



City of Palo Alto

City Council Staff Report

(ID # 10698)

Report Type: Study Session

Meeting Date: 3/2/2020

Summary Title: CIP Projects Update December 2019

Title: Semiannual Update on the Status of Capital Improvement Program Projects

From: City Manager

Lead Department: Public Works

Recommendation

This is an informational report to facilitate a Council Study Session discussion on the City's capital improvement program and the status of the 2014 Council Infrastructure Plan. No action by Council will be taken.

Executive Summary

The City Council and Palo Alto community can be proud of the City's capital improvement program (CIP). The CIP represents major investments into infrastructure functionality and sustainability, funded largely through the 2014 Council Infrastructure Plan as well as utility rates and various other sources totaling \$751 million through 204 projects over the next five years. Over the past five years, the City has completed 55 individual community-serving projects totaling nearly \$148 million of improvements.

The CIP also represents a major effort for much of the City workforce. The following table summarizes the status of all projects for the six-month period of July - December 2019.

Project Type	Active Projects		Construction Phase (excludes Recurring)	Completed
	One-Time	Recurring		
Buildings & Facilities	34	10	9	1
Parks & Open Space	12	9	-	1
Streets & Sidewalks	4	6	-	-
Traffic & Transportation	13	5	2	1

Airport	2	-	1	-
Electric Fund	28	10	7	-
Fiber Optics Fund	1	2	-	-
Gas Fund	2	4	-	-
Storm Drain	3	1	-	-
Water Fund	7	7	2	-
Wastewater Collection Fund	5	4	1	2
Wastewater Treatment Fund	6	1	-	-
Totals	117	59	22	5

Background

This report provides Council with an update on the status of capital improvement program (CIP) projects. Prior to 2016, year-end and mid-year financial reports included very simplistic status updates on CIP projects. In contrast, this semiannual report provides more detailed and useful information for Council regarding general fund and enterprise fund projects that appear on Council agendas and will be visible throughout the community.

Discussion

Project Update Organization

The City has a robust capital improvement program, and a large number of individual projects are in progress at any given time. In the five-year CIP FY 2020-2024, there are 204 projects (capital, enterprise and internal fund projects) totaling \$751 million in funding. The attached CIP project tables are intended to provide Council a quick overview of each project, including budgetary information, the anticipated completion date, a brief description of the project scope, the current status of the project, and upcoming activities including Council actions. Also included in the report, is a list of all completed projects since the introduction of the Infrastructure Management System.

The 2014 Council Infrastructure Plan is a major focus of staff's capital improvement program efforts. The following table details the Total Project Budget and Total Actual Expenses through the first half of FY 2020 for the Infrastructure Plan projects.

Major/Significant Projects Summary

Significant milestones have been achieved on the Infrastructure Plan projects since June 2019. Basement and ground level concrete floors have been completed on the California Avenue Garage, the Highway 101 Pedestrian/Bicycle Bridge project awarded a construction contract in November, and phases 1 and 2 of the Charleston/Arastradero Corridor Project are complete. Current Infrastructure Plan project schedules can be found at <http://www.infrastructure.cityofpaloalto.org/>

<u>Council Infrastructure Plan Projects</u>	<u>CIP Number</u>	<u>Update</u>	<u>Total Project Budget</u>	<u>Total Actual Expenses*</u>
New Public Safety Building	PE-15001	Design Development phase was completed and Construction Document preparation is underway. Plans submitted for building permit in December 2019.	\$115,526,721	\$7,348,829
Bicycle and Pedestrian Transportation Implementation Plan	PL-04010	Project on hold pending recent project evaluation and review of future project scoping.	\$20,800,000	\$9,108,934
New Downtown Parking Garage	PE-15007	Certified EIR and approved land use actions. Project on hold pending review of downtown parking supply options.	\$29,097,382	\$1,438,546
New California Avenue Area Parking Garage	PE-18000	Construction on schedule and underway with basement and ground level concrete floors poured. Project completion is expected in summer 2020.	\$51,351,746	\$20,308,836
Charleston Arastradero Corridor Project	PE-13011	Phases 1 & 2 improvement are nearly complete. Phase 3 to start construction in spring 2020.	\$19,600,075	\$10,919,564
Fire Station 3 Replacement	PE-15003	Construction is nearly complete with only site landscaping and final permit sign-off remaining.	\$10,080,296	\$8,671,723
Highway 101 Pedestrian/Bicycle Overpass Project	PE-11011	The notice to proceed was issued to the contractor in January, site preparation is underway and bridge construction will start in February	\$24,592,167	\$5,281,292
Fire Station 4 Replacement	PE-18004	Under Development.	\$10,200,000	\$0
Byxbee Park Completion	PE-18006	On hold pending completion of Baylands Comprehensive Conservation Plan.	\$3,814,601	\$342,825
Downtown Parking Guidance System	PL-15002	Under Development.	\$2,977,803	\$130,937

*Expenses as of January 28, 2020

Key considerations for the information presented in the project update tables include:

- Project status information is current as of December 2019
- The individual project tables align with the Capital Improvement Fund categories in the FY 2020-2024 capital budget: Buildings and Facilities, Parks and Open Space, Streets and Sidewalks, and Traffic and Transportation. Enterprise Fund projects follow the order of their respective Fund in the capital budget
- Additional project information is available in the FY 2020-2024 capital budget
- Cubberley Property Infrastructure Fund projects are included in the Buildings and Facilities table

- Each project table is divided into a section for one-time projects and a section for recurring projects that have ongoing annual funding
- Budgetary figures include staff oversight costs for projects to which staff costs have been allocated

Completed Projects

Projects completed in the first half of FY 2020, since the last update through June 2019 include the following:

Capital Improvement Fund (general fund)

- Downtown Mobility and Safety Improvements (PL-16001)
- Thermal Imaging Cameras Replacement (FD-20002)
- Cubberley Track and Field Replacement (CB-19000)

Enterprise Funds:

- Wastewater Collection System Rehabilitation Augmentation Project 24 (WC-11000)
- Wastewater Collection System Rehabilitation Augmentation Project 26 (WC-13001)

These completed projects do not include the significant amount of annual work completed under ongoing recurring projects, such as streets and sidewalks repairs, parking lot maintenance, roofing replacements, and regular maintenance of Utilities assets.

Cubberley Track and Field Replacement (CB-19000)



Projects Under Construction

Projects that are currently under construction include the following:

Capital Improvement Fund (general fund):

- Animal Shelter Renovation (PE-19002)
- Charleston/Arastradero Corridor Project (PE-13011)
- Fire Station 1 Improvements (PF-14002)
- Fire Station 3 Replacement (PE-15003)
- Fire Ringdown System Replacement (FD-14002)
- High and Bryant Street Garages Waterproofing and Repairs (PE-18002)
- Highway 101 Pedestrian/Bicycle Overpass Project (PE-11011)
- JMZ Renovation (AC-18001)
- New California Avenue Area Parking Garage (PE-18000)
- Municipal Service Center lighting, Mechanical, and Electrical Improvements (PF-16006)
- Parking Lot J Elevator Modernization (PF-18000)
- Ventura Buildings Improvements (PE-15011)

Enterprise Funds:

- Airport Apron Reconstruction (AP-16000)
- Fiber Optic System Rebuild (FO-16000)
- HCB Pilot Wire Relay Replacement (EL-17005)
- Mayfield Reservoir Subgrade and Venting Repair (WS-19000)
- Rebuild Electrical Underground District 24 (EL-10006)
- Rebuild Electrical Underground District 19 (EL-11008)
- Reconfigure Quarry Feeders (EL-14005)
- Electrical Underground District 46 – Charleston, El Camino Real (EL-12001)
- Electrical Underground District 47 – Middlefield, Homer, Webster, Addison (EL-11010)
- Water Main Replacement – Project 27 (WS-13001)
- Wastewater Collection System Rehabilitation / Augmentation Project 28 (WC-15001)
- Wastewater Collection System Rehabilitation / Augmentation Project 29 (WC-16001)
- Plant Master Plan (WQ-10001)
- Utility Site Security Improvements (EL-04012)

As described above for completed projects, the list of projects under construction does not include work currently being conducted under recurring CIP projects.

Below are some photos of projects under construction:

Charleston/Arastradero Corridor Project (PE-13011)



New California Avenue Area Parking Garage (PE-18000)



Airport Apron Reconstruction (AP-16000)



Resource Impact

Funding for the projects discussed in this report is provided in the FY2020 Capital Budget and 5-Year Plan.

Stakeholder Engagement

Stakeholder engagement is conducted separately for each project.

Attachments:

- ATTACHMENT A: CIP Project Updates and List of Completed Projects

Semiannual Update on the Status of Capital Improvement Program Projects

Capital Improvement Fund CIP Projects

- Buildings and Facilities Projects
- Parks and Open Space Projects
- Streets and Sidewalks Projects
- Traffic and Transportation Projects

Enterprise Fund CIP Projects

- Airport Projects
- Electric Projects
- Fiber Optics Projects
- Gas Projects
- Storm Drain Projects
- Water Projects
- Wastewater Collection Projects
- Wastewater Treatment Projects

List of Completed Projects

Buildings and Facilities Projects

Status as of December 2019

One-Time Projects

Baylands Boardwalk Improvements (PE-14018)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$2,240,522	\$22,200	Public Works	Completed	Winter 2019
	Project Status: This project replaced the existing boardwalk with a new boardwalk on the same alignment. The construction contract was awarded to Vortex Marine Construction, Inc. in June 2018 and construction was completed in January 2019. During construction, an equipment access zone was constructed within the wetlands by removing vegetation and placing temporary marsh mats. These temporary impacts within the access zone need to be restored to comply with project permits. The wetland restoration will include grading, soil import and filling, and planting native vegetation. This restoration project started in December 2019 and was completed in January 2020.				
Animal Shelter Renovation (PE-19002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$270,962	\$3,929,979	Public Works	Construction	Fall 2020
	Project Status: This project installs interim facility improvements to the Animal Shelter that accompany the agreement for operation of the shelter by Pets in Need approved by City Council in November 2018. The medical area upgrades and the modular office building are currently in construction. The new kennel addition is currently in design.				
Water, Gas, Wastewater Office Remodel (PE-19001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$5,996	\$754,437	Public Works	Design	Fall 2020
	Project Status: This project incorporates minor renovations to the Utilities Water Gas Wastewater (WGW) office space at the Municipal Service Center (MSC). The current space no longer meets the operational needs of the department. This project will reconfigure the work-area so it is more efficient for department operations and replace aging furniture and finishes. The new space will include a small reception area, additional offices and cubicles for new staff. Upgrades to lighting, fire life systems and enhancements to the WGW corridors will also be included with this renovation. The project is currently in design, and construction is anticipated to start in summer 2020.				

Buildings and Facilities Projects

Status as of December 2019

Baylands Flood Protection Levee Improvements (PE-17006)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$266,666	\$1,353,765	Public Works	Pre-design	Fall 2020
	Project Status: This project includes both the design and environmental review of improvements to the existing network of flood protection levees in the Palo Alto Baylands between San Francisquito Creek and Mountain View. The project will be designed to provide 1% (100 year) protection from tidal flooding, including the impacts of 50 years of future sea level rise. This project may be implemented as an element of the San Francisquito Creek Joint Power Authority (JPA) SAFER Bay Project, which is designing improvements to the Bayfront levees between Mountain View and Redwood City. The project is on hold pending completion of the SAFER Bay Feasibility Study. The draft Feasibility Study was released in June 2019. The report will be presented to Council for review and for discussion of which of the proposed alternatives should be advanced into design and regulatory permitting.				
Cardiac Monitor Replacement (FD-20000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$850,000	Fire	Pre-Design	Summer 2021
	Project Status: This project replaces the entire compliment of 20 cardiac monitors in the Department. Along with other tools needed for patient assessment and airway verification, cardiac monitors assess cardiac activity in patients and provide defibrillation and pacing. The Department has encumbered the funds and it is currently with the purchasing department to award the purchase order.				
City Facilities Assessment and Record Plan Management System (PE-20002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$314,000	Public Works	Design	Fall 2020
	Project Status: The Kitchell Report in 2008 summarized the last City-wide facility condition assessment. A new facility condition assessment is warranted per the City's APWA reaccreditation requirements. It is also an ideal opportunity to develop a new electronic system for managing the record plans of all City facilities. Currently, older record plans are managed through a Microsoft Access Database. Some record plans are still only available as hardcopy sheets. The project will include scanning older hardcopy sets and compiling all records into a new				

Buildings and Facilities Projects

Status as of December 2019

	indexed system that will be easily accessible to all City staff.				
City Hall Space Planning (PE-19000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$81,932	Public Works	Pre-Design	Fall 2024
	Project Status: This project involves space planning to determine future workgroup space needs and programming for the City Hall office building. The project will include preliminary design of the space following the initial feasibility phase.				
Civic Center Electrical Upgrade & EV Charger Installation (PE-17010)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$87,860	\$991,581	Public Works	Design	Spring 2021
	Project Status: This project replaces the aging Civic Center electrical switchgear and motor control centers. A request for proposals for a design contract is currently underway to hire an engineering consultant. Another part of the project is to install 13 dual head level 2 chargers in City parking garages. Design is currently in process for the EV charger installations.				
Civic Center Fire Life Safety Upgrades (PE-18016)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$16,624	\$627,018	Public Works	Design	Summer 2020
	Project Status: This project will assess, update and replace the Civic Center fire alarm system. The fire life safety system is approaching the end of its useful life. The fire alarm panels and associated equipment need an upgrade to meet current code requirements. Procurement documents are currently being prepared for a competitive solicitation.				
Civic Center Waterproofing Study and Repairs (PE-15020)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$54,493	\$742,555	Public Works	Design	Fall 2020
	Project Status: This project includes a condition assessment of the Civic Center plaza deck structural system. In late 2016, RDH Building Science, Inc. was hired to investigate the problem. The results indicated that the				

Buildings and Facilities Projects

Status as of December 2019

	expansion joint on the plaza can be repaired. The scope expanded to include replacing the waterproof coatings on the inside of the plaza perimeter planter boxes. The design contract is being amended and construction is estimated to begin in summer 2020.				
Cubberley Community Center Master Plan (CB-16001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$505,301	\$616,592	Community Services	Design	Summer 2020
	Project Status: This project supports the development of a Master Plan for future use of the Cubberley Community Center site by the City and Palo Alto Unified School District. An RFP for master planning consultant services was released in November 2017. In the first half of fiscal year 2019, the consultant has facilitated two community co-design meetings, completed a needs assessment and program document, and developed four concept layouts of a future site. A draft Cubberley Concept Plan was completed in November 2019 and was distributed to the community for input. CEQA analysis of the concept plan began and is expected to be completed in the first half of 2020.				
Cubberley Building Management Systems (CB-19001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$ 360,807	Public Works	Design	Winter 2020
	Project Status: This project replaces the Building Management System (BMS) controls for the Pavilion, Theater, Wing I, and Gyms A and B boiler rooms at the Cubberley Community Center. The project will include the installation of control points for each building along with controllers, valve and damper actuators. Design specifications have been completed and the procurement process is underway.				
Fire and Utilities Trench Training Facility (FD-19000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$110,000	Fire	Design	Summer 2020
	Project Status: The Fire and Utilities Departments will collaborate on building a State Certified Trench and Confined Space Training Facility at the Municipal Services Center. The facility will be used by each department to expand training and safety programs. The architectural design has been completed and Utilities is working with purchasing to release an RFP.				

