



Office of the City Manager

WORKSESSION

March 19, 2013

To: Honorable Mayor and Members of the City Council
From:  Christine Daniel, City Manager
Submitted by: Andrew Clough, Director, Public Works
Subject: Public Works Capital Improvement Program

INTRODUCTION

This report presents the Public Works Department's proposed FY 2014 and FY 2015 capital budget, the Public Works Capital Improvement Program (CIP) (for FY 2014 – FY 2018), and an overview of the opportunities and challenges that will define the future of our Capital Improvement Programs, and consequently the health of the City's public infrastructure. This report also includes a summary of the operational improvements in our Zero Waste Division (formerly Solid Waste Management) and Sanitary Sewer System Program, some recent accomplishments, and an outline for how staff and the Public Works Commission will develop an Expenditure Plan for the Measure M General Obligation Bond funds passed by Berkeley voters in November 2012.

Public Works is currently completing the first phase of *Strengthening Our Culture of Service*, the Department's program to realize a shift in our organizational culture. *Strengthening Our Culture of Service* hinges on promoting open, honest, and respectful communication practices, with an emphasis on customer service, including delivering capital projects on time and on budget.

The Public Works vision is to develop a more flexible, responsive, and resilient Department that provides an atmosphere where excellent customer service thrives.

The Department's effort to achieve our vision is guided by 4 strategic priorities:

1. People 1st.
2. Communication & Information Management.
3. Service Delivery.
4. Fiscal Responsibility.

During FY 2013 we focused on 4 organizational development goals:

1. Developing Department-wide and job specific customer service expectations.
2. Gathering feedback through customer satisfaction surveys.
3. Creating an enhanced employee recognition program.
4. Establishing improved procedures for Work Plan prioritization and tracking.

During FY 2014 we will enter the second phase of *Strengthening Our Culture of Service*. A major component of this phase is to implement changes in our project delivery system, designed to help us achieve our primary capital improvement goal for this fiscal year:

Public Works Capital Improvement Goal: By spring 2014, create, implement, monitor key indicators, and adjust as needed, a project delivery system with which we will maintain our current project load and deliver an additional \$4 – \$6 million per year of Measure M funded projects.

Summary of Report Contents

RESPONSIBILITIES, RECENT OPERATIONAL IMPROVEMENTS & ACCOMPLISHMENTS...2

 Operational Improvements.....2

 Some Other Accomplishments in FY 2012 and FY 2013.....3

PUBLIC WORKS CAPITAL IMPROVEMENT PROGRAM BUDGET SUMMARY3

 Budgeting for Capital Improvements.....4

 Capital Improvement Fund (General Fund)5

CAPITAL IMPROVEMENT PROGRAMS6

 Sanitary Sewer System.....6

 Watershed Management Plan and Storm Water System7

 Pavement Management.....8

 Sidewalks.....9

 Traffic Calming.....9

 Bike & Pedestrian Improvements.....9

 Public Buildings and Other Facilities.....11

OTHER OPERATIONS12

 Zero Waste Operations.....12

 Equipment Replacement.....13

FUNDING CHALLENGES AND OPPORTUNITIES.....13

 Unfunded Capital Needs.....13

 Funding Opportunities.....15

RESPONSIBILITIES, RECENT OPERATIONAL IMPROVEMENTS & ACCOMPLISHMENTS

The Department is responsible for maintaining and improving the City’s public infrastructure, including: the sanitary sewer and storm water systems; streets; sidewalks; bicycle and pedestrian pathways and facilities; traffic calming devices and pavement markings; traffic signs and signals; public buildings and other facilities; streetlights; Public Safety Radio System; and the City’s fleet of vehicles and other equipment.

Operational Improvements

Fiscal years FY 2012 and FY 2013 brought many changes to Public Works, with an emphasis on investing in modern equipment, methods, and information software to improve the efficiency of operations.

Public Safety Radio System: By the end of FY 2013, Public Works will complete the multi-year, interdepartmental implementation of the City’s new public safety radio system, including procurement and activation of over 500 portable and mobile radio

units, installation of new dispatch consoles, and successful integration with the East Bay Regional Communications System Authority (EBRCSA) infrastructure.

Zero Waste Operations: Changes in the Zero Waste Division (formerly Solid Waste Management) include implementation of 1-person routes for refuse and recycling; roll-out of split carts for recycling; scale house software upgrades; collection route optimization; and improved recovery and diversion operations at the Transfer Station. These operational improvements reduced annual operating costs by about \$2.5 million.

