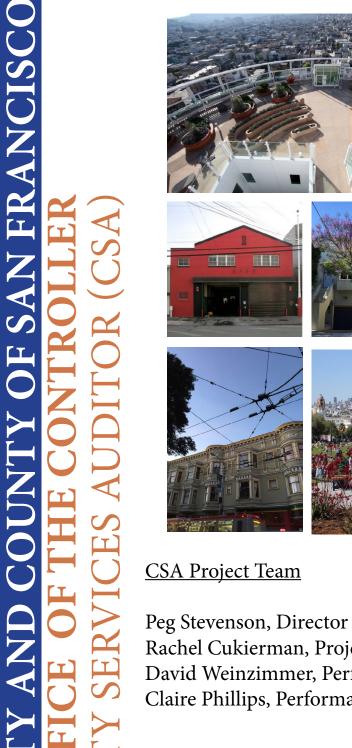
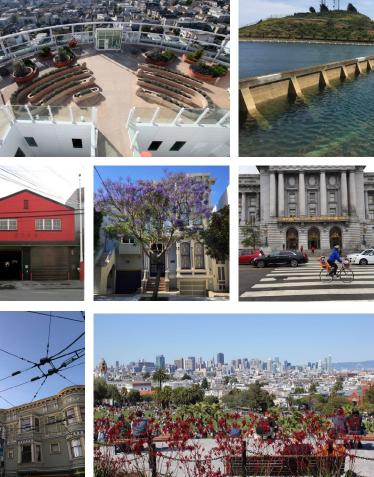
ANNUAL GENERAL OBLIGATION **BOND PROGRAM REPORT FISCAL YEAR 2015-16**





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June 30, 2016

CONTROLLER'S OFFICE CITY SERVICES AUDITOR

The City Services Auditor was created within the Controller's Office through an amendment to the City Charter that was approved by voters in November 2003. Under Appendix F to the City Charter, the City Services Auditor has broad authority for:

- Reporting on the level and effectiveness of San Francisco's public services and benchmarking the city to other public agencies and jurisdictions.
- Conducting financial and performance audits of city departments, contractors, and functions to assess efficiency and effectiveness of processes and services.
- Operating a whistleblower hotline and website and investigating reports of waste, fraud, and abuse of city resources.
- Ensuring the financial integrity and improving the overall performance and efficiency of city government.

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TABLE OF CONTENTS

Executive Summary	1
Background	5
2008 Clean and Safe Neighborhood Parks	7
2008 San Francisco General Hospital and Trauma Center Earthquake Safety (SFGH Rebuild)	10
2010 Earthquake Safety and Emergency Response	13
2011 Road Repaving and Street Safety	17
2012 Clean and Safe Neighborhood Parks	21
2014 Earthquake Safety and Emergency Response	24
2014 Transportation and Road Improvement	27
Appendix A: Changes in GO Bond Budgets	30
Appendix B: Summary of 2015 Bond Program	31
Appendix C: Definition of Terms	32
Appendix D: Methodology	33

EXECUTIVE SUMMARY

This report is an assessment of the City and County of San Francisco's (City) General Obligation (GO) Bond Program performance. GO bonds are approved by the voters of San Francisco and are issued to fund major capital construction projects. This report reviews all active GO Bond programs as of March 2016, assessing each component's scope, schedule, budget, and change orders.

This report is the second Annual General Obligation Bond Program Report issued by the Controller's Office, City Performance Unit. For the first time, it includes the bond measures approved by the voters in the June and November 2014 elections – the 2014 Earthquake Safety and Emergency Response (2014 ESER) bond and the 2014 Transportation and Road Improvement bond. This year's report also includes a closeout assessment of the 2008 San Francisco General and Trauma Center Earthquake Safety (SFGH Rebuild) bond. The November 2015 Affordable Housing bond, which is currently in the planning phase, is summarized in Appendix B.

The table below summarizes the City's seven active GO bond programs. Expenditures do not include encumbrances, and delays are calculated based on the last original and revised bond component completion dates; delays to specific bond components may be shorter or longer.

	Budget	Percent	Projected/Actual	Delay
Bond Program	(\$ millions)	Expended	Completion Date	(Years)
2008 Clean and Safe Neighborhood Parks	186.4	92%	1/31/2018	2.9
2008 SFGH and Trauma Center Earthquake Safety	887.4	95%	8/18/2015	0.3
2010 Earthquake Safety and Emergency Response	412.3	80%	12/13/2019	1.2
2011 Road Repaving and Street Safety	250.3	66%	12/31/2018	1
2012 Clean and Safe Neighborhood Parks	195.0	17%	2/28/2019	0.2
2014 Earthquake Safety and Emergency Response	401.2	10%	3/31/2021	0
2014 Transportation and Road Improvement	485.0	1%	12/31/2022	0

FINDINGS

2008 Clean and Safe Neighborhood Parks (CSNP)

The 2008 CSNP bond program contains 3 major components led jointly by the Recreation and Park Department (RPD) and the Port of San Francisco (Port). As of March 2016, 92.3% of the project budget has been expended. Of the 27 projects in the bond program, 21 are complete and the remaining projects are scheduled to be completed by January 2018.