Buildings and Facilities Projects

Status as of December 2019

Fire Ringdown System Replacement (FD-14002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$244,144	\$353,300	Fire	Construction	Winter 2020
	Project Status: This project will replace the current ring down system that provides an audible alert of calls for service in the fire stations. A vendor was selected through a cooperative purchasing agreement. Installation has been ongoing since 2018 and is waiting on the rebuild of Fire Station 3 to complete the project simultaneously. Ringdown installation is scheduled to begin at Fire Station 3 in late December 2019.				
Fire Station 1 Improvements (PF-14002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$73,510	\$187,067	Public Works	Construction	Summer 2020
	Project Status: Construction is 85% complete with only painting, skylight replacement, and outdoor concrete pad work remains.				
Fire Station 3 Replacement (PE-15003)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$7,656,982	\$10,080,296	Public Works	Construction	Winter 2020
	Project Status: This project will replace the existing Fire Station at Embarcadero Road and Newell Road with a new structure that meets essential services standards and current program needs. The Temporary Fire Station # 3 at 2000 Geng Road has been completed. Construction on the new Fire Station began in January 2018 and continued into 2019 with some challenges earlier this year that impacted the projected schedule. During fall 2019 the interior and exterior work was nearly completed. Site landscaping and final permit sign-off are the main remaining items. Construction is anticipated to be completed in January 2020.				
Fire Station 4 Improvements (P-18004)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$10,200,000	Public Works	Pre-design	Spring 2022
	Project Status: 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. This project has been on hold awaiting the completion of Fire Station #3.				
High and Bryant	Prior Years	Total Project	Implementing	Project	Project Completion

Buildings and Facilities Projects

Status as of December 2019

Street Garages Waterproofing and Repairs (PE-18002)	Actuals	Budget	Department	Phase	
	\$31,728	\$352,730	Public Works	Construction	Summer 2020
	Project Status: This project includes a study for analysis and repairs to the water proofing system in the High Street and Bryant Street parking garages. Water proofing repairs have been completed in the High Street parking garage. Repairs are 75% complete in the Bryant Street garage as additional repairs are needed in the subterranean stairwells and a few remaining areas of the subterranean levels of the garage.				
Internal Alarm System Replacement (PD-14000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$50,759	\$77,569	Police	Design	Fall 2020
	Project Status: This project will replace the citywide Internal Alarm System. The City Hall alarms migrated to the new system in FY 2019. There are on-going discussions about adding additional sites and a CAD interface in FY 2020.				
JMZ Renovation (AC-18001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$1,041,302	\$4,587,156	Community Services	Construction	Summer 2020
	Project Status: This project will fund the relocation of the Junior Museum and Zoo to the Cubberley auditorium building for two years, utilizing \$406,000 of the budget. The renovation of the Cubberley auditorium was completed in June 2018. The Junior Museum and Zoo moved into the Auditorium in June 2018 and opened to the public in July. Additionally, the project paid permit fees and other costs (\$306K in April 2019) for the new JMZ rebuild project in accordance with the Council-approved agreement between the Friends of the JMZ and the City. Construction of the new Junior Museum and Zoo commenced in June 2018 and is now 85% complete. Due to rainy weather in 2018-19 and 2019-20, the zoo is approximately two additional months behind schedule, with construction now expected to be completed in April 2020. Individual Exhibits are in a staggered schedule of design and fabrication with some exhibits complete, others in fabrication, and others still in design. Exhibits are scheduled to begin installation in May 2020. The public opening of the new JMZ is scheduled for October 3, 2020.				
Municipal Service Center Lighting,	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion

Buildings and Facilities Projects

Status as of December 2019

Mechanical, and Electrical Improvements (PF-16006)	\$931,209	\$7,218,775	Public Works	Design	Winter 2021
	Project Status: This project replaces original mechanical, electrical, and lighting systems installed in 1966. It also includes design and construction for office renovations for the Zero Waste group. Bids for the site-wide mechanical and electrical upgrades exceeded the available budget. Additional funding was added for FY 2020. A contract amendment with the design consultant is currently in negotiation to better prepare the facility for electrification in the future. The consultant will modify the design and it will be issued for bids again in FY 2020.				
Municipal Service Center A, B, & C Roof Replacement (PF-17000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$2,146,289	Public Works	Design	Winter 2021
	This project installs 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. Project dates have been 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.				
New California Avenue Area Parking Garage (PE-18000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$6,532,693	\$51,351,746	Public Works	Construction	Summer 2020
	Project Status: This project will provide a new California Avenue Area Parking Garage, part of the 2014 Council Infrastructure Plan and is being coordinated with the new Public Safety Building Project. The Public Safety Building will be placed on Lot C-6 while the new garage will be placed on Lot C-7. Construction began in winter 2019 and has proceeded on schedule with a portion of the ground floor concrete placed in late December. Project completion is expected in summer 2020.				
New Public Safety Building (PE-15001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$4,407,021	\$ 115,526,721	Public Works	Design	Spring 2023
	Project Status: This project will provide a new, modern Public Safety Building (PSB) that will meet essential				

Buildings and Facilities Projects

Status as of December 2019

	services standards and the current and future needs of the public safety departments. The PSB and new garage in the California Avenue business district are now an integrated project and both are part of the 2014 Council Infrastructure Plan. The PSB plans were submitted for building permit review in late December 2019. Project bidding will take place in spring 2020 with construction beginning shortly after the new California Avenue garage opens in late summer 2020.				
New Downtown Parking Garage (PE-15007)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$1,407,820	\$29,097,382	Public Works	Design	Summer 2022
	Project Status: This project will provide a new parking structure at existing 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. The project received ARB approval in July 2018. In February 2019, the City Council certified the EIR by adopting the Resolution and Mitigation Monitoring and Reporting Program. The Record of Land Use Action was approved for three (3) years and the project is on hold until after the City returns to the Policy and Services Committee for further discussion on the downtown parking management strategy.				
Parking Lot J Elevator Modernization (PF-18000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$413,998	\$781,324	Public Works	Construction	Spring 2020
	Project Status: This project modernizes the existing elevators at parking Lot J. The project involves upgrading the interior of the elevators, elevator control interface, call buttons, and meeting current ADA standards. Construction started in April 2019 and the project is approximately 95% complete.				
Performing Arts Venues Seat Replacement (AC-18000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$419,000	Community Services	Design	Summer 2020
	Project Status: This project to replace the self-rise mechanism in three venues for performing arts has been revised to replace all the seats in the Community and Children's Theatre. Staff is working to determine if there are any ADA needs to be addressed with the like-for-like seat replacement, or if the RFP can move forward.				

Buildings and Facilities Projects

Status as of December 2019

Police Video Recording Systems Replacement (PD-20000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$300,000	Police	Design	Winter 2021
	Project Status: This project replaces the Palo Alto Police Department 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. In-car systems are fixed in the vehicles and BWCs operate on rechargeable batteries for up to 8 hours, secured to the officer's uniform. The in-car video system is nearing the end of its service life and will need to be replaced as they fail in FY 2021. The BWCs are under warranty for the current fiscal year after a one-year pilot program was implemented in FY 2019.				
Self-Contained Breathing Apparatus (SCBA) Air Compressor Replacement (FD-20001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$ 86,000	Fire	Pre-Design	Summer 2021
	Project Status: This project replaces the central air compressor that provides air for Self-Contained Breathing Apparatus (SCBA) tanks to ensure firefighter safety when entering environments with hazardous air quality. The Department is researching potential vendors and collecting pricing.				
Self-Contained Breathing Apparatus Replacement (FD-18000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$730,139	\$ 799,999	Fire	Design	Winter 2020
	Project Status: This project replaces Self Contained Breathing Apparatus equipment (SCBA) used by firefighters when entering hazardous conditions when responding to fire and hazardous materials incidents. The SCBA provides breathable air for firefighters when entering environments where the atmosphere is immediately dangerous to life or health. The expected service life for SCBAs is 15 years. When this project was funded in FY 2018, 26 percent of the Palo Alto Fire Department (PAFD) SCBAs were past their useful life and 41 percent were approaching the end of their useful life. Final coupling units and Bluetooth connectivity components are being researched and the department will begin the purchasing process in the second half of FY 2020.				
Thermal Imaging Cameras	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion

Buildings and Facilities Projects

Status as of December 2019

Replacement (FD-20002)	\$0	\$ 99,000	Fire	Completed	Fall 2019
Project Status: This project replaced the Thermal Imaging Cameras (TICs) on all fire and response vehicles used to help identify the location of victims; assess the source of fires, smoke, and heat; and create a plan of action. Two thermal imaging cameras were approved for purchase as part of the Fiscal Year 2019 Mid-Year Review and the remaining nine will be replaced with this project. All remaining cameras have been purchased and delivered and will be put into use in FY 2020.					
Ventura Buildings Improvements (PE-15011)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$560,860	\$2,525,420	Public Works	Construction	Fall 2020
Project Status: This project replaces and upgrades the mechanical and electrical systems and provides accessibility improvements for the Ventura facility. Advanced Design Consultants was awarded a contract in August 2016 for design services. Bids received for the project exceeded the budget and the project was on hold until additional funding was available through the FY 2020 budget. The project will resume in spring 2020 with a new solicitation and anticipated construction contract will be awarded in the summer 2020.					

Recurring Projects

Americans With Disabilities Act Compliance (PF-93009)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$227,637	\$822,220	Public Works	N/A	Recurring
Project Status: This project provides accessibility upgrades to City facilities and equipment. It includes continued funding for improvements such as path of travel, restrooms, drinking fountains, and counters. Work in FY 2020 includes Council adoption of the update to the citywide ADA Transition Plan that began in November 2015. On December 17, 2018, Council approved an amendment to the consultant contract for public outreach to complete the ADA Transition Plan update. The public outreach process for the updated plan was completed in June 2019 and survey responses were compiled and taken into consideration to the ADA Transition Plan Schedule. A final report was submitted to the City by our consultants for review and finalization in September 2019. The updated Transition Plan is expected to go to Council for acceptance in February 2020.					

Buildings and Facilities Projects

Status as of December 2019

Roth Building Maintenance (PF-07011)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$1,420	\$41,073	Public Works	N/A	Recurring
	Project Status: This project is for window repairs, waterproofing of foundation walls, installation of electrical service, and a new ventilation system at the Roth building. In addition, roofing repairs will be done on an as needed basis until such time that the building is leased and occupied.				
Building Systems Improvements (PF-01003)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase Construction	Project Completion
	\$26,223	\$419,991	Public Works	N/A	Recurring
	Project Status: This project provides electrical, mechanical, plumbing, structural, and security upgrades for City facilities. The installation of a new air-cooled chiller for SA-5 at City Hall was completed. The LED lighting upgrades for Rinconada and Mitchell Park tennis courts have been delayed until FY 2021 due to City staffing constraints. The new cooling tower fill media for City Hall is now planned for Winter 2020 since the work is to be completed during the winter months.				
City Bridge Improvements (PE-20001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$16,000	Public Works	N/A	Recurring
	Project Status: This project includes bridge maintenance, repair, and an improvement program over the next 5 years. This program will include on-going inspections to report physical changes to the structures, recommendations for work to be done, and additional information to meet functional and structural standards in accordance with industry standards.				
City Facility Parking Lot Maintenance (PE-09003)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$27,831	\$1,024,611	Public Works	N/A	Recurring
	Project Status: This project maintains parking lots and walkways at City facilities. The parking lot resurfacing at Fire Station #1, as part of the FY 2019 overlay project was completed in fall 2019				

Buildings and Facilities Projects

Status as of December 2019

Cubberley Roof Replacements (CB-16002)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$282,779	\$577,200	Public Works	N/A	Recurring
	Project Status: This project replaces existing roofs at Cubberley Community Center. Cubberley Wing K roof was completed in 2019. Cubberley Wings F and FH roofs are scheduled to be completed in summer 2020.				
Cubberley Repairs (CB-17001)	Prior Years Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$84,889	\$761,862	Public Works	N/A	Recurring
	Project Status: This project is for general maintenance needs of the Cubberley campus. Several more concrete repairs were completed to address trip and fall incidents.				
Facility Interior Finishes Replacement (PF-02022)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$75,238	\$1,175,656	Public Works	N/A	Recurring
	Project Status: This project improves the interior finishes of City facilities, including flooring, walls, cabinets, paint, lighting, ceiling tiles, soundproofing, and fixed office furniture, doors, windows, and associated fire/life safety, mechanical, electrical and plumbing code compliance requirements. Design for the OMB furniture reconfiguration is complete, and installation will be in February 2020. Conceptual design for the Revenue Collections area is in process and includes new furniture, new casework, and painting of the interior office space. Children's Library carpet replacement scheduled to be completed in summer 2020. Lucie Stern Community Center interior remodel scheduled to be completed at the end of February 2020.				
Roofing Replacement (PF-00006)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$770,934	\$712,014	Public Works	N/A	Recurring
	Project Status: This project replaces existing roofs at City facilities that have outlived their useful lifespans. The roof replacement for the Ventura Community Center has been completed. Animal Shelter roof recoating delayed due to roof modifications required for current remodel of facility. Baylands Athletic Center Snack Shack/Restroom roof and Mitchell Park Tiny Tot Restroom roof scheduled for replacement in summer 2020.				