Sewer Maintenance Program: Improvements included scheduling cleaning and maintenance activities based on data collection and analysis; increased inspection and condition assessments; updated equipment and cleaning methods; updated training; and improved application of quality control techniques. Through the use of these improved methods and data driven scheduling the City has realized an 83% reduction in sanitary sewer overflows since 2008. This was accomplished without increasing resources.

The question is not only how to do things right, but how to find the right things to do, and then to concentrate resources on them.
Peter Drucker

Some Other Accomplishments in FY 2012 and FY 2013

- Replaced 6 miles of sanitary sewer mains and associated lower laterals, including Ashby Avenue, Cedar Street, and Adeline.
- Continued reductions (83% since 2008) in Sanitary Sewer Overflows (SSOs).
- Resurfaced 5 miles of streets, including Sacramento Street, Adeline, and 4th Street.
- Completed 9th Street Bicycle Path from Ashby Avenue to Emeryville.
- Constructed the West Street Pathway.
- Completed Safe Routes to Transit projects on Solano Avenue and Shattuck Avenue.
- Purchased and delivered 85 vehicles and pieces of major equipment.
- Automated parking garage operations.
- Installed 1,000 IPS “smart” parking meters.
- Installed 318 bike racks.
- Completed construction of the Dona Spring Animal Shelter.
- Completed renovation of the historic Ratcliff Building at the Corporation Yard.
- Completed Fire Stations 4 & 6 Roofing; Station 6 Drill Tower Evaluation and Repairs; Stations 3 & 4 Alerting (ring-down) System; all funded by Measure G.
- Submitted the Watershed Management Plan (WMP), which was adopted by Council.

PUBLIC WORKS CAPITAL IMPROVEMENT PROGRAM BUDGET SUMMARY

The Public Works proposed FY 2014 budget is \$88 million. The recurring, or baseline, Public Works Capital Improvement Program (CIP) budget of approximately \$10.6 million is about 12% of the total annual Department budget. Approximately \$4 – 6 million per year is also spent on capital projects not funded by the Capital Improvement Program

Recurring Budget. These funds come from grants, bond measures and settlement agreements. Examples of these projects include the Dona Spring Animal Shelter, Fire Station improvements and Safe Routes to Transit projects.

Revenue for Department managed funds comes from State taxes (Highway Users/Gas Tax), County fees and taxes (Measures B and F), City fees (Refuse, Sanitary Sewer and Clean Storm Water) and assessment districts, off-street and metered parking, internal service charges, and City bonds (Measure M), 1-time grants and other special tax or bond measures.

Recurring funding for FY 2014 and FY 2015 is consistent with previous fiscal years, with the following exceptions: new funding for the expansion of the sidewalks program beginning in FY 2014; new complete streets funding beginning in FY 2014; and a reduction in the bike and pedestrian programs beginning in FY 2015.

The following funds that support capital programs have historical structural deficits: the Sewer Fund, Special Gas Tax Improvement Fund, Measure B Bicycle and Pedestrian Fund, and Refuse Fund. Such a structural deficit exists when annual expenditures have been exceeding annual revenues. To address the structural deficits and balance these funds in FY 2014 and FY 2015, Public Works is proposing 1-time and recurring measures that will maintain funding for the capital programs (except bike and ped programs as of FY 2015). Future years will require service cuts to reduce expenditures and/or a revenue increase to meet expenses.

The following fee increases may be required:

- Waste Collection and Disposal – effective FY 2015
- Sewer Service Fee – effective FY 2016
- Clean Storm Water Fee – effective date undetermined

Budgeting for Capital Improvements

The City's FY 2014 and FY 2015 Proposed Budget includes recurring funding for the Public Works Capital Improvement Program (CIP) of \$10.6 million per year through FY 2018. These funds provide the baseline Capital Improvement Program Budget and come from many sources, including the General Fund.

