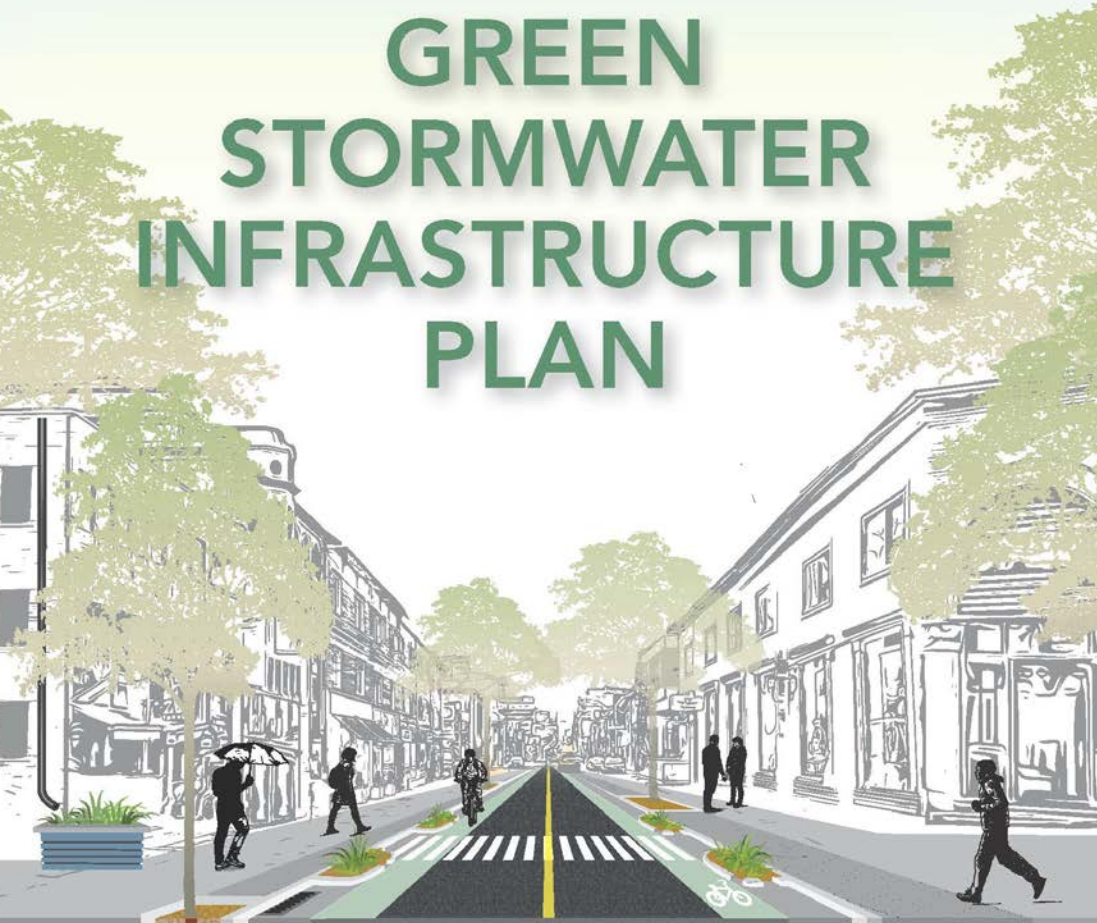
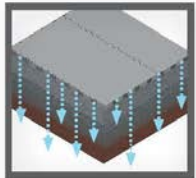


CITY OF PALO ALTO

# GREEN STORMWATER INFRASTRUCTURE PLAN



## GSI Plan (85% Version)



Permeable Pavement



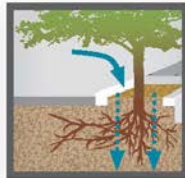
Stormwater Planter



CITY OF  
PALO  
ALTO



Bioretention Area



Tree Well Filter

CITY OF PALO ALTO • PUBLIC WORKS-WATERSHED PROTECTION

2501 EMBARCADERO WAY • PALO ALTO, CA 94303 • CITYOFPALOALTO.ORG/GSI • 650.329.2122

# Presentation Overview

- 85% Plan Overview
- Obtain Feedback
- Next Steps



**1.0 INTRODUCTION** .....

1.1 PURPOSE OF GREEN STORMWATER INFRASTRUCTURE PLAN .....

1.2 GREEN (STORMWATER) INFRASTRUCTURE .....

1.2.1 INTRODUCTION .....

1.2.2 TYPES OF FACILITIES .....

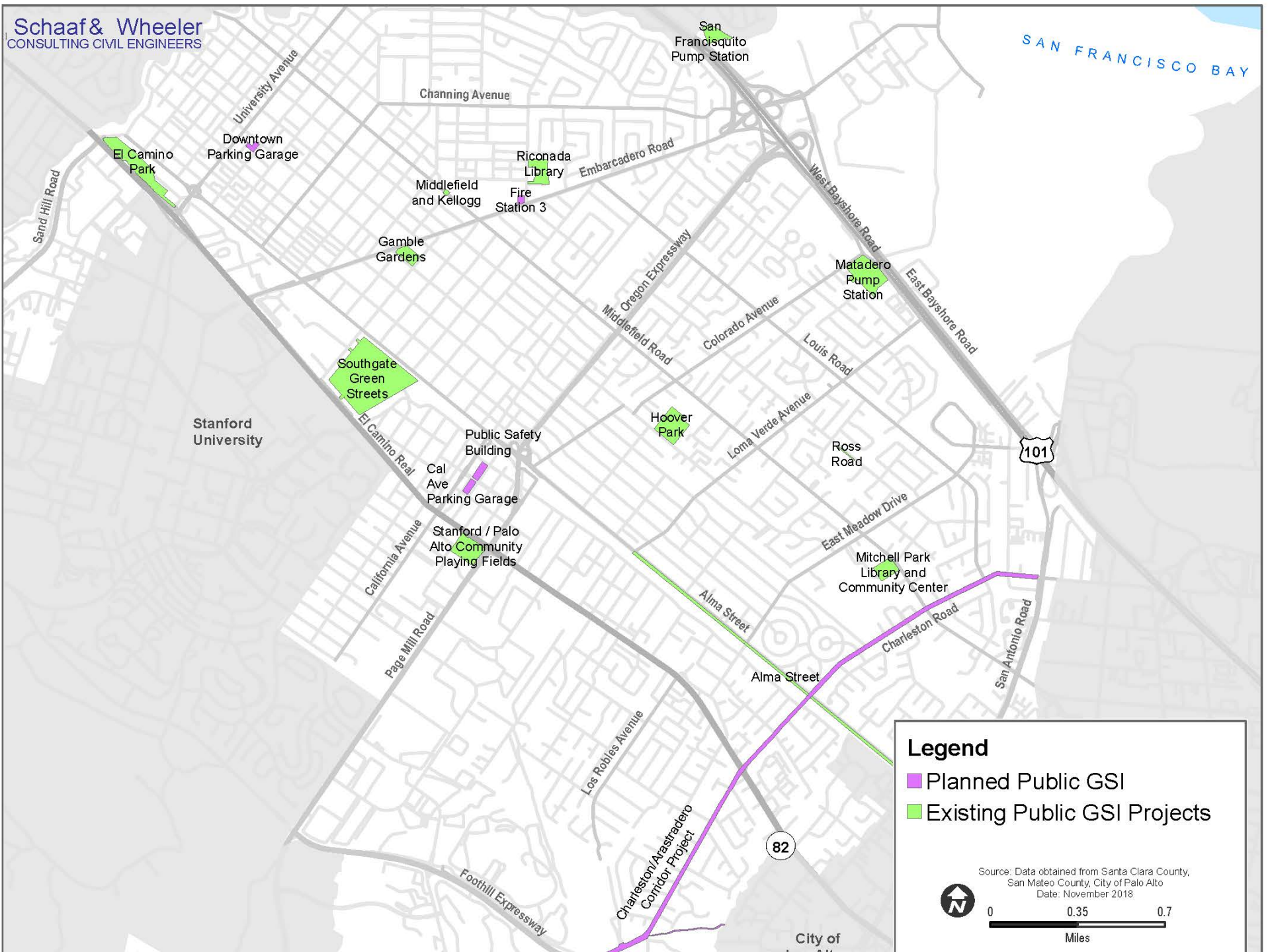
1.2.3 EXAMPLES OF EXISTING GSI FACILITIES WITHIN THE CITY OF PALO ALTO..