Buildings and Facilities Projects

Status as of December 2019

University Avenue Parking Improvements (PF-14003)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$48,116	\$361,100	Public Works	N/A	Recurring
	Project Status: This project maintains parking lots and parking structures within the University Avenue Downtown Business Parking District. After Parking Lot C was completed in spring 2019, all University Avenue parking district lots have been resurfaced and no additional work is needed at this time.				

Parks and Open Space Projects

Status as of December 2019

One-Time Projects

Baylands Comprehensive Conservation Plan (PG-17000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$322,220	\$431,029	Community Services	Design	Summer 2020
	Project Status: This project develops a conservation plan examining native vegetation, wildlife habitat, and public access for trails, recreation amenities, and interpretive messaging. Staff interviewed and selected a consultant, AECOM, to create the plan. Staff and the consultant have created an existing conditions report, formed a stakeholder and staff advisory group, held three stakeholder meetings, and one community meeting, created draft chapters of the report, and have developed conceptual plans for Byxbee Park and for the former ITT property. An environmental impact study is in process and upon completion the Baylands Comprehensive Conservation Plan will be presented to Council for formal adoption.				
Baylands Athletic Center 10.5 Acre Expansion (PG-19001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$10,402	\$115,132	Community Services	Pre-Design	Summer 2020
	Project Status: This project includes conceptual plans and public outreach for future use of an additional 10.5 acre expansion of the Baylands Athletic Center from land that was previously part of the golf course. With completion of the wetland delineation and in consultation with an Ad Hoc committee of the Parks and Recreation Commission, staff is developing a scope to hire a consultant to conduct public outreach and prepare a conceptual design.				
Byxbee Park Completion (PE-18006)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$342,825	\$3,814,601	Public Works	Pre-Design	Winter 2022
	Project Status: This project allows for the remaining improvements to Byxbee Park that follows the completion of the landfill capping work. The Baylands Comprehensive Conservation Plan (BCCP), which is currently undergoing CEQA analysis, includes development of a conceptual plan for Byxbee Park. The BCCP and the conceptual plan for Byxbee will be completed in summer 2020 and will be used to go out to bid for design and construction.				
Foothills Park, Pearson	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion

Parks and Open Space Projects

Status as of December 2019

Arastradero Preserve and Esther Clark Park Conservation Plan (PG-17001)	\$0	\$486,096	Community Services	Pre-Design	Winter 2023
	Project Status: This project creates a comprehensive conservation plan for Foothills Park, Pearson Arastradero Preserve, and Esther Clark Park. The plan will provide guidance on wildlife and habitat management, public access and recreation, trails, and interpretive messaging. The plan will provide insight on best management practices for wildlife, habitat, vegetation, and recreation management. The plan will also provide priorities, which will help guide resources to the most important projects.				
Boulware Park Improvements (PE-17005)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$100,462	\$550,805	Public Works	Pre-Design	Fall 2022
	Project Status: This park renovation project was initially planned in FY 2018 but was postponed due to project priorities and potential purchase of the adjacent AT&T lot located at 3350 Birch Street. In fall 2019, the lot was purchased by the City. In response to the purchase, the City is currently utilizing the funding for the initial renovation project for the design and outreach for both the existing park and the newly purchased park land. Additional funding is being requested as part of the current CIP process to implement park renovations for the existing Boulware Park and the new park land. A Community meeting to kick off the expanded park project was held in October 2019. A Parks and Recreation Commission meeting is planned for January 2020 with additional meetings to follow throughout 2020 to finalize the design. Construction is anticipated in Fiscal Year 2022.				
Cameron Park Improvements (PG-14002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$237,000	Community Services	Pre-Design	Summer 2020
	Project Status: This project upgrades and renovates safety and accessibility features at Cameron Park with a primary focus on the park playground. Project is currently in design planning phase with staff. A community meeting is planned for March 2020.				
Cubberley Field Restroom (CB-17002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$104,278	\$681,546	Public Works	Design	Fall 2020

Parks and Open Space Projects

Status as of December 2019

	Project Status: This project will install a new restroom in the sports field area of the Cubberley Community Center. Design for the project started in fall 2018 along with public outreach. Anticipated installation is in fall 2020. A community meeting was held on November 15, 2018, and the Parks and Recreation Commission reviewed the project in November 2018. The project is in design.				
Cubberley Track and Field Replacement (CB-19000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$23,862	\$1,880,089	Public Works	Completed	Fall 2019
	Project Status: This project replaced the synthetic turf field, installed an all-weather track and a fitness area. The project was completed in fall 2019.				
Foothills Park Dam Seepage Investigation and Repairs (PE-20000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$36,000	Public Works	Pre-design	Winter 2021
	Project Status: This project will study a location of historic seepage from the Foothills Park 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.				
Ramos Park Improvements (PG-14000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$271,000	Community Services	Design	Summer 2021
	Project Status: This project includes safety and accessibility improvements at Ramos Park. The work includes replacing the existing park playground, benches, and drinking fountain, as well as resurfacing the basketball court playing surface. Community outreach is planned for winter 2020 with construction planned for fall 2020.				
Rinconada Park Improvements (PE-08001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$2,280,051	\$4,680,681	Community Services	Design	Summer 2020
	Project Status: This project provides upgrades to safety, site amenities, playground facilities, a new restroom,				

Parks and Open Space Projects

Status as of December 2019

	irrigation, drainage and accessibility improvements at Rinconada Park. These improvements were identified in the Rinconada Long Range Plan (LRP). The project schedule is currently being coordinated with the construction of the new Junior Museum and Zoo Project. The Parks and Recreation Commission recommended a Park Improvement Ordinance (PIO) for Council adoption in January 2020. Design and public outreach for the project has been performed by in house staff. The project is anticipated to go out to bid in February 2020. According to the LRP, future improvement phases would include renovation to the eastern side of the park, arbor and pool areas, and development around the electrical substation.				
Turf Management Plan (PG-18002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$118,000	Community Services	Pre-Design	Fall 2020
	Project Status: This project evaluates select natural turf athletic fields maintained and brokered by the City for organized sports, and provides recommendations for improving the quality and durability of the fields. Staff is working with stakeholders to draft the scope of work and will seek bids for a qualified consultant to draft the plan. Staff has developed a scope and will be going out to bid in spring. The plan is anticipated to be complete by fall 2020.				

Recurring Projects

Art In Public Spaces (AC-86017)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$208,945	\$1,349,443	Community Services	N/A	Recurring
	Project Status: This project provides the ongoing temporary and permanent artworks throughout the City. These funds are primarily comprised of pooled Municipal Percent for Art allocations as well as funds rolled over from previous years due to the multi-year nature of public art projects. The 2016 Public Art Master Plan provides a ten-year plan for the future prioritization of public art projects in Palo Alto. FY 2020 funded temporary public artwork at King Plaza, Cubberley, the area surrounding California Avenue Garage construction site, and for the upcoming Code: Art2 Festival. Additional funds were also used to hire a consultant to create a California Avenue Public Art Plan. Some of the current Municipal Projects in process for FY 2021 include artworks for the Charleston/Arastradero Corridor, the Highway 101 Bike and Pedestrian Bridge, the Public				

Parks and Open Space Projects

Status as of December 2019

	Safety Building, and public programming for Code: ART2.				
Benches, Signage, Walkways, Perimeter Landscaping (PG-06003)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$420,374	\$207,000	Community Services	N/A	Recurring
	Project Status: This project restores and replaces existing benches, signage, fencing, walkways, and landscaping at various City facilities. In spring 2019, there were repairs to the pavers at the Stanford Palo Alto Playing Fields, various digital park directory maps were created for online applications, wood fiber surfacing was installed at the Peers Dog Park, and maintenance gates were installed at various City Park and Open Space locations. In fall 2019 site furnishings at Lytton Plaza were replaced. The fence at Hoover dog park was improved by increasing the height from three feet to five feet.				
Dog Park Installation and Renovation (PG-18001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$15,746	\$177,000	Community Services	N/A	Recurring
	Project Status: This project enables building of dog parks at various City parks and facilities that currently do not have dog parks, as well as renovating existing dog parks. The next dog park installation or renovation has not been determined and several locations are under consideration. Staff is meeting with the Parks and Recreation Commission to discuss location options and expansion of existing dog parks.				
Off-Road Pathway Resurfacing and Repair (OS-09001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$455,000	Community Services	N/A	Recurring
	Project Status: This project resurfaces failing and broken pathways within the City. Pathways are chosen based on inspections and resident requests. The Adobe Creek Reach Trail will be built with the Highway 101 Pedestrian and Bicycle Overcrossing Project beginning in winter 2020.				
Open Space Lakes And Pond Maintenance	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$14,406	\$102,800	Community Services	N/A	Recurring

Parks and Open Space Projects

Status as of December 2019

(OS-00002)	Project Status: 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 second year of a three-year contract to clear aquatic weeds at Boronda Lake is in progress and scheduled to be completed by September 2020.				
Open Space Trails and Amenities (OS-00001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$286,674	\$207,000	Community Services	N/A	Recurring
	Project Status: This project restores unpaved trails, fences, picnic areas, and campgrounds at Foothills Park, the Baylands, and the Pearson-Arastradero Nature Preserves. A contract for trail maintenance was awarded in May 2018, and the contractor has started the annual trail work. In fall 2019 the annual trail maintenance at Pearson Arastradero Preserve and Foothills Park included 50 miles of trails. At the south end of Foothills Park Service Yard a large fallen tree was removed from the creek.				
Park Restroom Installation (PG-19000)	Prior Years Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$414,000	Community Services	N/A	Recurring
	Project Status: This project installs new 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. Staff is planning a community meeting in January 2020 to discuss adding a restroom at Ramos Park.				
Parks and Open Space Emergency Repairs (PG-09002)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$177,434	\$142,000	Community Services	N/A	Recurring
	Project Status: This project replaces or repairs play grounds, play yard surfaces, wooden structures, park amenities, and play equipment in the event of storms, fire, vandalism or structural failure. In fall 2019 surface repairs were made to Peers Park tennis courts to prevent potential tripping hazards, the deteriorated wooden playground border at Bol Park was replaced and a damaged wooden pedestrian bridge at Briones Park was repaired.				

Parks and Open Space Projects

Status as of December 2019

Athletic Courts Resurfacing (PG-06001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$55,378	\$266,200	Community Services	N/A	Recurring
	Project Status: This project repairs and resurfaces tennis and basketball courts in various Palo Alto parks.. In fall 2019 the tennis court improvements and pickleball additions at Mitchell Park was completed and the tennis court renovations at Rinconada Park were completed.				

Streets and Sidewalks Projects

Status as of December 2019

One-Time Projects

California Avenue District Gateway Signs (PE-17004)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$7,604	\$177,001	Public Works	Design	Winter 2020
	Project Status: This project includes the design and replacement of two existing gateway signs in the right-of-way for the California Avenue business district. An application to the Architectural Review Board will be made in spring 2020. The signs are expected to be replaced in winter 2020.				
El Camino Median Landscape Improvements (PE-13017)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$12,330	\$1,058,329	Public Works	Design	Fall 2022
	Project Status: This project for median improvements on El Camino Real will include water conservation measures such as new drip irrigation systems and new drought tolerant trees, shrubs, and groundcover. Median designs will be consistent with the goals and objectives of the El Camino Real Master Planning Study. The project will be implemented in coordination with guidance from the Grand Boulevard plan.				
Newell Road/ San Francisquito Creek Bridge Replacement (PE-12011)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$1,367,302	\$4,831,259	Public Works	Pre-Design	Spring 2022
	Project Status: This project removes and replaces the Newell Road bridge over San Francisquito Creek with a clear span to allow the channel to convey up to the natural capacity of the San Francisquito Creek, approximately 7,500 cfs, and will provide improved safety for vehicular, bicycle, and pedestrian traffic. The project draft Environmental Impact Report (EIR) was released in spring 2019. This report analyzes potential traffic, aesthetic, and other environmental impacts and proposes appropriate mitigation measures. The project is being closely coordinated with the City of East Palo Alto, Santa Clara Valley Water District, and the San Francisquito Creek Joint Powers Authority (JPA). The EIR is anticipated to be certified by Council in spring 2020. The design of the preferred alternative will be submitted to regulatory agencies for permits. Project construction is estimated to start as early as summer 2021.				
Streetlights	Prior Years	Total Project	Implementing	Project Phase	Project Completion

Streets and Sidewalks Projects

Status as of December 2019

Condition Assessment (PE-13014)	Actuals	Budget	Department		
	\$8,799	\$241,481	Public Works	Design	Summer 2021
	Project Status: This project assesses the condition and maintenance needs of the City's streetlight system. Due to other project priorities and workloads this project has been put on hold until FY 2020. An RFP will be issued in summer 2020.				