PROPOSED 5-YEAR CAPITAL IMPROVEMENT PROGRAM RECURRING FUNDING ¹

Program (figures are rounded)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Sanitary Sewer System	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000	\$4,500,000
WMP ² & Storm Water System	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Pavement Mgt	\$3,400,000	\$3,400,000	\$3,400,000	\$3,400,000	\$3,400,000
Complete Streets ³	\$125,000	\$155,000	\$155,000	\$155,000	\$155,000
Sidewalks	\$860,000	\$860,000	\$860,000	\$860,000	\$860,000
Bike & Ped	\$365,000	\$305,000	\$305,000	\$305,000	\$305,000
Traffic Calming	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Pavement Markings	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Public Buildings, ADA upgrades,	\$885,000	\$885,000	\$885,000	\$885,000	\$885,000
TOTAL	\$10,635,000	\$10,605,000	\$10,605,000	\$10,605,000	\$10,605,000
NEW FUNDING: Measure M (<i>estimated</i>)	\$2,500,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000

Capital Improvement Fund (General Fund)

The City allocates \$3.5 million (33% of the Department's recurring capital budget) from the Capital Improvement Fund each year. The Capital Improvement Fund derives its revenue from the General Fund. These funding amounts are included in the previous table and are presented in the table below to show how the General Fund is used to support baseline capital programs.

¹ This table identifies the amount of funds expected to be spent, and does not specify individual projects.

² Watershed Management Plan, adopted by Council in fall 2012.

³ "Complete Streets" describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, emergency vehicles, seniors, children, youth, and families.

**5-YEAR CAPITAL IMPROVEMENT FUND (GENERAL FUND)
RECURRING FUNDING BY PROGRAM**

Program (figures are rounded)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Pavement Management	\$1,880,000	\$1,880,000	\$1,880,000	\$1,880,000	\$1,880,000
Sidewalks	\$620,000	\$620,000	\$620,000	\$620,000	\$620,000
Bike & Ped	\$115,000	\$115,000	\$115,000	\$115,000	\$115,000
Traffic Calming	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Public Buildings & ADA Upgrades	\$885,000	\$885,000	\$885,000	\$885,000	\$885,000
TOTAL	\$3,550,000	\$3,550,000	\$3,550,000	\$3,550,000	\$3,550,000

CAPITAL IMPROVEMENT PROGRAMS

This section provides a brief description of the City's Capital Improvement Programs managed by Public Works.

Sanitary Sewer System

Goal	Complete infrastructure improvements to reduce the volume of wet weather flow the City discharges to EBMUD.
Annual Funding	\$4.5 million
Funding Source	Sewer Fund

The City allocates \$4.5 million annually to sewer system capital improvements. Revenue is generated by fees for use of the sanitary system calculated on each 100 cubic feet of water used by each water account serving the premises. While the City has not raised Sewer fees since FY 2006, the Fund has maintained a healthy balance primarily through salary and other cost savings. Current projections indicate the need to consider a rate increase in FY 2016. A fee increase is subject to the Proposition 218 process.

Major factors in maintaining and improving the sanitary sewer system are Inflow and Infiltration (I/I) due to aging and defective infrastructure, which are significant sources of wet weather flows into the sanitary sewer collection system. These flows can contribute to wet weather discharges from EBMUD treatment facilities. The CIP is focused on completing infrastructure improvements that will reduce I/I and eliminate sanitary sewer overflows.

The City is also now subject to the terms of a Stipulated Order (SO) that was issued to Berkeley, other jurisdictions utilizing the EBMUD treatment plants, and EBMUD. Negotiations for a Final Consent Decree with the EPA and the Department of Justice are underway and will not be complete for up to a year. When the Decree is issued, it may require significant additional capital improvements.

The City's current 5-year sanitary sewer capital program is in full compliance with the SO. Significant capital projects in the 5-year program include the Potter Street sub-basin, Panoramic Hill sewers, Berkeley Marina Lift Stations, Dwight Way, Union Pacific ROW, Hopkins Street, and Cedar Street. Public Works is also working closely with the IT Department to implement a computerized maintenance management system that will provide improved information management, leading to more efficient allocation of resources and improved service delivery.

Watershed Management Plan and Storm Water System

Goal	The City's goal is to maintain the existing system to safely convey storm water, and incorporate recommendations from the Watershed Management Plan (WMP), adopted by Council in October 2012.
Annual Funding	\$200,000 for emergency repairs
Funding Source	Clean Storm Water Fund

Clean Storm Water: The City receives approximately \$2.3 million in annual revenue for the storm water system, \$200,000 of which is allocated to storm system capital improvements for emergency repair projects. Fees enacted in the early 1990s generate about \$2 million per year, and the City also receives approximately \$245,000 annually from the University of California as part of the Long Range Development Plan (LRDP) agreement. Initially, the fee provided funding for some capital improvements, but this rapidly diminished due to rising operating and maintenance costs. Any fee increases are subject to Proposition 218 requirements.

