City.

## Significant Changes

**2023-2027 CIP:** Project budget increased by approximately \$1.4 million to a total of \$8.4 million and the completion date extended from Winter 2025 to Winter 2027 for updated estimated cost and time needed to install the alternate 115kV Intertie.

**2022-2026 CIP:** Project renamed from 230kV Electric Intertie to 115kV Electric Intertie. The engineering staff is assessing the feasibility of an alternative 115kV interconnection from the south of the City, to be followed with a request submittal to the California Independent System Operator (CAISO). The budget reflects a rough cost estimate for the new connection.

**2021-2025 CIP:** Stanford had decided to withdraw from the project. Staff will evaluate alternative solutions with PG&E/CAISO that will require new/updated technical feasibility studies.

**2019-2023 CIP:** The City presented its findings to Stanford and SLAC/DOE and is waiting for a response from SLAC to determine whether this project will move forward.

**2017-2021 CIP:** Project completion has been moved out as discussions with Stanford and SLAC/DOE are ongoing and no agreement has been finalized. Cooperation between these two entities is necessary for this project to move forward.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	262,564	227,481	227,481	500,000	950,000	2,500,000	3,000,000	1,000,000	7,950,000	0	8,440,045
<b>Total</b>	<b>262,564</b>	<b>227,481</b>	<b>227,481</b>	<b>500,000</b>	<b>950,000</b>	<b>2,500,000</b>	<b>3,000,000</b>	<b>1,000,000</b>	<b>7,950,000</b>	<b>0</b>	<b>8,440,045</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	210,049	0	0	500,000	950,000	2,500,000	3,000,000	1,000,000	7,950,000	0	8,160,049
<b>Design</b>	52,510	227,481	227,481	0	0	0	0	0	0	0	279,991
<b>Total</b>	<b>262,559</b>	<b>227,481</b>	<b>227,481</b>	<b>500,000</b>	<b>950,000</b>	<b>2,500,000</b>	<b>3,000,000</b>	<b>1,000,000</b>	<b>7,950,000</b>	<b>0</b>	<b>8,440,040</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



Capacitor Bank

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Electric Substation  
**Managing Department:** Utilities  
**Initial Project Start:** Fall 2014  
**Initial Project Completion:** Spring 2016  
**Revised Project Start:** Fall 2015  
**Revised Project Completion:** Spring 2023  
**Project Number:** EL-16002

# Capacitor Bank Installation

## Description

The City of Palo Alto is required to maintain a power factor greater than 0.95 at its main supply point as part of its agreement with the Northern California Power Association (NCPA). The power factor is the ratio of power drawn from the main supply and the power that it actually consumes. This project will install capacitor banks at electric substations and on distribution lines to ensure this requirement is met.

## Justification

In recent years, the power factor, as measured at the service point from PG&E transmission lines, has dropped below the required 0.95 lagging amount. To raise the power factor to an amount above the required limit the Utilities Department will install up to 10 mega volt ampere reactive (MVAR) of capacitors at various locations on the electric system. With the installation of the capacitor bank, this project will increase the power factor to meet current requirements and maintain a sufficient power factor for the next seven years.

## Significant Changes

**2023-2027 CIP:** Due to staffing shortages and competing project priorities, this project will now be completed in Spring 2023.

**2022-2026 CIP:** Capacitor banks have been installed at Hanson Way, Hanover, and Park Boulevard Substations. Installation of capacitor banks at Maybell Substation is expected to be completed in the Winter 2021 to Spring 2022 time frame.

**2021-2025 CIP:** Funding will allow for completion of the capacity installations to comply with NCPA member requirements. Installation is expected to be completed by Winter 2021.

**2020-2024 CIP:** Capacitor banks will be installed at Hanover, Hansen Way, Maybell and Park Boulevard Substations. Capacitor banks have been ordered, and installation is expected to be completed by fall 2019.



**2019-2023 CIP:** Staff has performed an analysis on where capacitors are needed to provide MVAR support to the system. This project has become a lower priority due to a decrease in the system electric load and staff shortages that have elevated other projects above this one.

**2017-2021 CIP:** Shifting project priorities have delayed the completion of this project.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	482,870	567,577	421,577	146,000	0	0	0	0	146,000	0	1,050,447
<b>Total</b>	<b>482,870</b>	<b>567,577</b>	<b>421,577</b>	<b>146,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>146,000</b>	<b>0</b>	<b>1,050,447</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	482,859	567,577	421,577	146,000	0	0	0	0	146,000	0	1,050,436
<b>Total</b>	<b>482,859</b>	<b>567,577</b>	<b>421,577</b>	<b>146,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>146,000</b>	<b>0</b>	<b>1,050,436</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



Overhead crews working on overhead lines

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Coleridge/Cowper/Tennyson area  
**Managing Department:** Utilities  
**Initial Project Start:** Spring 2016  
**Initial Project Completion:** Spring 2017  
**Revised Project Start:** Spring 2019  
**Revised Project Completion:** Spring 2023  
**Project Number:** EL-14000

# Coleridge/Cowper/Tennyson 4/12kV Conversion

## Description

This project will convert the primary electric distribution system in the Coleridge/Cowper/Tennyson area from 4kV to 12kV.

## Justification

Because of the difference in voltage, the 4kV and 12kV systems cannot be directly connected and used to back up one another. Due to prior conversions to 12kV in adjacent areas, this 4kV area needs to be converted to 12kV so that adequate circuit connections can be restored. This will allow customers to be switched from one circuit to another during normal or emergency conditions, improve operating flexibility of the system, and enhance service reliability to customers in this area. Converting to 12kV will eliminate the need to replace this equipment as it is not needed at that voltage level.

## Significant Changes

**2022-2026 CIP:** Construction for this project is programmed to begin in Fiscal Years 2022 and 2023.

**2021-2025 CIP:** This project has been deferred due to lack of resources and projects with higher priorities. FY 2021 budget has been reduced to design only. The construction schedule and budget will be reviewed in the next budget cycle. This project converts the primary electric distribution system in the Coleridge/Cowper/Tennyson area from 4kV to 12kV. This project is a precursor to work being planned for Colorado/Hopkins Substations.

**2020-2024 CIP:** The majority of the project funding is moving to FY 2020 to coordinate with other projects planned in conjunction with the Colorado/Hopkins System Improvements.

**2019-2023 CIP:** This project is a precursor to work being planned for Colorado/Hopkins System Improvements (EL-15000). The purpose of this project converts the primary electric distribution system in the Coleridge/

Cowper/Tennyson area from 4kV to 12kV. The start date has been pushed out to coordinate with other projects planned in conjunction with the Colorado/Hopkins System Improvements.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	180,812	1,250,000	0	2,500,000	0	0	0	0	2,500,000	0	2,680,812
<b>Total</b>	<b>180,812</b>	<b>1,250,000</b>	<b>0</b>	<b>2,500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,500,000</b>	<b>0</b>	<b>2,680,812</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	62,667	1,250,000	0	2,500,000	0	0	0	0	2,500,000	0	2,562,667
<b>Design</b>	118,144	0	0	0	0	0	0	0	0	0	118,144
<b>Total</b>	<b>180,811</b>	<b>1,250,000</b>	<b>0</b>	<b>2,500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,500,000</b>	<b>0</b>	<b>2,680,811</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---

## ELECTRIC FUND



**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Colorado Substation  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2021  
**Initial Project Completion:** Spring 2022  
**Revised Project Start:** Fall 2022  
**Revised Project Completion:** Spring 2023  
**Project Number:** EL-22002

Replacing underground feeder.

# Colorado Distribution Feeder Outlet Replacement

## Description

Underground primary electric cables and equipment have a limited life span and need to be replaced before they fail and cause outages. This project includes the replacement and redesign of the distribution feeder cables and conduit duct bank from Colorado substation.

## Justification

The underground cables and equipment installed prior to 1990 have an expected life of 30 years and now need to be replaced. In addition, most of the equipment and cables were installed in subsurface enclosures that have standing water in them in the winter. Exposure to water reduces the life of the equipment and electrical connections and require the rebuilding of the facilities. In addition, some utility design standards have changed and improved since this original installation. New design standards will be implemented to improve the resiliency and reliability of the feeder cables.

## Significant Changes

**2023-2027 CIP:** Due to staffing shortages and competing project priorities, this project will now be completed in Spring 2023.

**2022-2026 CIP:** Project established during FY 2022.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	0	400,000	0	400,000	0	0	0	0	400,000	0	400,000
<b>Total</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>400,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	400,000	0	400,000	0	0	0	0	400,000	0	400,000
<b>Total</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>400,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                  Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p>	<p><b>Potential Board/Commission Review:</b>                  Planning and Transportation Commission                  Utilities Advisory Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	



Colorado Power Substation

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Colorado Substation  
**Managing Department:** Utilities  
**Initial Project Start:** Fall 2018  
**Initial Project Completion:** Fall 2019  
**Revised Project Start:** N/A  
**Revised Project Completion:** Spring 2027  
**Project Number:** EL-19001

# Colorado Power Station Equipment Upgrades

## Description

This project will replace aging major asset equipment at the Colorado Power Station. The Colorado Power Station is on the 115kV/60kV transmission side of the Colorado Substation, which transforms the electricity to a lower sub-transmission voltage that feeds the individual distribution stations around the City.

## Justification

A project was created in 2015 to replace all the original primary and secondary bushings. With these preventative maintenance and operating practices, the transformers life expectancy would be extended; however, the condition of the auxiliary equipment was poorer than anticipated. The tanks and radiators are rusty and the paint is chalky and faded, leading to the breakdown of the steel. The transformers have many minor oil leaks around the radiator flanges, inspection covers and valve packings from old and compressed cork gaskets. The leaks are a potential environmental hazard if the oil migrates to the ground and into storm water. Additionally, wherever oil leaks out, water can seep in. This will eventually increase the moisture in the oil that could result in failure of the transformer. The temperature and level gauges show signs of long-term ultraviolet (UV) exposure and the plastics have become brittle and cracked.

However, in 2018 transformer bank #2 failed, and funds for refurbishment were redirected to the emergency replacement. When comparing the cost of refurbishment versus replacement, it was determined that refurbishment was much more costly than replacement for this type of large electric substation equipment.

## Significant Changes

**2023-2027 CIP:** The project budget increased by \$1.5 million to a total of \$12.4 million for transformer #3 and 115kV breaker replacement.

**2022-2026 CIP:** The early replacement of transformer bank #3 has been deferred to FY 2023. Engineering staff will also study the potential retirement of transformer bank #1 as it reaches the end of its expected useful life.

**2021-2025 CIP:** Due to the discoveries made during replacement of transformer #2, staff is assessing the need and timing of the replacement of transformer #3 and the associated 115kV circuit breaker GCB-3. Funding requested in FY 2021 is considering the possibility of early replacement.

**2020-2024 CIP:** The replacement of aging peripheral equipment at the Colorado Power Station has been reassigned to replacing the failed COP-2 transformer. The unexpected cost of replacing the failed transformer increased the project from \$0.9 million to \$2.5 million. The aging peripheral equipment will be dealt with in a future year.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	3,432,024	983,429	983,429	1,000,000	3,300,000	1,900,000	400,000	500,000	7,100,000	0	11,515,453
<b>Other</b>	850,000	0	0	0	0	0	0	0	0	0	850,000
<b>Total</b>	<b>4,282,024</b>	<b>983,429</b>	<b>983,429</b>	<b>1,000,000</b>	<b>3,300,000</b>	<b>1,900,000</b>	<b>400,000</b>	<b>500,000</b>	<b>7,100,000</b>	<b>0</b>	<b>12,365,453</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	4,160,299	983,429	983,429	1,000,000	3,300,000	1,900,000	400,000	500,000	7,100,000	0	12,243,728
<b>Design</b>	121,715	0	0	0	0	0	0	0	0	0	121,715
<b>Total</b>	<b>4,282,014</b>	<b>983,429</b>	<b>983,429</b>	<b>1,000,000</b>	<b>3,300,000</b>	<b>1,900,000</b>	<b>400,000</b>	<b>500,000</b>	<b>7,100,000</b>	<b>0</b>	<b>12,365,443</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.3</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---





Colorado Electric Substation Driveway

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Colorado Substation  
**Managing Department:** Utilities  
**Initial Project Start:** Fall 2018  
**Initial Project Completion:** Summer 2020  
**Revised Project Start:** Fall 2021  
**Revised Project Completion:** Spring 2024  
**Project Number:** EL-19002

## Colorado Substation Site Improvements

### Description

This project will make modifications to the substation driveways, fence and oil containment to provide adequate ingress and egress for utility vehicles used for maintenance and repair and potentially build concrete barriers between transformers #1 and #3.

### Justification

The Colorado Power Station site contains three large utility power transformers and houses the 60kV main bus that forms the backbone of the 60kV loop throughout the City. Transformers #1 and #3 are situated near each other, and failure of one transformer can damage the other. Building a barrier between the two transformers reduces the damage risk to these assets.

### Significant Changes

**2023-2027 CIP:** Funding of approximately \$0.2 million programmed in FY 2024 for additional work identified.

**2022-2026 CIP:** A civil Master Plan is being developed site-wide to coordinate the many projects and upgrades at this busy site.

**2021-2025 CIP:** This is an ongoing project over several years to improve the accessibility in the substation for trucks and other machinery. Work will be planned in conjunction with work under EL-16003, Substation Physical Security.

**2019-2023 CIP:** Project established.



## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	183,203	771,971	121,971	990,000	150,000	0	0	0	1,140,000	0	1,445,174
<b>Total</b>	<b>183,203</b>	<b>771,971</b>	<b>121,971</b>	<b>990,000</b>	<b>150,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,140,000</b>	<b>0</b>	<b>1,445,174</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	159,191	758,221	108,221	990,000	150,000	0	0	0	1,140,000	0	1,407,412
<b>Design</b>	24,009	13,750	13,750	0	0	0	0	0	0	0	37,759
<b>Total</b>	<b>183,200</b>	<b>771,971</b>	<b>121,971</b>	<b>990,000</b>	<b>150,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,140,000</b>	<b>0</b>	<b>1,445,171</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Maintenance of Parks and Community Facilities                  Goal: C-3                  Policy: C-3.2</p>	<p><b>Relationship to Comprehensive Plan Secondary Connection</b></p> <p>Element: Land Use and Community Design                  Section: Public Streets and Public Spaces                  Goal: L-9                  Policy: L-9.11</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission                  Architectural Review Board</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>		

# ELECTRIC FUND



**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-89031

Traffic/Fiber technicians repairing the city fiber optic cables

## Communications System Improvements

### Description

This project installs copper wire cable systems, high frequency coaxial cable, fiber optic cable, and related equipment to provide communications services for traffic signal coordination, telephone links, computer data transmission, and the Electric Supervisory Control and Data Acquisition (SCADA) system.

### Justification

Installation of communication lines is essential for the provision of City services. The broadband system provides communication between the Utility Control Center to substations and field equipment and between substation protection equipment. This annual project funds, as necessary, expansion of the system and replacement of deteriorating facilities.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	200,370	200,370	100,000	100,000	100,000	100,000	103,000	503,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>200,370</b>	<b>200,370</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>103,000</b>	<b>503,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	177,870	177,870	100,000	100,000	100,000	100,000	103,000	503,000	0	N/A
<b>Design</b>	N/A	22,500	22,500	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>200,370</b>	<b>200,370</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>103,000</b>	<b>503,000</b>	<b>0</b>	<b>N/A</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Energy  
Goal: N-7  
Policy: N-7.1

### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## ELECTRIC FUND



Electric Linemen working on utility pole

**Fund:** Electric Fund

**Category:** System Improvements

**Project Location:** East Charleston/Alma Street/East Meadow Drive/Middlefield Road area

**Managing Department:** Utilities

**Initial Project Start:** Summer 2017

**Initial Project Completion:** Spring 2018

**Revised Project Start:** Fall 2021

**Revised Project Completion:** Spring 2024

**Project Number:** EL-17001

# East Meadow Circles 4/12kV Conversion

## Description

This project will convert the primary electric distribution system in the East Charleston/Alma Street/East Meadow Drive/Middlefield Road area from 4kV to 12kV.

## Justification

Because of the difference in voltage, the 4kV and 12kV systems cannot be directly connected and used to back up one another. Due to prior 12kV conversions in adjacent areas, this 4kV area needs to be converted to 12kV so that adequate circuit connections can be restored. This will allow customers to be switched from one circuit to another during normal or emergency conditions, and improve operating flexibility of the system and service reliability to customers in this area. Converting to 12kV will eliminate the need to replace this equipment as it is not needed at that voltage level.

## Significant Changes

**2022-2026 CIP:** The project area has been spread into six different areas which reduces the complexity and impact to affected residences. Funding for this project has been spread over four years.

**2021-2025 CIP:** The project budget has been defunded as part of the FY 2021 Capital Improvement Program budget strategy and funding in FY 2021 reduced to design only. Staff will review and schedule the construction funding in the upcoming 5-year CIP plan.

**2019-2023 CIP:** The project converts the primary electric distribution system in the East Charleston/Alma Street/East Meadow Drive/Middlefield Road area from 4kV to 12kV. This project is in the preliminary stages of assessment for engineering design and is being reevaluated to determine the scope of work that should be involved. Issues with replacing the rear-easement facilities may dictate a change in direction of the project scope. Project funding has been decreased by \$0.9 million and pushed out.

2017-2021 CIP: Project established.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	53,071	785,633	545,633	740,000	500,000	0	0	0	1,240,000	0	1,838,704
<b>Total</b>	<b>53,071</b>	<b>785,633</b>	<b>545,633</b>	<b>740,000</b>	<b>500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,240,000</b>	<b>0</b>	<b>1,838,704</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	15,162	785,633	545,633	740,000	500,000	0	0	0	1,240,000	0	1,800,795
<b>Design</b>	37,906	0	0	0	0	0	0	0	0	0	37,906
<b>Total</b>	<b>53,068</b>	<b>785,633</b>	<b>545,633</b>	<b>740,000</b>	<b>500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,240,000</b>	<b>0</b>	<b>1,838,701</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---

## ELECTRIC FUND



**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-98003

Electric crews working in an underground vault terminating cables

# Electric System Improvements

## Description

This project provides funding, as needed, to improve the Electric Distribution System. Typical activities include: increasing system capacity for load growth, replacing deteriorated capital facilities, reconfiguring/adding to the system to improve service reliability, repairing and replacing storm damaged equipment, and making general improvements to the system.

## Justification

Electric system service reliability and adequate system capacity are critical to providing a high level of service to customers in Palo Alto. When service interruptions occur, customers may experience significant economic losses. The City must continuously evaluate service reliability needs and make improvements to the system to maintain top-level service to City customers.

## Supplemental Information

Other funding sources include reimbursements from the telephone company for work performed on their behalf by City staff.

## Significant Changes

**2023-2027 CIP:** Increased funding of \$0.5 million in FY 2023 for electric grid assessment to study the electric distribution network to prepare the grid for electrification, two-way power flow for local generation, and improve overall system reliability.

**2021-2025 CIP:** Increased funding will be used to provide additional service reliability work and load break and fault interrupting switch replacements.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	3,275,845	3,275,845	2,906,000	2,500,000	2,550,000	2,550,000	2,626,500	13,132,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>3,275,845</b>	<b>3,275,845</b>	<b>2,906,000</b>	<b>2,500,000</b>	<b>2,550,000</b>	<b>2,550,000</b>	<b>2,626,500</b>	<b>13,132,500</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	2,761,314	2,761,314	2,906,000	2,500,000	2,550,000	2,550,000	2,626,500	13,132,500	0	N/A
<b>Design</b>	N/A	514,530	514,530	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>3,275,844</b>	<b>3,275,844</b>	<b>2,906,000</b>	<b>2,500,000</b>	<b>2,550,000</b>	<b>2,550,000</b>	<b>2,626,500</b>	<b>13,132,500</b>	<b>0</b>	<b>N/A</b>

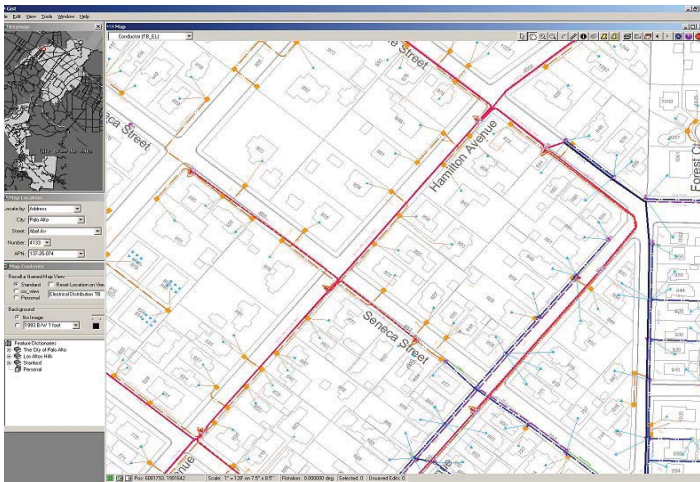
### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



## ELECTRIC FUND



View of City of Palo Alto GIS System

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-02011

# Electric Utility Geographic Information System

## Description

This project will enhance the citywide Geographical Information System (GIS). The primary emphasis will be to provide a compatible user interface and estimating software to edit and update data, which will reside in the citywide GIS. The project includes the migration of the existing electric and fiber networks to a unified mapping solution compatible with the citywide GIS.

## Justification

GIS has grown from being a set of special purpose computer applications to being an information tool that serves all segments of the City. Applications have been developed that make GIS information accessible to hundreds of users, which has greatly increased the value of the system. Funding in the CIP is for ongoing mapping system modifications to facilitate technical requirements, external contractor system support, anticipated system upgrades, and to meet future needs and facilitate integration to the new citywide GIS. This could include recommendations for upgrade or replacement of existing systems.

## Significant Changes

**2022-2026 CIP:** In FY 2022, the project budget increased by \$0.1 million to convert the electric information to the Esri Mapping platform.

**2021-2025 CIP:** In conjunction with the City effort to convert the City's GIS data from GIST (Geodesy) to an Esri Mapping platform, Electric Engineering will begin investigating the transition of the electric information to Esri. This transition will eventually support other utility applications, such as the Outage Management System, System Restoration practices, customer notifications, and system modeling and analysis.

**2020-2024 CIP:** The City will move to a new GIS platform, Esri, in FY 2020. Annual funding will support Electric's portion of the implementation and ongoing support of the new GIS system.



## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	602,702	442,702	325,000	165,000	165,000	165,000	170,000	990,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>602,702</b>	<b>442,702</b>	<b>325,000</b>	<b>165,000</b>	<b>165,000</b>	<b>165,000</b>	<b>170,000</b>	<b>990,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	558,322	398,322	325,000	165,000	165,000	165,000	170,000	990,000	0	N/A
<b>Design</b>	N/A	44,379	44,379	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>602,701</b>	<b>442,701</b>	<b>325,000</b>	<b>165,000</b>	<b>165,000</b>	<b>165,000</b>	<b>170,000</b>	<b>990,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Community Services &amp; Facilities                  Section: Efficient and Effective Service                  Delivery                  Goal: C-1                  Policy: C-1.3</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	



Overhead electric lines in Foothills Park

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Foothills  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2020  
**Initial Project Completion:** Fall 2022  
**Revised Project Start:** N/A  
**Revised Project Completion:** Summer 2025  
**Project Number:** EL-21001

# Foothills Rebuild (Fire Mitigation)

## Description

Devastating wildfires throughout the State of California have prompted electric utilities throughout the state to identify areas within their jurisdiction that are susceptible to power-line ignited wildfires and to take steps to prevent their occurrence. This project proposes to rebuild the approximately 11 miles of overhead line, as necessary to mitigate the possibility of a wildfire due to overhead electric lines. This could include the utilization of more robust equipment or construction practices; rerouting to avoid vegetation and improve access for inspection and maintenance; or converting the overhead lines to underground where feasible.

## Justification

At the direction of the California Public Utilities Commission (CPUC), all electric Utilities in the state of California were required to review their service territories and determine areas that may be susceptible to wildfire that should be considered for inclusion on statewide Fire Threat Map. The City of Palo Alto Utilities (CPAU), with the assistance of a fire science consultant, determined that the area within our service territory west of Interstate 280 had an "Elevated Risk" (categories: Moderate, Elevated, Extreme) of wildfire, requiring more stringent construction, inspection, and vegetation management requirements.

Subsequent state legislation required all utilities to prepare Wildfire Mitigation Plans outlining the processes and procedures CPAU will undertake to mitigate the threat of wildfires associated with overhead electric lines and equipment. In 2011, CPAU hired a consultant to perform a hazard risk assessment to assess natural and man made hazard risks associated with the Utilities Department assets, focusing on risk exposure and financial responsibility. Of all of the hazards evaluated, wildfire due to wind and in the foothills posed the highest financial risk.

## Supplemental Information

This project proposes to solicit a design/build contractor to rebuild/relocate/replace the overhead portions of CPAU electric system serving customers in the High Fire Threat areas of Palo Alto to reduce the probability of a wildfire caused by overhead electric facilities. CPAU will solicit bids from qualified engineering/construction contractors to design, engineer, and construct a 12kV electric distribution line to replace, reinforce, reroute, and in some places expand, the existing city-owned overhead electric and fiber optic lines in the Foothills in Palo Alto.

Design and construction will be performed in several phases, starting with the upper portion of the 12kV line, including a new fiber optic cable installation between two CPAU water reservoirs and working down the hill.

The estimated cost of this project was based on replacement of the existing overhead system with overhead facilities in the same locations. However, relocation or undergrounding of the lines would increase these estimated costs.

Design/build bids from contractors came in high in 2021, so staff recommended to perform the design in-house with contract services procured as-needed for construction.

## Significant Changes

**2023-2027 CIP:** Project budget increased by approximately \$11.0 million to a total of \$15.0 million and programmed for outer years based on current cost estimates for as-needed external contract services to underground electrical lines in the Foothills. The Fiber Fund will cover one-third, or approximately \$2.0 million, of the substructure costs since it will include conduits for fiber optics, through the Fiber Optics Network project (FO-10001).

**2022-2026 CIP:** Project work for overhead lines will be divided into smaller sections of lines. 800 feet of overhead line has been undergrounded. Staff will continue undergrounding areas in smaller sections and focus on areas based on the fire threat assessment study. This project is anticipated to complete Summer 2025.

**2021-2025 CIP:** Project established.

# ELECTRIC FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	185,383	3,814,615	2,314,615	3,500,000	3,000,000	6,000,000	0	0	12,500,000	0	14,999,998
<b>Total</b>	<b>185,383</b>	<b>3,814,615</b>	<b>2,314,615</b>	<b>3,500,000</b>	<b>3,000,000</b>	<b>6,000,000</b>	<b>0</b>	<b>0</b>	<b>12,500,000</b>	<b>0</b>	<b>14,999,998</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	117,830	3,814,615	2,314,615	3,500,000	3,000,000	6,000,000	0	0	12,500,000	0	14,932,445
<b>Design</b>	67,548	0	0	0	0	0	0	0	0	0	67,548
<b>Total</b>	<b>185,378</b>	<b>3,814,615</b>	<b>2,314,615</b>	<b>3,500,000</b>	<b>3,000,000</b>	<b>6,000,000</b>	<b>0</b>	<b>0</b>	<b>12,500,000</b>	<b>0</b>	<b>14,999,993</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Safety Section: Natural Hazards Goal: S-2 Policy: S-2.13 Program: S1.3.1	Element: Natural Environment Section: Open Space Goal: N-1 Policy: N-1.1	Planning and Transportation Commission Utilities Advisory Commission
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15302.		



CITY OF  
**PALO  
ALTO**

## ELECTRIC FUND



Aging electric equipment

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Spring 2019  
**Revised Project Start:** Winter 2019  
**Revised Project Completion:** Summer 2027  
**Project Number:** EL-17005

# Inter-substation Line Protection Relay

## Description

This project funds the replacement of existing wire relays with new microprocessor-based line differential protective relays to protect the City's 60kV sub-transmission line sections and equipment from damage due to faults (i.e. short circuits) on the 60kV line sections.

## Justification

The existing electro-mechanical wire differential relays are approaching the end of their useful life and rely on a copper pilot wire cable system running between each substation to maintain communication between the relay pairs located at the ends of each 60kV line section. These pilot wire cables have aged significantly and are the source of repeated failures due to corrosion in connections and splices, which cause open circuits, particularly during the rainy season. During these periods of interrupted pilot wire communication, the existing pilot wire relays do not provide adequate back-up protection, putting the City at risk of an outage should a fault occur on the 60kV line section.

## Significant Changes

**2023-2027 CIP:** Project increased by approximately \$0.8 million to a total of \$1.6 million, and budget programmed for outer years to continue the next highest priority sections targeting approximately three line sections to be completed each year.

**2022-2026 CIP:** Installation for five of the 13 line sections has been completed. Work will continue on the next highest priority sections with the expectation that approximately three line sections will be completed each year. Engineering and Operations are now working on design and installation of the relays at Adobe Creek and Colorado, Maybell and Park Boulevard, and Quarry and Park Boulevard substations.

**2021-2025 CIP:** Installation for three of the 13 line sections has been completed. Work will continue on the next highest priority sections with the expectation that approximately three line sections will be completed each year. This work requires the availability of fiber optic cable at each substation, which will be coordinated with the work undertaken to develop the Utilities Fiber Optic network.

**2020-2024 CIP:** Project title change from HCB Pilot Wire Replay Replacement to Inter-substation Line Protection Relay. The scope and funding for the project have increased as staff has determined that replacing the entire 60kV protection system is the best way to ensure reliable service.

**2019-2023 CIP:** Staff completed the relay replacements between Quarry and Hopkins Substations, installation of fiber optic communication cables between Colorado, Maybell, East Meadow and Adobe Creek Substations, and is now working on installation of the relays at Maybell and East Meadow and placing them in service.

**2017-2021 CIP:** Project established.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	366,348	453,983	303,983	300,000	154,000	175,000	175,000	200,000	1,004,000	0	1,674,331
<b>Total</b>	<b>366,348</b>	<b>453,983</b>	<b>303,983</b>	<b>300,000</b>	<b>154,000</b>	<b>175,000</b>	<b>175,000</b>	<b>200,000</b>	<b>1,004,000</b>	<b>0</b>	<b>1,674,331</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	275,003	431,483	281,483	300,000	154,000	175,000	175,000	200,000	1,004,000	0	1,560,486
<b>Design</b>	91,325	22,500	22,500	0	0	0	0	0	0	0	113,825
<b>Total</b>	<b>366,328</b>	<b>453,983</b>	<b>303,983</b>	<b>300,000</b>	<b>154,000</b>	<b>175,000</b>	<b>175,000</b>	<b>200,000</b>	<b>1,004,000</b>	<b>0</b>	<b>1,674,311</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



## ELECTRIC FUND



Electric crews installing new underground cables

**Fund:** Electric Fund

**Category:** System Improvements

**Project Location:** Louis Road between Greer Street and Loma Verde Avenue

**Managing Department:** Utilities

**Initial Project Start:** Winter 2016

**Initial Project Completion:** Spring 2018

**Revised Project Start:** Spring 2025

**Revised Project Completion:** Winter 2026

**Project Number:** EL-13003

# Rebuild Underground District 16

## Description

This project will rebuild and replace the underground electric system in Underground District 16. The area is located along Louis Road between Greer Street and Loma Verde Avenue. Work will include the replacement of deteriorated electrical cables, transformers, and enclosures. Installation of new equipment will bring the electrical system up to current construction standards.

## Justification

The underground system serving Underground District 16 was installed in 1974, and cables and equipment in the area have exceeded their expected life of 30 years. In addition, most of the equipment and cables were installed in subsurface enclosures that have standing water in them in the winter. The water reduces the life of the equipment and electrical connections and requires the rebuilding of the facilities.

## Significant Changes

**2023-2027 CIP:** Construction is delayed until FY 2025 and costs increased by approximately \$0.3 million to a total of \$1.1 million. Original estimates were based on in-house work, which has changed to include outside contractor work to better align with current available staffing levels.

**2022-2026 CIP:** Construction is planned for FY 2022 and FY 2023. Engineering design was completed and the construction is to be done by City staff.

**2021-2025 CIP:** Construction is tentatively planned for FY 2021. The project will be combined with work in the Rebuild Underground District 15 project (EL-11003) and Rebuild Underground District 26 project (EL-16000) in a single bid package to solicit a construction contractor. The project has been delayed to facilitate a request from residents to place transformer below ground related to project EL-11003. Staff is working on the added cost to residents and will prepare an agreement.



**2020-2024 CIP:** Work on this project has been delayed as staff continues with the process of receiving public input regarding the design of the project.

**2019-2023 CIP:** This project is in the preliminary stages of assessment for engineering design and work will be coordinated with Rebuild Underground District 26 (EL-16000), which is rebuilding the electric system along Arastradero Road. Funding has increased to reflect market prices and moved to FY 2019.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	27,454	357,884	357,884	0	0	350,000	350,000	0	700,000	0	1,085,338
<b>Total</b>	<b>27,454</b>	<b>357,884</b>	<b>357,884</b>	<b>0</b>	<b>0</b>	<b>350,000</b>	<b>350,000</b>	<b>0</b>	<b>700,000</b>	<b>0</b>	<b>1,085,338</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	22,564	357,884	357,884	0	0	350,000	350,000	0	700,000	0	1,080,448
<b>Design</b>	4,886	0	0	0	0	0	0	0	0	0	4,886
<b>Total</b>	<b>27,450</b>	<b>357,884</b>	<b>357,884</b>	<b>0</b>	<b>0</b>	<b>350,000</b>	<b>350,000</b>	<b>0</b>	<b>700,000</b>	<b>0</b>	<b>1,085,334</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---

## ELECTRIC FUND



Utility Engineer planning out the next underground rebuild project

**Fund:** Electric Fund

**Category:** System Improvements

**Project Location:** Channing Avenue; Center Street; Hamilton Avenue; and Lincoln Avenue

**Managing Department:** Utilities

**Initial Project Start:** Winter 2017

**Initial Project Completion:** Spring 2018

**Revised Project Start:** Spring 2027

**Revised Project Completion:** Spring 2029

**Project Number:** EL-14002

# Rebuild Underground District 20

## Description

This project will rebuild and replace the underground electric system in Underground District 20. Work will include the replacement of deteriorated electrical cables, transformers, and enclosures. Installation of new equipment will bring the electrical system up to current construction standards.

## Justification

The underground system serving Underground District 20 was installed in 1979, and cables and equipment in the area have exceeded their expected life of 30 years. In addition, most of the equipment and cables were installed in subsurface enclosures that have standing water during winter. The water reduces the life of the equipment and electrical connections and requires the rebuilding of the facilities.

## Significant Changes

**2023-2027 CIP:** Due to staffing resource constraints and other project priorities, the project design has pushed out from FY 2023 to start in FY 2027.

**2022-2026 CIP:** This project budget was updated to align to the new project schedule; with engineering design to start in FY 2023 and construction in FY 2024.

**2021-2025 CIP:** This project has been deferred to later years due to delays in completing related work in the area.

**2019-2023 CIP:** This project rebuilds and replaces the underground electric system in Underground District 20, the area bounded by Channing Avenue, Center Street, Hamilton Avenue, and Lincoln Avenue. This project is in the preliminary stages of assessment for engineering design.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	9,968	0	0	0	0	0	0	50,000	50,000	1,500,000	1,559,968
<b>Total</b>	<b>9,968</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>50,000</b>	<b>1,500,000</b>	<b>1,559,968</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	7,974	0	0	0	0	0	0	0	0	1,500,000	1,507,974
<b>Design</b>	1,991	0	0	0	0	0	0	50,000	50,000	0	51,991
<b>Total</b>	<b>9,965</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>50,000</b>	<b>1,500,000</b>	<b>1,559,965</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---

## ELECTRIC FUND



Electric underground cable vault

**Fund:** Electric Fund

**Category:** System Improvements

**Project Location:** Hamilton Avenue, San Francisquito Creek, Southwood Drive and Chaucer Street

**Managing Department:** Utilities

**Initial Project Start:** Fall 2016

**Initial Project Completion:** Summer 2019

**Revised Project Start:** Spring 2025

**Revised Project Completion:** Spring 2026

**Project Number:** EL-17000

# Rebuild Underground District 23

## Description

This project will rebuild and replace the underground electric system in the area of the City bounded by Hamilton Avenue, San Francisquito Creek, Southwood Drive, and Chaucer Street. Work will include the replacement of deteriorated electrical cables, transformers, switches and enclosures.

## Justification

The underground electric distribution system in the area bounded by Hamilton Avenue, San Francisquito Creek, Southwood Drive, and Chaucer Street was installed in 1983. Typical underground cable and equipment expected life is approximately 30 years in ideal conditions and now needs to be replaced. Installation of new equipment will bring the electrical system up to current construction standards.

## Significant Changes

**2023-2027 CIP:** Due to staffing resource constraints and other project priorities, design and construction estimates pushed out from FY 2024 and programmed for FY 2025 and FY 2026.

**2021-2025 CIP:** This project has been deferred to later years due to delays in completing related work in the area.

**2020-2024 CIP:** The budget has increased \$0.6 million to account for increased substructure work and construction costs.

**2019-2023 CIP:** This project rebuilds and replaces the underground electric system in the area bounded by Chaucer Street, San Francisquito Creek, Hamilton Avenue, and Southwood Drive. This project is in the preliminary stages of assessment for engineering design.

**2017-2021 CIP:** Project established.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	0	0	0	0	0	50,000	1,100,000	0	1,150,000	0	1,150,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>1,100,000</b>	<b>0</b>	<b>1,150,000</b>	<b>0</b>	<b>1,150,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	50,000	1,100,000	0	1,150,000	0	1,150,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>1,100,000</b>	<b>0</b>	<b>1,150,000</b>	<b>0</b>	<b>1,150,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                   Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p>	<p><b>Potential Board/Commission Review:</b>                   Planning and Transportation Commission                  Utilities Advisory Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	

## ELECTRIC FUND



Arastradero Road (part of Underground District 26)

**Fund:** Electric Fund

**Category:** System Improvements

**Project Location:** Arastradero Road between El Camino Real and Hillview Avenue

**Managing Department:** Utilities

**Initial Project Start:** Spring 2016

**Initial Project Completion:** Spring 2016

**Revised Project Start:** Spring 2021

**Revised Project Completion:** Fall 2025

**Project Number:** EL-16000

# Rebuild Underground District 26

## Description

This project will rebuild and replace the underground electric system in Underground District 26. Work will include the replacement of deteriorated electrical cables, transformers, switches, and enclosures. Installation of new equipment will bring the electrical system up to current construction standards.

## Justification

The electric system included in the scope of work of Underground District 26 was installed in 1984. Underground District 26 includes Arastradero Road between El Camino Real and Hillview Avenue. The cables are nearing the end of their expected life of 30 years and the fused switches that were installed at that time have operation issues and need to be replaced. In addition, most of the other equipment (transformers, junctions, etc.) were installed in subsurface enclosures that have standing water, garden chemicals, oil, and other corrosive materials that impact equipment life.

## Significant Changes

**2023-2027 CIP:** The design is complete and construction costs were increased by \$1.0 million to a total of \$1.4 million to align with current market conditions.

**2022-2026 CIP:** In FY 2022, the project scope includes replacing a 12kV electric feeder, MB-20, one of six distribution circuit connections at Maybell Substation. The project has been divided into four phases to facilitate the completion of this project without the need of outside contractors. This project will use improved protection devices to better sectionalize outages as well as pad mounted equipment for improved reliability and cost.

**2021-2025 CIP:** The project budget scope has been reduced to design engineering in FY 2021 and construction tentatively planned for FY 2022. The project will be combined with work in the Rebuild Underground District 15 project (EL-11003) and the Rebuild Underground District 16 project (EL-13003) in a single bid package to

solicit a construction contractor. The project has been delayed to facilitate a request from residents to place transformer below ground related to project EL-11003. Staff is working on the added cost to residents and will prepare an agreement.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	30,807	281,644	98,644	533,000	350,000	350,000	0	0	1,233,000	0	1,362,451
<b>Total</b>	<b>30,807</b>	<b>281,644</b>	<b>98,644</b>	<b>533,000</b>	<b>350,000</b>	<b>350,000</b>	<b>0</b>	<b>0</b>	<b>1,233,000</b>	<b>0</b>	<b>1,362,451</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	5,505	0	0	350,000	350,000	350,000	0	0	1,050,000	0	1,055,505
<b>Design</b>	25,297	281,644	98,644	183,000	0	0	0	0	183,000	0	306,941
<b>Total</b>	<b>30,802</b>	<b>281,644</b>	<b>98,644</b>	<b>533,000</b>	<b>350,000</b>	<b>350,000</b>	<b>0</b>	<b>0</b>	<b>1,233,000</b>	<b>0</b>	<b>1,362,446</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



## ELECTRIC FUND



Underground Utilities Enclosure

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Louis/California/Middlefield/Moreno  
**Managing Department:** Utilities  
**Initial Project Start:** Fall 2018  
**Initial Project Completion:** Spring 2020  
**Revised Project Start:** Spring 2026  
**Revised Project Completion:** Winter 2027  
**Project Number:** EL-19003

# Rebuild Underground District 30

## Description

This project will rebuild and replace the underground electric system in the area of the City bounded by San Francisquito Creek, Edgewood Drive, Island Drive, Hamilton Avenue, Center Drive, Dana Avenue, Alester Avenue, and Jackson Drive. Work will include the replacement of deteriorated electrical cables, transformers, switches, and enclosures.

## Justification

The underground electric distribution system in the area bounded by San Francisquito Creek, Edgewood Drive, Island Drive, Hamilton Avenue, Center Drive, Dana Avenue, Alester Avenue, and Jackson Drive was installed in 1987. Typical underground cable and equipment expected life is approximately 30 years in ideal conditions and now need to be replaced. Installation of new equipment will bring the electrical system up to current construction standards. Rebuild of this area is being done ahead of other older underground areas to facilitate the 4/12kV conversions needed for changes at Hopkins Substation (EL-20000).

## Significant Changes

**2023-2027 CIP:** This project is deferred from FY 2023 to FY 2026 to align with available staffing resources and current project priorities. Staff will reassess this project in the next budget cycle.

**2021-2025 CIP:** This project is deferred to later years because of delays in completing related work in the area.

**2020-2024 CIP:** The budget has increased \$0.3 million to account for increased substructure work and construction costs.

**2019-2023 CIP:** Project established



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	0	0	0	0	0	0	50,000	1,200,000	1,250,000	0	1,250,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>1,200,000</b>	<b>1,250,000</b>	<b>0</b>	<b>1,250,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	50,000	1,200,000	1,250,000	0	1,250,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>1,200,000</b>	<b>1,250,000</b>	<b>0</b>	<b>1,250,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  San Francisquito Creek Joint Powers Authority                  Utilities Advisory Commission</p>
---	--



SCADA Technologist configuring SCADA software

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** SCADA System at Utility Control Center  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-02010

# SCADA System Upgrades

## Description

This project will upgrade the Supervisory Control and Data Acquisition (SCADA) system hardware. The SCADA system is used to monitor and control critical assets of the City's Electric, Gas, and Water utility systems from the Utility Control Center.

## Justification

An upgrade to peripheral equipment is necessary each year to keep the hardware and software current in order to handle the ever-increasing demands on the system and maintain manufacturer/industry support.

## Supplemental Information

Annual budget amounts are for minor system upgrades/replacements. Full system upgrades are on a 3 to 4 year cycle.

## Significant Changes

**2022-2026 CIP:** The annual expense budget has been aligned to cover increased costs of equipment and account for internal labor dedicated to these projects.

**2021-2025 CIP:** This is an annual budget to fund various upgrades to the SCADA system and peripheral equipment. Increases reflect the increased cost of equipment and support.

**2020-2024 CIP:** The increase in FY 2021 budget increase is to fund the purchase and installation of a demilitarized zone (DMZ) to add an additional layer of security to the City's local area network (LAN). An external network node can access only what is exposed in the DMZ, while the rest of the organization's network is firewalled. The DMZ functions as a small, isolated network positioned between the Internet and the LAN which will allow the City extra time to detect and address breaches before they further penetrate into the internal networks.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	416,375	296,375	326,000	220,000	225,000	185,000	220,000	1,176,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>416,375</b>	<b>296,375</b>	<b>326,000</b>	<b>220,000</b>	<b>225,000</b>	<b>185,000</b>	<b>220,000</b>	<b>1,176,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	416,374	296,374	325,999	220,000	225,000	185,000	220,000	1,175,999	0	N/A
<b>Total</b>	<b>N/A</b>	<b>416,374</b>	<b>296,374</b>	<b>325,999</b>	<b>220,000</b>	<b>225,000</b>	<b>185,000</b>	<b>220,000</b>	<b>1,175,999</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
 Section: Maintenance of Parks and  
 Community Facilities  
 Goal: C-3  
 Policy: C-3.2  
 Program: C3.2.1

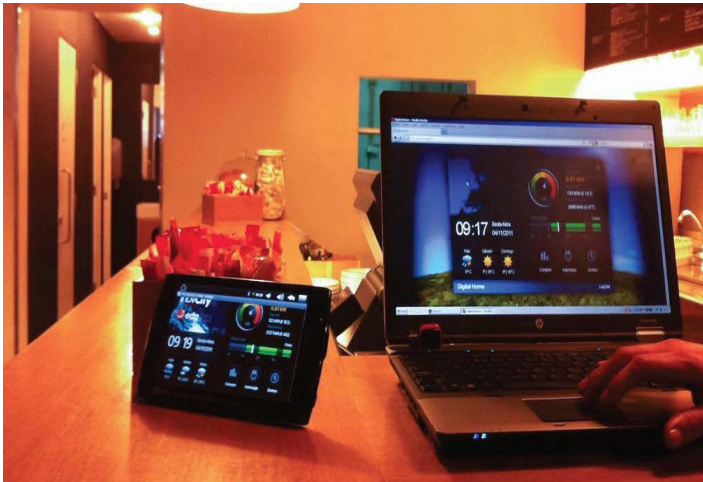
**Potential Board/Commission Review:**

Planning and Transportation Commission  
 Utilities Advisory Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.

## ELECTRIC FUND



**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Fall 2016  
**Initial Project Completion:** Fall 2022  
**Revised Project Start:** Fall 2021  
**Revised Project Completion:** Spring 2024  
**Project Number:** EL-11014

Sample of energy use information that could be available to customers

# Smart Grid Technology Installation

## Description

This project will implement portions of the Smart Grid Road Map that can be cost effectively applied to the City's Electric, Gas, and Water utility systems resulting in operating cost savings, environmental benefits, plus an increased quality of life and productivity for the residents and businesses of Palo Alto.

## Justification

The Smart Grid will help the City achieve the following goals: energy conservation, carbon emission reduction, efficient utilization of aging infrastructure, improved system reliability, integration of distributed energy resources, accommodation of battery charging demands, cost-effective commodity purchases, and meeting customer demands for information.

## Supplemental Information

This project could include aspects of data management system, smart metering, fiber optic infrastructure improvement, distribution system automation, outage management system, load management system, demand-side management system, leak and revenue protection, customer interface to energy usage, and customer equipment control.

## Significant Changes

**2022-2026 CIP:** Staff has evaluated the proposals and selected the vendors. The contracts are tentatively scheduled for City Council review and approval in October 2021. The project will be funded with the Electric Special Projects (ESP) reserves and once the project is complete, the Gas and Water Funds will reimburse the Electric Fund over a five year period at a 2.5 percent interest.

**2021-2025 CIP:** This project will implement portions of the Smart Grid Road Map that can be cost effectively applied to the City's electric, gas, and water utility systems, resulting in operating cost savings, environmental

benefits, plus an increased quality of life and productivity for the residents and businesses of Palo Alto. Staff completed a Request for Proposal to solicit bids to evaluate the implementation of Smart Grid technologies in Palo Alto incorporating information gathered from completed pilot projects.

**2020-2024 CIP:** In December 2018, the City Council accepted the ‘Smart Grid and Utilities Technology Implementation Plan’ that recommended the implementation of an Automated Metering Infrastructure (AMI) based smart grid system at an estimated cost of \$19 million.

The cost is estimated to be borne by the Electric (\$10.5 million), Gas (\$3.4 million) and Water (\$5.1 million) Funds. The actual project implementation is not expected to begin until 2023, upon the implementation of the customer information system upgrade project. It is also anticipated the funds from the Electric Special Projects (ESP) reserves will be used to cover the initial capital costs. The Gas and Water Funds will then repay the ESP reserve loan over 10 years at 3.5 percent interest with an annualized payment of \$0.4 million and \$0.6 million, respectively.

**2019-2023 CIP:** Project activities in 2019 include consultant development of system specifications in preparation for an RFP to solicit contracts with meter data management systems and advanced metering infrastructure vendors for delivery in 2021 and 2022, respectively. Implementation will begin in 2021 once the upgrade of Utilities’ Customer Information System is complete.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	(731,754)	7,061,198	7,061,198	7,000,000	3,000,000	0	0	0	10,000,000	0	16,329,444
<b>Transfer from Gas Fund</b>	616,334	0	0	0	0	0	0	0	0	0	616,334
<b>Transfer from Water Fund</b>	726,334	0	0	0	0	0	0	0	0	0	726,334
<b>Total</b>	<b>610,914</b>	<b>7,061,198</b>	<b>7,061,198</b>	<b>7,000,000</b>	<b>3,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,000,000</b>	<b>0</b>	<b>17,672,112</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	528,808	7,061,198	7,061,198	7,000,000	3,000,000	0	0	0	10,000,000	0	17,590,006
<b>Design</b>	82,099	0	0	0	0	0	0	0	0	0	82,099
<b>Total</b>	<b>610,907</b>	<b>7,061,198</b>	<b>7,061,198</b>	<b>7,000,000</b>	<b>3,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,000,000</b>	<b>0</b>	<b>17,672,105</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# ELECTRIC FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Transportation  
Section: Sustainable Transportation  
Goal: T-1  
Policy: T-1.5

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Utilities Advisory Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15302.



CITY OF  
**PALO  
ALTO**



High voltage circuit breakers

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Summer 2020  
**Revised Project Start:** Summer 2020  
**Revised Project Completion:** Summer 2028  
**Project Number:** EL-17002

## Substation Breaker Replacement

### Description

This project funds the purchase and replacement of high voltage circuit breakers that interconnect the nine electric substations and two power switching stations. There are 42 circuit breakers on the both the 60kV and 12kV lines reaching the end of their recommended reliable useful life expectancy and/or are now underrated for their use.