The bond program has experienced several scope changes at the project level due to unforeseen site conditions and the public planning and involvement process. Delivered by RPD, Mission Playground had significant scope changes to address unforeseen conditions. Additionally, Mission Dolores Park had an extensive public planning and involvement process as well as unforeseen conditions due to the presence of ground water. Scope changes resulted in change orders of 15.5% for RPD-delivered components.

The Port of San Francisco (Port) Crane Cove Park project, Phase 1 of which is funded by both the 2008 and 2012 CSNP bonds, also had significant increases in scope to address community feedback. While the increase in scope at Crane Cove Park has not reduced scope for other 2008 CSNP projects delivered by the Port, it has reduced the number of projects delivered in the 2012 CSNP. Scope changes resulted in change orders of 13.7%.

The overall budget for the bond program has increased by 2.5% due to appropriated interest and lower-thanexpected cost of issuance. As of March 2016, 92% of bond funds have been expended. The departments have had difficulty expending the remaining eight percent of bond funds due to needed coordination, constrained site staff, and a more complex regulatory environment for waterfront projects.

All 2008 CSNP bond components have been significantly delayed, with delays ranging from three to five years behind original schedules. RPD project schedules have been significantly delayed by the public planning

process, in particular historic preservation requirements under the California Environmental Quality Act (CEQA). As a result, RPD adjusted projected schedules in the 2012 CSNP to allow ample time for CEQA review of projects that may have historic resources that must be preserved. For Port-led projects, the projected completion date for the Waterfront Parks is just under 3 years beyond its original schedule. The primary reason for the most recent delays to the component has been the permitting process for Crane Cove Park.

2008 San Francisco General Hospital and Trauma Center Earthquake Safety (SFGH Rebuild)

The 2008 SFGH Rebuild bond program funds the building of a new hospital that is in full compliance with state laws, standards, and requirements, as well as seismically safe. As of March 2016, 94.8% of the project budget has been expended and the program is in the closeout process for the main hospital project. The Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center reached substantial completion on August 18, 2015, and received its first patients on May 21, 2016.

The nine-year project was completed approximately three months late, on budget, and had construction change orders equal to 4.9% of base contracts.

Part of the Program's success stems from the extensive project scoping work that was completed prior to the bond's approval by voters. Coordination of bond sales with other bond programs through the City's Office of Public Finance also created cost savings by allowing the SFGH Rebuild bond program to share cost of issuance with other bond programs.

2010 Earthquake Safety and Emergency Response (2010 ESER)

The 2010 ESER bond program is comprised of three major components led by Public Works and the Public Utilities Commission (PUC). As of March 2016, 80% of the 2010 ESER program budget has been expended. Of the total 123 individual projects that vary in size and scope, 100 are complete. All three bond components have experienced over one year of delays.

Led by Public Works in coordination with the San Francisco Police Department (SFPD) and the San Francisco Fire Department (SFFD), the Public Safety Building (PSB) was completed on April 28, 2015, just over one year behind schedule, with change orders amounting to 7% of the base contract amount. The PSB project was delayed due to difficulty in coordinating utilities, design errors due to conflicting surveys, a progressive release of partially incomplete bid documents, and a lack of IT coordination in the design phase. Nonetheless, delays to construction did not have a significant impact on the operations of the SFPD and SFFD.

The Neighborhood Fire Stations (NFS) component scope has shifted slightly in the past year, with Fire Station 35 moving to the 2014 ESER Program. The NFS component has delivered all but two of its 75 planned improvements, with the remaining two projects being large seismic upgrades to Fire Station 5 and Fire Station 16. These two projects account for just over half of the component's funds. As of March 2016, the NFS component has change orders of 13.7% (of which 9.7% was for client requests).

The Auxiliary Water Supply System (AWSS) component has completed 55% of its projects with 58% of its funds, and has change orders equal to 4.3% of base contract costs.

2011 Road Repaying and Street Safety (RRSS)

The 2011 RRSS bond program is comprised of 5 major components with Public Works managing the majority of the program, and the Municipal Transportation Agency (SFMTA) overseeing one component. As of March 2016, 66% of the 2011 RRSS program budget had been expended. All bond components were spending within their original budgets, and the Streetscape component budget had been increased by \$2.3 million due to appropriated interest. Projects were at varying stages of progress. The Sidewalk Accessibility component is the furthest along, with all projected scope completed and limited funds remaining to be spent for its curb ramps sub-component. The Street Structures component was 95% complete with 38 of 40 structures constructed, and Street Resurfacing component was 87% complete, with 1,114 of 1,281 blocks resurfaced. About half of

Streetscape projects and two thirds of Traffic Signal Improvements were complete.

Street Resurfacing and Sidewalk Accessibility work are ongoing programs for Public Works, and are funded by both 2011 RRSS funds as well as the General Fund. As such, targeted scope for these programs may fluctuate for reasons independent of the 2011 RRSS bond.

Over the past year, there have been changes in scope to the Streetscape component, which decreased from 75 to 66 projects. There have also been changes to the Street Structures component, which increased from 36 projects to 40 projects.

All components within the bond program are significantly delayed from original projections, with delays ranging from one to three years, though Public Works anticipates fewer delays going forward as most remaining projects enter construction. For Street Resurfacing, the longest-delayed component, the primary source of delays has been the need to coordinate projects with other departments; a delay to utility and pipeline work on a street for instance will delay a paving project since paving must follow those improvements. A number of Streetscape projects have also been delayed due to extra time needed for public outreach for joint projects with the San Francisco Municipal Transportation Agency (SFMTA), which was not built into original project schedules.

