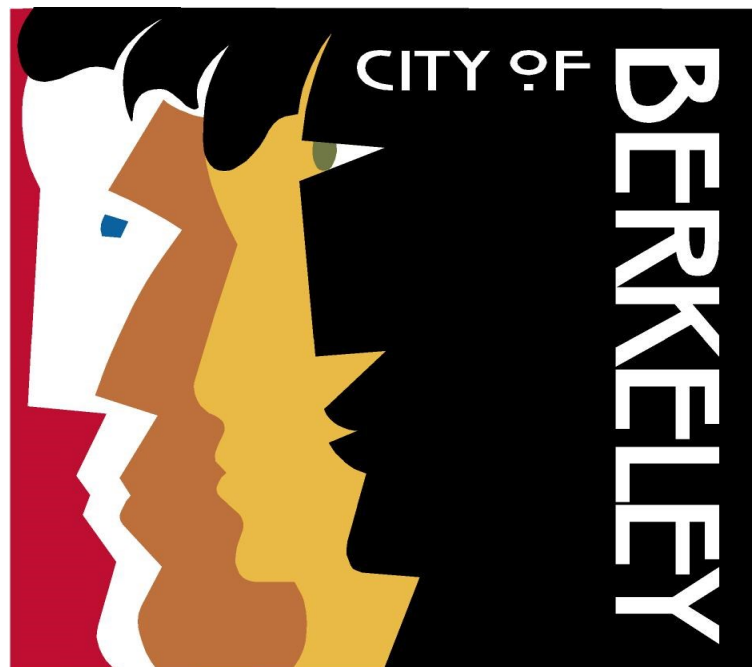


CITY OF BERKELEY
FISCAL YEARS 2018 & 2019
ADOPTED CAPITAL
IMPROVEMENT PROGRAM



FY 2018 & 2019 ADOPTED BIENNIAL BUDGET CAPITAL IMPROVEMENT PROGRAM

ELECTED OFFICIALS

Mayor

Jesse Arreguin

Councilmembers

Linda Maio, District 1
Cheryl Davila, District 2
Ben Bartlett, District 3
Kate Harrison, District 4
Sophie Hahn, District 5
Susan Wengraf, District 6
Kriss Worthington, District 7
Lori Droste, District 8

City Auditor

Ann-Marie Hogan

City Manager

Dee Williams-Ridley

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Department CIP Project Managers and Staff



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Office of the City Manager

June 27, 2017

Honorable Mayor and Members of the City Council:

The purpose of the Capital Improvement Program (CIP) book is to provide a tool that captures the detail of the City's CIP in order to assist Council with their long range planning efforts and decisions around capital expenditures. These decisions need to be made in the context of available funds. The capital needs of the City far exceed available resources. As a result, the CIP becomes a set of strategic choices to address Council priorities and translate policies into specific plans.

The City's ability to fund its CIP is limited to total available resources that are competing with other community priorities. However, years of limited funding and deferred maintenance have resulted in an aging City infrastructure that needs repair and improvement.

The Adopted FY 2018 & FY 2019 CIP Budget Book provides a detailed list of capital projects and equipment purchases and also includes planning schedules for the proposed projects.

Several goals of this CIP book include:

- Allowing for a systematic evaluation of all potential projects at the same time;
- Providing a framework by which City Council can focus on preserving the City of Berkeley's infrastructure while ensuring the efficient use of public funds; and
- Providing a tool which allows for planned capital projects to be ranked in order of priority.

The City has an extensive portfolio of capital assets and infrastructure which includes 95 public buildings, 254 miles of public sanitary sewer and 130 miles of public sewer laterals, 52 parks, tot lots and play areas, 15 athletic fields, 2 swimming pools, 3 resident camps, and 42 different facilities served by the City's IT systems. In addition, the City maintains the largest public marina in the Bay Area situated on 125 acres of land and 50 acres of water, and operates and maintains approximately 1000 berths, public access docks, fishing pier and small boat launch ramps.

Maintaining these assets is a costly and time consuming enterprise that requires significant resources and constant attention. Additionally, Berkeley is an aging city and thus its infrastructure faces challenges that younger cities do not.

The City faces significant long-term costs in the areas of capital assets and infrastructure. On May 29, 2012, the City Council established a process for reviewing the information necessary to identify expenditure priorities. They adopted Resolution No. 65,748—N.S. “Requiring that the City Manager Develop and Publish a Biennial Report of Current Liabilities and Projections of Future Liabilities.”¹ This report was presented at the February 28, 2017 and April 4, 2017, Council Work Sessions. This report contained a summary of all capital assets and infrastructure including:

- a. Public Buildings
- b. Condition of Streets and Roads using the “Street Saver” information projecting costs to bring streets and roads condition to an average Pavement Condition Index (PCI) of 75 within 5 years.
- c. Sewers: updated asset management plan for public sewers including projected costs for succeeding 5 years and projected revenue from sewer fees for the succeeding 5 years.
- d. Storm drains: updated projected costs contained in the Watershed Management Plan to reflect present value of identified improvements to all watershed acknowledging all completed improvements.
- e. Traffic Signals
- f. IT Infrastructure

Several recent actions by the voters have provided an important boost to the resources available for meeting these challenges:

- In November 2016, Berkeley voters passed Measure T1, authorizing the City to sell \$100 million of General Obligation Bonds to repair, renovate, replace, or reconstruct the City’s aging infrastructure and facilities, including sidewalks, storm drains, parks, streets, senior and recreation centers, and other important City facilities and buildings. On January 31, 2017, City Council approved a Public Process for Implementation of Measure T1² to include commission and citizen input for Measure T1 criteria and projects.
- In November 2014, Berkeley voters approved Measure F (a countywide vehicle registration fee), increasing the Parks Tax revenues approximately 16.7% to support parks, playgrounds, city trees and landscaping operations and maintenance. Measure F provided an additional \$750,000 per year to Berkeley

¹ Projection of Future Liabilities:

http://www.cityofberkeley.info/Clerk/City_Council/2017/02_Feb/Documents/2017-02-28_WS_Item_01_Projections_of_Future.aspx

² Public Process for Implementation of Measure T1:

http://www.cityofberkeley.info/Clerk/City_Council/2017/01_Jan/Documents/2017-01-31_Item_04_Public_Process_for_Implementation.aspx

for major maintenance projects, raising annual funding for parks capital and major maintenance projects from \$250,000 to \$1 million.

- In November 2014, Alameda County voters approved Measure BB (a property tax assessment), which implements a 30 year Transportation Expenditure Plan by renewing the 0.5 percent transportation sales tax approved in 2000 and increasing the tax by 0.5 percent. This 1 percent sales tax is managed by the Alameda County Transportation Commission. Berkeley's allocation is approximately \$2.6 million annually and is applied to improving the pavement condition and specific street/transportation improvement projects and increasing funding for local transportation enhancements. Measure BB will benefit the City's streets and roads, pedestrian and bicycle infrastructure, and provide capital funding for the Gilman interchange project.
- In November 2012, Berkeley voters approved Measure M (a general obligation bond), to provide an additional \$30 million which is being used to significantly accelerate the implementation of the 5-Year Street Plan and install green infrastructure where appropriate, improving the condition of city streets and Green Infrastructure projects as defined in the Watershed Master Plan.

At the April 4, 2017, Council Work session, the Department of Parks, Recreation & Waterfront (PRW) presented the **Update on Capital Improvement Projects: Recent and Planned Projects and Ongoing Needs**³. The report covers all PRW capital assets, infrastructure and facilities, including needed repairs to Echo Lake Camp and recent catastrophic damage to the Cazadero Performing Arts Music Camp.

On March 24, 2015, the Department of Public Works staff (Public Works) presented their 5-Year Facilities Capital Improvement Plan and Facility Conditioned Assessment and Maintenance Management Options. The Public Works 5-Year Facilities CIP for FY 2016 through FY 2020 includes a proposed \$1.1 million increase over the FY 2016 and FY 2017 Public Works budget.

On January 26, 2016, Council authorized staff to release an RFP to replace FUND\$. The City designated a dedicated team to lead the replacement process from evaluation to procurement, and through the implementation of a new ERP system. On May 27, 2016, the City issued an RFP for new ERP Software and implementation services. The City engaged GOFA in the RFP process to identify and select a qualified company to provide a comprehensive, fully integrated, public sector ERP system that meets the City's functional scope that includes Core Financials, Purchasing, Human Resources, Payroll, Budget Preparation, Time Entry, and Benefits Administration.

The City established a dedicated implementation team that consist of subject matter experts with varied experience, and a change manager whose primary focus is to work with staff through changes as the new system is designed and implemented. This team

³ Update on Parks Capital Improvement Projects: Recent and Planned Projects and Ongoing Need; http://www.ci.berkeley.ca.us/Clerk/City_Council/2017/04_Apr/Documents/2017-04-04_WS_Item_02_Update_on_Parks_Capital_Improvement_Projects.aspx

is working with the Department of Information Technology to create a defined governance process that ensures the product is aligned with proposal requirements and that business process decisions are approved and documented. The City's implementation team will utilize multiple communication tools to ensure staff and Council are kept up to date throughout the process. The ERP replacement project is also incorporated into the IT Department's Digital Strategic Plan. Additional information on the Digital Strategic Plan can be found in the Council Work Session dated November 15, 2016⁴.

The City has a number of major infrastructure project needs that are not addressed in the capital plan. The Council may need to consider new funding sources, which may include grants, fee increases and revenue generated from possible ballot measures. The City Council has made sound fiscal policy decisions that continue to provide a solid budget framework. Those decisions include establishing five-year plans for revenue and spending, and a "fix it first" approach in which we fund current capital improvements before funding new projects.

In July 2014 the City finalized a Consent Decree (CD) with the US Environmental Protection Agency requiring that the City reduce inflow and infiltration, reduce sanitary sewer overflows, and repair and replace aging sewer pipelines. To satisfy the CD, Berkeley will need to replace an average of 4.2 miles of sewer pipeline annually for the next 12 years, replace all noncompliant manholes, perform condition assessment on 25 miles of sewer annually, and increase required maintenance activities.

Our consultant, Bartle Wells Associates, prepared an initial Sanitary Sewer rate study that was presented to Council on March 17, 2015⁵, and outlined the steps required to conduct a Proposition 218-compliant rate setting process. The rate study has been updated to address the impact of EBMUD's mandated usage decrease. A rate increase was approved in October 2015 with the assumption that revenue would increase significantly. Due to the drought and compliance of residents to reduce water consumption, revenue did not actualize as anticipated.

Council has adopted fiscal policies which have served up well over the long-term. However, staff proposed that the following current Council fiscal policy be modified in order to balance the City's General Fund operational budget.

- ❖ Property Transfer Tax in excess of \$10.5 million dollars will be treated as one-time revenue, available for one-time expenditures. We will first consider use of these funds for the City's capital improvement needs (Fund 610).

⁴Digital Strategic Plan:

https://www.cityofberkeley.info/Clerk/City_Council/2016/11_Nov/City_Council_11-15-2016_-_Special_Meeting_Agenda.aspx

⁵ Sanitary Sewer Rate Study:

http://www.cityofberkeley.info/Clerk/City_Council/2015/03_Mar/City_Council_03-17-2015_-_Special_Meeting_Annotated_Agenda.aspx City Council: 03-17-2015 - Special Meeting Annotated Agenda - City of Berkeley, CA

On May 27, 2017⁶, Council adopted the proposed reset of the Property Transfer Tax baseline from 10.5 million to \$12.5 million beginning FY2018. While this will reduce the amount available for new infrastructure needs, the additional \$2.0 million contribution to the City's General Fund operating base line is need to balance the \$5 million shortfall in FY 2018 and \$5.3 million shortfall in FY 2019.

In closing, we look forward to planned improvements to our infrastructure including improved access to services and information for community members through implementation of our new ERP System.

In addition, we are excited about the construction of the new Center Street Garage in Downtown Berkeley which will increase the supply of public parking as well as provide space for additional bicycle parking and electric vehicle charging. There will also be Major Improvements to Downtown Berkeley infrastructure and amenities as we renovate the Downtown Berkeley BART Plaza, reconfigure Shattuck Avenue, implement the Hearst Complete Streets Project, and Modernize the Center Street Plaza to beautify the Downtown and improve flow and safety for all modes of transportation.

Also, in collaboration with partners in the community, City staff will work to develop a long-range plan and Environmental Impact Report for the Adeline/South Shattuck Corridor that will address key community priorities related to community character, economic development, transportation, parking, infrastructure and affordable housing and anti-displacement,. The City purchased three parcels along University Avenue between Ninth and Tenth streets. The City's long-term vision for the property includes redeveloping the majority of the site for below market rate housing.

There are potential interim uses for portions of the property.⁷ One interim use that the City has implemented involves using the ground floor of the building located at 1011 University Avenue for a City Council Chamber. This area is being converted to an interim Council Chamber with a seating capacity of 150-200 persons. Meetings of the City Council, the Rent Board, and the Zoning Adjustments Board would utilize the interim Council Chamber.

Funding of \$6.7 million in for the property purchase was secured with a loan from the City's Worker Compensation Fund with a 5-year payback of to the Workers' Compensation Fund 875 with interest. The payback utilizes \$2 million (30% of the purchase price) from General Fund excess Property Transfer Tax and \$4.650 million (70% of the purchase price) from other revenue sources.

Finally, we look forward to infrastructure improvements spearheaded by the Parks, Recreation and Waterfront department such as, completing the re-construction of the trellis and improve the pathways and lighting at the historic Berkeley Rose Garden;

⁶ FY 2018 & FY 219 Biennial Budget Adoption:

https://www.cityofberkeley.info/Clerk/City_Council/2017/06_June/City_Council_06-27-2017_-_Regular_Meeting_Agenda.aspx (Item 47)

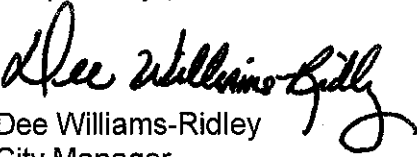
⁷ Acquisition of Real Property at 1001, 1007, 1011 University & 1925 Ninth St:

https://www.cityofberkeley.info/Clerk/City_Council/2017/03_Mar/City_Council_03-28-2017_-_Regular_Meeting_Agenda.aspx (Item 32)

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completing the planning and design to rebuild the Berkeley Tuolumne Camp, which was destroyed by the Rim Fire in 2013; and developing the conceptual plan for the Berkeley Waterfront which will identify opportunities to improve the amenities and visitor experience at the Berkeley Waterfront.

Respectfully Submitted,



Dee Williams-Ridley
City Manager

PROGRAM OVERVIEW

The Capital Improvement Program (CIP) for the City represents the spending plan for infrastructure improvements and other specific large scale recurring purchases. The City has an extensive portfolio of capital assets and infrastructure which includes 95 public buildings, 254 miles of public sanitary sewer mains and 130 miles of public sewer laterals, 52 parks, 2 pools, 3 camps, and 42 different facilities served by the City's IT systems. The Adopted FY 2018 & FY 2019 Capital Improvement Program includes the City's capital spending plan for the five-year period beginning with FY 2018 through FY 2022.

The City's ability to fund its Capital Improvement Program is limited by the total available resources that are competing with other community priorities. However, years of limited funding and deferred maintenance have resulted in an aging City infrastructure that desperately needs repair and improvement. CIP funding resources include the General Fund and a number of other special revenue funds, as well as grants and loans. This CIP book attempts to identify all known CIP projects, categorizing these projects as Baseline (annual, recurring program), One-time (special allocations, grants, loans), and Unfunded (no confirmed funding source).

Project Categories

The adopted CIP plan presents the City's blueprint for funding critical capital projects based on resource availability and Council's capital investment priorities. Elements of Capital Improvement Program project costs are grouped into broad program categories:

City Facilities	Sidewalks
Information Technology	Streets
Parks, Marina & Waterfront	Transportation
Sanitary Sewers	Other Infrastructure
Storm Drains	Equipment & Fleet

The resources that the City will commit to its priority capital projects are identified within these program categories. While the budget adopts appropriated funds for capital projects in FY 2018 & FY 2018, there are still some unknowns (i.e. status of the economy and pending State funding for approved projects) that exist. Furthermore, funding for the remaining years of the five-year plan are subject to the availability of resources. The plan does not depict funding for grants that we have not yet received or for projects funded in previous years that will be completed in FY 2019 or beyond.

Funding Sources

Total Baseline and One-time CIP allocations for FY 2018 & FY 2019 are projected at \$81.5 million and \$39.9 million respectively.

Funding sources include:

- ❑ General Fund;
- ❑ Special Revenue Funds such as Measure B and Measure BB Sales Tax, Vehicle Registration Fee, State Transportation Tax Fund (Gas Tax), Measure F and Parks Tax;
- ❑ Measure M General Obligation Bond;
- ❑ Enterprise Funds such as Zero Waste, Marina, Sanitary Sewer, Clean Storm Water;
- ❑ Internal Service Funds such as Equipment Replacement Fund, PC & Service Replacement Fund; and
- ❑ Federal and State Funds such as Boating and Waterway Loans, and Parks Bonds Grants.

General Fund: a transfer from the General Fund to the Capital Improvement Fund is made annually. The General Fund contribution to the capital program is \$5.5 million in FY 2018 and in FY 2019. This funding supports the capital improvements that do not have other funding sources regularly available such as building repairs, and supplements programs like street rehabilitation.

Measure F: approved by Berkeley voters in November 2014, will benefit the Parks, Recreation & Waterfront Department in terms of additional annual funding for major maintenance and capital expenses for parks facilities. Measure F funds will provide the majority of funding for major renovations and upgrades to the Rose Garden Trellis in FY 2018 and FY 2019.

Measure BB: approved by Alameda County voters in November 2014 implements a 30 year Transportation Expenditure Plan by renewing the 0.5 percent transportation sales tax approved in 2000 and increasing the tax by 0.5 percent, will benefit the City's streets and roads, as well as pedestrian and bicycle infrastructure. This 1 percent sales tax is managed by the Alameda County Transportation Commission and Berkeley will receive over \$3 million a year in additional funding, as well as capital funding for the Gilman interchange project.

Measure M: approved by Berkeley voters in November 2012, General Obligation bonds not-to-exceed \$30 million, which are being used to significantly accelerate the implementation of the 5-Year Street Plan and install green infrastructure where appropriate

New Funding Opportunities

The City has a number of major infrastructure project needs that are not addressed in the capital plan. The City needs to identify funding sources, which may include grants, fee increases and revenue generated from possible ballot measures.

Measure T1: approved by Berkeley voters in November 2016, General Obligation Bonds not-to-exceed \$100 million, which will be used to repair, renovate, replace, or reconstruct the City's aging infrastructure and facilities, including sidewalks, storm drains, parks, streets senior and recreation centers and other important City facilities and buildings.

Property Transfer Tax in Excess of \$12.5 Million

The City Council has made sound fiscal policy decisions that continue to provide a solid budget framework. Those decisions include establishing five-year plans for revenue and spending, and a “fix it first” approach in which we fund current capital improvements before funding new projects. In addition, the following policy is targeted to help fund the City’s capital improvement needs:

- ❖ Transfer Tax in excess of \$12.5 million dollars will be treated as one-time revenue, available for one-time expenditures. We will first consider use of these funds for the City’s capital improvement needs (fund 610).

While current real estate activity has increased transfer tax revenue, the volatility of its history has shown that allocating amounts above the most likely recurring revenues to one-time capital projects is prudent. With this current boom generating transfer tax revenue in excess of \$12.5 million, those amounts can be used to fund replacement of the City’s very old financial system (FUND\$), as well as various important capital infrastructure needs.

GO Bond Capacity

The City’s Financial Advisor, NHA Advisors, LLC, prepared an analysis of the City’s current GO bonding capacity, assuming that the City’s aggregate bond tax rate were held constant. Based on the existing bond authorizations, outstanding balances and projected tax revenues, the City is likely to have the ability to generate new bond proceeds in the range of \$57M-\$74M and keep the total tax rate near the current level (0.0505%) over the next 30 years. The Council may wish to consider asking staff to develop scenarios for bond debt programs that would keep the taxes paid by property owner’s level over a course of time. This could mean that as old debt is retired, new debt could be issued for new projects. Staff could develop a timeline for that debt issuance and a list of potential projects for the Council to consider.

Sanitary Sewer Fund

Our consultant, Bartle Wells Associates, prepared an initial sustainable Sanitary Sewer rate study that was presented to Council on March 17, 2015, and outlined the steps required to conduct a Proposition 218-compliant rate setting process¹. That rate study has been updated to address the impact of EBMUD’s mandated usage decrease, due to drought. Options for the Council to consider to increase rates were included in the May 12, 2015 agenda packet. The rate increase was implemented in FY 2016.

Large Unfunded Citywide Infrastructure Needs

The City has a number of major infrastructure project needs that are not addressed in the capital plan. Included in the Projections of Future Liabilities report that went to Council on February 28, 2017², is a summary of the City’s capital assets and infrastructure including an overview of the City’s long-term expenditure obligations.