### Justification

The high voltage circuit breakers interconnect the nine electric substations and two power switching stations. These circuit breakers are integral and critical components of the electric utility transmission system. The breakers protect the feeders and the busbar configuration in a substation. These circuit breakers are reaching the end of their recommended reliable useful life expectancy and/or are now underrated for their use. Due to the current physical configuration, it is also difficult to perform maintenance work. The replacements will include reconfiguring the installation of the replacement breakers for easy operation and maintenance. These replacements ensure the electric substations have operable equipment is critical to maintaining a safe and reliable distribution system.

### Significant Changes

**2023-2027 CIP:** Renamed from Substation 60kV Breaker Replacement to Substation Breaker Replacement. Funding increased by approximately \$1.7 million to a total of \$7.8 million to include replacement of breakers on the 12kV system.

**2022-2026 CIP:** The project expense increased to account for additional breakers and an increase in material cost. Nine additional oil breakers were added to the replacement list. One of the primary reasons for an increase in material cost is due to the industry migrating away from using greenhouse gases in breaker insulation, such as sulfur hexafluoride (SF6), to dry air technology designed breakers.



**2021-2025 CIP:** This is an ongoing project over several years to replace 60 kV breakers at substations. The increased cost is to cover anticipated increases in material and installation cost.

**2020-2024 CIP:** This project will be a 10-year program replacing five breakers per year. The annual budget of \$600,000 includes engineering consulting services, material, and construction.

**2017-2021 CIP:** Project established.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	1,350,129	1,112,519	612,519	1,250,000	1,250,000	1,350,000	1,000,000	1,000,000	5,850,000	0	7,812,648
<b>Total</b>	<b>1,350,129</b>	<b>1,112,519</b>	<b>612,519</b>	<b>1,250,000</b>	<b>1,250,000</b>	<b>1,350,000</b>	<b>1,000,000</b>	<b>1,000,000</b>	<b>5,850,000</b>	<b>0</b>	<b>7,812,648</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	1,109,938	1,041,850	541,850	1,250,000	1,250,000	1,350,000	1,000,000	1,000,000	5,850,000	0	7,501,788
<b>Design</b>	240,176	70,668	70,668	0	0	0	0	0	0	0	310,844
<b>Total</b>	<b>1,350,114</b>	<b>1,112,518</b>	<b>612,518</b>	<b>1,250,000</b>	<b>1,250,000</b>	<b>1,350,000</b>	<b>1,000,000</b>	<b>1,000,000</b>	<b>5,850,000</b>	<b>0</b>	<b>7,812,632</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



Electric Substation transformer and bus structure

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-89044

## Substation Facility Improvements

### Description

This project involves several improvements to each of the nine substation facilities in Palo Alto, including improvement to the safety grounding grids, upgrading gravel for electrical isolation, replacement of various substation equipment, renovation of security fences and entry gates, paving of driveways and parking areas in substations, upgrading of substation drainage systems, replacement of Remote Terminal Unit (RTU) equipment, bus voltage monitoring and local area network (LAN) connections, as well as other improvements.

### Justification

The electric substations are the link between the transmission and distribution systems. At the substations, voltage levels are converted and distribution circuits branch out to provide power throughout the City. They are a key element to providing reliable electric service to residents and customers in Palo Alto. Work completed under this project helps to ensure reliable operation and electric service.

### Significant Changes

**2022-2027 CIP:** Budget increased by approximately \$1.0 million over the five-year CIP compared to the prior CIP to align with current cost of materials, and fund the replacement of air switches and equipment oil leaks.

**2021-2025 CIP:** Budget increase in FY 2021 for grounding upgrades.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	860,860	860,860	950,000	400,000	400,000	400,000	412,000	2,562,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>860,860</b>	<b>860,860</b>	<b>950,000</b>	<b>400,000</b>	<b>400,000</b>	<b>400,000</b>	<b>412,000</b>	<b>2,562,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	502,733	502,733	950,000	400,000	400,000	400,000	412,000	2,562,000	0	N/A
<b>Design</b>	N/A	358,125	358,125	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>860,858</b>	<b>860,858</b>	<b>950,000</b>	<b>400,000</b>	<b>400,000</b>	<b>400,000</b>	<b>412,000</b>	<b>2,562,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---

## ELECTRIC FUND



**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Colorado Substation  
**Managing Department:** Utilities  
**Initial Project Start:** Fall 2015  
**Initial Project Completion:** Spring 2017  
**Revised Project Start:** Fall 2018  
**Revised Project Completion:** Winter 2027  
**Project Number:** EL-16003

Substation perimeter wall providing security for the enclosed equipment

# Substation Physical Security

## Description

The electric substations are a key element of the Electric Distribution System used to provide electricity to residents and customers of Palo Alto. This project will evaluate options for protecting electric substations from outside vandalism and intrusion. If necessary, fences and other protections will be repaired. Security lighting will be designed and issued for construction.

## Justification

In 2014, legislation was passed (SB-699) to address security concerns regarding utility sites and systems following a 2013 incident involving PG&E's Metcalf Substation in South San Jose. The incident prompted utility providers to consider similar disruptions and implement security measures to mitigate them. If one of Palo Alto's substations were to be similarly damaged, the impact would cause outages of an extended period. The Utility Site Security Improvements project (EL-04012) addresses aspects of visual security such as digital cameras, and was combined with this project to include the need for physical protection.

## Significant Changes

**2023-2027 CIP:** Project budget increased by approximately \$3.6 million to a total of \$6.8 million to align construction costs based on the latest bids received. Project completion also moved out from Winter 2025 to Winter 2027.

**2022-2026 CIP:** Security lighting and cameras added to the project scope, but the total project budget remained the same.

**2021-2025 CIP:** This is an ongoing project over several years to improve security of electric substations. Project work will be coordinated with work proposed in EL-19002, Colorado Substation Site Improvements. Delayed and reappropriated

**2020-2024 CIP:** Project title changed from Substation Security to Substation Physical Security. The project budget has increased by \$1.0 million to account for increased project scope at Colorado and Hansen Substations and construction cost escalation.

**2019-2023 CIP:** Project budget increased by \$0.3 million to account for construction escalation.

**2017-2021 CIP:** Shifting project priorities have caused the delay for the completion of this project. A consultant assessed and recommended security measures in 2017. Staff will review recommendations and issue bids for selected improvements.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	974,911	1,695,311	595,311	4,400,000	165,000	165,000	165,000	300,000	5,195,000	0	6,765,222
<b>Total</b>	<b>974,911</b>	<b>1,695,311</b>	<b>595,311</b>	<b>4,400,000</b>	<b>165,000</b>	<b>165,000</b>	<b>165,000</b>	<b>300,000</b>	<b>5,195,000</b>	<b>0</b>	<b>6,765,222</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	381,656	1,429,201	329,201	4,400,000	165,000	165,000	165,000	300,000	5,195,000	0	5,905,857
<b>Design</b>	593,218	266,108	266,108	0	0	0	0	0	0	0	859,326
<b>Total</b>	<b>974,874</b>	<b>1,695,309</b>	<b>595,309</b>	<b>4,400,000</b>	<b>165,000</b>	<b>165,000</b>	<b>165,000</b>	<b>300,000</b>	<b>5,195,000</b>	<b>0</b>	<b>6,765,183</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---

## ELECTRIC FUND



**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Electric Substations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-89038

Electric Substation used to distribute power to City of Palo Alto residents and customers

# Substation Protection Improvements

## Description

This project funds the purchase, engineering, and installation of protective overcurrent relays, circuit breakers, high voltage fuses, and other equipment used at electric substations to protect the equipment and circuits emanating from the substation from damage due to faults (i.e. short circuits) on the electric system.

## Justification

The electric substations are the link between the transmission and distribution systems. At the substations, voltage levels are converted and distribution circuits branch out to provide power throughout the City. They are a key element to providing reliable electric service to residents and customers in Palo Alto. Protective equipment is used to stop power flow when there are problems on the electric system. As the Electric Distribution System becomes more complex and reliability more critical, maintenance of these systems is imperative.

This project includes replacement of old protective devices and controls that have misoperated or no longer provide the level of functionality now required for more sophisticated and sensitive devices. Properly designed and operating protective systems are required to ensure public safety, reduce equipment damage, and minimize the impact of faults such as reduction in outage durations.

## Significant Changes

**2022-2026 CIP:** Staff replaced a group of current transformers, and has completed design and installation of the relays and control systems at Maybell Substation. Staff replaced the Quarry Substation and Hanover Substation feeder relays. Staff is upgrading the transformer protection relays at Colorado Power Station. Staff is also evaluating the 60kV protection system due to recent changes in EL-19001.

**2020-2024 CIP:** Staff completed the 60kV coordination study and is working on designs for replacement of current transformers that would be overloaded during faults. Staff is also working on the designs to replace the

relays on the Maybell Substation feeders. Due to the size and complexity of this project, staff is in the process of procuring an Engineering Consultant to do the detailed design of the equipment layout and wiring.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	563,208	563,208	600,000	300,000	300,000	300,000	309,000	1,809,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>563,208</b>	<b>563,208</b>	<b>600,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>309,000</b>	<b>1,809,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	563,208	563,208	600,000	300,000	300,000	300,000	309,000	1,809,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>563,208</b>	<b>563,208</b>	<b>600,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>309,000</b>	<b>1,809,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



## ELECTRIC FUND



Electric crews preparing to enter underground vault

**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-16001

# Underground System Rebuild

## Description

Underground primary electric cables and equipment have a limited life span and need to be replaced before they fail and cause outages. This project will replace underground electric equipment in areas that were originally installed underground instead of as a part of an Underground District. Work will include the replacement of deteriorated electrical cables, transformers, switches and enclosures. Installation of new equipment will bring the electrical system up to current construction standards.

## Justification

The underground system cables and equipment installed prior to 1990 have an expected life of 30 years and now need to be replaced. In addition, most of the equipment and cables were installed in subsurface enclosures that have standing water in them in the winter. Exposure to water reduces the life of the equipment and electrical connections and require the rebuilding of the facilities. Utilities has specific projects to address rebuilding Underground Districts. This project will address replacing underground equipment that was installed originally as underground and not part of an Underground District.

## Significant Changes

**2021-2025 CIP:** This is an annual budget to fund various projects to replace underground cable as the need is identified. Increases reflect the increased cost of materials and installation.

**2020-2024 CIP:** Staff is working to identify areas that are high priority for cable replacement based on the age of the existing cables. This currently includes areas in the Stanford Research Park, Arastradero Road, and along East Bayshore Road.

**2019-2023 CIP:** Shifting project priorities and staffing shortages have delayed identification and development of projects to replace underground facilities that fall under this project.



2016-2021 CIP: Project established.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	350,000	350,000	350,000	350,000	350,000	350,000	350,000	1,750,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>1,750,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	349,999	349,999	349,999	350,000	350,000	350,000	350,000	1,749,999	0	N/A
<b>Total</b>	<b>N/A</b>	<b>349,999</b>	<b>349,999</b>	<b>349,999</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>350,000</b>	<b>1,749,999</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



**Fund:** Electric Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** EL-19004

Aging pole that needs to be replaced.

## Wood Pole Replacement

### Description

This project will fund the annual replacement of deteriorated wood poles.

### Justification

Wood poles are used to support overhead utility lines throughout Palo Alto. Though poles are inspected, tested, and treated to maintain their integrity, over time poles will deteriorate to the point that they are no longer safe for utility workers. Replacement of wood poles has been funded under the Electric System Improvement project (EL-98003); however, wood pole replacement competes with other system improvement and service reliability work for funding. A new specific project for pole replacement is being established to give pole replacement a higher priority, as poles are getting older, and to ensure proper funding is approved and allocated each year.

### Significant Changes

**2022-2026 CIP:** Due to the timing and execution of the contract, the poles assigned in FY 2020 were completed at the start of FY 2021. The bid proposal and contract to replace the next set of poles will extend into FY 2022. The division does not have sufficient resources to manage a second wood pole project in the year. Funding from FY 2021 is being reappropriated to FY 2022 for the next set of wood pole replacements that year.

**2021-2025 CIP:** The increased costs are due to increases in cost of materials and construction labor. In June 2020, Council approved the contract for construction of this project, in conjunction with EL-17007 - Facility Relocation for Caltrain Modernization Project and construction is expected to start in July 2020.

**2020-2024 CIP:** Project revenues updated to reflect estimated shared costs from AT&T for joint pole access.

**2019-2023 CIP:** Project established.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	N/A	1,744,181	1,744,181	1,350,000	1,350,000	1,350,000	1,350,000	1,395,000	6,795,000	0	N/A
<b>Other</b>	N/A	150,000	150,000	150,000	150,000	150,000	150,000	150,000	750,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,894,181</b>	<b>1,894,181</b>	<b>1,500,000</b>	<b>1,500,000</b>	<b>1,500,000</b>	<b>1,500,000</b>	<b>1,545,000</b>	<b>7,545,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	1,894,181	1,894,181	1,500,000	1,500,000	1,500,000	1,500,000	1,545,000	7,545,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,894,181</b>	<b>1,894,181</b>	<b>1,500,000</b>	<b>1,500,000</b>	<b>1,500,000</b>	<b>1,500,000</b>	<b>1,545,000</b>	<b>7,545,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



CITY OF  
**PALO  
ALTO**

# Undergrounding Projects



**Fund:** Electric Fund  
**Category:** Undergrounding Projects  
**Managing Department:** Utilities  
**Initial Project Start:** Spring 2017  
**Initial Project Completion:** Spring 2019  
**Revised Project Start:** Spring 2026  
**Revised Project Completion:** Spring 2027  
**Project Number:** EL-08001

Intersection of Embarcadero Road and Waverley Street (part of Underground District 42)

## Underground District 42 - Embarcadero Road, Emerson, Middlefield

### Description

This project will replace the existing overhead electrical distribution system with an underground system along Embarcadero between Emerson and Middlefield. This project involves creating an Underground Utilities District and performing the work on a general benefit basis under the provisions of Utility Rule 17 which requires the Utility to bear the cost of the distribution system and the property owners to bear the cost of undergrounding their services.

### Justification

Benefits of undergrounding include system improvement, higher reliability, reduced tree trimming, and improved aesthetics. Undergrounding has been approved to continue the ongoing underground conversion program because the area meets the California Public Utilities Commission rules dictating the areas where a telephone company can underground their lines.

### Significant Changes

**2023-2027 CIP:** Project construction estimates of approximately \$1.5 million programmed for FY 2027.

**2022-2026 CIP:** This project has been deferred, with design beginning in FY 2026 due to lack of resources and higher priority projects.

**2021-2025 CIP:** This project has been deferred to lack of resources and higher priority projects.

**2020-2024 CIP:** Design and construction are being spread over two years.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	0	0	0	0	0	0	50,000	1,500,000	1,550,000	0	1,550,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>1,500,000</b>	<b>1,550,000</b>	<b>0</b>	<b>1,550,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	0	1,500,000	1,500,000	0	1,500,000
<b>Design</b>	0	0	0	0	0	0	50,000	0	50,000	0	50,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>1,500,000</b>	<b>1,550,000</b>	<b>0</b>	<b>1,550,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



**Fund:** Electric Fund  
**Category:** Undergrounding Projects  
**Project Location:** Alma, Addison, Bryant, and Melville  
**Managing Department:** Utilities  
**Initial Project Start:** Spring 2018  
**Initial Project Completion:** Spring 2019  
**Revised Project Start:** Spring 2026  
**Revised Project Completion:** Spring 2027  
**Project Number:** EL-11009

Alma Street at Embarcadero Road (part of Underground District 43)

## Underground District 43 - Alma/ Embarcadero

### Description

This project will replace the existing overhead electrical distribution system with an underground system in the area bounded by Alma, Addison, Bryant, and Melville. This project involves creating an Underground Utilities District and performing the work on a general benefit basis under the provisions of Utility Rule 17, which requires the Utility to bear the cost of the distribution system and the property owners to bear the cost of undergrounding their services.

### Justification

Benefits of undergrounding include system improvement, higher reliability, reduced tree trimming, and improved aesthetics. Undergrounding has been approved to continue the ongoing underground conversion program because the area meets California Public Utilities Commission rules dictating the areas where a telephone company can underground their lines.

### Significant Changes

**2023-2027 CIP:** Project construction estimates of approximately \$1.5 million programmed for FY 2027.

**2022-2026 CIP:** This project has been deferred, with design beginning in FY 2026 due to lack of resources and higher priority projects.

**2021-2025 CIP:** This project is deferred to later years to focus on higher priority work.

**2020-2024 CIP:** Design and construction work is being spread over two years.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Electric Fund</b>	0	0	0	0	0	0	50,000	1,500,000	1,550,000	0	1,550,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>1,500,000</b>	<b>1,550,000</b>	<b>0</b>	<b>1,550,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	0	1,500,000	1,500,000	0	1,500,000
<b>Design</b>	0	0	0	0	0	0	50,000	0	50,000	0	50,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50,000</b>	<b>1,500,000</b>	<b>1,550,000</b>	<b>0</b>	<b>1,550,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



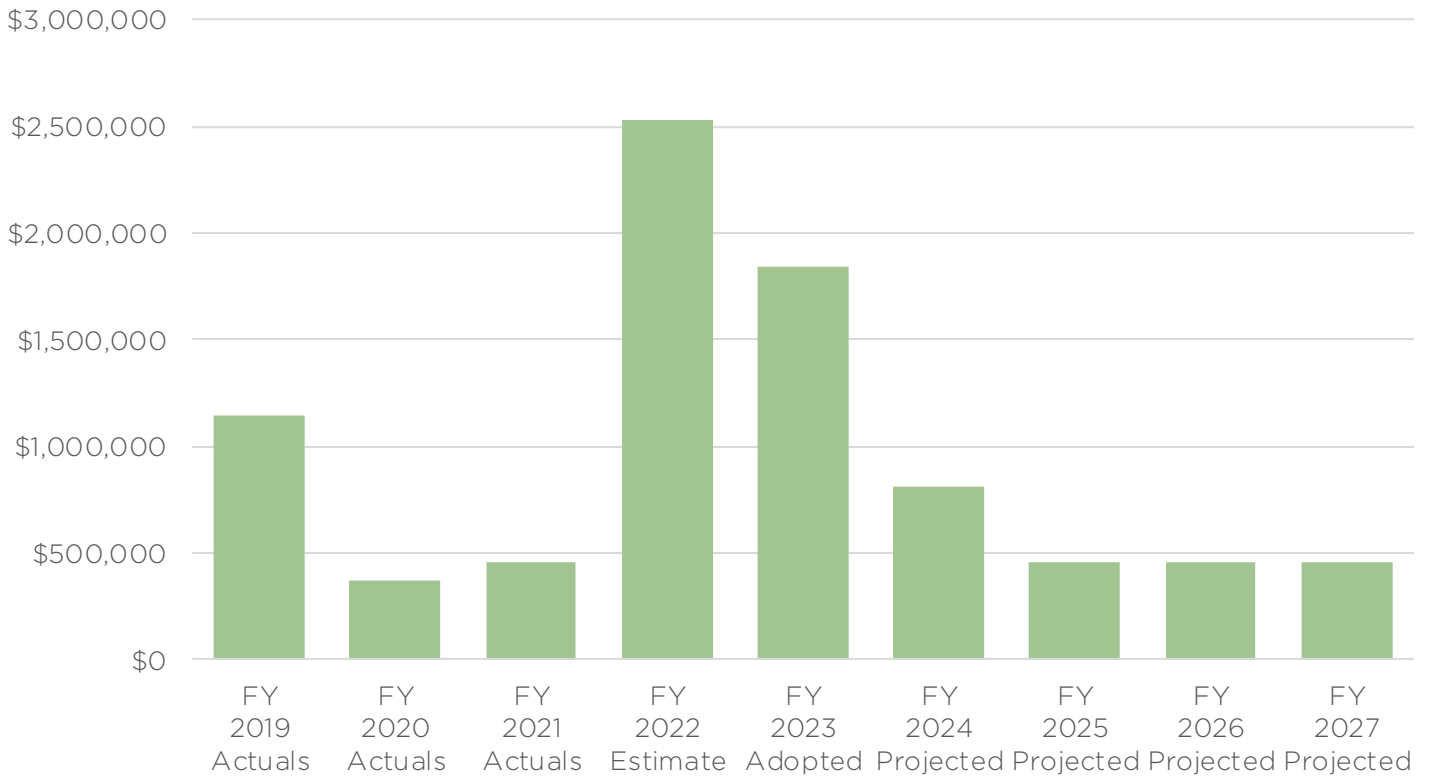
CITY OF  
**PALO  
ALTO**

# FIBER OPTICS FUND

# Overview

The City of Palo Alto offers a full array of utility services to its citizens and businesses. The most recent addition to this list of services provided to City of Palo Alto residents and commercial customers is the licensing of dark fiber service connections on a dark optical fiber backbone network (fiber network), originally designed and built by the City in the mid to late 1990s.

## Fiber Optics Fund Capital Expenditures



For the 2023-2027 Capital Improvement Program (CIP), expenditures of \$4.0 million are programmed, with \$1.8 million allocated in Fiscal Year 2023. Major projects funded in the 2023-2027 CIP include Fiber Optics Customer Connections (\$1.3 million), Fiber Network System Rebuild (\$1.0 million), and Fiber Network System Improvements (\$1.8 million). The budget for the Fiber Optics CIP can be categorized into two types of projects: Capacity Improvements and Customer Connections.

## Infrastructure Inventory

CLASSIFICATION	QUANTITY
Route Miles of Backbone Fiber Cable	55.4
Route Miles of Overhead Backbone Fiber Optic Cable	21.6
Route Miles of Underground Backbone Fiber Optic Cable	33.8

## Capacity Improvements

With advances in various technologies dependent on high-bandwidth broadband connectivity, increases in online services and applications, and significant increases in data transmission over fiber optic networks, access to fiber optic cables is increasingly in demand. To ensure reliable fiber optic service to City of Palo Alto residents and commercial customers, network components such as fiber optic cables and splice cabinets need to be upgraded or added to increase capacity; replaced or protected from damage by animals; and rerouted away from hazardous conditions.

### Recent Accomplishments

- Completed a 60% detailed design of fiber network that incorporates current and future City needs, new dark fiber leasing and supports a future fiber-to-the premise platform.
- Conducted Fiber-to-the-Home (FTTH) education, community engagement, and residential and commercial broadband survey.
- Reviewed local ordinances (i.e. Dig Once, One Touch Make Ready, Multi-unit Housing Access) to reduce construction costs and implementation time associated with a fiber network expansion.
- Installed substructure cable on Arastradero to enhance network capacity for future expansion.
- Installed a camera in Foothills for fire prevention purposes.

## 2023-2027 Capital Improvement Program

### Recurring Projects

There is one recurring project in the Capacity Improvements category in the 2023-2027 CIP:

- Fiber Optics Network System Improvements (Fiscal Year 2023: \$0.6 million; 5-Year CIP: \$1.8 million)

### Non-Recurring Projects

There is one non-recurring project in the Capacity Improvements category in the 2023-2027 CIP:

- Fiber Optics Network System Rebuild (Fiscal Year 2023 and 5-Year CIP: \$1.0 million)

## Customer Connections

The fiber network must evolve as customers continually change their fiber optic needs due to equipment additions, new construction, building expansions, building remodels, teardowns and rebuilds, and new building occupancy types. Projects in this category include work required to meet the needs of customers who have applied for new or upgraded dark fiber optic service connections. The connection costs associ-

# FIBER OPTICS FUND

ated with new or upgraded connections are offset by non-recurring charges (NRC) to establish the connections and monthly recurring charges (MRC) or dark fiber license fees.

## 2023-2027 Capital Improvement Program

### Recurring Projects

There is one recurring project in the Fiber Optics Customer Connections category with amounts in the 2023-2027 CIP:

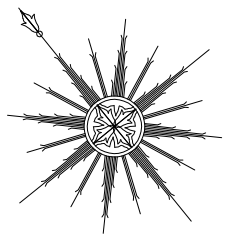
- Customer Connections (Fiscal Year 2023 \$0.3 million; 5-Year CIP: \$1.5 million)

### Non-Recurring Projects

There are no non-recurring projects in this category.

## Fiber Optics

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Other</b>									
<b>FO-10000</b>	Fiber Optics Customer Connections	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
<b>Other Total</b>		<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$1,000,000</b>
<b>Total Sources</b>		<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$1,000,000</b>
<b>USE OF FUNDS</b>									
<b>Capacity Improvements</b>									
<b>FO-10001</b>	Fiber Optics Network - System Improvements	259,958	259,958	595,000	561,000	202,500	203,300	203,900	1,765,700
<b>FO-16000</b>	Fiber Optics Network - System Rebuild	1,963,225	1,963,225	1,000,000	0	0	0	0	1,000,000
<b>Capacity Improvements Total</b>		<b>\$2,223,183</b>	<b>\$2,223,183</b>	<b>\$1,595,000</b>	<b>\$561,000</b>	<b>\$202,500</b>	<b>\$203,300</b>	<b>\$203,900</b>	<b>\$2,765,700</b>
<b>Customer Connections</b>									
<b>FO-10000</b>	Fiber Optics Customer Connections	250,000	250,000	250,000	251,600	253,100	254,100	254,900	1,263,700
<b>Customer Connections Total</b>		<b>\$250,000</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$251,600</b>	<b>\$253,100</b>	<b>\$254,100</b>	<b>\$254,900</b>	<b>\$1,263,700</b>
<b>Total Uses</b>		<b>\$2,473,183</b>	<b>\$2,473,183</b>	<b>\$1,845,000</b>	<b>\$812,600</b>	<b>\$455,600</b>	<b>\$457,400</b>	<b>\$458,800</b>	<b>\$4,029,400</b>



MAY 2022

## LEGEND

<p><b>F</b></p> <p><b>F1</b></p> <p><b>F6</b></p> <p><b>VARIOUS</b></p>	<p><b>PROPOSED FIBER OPTIC BACKBONE EXTENSION</b></p> <p>ADD FIBER CABLE TO INCREASE CAPACITY TO SERVE (XXXXX) _____ 2023 - 2027</p> <p>SAME AS ABOVE (XXXXX) _____ 2023 - 2027</p> <p>EXPANSION IN CONJUNCTION WITH UTILITY COMMUNICATION UPGRADES (XXXXX) _____ 2023 - 2027</p> <p><b>PROPOSED FIBER OPTIC SYSTEM IMPROVEMENT</b></p> <p><b>VARIOUS</b> RELIABILITY IMPROVEMENT (10001) _____ RECURRING</p> <p>FOOTHILLS SYSTEM REBUILD (10001) _____ 2021 - 2025</p>
---	---



The City of Palo Alto



# FIBER OPTIC FUND 2023-2027 CAPITAL IMPROVEMENT PROGRAM

This map is a product of the City of Palo Alto GIS





CITY OF  
**PALO  
ALTO**



# Capacity Improvements

## FIBER OPTICS FUND



Fiber optic crew installing new fiber optic cables

**Fund:** Fiber Optics Fund  
**Category:** Capacity Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** FO-10001

# Fiber Optics Network - System Improvements

## Description

This project provides funding to improve reliability within the existing fiber network. Typical activities in this project include purchasing, upgrading, and installing fiber optic cables, conduits, and splice enclosures.

## Justification

This project promotes the formation of a competitive market for telecommunications in Palo Alto by accelerating the pace at which high-quality, low-cost, advanced telecommunications services are delivered to the residents and businesses in Palo Alto. This occurs while limiting the negative impacts on Palo Alto's environment by using existing conduit and wood utility poles in the public rights-of-way. This also enables the Fiber Optics Fund to generate additional revenues through the enhanced use of its existing conduit and wood utility poles.

## Supplemental Information

The Fiber Optics Utility continues to add capacity improvements in the form of additional fiber in congested areas as well as areas of predicted growth.

## Significant Changes

**2023-2027 CIP:** As part of Electric Fund's Foothills Rebuild (Fire Mitigation) project (EL-21001), the Electric Fund will underground the overhead lines in the Foothills. Since the substructure will include conduits for fiber optics, the Fiber Fund will cover one-third, or approximately \$2.0 million, of substructure costs. The project's expense in FY 2024 and FY 2025 will be updated in the next budget cycle to reflect this funding.

**2022-2026 CIP:** Staff will postpone and combine the Montebello project with the Wildfire Mitigation Project to save costs on the substructure work.

**2021-2025 CIP:** Changed project title from Fiber Optic System Improvements to Fiber Optic Network - System Improvements.

**2020-2024 CIP:** The Fiber Optics Fund will build emergency water supply resiliency at Montebello reservoir to enable the Utilities Supervisory Control and Data Acquisition (SCADA) system to add full remote-control valves at the reservoir. Montebello is the only reservoir (of seven) remaining without available fiber service connections. Staff must manually turn on/off the valves which may be difficult after a major earthquake or unsafe during a wildfire or similar emergencies. In addition, intermittent loss of cellular and radio coverage in the foothills area where the reservoir is located may occur. This is a major impediment for emergency response calls. Finally, if fiber is available at Montebello Reservoir, Utilities can use this fiber for backhaul communication links for Advanced Metering Infrastructure (AMI) collectors to serve customers.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Fiber Optics Fund</b>	N/A	259,959	259,959	595,000	561,000	202,500	203,300	203,900	1,765,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>259,959</b>	<b>259,959</b>	<b>595,000</b>	<b>561,000</b>	<b>202,500</b>	<b>203,300</b>	<b>203,900</b>	<b>1,765,700</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	259,958	259,958	595,000	561,000	202,500	203,300	203,900	1,765,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>259,958</b>	<b>259,958</b>	<b>595,000</b>	<b>561,000</b>	<b>202,500</b>	<b>203,300</b>	<b>203,900</b>	<b>1,765,700</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Business &amp; Economics                  Section: Culture of Innovation and Business Diversity                  Goal: B-4                  Policy: B-4.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission                  Architectural Review Board</p>
--	---

## FIBER OPTICS FUND



Fiber optic splice closer ready for inspection and work

**Fund:** Fiber Optics Fund  
**Category:** Capacity Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Spring 2016  
**Initial Project Completion:** Spring 2018  
**Revised Project Start:** Spring 2019  
**Revised Project Completion:** Spring 2023  
**Project Number:** FO-16000

# Fiber Optics Network - System Rebuild

## Description

This project rebuilds portions of the fiber network to improve capacity, which will facilitate licensing of dark fiber to companies that provide telecommunication services to residents and businesses in Palo Alto. The project will install new aerial duct or substructures (conduit and boxes) and additional fiber backbone cables to increase capacity for sections of the network that are at or near capacity to meet customer requests for service connections. The main rebuild project areas are the Stanford Research Park, the Palo Alto Internet Exchange (PAIX) at 529 Bryant Street, and the downtown business district.

## Justification

The fiber network was planned, designed, and constructed in the mid to late 1990s by City of Palo Alto Utilities Department. The Utilities Department began to license dark fiber service connections for commercial purposes in the late 1990s. Since then, several sections of the fiber network have reached capacity and limited the City's ability to efficiently serve its customers. This project will increase network capacity and improve reliability, allowing the City to maintain a competitive market for telecommunications by accelerating the pace at which high-quality and low-cost advanced telecommunications services are delivered to residents and businesses.

## Supplemental Information

Coordination of Fiber-to-the-Premise (FTTP) with electric and natural gas utility planning enables an integrated approach to strategies such as building electrification and electric vehicle support infrastructure at the scale of neighborhood blocks and potentially entire neighborhoods. Contingent on completing a competitive Request for Proposals process and seeking Council approval, a telecommunications consulting firm will be retained under a Professional Services Agreement to develop a fiber network expansion plan in four (4) phases. The scope of work entails the following:

- Phase 1 seeks a high-level design and cost estimate for fiber expansion to support Advanced Metering Infrastructure (AMI), Supervisory Control and Data Acquisition (SCADA), and wireless communication for City field staff and other City services;
- Phase 2 seeks a detailed engineering design and cost estimate for fiber expansion to support AMI, SCADA, and wireless communication for City field staff and other City services;
- Phase 3 seeks a business case and high-level design for a citywide FTTP network. The FTTP network and high-level design in the business case should expand on the fiber network for AMI, SCADA and wireless communication; and
- Phase 4 seeks a detailed engineering design, cost estimate, and a phased deployment approach for FTTP.

Upon the completion of each phase, staff will return to the Council with findings and recommendations and request authorization to proceed to the next phase.

Note: The fiber optic connections for AMI implementation and connections for the existing SCADA system is funded by the Electric Fund.

### Significant Changes

**2023-2027 CIP:** Detailed engineering design of the new Fiber Backbone Expansion and fiber-to-the-home (FTTH) currently in progress and is anticipated to be completed by Spring 2023. \$1.0 million estimated costs for initial design work have been programmed into this project, pending further changes resulting from final approval of final scope and business plan.

**2022-2026 CIP:** Council approved staff's recommendation to combine phase 2 and 4 together for efficiency gains and cost savings. By combining phases 2 and 4, the detailed engineering can be completed for the two phases concurrently rather than independently of one another. This will lead to a shortened design timeframe and reduced costs for the City.

**2021-2025 CIP:** Changed project title from Fiber Optic System Rebuild to Fiber Optic Network - System Rebuild. In November 2018, the Council accepted the Smart Grid and Technology Implementation Plan and directed staff to align fiber network expansion with the Advanced Metering Infrastructure (AMI) implementation plan. The project was delayed and funding was reappropriated.

In June 2019, Council directed staff to design and plan a fiber network system based on fundamental principles that leverage and expand the network to support a communications platform for AMI; Supervisory Control and Data Acquisition (SCADA) systems; Emerging Smart City initiatives (e.g. traffic management, smart streetlights, parking garage sensors, data collection); and deployment of City operations dependent on fiber for the delivery of essential City services.

The objective is to pursue a comprehensive fiber expansion strategy from an integrated cross-utility perspective. This strategy is focused on evaluating the feasibility of integrating fiber network expansion into other ongoing utility capital improvement projects and programs, if practical, to fully leverage the City's fiber asset. The City is adding new telecommunication infrastructure which may reduce the incremental cost to extend fiber and wireless communications infrastructure to residential and commercial areas. This

# FIBER OPTICS FUND

integrated strategy for fiber expansion planning includes the above-noted fiber network rebuild project and may also become a foundation for (FTTP).

**2019-2023 CIP:** Due to limited staffing, this project has shifted to start in FY 2019. Additionally, \$0.3 million has been added to the following two years to address additional site locations.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Fiber Optics Fund</b>	351,884	1,963,225	1,963,225	1,000,000	0	0	0	0	1,000,000	0	3,315,109
<b>Total</b>	<b>351,884</b>	<b>1,963,225</b>	<b>1,963,225</b>	<b>1,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,000,000</b>	<b>0</b>	<b>3,315,109</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	318,446	1,963,225	1,963,225	1,000,000	0	0	0	0	1,000,000	0	3,281,671
<b>Design</b>	33,429	0	0	0	0	0	0	0	0	0	33,429
<b>Total</b>	<b>351,875</b>	<b>1,963,225</b>	<b>1,963,225</b>	<b>1,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,000,000</b>	<b>0</b>	<b>3,315,100</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Business & Economics  
Section: Culture of Innovation and Business Diversity  
Goal: B-4  
Policy: B-4.1

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission  
Architectural Review Board

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

# Customer Connections



# FIBER OPTICS FUND



**Fund:** Fiber Optics Fund  
**Category:** Customer Connections  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** FO-10000

Technician installing new fiber optic cables

## Fiber Optics Customer Connections

### Description

This project provides funding for the installation of fiber optic infrastructure for new service connections. Typical activities in this project include: purchasing, upgrading, and installing fiber optic cables, conduits, and splice enclosures at customer sites.

### Justification

This project promotes the formation of a competitive market for telecommunications in Palo Alto, accelerating the pace at which high-quality, low-cost, advanced telecommunications services are delivered to businesses while limiting the negative impacts on Palo Alto's environment by using existing conduits and wood utility poles rather than adding additional infrastructure to support the system. This project enables the Fiber Optics Fund to generate additional revenues through the enhanced use of its conduits and poles.

### Supplemental Information

The cost to the Fiber Optics Fund associated with new service connections and the City's cost of ownership are billed to the requesting parties.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Fiber Optics Fund</b>	N/A	50,000	50,000	50,000	51,600	53,100	54,100	54,900	263,700	0	N/A
<b>Other</b>	N/A	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>250,000</b>	<b>250,000</b>	<b>250,000</b>	<b>251,600</b>	<b>253,100</b>	<b>254,100</b>	<b>254,900</b>	<b>1,263,700</b>	<b>0</b>	<b>N/A</b>



## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	250,000	250,000	250,000	251,600	253,100	254,100	254,900	1,263,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>250,000</b>	<b>250,000</b>	<b>250,000</b>	<b>251,600</b>	<b>253,100</b>	<b>254,100</b>	<b>254,900</b>	<b>1,263,700</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Business &amp; Economics                  Section: Culture of Innovation and Business Diversity                  Goal: B-4                  Policy: B-4.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission                  Architectural Review Board</p>
--	---



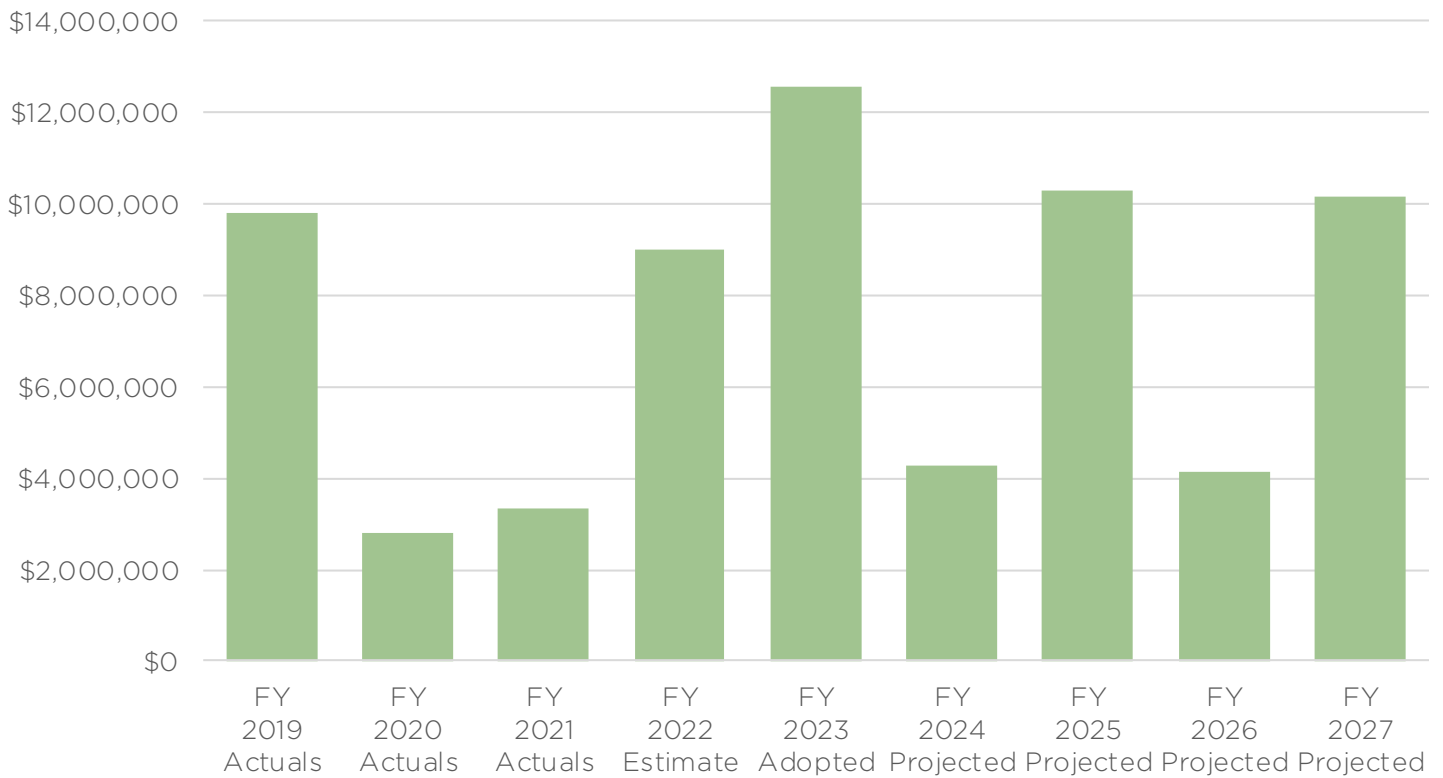
CITY OF  
**PALO  
ALTO**

# GAS FUND

# Overview

The City of Palo Alto offers a full array of utility services to its citizens and businesses. The municipal natural gas distribution system began operation in 1917 and provides safe, reliable, and cost-effective gas service to residents and customers of Palo Alto. For the 2023-2027 Capital Improvement Program (CIP), approximately \$41.4 million is projected, with \$12.5 million allocated in Fiscal Year 2023. Overall, a total of eight projects are planned for the 5-year CIP.

## Gas Fund Capital Expenditures



Major projects funded in the 2023-2027 CIP include Gas Main Replacements (cumulative total of \$30.1 million), Gas System, Customer Connections (\$5.8 million), and Gas Meters and Regulators (\$2.5 million). The budget for the Gas Fund CIP can be categorized into three separate types of projects: Customer Connections, Gas Main Replacements, and System Improvements.

## Infrastructure Inventory

CLASSIFICATION	QUANTITY
Total miles of gas main distribution system	210.66
Total miles of gas service extension to residents and businesses	200.96
Number of gas receiving stations	4

## Natural Gas System Miles of Pipeline by Material

MATERIAL TYPE	MILES OF MAINS IN SYSTEM	NUMBER OF SERVICES IN SYSTEM	MILES OF SERVICES IN SYSTEM (AVG 62'SERVICE)
Steel	61.79	2,158	24.93
Plastic, PVC	32.08	691	7.98
Plastic, PE	116.74	14,459	167.05
Plastic, ABS	0.05	15	0.17
Plastic, Other	0.00	4	0.05
Other	0.00	68	0.79
<b>TOTAL</b>	<b>210.66</b>	<b>17,395</b>	<b>200.96</b>

## Customer Connections

As customers continually change their gas needs due to equipment additions, building expansions, building remodels, and new building occupancy types, the gas system must evolve to meet these needs. The Gas System Customer Connections project, which is one of the largest recurring projects within the Gas Fund is accounted for within this category. This project allows for the completion of work required to meet the needs of customers who have applied for new or upgraded gas service. The Gas Fund pays for a portion of this project, while remaining costs are supported by reimbursements from customers for connection work performed by the City.

### Recent Accomplishments

- In Fiscal Year 2021, the Utilities Gas Division completed approximately 162 customer service projects at a cost of approximately \$0.4 million.

## 2023-2027 Capital Improvement Program

### Recurring Projects

Recurring projects in this category include the following:

- Gas System, Customer Connections (Fiscal Year 2023: \$1.2 million; 5-Year CIP: \$5.8 million)

### Gas Main Replacements

The Gas Main Replacements (GMR) category accounts for the replacement of inadequately-sized and structurally deficient gas mains and services that are subject to corrosion or reaching the end of their expected life. The Utilities Department coordinates with the Public Works Department's street maintenance projects to minimize damage to the City's pavement and maximize cost efficiency. In the next five years, it is anticipated that approximately 70,000 linear feet of gas mains, or six percent of the entire system, will be replaced. The 2023-2027 CIP includes \$30.1 million in funding for projects within this category.

#### Recent Accomplishments

- Completed construction on the Gas Main Replacement 23 project of approximately 20,900 linear feet of natural gas mains and approximately 180 natural gas service pipelines made of Polyvinyl Chloride (PVC) and Steel Black Wrap Pipe (BWP).
- Finalized designs of the Gas Main Replacement 24 project to replace 25,200 linear feet of natural gas mains and approximately 190 natural gas service pipeline made of Polyvinyl Chloride (PVC) and Steel Black Wrap Pipe (BWP).

### 2023-2027 Capital Improvement Program

#### Non-Recurring Projects

A total of four GMR projects are included in the 2023-2027 CIP (Fiscal Year 2023: \$10.1 million; 5-Year CIP: \$30.1 million).

### System Improvements

To ensure reliable gas services for City of Palo Alto residents and customers, gas infrastructure must be replaced upon reaching the end of its expected life. The System Improvements category includes three projects during the 2023-2027 CIP at a total cost of \$5.5 million, with \$1.3 million allocated in Fiscal Year 2023.

#### Recent Accomplishments

- In calendar year 2021, repaired 87 Grade 1, 2, and 3 leaks throughout the City.
- Completed inspection of approximately 983 of the 1,480 sanitary sewer laterals to be inspected in year one under the Phase III Crossbore Gas Safety Program. Year 2 under the Phase III Crossbore Gas Safety Program will continue inspecting the remaining sanitary sewer laterals.
- Purchased new Polyethylene pipe peelers for fusing water, gas, and wastewater Polyethylene pipe.
- Replaced leaking valves and gas service lines to comply with new utility standards through the City.

### 2023-2027 Capital Improvement Program

#### Recurring Projects

There are three recurring projects in the System Improvements category in the 2023-2027 CIP:

- Gas Distribution System Improvements (Fiscal Year 2023: \$0.8 million; 5-Year CIP: \$2.8 million)
- Gas Equipment and Tools (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.3 million)
- Gas Meters and Regulators (Fiscal Year 2023: \$0.5 million; 5-Year CIP: \$2.5 million)

Please refer to the City of Palo Alto Utilities webpage to confirm project details: <https://www.cityof-paloalto.org/Departments/Utilities/Utilities-Services-Safety/Utilities-Projects>

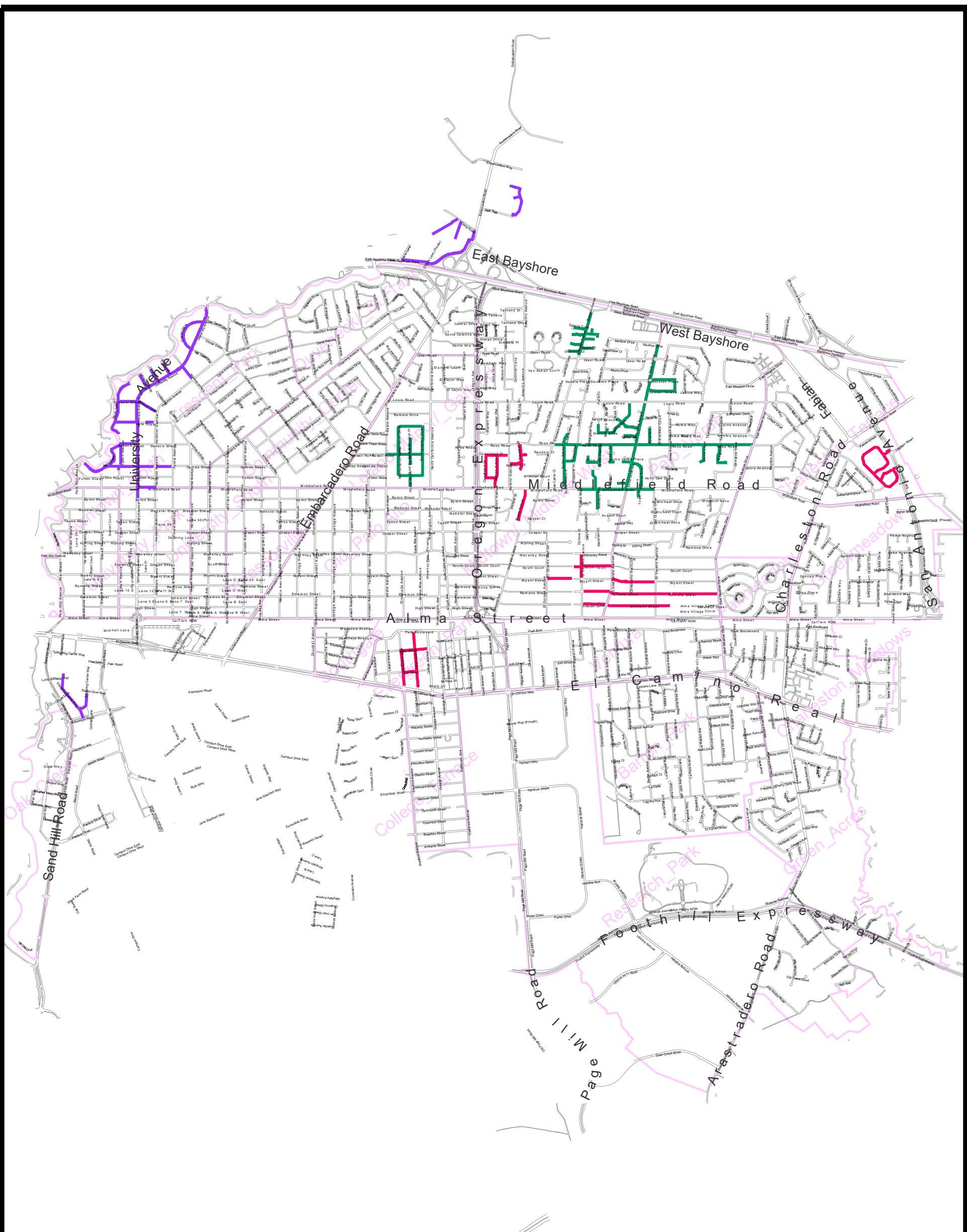
## Gas

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Other</b>									
GS-80017	Gas System, Customer Connections	900,000	900,000	900,000	900,000	900,000	900,000	900,000	4,500,000
<b>Other Total</b>		<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$4,500,000</b>
<b>Total Sources</b>		<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$4,500,000</b>
<b>USE OF FUNDS</b>									
<b>Customer Connections</b>									
GS-80017	Gas System, Customer Connections	1,198,730	1,198,730	1,166,900	1,210,900	1,247,200	1,100,000	1,100,000	5,825,000
<b>Customer Connections Total</b>		<b>\$1,198,730</b>	<b>\$1,198,730</b>	<b>\$1,166,900</b>	<b>\$1,210,900</b>	<b>\$1,247,200</b>	<b>\$1,100,000</b>	<b>\$1,100,000</b>	<b>\$5,825,000</b>
<b>Gas Main Replacements</b>									
GS-13001	Gas Main Replacement - Project 23	6,970,086	6,876,392	93,694	0	0	0	0	93,694
GS-14003	Gas Main Replacement - Project 24	2,000,000	20,000	9,980,000	0	0	0	0	9,980,000
GS-15000	Gas Main Replacement - Project 25	0	0	0	2,000,000	8,000,000	0	0	10,000,000
GS-16000	Gas Main Replacement - Project 26	0	0	0	0	0	2,000,000	8,000,000	10,000,000
<b>Gas Main Replacements Total</b>		<b>\$8,970,086</b>	<b>\$6,896,392</b>	<b>\$10,073,694</b>	<b>\$2,000,000</b>	<b>\$8,000,000</b>	<b>\$2,000,000</b>	<b>\$8,000,000</b>	<b>\$30,073,694</b>
<b>System Improvements</b>									
GS-11002	Gas Distribution System Improvements	570,756	320,756	750,000	500,000	500,000	500,000	500,000	2,750,000
GS-13002	Gas Equipment and Tools	61,187	61,187	50,000	50,000	50,000	50,000	50,000	250,000
GS-80019	Gas Meters and Regulators	522,250	522,250	500,000	500,000	500,000	500,000	500,000	2,500,000
<b>System Improvements Total</b>		<b>\$1,154,193</b>	<b>\$904,193</b>	<b>\$1,300,000</b>	<b>\$1,050,000</b>	<b>\$1,050,000</b>	<b>\$1,050,000</b>	<b>\$1,050,000</b>	<b>\$5,500,000</b>
<b>Total Uses</b>		<b>\$11,323,009</b>	<b>\$8,999,315</b>	<b>\$12,540,594</b>	<b>\$4,260,900</b>	<b>\$10,297,200</b>	<b>\$4,150,000</b>	<b>\$10,150,000</b>	<b>\$41,398,694</b>



CITY OF  
**PALO  
ALTO**

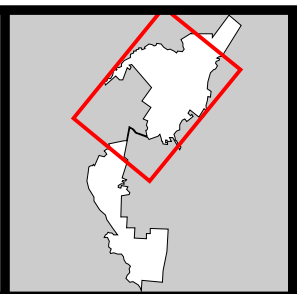
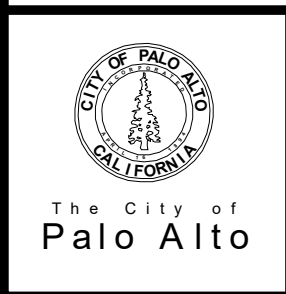




Page 111

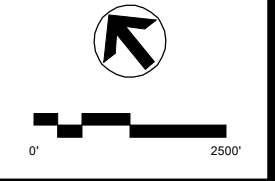
**Gas Main Replacement (GMR) Projects**

- FY'23 (GMR 24)
- FY'25 (GMR 25)
- FY'27 (GMR 26)



## GAS FUND MAP FY'23 to FY'27 CAPITAL IMPROVEMENT PROGRAM

This map is a product of the City of Palo Alto GIS





CITY OF  
**PALO  
ALTO**

# Customer Connections

## GAS FUND



Gas System

**Fund:** Gas Fund  
**Category:** Customer Connections  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** GS-80017

# Gas System, Customer Connections

## Description

This funding allows for the Gas Distribution System to be extended in order to provide gas service to new customers and augment service to customers with increased natural gas demands. Improvements include new mains, services, valves, regulators, meters, and accessories.