1.3 REGULATORY CONTEXT.....

1.3.1 FEDERAL AND STATE REGULATIONS AND INITIATIVES.....

1.3.2 MUNICIPAL REGIONAL STORMWATER PERMIT .....





**Legend**

- Planned Public GSI
- Existing Public GSI Projects

Source: Data obtained from Santa Clara County, San Mateo County, City of Palo Alto  
Date: November 2018

0 0.35 0.7  
Miles

**2.0 CITY OF PALO ALTO DESCRIPTION AND BACKGROUND ...**

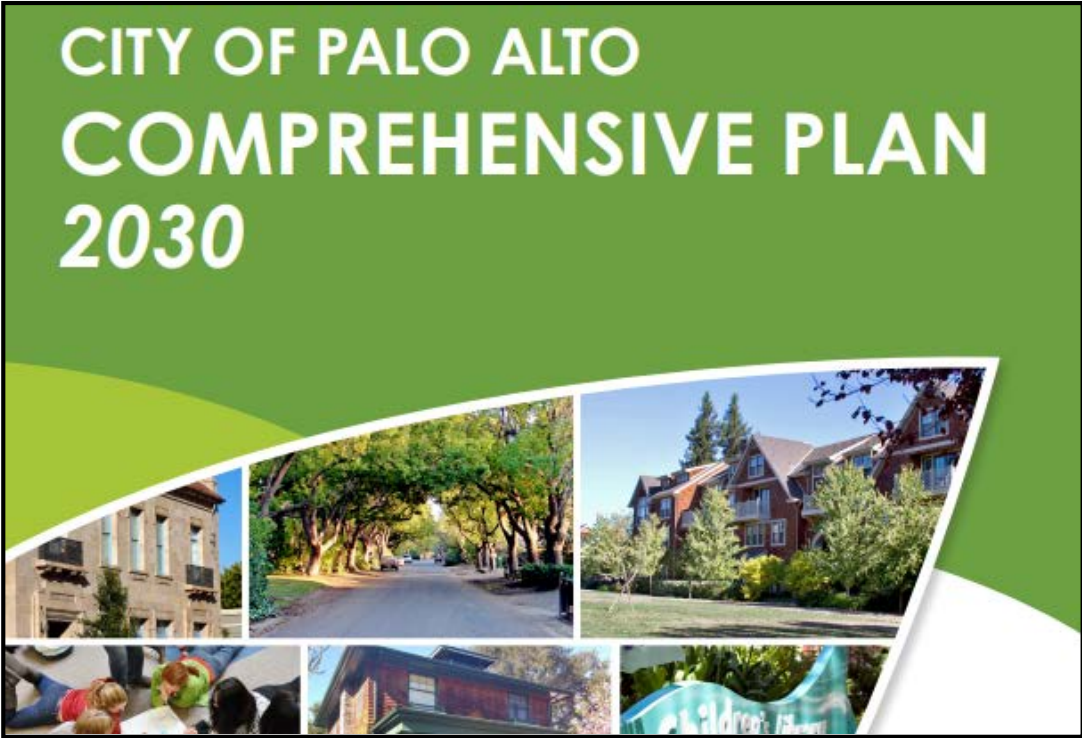
2.1 BACKGROUND AND LAND USE .....

2.2 SURFACE WATER BODIES AND NATURAL RESOURCES .....

2.3 GROUNDWATER RESOURCES .....

2.4 TRANSPORTATION .....

2.5 POPULATION AND GROWTH FORECASTS .....



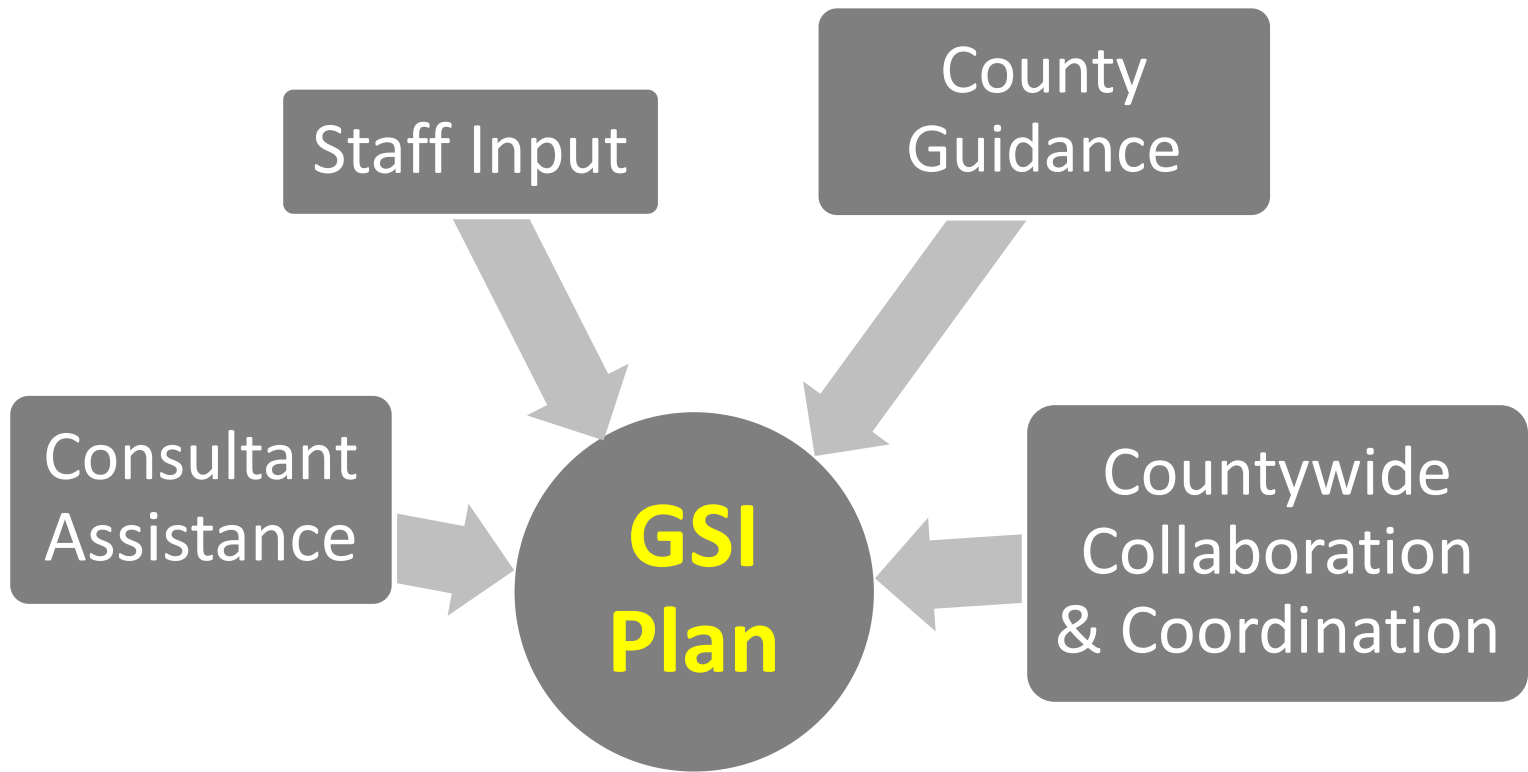
# 3.0 PROJECT MANAGEMENT AND COORDINATION .....