¹ Sanitary Sewer Rate Study:

http://www.cityofberkeley.info/Clerk/City_Council/2015/03_Mar/City_Council_03-17-2015_-_Special_Meeting_Annotated_Agenda.aspxCity Council: 03-17-2015 - Special Meeting Annotated Agenda - City of Berkeley, CA

² Projections of Future Liabilities:

http://www.cityofberkeley.info/Clerk/City_Council/2017/02_Feb/Documents/2017-02-28_WS_Item_01_Projections_of_Future.aspx

Despite support from a variety of City funds, the cost for routine maintenance, major maintenance, and capital improvements far exceeds currently existing sources of funds.

- The City is responsible for maintenance of 95 facilities, not including Library facilities and facilities leased to other entities. These 95 facilities include: 39 facilities in the Parks Recreation and Waterfront inventory and 56 facilities in the Public Works inventory. The current estimated cost for the 5-Year Facility Capital Improvement Program is estimated at \$25.5 million. The current budget allocation for this work is \$9.1 million; which results in an estimated unfunded liability of \$16.4 million.
- The City needs to allocate an additional \$30 million to streets and roads to achieve a Pavement Condition Index (PCI) of 75 within 5 years. This funding is in addition to the \$30 million received from Measure M, approved by Berkeley voters in 2012, that is being used to improve the condition of City streets and install Green Infrastructure projects as appropriate. The City's PCI prior to the passage of Measure M was 55. With Measure M funding, the projected PCI within 5 years will be 68. An additional \$30 million would be needed to achieve a PCI of 75.
- In 2012, City Council adopted the City's Watershed Management Plan (WMP). The WMP establishes an integrated and sustainable strategy for managing urban water resources that addresses water quality, flooding, and the preservation of local creek habitats and the San Francisco Bay using multi-objective approaches where possible. Through modeling and analysis, the WMP also identifies capital improvement projects and projected revenue needs for all City watersheds. The City's unfunded liability over the next 5 years is estimated at \$37 million. This includes \$5 million in unfunded maintenance needs and \$32 million for projected capital improvement projects.

Public Works retained a consultant to update the facilities assessments that were completed over 14 years ago; this assessment was completed in 2013 and provides the basis for more refined cost estimates and capital planning. The proposed FY 2018 and FY 2018 CIP budget includes an additional \$1.1M each year to address facilities. Although the Measure T1 funding source will help to mitigate a portion of the liability, the City will need to continue to identify additional ongoing funding sources, which may include grants, fee increases and revenue generated from possible ballot measures to fully address deferred maintenance.

Finally, the City Council has received prior reports regarding the costs and timing of replacement of the City's FUNDS\$ system ([FUNDS\\$ Status Report](#)³). Beginning in FY 2015 the City set aside the first \$500,000 of the Property Transfer Tax in excess of the \$10.5 million baseline to fund the replacement for that system. The CIP budget continued that allocation in FY 2016 and FY 2017, subject to the availability of excess transfer tax.

³ Funds Status Report:

http://www.ci.berkeley.ca.us/uploadedFiles/Clerk/Level_3_-_City_Council/2010/06Jun/2010-06-01_Item_54_FUNDS_Status_Report.pdf

DEFINITIONS

CIP: Capital Improvement Program

Capital Project: A Capital Project must add to, support, or improve the physical infrastructure, capital assets, or productive capacity of City services. A Capital Improvement Project would include any of the following:

- ❑ The acquisition, construction, and/or improvement of buildings, roads, utilities and parks.
- ❑ The acquisition and/or development of land.
- ❑ The acquisition and installation of equipment and machinery.
- ❑ Major repair of buildings, facilities and other infrastructure to preserve and extend life.
- ❑ Other non-recurring items for which long-term benefits are realized.

Capital Improvement Budget: A plan for capital expenditures and the means of financing them, to be incurred each year over a fixed period of years, to meet capital needs arising from long-term work program. Included are expenditures made for land, large equipment and machinery, buildings, permanent public works projects, major reconstruction or renovation of structures, and major landscaping or park improvements.

Debt Service: Actual cost of interest and principal on bond maturities as well as revenue anticipation notes.

Five-Year Capital Improvement Spending Plan: The Five-Year Capital Improvement Spending Plan consists of a series of projects, which will add to, support, or improve the physical infrastructure, capital assets, or productive capacity of City services. This is a long-range plan that looks beyond the traditional one-year budget. Only the projects included in the first year of this plan (i.e., the Capital Budget) are legal appropriations. The second, third, fourth and fifth years of the Spending Plan represent the City's best estimate of a reasonably fundable plan for capital improvements.

Gas Tax Fund: This fund is required by State law to account for gas tax revenues received from the State and expended for construction and maintenance of City streets.

General Obligation Bond: A bond whose repayment is guaranteed by pledging all the assets and revenues of a government agency.

Grant: A contribution from one government unit to another, usually made for a specific purpose and time period.

One-Time: Non-recurring funding identified for a specific program or project including outside funding sources such as endowments, grants or loans.

Special Assessment Fund: A fund used to account for the financing of public improvements or services deemed to benefit primarily the properties against which special assessments are levied.

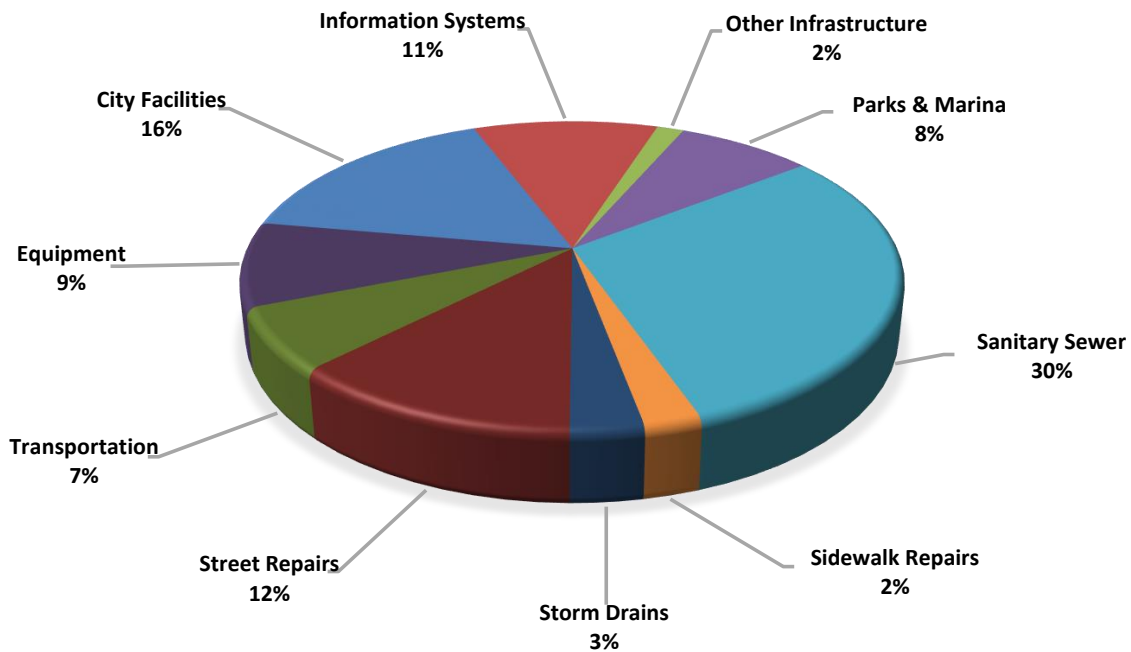
Unfunded Liabilities: Unfunded liabilities are defined as identifiable obligations of an organization for which the organization does not have 100% of the funding (cash or other assets) set aside to cover the cost should all obligations become immediately due.

Unfunded Requests: An item for which funding is not confirmed or a funding source is not identified. The Council may act to include them in the final budget, which may require reordering of budget priorities.

CITYWIDE CAPTIAL PROGRAM BY CATEGORY - ALL FUNDS

Baseline and One-time Funding

Category	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Total
City Facilities	\$ 28,075,631	\$ 2,471,333	\$ 2,459,466	\$ 2,458,600	\$ 2,461,877	\$ 37,926,907
Information Systems	6,207,264	6,724,958	3,515,384	4,139,784	4,195,404	24,782,794
Parks & Marina	8,137,690	3,035,186	2,385,620	2,385,567	2,385,538	18,329,601
Sanitary Sewer	14,553,375	11,954,935	13,339,489	15,049,730	14,610,475	69,508,004
Storm Drains	3,789,543	1,699,052	530,000	530,000	530,000	7,078,595
Sidewalk Repairs	1,235,000	1,235,000	1,035,000	1,035,000	1,035,000	5,575,000
Street Repairs	8,660,253	4,899,303	4,975,303	4,975,303	4,975,303	28,485,465
Transportation	7,284,743	2,629,262	2,817,127	1,134,827	1,134,827	15,000,786
Other Infrastructure	749,068	710,428	972,128	570,328	570,328	3,572,280
Equipment	2,879,086	4,567,451	2,998,935	3,006,054	6,853,967	20,305,493
Total	\$ 81,571,653	\$ 39,926,908	\$ 35,028,452	\$ 35,285,193	\$38,752,719	\$230,564,925

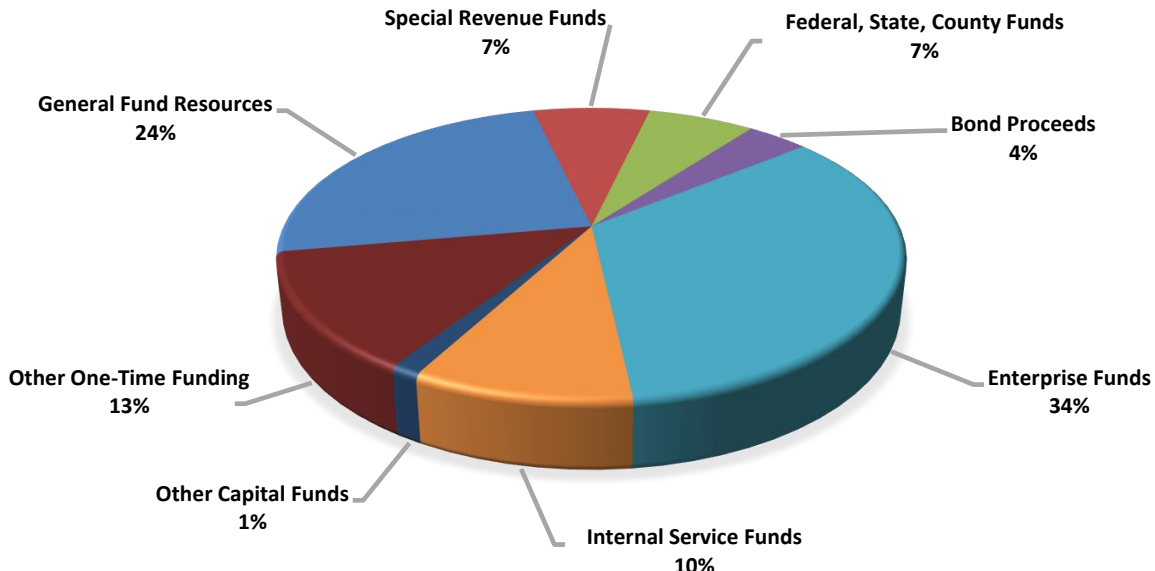


CITYWIDE CAPITAL PROGRAM BY FUNDING SOURCE - ALL FUNDS

Baseline and One-time Funding

	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Total
General Fund Resources	16,655,290	12,341,236	8,470,229	9,093,710	9,152,578	55,713,043
Capital Improvement Fund	9,278,290	7,668,662	6,819,229	6,818,310	6,821,558	37,406,049
ERP Replacement Fund	4,000,000	4,595,574	1,488,000	2,112,400	2,168,020	14,363,994
VoIP Replacement Fund	65,000	65,000	163,000	163,000	163,000	619,000
General Fund (Reserve)*	3,312,000	12,000	-	-	-	3,324,000
Special Revenue Funds	4,346,706	3,209,852	3,035,852	3,035,852	3,035,852	16,664,114
Measure B	1,930,938	1,064,549	1,090,549	1,090,549	1,090,549	6,267,134
Parks Tax	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
Transportation/Gas Taxes	1,415,768	1,145,303	945,303	945,303	945,303	5,396,980
Federal, State, County Funds	3,448,611	3,284,000	2,830,000	2,830,000	2,830,000	15,222,611
Measure F (Vehicle Registration Fee)	408,611	280,000	280,000	280,000	280,000	1,528,611
Measure BB	3,040,000	3,004,000	2,550,000	2,550,000	2,550,000	13,694,000
Bond Proceeds	7,652,259	1,169,052	-	-	-	8,821,311
Measure M - General Obligation	7,652,259	1,169,052	-	-	-	8,821,311
Enterprise Funds	16,749,422	13,740,982	15,125,536	16,835,777	16,396,522	78,848,239
Clean Storm	230,000	230,000	230,000	230,000	230,000	1,150,000
Marina	1,145,719	735,719	735,719	735,719	735,719	4,088,595
Refuse	820,328	820,328	820,328	820,328	820,328	4,101,640
Sanitary Sewer	14,553,375	11,954,935	13,339,489	15,049,730	14,610,475	69,508,004
Internal Service Fund	3,262,886	4,951,251	3,382,735	3,389,854	7,237,767	22,224,493
Equipment Replacement Fund	2,879,086	4,567,451	2,998,935	3,006,054	6,853,967	20,305,493
Computer Replacement Fund	383,800	383,800	383,800	383,800	383,800	1,919,000
Other Capital Funds	1,151,085	774,035	814,600	100,000	100,000	2,939,720
Private Party Sidewalks	100,000	100,000	100,000	100,000	100,000	500,000
Street Light Assessment	593,455	390,100	401,800	-	-	1,385,355
UC Settlement	457,630	283,935	312,800	-	-	1,054,365
Other One-Time Funding	28,305,394	456,500	1,369,500	-	-	30,131,394
Off Street Parking	23,328,745	-	-	-	-	23,328,745
Gilman Reserve Fund	1,200,000	-	-	-	-	1,200,000
Parking In-Lieu (Shattuck Reconfig.)	800,000	-	-	-	-	800,000
Street & Open Space Improvements	650,000	456,500	1,369,500	-	-	2,476,000
FEMA - (NB Sismic Retrofit)	1,875,000	-	-	-	-	1,875,000
CALTRANS	451,649	-	-	-	-	451,649
Total	\$ 81,571,653	\$ 39,926,908	\$ 35,028,452	\$ 35,285,193	\$ 38,752,719	\$230,564,925

*General Fund Reserve - Catastrophic Loss



**GENERAL FUND FIVE-YEAR CIP PLAN:
Baseline and One-time Funding**

Program Areas	R/ OT	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	Totals
City Facilities		\$ 1,300,000	\$ 900,000	\$ 900,000	\$ 900,000	\$ 900,000	\$ 4,900,000
ADA Building Improvements	R	100,000	100,000	100,000	100,000	100,000	500,000
Emergency Building Repairs	R	500,000	500,000	500,000	500,000	500,000	2,500,000
Deferred Building Maintenance	R	300,000	300,000	300,000	300,000	300,000	1,500,000
New Projects (Pathway Project)	OT*	400,000	-	-	-	-	400,000
Information Systems		1,758,464	1,680,584	1,480,584	1,480,584	1,480,584	7,880,800
AS/400 Computer	R	21,400	21,400	21,400	21,400	21,400	107,000
Network Infrastructure	R	175,964	175,964	175,964	175,964	175,964	879,820
Software /Network Licensing	R	1,011,100	1,093,220	1,093,220	1,093,220	1,093,220	5,383,980
Syber Security Resilience Plan	R	190,000	190,000	190,000	190,000	190,000	950,000
Fiber Master Plan	OT	210,000	100,000	-	-	-	310,000
Wireless Master Plan	OT	150,000	100,000	-	-	-	250,000
Parks and Marina		1,242,000	1,050,000	400,000	400,000	400,000	3,492,000
ADA Parks Improvements	R	-	-	250,000	250,000	250,000	750,000
Play Equipment Improvements	R	200,000	-	150,000	150,000	150,000	650,000
Rose Garden Trellis Phase II	R	200,000	-	-	-	-	200,000
Strawberry Creek Phase II	R	-	100,000	-	-	-	100,000
San Pablo Park Play Equipment	R	-	200,000	-	-	-	200,000
Ohlone Park Basketball Courts	R	-	100,000	-	-	-	100,000
Echo Lake Leach Fields/ADA Pathway	OT	200,000	600,000	-	-	-	800,000
Cazadero Camp Landslide Repair	OT	642,000	50,000	-	-	-	692,000
Sidewalks		635,000	635,000	635,000	635,000	635,000	3,175,000
ADA Curb Ramp Program	R	200,000	200,000	200,000	200,000	200,000	1,000,000
Responsive Sidewalk Repairs	R	210,000	210,000	210,000	210,000	210,000	1,050,000
Pathway Repairs	R	50,000	50,000	50,000	50,000	50,000	250,000
Proactive Sidewalk Program	R	175,000	175,000	175,000	175,000	175,000	875,000
Streets		1,925,000	1,925,000	1,925,000	1,925,000	1,925,000	9,625,000
Street Rehabilitation	R	1,725,000	1,725,000	1,725,000	1,725,000	1,725,000	8,625,000
Street Survey/Design	R	200,000	200,000	200,000	200,000	200,000	1,000,000
Transportation /Traffic		1,057,969	169,278	169,278	169,278	169,278	1,735,081
Bike Plan Improvements	R	119,278	119,278	119,278	119,278	119,278	596,390
Traffic Calming	R	50,000	50,000	50,000	50,000	50,000	250,000
Traffic Calming	OT*	263,000	-	-	-	-	263,000
San Pablo/Ashby Intersection Imp.	OT	625,691	-	-	-	-	625,691
Other Infrastructure		50,000	-	-	-	-	50,000
Street Light	OT*	50,000	-	-	-	-	50,000
Debt Service		1,309,857	1,308,800	1,309,367	1,308,448	1,311,696	6,548,168
Animal Shelter Debt Service/2010 COP Animal Shelter	R	402,963	402,913	402,613	401,800	405,106	2,015,395
Ball Fields Acquisition	R	249,971	249,467	249,901	249,848	249,819	1,249,006
Theater Debt Service	R	249,971	249,468	249,901	249,848	249,819	1,249,007
University Ave. W/C Debt Service	R	406,952	406,952	406,952	406,952	406,952	2,034,760
Total General Fund		\$ 9,278,290	\$ 7,668,662	\$ 6,819,229	\$ 6,818,310	\$ 6,821,558	\$ 37,356,049

R=Recurring Funding; OT = One-time Funding; OT*= Mayor/Council One Time Supplemental

Personnel Cost Allocation		\$ 1,177,021	\$ 1,074,816	\$ 1,107,060	\$ 1,140,272	\$ 1,174,480	\$ 5,673,650
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Note: Not included in the chart above are personnel costs in excess of \$1M per year that will ultimately be charged to projects supported by other funds.



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Summary of All Capital Assets and Infrastructure

The City has an extensive portfolio of capital assets and infrastructure, which includes 95 public buildings, 254 miles of public sanitary sewer mains and 130 miles of public sewer laterals, 52 parks, 2 pools, 3 camps, and 42 different facilities served by the City's IT systems. Maintaining these assets is a costly and time consuming enterprise that requires significant resources and constant attention. Additionally, Berkeley is an aging city and thus its infrastructure faces challenges that other younger cities do not.

Several recent actions by the voters have provided an important boost to the resources available for meeting these challenges:

- In November 2016, Berkeley voters passed Measure T1, authorizing the City to sell \$100 million of General Obligation Bonds to repair, renovate, replace, or reconstruct the City's aging infrastructure and facilities, including sidewalks, storm drains, parks, streets, senior and recreation centers, and other important City facilities and buildings. [Staff have proposed preliminary allocations](#)¹ for these bond funds, and are now engaged in a community process to seek input.
- The November 2014 voter approval of Measure F provided an additional \$750,000 per year for major maintenance projects, raising annual funding for parks capital and major maintenance projects from the prior \$250,000 to \$1 million.
- In November 2012, Berkeley voters approved Measure M, to provide an additional \$30 million towards improving the condition of city streets and where appropriate, install Green Infrastructure projects as defined in the Watershed Master Plan.
- November 2014, Alameda County voters approved Measure BB, increasing funding for local transportation enhancements. Berkeley's allocation is approximately \$2.6 million annually and is applied to improving the pavement condition and specific street/transportation improvement projects.

Despite these measures, City facilities and infrastructure needs continue to exceed available funds, as discussed most recently at the [October 18, 2016](#)

¹ See http://www.cityofberkeley.info/uploadedFiles/Clerk/Level_3_-_General/Measure%20T1%20GO%20Bonds%20Recommendations%20122216.pdf

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[Council.Worksession](#)². Current estimates of the minimum unfunded needs in parks, waterfront, pools and camps exceed \$96 million, and may be significantly higher, for example, depending on the costs of the Berkeley Pier, Marina dock replacement, and the rebuild of Berkeley Tuolumne Camp. The amount of recurring funding to address these needs has been bolstered by the passage of Measure F, but is still only \$1.65 million per year. The unfunded needs in streets, storm drain/watershed, transportation and buildings/facilities exceeds \$365 million. The amount of recurring funding to address these needs is \$7.4 million.