## Justification

This project upgrades infrastructure to provide gas service connections to new customers, meet changes in existing customer service demands, and respond to changes in gas service requirements due to new development or redevelopment. This project is funded partially from reimbursements by customers.

## Significant Changes

**2021-2025 CIP:** Funding was decreased slightly to reflect actual expenditures from prior years.

**2015-2019 CIP:** Project was retitled from Gas Systems Extensions.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Gas Fund</b>	N/A	298,730	298,730	266,900	310,900	347,200	200,000	200,000	1,325,000	0	N/A
<b>Other</b>	N/A	900,000	900,000	900,000	900,000	900,000	900,000	900,000	4,500,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,198,730</b>	<b>1,198,730</b>	<b>1,166,900</b>	<b>1,210,900</b>	<b>1,247,200</b>	<b>1,100,000</b>	<b>1,100,000</b>	<b>5,825,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	1,198,730	1,198,730	1,166,900	1,210,900	1,247,200	1,100,000	1,100,000	5,825,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,198,730</b>	<b>1,198,730</b>	<b>1,166,900</b>	<b>1,210,900</b>	<b>1,247,200</b>	<b>1,100,000</b>	<b>1,100,000</b>	<b>5,825,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Energy  
Goal: N-7  
Policy: N-7.1

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.



CITY OF  
**PALO  
ALTO**

# Gas Main Replacements





Installation of new HDPE gas service main

**Fund:** Gas Fund

**Category:** Gas Main Replacements

**Project Location:** Various locations

**Managing Department:** Utilities

**Initial Project Start:** Summer 2016

**Initial Project Completion:** Winter 2018

**Revised Project Start:** Summer 2019

**Revised Project Completion:** Fall 2022

**Project Number:** GS-13001

# Gas Main Replacement - Project 23

## Description

This project replaces approximately 20,900 linear feet (which represents 1.8 percent of the City's Gas Distribution System) of gas mains that may be leaking, inadequately-sized, and/or structurally deficient. These replacements are located on various streets in the Evergreen Park, Ventura, Midtown, College Terrace, Charleston Terrace, and Research Park neighborhoods. Staff identifies problematic mains/services by researching maintenance and leak histories, analyzing performance of the entire Gas Distribution System, and considering risks ratings of the Distribution Integrity Management Plan.

## Justification

The project will target replacing PVC mains and services located in business districts and steel mains and services with ineffective corrosion protection, also known as cathodic protection. This project is mandatory due to the need to replace aging infrastructure and to reduce the City's liability exposure due to PVC and steel gas facilities with ineffective cathodic protection.

## Supplemental Information

The City of Palo Alto Distribution Integrity Management Plan's mathematical model is used to evaluate risks presented by PVC and steel facilities located within business districts that have been assigned the highest probability and consequence scores. Targeted streets will be coordinated with the Public Works Street Maintenance Program to complete replacement before streets are paved. Linear footage and locations are subject to change. Please refer to the City of Palo Alto Utilities webpage for the most recent project details.

## Significant Changes

**2022-2026 CIP:** The design was completed during the summer and construction is scheduled to start in the winter of 2021.



**2021-2025 CIP:** In order to maintain Gas fund reserves within acceptable target levels, staff reduced the scope and budget of the project by 5,436 linear feet and approximately \$3,000,000.

**2020-2024 CIP:** City staff has proposed a new replacement schedule of completing a water, gas and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. In the last few years there have been fewer bidders and higher prices on construction projects due to the increased demand for construction services. Revised total project estimate to \$11.0 million, an increase of \$3.8 million, due to higher construction costs. The project scope has also increased by 7,136 in linear footage.

**2019-2023 CIP:** The budget has been revised to account for construction cost escalation.

**2018-2022 CIP:** The construction is postponed to start in FY 2018 due to GMR 22 being delayed.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Gas Fund</b>	981,783	6,970,087	6,876,393	93,694	0	0	0	0	93,694	0	7,951,870
<b>Total</b>	<b>981,783</b>	<b>6,970,087</b>	<b>6,876,393</b>	<b>93,694</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93,694</b>	<b>0</b>	<b>7,951,870</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	795,383	6,904,022	6,876,242	27,780	0	0	0	0	27,780	0	7,699,405
<b>Design</b>	186,389	66,064	150	65,914	0	0	0	0	65,914	0	252,453
<b>Total</b>	<b>981,772</b>	<b>6,970,086</b>	<b>6,876,392</b>	<b>93,694</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93,694</b>	<b>0</b>	<b>7,951,858</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



**Fund:** Gas Fund  
**Category:** Gas Main Replacements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Winter 2020  
**Revised Project Start:** Summer 2022  
**Revised Project Completion:** Fall 2023  
**Project Number:** GS-14003

Installation of new HDPE gas service main

## Gas Main Replacement - Project 24

### Description

This project replaces approximately 25,200 linear feet (which represents 2.3 percent of the City's Gas Distribution System) of leaking, inadequately-sized, and structurally deficient gas mains and services located on various streets in neighborhoods of the Stanford Research Park, Green Acres, Charleston Terrace, and the Stanford Industrial business districts. Staff identifies problematic mains/services by researching maintenance and leak histories, analyzing performance of the entire Gas Distribution System, and considering risks ratings of the Distribution Integrity Management Plan.

### Justification

The project will target replacing PVC mains and services located in business districts and steel mains and services with ineffective corrosion protection, also known as cathodic protection. This project is mandatory due to the need to replace aging infrastructure and to reduce the City's liability exposure due to PVC and steel gas facilities with ineffective cathodic protection.

### Supplemental Information

The City of Palo Alto Distribution Integrity Management Plan's mathematical model is used to evaluate risks presented by PVC and steel facilities, located within business districts that have been assigned the highest probability and consequence scores. Targeted streets will be coordinated with the Public Works Street Maintenance Program to complete replacement before streets are paved. Linear footage and locations are subject to change. Please refer to the City of Palo Alto Utilities webpage for the most recent project details.

### Significant Changes

**2023-2027 CIP:** \$1.0 million was reallocated from GMR 25 to this project's schedule to address higher priority mains and services recently identified. This will decrease the linear footage of GMR 25 by approximately 5,000

feet and increase the linear footage of this project by approximately 5,000 feet, resulting in a net zero change of linear feet of PVC pipes being addressed in the Gas Distribution system.

**2022-2026 CIP:** To maintain the Gas fund reserve within acceptable target levels and keep rate increases low, the project budget for GMR 24 has decreased by \$2.0 million.

**2021-2025 CIP:** Due to delays of GMR 23, construction for GMR 24 is being postponed to FY 2023.

**2020-2024 CIP:** City staff has proposed a new replacement schedule of completing a water, gas and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. In the last few years there have been fewer bidders and higher prices on construction projects due to the increased demand for construction services. Revised total project estimate to \$11.0 million, an increase of \$3.8 million, due to higher construction costs. Project scope increased by 4,030 in linear footage.

**2019-2023 CIP:** The budget has been revised to account for construction cost escalation.

**2018-2022 CIP:** Due to delays of GMR 22 and GMR 23, GMR 24 is being postponed to FY 2019.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Gas Fund</b>	0	2,000,000	20,000	9,980,000	0	0	0	0	9,980,000	0	10,000,000
<b>Total</b>	<b>0</b>	<b>2,000,000</b>	<b>20,000</b>	<b>9,980,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,980,000</b>	<b>0</b>	<b>10,000,000</b>

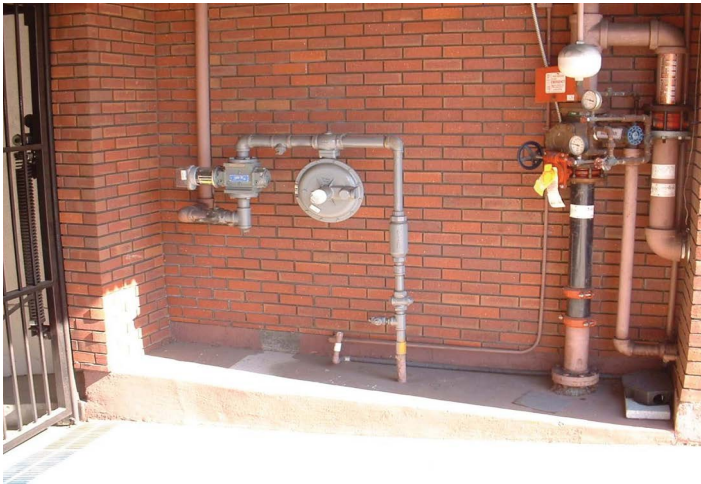
### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	8,543,900	0	0	0	0	8,543,900	0	8,543,900
<b>Design</b>	0	2,000,000	20,000	1,436,100	0	0	0	0	1,436,100	0	1,456,100
<b>Total</b>	<b>0</b>	<b>2,000,000</b>	<b>20,000</b>	<b>9,980,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,980,000</b>	<b>0</b>	<b>10,000,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



New gas service meter and regulating equipment

**Fund:** Gas Fund  
**Category:** Gas Main Replacements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2018  
**Initial Project Completion:** Winter 2020  
**Revised Project Start:** Summer 2024  
**Revised Project Completion:** Winter 2025  
**Project Number:** GS-15000

# Gas Main Replacement - Project 25

## Description

This Gas Main Replacement (GMR) project replaces approximately 26,300 linear feet (which represents 2.4 percent of the City's Gas Distribution System) of leaking, inadequately-sized, and structurally deficient gas mains and services located on various streets in the neighborhoods of Palo Verde, Midtown, Evergreen, and Ventura. Staff identifies problematic mains/services by researching maintenance and leak histories, analyzing performance of the entire Gas Distribution System, and considering risks ratings of the Distribution Integrity Management Plan.

## Justification

The project will target replacing PVC mains and services, also known in the industry as cathodic protection, located in business districts and steel mains and services with ineffective corrosion protection. This project is mandatory due to the need to replace aging infrastructure and to reduce the City's liability exposure due to PVC and steel gas facilities with ineffective cathodic protection.

## Supplemental Information

The City of Palo Alto Distribution Integrity Management Plan's mathematical model is used to evaluate risks presented by PVC facilities located within business districts that have been assigned the highest probability and consequence scores. Targeted streets will be coordinated with the Public Works Street Maintenance Program to complete replacement before streets are paved. Linear footage and locations are subject to change. Please refer to the City of Palo Alto Utilities webpage for the most recent project details.

## Significant Changes

**2023-2027 CIP:** \$1.0 million of this project budget was reallocated to GMR 24 to address higher priority mains and services identified. This will decrease the linear footage of this project by approximately 5,000 feet and

increase the linear footage of GMR 24 by approximately 5,000 feet, resulting in a net zero change of linear feet of PVC pipes being addressed in the Gas Distribution system.

**2021-2025 CIP:** Due to delays of GMR 22, GMR 23, and GMR 24, GMR 25 postponed to FY 2024.

**2020-2024 CIP:** City staff has proposed a new replacement schedule of completing a water, gas and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. Revised total project estimate to \$12.0 million, an increase of \$3.8 million, due to higher construction costs. In the last few years there have been fewer bidders and higher prices on construction projects due to the increased demand for construction services.

**2019-2023 CIP:** The budget has been revised to account for construction cost escalation.

**2018-2022 CIP:** Project postponed to begin in FY 2020 due to GMR 22 being delayed.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Gas Fund	0	0	0	0	2,000,000	8,000,000	0	0	10,000,000	0	10,000,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000,000</b>	<b>8,000,000</b>	<b>0</b>	<b>0</b>	<b>10,000,000</b>	<b>0</b>	<b>10,000,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	0	0	0	979,800	6,154,500	0	0	7,134,300	0	7,134,300
Design	0	0	0	0	1,020,200	1,845,500	0	0	2,865,700	0	2,865,700
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000,000</b>	<b>8,000,000</b>	<b>0</b>	<b>0</b>	<b>10,000,000</b>	<b>0</b>	<b>10,000,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



**Fund:** Gas Fund  
**Category:** Gas Main Replacements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2019  
**Initial Project Completion:** Winter 2021  
**Revised Project Start:** Summer 2025  
**Revised Project Completion:** Fall 2026  
**Project Number:** GS-16000

Gas Main Replacement - Project 26

## Gas Main Replacement - Project 26

### Description

This project replaces approximately 13,500 linear feet (which represents 1.2 percent of the City's Gas Distribution System) of leaking, inadequately-sized, and structurally deficient gas mains and services located on various streets in the University Park and Crescent Park neighborhoods. Staff identifies problematic mains/services by researching maintenance and leak histories, analyzing performance of the entire gas distribution system, and considering risks ratings of the Distribution Integrity Management Plan.

### Justification

The project will target replacing PVC mains and services located in business districts and steel mains and services with ineffective corrosion protection, also known in the industry as cathodic protection. This project is mandatory due to the need to replace aging infrastructure and to reduce the City's liability exposure due to PVC and steel gas facilities with ineffective cathodic protection.

### Supplemental Information

The City of Palo Alto Distribution Integrity Management Plan's mathematical model is used to evaluate risks presented by PVC facilities located within business districts assigned the highest probability and consequences scores. Targeted streets will be coordinated with the Public Works Street Maintenance Program to complete replacement before streets are paved. Linear footage and locations are subject to change. Please refer to the City of Palo Alto Utilities webpage for the most recent project details.

### Significant Changes

**2023-2027 CIP:** Project budget decreased by \$1.0 million to align with other gas main replacement budgets and smooth out rates.

**2022-2026 CIP:** Due to delays of GMR 23, GMR 24, and GMR 25, GMR 26 was postponed to FY 2026.



**2019-2023 CIP:** The budget has been revised to account for construction cost escalation.

**2018-2022 CIP:** Due to delays of GMR 22 and GMR 23, this project is postponed to FY 2021.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Gas Fund</b>	0	0	0	0	0	0	2,000,000	8,000,000	10,000,000	0	10,000,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000,000</b>	<b>8,000,000</b>	<b>10,000,000</b>	<b>0</b>	<b>10,000,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	1,093,600	2,016,400	3,110,000	0	3,110,000
<b>Design</b>	0	0	0	0	0	0	906,400	5,983,600	6,890,000	0	6,890,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000,000</b>	<b>8,000,000</b>	<b>10,000,000</b>	<b>0</b>	<b>10,000,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



CITY OF  
**PALO  
ALTO**



# System Improvements



**Fund:** Gas Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** GS-11002

Gas System Improvements

## Gas Distribution System Improvements

### Description

This project provides funding as needed to improve the Gas Distribution System. Typical activities include: increasing distribution system capacity for load growth, replacing deteriorated capital facilities, re-configuring/adding to the system to improve service reliability, conducting research related to performance of the Gas Distribution System or its various components, and making general improvements to the system.

### Justification

Gas Distribution System reliability and adequate capacity are critical to providing a high level of service to customers. When service interruptions occur, customers may experience significant economic losses. The City must continuously evaluate service reliability needs and make improvements to the system to maintain top-level service to City customers.

### Significant Changes

**2020-2024 CIP:** Project funding increased in Fiscal Years 2020 to 2024 by \$254,000 each year. This project has been consolidated with GS-03009 as the project activities are similar in nature.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Gas Fund</b>	N/A	570,756	320,756	750,000	500,000	500,000	500,000	500,000	2,750,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>570,756</b>	<b>320,756</b>	<b>750,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>2,750,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	570,756	320,756	750,000	500,000	500,000	500,000	500,000	2,750,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>570,756</b>	<b>320,756</b>	<b>750,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>2,750,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---

## GAS FUND



**Fund:** Gas Fund  
**Category:** System Improvements  
**Project Location:** Municipal Service Center  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** GS-13002

New HDPE gas pipe being fused prior to installation

# Gas Equipment and Tools

## Description

This project funds the purchase of polyethylene (PE) fusion equipment and tools, directional boring/locating equipment and tools, and general shop equipment and tools.

## Justification

In order to safely operate and maintain a natural gas distribution system and support operating personnel safety and productivity, PE fusion, directional boring/locating, and general equipment and tools need to be upgraded on an annual basis.

## Significant Changes

**2022-2026 CIP:** The project funding has been reduced to \$50,000 annually to align with actual costs incurred in this project.

**2019-2023 CIP:** Project funding increased to include purchase of new tapping and stopping equipment for Operations. This equipment is required to safely interrupt the flow of gas without performing large shutdowns of service to customers.

**2015-2019 CIP:** Project was retitled from General Shop Equipment and Tools.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Gas Fund</b>	N/A	61,187	61,187	50,000	50,000	50,000	50,000	50,000	250,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>61,187</b>	<b>61,187</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>250,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	61,187	61,187	50,000	50,000	50,000	50,000	50,000	250,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>61,187</b>	<b>61,187</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>250,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



**Fund:** Gas Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** GS-80019

Gas Meters and Regulators

# Gas Meters and Regulators

## Description

This project provides replacement of the existing meters and regulators at approximately 1,000 meter sets per year.

## Justification

The meter replacement program ensures accuracy of gas consumption measurement, reduces possible revenue loss due to under-registering gas, and provides customers with accurate monthly bills. The program exchanges large meters (630 cubic feet per hour and larger) every 10 years and smaller meters every 17 to 20 years.

## Significant Changes

**2022-2026 CIP:** The Advanced Metering Infrastructure (AMI) Project is expected to replace approximately 2,000 gas meters with meters that are compatible with a smart grid system to collect interval usage information remotely. After reviewing gas meter accuracy test results, staff determined that it is unnecessary to replace all meters that have been in service more than 30 years, because their reading accuracy was within plus or minus a 2 percent range. A small number of ultrasonic gas meters will be piloted and evaluated during the project. The remaining 22,000 meters will be assessed for their compatibility with the AMI smart grid and will either be retrofitted or replaced.

**2021-2025 CIP:** The Advanced Metering Infrastructure (AMI) Project is expected to replace up to 11,906 gas meters with meters that are compatible with a smart grid system to collect usage information remotely. The remaining 12,287 meters will be assessed for their compatibility with the AMI smart grid and will either be retrofitted or replaced.

**2020-2024 CIP:** The number of meters replaced annually was updated from 2,000 to 1,000 meters and the annual funding has been reduced to \$250,000 throughout the 2020-2024 CIP. Staff have adjusted the replacement number and budget accordingly after reviewing their workload and available resources.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Gas Fund</b>	N/A	522,251	522,251	500,000	500,000	500,000	500,000	500,000	2,500,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>522,251</b>	<b>522,251</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>2,500,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	522,250	522,250	500,000	500,000	500,000	500,000	500,000	2,500,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>522,250</b>	<b>522,250</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>2,500,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Energy                  Goal: N-7                  Policy: N-7.1</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



CITY OF  
**PALO  
ALTO**



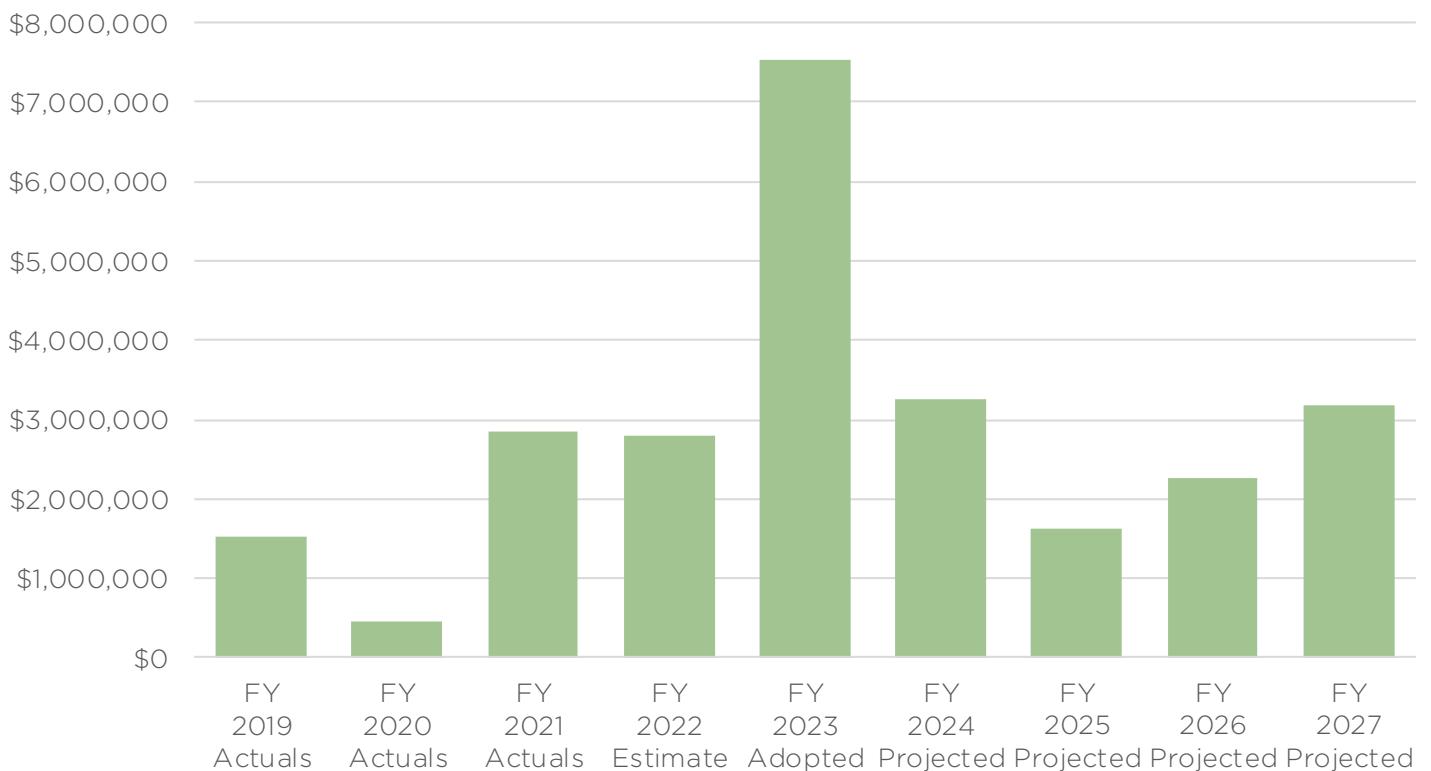
# STORMWATER MANAGEMENT FUND

# STORMWATER MANAGEMENT FUND

## Overview

The Stormwater Management Fund Capital Improvement Program (CIP) accounts for activities related to the improvement of the City's storm drain system (including pipelines, manholes, catch basins, and pump stations). The 2023-2027 CIP includes projects totaling \$17.9 million with Fiscal Year 2023 projects totaling \$7.5 million. The budget for the Stormwater Management CIP is divided into three categories: Capacity Improvements (projects to upgrade the conveyance capacity of the storm drain system as a whole), System Rehabilitation (projects for the replacement and rehabilitation of the existing storm drain infrastructure), and System Improvements (projects to enhance the quality and efficacy of the storm drain system).

### Stormwater Management Fund Capital Expenditures



## Capacity Improvements

The Capacity Improvements category accounts for new or enhanced infrastructure added to the storm drain system, increasing its capacity to convey stormwater runoff to local creeks and San Francisco Bay. In Fiscal Year 2015, an update to the Storm Drain Master Plan resulted in the identification of \$98.0 million in additional recommended storm drainage improvements, with \$22.0 million identified as high-priority projects. With the passage of the 2017 Storm Water Management Fee ballot measure, 13 capital improvement projects will be recommended over the following 13 years. The first of the 13 projects was completed in 2020 with five more projects scheduled to be completed within the next five years.

## Recent Accomplishments

- Continued the design of three projects identified in the 2017 Storm Water Management Fee ballot measure: Corporation Way System Upgrades and Pump Station (SD-21000), West Bayshore Road Pump Station (SD-20000), and West Bayshore Road Trunk Line Improvements (SD-23000). Began working with a private property owner to secure permanent easements to install the two pump stations within private properties. The final design of the pump stations cannot be completed until the required permanent easements are secured.
- Commenced the design of the East Meadow Drive System Upgrades (SD-22000) by conducting a field survey, evaluating existing utility and roadway conditions, and preparing the plans and specifications.

## 2023-2027 Capital Improvement Program

### Non-Recurring Projects

There are six projects in this category during the 2023-2027 CIP:

- Corporation Way System Upgrades and Pump Station (Fiscal Year 2023: \$3.2 million; 5-Year CIP: \$3.2 million)
- East Meadow Circle Connection to Adobe Creek Pump Station (5-Year CIP: \$0.7 million)
- East Meadow Drive System Upgrades (5-Year CIP: \$0.5 million)
- Louis Road System Upgrades (5-Year CIP: \$3.8 million)
- West Bayshore Road Pump Station (Fiscal Year 2023: \$1.1 million; 5-Year CIP: \$2.2 million)
- West Bayshore Road Trunk Line Improvements (Fiscal Year 2023: \$0.9 million; 5-Year CIP: \$2.4 million)

The design and construction of the two new pump stations at Corporation Way and West Bayshore Road will reduce flooding where stormwater is discharged into Adobe Creek. The upgrade of pipes located under East Meadow Drive between East Meadow Circle and the Adobe Pump Station will reduce flooding in the area. Completing the East Meadow Circle Connection to Adobe Creek pump station project may allow the City to bid the two projects as one.

## System Improvements

The Systems Improvements category accounts for the Installation of features to improve and enhance the quality and efficacy of the current storm drain system. Funding is budgeted for system modifications needed to accommodate new operational requirements, such as the mandate in the Municipal Regional Stormwater Discharge Permit to incorporate trash capture devices into the storm drain system to reduce the amount of trash entering local creeks and San Francisco Bay and implementation of the Green Stormwater Infrastructure (GSI) Plan.

### Recent Accomplishments

- Commenced design of Trash Capture Device Installation project (SD-22002).

# STORMWATER MANAGEMENT FUND

## 2023-2027 Capital Improvement Program

### Recurring Projects

The 2023-2027 CIP Includes funding for one recurring project in this category: Green Stormwater Infrastructure (Fiscal Year 2023: \$0.6 million; 5-Year CIP: \$0.6 million), focused on the installation and integration of GSI features into other CIP projects to improve the quality of the City's storm drain system.

### Non-Recurring Projects

The 2023-2027 CIP includes funding for one non-recurring project in this category: Trash Capture Device Installation (Fiscal Year 2023: \$0.5 million; 5-year CIP \$0.5 million), for the design and construction of a large trash capture device to be installed in the planting strip along Embarcadero Road located in the front parking lot of Palo Alto Baylands Golf Links.

## System Rehabilitation

The System Rehabilitation category accounts for the replacement or rehabilitation of deteriorated components of the storm drain system. Funding is budgeted annually to replace or rehabilitate storm drain pipelines, manholes, catch basins, and pump station equipment.

### Recent Accomplishments

- Awarded a construction contract to replace and/or line broken pipes and storm drain structures at 13 locations throughout the City.

## Infrastructure Inventory

CLASSIFICATION	QUANTITY
Storm drain pipelines	130 miles
Catch basins	3,000
Manholes	800
Stormwater pump stations	8

## 2023-2027 Capital Improvement Program

### Recurring Projects

The 2023-2027 CIP includes funding for one project in this category: Storm Drain System Replacement and Rehabilitation (Fiscal Year 2023: \$1.2 million; 5-Year CIP: \$3.9 million), focused on the replacement and rehabilitation of the existing storm drain pipelines, manholes, and catch basins.

# STORMWATER MANAGEMENT FUND

## Stormwater Management

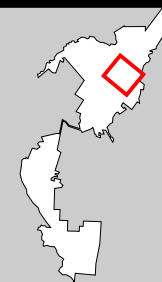
Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Revenue from the State of California</b>									
<b>SD-22002</b>	Trash Capture Device Installation	613,000	0	613,000	0	0	0	0	613,000
<b>Revenue from the State of California Total</b>		<b>\$613,000</b>	<b>\$0</b>	<b>\$613,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$613,000</b>
<b>Total Sources</b>		<b>\$613,000</b>	<b>\$0</b>	<b>\$613,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$613,000</b>
<b>USE OF FUNDS</b>									
<b>Capacity Improvements</b>									
<b>SD-21000</b>	Corporation Way System Upgrades and Pump Station	3,586,965	622,765	3,182,200	0	0	0	0	3,182,200
<b>SD-26000</b>	East Meadow Circle Connection to Adobe Creek Pump Station	0	0	0	0	0	73,000	662,800	735,800
<b>SD-22000</b>	East Meadow Drive System Upgrades	0	0	0	65,200	424,000	0	0	489,200
<b>SD-19000</b>	Loma Verde Avenue Trunk Line Improvements	3,364	0	0	0	0	0	0	0
<b>SD-24000</b>	Louis Road System Upgrades	0	0	0	0	451,700	1,497,000	1,867,800	3,816,500
<b>SD-20000</b>	West Bayshore Road Pump Station	682,906	332,906	1,134,000	1,066,100	0	0	0	2,200,100
<b>SD-23000</b>	West Bayshore Road Trunk Line Improvements	49,595	43,795	891,400	1,538,500	0	0	0	2,429,900
<b>Capacity Improvements Total</b>		<b>\$4,322,830</b>	<b>\$999,465</b>	<b>\$5,207,600</b>	<b>\$2,669,800</b>	<b>\$875,700</b>	<b>\$1,570,000</b>	<b>\$2,530,600</b>	<b>\$12,853,700</b>
<b>System Improvements</b>									
<b>SD-22001</b>	Green Stormwater Infrastructure	500,800	0	545,000	0	0	0	0	545,000
<b>SD-22002</b>	Trash Capture Device Installation	613,000	107,000	550,000	0	0	0	0	550,000
<b>System Improvements Total</b>		<b>\$1,113,800</b>	<b>\$107,000</b>	<b>\$1,095,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,095,000</b>
<b>System Rehabilitation</b>									
<b>SD-06101</b>	Storm Drainage System Replacement And Rehabilitation	2,354,142	1,701,042	1,233,100	579,100	764,000	686,700	641,900	3,904,800
<b>System Rehabilitation Total</b>		<b>\$2,354,142</b>	<b>\$1,701,042</b>	<b>\$1,233,100</b>	<b>\$579,100</b>	<b>\$764,000</b>	<b>\$686,700</b>	<b>\$641,900</b>	<b>\$3,904,800</b>
<b>Total Uses</b>		<b>\$7,790,772</b>	<b>\$2,807,507</b>	<b>\$7,535,700</b>	<b>\$3,248,900</b>	<b>\$1,639,700</b>	<b>\$2,256,700</b>	<b>\$3,172,500</b>	<b>\$17,853,500</b>



CITY OF  
**PALO  
ALTO**

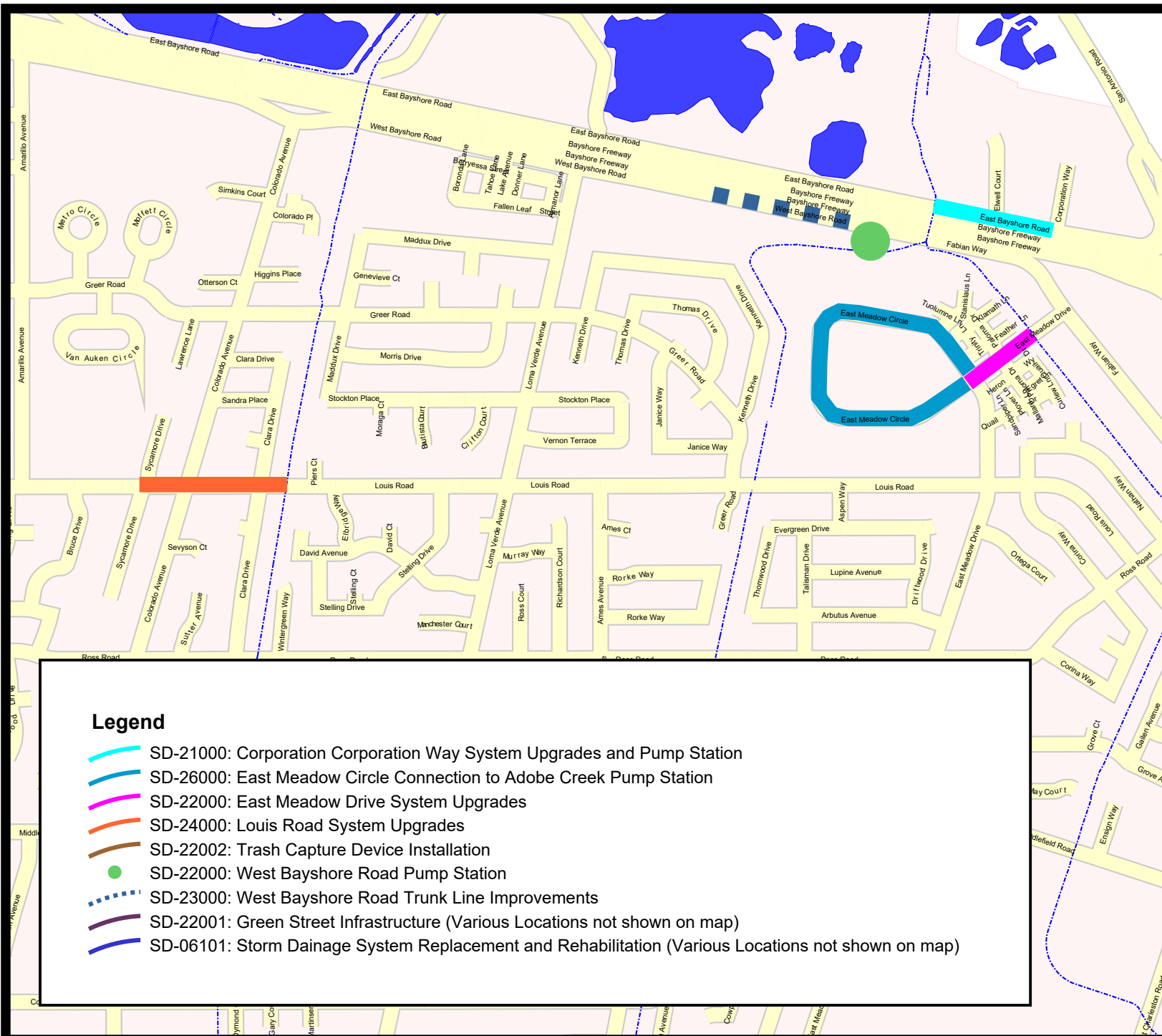


The City of Palo Alto












# Stormwater Management Fund FY 2023-27

This map is a product of the City of Palo Alto GIS



### Legend

-  SD-21000: Corporation Corporation Way System Upgrades and Pump Station
-  SD-26000: East Meadow Circle Connection to Adobe Creek Pump Station
-  SD-22000: East Meadow Drive System Upgrades
-  SD-24000: Louis Road System Upgrades
-  SD-22002: Trash Capture Device Installation
-  SD-22000: West Bayshore Road Pump Station
-  SD-23000: West Bayshore Road Trunk Line Improvements
-  SD-22001: Green Street Infrastructure (Various Locations not shown on map)
-  SD-06101: Storm Drainage System Replacement and Rehabilitation (Various Locations not shown on map)



CITY OF  
**PALO  
ALTO**



# Capacity Improvements

## STORMWATER MANAGEMENT FUND



E. Bayshore Road at Corporation Way, 2017

**Fund:** Stormwater Management Fund

**Category:** Capacity Improvements

**Project Location:** East Bayshore Road- from Corporation Way to Adobe Creek

**Managing Department:** Public Works

**Initial Project Start:** Summer 2020

**Initial Project Completion:** Winter 2021

**Revised Project Start:** Summer 2021

**Revised Project Completion:** Fall 2023

**Project Number:** SD-21000

# Corporation Way System Upgrades and Pump Station

## Description

This project provides funding for the design of a new small pump station with 25 cubic feet per second capacity and the upgrade of 700 linear feet of storm drain pipe to 30-inch High Density Polyethylene.

## Justification

The invert elevations of the existing storm drain lines are lower than the outfall and, as a result, this area is subject to flooding problems. Adding a pump in advance of the outfall will eliminate the routine flooding along East Bayshore Road and upsizing the pipe from 21 inches will eliminate ponding and increase capacity to convey runoff from a 10-year storm event. Due to hydraulics requirements, the pump station will be constructed before the storm drain line will be replaced. The pump station design will be completed in 2022, with construction starting in 2023.

## Supplemental Information

This project is funded by the Storm Water Management Fee approved via a ballot measure by Palo Alto voters in April 2017. On the ballot, this project is referred to as 2. Corporation Way/E. Bayshore Road Pump Station to Adobe Creek. The need for this project was identified in Fiscal Year 2015 in the Storm Drain Master Plan dated June 2015. The funding amount is based on the engineer's cost estimate prepared for the Storm Drain Master Plan, which references Saylor Publication's 2014 Current Construction Costs and includes a 3% annual increase for escalation.

## Significant Changes

**2023-2027 CIP:** The project timeline has been updated to reflect additional time needed to complete design and secure easements.

# STORMWATER MANAGEMENT FUND

**2021-2025 CIP:** This project will be designed concurrently with West Bayshore Road Pump Station (SD-20000), and construction will take place in FY 2021 and FY 2022.

**2020-2024 CIP:** Design and construction expenses were adjusted by 3% to account for escalation.

**2019-2023 CIP:** Previously split between Storm Drainage Pump Stations to Adobe Creek (SD-20000) and Storm Drainage System Upgrades-East Bayshore Road and East Meadow Drive (SD-22000), the scope of this project was combined in alignment with the 13 projects approved in April 2017 as part of the Storm Water Management Fee ballot measure.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Stormwater Management Fund</b>	144,862	3,586,965	622,765	3,182,200	0	0	0	0	3,182,200	0	3,949,827
<b>Total</b>	<b>144,862</b>	<b>3,586,965</b>	<b>622,765</b>	<b>3,182,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,182,200</b>	<b>0</b>	<b>3,949,827</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	3,342,459	0	3,182,200	0	0	0	0	3,182,200	0	3,182,200
<b>Design</b>	144,862	244,506	622,765	0	0	0	0	0	0	0	767,627
<b>Total</b>	<b>144,862</b>	<b>3,586,965</b>	<b>622,765</b>	<b>3,182,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,182,200</b>	<b>0</b>	<b>3,949,827</b>

### Operating Impact

This project is anticipated to impact operating expenses in the future with costs for electricity to serve the pump station; future routine inspections; and maintenance of the mechanical, electrical, and fiber operating systems. As these costs are quantified, and if the department determines they cannot be absorbed within the available maintenance schedule and annual operating budget, adjustments will be brought forward in future budgets, as necessary.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.14

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Storm Drain Oversight Committee

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## STORMWATER MANAGEMENT FUND



East Meadow Circle, November 2021

**Fund:** Stormwater Management Fund  
**Category:** Capacity Improvements  
**Project Location:** East Meadow Circle North of East Meadow Drive  
**Managing Department:** Public Works  
**Initial Project Start:** Winter 2026  
**Initial Project Completion:** Winter 2027  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** SD-26000

# East Meadow Circle Connection to Adobe Creek Pump Station

## Description

This project provides funding to install approximately 600 linear feet of 15-inch pipe along East Meadow Circle. This project will extend the existing 15-inch line on East Meadow Circle North to an existing line that is discharging into Barron Creek.

## Justification

Installing this segment of pipe will allow the system that flows to Barron Creek to overflow into the Adobe Pump Station during high flows and when creek levels are high. Along with the new pipelines, this project will also install new storm drain manholes and inlets.

## Supplemental Information

This project is funded by the Storm Water Management Fee approved via a ballot measure by Palo Alto voters in April 2017. On the ballot, this project is referred to as 6. East Meadow Circle connection to Adobe Creek Pump Station capacity upgrades. The need for this project was identified in Fiscal Year 2015 and ranked as a high priority on the Storm Drain Master Plan dated June 2015. The funding amount shown here is based on the engineer's cost estimate prepared for the 2015 Storm Drain Master Plan, which references Saylor Publication's 2014 Current Construction Costs. Design and Construction expenses have been adjusted by an annual 3% to account for escalation.

# STORMWATER MANAGEMENT FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Stormwater Management Fund</b>	0	0	0	0	0	0	73,000	662,800	735,800	0	735,800
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73,000</b>	<b>662,800</b>	<b>735,800</b>	<b>0</b>	<b>735,800</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	0	662,800	662,800	0	662,800
<b>Design</b>	0	0	0	0	0	0	73,000	0	73,000	0	73,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73,000</b>	<b>662,800</b>	<b>735,800</b>	<b>0</b>	<b>735,800</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment          Section: Water Resources          Goal: N-4          Policy: N-4.14</p> <p><b>Environmental Impact Analysis:</b>          This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission          Storm Drain Oversight Committee</p>
---	---

## STORMWATER MANAGEMENT FUND



East Meadow Drive

**Fund:** Stormwater Management Fund  
**Category:** Capacity Improvements  
**Project Location:** East Meadow Drive from East Meadow Circle to Adobe Creek Pump Station  
**Managing Department:** Public Works  
**Initial Project Start:** Winter 2021  
**Initial Project Completion:** Winter 2022  
**Revised Project Start:** Summer 2023  
**Revised Project Completion:** Winter 2024  
**Project Number:** SD-22000

# East Meadow Drive System Upgrades

## Description

This project provides funding for the upgrade of approximately 400 linear feet of 36-inch pipe located in East Meadow Drive between East Meadow Circle and the Adobe Pump Station.

## Justification

Upgrading this segment of pipe to 48-inches will reduce flooding, contain runoff from a 10-year storm event, and allow for upstream improvements at a later date. Along with the new pipelines, this project will also replace storm drain manholes, reconnect and/or install new inlets, and connect lines to the pump station.

## Supplemental Information

This project is funded by the Storm Water Management Fee approved via a ballot measure by Palo Alto voters in April 2017. On the ballot, this project is referred to as 7. East Meadow Drive to Adobe Creek Pump Station capacity upgrades. The need for this project was identified in Fiscal Year 2015 and ranked a high priority on the Storm Drain Master Plan dated June 2015. The funding amount shown here is based on the engineer's cost estimate prepared for the 2015 Storm Drain Master Plan, which references Saylor Publication's 2014 Current Construction Costs and includes a 3% annual increase for escalation.

## Significant Changes

**2021-2025 CIP:** Due to limited funds, rising construction costs, and prioritization of other higher ranked projects, the design of this project is scheduled for FY 2024 and construction for FY 2025.

**2020-2024 CIP:** Design and construction expenses were adjusted by 3% to account for escalation.

**2019-2023 CIP:** Previously incorporating two separate projects, the scope of this project was separated in alignment with the 13 projects approved in April 2017 as part of the Storm Water Management Fee ballot measure.

# STORMWATER MANAGEMENT FUND

SD-22000 was renamed East Meadow Drive System Upgrades from the previous title Storm Drainage System Upgrades - East Bayshore Road and East Meadow Drive in the 2018-2022 CIP.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Stormwater Management Fund</b>	0	0	0	0	65,200	424,000	0	0	489,200	0	489,200
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>65,200</b>	<b>424,000</b>	<b>0</b>	<b>0</b>	<b>489,200</b>	<b>0</b>	<b>489,200</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	424,000	0	0	424,000	0	424,000
<b>Design</b>	0	0	0	0	65,200	0	0	0	65,200	0	65,200
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>65,200</b>	<b>424,000</b>	<b>0</b>	<b>0</b>	<b>489,200</b>	<b>0</b>	<b>489,200</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>          Element: Natural Environment          Section: Water Resources          Goal: N-4          Policy: N-4.14</p>	<p><b>Potential Board/Commission Review:</b>          Planning and Transportation Commission          Storm Drain Oversight Committee</p>
<p><b>Environmental Impact Analysis:</b>          This project is expected to have a possible exemption from CEQA under Section 15302.</p>	



## STORMWATER MANAGEMENT FUND



Intersection of Louis Road and Clara Drive

**Fund:** Stormwater Management Fund  
**Category:** Capacity Improvements  
**Project Location:** Louis Road from Sycamore Drive to Matadero Creek  
**Managing Department:** Public Works  
**Initial Project Start:** Fall 2023  
**Initial Project Completion:** Winter 2024  
**Revised Project Start:** Fall 2025  
**Revised Project Completion:** Summer 2027  
**Project Number:** SD-24000

# Louis Road System Upgrades

## Description

This project provides funding to install 1,100 linear feet of new high-density polyethylene storm drain pipe, concrete inlets and manholes northwest of Sycamore Drive to a new outfall with a flap-gate at Matadero Creek.

## Justification

Installing new storm drain improvements will divert flows that currently drain into Colorado Avenue directly into Matadero Creek. In addition, the proposed 72-inch pipe will provide storage during the storm peak. This is recommended to alleviate flooding in the pipes northwest of Sycamore Drive and achieve a 10-year level of service.

## Supplemental Information

This project is funded by the Storm Water Management Fee approved via a ballot measure by Palo Alto residents in April 2017. The need for this project was identified in Fiscal Year 2015 and this project ranked as high-priority on the Storm Drain Master Plan dated June 2015. This is the eleventh project on the Storm Drain Blue Ribbon Committee Recommended list that was described to voters. Once this project is complete, other upstream improvements along Louis Road can be scheduled. The funding amount shown is based on the engineer's estimate prepared for the Storm Drain Master Plan, which references Saylor Publication's 2014 Current Construction Costs, and includes a 3% annual increase for escalation.

## Significant Changes

**2023-2027 CIP:** Program funding increased by \$2.0 million to a total of \$3.8 million to align with planned construction schedule, with costs split between FY 2026 and FY 2027 due to delays of higher priority projects.

**2022-2026 CIP:** Construction delayed due to staffing constraints and moved to FY 2025 and FY 2026.



# STORMWATER MANAGEMENT FUND

**2021-2025 CIP:** Construction delayed due to staffing constraints and moved to FY 2025 and FY 2026. Design funding increased to add scope for surveying and potholing. Construction increased using 3% escalation.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Stormwater Management Fund</b>	0	0	0	0	0	451,700	1,497,000	1,867,800	3,816,500	0	3,816,500
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>451,700</b>	<b>1,497,000</b>	<b>1,867,800</b>	<b>3,816,500</b>	<b>0</b>	<b>3,816,500</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	920,300	1,867,800	2,788,100	0	2,788,100
<b>Design</b>	0	0	0	0	0	451,700	576,700	0	1,028,400	0	1,028,400
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>451,700</b>	<b>1,497,000</b>	<b>1,867,800</b>	<b>3,816,500</b>	<b>0</b>	<b>3,816,500</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.14

### Potential Board/Commission Review:

Planning and Transportation Commission  
Storm Drain Oversight Committee

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## STORMWATER MANAGEMENT FUND



Location of New West Bayshore Pump Station

**Fund:** Stormwater Management Fund

**Category:** Capacity Improvements

**Project Location:** West Bayshore Road at Adobe and Barron Creek junction

**Managing Department:** Public Works

**Initial Project Start:** Summer 2019

**Initial Project Completion:** Winter 2021

**Revised Project Start:** Winter 2019

**Revised Project Completion:** Summer 2024

**Project Number:** SD-20000

# West Bayshore Road Pump Station

## Description

This project provides funding for the design and construction of a new small pump station with 15 cubic feet per second capacity.