Recurring Projects

Curb and Gutter Repairs (PO-12001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$450,166	\$569,223	Public Works	N/A	Recurring
	Project Status: This project repairs curbs and gutters uplifted by tree roots. For FY 2020, the curb and gutter locations are selected from a list reported by the public and evaluated by Public Works staff. This project is combined with the current year's Sidewalk Repair Project (PO-89003). As of December 2019, there were 1,300 linear feet of curbs replaced and 3,000 square feet of gutter repaired at various locations throughout the City.				
Sidewalk Repairs (PO-89003)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$1,658,872	\$1,455,975	Public Works	N/A	Recurring
	Project Status: This project repairs and replaces broken and uplifted sidewalks. The program completed all twenty-three sidewalk districts in 2017, a thirty-year (1986 – 2017) sidewalk repair district cycle. Council approved a sidewalk assessment contract in November 2017 to evaluate the sidewalk program and assess potential improvements to the current district-based program. Staff used this assessment to compile a list of areas that require prompt action at varying locations throughout Palo Alto. These priority locations were repaired in FY 2020. The project has repaired 18,000 square feet of sidewalk, 3,300 square feet of driveway, and brought 19 curb ramps up to ADA compliance as of December 2019.				
Sign Reflectivity Upgrade (PO-11000)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$10,207	\$246,663	Public Works	N/A	Recurring

Streets and Sidewalks Projects

Status as of December 2019

	Project Status: This project includes the annual inventorying, upgrading and maintaining of all traffic signs. A list of signs not meeting the minimum requirement is derived from MUTCD approved Nighttime Visual Inspection surveys. In the first half of FY 2020, 460 signs were identified for reflectivity replacements.				
Street Lights Improvements (PO-05054)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$100,374	\$374,352	Public Works	N/A	Recurring
	Project Status: This project replaces street light poles, pole foundations, luminaires and wiring as needed to restore or improve street lighting.				
Street Maintenance (PE-86070)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$5,353,373	\$9,413,643	Public Works	N/A	Recurring
	Project Status: This project includes the annual resurfacing, micro-seal, crack seal and reconstruction of various city streets. This project funds the street maintenance work that supports Council's adopted goal of achieving a citywide average pavement condition index (PCI) score of 85, representing very good or excellent conditions, by 2019. The citywide PCI goal of 85 was met at the end of calendar year 2018, and the emphasis will now shift to maintaining the 85 score while addressing the remaining streets with PCI scores less than 60. The Street Resurfacing Project performed over 1.6 lane miles of resurfacing, including Everette Avenue from Alma to Middlefield and Hawthorne Avenue from Emerson to Tasso. The Preventive Maintenance Project has slurry sealed 22 lane miles of streets.				
Thermoplastic Lane Marking and Striping (PO-11001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$13,006	\$231,455	Public Works	N/A	Recurring
	Project Status: This project maintains the thermoplastic markings on roadways. Thermoplastic lane marking and striping is incorporated into annual Pavement Preventive Maintenance Projects. In FY 2020 the project has restriped 27,270 linear feet of thermoplastic striping ranging from lane striping, crosswalk striping, and bike lane striping, and refreshed 381 thermoplastic paving legends as of December 2019.				

Traffic and Transportation Projects

Status as of December 2019

One-Time Projects

Charleston Arastradero Corridor Project (PE-13011)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$7,254,489	\$19,600,075	Public Works	Construction	Fall 2020
	Project Status: This project is part of the Council Infrastructure Plan. It will reconfigure the Charleston Arastradero Corridor to provide new landscaped median islands, bulb outs, enhanced bike lanes and new street trees to complement the new lane configurations that were approved for permanent retention in 2008 and 2012. City Council approved the conceptual plan line for the corridor in September 2015. This project will be constructed in three phases. Remaining work for Phase 1 includes widening the Los Altos-Palo Alto Bike Path and remaining streetlight work. The contractor is completing punchlist work on Phase 2. The redesign of Phase 3 is wrapping up and expected to go out to bid in February 2020 and start construction in spring 2020.				
Churchill Avenue Alma Street Railroad Crossing Safety Improvements (PL-20000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$4,814,000	Office of Transportation	Design	Summer 2021
	Project Status: This project will design and construct pedestrian and bicycle safety improvements on the east side of the Churchill Avenue and Alma Street railroad crossing intersection. Design includes, but is not limited to, traffic signal modifications, street lighting improvements, roadway resurfacing, sidewalk realignment and/or widening, drainage improvements, utility relocations, signage and striping, innovative bicycle treatments, traffic calming elements, and way-finding improvements.				
Churchill Avenue Enhanced Bikeway (PL-14000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$247,905	\$3,429,459	Office of Transportation	Design	Summer 2021

Traffic and Transportation Projects

Status as of December 2019

	Project Status: This project includes 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, to include a new dedicated westbound right-turn lane. Design plans for the project are at 65% completion. Staff is aiming to finalize the design plans by July 2020 and begin construction soon after. An encroachment permit from Caltrans will need to be secured for the work within the El Camino Real right-of-way.				
Downtown Parking Wayfinding (PL-15004)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$445,082	\$1,163,180	Office of Transportation	Design	Fall 2021
	Project Status: This project included design and installation of new downtown parking wayfinding signage that will incorporate a new parking brand for the City and replace the existing parking signage to improve visibility of parking in Downtown Palo Alto. This project will be implemented in coordination with the Upgrade Downtown underground utilities replacement project. The construction contract was awarded in January 2018. Signs were fabricated and delivered late fall 2018. Due to operational constraints and insufficient funding for electrification, the project has been suspended indefinitely.				
Highway 101 Pedestrian/Bicycle Overpass Project (PE-11011)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$5,096,952	\$24,592,167	Public Works	Construction	Summer 2021

Traffic and Transportation Projects

Status as of December 2019

	Project Status: This project, part of the Council Infrastructure Plan, includes the design and construction of a new pedestrian bridge across Highway 101 at Adobe Creek. Council approved a design contract in May 2016 for preliminary design and environmental assessment services. The contract was amended in December 2017 and June 2019 to provide the final design and bidding/construction support services, respectively. Upon approval of the project design, right-of-way certification, and encroachment permit, Caltrans granted federal funds authorization (E-76) in August 2019. The project was issued for bids in August 2019 and Council approved a contract with Granite Construction on November 18, 2019. Construction is anticipated to begin in January 2020 and end in summer 2021.				
Downtown Mobility and Safety Improvements (PL-16001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$1,924,945	\$1,845,547	Office of Transportation	Completed	Fall 2019
	Project Status: Phase 1, which included the replacement of all existing pedestrian signal heads with countdown pedestrian signal heads was completed in early 2017. Phase 2, included the construction of curb extensions and the installation of new pedestrian signal heads and traffic signal modifications was completed in 2019 as part of the Upgrade Downtown underground utilities replacement project.				
Parking Management and System Implementation (PL-16002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$248	\$ 1,287,123	Office of Transportation	Design	Spring 2022
	Project Status: This project includes implementation and installation of equipment to implement the outcomes of the paid parking study for downtown, including the Comprehensive Parking Permit and Citation System. Professional Account Management (Duncan) was selected as the City's service provider for the comprehensive permit and citation management system. System design started in fall 2019. Base system is on schedule to launch in select districts in fall 2020.				
El Camino Real Pedestrian Safety	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion

Traffic and Transportation Projects

Status as of December 2019

and Streetscape Project (PL-18000)	\$113,422	\$6,481,553	Office of Transportation	Pre-Design	Summer 2021
	Project Status: The El Camino Real Pedestrian Safety and Streetscape Project will install complete streets improvements focused on pedestrian safety at controlled and uncontrolled crosswalks, enhanced bus operations at two existing major transit stops, and new urban design amenities between Stanford Avenue and Sheridan Avenue. The project includes: Curb extensions; median refuges; median shade trees; pedestrian scale lighting and potential bus enhancement.				
Embarcadero Road at El Camino Improvements (PL-15001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$871,548	\$7,470,939	Office of Transportation	Design	Spring 2023
	Project Status: This project includes the planning, design and construction of bicycle, pedestrian and traffic circulation improvements along Embarcadero Road between Bryant Street and El Camino Real. The concept approved by Council includes Class IV raised separated bike-ways between the Caltrain Path, Bryant Street Bicycle Boulevard and Stanford Perimeter Trail, a protected intersection for bicyclists and pedestrians at El Camino Real, intersection realignments at High Street, Emerson Street and Kingsley Avenue, new landscaping, transit amenities, and pedestrian safety enhancements.				
Quarry Road Improvements and Transit Center Access (PL-16000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$7,470,939	Office of Transportation	Design	Fall 2022
	Project Status: This project includes 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 a new bicycle, pedestrian, and transitway between the Palo Alto Transit Center bus depot and the intersection of Quarry Road and El Camino Real has been completed. Implementation is timed to support expanded operations of the hospital and the completion of Caltrain electrification in 2022.				

Traffic and Transportation Projects

Status as of December 2019

Emergency Vehicle Traffic Signal Preemption System Pilot (PL-19000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$597,500	Palo Alto Fire Department	Design	Fall 2020
	Project Status: This project will purchase and implement an emergency vehicle preemption system pilot project. The system will integrate with the City's current traffic signal management system and with the City's computer- aided emergency response dispatch system to provide safer and quicker response times for emergency vehicles. Staff has procured a cost estimate from one vendor and is finalizing a contract for sole source services. Project start date is anticipated for spring 2020.				
Railroad Grade Separation and Safety Improvements (PL-17001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$2,101,075	\$12,401,738	Office of Transportation	Design	Summer 2024
	Project Status: 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 Project Study Report and environmental analysis that will be required for the City to realize its goals of advancing grade separations. This capital project provides funds for a contract with AECOM to do engineering support for the rail grade separation studies. Funding for safety improvements at the railroad crossing at Alma Street and Churchill Avenue has been moved into a separate project, Churchill Avenue/Alma Street Railroad Crossing Safety Improvement Project (PL-20001).				
Downtown Automated Parking Guidance Systems, Access Controls & Revenue Collection Equipment	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$130,028	\$2,977,803	Office of Transportation	Design	Spring 2021

Traffic and Transportation Projects

Status as of December 2019

(PL-15002)	Project Status: This project includes design and installation of new downtown parking guidance systems, access controls and revenue collection equipment that will be coordinated with both the Downtown Parking Wayfinding, PL-15004 project and the Downtown Parking Management Study that is scheduled to be completed at the end of 2016. Following City Council direction in April 2016, Staff has advanced the design of the single space detection system with individual indicator lights. Staff contracted with Dixon Resources for additional management support in design and procurement for the system installation in the Downtown garages on University Avenue.
------------	---

Recurring Projects

Bicycle and Pedestrian Transportation Plan Implementation (PL-04010)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$2,367,931	\$2,321,200	Office of Transportation	N/A	Recurring
	Project Status: The Neighborhood Traffic Safety and Bicycle Boulevards Phase 1 Project along Amarillo Avenue/Moreno Avenue, and Ross Road were completed in November 2018. The remaining segments of Bryant Street and Louis Road/Montrose Avenue are on hold until further Council review in 2019. Conceptual plans for the Neighborhood Traffic Safety and Bicycle Boulevards Phase 2 Project along Bryant Street, Maybell Avenue, Stanford Avenue, and Park Boulevard/Wilkie Way were adopted by City Council in 2015. Phase 2 is on hold at 75% design until further Council review in early 2020.				
Safe Routes To School (PL-00026)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$89,373	\$222,300	Office of Transportation	N/A	Recurring

Traffic and Transportation Projects

Status as of December 2019

	Project Status: This project enables the City's Safe Routes to School program, including school commute planning, encouragement activities, and capital improvements along local and collector streets that may be impacted by school commute activities. The capital improvements include traffic calming devices, enhanced crosswalks, and improved signage along suggested safe routes to school. In FY 2020, traffic calming projects will continue and traffic studies will be pursued for locations in need of traffic calming and other safety countermeasures. In FY 2020 and 2021, enhanced signage, striping and buffers on East Meadow Drive from Alma to Fabian Way, on Fabian Way from East Meadow Drive to East Charleston Road, and the widening and repaving of the Waverley Bike Path between East Meadow Drive and Charleston Road.				
Parking District Implementation (PL-15003)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$32,760	\$272,100	Office of Transportation	N/A	Recurring
	Project Status: This project implemented the signage needs of the residential preferential parking program. Phase 1 of the Downtown Residential Preferential Parking Program was implemented in October 2015, Phase 2 was implemented in April 2016, and the program was made permanent in April 2017. The Evergreen Park-Mayfield RPP program was made permanent in April 2018. The Southgate RPP program was made permanent in October 2019. The Old Palo Alto pilot was approved by Council and began in November 2019.				
Traffic Signal and Intelligent Transportation Systems (PL-05030)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$368,200	\$2,461,200	Office of Transportation	N/A	Recurring

Traffic and Transportation Projects

Status as of December 2019

	Project Status: This project will include design and construction of traffic signals, traffic signal communications networks, detection and data 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 related field equipment. The new controllers enable additional traffic signal timing strategies and improve the reliability of the City's traffic signals.				
Transportation and Parking Improvements (PL-12000)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$290,303	\$337,000	Office of Transportation	N/A	Recurring
	Project Status: This project implements miscellaneous neighborhood traffic calming improvements including neighborhood traffic studies and parking improvements. This project also funds the development of grant proposals used to procure funding for future projects. Projects which are currently in progress include the Middlefield North Traffic Safety Project, Crescent Park neighborhood safety improvement pilot, and Charleston/San Antonio Traffic Signal Safety and Operations Improvement Project.				

Airport Projects

Status as of December 2019

One-Time Projects

Airport Apron Reconstruction (AP-16000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$13,499,947	\$41,987,059	Public Works	Construction	Summer 2022
	Project Status: This project includes the design and reconstruction of the Palo Alto Airport apron and is being implemented in multiple phases. The pavement surfaces at the airport are failing and uneven. The need to reconstruct the aircraft parking apron is critical to airport safety. Construction Phase I was completed in November 2017. Construction Phase II will be completed in Winter 2020. Construction on Phase III is scheduled to begin in FY 2021.				
Airport Facilities Electrical Improvements (AP-20000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$206,000	Public Works	Design	Fall 2020
	Project Status: This project upgrades the outdated electrical panels for the Palo Alto Airport office rental spaces. The project design phase is nearing completion and the solicitation process is tentatively scheduled for May 2020.				