These costs will continue to increase through typical wear and tear on our City infrastructure in the coming years, plus the pressures of long-deferred maintenance. As needed improvements continue to be deferred, operating and maintenance costs rise and rehabilitation and replacement costs increase substantially. The figures in Attachment 3 do not account for these additional cost escalators.

a. Parks, Waterfront, Pools, and Camps

The Parks, Recreation & Waterfront Department (PRW) operates, maintains and manages 52 parks, 5 community centers, 2 pools, 3 resident camps, 15 sports fields, 49 sports courts, 63 play areas, 36 picnic areas, 33,000 street trees and park trees, 124 street medians, 263 street irrigation systems, and 29 restrooms and out-buildings. In addition, PRW operates and maintains the Berkeley Waterfront and its related facilities, including the docks, parking lots, trails and other infrastructure, Adventure Playground, and 1,000 boat and berth rentals.

Recurring funding available for capital and major maintenance of these facilities is \$1.65M, (see Table 1). This amount is exclusive of T1 funds, which have not yet been allocated by Council.

Table 1 - Annual Funding for Parks, Waterfront, Pools & Camps Capital & Major Maintenance Needs

Funding Source	Annual Funding
Parks Tax Fund	\$1,000,000
Capital Improvement Fund	\$400,000
Marina Fund	\$250,000
Camps Fund ³	\$0
Total Funding Available	\$1,650,000

² See http://www.cityofberkeley.info/Clerk/City_Council/2016/10_Oct/Documents/2016-10-18_WS_Item_01_Update_on_Capital_Improvements.aspx.

³ Due to the loss of Berkeley Tuolumne Camp, the Camps Fund does not have sufficient funds at this time to cover any annual investment in capital or major maintenance.

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Unfunded needs in these facilities are summarized in Table 2, and available in detail at http://www.cityofberkeley.info/Parks_Rec_Waterfront/Home/Unfunded_Capital_Projects_List.aspx.

Table 2 - Unfunded Needs in Parks, Waterfront, Pools & Camps Facilities and Infrastructure

Needed Improvements	Low-End Estimate	High-End Estimate
Resident Camps	\$5,900,000	\$10,950,000
Waterfront	\$27,190,000	\$45,140,000
Pools	\$4,600,000	\$4,650,000
Park Buildings/Facilities	\$7,510,000	\$7,595,000
Parks (General)	\$9,480,000	\$11,480,000
Parks (Specific)	\$32,202,000	\$35,547,000
Park Restrooms	\$9,700,000	\$9,700,000
Total	\$96,582,000	\$125,062,000

Two projects drive the majority of the variance between the low-end estimate and the high-end estimate. First, the rebuild of Berkeley Tuolumne Camp (BTC), which was destroyed in the 2013 Rim Fire, is estimated to cost more than \$60 million. Insurance and a public assistance grant from the Federal Emergency Management Agency (FEMA) are expected to cover more than 90% of these expenses. Further discussion of the BTC rebuild, along with recovery work at the City’s other resident camps, was held at the [November 29, 2016 Council Worksession](#).⁴ Second, the City is commissioning a structural condition assessment and feasibility study to evaluate alternatives for restoring the currently-closed [Berkeley Pier](#).⁵ The cost of these alternatives, tentatively estimated between \$10 million and \$20 million, will depend on the type of restoration performed.

b. Public Buildings

The following is a preliminary cost estimate of capital improvements and major maintenance for City facilities over the next 5 years. The City is responsible for maintenance of 95 facilities, not including Library facilities and facilities leased to other entities, which were not part of this analysis. These 95 facilities include: 39 facilities in the Parks Recreation and Waterfront inventory and 56 facilities in the Public Works inventory.

In 2013, staff retained the professional services of Kitchell Consulting to perform new assessments and provide updated condition reports and cost estimates for the city’s facility inventory. All projects included in these assessments are considered either

⁴ See http://www.cityofberkeley.info/Clerk/City_Council/2016/11_Nov/Documents/2016-11-29_WS_Item_02_Berkeley_Resident_Camps_Update.aspx

⁵ See <http://www.ci.berkeley.ca.us/parks/pier/> for more information on the Berkeley Pier.

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major maintenance or capital projects. Major maintenance projects typically involve improvements to a facility at a cost of up to \$50,000 that are over and above the industry norm for routine maintenance services. Capital projects involve the construction of new or restored facilities or improvements to existing facilities at a cost of \$50,000 or more. Routine maintenance projects are defined as projects involving repairs to minor components at existing facilities including plumbing, electrical, HVAC, painting etc., and are not included in this report.

Despite support from a variety of City funds, the cost for routine maintenance, major maintenance, and capital improvements far exceeds currently existing sources of funds. The current estimated cost for city facility needs the within the 5-Year Facility Capital Improvement Program is estimated at approximately \$21 million, while the current budget allocation for this work is \$4 million; which results in an estimated unfunded liability of \$17 million. As noted earlier, the facility maintenance program budgeted amount is currently exclusive of T1 funds.

The City has implemented a strategy towards self-sustainability of capital facility needs within Fund 850, which governs the facility costs and maintenance for the 1947 Center Street building. In updating the rates charged to internal and external tenants of the facility, staff re-set the methodology to include the gradual building of a capital reserve within the rate structure. Overtime, the reserve budget will be applied to major capital replacement needs within that facility. Where appropriate, the City may look to implement this approach with other facilities and funding sources.

c. Streets & Roads

On November 15, 2011 the City Auditor presented Council with an Audit on the condition of the City's 216 centerline miles of improved streets. A principle recommendation of the audit was the adoption of a Pavement Condition Index (PCI) ratings goal. On May 29, 2012, Council included a goal of a PCI of 75 in five years in its request for a report on long-term obligations.

Using the StreetSaver system software and the current projections for future funding, it is now estimated that the City would need to allocate an additional \$100 million to achieve a PCI of 75 within five years. An additional \$24.5 million could added to the \$100 million needed strictly for paving to represent the full cost of improving city streets, following Council's adopted Complete Streets policy prescribing that capital transportation projects accommodate the needs of all roadway users. This funding would go towards improvements adjacent to the main paving project, including sidewalks, storm drains, curb ramps, and green infrastructure. This \$124.5 million gap

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in funding exists in addition to the \$30 million received from Measure M, approved by Berkeley voters in 2012 to improve the condition of City streets and install Green Infrastructure projects. Utilizing Measure M funding and other baseline local sources of funding, including Measure BB and Vehicle Registration Fees (VRF), the projected PCI within 5 years is projected to be 65, far short of the original target of 75. In the FY18-22 capital paving plan, use of T1 funds is anticipated, and will help towards short term PCI gains, but will be partially offset by the loss of Measure M when those funds are exhausted after 2019. In order to merely maintain the City's PCI after one-time bond funds are expended, it will be necessary to identify additional annual funding to the pavement management program.

d. Sewers

In 2014, the City (along with EBMUD and all agencies conveying flows to EBMUD) concluded negotiations with the Environmental Protection Agency and the Department of Justice for violation of the Clean Water Act and agreed to a stipulated settlement known on the final [Consent Decree](#)⁶. To comply with the Consent Decree, the City is required to rehabilitate an average of 4.2 miles of sewer pipeline annually based on a three-year rolling average. Effectively, this mandated significant additional maintenance activities and capital improvements which increases the costs of managing the City's existing sewer system. After a sewer rate study was completed, a [series of rate adjustments were adopted](#)⁷ beginning in FY 2016 to support the added financial load of the Consent Decree requirements.

While the City is currently on track to meet rehabilitation mileage targets with revenues generated from sanitary sewer fees, the costs per mile for sewer construction has increased since the rate study was completed. These costs will have to be closely monitored going forward over the duration of the Consent Decree, in case funding supplementation from additional sources or future rate adjustments are needed to fund the cost of the required capital improvements.

e. Storm Drains – Clean Stormwater Program

The City's engineered storm drain system consists of approximately 78 miles of underground pipes, manholes, catch basins and cross-drains. The stormwater infrastructure is over 80 years old and needs substantial rehabilitation. The backlog of

⁶ See http://www.cityofberkeley.info/Clerk/City_Council/2014/09_Sep/Documents/2014-09-09_Item_62_EPA_Litigation.aspx for EPA litigation settlement report

⁷ See http://www.cityofberkeley.info/Clerk/City_Council/2015/06_Jun/Documents/2015-06-30_Item_21_Setting_New_Sustainable.aspx for Sanitary Sewer Rate increases and Proposition 218 information.

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projects includes include: rehabilitation of piping reaches; elimination of rising groundwater flooding issues; replacement of deteriorated drain inlets and piping; major cleaning of the primary storm collectors in the lower Berkeley drainage watersheds; and replacement of street cross drains.

In 2012, City Council adopted the City's [Watershed Management Plan \(WMP\)](#)⁸. The WMP establishes an integrated and sustainable strategy for managing urban water resources that addresses water quality, flooding, and the preservation of local creek habitats and the San Francisco Bay using multi-objective approaches where possible. Through modeling and analysis, the WMP also identifies capital improvement projects and projected revenue needs for all City watersheds. According to the Watershed Management Plan, the total unfunded need of the stormwater system is approximately \$204 million, and \$37 million over the next five years. This includes \$5 million in unfunded maintenance needs and \$32 million for projected capital improvement projects.

The City currently allocates approximately \$200,000 in annual capital funding to the storm drain system. This revenue is generated by Clean Stormwater fees assessed to owners of real property that contribute to stormwater runoff and use the City's storm drain system for collection and conveyance. The Clean Stormwater fees have not been increased since they were established in the early 1990's. This funding only provides for minor capital and maintenance work and some emergency storm drain response efforts. In addition, the City also receives \$245,000 annually from the University of California as part of a Long Range Development Plan agreement. Annual projected expenditures to maintain the system, including capital replacements to the aging storm drains, storm support and maintenance of the new Green Infrastructure projects currently being installed, exceed the available revenues. The Program has in the past relied on General Fund support, \$700,000 annually, to address shortfalls in capital expenditures and application of established Best Management Practices in the Public Works Operations Division. This General Fund contribution ended in FY 2013. In the FY18-22 Capital Plan, Measure M funding is being considered to supplement the Clean Stormwater fee funding for eligible green infrastructure projects that will reduce flooding and improve water quality measures.

f. Traffic Signals

The City currently has 139 traffic signals which are maintained by Public Works Department. Due to underfunding, a backlog of capital improvement work has grown,

⁸ See http://www.cityofberkeley.info/Clerk/City_Council/2012/10Oct/Documents/2012-10-30_Item_20_Watershed_Management_Plan.aspx

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preventing the signals from being kept up to date. As a result there are deficiencies at many intersections throughout the city, including lack of detection devices, lack of pedestrian push buttons, and lack of battery backup for signal controllers in case of power outage. Since 2014, an annual budget of \$50,000 has been allocated for improvement of the traffic signals, and has begun to address the deficiencies. However, this amount is quite insignificant compared to the approximately \$300,000 cost of a new traffic signal for a full intersection.

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		FY 2018 Year 1	FY 2019 Year 2	FY 2020 Year 3	FY 2021 Year 4	FY 2022 Year 5	Total Year 1- 5
Parks, Park Buildings, Pools, Waterfront, and Camps							
Available Funding ⁽¹⁾		\$1,650,000	\$1,650,000	\$1,650,000	\$1,650,000	\$1,650,000	\$8,250,000
Expenditures		\$1,650,000	\$1,650,000	\$1,650,000	\$1,650,000	\$1,650,000	\$8,250,000
Capital & Maint. Need ⁽²⁾	\$96,582,000						
Unfunded Liability		(\$96,830,640)	(\$97,084,253)	(\$97,342,938)	(\$97,606,797)	(\$97,875,933)	(\$97,875,933)
Public Buildings⁽¹⁾							
Available Funding		\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,000,000
Expenditures		\$800,000	\$800,000	\$800,000	\$800,000	\$800,000	\$4,000,000
Capital & Maint. Need	\$33,581,000						
Unfunded Liability		(\$33,436,620)	(\$33,289,352)	(\$33,139,139)	(\$32,985,922)	(\$32,829,641)	(\$32,829,641)
Streets & Roads⁽³⁾							
Available Funding		\$11,915,000	\$7,102,000	\$4,580,000	\$4,580,000	\$4,580,000	\$32,757,000
Expenditures		\$11,915,000	\$7,102,000	\$4,580,000	\$4,580,000	\$4,580,000	\$32,757,000
Capital & Maint. Need	\$124,500,000						
Unfunded Liability		(\$114,836,700)	(\$109,889,394)	(\$107,415,582)	(\$104,892,294)	(\$102,318,539)	(\$102,318,539)
Sewers⁽⁵⁾							
Available Funding		\$11,475,445	\$12,834,394	\$13,339,489	\$15,741,291	\$14,610,475	\$68,001,094
Expenditures		\$11,475,445	\$12,834,394	\$13,339,489	\$15,741,291	\$14,610,475	\$68,001,094
Capital & Maint. Need	\$100,000,000						
Unfunded Liability		(\$90,295,046)	(\$79,009,865)	(\$66,983,784)	(\$52,267,343)	(\$38,410,005)	(\$38,410,005)
Storm Drains⁽³⁾							
Available Funding		\$1,200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$2,000,000
UC LRDP Payment (CIP ONLY)		\$276,847	\$285,152	\$293,707	\$302,518	\$311,594	\$1,469,818
Expenditures		\$1,476,847	\$485,152	\$493,707	\$502,518	\$511,594	\$3,469,818
Capital & Maint. Need	\$104,000,000						
Unfunded Liability		(\$104,573,616)	(\$106,170,233)	(\$107,790,056)	(\$109,433,289)	(\$111,100,129)	(\$111,100,129)
Traffic Signals							
Available Funding		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
Expenditures		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
Capital & Maint. Need	\$7,444,000						
Unfunded Liability		(\$7,541,880)	(\$7,641,718)	(\$7,743,552)	(\$7,847,423)	(\$7,953,371)	(\$7,953,371)
TOTAL							
Available Funding		\$27,090,445	\$22,636,394	\$20,619,489	\$23,021,291	\$21,890,475	\$115,258,094
Expenditures		\$27,367,292	\$22,921,546	\$20,913,196	\$23,323,809	\$22,202,069	\$116,727,912
T1 Funding: \$100M Infrastructure Bond ⁽⁴⁾		\$8,330,000	\$8,330,000	\$8,330,000	\$8,330,000	\$8,330,000	\$41,650,000
Capital & Maint. Need	\$466,107,000						
Unfunded Liability		(\$439,017,902)	(\$416,546,714)	(\$395,634,452)	(\$371,893,332)	(\$348,799,130)	(\$348,799,130)

⁽¹⁾ Unless otherwise noted, available funding includes recurring sources of capital and major maintenance funding.

⁽²⁾ Capital & Maint. Needs are current estimates of unfunded needs. Needs are estimated to increase at a rate of 2% per year.

⁽³⁾ Available funding in FY 2018 includes anticipated use of Measure M

⁽⁴⁾ The \$100 million in bond expenditures are estimated to be equally distributed over 12 years, (\$8.33 million/year). This chart shows the first five years

⁽⁵⁾ For FY 2019 & 2021, the project cost estimate were updated after Unfunded Liability Report number was submitted.

CITY FACILITIES

Summary

During the past 25 years, the City has deferred maintenance on many City buildings, which has decreased the value of assets and diminished the utility of the buildings for City programs. To partially address this problem, bonds have been approved to rebuild a number of City buildings, including the Civic Center, Central Library, four Branch Libraries, Animal Shelter, Center Street Garage and various fire stations. However, many outdated structures remain (e.g., recreation and senior centers) that require considerable improvements. Projects are selected and prioritized each fiscal year based on facility condition assessments, life-safety deficiencies, facility maintenance staff recommendations, and department needs.

Accomplishments

Major Facility Capital Improvement Projects completed in FY 2017 include the renovations of Fire Station No. 1 and 1947 Center Street. Numerous deferred maintenance repair projects were also completed at various City facilities in FY 2016 and FY 2017, including Fire Station No. 6 Drill Tower siding and painting, Public Safety Communications Center upgrades, Transfer Station scale replacement, and Senior Center landscaping improvements.

Planned Projects

North Berkeley Senior Center

Public Works was successful in receiving a \$1,875,000 Federal Emergency Management Agency (FEMA) grant for the seismic retrofit of the North Berkeley Senior Center. The grant includes a 25% local match requirement of \$625,000. The project is scheduled to start design in FY 2018. Deferred maintenance repairs and program improvements will also be completed as part of the seismic retrofit project.

Center Street Garage

The City's Center Street Garage replacement project is currently under construction. The new garage will be seismically safe and increase parking capacity from 480 to 720 spots. The project is estimated to cost \$47 million at completion, and is scheduled to reopen in Spring 2018. \$31.9 million in Bond funding was secured for construction, supplementing the Off-Street Parking Fund's contribution of \$15 million.

Health, Housing and Community Services (HHCS) – Adult Mental Health Clinic, MHPA Funds

Mental Health Service Act (MHPA) approved plans have allocated MHPA Capital Facilities funding for facility improvements at the Adult Mental Health Clinic. Since the approval of the original plan, a more detailed assessment of the project has determined the total cost of the project is currently estimated to be approximately \$3.7 million. Funding was previously approved and adopted with the FY2016 & FY2017 budget process. The initial work is underway and is estimated to be completed by FY 2019.

CITY FACILITIES

Deferred & Emergency Facilities Maintenance

Deferred facilities maintenance and repair for City buildings continues to be at a critical point. The General Fund budget allocation for emergency building maintenance and deferred maintenance remain at the same levels as FY 2013. In FY 2018 & 2019, the annual allocation of \$100,000 for ADA Compliance is programmed for an update to the ADA Transition Plan. Deferred Maintenance projects are programmed for carpet replacement at the Public Safety Building and 2180 Milvia, paving repairs to the Corp Yard Parking Lot, rehabilitation of city-owned upper laterals. The planned Emergency Maintenance projects are: water leak repair at the Public Safety Building, roof water leak assessments at various facilities citywide, repairs at the Animal Shelter sewer lift station.

Pathways Project

The Pathways Project identifies four new programs for the City of Berkeley: an Encampment Resolution Team, a STAIR Center, a Bridge Living Community, and a Homeward Bound program as pathways along a continuum from street to home, each addressing different milestones of the Coordinated Entry System (CES) process. On April 4, 2017, the City Council voted unanimously to direct the City Manager to implement Emergency Interim Measures, as described in the Pathways Project to provide stability, navigation and respite to homeless individuals, and pathways to permanent housing and services. City Council allocated start-up costs of \$400,000 for implementation of the project.

University Avenue Center

The City purchased three parcels along University Avenue between Ninth and Tenth streets. The City's long-term vision for the property includes redeveloping the majority of the site for below market rate housing. Additionally, there are potential interim uses for portions of the property.¹

One interim use that the City has implemented involves using the ground floor of the building located at 1011 University Avenue for a City Council Chamber. This area will be converted to an interim Council Chamber with a seating capacity of 150-200 persons. Meetings of the City Council, the Rent Board, and the Zoning Adjustments Board would utilize the interim Council Chamber. \$6.7 million in funding for the property purchase was secured with a loan from the City's Worker Compensation Fund. Staff proposes a 5-year payback of funds to the Workers' Compensation Fund 875 with interest. The payback utilizes \$2 million (30% of the purchase price) from General Fund excess Property Transfer Tax and \$4.650 million (70% of the purchase price) from other revenue sources.

¹ [https://www.cityofberkeley.info/Clerk/City_Council/2017/03_Mar/City_Council_03-28-2017_-_Regular_Meeting_Agenda.aspx\(Item#32\)](https://www.cityofberkeley.info/Clerk/City_Council/2017/03_Mar/City_Council_03-28-2017_-_Regular_Meeting_Agenda.aspx(Item#32))

CITY FACILITIES

PROGRAM AND FUNDING SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
One-Time Funding						
North Berkeley Senior Center Seismic Retrofit (FEMA only)	1,875,000	-	-	-	-	1,875,000
Center Street Garage Rebuild Pathway Project <i>(Council Supplemental)</i>	23,328,745	-	-	-	-	23,328,745
	400,000					
Subtotal	25,603,745	-	-	-	-	25,203,745
Recurring Funding						
ADA Building Improvements	100,000	100,000	100,000	100,000	100,000	500,000
Emergency Building Repairs	500,000	500,000	500,000	500,000	500,000	2,500,000
Deferred Building Maintenance	300,000	300,000	300,000	300,000	300,000	1,500,000
Transfer Station Design & Rebuild Reserve	500,000	500,000	500,000	500,000	500,000	2,500,000
<i>Debt Service: Animal Shelter - 2010 COP</i>	402,963	402,913	402,613	401,800	405,106	2,015,395
<i>Debt Service: Theater & Ballpark - 2012 Lease Rev. Bond</i>	249,971	249,468	249,901	249,848	249,819	1,249,007
<i>Debt Service: University Ave. Center (W/C Loan Payback)*</i>	406,952	406,952	406,952	406,952	406,952	2,034,760
Subtotal	2,459,886	2,459,333	2,459,466	2,458,600	2,461,877	12,299,162
Total	\$28,063,631	\$2,459,333	\$2,500,860	\$2,500,860	\$2,500,860	\$ 37,502,907
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
Capital Improvement Fund	2,359,886	1,959,333	1,959,466	1,958,600	1,961,877	10,199,162
FEMA - Mitigation Funds	1,875,000	-	-	-	-	1,875,000
Zero Waste Fund	500,000	500,000	500,000	500,000	500,000	2,500,000
Off Street Parking Fund	23,328,745	-	-	-	-	23,328,745
Total	\$28,063,631	\$2,459,333	\$2,459,466	\$2,458,600	\$2,461,877	\$ 37,902,907

* Funding from available General Fund Excess Property Transfer Tax

First Source Fund receives 1% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). First Source Fund (B.M.C.13.26) promotes the hiring of local jobseekers on local and publicly funded construction projects, in addition to non-construction jobs that are created after construction is complete.