## Justification

The invert elevations of the existing storm drain lines are lower than the outfall. As such, this area is subject to flooding problems. Adding a pump in advance of the outfall would eliminate the routine flooding along West Bayshore Road. The pump station design will be completed in Fiscal Year 2022, and construction is scheduled to start in Fiscal Year 2023 and be completed in Fiscal Year 2024.

## Supplemental Information

This project is funded by the Storm Water Management Fee approved via a ballot measure by Palo Alto voters in April 2017. On the ballot, this project is referred to as 4. West Bayshore Road Pump Station to Adobe Creek. The need for this project was identified in Fiscal Year 2015 and ranked as a high priority on the Storm Drain Master Plan dated June 2015. The funding amount shown here is based on the engineer's cost estimate prepared for the Storm Drain Master Plan, which references Saylor Publication's 2014 Current Construction Costs and includes a 3% annual increase for escalation.

## Significant Changes

**2023-2027 CIP:** The total project funding increased by approximately \$1.0 million to a total of \$2.7 million and the timeline has been updated to reflect additional time needed to complete design and secure easements. Due to limited funds collected annually, the construction costs are shown split between two fiscal years FY 2023 and FY 2024.

# STORMWATER MANAGEMENT FUND

**2021-2025 CIP:** This project will be designed concurrently with Corporation Way System Upgrades and Pump Station (SD-21000). However, due to limited funds these projects cannot be constructed in the same year. Since SD-21000 is ranked as the highest priority on the Storm Drain Master Plan, and due to limited funds, construction of SD-20000 is now scheduled for FY 2023.

**2020-2024 CIP:** Design and construction expenses were adjusted by 3% to account for escalation.

**2019-2023 CIP:** Previously incorporating two separate projects, the scope of this project was separated in alignment with the 13 projects approved in April 2017 as part of the Storm Water Management Fee ballot measure. SD-20000 was renamed West Bayshore Road Pump Station from the previous title Storm Drain Pump Stations to Adobe Creek in the 2018-2022 CIP.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Stormwater Management Fund</b>	215,392	682,906	332,906	1,134,000	1,066,100	0	0	0	2,200,100	0	2,748,398
<b>Total</b>	<b>215,392</b>	<b>682,906</b>	<b>332,906</b>	<b>1,134,000</b>	<b>1,066,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,200,100</b>	<b>0</b>	<b>2,748,398</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	832	438,400	88,400	1,134,000	1,066,100	0	0	0	2,200,100	0	2,289,332
<b>Design</b>	214,558	244,506	244,506	0	0	0	0	0	0	0	459,064
<b>Total</b>	<b>215,390</b>	<b>682,906</b>	<b>332,906</b>	<b>1,134,000</b>	<b>1,066,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,200,100</b>	<b>0</b>	<b>2,748,396</b>

### Operating Impact

This project is anticipated to impact operating expenses in the future with costs for electricity to serve the pump station; future routine inspections; and maintenance of the mechanical, electrical, and fiber operating systems. As these costs are quantified, and if the Department determines they cannot be absorbed within the available maintenance schedule and annual operating budget, adjustments will be brought forward in future budgets, as necessary.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.14

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Storm Drain Oversight Committee

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## STORMWATER MANAGEMENT FUND



**Fund:** Stormwater Management Fund  
**Category:** Capacity Improvements  
**Project Location:** West Bayshore Road from Adobe Creek to Loma Verde Avenue  
**Managing Department:** Public Works  
**Initial Project Start:** Spring 2021  
**Initial Project Completion:** Summer 2024  
**Revised Project Start:** Winter 2019  
**Revised Project Completion:** Summer 2024  
**Project Number:** SD-23000

West Bayshore Road, North of Adobe and Barron Creek confluence

# West Bayshore Road Trunk Line Improvements

## Description

This project provides funding to upgrade 1,400 linear feet of storm drain pipe with 36-inch High-Density Polyethylene.

## Justification

Upsizing the existing 15-inch pipes will eliminate ponding and increase the capacity required to convey runoff from a 10-year storm event along West Bayshore Road.

## Supplemental Information

This project is funded by the Storm Water Management Fee approved via ballot measure by Palo Alto voters in April 2017. The need for this project was identified in Fiscal Year 2015 and ranked as a high priority in the Storm Drain Master Plan dated June 2015. This is the third project on the Storm Drain Blue Ribbon Committee Recommended list that was described to voters. The funding amount shown is based on the engineer's estimate prepared for the Storm Drain Master Plan, which references Saylor Publication's 2014 Current Construction Costs, and includes a 3% annual increase for escalation.

## Significant Changes

**2021-2025 CIP:** This project is part of the same system as SD-20000 and SD-21000, so a consultant will analyze and design the entire system up to and including the associated pump station. Design is scheduled to occur in FY 2021, but construction of SD-23000 will be delayed to FY 2023.

# STORMWATER MANAGEMENT FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Stormwater Management Fund</b>	5,270	49,595	43,795	891,400	1,538,500	0	0	0	2,429,900	0	2,478,965
<b>Total</b>	<b>5,270</b>	<b>49,595</b>	<b>43,795</b>	<b>891,400</b>	<b>1,538,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,429,900</b>	<b>0</b>	<b>2,478,965</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	891,400	1,538,500	0	0	0	2,429,900	0	2,429,900
<b>Design</b>	5,270	49,595	43,795	0	0	0	0	0	0	0	49,065
<b>Total</b>	<b>5,270</b>	<b>49,595</b>	<b>43,795</b>	<b>891,400</b>	<b>1,538,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,429,900</b>	<b>0</b>	<b>2,478,965</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.14  
Program: N4.14.2

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Storm Drain Oversight Committee

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.



CITY OF  
**PALO  
ALTO**

## System Improvements

## STORMWATER MANAGEMENT FUND



**Fund:** Stormwater Management Fund  
**Category:** System Improvements  
**Project Location:** Various  
**Managing Department:** Public Works  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** SD-22001

Bioretention measure at Rinconada Library that treats on-site stormwater runoff, 2014

# Green Stormwater Infrastructure

## Description

This project provides funding for Green Stormwater Infrastructure (GSI) projects and the integration of GSI measures to be included in the design and implementation of planned CIP projects supported by other funds and, in the future, maintenance of the City's GSI assets. GSI mimics the natural environment to slow, spread, sink, and filter storm runoff through native or engineered soils rather than discharging it directly into storm drain inlets. Types of GSI include bioretention areas, bioswales, tree filters, green roofs, pervious pavement, and rainwater harvesting (rain barrels and cisterns) to manage stormwater runoff.

## Justification

The City is required to comply with the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, also known as the Municipal Regional Permit (MRP), which applies to municipalities and flood control agencies that discharge stormwater to the San Francisco Bay (Bay). Under the MRP and previous permits, new development and redevelopment projects on private and public property that exceed certain size thresholds have been required to mitigate stormwater quality impacts by incorporating site design, pollutant source control, and GSI measures. One of the requirements of the current MRP is to identify opportunities to proactively integrate GSI measures into streets, roads, parking lots, roofs, and other elements beyond the current threshold requirements.

Implementing GSI projects and incorporating GSI measures into the design of planned project sites throughout the City will reduce street flooding and capture pollution before it reaches the creeks or Bay by mimicking the natural environment to slow, spread, and sink storm runoff.

## Supplemental Information

Fiscal Year 2023 planned projects include installation of bioretention along City streets and integration of GSI measures in existing City parking lots to reduce stormwater runoff and associated pollutants in collaboration



# STORMWATER MANAGEMENT FUND

with the City of Santa Clara with support of matching grant funding from the Environmental Protection Agency (EPA). Subsequent years' work plans and funding will be defined and brought forward for approval through the annual budget development process.

## Significant Changes

**2023-2027 CIP:** Due to staffing shortages, the implementation of GSI measures has been delayed to Summer 2022. Staff will evaluate the feasibility of integrating GSI into planned projects in subsequent years during FY 2023.

**2022-2026 CIP:** Project established during FY 2022.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Stormwater Management Fund</b>	N/A	500,800	0	545,000	0	0	0	0	545,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>500,800</b>	<b>0</b>	<b>545,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>545,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

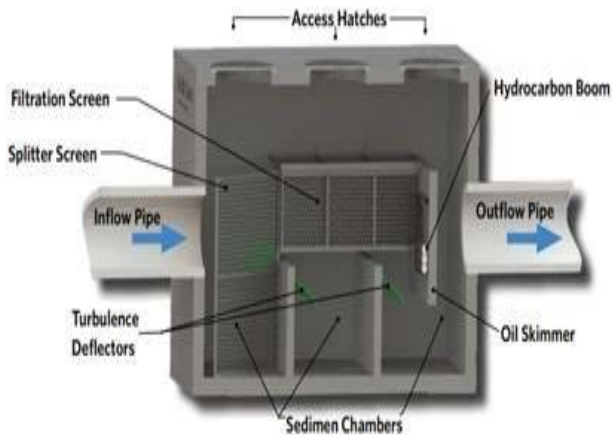
Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	300,000	0	345,000	0	0	0	0	345,000	0	N/A
<b>Design</b>	N/A	200,800	0	200,000	0	0	0	0	200,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>500,800</b>	<b>0</b>	<b>545,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>545,000</b>	<b>0</b>	<b>N/A</b>

## Operating Impact

This project is anticipated to impact operating expenses in the future, such as maintenance costs. As these costs are quantified, and if the Department determines they cannot be absorbed within the available maintenance schedule and annual operating budget, adjustments will be brought forward in future budget cycles.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Natural Environment Section: Water Resources Goal: N-4 Policy: N-4.10 Program: N4.10.1	Element: Natural Environment Section: Water Resources Goal: N-4 Policy: N-4.14 Program: N4.14.2	Parks and Recreation Commission Planning and Transportation Commission Storm Drain Oversight Committee
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15302.		

## STORMWATER MANAGEMENT FUND



Example of TCD: Nutrient Separating Baffle Box

**Fund:** Stormwater Management Fund  
**Category:** System Improvements  
**Project Location:** 1875 Embarcadero Road  
**Managing Department:** Public Works  
**Initial Project Start:** Fall 2021  
**Initial Project Completion:** Fall 2022  
**Revised Project Start:** Winter 2021  
**Revised Project Completion:** Fall 2023  
**Project Number:** SD-22002

# Trash Capture Device Installation

## Description

This project provides funding for the design and construction of a large trash capture device (TCD) to be installed in the planting strip along Embarcadero Road located in front of the parking lot of Palo Alto Baylands Golf Links. The TCD will be integrated in-line a 36-inch storm drain pipe to capture trash as small as five millimeters from a section of the storm drain system prior to discharging to the San Francisco Bay. The 189-acre drainage area treated by the TCD consists of 169 acres of commercial and office land use in the City's jurisdiction and 20 acres in the California Department of Transportation (Caltrans) right-of-way.

## Justification

The City is required to comply with the Municipal Regional Stormwater National Pollution Discharge Elimination System (NPDES) Permit in the San Francisco Bay Area (Order R2-2015-0049), also known as the Municipal Regional Permit (MRP). The MRP outlines various requirements for protecting the City's storm drain system and local receiving waters from pollutants commonly found in urban stormwater runoff, including trash and other priority pollutants like Polychlorinated Biphenyls (PCBs) and mercury. The MRP requires the 76 permittees (including the City) to meet the goal of 100 percent trash load reduction, or no adverse impact to receiving waters from trash, by July 1, 2025.

With the installation of this large TCD, the City's trash reduction efforts will increase from 8 percent to 85 percent, a significant increase towards the trash reduction permit requirement.

## Supplemental Information

Caltrans is required by the State Water Resources Control Board (State Water Board) to address trash generated in its right-of-way. The agency's State Stormwater Permit issued by the State Water Board allows and encourages Caltrans to partner with local municipalities by providing funding for stormwater quality treatment facilities that address trash or other pollutants. The City of Palo Alto has been selected to receive such funding

# STORMWATER MANAGEMENT FUND

for the installation of this TCD, allowing both agencies to receive trash reduction compliance credits to meet permit requirements. Caltrans will fund the TCD installation through reimbursement of final design and construction phases costs with the City agreeing to fund the long-term operations and maintenance costs for the life of the asset.

## Significant Changes

**2023-2027 CIP:** Due to staffing shortages, the project has been delayed and the City will receive an extension from Caltrans to proceed with this new schedule.

**2022-2026 CIP:** Project established during FY 2022.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Revenue from the State of California	0	613,000	0	613,000	0	0	0	0	613,000	0	613,000
Stormwater Management Fund	0	0	107,000	(63,000)	0	0	0	0	(63,000)	0	44,000
<b>Total</b>	<b>0</b>	<b>613,000</b>	<b>107,000</b>	<b>550,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>550,000</b>	<b>0</b>	<b>657,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	508,000	20,000	532,000	0	0	0	0	532,000	0	552,000
Design	0	105,000	87,000	18,000	0	0	0	0	18,000	0	105,000
<b>Total</b>	<b>0</b>	<b>613,000</b>	<b>107,000</b>	<b>550,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>550,000</b>	<b>0</b>	<b>657,000</b>

## Operating Impact

This project is anticipated to impact operating expenses in the future to cover the operations and maintenance associated with the device. Any costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Natural Environment Section: Water Resources Goal: N-4 Policy: N-4.4	Goal: N-4 Policy: N-4.10 Program: N4.10.1	Parks and Recreation Commission Planning and Transportation Commission Storm Drain Oversight Committee
<b>Environmental Impact Analysis:</b> This project is expected to have a categorical exemption or mitigated negative declaration.		



CITY OF  
**PALO  
ALTO**

# System Rehabilitation

## STORMWATER MANAGEMENT FUND



**Fund:** Stormwater Management Fund  
**Category:** System Rehabilitation  
**Project Location:** Various  
**Managing Department:** Public Works  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** SD-06101

Storm Drain Repair & Rehabilitation

# Storm Drainage System Replacement And Rehabilitation

## Description

This project provides funding for annual replacement and rehabilitation projects, identified by a previous condition assessment, to help maintain the integrity of the storm drain system, including the replacement or rehabilitation of deteriorated storm drain pipes, manholes, and storm drain inlets.

## Justification

The project implements the recommendations established by the 1993 Storm Drain Condition Assessment Report and later reassessed as part of the 2015 Storm Drain Master Plan. The specific pipes and drainage structures selected for replacement and/or rehabilitation were determined based on their condition score and recommendations by field maintenance staff. The pipelines and structures need to be replaced since they are approaching the end of their intended useful life.

## Supplemental Information

The proposed improvements are feasible due to the passing of the Storm Water Management Fee ballot measure. Pipe and structure replacements include recommendations by field maintenance staff who inspect structures during routine inlet and pipe cleaning, identifying broken segments or structures. Lastly, if an existing storm drain line is located near or within another public improvement project, replacement may be warranted to extend useful life and/or avoid limited future access.

**Fiscal Year 2023:** Prepare plans and specifications in-house for the next rehabilitation and replacement project. Obtain regulatory permits for work at outfalls or within creeks. Integrate the fiber connection for the two new pump stations into the existing storm drain fiber loop.

**Fiscal Year 2024:** Hire a consultant to evaluate the need for a catwalk along Matadero Creek Pump Station trash rack to facilitate clean-up and design catwalk if recommended.

# STORMWATER MANAGEMENT FUND

**Fiscal Year 2025:** If catwalk determined necessary, install catwalk structure within Matadero Creek Pump Station wetwell.

**Fiscal Year 2026:** Replace broken or cracked lines per plans prepared in-house.

**Fiscal Year 2027:** Ongoing system maintenance.

## Significant Changes

**2023-2027 CIP:** Work plans have been reevaluated and funding is anticipated to be available and programmed into FY 2025 through FY 2027 for ongoing maintenance without an impact to ballot measure projects.

**2022-2026 CIP:** No funding programmed in FY 2026 in order to retain funding for the 13 projects approved in April 2017 as part of the Storm Water Management Fee ballot measure.

**2021-2025 CIP:** Reappropriated funding will be used to replace or rehabilitate broken pipes and catch basins identified in the last inspection. Additional funding will return to the storm drain fund to help support other Stormwater Management capital improvement program project increases.

**2019-2023 CIP:** Replace pipes within Page Mill ranked high priority and pipes within public utility easements associated with public infrastructure.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Stormwater Management Fund	N/A	2,354,142	1,701,042	1,233,100	579,100	764,000	686,700	641,900	3,904,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>2,354,142</b>	<b>1,701,042</b>	<b>1,233,100</b>	<b>579,100</b>	<b>764,000</b>	<b>686,700</b>	<b>641,900</b>	<b>3,904,800</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	N/A	2,354,142	1,701,042	1,233,100	579,100	764,000	686,700	641,900	3,904,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>2,354,142</b>	<b>1,701,042</b>	<b>1,233,100</b>	<b>579,100</b>	<b>764,000</b>	<b>686,700</b>	<b>641,900</b>	<b>3,904,800</b>	<b>0</b>	<b>N/A</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# STORMWATER MANAGEMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.14

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Storm Drain Oversight Committee

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15302.



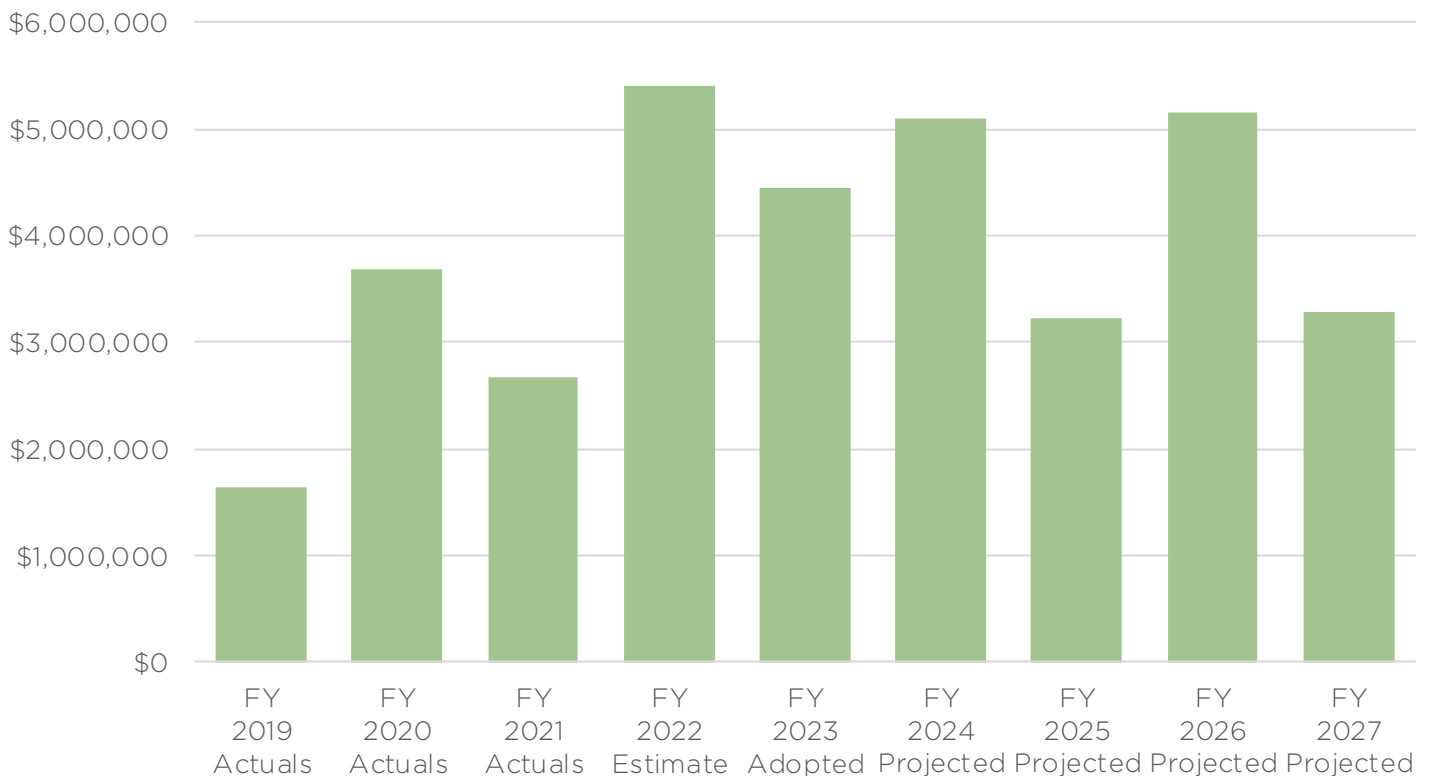
# WASTEWATER COLLECTION FUND

# WASTEWATER COLLECTION FUND

## Overview

The City of Palo Alto offers a full array of utility services to its citizens and businesses. The municipal Wastewater Collection System began operation in 1898 and continues to provide safe, reliable, and cost-effective services to residents and customers of Palo Alto. For the 2023-2027 Capital Improvement Program (CIP), approximately \$21.2 million is projected, with \$4.5 million allocated in Fiscal Year 2023. Overall, a total of eight projects are programmed for the 5-year CIP.

## Wastewater Collection Fund Capital Expenditures



Major projects funded in the 2023-2027 CIP include Wastewater Collection System Rehabilitation/Augmentation projects (cumulative total of \$12.9 million), Sewer Lateral/Manhole Rehabilitation and Replacement (\$4.4 million), and Sewer System, Customer Connections (\$2.3 million). The budget for the Wastewater Collection Fund CIP is categorized into two types of projects: Customer Connections and System Improvements. In order to balance the Wastewater Collection Fund reserves and keep rate increases low, the wastewater main replacement projects have been reduced from annually to biennially to keep expenditures in line with expected revenue.

## Infrastructure Inventory

CLASSIFICATION	QUANTITY
Total miles of sanitary sewer lines	216
Total number of sanitary laterals	18,073

## Customer Connections

As customers continually change their wastewater needs due to equipment additions, new construction, building expansions, building remodels, teardowns and rebuilds, and new building occupancy types, the Wastewater Collection System must evolve to meet these needs. The Sewer System Customer Connections project is the only project within this category and includes work required to meet the needs of customers who have applied for new sewer laterals or are required to upgrade the laterals. The Wastewater Collection Fund pays for a portion of this project while remaining costs are supported by reimbursements from customers for project work performed by the City.

### Recent Accomplishments

- In Fiscal Year 2021, the Utilities Wastewater Division completed over 25 customer service projects at a cost of approximately \$0.3 million.

## 2023-2027 Capital Improvement Program

### Recurring Projects

There is one recurring project in Customer Connections in the 2023-2027 CIP: Sewer System, Customer Connections (Fiscal Year 2023 \$0.4 million; 5-Year CIP: \$2.3 million). This project funds changes to customer connections and costs are partially offset by reimbursements from customers requesting the service.

## System Improvement

To ensure reliable wastewater services for the City of Palo Alto residents and customers, infrastructure must be replaced upon reaching the end of its useful life. The infrastructure replacement program includes projects that will rehabilitate or replace deteriorated pipelines. In the next five years, it is estimated that approximately 22,000 linear feet of wastewater mains will be replaced.

### Recent Accomplishments

- Completed design of Wastewater Collection System Rehabilitation/Augmentation Project 30 (SSR 30) in Fiscal Year 2022. Construction of this project started at the end of March 2022 to replace 10,119 linear feet of sanitary sewer mains, as well as replacement and rehabilitation of 38 sewer manholes in the Ventura, Palo Verde, Fair Meadow, and Charleston Meadows neighborhoods. The existing clay pipe mains will be replaced with High Density Polyethylene pipe. In addition, 278 existing City-owned sewer service laterals and cleanouts will be replaced with new 4" or 6" service laterals and cleanouts.

## 2023-2027 Capital Improvement Program

### Recurring Projects

A total of \$6.0 million is programmed for System Improvement recurring projects in the 2023-2027 CIP, with \$1.5 million allocated in Fiscal Year 2023. Recurring projects in this category include the following:

- Wastewater System Improvements (Fiscal Year 2023: \$0.6 million; 5-Year CIP: \$1.4 million)
- Wastewater General Equipment and Tools (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.3 million)
- Sewer Lateral/Manhole Rehabilitation and Replacement (Fiscal Year 2023: \$0.8 million; 5-Year CIP: \$4.4 million)

# WASTEWATER COLLECTION FUND

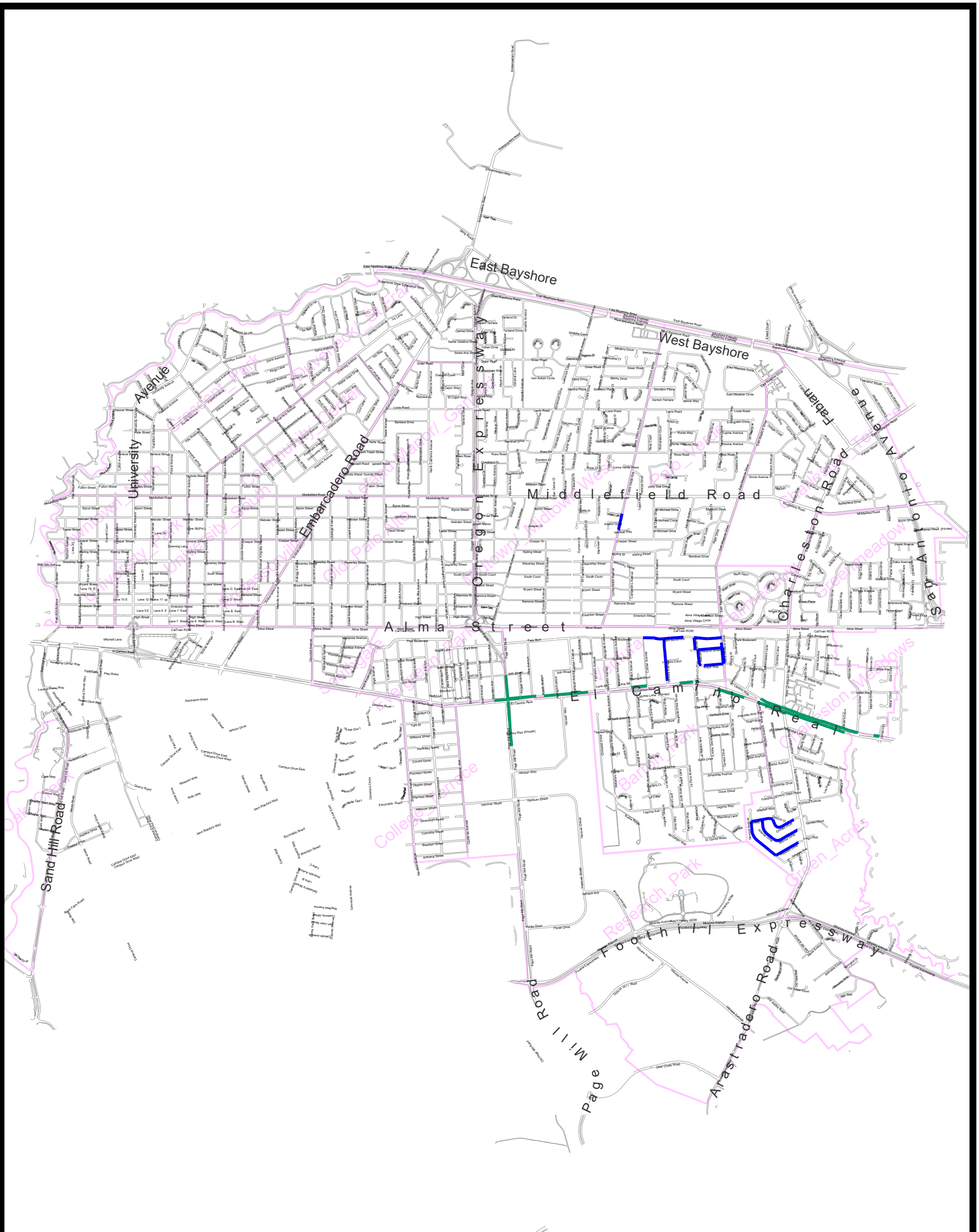
## Non-Recurring Projects

The majority of funding within this category is allocated towards Wastewater Collection System Rehabilitation/Augmentation Projects (cumulative total of \$12.9 million). These projects implement high-priority rehabilitation, augmentation, and lateral replacement work which reduces inflow of rainfall and groundwater into the collection system. The Utilities Department coordinates with the Public Works Department's street maintenance projects to minimize damage to the City's pavement and maximize cost efficiencies.

Linear footage and locations are subject to change, please refer to the City of Palo Alto Utilities webpage to confirm project details: <https://www.cityofpaloalto.org/Departments/Utilities/Utilities-Services-Safety/Utilities-Projects>.

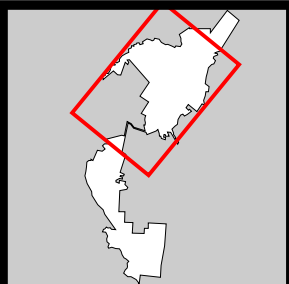
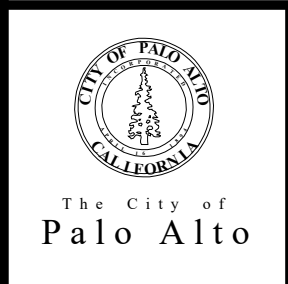
## Wastewater Collection

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Other</b>									
WC-80020	Sewer System, Customer Connections	450,000	450,000	450,000	450,000	450,000	450,000	450,000	2,250,000
<b>Other Total</b>		<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$2,250,000</b>
<b>Total Sources</b>		<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$2,250,000</b>
<b>USE OF FUNDS</b>									
<b>Customer Connections</b>									
WC-80020	Sewer System, Customer Connections	475,832	475,832	450,000	450,000	450,000	450,000	450,000	2,250,000
<b>Customer Connections Total</b>		<b>\$475,832</b>	<b>\$475,832</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$450,000</b>	<b>\$2,250,000</b>
<b>System Improvements</b>									
WC-99013	Sewer Lateral/Manhole Rehabilitation and Replacement	800,001	800,001	825,000	850,000	875,500	900,000	927,000	4,377,500
WC-16001	Wastewater Collection System Rehabilitation/Augmentation Project 29	684,788	349,927	0	0	0	0	0	0
WC-17001	Wastewater Collection System Rehabilitation/Augmentation Project 30	4,423,408	3,543,720	879,688	0	0	0	0	879,688
WC-19001	Wastewater Collection System Rehabilitation/Augmentation Project 31	0	0	1,650,000	3,550,000	0	0	0	5,200,000
WC-20000	Wastewater Collection System Rehabilitation/Augmentation Project 32	0	0	0	0	1,650,000	3,550,000	0	5,200,000
WC-21000	Wastewater Collection System Rehabilitation/Augmentation Project 33	0	0	0	0	0	0	1,650,000	1,650,000
WC-13002	Wastewater General Equipment and Tools	192,612	192,612	50,000	50,000	50,000	50,000	50,000	250,000
WC-15002	Wastewater System Improvements	204,912	34,501	600,000	200,000	200,000	200,000	200,000	1,400,000
<b>System Improvements Total</b>		<b>\$6,305,721</b>	<b>\$4,920,761</b>	<b>\$4,004,688</b>	<b>\$4,650,000</b>	<b>\$2,775,500</b>	<b>\$4,700,000</b>	<b>\$2,827,000</b>	<b>\$18,957,188</b>
<b>Total Uses</b>		<b>\$6,781,553</b>	<b>\$5,396,593</b>	<b>\$4,454,688</b>	<b>\$5,100,000</b>	<b>\$3,225,500</b>	<b>\$5,150,000</b>	<b>\$3,277,000</b>	<b>\$21,207,188</b>



**Sanitary Sewer Replacement (SSR) Projects**

- FY'23 (No Construction Projects)
- FY'24 (SSR 31)
- FY'25 (No Construction Project)
- FY'26 (SSR 32)
- FY'27 (No Construction Project)



## WASTEWATER FUND MAP FY'23 to FY'27 CAPITAL IMPROVEMENT PROGRAM

This map is a product of the City of Palo Alto GIS



CITY OF  
**PALO  
ALTO**

## Customer Connections



## WASTEWATER COLLECTION FUND



Sewer System, Customer Connections

**Fund:** Wastewater Collection Fund  
**Category:** Customer Connections  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WC-80020

# Sewer System, Customer Connections

## Description

This project provides for the installation of sewer lateral connections, additions of existing mains, and extensions of mains for new or existing customers.

## Justification

It is necessary to provide sewer connections to serve new customers and to respond to changes in sewer requirements due to redevelopment. Old existing non-plastic sewer service laterals become cracked and broken by tree root intrusion, ground movement, and third-party excavation damages requiring the laterals to be replaced.

## Supplemental Information

Other funding sources include customer connection and capacity fees for connecting to the Wastewater Collection System. Capacity fees are collected through connection charges to cover the proportionate cost of system improvements required to serve new customers.

## Significant Changes

**2022-2026 CIP:** The annual revenues budgeted for this project has been decreased to align with actual customer connections experienced in prior years for this project.

**2021-2025 CIP:** The annual amount budgeted for this project has been decreased to align with actual costs experienced in prior years for this project.

**2015-2019 CIP:** This project was previously titled Sewer System Extension. As part of the FY 2015 budget, it was retitled to more accurately reflect the work done with this funding.



# WASTEWATER COLLECTION FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	N/A	450,000	450,000	450,000	450,000	450,000	450,000	450,000	2,250,000	0	N/A
<b>Wastewater Collection Fund</b>	N/A	25,832	25,832	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>475,832</b>	<b>475,832</b>	<b>450,000</b>	<b>450,000</b>	<b>450,000</b>	<b>450,000</b>	<b>450,000</b>	<b>2,250,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	475,832	475,832	450,000	450,000	450,000	450,000	450,000	2,250,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>475,832</b>	<b>475,832</b>	<b>450,000</b>	<b>450,000</b>	<b>450,000</b>	<b>450,000</b>	<b>450,000</b>	<b>2,250,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment          Section: Water Resources          Goal: N-4          Policy: N-4.16          Program: N4.16.1</p> <p><b>Environmental Impact Analysis:</b>          This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission          Utilities Advisory Commission</p>
---	---



CITY OF  
**PALO  
ALTO**

## System Improvements

## WASTEWATER COLLECTION FUND



Sewer manhole base

**Fund:** Wastewater Collection Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WC-99013

# Sewer Lateral/Manhole Rehabilitation and Replacement

## Description

This project will replace defective sewer laterals, cleanouts, and manholes; install backwater devices; and purchase equipment to support these activities in order to maintain the Wastewater Collection System. Information collected during routine annual maintenance activities is used to prioritize work. Defective laterals, for example, will be replaced to re-establish existing services, reduce maintenance expenses, and eliminate ground water intrusion. Backwater devices will be installed to reduce backflows of sewage. New manholes will be installed or rehabilitated to improve structural integrity.

## Justification

The work will help reduce both the backflow of sewage onto private property and the City's treatment expenses. This project also cleans and takes videos of sewer collection mains and laterals as necessary.

## Significant Changes

**2022-2026 CIP:** This budget was increased in alignment to anticipated work levels.

**2021-2025 CIP:** This budget was increased to accommodate anticipated construction cost escalation for the multi-year lateral replacement project. The bid result indicated that the contractor's cost is substantially higher than in-house cost, therefore WW Operations decided to perform the work themselves. Project costs will continue to be evaluated throughout FY 2021 and considered as part of the development of the 2022-2026 CIP.

# WASTEWATER COLLECTION FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Collection Fund</b>	N/A	800,001	800,001	825,000	850,000	875,500	900,000	927,000	4,377,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>800,001</b>	<b>800,001</b>	<b>825,000</b>	<b>850,000</b>	<b>875,500</b>	<b>900,000</b>	<b>927,000</b>	<b>4,377,500</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	800,001	800,001	825,000	850,000	875,500	900,000	927,000	4,377,500	0	N/A
<b>Total</b>	<b>N/A</b>	<b>800,001</b>	<b>800,001</b>	<b>825,000</b>	<b>850,000</b>	<b>875,500</b>	<b>900,000</b>	<b>927,000</b>	<b>4,377,500</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## WASTEWATER COLLECTION FUND



**Fund:** Wastewater Collection Fund

**Category:** System Improvements

**Managing Department:** Utilities

**Initial Project Start:** Summer 2018

**Initial Project Completion:** Winter 2020

**Revised Project Start:** Summer 2020

**Revised Project Completion:** Summer 2022

**Project Number:** WC-17001

Trenching for installation of High Density Polyethylene (HDPE) sewer main by open trench method

# Wastewater Collection System Rehabilitation/Augmentation Project 30

## Description

This project funds the design and construction of high priority main and lateral replacement work, which reduces inflow of rainfall and infiltration of groundwater into the collection system. The project replaces approximately 10,100 linear feet (which represents 1.0 percent of the City's Wastewater Collection System) for various streets in the City, including Ventura, Research Park, Fair Meadow, and Midtown West neighborhoods. The project will be comprised of laterals identified in video inspection work or through maintenance records as deficient and in need of replacement. Priority will be given to areas identified by Public Works as targeted work zones ensuring coordination between departments.

## Justification

The 2004 Collection System Master Plan (Master Plan Study) update indicated certain facilities are in need of augmentation to handle growth and peak flows. The mains selected for replacement and/or rehabilitation are part of the asset management program recommended by the Master Plan Study.

## Supplemental Information

Linear footage and locations are subject to change, please refer to the City of Palo Alto Utilities webpage to confirm project details.

## Significant Changes

**2023-2027 CIP:** The location of planned work has been adjusted to prioritize pipes in worse condition in the Fair Meadow neighborhood. The project budget has been increased by approximately \$0.4 million for construction cost escalation.

**2022-2026 CIP:** The main replacement scope and schedule has been adjusted to align with the Wastewater Fund financial plan. The project scope for Wastewater Collection Replacement Project 30 has been reduced to

# WASTEWATER COLLECTION FUND

keep the rate increase low and reserves within guidelines. The overall project budget has been reduced from \$6.2 million to \$4.3 million.

**2021-2025 CIP:** The project scope for FY 2021 has been reduced to design engineering and the budget was adjusted down by \$0.7 million.

**2020-2024 CIP:** City staff has proposed a new replacement schedule of completing a water, gas and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. In the last few years there have been fewer bidders and higher prices on construction projects due to the increased demand for construction services. The overall project budget has increased by \$2.3 million to account for a reduction of 3,614 in linear feet and construction cost escalation.

**2019-2023 CIP:** Project budget has increased by \$0.9 million to account for construction cost escalation.

**2018-2022 CIP:** Due to delays in SSR 24, 25, 26, and 27, the construction for this project is postponed to FY 2021.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Collection Fund</b>	233,371	4,423,408	3,543,720	879,688	0	0	0	0	879,688	0	4,656,779
<b>Total</b>	<b>233,371</b>	<b>4,423,408</b>	<b>3,543,720</b>	<b>879,688</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>879,688</b>	<b>0</b>	<b>4,656,779</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	4,423,408	3,543,720	879,688	0	0	0	0	879,688	0	4,423,408
<b>Design</b>	233,369	0	0	0	0	0	0	0	0	0	233,369
<b>Total</b>	<b>233,369</b>	<b>4,423,408</b>	<b>3,543,720</b>	<b>879,688</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>879,688</b>	<b>0</b>	<b>4,656,777</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.



## WASTEWATER COLLECTION FUND



Sewer Trench Line

**Fund:** Wastewater Collection Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2019  
**Initial Project Completion:** Winter 2021  
**Revised Project Start:** Summer 2023  
**Revised Project Completion:** Summer 2025  
**Project Number:** WC-19001

# Wastewater Collection System Rehabilitation/Augmentation Project 31

## Description

This project funds the design and construction of high priority lateral replacement work, which reduces inflow of rainfall and groundwater into the collection system. The project replaces approximately 10,500 linear feet (which represents 1.1 percent of the City's Wastewater Collection System) for various streets in the City, including Ventura, and Green Acres neighborhoods. The project will be comprised of laterals identified in video inspection work or through maintenance records as deficient and in need of replacement. Priority will be given to areas identified by Public Works as targeted work zones ensuring coordination between departments.

## Justification

The 2004 Collection System Master Plan (Master Plan Study) indicated certain facilities are in need of augmentation to handle growth and peak flows. The mains selected for replacement and/or rehabilitation are part of the asset management program recommended by the Master Plan Study.

## Supplemental Information

Linear footage and locations are subject to change, please refer to the City of Palo Alto Utilities webpage to confirm project details.

## Significant Changes

**2023-2027 CIP:** The project schedule was adjusted to start in FY 2023, instead of FY 2024, due to a recent assessment of the CCTV inspection, which shows structural defects on a number of pipes that cannot be addressed through routine maintenance activities.

**2022-2026 CIP:** The main replacement scope and schedule has been adjusted to align with the Wastewater Fund financial plan. In an effort to keep rates low and reserves within guidelines, this project start in FY 2024



# WASTEWATER COLLECTION FUND

and the scope for Wastewater Collection Replacement Project 31. The overall project budget has been reduced from \$6.9 million to \$5.2 million.

**2020-2024 CIP:** City staff has proposed a new replacement schedule of completing a water, gas and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. In the last few years there have been fewer bidders and higher prices on construction projects due to the increased demand for construction services. The overall project budget has increased by \$2.3 million and decreased in linear footage by 12,109 to account for construction cost escalation.

**2019-2023 CIP:** Project budget has increased by \$1.0 million to account for construction cost escalation.

**2018-2022 CIP:** Due to delays in WCSR 24, 25, 26, and 27, the construction for this project is postponed to FY 2022.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Collection Fund</b>	0	0	0	1,650,000	3,550,000	0	0	0	5,200,000	0	5,200,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,650,000</b>	<b>3,550,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,200,000</b>	<b>0</b>	<b>5,200,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	2,973,500	0	0	0	2,973,500	0	2,973,500
<b>Design</b>	0	0	0	1,650,000	576,500	0	0	0	2,226,500	0	2,226,500
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,650,000</b>	<b>3,550,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,200,000</b>	<b>0</b>	<b>5,200,000</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## WASTEWATER COLLECTION FUND



**Fund:** Wastewater Collection Fund

**Category:** System Improvements

**Project Location:** Various locations

**Managing Department:** Utilities

**Initial Project Start:** Summer 2020

**Initial Project Completion:** Winter 2022

**Revised Project Start:** Summer 2025

**Revised Project Completion:** Spring 2026

**Project Number:** WC-20000

Sewer Main Replacement Project using Pipe Bursting Method

# Wastewater Collection System Rehabilitation/Augmentation Project 32

## Description

This project funds the design and construction of high priority main and lateral replacement work, which reduces inflow of rainfall and infiltration of groundwater into the collection system. The project replaces approximately 9,800 linear feet (which represents 1 percent of the City's Wastewater Collection System) for various streets in the City, including Old Palo Alto and Barron Park neighborhoods. The project will be comprised of laterals identified in video inspection work or through maintenance records as deficient and in need of replacement. Priority will be given to areas identified by Public Works as targeted work zones ensuring coordination between departments.

## Justification

The 2004 Collection System Master Plan (Master Plan Study) update indicated certain facilities are in need of augmentation to handle growth and peak flows. The mains selected for replacement and/or rehabilitation are part of the asset management program recommended by the Master Plan Study.

## Supplemental Information

Linear footage and locations are subject to change, please refer to the City of Palo Alto Utilities webpage to confirm project details.

## Significant Changes

**2023-2027 CIP:** The project schedule was adjusted to start in FY 2025, instead of FY 2026, to align with adjustments made to the schedule for WC-19001 and the Wastewater Fund financial plan. In an effort to keep rates low and reserves within guidelines, the overall project budget has been reduced from \$5.5 million to \$5.2 million.

# WASTEWATER COLLECTION FUND

**2022-2026 CIP:** The main replacement scope and schedule has been adjusted to align with the Wastewater Fund financial plan. In an effort to keep rates low and reserves within guidelines, the project scope for Wastewater Collection Replacement Project 32. The overall project budget has been reduced from \$7.2 million to \$5.5 million.

**2020-2024 CIP:** City staff has proposed a new replacement schedule of completing a water, gas and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. In the last few years there have been fewer bidders and higher prices on construction projects due to the increased demand for construction services. The overall project budget has increased by \$2.3 million to account for construction cost escalation.

**2019-2023 CIP:** Project budget has increased by \$1.0 million to account for construction cost escalation.

**2018-2022 CIP:** Due to delays in WCSR 24, 25, 26, and 27, the construction for this project is postponed to FY 2023.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Collection Fund</b>	0	0	0	0	0	1,650,000	3,550,000	0	5,200,000	0	5,200,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,650,000</b>	<b>3,550,000</b>	<b>0</b>	<b>5,200,000</b>	<b>0</b>	<b>5,200,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	3,550,000	0	3,550,000	0	3,550,000
<b>Design</b>	0	0	0	0	0	1,650,000	0	0	1,650,000	0	1,650,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,650,000</b>	<b>3,550,000</b>	<b>0</b>	<b>5,200,000</b>	<b>0</b>	<b>5,200,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## WASTEWATER COLLECTION FUND



Rehabilitation equipment

**Fund:** Wastewater Collection Fund

**Category:** System Improvements

**Project Location:** Various locations

**Managing Department:** Utilities

**Initial Project Start:** Summer 2027

**Initial Project Completion:** Winter 2028

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** WC-21000

# Wastewater Collection System Rehabilitation/Augmentation Project 33

## Description

This project funds the design and construction of high priority main and lateral replacement work, which reduces inflow of rainfall and groundwater into the collection system. The project will include approximately 15,000 to 25,000 linear feet for various streets within the City's limits. The project will be comprised of laterals identified in video inspection work or through maintenance records as deficient and in need of replacement. Priority will be given to areas identified by Public Works as targeted work zones ensuring coordination between departments.

## Justification

The 2004 Collection System Master Plan Study update indicated certain facilities are in need of enlargement to handle growth and peak flows. The mains selected for replacement and/or rehabilitation are informed by the Master Plan Study; research and analysis of sewer main maintenance records; cleaning and videotaping of sanitary sewer mains; condition assessment; real time flow monitoring of existing sewers; and hydraulic computer modeling.

## Supplemental Information

Linear footage and locations are subject to change, please refer to the City of Palo Alto Utilities webpage to confirm project details.

# WASTEWATER COLLECTION FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Collection Fund</b>	0	0	0	0	0	0	0	1,650,000	1,650,000	3,550,000	5,200,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,650,000</b>	<b>1,650,000</b>	<b>3,550,000</b>	<b>5,200,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	0	1,206,400	1,206,400	3,550,000	4,756,400
<b>Design</b>	0	0	0	0	0	0	0	443,600	443,600	0	443,600
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,650,000</b>	<b>1,650,000</b>	<b>3,550,000</b>	<b>5,200,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment          Section: Water Resources          Goal: N-4          Policy: N-4.16          Program: N4.16.1</p> <p><b>Environmental Impact Analysis:</b>          This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission          Utilities Advisory Commission</p>
---	---

# WASTEWATER COLLECTION FUND



**Fund:** Wastewater Collection Fund  
**Category:** System Improvements  
**Project Location:** Municipal Service Center  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WC-13002

Equipment used to install fuse High Density Polyethylene (HDPE) pipe

## Wastewater General Equipment and Tools

### Description

This funding allows for the acquisition of new fusion equipment and other associated tools. This equipment is used to fuse together pipe joints in the City's Wastewater Collection System.

### Justification

As the equipment ages, the quality of the fusion joints begin to decline and the operators must spend more time scraping, aligning, and fusing construction joints. In order to maintain high quality standards for the installation of the City's wastewater collection mains, along with the associated service standards and worker safety and productivity measures, equipment and tools require continuous upgrades.

### Significant Changes

**2021-2025 CIP:** Project increased from \$50,000 to \$185,000 for FY 2021. This funding enables the purchase of a new trailer flusher (pressure washer) and replacement of new closed-circuit television equipment.

**2015-2019 CIP:** Project was retitled from Wastewater Fusion and General Equipment/Tools.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Collection Fund</b>	N/A	192,612	192,612	50,000	50,000	50,000	50,000	50,000	250,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>192,612</b>	<b>192,612</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>250,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	192,612	192,612	50,000	50,000	50,000	50,000	50,000	250,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>192,612</b>	<b>192,612</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>250,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---



## WASTEWATER COLLECTION FUND



**Fund:** Wastewater Collection Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WC-15002

Trenching for installation of High Density Polyethylene (HDPE) sewer main by directional drilling method

# Wastewater System Improvements

## Description

This project provides funding as needed to improve the Wastewater Collection System. Typical activities include: increasing system capacity for growth, flow monitoring, hydraulic modeling and system analysis, load simulations, asset management analysis and assessment, system inflow/infiltration analysis, and sanitary sewer overflow monitoring and reduction.

## Justification

Wastewater Collection System reliability and adequate capacity are critical to providing a high level of service to customers. Mainline sewer backups and overflows into homes and businesses are costly and pose a health risk. Reducing losses associated with these backup claims requires a continuous evaluation of system needs and making improvements to maintain a high level of service.

## Significant Changes

**2023-2027 CIP:** One-time funding of \$0.4 million programmed in FY 2023 for a capacity assessment of the wastewater collection system. The last study was completed in 2004 and since then miles of mains have been upgraded so the model from 2004 is becoming outdated, limiting its usefulness for evaluating new development projects. The new study will reflect today's conditions and also include collecting flow monitoring data.

**2022-2026 CIP:** Project budget anticipated to increase annually in FY 2023 through FY 2025 to address small improvements to mains and laterals, which are not included in a main replacement project due to reduced scope in those projects. The reduced scope in main replacements helps keep the fund reserves within guidelines and rate increases low.



# WASTEWATER COLLECTION FUND

**2021-2025 CIP:** This budget is lowered based on past expenditures. In the upcoming years, the proposed budget will be used to improve the system due to unexpected conditions, purchase and implement a new wastewater collection system maintenance software, conduct system assessment, etc.