3.1 APPROACH .....

3.2 PROJECT OVERSIGHT.....

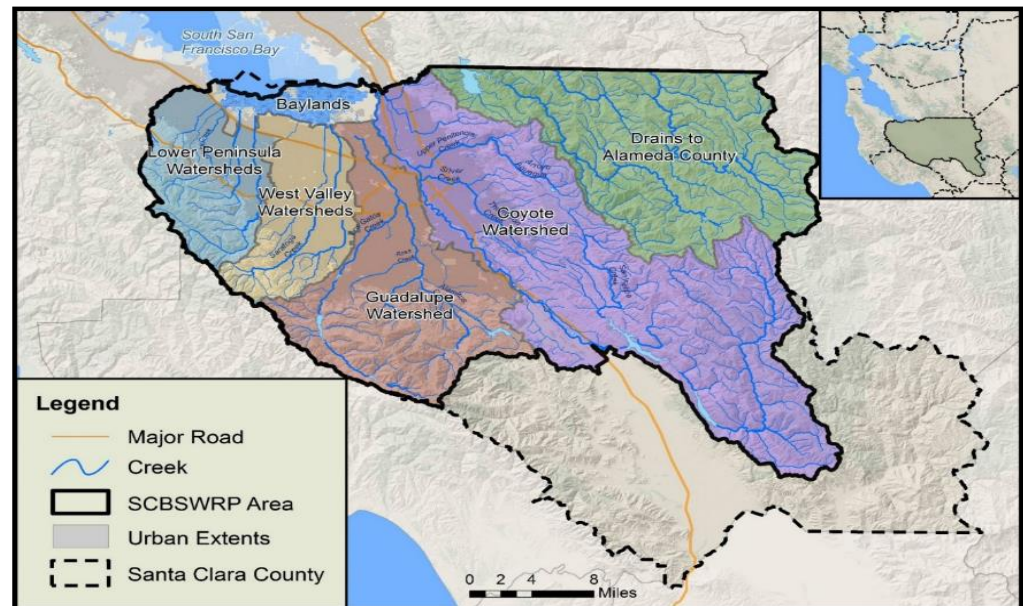
3.3 PUBLIC PARTICIPATION AND TIMELINE.....