The storm water program includes storm water system maintenance and repair, storm response, street cleaning, toxics management, and a clean water education and inspection program. The engineered storm drain system infrastructure is more than 80 years old and consists of approximately 78 miles of underground pipes, manholes, catch basins, and cross-drains. The engineered system is deteriorating and becoming unreliable.

Watershed Management Plan⁴: The WMP takes a comprehensive approach to establishing a healthier balance between the urban environment and natural ecosystems, and includes recommendations for enhancing and improving City efforts to meet goals of: water quality protection; urban flooding reduction; natural waterways and habitat preservation and restoration; and promotion of the re-use of rainwater as a resource. The WMP's total unfunded capital needs Citywide, not limited by time period, are \$208 million or \$37.4 million over 5 years, as presented in the February 19, 2013 worksession.

⁴ Council adopted the WMP in October 2012: It takes a comprehensive approach to establishing a healthier balance between the urban environment and natural ecosystems, with recommendations to meet goals of: water quality protection; urban flooding reduction; natural waterways and habitat preservation and restoration; and promotion of the re-use of rainwater as a resource.

The current backlog of projects includes: rehabilitation of piping reaches; elimination of rising groundwater flooding issues; replacement of deteriorated drain inlets and piping; major cleaning of primary storm collectors in the lower Berkeley drainage watersheds; and replacement of cross drains (storm water “street” crossings).

Pavement Management

Public Works manages a portfolio of inter-related programs to maintain, improve and enhance the infrastructure for traveling around the City, whether by foot, bicycle, or in various forms of vehicles. The foundation of these programs is an integrated pavement management program for City streets and sidewalks. The Berkeley City Council annually adopts an updated 5-Year Street Rehabilitation Plan, and in recent years has adopted both a Bicycle Plan and a Pedestrian Plan. The adopted “Complete Streets” Policy guides implementation of all pavement management projects.

Funding for this portfolio of programs is from a number of different sources, and the first to be discussed here is the expenditure plan for Measure M, approved by Berkeley voters to accelerate the City’s 5-Year Street Rehabilitation Plan and incorporate green infrastructure elements defined in the WMP.

Measure M Expenditure Plan

In November 2012 the voters approved Measure M, a \$30 million general obligation (GO) bond to significantly accelerate the implementation of the 5-Year Street Plan and, when appropriate, install green infrastructure, as it is defined in the Watershed Management Plan. Funding will be requested for appropriation through the Annual Appropriations Ordinance amendment process beginning in FY 2014. Public Works staff and the Public Works Commission will work with other interested commissions and the public to gather input for developing an Expenditure Plan with defined goals and evaluation methods, and regular progress reports to Council.

Staff has initiated technical evaluation to prioritize streets for the accelerated 5-Year Street Rehabilitation Plan. This process includes use of Streetsaver® scenarios to meet the goal of a Pavement Condition Index (PCI) of “good” or better; and reviewing projects for use of WMP storm water treatment measures (such as green infrastructure).

Pending Council’s action on Measure M recommendations (see the three items on regular Council meeting agenda of this same date), this evaluation will merge with a “scenario” planning process. The scenarios will consider various factors, including:

- Raising the PCI number.
- Using green infrastructure.
- Flood protection.
- Visible improvements early in the construction period.
- Ensuring as many projects are funded as possible.

The Measure M Expenditure Plan and the 5-Year Street Rehabilitation Plan will be brought to Council in fall 2013.

Pavement Management Programs for Bicycles/Pedestrians/Vehicles

Program	Annual Funding (figures are rounded)	Funding Source
Pavement Mgt	\$3,400,000	Special Gas Tax Improvement Fund Measure B Transportation Sales Tax Capital Improvement Fund
Complete Streets	\$155,000	Vehicle Registration Fee (VRF)
Sidewalks	\$860,000	Special Gas Tax Improvement Fund Measure F Vehicle Registration Fee (VRF) Capital Improvement Fund Private Party Sidewalks Fund
Pavement Markings	\$250,000	Special Gas Tax Improvement Fund
Traffic Calming	\$50,000	Capital Improvement Fund
Bike & Pedestrian Improvements	FY14 \$365,000 (in FY15 reduced to \$305,000)	Measure B Transportation Sales Tax Capital Improvement Fund

Pavement Management: (Baseline program budget is \$3,400,000) While the current CIP budget will support the existing 5-Year Street Rehabilitation Plan to maintain Berkeley's streets, this funding alone is not sufficient to raise the overall average Pavement Condition Index (PCI), and leaves City streets at an "at risk" level. The City Auditor presented a report to Council in November 2011 on the condition of Berkeley's streets, and its recommendations, if implemented, would improve the "at risk" condition for the average street in Berkeley. A principal recommendation of the Audit was adoption of a desired average PCI, and on May 29, 2012 Council included a goal of a PCI of 75 in 5 years in its request for a report on long-term obligations (see Resolution 65,748 Exhibit A).