Recurring Projects

2019-2023 – Airport Capital Improvements Program Projects: *There are no recurring projects scheduled at this time.*

Electric Fund Projects

Status as of December 2019

One-Time Projects

230 kV Electric Intertie (EL-06001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$578,055	\$440,045	Utilities	Pre-Design	Summer 2020
	Project Status: This project is used to perform a technical feasibility study to determine the general project requirements to establish a 230 kV electric intertie line and construct a 230/60 kV substation to connect the City's electric system directly to the 230kV transmission line. The City has presented its findings to Stanford University and SLAC National Accelerator Laboratory (under the oversight of the Department of Energy), the two other parties involved with facilitating this work. The City is waiting for a response from SLAC and Stanford University to determine whether this project will move forward.				
Capacitor Bank Installation (EL-16002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$180,434	\$186,300	Utilities	Design	Fall 2020
	Project Status: This project installs capacitor banks at electric substations and on distribution lines to ensure Northern California Power Association Power Factor requirements are met. Staff has performed an analysis on where capacitors are needed to provide VAR support to the system. Capacitor banks will be installed at Hanover, Hansen Way, Quarry Road and Park Boulevard Substations. Capacitor banks have been ordered, and the first installation has been completed at Hansen Way substation. The remaining installations will happen in phases and are expected to be completed by fall 2020.				
Coleridge Cowper Tennyson 4/12kV Conversion (EL-14000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$29,827	\$980,000	Utilities	Design	Summer 2021
	Project Status: This project converts the primary electric distribution system in the Coleridge/Cowper/Tennyson area from 4 kV to 12 kV. This project is a precursor to work being planned for Colorado/Hopkins Substations. Design is at 75% completion as of December 2019.				
Colorado Power Station	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion

Electric Fund Projects

Status as of December 2019

Equipment Upgrades (EL-19001)	\$922,316	\$2,762,500	Utilities	Design	Fall 2021
	Project Status: This project provides funding to replace aging peripheral equipment used on the substation transformer banks at the Colorado Power Station, but the project scope has been reassigned for the replacement of the failed COP-2 transformer replacement. The aging peripheral equipment will be dealt with in future years. Ongoing funding will be used to deal with the COP-3 transformer bank.				
Colorado Substation Site Improvements (EL-19002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$16,360	\$500,000	Utilities	Pre-Design	Fall 2021
	Project Status: This project will make modifications to the substation driveways and fence to provide adequate ingress and egress for utility vehicles used for maintenance and repair.				
Colorado Hopkins System Improvement (EL-15000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$3,518,000	Utilities	Pre-Design	Summer 2027
	Project Status: This project will replace deteriorating equipment which will increase system capacity and improve service reliability for the areas served by the Hopkins and Colorado substations and adjacent substations. After performing the preliminary engineering analysis, it has been decided to rebuild Hopkins substation to a 12kV substation. Design on this project will begin summer 2020.				
East Meadow Circles 4/12kV Conversion (EL-17001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$38,704	\$1,014,995	Utilities	Pre-Design	Spring 2022
	Project Status: The project converts the primary electric distribution system in the East Charleston/Alma Street/East Meadow Drive/Middlefield Road area from 4 kV to 12 kV. This project is in the preliminary stages of assessment for engineering design. The project 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. Some work has been done evaluating the condition of the existing poles in the project area. Engineering is continuing to work on a preliminary design that should be completed May 2020.				

Electric Fund Projects

Status as of December 2019

Facility Relocation for Caltrain Modernization (EL-17007)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$103,587	\$3,062,000	Utilities	Design	Fall 2020
	Project Status: The Utilities Department received approval from Caltrain to continue removal of the overhead lines in October 2018. The installation of the Overhead Catenary System above the rails to power the trains will cause conflicts with the City's overhead electric and communication lines, as well as those owned by others, including AT&T and Comcast, which cross the railroad tracks. Engineering completed the design work in November 2019. Due to Operations staffing constraints, the work will be completed by contractors. Work includes raising the lines at eight crossings and undergrounding the lines at two crossings. The bid package is currently with Purchasing for review and advertisement. This bid package is being issued in conjunction with EL-19004 – Wood Pole Replacement in the hopes of obtaining bettering bid prices.				
Hopkins Substation 4/12kV Conversion (EL-20000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$5,693,000	Utilities	Pre-Design	Spring 2023
	Project Status: This project converts the distribution system connected to the Hopkins Sub-station from 4kV to 12kV. Engineering design is to begin on this project in fall 2020.				
HCB Pilot Wire Relay Replacement (EL-17005)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$305,123	\$819,660	Utilities	Construction	Summer 2022
	Project Status: This project replaces the existing HCB pilot wire relays with a 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. Staff has completed the relay replacement between line sections HO-QR, MB-EM and EM-AC and is working on the design for the replacement of relays between line sections COP-PB, COP-AC and COP-HO.				
Rebuild Underground District 15	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$43,348	\$506,111	Utilities	Design	Spring 2021

Electric Fund Projects

Status as of December 2019

(EL-11003)	Project Status: This project rebuilds and replaces the underground electric system in Underground District 15, the area bounded by Los Palos Avenue, Glenbrook Drive, Pomona Avenue, and Arastradero Road. This project is in the preliminary stages of engineering design and work will be coordinated with EL-16000 which is currently rebuilding the electric system along Arastradero Road. Work on this project has been delayed due to public input regarding the design of the project. Utilities has had meetings with the residents, UAC, and Council. This project will be bundled with other similar type jobs for better bid results.				
Reb Underground District 16 (EL-13003)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$10,858	\$398,254	Utilities	Design	Spring 2021
	Project Status: This project rebuilds and replaces the underground electric system in Underground District 16, the area along Louis Road between Greer Street and Loma Verde Avenue. This project design is nearly complete and Utilities staff will be soliciting the construction phase for contract labor. This project will be bundled with other similar type jobs for better bid results.				
Rebuild Underground District 19 (EL-11008)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$149,023	\$0	Utilities	Construction	Summer 2020
	Project Status: This project rebuilds and replaces the underground electric system in Underground District 19, the area bounded by Forest Avenue, Waverley Street, Addison Avenue, and Alma Street. Much of this work needs to be performed during the evening or after hours to avoid impacting commercial businesses, which increases the construction timeline. Construction by city staff is approximately 85% completed for this area, but is currently delayed due to a shortage of Operations staff. Due to the work location and the impact to commercial customers, this work is being kept inhouse rather than contracting the remaining work. Work will begin again once the work can be scheduled with Operations and impacted customers can be notified. Work is being done in conjunction with EL-10006.				
Rebuild Underground District 20	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$9,969	\$1,409,968	Utilities	Design	Summer 2024

Electric Fund Projects

Status as of December 2019

(EL-14002)	Project Status: 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. Design is 50% completed as of December 2019.				
Rebuild Underground District 23 (EL-17000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$1,264,000	Utilities	Pre-design	Summer 2024
	Project Status: This project rebuilds and replaces the underground electric system in Underground District 23, the area bounded by Chaucer Street; Hamilton Avenue; and Southwood Drive. This project is in the preliminary stages of assessment for engineering design. Design on this project will begin January 2021.				
Rebuild Underground District 24 (EL-10006)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$1,885,129	\$2,529,220	Utilities	Construction	Fall 2020
	Project Status: This project rebuilds and replaces the underground electric system in Underground District 24, the area bounded by Lytton Avenue; Bryant Street; Forest Avenue; and Alma Street. Construction by city staff is approximately 85% completed but is currently delayed due to a shortage of Operations staff. Due to the work location and the impact to commercial customers, this work is being kept inhouse rather than contracting the remaining work. Work will begin again once the work can be scheduled with Operations and impacted customers can be notified. Work is being done in conjunction with Rebuild Underground District 19 (EL-11008).				
Rebuild Underground District 25 (EL-19000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$9,266	\$242,600	Utilities	Design	Winter 2021
	Project Status: This project rebuilds and replaces the underground electric system in Underground District 25. District 25 includes Orme Street between Los Robles Avenue and Juana Briones School. Engineering design is currently in progress and is awaiting the procurement of an easement on private property. Once granted the project will be released and scheduled with Electric Operations for construction.				
Rebuild	Prior Years	Total Project	Implementing	Project Phase	Project Completion

Electric Fund Projects

Status as of December 2019

Underground District 26 (EL-16000)	Actuals	Budget	Department		
	\$4,800	\$796,830	Utilities	Design	Spring 2021
	Project Status: This project rebuilds and replaces the underground electric system in Underground District 26 the area along Arastradero Road between El Camino Real and Hillview Avenue. This project is in the preliminary stages of assessment for engineering design and will be designed in conjunction with EL-11003 which is rebuilding the electric system on Los Palos Avenue, Glenbrook Drive, and Pomona Avenue. This project will be bundled with other similar type jobs for better bid results.				
Rebuild Underground District 30 (EL-19003)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$1,556,000	Utilities	Pre-Design	Summer 2024
	Project Status: 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. Design on this project to begin July 2021.				
Reconfigure Quarry Feeders (EL-14005)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$469,506	\$1,036,776	Utilities	Construction	Fall 2020
	Project Status: This project reconfigures how distribution circuits are connected to each substation transformer at Quarry Substation. While phases of this project have been completed in construction, others phases still need to be designed and constructed. The final phase of this project is in design. Construction is scheduled for fall 2020.				
Smart Grid Technology Installation (EL-11014)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$736,960	\$20,066,110	Utilities	Pre-Design	Fall 2024
	Project Status: Council approved proceeding with Advanced Metering Infrastructure (AMI) and associated smart grid investments in December 2018. AMI is a foundational technology that is becoming a standard in the utilities industry and will improve customer experience while enabling CPAU to operate more effectively. An AMI-based smart grid system will empower customers to more efficiently utilize utility supplies, facilitate customer				

Electric Fund Projects

Status as of December 2019

	adoption of distributed energy resources (DER) such as solar photovoltaics (PV) and electric vehicles (EV), and enable the timely detection of water leaks. AMI will also enable CPAU to optimize operations and improve reliability by reducing restoration time for outages.				
Substation 60kV Breaker Replacement (EL-17002)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$248,238	\$3,413,180	Utilities	Design	Summer 2024
	Project Status: This project replaces high voltage circuit breakers that interconnect the nine electric substations and two power switching stations that are reaching the end of their useful life and/or are now underrated for the use. Staff completed the first phase of procurement and installation, and is now moving onto a procurement package that will be renewed up to 5 total years to complete all needed upgrades.				
Substation Physical Security (EL-16003)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$212,719	\$2,139,796	Utilities	Design	Winter 2023
	Project Status: This project installs facilities providing physical protection of electric substations from vandalism and intrusion. A professional services contract was awarded to Burns & McDonnell and the study is complete and is being reviewed by staff for projects to be implemented this Fiscal Year. Funding will be requested in future years to implement additional security measures. Current funding is addressing fencing, tree trimming, and substation lighting.				
Utility Site Security Improvements (EL-04012)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$1,539,560	\$1,644,681	Utilities	Construction	Spring 2021
	Project Status: This project adds electronic security systems at utility sites to protect equipment at electric substations, water pumping plants, reservoirs, and gas stations from intrusion and vandalism. To date, cameras and detection systems have been installed at nine (9) electric substations, three (3) water stations, and one (1) natural gas station to monitor facilities. Staff is working on standardizing equipment and video management software across departments. This project is 75% completed. Video feeds have been transferred to new software, but motion and door alarms remain.				

Electric Fund Projects

Status as of December 2019

VA Hospital – Customer Load Requirements (EL-17003)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$84,984	\$0	Utilities	Design	Summer 2023
	Project Status: This project is to meet the growing electric needs of the VA Hospital. Staff has had numerous discussions with VA Hospital on electric load growth at the hospital and anticipated needs from the utility. Much of the cost is reimbursed to the City by the VA Hospital. Staff has prepared preliminary designs for interim solutions and is awaiting additional information from VA to develop long range plans to meet their future needs.				
Underground District 42 – Embarcadero Road, Emerson, Middlefield	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$2,050,000	Utilities	Pre-Design	Spring 2024
	Project Status: 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.				
Underground District 46 – Charleston/El Camino Real (EL- 12001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$2,328,463	\$3,920,203	Utilities	Construction	Fall 2021
	Project Status: This project undergrounds the existing overhead utility systems in the area along the 400 block of West Charleston and El Camino Real. Underground substructures have been installed. A shortage of Operations staff has caused a review and revision of construction plans. Staff is now working on a bid package to complete the reconstruction of the 60kV line, installation of steel poles, and removal of the overhead wires.				
Underground District 47 – Middlefield, Homer, Webster,	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$3,190,128	\$3,636,183	Utilities	Construction	Summer 2020
	Project Status: This project undergrounds the existing overhead distribution system in the area bounded by				

Electric Fund Projects

Status as of December 2019

Addison (EL-11010)	Middlefield Road, Homer Avenue, Webster Street, and Addison Avenue. Installation of substructures and utility electric system is completed. There is only one customer who has not converted their service and staff is working with the customer to get this accomplished. Where possible, the overhead electric lines are being removed and poles cut down to the level of the communication lines.
-----------------------	---

Recurring Projects

Communications System Improvements (EL-89031)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$800,766	\$100,000	Utilities	N/A	Recurring
	Project Status: 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. Staff is assessing the needs to upgrade the communication lines between substations to facilitate the substation protection pilot wire relay replacements. The new relays utilize fiber optic communication instead of the copper wire communication lines utilized by the existing relays. No additional work has been completed at this time due to higher project priorities.				
Electric Customer Connections (EL-89028)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$2,648,995	\$2,400,000	Utilities	N/A	Recurring
	Project Status: This project installs services, transformers, and meters for new customers; upgrading of existing services; temporary service connections; and overhead and underground extensions for new or existing customers. Projects are in various stages of design and construction to provide temporary and permanent power to residential and commercial customers in Palo Alto.				
Electric System Improvements (EL-98003)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$2,414,005	\$1,500,000	Utilities	N/A	Recurring
	Project Status: This project consists of various projects that replace deteriorated facilities or install protective devices that improve the Electric Distribution System. Projects are in various stages of development to replace				

Electric Fund Projects

Status as of December 2019

	transformers, replace poles, replace overhead wires, and install protective devices to improve service reliability.				
Electric Utility Geographic Information System (EL-02011)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$68,904	\$326,000	Utilities	N/A	Recurring
	Project Status: This project enhances 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. Staff is working on a scope of work for an RFP to assess GIS needs for Utilities Engineering. This funding is also being used to pay for Utilities Electric Division's share of cost for the implementation of new city-wide GIS system (ESRI) led by IT.				
SCADA System Upgrades (EL-02010)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$63,805	\$265,000	Utilities	N/A	Recurring
	Project Status: This project upgrades the Supervisory Control and Data Acquisition (SCADA) system hardware. Staff completed upgrade of the servers in 2014 used for monitoring the utility substations and equipment and will be performing the next server and software upgrade in 2020.				
Substation Facility Improvements (EL-89044)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$375,144	\$327,800	Utilities	N/A	Recurring
	Project Status: This project makes improvements to facilities at the electric substations in Palo Alto. Staff is working on the replacement of Remote Terminal Units (RTU) at various substations, upgrading gravel and grounding, and reconfiguring steel trusses and associated devices.				
Substation Protection Improvements (EL-89038)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$690,592	\$300,000	Utilities	N/A	Recurring
	Project Status: This project makes improvements to equipment used at electric substations to protect the substation equipment and circuits emanating from the substation from damage due to faults (i.e. short circuits)				

Electric Fund Projects

Status as of December 2019

	on the electric system. Staff completed the 60kV coordination study and is working on designs for improvements..				
Underground System Rebuild (EL-16001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$22,478	\$350,000	Utilities	N/A	Recurring
	Project Status: This project replaces underground electric equipment in areas that were originally installed underground, i.e. not part of an Underground District. Staff is working to identify areas where based on the age of the existing cables are a high priority for cable replacement. So far this includes areas in the Stanford Research Park, Arastradero Road, and along East Bayshore Road. New areas have been identified but no progress has been made on development of the project as staff are currently working on other projects with higher priorities.				
Wood Pole Replacement (EL-19004)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$26,395	\$1,500,000	Utilities	N/A	Recurring
	Project Status: This project will fund the annual replacement of deteriorated wood power poles. Staff has identified 84 wood poles for the pole replacement contract and are currently the bid package has been submitted to Purchasing for review and advertisement. This bid package is being issued in conjunction with EL-17007 Facility Relocation for Caltrain Modernization, in the hopes of obtaining bettering bid prices.				
Upgrade Electric Estimating System (EL-13008)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$23,148	\$0	Utilities	N/A	Recurring
	Project Status: This project upgrades the existing Electric estimating software used for preparing job estimates by integrating engineering analysis, adding predefined standards and templates, and by integrating documentation, materials ordering, and work management functions. Staff completed the underground construction standards and the draft of the overhead construction standards for electric installations. The software used for project estimating was upgraded to the latest version. Staff is working with IT to facilitate the transition of the mapping and estimating software to ESRI.				