3.4 SCVURPPP GUIDANCE AND INTER-AGENCY COORDINATION ...

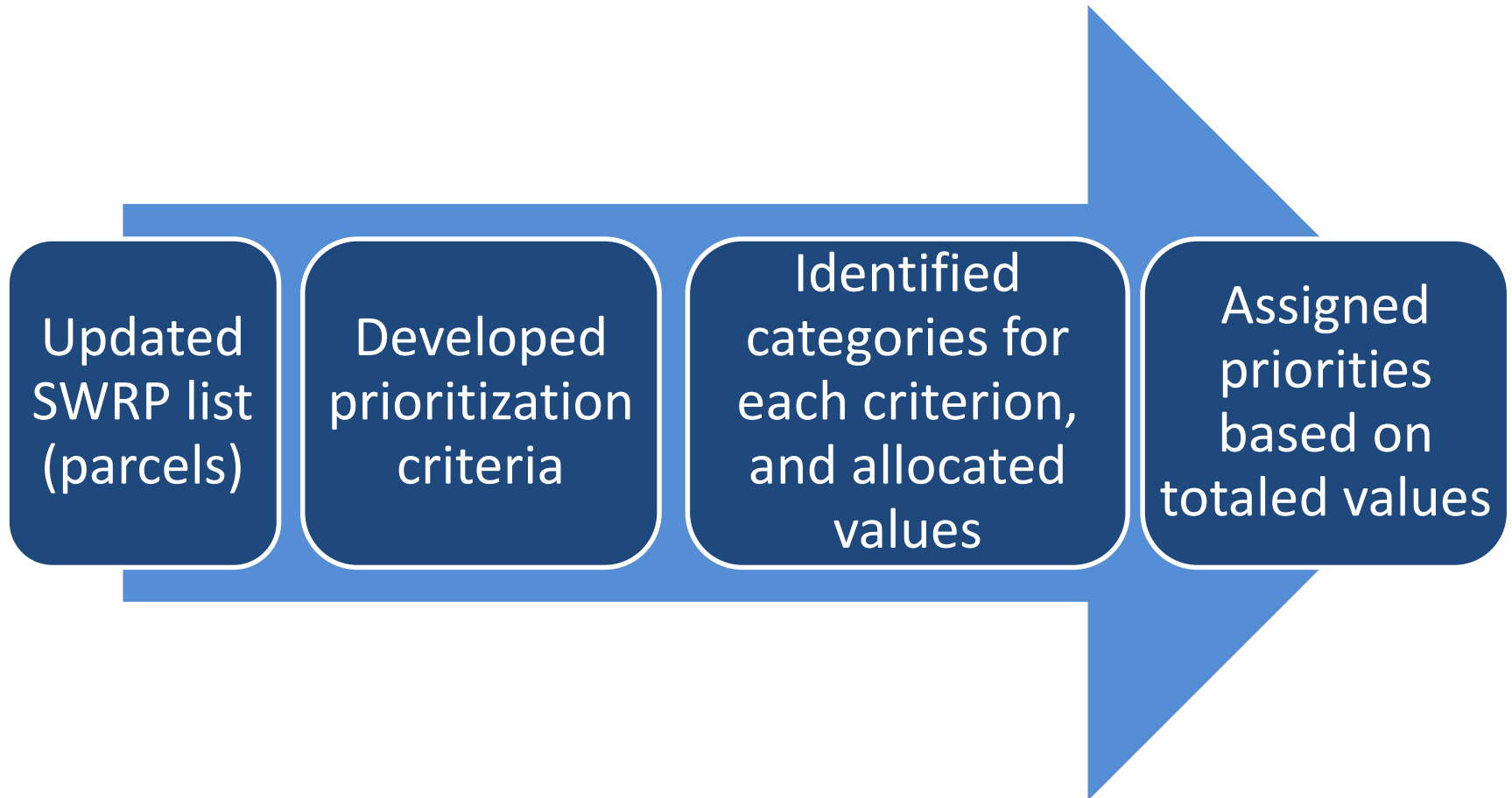


# 4.2 – Step One: SWRP Prioritization

- SB 985: required for eligibility to receive grant funds (post- Jan. 2014)
- Countywide list of prioritized parcels and streets (modeling results)



## 4.3 – Step Two: City Prioritization





## 4.3 –Criteria Example

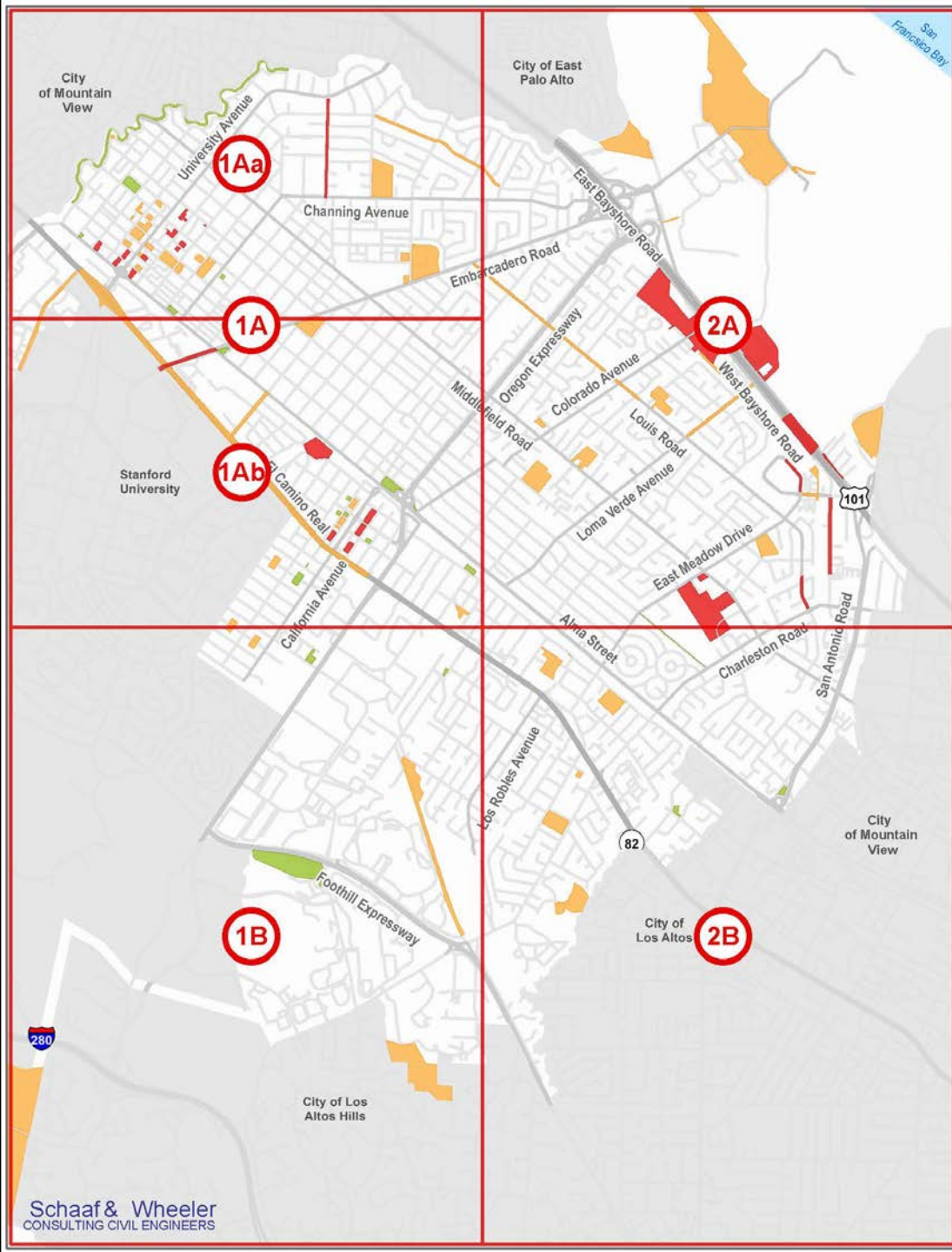
Prioritization Criteria	Criteria Category	Value
Project Status	Planned in FY18 Adopted Capital Budget	3
	Not planned in FY18 Adopted Capital Budget	1
Proximity to Existing Bikeways or Safe Routes to School	Not adjacent to either a bikeway or SR2S	3
	Adjacent to either a bikeway or SR2S	1
Parcel Area	≥ 0.25 acres	3
	< 0.25 acres	1