Public Art Fund receives 1.5% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). Funding for the program is provided through the Public Art Resolution, passed in 1999, which requires all eligible capital projects within the city to allocate 1.5% of the project budget of public improvements to the Public Art Fund.

CITY FACILITIES

Program Detail by Project

One-Time Projects	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
North Berkeley Senior Center Seismic Retrofit (FEMA only)	1,875,000	-	-	-	-	FEMA Mitigation Funding portion of larger project at North Berkeley Senior Center for Seismic Upgrades and Deferred Maintenance Repairs and Improvements. Funding for the remainder of the project is anticipated from T1 Infrastructure Bond funds.
Pathway Project Start Up Capital (Council Supplemental)	400,000					Implementation of Pathway Project. Develop a comprehensive, innovative and meaningful plan to house and serve Berkeley's homeless population.
Center Street Garage Rebuild	23,328,745	-	-	-	-	Funding for the completion of the Center Street Garage reconstruction project.
Subtotal	\$ 25,603,745	-	-	-	-	
Deferred Maintenance	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Carpet Replacement	210,000	-	-	-	-	Public Safety Building and portions of 2180 Milvia
Upper Sewer Lateral Rehabilitation	90,000	90,000	-	-	-	Replacement or repair of city-owned upper laterals to reach compliance with the consent decree with the EPA.
Corp Yard Parking Lot Paving	-	110,000	-	-	-	Capital Improvement Fund allocation for paving repairs to the Corp Yard Parking Lot
Fire Station No. 2	-	100,000	-	-	-	Kitchen repair and selective tenant improvements
Deferred Maintenance (TBD)	-	-	300,000	300,000	300,000	Annual allocation to Facilities Deferred Maintenance from the General Fund is \$300,000. Funding is allocated to projects as they arise.
Subtotal	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	
ADA Compliance	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
ADA Transition Plan Development	100,000	100,000	-	-	-	Update of the City's ADA Transition Plan
ADA Capital (TBD)	-	-	100,000	100,000	100,000	Annual allocation to Facilities ADA Compliance from the General Fund is \$100,000. Funding is allocated to projects as needs arise.
Subtotal	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	
Emergency Maintenance	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Public Safety Building Leak Repair	250,000	-	-	-	-	Repairs to damage caused by water intrusion at the Public Safety Building and eliminating source of leak.
Roof/Water Leak Assessment and Repair	50,000	50,000	-	-	-	Evaluation of water intrusions at the animal shelter and other city facilities.
Animal Shelter Lift Station	200,000	-	-	-	-	Sewer pump lift station repairs at the Animal Shelter, will reduce maintenance service calls.
Emergency Maintenance (TBD)	-	450,000	500,000	500,000	500,000	Annual allocation to Facilities Emergency Maintenance from the General Fund is \$500,000. Funding is allocated to projects as needs arise.
Subtotal	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	
Debt Service/Reserve	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Transfer Station Design & Rebuild Reserve	500,000	500,000	500,000	500,000	500,000	Annual contribution from the Zero Waste Fund towards the eventual Rebuild of the City Transfer Station.
Debt Service: Animal Shelter - 2010 COP	402,963	402,913	402,613	401,800	405,106	Annual Debt Service Payment
Debt Service: Theater & Ballpark - 2012 Lease Rev. Bond	249,971	249,468	249,901	249,848	249,819	Annual Debt Service Payment for Berkeley Rep. Theater portion
Debt Service: University Ave. Center - W/C Loan Payback	406,952	406,952	406,952	406,952	406,952	Annual Loan Payment to Worker Compensation Fund.
Subtotal	\$ 1,559,886	\$ 1,559,333	\$1,559,466	\$1,558,600	\$ 1,561,877	
Total	\$ 28,063,631	\$ 2,459,333	\$2,459,466	\$2,458,600	\$ 2,461,877	

INFORMATION TECHNOLOGY

Summary

Currently, the City's PC inventory comprises 1,215 desktops, 238 laptops, 93 tablets, and 87 Public Safety MDTs (Mobile Data Terminals). In FY 2003, the City's server infrastructure comprised 93 Physical servers (13 for email), with each server supporting a single software application. Currently, the City runs 35 Physical servers (4 virtual for email), 183 virtual servers as a result of Virtualization and thus reducing carbon footprint and resulted in energy efficiencies. The City also runs City owned Fiber to the downtown locations and this was placed in operation in year 2000. City Network Infrastructure runs over 190 routers, switches, and access points that connect the City's 42 service locations.

In FY 2008, the City centralized PC purchasing and instituted a capital replacement program requiring departments to set aside money every year for desktop PCs, enterprise desktop software, and for servers. Because a capital replacement fund was established, the City's PC inventory, Servers and Storage is a funded liability and the network devices, wireless and UPS inventory is an underfunded liability. In FY 2015 the City established a replacement fund for our core enterprise financial system, FUND\$, the property tax in excess of the \$10.5 million baseline will be allocated for FUND\$ replacement.

In FY 2016 the City established a replacement fund for the citywide telephone system, estimating a ten year replacement cycle. Staff is planning to replace the handsets at the five year mark, as the current handsets are already one generation behind.

Computer Replacement Fund: PC & Server

This fund supports centralized licensing and maintenance of Citywide PCs and servers: critical desktop hardware is upgraded every four to six years, all desktops are licensed for the City standard software suite, and servers are maintained for all departments.

In FY 2013, this fund provided for a replacement of our disk and cloud-based backup system. In FY 2014, this fund provided for an upgrade and expansion of our virtual server infrastructure, comprising 11 physical servers that support over 183 virtual servers. In FY 2016, this fund provided for a replacement of our storage area network (SAN), which supports the backend storage for our virtual server infrastructure. In FY2017, the City upgraded their Microsoft Office software licenses to enable video conferencing and Office 365 capabilities. Implementation will occur in early 2017, and will improve access to data and files from any location thus increasing employee efficiencies, will provide more reliable security, and help enhance the disaster recovery process, which will allow email to still be accessible on our mobile devices should City Hall be impacted in a disaster. Our investment decisions will prioritize initiatives that achieve the best performance outcomes and greatest benefit so funding and other resources currently dedicated to operations and maintenance efforts can be recapitalized and invested in modernization efforts

Enterprise Resource Planning (ERP) Project

The ERP Team (FUND\$ Replacement) provides project management, change management and subject matter expertise to implement a new , fully integrated, public sector Enterprise Resource Planning ("ERP") system that meets the City's functional needs related to financial data management, purchasing, human resources, payroll, benefits administration, and

INFORMATION TECHNOLOGY

budget preparation. In later phases the ERP Project Team will also identify optimal solutions to improve refuse billing, the City's work order system, fleet and facilities management, performance evaluations for City staff, learning management system for all City employees, administration of business licenses, and property tax assessments.

Fiber Master Plan

The goals in developing a Fiber Master Plan are to comprehensively assess its options, evaluate the advantages and drawbacks of potential business models, identify funding requirements (to be assumed by a combination of public and/or private entities), and lay the groundwork for a phased implementation that would accurately reflect the City's unique needs and constraints, and would enable on-demand build-out without incurring any debt. The master plan will objectively balance need with equity when determining areas to prioritize with fiber optic construction. And, because of the extended time likely required for implementation, it seeks to enable better coordination among City departments.

Wireless Master Plan

The City will develop a wireless master plan to improve the accessibility to broadband (commonly understood as high-speed Internet) and wireless access (Wi-Fi) for public services. The emerging use of video-based services, reliance on cloud computing, and public demand for interactive bandwidth intensive City services requires the City to look at increasing the availability of high-speed and reliable broadband services. In addition, there are certain parts of the City that have less than adequate, or no, broadband services, which thereby affects the economic development of the City. The ultimate goal of broadband access is to allow people to take advantage of its potential to improve the user's experience for business development, education, or recreation. The project will be completed in multiple phases:

- Phase I: Expanding Wi-Fi Access Points throughout all City buildings
- Phase II: Public Wi-Fi Downtown - Downtown Wireless Plan
- Phase III: Evaluate feasibility of future expansion

INFORMATION TECHNOLOGY

PROGRAM AND FUNDING SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
One-Time Funding						
Fiber Master Plann	210,000	100,000	-	-	-	310,000
Wireless Master Plan	150,000	100,000	-	-	-	250,000
Subtotal	\$ 360,000	\$ 200,000	\$ -	\$ -	\$ -	\$ 560,000
Recurring Funding						
Voice Over Internet Protocol (VoIP)	65,000	65,000	163,000	163,000	163,000	619,000
FUNDS/ERP	4,000,000	4,595,574	1,488,000	1,112,400	1,168,020	12,363,994
ERP Replacement Fund				1,000,000	1,000,000	2,000,000
AS/400 Computer (Servers Replacement)	121,400	121,400	121,400	121,400	121,400	607,000
Network Infrastructure	175,964	175,964	175,964	175,964	175,964	879,820
Software Annual Costs (Network Licensing)	1,149,100	1,231,220	1,231,220	1,231,220	1,231,220	6,073,980
Syber Security Resillience Plan/SIEM Software	190,000	190,000	190,000	190,000	190,000	950,000
PC Replacement	145,800	145,800	145,800	145,800	145,800	729,000
Total	\$6,207,264	\$6,724,958	\$ 3,515,384	\$4,139,784	\$4,195,404	\$ 24,782,794
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
Phone System Replacement-VOIP	65,000	65,000	163,000	163,000	163,000	619,000
FUND\$ Replacement	4,000,000	4,595,574	1,488,000	2,112,400	2,168,020	14,363,994
Capital Improvement Fund	1,758,464	1,680,584	1,480,584	1,480,584	1,480,584	7,880,800
Computer Replacemetn Fund	383,800	383,800	383,800	383,800	383,800	1,919,000
Total	\$6,207,264	\$6,724,958	\$ 3,515,384	\$4,139,784	\$4,195,404	\$ 24,782,794

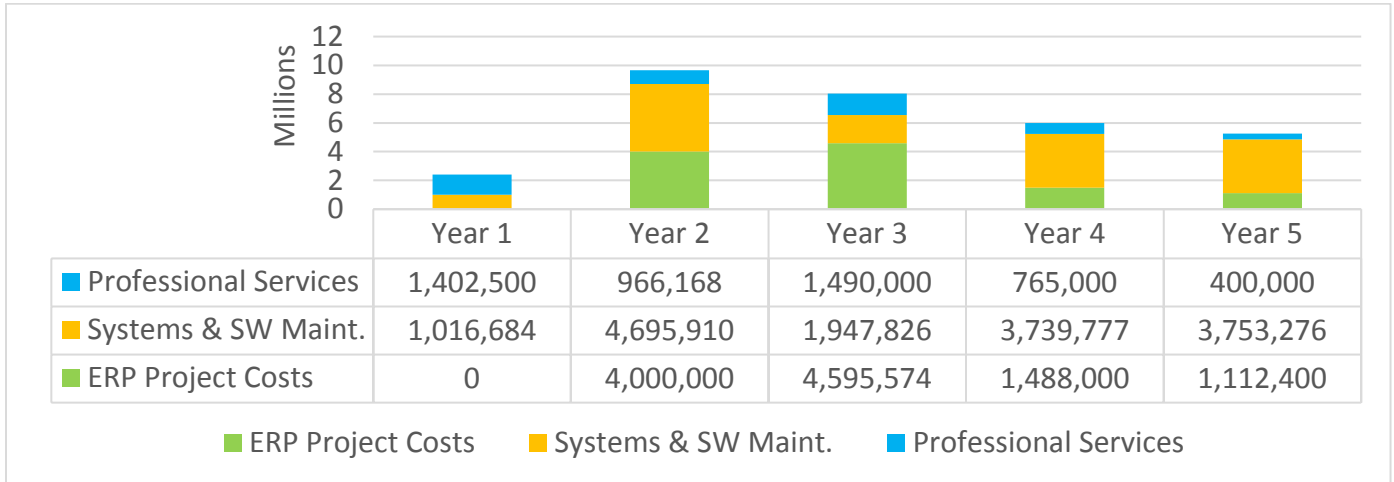
INFORMATION TECHNOLOGY

Program Detail by Project

One-Time Projects	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Fiber Master Plan	210,000	100,000				Fiber Master Plan
Wireless Master Plan	150,000	100,000				Wi Fi Master Plan Framework
Subtotal	360,000	200,000	-	-	-	
Infrastructure						
Servers	121,400	121,400	121,400	121,400	121,400	Average annual cost for a 5 year replacement cycle.
Network	175,964	175,964	175,964	175,964	175,964	Average annual cost for a 7 year replacement cycle.
Subtotal	297,364	297,364	297,364	297,364	297,364	
Software						
Location/Description						
Desktop Computers	554,000	554,000	554,000	554,000	554,000	Microsoft EA, Skype for business, PSTN, Azure cloud, O365, MS Project, MS Visio, MS Visual Studio Pro
Servers & Storage	122,500	204,620	204,620	204,620	204,620	Dell Server and Storage Warranty: \$50,000; VMWare: \$30,000; Windows Data Center: \$12,500; Remote Desktop Services (RDS): \$30,000; SQL Licensing will be added starting FY2019 - \$82,120.
Core Infrastructure/Network Licensing	472,600	472,600	472,600	472,600	472,600	Core infrastructure Software / Network Licensing.
Core Infrastructure/Network Licensing	190,000	190,000	190,000	190,000	190,000	Cyber Security Resilience Plan/SIEM Software
Subtotal	1,339,100	1,421,220	1,421,220	1,421,220	1,421,220	
Telephones						
Location/Description						
VolP Phone System	65,000	65,000	163,000	163,000	163,000	Average annual cost for a 10 year replacement cycle.
Subtotal	65,000	65,000	163,000	163,000	163,000	
Desktop Comupputers						
Location/Description						
PC Replacement	145,800	145,800	145,800	145,800	145,800	Includes PC replacement only. Laptops are paid by department; Police MDT's are part of Vehicle replacement fund; Fire MDT's are separate account maintained by Fire.
Subtotal	145,800	145,800	145,800	145,800	145,800	
ERP FUND\$ Replacement						
Location/Description						
ERP Project Cost	4,000,000	4,595,574	1,488,000	1,112,400	1,168,020	The \$15.1 M covers costs thru FY 2020. These are non personnel costs only. The costs include replacement and ongoing software maintenance estimates: Core Financials/ HR, Contract Management / CAFR, Refuse Billing, Work Order System, Fleet and Facilities Management, Performance Evaluations, Learning Management System, Business License, Property Tax Assessment, Printers and Timesheet Workstations.
ERP Replacement FUND 15 Yr Replacement Fund (Next ERP to be replaced FY 2033)	-	-	-	1,000,000	1,000,000	Starting FY2021 - The costs include replacement and ongoing software maintenance estimates: Core Financials/ HR, Contract Management / CAFR, Refuse Billing, Work Order System, Fleet and Facilities Management, Performance Evaluations, Learning Management System, Business License, Property Tax Assessment, Printers and Timesheet Workstations.
Subtotal	4,000,000	4,595,574	1,488,000	2,112,400	2,168,020	
Total	\$6,207,264	\$6,724,958	\$3,515,384	\$4,139,784	\$4,195,404	

INFORMATION TECHNOLOGY

5 Year Digital Strategy Plan (DSP) Implementation Budget Estimates



Year 1 FY 17 DSP Budget Estimate

Year	Type	Initiative	Year 1	Year 2	Year 3	Year 4	Year 5
Phase 1							
1.1	ESW	ERP Implementation	0	4,000,000	2,340,574	450,000	472,500
1.2	EGOV	Website Upgrade	50,000	200,000	80,000	84,000	88,200
1.3	ESW	Community Engagement Tool	12,000	12,600	13,230	13,892	14,586
1.4	M	IT Governance	0	0	0	0	0
1.5	ESW	Accela Phase 3	0	600,000	125,000	131,250	137,813
1.6	ESW	IT Service Management/Enterprise PM Tool	200,000	393,000	160,650	168,683	177,117
1.7	DSW	Lagan Upgrade/Integrations	0	0	0	0	0
1.8	ESW	Skype for Business	12,000	0	0	0	0
1.9	ESW	MS Enterprise Upgrade, O365 Migration	0	100,000	0	0	0
1.10	DSW	Replace Access Commissioner Tracking (CIS)	0	15,000	4,500	4,725	4,961
1.11	DSW	Knox Maintenance (Medic Units)	5,000	0	0	0	0
1.12	DSW	Targeted Case Management (TCM) System	62,500	55,500	57,580	60,459	63,482
1.13	DSW	New World Systems Upgrade/Migration V 9-10.2	415,484	0	0	0	0
1.14	DSW	16 Beat Layer / New World GIS	0	0	0	0	0
1.15	DSW	Vesta Upgrade	0	0	0	0	0
1.16	DSW	Mobile ID Bluetooth Fingerprint Reader	75,000	0	0	0	0
1.17	DSW	Telestaff Upgrade for Fire	36,000	18,000	18,000	18,000	18,000
1.18	DSW	CAD Run Card Maintenance	0	0	0	0	0
1.19	DSW	Sungard Upgrades	150,000	45,000	45,000	45,000	45,000
1.20	DSW	Route Smart App, Mobile Commun	28,200	29,660	10,168	10,676	11,210
1.21	DSW	GasBoy Fuel Management Upgrade	70,000	15,000	15,750	16,538	17,364
1.22	INF	Print Server Upgrade Citywide	25,000	6,250	6,563	6,891	7,235
1.23	INF	Windows Server 2003 OS Upgrade/Migration	0	0	0	0	0
1.24	INF	SCCM Upgrade Citywide	0	0	0	0	0
1.25	INF	Solarwinds Monitoring	9,000	2,700	2,835	2,977	3,126
1.26	INF	City Council Chambers Infrastructure	0	30,000	0	0	0
1.27	M	IT Staff Training; PM / BPI	42,000	150,000	150,000	150,000	150,000
1.28	M	IT Organization Staff	0	0	0	0	0
1.29	M	Staff Cost Allocation Model	10,000	0	0	0	0
1.30	M	IT Classification Study	0	50,000	0	0	0
1.31	DSW	Rent Stabilization Management System Phase 2	110,000	50,000	50,000	50,000	50,000
1.32	DSW	Rental Registration Portal	0	0	0	0	0

INFORMATION TECHNOLOGY

Year 2 FY 18 DSP Budget Estimate

Year	Type	Initiative	Year 1	Year 2	Year 3	Year 4	Year 5
Phase 2							
2.1	ESW	Intranet Portal	0	50,000	15,000	15,000	15,000
2.2	INF	Web Server Redundancy	0	0	0	0	0
2.3	ESW	GIS Master Plan Implementation	0	200,000	200,000	200,000	200,000
2.4	M 11	Physical Security	0	150,000	150,000	90,000	90,000
2.5	M 12	Cyber Security Resilience Plan	0	100,000	100,000	100,000	100,000
2.6	INF	Security Infor & Event Management (SIEM)	0	90,000	27,000	28,350	29,768
2.7	INF	VOIP Phase II Citywide	0	50,000	15,000	15,750	16,538
2.8	INF	Internet Bandwidth increase/Backup	0	65,000	65,000	65,000	65,000
2.9	INF	Conference Room Upgrades Citywide	0	100,000	150,000	0	0
2.10	DSW	Youthworks/Temp Employees Online App (ERP)	0	0	0	0	0
2.11	INF	Citywide Windows 10 Upgrade	0	45,000	0	0	0
2.12	DSW	Real Property Leasing Software Assessment	0	145,000	30,000	31,500	33,075
2.13	DSW	BENS Replacement	0	25,000	25,000	25,000	25,000
2.14	DSW	ePCR Tablet Replacement	0	50,000	0	0	0
2.15	DSW	FireRMS/Red Alert Alternatives	0	250,000	75,000	78,750	82,688
2.16	DSW	New Suppression Inspection System	0	210,000	63,000	66,150	69,458
2.17	DSW	NextGen EPM-EHR System Projects	57,000	72,000	52,500	55,125	57,881
2.18	INF	Mobile Crisis Team Incident Log Replacement	0	125,000	30,000	31,500	33,075
2.19	INF	Mobile Devices, Clinicians & Inspectors HHCS	0	60,000	37,800	37,800	37,800
2.20	INF	WebMethods Intergration Services	0	0	0	0	0
2.21	INF	Data Warehouse Reporting	0	0	0	0	0
2.22	INF	AC PSB Server Room HVAC Upgrade	900,000	24,000	24,000	24,000	24,000
2.23	DSW	Online Mapping Solution for Planning Permits	0	35,000	36,750	38,588	40,517
2.24	DSW	Nemo Q Replacement (Ticketing System)	0	75,000	15,000	15,750	16,538
2.25	DSW	CJIS Advanced Authentication Police	0	0	0	0	0
2.26	DSW	New World Upgrade V10.2 to Enterprise	0	458,368	250,000	262,500	275,625
2.27	DSW	PD Online False Alarm Management & Interface	0	0	0	0	0
2.28	DSW	New Irrigation Management System	0	150,000	45,000	47,250	49,613
2.29	DSW	Center St. Garage Software Systems	0	150,000	50,000	52,500	55,125
2.30	DSW	Public Notification System	0	35,000	10,500	11,025	11,576
2.31	DSW	Body Worn Cameras	150,000	150,000	150,000	150,000	150,000
2.32	DSW	PD Conversion of Microfiche	0	20,000	0	0	0