Fiber Optics Fund Projects

Status as of December 2019

One-Time Projects

Fiber Optic System Rebuild (FO-16000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$167,167	\$1,292,165	Utilities	Design	Spring 2021
	Project Status: This project is for the System Capacity Improvement that rebuilds portions of the "dark" fiber optic network around Palo Alto. The first phase of this project has been constructed. The remaining phases are in design. Higher priority projects and staffing constraints are preventing this project from completing the design.				

Recurring Projects

Fiber Optics Network System Improvements (FO-10001)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$1,009,942	\$500,000	Utilities	N/A	Recurring
	Project Status: This project improves the reliability within the fiber optic network system. A project to install a new fiber optic cable from Park Substation to the Stanford Research Park to enhance capabilities and reliability is identified and waiting for availability of staff to design				
Fiber Optics Customer Connections (FO-10000)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$133,326	\$250,000	Utilities	N/A	Recurring
	Project Status: This project enables the installation of fiber optic infrastructure for new service connections. Projects are developed as needed to meet customer requests for leasing of fibers on the Dark Fiber system. Staff have processed and completed X number of 3 customer connection projects in Q1 and Q2. This is in addition to several smaller projects involving existing fiber optic cable connections that did not require additional engineering design and were handled directly by Operations staff.				

Gas Fund Projects

Status as of December 2019

One-Time Projects

Gas Main Replacement Project 23 (GS-13001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$154,872	\$11,124,281	Utilities	Design	Fall 2021
	Project Status: This project enables the design and construction to replace approximately 22,700 linear feet (which represents 2.0% of the City's Gas distribution main system) of distribution main and 320 gas service laterals constructed mainly of PVC material on various streets within the Midtown, Midtown West, Evergreen, Ventura, and Green Acres neighborhoods. The design is expected to be completed in spring 2020 with construction beginning in winter 2021.				
Gas ABS/Tenite Replacement Project (GS-18000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$31,015	\$2,615,100	Utilities	Design	Spring 2020
	Project Status: This project replaces approximately 130 gas services laterals constructed of Acrylonitrile-butadiene-styrene (ABS) or Tenite material on various streets. Council approved funding in June 2019. Construction began in fall 2019 and will be completed in spring 2020.				

Recurring Projects

Gas System, Customer Connections (GS-80017)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$1,039,110	\$1,342,415	Utilities	N/A	Recurring
	Project Status: This project enables 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. 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. City crews completed approximately 80 new gas services between July 2019 and December 2019.				

Gas Fund Projects

Status as of December 2019

Gas Distribution System Improvements (GS-11002)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$9,600	\$500,000	Utilities	N/A	Recurring
	Project Status: This project enables Gas Distribution System improvements. Typical activities include: increasing distribution system capacity for load growth, replacing deteriorated capital facilities, reconfiguring/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. The City must continuously evaluate service reliability needs and make improvements to the system to maintain top level service to City customers and to minimize potential economic losses due to service interruptions. In the first half of FY 2020, approximately 300 feet of natural gas mains and 10 natural gas services identified in non-standard locations were either upgraded or replaced.				
Gas Equipment and Tool (GS-13002)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$117,005	\$100,000	Utilities	N/A	Recurring
	Project Status: This project purchases polyethylene (PE) fusion equipment and tools, directional boring/locating equipment and tools, and general shop equipment and tools. The equipment needs to be upgraded on an annual basis to safely operate and maintain a natural gas distribution system and to ensure operators' safety and productivity. Some recent purchases include large diameter tapping, stopping machines and a pressure recording chart.				
Gas Meters and Regulators (GS-80019)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$45,551	\$250,000	Utilities	N/A	Recurring
	Project Status: This project provides replacement of the existing gas meters and regulators annually. The coordination of gas meter and regulator replacements with gas meters identified to be replaced under the AMI contract, which is generally gas meters that are 25 years or older. The gas meter replacement program ensures the accuracy of gas consumption measurement, reduces possible revenue loss due to under-registered gas, and provides customers with accurate monthly bills.				

Storm Drain Projects

Status as of December 2019

One-Time Projects

Corporation Way System Upgrades and Pump Station (SD-21000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$3,166,000	Public Works	Design	Winter 2021
	Project Status: This project incorporates a design of a new small pump station with 25 cubic feet per second capacity and upgrades 700 linear feet of storm drain pipe to 30-inch High Density Polyethylene. The existing system does not have the force needed to discharge storm flows into the Adobe Creek. Adding a pump station in advance of the outfall and upsizing the storm drain pipe will eliminate the routine flooding along East Bayshore Road and convey runoff from a 10-year storm event. Proposals were received in November 2019 for a design contract. Staff anticipates awarding a construction contract in summer 2020, with construction beginning in fall 2020.				
Loma Verde Avenue Trunk Line Improvements (SD-19000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$45,028	\$2,976,813	Public Works	Design	Fall 2020
	Project Status: This project provides replaces 1,750 linear feet of storm drain pipe with 48-inch High Density Polyethylene and replace associated catch basins, laterals and manholes. This project was dependent on completion of the Matadero Creek Storm Water Pump Station Project, located downstream from Loma Verde Avenue storm drain improvements. The procurement for a construction contract is scheduled for winter 2020. Construction is planned to begin spring 2020.				
West Bayshore Road Pump Station (SD-20000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$2,624	\$1,339,400	Public Works	Design	Winter 2021
	Project Status: This project incorporates design and construction of a new small pump station with 15 cubic feet per second capacity. The Storm Drain Master Plan identifies this as a high priority project. Installing a new pump station will allow storm flows to be pumped into the Adobe / Barron Creek confluence while adding a pump station in advance of the outfall would eliminate the routine flooding along West Bayshore Road and allow the system to convey runoff from a 10-year storm event. Proposals were received in November 2019 for a design contract. Staff anticipates awarding a construction contract in summer 2020, with construction beginning in fall 2020				

Storm Drain Projects

Status as of December 2019

Recurring Projects

Storm Drainage System	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
Replacement and Rehabilitation (SD-06101)	\$461,993	\$2,159,481	Public Works	N/A	Recurring
Project Status: This project provides for annual replacement and rehabilitation to maintain the integrity of the storm drain system, including deteriorated storm drain pipes, manholes, and storm drain inlets. The current project to rehabilitate an existing box culvert over Oregon Expressway is underway. The design was finalized in December 2019. The project will go out to bid and staff anticipates awarding a construction contract will occur in spring 2020 with construction completing in fall 2020.					

Water Fund Projects

Status as of December 2019

One-Time Projects

Mayfield Reservoir Subgrade and Venting Repair (WS-19000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$600,000	Utilities	Construction	Summer 2020
	Project Status: This project is part of the City's recent Seismic Upgrade and Emergency Water Supply and Storage Projects. The reservoir was drained in 2012 for approximately two years to allow extensive seismic rehabilitation work to be performed and construction of a new pump station. Subsequently hairline cracks were sealed in the reservoir. A geotechnical consultant was hired to evaluate the tank foundation. This study was completed and there were several options identified. Staff has completed the design of the vent screen replacement and crack sealing. A construction contract was awarded in fall 2019 and work is anticipated to start in January 2020.				
Water Main Replacement Project 27 (WS-13001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$148,886	\$ 7,787,000	Utilities	Construction	Summer 2020
	Project Status: This project will replace approximately 9,600 linear feet of structurally deficient, aging, or corroded water mains and services along the mains on Sand Hill Road, Oak Creek Drive (5%) and Fulton Avenue. The project is currently under construction except for the Oak Creek Drive (95%) portion of the work that should be done after Stanford's bank stabilization project is complete.				
Water Regulation Station Improvements (WS-07000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$ 1,476,112	\$ 797,100	Utilities	Pre-Design	Winter 2020
	Project Status: This project for Water Regulation Station Improvements includes seismic upgrades, piping improvements and other various upgrades to increase the structural reliability of three of the City's turnouts with SFPUC. Work under this project was included in the Seismic Upgrade of four Steel Tanks and three Turnouts' Project and the project was completed and closed out. Due to multiple existing issues at the California Turnout, upgrade work at this facility has been removed from the contract and will be re-evaluated. The Water Configuration Study was terminated and staff will review the needs at a Pre-Design level. Additionally, new issues with the pressure reducing valves in the Page Mill and Arastradero regulating stations				

Water Fund Projects

Status as of December 2019

	were found and will be addressed.				
Water Recycling Facilities (WS-07001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$ 705,477	\$ 852,699	Utilities	Pre-Design	Fall 2023
	Project Status: This project allows the City to hire a consultant to prepare a business plan, prepare preliminary design, and secure funding options for an expansion of the existing recycled water delivery system in the City. The pipeline will primarily serve the Stanford Research Park and provide an alternative supply source of 435,600 cubic feet per year, roughly 10% of Palo Alto's total water consumption in 2015. The environmental impact report was completed in September 2015. The expansion pipeline is one of several water reuse projects being considered in the Northwest County Recycled Water Strategic Plan. This, or one of the other projects, may be recommended to Council for design and construction. The earliest that work would commence is in FY 2022.				
Water Reservoir Coating Improvements (WS-08001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$ 1,624,519	\$ 2,141,182	Utilities	Design	Winter 2020
	Project Status: This project for Water Reservoir Coating Improvements includes the recoating of four steel tanks. Work under this project was included in the Seismic Upgrade of four Steel Tanks and the three Turnout Projects. Once construction started, it was found that the Montebello Reservoir was in very poor condition. Due to escalating costs associated with roof replacement, staff decided to complete construction of the Montebello Reservoir and re-evaluate the remaining three tanks for replacement. Coating work at the three remaining steel tanks (Dahl, Park and Corte Madera Reservoirs) was removed from the construction contract. The City contracted with an engineering consultant to study the water system as a whole and make recommendations for upgrades and/or improvements. During the Water Configuration Study, the Corte Madera Reservoir was found to be in critical condition and was recommended to be replaced. Part of the funding for the new reservoir will come from this task. The Water Configuration Study contract was terminated due to Consultant's staffing inability to complete the project. This CIP is scheduled to be closed and the remaining funds are to be returned to reserves.				

Water Fund Projects

Status as of December 2019

Water Tank Seismic Upgrade and Rehabilitation (WS-09000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$ 3,617,775	\$ 11,728,043	Utilities	Design	Summer 2021
	Project Status: This project for Seismic Water System Upgrades includes seismic upgrades at the Montebello, Mayfield, Corte Madera, Park, Boronda, and Dahl Reservoirs in compliance with the American Society of Civil Engineers (ASCE 7) seismic codes. Work at the steel tank sites includes the installation of new concrete footings, anchor chairs and tie-downs, installation of seismic shut off valves and control valves, flexible joints at the inlet/outlet piping connections, relocation of various inlet and outlet piping, backup power supplies, and reinforcement and/or replacement of interior tank columns. Seismic upgrade work at the Mayfield Reservoir was completed in summer 2013 and work on the Boronda Reservoir was completed in summer 2016. All remaining reservoirs were to be seismically upgraded as part of the Seismic Upgrade of four Steel Tanks and three Turnouts' Project. However, during construction at the Montebello Reservoir, it was found that the existing roof, support columns and support beams, and floor coating needed total replacement due to their poor condition. Given that all four tanks were constructed at the same time, staff assumes that the remaining three tanks are in the same condition. In order to determine the most efficient way to upgrade and/or replace the remaining three reservoirs, upgrade work at the Corte Madera, Park and Dahl Reservoirs has been removed from the construction contract. The City is currently under contract with an engineering consultant to study the water system as a whole and make recommendations for upgrades and/or improvements. During the Water Configuration Study the Corte Madera Reservoir was found to be in critical condition and was recommended to be replaced. Most of the funding for the new reservoir will come from this task. Design documents to a 25% level were completed. Request for Proposals for the Design/Build project are being solicited.				
Water Main Replacement Project 28 (WS-14001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$ 9,085,107	Utilities	Pre-Design	Winter 2022
	Project Status: This project will replace approximately 11,810 linear feet (which represents 1.1% of the City's water distribution system) of mains and services on various streets within the City, including areas in the Duveneck/St. Francis, Barron Park and Charleston Meadows neighborhoods. The recently approved capital improvement plan increases the scope of each project and staggers construction projects to every other year.				