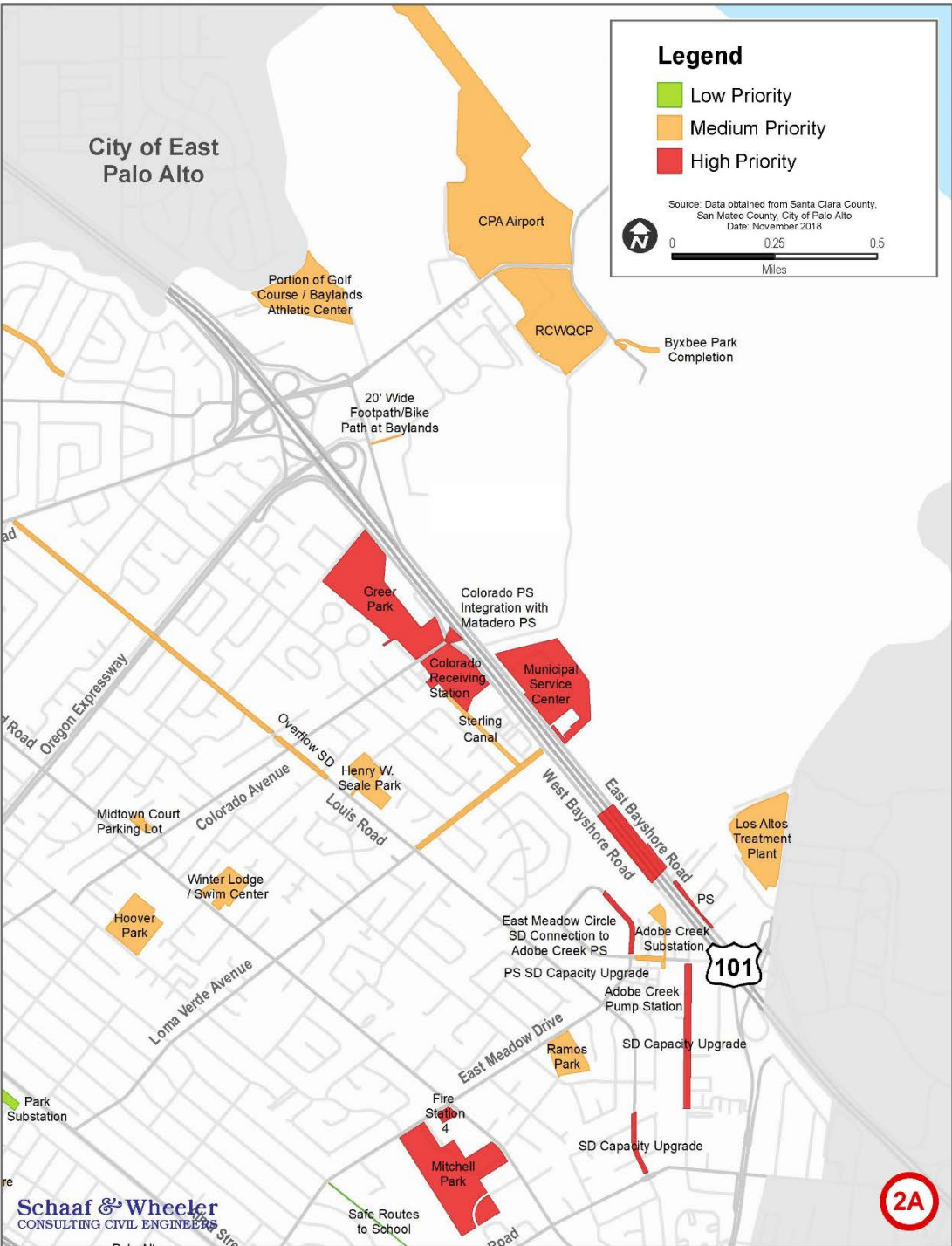
# 4.3 – Identifying Project Locations



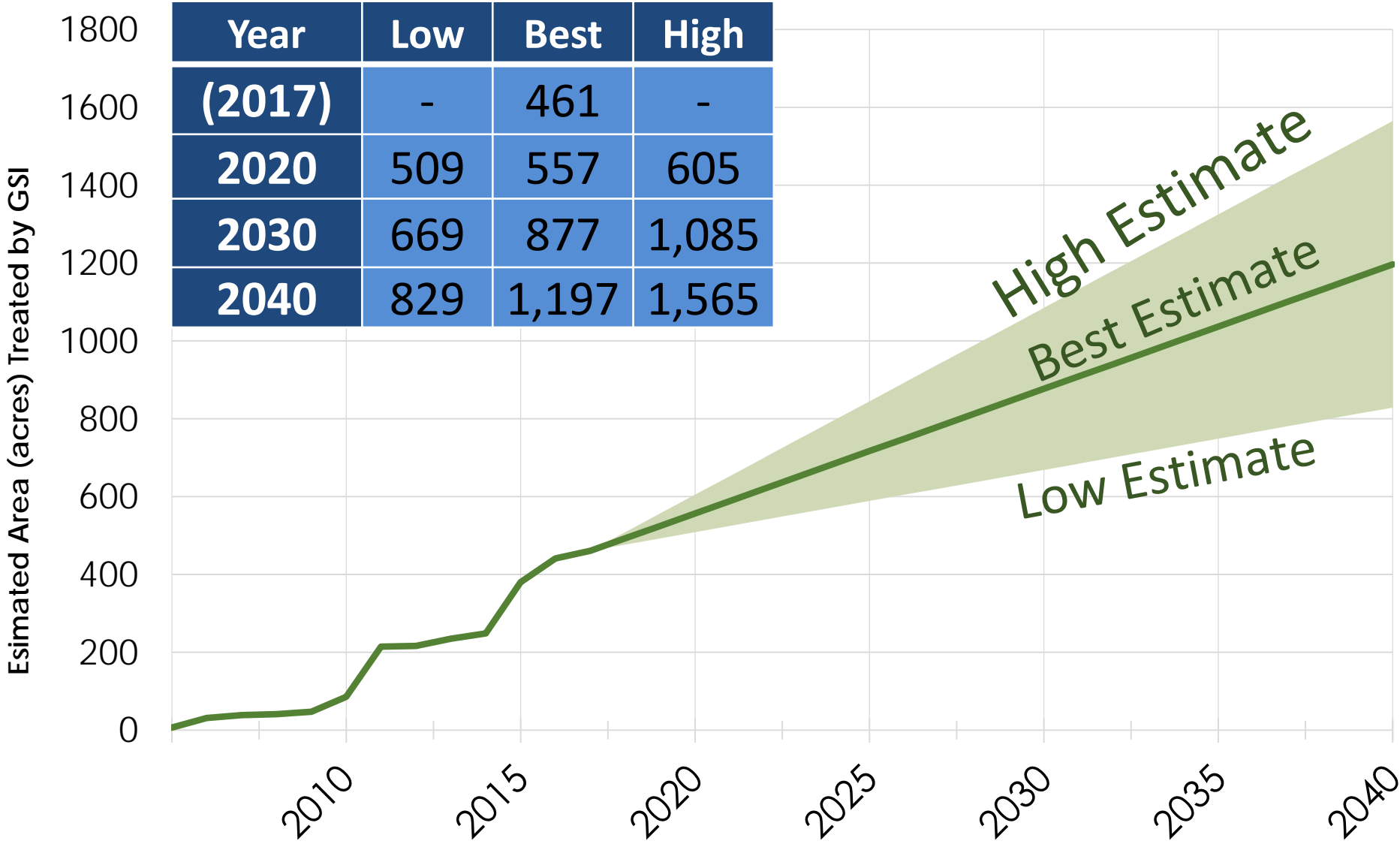
## 4.3 – City Prioritization

Priority	Percentile	# of Projects
High	85 <sup>th</sup>	29
Medium	between 25 <sup>th</sup> and 85 <sup>th</sup>	59
Low	25 <sup>th</sup>	25