Year 3 FY 19 DSP Budget Estimate

Year	Type	Initiative	Year 1	Year 2	Year 3	Year 4	Year 5
Phase 3							
3.1	DSW	Capital Project Management Software	0	340,000	72,000	66,150	69,458
3.2	M	Disaster Recovery / Business Continuity Plan	0	100,000	100,000	100,000	100,000
3.3	M	Wi-Fi Master Plan Framework	0	150,000	100,000	100,000	100,000
3.4	HW	Open Data Portal Expansion Citywide	0	75,000	75,000	75,000	75,000
3.5	DSW	Electronic Timecards (ERP)	0	0	0	0	0
3.6	ESW	Contract Management (ERP)	0	0	0	0	0
3.7	ESW	Refuse Billing (ERP)	0	0	400,000	90,000	94,500
3.8	ESW	Work Order Application (ERP)	0	0	1,000,000	210,000	220,500
3.9	ESW	Customer Relationship Management	0	40,000	40,000	40,000	40,000
3.10	ESW	Public Records Act (PRA)	0	40,000	40,000	40,000	40,000
3.11	DSW	CAFR Application (ERP)	0	0	0	0	0
3.12	DSW	Learning Management Application (ERP)	0	0	80,000	18,000	18,900
3.13	ESW	Performance Evaluations (ERP)	0	0	150,000	30,000	31,500
3.14	ESW	Property Tax Assessment (ERP)	0	0	375,000	90,000	94,500
3.15	DSW	EOC Management Software	0	0	40,000	10,500	11,025
3.16	INF	Infrastructure Fiber Master Plan	0	210,000	100,000	0	0
3.17	ESW	Integrations for ERP	0	0	250,000	0	0
3.18	DSW	Replace Locate in Berkeley	0	0	150,000	36,000	37,800
3.19	DSW	Telecomm Expense Management Software	0	0	125,000	37,500	39,375
3.20	DSW	Online Business Registration Permitting	0	0	155,000	40,000	42,000
3.21	DSW	Data Warehouse Migration (PD RMS, Fire FMIS)	0	50,000	0	0	0
3.22	DSW	Customer Relationships/Commun. Management	0	0	85,000	15,000	15,750

INFORMATION TECHNOLOGY

Year 4 FY 20 and Year 5 FY21 DSP Budget Estimate

Year	Type	Initiative	Year 1	Year 2	Year 3	Year 4	Year 5
Phase 4							
4.1	ESW	E-Forms/E-Signatures & Workflow	0	0	0	200,000	37,500
4.2	EWS	Business License Software Replacement (ERP)	0	0	0	500,000	150,000
4.3	INF	Develop/Implement City-wide Plan for KIOSKS	0	0	0	100,000	30,000
4.4	INF	Develop City-wide Plan, Security Cameras	0	0	0	180,000	30,000
4.5	EWS	Enterprise Taxonomy for OnBase	0	0	0	150,000	0
4.6	INF	Develop/Implement Computer Lab Plan	0	0	0	60,000	12,000
4.7	DSW	Elite System Replacement	0	0	0	75,000	18,000
4.8	DSW	Loan Tracking Software Replacement	0	0	0	150,000	30,000
4.9	DSW	OPAC Computer Skills Testing Application	0	0	0	10,000	3,000
4.10	INF	Single Sign-on	0	0	0	340,000	72,000
4.11	DSW	Workers Compensation Application	0	0	0	175,000	30,000
4.12	DSW	Replace Evidence Tracking System	0	0	0	200,000	42,000
4.13	DSW	Case Management	0	0	0	200,000	42,000
Phase 5							
5.1	INF	OnBase ECMS	0	0	0	0	750,000
5.2	INF	MS Enter. Upgrade, O365 Migration	0	0	0	0	250,000



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PARKS, RECREATION AND WATERFRONT

Summary

The City of Berkeley Parks, Recreation and Waterfront Department maintains almost 250 park acres which include 52 parks, tot lots and play areas. The Department also maintains pathways, turf and medians, 15 athletic fields, 49 sports courts (basketball and tennis), 4 community centers, 2 clubhouses, 29 restrooms and outbuildings, 2 swimming pools and 3 resident camps. The Department also manages the largest public marina in the Bay Area situated on 125 acres of land and 50 acres of water, and operates and maintains approximately 1000 berths, public access docks, a fishing pier and small boat launch ramps.

Parks Capital Improvements Projects

Recurring capital funding is used to address our most critical unfunded needs and allows selected projects to be accomplished annually. These funds are also used selectively to leverage grants. Park improvements focus on direct benefits to park users and future sustainability. These improvements include safety and accessibility improvements; replacing deteriorated play equipment; repairing or replacing site furnishings; improvements to existing playing fields for increased youth sports opportunities; and basic infrastructure improvements, including rehabilitation of sports courts, lighting, eroded walkways and irrigation renovations for greater water efficiency.

The Department's historically underfunded capital and major maintenance programs have led to complete failure or closure or some of its most iconic facilities, such as the Rose Garden Trellis and the Berkeley Pier. The deterioration of park buildings and facilities citywide has accelerated due to the lack of funds. In the case of James Kenney, this has required emergency repairs at a far greater cost than would be the case if the facilities were more routinely maintained.

The passage of Measure WW provided funding for the acquisition, restoration and improvement of parks and recreation facilities. The funds are distributed by the East Bay Regional Park District to the cities based on population counts. The City's share is \$4,876,584 over a 10 year period. The Department worked with the Parks and Recreation Commission to hold a public process to identify and prioritize projects and provided a recommendation to the City Council. Many of these projects are currently underway or have just been completed. All of the Measure WW funded work must be completed, billed and closed by the end of 2018, and the Department is on track to do so.

The passage of Measure F in 2014 provides an important new infusion of funding to address deferred maintenance, by introducing \$450,000 for recurring maintenance and an additional \$750,000 for major maintenance in parks and park buildings. However, given the estimated \$66 million of needed improvements in parks, park buildings, park

PARKS, RECREATION AND WATERFRONT

restrooms, and pools, it will still be some time before the Department's assets and infrastructures are brought into good repair.

While there is a substantial amount of unfunded park work still to accomplish, several priority projects have been identified for funding over the next two years. In FY 2018, the Rose Garden Trellis – Phase II project will require the majority of available funding. This project will complete replacement of the trellis, a landmarked structure and prized community amenity. In FY 2019, the focus will be on upgrading highly-used sport courts and play equipment at Strawberry Creek Park, Ohlone Park, and San Pablo Park. Other available funding in FY 2018 and FY 2019 will focus on projects that can leverage Measure WW funding, such as the Becky Temko Play Equipment renovation project.

Also planned for FY 2018 is the Gilman Fields Turf Replacement project. This \$1.2 million project is funded by the City of Berkeley and four neighboring cities – Albany, El Cerrito, Emeryville and Richmond - who participate in the Gilman joint powers agreement to annually set aside funds for periodic replacement of the artificial turf at Gilman sports fields.

Waterfront Capital Improvements Projects

Maintaining the marina, waterfront infrastructure and associated parks and facilities is crucial to the continued successful operation of the Berkeley Marina and waterfront parks. Annual funding from the Marina Enterprise Fund is earmarked for capital improvements to replace aging infrastructure.

The nature of the capital improvement work at the Waterfront consists of (1) ongoing, routine maintenance such as replacement of pilings, roadways, restrooms, etc.; and (2) large scale improvements such as dock replacement and dredging. In many cases, deferred maintenance projects have now grown into full-scale capital replacement projects, e.g. by not routinely resurfacing parking lots, we now need to replace them. The total identified unfunded maintenance work needed at the Waterfront exceeds \$41 million.

The available allocation from the Marina Fund for capital and major maintenance projects is approximately \$250,000 per year. In FY 2018 and FY 2019, proposed projects focus on dock and restroom improvements, as well as landscape and real estate planning efforts. The City also plans to request a loan from the State of California Division of Boating and Waterways to fund major capital work (large dock replacement) at the Marina. In addition, two projects are proposed in FY18, drawing one-time funding from the Marina Fund reserve: small dock replacement in the South Sailing Basin, and a Waterfront Master Plan.

Camps Capital Improvement Projects

Since the 1920s, the City of Berkeley has operated three resident camps: Echo Lake Camp, Berkeley Tuolumne Camp, and Cazadero Camp. In recent years, natural disasters have caused catastrophic damage: the Rim Fire of 2013 devastated Berkeley

PARKS, RECREATION AND WATERFRONT

Tuolumne Camp; and a 2016 landslide at Cazadero Camp destroyed a dorm building and destabilized trees and the hillside; and heavy snows damaged structures at Echo Lake Camp in 2011.

The reserve balance of the Camps Fund has been nearly depleted by the catastrophic losses at these Camps, and cannot cover the needed capital or maintenance expenses. Yet significant capital improvement projects are needed at each of the three resident camp facilities.

Berkeley Tuolumne Camp

The rebuild of Berkeley Tuolumne Camp includes reconstruction of all the of the Camp facilities, including Dining and Recreation Halls, camper and staff cabins, a bridge over the South Fork Tuolumne River, parking and accessibility paths, restrooms, and utilities, including water and wastewater treatment. Construction is anticipated to begin in 2019 and to take two years to complete. The total project cost is estimated to be \$54.4 million. Most of this cost is expected to be covered by insurance and a Public Assistance grant from Federal Emergency Management Agency (FEMA). The remainder – estimated to be approx. \$3.3 million – will be covered by the City of Berkeley's Catastrophic Reserve fund.

Cazadero Camp

The capital improvement project at Cazadero includes repair of the landslide, and construction of a new Jensen Dormitory. Landslide repair work is planned for FY18, and is estimated to cost \$642,000. While the City's insurance carrier has indicated that the dorm building is a covered loss, an estimated \$50,000 of the \$765,000 total dorm rebuild cost will need to be paid by the City. The dorm is planned to be designed in FY18 and constructed in FY 2019.

Echo Lake Camp

Following 2011 snow damage, staff worked for several years to structurally reinforce the dining hall and lodge deck, in addition to other priority projects including reopening the swimming pool and modernizing the kitchen make-up air system. These efforts delayed two capital projects at Echo Lake Camp needed to ensure that Camp can continue to operate. Reconstruction of the leach field is required to bring the Camp's wastewater treatment system up to modern standards. The project is in design now, and is estimated to cost \$200,000. Also required is ADA pathway work to ensure accessibility of main Camp features. This work is estimated to cost \$600,000.

PARKS, RECREATION AND WATERFRONT

PROGRAM AND FUNDING SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
One-Time Funding						
Tuolumne Camp	3,300,000	-	-	-	-	3,300,000
Gilman Turf Replacement	1,200,000	-	-	-	-	1,200,000
Echo Lake Camp Leach Field & ADA Pathways	200,000	600,000	-	-	-	800,000
Cazadero Camp - Landslide Repair/Dorm Replacement	642,000	50,000	-	-	-	692,000
Waterfront Master Plan	150,000	-	-	-	-	150,000
Small Docks Replacement	260,000	-	-	-	-	260,000
Subtotal	5,752,000	650,000	-	-	-	6,402,000
Recurring Funding						
<i>Parks Tax Fund</i>						
Rose Garden Trellis Phase II	900,000	-	-	-	-	900,000
Gilman Reserve/Facility Assessment/Sewer Lateral	100,000	100,000	100,000	100,000	100,000	500,000
Ohlone Basketball Courts/Other Improvements	-	500,000	-	-	-	500,000
Strawberry Creek Park Phase II	-	400,000	-	-	-	400,000
Unallocated Projects	-	-	900,000	900,000	900,000	2,700,000
<i>Capital Improvement Fund</i>						
Rose Garden Trellis Phase II	200,000	-	-	-	-	200,000
Becky Temko Play Equipment	200,000	-	-	-	-	200,000
Ohlone Basketball Courts/Other Improvements	-	100,000	-	-	-	100,000
Strawberry Creek Park Phase II	-	100,000	-	-	-	100,000
San Pablo Park Play Equipment	-	200,000	-	-	-	200,000
ADA Parks: Unallocated	-	-	250,000	250,000	250,000	750,000
Replace Hazardous Play Equipment: Unallocated	-	-	150,000	150,000	150,000	450,000
Ball Fields Acquisition Debt Service	249,971	249,467	249,901	249,848	249,819	1,249,006
<i>Marina Fund</i>						
Waterfront Real Estate Consulting	150,000	-	-	-	-	150,000
Finger Docks	75,000	75,000	-	-	-	150,000
Waterfront Restroom Upgrades	-	175,000	-	-	-	175,000
Waterfront Landscape Architect Consultant Services	25,000	-	-	-	-	25,000
Marina Debt Service	485,719	485,719	485,719	485,719	485,719	2,428,595
Marina CIP	-	-	250,000	250,000	250,000	750,000
Subtotal	2,385,690	2,385,186	2,385,620	2,385,567	2,385,538	11,927,601
Total	\$ 8,137,690	\$ 3,035,186	\$ 2,385,620	\$ 2,385,567	\$ 2,385,538	\$18,329,601
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
General Fund (<i>Catastrophic Reserve</i>)	3,300,000	-	-	-	-	3,300,000
Gilman Fields Turf Replacement Fund	1,200,000	-	-	-	-	1,200,000
Parks Tax	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
Capital Improvement Fund	1,491,971	1,299,467	649,901	649,848	649,819	4,741,006
Marina Fund	1,145,719	735,719	735,719	735,719	735,719	4,088,595
Total	\$ 8,137,690	\$ 3,035,186	\$ 2,385,620	\$ 2,385,567	\$ 2,385,538	\$18,329,601

First Source Fund receives 1% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). First Source Fund (B.M.C.13.26) promotes the hiring of local jobseekers on local and publicly funded construction projects, in addition to non-construction jobs that are created after construction is complete.

Public Art Fund receives 1.5% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). Funding for the program is provided through the Public Art Resolution, passed in 1999, which requires all eligible capital projects within the city to allocate 1.5% of the project budget of public improvements to the Public Art Fund.

PARKS, RECREATION AND WATERFRONT

Program Detail by Project

PRW Projects	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
One-Time Funding						
Tuolumne Camp	3,300,000	-	-	-	-	Reconstruct Berkeley Tuolumne Camp; General Fund catastrophic reserve allocation of \$3.3 million will cover City share of \$54 million total camp reconstruction cost.
Gilman Turf Replacement	1,200,000	-	-	-	-	Replace artificial turf at the existing two major fields. Project is funded by the Gilman Fields Reserve fund.
Echo Lake Camp Leach Field & ADA Pathways	200,000	600,000	-	-	-	Reconstruct existing leach field; and construct ADA pathways within Camp.
Cazadero Camp - Landslide Repair/Dorm Replacement	642,000	50,000	-	-	-	Design, permit and construct landslide repair; and rebuild Jensen Dorm
Waterfront Master Plan	150,000	-	-	-	-	Evaluate existing conditions to inform future Waterfront planning.
Small Docks Replacement	260,000	-	-	-	-	Replace east and west docks at South Sailing Basin.
Subtotal	5,752,000	650,000	-	-	-	
Recurring Funding						
Parks Tax Fund						
Rose Garden Trellis Phase II	900,000	-	-	-	-	Construct final 85% of Trellis and complete remaining ADA work.
Gilman Reserve/Facility Assessment/Sewer Lateral	100,000	100,000	100,000	100,000	100,000	Annual set-asides for: contribution to Gilman turf replacement fund; parks facility condition assessments; and parks sewer lateral work.
Ohlone Basketball Courts/Other Improvements	-	500,000	-	-	-	Renovate basketball court, picnic area and lighting
Strawberry Creek Park Phase II	-	400,000	-	-	-	Renovate basketball court and picnic area
Unallocated Projects	-	-	900,000	900,000	900,000	Annual allocation
Capital Improvement Fund						
Rose Garden Trellis Phase II	200,000	-	-	-	-	Construct final 85% of Trellis and complete remaining ADA work.
Becky Temko Play Equipment	200,000	-	-	-	-	Replace play structure and equipment, including ADA work.
Ohlone Basketball Courts/Other Improvements	-	100,000	-	-	-	Renovate basketball court, picnic area and lighting
Strawberry Creek Park Phase II	-	100,000	-	-	-	Renovate basketball court and picnic area
San Pablo Park Play Equipment	-	200,000	-	-	-	Replace play equipment
ADA Parks: Unallocated	-	-	250,000	250,000	250,000	Annual allocation
Replace Hazardous Play Equipment: Unallocated	-	-	150,000	150,000	150,000	Annual allocation
Ball Fields Acquisition Debt Service	249,971	249,467	249,901	249,848	249,819	
Marina Fund						
Real Estate Consulting	150,000	-	-	-	-	Provide City with possible development and/or replacement of Waterfront facilities.
Finger Docks	75,000	75,000	-	-	-	Replace damaged finger docks
Restroom Upgrades	-	175,000	-	-	-	Replace and upgrade Marina restroom amenities
Landscape Architect Consultant Services	25,000	-	-	-	-	Provide standard specifications for Waterfront landscape design.
Marina Debt Service	485,719	485,719	485,719	485,719	485,719	Loan payments for prior dock replacements
Unallocated Projects	-	-	250,000	250,000	250,000	Annual allocation
Subtotal	2,385,690	2,385,186	2,385,620	2,385,567	2,385,538	
Total	\$ 8,137,690	\$3,035,186	\$2,385,620	\$2,385,567	\$2,385,538	



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SANITARY SEWER SYSTEM

Summary

There are 254 miles of public sanitary sewer mains and 130 miles of public sewer laterals serving an area of approximately 6,300 acres. Approximately 85% (217 miles of sewer main and associated sewer laterals) have been replaced since the current program started in 1987. The remaining sewers range in age from 30 to 100 years with the average age around 60 years old. The sewer pipes are beyond or near the end of normal life expectancy, and are in need of rehabilitation or repair.

In September 2014, the Consent Decree (CD) was finalized, with EBMUD and its seven satellite collection system agencies¹ settling with the EPA regarding excess wet weather flows and facility discharges. Each agency developed plans and programs to reduce inflow and infiltration (I&I), reduce sanitary sewer overflows, and repair and replace aging sewer pipelines. Under the final CD requirements, Berkeley agreed to replace an average of 4.2 miles of sewer pipeline annually for the next 12 years; replace noncompliant manholes; perform regular condition assessment, spot repairs, and increase required maintenance activities.

Prior to the Consent Decree, a total of approximately \$4.5 million per year was budgeted for sewer capital. In 2016, a sewer rate study and Proposition 218 process led to the adoption of a series of rate adjustments to support the added financial load of the Consent Decree requirements. Based on current construction costs, a total of approximately \$12-15 Million in annual capital expenditures is necessary to cover increased costs of CD compliance.

There are also approximately 31,600 private sewer laterals (130 miles), many of which are expected to need repair or replacement. Private portions of the collection system are believed to be a major cause of ongoing I/I problems. In 2006, Berkeley began a private lateral program to address this issue. To date, approximately 25% of City private sewer laterals have been tested or replaced.

Accomplishments

Major sanitary sewer CIP projects completed in FY 2016 and FY 2017 include segments on Hopkins Street, Arlington Avenue, Shattuck Avenue, Warring Street, Francisco Street, Adeline Street, and Martin Luther King Junior Way. The completed scope included the rehabilitation of approximately 7.7 miles of sewer mains at a construction cost of about \$12.5M. Also in FY 2017, staff completed the design for FY 2018 sewer rehabilitation improvements at Carleton Street, Haste Street, and Ninth Street. The estimated construction cost of the FY 2018 projects is \$8.7M. Construction is scheduled to start in Fall 2017 and projected to be completed by June 30, 2018.