To achieve a PCI of 75 in 5 years, the pavement management program requires \$65 million. The program would require an additional \$39.5 million over 5 years to achieve the goal. With passage of Measure M last November, an accelerated 5-Year Street Rehabilitation Plan will be developed to reflect an infusion of this bond funding, and will be submitted to Council in fall 2013. While Measure M funds will help, there will still be a funding shortfall.

The 5-Year Street Rehabilitation Plan will include paving projects that incorporate elements of green infrastructure as defined in the WMP. The updated plan will be informed by a scenario planning process being lead by the Public Works Commission (see the previous section on Measure M Expenditure Plan).

Complete Streets: (Baseline program budget is \$155,000) Council adopted a Complete Streets Policy in December 2012 to ensure that capital transportation projects accommodate the needs of all roadway users. The first project to complete in this new program is the Complete Streets Implementation Plan which will establish the procedures for incorporating elements of the Complete Streets Policy into City projects.

Sidewalks: (Baseline Program budget \$860,000) Effective October 1, 2011, the City modified its sidewalk program with the goal of increasing the amount of sidewalk repaired or replaced each year and improving overall pedestrian safety. To accomplish these goals the cost share between the property owner and the City was adjusted and the inspection program was modified.

The new program has two components: Proactive and Responsive. The Proactive Sidewalk component inspects and schedules repairs to high-use areas in a 5-year cycle, and inspects lower pedestrian use areas on a 30-year cycle. High use areas are commercial districts, and near hospitals, schools and public facilities. The Responsive Sidewalk component replaces or repairs damage reported to Public Works. Staff may initially respond with a temporary repair, such as an asphalt patch or grinding. These repairs (“make-safes”) are completed at City expense when in the public right-of-way.

Under the new program, the City splits the cost of sidewalk repair with the abutting property owner on a 50/50 basis; regardless of the cause of the damage (most California cities require a 100% contribution by the property owner). This change generally increases the property-owner’s share of costs for repair of damaged sidewalks. Before the change, the City paid for all damage due to street trees (about 80%) and the property owners paid for all non-tree root sidewalk damage (about 20%). Changing to a 50/50 program provides additional revenue and should allow the City to increase the amount of sidewalk repaired each year, reducing the backlog of sidewalk sites in need of repair, and thereby increasing pedestrian safety.

Staff presented the method for implementation of the 50/50 program to Council in June 2011. The Council approved the policy, along with a related BMC amendment, to make property owners potentially liable for pedestrian accidents, which is intended to limit the City’s exposure in these cases.

Public Works has heard concerns from property owners regarding the new cost share arrangement, primarily related to their responsibility for paying 50% of the damage caused by street trees. Public Works will bring a program review to Council before the close of calendar year 2013, to report on program operations and discuss potential policy modifications.

Beginning in FY 2014, a new allocation of \$100,000 per year from the VRF has been added to expand the sidewalk program. This will augment the previous funding and bring the total sidewalk repair budget to \$860,000 a year.

Berkeley Bike and Pedestrian Improvements Program: (Baseline program budget reduced from \$365,000 in FY 2014 to \$305,000 in FY 2015) Projects for inclusion in the Bike and Pedestrian Improvements Program come from the Berkeley Bicycle Plan (identified \$18 million of projects) and the Pedestrian Master Plan (identified \$30 million of projects).

In addition to the baseline funding from Measure B and the General Fund for Bike and Ped Programs, funding for construction of identified projects comes from various grants, bond measures and settlement agreements, including: State Transportation Development Act, Transportation Funds for Clean Air, Caldecott 4th Bore Settlement Funds, Safe Routes to School, Safe Routes to Transit, and the Bicycle Transportation Account. The City has currently secured \$4.9 million from these funding sources, some of which has been programmed in FY 2013.