2012 Clean and Safe Neighborhood Parks (2012 CSNP)

The 2012 CSNP bond program bond program contains four major components, three of which are led by the Recreation and Park Department (RPD), and one of which is led by the Port of San Francisco (Port). As of March 2016, 17.5% of the bond has been expended and of the total 27 projects in the program, two are complete. All four components are estimated to be complete in the year 2018. Due to the limited spending and the small number of projects constructed at this point, there have been limited change orders in the program.

The scope and budget for RPD-led Citywide Parks, Citywide Programs, and Neighborhood Parks components has not changed, though there were scope changes at the project level for the first Neighborhood Park (Joe DiMaggio North Beach Playground). Due to a competitive bid environment and scope changes on the first project in the Neighborhood Parks component, to remain within bond allocation, RPD is now bidding amenities within parks projects as additive components on Neighborhood Park contracts, allowing the scope of each park to fluctuate to stay within project budgets. The Citywide Programs component faces the same challenges in expending bond funds as the 2008 program, including coordination with site staff. There are also new challenges in leveraging philanthropic funds, which require substantial ongoing staff effort. The Neighborhood Parks component, which includes more than half of the bond program's projects and funding, is projected to be completed three months behind schedule due to complex site conditions.

The scope of the Port-led Waterfront Parks component has significantly changed. Based on substantial community input, the Port re-scoped the bond component to fund four projects instead of seven in order to provide more of the desired amenities at Crane Cove Park in the Phase 1 project, which is funded by both the 2008 and 2012 CSNP Programs. There are still more desired improvements at Crane Cove Park, which would have to be delivered in a Phase 2 project using other, not yet identified funding sources.

Notwithstanding changes in scope, the Waterfront Parks component is still on track to be completed on schedule; however, some projects within the component are delayed to coordinate with various other developments and parks along the San Francisco waterfront, as well as changes to scope based on community input.

2014 Earthquake Safety and Emergency Response (ESER)

The 2014 ESER bond continues the work of the 2010 ESER bond to improve or construct facilities identified in the City's Capital Plan that support earthquake safety and emergency response, and includes three new components of work: improvements at nine district stations and three other police facilities; a Traffic Company and Forensic Services Division Facility to house the SFPD motorcycle unit and crime lab; and a new Office of

the Chief Medical Examiner.

It is still relatively early in the 2014 ESER bond program, and only 10% of funds have been expended as of March 2016, primarily for the Traffic Company and Forensic Services Division Facility and the Office of the Chief Medical Examiner. All bond components are currently still on schedule except for the Office of the Chief Medical Examiner, which has been delayed by nine months due to the discovery of contaminated soil and the need to remove existing concrete-reinforced panels on the site, as well as client requests. These delays may have been possible to avoid if the Construction Management Support Services team that provides expert scheduling and estimating services had been hired prior to issuing an RFP for the Construction Management/General Contractor and Architect & Engineer teams.

The Neighborhood Fire Stations component has change orders that amount to 5% of the base contract, only 0.3% of which were indicated as being for errors and omissions, well below the 3% standard performance threshold. The remaining components have not had substantial change orders.

2014 Transportation and Road Improvement

Led by the San Francisco Municipal Transportation Agency (SFMTA), this bond program is comprised of eight major components, each including a number of discreet projects of varying size and scope. Specific projects are selected for bond funding at the time of bond issuances. As of March 2016, 18 projects were funded by the first issuance of the bond.

The largest portion of the bond funds is allocated for Muni Forward Rapid Network Improvements, which implements the SFMTA's Muni Forward project that restructures transit service on Muni's high ridership lines to improve travel times and reliability, increase accessibility, and improve pedestrian safety. Other bond components fund improvements to Caltrain, accessibility improvements, upgrades to Muni operations and maintenance facilities, major transit corridor improvements, targeted pedestrian safety improvements, traffic signal improvements, and complete streets projects.

It is still early in the bond program, and only 0.5% of bond funds (\$2.6 million) have been expended as of March 2016. Likewise, there have been no changes in the scope of the bond program, and no change orders to the program. Projects delivered by Public Works will use the same change order tracking system as other Public Works Projects, but the SFMTA will independently track change orders on the projects it delivers and has not yet finalized the level of detail for that reporting.

There have already been some lessons learned and challenges in the bond program. Advanced coordination and proactive communication from the Muni Forward team to Public Works has been critical, and frequent coordination meetings between the departments have been helpful. Effective public engagement is a continuous challenge, and unexpected project changes based on community input have already impacted some project schedules within bond components.

BACKGROUND

General obligation bonds (GO bonds) are debt instruments issued by the City to raise funds for public works projects. They give the City a tool to raise funds for projects that will not provide direct sources of revenue, such as roads, parks, or bridges. GO bonds allow the City to make critical capital improvements to strengthen aging infrastructure, increase the City's ability to respond to and recover from an earthquake, and fund improvements to the City's hospitals and public safety buildings.