# 5.0 – Acres Treated by GSI (DRAFT Targets)



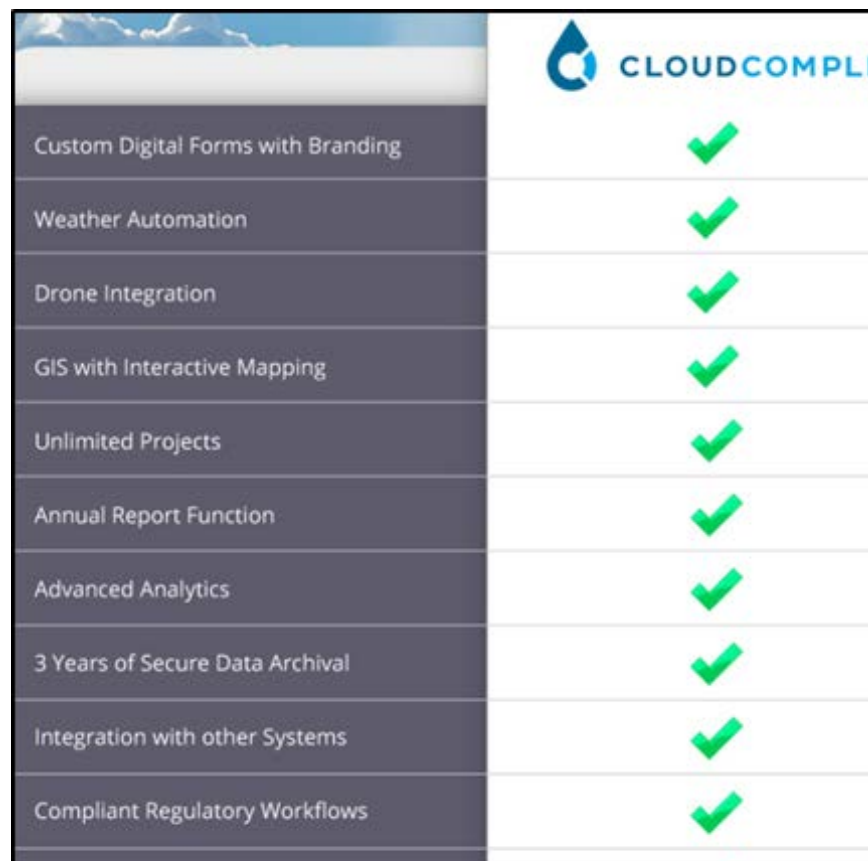
# 6.0 PROJECT TRACKING SYSTEM .....

6.1 CITY PROJECT TRACKING SYSTEM .....

6.2 COUNTY-WIDE PROJECT TRACKING SYSTEM ...

6.2.1 DATA COLLECTION PROCESS.....

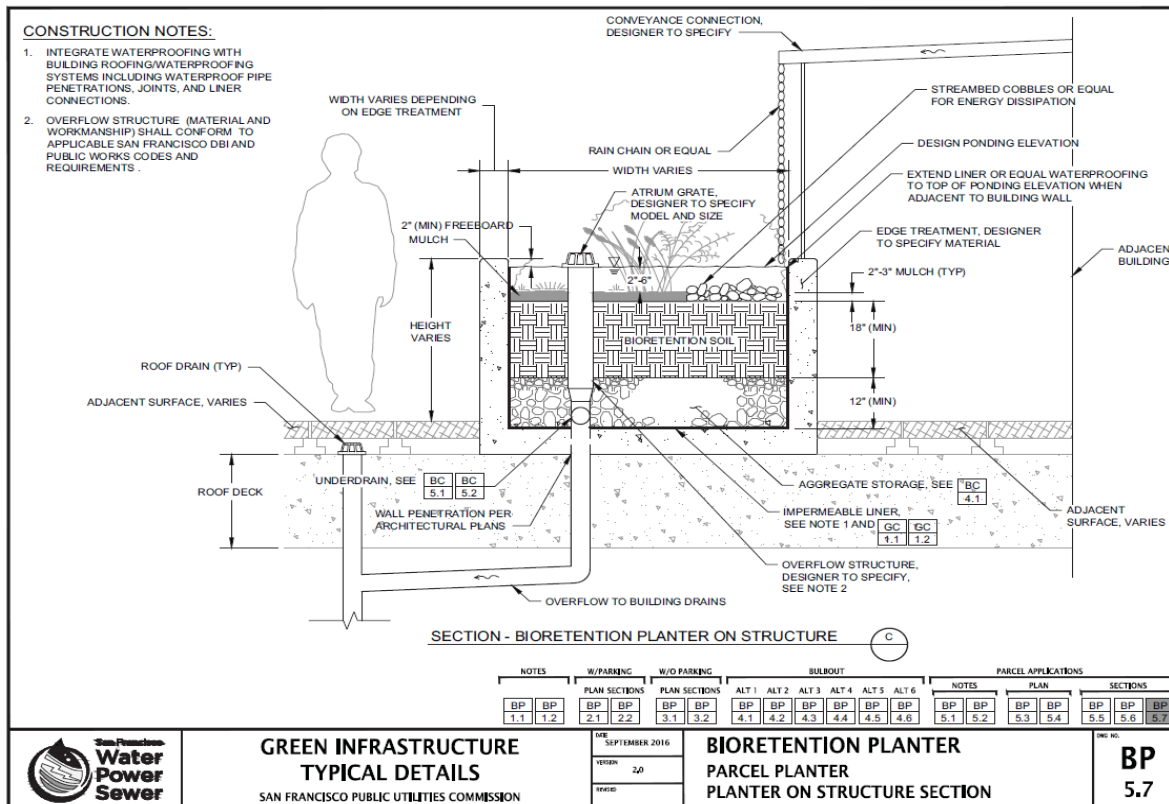
6.2.2 DATA OUTPUT .....



CLOUDCOMPLI	
Custom Digital Forms with Branding	✓
Weather Automation	✓
Drone Integration	✓
GIS with Interactive Mapping	✓
Unlimited Projects	✓
Annual Report Function	✓
Advanced Analytics	✓
3 Years of Secure Data Archival	✓
Integration with other Systems	✓
Compliant Regulatory Workflows	✓

# 7.0 – GSI Guidelines & Specs

- County-wide Handbook for reference
- City-specific (integration with PW & Utilities)
- Workshops w/ staff