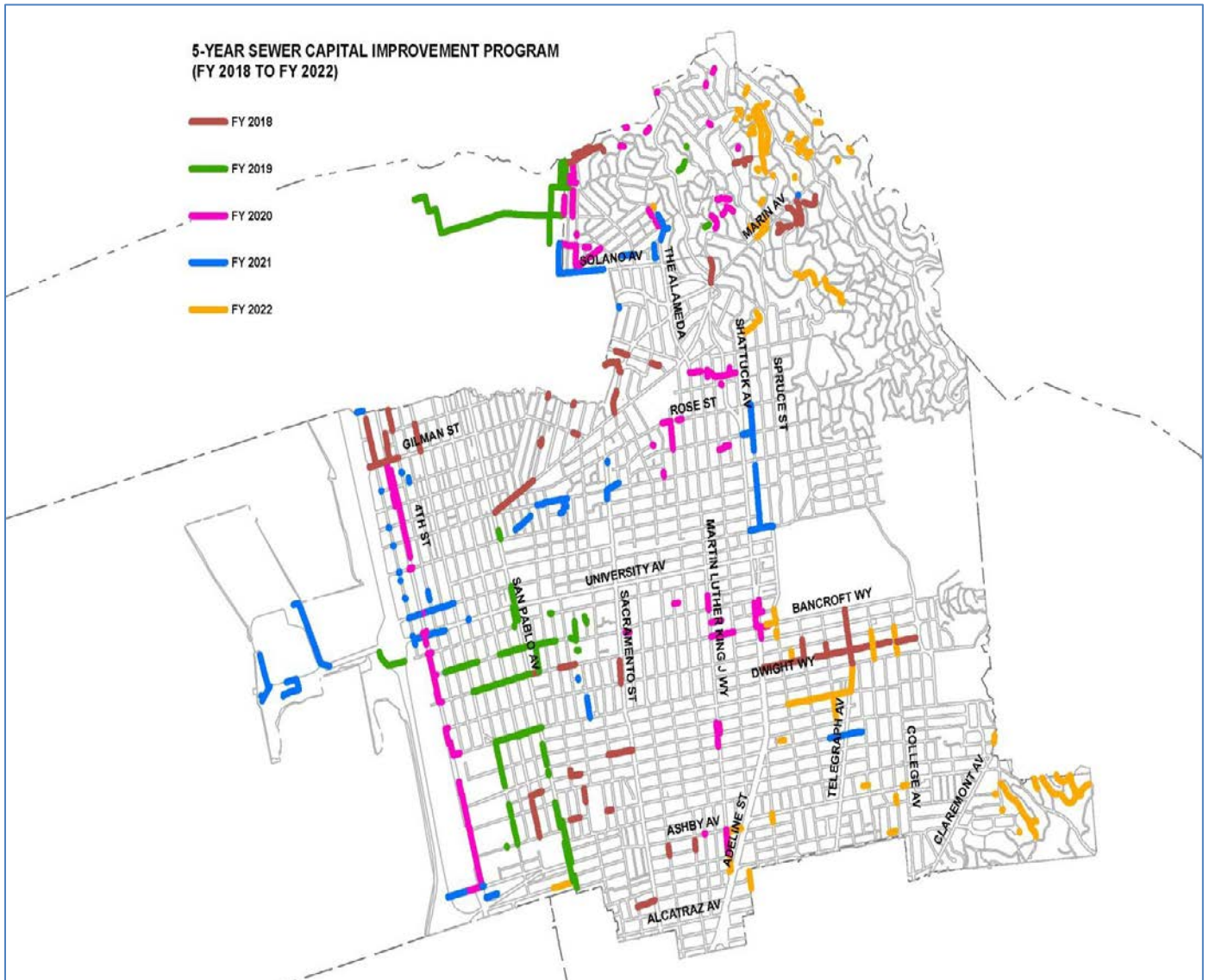
¹ The agencies to which EBMUD provides sewage treatment are known as "Satellite" agencies. They are: the Cities of Alameda, Albany, Berkeley, Emeryville, Oakland, and Piedmont and the Stege Sanitary District (which serves parts of El Cerrito and Kensington).

SANITARY SEWER SYSTEM

Funding

The capital program is funded entirely by sewer fees, which are adopted by Council on an annual basis. A five year phased in approach to rate adjustments for single family residential customers was implemented in FY 2016. Annual rate increases for FY 2018-2020 will be 14.2%, 7.0%, and 3.6%, respectively.

5-Year Sewer Capital Improvement Program Map



SANITARY SEWER SYSTEM

PROGRAM AND FUNDING SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
One-Time Funding						
Virginia Street Completion	3,077,930	-	-	-	-	3,077,930
		-	-	-	-	0
Subtotal	3,077,930	-	-	-	-	3,077,930
Recurring Funding						
Sewer Rehabilitation	8,676,490	8,851,179	10,106,832	11,442,411	11,081,987	50,158,899
Sewer Design & Planning	2,798,955	3,103,756	3,232,657	3,607,319	3,528,488	16,271,175
Subtotal	11,475,445	11,954,935	13,339,489	15,049,730	14,610,475	66,430,074
Total	\$14,553,375	\$11,954,935	\$13,339,489	\$15,049,730	\$14,610,475	\$69,508,004
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
Sanitary Sewer Fund	14,553,375	11,954,935	13,339,489	15,049,730	14,610,475	69,508,004
Total	\$14,553,375	\$11,954,935	\$13,339,489	\$15,049,730	\$14,610,475	\$69,508,004

Program Detail by Project

Sewer Rehabilitation	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Rehabilitate sanitary sewer mains and the associated manholes, sewer laterals and related work	\$ 3,077,930	-	-	-	-	Construction of sewer rehab at Virginia Street. Design occurred in FY 2017.
	\$ 8,676,490	-	-	-	-	Carleton, Fairview, Mabel; Haste, Shattuck, Telegraph; 9th Street, Posen, Indian Rock
	-	\$ 8,851,179	-	-	-	San Pablo; Bancroft, Alston, Byron; Portland, Santa Fe, Kains, West Frontage
	-	-	\$10,106,832	-	-	Neilson, The Alameda, San Antonio; Milvia, Shattuck, MLK
	-	-	-	\$11,442,411	-	Marina, Seawall, University; Solana, Hearst, Capitstrano; Walnut, Cedar, Vine
	-	-	-	-	\$11,081,987	Euclide, Grizzly Peak; Parker, MLK; Alvarado, El Camino Real
Sewer Design & Planning	\$ 2,798,955	\$ 3,103,756	\$ 3,232,657	\$ 3,607,319	\$ 3,528,488	Conditions Assessment: perform inspections and produce inspection reports meeting standards; evaluate the condition of sewer mains, manholes and lateral connections inspected; identify critical structural and O&M defects.
Totals	\$14,553,375	\$11,954,935	\$13,339,489	\$15,049,730	\$14,610,475	



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STORM DRAIN SYSTEM

Summary

The City's storm drain system consists of approximately 78 miles of underground pipes, manholes, catch basins, and cross-drains (corner inlets and outlets). The storm water program includes storm water system maintenance, capital improvements, street cleaning, and clean stormwater program activities such as toxics management, clean stormwater education, developing a Green Infrastructure Plan, Watershed Planning documentation, and a food service and industrial inspection program. The storm water infrastructure is more than 80 years old and needs to be rehabilitated. The current backlog of projects include: rehabilitation of piping reaches; elimination of rising groundwater flooding issues, replacement of deteriorated drain inlets and piping; major cleaning of the primary storm collectors in the lower Berkeley Drainage watersheds; and replacement of cross drains (storm water "street" crossings). According to the 2011 Watershed Management Plan, the total unfunded capital needs of the storm water system exceed \$208 million.

Accomplishments

In FY 2016, a \$1.53 million project began for drainage and valley gutter improvements at 6 sites throughout the City. In FY 2017, construction was completed at Curtis Street and Francisco Street, Stuart Street and California Street, and Jones Street and Tenth Street intersections, and work is underway at Bancroft Way and Bolivar Drive, and Sixth Street and Hearst Avenue intersections. Due to a landslide and hazardous conditions, construction on the 6th site, Cragmont Avenue between Regal and Bret Hart Roads will be deferred until the uphill land slide is stabilized.

In FY 2017, construction began on two Measure M funded green infrastructure sites: a bioswale at the intersection of Rose Street and Hopkins Street and a permeable paver bus pad on the northwest corner of the intersection of Shattuck and University.

Funding

The Clean Storm Water fees were enacted in the early 1990s and generate approximately \$2 million per year. The fee has not been increased since it was originally enacted. In accordance with Proposition 218, voter approval is required for fee increases. Initially, the fee provided funding for some capital improvements, but this rapidly diminished due to rising operating and maintenance costs and added requirements imposed by NPDES Permits (National Pollutant Discharge Elimination System) through the Federal Clean Water Act. The majority of the available funding goes towards basic maintenance operations of storm drain system.

The annual capital project allocation of \$200,000 from the Clean Storm Water Fund is insufficient to fund substantial repairs to the storm drain system. The funding only

STORM DRAIN SYSTEM

provides for minor capital and maintenance work and emergency storm response efforts. In FY 2016, the department began an annual reallocation of \$300,000 in Gas Tax funding from the Streets Program to the Storm Water Program. The capital storm drain program frequently relies on short term supplements from other fund sources to deliver projects. In FY 2018, Measure M funding in the amount of \$3,259,543 will fund storm-related green infrastructure projects.

STORM DRAIN SYSTEM

PROGRAM FUNDING AND SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
One-Time Funding						
2017 GI Project - Rose & Hopkins, University & Shattuck, Woolsey	1,959,543	-	-	-	-	1,959,543
2018 GI Project - Parker St. Cistern & Drainage Improvements	1,300,000	-	-	-	-	1,300,000
2019 GI Project - King School Park, N. Branch Library, Civic Center Park, Dwight/Sacto Bus Stop, Willard Park, San Pablo Park	-	1,169,052	-	-	-	1,169,052
Subtotal	\$ 3,259,543	\$1,169,052	\$ -	\$ -	\$ -	\$ 1,169,052
Recurring Funding						
Storm Drain Project - Kains Trash Rack	164,000	12,000	12,000	12,000	-	200,000
Storm Drain Project - Storm Drain Rehab TBD	10,000	91,584	119,984	488,000	500,000	1,209,568
Storm Drain Project - Wildcat Canyon Rd. Drainage Improvements	-	-	368,016	-	-	368,016
Storm Planning - Stormwater Master Plan	326,000	396,416	-	-	-	722,416
Clean Storm Planning	30,000	30,000	30,000	30,000	30,000	150,000
Subtotal	530,000	530,000	530,000	530,000	530,000	2,650,000
Total	\$ 3,789,543	\$1,699,052	\$ 530,000	\$ 530,000	\$ 530,000	\$ 3,819,052
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
State Transportation Tax	300,000	300,000	300,000	300,000	300,000	1,500,000
Measure M General Obligation Bond	3,259,543	1,169,052	-	-	-	4,428,595
Clean Stormwater Fund	230,000	230,000	230,000	230,000	230,000	1,150,000
Total	\$ 3,789,543	\$1,699,052	\$ 530,000	\$ 530,000	\$ 530,000	\$ 7,078,595

STORM DRAIN SYSTEM

Program Detail by Project

Green Infrastructure	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
2017 GI Project - Rose & Hopkins, University & Shattuck, Woolsey	\$ 1,959,543	-	-	-	-	Installing Low Impact Development within the right-of-way, using bio-swales replacing traffic islands, and installing high durability permeable pavers at a bus stop to control trash in a commercial area experiencing high trash generation levels. Install large underground stormwater storage for stormwater treatment and peak flow reduction to reduce downstream flooding potential, combined with reducing street width, improved street lighting and additional street trees. Design/planning for this project began in FY 2017.
2018 GI Project - Parker St. Cistern & Drainage Improvements	\$ 1,300,000	-	-	-	-	Install twin cisterns underground on Parker Street between 10th and 8th Streets
2019 GI Project - King School Park, N. Branch Library, Civic Center Park, Dwight/Sacto Bus Stop, Willard Park, San Pablo Park	-	\$ 1,169,052	-	-	-	Install bioswales on City property to treat runoff from City right-of-way
Subtotal	\$ 3,259,543	\$ 1,169,052	-	-	-	
Storm Projects	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Storm Drain Project - Kains Trash Rack	\$ 164,000	\$ 12,000	\$ 12,000	\$ 12,000	-	Remove concrete creek channel and partially restore creek meander within constraints of limited project site area.
Storm Drain Project - Storm Drain Rehab	\$ 10,000	\$ 91,584	\$ 119,984	\$ 488,000	\$ 500,000	General allocation that will be directed to specific projects, when identified
Storm Drain Project - Wildcat Canyon Rd. Drainage Improvements			\$ 368,016			Drainage from Wildcat Canyon Road contributes to erosion on East Bay Regional Park District (EBRPD) property and damage to EBRPD's Selby Trail. The project will improve drainage and reduce erosion.
Stormwater Master Plan	\$ 326,000	\$ 396,416				Stormwater Master Plan will be the overall document guiding the City's efforts to meet its responsibilities for drainage. The master plan will include the Green Infrastructure Plan (addressing GI to meet stormwater quality requirements imposed by NPDES permits), and Stormwater Resource Plan.
Clean Storm Planning	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	Allocation to planning Clean Storm projects
Subtotal	\$ 530,000	\$ 530,000	\$ 530,000	\$ 530,000	\$ 530,000	
Total	\$ 3,789,543	\$ 1,699,052	\$ 530,000	\$ 530,000	\$ 530,000	

SIDEWALKS

Summary

There are approximately 300 miles of concrete sidewalk in the City. An estimated 20-25 miles are in need of replacement, at a total estimated cost of \$7 million. Each year, sidewalk replacements are performed within the Proactive Sidewalk Repair Program and the Responsive Sidewalk Repair Program Funds. The Proactive Repair Program is focused on high pedestrian areas. The Responsive Sidewalk Repair Program targets residential neighborhoods where staff has received information about damaged sidewalks.

The Sidewalk Program also includes repairs to damaged curbs and driveway aprons located in the public right of way. City staff estimates that there are approximately 15 miles of damaged curbs and hundreds of driveway aprons in need of replacement, at a total estimated cost of \$3 million.

The California Streets and Highway Code assigns full responsibility for sidewalk maintenance and repair to the abutting property owner. On June 7, 2011, the City Council amended Berkeley Municipal Code Section 16.04.010 to establish a policy of splitting the costs 50%-50% with property owners, regardless of the cause of the damage, with the goal of increasing the amount of sidewalk repaired or replaced each year and improving overall pedestrian safety.

Accomplishments

In FY 2016 the City replaced approximately 4,300 linear feet (LF) of sidewalk, 6,300 square feet (SF) of driveway aprons, 2,000 LF of curb, and developed Keeler Walk. In FY 2017 the City is working to complete the annual Proactive and Responsive projects, which staff expects will replace 10-15% more sidewalk, driveway aprons, and curb than were replaced in the FY16 sidewalk projects. In addition, in FY17 we also plan to construct the West Berkeley Sidewalk Gap Project which will install more than 1,600 LF of sidewalk in five locations in west Berkeley where there are currently no sidewalks.

Funding

The annual budget for the City's Sidewalks Capital Improvement Program, including the Proactive and Responsive Sidewalk Programs, curb ramps, curbs, driveway aprons, and pathways, totals \$1,235,000 in FY 2018 & FY 2019. This includes recurring allocations from State Gas Tax, the Measure F Vehicle Registration Fee, Measure BB, the Capital Improvement Fund, and a \$100,000 allocation from the Private Party Sidewalk Fund. This funding amount includes a proposed increase from baseline funding out of the State Gas Tax in the amount of \$200,000 in FY 2018 and 2019.

SIDEWALKS

PROGRAM FUNDING AND SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
Recurring Funding						
Responsive Sidewalk Repairs	260,000	260,000	260,000	260,000	260,000	1,300,000
Proactive Sidewalk Program	225,000	225,000	225,000	225,000	225,000	1,125,000
ADA Curb Ramp Program	200,000	200,000	200,000	200,000	200,000	1,000,000
Pathway Repairs	50,000	50,000	50,000	50,000	50,000	250,000
Private Party Sidewalks (50/50 Program)	100,000	100,000	100,000	100,000	100,000	500,000
Sidewalks Program Expansion	400,000	400,000	200,000	200,000	200,000	1,400,000
Total	\$ 1,235,000	\$1,235,000	\$1,035,000	\$1,035,000	\$1,035,000	\$ 5,575,000
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
State Transportation Tax	300,000	300,000	100,000	100,000	100,000	900,000
Measure BB - Local Streets & Roads	100,000	100,000	100,000	100,000	100,000	500,000
Measure F - Vehicle Registration Fee	100,000	100,000	100,000	100,000	100,000	500,000
Capital Improvement Fund	635,000	635,000	635,000	635,000	635,000	3,175,000
Private Party Sidewalks Fund	100,000	100,000	100,000	100,000	100,000	500,000
Total	\$ 1,235,000	\$1,235,000	\$1,035,000	\$1,035,000	\$1,035,000	\$ 5,575,000

First Source Fund receives 1% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). First Source Fund (B.M.C.13.26) promotes the hiring of local jobseekers on local and publicly funded construction projects, in addition to non-construction jobs that are created after construction is complete.

Public Art Fund receives 1.5% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). Funding for the program is provided through the Public Art Resolution, passed in 1999, which requires all eligible capital projects within the city to allocate 1.5% of the project budget of public improvements to the Public Art Fund.

SIDEWALKS

Program Detail by Project

Sidewalk Program	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Proactive and Responsive Sidewalk Repair Projects	485,000	485,000	485,000	485,000	485,000	Citywide sidewalk repair programs: Proactive program targets high pedestrian areas, Responsive program focuses in residential neighborhoods. Various locations throughout the City.
ADA Curb Ramps Program	200,000	200,000	200,000	200,000	200,000	Program to bring curb ramps into compliance with the American Disabilities Act, improving ADA access to City streets and sidewalks. Various locations throughout the City.
Pathway Repair	50,000	50,000	50,000	50,000	50,000	Improve and maintain Citywide network of pedestrian paths. Various locations throughout the City.
Private Party Sidewalks	100,000	100,000	100,000	100,000	100,000	Programmed funding for the 50/50 program, in which the City splits the cost of sidewalk repair 50%/50% with property owners. Various locations throughout the City.
Sidewalks Capital Program Expansion	400,000	400,000	200,000	200,000	200,000	Funding for Sidewalk capital projects as they arise. Various locations throughout the City.
Total	\$ 1,235,000	\$ 1,235,000	\$ 1,035,000	\$ 1,035,000	\$ 1,035,000	



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STREETS

Summary

There are approximately 216 centerline miles of improved streets in Berkeley. Every two to three years, Berkeley's streets are inspected as part of the Metropolitan Transportation Commission's Pavement Management System (PMS) to identify repair needs and assign a pavement condition index (PCI) for each street. The City uses the PMS and PCI to track and prioritize pavement rehabilitation and maintenance needs on individual streets, and the overall condition of the City's street pavement network.

The primary purpose of the street rehabilitation program is to maintain a safe surface conveyance system in the public right-of-way for vehicles, bicycles, transit and pedestrians. The right-of-way also provides ancillary functions of a storm water conveyance system and the location of public utilities. Recent efforts have been made to revise paving project construction cost estimates to better reflect the cost of upgrading the complete street system as pavement improvements are made.

In FY 2018 and FY 2019, the City plans to resurface approximately 8.7 miles and make needed repairs to associated infrastructure including storm drains, curbs, gutters and sidewalks.

Accomplishments

The passage of the \$30 million Measure M Streets and Watersheds Bond in 2012, enabled the City to accelerate the implementation of the paving program and install green infrastructure where appropriate from FY 2014 through FY 2018. In FY 2014 and 2015 the City paved approximately¹ two and a half times the number of miles paved annually prior to passage of Measure M. In FY 2016 the City resurfaced 10.77 miles and plans to rehabilitate an additional 9.6 miles in 2017.

Funding

The City's annual CIP budget for street paving prior to the passage of Measure M was \$3.4 million. That amount proved insufficient to maintain the City's PCI and prevent continued deterioration of the City's street network. Measure M has added \$30 million to the street and green infrastructure projects from its passage through FY 2019 planned expenditures. Approximately \$23 million is allocated to the street paving budget and \$7 million to green infrastructure projects, discussed in the Storm Drain section of this report. With the passage of Measure BB in November 2014, an additional \$1,300,000 was added to the annual paving program budget beginning in FY16. Funds generated from the T1 Infrastructure Bond, passed in November 2016 by Berkeley voters, are eligible to be added to the street paving program.

¹ Before Measure M, from 2009 - 2013 the City resurfaced 17.2 miles or 3.44 miles per year on average, in 2014 and 2015 the City resurfaced 7.82 & 8.93 miles respectively.