	Voter-approved G.O. Bonds since 2008					
		Amount				
Year	Debt Issuance	(in millions)				
2008	Clean and Safe Neighborhood Parks	\$180				
2008	SFGH and Trauma Center Earthquake Safety	\$887				
2010	Earthquake Safety and Emergency Response	\$412				
2011	Road Repaving and Street Safety	\$248				
2012	Clean and Safe Neighborhood Parks	\$195				
2014	Earthquake Safety and Emergency Response	\$400				
2014	Transportation and Road Improvement	\$500				
2015	Affordable Housing	\$310				
	Voter-approved G.O. Bonds Total	\$3,132				

GO bonds must be approved by a two-thirds vote of the electorate. Since 2008, voters have approved eight GO bonds totaling just over \$3.1 billion. In addition to historic GO bond investments, the City issues debt through several other sources, including revenue bonds, general fund revenues, and user fees.

For an overview of changes in budget to GO bonds at both the program and component level, see Appendix A. For a description of the 2015 Affordable Housing bond, see Appendix B.

Methodology

In order to provide a high-level review of the City's GO bond programs, the City Services Auditor asked departments to provide budget and schedule data on each individual bond component. Bond program managers and in some cases bond component project managers were interviewed to obtain more detail on scope, schedule, and budget status. For a list of terms used throughout this report, see Appendix C, and for more detail on Methodology, see Appendix D.

Project versus Programmatic Work

Bond programs are made up of one or more components, each of which is assigned a lead department. Components can be a stand-alone, large-scale project or an ongoing, recurring program. Programmatic work tends to consist of smaller individual improvements implemented over an ongoing period of time (such as street resurfacing). Project work is a large-scale, one-time public work (such as constructing the new Public Safety Building).

Making a distinction between project and programmatic work is helpful in understanding how a department tracks and reports on the status of each component. Project work lends itself to set phases, schedules, and budgets. Further, there is generally strict adherence to the planned start and end date, and the budget is clearly defined for each individual project. Since programmatic work covers many smaller, on-going jobs, performance measures tend to be reported at the component level. As long as all individual projects are complete within the planned timeframe, and the budget does not go over the component's allocation, the schedule and budget performance goals have been met.

Change Orders

Change orders are defined as work that is added to or deleted from a contract's original scope of work, which then alters the contract amount and/or completion date. There is no single citywide standard for determining an acceptable amount of change orders on a project, and each implementing department sets a threshold in order to measure a project's performance. For example, San Francisco Public Works (Public Works) considers it a good indicator to have a total change order amount less than three percent of the base contract amount for errors and omissions in the scope of work. In general, other change order types (such as code issues, modifications needed for unforeseen conditions, and additional client requests) are not evaluated based on set thresholds. The Port of San Francisco (Port) and San Francisco Public Utilities Commission (SFPUC) use a standard contingency of ten percent for the overall construction contract, and measure performance based on whether the total amount of all change order types is below this ten percent contingency.

Based on the City Services Auditor's research, no single, widely accepted industry standard exists for and acceptable amount of change orders on a project. Some sources quote a ten percent contingency as an acceptable

standard; however, this can vary depending on the project size or type.¹ If a project is considered significantly complex, a contingency greater than ten percent may be appropriate. Chapter 6 of the San Francisco Administrative code, the Public Works Contracting Policies and Procedures, specifies that "any cumulative increase or decrease in price in excess of 10% of the original Contract price or scope" requires the "approval of the Mayor or Mayor's designee or the board or commission as appropriate and also the approval of the Controller notwithstanding any delegation as provided for [prior in Chapter 6]."²

The remaining sections review the scope, budget, schedule and completion status, and change orders for the following bond programs:

- 2008 Clean and Safe Neighborhood Parks
- 2008 San Francisco General Hospital and Trauma Center Earthquake Safety (SFGH Rebuild)
- 2010 Earthquake Safety and Emergency Response
- 2011 Road Repaying and Street Safety
- 2012 Clean and Safe Neighborhood Parks
- 2014 Earthquake Safety and Emergency Response
- 2014 Transportation and Road Improvement

¹ http://www.herzog.com/wp/wp-content/uploads/2014/08/CMGC-Best-Practices-2014_WR-proof-8-14-14.pdf https://comptroller.nyc.gov/wp-content/uploads/documents/7E13_099S.pdf

² San Francisco City Charter, Administrative Code, Chapter 6, Sec. 6.22(h)(1).

2008 CLEAN AND SAFE NEIGHBORHOOD PARKS

SUMMARY

In February 2008, San Francisco voters approved Proposition A with 71% approval for a \$185 million Clean and Safe Neighborhood Parks (2008 CSNP) bond.³ As of March 2016, \$172.1 million (92.3% of project budget)⁴ has been expended. Of the 27 projects in the bond program, 21 are complete, and the remaining projects are scheduled to be completed by January 2018.

SCOPE

The 2008 CSNP bond was approved to make the following improvements: (1) fix and improve park restrooms citywide, (2) eliminate serious earthquake safety risks in neighborhood and waterfront park facilities, (3) renovate parks and playgrounds in poor physical condition, (4) replace dilapidated playfields, (5) repair nature trail systems in the City's parks, and (5) attract matching community and philanthropic support.