# 8.0 – Integration w/ City Plans

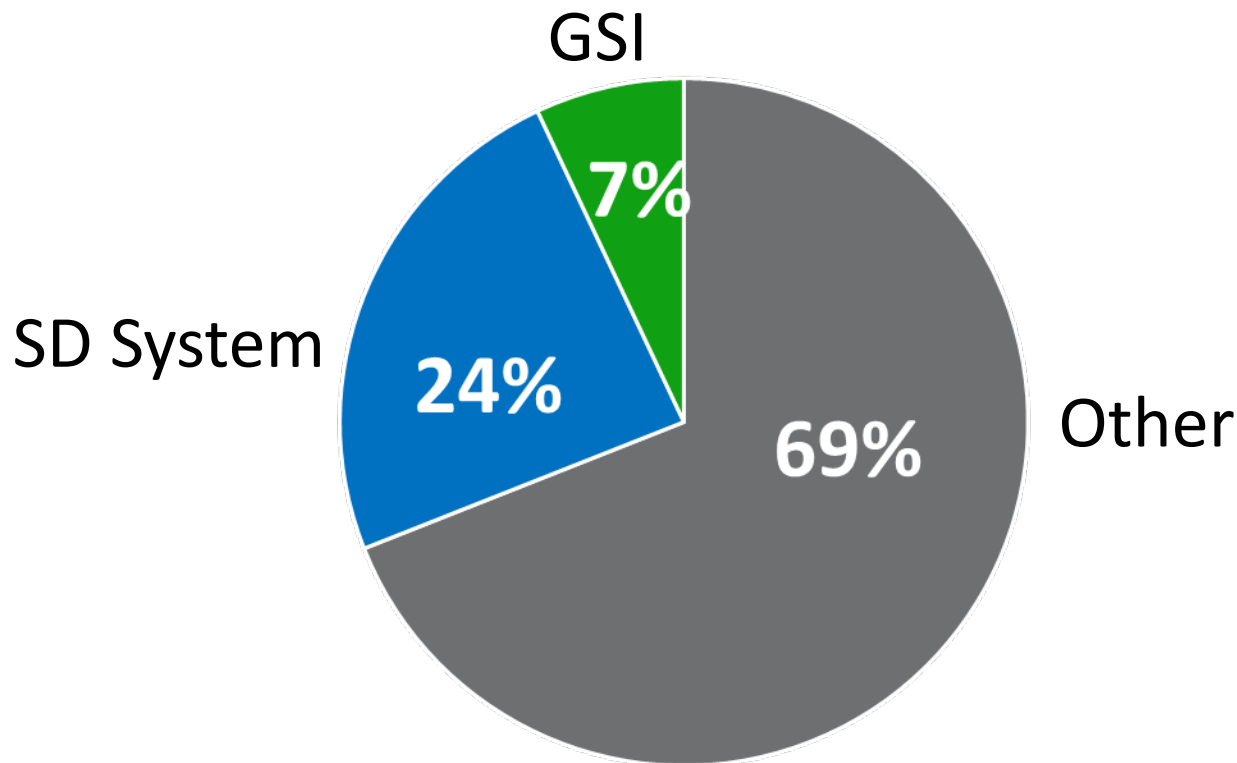
- MRP should align with City’s documents/policies
- *“planning documents...updated or modified to appropriately incorporate green infrastructure requirements, such as: General Plans, Transportation Plans, Storm Drain Master Plans...other plans that may affect the future...of impervious surfaces, including, but not limited to, streets, alleys, parking lots, sidewalks and drainage infrastructure.”*
- *By January 2021 or “workplan identifying how...green infrastructure and low impact development measures are appropriately included in future plans”*

Title	Projected Update
<b>Existing</b>	
<b>Bicycle and Pedestrian Transportation Plan</b>	Unknown
<b>Comprehensive Plan</b>	Unknown
<b>Storm Drain Master Plan</b>	Unknown
<b>New</b>	
<b>Cubberley Master Plan</b>	N/A
<b>North Ventura Comprehensive Area Plan</b>	N/A
<b>Sea Level Rise Policy</b>	March 2019
<b>Tree and Landscape Technical Manual</b>	Finalized Fall 2019

- Interim policies to be drafted for major plans

# 9.0 – Evaluation of Funding Options

- Funding needs and opportunity analysis
  - Phase 1: initial assessment (~ May 2019)
  - Phase 2: long-term plan (FY 20-21)



# 10.0 – Outreach and Education

## Inter-Departmental

Stormwater (Quality) Program Manager + City Staff

GSI Workgroup

Analyze Capital Improvement Projects (CIPs)

## Coordination Efforts

Storm Drain Blue Ribbon Committee

Stormwater Oversight Committee

SCVURPPP Outreach and Education Program

Community Members

Grassroots Ecology (small-scale GSI projects)

SCVURPPP Committees and Workgroups

Provide Feedback on SCVURPPP Draft Products

## Training

SCVURPPP: Developing GI Prog. & Identifying Opportunities to turn Gray to Green

SCVURPPP: LID and GI – Meeting New Requirements

SCVURPPP: GSI Design and Implementation

SCVURPPP: GSI Handbook Details Part 1

SCVURPPP: GSI Handbook Details Part 2

SCVURPPP: SWRP and GSI Planning and Implementation

PWE Annual Workshops on Stormwater Harvesting Media for Residents

## Informational

GSI Utility Bill Insert for Residents in 2016

Updated GSI Utility Bill Insert for Residents in 2018

Provide Outreach Materials for GSI Plan and Available City Rebates

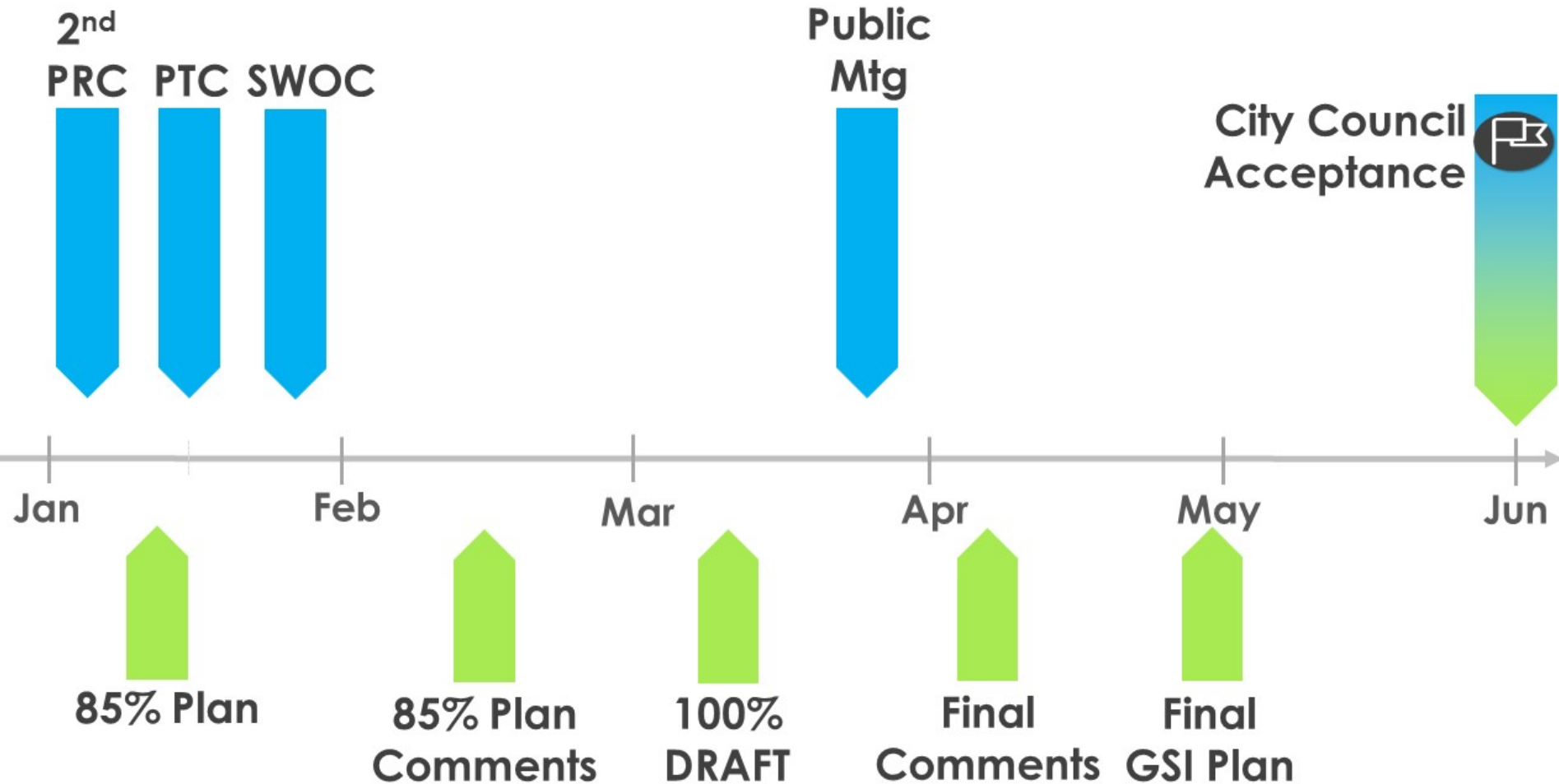
SCVURPPP Fact Sheet for Elected Officials