Projects for FY 2014 and FY 2015 include:

- Bicycle Plan Update: Bicycle Boulevard Design Tools and Guidelines.
- Bicycle Rack Installation Project: bike racks in the public right-of-way, primarily in commercial areas.
- Bicycle Boulevard Crossing Improvements: Hillegass Street/Ashby Avenue and 9th Street/Ashby Avenue.
- Tunnel Road Bike Lanes: a nearly continuous buffered and colored bicycle lane on Tunnel road from Domingo Street to the Berkeley/Oakland border.
- Hearst Corridor Complete Streets Project: segments from Shattuck to Gayley Road.

Traffic Calming: (Baseline program budget is \$50,000) This program responds to neighborhood requests for traffic calming of local streets. There are insufficient funds available to design and construct all of the projects already approved and on the CIP list. As additional requests are received they are evaluated as part of the annual traffic calming study. If the evaluation criteria are met, the project is added to the CIP list.

There are currently 4 projects on the CIP list. The construction cost for these projects is estimated at \$135,000. An additional 10 requests for inclusion on the CIP list are pending the 2013 traffic calming study. The cost for the annual traffic calming study is about \$15,000.

Pavement Marking Program: (Baseline program budget is \$250,000) This program replaces worn roadway markings, including: traffic lanes, crosswalks, bike lanes, and other guidance to roadway users. Restriping of freshly resurfaced streets is completed as part of paving projects.

Public Buildings and Other Facilities

Goal	To provide safe accessible functional facilities so City programs can provide their customer services.
Annual Funding	\$885,000 public buildings
Funding Source	Capital Improvement Fund

Annual City allocations include \$300,000 for deferred maintenance CIP projects, \$487,500 for emergency building repair projects, and \$97,500 for ADA upgrades. During the past 25 years, the City has deferred maintenance on many City buildings decreasing the value of the asset and diminishing 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, Public Safety Building, Central Library, four Branch Libraries, Animal Shelter, and various fire stations. However, many outdated structures remain (e.g., recreation and senior centers) that require considerable improvements.

Deferred facilities maintenance and repair for City buildings continues to be at a critical point. Projects are prioritized and selected each fiscal year by a team comprised of staff from the City Manager's Office and Department project managers. The following seismic upgrade projects are planned in FY 2014:

- James Kenny Recreation Center: Staff has been working with CalEMA and FEMA to re-allocate a \$734,000 grant for non-structural seismic upgrades of the Veteran's building to Seismic Improvements for this Recreation Center, which is identified as an emergency shelter. The City has tentative approval and the last requirement is a seismic evaluation by a structural engineer. This work is currently underway and the application will be submitted before the close of FY 2013. The grant requires a 25% local match.
- Adult Mental Health Clinic: The Department of Health, Housing and Community Services will recommend an allocation of Mental Health Services Act funding for seismic upgrades at the Clinic; and approximately \$250,000 to \$350,000 will be allocated from the FY 2014 facilities CIP budget to complete some other deferred maintenance and repairs during the seismic upgrades construction.
- Center Street Garage: The City's Center Street Garage needs to be replaced, as it was previously deemed infeasible to perform a seismic upgrade on the existing structure. Estimated project costs are \$25 to \$35 million. The Off-Street Parking Fund has a projected balance of \$10 million as of mid-year FY 2013, and a portion of funding may come from project partners, including the Peralta Community College District. The remainder of replacement costs needs to be financed. Work on developing project partnerships and beginning project design is planned to commence in FY 2014.

OTHER OPERATIONS

Zero Waste Operations

The Refuse Fund is a self-supporting enterprise fund for Zero Waste operations. Revenue is generated by fees charged for waste disposal at the City's transfer station and to property owners for waste collection and disposal. Fee amounts are currently determined by the size and number of receptacles, and the frequency of service. Staff is working with the Zero Waste Commission on a strategic approach for commercial collection routes, materials recovery facility processing, and a sustainable rate structure.

Over the last several years, annual operating costs have been reduced by approximately \$2.5 million through various cost controls, including the implementation of 1-person routes, collection route optimization, the roll-out of split-carts for recycling, Transfer Station scale house software upgrades, new vendor contracts, and improved recovery and diversion operations at the Transfer Station.

In spite of these improvements, the Refuse Fund currently has a projected structural deficit of approximately \$300,000 in FY 2014. In FY 2015, the deficit grows to \$1.7 million; of that, \$1.3 million is for planned capital projects at the Transfer Station and the closed landfill (now Cesar Chavez Park). It's anticipated that a revenue increase from collection operations of 15% will be needed in FY 2015 to balance the fund, complete these capital projects, and maintain current service levels. A rate study will be performed and presented to Council in FY 2014. The Proposition 218 process applies for any property-based rate increase.