Subsequent to voter approval, the 2008 CSNP bond was divided into the following three components:

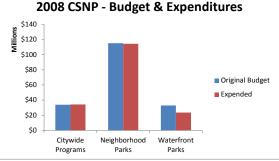
- 1. **Citywide Programs:** led by the Recreation and Park Department (RPD), this component is broken into 5 subprograms, including restroom repair, renovation of playfields, assessing and repairing trees, restoring trails, and a Community Opportunity Fund.⁵
- 2. **Neighborhood Parks:** led by RPD, this component includes capital improvements to 12 parks with a specific focus on earthquake safety, general physical condition, and adequacy for basic recreational use.
- 3. Waterfront Parks: led by the Port of San Francisco (Port), this component consists of 10 capital improvement projects intended to improve waterfront open spaces.

No significant changes to the bond program scope have occurred in the past year, and the number of projects funded by the 2008 CSNP bond has not changed. However, the Crane Cove Project, which is funded by both the 2008 and 2012 CSNP Waterfront Park bond funds, has driven significant changes in scope described in the summary of the 2012 CSNP bond program. Due to minor cost savings in RPD's Neighborhood Parks component as well as appropriated interest, the RPD-led Citywide Programs budget has been increased by \$4 million. This additional funding increases the scope of that component's programmatic work.

In the fiscal year 2014-15 annual report, the most substantial changes in scope had been project level changes at Mission Dolores (RPD), Mission Playground (RPD), the Community Opportunity Fund (RPD), the Pier 43 Bay Trail Link (Port), and the Bayview Gateway (Port) projects.

BUDGET⁶

As of March 2016, the revised overall budget for the bond program was \$186.4 million, a \$4.6 million increase over March 2015, due to interest appropriated to the bond program by both departments. Within the RPD components of the bond program, the Neighborhood Parks component budget was decreased by \$227,850 due to cost savings at one Neighborhood Park, while the Citywide Programs budget was increased from \$33.9 million to \$37.9 million, an increase of 11.9% due to the reallocation of cost



savings and appropriated interest. The Waterfront Parks component (Port) had a budget increase of \$743,023 due to appropriated interest.



³ Hereafter referred to as the 2008 CSNP bond to differentiate it from the subsequent CSNP bond approved by the voters in 2012, referred to as the 2012 CSNP bond.

⁴ The project budget, excluding cost of issuance, increased by \$4.6 million compared to the original bond amount due to appropriated interest.

⁵ The Community Opportunity Fund allows residents, neighborhood groups, and park advocates to initiate improvements in their parks by matching community-nominated projects and funds with private gifts and grants.

⁶ For consistency with other CSNP bond reporting, these figures exclude cost of issuance.

Of the total \$186.4 million budget, \$172.1 million (92.3%) has been expended as of March 2016. The RPD components had expended 97.3% of their budgets, with the remaining funds in the Citywide Programs component. The Port had expended 70.0% of the Waterfront Parks budget, with the remaining funds set aside for Crane Cove Park and Blue Greenway Public Art project.

SCHEDULE AND PERCENT COMPLETE

The three components have varying delays ranging from just under three to just under five years.

		Original	Projected/Actual	Variance	% Projects
Component	Dept. Lead	Completion Date	Completion Date	(days)	Complete
Citywide Programs	RPD	8/30/2012	6/30/2017	1765	20%
Neighborhood Parks	RPD	3/31/2013	1/27/2016	1032	100%
Waterfront Parks	Port	2/28/2015	1/31/2018	1068	80%

Citywide Programs

RPD's projected completion date is June 2017 for all capital improvements within this component. This is almost five years beyond the original completion date, and one and a half years beyond the completion date projected one year ago. There are 5 subprograms within the Citywide Programs component: the Restroom Repair and Replacement Program, Park Playfield Repairs and Construction, Park Forestry Needs, Park Trails Reconstruction, and Community Opportunity Fund. Of these, only the Playfields subprogram is completed (December 2015), though the last Restroom Repair project is currently under construction.

The primary drivers of the increased delay are projects in the Forestry, Trails, and Community Opportunity Fund subprograms of the Citywide Programs component. These projects require substantial coordination with site staff and community groups.

As outlined in the previous release of this report, other schedule pressures on Citywide Programs have included:

- Litigation: the Playfields Program was delayed by a long environmental review period and repeated appeals of building permits and California Environmental Quality Act (CEQA) approvals.
- Staffing: the Trails and Forestry Programs require Operations staff coordination and participation, but day-to-day responsibilities constrain their time and result in program delays.
- Community Opportunity Fund: adhering to guidelines for distributing funds, community involvement in project delivery, and lack of staff resources and project funding contributed to delays.
- Regulatory Delays: the Restrooms Program encountered delays associated with permit appeals and prolonged CEQA review for historical preservation issues.

Neighborhood Parks

The Neighborhood Parks component is complete as of January 27, 2016 when the Mission Dolores Park renovation was substantially completed. The primary delays in this component were due to unforeseen site conditions, regulatory requirements, and difficulties managing project workloads with current staffing levels.

The Mission Dolores Park project encountered substantial delays due to historic preservation issues. Various elements of the park were deemed to be a historic resource. As a result, there was a lengthy



process of working with the Planning Department and an external consultant to modify the project to receive environmental clearance. The Beach Chalet renovation also went through a lengthy litigation process.