STREETS

PROGRAM AND FUNDING SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
One-Time Funding						
Street Rehabilitation (Measure M)	4,392,716		-	-	-	4,392,716
Subtotal	4,392,716	-	-	-	-	4,392,716
Recurring Funding						
Street Rehabilitation	4,067,537	4,544,303	4,620,303	4,620,303	4,620,303	22,472,749
Street Survey/Design	200,000	200,000	200,000	200,000	200,000	1,000,000
Complete Streets CIP	-	155,000	155,000	155,000	155,000	620,000
Subtotal	4,267,537	4,899,303	4,975,303	4,975,303	4,975,303	24,092,749
Total	\$ 8,660,253	\$ 4,899,303	\$ 4,975,303	\$ 4,975,303	\$ 4,975,303	\$28,485,465
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
State Transportation Tax	495,303	495,303	495,303	495,303	495,303	2,476,515
Measure B - Local Streets & Roads	724,000	724,000	700,000	700,000	700,000	3,548,000
Measure BB - Local Streets & Roads	1,123,234	1,600,000	1,700,000	1,700,000	1,700,000	7,823,234
Measure F - Vehicle Registration Fee	-	155,000	155,000	155,000	155,000	620,000
Measure M - General Obligation Bond	4,392,716	-	-	-	-	4,392,716
Capital Improvement Fund	1,925,000	1,925,000	1,925,000	1,925,000	1,925,000	9,625,000
Total	\$ 8,660,253	\$ 4,899,303	\$ 4,975,303	\$ 4,975,303	\$ 4,975,303	\$28,485,465

First Source Fund receives 1% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). First Source Fund (B.M.C.13.26) promotes the hiring of local jobseekers on local and publicly funded construction projects, in addition to non-construction jobs that are created after construction is complete.

Public Art Fund receives 1.5% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund. Funding for the program is provided through the Public Art Resolution, passed in 1999, which requires all eligible capital projects within the city to allocate 1.5% of the project budget of public improvements to the Public Art Fund.

STREETS

Program Detail by Project

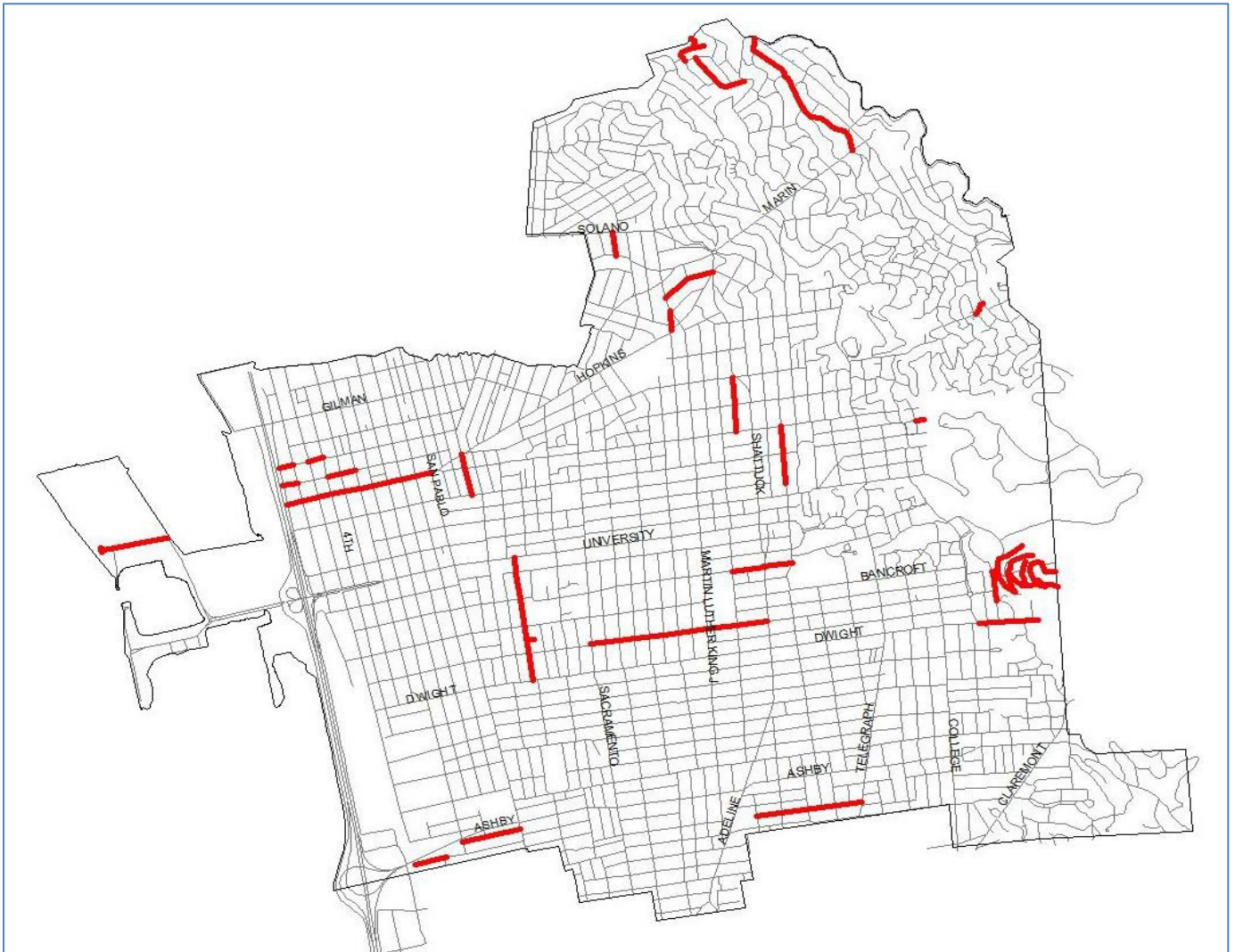
Street Rehabilitation	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
FY 18 Street Rehabilitation Project for improving pavement conditions	8,460,253	-	-	-	-	Cedar Street from East Frontage to 4th Cedar Street from 4th to 6th Oxford Street from Cedar to North of Hearst Cedar Street from 6th to San Pablo Grizzly Peak Blvd from N. City Limit to Euclid Grizzly Peak Blvd from Euclid to Keeler Grizzly Peak Blvd from Keeler to Marin Allston Way from Milvia to Shattuck Allston Way from Shattuck to Oxford Arcade Ave from Grizzly Peak to Fairlawn Arden Rd from Mosswood to Panoramic Bancroft Way from Prospect to Panoramic Bonar Street from University to Dwight Canyon Rd from Panoramic to Dead End Channing Way from Sacramento to ML King Channing Way from ML King to Milvia Channing Way from Milvia to Shattuck Cornell Avenue from Hopkins to Virginia Dwight Way from Piedmont to Dead End Dwight Way from Panoramic to E. City Limit El Dorado Ave from The Alameda to Sutter Folger St from 3rd to Hollis Henry St from Rose to Cedar Hilgard Ave from La Vereda to Dead End Jones Street from Eastshore to 2nd Jones Street from 4th to 6th Josephine Street from The Alameda to Hopkins
FY 19 Street Rehabilitation Project for improving pavement conditions	-	4,544,303	-	-	-	Shattuck Avenue from Rose to University Shattuck Place from Rose to Shattuck Ave
FY 20-22 Street Rehabilitation Projects for improving pavement conditions	-	-	4,620,303	4,620,303	4,620,303	Locations TBD
Street Survey/Design	200,000	200,000	200,000	200,000	200,000	Annual allocation for survey and/or design consultant work for street projects
Complete Streets CIP	-	155,000	155,000	155,000	155,000	Funding for Streets division planning of Complete Streets elements
Total	\$ 8,660,253	\$ 4,899,303	\$ 4,975,303	\$ 4,975,303	\$ 4,975,303	

STREETS

STREET REHABILITATION PROJECTS (MAP) FY 2018

Map shows

- ▣ Streets scheduled for rehabilitation in FY 2018



TRANSPORTATION

Summary

The City of Berkeley is committed to improving traffic safety, encouraging transit use, bicycling and walking, and addressing a variety of transportation issues. Capital projects include, parking facilities, street improvements, traffic calming measures such as signs, markings, striping, and traffic circles, and bicycle and pedestrian infrastructure improvements such as pathways, on-street facilities, and bicycle parking.

Accomplishments

Multiple transportation Capital Improvement Projects were implemented in FY 2016 and FY 2017, including:

- ❑ Transportation improvements along the Ashby Ave./Tunnel Rd. corridor received Caltrans permits and are scheduled for construction summer 2017;
- ❑ Completed construction of Safe Routes to Schools capital improvements at two schools (Emerson and MLK) and scheduled construction for another (LeConte) in FY 2017 (\$1,421,158);
- ❑ Began construction of Hearst Complete Street in FY 2017 on the campus periphery and completed design of Bancroft bike and transit lane project for implementation early FY 2018 to enhance multi-modal access and bicycle and pedestrian safety supported by UC Long Range Development Plan Settlement Agreement funds;
- ❑ Installed Berkeley's first buffered bike lane on Fulton Street in FY 2017;
- ❑ Completing the Project Study Report for the I-80/Gilman Interchange in FY 2016 and began the Environmental phase in FY 2017;
- ❑ Continued neighborhood traffic calming studies and projects; and
- ❑ Began construction of the Downtown Berkeley BART Plaza and Transit Area Capital Improvement Project in FY 2017. Construction is planned to finish in FY 2018;
- ❑ Completed design development for the Shattuck Avenue Reconfiguration Project in FY 2017. Ready for construction to begin in FY 2018.

Funding

Transportation receives recurring allocations from State Gas Tax, local fund sources such as Measure B, BB, and F, and the Capital Improvement Fund, to fund transportation planning and operations such as traffic calming, traffic signal improvements and maintenance, and roadway marking, as well as Bicycle and Pedestrian planning and programs. The division also leverages use of these recurring funds together with one-time grants and other outside funding sources whenever possible. In this capital budget, several one-time fund sources are proposed, including developer mitigation funds and Caltrans funds for new traffic signal improvements along

TRANSPORTATION

Ashby and Sacramento. This capital plan also proposes the use of new development fee based fund sources: the Shattuck Open Space Improvement Plan (SOSIP) fee and Development Parking In-Lieu fee; for the Shattuck Avenue Reconfiguration project and the Center Street Plaza project.

TRANSPORTATION

PROGRAM AND FUNDING SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
One-Time Funding						
Shattuck Reconfiguration	3,551,481	-	-	-	-	3,551,481
Center Street Plaza	650,000	456,500	1,369,500	-	-	2,476,000
Ashby Corridor Safety Improvements	451,649	-	-	-	-	451,649
San Pablo/Ashby Traffic Signal Improvements	625,691	-	-	-	-	625,691
Ninth Street Pathway Phase II	90,000	90,000	-	-	-	180,000
Downtown Transit Center Study	150,000	-	-	-	-	150,000
Southside Mobility Improvements	247,630	183,935	162,800	-	-	594,365
Campus Bike Access	-	100,000	150,000	-	-	250,000
Subtotal	5,766,451	830,435	1,682,300	-	-	8,279,186
Council Supplemental One-Time Funding						
Evaluation of Allston and California Stop Signs	8,000	-	-	-	-	8,000
Hawk Light @ Claremont Blvd. & Russell St.	50,000	-	-	-	-	50,000
Increase Funding for Neighborhood Traffic Calming	50,000	-	-	-	-	50,000
Pedestrian Activated Crosswalk @ Sac./NB Bart	80,000	-	-	-	-	80,000
Three Beacon Lights	75,000	-	-	-	-	75,000
Subtotal	263,000	-	-	-	-	263,000
Total One Time Funding	6,029,451	830,435	1,682,300	-	-	8,542,186
Recurring Funding						
Complete Streets Implementation Tools	100,000	100,000	-	-	-	200,000
Pedestrian Master Plan Update	100,000	100,000	-	-	-	200,000
Bike Plan Update	-	-	100,000	100,000	100,000	300,000
Bike Plan Improvements	119,278	119,278	119,278	119,278	119,278	596,390
Bike & Ped CIP Unprogrammed	90,549	90,549	190,549	190,549	190,549	752,745
Traffic Calming Devices Replacement & Maintenance	50,000	50,000	50,000	50,000	50,000	250,000
Traffic Calming Program (New Requests)	50,000	50,000	50,000	50,000	50,000	250,000
Traffic Signals Maintenance	250,000	250,000	300,000	300,000	300,000	1,400,000
Traffic Signals Improvement (Unallocated)	25,000	25,000	25,000	25,000	25,000	125,000
- 7th/Anthony Traffic Signals Improvements	170,465	-	-	-	-	170,465
- Sacramento/Hopkins & Sacramento/Allston Traffic Signals	-	764,000	-	-	-	764,000
Pavement Markings (incl. Roadway Thermo Marking)	250,000	250,000	250,000	250,000	250,000	1,250,000
Subtotal	1,205,292	1,798,827	1,084,827	1,084,827	1,084,827	6,258,600
Total	\$ 7,234,743	\$ 2,629,262	\$ 2,767,127	\$ 1,084,827	\$ 1,084,827	\$14,800,786
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
State Transportation Tax	320,465	50,000	50,000	50,000	50,000	520,465
Measure B - Local Streets & Roads	1,016,389	200,000	200,000	200,000	200,000	1,816,389
Measure B - Bicycle & Pedestrian	190,549	190,549	190,549	190,549	190,549	952,745
Measure BB - Local Streets & Roads	1,626,766	1,114,000	400,000	400,000	400,000	3,940,766
Measure BB - Bicycle & Pedestrian	190,000	190,000	100,000	100,000	100,000	680,000
Measure F - Vehicle Registration Fee	308,611	25,000	25,000	25,000	25,000	408,611
Capital Improvement Fund	382,278	119,278	119,278	119,278	119,278	859,390
Capital Improvement Fund (Bayer Mitigation)	625,691	-	-	-	-	625,691
Shattuck Open Space Improvement Plan (SOSIP)	650,000	456,500	1,369,500	-	-	2,476,000
Development Parking in Lieu Fee	800,000	-	-	-	-	800,000
Caltrans	451,649	-	-	-	-	451,649
Streetlight Assessment District Fee	214,715	-	-	-	-	214,715
UC - LRDP	457,630	283,935	312,800	-	-	1,054,365
Total	\$ 7,234,743	\$ 2,629,262	\$ 2,767,127	\$ 1,084,827	\$ 1,084,827	\$14,800,786

First Source Fund receives 1% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). First Source Fund (B.M.C.13.26) promotes the hiring of local jobseekers on local and publicly funded construction projects, in addition to non-construction jobs that are created after construction is complete.

Public Art Fund receives 1.5% of the project budget from all eligible capital projects (i.e. Capital Improvement Fund, Camps Fund, Parks Tax Fund and Marina Fund). Funding for the program is provided through the Public Art Resolution, passed in 1999, which requires all eligible capital projects within the city to allocate 1.5% of the project budget of public improvements to the Public Art Fund.

TRANSPORTATION

Program Detail by Project

Transportation Planning & Downtown & UC	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Shattuck Reconfiguration	3,551,481	-	-	-	-	The Project would reconfigure a three-block segment of Shattuck Avenue from Allston Way to University Avenue. The Project's main goals are to improve pedestrian and bicycle safety, improve northbound circulation for motorists and transit vehicles, and enhance the quality of public spaces in the Downtown core.
Center Street Plaza	650,000	456,500	1,369,500	-	-	Priority downtown project. Project will raise street surface to sidewalk level with enhanced paving, include stormwater infiltration features, bollards to separate pedestrians from vehicles, enhanced lighting, trees and other amenities.
Downtown Transit Center Study (UCLRDP)	150,000	-	-	-	-	Concept plan for development of an area-wide transit center in downtown that builds upon work began with the BART Plaza and Shattuck Reconfiguration.
Southside Mobility Improvements (UCLRP)	247,630	183,935	162,800	-	-	Development of an action plan and phasing and funding strategy, for projects to address: pedestrian safety; bicycle safety; pedestrian and bicycle connectivity between UC Berkeley residential facilities, campus and other destinations; and transit service/reliability between the Telegraph District and downtown.
Campus Bike Access (UCLRDP)	-	100,000	150,000	-	-	Develop preliminary engineering plans for high-impact campus bike access projects, and near term projects, including: bicycle crossing treatments at major arterial roadways, providing protected bicycle facilities where feasible, and connecting the City's bike network with bike facilities in adjacent jurisdictions
Subtotal	\$ 4,599,111	\$ 740,435	\$ 1,682,300	\$ -	\$ -	
Bicycle & Pedestrian	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Pedestrian Master Plan Update	100,000	100,000	-	-	-	Funding to update the City Pedestrian Master Plan. Elements of the plan will be implemented as part of other projects or as specific grant opportunities may arise.
Bike Plan Update	-	-	100,000	100,000	100,000	Programmed funding for the 5 year update to the City Bicycle Master Plan. Elements of the plan will be implemented as part of other projects or as specific grant opportunities may arise.
Complete Streets Implementation Tools	100,000	100,000	-	-	-	Development of tools and guidance documents for implementing the City's Complete Streets Policy.
Bicycle & Pedestrian Capital	209,827	209,827	309,827	309,827	309,827	For program planning and projects to be developed, potential local match for grants.
Ninth Street Pathway Phase II	90,000	90,000	-	-	-	Final design and construction of gap closure pathway project in Southwest Berkeley
Subtotal	\$ 499,827	\$ 499,827	\$ 409,827	\$ 409,827	\$ 409,827	

TRANSPORTATION

Program Detail by Project

Traffic Engineering	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
Ashby Corridor Safety Improvements	451,649	-	-	-	-	Implement safety and access improvements on Ashby/State Route 13 (Caltrans Caldecott 4th Bore Settlement Agreement)
San Pablo/Ashby Traffic Signal Improvements	625,691	-	-	-	-	Increase capacity of the intersection, using Mitigation fees from Bayer and in coordination with Caltrans approval of project scope.
7th/Anthony Traffic Signals Improvements	170,465	-	-	-	-	Remove the existing signal at 7th/Potter, and install new signal at 7th/Anthony, also relocate existing flashing beacons from 7th/Anthony to 7th/Potter.
Sacramento/Hopkins & Sacramento/Allston Traffic Signals	-	764,000	-	-	-	Traffic signal modification at intersections of Sacramento & Hopkins and Sacramento and Allston to improve safety and traffic operation.
Traffic Calming Devices Replacement & Maintenance	50,000	50,000	50,000	50,000	50,000	Ongoing funding of \$50,000 per year to support Neighborhood Traffic Calming Program equipment operations and maintenance
Traffic Calming Program (New Requests)	50,000	50,000	50,000	50,000	50,000	Ongoing funding of \$50,000 per year to review/implement new requests for the Neighborhood Traffic Calming Program
Traffic Signals Maintenance	250,000	250,000	300,000	300,000	300,000	Five year capital program
Traffic Signals Improvement (Unallocated)	25,000	25,000	25,000	25,000	25,000	Annual funding towards Traffic Signal Improvements from the Vehicle Registration Fee
Pavement Markings (Roadway Thermo Marking)	250,000	250,000	250,000	250,000	250,000	Provide pavement marking/stripping plans for 5-year Repaving Plan and other pavement marking needs
Evaluation of Allston and California Stop Signs	8,000					Council supplemental one-time funding requests.
Hawk Light at Claremont Blvd. & Russell St.	50,000					Council supplemental one-time funding requests.
Increase Funding for Neighborhood Traffic Calming	50,000					Council supplemental one-time funding requests.
Pedestrian Activated Crosswalk at Sacramento St. & North Berkeley Bart Station	80,000					Council supplemental one-time funding requests.
Three Beacon Lights	75,000					Council supplemental one-time funding requests.
Subtotal	\$ 2,135,805	\$ 1,389,000	\$ 675,000	\$ 675,000	\$ 675,000	
Total	\$ 7,234,743	\$ 2,629,262	\$ 2,767,127	\$1,084,827	\$ 1,084,827	



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OTHER INFRASTRUCTURE

The projects and programs listed here in the “Other Infrastructure” category because they do not directly fit other capital program categories such as Streets or Facilities (buildings). As such, the fund sources for respective projects vary.

Closed Landfill

The Public Works Department maintains, monitors and repairs the City’s closed landfill. The closed landfill accepted waste from approximately 1961 until its closure in 1985 and has an active gas collection and control system (GCCS) with an existing methane destruction device (flare station). Currently, the Site is developed as a City Park, known as Cesar Chavez Park, with approximately half of the 90-acre area landscaped as lawn area that is regularly maintained, and the other half designated as a natural area with native seasonal grasses, and a bird nesting area. Annual funding has been allocated in the past for both routine and non-routine maintenance and monitoring and the landfill and an annual funding of \$320,000 is proposed to continue for FY 2018-2022. In 2015, the Public Works Department funded a project to replace the original flare station and construction will be completed in FY 2017. The next scheduled major capital project at the landfill is the repair of the rock armoring on the east side of the park to prevent erosion. Currently, the City is seeking permits with the various federal and state aquatic agencies for that project.

City Streetlight Program

Annual funding began in FY 2016 and FY 2017 for a five year comprehensive city streetlight program. Streetlight Program projects include streetlight pole replacement, pole painting and rust removal, installation of additional streetlights on existing poles, streetlight pedestal upgrades, and program related tree trimming. Funding for the program is proposed to continue through FY 2020, funded from Streetlight Assessment District revenue.