Water Fund Projects

Status as of December 2019

Recurring Projects

Water Service Hydrant Replacement (WS-80014)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$72,158	\$ 400,000	Utilities	N/A	Recurring
	Project Status: This project replaces system control valves, deteriorated galvanized service lines, lead goose-necks, and fire hydrant valves and assemblies as a result of Fire Department flow testing; upgrades fire hydrants in main replacement project areas; and replaces existing undersized or deteriorated copper water services. In the first half of FY 2020, 16 fire hydrants were replaced.				
Water System Customer Connections (WS-80013)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$ 851,385	\$ 750,000	Utilities	N/A	Recurring
	Project Status: This project allows for improvements that include new main extensions, valves, domestic services, meters on upgraded services, backflow devices, fire services, and fire hydrants. System extensions are required to provide service to new customers and to serve existing customers requesting expanded service.				
Water Distribution System Improvements (WS-11003)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$148,016	\$ 446,620	Utilities	N/A	Recurring
	Project Status: This project enables improvements to 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. Continuous evaluation of system needs and making required improvements is necessary to maintain adequate quantities of quality water, meeting local, state, and federal safe drinking water standards. During the last six months the Mayfield Reservoir VFD replacement and back-up controls were completed. El Camino Pump Station pump programming was completed and tested to add the capability for the El Camino Reservoir to pump into zone 1 in addition to zone 2. Prior piping modifications at the pump station were completed in the first half of 2019. The 18" CCP repair and valve installation on Page Mill Road was bid as part of the WMR 27 project which is under construction. ACP pipe study began and staff is in the process of				

Water Fund Projects

Status as of December 2019

	collecting pipe samples. The Water CAD modeling software was upgraded from 2000 pipe to 5000 pipe model.				
Water General Equipment/Tools (WS-13002)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$ 0	\$ 50,000	Utilities	N/A	Recurring
	Project Status: This project acquires new equipment and tools, the replacement of existing fusion equipment, and other associated tools. The fusion equipment is used to fuse together pipe joints in the City's water distribution system. Equipment and tools are required to be upgraded on an annual basis 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. Staff did not purchase any equipment or tools in the first half of FY 2020.				
Water Meters (WS-80015)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$122,265	\$ 1,292,700	Utilities	N/A	Recurring
	Project Status: This project enables the purchasing 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 selected meters to maintain meter accuracy and reliability. Standard replacements were completed in the first half of FY 2020. During the AMI implementation process approximately 25% of the meters will be replaced.				
Water System Supply Improvements (WS-11004)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$61,673	\$ 261,620	Utilities	N/A	Recurring
	Project Status: This project evaluates and improves the City's water distribution system on an as-needed basis. 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, conditional assessment of the reliability of transmission mains, and security system installations. The water system includes the connection facilities between the City's and the San Francisco Public Utility Commission's pipelines, emergency water wells within the City, pumping stations, water reservoirs, and pipelines. Procured SCADA switches and firewall components for the fiber connections to 27 water sites.				

Water Fund Projects

Status as of December 2019

	Software to control the system was purchased too. Staff will install the hardware and software.				
Water, Gas, Wastewater Utility GIS Data (WS-02014)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$178,991	\$ 736,399	Utilities	N/A	Recurring
	Project Status: This project enables contracts related to Utilities GIS (Geographic Information System) needs. AME database is heavily utilized by Utilities Engineering staff to update the utility information in GIS. The updated information is used by various City staff, such as marking/locating underground utilities to comply with USA (Underground Service Alert) requirements; developing design drawings for pipeline replacement projects; verifying existing underground utilities during construction activities; creating customized utility map books for field crews and on-call personnel to meet their specific needs. Annual surveying contracts to collect GPS points of existing above-ground utility features within the CIP project areas. The data is used to correct the GIS database. Accurate utility data helps the design of new pipe alignment to minimize construction conflicts. Create synchronization and user interface between the upcoming Citywide ESRI GIS database and Utilities AME database.				

Wastewater Collection Fund Projects

Status as of December 2019

One-Time Projects

Wastewater Collection System Rehabilitation Augmentation Project 24 (WC-11000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$	\$3,131,595	Utilities	Completed	Fall 2019
	Project Status: This project is part of the Utilities Department plan to address areas that were identified in Wastewater Capital Improvement Project 17 (Cleaning and Video Inspection of the Collection System) as needing rehabilitation. This project was combined with Project 25 and 26(WC-12001; WC-13001). Construction was completed in September 2019.				
Wastewater Collection System Rehabilitation Augmentation Project 26 (WC-13001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$	\$3,309,998	Utilities	Completed	Fall 2019
	Project Status: This project is part of the Utilities Department plan to address areas that were identified in Wastewater Capital Improvement Project 17 (Cleaning and Video Inspection of the Collection System) as needing rehabilitation. This project was combined with Project 24 and 25(WC-11001; WC-12001). All new service laterals were installed from the new sewer main to the new sewer cleanouts located in the City's right-of-way. Construction was completed in September 2019.				
Wastewater Collection System Rehabilitation Augmentation Project 28 (WC-15001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$475,261	\$5,092,599	Utilities	Construction	Winter 2020
	Project Status: This project enables the design and construction of high priority wastewater main and lateral replacement work to reduce inflow of rainfall and ground water into the collection system. The scope is to replace approximately 10,000 linear feet of wastewater mains including Oregon Avenue, Colorado Avenue, and Lower Page Mill Rd. The project is primarily located in the Leland Manor/Garland, Midtown West, and Lower Page Mill/Los Altos Hills areas of the City. The CIP liner rehabilitation work will be within existing utility easements located on private properties. The work along Oregon Avenue is complete. Colorado Avenue and Lower Page Mill Road construction will occur in January 2020. Project completion is on schedule for February 2020.				

Wastewater Collection Fund Projects

Status as of December 2019

Wastewater Collection System Rehabilitation Augmentation Project 30 (WC-16001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$421,684	\$6,921,684	Utilities	Pre-Design	Spring 2023
	Project Status: 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 replaces 12,066 linear feet (which represents 1.1% of the City's Wastewater Collection System) for various streets in the City, including Ventura and Research 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.				
Wastewater Collection System Rehabilitation Augmentation Project 29 (WC-16001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$327,849	\$4,508,339	Utilities	Construction	Spring 2020
	Project Status: This project enables the design and construction of replacement of approximately 9,000 linear feet of wastewater mains. The sanitary sewer mains, laterals, and manholes to be rehabilitated or replaced in this project is located in the Charleston Meadows neighborhood. The City and the Contractor will provide written notification to all affected residents prior to the start of construction. Construction is expected to start in early January 2020 and last approximately three months.				

Recurring Projects

Sewer System, Customer Connections (WC-80020)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$ 295,652	\$445,000	Utilities	N/A	Recurring
	Project Status: This project installs sewer lateral connections and additions or extensions of existing mains to serve new customers and to respond to changes in sewer requirements due to redevelopment. Old existing non-plastic sewer laterals with condition deficiencies per Utilities Operations' criteria are required to be replaced. Other revenue includes customer connection and capacity fees for connecting to the wastewater collection				

Wastewater Collection Fund Projects

Status as of December 2019

	system.				
Sewer Lateral/Manhole Rehabilitation and Replacement (WC-99013)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$ 494,877	\$921,500	Utilities	N/A	Recurring
	Project Status: This project replaces defective sewer laterals, cleanouts, manholes, install backwater devices, and purchase equipment to support these activities to maintain the Wastewater Collection System. Information collected during routine annual maintenance activities is used to prioritize work. The work performed will help reduce both the backflow of sewage onto private property and the City's treatment expenses. This project also cleans and video-inspects sewer collection mains and laterals as necessary. This resulted in streamlined collection system operations and maintenance from July through December 2019 effectively and efficiently reducing SSOs.				
Wastewater General Equipment and Tools (WC-13002)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$24,204	\$50,000	Utilities	N/A	Recurring
	Project Status: This project includes the acquisition of new fusion equipment and other associated tools. The equipment is used to fuse together pipe joints in the City's wastewater collection system. As the 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 City's wastewater collection mains, along with the associated service standards and worker safety and productivity measures, equipment and tools require continuous upgrades. In the first half of FY 2020 a future trailer jetter was purchased and an CCTV van upgrade is anticipated later in the year as funds become available.				
Wastewater System Improvements (WC-15002)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$ 0	\$260,000	Utilities	N/A	Recurring
	Project Status: This project implements improvements to the Wastewater Collection System. Typical activities include: increasing system capacity for growth, flow monitoring, hydraulic modeling and system analysis, load				

Wastewater Collection Fund Projects**Status as of December 2019**

	<p>simulations, asset management analysis and assessment, system inflow/infiltration analysis, and sanitary sewer overflow monitoring and reduction. Mainline sewer backups and overflows into homes and businesses are costly and create a health risk. Reducing the losses associated with these backup claims requires a continuous evaluation of system needs and making improvements to maintain a high level of service. Replacement of the City's legacy wastewater maintenance and asset management software (ICOM) is scheduled to begin in spring 2020.</p>
--	---

Wastewater Treatment Fund Projects

Status as of December 2019

One-Time Projects

Advanced Water Purification Facility (WQ-19003)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$23,246,073	Public Works	Pre-Design	Summer 2022
	Project Status: This project enables the design and construction of 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. The water reuse partnership agreement with Valley Water and Mountain View provides \$16 million in funding from Valley Water for this project. Design is expected to be completed in FY 2021 with project completion in FY 2022.				
Outfall Line Construction (WQ-19000)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$0	\$8,219,000	Public Works	Design	Winter 2022
	Project Status: This project consists of the construction of a new parallel outfall pipe to convey final plant effluent to San Francisco Bay. Design is 90% complete. The City is expecting a State low-interest loan to be awarded for the construction phase.				
Secondary Treatment Upgrades (WQ-19001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$483,059	\$30,763,109	Public Works	Design	Fall 2024
	Project Status: This project upgrades the Secondary Treatment process at the Regional Water Quality Control Plant. The existing Secondary Treatment process has two main components; the Fixed Film Reactors (FFR) and the Activated Sludge (AS) Process. This project includes the reconstruction of the AS process, rehabilitation of the AS Aeration Basins and the elimination of the FFRs. The design contract began in October 2018. Staff is pursuing a State low-interest loan or bond for the construction phase.				
New Laboratory and Environmental Services	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$76,175	\$22,767,993	Public Works	Design	Fall 2024
	Project Status: This project replaces the existing Plant lab and environmental services offices. This building will				

Wastewater Treatment Fund Projects

Status as of December 2019

Building (WQ-14002)	consolidate staff from four separate buildings currently and will provide a larger and updated lab. The solicitation and selection of a design consultant is complete. The design contract began in February 2019. Staff is pursuing a State low-interest loan or bond for the construction phase.				
Plant Master Plan (WQ-10001)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$3,024,494	\$0	Public Works	Construction	Fall 2021
	Project Status: This project enables the ongoing program management support for major capital projects. Current tasks include developing scopes of work, evaluating consultant proposals, coordinating project management activities, pursuing State low-interest loans for multiple projects, and updating partner agreements. The consultant continues to provide support for the tasks associated with this project.				
Primary Sedimentation Tank Rehabilitation (WQ-14003)	Prior Years Actuals	Total Project Budget	Implementing Department	Project Phase	Project Completion
	\$653,663	\$20,389,640	Public Works	Design	Fall 2022
	Project Status: This project enables the design and construction for new protective coatings on each of the four concrete primary sedimentation tanks and replacement of worn rotating parts, equipment, and electrical equipment. The primary tanks at the Plant were installed in 1972. This recoating project will extend the concrete life another 30 years. Design is 90% complete. The City is expecting a State low-interest loan be awarded for the construction stage.				

Recurring Projects

Plant Repair, Retrofit and Equipment Replacement (WQ-19002)	Prior Year Actuals	Current Year Budget	Implementing Department	Project Phase	Project Completion
	\$327,099	\$7,017,719	Public Works	N/A	Recurring
	Project Status: This project enables the assessment, repair, and retrofit of the Plant's concrete and metal structures; the replacement of necessary Plant 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.				

List of Completed Projects

Attachment A

<u>CIP #</u>	<u>Project Name</u>	<u>Project Description</u>	<u>Project Type</u>	<u>Fund Source</u>	<u>Department</u>	<u>Season Completed</u>	<u>Year Completed</u>	<u>Total Project Budget **</u>
PL-16001	Downtown Mobility and Safety Improvements	This project included the construction of curb extensions and the installation of new pedestrian signal heads and traffic signal modifications in 2019 as part of the Upgrade Downtown project.	Construction	Traffic and Transportation	Office of Transportation	Fall	2019	\$ 1,819,847
FD-20002	Thermal Imaging Cameras Replacement	This project replaced the Thermal Imaging Cameras (TICs) on all fire and response vehicles used to help identify the location of victims; assess the source of fires, smoke, and heat; to assist in creating a plan of action.	Purchase	Buildings and Facilities	Fire Department	Fall	2019	\$ 99,000
WC-11000	Wastewater Collection System Rehabilitation Augmentation Project 24	This project addressed areas that were identified in Wastewater Capital Improvement Project 17 (Cleaning and Video Inspection of the Collection System) as needing rehabilitation. This project was combined with Project 25 and 26(WC-12001; WC-13001).	Construction	Wastewater Collection	Utilities	Fall	2019	\$ 3,131,595
WC-13001	Wastewater Collection System Rehabilitation Augmentation Project 26	This project was combined with Project 24 and 25(WC-11001; WC-12001). All new service laterals were installed from the new sewer main to the new sewer cleanouts located in the City's right-of-way.	Construction	Wastewater Collection	Utilities	Fall	2019	\$ 3,309,998
CB-19000	Cubberley Track and Field Replacement	This project replaced the synthetic turf field, installed an all-weather track and a fitness area.	Construction	Parks and Open Space	Public Works	Fall	2019	\$ 1,851,708
PE-14018	Baylands Boardwalk Improvements	This project replaced the existing boardwalk with similar alignment and configuration.	Construction	Buildings and Facilities	Public Works	Winter	2019	\$ 2,123,681
PE-17009	City Hall Floor 4 Remodel	This project improved the Administrative Services Department offices on the fourth floor of City Hall.	Construction	Buildings and Facilities	Public Works	Winter	2019	\$ 494,818
PE-14015	Lucie Stern Buildings Mechanical and Electrical Upgrades	This project replaced and upgraded the mechanical, electrical, and fire/life safety systems at Lucie Stern Children's Theater, Lucie Stern Community Theater, and Lucie Stern Community Center.	Construction	Buildings and Facilities	Public Works	Spring	2019	\$ 6,142,607
PL-16000	Quarry Road Improvements and Transit Center Access	This project included planning, design and construction of bicycle and pedestrian improvements along Quarry Road.	Construction	Traffic and Transportation	Planning and Community Environment	Spring	2019	\$ 5,148,378
EL-17008	Utility Control Center Upgrades	This project upgraded the Utility Control Center working environment.	Construction	Electric	Utilities	Winter	2019	\$ 499,997
GS-12001	Gas Main Replacement Project 22	This project replaced approximately 23,700 linear feet of gas mains and services along University Avenue and other streets in the Downtown North neighborhood.	Construction	Gas	Utilities	Spring	2019	\$ 11,658,997