Waterfront Parks

The projected completion date for the Waterfront Parks is just under 3 years beyond its original schedule, and 8 months beyond the expected completion date from one year ago. The primary reason for the most recent delays has been the permitting process for Crane Cove Park, which is currently waiting on a U.S. Army Corps of

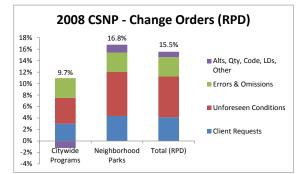
Engineers permit for waterside construction that is expected to be issued in November 2016.

The component has also been delayed due to extensive stakeholder input after initial scoping of projects, delays in design review process for both the City and Bay Conservation and Development Commission, and historic preservation issues. The addition of 2012 CSNP bond funding renewed community discussions about Crane Cove Park in particular. These discussions resulted in additions to the scope of the 2012 CSNP-funded portion of the project, pushing out the timeline for the park's completion.

CHANGE ORDERS

Neighborhood Parks and Citywide Programs (RPD)

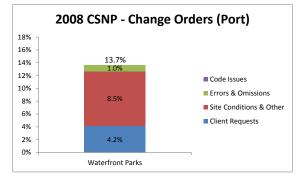
As of March 2016, the total change orders for the RPD-led components were 15.5% of the total base contract amount (9.7% for Citywide Programs and 16.8% for Neighborhood Parks). In general, RPD considers change orders less than 12-14% of the base contract amount for renovation or tenant improvement projects to be an indicator of good performance, and 6-8% for new projects.⁷ The current change order amounts for these components are in excess of the department's standards for good performance, and are



unlikely to change substantially before the bond program is closed out, since most bond funds have been expended and RPD bond components are scheduled to be completed by June 30, 2017.

Waterfront Parks (Port)

As of March 2016, the total change orders for the Port-led Waterfront Parks component were 13.7% of total base contract amount. The Port considers change orders less than 10% of the base contract amount to be a for good performance. The overall change order amount on Waterfront Parks is in excess of this departmental standard. Change orders have been driven primarily by unforeseen site conditions issues, particularly due to a contractor dispute on the Pier 43 Bay Trail Link project.



LESSONS LEARNED

An important lesson learned for RPD from the 2008 CSNP bond program was that potentially complicated CEQA and historic preservation issues need substantial lead time before construction, and thus it is important to start early on those approvals. For example, as mentioned above, Mission Dolores Park was substantially delayed by historic preservation requirements. Structures in the park as well as the contours of the grass were found to be historic resources by an external consultant. RPD worked with the Planning Department and an external consultant to identify mitigations for the parks project that would allow for the provision of new landscaping, restrooms, tennis courts, and walkways compliant with Americans with Disabilities Act (ADA) requirements, while maintaining the parks historic resources.

The Port has found the 2008 CSNP bond funds to be critical to the delivery of park improvements on San Francisco's waterfront, but has learned an important lesson regarding the complexity of building on the waterfront, both from a regulatory and technical perspective. Waterfront parks projects require additional, time-intensive permits from the Bay Conservation and Development Commission and the U.S. Army Corps of Engineers. Furthermore, building on top of water is also expensive and difficult, costing about \$600 per square foot, since building over water adds complexity to technical details such as drainage, corrosion, and designing pier structures to support the additional weight of parks.

⁷ In accordance with Chapter 6 of the San Francisco Administrative Code, RPD goes to their Commission for approval if change orders are in excess of 10 percent of the original contract price or scope.

2008 SAN FRANCISCO GENERAL HOSPITAL AND TRAUMA CENTER EARTHQUAKE SAFETY (SFGH REBUILD)

SUMMARY

In 2008, San Francisco voters passed Proposition A with nearly 84% approval for an \$887.4 million San Francisco General Hospital and Trauma Center Earthquake Safety (SFGH Rebuild) bond. In March 2015, the hospital was officially renamed the Priscilla Chan and Mark Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) to honor their gift of \$75 million. As of March 2016, \$841.0 million (94.8% of the project budget) has been expended. The main construction project was substantially completed on August 18, 2015, with the remaining funds



to be used for the close-out of the main construction project and completion of supporting follow-on projects. Patient transfer to the new hospital occurred on May 21, 2016, and the new hospital is now operational while follow-on projects are being completed.

SCOPE

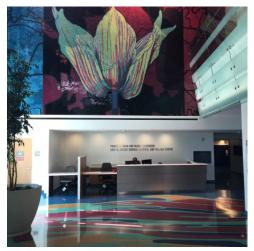
The 2008 SFGH Rebuild bond was approved to ensure the availability of the hospital and trauma center in the event of a natural disaster or emergency by improving earthquake safety.

Subsequent to voter approval, the 2008 SFGH Rebuild Program was scoped to build a new hospital to be in full compliance with state laws, standards, and requirements, as well as be seismically safe, by implementing: (1) service building modifications; (2) site utilities relocation or removing campus utilities; (3) reconfiguring pedestrian and vehicular traffic flow for continued operation of the medical center; (4) replacing the Campus Generator System with two new diesel generators; (5) creating a mat foundation and installing base isolators;

(6) increasing capacity with a seismically resistant design; and (7) building out the new 284-bed hospital and outfitting it with major medical equipment and the most state-of-the-art imaging equipment.