Currently acquiring a new asset management software platform to replace the current software used to manage Wastewater Operations maintenance activities. All maintenance history, records, and attachments stored in the current database will be exported from cloud-based database and converted or migrated into the new software system. The new wastewater management system will be used by Utilities Wastewater Operations staff to generate work orders, schedule planned or unplanned maintenance work in order to help plan/prioritize pipeline capital improvement replacement.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Collection Fund</b>	N/A	204,912	34,501	600,000	200,000	200,000	200,000	200,000	1,400,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>204,912</b>	<b>34,501</b>	<b>600,000</b>	<b>200,000</b>	<b>200,000</b>	<b>200,000</b>	<b>200,000</b>	<b>1,400,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	200,000	29,589	600,000	200,000	200,000	200,000	200,000	1,400,000	0	N/A
<b>Design</b>	N/A	4,912	4,912	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>204,912</b>	<b>34,501</b>	<b>600,000</b>	<b>200,000</b>	<b>200,000</b>	<b>200,000</b>	<b>200,000</b>	<b>1,400,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Utilities Advisory Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.



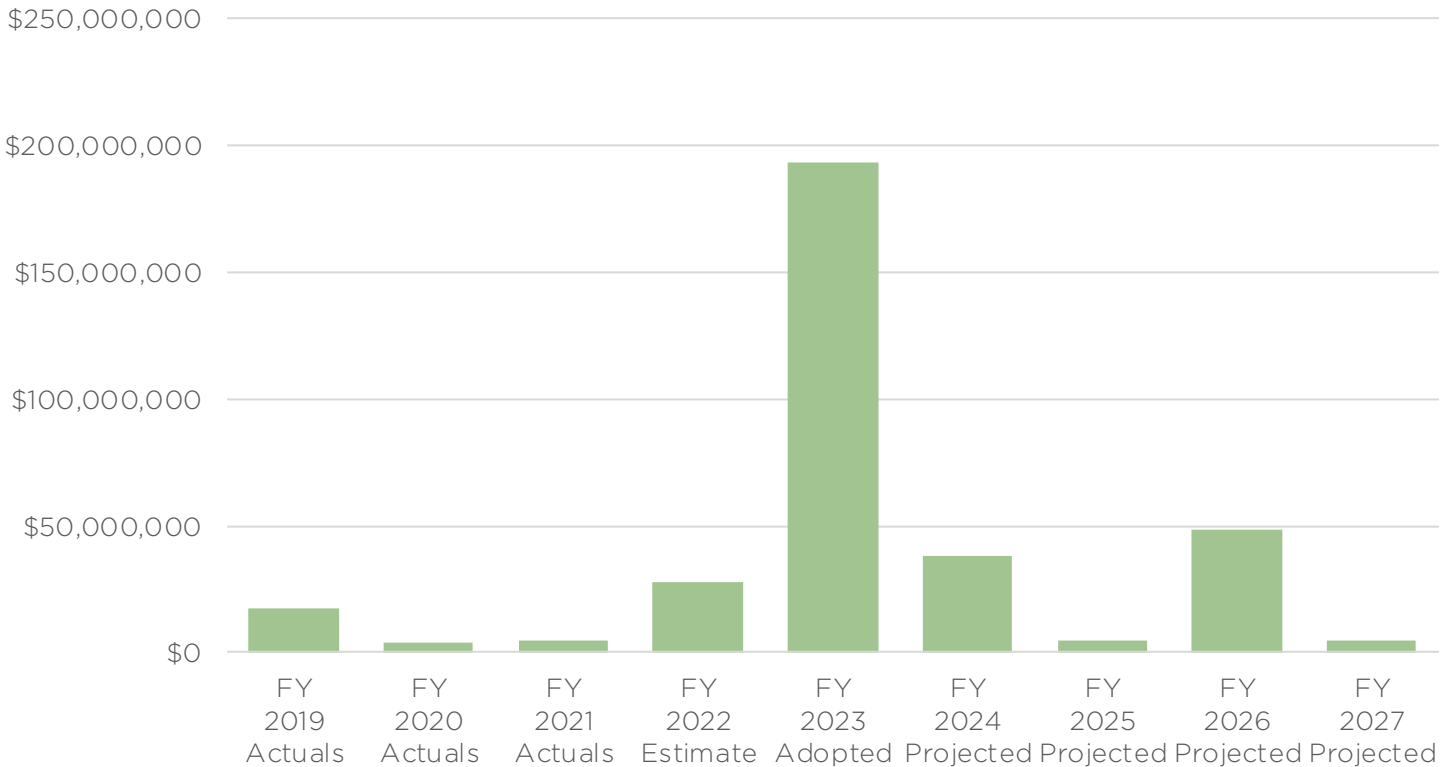
CITY OF  
**PALO  
ALTO**

# WASTEWATER TREATMENT FUND

# Overview

Activities related to the replacement, rehabilitation, optimization, and upgrading of the City’s wastewater treatment plant infrastructure are accounted for in the Wastewater Treatment Fund. For detailed information on the maintenance and operation of the wastewater treatment plant, please refer to the Wastewater Treatment Fund section of the Operating Budget. As part of the 2023-2027 Capital Improvement Program (CIP), expenditures of approximately \$289.0 million are programmed with \$193.2 million allocated in Fiscal Year 2023. The Wastewater Treatment Fund recovers its costs from the Palo Alto Wastewater Collection Fund, Stanford University, East Palo Alto Sanitary District, Mountain View, Los Altos, and Los Altos Hills based on each agency’s expected share of the capacity. Each agency bills their respective sewer ratepayers for associated sewer and treatment costs as well as the Wastewater Treatment Fund’s capital projects. Approximately 250,000 residents are served by the six agencies contributing sewage to the Regional Water Quality Control Plant (RWQCP). Overall, a total of ten projects are programmed in the 2023-2027 CIP with the budget accounted for in two categories: Buildings and Facilities and System Improvements.

## Wastewater Treatment Fund Capital Expenditures



The 2012 Long Range Facilities Plan evaluated the infrastructure needs of the RWQCP. It analyzed and made recommendations on future regulations, replacement and rehabilitation needs, site planning, and flow and load projections. Funding for the major projects included in the 2023-2027 CIP requires debt financing and approval by the partners, per the individual agreements between the City and each of the partners. Over the years, staff has met with partner agencies at the staff and board/council level to discuss

major capital projects. It should be noted that a portion of the expenses for these projects are expected to be incurred after the five years included in the 2023-2027 CIP. Staff has applied for State Revolving Fund loans and has considered revenue bonds for these projects.

Major projects planned include:

- Advanced Water Purification Facility (Fiscal Year 2023: \$17.1 million; 5-Year CIP: \$17.1 million)
- Headworks Facility Replacement (Fiscal Year 2023: \$4.8 million; 5-Year CIP: \$48.8 million)
- New Laboratory and Environmental Services Building (Fiscal Year 2023: \$2.6 million; 5-year CIP: \$23.7 million)
- Outfall Line Construction (Fiscal Year 2023: \$10.6 million; 5-Year CIP: \$10.6 million)
- Primary Sedimentation Tank Rehabilitation (Fiscal Year 2023: \$2.6 million; 5-Year CIP: \$2.6 million)
- Secondary Treatment Upgrades (Fiscal Year 2023: \$144.7 million; 5-Year CIP: \$144.7 million)

Minor CIP projects are funded through recurring payments to the City by the partner agencies, with the total dollar amount for the minor CIP projects capped by the partner agreements and adjusted annually for inflation. Minor projects are budgeted in Plant Repair, Retrofit, and Equipment Replacement (Fiscal Year 2023: \$10.5 million; 5-Year CIP: \$26.2 million).

## Infrastructure Inventory

CLASSIFICATION	TYPE
Liquid Treatment Systems	Preliminary, Primary, Secondary, and Tertiary Treatment, UV Disinfection, and Outfall
Solids Treatment Systems	Solids Handling
Staff Buildings	Staff Buildings and Support Systems
Recycled Water	Recycled Water Treatment

## Buildings and Facilities

The Buildings and Facilities category accounts for projects that will improve or construct facilities that house equipment related to wastewater treatment at the RWQCP. During the 2023-2027 CIP, two projects are programmed in this category.

### 2023-2027 Capital Improvement Program

#### Recurring Projects

There is one recurring project in this category as part of the 2023-2027 CIP.

- Plant Master Plan (Fiscal Year 2023: \$0.2 million; 5-Year CIP: \$2.1 million)

#### Non-Recurring Projects

There is one non-recurring project in this category as part of the 2023-2027 CIP.

- New Laboratory and Environmental Services Building (Fiscal Year 2023: \$2.6 million; 5-Year CIP: \$23.7 million)

## System Improvements

The System Improvements category accounts for all infrastructure and equipment related to the safe and efficient treatment of wastewater received at the RWQCP. Over the course of the 2023-2027 CIP, approximately \$263.3 million is allocated towards System Improvements projects, with \$190.0 million allocated in Fiscal Year 2023.

### Recent Accomplishments

- Completed 60% design of the Advanced Water Purification Facility.
- Completed design for Secondary Treatment Upgrades.
- Completed 60% design of the Horizontal Levee Pilot.

## 2023-2027 Capital Improvement Program

### Recurring Projects

There is one recurring project in this category: Plant Repair, Retrofit, and Equipment Replacement (Fiscal Year 2023: \$10.5 million; 5-Year CIP: \$26.2 million). This project provides funding for the assessment, repair, and retrofit of the concrete and metal structural condition of the plant; the replacement of necessary plant equipment to maintain treatment reliability and ancillary facilities to maintain existing infrastructure; and the replacement of large diameter flow meters built into the wastewater treatment system on sewers, pipes, and water lines. The United States Environmental Protection Agency mandates that funding is allocated for equipment replacement to ensure adequate wastewater treatment reliability.

### Non-Recurring Projects

There are seven non-recurring projects in this category :

- Advanced Water Purification Facility (Fiscal Year 2023: \$17.1 million; 5-Year CIP: \$17.1 million)
- Headworks Facility Replacement (Fiscal Year 2023: \$4.8 million; 5-Year CIP: \$48.8 million)
- Horizontal Levee Pilot (Fiscal Year 2023: \$0.2 million; 5-Year CIP \$0.7 million)
- Joint Intercepting Sewer Rehabilitation (5-Year CIP \$12.6 million)
- Outfall Line Construction (Fiscal Year 2023: \$10.6 million; 5-Year CIP: \$10.6 million)
- Primary Sedimentation Tank Rehabilitation (Fiscal Year 2023: \$2.6 million; 5-Year CIP: \$2.6 million)
- Secondary Treatment Upgrades (Fiscal Year 2023: \$144.7 million; 5-Year CIP: \$144.7 million)

# WASTEWATER TREATMENT FUND

## Wastewater Treatment

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Other</b>									
<b>WQ-19003</b>	Advanced Water Purification Facility	2,959,308	1,268,308	18,521,000	0	0	0	0	18,521,000
<b>WQ-16002</b>	Headworks Facility Replacement	0	0	4,757,000	0	0	43,607,000	0	48,364,000
<b>WQ-24000</b>	Joint Intercepting Sewer Rehabilitation (Phase 1)	0	0	0	12,500,000	0	0	0	12,500,000
<b>WQ-14002</b>	New Laboratory And Environmental Services Building	2,510,000	0	2,510,000	20,900,000	0	0	0	23,410,000
<b>WQ-19000</b>	Outfall Line Construction	10,582,715	0	10,582,800	0	0	0	0	10,582,800
<b>WQ-14003</b>	Primary Sedimentation Tank Rehabilitation	17,632,000	5,000,000	12,632,000	0	0	0	0	12,632,000
<b>WQ-19001</b>	Secondary Treatment Upgrades	4,462,000	0	148,799,600	0	0	0	0	148,799,600
<b>Other Total</b>		<b>\$38,146,023</b>	<b>\$6,268,308</b>	<b>\$197,802,400</b>	<b>\$33,400,000</b>	<b>\$0</b>	<b>\$43,607,000</b>	<b>\$0</b>	<b>\$274,809,400</b>
<b>Total Sources</b>		<b>\$38,146,023</b>	<b>\$6,268,308</b>	<b>\$197,802,400</b>	<b>\$33,400,000</b>	<b>\$0</b>	<b>\$43,607,000</b>	<b>\$0</b>	<b>\$274,809,400</b>
<b>USE OF FUNDS</b>									
<b>Buildings and Facilities</b>									
<b>WQ-14002</b>	New Laboratory And Environmental Services Building	2,637,564	65,000	2,578,200	21,127,500	0	0	0	23,705,700
<b>WQ-10001</b>	Plant Master Plan	1,004,806	1,004,806	221,500	444,800	483,600	443,900	483,900	2,077,700
<b>Buildings and Facilities Total</b>		<b>\$3,642,370</b>	<b>\$1,069,806</b>	<b>\$2,799,700</b>	<b>\$21,572,300</b>	<b>\$483,600</b>	<b>\$443,900</b>	<b>\$483,900</b>	<b>\$25,783,400</b>
<b>System Improvements</b>									
<b>WQ-19003</b>	Advanced Water Purification Facility	3,107,198	2,913,198	17,060,500	0	0	0	0	17,060,500
<b>WQ-16002</b>	Headworks Facility Replacement	14,100	14,100	4,767,300	0	0	43,996,900	0	48,764,200
<b>WQ-22001</b>	Horizontal Levee Pilot	131,500	88,600	194,400	151,600	164,900	151,300	0	662,200
<b>WQ-24000</b>	Joint Intercepting Sewer Rehabilitation (Phase 1)	0	0	0	12,636,100	0	0	0	12,636,100
<b>WQ-19000</b>	Outfall Line Construction	10,593,116	10,400	10,605,800	0	0	0	0	10,605,800
<b>WQ-19002</b>	Plant Repair, Retrofit, and Equipment Replacement	11,334,802	4,349,702	10,465,000	3,610,900	4,039,900	3,816,800	4,281,600	26,214,200
<b>WQ-14003</b>	Primary Sedimentation Tank Rehabilitation	19,726,437	17,098,437	2,633,700	0	0	0	0	2,633,700
<b>WQ-19001</b>	Secondary Treatment Upgrades	2,067,520	2,033,320	144,685,200	0	0	0	0	144,685,200
<b>System Improvements Total</b>		<b>\$46,974,673</b>	<b>\$26,507,757</b>	<b>\$190,411,900</b>	<b>\$16,398,600</b>	<b>\$4,204,800</b>	<b>\$47,965,000</b>	<b>\$4,281,600</b>	<b>\$263,261,900</b>
<b>Total Uses</b>		<b>\$50,617,043</b>	<b>\$27,577,563</b>	<b>\$193,211,600</b>	<b>\$37,970,900</b>	<b>\$4,688,400</b>	<b>\$48,408,900</b>	<b>\$4,765,500</b>	<b>\$289,045,300</b>



CITY OF  
**PALO  
ALTO**



## Buildings and Facilities



Water Quality Control Plant Laboratory

**Fund:** Wastewater Treatment Fund  
**Category:** Buildings and Facilities  
**Project Location:** 2501 Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Winter 2015  
**Initial Project Completion:** Fall 2021  
**Revised Project Start:** Spring 2019  
**Revised Project Completion:** Fall 2027  
**Project Number:** WQ-14002

# New Laboratory And Environmental Services Building

## Description

This project provides funding for a new building that will consolidate staff and provide a larger updated lab.

## Justification

The existing laboratory does not have adequate space for staff, instruments, chemical storage, and microbiology testing. Due to limited space, staff is currently located in four separate aging buildings, which house industrial pumps, limiting the number of staff that can be assigned to each building.

## Supplemental Information

This project was identified in the Long Range Facilities Plan accepted by City Council in 2012. Construction funding via a low interest State Revolving Fund (SRF) loan or a revenue bond will be pursued for this project, which is subject to approval from partner agencies (Stanford University, Mountain View, Los Altos, Los Altos Hills, and the East Palo Alto Sanitary District). Partners have already approved repayment of an SRF design and planning loan, while staff evaluate the revenue bond option as an alternative funding source.

## Significant Changes

**2023-2027 CIP:** Project planning commenced in Spring 2022. The project cost estimate and timeline will be updated as the project definition is refined after planning and design.

**2022-2026 CIP:** Full design will proceed following additional planning level analyses including evaluation of additional options, including potential lease or facility procurement options. If the project continues as planned, construction is projected to begin in FY 2024. Funding for subsequent years has been consolidated into the fiscal years that the design and construction contracts are anticipated to be awarded, Fiscal Years 2022 and 2024 respectively.

**2021-2025 CIP:** Construction has been delayed and projected to begin in FY 2022.

# WASTEWATER TREATMENT FUND

**2020-2024 CIP:** Design contract slightly delayed and awarded in February 2019.

**2019-2023 CIP:** Design phase of the project is expected to start in Fall 2018. The City is exploring funding alternatives for the project; therefore, the funding source is no longer stated as Revenue from the State of California.

**2018-2022 CIP:** Partners approved repayment of the SRF design and planning loan, but securing the loan took longer than expected and there was uncertainty about availability of State funds. The City will explore alternate methods of funding such as a revenue bond. Project planning/design can commence once the funds are secured, but the timeline has been impacted.

**2017-2021 CIP:** Approval by partner agencies was required for project approval and to guarantee repayment of any state loans.

**2016-2020 CIP:** Project budget in FY 2016 now captures an additional \$4.0 million more in FY 2020 for final design and start of construction.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	2,510,000	0	2,510,000	20,900,000	0	0	0	23,410,000	0	23,410,000
<b>Wastewater Treatment Fund</b>	363,703	127,564	65,000	68,200	227,500	0	0	0	295,700	0	724,403
<b>Total</b>	<b>363,703</b>	<b>2,637,564</b>	<b>65,000</b>	<b>2,578,200</b>	<b>21,127,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,705,700</b>	<b>0</b>	<b>24,134,403</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	21,127,500	0	0	0	21,127,500	0	21,127,500
<b>Design</b>	363,703	2,637,564	65,000	2,578,200	0	0	0	0	2,578,200	0	3,006,903
<b>Total</b>	<b>363,703</b>	<b>2,637,564</b>	<b>65,000</b>	<b>2,578,200</b>	<b>21,127,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,705,700</b>	<b>0</b>	<b>24,134,403</b>

## Operating Impact

This project is anticipated to impact operating expenses in the future such as utilities, janitorial services, and alarm/security systems. Once the design, including features and square feet, is complete, costs will be quantified and adjustments will be brought forward in future budgets.

# WASTEWATER TREATMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Architectural Review Board

**Environmental Impact Analysis:**

CEQA will be required.



CITY OF  
**PALO  
ALTO**

# WASTEWATER TREATMENT FUND



Looking West from Fixed Film Reactors

**Fund:** Wastewater Treatment Fund  
**Category:** Buildings and Facilities  
**Project Location:** 2501 Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WQ-10001

## Plant Master Plan

### Description

This project provides funding for the planning and program management of the Long Range Facilities Plan (LRFP) which was completed in 2012. Program management includes project definitions of long range capital projects, acquisition of funding for new large capital projects, preparation of City issued design consultant Request for Proposal packages, and ancillary services related to plan implementation. The program management services are needed through the full execution of the projects covered in the LRFP. The projects in the LRFP are currently underway and are in various stages of development and completion.

### Justification

The long range facilities needed for a wastewater treatment plant primarily consist of replacing aging industrial facilities but also include plant process optimizations, new support infrastructure, and responsiveness to changing situations and regulations.

### Significant Changes

**2023-2027 CIP:** Projects outlined in the LRFP are anticipated to need oversight and management until FY 2055, so this project has been recategorized to a recurring project in order to maintain funding for overall management of the LRFP for the next 30+ years.

**2022-2026 CIP:** The term of the Program Manager contract was extended to FY 2023 to continue to support implementation of the LRFP due to delays in securing state revolving fund loans.

**2019-2023 CIP:** The term of the Program Manager contract is extended to FY 2021 to continue to support implementation of the LRFP.

**2017-2021 CIP:** The Plant is in the second year of the program manager contract and program implementation continues to be dependent upon securing state revolving fund loans.

# WASTEWATER TREATMENT FUND

**2016-2020 CIP:** After completion of the LRFP in 2012, a program manager was brought on board to support implementation of the master plan. About \$0.6 million of the consultant’s work was approved during FY 2015, and the remainder was subject to approval of an additional \$3.3 million in capital funding authorization in the FY 2016 capital budget.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Treatment Fund</b>	N/A	1,004,806	1,004,806	221,500	444,800	483,600	443,900	483,900	2,077,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,004,806</b>	<b>1,004,806</b>	<b>221,500</b>	<b>444,800</b>	<b>483,600</b>	<b>443,900</b>	<b>483,900</b>	<b>2,077,700</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Design</b>	N/A	1,004,806	1,004,806	221,500	444,800	483,600	443,900	483,900	2,077,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>1,004,806</b>	<b>1,004,806</b>	<b>221,500</b>	<b>444,800</b>	<b>483,600</b>	<b>443,900</b>	<b>483,900</b>	<b>2,077,700</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no operating or maintenance expenses associated with this project.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.16                  Program: N4.16.1</p> <p><b>Environmental Impact Analysis:</b>                  This project may require environmental review.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
---	---



CITY OF  
**PALO  
ALTO**



## System Improvements

## WASTEWATER TREATMENT FUND



Filtration system testing unit

**Fund:** Wastewater Treatment Fund  
**Category:** System Improvements  
**Project Location:** 2501 Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Winter 2018  
**Initial Project Completion:** Spring 2021  
**Revised Project Start:** Spring 2021  
**Revised Project Completion:** Fall 2024  
**Project Number:** WQ-19003

# Advanced Water Purification Facility

## Description

This project provides funding for an Advanced Water Purification Facility to further improve the quality of the tertiary-treated recycled water by microfiltration or ultrafiltration followed by reverse osmosis to reduce the level of Total Dissolved Solids (TDS).

## Justification

The Regional Water Quality Control Plant (RWQCP) currently provides tertiary-treated recycled water to permitted users in its service area, mostly for irrigation. The current recycled water delivered has a TDS level of 800-900 mg/L. City Council adopted a goal to reduce the TDS level to 600 mg/L in 2010. In 2015, City Council adopted an Environmental Impact Report for the Phase III Recycled Water Pipeline to South Palo Alto and Stanford Research Park, which specifically mentioned recycled water quality would be improved through additional treatment at the RWQCP. In addition, there are approximately 40 potential recycled water users in the service area with their connection still pending until the RWQCP lowers the recycled water TDS level.

## Supplemental Information

The RWQCP, in collaboration with Valley Water (formerly known as the Santa Clara Valley Water District) and the City of Mountain View, conducted an Advanced Water Purification System Feasibility Study. This study recommended microfiltration or ultrafiltration followed by reverse osmosis after comparing different water quality improvement options. The study also included evaluations of greenhouse gas emissions, storage requirements, facility sites, concentrate treatment options, and initial design and construction cost estimates.

This project was also identified in the Long Range Facilities Plan accepted by City Council in 2012. Funding via contributions from Valley Water, the City of Mountain View, and other external sources such as a low-interest state revolving fund loan or revenue bond will be pursued for this project.

# WASTEWATER TREATMENT FUND

## Significant Changes

**2022-2026 CIP:** Project was delayed due to the amount of time needed to bring the design engineer under contract. Project budget updated to align with original project cost estimate of \$20.2 million, which may be further refined through the design process. Construction funding has been consolidated into FY 2023, when a contract is anticipated to be awarded.

**2021-2025 CIP:** Construction of project has been delayed and projected to begin in FY 2022.

**2020-2024 CIP:** Project start delayed from Winter 2018 to Winter 2019 due to lack of funding as staff is still negotiating with the City of Mountain View and Valley Water to secure funding for this project.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	223,691	2,959,308	1,268,308	18,521,000	0	0	0	0	18,521,000	0	20,012,999
<b>Wastewater Treatment Fund</b>	0	147,890	1,644,890	(1,460,500)	0	0	0	0	(1,460,500)	0	184,390
<b>Total</b>	<b>223,691</b>	<b>3,107,198</b>	<b>2,913,198</b>	<b>17,060,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17,060,500</b>	<b>0</b>	<b>20,197,389</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	147,900	147,900	16,866,500	0	0	0	0	16,866,500	0	17,014,400
<b>Design</b>	223,691	2,959,298	2,765,298	194,000	0	0	0	0	194,000	0	3,182,989
<b>Total</b>	<b>223,691</b>	<b>3,107,198</b>	<b>2,913,198</b>	<b>17,060,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17,060,500</b>	<b>0</b>	<b>20,197,389</b>

## Operating Impact

This project is anticipated to impact operating expenses in the future, such as utilities. As these costs are quantified, adjustments will be brought forward in future budgets, as necessary.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Natural Environment Section: Water Resources Goal: N-4 Policy: N-4.17	Element: Natural Environment Section: Water Resources Goal: N-4 Policy: N-4.16 Program: N4.16.1	Planning and Transportation Commission Architectural Review Board
<b>Environmental Impact Analysis:</b> An addendum to the existing EIR completed in 2015 for the expansion of the Palo Alto recycled water distribution system will be required.		

## WASTEWATER TREATMENT FUND



Headworks Facility

**Fund:** Wastewater Treatment Fund  
**Category:** System Improvements  
**Project Location:** 2501 Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Spring 2020  
**Initial Project Completion:** Winter 2024  
**Revised Project Start:** Winter 2022  
**Revised Project Completion:** Summer 2029  
**Project Number:** WQ-16002

# Headworks Facility Replacement

## Description

This project provides funding for replacing influent pumping, including the suction and discharge piping, pipe manifolds, valves, the electrical and controls system, screening equipment, grit handling equipment, the force main to the primaries and modifying headworks building, and yard piping.

## Justification

This project was identified in the Long Range Facilities Plan (LRFP) report accepted by City Council in 2012. The existing headworks are at the end of their useful life and replacement is required for operational reliability of pumping the raw sewage from the influent sewers into the treatment plant.

## Supplemental Information

Partner agencies' approval to repay design and construction loans is needed as a low-interest state revolving fund loan or a revenue bond will be pursued to fund the project.

## Significant Changes

**2023-2027 CIP:** Project planning commenced in Spring 2022 followed by design and construction in Fiscal Years 2024 and 2027 respectively. Project cost estimate will be updated as the project definition is refined after planning and design.

**2022-2026 CIP:** Project is delayed from Winter 2021 to Winter 2022 due to continued budget constraints, staffing resources, and construction logistics with other projects in progress. Project cost increased from the prior estimate of \$35.2 million to account for anticipated future cost escalation/inflation. Funding for subsequent years has been consolidated into the fiscal years the design and construction contracts are anticipated to be awarded, Fiscal Years 2023 and 2026 respectively.

# WASTEWATER TREATMENT FUND

**2021-2025 CIP:** Project is delayed from Winter 2020 to Winter 2021 due to budget constraints, staffing resources, and construction logistics with other projects in progress.

**2020-2024 CIP:** Project start delayed from Summer 2019 to Winter 2020 due to budget constraints, staffing resources, and construction logistics with other projects in progress.

**2019-2023 CIP:** Staff is evaluating alternative funding options, therefore the funding source is no longer stated explicitly as Revenue from the State of California.

**2018-2022 CIP:** Staff revised the Funding Sources Schedule and the Expenditure Schedule to better reflect the project timeline recommended in the LRFPP, where design will take place from 2020 to 2022, with CEQA and construction to follow.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	0	0	4,757,000	0	0	43,607,000	0	48,364,000	0	48,364,000
<b>Wastewater Treatment Fund</b>	0	14,100	14,100	10,300	0	0	389,900	0	400,200	0	414,300
<b>Total</b>	<b>0</b>	<b>14,100</b>	<b>14,100</b>	<b>4,767,300</b>	<b>0</b>	<b>0</b>	<b>43,996,900</b>	<b>0</b>	<b>48,764,200</b>	<b>0</b>	<b>48,778,300</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	43,996,900	0	43,996,900	0	43,996,900
<b>Design</b>	0	14,100	14,100	4,767,300	0	0	0	0	4,767,300	0	4,781,400
<b>Total</b>	<b>0</b>	<b>14,100</b>	<b>14,100</b>	<b>4,767,300</b>	<b>0</b>	<b>0</b>	<b>43,996,900</b>	<b>0</b>	<b>48,764,200</b>	<b>0</b>	<b>48,778,300</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

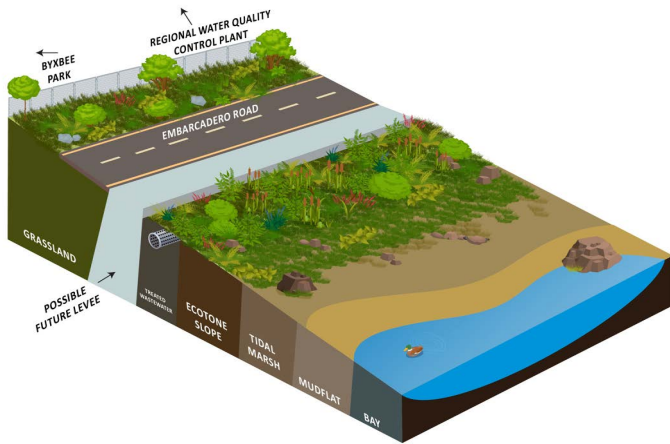
### Potential Board/Commission Review:

Planning and Transportation Commission  
Architectural Review Board

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

# WASTEWATER TREATMENT FUND



**Fund:** Wastewater Treatment Fund  
**Category:** System Improvements  
**Project Location:** Palo Alto Baylands  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2021  
**Initial Project Completion:** Winter 2025  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WQ-22001

Schematic of a horizontal levee

## Horizontal Levee Pilot

### Description

This project consists of the design, permitting, and construction of a horizontal levee pilot system. The system will utilize treated wastewater to create a transitional brackish habitat on the Bayside of a future flood control levee located in the Palo Alto Baylands, adjacent to the City of Palo Alto's Regional Water Quality Control Plant (RWQCP). Information and data collected by this pilot system could support broader implementation of horizontal levees as green infrastructure components in larger flood control levee improvement projects within Palo Alto and beyond.

### Justification

The City of Palo Alto is currently evaluating needed improvements to the existing flood control levees surrounding the City under the Baylands Flood Protection Levee Improvements Project (PE-17006). A horizontal levee is a green infrastructure alternative to the typical wave attenuation technologies (i.e., rip rap) used for flood control levees. Compared to traditional wave attenuation technologies, horizontal levees provide multiple benefits, including sea-level rise protection, habitat improvement, and polishing treatment for treated wastewater. However, because horizontal levees are an emerging technology, the City has been evaluating the feasibility of constructing a pilot system within the Baylands that would collect information and data. This site-specific information could support broader implementation of horizontal levees as green infrastructure components within the larger flood control levee improvement projects. Ultimately, the pilot system itself would be integrated into the larger flood control levee system once built.

### Supplemental Information

City staff, in collaboration with the San Francisco Estuary Partnership (SFEP), are actively seeking grant funding to complete the construction phase of the project. To date, the majority of the total planning and design costs (estimated at \$1.38M) have been paid for by grants awarded to the SFEP. Grantees include the United

# WASTEWATER TREATMENT FUND

Stated Environmental Protection Agency’s Climate Ready Estuaries Program and the State Coastal Conservancy. Currently, the project team has secured funding to get the project through design, including permitting and environmental evaluations. The project team will continue to apply for grants to meet the funding needs of completing construction in subsequent fiscal years. The project team anticipates needing continued funding from the City to meet the local match requirements of any grants obtained for this project; estimates for funding beyond FY 2023 are placeholders for local match requirements and will be adjusted as external funding is secured.

## Significant Changes

**2023-2027 CIP:** Grant funding has been secured through the Environmental Protection Agency (EPA) Water Quality Improvement Fund for completion of the design phase of the project. The project budget includes the City’s fund match requirements. The project team will continue to seek grant funding for the construction phase of the project in subsequent years.

**2022-2026 CIP:** Project established during FY 2022.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Treatment Fund</b>	0	131,500	88,600	194,400	151,600	164,900	151,300	0	662,200	0	750,800
<b>Total</b>	<b>0</b>	<b>131,500</b>	<b>88,600</b>	<b>194,400</b>	<b>151,600</b>	<b>164,900</b>	<b>151,300</b>	<b>0</b>	<b>662,200</b>	<b>0</b>	<b>750,800</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	151,600	164,900	151,300	0	467,800	0	467,800
<b>Design</b>	0	131,500	88,600	194,400	0	0	0	0	194,400	0	283,000
<b>Total</b>	<b>0</b>	<b>131,500</b>	<b>88,600</b>	<b>194,400</b>	<b>151,600</b>	<b>164,900</b>	<b>151,300</b>	<b>0</b>	<b>662,200</b>	<b>0</b>	<b>750,800</b>

## Operating Impact

This project is anticipated to impact operating expenses in the future such as utilities. Once the design is complete, costs will be quantified and adjustments will be brought forward in future budgets.

# WASTEWATER TREATMENT FUND

<b>Relationship to Comprehensive Plan Primary Connection</b>	<b>Relationship to Comprehensive Plan Secondary Connection</b>	<b>Potential Board/Commission Review:</b>
Element: Natural Environment Section: Climate Change and Climate Adaptation Goal: N-8 Policy: N-8.4 Program: N8.4.1	Element: Natural Environment Section: Community Safety Goal: S-2 Policy: S-2.12 Program: S2.12.2	Parks and Recreation Commission Planning and Transportation Commission Architectural Review Board
<b>Environmental Impact Analysis:</b> This project is expected to have a mitigated negative declaration or focused Environmental Impact Report.		





CITY OF  
**PALO  
ALTO**

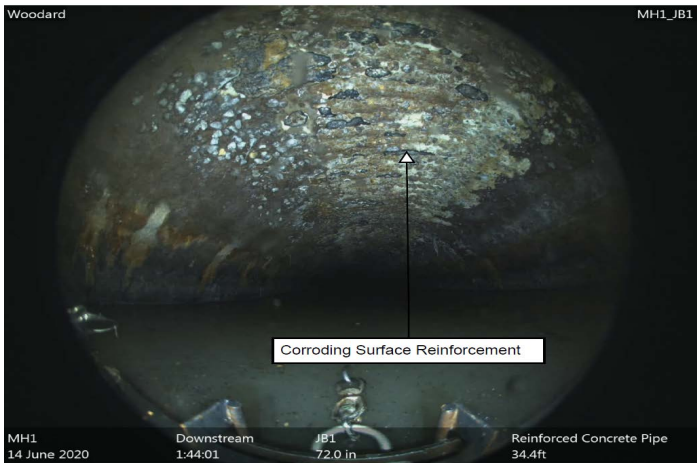


Figure: MH1 To JB1 – Example of Corroding Surface Reinforcement

Sewer Pipe Interior

**Fund:** Wastewater Treatment Fund  
**Category:** System Improvements  
**Project Location:** 2501 Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2023  
**Initial Project Completion:** Spring 2024  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WQ-24000

## Joint Intercepting Sewer Rehabilitation (Phase 1)

### Description

This project provides funding for the rehabilitation of the 60" and 72" Joint Intercepting Sewer (JIS) trunk line at the Regional Water Quality Control Plant (RWQCP). The trunk sewer line, constructed in 1972, is approximately 9000 feet long consisting of 13 manholes/structures. The JIS conveys raw wastewater from the City of Mountain View, City of Los Altos, Los Altos Hills, and a portion Palo Alto, which accounts for more than half of the RWQCP's influent.

### Justification

In Spring 2020, consultant Woodard and Curran performed a condition assessment of the entire alignment of the 60"/72" sewer trunk line and associated manholes/structures using close-circuit television (CCTV), sonar inspection, and visual inspection of the manholes and structures to refine the assessments made in 2012. The condition assessment detailed the need for rehabilitation of the trunk line. In February 2021, an analysis of alternative rehabilitation methods was completed. The alternative analysis found cured-in-place pipe lining with temporary wastewater bypass to be the most favorable sewer trunk line rehabilitation technology and grout repair coupled with epoxy lining or calcium aluminate to be the most favorable manhole rehabilitation method.

The recommended Phase 1 rehabilitation project includes repairs to a trunk line section, approximately 2,364 feet long, where the pipeline has reached the end of its useful life and exposed or corroded rebar, cracks or fractures, and joint separations or offsets were detected. The rehabilitation work includes the removal of sedimentation and debris, cleaning, repairing the corrosion damage to the pipe and the manholes/structures, and relining the interior of the pipe throughout the sewer trunk line. The failure of the pipe could result in raw sewage escaping from the pipe and contaminating the bay/park lands. The scope of Phase 2 of this project will be evaluated and brought forward after Phase 1 is completed and remaining needs are assessed.

# WASTEWATER TREATMENT FUND

## Supplemental Information

The rehabilitation or replacement of 60"/72" trunk sewer was identified in the Long Range Facilities Plan accepted by the City Council in 2012. Construction funding via a revenue bond will be pursued, which is subject to approval from partner agencies.

## Significant Changes

**2023-2027 CIP:** Project established during FY 2023.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Other	0	0	0	0	12,500,000	0	0	0	12,500,000	0	12,500,000
Wastewater Treatment Fund	0	0	0	0	136,100	0	0	0	136,100	0	136,100
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,636,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,636,100</b>	<b>0</b>	<b>12,636,100</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	0	0	0	12,636,100	0	0	0	12,636,100	0	12,636,100
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,636,100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,636,100</b>	<b>0</b>	<b>12,636,100</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

### Potential Board/Commission Review:

Planning and Transportation Commission

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15302.

## WASTEWATER TREATMENT FUND



**Fund:** Wastewater Treatment Fund  
**Category:** System Improvements  
**Project Location:** Wastewater Treatment Plant and Palo Alto Airport  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2018  
**Initial Project Completion:** Fall 2019  
**Revised Project Start:** Summer 2021  
**Revised Project Completion:** Summer 2025  
**Project Number:** WQ-19000

Outfall, Winter 2017

# Outfall Line Construction

## Description

This project consists of the construction of a new parallel outfall pipe to convey final plant effluent to San Francisco Bay.

## Justification

Installation of a new outfall line is needed to address outfall age (built in 1964) and, more importantly, to address the outfall capacity in light of peak wet-weather flow, peak tide, and future sea level rise scenarios. The existing system of a 54-inch outfall line and a 36-inch legacy outfall line are inadequate to pass the Plant's peak wet-weather hydraulic flow capacity of 80 million gallons per day.

## Supplemental Information

This project was identified in the Long Range Facilities Plan report accepted by City Council in 2012. Construction funding via a low-interest State Revolving Fund loan will be pursued for this project, while staff evaluate revenue bond options as an alternative funding source.

The existing 54-inch outfall needs rehabilitation, which can only be completed after the new outfall is operational. Rehabilitating the existing 54-inch outfall will be a future project. Once rehabilitated, the 54-inch outfall along with the new parallel outfall in this project are anticipated to work together to convey peak flows for another 50 or more years. The 36-inch legacy outfall line will be plugged and abandoned in place.

## Significant Changes

**2023-2027 CIP:** Attorneys are drafting utility easements and rental payments to satisfy Federal Aviation Administration (FAA) Grant Assurances for "fair market value" of utility assets. Due to uncertainty in legal timetable, the project is on hold until these legal issues are resolved.

# WASTEWATER TREATMENT FUND

**2022-2026 CIP:** Project is delayed to obtain a low-interest SRF loan and the additional review required in coordination with the Palo Alto Airport, Federal Aviation Administration (FAA), and US Army Corps of Engineers Levee Project.

**2021-2025 CIP:** Construction cost for the project is estimated to be increased by approximately \$660,000 as staff finalized the SRF loan application. The SRF loan funding, including this budget increase, is being secured and finalized.

**2020-2024 CIP:** Project design was completed and construction has not begun due to permitting and finalization on the lease agreement with California State Lands Commission (CSLC).

**2019-2023 CIP:** Staff is evaluating alternative funding options, therefore the funding source is no longer stated explicitly as Revenue from the State of California.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	10,582,715	0	10,582,800	0	0	0	0	10,582,800	0	10,582,800
<b>Wastewater Treatment Fund</b>	0	10,401	10,400	23,000	0	0	0	0	23,000	0	33,400
<b>Total</b>	<b>0</b>	<b>10,593,116</b>	<b>10,400</b>	<b>10,605,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,605,800</b>	<b>0</b>	<b>10,616,200</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	10,593,116	10,400	10,605,800	0	0	0	0	10,605,800	0	10,616,200
<b>Total</b>	<b>0</b>	<b>10,593,116</b>	<b>10,400</b>	<b>10,605,800</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,605,800</b>	<b>0</b>	<b>10,616,200</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

Relationship to Comprehensive Plan Primary Connection	Relationship to Comprehensive Plan Secondary Connection	Potential Board/Commission Review:
Element: Natural Environment Section: Water Resources Goal: N-4 Policy: N-4.16 Program: N4.16.1	Element: Natural Environment Section: Water Resources Goal: N-4 Policy: N-4.16 Program: N4.16.2	Planning and Transportation Commission
<b>Environmental Impact Analysis:</b> This project had a mitigated negative declaration from CEQA under Section 15070.		

## WASTEWATER TREATMENT FUND



Old pumping plant

**Fund:** Wastewater Treatment Fund  
**Category:** System Improvements  
**Project Location:** 2501 Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WQ-19002

# Plant Repair, Retrofit, and Equipment Replacement

## Description

This project provides funding for the assessment, repair, and retrofit of the Regional Water Quality Control Plant (RWQCP) concrete and metal structures; the replacement of necessary RWQCP equipment and ancillary facilities to maintain treatment reliability and existing infrastructure; and the replacement of large diameter flow meters built into the wastewater treatment system on sewers, pipes, and water lines.

Tasks and funding previously budgeted in three separate maintenance related projects, WQ-80021, WQ-80022, and WQ-04011, were consolidated and budgeted in this one recurring project.

## Justification

Plant facilities are subject to many adverse conditions and plant equipment requires periodic replacement to maintain reliability. Concrete and metal structures are evaluated for evidence of damage caused by corrosion, weathering, age, and ground movement. Facilities with repair and retrofit deficiencies need to be repaired to good structural condition to ensure that the plant continues to operate safely and reliably. In addition, United States Environmental Protection Agency and State Water Resources Control Board regulations and permits require ongoing allocated funding for equipment replacement to ensure adequate treatment reliability.

In addition to equipment physically located at the plant, there are 13 key magnetic flow meters throughout the collection system. Meters have an average life of ten years, however, when the meter's reliability fails, the meter must be replaced immediately to continue accurate partner billing, process control, and regulatory reporting.

## Supplemental Information

Planned projects include replacement of equipment mechanisms for secondary clarifiers and sludge thickeners, and replacement of wire, transformers, switches, and electrical components in the medium voltage electrical network.

# WASTEWATER TREATMENT FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Wastewater Treatment Fund</b>	N/A	11,334,803	4,349,703	10,465,000	3,610,900	4,039,900	3,816,800	4,281,600	26,214,200	0	N/A
<b>Total</b>	<b>N/A</b>	<b>11,334,803</b>	<b>4,349,703</b>	<b>10,465,000</b>	<b>3,610,900</b>	<b>4,039,900</b>	<b>3,816,800</b>	<b>4,281,600</b>	<b>26,214,200</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	10,394,862	3,409,762	10,048,000	3,181,900	3,598,900	3,362,800	3,813,600	24,005,200	0	N/A
<b>Design</b>	N/A	939,940	939,940	417,000	429,000	441,000	454,000	468,000	2,209,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>11,334,802</b>	<b>4,349,702</b>	<b>10,465,000</b>	<b>3,610,900</b>	<b>4,039,900</b>	<b>3,816,800</b>	<b>4,281,600</b>	<b>26,214,200</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
 Section: Water Resources  
 Goal: N-4  
 Policy: N-4.16  
 Program: N4.16.1

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.



## WASTEWATER TREATMENT FUND



Primary Sedimentation Tank

**Fund:** Wastewater Treatment Fund  
**Category:** System Improvements  
**Project Location:** 2501 Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Spring 2014  
**Initial Project Completion:** Fall 2019  
**Revised Project Start:** Summer 2021  
**Revised Project Completion:** Winter 2023  
**Project Number:** WQ-14003

# Primary Sedimentation Tank Rehabilitation

## Description

This project provides funding for new protective coatings on each of the four concrete primary sedimentation tanks and replacement of worn rotating parts and aging power distribution equipment. The tanks, installed in 1972, are 220 feet long by 41 feet wide by 14 feet deep each and remove settleable solids and floatable grease with mechanical and electrical equipment. The new coating ensures steel reinforcing bars within the concrete are protected from corrosive sewer gases and extends the concrete's life for another 30 years.

## Justification

Without recoating, the concrete will lose its structural integrity, gradually spalling and harming pumps, pipes, and treatment systems as a result. In a mild seismic event, weakened concrete could potentially collapse, endangering staff and the treatment system. Rehabilitation of the concrete slabs will extend the life of the tanks, preserving capital resources for other uses.

## Supplemental Information

This project was identified in the Long Range Facilities Plan report accepted by the City Council in 2012. Construction funding via a low-interest State Revolving Fund (SRF) loan will be pursued, which is subject to approval from the partner agencies. The partners already approved repayment of an SRF design and planning loan, while staff evaluate a revenue bond as an alternative to an SRF loan for construction.

## Significant Changes

**2023-2027 CIP:** Due to the longer than expected time to finalize the Installment Sale Agreement for low-interest SRF loan and to re-bid the construction contract for the project, the construction start date was delayed to Summer 2021 with project completion scheduled for Winter 2023.



# WASTEWATER TREATMENT FUND

**2022-2026 CIP:** Construction has been delayed moving the estimated completion to Winter 2023 due to time needed to finalize the Installment Sale Agreement for low-interest SRF loan and to re-bid the construction contract.

**2021-2025 CIP:** Construction has been delayed, moving the estimated completion to Fall 2022. SRF loan funding is being secured and finalized.

**2019-2023 CIP:** Design started in January-March of 2018. The City is exploring funding alternatives; therefore, the funding source is no longer stated as Revenue from the State of California.

**2018-2022 CIP:** All partner agencies approved repayment of a planning/design loan. Securing the loan took longer than expected, and there is uncertainty about availability of State funds. The City will explore alternative methods of funding such as a revenue bond, but the project planning/design can commence once the funds are secured. Project timeline is impacted.

**2017-2021 CIP:** Approval by the partner agencies was required for project approval and to guarantee repayment of any state loans.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Other	0	17,632,000	5,000,000	12,632,000	0	0	0	0	12,632,000	0	17,632,000
Wastewater Treatment Fund	770,110	2,094,438	12,098,438	(9,998,300)	0	0	0	0	(9,998,300)	0	2,870,248
<b>Total</b>	<b>770,110</b>	<b>19,726,438</b>	<b>17,098,438</b>	<b>2,633,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,633,700</b>	<b>0</b>	<b>20,502,248</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	18,731,501	16,736,801	2,000,400	0	0	0	0	2,000,400	0	18,737,201
Design	770,108	994,936	361,636	633,300	0	0	0	0	633,300	0	1,765,044
<b>Total</b>	<b>770,108</b>	<b>19,726,437</b>	<b>17,098,437</b>	<b>2,633,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,633,700</b>	<b>0</b>	<b>20,502,245</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# WASTEWATER TREATMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project has obtained Categorical Exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**

## WASTEWATER TREATMENT FUND



Aeration basins

**Fund:** Wastewater Treatment Fund  
**Category:** System Improvements  
**Project Location:** 2501 Embarcadero Way  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2018  
**Initial Project Completion:** Fall 2021  
**Revised Project Start:** Fall 2018  
**Revised Project Completion:** Fall 2026  
**Project Number:** WQ-19001

# Secondary Treatment Upgrades

## Description

This project provides funding for upgrades to the Secondary Treatment process at the Regional Water Quality Control Plant. The existing Secondary Treatment process has two main components: the Fixed Film Reactors (FFRs) and the Activated Sludge (AS) Process. This project includes the reconfiguration of the aeration basins, modification of the AS Process, and the elimination of the FFRs. The AS Aeration Basins will be subdivided with concrete walls creating different zones where different pollutants can be treated. Some of the zones will operate without oxygen, treating nitrogen and cutting the nitrogen in the treated wastewater by roughly half. The project will not only reduce organics and ammonia in the existing processes but will also reduce total nitrogen, the next pollutant being targeted for more stringent regulation.

## Justification

The components of the Secondary Treatment process are between 33 and 49 years old and show extreme signs of wear and structural weakness. The rehabilitation of both the FFRs and the AS Process were identified in the Long Range Facilities Plan accepted by Council in 2012. In addition, regulatory agencies are developing new compliance and permit requirements for total nitrogen. A special study was completed in 2017, which proposed a complete Secondary Treatment process upgrade instead of individual rehabilitation projects. The completion of the upgrades will meet several objectives.

## Supplemental Information

The project cost is estimated to be \$147.0 million, which is more than the combined estimated cost for the FFRs, AS Aeration Basins rehabilitation, and large-scale Denitrification System (or other nutrients removal) projects due to the complexity of the construction coupled with the need to keep the Plant operating through construction.

# WASTEWATER TREATMENT FUND

## Significant Changes

**2023-2027 CIP:** The complex nature of the project has pushed design completion to Spring 2022 and increased the project budget by approximately \$20.0 million to a total of \$149.2 million. Construction is expected to take up to 45 months with completion in Fall 2026.

**2022-2026 CIP:** Project cost increased to address sea level rise policy implications, new infrastructure needed to lower project life cycle cost, a larger standby power generator for unanticipated loads, and to meet code requirements. Project timeline delayed due to an anticipated longer duration to obtain state project financing and a design delay to evaluate technology improvements. Funding for subsequent years has been consolidated into the fiscal year that the design and construction contracts are anticipated to be awarded in.

**2021-2025 CIP:** Design cost has increased as the design progresses and pending completion of a feasibility assessment that aims at intensifying the treatment process, therefore construction of project has been delayed and projected to begin in FY 2022.

**2020-2024 CIP:** Design phase began in October 2018. Project start delayed from Summer 2018 to Fall 2018 with project completion now estimated to be in Winter 2022.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Other	0	4,462,000	0	148,799,600	0	0	0	0	148,799,600	0	148,799,600
Wastewater Treatment Fund	2,432,158	(2,394,480)	2,033,320	(4,114,400)	0	0	0	0	(4,114,400)	0	351,078
<b>Total</b>	<b>2,432,158</b>	<b>2,067,520</b>	<b>2,033,320</b>	<b>144,685,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>144,685,200</b>	<b>0</b>	<b>149,150,678</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	37,700	37,700	142,656,500	0	0	0	0	142,656,500	0	142,694,200
Design	2,432,157	2,029,820	1,995,620	2,028,700	0	0	0	0	2,028,700	0	6,456,477
<b>Total</b>	<b>2,432,157</b>	<b>2,067,520</b>	<b>2,033,320</b>	<b>144,685,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>144,685,200</b>	<b>0</b>	<b>149,150,677</b>

## Operating Impact

This project is anticipated to impact operating expenses in the future, potentially by lowering utilities usage. As these costs are quantified, adjustments will be brought forward in future budgets, as necessary.