SCVURPPP Fact Sheet for Resident Neighborhoods

City GSI Webpage

SCVURPPP Watershed Watch Webpage

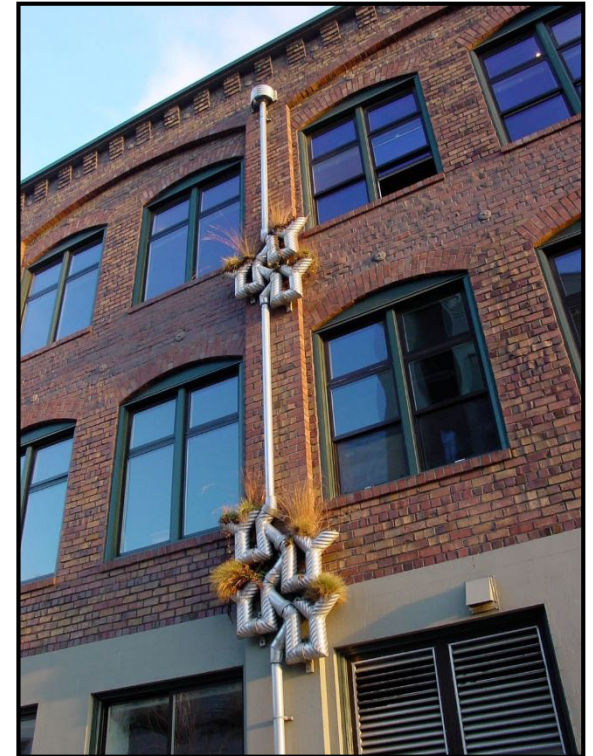
# 11.0 – Acceptance of GSI Plan



- PRC: Parks and Recreation Commission
- PTC: Planning and Transportation Commission
- SWOC: Stormwater Oversight Committee

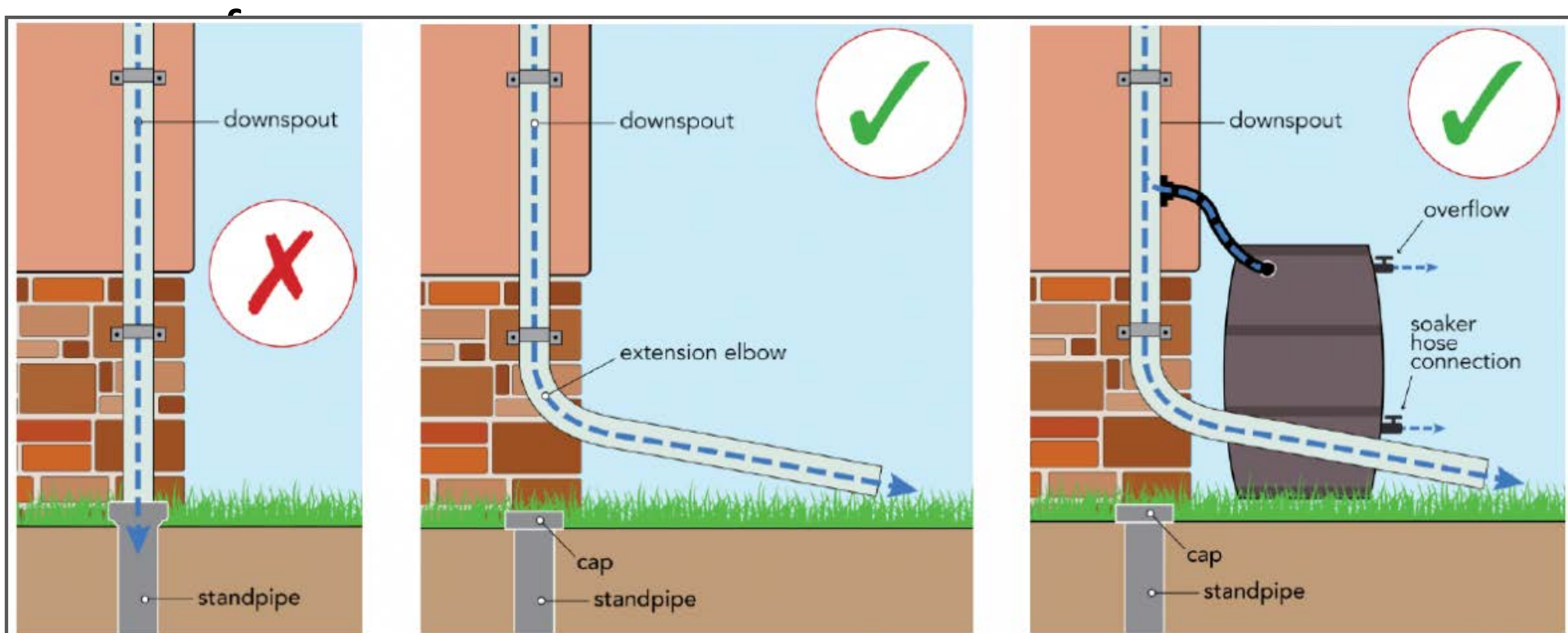
# 12.0 – Plan Implementation

- Legal update (Ch. 16.11)
- Change of perspective: from requirement to forefront of design
- Stormwater art and education



# Low Impact Development (LID)

- Design & Practices at Site Scale:
  - Control stormwater in place; reducing impervious



**Connected to  
storm drain system**

***Disconnected* from  
storm drain system**

**Connected to  
rain barrel**

# 13.0 – Implementation Process

- Conduct regular, collaborative meetings
- Create different subcommittees
- Develop tools, policies, and guidelines
- Update City plans and policies
- Develop evaluation, tracking, and reporting tools
- Track and implement best practices
- Perform outreach and education as feasible





# 13.0 – Implementation Process

- Feasibility assessment tools
- Tracking tools
- Maintenance and Monitoring Plan (FY 20-21)



# 14.0 – Project Prioritization (Long-Term)

- External project oversight
- Long-term planning
- Performance tracking