San Francisco Public Works (Public Works), in coordination with the Department of Public Health (DPH), is leading the SFGH Rebuild program. The new facility resides within the existing campus and has a total of nine levels, with two levels below grade.

The facility reached substantial completion on August 18, 2015. The bond program included only one project, the delivery of a new acute care hospital, but the hospital project was completed with cost savings and earned bond interest dollars. The original language of the bond measure authorized "related costs necessary or convenient" for the rebuilding and improvement of the hospital. As described below, the project was



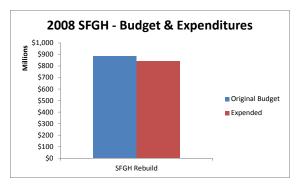
completed under budget, and as such portions of the remaining funds are being used for four smaller follow-on projects. These projects address needs that have arisen during the construction of the hospital, either from changes in policy mandates over the nine years of construction or other site needs that have arisen during construction.

The four new follow-on projects and their budgets and timelines are presented in the table below.

Project Name	Description	Budget	Completion Date
Plant Services Building NPC-4 Seismic Upgrade	Retrofit of architectural components, including existing utilities and equipment anchorages, to meet OSHPD NPC-4 (Non-structural Performance Category, Rating 4)	\$2.3 million	December 2016
Building 5 Ground Floor Remodel at Tunnel Connection and Second Floor Remodel at Bridge Connection	Renovate areas affected by the bridge and tunnel connection between the new Hospital (Building 25) and the existing Main Hospital (Building 5) to create the corridor access between these two buildings	\$7 million	October 2016
ZSFG Pneumatic Tube Connectivity Project	Replacement of existing pneumatic tube equipment in the basement and installation of new pneumatic tube stations in Building 5, Second Floor	\$1.3 million	February 2016
Miscellaneous ZSFG Follow- on Projects	Miscellaneous minor projects in the new hospital driven by ZSFG operational and California Department of Public Health (CDPH) licensing needs	Based on availability of remaining funds after close-out	To be finalized as the scopes are being developed by ZSFG.

BUDGET

The primary project for the Program, the construction of a new acute care hospital, was completed under budget. Excluding cost of issuance, \$43.5 million of the bond funds had not yet been expended as of March 2016. However, complete financial closure of the bond program will take additional time, partially due to reconciliation of costs with the contractor and the addition of follow-on projects funded by cost savings.



The unexpended funds are earmarked for soft costs, contractor change orders, OSHPD (Office of Statewide Health Planning and

Development) close-out, and the four follow-on projects described above. The amount of funding for follow-on projects is contingent on the remaining funds after close-out, but the overall bond program will remain within the original appropriated budget of \$887.4 million. Since ZSFG's project needs exceed the availability of funds, Public Works has been coordinating with ZSFG to prioritize follow-on projects.

SCHEDULE AND PERCENT COMPLETE

Construction of the new acute care hospital was completed approximately three months behind schedule, in August 2015, and is now in its closeout phase when punch list items are addressed.⁸ The delays included resolving minor issues with the building fire alarm, air balance, and electrical systems as well as some required re-work due to design issues and contractor performance.

The four follow-on projects are currently underway, and will support the broader hospital project. The three specific follow-on projects will be completed by December 2016, while the fourth miscellaneous project does not yet have a defined end date. The added delay in closure of the



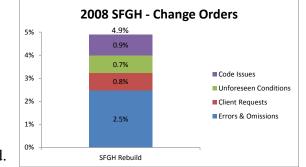
bond program is primarily due to reconciling costs with the contractor and the opportunity presented by the main project's cost savings to fund other projects that support the new hospital.

⁸ At the end of construction contracts, it is typical to prepare a "punch list" for the contractor of items not conforming to contract specifications that must be completed before final payment is made.

CHANGE ORDERS

The total construction contract amount paid to date is \$692.8 million, including additional change orders amounting to 4.9% (\$32.3 million) of the base contract amount. The majority of the change orders are due to errors and omissions.

Public Works considers change orders for errors and omissions under 3% of the base contract amount to be an indicator of good project performance. At 2.5% of change orders for errors and omissions, the hospital project is considerably below this threshold. Many of the change orders for the project arose from gaps in



coordination between the different disciplines in the construction project (e.g., electrical and low-voltage systems).

LESSONS LEARNED

As the SFGH Rebuild hospital project draws toward a close, there have been a number of lessons learned over the nine-year project. Coordination with the Controller's Office to reduce the number of bond sales and sell together with other bonds to share costs of issuance has resulted in cost savings of \$1.5 million for the SFGH Rebuild bond. Another lesson learned was that pre-bond funding allowed for more detailed scoping of the project, helping the project be delivered under budget and with only modest delays.

From an operational perspective, using a Construction Manager/General Contractor (CM/GC) project delivery model was beneficial to the project. However, the performance incentive structure would have been more effective if it also applied to the design team. In addition, the contract incentive of sharing leftover contingency would have been more effective if it was not predicated on there being no claims; this incentive structure creates hesitancy to advance claims that might have been productive, and removes the entire incentive for the contractor when a single claim is made.