Equipment Replacement

The Equipment Replacement Fund is an internal service fund with revenue generated from departmental charges to fund the scheduled replacement of the City's fleet. There are currently 671 vehicles and pieces of equipment within the City's fleet, represented primarily in four major Departments: Police, Fire, Public Works, and Parks, Recreation & Waterfront.

The Equipment Replacement Program establishes estimated service life values for all vehicles and equipment within the fleet, and collects charges on a monthly basis. Service life values and replacement time periods are established by the City's Fleet Superintendent and the 5-year replacement schedule. Replacement charges are updated annually for new purchases, and include reducing replacement backlogs.

In FY 2014, the Fleet Superintendent will conduct a review of the current fleet inventory, and if necessary, request an adjustment to departments' replacement budgets to more accurately reflect costs.

FUNDING CHALLENGES AND OPPORTUNITIES

Even with the efficiencies implemented over the last 2 years, Public Works still faces deficits in many of the Department's key operating funds. Additional improvements or program cuts are necessary to balance these funds. However; Public Works will face significant unfunded capital needs to implement the Watershed Management Plan, and for public buildings and facilities. Funding challenges for street lights, sidewalks, bike and pedestrian programs, zero waste operations, and possibly the sewer program, also loom as we continue to grapple with limited resources and the increasing maintenance needs of the City's aged infrastructure. An estimate of these unfunded capital needs for the next 5 years was presented to Council in the worksession on February 19, 2013.

Unfunded Capital Needs

Two significant areas in which Public Works infrastructure is substantially underfunded are Public Buildings and Facilities (an unfunded need overall of \$100 – 126 million; \$19 million over the next 5 years), and implementation of the Watershed Management Plan (an unfunded need overall of \$208 million; \$37.4 million over the next 5 years). Capital projects in these programs are currently limited to critical improvements and emergency repairs that address public safety, building and infrastructure integrity, and the environmental health of the City's watersheds. Potential funding opportunities to expand the program are described in the following section.

Public Buildings and Facilities: The Public Works Department is responsible for 56 public buildings and facilities, excluding accessory buildings and facilities. These buildings have numerous interdependent components that must be maintained, including heating, ventilation, air conditioning; roofs; elevators and other conveyances; exterior and interior finishes, plumbing and electrical systems. Unfunded capital needs fall into 2 major categories: Emergency & Deferred Maintenance; and Seismic Retrofits.

- Emergency & Deferred Maintenance: This work is at a critical point: deferred maintenance results in facilities that degrade more rapidly and ultimately increase maintenance costs. Over the past 25 years the City has deferred maintenance on many City facilities, decreasing their value and potentially diminishing their safety and functionality. To partially address this problem, bonds were approved in past years to rebuild a number of City buildings, including City Hall/Civic Center (2180 Milvia Street); the Central Library and Branch Libraries; the Public Safety Building; and all 7 Fire Stations.

Public Works identified as much as \$8.2 million of unfunded emergency and deferred maintenance needs. The current annual capital improvement fund allocation for emergency and deferred maintenance, and ADA work is \$885,000.

- Seismic Retrofit: the City has about \$78 million of unfunded seismic retrofit or replacement to do on major public facilities, including: replacement of the Center Street Garage (\$25-35 million); and retrofit of the Veterans Memorial Building (\$20 million) and Old City Hall (\$30 million). There are another 20 smaller facilities, such as senior centers and recreation centers that are not yet fully evaluated and are estimated to require \$15 - \$40 million of work. The total unfunded need for seismic retrofits is \$93 to \$118 million.

Implementation of the Watershed Management Plan: The Watershed Management Plan's (WMP) total unfunded capital needs are \$208 million overall (\$37.4 million over a 5 year period). Watershed drainage pathways in Berkeley's densely urban setting include curb and gutters, storm drain pipeline infrastructure, and open and culverted creeks. The existing storm drain pipes and creek culverts on public property are 80 to 100 years old, and have exceeded their life expectancies.

Stormwater runoff from the public right-of-way and adjacent properties is discharged into local creeks or San Francisco Bay. As urban runoff travels over impervious surfaces (such as streets), it picks up various pollutants and gains volume and velocity. This contributes to water pollution, localized flooding, and wash-outs of in-stream habitat.