# WASTEWATER TREATMENT FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.16  
Program: N4.16.1

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

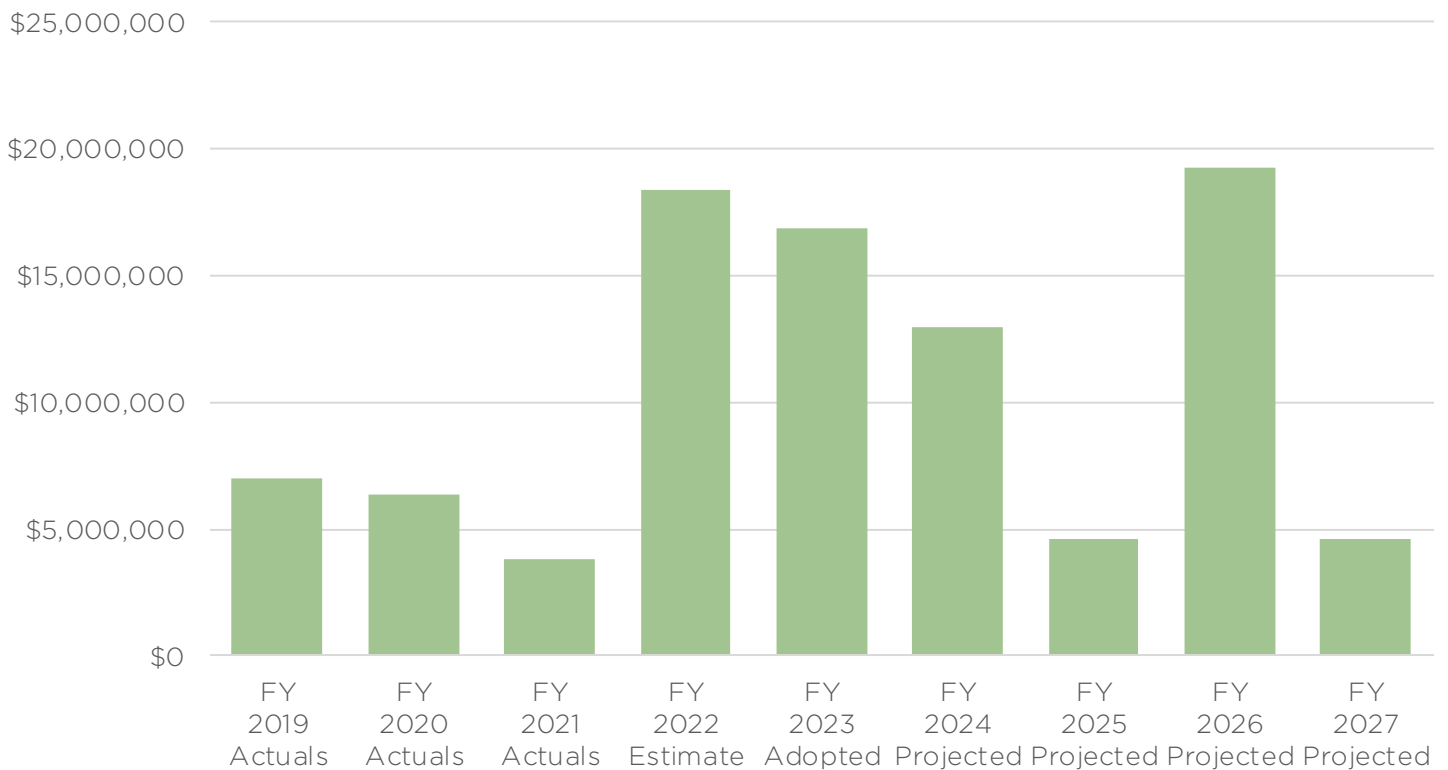
This project has obtained Categorical Exemption under CEQA Section 15301.

# WATER FUND

## Overview

The City of Palo Alto offers a full array of utility services to its citizens and businesses. The municipal Water Distribution System began operation in 1896 and continues to provide safe, reliable, and cost-effective water service to residents and customers of Palo Alto. For the 2023-2027 Capital Improvement Program (CIP), approximately \$58.2 million is projected, with \$16.9 million allocated in Fiscal Year 2023. Overall, a total of 15 projects are planned for the 5-year CIP.

## Water Fund Capital Expenditures



Major projects funded in the 2023-2027 CIP include Water Main Replacements (cumulative total of \$21.5 million), Water Tank Seismic Upgrade and Rehabilitation (\$15.9 million), Water System Customer Connections (\$4.8 million), Water Meters (\$3.4 million) and Water, Gas, and Wastewater Utility GIS Data (\$2.6 million). The budget for the Water Fund CIP is categorized into three types of projects: Customer Connections, System Improvements, and Water Main Replacements.

## Infrastructure Inventory

Classification	Quantity
Miles of water main	235.6
Number of wells	1 active standby and 7 emergency standby
Number of reservoirs	4 steel and 3 reinforced concrete



## Water Distribution System Main Materials

MATERIAL TYPE	TOTAL LENGTH	PERCENT
Asbestos Cement Pipe	130.92 mi	55.56%
Concrete Cylinder Pipe	16.79 mi	7.13%
Cast Iron Pipe	18.21 mi	7.74%
Copper Pipe	0.28 mi	0.12%
Ductile Iron Pipe	6.98 mi	2.96%
Polyethylene	18.85 mi	8.00%
Polyvinyl Chloride	42.38 mi	17.98%
Steel	0.73 mi	0.31%
Unknown Material	0.49 mi	0.21%
<b>Total:</b>	<b>235.62 mi</b>	<b>100%</b>

## Customer Connections

As customers continually change their water needs due to equipment additions, new construction, building expansions, building remodels, teardowns and rebuilds, and new building occupancy types, the water system must evolve to meet these needs. The Water System Customer Connections is the only project in this category and includes work required to meet the needs of customers who have applied for new or upgraded water service. The Water Fund pays for a portion of this project, while remaining costs are supported by reimbursements from customers for project work performed by the City.

### Recent Accomplishments

- In Fiscal Year 2021 the Water Utility completed over 183 water service projects at a cost of approximately \$0.6 million.

## 2023-2027 Capital Improvement Program

### Recurring Projects

The Water System Customer Connections is the only project within this category. Over the course of the 2023-2027 CIP, \$4.8 million is programmed, with \$0.9 million allocated in Fiscal Year 2023.

## System Improvements

To ensure reliable water services for the City of Palo Alto's residents and customers, infrastructure must be replaced at the end of its expected life. The System Improvements category includes nine projects as part of the 2023-2027 CIP at a total cost of \$31.9 million, with \$13.1 million allocated in Fiscal Year 2023.

### Recent Accomplishments

- Continued construction on the 1.5 million gallon Corte Madera water reservoir to replace the steel tank with a new concrete tank.
- Completed design for 2 Turnouts Project, for rebuilding California Avenue turnout (water receiving station), including all new piping, seismic retrofitting, electrical and SCADA upgrades, adding roof

access from street, flood improvements, and lead paint remediation, and for restraining a valve at Page Mill turnout to remove a dangerous condition to operators working in the vault.

### 2023-2027 Capital Improvement Program

#### Recurring Projects

A total of \$15.0 million is programmed for System Improvement recurring projects during the 2023-2027 CIP, with \$5.5 million allocated in Fiscal Year 2023. Recurring projects in this category include the following:

- Water Distribution System Improvements (Fiscal Year 2023: \$0.3 million; 5-Year CIP: \$1.5 million)
- Water General Equipment/Tools (Fiscal Year 2023: \$0.1 million; 5-Year CIP: \$0.3 million)
- Water, Gas, Wastewater Utility GIS Data (Fiscal Year 2023: \$0.5 million; 5-Year CIP: \$2.6 million)
- Water Meters (Fiscal Year 2023: \$1.0 million; 5-Year CIP: \$3.4 million)
- Water Service Hydrant Replacement (Fiscal Year 2023: \$0.4 million; 5-Year CIP: \$2.1 million)
- Water System Supply Improvements (Fiscal Year 2023: \$3.3 million; 5-Year CIP: \$5.1 million)

#### Non-Recurring Projects

A total of \$16.9 million is programmed for non-recurring projects during the 2023-2027 CIP, with \$7.6 million allocated in Fiscal Year 2023. Non-recurring projects in this category include the following:

- Water Recycling Facilities (5-Year CIP: \$0.4 million)
- Water Regulation Station Improvement (Fiscal Year 2023: \$0.6 million)
- Water Tank Seismic Water System Upgrades (Fiscal Year 2023: \$7.0 million; 5-Year CIP: \$15.9 million)

### Water Main Replacements

The Water Main Replacements category accounts for the replacement of inadequately sized and structurally deficient water mains. In the next five years, it is estimated that approximately 7.4 miles of water mains will be replaced. City staff has proposed a new replacement schedule of water and wastewater construction every even year and gas construction every odd year to reduce the amount of construction when prices are high and allow staff to focus on other priorities such as water tank replacement and cross-bore inspections.

A recent study indicated that the City has already replaced many of the most leak-prone and deteriorated pipes through past water main replacement projects 1 through 26. This study recommended replacing 11.6 miles of mains that are deteriorating or are in liquefaction zones. Project 27 included 0.6 miles of seismically vulnerable pipes. Upcoming water main replacement projects will continue to target replacement of deteriorating and seismically vulnerable pipes.

#### Recent Accomplishments

- Completed design of Water Main Replacement Project 28 (WS-14001) to replace approximately 18,000 linear feet of water main pipelines in various locations throughout the City, including 3,800 linear feet which were not installed under WMR Project 27 (WS-13001). Construction of this project is anticipated to start in May 2022.

## 2023-2027 Capital Improvement Program

The 2023-2027 CIP includes \$21.5 million in funding for five non-recurring projects within this category, with \$2.8 million appropriated for Fiscal Year 2023. The Utilities Department coordinates with the Public Works Department’s street maintenance projects to minimize damage to the City’s pavement and maximize cost efficiencies when replacing water mains.

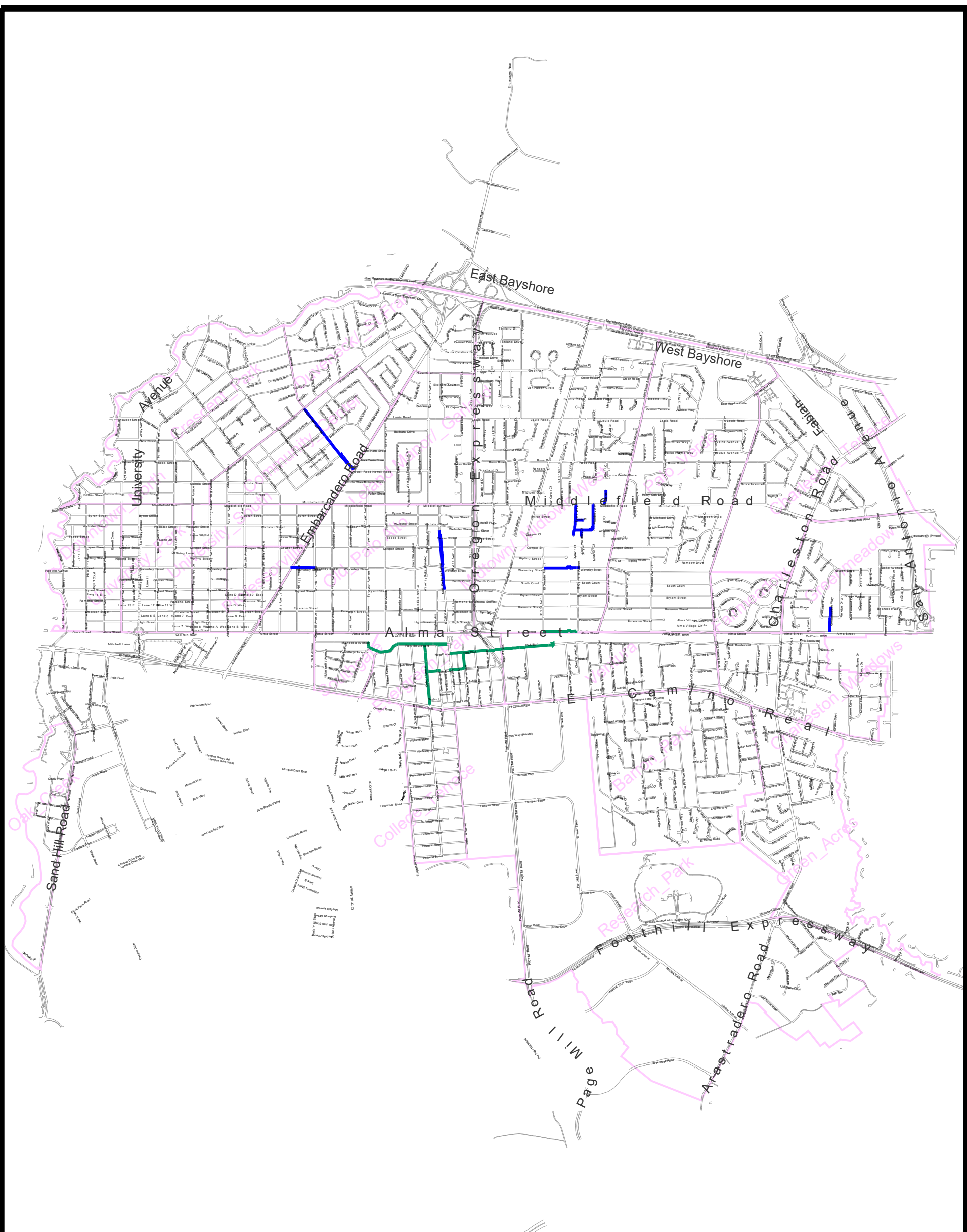
### Water

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Other</b>									
WS-80013	Water System Customer Connections	877,250	877,250	904,600	932,000	960,500	972,100	984,000	4,753,200
<b>Other Total</b>		<b>\$877,250</b>	<b>\$877,250</b>	<b>\$904,600</b>	<b>\$932,000</b>	<b>\$960,500</b>	<b>\$972,100</b>	<b>\$984,000</b>	<b>\$4,753,200</b>
<b>Transfer from Gas Fund</b>									
WS-02014	Water, Gas, Wastewater Utility GIS Data	161,320	161,320	166,200	171,100	176,300	181,000	186,400	881,000
<b>Transfer from Gas Fund Total</b>		<b>\$161,320</b>	<b>\$161,320</b>	<b>\$166,200</b>	<b>\$171,100</b>	<b>\$176,300</b>	<b>\$181,000</b>	<b>\$186,400</b>	<b>\$881,000</b>
<b>Transfer from Wastewater Collection Fund</b>									
WS-02014	Water, Gas, Wastewater Utility GIS Data	161,320	161,320	166,200	171,100	176,300	181,000	186,400	881,000
<b>Transfer from Wastewater Collection Fund Total</b>		<b>\$161,320</b>	<b>\$161,320</b>	<b>\$166,200</b>	<b>\$171,100</b>	<b>\$176,300</b>	<b>\$181,000</b>	<b>\$186,400</b>	<b>\$881,000</b>
<b>Total Sources</b>		<b>\$1,199,890</b>	<b>\$1,199,890</b>	<b>\$1,237,000</b>	<b>\$1,274,200</b>	<b>\$1,313,100</b>	<b>\$1,334,100</b>	<b>\$1,356,800</b>	<b>\$6,515,200</b>
<b>USE OF FUNDS</b>									
<b>Customer Connections</b>									
WS-80013	Water System Customer Connections	951,811	951,811	904,600	932,000	960,500	989,000	1,018,700	4,804,800
<b>Customer Connections Total</b>		<b>\$951,811</b>	<b>\$951,811</b>	<b>\$904,600</b>	<b>\$932,000</b>	<b>\$960,500</b>	<b>\$989,000</b>	<b>\$1,018,700</b>	<b>\$4,804,800</b>
<b>System Improvements</b>									
WS-11003	Water Distribution System Improvements	297,502	297,502	285,900	294,500	305,000	314,000	323,000	1,522,400
WS-13002	Water General Equipment/Tools	100,000	45,000	105,000	50,000	50,000	50,000	50,000	305,000
WS-80015	Water Meters	546,384	146,384	962,800	579,600	600,000	621,000	640,000	3,403,400
WS-07001	Water Recycling Facilities	0	0	0	391,000	0	0	0	391,000
WS-07000	Water Regulation Station Improvements	640,273	92,123	608,150	0	0	0	0	608,150
WS-80014	Water Service and Hydrant Replacement	400,000	189,192	400,000	400,000	412,000	424,000	437,000	2,073,000
WS-11004	Water System Supply Improvements	279,553	279,553	3,285,900	345,100	715,000	366,000	377,000	5,089,000
WS-09000	Water Tank Seismic Upgrade and Rehabilitation	6,560,650	6,560,650	7,000,000	500,000	600,000	7,000,000	800,000	15,900,000
WS-02014	Water, Gas, Wastewater Utility GIS Data	950,551	950,551	498,500	513,400	528,800	544,000	560,000	2,644,700
<b>System Improvements Total</b>		<b>\$9,774,913</b>	<b>\$8,560,955</b>	<b>\$13,146,250</b>	<b>\$3,073,600</b>	<b>\$3,210,800</b>	<b>\$9,319,000</b>	<b>\$3,187,000</b>	<b>\$31,936,650</b>
<b>Water Main Replacements</b>									
WS-13001	Water Main Replacement - Project 27	2,794,890	0	0	0	0	0	0	0
WS-14001	Water Main Replacement - Project 28	10,839,496	8,839,496	2,000,000	0	0	0	0	2,000,000

# WATER FUND

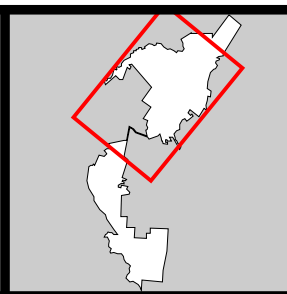
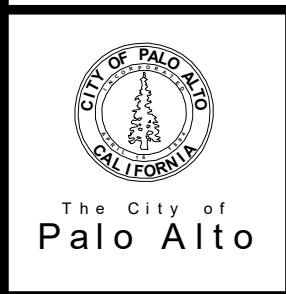
## Water *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>WS-15002</b>	Water Main Replacement - Project 29	425,000	50,400	799,600	8,500,000	0	0	0	9,299,600
<b>WS-16001</b>	Water Main Replacement - Project 30	0	0	0	425,000	425,000	8,500,000	0	9,350,000
<b>WS-19001</b>	Water Main Replacement - Project 31	0	0	0	0	0	425,000	425,000	850,000
<b>Water Main Replacements Total</b>		<b>\$14,059,386</b>	<b>\$8,889,895</b>	<b>\$2,799,600</b>	<b>\$8,925,000</b>	<b>\$425,000</b>	<b>\$8,925,000</b>	<b>\$425,000</b>	<b>\$21,499,600</b>
<b>Total Uses</b>		<b>\$24,786,110</b>	<b>\$18,402,661</b>	<b>\$16,850,450</b>	<b>\$12,930,600</b>	<b>\$4,596,300</b>	<b>\$19,233,000</b>	<b>\$4,630,700</b>	<b>\$58,241,050</b>



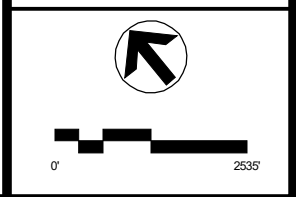
**Water Main Replacement (WMR) Projects**

- FY'23 (No Construction Projects)
- FY'24 (WMR 29)
- FY'25 (No Construction Projects)
- FY'26 (WMR 30)
- FY'27 (No Construction Projects)



**WATER FUND MAP  
FY'23 to FY'27  
CAPITAL IMPROVEMENT PROGRAM**

This map is a product of the City of Palo Alto GIS



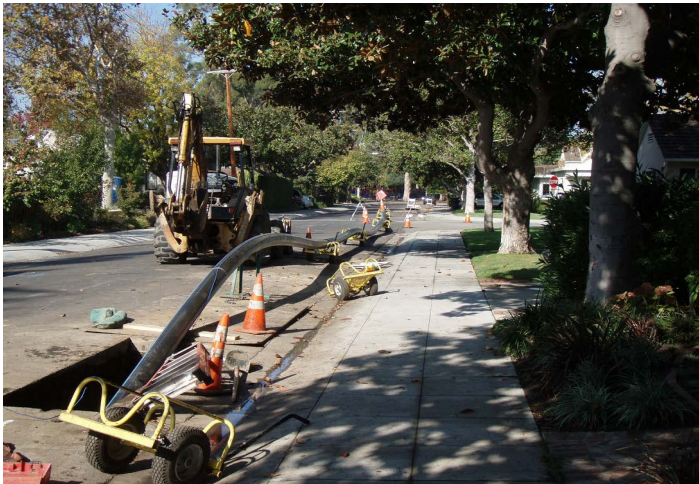


CITY OF  
**PALO  
ALTO**

# Customer Connections



## WATER FUND



**Fund:** Water Fund  
**Category:** Customer Connections  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WS-80013

Installation of 8" HDPE pipe by directional drilling method

# Water System Customer Connections

## Description

This project allows for improvements that include new main extensions, valves, domestic services, meters on upgraded services, backflow devices, fire services, and fire hydrants.

## Justification

System extensions are required to provide service to new customers and to serve existing customers requesting expanded service.

## Significant Changes

**2022-2026 CIP:** Project expense and revenues adjusted to align with prior year actuals and known planned new construction.

**2015-2019 CIP:** This project was previously titled Water System Extensions. As part of the FY 2015 budget, it was re-titled to more accurately reflect the work done with this funding.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	N/A	877,250	877,250	904,600	932,000	960,500	972,100	984,000	4,753,200	0	N/A
<b>Water Fund</b>	N/A	74,561	74,561	0	0	0	16,900	34,700	51,600	0	N/A
<b>Total</b>	<b>N/A</b>	<b>951,811</b>	<b>951,811</b>	<b>904,600</b>	<b>932,000</b>	<b>960,500</b>	<b>989,000</b>	<b>1,018,700</b>	<b>4,804,800</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	951,811	951,811	904,600	932,000	960,500	989,000	1,018,700	4,804,800	0	N/A
<b>Total</b>	<b>N/A</b>	<b>951,811</b>	<b>951,811</b>	<b>904,600</b>	<b>932,000</b>	<b>960,500</b>	<b>989,000</b>	<b>1,018,700</b>	<b>4,804,800</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---



CITY OF  
**PALO  
ALTO**

# System Improvements

## WATER FUND



**Fund:** Water Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WS-11003

Installation of a new fire hydrant with FlowGuard fire hydrant check valve

# Water Distribution System Improvements

## Description

This project provides funds to improve Water Distribution System deliverability and reliability. Typical activities include: installing restraining joints at critical pipelines and bridge crossings, increasing the size of inadequate facilities, system leakage surveys, network modeling, and fire flow studies or other system improvements as required.

## Justification

Water Distribution System reliability and adequate capacity are critical to providing a high level of service to customers in Palo Alto. Continuous evaluation of system needs and making required improvements are necessary to maintain adequate quantities of quality water, that meets local, state, and federal safe drinking water standards.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	N/A	297,502	297,502	285,900	294,500	305,000	314,000	323,000	1,522,400	0	N/A
<b>Total</b>	<b>N/A</b>	<b>297,502</b>	<b>297,502</b>	<b>285,900</b>	<b>294,500</b>	<b>305,000</b>	<b>314,000</b>	<b>323,000</b>	<b>1,522,400</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	277,553	277,553	285,900	294,500	305,000	314,000	323,000	1,522,400	0	N/A
<b>Design</b>	N/A	19,949	19,949	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>297,502</b>	<b>297,502</b>	<b>285,900</b>	<b>294,500</b>	<b>305,000</b>	<b>314,000</b>	<b>323,000</b>	<b>1,522,400</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---

# WATER FUND



**Fund:** Water Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WS-13002

16" HDPE pipe being fused prior to installation

## Water General Equipment/Tools

### Description

This funding allows for the acquisition of new equipment and tools, replacement of existing fusion equipment, and other associated tools and equipment to operate, maintain and construct the water distribution and transmission system. The fusion equipment is used to fuse together pipe joints in the City's Water Distribution System.

### Justification

As equipment ages, the quality of the fusion joints begins to decline, and the operators must spend more time scraping, aligning, and fusing construction joints. In order to maintain high quality standards for the installation of the City's water distribution mains, along with the associated service standards and worker safety and productivity measures, equipment and tools are required to be upgraded on an annual basis.

### Significant Changes

**2022-2026 CIP:** The budget was increased for FY 2022 to replace testing equipment at the sampling stations.

**2015-2019 CIP:** Project was retitled from Water Fusion and General Equipment/Tools.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	N/A	100,000	45,000	105,000	50,000	50,000	50,000	50,000	305,000	0	N/A
<b>Total</b>	N/A	<b>100,000</b>	<b>45,000</b>	<b>105,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>305,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	100,000	45,000	105,000	50,000	50,000	50,000	50,000	305,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>100,000</b>	<b>45,000</b>	<b>105,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>50,000</b>	<b>305,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---

## WATER FUND



5/8" Badger water meter

**Fund:** Water Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WS-80015

# Water Meters

## Description

This funding allows for the purchase of meters for new customers, upgrading meters for current customers, installing meter bypasses, and replacing obsolete meters that are no longer repairable. This funding also allows for annual testing and calibration of select meters.

## Justification

This project will maintain meter accuracy, reliability, and stock meter equipment and replacement parts. Meter replacements enhance information on system water volume; align the Utility's ten-year meter testing and replacement cycle in accordance with industry-standard best management practices; and provide accurate data for the Water Utility billing system.

## Significant Changes

**2021-2025 CIP:** The Advanced Metering Infrastructure (AMI) Project is expected to replace up to 9,000 water meters to install meters that are compatible with a smart grid system that collects usage information remotely. The remaining meters will be assessed for their compatibility with the AMI smart grid and will either be retro-fitted or replaced.



## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	N/A	546,384	146,384	962,800	579,600	600,000	621,000	640,000	3,403,400	0	N/A
<b>Total</b>	<b>N/A</b>	<b>546,384</b>	<b>146,384</b>	<b>962,800</b>	<b>579,600</b>	<b>600,000</b>	<b>621,000</b>	<b>640,000</b>	<b>3,403,400</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	546,384	146,384	962,800	579,600	600,000	621,000	640,000	3,403,400	0	N/A
<b>Total</b>	<b>N/A</b>	<b>546,384</b>	<b>146,384</b>	<b>962,800</b>	<b>579,600</b>	<b>600,000</b>	<b>621,000</b>	<b>640,000</b>	<b>3,403,400</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                  Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p>	<p><b>Potential Board/Commission Review:</b>                  Planning and Transportation Commission                  Utilities Advisory Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	



Recycled water piping

**Fund:** Water Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Spring 2011  
**Initial Project Completion:** Spring 2015  
**Revised Project Start:** N/A  
**Revised Project Completion:** Fall 2024  
**Project Number:** WS-07001

# Water Recycling Facilities

## Description

Funding in this project will provide a business plan, preliminary design, and options to secure funding for the expansion of the existing recycled water delivery system in the City. The expanded pipeline will primarily serve the Stanford Research Park and provide an alternative supply source of 435,600 cubic feet per year, which at the time this project was established, represented roughly 10 percent of Palo Alto's total water consumption in 2015.

## Justification

Palo Alto is aggressively pursuing all options to meet future water supply needs. Recycled water provides a stable, drought-proof supply of water that replaces the need to use Hetch Hetchy potable supplies for irrigation purposes and other non-potable uses in anticipation of extended periods of drought and mandatory potable water reduction imposed by the State. The City is taking an integrated approach to evaluating the most flexible and robust strategic plan for non-potable recycled water, shallow aquifer groundwater, deep aquifer groundwater, and Direct Potable Reuse and Indirect Potable Reuse.

## Supplemental Information

On November 18, 2019, City Council approved a Partnership Agreement that gives the Santa Clara Valley Water District (Valley Water) an option to acquire about half of the treated wastewater produced by the Regional Water Quality Control Plant (RWQCP). The Agreement addresses multiple objectives, including diverting treated wastewater discharge from the San Francisco Bay, increasing the use of treated wastewater from the RWQCP, and displacing potable imported water where appropriate and feasible. As part of this Agreement, the City is moving forward with implementation of a local salt removal facility (also referred to as the Local Advanced Water Purification System) to be located at the RWQCP. For more information on the plan for this

new facility, refer to the Advanced Water Purification System Feasibility Study and the Preliminary Design Report.

**Significant Changes**

**2022-2026 CIP:** Project to begin the design phase. The first \$16.0M of funding will come from Valley Water and the remaining balance, which is currently estimated at \$4.0M, will be split between Palo Alto (\$1.0M or 25 percent) and Mountain View (\$3.0M or 75 percent). Palo Alto’s portion will be covered by Utilities and Public Works, and the contribution amounts will be reassessed after designs are complete. Expenditures in this project are not expected until the construction phase in 2024.

**2021-2025 CIP:** Construction funding is supported through RWQCP project WQ-19003.

**2020-2024 CIP:** The remaining build portion of this project will be implemented in the RWQCP’s project WQ-19003, Advanced Water Purification Facility.

**2018-2022 CIP:** While staff have addressed many issues regarding a future recycled water project, including the completion and certification by the Council of the project’s Environmental Impact Report (EIR), the replacement of high quality potable water with recycled water remains a concern for the landscape community among others. Completion of the EIR was essential for securing Federal or State grant or loan funding for the construction of the project, and now the City needs to reassess a more exhaustive number of potential end uses, assess customer demand, prepare a business plan, finish a preliminary design, and secure funding.

Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Revenue from the Federal Government	111,013	0	0	0	0	0	0	0	0	0	111,013
Water Fund	350,666	0	0	0	391,000	0	0	0	391,000	0	741,666
<b>Total</b>	<b>461,679</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>391,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>391,000</b>	<b>0</b>	<b>852,679</b>

Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	370,265	0	0	0	391,000	0	0	0	391,000	0	761,265
Design	91,409	0	0	0	0	0	0	0	0	0	91,409
<b>Total</b>	<b>461,674</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>391,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>391,000</b>	<b>0</b>	<b>852,674</b>

**Operating Impact**

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

# WATER FUND

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Natural Environment  
Section: Water Resources  
Goal: N-4  
Policy: N-4.1  
Program: N4.13.2

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Utilities Advisory Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**



Seismic Upgrade, Arastradero Turnout, June 2010

**Fund:** Water Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Fall 2006  
**Initial Project Completion:** Summer 2008  
**Revised Project Start:** Summer 2014  
**Revised Project Completion:** Spring 2023  
**Project Number:** WS-07000

# Water Regulation Station Improvements

## Description

This project will improve fourteen underground vaults and two above-ground water regulation facility locations. The improvements include: supervisory control and data acquisition (SCADA) chloramine monitors, pipe coating, wall sealing/painting, vault door replacement, lighting, valve replacement, and electrical upgrades.

## Justification

These critical components in the water system require various improvements to increase reliability, safety and to prolong their service life. The San Francisco Public Utility Commission (SFPUC) turnouts are the main source of water supply to Palo Alto residents and require maintenance improvements. The pressure regulating stations protect pipelines from over-pressurization, which prevents water main breaks and customer outages. The electrical systems for these facilities need to be improved for staff safety.

## Supplemental Information

The work locations of this project include California Avenue Turnout and Page Mill Turnout.

## Significant Changes

**2022-2026 CIP:** Project completion pushed out as vault improvements continue at the California Avenue Turnout and additional improvements are performed at the Page Mill Turnout to provide safer access in a confined space for staff. These improvements will ensure continuous operation of the turnouts.

**2019-2023 CIP:** Seismic and vault improvements were completed at Page Mill and Arastradero. In FY 2019, staff will address the turnout at California.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	1,459,734	640,273	92,123	608,150	0	0	0	0	608,150	0	2,160,007
<b>Total</b>	<b>1,459,734</b>	<b>640,273</b>	<b>92,123</b>	<b>608,150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>608,150</b>	<b>0</b>	<b>2,160,007</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	1,185,432	627,610	79,460	608,150	0	0	0	0	608,150	0	1,873,042
<b>Design</b>	274,287	12,663	12,663	0	0	0	0	0	0	0	286,950
<b>Total</b>	<b>1,459,719</b>	<b>640,273</b>	<b>92,123</b>	<b>608,150</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>608,150</b>	<b>0</b>	<b>2,159,992</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan

##### Primary Connection

Element: Natural Environment  
 Section: Water Resources  
 Goal: N-4  
 Policy: N-4.1  
 Program: N4.13.2

##### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## WATER FUND



**Fund:** Water Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WS-80014

Newly installed fire hydrant service line and assembly on Greenwood Avenue

# Water Service and Hydrant Replacement

## Description

This project replaces system control valves, deteriorated galvanized service lines, lead goosenecks, and fire hydrant valves and assemblies needed for Fire Department flow testing; upgrades fire hydrants in main replacement project areas; and replaces existing undersized or deteriorated copper water services. Upgrading hydrants and system control valves is consistent with fire protection policies.

## Justification

In order to maintain a high water quality standard for Palo Alto's water supplies, it is necessary to replace old, lead, galvanized, and corroded copper water service lines.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	N/A	400,000	189,192	400,000	400,000	412,000	424,000	437,000	2,073,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>400,000</b>	<b>189,192</b>	<b>400,000</b>	<b>400,000</b>	<b>412,000</b>	<b>424,000</b>	<b>437,000</b>	<b>2,073,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	400,000	189,192	400,000	400,000	412,000	424,000	437,000	2,073,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>400,000</b>	<b>189,192</b>	<b>400,000</b>	<b>400,000</b>	<b>412,000</b>	<b>424,000</b>	<b>437,000</b>	<b>2,073,000</b>	<b>0</b>	<b>N/A</b>



**Operating Impact**

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---

## WATER FUND



**Fund:** Water Fund  
**Category:** System Improvements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WS-11004

Installation of 8" HDPE pipe and valve between two main connection points on El Camino Real at El Camino Way

# Water System Supply Improvements

## Description

This project provides funding to improve the City's Water Distribution System, which connects facilities between the City's and the San Francisco Public Utility Commission's pipelines, emergency water wells within the City, pumping stations, and water reservoirs.

## Justification

It is critical that the City has an adequate supply of water that meets federal and state drinking water requirements. To meet these objectives, the City must continually evaluate the system and make improvements as needed.

## Supplemental Information

Typical activities performed under this project include: piping modifications, equipment replacements associated with water delivery, Supervisory Control software upgrades, system modifications for water system quality compliance, implementation of an asset management system, conditional assessment of the reliability of transmission mains, and security system installations.

## Significant Changes

**2023-2027 CIP:** In addition to the \$0.2 million annually programmed for small projects, approximately \$1.0 million is programmed in FY 2023 to replace existing cameras at reservoir tanks and pump stations with more current devices with higher-resolution video and current cyber security features. \$2.0 million is programmed in FY 2023 to add generators to Dahl and Park Booster Stations (located in the foothill system) at several of the emergency wells and turnouts. These improvements ensure the City can safely and consistently deliver drinking water to its customers and maintain sufficient storage for firefighting and emergency use during an extended power outage.

**2021-2025 CIP:** Supervisory control and data acquisition (SCADA) router and firewall components are in the process of being upgraded. Budget increases in FY 2021 and FY 2025 are for upgrading the Programmable Logic Controllers (PLCs) computers that control the equipment in the system.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	N/A	279,553	279,553	3,285,900	345,100	715,000	366,000	377,000	5,089,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>279,553</b>	<b>279,553</b>	<b>3,285,900</b>	<b>345,100</b>	<b>715,000</b>	<b>366,000</b>	<b>377,000</b>	<b>5,089,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	279,553	279,553	3,285,900	345,100	715,000	366,000	377,000	5,089,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>279,553</b>	<b>279,553</b>	<b>3,285,900</b>	<b>345,100</b>	<b>715,000</b>	<b>366,000</b>	<b>377,000</b>	<b>5,089,000</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---



Seismic Upgrade, Boronda Reservoir, December 2014

**Fund:** Water Fund

**Category:** System Improvements

**Project Location:** Various locations

**Managing Department:** Utilities

**Initial Project Start:** Spring 2014

**Initial Project Completion:** Winter 2017

**Revised Project Start:** Spring 2021

**Revised Project Completion:** Fall 2027

**Project Number:** WS-09000

# Water Tank Seismic Upgrade and Rehabilitation

## Description

This project will provide tank rehabilitation, seismic upgrades, and/or tank replacement structural reinforcement for the Corte Madera, Park, Boronda, and Dahl reservoirs in order to improve earthquake resistance in compliance with the American Society of Civil Engineers (ASCE 7) seismic codes. Work at the reservoir sites will also include the installation of: new seismic shut off valves between the reservoirs and valve vaults, new plug valves, piping and pipe supports in the valve vaults, and recoating of the interior and exterior reservoir walls.

## Justification

Palo Alto's water tanks have no protection from water loss in a seismic event. If an earthquake causes a significant water leak, various impacts such as loss of water for fire fighting purposes, loss of water storage for drinking, property damage from flooding or mudslides, and environmental damages could occur. The seismic protection systems will preserve potable water after a seismic event. Additionally, during the seismic upgrade of the Montebello reservoir the structural condition of the tank required significant repair, which is now anticipated in the remaining three tanks constructed in a similar time period.

## Significant Changes

**2023-2027 CIP:** Funding is programmed for the replacement of Dahl Reservoir and Park Reservoir with construction planned for FY 2023 and FY 2026. Funding in FY 2024, FY 2025, and FY 2027 are planned for project prep before construction year and project close out activities such as inspections and punch list items.

**2022-2026 CIP:** The design and build contract was issued in FY 2021. Although staff estimated \$5.0 million to replace each reservoir, the bid proposals received pushed the costs to approximately \$7.0 million. With anticipated work at Dahl and Park Reservoirs, which are structurally similar, an additional \$3.0 million was added in FY 2023 and \$7.0 million in FY 2026 to align with proposals received.

**2021-2025 CIP:** The Corte Madera reservoir is in the process of being replaced using the Design-Build method. Construction is anticipated to start in FY 2021. Staff is currently evaluating the plan for both Dahl and Park Reservoirs. These reservoirs will need to be replaced in the future at their current locations or at a location that improves the reliability and resiliency of the system. The budget for FY 2023 was increased to cover the replacement of Dahl Reservoir. Park Reservoir will follow in FY 2026.

**2019-2023 CIP:** Project was retitled from "Seismic Water System Upgrade". Budget has also increased to account for scope changes and construction cost escalation.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	4,463	0	0	0	0	0	0	0	0	0	4,463
<b>Water Fund</b>	4,646,265	6,560,650	6,560,650	7,000,000	500,000	600,000	7,000,000	800,000	15,900,000	0	27,106,915
<b>Total</b>	<b>4,650,728</b>	<b>6,560,650</b>	<b>6,560,650</b>	<b>7,000,000</b>	<b>500,000</b>	<b>600,000</b>	<b>7,000,000</b>	<b>800,000</b>	<b>15,900,000</b>	<b>0</b>	<b>27,111,378</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	3,907,474	6,560,650	6,560,650	7,000,000	500,000	600,000	7,000,000	800,000	15,900,000	0	26,368,124
<b>Design</b>	743,235	0	0	0	0	0	0	0	0	0	743,235
<b>Total</b>	<b>4,650,709</b>	<b>6,560,650</b>	<b>6,560,650</b>	<b>7,000,000</b>	<b>500,000</b>	<b>600,000</b>	<b>7,000,000</b>	<b>800,000</b>	<b>15,900,000</b>	<b>0</b>	<b>27,111,359</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---

# WATER FUND



**Fund:** Water Fund  
**Category:** System Improvements  
**Project Location:** Software maintenance & update  
**Managing Department:** Utilities  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** WS-02014

Staff collecting data for GIS system

## Water, Gas, Wastewater Utility GIS Data

### Description

This project covers the annual maintenance and support contract to improve the ability for Utilities Department staff to use the Geographic Information System (GIS). As with other GIS activities, continuing the completion of data-related tasks is the primary emphasis. Field personnel still need accurate paper maps in the field, therefore standard map books will continue to be produced to meet their specific needs. Funding is also included to improve the GIS user interface to better serve the unique requirements of Utility Department users, as well as collecting GPS survey data to be used to update utility information in the GIS database to increase its accuracy.

### Justification

The GIS program is used for interfacing with modeling software to perform engineering analysis and master planning, develop and prioritize cost-effective capital improvement designs, and asset management of the City's utility enterprise system to enhance the level of service to utility customers.

### Significant Changes

**2020-2024 CIP:** The City will transition to a new GIS platform in FY 2020. Remaining FY 2019 funds are being reappropriated to fund the conversion activities required to bring the maps to the new platform.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Transfer from Gas Fund	N/A	161,320	161,320	166,200	171,100	176,300	181,000	186,400	881,000	0	N/A
Transfer from Wastewater Collection Fund	N/A	161,320	161,320	166,200	171,100	176,300	181,000	186,400	881,000	0	N/A



## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	N/A	627,912	627,912	166,100	171,200	176,200	182,000	187,200	882,700	0	N/A
<b>Total</b>	<b>N/A</b>	<b>950,552</b>	<b>950,552</b>	<b>498,500</b>	<b>513,400</b>	<b>528,800</b>	<b>544,000</b>	<b>560,000</b>	<b>2,644,700</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	946,158	946,158	498,500	513,400	528,800	544,000	560,000	2,644,700	0	N/A
<b>Design</b>	N/A	4,393	4,393	0	0	0	0	0	0	0	N/A
<b>Total</b>	<b>N/A</b>	<b>950,551</b>	<b>950,551</b>	<b>498,500</b>	<b>513,400</b>	<b>528,800</b>	<b>544,000</b>	<b>560,000</b>	<b>2,644,700</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Community Services & Facilities  
 Section: Efficient and Effective Service  
 Delivery  
 Goal: C-1  
 Policy: C-1.3  
 Program: C1.3.1

**Potential Board/Commission Review:**

Planning and Transportation Commission  
 Utilities Advisory Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**



# Water Main Replacements

## WATER FUND



New HDPE main connecting to side street with new valve

**Fund:** Water Fund  
**Category:** Water Main Replacements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2017  
**Initial Project Completion:** Winter 2019  
**Revised Project Start:** Summer 2020  
**Revised Project Completion:** Spring 2022  
**Project Number:** WS-14001

# Water Main Replacement - Project 28

## Description

This project will fund the design and replacement of structurally deficient water mains and appurtenances in Fiscal Years 2021 and 2022. Mains are selected by researching the maintenance history of the system and identifying those that are undersized, corroded, and/or subject to breaks. The project scope includes approximately 18,500 linear feet (which represents 1.5 percent of the City's Water Distribution System) of mains and services on various streets within the City, including areas in the Crescent Par, Barron Park, and Charleston Meadows neighborhoods.

## Justification

Some mains are inadequate in size to supply required flows and pressures for fire protection, some are located in areas of high liquefaction, and others are subject to recurring breaks.

## Supplemental Information

Each year the projects are re-evaluated and the highest priority is given to the most deteriorated portions of the system. Linear footage and locations are subject to change; please refer to the City of Palo Alto Utilities webpage to confirm project details.

## Significant Changes

**2022-2026 CIP:** The project scope was increased to include 3,800 linear feet, to be installed in an easement at Oak Creek Apartments, which was not completed in Water Main Replacement (WMR) Project 27.

**2020-2024 CIP:** City staff proposed a new replacement schedule of completing a water, gas, and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. In the last few years there have been fewer bidders and higher prices on construction projects due to

the increased demand for construction services. The total project cost increased to \$9.0 million to account for an additional 1,400 of linear feet and escalating construction costs.

**2018-2022 CIP:** Due to delays of WMR 26 and 27, the project design and construction will be delayed to FY 2019 and FY 2020 respectively.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	267,125	10,839,496	8,839,496	2,000,000	0	0	0	0	2,000,000	0	11,106,621
<b>Total</b>	<b>267,125</b>	<b>10,839,496</b>	<b>8,839,496</b>	<b>2,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000,000</b>	<b>0</b>	<b>11,106,621</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	10,451,011	8,451,011	2,000,000	0	0	0	0	2,000,000	0	10,451,011
<b>Design</b>	267,123	388,485	388,485	0	0	0	0	0	0	0	655,608
<b>Total</b>	<b>267,123</b>	<b>10,839,496</b>	<b>8,839,496</b>	<b>2,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000,000</b>	<b>0</b>	<b>11,106,619</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---



16" HDPE pipe ready to be installed by open trench method

**Fund:** Water Fund  
**Category:** Water Main Replacements  
**Project Location:** Various locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2018  
**Initial Project Completion:** Winter 2020  
**Revised Project Start:** Summer 2022  
**Revised Project Completion:** Spring 2024  
**Project Number:** WS-15002

# Water Main Replacement - Project 29

## Description

This project will fund the design and replacement of structurally deficient water mains and appurtenances in Fiscal Years 2022 and 2024. Mains are selected by researching the maintenance history of the system and identifying those that are undersized, corroded, and/or subject to breaks. The project scope includes approximately 10,000 linear feet (which represents 0.8 percent of the City's Water Distribution System) of mains and services on various streets within the City, including areas in the Evergreen Park, Ventura, and Midtown/Midtown West neighborhoods.

## Justification

Some mains are inadequate in size to supply required flows and pressures for fire protection, some are located in areas of high liquefaction, and others are subject to recurring breaks.

## Supplemental Information

Each year the projects are re-evaluated and the highest priority is given to the most deteriorated portions of the system. Linear footage and locations are subject to change, please refer to the City of Palo Alto Utilities webpage to confirm project details.

## Significant Changes

**2021-2025 CIP:** After conducting a geotechnical study, the scope of this project did not require the funding previously budgeted, so the budget has been reduced.

**2020-2024 CIP:** City staff proposed a new replacement schedule of completing a water, gas and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. In the last few years there have been fewer bidders and higher prices on construction projects due to

the increased demand for construction services. The total project linear footage increased by 1,475 and overall project cost increased to \$9.4 million to account for escalating construction costs.

**2018-2022 CIP:** Due to delays of WMR 26, 27 and 28, the project design and construction will be postponed to FY 2020 and FY 2021 respectively.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	0	425,000	50,400	799,600	8,500,000	0	0	0	9,299,600	0	9,350,000
<b>Total</b>	<b>0</b>	<b>425,000</b>	<b>50,400</b>	<b>799,600</b>	<b>8,500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,299,600</b>	<b>0</b>	<b>9,350,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	8,500,000	0	0	0	8,500,000	0	8,500,000
<b>Design</b>	0	425,000	50,400	799,600	0	0	0	0	799,600	0	850,000
<b>Total</b>	<b>0</b>	<b>425,000</b>	<b>50,400</b>	<b>799,600</b>	<b>8,500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,299,600</b>	<b>0</b>	<b>9,350,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---



HDPE pipe waiting to be fused

**Fund:** Water Fund  
**Category:** Water Main Replacements  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2019  
**Initial Project Completion:** Winter 2021  
**Revised Project Start:** Summer 2024  
**Revised Project Completion:** Spring 2026  
**Project Number:** WS-16001

# Water Main Replacement - Project 30

## Description

This project will fund the design and replacement of structurally deficient water mains and appurtenances in Fiscal Years 2024 and 2026. Mains are selected by researching the maintenance history of the system and identifying those that are undersized, corroded, and/or subject to breaks. The project scope includes approximately 10,000 linear feet (which represents 0.8 percent of the City's Water Distribution System) of mains and services on various streets within the City, including areas in Midtown/Midtown West, Palo Verde, and Green-meadow neighborhoods.

## Justification

Some mains are inadequate in size to supply required flows and pressures for fire protection, some are located in areas of high liquefaction, and others are subject to recurring breaks.

## Supplemental Information

Each year the projects are re-evaluated and the highest priority is given to the most deteriorated portions of the system. Linear footage and locations are subject to change; please refer to the City of Palo Alto Utilities webpage to confirm project details.

## Significant Changes

**2020-2024 CIP:** City staff proposed a new replacement schedule of completing a water, gas and wastewater construction project every other year instead of annually to reduce the amount of construction when prices are high. In the last few years there have been fewer bidders and higher prices on construction projects due to the increased demand for construction services. The project increased by 2,600 linear footage and the overall cost increased to \$9.4 million to account for escalating construction costs.

**2018-2022 CIP:** Due to delays of WMR 26 - 29, the project design and construction is postponed to FY 2021 and FY 2022 respectively.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	0	0	0	0	425,000	425,000	8,500,000	0	9,350,000	0	9,350,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>425,000</b>	<b>425,000</b>	<b>8,500,000</b>	<b>0</b>	<b>9,350,000</b>	<b>0</b>	<b>9,350,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	(7,600)	128,000	8,491,800	0	8,612,200	0	8,612,200
<b>Design</b>	0	0	0	0	432,600	297,000	8,200	0	737,800	0	737,800
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>425,000</b>	<b>425,000</b>	<b>8,500,000</b>	<b>0</b>	<b>9,350,000</b>	<b>0</b>	<b>9,350,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---





Installed 16" HDPE pipe waiting to be backfilled

**Fund:** Water Fund  
**Category:** Water Main Replacements  
**Project Location:** Various Locations  
**Managing Department:** Utilities  
**Initial Project Start:** Summer 2020  
**Initial Project Completion:** Winter 2022  
**Revised Project Start:** Summer 2026  
**Revised Project Completion:** Spring 2028  
**Project Number:** WS-19001

# Water Main Replacement - Project 31

## Description

This project will fund the design and replacement of structurally deficient water mains and appurtenances in Fiscal Years 2026 and 2028. Mains are selected by researching the maintenance history of the system and identifying those that are undersized, corroded, and/or subject to breaks. The project scope includes 11,250 linear feet (which represents 0.9% of the City's Water Distribution System) of mains and services on various streets within the City, including areas in the Research Park, Midtown/Midtown West, Old Palo Alto, and Ventura neighborhoods.

## Justification

Some mains are inadequate in size to supply required flows and pressures for fire protection, some are located in areas of high liquefaction, and others are subject to recurring breaks.