Retaining Walls and Miscellaneous Non-Building Structures

The Public Works Department is responsible for maintaining approximately 325 retaining walls, and bridges, tunnels, culverts and other miscellaneous non-building structures within the public right of way. Many of the structures are older and in need of repair. An annual funding allocation of \$250,000 for the maintenance of these structures is proposed FY 2020-2022.

OTHER INFRASTRUCTURE

PROGRAM AND FUNDING SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
One Time Funding						
Street Light Program <i>(Council Supplemental)</i>	50,000	-				50,000
Recurring Funding						
City Streetlight Program	378,740	390,100	401,800	-	-	1,170,640
Landfill Postclosure Monitoring (routine)	167,000	167,000	167,000	167,000	167,000	835,000
Closed Landfill Maintenance and Monitoring (non-routine)	153,328	153,328	153,328	153,328	153,328	766,640
Retaining Walls Condition Wall Repairs	-	-	250,000	250,000	250,000	750,000
Total	\$ 749,068	\$ 710,428	\$ 972,128	\$ 570,328	\$ 570,328	\$3,572,280
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
Capital Improvemetrn Fund	50,000	-	-	-	-	50,000
Measure BB - Local Streets & Roads	-	-	250,000	250,000	250,000	750,000
Streetlight Assessment District Fee	378,740	390,100	401,800	-	-	1,170,640
Zero Waste Fund	320,328	320,328	320,328	320,328	320,328	1,601,640
Total	\$ 749,068	\$ 710,428	\$ 972,128	\$ 570,328	\$ 570,328	\$3,572,280

Program Detail by Project

Other/Misc. Infrastructure	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Location/Description
City Streetlight Program	378,740	390,100	401,800	-	-	Comprehensive city streetlight program: includes streetlight pole replacement, pole painting and rust removal, installation of additional streetlights on existing poles, streetlight pedestal upgrades, and program related tree trimming. Various locations throughout the City.
Landfill Postclosure Monitoring (routine)	167,000	167,000	167,000	167,000	167,000	Routine maintenance and monitoring to fulfill City of Berkeley federal environmental requirements at the City of Berkeley's closed landfill, Cesar Chavez Park.
Closed Landfill Maintenance and Monitoring (non routine)	153,328	153,328	153,328	153,328	153,328	Non-Routine maintenance and monitoring to fulfill the City of Berkeley's federal environmental requirements at the City of Berkeley's closed landfill, Cesar Chavez Park.
Retaining Walls Condition Wall Repairs	-	-	250,000	250,000	250,000	Repair of the City's 300 plus retaining walls, tunnels, culverts and other non-building structures. Various locations throughout the City.
Street Light Program One-Time Funding	50,000					Council Supplemental One-time funding request.
Total	\$ 749,068	\$ 710,428	\$ 972,128	\$ 570,328	\$ 570,328	

EQUIPMENT & FLEET

Summary

All City Departments make annual replacement contributions into the Equipment Replacement Fund for the eventual replacement of their vehicles. Historically, the Equipment Maintenance Division has been responsible for determining what each Department's replacement contribution will be, recommending a schedule of vehicle replacements to the City Manager, and purchasing the equipment from the Replacement Fund in accordance with the replacement schedule. Staff will continue to review the replacement schedule and identify the vehicles on the schedule that can be replaced with energy saving vehicles.

Accomplishments

In addition to managing the replacement schedule and purchase of new vehicles, the Equipment Maintenance Division maintains the city's entire fleet, comprising 706 vehicles. In FY 2016, 62 vehicles were replaced, at a replacement cost of \$3.9 Million. In FY 2017, purchases were made to replace 41 vehicles, for a cost of \$6.1 Million.

Equipment Backlog

The equipment replacement backlog is currently estimated at \$1.8 Million. The replacement of the remaining equipment and vehicles on the backlog is planned through FY 2022.

Funding

The proposed budget reflects the 5-year replacement plan to replace equipment and vehicles citywide. The amount budgeted per year varies due to type/cost of the vehicles on the replacement schedule. All departments contribute to the Equipment Replacement Fund based on the projected replacement cost of each of their vehicles and according to the vehicle's replacement schedule. Replacement vehicles are not purchased until the vehicle to be replaced has been fully funded. New vehicles purchases that are fleet additions (net new vehicles) are added then added to the equipment replacement schedule and departmental cost allocation.

PROGRAM FUNDING AND SUMMARY

Project Description	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
Recurring Funding						
Vehicle Replacement	2,878,826	4,567,451	2,995,870	2,887,082	6,801,540	20,130,769
Total	\$2,878,826	\$4,567,451	\$2,995,870	\$2,887,082	\$6,801,540	\$20,130,769
Funding Summary						
Fund Source	Adopted FY 2018	Adopted FY 2019	Planned FY 2020	Planned FY 2021	Planned FY 2022	5 Year Total
Equipment Replacement Fund	2,878,826	4,567,451	2,995,870	2,887,082	6,801,540	20,130,769
Total	\$2,878,826	\$4,567,451	\$2,995,870	\$2,887,082	\$6,801,540	\$20,130,769

EQUIPMENT & FLEET

FY 2018 Vehicle Replacement Schedule

Equipment Number	Year	Description	Replacement Year	Replacement Cost
192	1999	1/2 TON CARGO VAN	FY18	\$ 27,503
248	1999	3/4 TON PICKUP TRUCK	FY18	\$ 29,470
411	1999	1/2 TON CARGO VAN	FY18	\$ 27,461
1118	2003	MOBILE SUBSTATION	FY18	\$ 376,204
1756	2014	POLICE PATROL(PROPERT	FY18	\$ 43,000
1757	2014	POLICE (HOMICIDE)	FY18	\$ 42,000
1758	2014	POLICE PATROL(ROBBERY	FY18	\$ 43,000
1759	2014	4DR SEDAN (SEX CRIMES	FY18	\$ 43,000
1760	2014	POLICE (POOL)	FY18	\$ 42,000
1761	2014	POLICE PATROL (PROPER	FY18	\$ 43,000
1762	2014	POLICE (BEAT 11)	FY18	\$ 45,000
1763	2014	POLICE PATROL (BEAT 1	FY18	\$ 45,000
1764	2014	POLICE PATROL (POOL)	FY18	\$ 45,000
1765	2014	POLICE (BEAT 13)	FY18	\$ 45,000
1808	2014	POLICE (BEAT 4)	FY18	\$ 45,000
1809	2014	POLICE (BEAT 12)	FY18	\$ 45,000
1963	2009	F150 4X4 SUPERCREW	FY18	\$ 62,707
1964	2009	F150 4X4 SUPERCREW	FY18	\$ 62,707
1965	2009	F150 4X4 SUPERCREW	FY18	\$ 62,707
2366	2008	F150 4X2 P/U	FY18	\$ 20,872
2367	2008	F150 4X2 P/U	FY18	\$ 20,872
2368	2008	F150 4X2 P/U	FY18	\$ 20,872
2369	2008	3/4 TON PICKUP	FY18	\$ 34,199
2371	2008	F550 DUMP TRUCK	FY18	\$ 77,131
2703	2008	EQUIPMENT TRAILER	FY18	\$ 6,928
2904	2008	LINE STRIPER	FY18	\$ 1,500
3022	2008	MINI UTILITY PICKUP	FY18	\$ 37,116
3274	2001	CHIPPER TRUCK	FY18	\$ 101,862
3275	2001	CHIPPER TRUCK	FY18	\$ 101,861
4100	2002	3/4 TON UTILITY TRUCK	FY18	\$ 51,860
4101	2001	3/4 TON UTILITY TRUCK	FY18	\$ 51,860
4102	2002	3/4 TON UTILITY TRUCK	FY18	\$ 48,995
4106	2008	BUILDING MAINT. VAN	FY18	\$ 32,622
4107	2008	MINI CARGO VAN	FY18	\$ 32,622
4109	2009	MINI PICK UP	FY18	\$ 25,074
4110	2008	ESCAPE HYBRID (POOL)	FY18	\$ 42,712
6360	2008	CNG DROP BOX TRUCK	FY18	\$ 368,254
6361	2008	CNG DROP BOX TRUCK	FY18	\$ 368,254
6400	2008	12' FLAT BED TRUCK W/	FY18	\$ 59,484
6402	2008	3/4 TON PICKUP	FY18	\$ 43,557
6889	2008	ESCAPE HYBRID	FY18	\$ 42,712
8187	2008	UTILITY TRAILER 16'	FY18	\$ 15,000
8200	2001	MAXI CARGO VAN	FY18	\$ 30,845
9011	2002	HYBRID TOYOTA PRIUS	FY18	\$ 36,000
9013	2003	HYBRID HONDA CIVIC (P	FY18	\$ 31,000
			TOTAL	\$ 2,878,826

EQUIPMENT & FLEET

FY 2019 Vehicle Replacement Schedule

Equipment Number	Year	Description	Replacement Year	Replacement Cost
1966	2009	ESCAPE HYBRID	FY19	\$ 47,741
1988	2014	AMBULANCE	FY19	\$ 310,820
1989	2014	AMBULANCE	FY19	\$ 310,820
1990	2014	AMBULANCE	FY19	\$ 310,820
1991	2014	AMBULANCE	FY19	\$ 310,820
2015	2009	PORTABLE AIR COMPRESS	FY19	\$ 29,248
2016	2009	PORTABLE AIR COMPRESS	FY19	\$ 29,248
2017	2009	MINI ASPHALT ROLLER	FY19	\$ 25,022
2363	2006	1 TON UTILITY TRUCK	FY19	\$ 55,680
2364	2006	1 TON UTILITY TRUCK	FY19	\$ 55,680
2370	2008	MINI VAN (CRIME SC	FY19	\$ 27,935
2372	2009	F150 4X2 REG CAB	FY19	\$ 25,980
2373	2009	TOPKICK UTILITY	FY19	\$ 209,991
2374	2009	TOPKICK UTILITY	FY19	\$ 209,991
2718	2012	STREET SWEEPER	FY19	\$ 335,530
2719	2012	STREET SWEEPER	FY19	\$ 328,745
2906	2009	ESCAPE HYBRID	FY19	\$ 47,653
3018	2002	JOHN DEERE TRACTOR	FY19	\$ 40,943
3738	2012	RIDING MOWER	FY19	\$ 12,620
3739	2012	RIDING MOWER	FY19	\$ 12,620
4105	2003	8 PASSANGER VAN-CNG	FY19	\$ 38,525
4700	2003	CNG AERIAL 48' BCKT T	FY19	\$ 265,975
4707	2010	F150 SUPER CAB	FY19	\$ 40,748
6008	2009	REFUSE TRAILER	FY19	\$ 111,946
6009	2009	REFUSE TRAILER	FY19	\$ 111,946
6010	2009	REFUSE TRAILER	FY19	\$ 111,946
6011	2009	REFUSE TRAILER	FY19	\$ 111,946
6048	2009	LONG HAUL TRUCK	FY19	\$ 162,081
6049	2009	LONG HAUL TRUCK	FY19	\$ 162,081
6050	2009	LONG HAUL TRUCK	FY19	\$ 162,081
6051	2009	LONG HAUL TRUCK	FY19	\$ 162,081
6403	2009	1/2 TON PICKUP	FY19	\$ 39,935
6890	2009	ESCAPE HYBRID	FY19	\$ 47,653
6900	2003	HONDA CIVIC - CNG	FY19	\$ 35,978
8188	2008	UTILITY TRAILER 16'(A	FY19	\$ 15,000
8189	2008	UTILITY TRAILER 16'	FY19	\$ 15,000
8190	2008	UTILITY TRAILER 16'	FY19	\$ 15,000
8457	2003	HYBRID HONDA CIVIC	FY19	\$ 35,324
9017	2009	ESCAPE HYBRID	FY19	\$ 47,653
9101	2003	HONDA CIVIC - CNG	FY19	\$ 35,978
9102	2003	HYBRID SEDAN	FY19	\$ 32,345
9103	2003	HYBRID SEDAN (POOL)	FY19	\$ 32,345
9105	2003	HONDA CIVIC - CNG	FY19	\$ 35,978
			TOTAL	\$ 4,567,451

EQUIPMENT & FLEET

FY 2020 Vehicle Replacement Schedule

Equipment Number	Year	Description	Replacement Year	Replacement Cost
1802	2010	CARGO VAN (SEU)	FY20	\$ 57,117
1812	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1813	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1814	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1815	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1816	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1817	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1818	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1819	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1820	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1821	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1822	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1823	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1824	2016	POLICE SUV EXPLORER	FY20	\$ 50,000
1825	2016	POLICE SUV EXPLORER 1	FY20	\$ 50,000
1929	2010	EXPEDITION	FY20	\$ 75,672
1931	2009	CERT TRAILER	FY20	\$ 10,000
2318	2008	BACKHOE /LOADER	FY20	\$ 171,378
2320	2011	RANGER SUPERCAB 4X2	FY20	\$ 34,167
2375	2010	SEWER CAMERA VAN	FY20	\$ 341,609
2376	2010	SEWER JET TRAILER	FY20	\$ 95,000
2601	2011	P/U WITH LIFT GATE	FY20	\$ 54,900
2602	2011	P/U WITH LIFT GATE	FY20	\$ 54,900
2603	2011	P/U WITH LIFT GATE	FY20	\$ 54,900
2700	2000	ARROW BOARD TRAILER	FY20	\$ 11,087
2902	2008	1/2 TON PICKUP(ON CAL	FY20	\$ 26,161
2903	2008	1/2 TON PICKUP	FY20	\$ 26,616
3013	2004	4X4 TRACTOR	FY20	\$ 140,162
3904	2001	SMALL EQUIPMENT TRAIL	FY20	\$ 6,155
3905	2001	SMALL EQUIPMENT TRAIL	FY20	\$ 6,155
3906	2001	SMALL EQUIPMENT TRAIL	FY20	\$ 6,155
3907	2001	SMALL EQUIPMENT TRAIL	FY20	\$ 6,625
3908	2002	SMALL EQUIPMENT TRAIL	FY20	\$ 6,916
4111	2010	RANGER UTILITY	FY20	\$ 46,448
4112	2011	RANGER UTILITY	FY20	\$ 40,912
4113	2011	RANGER UTILITY	FY20	\$ 40,912
6504	2013	WHEEL LOADER	FY20	\$ 293,559
6505	2015	HYBRID WHEEL LOADER	FY20	\$ 497,577
8192	2008	HONDA 4DR FIT	FY20	\$ 23,395
8602	2009	3/4 TON UTILITY TRUCK	FY20	\$ 55,402
9002	2005	MINI PICKUP	FY20	\$ 19,416
9018	2010	FORD 1/2 TON PICK UP	FY20	\$ 29,351
9116	2010	HYBRID TOYOTA PRIUS	FY20	\$ 36,000
9801	2008	1/2 TON P/U (SHOP TRU	FY20	\$ 27,221
			TOTAL	\$ 2,995,870

EQUIPMENT & FLEET

FY 2021 Vehicle Replacement Schedule

Equipment Number	Year	Description	Replacement Year	Replacement Cost
1958	2011	500 GAL FUEL TANKER	FY21	\$ 16,850
1967	2011	4X4 SPORT UTILITY	FY21	\$ 98,374
2377	2011	F150 4X2 SUPERCAB	FY21	\$ 36,151
2600	2011	SD CUTAWAY VAN	FY21	\$ 66,773
3034	2016	BRUSH CHIPPER	FY21	\$ 68,065
3035	2016	BRUSH CHIPPER	FY21	\$ 68,065
3036	2016	BRUSH CHIPPER	FY21	\$ 68,065
3914	2011	TRAILER	FY21	\$ 10,000
4011	2011	PRIUS HYBRID	FY21	\$ 42,123
4705	2005	35' AERIAL TRUCK	FY21	\$ 269,457
6366	2008	30YD SIDE LOADER B/U	FY21	\$ 300,288
6377	2013	MCNIELIUS CNG FRT LOA	FY21	\$ 524,108
6378	2013	MCNIELIUS CNG FRT LOA	FY21	\$ 524,108
6380	2013	MCNIELIUS FRT LOADER	FY21	\$ 482,611
6404	2011	FUSION 4 DOOR	FY21	\$ 32,254
8231	2011	15 PASSENGER VAN	FY21	\$ 42,398
9107	2006	HYBRID TOYOTA PRIUS	FY21	\$ 36,000
9108	2006	HYBRID TOYOTA PRIUS(A	FY21	\$ 36,000
9109	2006	HYBRID TOY PRIUS(P	FY21	\$ 36,000
9110	2006	HYBRID TOYOTA PRIUS(P	FY21	\$ 36,000
9111	2006	HYBRID TOYOTA PRIUS(S	FY21	\$ 36,000
9112	2006	HYBRID TOYOTA PRIUS	FY21	\$ 36,000
9800	2001	SNORKEL MAN LIFT	FY21	\$ 21,392
			TOTAL	\$ 2,887,082

EQUIPMENT & FLEET

FY 2022 Vehicle Replacement Schedule

Equipment Number	Year	Description	Replacement Year	Replacement Cost
1811	2015	TUNDRA 4X4 (TRAFFIC)	FY22	\$ 54,948
1902	2015	EXPLORER (CHIEF)	FY22	\$ 44,967
1959	2011	4X4 TYPE 3 (E305)	FY22	\$ 507,664
1973	2013	FORD ESCAPE 4WD	FY22	\$ 40,934
1974	2013	FORD ESCAPE 4WD	FY22	\$ 40,934
1975	2013	FORD ESCAPE 4WD	FY22	\$ 40,934
1976	2013	FORD ESCAPE 4WD	FY22	\$ 40,934
1977	2013	FORD ESCAPE 4WD	FY22	\$ 40,934
1980	2011	COMPACT TRACK LOADER	FY22	\$ 162,618
1981	2011	MINI EXCAVATOR	FY22	\$ 7,500
2382	2014	1/2 TON PICKUP TRUCK	FY22	\$ 27,677
2604	2013	E250 CARGO VAN	FY22	\$ 49,891
2605	2013	E250 CARGO VAN	FY22	\$ 49,891
2606	2013	E250 CARGO VAN	FY22	\$ 49,891
2607	2013	E250 CARGO VAN	FY22	\$ 49,891
2608	2013	E250 CARGO VAN	FY22	\$ 49,891
2909	2013	FORD ESCAPE	FY22	\$ 38,204
2910	2012	FORD F550 (SIGN TRUCK)	FY22	\$ 88,862
3021	2008	F250 4X2 REG CAB	FY22	\$ 45,088
3033	2015	RIDING MOWER 4X4	FY22	\$ 45,793
3246	2012	3/4 TON PICK UP	FY22	\$ 33,125
3247	2012	3/4 TON PICK UP	FY22	\$ 37,601
3248	2012	3/4 TON PICK UP	FY22	\$ 37,601
3249	2012	3/4 TON PICK UP	FY22	\$ 37,601
3740	2013	RIDING MOWER 4WD	FY22	\$ 66,688
3741	2013	RIDING MOWER 4WD	FY22	\$ 66,688
3861	2015	4 WD MOWER	FY22	\$ 140,998
4805	2012	HYBRID TOYOTA PRIUS	FY22	\$ 36,000
6211	2012	F150 4X2 SUPERCAB	FY22	\$ 40,352
6281	2012	F150 4X2 SUPERCAB	FY22	\$ 40,352
6282	2012	F150 4X2 SUPERCAB	FY22	\$ 40,352
6284	2012	F150 4X2 SUPERCAB	FY22	\$ 40,352
6367	2012	HEIL SIDELOADER	FY22	\$ 400,000
6368	2012	HEIL SIDELOADER	FY22	\$ 400,000
6369	2012	HEIL SIDELOADER	FY22	\$ 400,000
6370	2012	HEIL SIDELOADER	FY22	\$ 400,000
6371	2012	HEIL SIDELOADER	FY22	\$ 400,000
6372	2012	HEIL CNG SIDELOADER	FY22	\$ 438,000
6373	2012	HEIL CNG SIDELOADER	FY22	\$ 438,000
6374	2012	HEIL CNG SIDELOADER	FY22	\$ 438,000
6375	2012	HEIL CNG SIDELOADER	FY22	\$ 438,000
6376	2012	HEIL CNG SIDELOADER	FY22	\$ 438,000
8506	2012	HYBRID TOYOTA PRIUS	FY22	\$ 36,000
8507	2012	HYBRID TOYOTA PRIUS	FY22	\$ 36,000
8508	2012	HYBRID TOYOTA PRIUS	FY22	\$ 36,000
8509	2012	HYBRID TOYOTA PRIUS	FY22	\$ 36,000
8519	2013	FORD ESCAPE 4WD	FY22	\$ 40,934
8520	2013	FORD ESCAPE 4WD	FY22	\$ 40,934
9004	2012	ESCAPE HYBRID	FY22	\$ 53,016
9019	2012	ESCAPE HYBRID	FY22	\$ 55,825
9021	2013	ESCAPE SE FWD	FY22	\$ 35,135
9119	2013	FORD ESCAPE	FY22	\$ 38,204
9120	2013	FORD ESCAPE	FY22	\$ 38,204
9603	2003	MINI PICKUP	FY22	\$ 35,000
9604	2013	ESCAPE SE FWD	FY22	\$ 35,135
			TOTAL	\$ 6,801,540