List of Completed Projects

Attachment A

<u>CIP #</u>	<u>Project Name</u>	<u>Project Description</u>	<u>Project Type</u>	<u>Fund Source</u>	<u>Department</u>	<u>Season Completed</u>	<u>Year Completed</u>	<u>Total Project Budget **</u>
WC-12001	Wastewater Collection System Rehabilitation / Augmentation Project 25	This project was combined with Project 24 and 26 (WC-11001; WC-13001) replacing 45,294 linear feet of sanitary sewer mains in university South, Professorville and Old palo Alto neighborhoods.	Construction	Wastewater Collection	Utilities	Spring	2019	\$ 3,211,998
WQ-14001	Dewatering and Loadout Facility	This project provides funding for the design and construction of the sludge dewatering facility and truck loadout to retire existing dewatering and sewage sludge incinerators.	Construction	Wastewater Treatment	Public Works	Spring	2019	\$ 27,497,551
WS-12001	Water Main Replacement – Project 26	This project replaced approximately 11,000 linear feet of aging water mains and services which included water main replacement as part of the Upgrade Downtown Project.	Construction	Water	Utilities	Spring	2019	\$ 7,506,161
PE-17009	City Hall Floor 5 Remodel	This project improved the Planning and Community Environment (PCE) Department offices on the fifth floor of City Hall.	Construction	Buildings and Facilities	Public Works	Summer	2018	\$ 525,000
AC-14001	Baylands Nature Interpretive Center Exhibit Improvements	This project replaced worn out or non-functioning exhibits at the Baylands Nature Interpretive Center.	Construction	Buildings and Facilities	Community Services	Summer	2018	\$ 56,000
PE-17000	Mitchell Park Adobe Creek Bridge Replacement	This project replaced the existing bridge over Adobe Creek in Mitchell Park.	Construction	Parks and Open Space	Public Works	Summer	2018	\$ 250,000
PD-14000	Internal Alarm System Replacement	This project replaced the citywide system of panic alarms from various departments and the Council chambers.	Construction	Buildings and Facilities	Police	Summer	2018	\$ 78,000
EL-14004	Maybell 1&2 4/12kV Conversion	This project converted circuits 1 & 2 at Maybell substation from 4kV to 12kV.	Construction	Electric	Utilities	Fall	2018	\$ 364,796
GS-15001	Security at City Gas Receiving Stations	This project equipped the City's four Gas Receiving Stations with video surveillance systems.	Construction	Gas	Utilities	Summer	2018	\$ 150,000
SD-13003	Matadero Creek Storm Water Pump Station and Trunk Line Improvements	This project upgraded the capacity to the Matadero Creek Storm Water Pump Station, which serves a low-lying 1200-acre area of southeastern Palo Alto.	Construction	Storm Drain	Public Works	Summer	2018	\$ 6,685,317
AP-16002	Wildlife Hazard Management Plan	The Wildlife hazard Management Plan identified the specific actions the airport will take to mitigate the risk of wildlife strikes on or near the airport.	Study	Airport	Public Works	Summer	2018	\$ 63,415
WC-14001	Wastewater Collection System Rehabilitation Augmentation Project 27	This project replaced 16,859 linear feet of sanitary sewer mains of various sizes on various streets.	Construction	Wastewater Collection	Utilities	Winter	2018	\$ 4,022,455

List of Completed Projects

Attachment A

<u>CIP #</u>	<u>Project Name</u>	<u>Project Description</u>	<u>Project Type</u>	<u>Fund Source</u>	<u>Department</u>	<u>Season Completed</u>	<u>Year Completed</u>	<u>Total Project Budget **</u>
PG-15000	Buckeye Creek Hydrology Study	This project analyzed flooding conditions and recommended flood control structures and drainage and erosion control solutions for the creek located within Foothills Park.	Study	Parks and Open Space	Public Works	Spring	2018	\$ 167,741
PE-17004	CalTrain Corridor Video Management System Installation	This project replaced two existing gateway signs in the right-of-way for the California Avenue business district.	Construction	Streets and Sidewalks	Public Works	Spring	2018	\$ 1,550,000
PF-16003	Parking Lot Q Elevator Modernization	This project modernized the existing elevator at Parking Lot Q.	Construction	Buildings and Facilities	Public Works	Fall	2017	\$ 170,608
PE-13003	Parks, Trails, Open Space, and Recreation Master Plan	This master plan provided guidance on the recreation and improvement needs for Palo Alto's parks, trails, open space and recreational programs.	Study	Parks and Open Space	Community Services	Fall	2017	\$ 627,057
PE-12003	Rinconada Park Master Plan	This project developed a plan for short, medium and long range improvements to the regional park including the consideration of pathways, new restrooms and playgrounds, new landscaping, and revitalization of underutilized areas within the park.	Study	Parks and Open Space	Community Services	Fall	2017	\$ 541,355
PE-13012	Structural Assessment of City Bridges	The project developed an inventory of all City-owned bridges and culvert structures, condition assessment, cost estimate for rehabilitation, and recommendation for future inspection frequencies, assessment and improvements.	Study	Buildings and Facilities	Public Works	Fall	2017	\$ 198,529
WC-11000	Wastewater Collection System Rehabilitation / Augmentation Project 24	Combined with Project 25 and 26 (WC-12001; WC-13001), this project replaced and/or rehabilitated approximately 42,398 linear feet of sanitary sewer mains of various sizes, 779 sewer laterals, and 121 sewer manholes.	Construction	Wastewater Collection	Utilities	Fall	2017	\$ 3,119,806
WC-13001	Wastewater Collection System Rehabilitation / Augmentation Project 26	Combined with Project 25 and 26 (WC-12001; WC-13001), this project replaced and/or rehabilitated approximately 42,398 linear feet of sanitary sewer mains of various sizes, 779 sewer laterals, and 121 sewer manholes.	Construction	Wastewater Collection	Utilities	Fall	2017	\$ 3,361,118
PG-13003	Golf Reconfiguration and Baylands Athletic Center Improvements	This project completed the rehabilitation of the Palo Alto Municipal Golf Course, including a new layout for the course, new prefabricated restroom, new water-saving turf and irrigation system, and rebranded the course as the Baylands Golf Links.	Construction	Parks and Open Space	Public Works	Fall	2017	\$ 13,675,177
GS-11000	Gas Main Replacement – Project 21	This project combined with GWR 19B & GMR 20 and replaced ABS gas mains and services.	Construction	Gas	Utilities	Winter	2017	\$ 2,364,937

List of Completed Projects

Attachment A

<u>CIP #</u>	<u>Project Name</u>	<u>Project Description</u>	<u>Project Type</u>	<u>Fund Source</u>	<u>Department</u>	<u>Season Completed</u>	<u>Year Completed</u>	<u>Total Project Budget **</u>
WS-11000	Water Main Replacement – Project 25	This project provided installation of approximately 11,869 linear feet of new High Density Polyethylene (HDPE) water mains, 232 new HDPE water services, and 15 new fire hydrants within the City limits.	Construction	Water	Utilities	Winter	2017	\$ 5,445,069
WS-15004	Water System Master Plan	The 2015 Water System Master Plan identified present capital improvements and replacement rates required to ensure optimal reliability levels of service to the existing distribution and transmission systems.	Study	Water	Utilities	Spring	2017	\$ 500,000
WC-10002	Wastewater Collection System Rehabilitation / Augmentation Project 23	Combined with Project 22 (WC-09001). This project replaced and/or rehabilitated approximately 33,497 linear feet of sanitary sewer mains of various sizes, 554 sewer laterals, and 102 sewer manholes.	Construction	Wastewater Collection	Utilities	Winter	2017	\$ 1,272,289
EL-10009	Street Light System Street Light System Conversion Project	This project converted HPS streetlights to LED and the conversion of approximately 4500 cobrahead streetlight fixtures.	Construction	Electric	Utilities	Spring	2017	\$ 696,918
EL-13006	Sand Hill / Quarry 12kV InterTie	This project installed new wire to connect circuits QR-24 and QR-27 in the Sand Hill/Quarry area.	Construction	Electric	Utilities	Winter	2017	\$ 208,648
EL-15001	Electric Substation Battery Replacement	This project replaced the batteries in all nine of the City's electric substations.	Construction	Electric	Utilities	Winter	2017	\$ 400,000
PG-13001	Stanford/Palo Alto Playing Fields Soccer Turf Replacement	This project replaced the synthetic turf at the Stanford/Palo Alto Playing Fields.	Construction	Parks and Open Space	Community Services	Fall	2016	\$ 1,499,979
PG-09003	Park Maintenance Shop Remodel	This project renovated and remodeled the Parks maintenance shop for safety and efficiency upgrades.	Construction	Parks and Open Space	Community Services	Summer	2016	\$ 94,419
PE-12017	City Hall First Floor Renovations	This project installed new elevator control panels and replaced the gray-painted panels inside the elevators.	Construction	Buildings and Facilities	Public Works	Summer	2016	\$ 3,974,963
PE-11012	Temporary Main Library	This project created a temporary main Library to be used while the new one was being constructed.	Construction	Buildings and Facilities	Public Works			\$ 156,254

List of Completed Projects

Attachment A

<u>CIP #</u>	<u>Project Name</u>	<u>Project Description</u>	<u>Project Type</u>	<u>Fund Source</u>	<u>Department</u>	<u>Season Completed</u>	<u>Year Completed</u>	<u>Total Project Budget **</u>
PE-15029	Baylands Nature Interpretive Center Facility Improvement	The project replaced decking, railings, structural framing members, exterior wood flooring, and cabinetry, restroom reconfiguration, and provided Americans with Disabilities Act (ADA) improvements.	Construction	Buildings and Facilities	Public Works	Spring	2017	\$ 889,452
PE-13008	Bowden Park Improvements	This project improved the children's playground and included park amenity upgrades such as new playground equipment, a new retaining wall, surfacing and pathway upgrades, planting restoration and irrigation renovations, and replaced of damaged wood benches and the playground perimeter fence.	Construction	Parks and Open Space	Community Services	Summer	2016	\$ 421,126
PE-13020	Byxbee Park Trails	This project provided trail and site amenities over the remaining area of the landfill cap.	Construction	Parks and Open Space	Public Works	Fall	2016	\$ 334,607
PE-17002	City Hall Floor 3 Remodel	This project improved the Utilities Department administrative offices on the third floor of City Hall. It included new carpet, wall reconfiguration, a kitchenette, cabinets, paint, soundproofing, office furniture, doors, and associated building systems.	Construction	Buildings and Facilities	Public Works	Spring	2017	\$ 440,000
PE-14015	Lucie Stern Buildings Mechanical and Electrical Upgrades – Phase 1	This project replaced and upgraded the mechanical, electrical, and fire/life safety systems at Lucie Stern Children's Theater, Lucie Stern Community Theater, and Lucie Stern Community Center.	Construction	Buildings and Facilities	Public Works	Summer	2016	\$ 3,247,248
PG-12004	Sarah Wallis Park Improvements	This project improved site amenities with new concrete pathways, replaced old furnishings, and upgraded landscape with drought tolerant species.	Construction	Parks and Open Space	Community Services	Winter	2017	\$ 65,000
AP-16003	Airport Perimeter Fence	This project replaced the perimeter fencing and gates surrounding the Palo Alto Airport boundaries to prevent unauthorized access to the airport runway in accordance with Federal and State standards.	Construction	Airport	Public Works	Spring	2017	\$ 2,003,540
SD-11101	Channing Avenue/Lincoln Avenue Storm Drain Improvements	This project installed of 5,800 linear feet of 36-inch to 60-inch diameter storm drain along Channing and Lincoln Avenues over three project phases to increase drainage system capacity.	Construction	Storm Drain	Public Works	Winter	2016	\$ 7,676,275
GS-14004	Gas Distribution System Model	This project included the development, model installation, testing, documentation, and staff training of a natural gas distribution system model.	Study	Gas	Utilities	Summer	2016	\$ 149,500
AC-14000	Art Center Auditorium Audio, Visual and Furnishings	This project replaced outdated audio visual equipment and furnishings following the auditorium's use as a temporary library.	Construction	Buildings and Facilities	Community Services	Winter	2016	\$ 150,000

List of Completed Projects

Attachment A

<u>CIP #</u>	<u>Project Name</u>	<u>Project Description</u>	<u>Project Type</u>	<u>Fund Source</u>	<u>Department</u>	<u>Season Completed</u>	<u>Year Completed</u>	<u>Total Project Budget **</u>
PF-15000	Rinconada Pool Locker Room	This project renovated the Rinconada Pool locker room including the changing area, restrooms, and showers in the women's and men's locker rooms.	Construction	Buildings and Facilities	Public Works	Winter	2016	\$ 464,433
PE-13016	El Camino Park Restoration	This project installed new athletic fields, synthetic turf, field lighting, fencing, a new restroom, scorekeeper booth and storage buildings, an expanded parking lot, new bike and pedestrian pathways, landscaping, benches, and other amenities.	Construction	Parks and Open Space	Community Services	Fall	2015	\$ 5,611,122
Notes: ** Final Project Actuals may be different from Total Project Budget amounts					Grand Total			\$ 148,168,489