## Supplemental Information

Each year the projects are re-evaluated and the highest priority is given to the most deteriorated portions of the system. Linear footage and locations are subject to change; please refer to the City of Palo Alto Utilities webpage to confirm project details.

## Significant Changes

**2023-2027 CIP:** Design dollars programmed in FY 2027 split for soil testing to begin in FY 2026, design in FY 2027. This provides adequate time to assess the areas designated for main and lateral replacements.



### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Water Fund</b>	0	0	0	0	0	0	425,000	425,000	850,000	8,500,000	9,350,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>425,000</b>	<b>425,000</b>	<b>850,000</b>	<b>8,500,000</b>	<b>9,350,000</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	0	0	0	0	0	43,900	129,000	172,900	8,500,000	8,672,900
<b>Design</b>	0	0	0	0	0	0	381,100	296,000	677,100	0	677,100
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>425,000</b>	<b>425,000</b>	<b>850,000</b>	<b>8,500,000</b>	<b>9,350,000</b>

### Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Water Resources                  Goal: N-4                  Policy: N-4.1                  Program: N4.13.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15302.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Utilities Advisory Commission</p>
--	---



CITY OF  
**PALO  
ALTO**



# INTERNAL SERVICE FUND PROJECTS





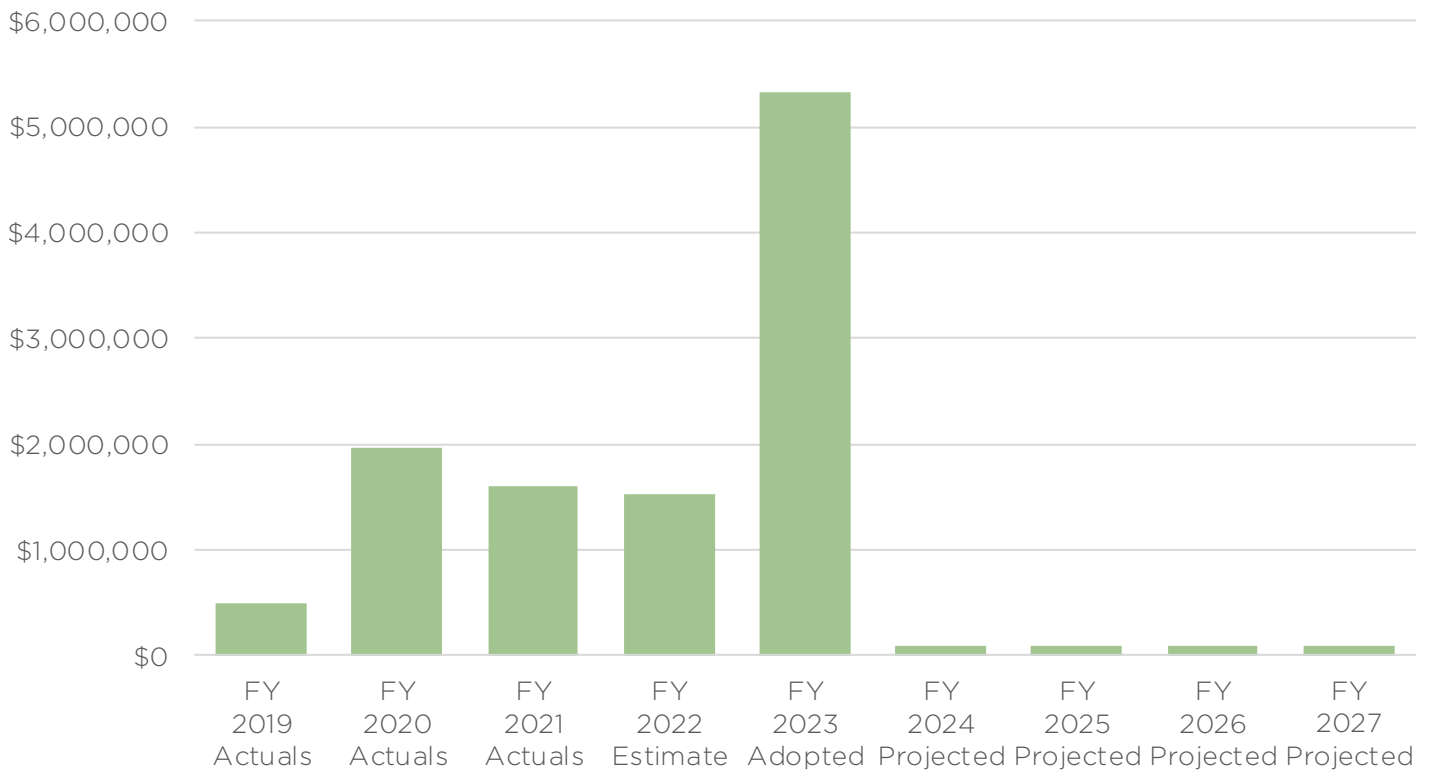
CITY OF  
**PALO  
ALTO**

# TECHNOLOGY FUND

## Overview

The Technology Fund accounts for expenses associated with citywide Information Technology activities. Technology Fund capital projects enhance service delivery to the community and to City staff through the delivery and implementation of Information Technology infrastructure. It is important to note that all expenditures in the Technology Fund are reimbursed by transfers from the other City funds benefiting from the services and purchases incurred in the Technology Fund. Overall, a total of six capital projects are programmed over the five-year Capital Improvement Program (CIP). The projects outlined in the capital program represent only a small subset of the total number of technology projects delivered to the City, as most technology projects are funded through the operating budget and do not meet the criteria of a capital project. Please refer to the Information Technology Department section of the Operating Budget for additional information. The budget for the Technology Fund Capital Improvement Program is accounted for in two separate categories: Citywide Technology Upgrades and Improvements, and Department Technology Upgrades and Improvements.

## Technology Fund Capital Expenditures



## Citywide Technology Upgrades and Improvements

The Citywide Technology Upgrades category includes projects that benefit multiple City departments. They tend to have a larger scope than projects for individual departments and thus entail more coordination and complexity. For the 2023-2027 Capital Improvement Program, \$4.2 million is allocated within this category with \$4.0 million reappropriated from Fiscal Year 2022 to complete projects already in process.

**Recent Accomplishments:**

- Scope has been identified for the ERP Phase II work which is anticipated to start at the end of Fiscal Year 2022.

**2023-2027 Capital Improvement Program****Non-Recurring Projects:**

- Enterprise Resource Planning Upgrade: The original scope of this project was to upgrade the existing Enterprise Resource Planning (ERP) system and replace the existing Customer Information System (CIS) to better meet the City's needs. Phase I of the ERP replacement has been complete, Phase II is planned for the end of Fiscal Year 2022, and the CIS portion of the project is currently on hold (Fiscal Year 2023: \$2.0 million; 5-Year CIP: \$2.0 million).
- City Council Chambers Upgrade: This project will upgrade the necessary audio visual equipment in Council Chambers as the equipment in place now is unsupported and outdated. This project will also bring the identified Americans with Disabilities Act (ADA) components to compliance (Fiscal Year 2023: \$1.7 million; 5-Year CIP: \$1.7 million).
- Radio Infrastructure Replacement: This project, which is funded by annual transfers from the General Fund and Utility Enterprise Funds as well as funding from Stanford, allows for the replacement of various items in the City's Public Safety infrastructure inventory. This project is slated to close in Fiscal Year 2023 and ongoing maintenance for the City's radios will be transitioned over to the Police Department which will then administer the maintenance for all City departments (Fiscal Year 2023: \$0.3 million; 5-Year CIP: \$0.3 million).
- Infrastructure Management System: This project will procure and implement a new electronic facility plan record management system in Fiscal Year 2023 (Fiscal Year 2023: \$0.2 million; 5-Year CIP: \$0.2 million).

## Department Technology Upgrades and Improvements

The Department Technology Upgrades and Improvements category includes projects that benefit one or a limited number of City departments. For the 2023-2027 Capital Improvement Program, \$1.6 million is programmed within this category, of this amount, \$0.1 million will be reappropriated from Fiscal Year 2022 to complete projects already in process.

**Recent Accomplishments:**

- New Records Management System for the Police Department has been implemented.
- The MyCPAU customer portal has been updated to improve customer experience.

**2023-2027 Capital Improvement Program****Recurring Projects:**

The 2023-2027 CIP includes one recurring project within this category:

- Utilities Customer Bill System Improvements: This project allows for enhancements to the Utilities Billing system particularly in response to new legislative, regulatory, and security requirements. Other system enhancements may include third party or hosted services for bill printing and invoicing,

# TECHNOLOGY FUND

customer self-service portal, and reporting capabilities. This project will continue to be recurring until the upgrade of the ERP and replacement of the Utilities Billing system is completed. After the systems are implemented, the project will be reevaluated to determine if recurring funding is required (Fiscal Year 2023: \$0.5 million; 5-Year CIP: \$0.9 million).

## Non-Recurring Projects:

- Computer Aided Dispatch (CAD) Upgrade: This upgrade is a Tri-City Consortium coordinated effort between Mountain View, Los Altos, and Palo Alto to upgrade the CAD current system that was replaced in Fiscal Year 2015 as is now at its end of life (Fiscal Year 2023: \$0.7 million; 5-Year CIP: \$0.7 million).

## Technology

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Revenue from Other Agencies</b>									
TE-23000	Computer Aided Dispatch (CAD) Upgrade	0	0	104,000	0	0	0	0	104,000
TE-21000	Public Safety Records Management System (RMS) Replacement	0	21,863	0	0	0	0	0	0
<b>Revenue from Other Agencies Total</b>		<b>\$0</b>	<b>\$21,863</b>	<b>\$104,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$104,000</b>
<b>Transfer from Airport Fund</b>									
TE-19001	City Council Chambers Upgrade	500	500	0	0	0	0	0	0
TE-13004	Infrastructure Management System	0	0	1,100	0	0	0	0	1,100
<b>Transfer from Airport Fund Total</b>		<b>\$500</b>	<b>\$500</b>	<b>\$1,100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,100</b>
<b>Transfer from Print &amp; Mail Fund</b>									
TE-19001	City Council Chambers Upgrade	400	400	0	0	0	0	0	0
<b>Transfer from Print &amp; Mail Fund Total</b>		<b>\$400</b>	<b>\$400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Transfer from Refuse Fund</b>									
TE-19001	City Council Chambers Upgrade	5,600	5,600	0	0	0	0	0	0
TE-10001	Utilities Customer Bill System Improvements	14,950	14,950	42,600	11,500	11,500	11,500	11,500	88,600
<b>Transfer from Refuse Fund Total</b>		<b>\$20,550</b>	<b>\$20,550</b>	<b>\$42,600</b>	<b>\$11,500</b>	<b>\$11,500</b>	<b>\$11,500</b>	<b>\$11,500</b>	<b>\$88,600</b>
<b>Transfer from Stormwater Management Fund</b>									
TE-19001	City Council Chambers Upgrade	2,500	2,500	0	0	0	0	0	0
TE-13004	Infrastructure Management System	0	0	5,300	0	0	0	0	5,300
TE-10001	Utilities Customer Bill System Improvements	3,380	3,380	9,600	2,600	2,600	2,600	2,600	20,000
<b>Transfer from Stormwater Management Fund Total</b>		<b>\$5,880</b>	<b>\$5,880</b>	<b>\$14,900</b>	<b>\$2,600</b>	<b>\$2,600</b>	<b>\$2,600</b>	<b>\$2,600</b>	<b>\$25,300</b>
<b>Transfer from Utilities Administration Fund</b>									
TE-19001	City Council Chambers Upgrade	19,500	19,500	0	0	0	0	0	0
TE-23000	Computer Aided Dispatch (CAD) Upgrade	0	0	39,000	0	0	0	0	39,000
TE-13004	Infrastructure Management System	0	0	68,800	0	0	0	0	68,800
TE-10001	Utilities Customer Bill System Improvements	111,670	111,670	317,800	85,900	85,900	85,900	85,900	661,400
<b>Transfer from Utilities Administration Fund Total</b>		<b>\$131,170</b>	<b>\$131,170</b>	<b>\$425,600</b>	<b>\$85,900</b>	<b>\$85,900</b>	<b>\$85,900</b>	<b>\$85,900</b>	<b>\$769,200</b>



Technology *(Continued)*

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>Transfer from Vehicle Replacement and Maintenance</b>									
TE-19001	City Council Chambers Upgrade	3,500	3,500	0	0	0	0	0	0
TE-13004	Infrastructure Management System	0	0	5,200	0	0	0	0	5,200
<b>Transfer from Vehicle Replacement and Maintenance Total</b>		<b>\$3,500</b>	<b>\$3,500</b>	<b>\$5,200</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,200</b>
<b>Transfer from Wastewater Treatment Fund</b>									
TE-19001	City Council Chambers Upgrade	14,000	14,000	0	0	0	0	0	0
TE-13004	Infrastructure Management System	0	0	26,900	0	0	0	0	26,900
<b>Transfer from Wastewater Treatment Fund Total</b>		<b>\$14,000</b>	<b>\$14,000</b>	<b>\$26,900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$26,900</b>
<b>Total Sources</b>		<b>\$176,000</b>	<b>\$197,863</b>	<b>\$620,300</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$1,020,300</b>
<b>USE OF FUNDS</b>									
<b>Citywide Technology Upgrades and Improvements</b>									
TE-19001	City Council Chambers Upgrade	1,793,000	95,500	1,697,500	0	0	0	0	1,697,500
TE-19000	Enterprise Resource Planning Upgrade	2,414,390	385,390	2,029,000	0	0	0	0	2,029,000
TE-13004	Infrastructure Management System	34,660	34,660	185,000	0	0	0	0	185,000
TE-05000	Radio Infrastructure Replacement	259,924	0	259,900	0	0	0	0	259,900
<b>Citywide Technology Upgrades and Improvements Total</b>		<b>\$4,501,974</b>	<b>\$515,550</b>	<b>\$4,171,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,171,400</b>
<b>Department Technology Upgrades and Improvements</b>									
TE-23000	Computer Aided Dispatch (CAD) Upgrade	0	0	650,000	0	0	0	0	650,000
TE-12001	Development Center Blueprint Technology Enhancements	300,628	300,628	0	0	0	0	0	0
TE-21000	Public Safety Records Management System (RMS) Replacement	492,782	512,290	0	0	0	0	0	0
TE-10001	Utilities Customer Bill System Improvements	293,281	163,281	500,000	100,000	100,000	100,000	100,000	900,000
<b>Department Technology Upgrades and Improvements Total</b>		<b>\$1,086,691</b>	<b>\$976,199</b>	<b>\$1,150,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$1,550,000</b>
<b>Total Uses</b>		<b>\$5,588,665</b>	<b>\$1,491,749</b>	<b>\$5,321,400</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$5,721,400</b>



CITY OF  
**PALO  
ALTO**

# Citywide Technology Upgrades and Improvements



City Council Chambers

**Fund:** Technology Fund  
**Category:** Citywide Technology Upgrades and Improvements  
**Project Location:** City Hall  
**Managing Department:** Information Technology  
**Initial Project Start:** Summer 2019  
**Initial Project Completion:** Summer 2022  
**Revised Project Start:** N/A  
**Revised Project Completion:** Summer 2023  
**Project Number:** TE-19001

# City Council Chambers Upgrade

## Description

Funding will be used to upgrade outdated electronic equipment that has become unsupported in City Council Chambers. This will help address technical issues and ensure compliance with Americans with Disabilities Act (ADA) requirements. This project will:

- Replace and upgrade outdated audio/visual equipment to bring City Council Chambers in compliance with ADA requirements
- Upgrade the City Council Chambers broadcast booth, overhead display equipment, and dais equipment (including a supportable voting system)
- Bring the broadcast booth in the City Council Chambers in compliance with ADA and State regulations
- Obtain adequate support, maintenance, and warranty for all equipment
- Integrate the City Hall Lobby Video Wall, Community Meeting Room, and Council Conference Room with new City Council Chambers equipment to enable viewing and/or broadcasting

## Justification

Most of the electronic equipment in the City Council Chambers is obsolete and unsupported. The City's recent ADA transition plan update identified accessibility deficiencies in the City Council Chambers. The broadcast booth contains some equipment with expired warranties, unused equipment, and cabling that is not well managed. These issues pose potential hazards for the broadcasting operators. The broadcast booth also lacks back-up power supplies, which could hinder broadcasting and recording of the session. The rear projected overhead display is not clear, presents dissimilar sizes, and can only display two inputs. These issues unnecessarily hinder the City Clerks' administrative function during Council meetings. The existing voting system has been deemed unsupported and unrepairable by electricians and could stop functioning at any time.

The broadcast booth is not currently integrated with the upgraded equipment that has been installed in the Community Meeting Room, Council Conference Room, Flexible Training Room, and several library meeting rooms, which prevents the City from fully utilizing the new capabilities and functionality this upgraded equipment offers.

## Significant Changes

**2023-2027 CIP:** Due to the ongoing COVID-19 pandemic, project has been delayed. Staff will resume working on the upgrade in FY 2023 and further review or refine the current scope.

**2022-2026 CIP:** Staff will resume working on the upgrade in FY 2022 and further review or refine the current scope.

**2021-2025 CIP:** This project will be temporarily on hold in the wake of COVID-19, which requires the scope of this project to be re-imagined for needs such as social distancing and virtual flexibility. The majority of funding for this project comes from restricted funds.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Technology Fund</b>	(907,066)	1,747,000	49,500	1,697,500	0	0	0	0	1,697,500	0	839,934
<b>Transfer from Airport Fund</b>	9,200	500	500	0	0	0	0	0	0	0	9,700
<b>Transfer from Print &amp; Mail Fund</b>	9,200	400	400	0	0	0	0	0	0	0	9,600
<b>Transfer from Refuse Fund</b>	55,100	5,600	5,600	0	0	0	0	0	0	0	60,700
<b>Transfer from Stormwater Management Fund</b>	36,700	2,500	2,500	0	0	0	0	0	0	0	39,200
<b>Transfer from Utilities Administration Fund</b>	587,500	19,500	19,500	0	0	0	0	0	0	0	607,000
<b>Transfer from Vehicle Replacement and Maintenance</b>	64,200	3,500	3,500	0	0	0	0	0	0	0	67,700
<b>Transfer from Wastewater Treatment Fund</b>	156,100	14,000	14,000	0	0	0	0	0	0	0	170,100
<b>Total</b>	<b>10,934</b>	<b>1,793,000</b>	<b>95,500</b>	<b>1,697,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,697,500</b>	<b>0</b>	<b>1,803,934</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	10,806	1,793,000	95,500	1,697,500	0	0	0	0	1,697,500	0	1,803,806
<b>Design</b>	128	0	0	0	0	0	0	0	0	0	128
<b>Total</b>	<b>10,934</b>	<b>1,793,000</b>	<b>95,500</b>	<b>1,697,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,697,500</b>	<b>0</b>	<b>1,803,934</b>

## Operating Impact

While this project is anticipated to impact operating expenses in the future, operating impacts have not been determined at this time. Estimates will be determined after Request for Proposals are issued, and as these costs are quantified, adjustments will be brought forward in future budgets as necessary.

### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
Section: Maintenance of Parks and  
Community Facilities  
Goal: C-3  
Policy: C-3.2

### Potential Board/Commission Review:

Planning and Transportation Commission

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**

## TECHNOLOGY FUND



**Fund:** Technology Fund

**Category:** Citywide Technology Upgrades and Improvements

**Project Location:** Various

**Managing Department:** Information Technology

**Initial Project Start:** Summer 2018

**Initial Project Completion:** Summer 2022

**Revised Project Start:** N/A

**Revised Project Completion:** Summer 2025

**Project Number:** TE-19000

**New Financial System**

# Enterprise Resource Planning Upgrade

## Description

This project provides funding to upgrade the existing Enterprise Resource Planning (ERP) system and Customer Information System (CIS) to better meet the City's needs.

## Justification

The City's existing ERP system, SAP, was selected in 2002 with the purpose of integrating various business processes and moving towards electronic Government (eGovernment). In Fiscal Year 2003, the implementation of SAP's Enterprise Central Component (ECC 4.6C) core modules was completed and since then the City has used SAP to support Accounting, Finance, Purchasing, Project Management, Plant Maintenance, Budgeting, Payroll, Human Resource Management, and Service Order Management functions. In 2009, the City completed a major upgrade to SAP (ECC 6.0). The City also replaced the former utility billing system (Banner) with the implementation of SAP's Customer Relationship Management (CRM) Utilities Customer Electronic Services (also known as My Utilities Account customer portal) and Business Intelligence Systems (BI).

## Supplemental Information

Technology and business needs have changed dramatically since the current ERP solution was selected and implemented. The upgrade of the existing ERP is anticipated to address a number of issues currently facing the City, including the following:

- The City is currently running an old version of SAP which does not support increasing demands in business and technology.
- The City requires a system that is user friendly with faster response times for any add/modify needs.
- The upgraded system will facilitate automation of additional business processes which are not supported in the current software.



- The City anticipates improvements to quality and reliability of information that will enhance decision making and strengthen the reporting capacity of the City in a user-friendly manner.

Funds currently recommended reflect only estimated costs. Once a vendor is selected, full system and implementation costs will be updated.

### Significant Changes

**FY 2023-2027 CIP:** SAP Phase II scope has been identified and will begin at the end of FY 2022. Anticipated completion date of Phase II is during FY 2025.

**FY 2022-2026 CIP:** The SAP upgrade has been completed for Phase I. The CIS upgrade remains on hold at this time. Remaining funds for FY 2022 will be used for Phase II of the SAP upgrade. Staff will come back and request funding for CIS as necessary.

**FY 2021-2025 CIP:** The SAP upgrade is underway. The necessary licensing has been purchased for the contract with LSI, Inc to help the City upgrade the SAP system. Implementation for the SAP upgrade has started and is anticipated to be finished in FY 2021. However, the CIS upgrade will be temporarily on hold in the wake of COVID-19. Staff will further review the scope and current platform once the ERP upgrade has been completed.

**FY 2020-2024 CIP:** After thorough consideration, it was determined that an upgrade to the current SAP environment would be more appropriate than a complete system replacement at this time. The request for proposal (RFP) was therefore canceled on November 14th, 2018 and the vendors were notified of the cancellation. An upgrade to the current SAP system will avoid the risks, costs, and management challenges associated with migration to a new ERP.

The upgrade cost of the current SAP environment is estimated at \$4.0 million, which includes Financial/ Human Resources system software and services, hardware, project staffing and other costs. The scope of this upgrade includes moving from the current SAP ECC 6.0 Enhancement Package (EHP) 2.0 to SAP ECC 6.0 EHP 8.0. The recurring annual SAP licensing cost for EHP 8.0 is estimated at \$0.4 million. The annual licensing cost is approximately \$0.6 million less annually when compared to a new ERP. The difference in cost to implement the upgrade versus a new ERP saves the City approximately \$2.0 million.

With this upgrade, the City will be able to benefit from a more user-friendly interface, mobile friendly workflows and timesheets, and faster and easier access to necessary operational reports enabling data driven decisions. Staff can anticipate tight integration with key external solutions such as Geographic Information System (GIS) Spatial Mapping solution, Smart Water Metering Technologies, and SAP Business Intelligence and reporting solution. While it is expected that all major Financial and Human Resource functions will be maintained within this upgraded SAP, many business processes will see improvements or changes to increase efficiency and improved controls.

# TECHNOLOGY FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Technology Fund</b>	2,489,075	2,414,390	385,390	2,029,000	0	0	0	0	2,029,000	0	4,903,465
<b>Total</b>	<b>2,489,075</b>	<b>2,414,390</b>	<b>385,390</b>	<b>2,029,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,029,000</b>	<b>0</b>	<b>4,903,465</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	0	2,029,000	0	2,029,000	0	0	0	0	2,029,000	0	2,029,000
<b>Design</b>	2,489,075	385,390	385,390	0	0	0	0	0	0	0	2,874,465
<b>Total</b>	<b>2,489,075</b>	<b>2,414,390</b>	<b>385,390</b>	<b>2,029,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,029,000</b>	<b>0</b>	<b>4,903,465</b>

### Operating Impact

While this project is anticipated to impact operating expenses in the future, operating impacts from Phase II of this project have not been determined at this time. As these costs are quantified, adjustments will be brought forward in future budgets as necessary.

#### Relationship to Comprehensive Plan Primary Connection

Element: Community Services & Facilities  
 Section: Efficient and Effective Service  
 Delivery  
 Goal: C-1  
 Policy: C-1.3

#### Potential Board/Commission Review:

Planning and Transportation Commission

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**

## TECHNOLOGY FUND



**Fund:** Technology Fund  
**Category:** Citywide Technology Upgrades and Improvements  
**Project Location:** Various  
**Managing Department:** Information Technology  
**Initial Project Start:** Summer 2013  
**Initial Project Completion:** Summer 2014  
**Revised Project Start:** N/A  
**Revised Project Completion:** Fall 2023  
**Project Number:** TE-13004

Infrastructure Management System

# Infrastructure Management System

## Description

This project establishes an Enterprise Asset Management System (EAMS) to maintain an up-to-date inventory of the City's infrastructure, its catch-up and keep-up needs, and available funding. This project also provides funding for a new electronic Record Management System (RMS) to hold record plans and related information on each facility. These management tools will support ongoing staff and Council attention to infrastructure budgeting, planning, and accountability, and the systems will be integrated with the programs the City now uses to manage infrastructure and finance.

## Justification

As recommended by the Infrastructure Blue Ribbon Commission, an Infrastructure Management System (IMS) is needed to enable staff to monitor facility conditions, forecast maintenance needs, factor inflation, and assemble usage data. An IMS will provide decision makers with invaluable cost and funding data. Currently, the relevant information is not maintained within a single system. Several outside consultants, as well as the City Auditor (2008), have recommended that the City put in place such a system, widely used in industry and government and available commercially.

While establishing the IMS, it was determined that a new electronic facility plan RMS is needed to centrally store records, plans, and related information on each City facility. Currently, older records and plans are managed through a Microsoft Access Database, with limited search capabilities, and some records and plans are still only available as hardcopy sheets. The project will include scanning older hard copy sets and compiling all records into a new indexed system that will be easily accessible to all City Staff.

## Supplemental Information

Based on the results of the needs assessment study, two software applications already in use by the City will be used to form an integrated IMS. One application will be used to maintain an asset inventory and to track

maintenance and condition information, while the other will be used to schedule projected capital maintenance needs and to track catch-up and keep-up.

The RMS project will scan, catalog, and archive documents in an open-format electronic database system that will allow staff to easily search, access, and retrieve all City facility records and plans.

## Significant Changes

**2023-2027 CIP:** The project scope and funding increased by approximately \$0.2 million to include a new electronic facility plan record management system in FY 2023.

**2022-2026 CIP:** Customization and configuration work was not able to be fully completed in FY 2021 due to the ongoing COVID-19 shelter in place. Funding to finalize the integration will be reappropriated to FY 2022 to complete the project.

**2021-2025 CIP:** Customization and configuration work was not able to be fully completed in FY 2020. Funding to finalize the integration will be reappropriated to FY 2021 to complete the project.

**2020-2024 CIP:** Additional work is required for the integrated Infrastructure Management System, such as further professional service hours required for customization and configuration for the two systems that have been identified as the integrated IMS. This CIP is anticipated to close at the end of FY 2020.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Technology Fund</b>	186,803	34,660	34,660	77,700	0	0	0	0	77,700	0	299,163
<b>Transfer from Airport Fund</b>	0	0	0	1,100	0	0	0	0	1,100	0	1,100
<b>Transfer from Stormwater Management Fund</b>	0	0	0	5,300	0	0	0	0	5,300	0	5,300
<b>Transfer from Utilities Administration Fund</b>	0	0	0	68,800	0	0	0	0	68,800	0	68,800
<b>Transfer from Vehicle Replacement and Maintenance</b>	0	0	0	5,200	0	0	0	0	5,200	0	5,200
<b>Transfer from Wastewater Treatment Fund</b>	0	0	0	26,900	0	0	0	0	26,900	0	26,900
<b>Total</b>	<b>186,803</b>	<b>34,660</b>	<b>34,660</b>	<b>185,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>185,000</b>	<b>0</b>	<b>406,463</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	186,803	34,660	34,660	185,000	0	0	0	0	185,000	0	406,463
<b>Total</b>	<b>186,803</b>	<b>34,660</b>	<b>34,660</b>	<b>185,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>185,000</b>	<b>0</b>	<b>406,463</b>

## Operating Impact

There are no additional operating impacts anticipated from this project. Any maintenance costs that arise will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Land Use and Community  
Design  
Section: Public Streets and Public  
Spaces  
Goal: L-9  
Policy: L-9.11  
Program: L9.11.2

**Potential Board/Commission Review:**

Planning and Transportation Commission

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.



CITY OF  
**PALO  
ALTO**



Public Safety Radios

**Fund:** Technology Fund

**Category:** Citywide Technology Upgrades and Improvements

**Project Location:** Various

**Managing Department:** Information Technology

**Initial Project Start:** Recurring

**Initial Project Completion:** Recurring

**Revised Project Start:** N/A

**Revised Project Completion:** Summer 2023

**Project Number:** TE-05000

# Radio Infrastructure Replacement

## Description

This project provides funding for the transition from the City's legacy analog radio system to the new Silicon Valley Regional Communications System (SVRCS). The City is participating with 14 other local agencies in an effort organized by the Silicon Valley Regional Interoperability Authority (SVRIA) to move to a countywide 700 Mhz radio communication system. This project provides funding for the City's share of establishing an interoperable radio communication system within the region and radios for all Palo Alto City users. Upon completion of the project, the law enforcement, fire and rescue service, emergency medical response, and disaster recovery units within the participating agencies will be able to communicate via an integrated voice and data communications system.

## Justification

Communications systems require continued replacement as infrastructure and equipment ages. Within the region, the communications systems have been fragmented. The new SVRCS will provide interoperable communications compliant with Department of Homeland Security communications guidelines.

## Supplemental Information

This project is slated to close in Fiscal Year 2023 and ongoing maintenance for the City's radios will transition to the Police Department to administer for all City departments.

## Significant Changes

**2023-2027 CIP:** The tower for radio communications is currently pending site coordination with other departments and agencies, which is anticipated to take place in FY 2023.

**2022-2026 CIP:** Migration of the remaining City radios is now complete. The remaining funding will be used to fund a tower for radio communications.



**2021-2025 CIP:** Migration of the remaining City radios was not able to be fully completed in FY 2020. Funding to finalize this work will be reappropriated to FY 2021 to complete the migration.

**2020-2024 CIP:** The infrastructure for the West Cell (location of multiple transmit/receive sites) is close to complete. The City has installed all of the required consoles and base stations. Public Works and Utilities migrated to the new system in November of 2018 and Public Safety and the remaining City radio users will be on the new system in FY 2020.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Technology Fund</b>	N/A	259,924	0	259,900	0	0	0	0	259,900	0	N/A
<b>Total</b>	<b>N/A</b>	<b>259,924</b>	<b>0</b>	<b>259,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>259,900</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	259,924	0	259,900	0	0	0	0	259,900	0	N/A
<b>Total</b>	<b>N/A</b>	<b>259,924</b>	<b>0</b>	<b>259,900</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>259,900</b>	<b>0</b>	<b>N/A</b>

### Operating Impact

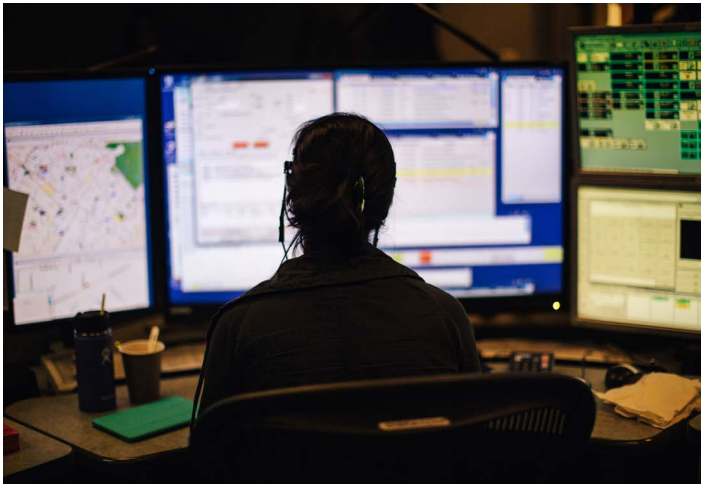
City departments will fund the maintenance of their department’s radios out of their respective departmental operating budgets.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b>                  Element: Community Services &amp; Facilities                  Section: Service to the Public                  Goal: C-2                  Policy: C-2.2</p>	<p><b>Potential Board/Commission Review:</b>                  Planning and Transportation Commission                  Utilities Advisory Commission</p>
<p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	



CITY OF  
**PALO  
ALTO**

# Department Technology Upgrades and Improvements



Public Safety Dispatcher using the Computer Aided Dispatch system

**Fund:** Technology Fund  
**Category:** Department Technology Upgrades and Improvements  
**Project Location:** Police  
**Managing Department:** Information Technology  
**Initial Project Start:** Spring 2022  
**Initial Project Completion:** Spring 2023  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** TE-23000

# Computer Aided Dispatch (CAD) Upgrade

## Description

This project provides funding for the upgrade of the Computer-Aided Dispatch (CAD) system that serves the city of Palo Alto public safety departments along with the departments responsible for Utilities, Public Works, Animal Control, Park Rangers, and Stanford DPS. The system is a combination of hardware, software, database, network devices and switches to facilitate the quick and accurate transfer of information from reporting parties to operators in the field. The system is interoperable with systems in the cities of Mountain View and Los Altos.

## Justification

In 2013, the City Managers of Los Altos, Mountain View, and Palo Alto agreed to a broad initiative of sharing public safety technology as a method to conserve resources, improve response times, increase the resiliency and the redundancy of these critical systems, as well as to enhance interoperable communications between the three cities' first responders. Since that time, a system of coordination has been implemented with the cities sharing in costs according to their level of participation, expertise, Full-Time Equivalent (FTE) support, use and resident population. The existing hardware for the systems resides in Mountain View but may be relocated. Originally the current vendor was selected in 2013 the project was principally completed in 2015. It is now at end of life as the vendor will no longer support the software, nor the operating platform, and the system will not integrate with current operating/network systems or platforms used throughout the cities.

## Significant Changes

**2023-2027 CIP:** The project remains in the initiation phase and requires Council direction on work with partner cities. The project is expected to be defined, designed and developed in FY 2023 with RFP and implementation in FY 2023 or FY 2024, pending direction.

**2022-2026 CIP:** The project is in the specification phase and expected to go to RFP in FY 2022 with implementation in FY 2023. An operating agreement is currently being considered by all three cities, and the project is expected to be completed within 18 months of vendor selection.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Revenue from Other Agencies	0	0	0	104,000	0	0	0	0	104,000	0	104,000
Technology Fund	0	0	0	507,000	0	0	0	0	507,000	0	507,000
Transfer from Utilities Administration Fund	0	0	0	39,000	0	0	0	0	39,000	0	39,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>650,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>650,000</b>	<b>0</b>	<b>650,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Construction	0	0	0	650,000	0	0	0	0	650,000	0	650,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>650,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>650,000</b>	<b>0</b>	<b>650,000</b>

## Operating Impacts

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Technology Fund	0	60,000	60,000	60,000	60,000

### Operating Impact

Annual licensing fees of \$160,000 will begin once the CAD system is upgraded, approximately \$60,000 more than the current licensing costs, which are \$100,000 per year.

#### Relationship to Comprehensive Plan Primary Connection

Element: Safety  
Section: Community Safety  
Goal: S-1  
Policy: S-1.9  
Program: S1.9.1

#### Potential Board/Commission Review:

Planning and Transportation Commission

#### Environmental Impact Analysis:

Not Applicable



**Fund:** Technology Fund  
**Category:** Department Technology Upgrades and Improvements  
**Project Location:** Various  
**Managing Department:** Information Technology  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** TE-10001

## Utilities Customer Bill System Improvements

# Utilities Customer Bill System Improvements

## Description

This project provides regulatory enhancements and improved security for the Utilities Billing system. Through the implementation of this recurring project the Utilities Department will be responsive to new legislation and legal requirements. Securing customer sensitive information and complying with Payment Card Industry (PCI) data security standards will continue to be a priority as well.

## Justification

This project provides software system updates to meet mandatory security, regulatory, and governing requirements. This includes reviewing the various Meter-to-Cash business processes, the MyCPAU online customer portal, reporting tools, bill print software, and the Customer Relationship Management (CRM) solution for the Utilities Billing system. The Enterprise Funds share proportionately in the costs of this project.

## Supplemental Information

During the FY 2016 budget cycle, the ongoing budget for system enhancements was removed in anticipation of the City's Enterprise Resource Planning (ERP) system and Utilities Billing system implementations. Those projects have been delayed and as such, this project will continue to be recurring until the upgrade or replacements are complete. After the systems are implemented, the project will be reevaluated to determine if recurring funding is required.

## Significant Changes

**2023-2027 CIP:** Funding for this project increased by approximately \$0.4 million in FY 2023 for numerous short and long term enhancements that are being developed to achieve maximum benefits in the MyCPAU customer portal. Planned for FY 2023 are the following: WaterSmart report, Clean Power Research, integration with the future AMI (Advanced Metering Infrastructure) system, and other usability portal enhancements. In addition to

the enhancements to the MyCPAU portal, updates are required to the bill printing software. Lastly, funds will be used for any critical billing system enhancements for legislation and regulatory requirements.

**2022-2026 CIP:** The MyCPAU customer portal was integrated into the City’s upgraded cloud based SAP ERP system in FY 2021. For FY 2022 through FY 2025, enhancements to MyCPAU continue including updates to portal pages/views and the integration to new third party energy efficiency portals. In addition, staff is planning for potential changes to the utilities invoice in order to accommodate upcoming programs (e.g. on-bill financing, ambulance subscription fee).

**2021-2025 CIP:** The customer portal went live to all customers in March 2020. In conjunction with the launch of MyCPAU, minor cosmetic enhancement to the utilities invoice were made including the update of the logo. Additional enhancements to the MyCPAU portal are planned for FY 2021 and FY 2022 including the integration of MyCPAU to the new third party energy efficiency portals.

**2020-2024 CIP:** Continuing replacement of the My Utilities Account (MUA) self-service customer portal, initiated in Summer 2017, to provide new online services and functionality. The design and implementation of the portal have taken longer than initially anticipated and the portal is now expected to be fully operational in Summer 2019.

**2019-2023 CIP:** Enhancements to the new customer portal will continue to allow for enhancements to the bill print software and Utilities Billing system, particularly in response to new legislative, regulatory, and security requirements.

**2018-2022 CIP:** A replacement of the MUA self-customer service portal is scheduled to be completed by Summer 2018 and will provide new online self-services and functionality.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Technology Fund</b>	N/A	163,281	33,281	130,000	0	0	0	0	130,000	0	N/A
<b>Transfer from Refuse Fund</b>	N/A	14,950	14,950	42,600	11,500	11,500	11,500	11,500	88,600	0	N/A
<b>Transfer From Stormwater Management Fund</b>	N/A	3,380	3,380	9,600	2,600	2,600	2,600	2,600	20,000	0	N/A
<b>Transfer from Utilities Administration Fund</b>	N/A	111,670	111,670	317,800	85,900	85,900	85,900	85,900	661,400	0	N/A
<b>Total</b>	<b>N/A</b>	<b>293,281</b>	<b>163,281</b>	<b>500,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>900,000</b>	<b>0</b>	<b>N/A</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Construction</b>	N/A	26,266	26,266	0	0	0	0	0	0	0	N/A
<b>Design</b>	N/A	267,015	137,015	500,000	100,000	100,000	100,000	100,000	900,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>293,281</b>	<b>163,281</b>	<b>500,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>900,000</b>	<b>0</b>	<b>N/A</b>

**Operating Impact**

There are no net additional operating impacts anticipated from this project. The maintenance cost of this new customer portal is commensurate to the old utilities account portal system.

<b>Relationship to Comprehensive Plan Primary Connection</b>	<b>Potential Board/Commission Review:</b>
Element: Community Services & Facilities Section: Service to the Public Goal: C-2 Policy: C-2.2	Planning and Transportation Commission Utilities Advisory Commission
<b>Environmental Impact Analysis:</b> This project is expected to have a possible exemption from CEQA under Section 15301.	



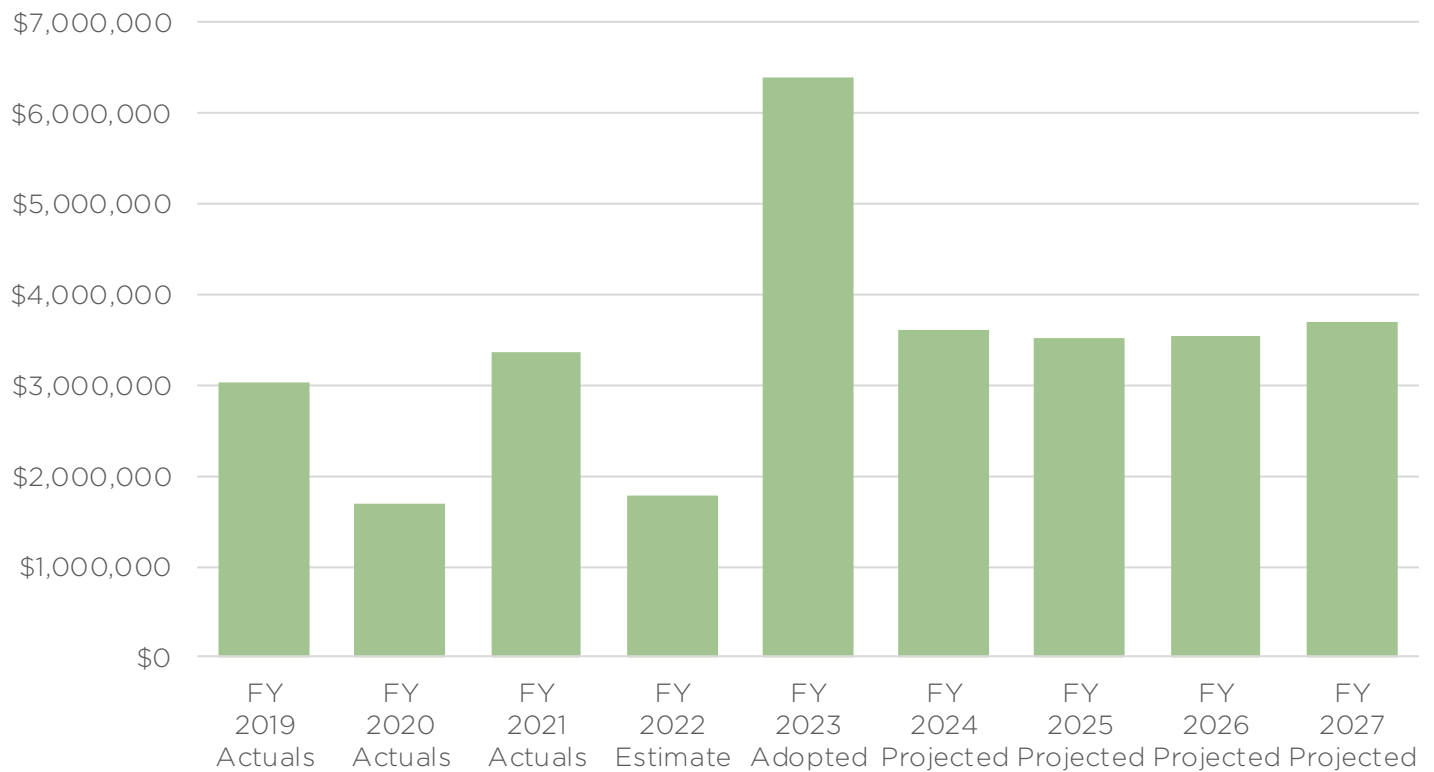
# VEHICLE REPLACEMENT AND MAINTENANCE FUND

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

## Overview

Activities related to the replacement, maintenance, and operations of the City's fleet and equipment are accounted for within the Vehicle Replacement and Maintenance Fund (VRF). The VRF Capital Improvement Program (CIP) accounts for activities related to the replacement of the City's fleet and equipment, as well as the infrastructure necessary to operate and maintain the fleet and equipment. For detailed information on the maintenance and operation of the fleet, please refer to the Vehicle Replacement and Maintenance Fund section of the Operating Budget. Over the 2023-2027 CIP, approximately 28.5 percent of the fleet is programmed for replacement at a cost of \$20.7 million, with \$6.4 million allocated in Fiscal Year 2023. Of the \$6.4 million, \$2.8 million is recommended to be reappropriated for the continuation of projects approved by City Council in prior fiscal years. It is important to note that all expenditures in the fund are reimbursed by transfers from the funds benefiting from the services and purchases incurred in the fund. A total of nine capital projects are programmed over the five-year program. The budget for the VRF Capital Improvement Program is divided into two categories: Fleet Infrastructure Improvements and Vehicle and Equipment Replacement.

## Vehicle Fund Capital Expenditures



## Fleet Infrastructure Improvements

The Fleet Infrastructure Improvements category accounts for the repair or improvement of existing systems or structures. Examples of projects previously funded in this category include fuel management software, diesel particulate filters required by Bay Area Air Quality Management District, and new fuel tanks. No projects are recommended in this category for the 2023-2027 CIP.

### Recent Accomplishments

- Completed fuel station system upgrades at all remote fueling facility locations.
- Continued evaluation and revision of rates to ensure cost-recovery is being achieved for compressed natural gas (CNG), shop and commercial maintenance and repairs, and parts.

## Vehicle and Equipment Replacement

The Vehicle and Equipment Replacement Category accounts for the purchase, repair, and replacement of vehicles/equipment. Over the projected life of the vehicle/equipment, funds are collected in the Vehicle Fund from the department/fund that will utilize the asset so funding will be available to replace the asset when it has reached the end of its useful life. When a vehicle or piece of equipment is estimated to meet replacement criteria and has been reviewed and approved for replacement by the Fleet Review Committee, it is programmed into the Vehicle and Equipment Replacement CIP that corresponds to the year the useful life of the vehicle/equipment will expire.

Key replacements in the 2023-2027 CIP include four ambulances (\$1.3 million); four fire engines (\$3.5 million); eighteen marked patrol vehicles (\$1.4 million); three tree chipper trucks (\$0.6 million); one wildland unit (\$0.1 million); and one fire air support unit (\$0.5 million).

## Infrastructure Inventory

TYPE/GROSS VEHICLE WEIGHT (GVW)	UNLEADED	DIESEL	CNG	HYBRID	ELECTRIC	NO ENGINE TRAILER	TOTAL
Sedans/SUVs	26	-	16	10	6	-	58
Police marked units	24	-	-	-	-	-	24
Motorcycles	3	-	-	-	-	-	3
Scooters	4	-	-	-	-	-	4
Truck/Van Under 6k GVW <sup>1</sup>	64	-	-	-	-	-	64
Truck/Van 6K-11K GVW <sup>2</sup>	72	2	15	1	-	-	90
Trucks 11K-15K GVW <sup>1</sup>	11	3	-	-	-	-	14
Trucks 15K-26K GVW <sup>1</sup>	5	17	-	-	-	-	22
Dump Truck Under 11K GVW <sup>1</sup>	17	17	-	-	-	-	34
Large Equip: Boom & crane trucks, aerials	-	14	-	-	-	-	14
Wildland patrol vehicles	3	-	-	-	-	-	3
Water truck	-	2	-	-	-	-	2

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

## Infrastructure Inventory

TYPE/GROSS VEHICLE WEIGHT (GVW)	UNLEADED	DIESEL	CNG	HYBRID	ELECTRIC	NO ENGINE TRAILER	TOTAL
Fire safety	2	17	-	-	-	-	19
Sweepers	1	5	-	-	-	-	6
Backhoe, mowers, tractors, fork-lifts, rollers, air compressors, chip-pers, trailers <sup>1</sup>	3	46	-	-	8	58	115
Asphalt rollers, water pumps, spray rigs <sup>1</sup>	2	-	-	-	3	8	13
Generators, ditch witches, cable reelers <sup>1</sup>	6	44	4	-	-	-	54
<b>TOTAL</b>	<b>243</b>	<b>167</b>	<b>35</b>	<b>13</b>	<b>17</b>	<b>66</b>	<b>541</b>

<sup>1</sup> Vehicle classification aligned with recommended study results, shifting budgeted inventory within these categories

<sup>2</sup> Budgeted inventory in this category shifted due to restricted availability of fuel types from the manufacturer

### Recent Accomplishments

- Delivered 41 vehicles and 12 pieces of equipment in FY 2022 to maintain safe, reliable, and efficient use of resources.

## 2023-2027 Capital Improvement Program

### Recurring Projects

The 2023-2027 CIP includes one recurring project, Emergency Repair and Replacement, providing \$100,000 annually, plus salary and benefits for maintenance staff, to repair and/or replace critical vehicles/equipment that sustain damage due to accidents or unpreventable failure. This project mitigates impact to service delivery that could occur if these vehicles experienced lengthy times out of service. Since the inception of this project in Fiscal Year 2015, it has funded 49 repairs on vehicles/equipment and eight replacements.

### Non-Recurring Projects

The 2023-2027 CIP includes eight projects, with \$20.1 million allocated for vehicle and equipment replacements. All replacements are programmed for vehicles/equipment at the end of their useful life. Criteria for vehicles/equipment replacement include but are not limited to: utilization based on mileage or hours of operation, age, maintenance/repair records, and funding availability. As part of the replacement policy, and wherever possible, electric vehicles are considered first, then vehicles that use alternative fuels.