The WMP presents an integrated and sustainable strategy for managing urban water resources that addresses water quality, flooding, and the preservation of creeks and habitats using multi-objective approaches where possible. Implementation of the WMP is a 30-plus year program dependent on scope, cost escalation, and the availability of

state and federal grant funding opportunities. Measure M will provide some funding for implementation of the WMP, pending adoption of an expenditure plan.

Funding Opportunities

Additional revenue sources, including grant applications, possible capital improvement bonds, and lease to own options will be considered.

Public Buildings and Facilities – City-Issued Bonds: Staff will consider recommending the option of general obligation bonds for unfunded capital needs. A long term funding solution (i.e. reserve fund or internal enterprise fund) is also needed. Public Works will soon develop a contract for a new facilities condition assessment. The scope of work includes analysis of long-term budget implications based on the life-cycle model developed for each facility, and evaluation of financing options for the City to consider. The report will be completed in fall 2013.

Watershed Management Plan – Grant Opportunities: Two potential grant funding opportunities for the WMP are Urban Greening Project Grants (Prop. 84), and Stormwater–Flooding Management Projects Grants (Prop. 1E). In October 2012 the WMP was submitted to, and accepted by, the Integrated Regional Water Management Plan, which is the first step to apply for available grants. Concept proposals for the Urban Greening grant are due in spring 2013 and staff is preparing a new proposal for consideration. Last year’s City submission was not selected, and this is the final opportunity for an Urban Greening Projects Grant. Stormwater–Flooding Management Projects Grants are due in early calendar year 2014.

Measure M: approved by Berkeley voters in November 2012, Measure M will provide \$30 million from general obligation (GO) bonds to accelerate improvements in the City’s 5-year Street Rehabilitation Plan and incorporate green infrastructure to the extent feasible, as set forth in the Watershed Management Plan.

Other Funding Sources

- The 2012/13 Alameda County Coordinated Funding Program: An estimated \$65.2 million is available for transportation projects in Alameda County from a combination of federal funds from the Metropolitan Transportation Commission’s (MTC) One Bay Area Grant (OBAG) program, and regional funds from Measure B Transportation Sales Tax and Vehicle Registration Fee.
- The Downtown Streets and Open Space Improvement Plan (SOSIP) Impact Fee, adopted on January 29, 2013, is a fee paid by new residential, commercial and institutional development to implement the SOSIP Capital Improvement Plan, which were studied in the SOSIP Nexus Study and DAP EIR.

Measure B1: In November 2012, Measure B1 very narrowly failed Alameda County voter approval to extend and augment the existing half-cent sales tax for transportation. Passage would have funded construction of the Gilman/I-80 Interchange, as well as doubled regional funds for pavement maintenance, bicycle and ped programs,

and significantly increased funds for transit operations and other potential improvements in Berkeley. The Alameda County Transportation Commission is already making plans to develop a more competitive version of this measure for the 2014 or 2016 election.

LED or Induction Streetlight Project – Lease to Own: Energy cost savings from an LED or induction streetlight conversion could fund new streetlights in the City. A possible funding source is contracting with a vendor for a “turnkey” installation. The vendor advances the start-up costs, installs the equipment, assists with grant applications, and is paid back by the City from energy cost savings. The contract ends after the payback period. If enough savings are realized, it may be possible to add to the existing street light inventory.

In FY 2013 \$48,000 was budgeted in the Capital Improvement Fund to leverage the conversion of City street lighting to LED fixtures. A pilot project was completed at the Berkeley Marina, and another is planned for Telegraph Avenue between Bancroft and Dwight. The main economic benefit from LED lighting is their greater efficiency over traditional and other alternative lighting sources. This efficiency results in cost savings from lower electricity bills and reduced replacement costs.

Last year Council referred the subject of LED streetlights to both the Public Works Commission (PWC) and the Energy Commission. Staff is working with the PWC to finalize a strategy for turnkey implementation. The PWC is scheduled to submit a joint report with the Energy Commission to Council in May. The report will suggest a timeline to begin the turnkey process, based on the City executing a vendor contract by late fall 2013.

CONCLUSION

Public Works is responding to the challenges presented by the Capital Improvement Program and budget constraints by looking to funding and efficiency opportunities. The principal points of leverage are the Department’s organizational change to *Strengthen Our Culture of Service*, and next year’s goal to create and implement a project delivery system to maintain our current project load and deliver additional Measure M funded projects. Within these challenges and opportunities, Public Works will continue to meet its responsibility for the health of the City’s public infrastructure and commitment for service to the Berkeley community.

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Attachments:

1. Public Works Organization Chart

ORGANIZATION CHART