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

## Vehicle

Project Number	Project Title	FY 2022 Budget	FY 2022 Estimate	FY 2023 Adopted	FY 2024	FY 2025	FY 2026	FY 2027	5-Year Total
<b>SOURCE OF FUNDS</b>									
<b>Transfer from Airport Fund</b>									
VR-22000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2022	\$100,00	100,000	0	0	0	0	0	0
<b>Transfer from Airport Fund Total</b>		<b>\$100,000</b>	<b>\$100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Transfer from Gas Fund</b>									
VR-22000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2022	191,002	191,002	0	0	0	0	0	0
<b>Transfer from Gas Fund Total</b>		<b>\$191,002</b>	<b>\$191,002</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Transfer from General Fund</b>									
VR-22000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2022	\$40,000	40,000	0	0	0	0	0	0
VR-23000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2023	0	0	80,000	0	0	0	0	80,000
<b>Transfer from General Fund Total</b>		<b>\$40,000</b>	<b>\$40,000</b>	<b>\$80,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80,000</b>
<b>Total Sources</b>		<b>\$331,002</b>	<b>\$331,002</b>	<b>\$80,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$80,000</b>
<b>USE OF FUNDS</b>									
<b>Vehicle and Equipment Replacement</b>									
VR-15001	Emergency Repair and Replacement	189,000	189,000	116,000	118,000	120,000	122,000	124,000	600,000
VR-19000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2019	664,515	0	0	0	0	0	0	0
VR-20000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2020	1,756,130	342,432	1,413,700	0	0	0	0	1,413,700
VR-21000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2021	871,392	599,697	271,700	0	0	0	0	271,700
VR-22000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2022	1,568,002	639,002	1,069,000	0	0	0	0	1,069,000
VR-23000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2023	0	0	3,524,000	0	0	0	0	3,524,000
VR-24000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2024	0	0	0	3,492,000	0	0	0	3,492,000
VR-25000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2025	0	0	0	0	3,397,000	0	0	3,397,000
VR-26000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2026	0	0	0	0	0	3,409,000	0	3,409,000
VR-27000	Scheduled Vehicle and Equipment Replacement - Fiscal Year 2027	0	0	0	0	0	0	3,566,000	3,566,000
<b>Vehicle and Equipment Replacement Total</b>		<b>\$5,049,039</b>	<b>\$1,770,131</b>	<b>\$6,394,400</b>	<b>\$3,610,000</b>	<b>\$3,517,000</b>	<b>\$3,531,000</b>	<b>\$3,690,000</b>	<b>\$20,742,400</b>
<b>Total Uses</b>		<b>\$5,049,039</b>	<b>\$1,770,131</b>	<b>\$6,394,400</b>	<b>\$3,610,000</b>	<b>\$3,517,000</b>	<b>\$3,531,000</b>	<b>\$3,690,000</b>	<b>\$20,742,400</b>



CITY OF  
**PALO  
ALTO**

## Vehicle and Equipment Replacement

# VEHICLE REPLACEMENT AND MAINTENANCE FUND



**Fund:** Vehicle Replacement & Maintenance Fund  
**Category:** Vehicle and Equipment Replacement  
**Project Location:** 3201 East Bayshore Road  
**Managing Department:** Public Works  
**Initial Project Start:** Recurring  
**Initial Project Completion:** Recurring  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** VR-15001

Marked Police & Fire Vehicle, February 2013

## Emergency Repair and Replacement

### Description

This project provides funding to replace or repair vehicles/equipment that sustain damage due to accidents or unpreventable failure.

### Justification

Service levels are impacted when critical vehicles/equipment such as utility trucks and police sedans experience lengthy down times. Therefore, when damage or failure occurs, these critical vehicles/equipment need to be replaced or repaired quickly to ensure uninterrupted service. In some cases, reserve vehicles/equipment exist; however, it is unrealistic to have a back-up for each vehicle and piece of equipment in the City.

### Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Vehicle Replacement Fund</b>	N/A	189,000	189,000	116,000	118,000	120,000	122,000	124,000	600,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>189,000</b>	<b>189,000</b>	<b>116,000</b>	<b>118,000</b>	<b>120,000</b>	<b>122,000</b>	<b>124,000</b>	<b>600,000</b>	<b>0</b>	<b>N/A</b>

### Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	N/A	189,000	189,000	116,000	118,000	120,000	122,000	124,000	600,000	0	N/A
<b>Total</b>	<b>N/A</b>	<b>189,000</b>	<b>189,000</b>	<b>116,000</b>	<b>118,000</b>	<b>120,000</b>	<b>122,000</b>	<b>124,000</b>	<b>600,000</b>	<b>0</b>	<b>N/A</b>



# VEHICLE REPLACEMENT AND MAINTENANCE FUND

## Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Air Quality  
Goal: N-5  
Policy: N-5.2

### Potential Board/Commission Review:

Planning and Transportation Commission  
Fleet Review Committee

### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## VEHICLE REPLACEMENT AND MAINTENANCE FUND



Isuzu cab chassis with custom utility body, February 2014

**Fund:** Vehicle Replacement & Maintenance Fund

**Category:** Vehicle and Equipment Replacement

**Project Location:** 3201 East Bayshore Road

**Managing Department:** Public Works

**Initial Project Start:** Summer 2019

**Initial Project Completion:** Spring 2021

**Revised Project Start:** N/A

**Revised Project Completion:** Fall 2022

**Project Number:** VR-20000

# Scheduled Vehicle and Equipment Replacement - Fiscal Year 2020

## Description

This project provides funding for the existing City fleet vehicles and equipment scheduled for replacement in Fiscal Year 2020.

## Justification

The ongoing replacement of City fleet vehicles and equipment is prescribed by the City's policy for vehicle replacement, which includes guidelines based on age, mileage accumulation, and obsolescence. Timely replacement of vehicles lowers maintenance costs, helps to maintain or even increase the productivity of client departments, and allows the City to take advantage of new technology. As part of the policy, staff will first consider electric vehicles and then other alternative fuel vehicles when replacing existing vehicles.

## Supplemental Information

Funding in this project allows for the following replacements: five sedans; one motorcycle; one marked patrol vehicle; 18 pickups; two vans; two dump trucks; one aerial truck; seven miscellaneous equipment units. Of the 37 vehicles and pieces of equipment, 25 support the operations of the General Fund (\$1.65 million) and 12 support the operations of various Enterprise Funds (\$1.85 million). Since the inception of this project, vehicles/equipment have been added or removed based on the needs and available budget of individual departments (\$3.5 million).

## Significant Changes

**2023-2027 CIP:** Two pieces of equipment were delayed in production thus resulting in a new delivery date. Deliveries have also been delayed due to vendor staffing shortages.

**2022-2026 CIP:** One sedan was previously replaced and therefore removed from the list last year. All remaining vehicles on the list have been ordered; four vehicles still to be delivered and outfitted.

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

**2021-2025 CIP:** Seven vehicles to be ordered; 26 vehicles to be delivered and outfitted; and one vehicle removed from list.

**2020-2024 CIP:** The replacement list is reviewed each year and changes are tracked but not finalized until the year preceding replacement. Changes in the FY 2020 list include the addition of six vehicles and the removal of 12 vehicles, bringing the total number of vehicles and pieces of equipment to be replaced to 37 and an overall funding increase of \$31,000.

**2019-2023 CIP:** Five vehicles/pieces of equipment were removed including two sedans, one van, one generator, and one mower; while three were added including one F-150 and two F-350s with utility bodies. General Fund reduced by \$0.3 million. Enterprise funds increased by \$0.2 million.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Vehicle Replacement Fund</b>	1,712,865	1,756,132	342,432	1,413,700	0	0	0	0	1,413,700	0	3,468,997
<b>Total</b>	<b>1,712,865</b>	<b>1,756,132</b>	<b>342,432</b>	<b>1,413,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,413,700</b>	<b>0</b>	<b>3,468,997</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	1,712,828	1,756,130	342,432	1,413,700	0	0	0	0	1,413,700	0	3,468,960
<b>Total</b>	<b>1,712,828</b>	<b>1,756,130</b>	<b>342,432</b>	<b>1,413,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,413,700</b>	<b>0</b>	<b>3,468,960</b>

### Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

**Relationship to Comprehensive Plan  
Primary Connection**

Element: Natural Environment  
Section: Air Quality  
Goal: N-5  
Policy: N-5.2

**Potential Board/Commission Review:**

Planning and Transportation Commission  
Fleet Review Committee

**Environmental Impact Analysis:**

This project is expected to have a possible exemption from CEQA under Section 15301.

## VEHICLE REPLACEMENT AND MAINTENANCE FUND



Ford F-550 Saw Truck, March 2019

**Fund:** Vehicle Replacement & Maintenance Fund  
**Category:** Vehicle and Equipment Replacement  
**Project Location:** 3201 East Bayshore Road  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2020  
**Initial Project Completion:** Spring 2022  
**Revised Project Start:** N/A  
**Revised Project Completion:** Spring 2023  
**Project Number:** VR-21000

# Scheduled Vehicle and Equipment Replacement - Fiscal Year 2021

## Description

This project provides funding for the existing City fleet vehicles and equipment scheduled for replacement in Fiscal Year 2021.

## Justification

The ongoing replacement of City fleet vehicles and equipment is prescribed by the City's policy for vehicle replacement, which includes guidelines based on age, mileage accumulation, and obsolescence. Timely replacement of vehicles lowers maintenance costs, helps to maintain or even increase the productivity of client departments, and allows the City to take advantage of new technology. As part of the policy, staff will first consider electric vehicles and then other alternative fuel vehicles when replacing existing vehicles.

## Supplemental Information

Funding in this project allows for the following replacements: one sedan, four vans, eight trucks, two marked vehicles, four trailers, one generator, and 10 miscellaneous pieces of equipment. Of the 30 vehicles and pieces of equipment, 16 support the operations of the General Fund (\$0.7 million) and 14 support the operations of various Enterprise Funds (\$0.8 million). Since the inception of this project, 5 vehicles/equipment have been added and three vehicles/equipment removed (\$0.1 million) based on the individual needs and available budget of each department (\$1.5 million).

## Significant Changes

**2023-2027 CIP:** Corrections to ordered vehicles/equipment were made; one vehicle remains unordered due to the manufacturer's lack of inventory.

**2022-2026 CIP:** Five vehicles were added to the list making a total of 30 vehicles, funding not increased; all vehicles on the list have been ordered; 19 vehicles still to be delivered and outfitted.

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

**2021-2025 CIP:** Program in Fiscal Years 2021 and 2022 was reduced as part of the FY 2021 budget balancing strategy. Vehicle replacement for FY 2021 is limited to vehicles or equipment that have regulatory requirements or serious maintenance issues. Contingency funding has been added in case vehicles or equipment exceed estimates.

**2020-2024 CIP:** The replacement list is reviewed each year and changes are tracked but not finalized until the year preceding replacement. Changes in the FY 2021 list include the addition of four vehicles and the removal of eight vehicles, bringing the total number of vehicles and pieces of equipment to be replaced to 34.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Transfer from Public Services Donation Fund</b>	55,055	0	0	0	0	0	0	0	0	0	55,055
<b>Vehicle Replacement Fund</b>	533,601	871,397	599,697	271,700	0	0	0	0	271,700	0	1,404,998
<b>Total</b>	<b>588,656</b>	<b>871,397</b>	<b>599,697</b>	<b>271,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>271,700</b>	<b>0</b>	<b>1,460,053</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	588,642	871,392	599,697	271,700	0	0	0	0	271,700	0	1,460,039
<b>Total</b>	<b>588,642</b>	<b>871,392</b>	<b>599,697</b>	<b>271,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>271,700</b>	<b>0</b>	<b>1,460,039</b>

### Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Air Quality                  Goal: N-5                  Policy: N-5.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Fleet Review Committee</p>
--	--

## VEHICLE REPLACEMENT AND MAINTENANCE FUND



Pierce Heavy Rescue Unit, February 2012

**Fund:** Vehicle Replacement & Maintenance Fund

**Category:** Vehicle and Equipment Replacement

**Project Location:** 3201 East Bayshore Road

**Managing Department:** Public Works

**Initial Project Start:** Summer 2021

**Initial Project Completion:** Spring 2023

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** VR-22000

# Scheduled Vehicle and Equipment Replacement - Fiscal Year 2022

## Description

This project provides funding for the existing City fleet vehicles and equipment scheduled for replacement in Fiscal Year 2022.

## Justification

The ongoing replacement of City fleet vehicles and equipment is prescribed by the City's policy for vehicle replacement, which includes guidelines based on age, mileage accumulation, and obsolescence. Timely replacement of vehicles lowers maintenance costs, helps to maintain or even increase the productivity of client departments, and allows the City to take advantage of new technology. As part of the policy, staff will first consider electric vehicles and then other alternative fuel vehicles when replacing existing vehicles.

## Supplemental Information

Funding in this project allows for the following replacements: six sedans, three vans, two trucks, two SUVs, three marked vehicles, and three miscellaneous pieces of equipment. Of the 19 vehicles and pieces of equipment, 10 support the operations of the General Fund (\$0.6 million) and nine support the operations of various Enterprise Funds (\$0.9 million). Since the inception of this project, vehicles and equipment have been added or removed based on the individual needs and available budget of each department (\$1.5 million).

## Significant Changes

**2023-2027 CIP:** 13 vehicles/equipment were ordered, six vehicles/equipment are delayed due to an early closing of the production year, and two vehicles and one piece of equipment will be postponed to an outer year.

**2022-2026 CIP:** FY 2022 list reduced to 18 vehicles and pieces of equipment in the amount of \$1,377,000.

**2021-2025 CIP:** Funding for the Vehicle Replacement Fund Capital Improvement Program in Fiscal Years 2021-2022 was reduced as part of the FY 2021 budget balancing strategy. Vehicle replacement for FY 2022 is lim-

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

ited to vehicles or equipment that have regulatory requirements or serious maintenance issues. Contin-  
gency funding has been added in case vehicles or equipment exceed estimates.

**2020-2024 CIP:** Changes in the FY 2022 list include the addition of 11 vehicles and the removal of seven vehi-  
cles, bringing the total number of vehicles and pieces of equipment to be replaced to 43.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Transfer from Airport Fund	0	100,000	100,000	0	0	0	0	0	0	0	100,000
Transfer from Gas Fund	0	191,002	191,002	0	0	0	0	0	0	0	191,002
Transfer from General Fund	0	40,000	40,000	0	0	0	0	0	0	0	40,000
Vehicle Replacement Fund	0	1,237,000	308,000	1,069,000	0	0	0	0	1,069,000	0	1,377,000
<b>Total</b>	<b>0</b>	<b>1,568,002</b>	<b>639,002</b>	<b>1,069,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,069,000</b>	<b>0</b>	<b>1,708,002</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
Other	0	1,568,002	639,002	1,069,000	0	0	0	0	1,069,000	0	1,708,002
<b>Total</b>	<b>0</b>	<b>1,568,002</b>	<b>639,002</b>	<b>1,069,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,069,000</b>	<b>0</b>	<b>1,708,002</b>

### Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Air Quality  
Goal: N-5  
Policy: N-5.2

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Fleet Review Committee

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.



## VEHICLE REPLACEMENT AND MAINTENANCE FUND



Peterbilt Dump Truck, March 2018

**Fund:** Vehicle Replacement & Maintenance Fund  
**Category:** Vehicle and Equipment Replacement  
**Project Location:** 3201 East Bayshore Road  
**Managing Department:** Public Works  
**Initial Project Start:** Summer 2022  
**Initial Project Completion:** Summer 2023  
**Revised Project Start:** N/A  
**Revised Project Completion:** N/A  
**Project Number:** VR-23000

# Scheduled Vehicle and Equipment Replacement - Fiscal Year 2023

## Description

This project provides funding for the existing City fleet vehicles and equipment scheduled for replacement in Fiscal Year 2023.

## Justification

The ongoing replacement of City fleet vehicles and equipment is prescribed by the City's policy for vehicle replacement, which includes guidelines based on age, mileage accumulation, and obsolescence. Timely replacement of vehicles lowers maintenance costs, helps to maintain or even increase the productivity of client departments, and allows the City to take advantage of new technology. As part of the policy, staff will first consider electric vehicles and then other alternative fuel vehicles when replacing existing vehicles.

## Supplemental Information

Funding in this project allows for the following replacements: two sedans, two vans, nine trucks, one ambulance, five marked vehicles, three dump trucks, two trailers, and five miscellaneous pieces of equipment. Of the 29 vehicles and pieces of equipment, 18 support the operations of the General Fund (\$2.6 million) and 11 support the operations of various Enterprise Funds (\$0.9 million). Since the inception of this project, vehicles and equipment have been added or removed based on the individual needs and available budget of each department (\$3.5 million).

## Significant Changes

**2023-2027 CIP:** One trailer and two sedans added; two marked vehicles, one dump truck, and one ambulance moved to a later year. Vehicle/equipment total decreased from 30 to 29.



# VEHICLE REPLACEMENT AND MAINTENANCE FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Transfer from General Fund</b>	0	0	0	80,000	0	0	0	0	80,000	0	80,000
<b>Vehicle Replacement Fund</b>	0	0	0	3,444,000	0	0	0	0	3,444,000	0	3,444,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,524,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,524,000</b>	<b>0</b>	<b>3,524,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	0	0	3,524,000	0	0	0	0	3,524,000	0	3,524,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,524,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,524,000</b>	<b>0</b>	<b>3,524,000</b>

### Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Air Quality  
Goal: N-5  
Policy: N-5.2

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Fleet Review Committee

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## VEHICLE REPLACEMENT AND MAINTENANCE FUND



Freightliner FL-70 Aerial, March 2019

**Fund:** Vehicle Replacement & Maintenance Fund

**Category:** Vehicle and Equipment Replacement

**Managing Department:** Public Works

**Initial Project Start:** Summer 2023

**Initial Project Completion:** Spring 2024

**Revised Project Start:** N/A

**Project Number:** VR-24000

# Scheduled Vehicle and Equipment Replacement - Fiscal Year 2024

## Description

This project provides funding for the existing City fleet vehicles and equipment scheduled for replacement in Fiscal Year 2024.

## Justification

The ongoing replacement of City fleet vehicles and equipment is prescribed by the City's policy for vehicle replacement, which includes guidelines based on age, mileage accumulation, and obsolescence. Timely replacement of vehicles lowers maintenance costs, helps to maintain or even increase the productivity of client departments, and allows the City to take advantage of new technology. As part of the policy, staff will first consider electric vehicles and then other alternative fuel vehicles when replacing existing vehicles.

## Supplemental Information

Funding in this project allows for the following replacements: 10 trucks, three aerials, one pumper engine, three marked vehicles, two dump trucks, six trailers, and one miscellaneous piece of equipment. Of the 26 vehicles and pieces of equipment, 14 support the operations of the General Fund (\$2.3 million) and 12 support the operations of various Enterprise Funds (\$1.2 million). Since the inception of this project, vehicles and equipment have been added or removed based on the individual needs and available budget of each department (\$3.5 million).

## Significant Changes

**2023-2027 CIP:** One aerial, one dump truck and one trailer removed from list leaving 26 units to replace. Total budget remains the same.

**2022-2026 CIP:** Additional vehicles have been added to the replacement list for FY 2024. This list will still evolve until the year prior to budget adoption. Changes in the FY 2024 list include the addition of twenty vehicles and

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

the removal of 3 vehicles, bringing the total number of vehicles and pieces of equipment to be replaced to 29 and an overall funding increase of \$1.1M.

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Vehicle Replacement Fund</b>	0	0	0	0	3,492,000	0	0	0	3,492,000	0	3,492,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,492,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,492,000</b>	<b>0</b>	<b>3,492,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	0	0	0	3,492,000	0	0	0	3,492,000	0	3,492,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,492,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,492,000</b>	<b>0</b>	<b>3,492,000</b>

### Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

#### Relationship to Comprehensive Plan Primary Connection

Element: Natural Environment  
Section: Air Quality  
Goal: N-5  
Policy: N-5.2

#### Potential Board/Commission Review:

Planning and Transportation Commission  
Fleet Review Committee

#### Environmental Impact Analysis:

This project is expected to have a possible exemption from CEQA under Section 15301.

## VEHICLE REPLACEMENT AND MAINTENANCE FUND



Isuzu NPR with Utility Body

**Fund:** Vehicle Replacement & Maintenance Fund

**Category:** Vehicle and Equipment Replacement

**Managing Department:** Public Works

**Initial Project Start:** Summer 2024

**Initial Project Completion:** Summer 2025

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** VR-25000

# Scheduled Vehicle and Equipment Replacement - Fiscal Year 2025

## Description

This project provides funding for the existing City fleet vehicles and equipment scheduled for replacement in Fiscal Year 2025.

## Justification

The ongoing replacement of City fleet vehicles and equipment is prescribed by the City's policy for vehicle replacement, which includes guidelines based on age, mileage accumulation, and obsolescence. Timely replacement of vehicles lowers maintenance costs, helps to maintain or even increase the productivity of client departments, and allows the City to take advantage of new technology. As part of the policy, staff will first consider electric vehicles and then other alternative fuel vehicles when replacing existing vehicles.

## Supplemental Information

Funding in this project allows for the following replacements: one sedan, five trucks, one van, two fire vehicles, one SUV, one marked vehicle, one dump truck, 13 trailers and 14 miscellaneous pieces of equipment. Of the 39 vehicles and pieces of equipment, 28 support the operations of the General Fund (\$2.9 million) and 11 support the operations of various Enterprise Funds (\$0.5 million). Since the inception of this project, vehicles and equipment have been added or removed based on the individual needs and available budget of each department (\$3.4 million).

## Significant Changes

**2022-2026 CIP:** Additional vehicles have been added to the replacement list for FY 2024. This list will still evolve until the year prior to budget adoption. Changes in the FY 2025 list include the addition of eleven vehicles and the removal of two vehicles, bringing the total number of vehicles and pieces of equipment to be replaced to 38 and an overall funding increase of \$347,000.

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Vehicle Replacement Fund</b>	0	0	0	0	0	3,397,000	0	0	3,397,000	0	3,397,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,397,000</b>	<b>0</b>	<b>0</b>	<b>3,397,000</b>	<b>0</b>	<b>3,397,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	0	0	0	0	3,397,000	0	0	3,397,000	0	3,397,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,397,000</b>	<b>0</b>	<b>0</b>	<b>3,397,000</b>	<b>0</b>	<b>3,397,000</b>

### Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Air Quality                  Goal: N-5                  Policy: N-5.2</p> <p><b>Environmental Impact Analysis:</b>                  Not Applicable</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Fleet Review Committee</p>
--	--

## VEHICLE REPLACEMENT AND MAINTENANCE FUND



Freightliner with Utility Body, March 2013

**Fund:** Vehicle Replacement & Maintenance Fund

**Category:** Vehicle and Equipment Replacement

**Project Location:** 3201 E. Bayshore Road

**Managing Department:** Public Works

**Initial Project Start:** Summer 2025

**Initial Project Completion:** Summer 2026

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** VR-26000

# Scheduled Vehicle and Equipment Replacement - Fiscal Year 2026

## Description

This project provides funding for the existing City fleet vehicles and equipment scheduled for replacement in Fiscal Year 2026.

## Justification

The ongoing replacement of City fleet vehicles and equipment is prescribed by the City's policy for vehicle replacement, which includes guidelines based on age, mileage accumulation, and obsolescence. Timely replacement of vehicles lowers maintenance costs, helps to maintain or even increase the productivity of client departments, and allows the City to take advantage of new technology. As part of the policy, staff will first consider electric vehicles and then other alternative fuel vehicles when replacing existing vehicles.

## Supplemental Information

Funding in this project allows for the following replacements: two sedans, five trucks, two ambulances, one fire engine, seven marked vehicles, one motorcycle, one dump truck, and four trailers. Of the 23 vehicles and pieces of equipment, 18 support the operations of the General Fund (\$2.6 million) and 5 support the operations of various Enterprise Funds (\$0.8 million). Since the inception of this project, vehicles and equipment have been added or removed based on the individual needs and available budget of each department (\$3.4 million).

## Significant Changes

**2023-2027 CIP:** One generator removed from list leaving 23 units to replace. Total budget remains the same.

**2022-2026 CIP:** Project established during FY 2022.

# VEHICLE REPLACEMENT AND MAINTENANCE FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Vehicle Replacement Fund</b>	0	0	0	0	0	0	3,409,000	0	3,409,000	0	3,409,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,409,000</b>	<b>0</b>	<b>3,409,000</b>	<b>0</b>	<b>3,409,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	0	0	0	0	0	3,409,000	0	3,409,000	0	3,409,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,409,000</b>	<b>0</b>	<b>3,409,000</b>	<b>0</b>	<b>3,409,000</b>

### Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Air Quality                  Goal: N-5                  Policy: N-5.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Fleet Review Committee</p>
--	--

## VEHICLE REPLACEMENT AND MAINTENANCE FUND



Stores Walk-In Delivery Van, 2022

**Fund:** Vehicle Replacement & Maintenance Fund

**Category:** Vehicle and Equipment Replacement

**Project Location:** 3201 E. Bayshore Road

**Managing Department:** Public Works

**Initial Project Start:** Summer 2027

**Initial Project Completion:** Summer 2027

**Revised Project Start:** N/A

**Revised Project Completion:** N/A

**Project Number:** VR-27000

# Scheduled Vehicle and Equipment Replacement - Fiscal Year 2027

## Description

This project provides funding for the existing City fleet vehicles and equipment scheduled for replacement in Fiscal Year 2027.

## Justification

The ongoing replacement of City fleet vehicles and equipment is prescribed by the City's policy for vehicle replacement, which includes guidelines based on age, mileage accumulation, and obsolescence. Timely replacement of vehicles lowers maintenance costs, helps to maintain or even increase the productivity of client departments, and allows the City to take advantage of new technology. As part of the policy, staff will first consider electric vehicles and then other alternative fuel vehicles when replacing existing vehicles.

## Supplemental Information

Funding in this project allows for the following replacements: four sedans, six trucks, six vans, one SUV, one pumper, three marked vehicles, one motorcycle, one generator, eleven trailers, one SWAT vehicle and four pieces of equipment. Of the 39 vehicles and pieces of equipment, 24 support the operations of the General Fund (\$2.4 million) and 15 support the operations of various Enterprise Funds (\$1.2 million). Since the inception of this project, vehicles and equipment have been added or removed based on the individual needs and available budget of each department (\$3.6 million).

## Significant Changes

**2023-2027 CIP:** Project established during FY 2023.



# VEHICLE REPLACEMENT AND MAINTENANCE FUND

## Funding Sources Schedule

Funding Source	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Vehicle Replacement Fund</b>	0	0	0	0	0	0	0	3,566,000	3,566,000	0	3,566,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,566,000</b>	<b>3,566,000</b>	<b>0</b>	<b>3,566,000</b>

## Expenditure Schedule

Project Phase	Prior Years	FY 2022 Budget	FY 2022 Estimate	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	5 Year CIP Total	Beyond 5 Year CIP	Total
<b>Other</b>	0	0	0	0	0	0	0	3,566,000	3,566,000	0	3,566,000
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,566,000</b>	<b>3,566,000</b>	<b>0</b>	<b>3,566,000</b>

### Operating Impact

Costs to operate and maintain the City's fleet are budgeted annually in the Vehicle Replacement Fund and allocated to other City departments based on historical maintenance and repair needs. There are no additional operating impacts anticipated from this project and maintenance will be absorbed within the available maintenance schedule and annual operating budget.

<p><b>Relationship to Comprehensive Plan</b>  <b>Primary Connection</b></p> <p>Element: Natural Environment                  Section: Air Quality                  Goal: N-5                  Policy: N-5.2</p> <p><b>Environmental Impact Analysis:</b>                  This project is expected to have a possible exemption from CEQA under Section 15301.</p>	<p><b>Potential Board/Commission Review:</b></p> <p>Planning and Transportation Commission                  Fleet Review Committee</p>
--	--



CITY OF  
**PALO  
ALTO**



# SUPPLEMENTAL INFORMATION





CITY OF  
**PALO  
ALTO**

# GLOSSARY

## Key Budget Terms

**Accrual Accounting :** A method of accounting that recognizes expenses when incurred and revenues when earned rather than when payment is made or received.

**Adopted Budget :** The budget that is approved and enacted by the City Council annually on before June 30th.

**American Rescue Plan Act (ARPA) :** A Federal economic stimulus plan signed into law by the President Biden on March 11, 2021. The stimulus package provided direct, flexible relief funds to cities, counties and states to combat the negative financial impact of the Pandemic.

**Appropriation :** The allocation of an expense budget for a particular project or program usually for a specific period of time.

**Balanced Budget :** A balanced budget exists when total revenues are equal to, or greater than, total expenses.

**Bond :** A debt investment in which an investor loans money to an entity (governmental or otherwise) that borrows the money for a defined period of time at a fixed interest rate to pay for a variety of projects.

**Budget Stabilization Reserve (BSR) :** The BSR was established as a prudent measure to maintain the City's fiscal stability in the event that unanticipated events reduce revenue or create obligations that significantly impact the current-year budget. Examples of such events include a downturn in the economy, a natural disaster or actions that may be taken by another governmental agency that reduce revenues and/or increase expenses for the City.

**Capital Budget :** A plan of proposed capital outlays and the means of financing them for the current fiscal period. In a two-year budget, the second year of the Capital Improvement Program is adopted-in-concept.

**Capital Improvement Program (CIP) :** The City's plan for current and future projects related to the acquisition, expansion, or rehabilitation of buildings, equipment, parks, streets, and other public infrastructure.

**Capital Projects Fund :** A fund created to account for all resources to be used for the construction or acquisition of designated fixed assets by a governmental unit except those financed by proprietary or fiduciary funds.

**City Manager's Report (CMR) :** Staff reports for City Council meetings as well as boards and commissions that are prepared by City staff and submitted through the City Manager's Office.

**Comprehensive Plan :** The Palo Alto Comprehensive Plan contains the City's official policies on land use and community design; transportation; natural environment; safety; community services and facilities; and business and economics. Its focus is on the physical form of the City and is applicable to both public and private properties. The Budget integrates the 2030 Comprehensive Plan into the budget process.

## GLOSSARY

**Cost Accounting :** The branch of accounting that provides for the assembling and recording of all the elements of cost incurred to accomplish a purpose, carry on an activity or operation, or complete a unit of work or a specific job.

**Enterprise Funds :** Funds used to account for services that are provided to the public on a user charge basis, similar to the operation of a commercial business. The City's enterprise funds include the gas, electric, water, fiber optics and wastewater collection and treatment funds.

**Fiduciary Fund :** A fund used to account for assets held by the City acting in a fiduciary capacity for other individuals or entities. These funds are operated to carry out the specific actions required by the trust agreements, ordinances and other governing regulations.

**Fiscal Agent :** A bank or other corporate fiduciary that performs the function of paying, on behalf of the governmental unit, or other debtor, interest on debt or principal of debt when due.

**Fiscal Year :** A 12-month period of time to which the annual budget applies and at the end of which a governmental unit determines its financial position and the results of operations. Palo Alto's fiscal year begins on July 1st and ends on June 30th.

**Fixed Assets :** Assets such as land, structures and improvements, furniture and/or equipment that are expected to last and/or be used for more than one year.

**Full-Time Equivalent (FTE) :** Used to quantify staffing hours for permanent and temporary employees. A 1.00 FTE employee works full time; a 0.50 FTE employee works half-time.

**Fund Balance :** An excess of the assets of a fund over its liabilities.

**General Fund :** The primary fund used to account for the City's general purpose revenues such as sales, property, utility users and transient occupancy taxes. General Fund revenues typically pay for citywide services such as public safety, community development, recreation, libraries and parks. The General Fund is distinguished from Special Funds in that the latter are used to account for revenues that have restricted uses (e.g. gas tax funds that must be used for street maintenance or repair).

**Governmental Funds :** A generic classification used to refer to all funds other than proprietary and fiduciary funds. Governmental funds include the general fund, capital fund, special revenue funds and debt service funds.

**Infrastructure Assets :** Roads, bridges, curbs and gutters, streets, sidewalks, drainage systems, and lighting systems installed for the common good.

**Infrastructure Management Plan (IMP) :** A portion of the General Fund capital improvement program which focuses on rehabilitating the City's infrastructure. In 1998-99, an outside consultant on the City's infrastructure prepared a report known as the Adamson report. Within this report the City's infrastructure was cataloged and ranked based on when the infrastructure needed to be upgraded or replaced and the cost for each item. At that time, the City Council decided to establish a plan using the Adamson report as a guide for both timeline and cost.

**Internal Service Funds :** These funds provide services to City departments and recover their costs through user charges. For example the Vehicle Replacement Fund is an Internal Service Fund managing the replacement and maintenance of the City fleet.

**Method of Accounting :** The City's General Fund budget is developed using a modified accrual basis of accounting, with revenues being recorded when measurable and available, and expenditures recorded when the liability is incurred. Enterprise Funds and Internal Service Funds are budgeted on a generally accepted accounting principles (GAAP) basis, which for Proprietary Funds is on a full accrual accounting basis.

**Operating Transfer :** Amounts transferred between funds, not considered a revenue or expense. For example, legally authorized transfers from a fund receiving revenue to the fund through which the resources are to be expended.

**Pay-As-You-Go-Basis :** A term used to describe the financial policy of a governmental unit that finances all of its capital outlays from current revenues rather than by borrowing.

**Proposed Budget :** The proposed budget is the preliminary version of the budget that is sent to the Finance Committee and City Council by the City Manager. The proposed budget is reviewed by the Finance

Committee and the City Council, updated with any changes, and then adopted by the City Council prior to the beginning of the next fiscal year.

**Proprietary Funds :** A generic classification used to refer to all funds other than governmental funds or fiduciary funds. Proprietary funds include internal service funds and enterprise funds.

**Reimbursements :** Inter-fund transactions that constitute reimbursements to a fund for expenditures or expenses initially made from it but that properly apply to another fund. For example, the Enterprise Funds reimburse the Technology Fund for CIP projects from which the Enterprise Funds benefit.

**Reserve :** Represents the portion of fund balance set aside for financing future financing needs and addressing one-time emergency or unanticipated events.

**Revenues :** Revenues include compensation received by the project for specific services to the public (external revenues), as well as revenues received from other funds (internal revenues).

**Special Revenue Funds :** These funds account for the proceeds derived from specific revenue sources that are legally restricted to expenditures for specified purposes. The Street Improvement Fund (SIF) is a Special Revenue Fund that derives its funding from state gas tax revenues. Capital appropriations from the SIF must be spent on the construction and maintenance of the road network system of the City.



CITY OF  
**PALO  
ALTO**

IN COMPLIANCE WITH  
AMERICANS WITH DISABILITIES ACT (ADA) OF 1990,  
THIS DOCUMENT MAY BE PROVIDED  
IN OTHER ACCESSIBLE FORMATS.

For information contact:

ADA Coordinator  
City of Palo Alto  
285 Hamilton Ave  
(650) 329-2550



# PROJECT NAME INDEX

## Numerics

115 kV Electric Intertie . . . . . 336

## A

Advanced Water Purification Facility . . . . .516  
 Airfield Electrical Improvements . . . . .300  
 Airport Access Road Reconstruction . . . . . 310  
 Airport Apron Reconstruction . . . . . 302  
 Airport Layout Plan . . . . .312  
 Airport Parking Lot Electric Vehicle Charger  
 Installation . . . . .314  
 Airport Temporary Office Buildings . . . . .316  
 Airport Zero Emission Vehicle Fleet  
 Replacement Program . . . . .318  
 Americans With Disabilities Act Compliance .  
 80  
 Animal Shelter Renovation . . . . . 82  
 Art In Public Spaces . . . . . 144  
 Athletic Courts Resurfacing . . . . .146  
 Automated Weather Observation System  
 (AWOS) . . . . . 320

## B

Baylands Comprehensive Conservation Plan .  
 148  
 Baylands Levee Repair for Public Safety  
 Access . . . . . 150  
 Benches, Signage, Walkways, Perimeter  
 Landscaping, and Site Amenities . . . . .152  
 Bicycle and Pedestrian Transportation Plan  
 Implementation . . . . . 246  
 Bol Park Improvements . . . . .154  
 Bol Park Pathway Repaving and Repair . .156  
 Boulware Park Improvements . . . . .158  
 Building Systems Improvements . . . . . 84  
 Byxbee Park Completion . . . . .162

## C

California Avenue Streetscape Update . . 248  
 Cameron Park Improvements . . . . .164  
 Capacitor Bank Installation . . . . . 338  
 Capital Improvement Fund Administration 76  
 Churchill Avenue Enhanced Bikeway . . . . 250  
 Churchill Avenue/Alma Street Railroad

Crossing Safety Improvements . . . . . 252  
 City Bridge Improvements . . . . .220  
 City Council Chambers Upgrade . . . . .590  
 City Facility Parking Lot Maintenance . . . . 88  
 City Hall Space Planning . . . . .90  
 Civic Center Electrical Upgrade & EV Charger  
 Installation . . . . . 92  
 Civic Center Fire Life Safety Upgrades . . .94  
 Civic Center Waterproofing Study and  
 Repairs . . . . .96  
 Coleridge/Cowper/Tennyson 4/12kV  
 Conversion . . . . .340  
 Colorado Distribution Feeder Outlet  
 Replacement . . . . .342  
 Colorado Power Station Equipment Upgrades  
 . . . . .344  
 Colorado Substation Site Improvements .346  
 Communications System Improvements .348  
 Computer Aided Dispatch (CAD) Upgrade . .  
 606  
 Corporation Way System Upgrades and Pump  
 Station . . . . .452  
 Cubberley Community Center  
 Redevelopment . . . . .278  
 Cubberley Field Restroom . . . . .288  
 Cubberley Repairs . . . . .280  
 Cubberley Roof Replacements . . . . .284  
 Curb and Gutter Repairs . . . . .222

## D

Dog Park Installation and Renovation . . . 166  
 Downtown Automated Parking Guidance  
 Systems, Access Controls & Revenue  
 Collection Equip. . . . .254

## E

East Meadow Circle Connection to Adobe  
 Creek Pump Station . . . . .454  
 East Meadow Circles 4/12kV Conversion .350  
 East Meadow Drive System Upgrades . . .456  
 Electric Charger Infrastructure Installation 98  
 Electric Customer Connections . . . . .332  
 Electric System Improvements . . . . .352  
 Electric Utility Geographic Information

# PROJECT NAME INDEX

System ..... 354  
 Emergency Repair and Replacement ... 618  
 Enterprise Resource Planning Upgrade .. 594  
 Extrication Tool Replacement .....138

## F

Facility Interior Finishes Replacement ... 100  
 Fiber Optics Customer Connections .... 410  
 Fiber Optics Network - System Improvements  
 .....404  
 Fiber Optics Network - System Rebuild .406  
 Fire Station 4 Replacement ..... 104  
 Fire Training Facility Replacement ..... 106  
 Foothills Nature Preserve Boronda Lake Dock  
 Replacement .....168  
 Foothills Nature Preserve Dam Seepage  
 Investigation and Repairs .....174  
 Foothills Nature Preserve Improvement  
 Project .....170  
 Foothills Nature Preserve Improvements .170  
 Foothills Park Dam Seepage Investigation and  
 Repairs .....174  
 Foothills Rebuild (Fire Mitigation) ..... 356

## G

Gas Distribution System Improvements .436  
 Gas Equipment and Tools ..... 438  
 Gas Main Replacement - Project 23 ..... 426  
 Gas Main Replacement - Project 24 ..... 428  
 Gas Main Replacement - Project 25 ..... 430  
 Gas Main Replacement - Project 26 ..... 432  
 Gas Meters and Regulators .....440  
 Gas System, Customer Connections .... 422  
 Golf Course Net and Artificial Turf  
 Replacement .....176  
 Golf Reconfiguration & Baylands Athletic  
 Center Improvements .....178  
 Green Stormwater Infrastructure ..... 466

## H

Headworks Facility Replacement .....518  
 Heritage Park Site Amenities Replacement ..  
 182  
 Hoover Park Improvements .....184  
 Horizontal Levee Pilot ..... 520

## I

Infrastructure Management System ..... 598  
 Inter-substation Line Protection Relay .. 360

## J

JMZ Renovation ..... 108  
 Johnson Park Renovation ..... 186  
 Joint Intercepting Sewer Rehabilitation  
 (Phase 1) .....524

## L

Library Automated Material Handling ...110  
 Louis Road System Upgrades .....458

## M

Magical Bridge Playground Rubber and  
 Synthetic Turf Resurfacing ..... 188  
 Mitchell Park Improvements ..... 190  
 Municipal Service Center A, B, & C Roof  
 Replacement .....112  
 Municipal Service Center Lighting,  
 Mechanical, and Electrical Improvements  
 116

## N

New California Avenue Area Parking Garage  
 118  
 New Downtown Parking Garage ..... 120  
 New Laboratory And Environmental Services  
 Building .....508  
 New Public Safety Building ..... 122  
 Newell Road/San Francisquito Creek Bridge  
 Replacement .....224

## O

Off-Road Pathway Resurfacing And Repair .  
 192  
 Open Space Lakes And Pond Maintenance ..  
 194  
 Open Space Trails and Amenities ..... 196  
 Outfall Line Construction .....526

## P

Park and Open Space Emergency Repairs ..  
 198  
 Park Restroom Installation ..... 200  
 Parking District Implementation .....256  
 Parking Management and System  
 Implementation .....258  
 Pearson Arastradero Improvement Project ..  
 202  
 Peers Park Improvements .....204  
 Performing Arts Venues Seat Replacement .  
 126

Plant Master Plan .....512  
 Plant Repair, Retrofit, and Equipment  
     Replacement ..... 528  
 Police Video Recording Systems Replacement  
     ..... 140  
 Primary Sedimentation Tank Rehabilitation ..  
     530

**Q**

Quarry Road Improvements and Transit  
     Center Access ..... 260

**R**

Radio Infrastructure Replacement ..... 602  
 Railroad Grade Separation and Safety  
     Improvements ..... 264  
 Ramos Park Improvements ..... 206  
 Rebuild Underground District 16 ..... 362  
 Rebuild Underground District 20 ..... 364  
 Rebuild Underground District 23 ..... 366  
 Rebuild Underground District 26 ..... 368  
 Rebuild Underground District 30 ..... 370  
 Rinconada Park Improvements ..... 208  
 Robles Park Improvements ..... 212  
 Roofing Replacement ..... 128  
 Roth Building Rehabilitation Phase 1 .... 130  
 Runway and Taxiway Reconstruction and  
     Drainage Improvements ..... 306

**S**

Safe Routes To School ..... 266  
 San Francisquito Creek Joint Powers  
     Authority Ongoing Creek Projects ... 228  
 SCADA System Upgrades ..... 372  
 Scheduled Vehicle and Equipment  
     Replacement - Fiscal Year 2020 ..... 620  
 Scheduled Vehicle and Equipment  
     Replacement - Fiscal Year 2021 ..... 622  
 Scheduled Vehicle and Equipment  
     Replacement - Fiscal Year 2022 ..... 624  
 Scheduled Vehicle and Equipment  
     Replacement - Fiscal Year 2023 ..... 626  
 Scheduled Vehicle and Equipment  
     Replacement - Fiscal Year 2024 ..... 628  
 Scheduled Vehicle and Equipment  
     Replacement - Fiscal Year 2025 ..... 630  
 Scheduled Vehicle and Equipment  
     Replacement - Fiscal Year 2026 ..... 632  
 Scheduled Vehicle and Equipment  
     Replacement - Fiscal Year 2027 ..... 634  
 Seale Park Improvements ..... 214

Secondary Treatment Upgrades .....534  
 Sewer Lateral/Manhole Rehabilitation and  
     Replacement ..... 486  
 Sewer System, Customer Connections ... 482  
 Sidewalk Repairs ..... 230  
 Sign Reflectivity Upgrade ..... 232  
 Smart Grid Technology Installation ..... 374  
 Storm Drainage System Replacement And  
     Rehabilitation ..... 472  
 Street Lights Condition Assessment ..... 234  
 Street Lights Improvements ..... 236  
 Street Maintenance ..... 238  
 Substation Breaker Replacement ..... 378  
 Substation Facility Improvements ..... 380  
 Substation Physical Security ..... 382  
 Substation Protection Improvements .... 384

**T**

Thermoplastic Lane Marking and Striping ...  
     242  
 Traffic Signal and Intelligent Transportation  
     Systems ..... 268  
 Transportation and Parking Improvements ..  
     270  
 Trash Capture Device Installation ..... 468

**U**

Underground District 42 - Embarcadero  
     Road, Emerson, Middlefield ..... 392  
 Underground District 43 - Alma/  
     Embarcadero ..... 394  
 Underground System Rebuild ..... 386  
 University Avenue Parking Improvements 132  
 Utilities Customer Bill System Improvements  
     608

**W**

Wastewater Collection System Rehabilitation/  
     Augmentation Project 30 ..... 488  
 Wastewater Collection System Rehabilitation/  
     Augmentation Project 31 ..... 490  
 Wastewater Collection System Rehabilitation/  
     Augmentation Project 32 ..... 492  
 Wastewater Collection System Rehabilitation/  
     Augmentation Project 33 ..... 494  
 Wastewater General Equipment and Tools ..  
     496  
 Wastewater System Improvements ..... 498  
 Water Distribution System Improvements ...  
     550  
 Water General Equipment/Tools ..... 552

# PROJECT NAME INDEX

Water Main Replacement - Project 28 . . . 572  
Water Main Replacement - Project 29 . . . 574  
Water Main Replacement - Project 30 . . . 576  
Water Main Replacement - Project 31 . . . 578  
Water Meters . . . . . 554  
Water Recycling Facilities . . . . . 556  
Water Regulation Station Improvements 560  
Water Service and Hydrant Replacement 562  
Water System Customer Connections . . . 546  
Water System Supply Improvements . . . 564  
Water Tank Seismic Upgrade and  
    Rehabilitation . . . . . 566  
Water, Gas, Wastewater Office Remodel . .134  
Water, Gas, Wastewater Utility GIS Data . 568  
Werry Park Playground Improvements . . .216  
West Bayshore Road Pump Station . . . .460  
West Bayshore Road Trunk Line  
    Improvements . . . . . 462  
Wood Pole Replacement . . . . . 388

# PROJECT NUMBER INDEX

## A

AC-18000	126
AC-18001	108
AC-86017	144
AP-16000	302
AP-19000	320
AP-19001	300
AP-21000	312
AP-22000	306
AP-22001	316
AP-23000	318
AP-24000	310
AP-24001	314
AS-10000	76

## C

CB-16002	284
CB-17001	280
CB-17002	288
CB-26000	278

## E

EL-02010	372
EL-02011	354
EL-06001	336
EL-08001	392
EL-11009	394
EL-11014	374
EL-13003	362
EL-14000	340
EL-14002	364
EL-16000	368
EL-16001	386
EL-16002	338
EL-16003	382
EL-17000	366
EL-17001	350
EL-17002	378
EL-17005	360
EL-19001	344
EL-19002	346
EL-19003	370
EL-19004	388
EL-21001	356

EL-22002	342
EL-89028	332
EL-89031	348
EL-89038	384
EL-89044	380
EL-98003	352

## F

FD-22000	138
FD-24000	106
FO-10000	410
FO-10001	404
FO-16000	406

## G

GS-11002	436
GS-13001	426
GS-13002	438
GS-14003	428
GS-15000	430
GS-16000	432
GS-80017	422
GS-80019	440

## L

LB-21000	110
----------	-----

## O

OS-00001	196
OS-00002	194
OS-09001	192
OS-09002	150
OS-18000	168

## P

PD-20000	140
PE-08001	208
PE-09003	88
PE-12011	224
PE-13014	234
PE-15001	122
PE-15007	120
PE-15020	96

# PROJECT NUMBER INDEX

PE-16000	154	PL-16000	260
PE-17005	158	PL-16002	258
PE-17010	92	PL-17001	264
PE-18000	118	PL-20000	252
PE-18004	104	PL-23000	248
PE-18006	162	PO-05054	236
PE-18010	190	PO-11000	232
PE-18012	184	PO-11001	242
PE-18015	212	PO-12001	222
PE-18016	94	PO-89003	230
PE-19000	90		
PE-19001	134	<b>S</b>	
PE-19002	82	SD-06101	472
PE-20000	174	SD-20000	460
PE-20001	220	SD-21000	452
PE-21000	170	SD-22000	456
PE-21001	202	SD-22001	466
PE-21002	186	SD-22002	468
PE-21003	188	SD-23000	462
PE-22000	228	SD-24000	458
PE-25000	156	SD-26000	454
PE-86070	238		
PF-00006	128	<b>T</b>	
PF-01003	84	TE-05000	602
PF-02022	100	TE-10001	608
PF-14003	132	TE-13004	598
PF-16006	116	TE-19000	594
PF-17000	112	TE-19001	590
PF-23000	98	TE-23000	606
PF-23001	130		
PF-93009	80	<b>V</b>	
PG-06001	146	VR-15001	618
PG-06003	152	VR-20000	620
PG-09002	198	VR-21000	622
PG-13003	178	VR-22000	624
PG-14000	206	VR-23000	626
PG-14001	204	VR-24000	628
PG-14002	164	VR-25000	630
PG-14003	214	VR-26000	632
PG-17000	148	VR-27000	634
PG-18000	176		
PG-18001	166	<b>W</b>	
PG-19000	200	WC-13002	496
PG-21000	182	WC-15002	498
PG-22000	216	WC-17001	488
PL-00026	266	WC-19001	490
PL-04010	246	WC-20000	492
PL-05030	268	WC-21000	494
PL-12000	270	WC-80020	482
PL-14000	250	WC-99013	486
PL-15002	254	WQ-10001	512
PL-15003	256		

WQ-14002 ..... 508  
WQ-14003 ..... 530  
WQ-16002 ..... 518  
WQ-19000 ..... 526  
WQ-19001 ..... 534  
WQ-19002 ..... 528  
WQ-19003 ..... 516  
WQ-22001 ..... 520  
WQ-24000 ..... 524  
WS-02014 ..... 568  
WS-07000 ..... 560  
WS-07001 ..... 556  
WS-09000 ..... 566  
WS-11003 ..... 550  
WS-11004 ..... 564  
WS-13002 ..... 552  
WS-14001 ..... 572  
WS-15002 ..... 574  
WS-16001 ..... 576  
WS-19001 ..... 578  
WS-80013 ..... 546  
WS-80014 ..... 562  
WS-80015 ..... 554



CITY OF  
**PALO  
ALTO**





CITY OF  
**PALO  
ALTO**

## PALO ALTO

Spanish explorers named the area for the tall, twin-trunked redwood tree they camped beneath in 1769. Palo Alto incorporated in 1894 and the State of California granted its first charter in 1909. The City has long been known for its innovative people and its exploration of ideas that have changed the world.

In Palo Alto, our history has always been about the future.

[CITYOFPALOALTO.ORG](http://CITYOFPALOALTO.ORG)

CITY OF PALO ALTO  
250 HAMILTON AVENUE,  
PALO ALTO, CA 94301  
650.329.2100