2010 EARTHQUAKE SAFETY AND EMERGENCY RESPONSE

SUMMARY

In 2010, voters passed Proposition A with 79% approval for a \$412 million Earthquake Safety and Emergency Response (2010 ESER) bond.⁹ As of March 2016, \$322.9 million (80.1% of project budget) has been expended (excluding cost of issuance). Of the total 123 individual projects that vary in size and scope, 100 are complete.

SCOPE

The ESER bond was approved to do the following:

- Improve and/or replace deteriorating cisterns, pipes, tunnels, and related facilities to ensure firefighters a reliable water supply for fires and disasters;
- Improve and/or replace neighborhood fire and police stations; and



• Replace other seismically-unsafe facilities with earthquake-safe buildings.

Subsequent to voter approval, the ESER bond was divided into 3 components:

- 1. **Auxiliary Water Supply System (AWSS):** led by the San Francisco Public Utilities Commission (SFPUC), the 47 AWSS projects consist of two tanks, one reservoir, two pump stations, eleven pipeline/tunnel projects, approximately six cistern contracts that cover an estimated 30 cisterns, and a comprehensive planning study. The scope and location of improvements were prioritized using reliability scores from probabilistic modeling of the availability of firefighting water after a major earthquake.
- 2. **Neighborhood Fire Stations (NFS):** led by Public Works in coordination with the San Francisco Fire Department (SFFD), the NFS component consists of seismic upgrades, retrofitting, and other health and safety improvements to 22 of the City's 46 fire stations. Within this component, there are three subcomponents: Focused Scope, Comprehensive, and Seismic projects.
- 3. **Public Safety Building (PSB):** led by Public Works in coordination with the SFFD and San Francisco Police Department (SFPD), the PSB serves as a seismically safe replacement for the SFPD Headquarters and the Southern District Police Station, as well as a new fire station for the Mission Bay Neighborhood. This project component also includes the rehabilitation of historic Fire Station #30, which will serve as a new home for the SFFD Arson Task Force and provide a meeting space for City and community use.

The scope for the PSB has not changed over the last year, and the project is now complete. One project in the AWSS component, the 4th Street Pipeline, was cancelled because it is no longer hydraulically needed. The police and fire stations in the PSB had their first day of business on March 30, 2015, and the PSB construction project reached substantial completion on April 28, 2015.

The NFS scope was determined based on a comprehensive survey of all neighborhood fire stations in 2009, which identified \$350 million dollars of immediate capital needs, with a commitment that up to 23 non-specified existing stations would be addressed 2010 ESER bond. The NFS scope has been reduced over the last year due to the relocation of the Fire Station 35 project. Fire Station 35 was planned to have been moved from its current location at Pier 22 ½ to Pier 30/32 as part of the new Warriors Arena, ¹⁰ but due to the Warriors' decision to locate at a site in Mission Bay the Fire Station project has moved back to Pier 22 ½. For this reason and because of funding pressure due to unforeseen conditions with the historic structures of neighborhood fire stations, the station project has been removed from the 2010 ESER bond and moved to the NFS component of

⁹ Hereafter referred to as the 2010 ESER bond to differentiate it from the subsequent ESER bond approved by the voters in 2014, referred to as the 2014 ESER bond.

¹⁰ Go Dubs!!

the 2014 ESER bond.

BUDGET

As of March 2016, all components are spending within their original budget and departments have not made any formal revisions to projected spending. However, as discussed in the previous release of this report one year ago, AWSS and NFS identified changes in the scope of work that required changes in project budgets to be funded by appropriations from the ESER 2014 bond and other sources.

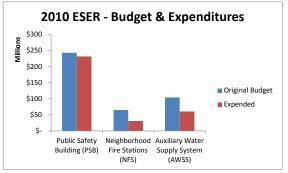
Auxiliary Water Supply System

This component's budget has not changed, and as of March 2016 58% of the original budget was expended. As described in the fiscal year 2014-15 report, the scope of work for Pump Station 1 was expanded to include four new engines and a new generator, with the additional \$9.5 million of scope to be funded with 2014 ESER funds.

As more projects are completed within the component, many have had contingencies that did not need to be used, which are either able to fund change orders on other projects or increase the overall scope of the component. As of March 2016, there was approximately \$400,000 of cost savings among the cistern projects.

Neighborhood Fire Stations (NFS)

The NFS component's budget has not changed, and as of March 2016, 48% of the budget was expended. Unforeseen conditions with historic structures have affected the budgets of individual projects and, as described above, Fire Station 35 has been moved from the 2010 ESER bond to the 2014 ESER bond; however, the 2010 budget will remain the same. The balance of funding remaining in the 2010 ESER bond that resulted from this move will be applied as necessary to the Fire Station 5 and Fire Station



16 projects still underway within the 2010 ESER program. If an additional balance of funds occurs, it will be applied to NFS Focus Scope type improvements.

Bids are still forthcoming for Fire Stations 5 and 16, both of which are relatively large projects, so these two projects are the greatest area of remaining uncertainty for the component. Cost savings from the PSB, appropriated bond interest, and lower-than-expected costs of bond issuance are expected to offset budget increases on individual projects.

Public Safety Building (PSB)

The Public Safety Building budget has remained the same. The project was completed on April 28, 2015, and as of March 2016 had expended \$231.5 million of its budgeted \$236.7 million. The project benefited from a favorable bid environment at the time it went to construction bids. The remaining budget is to be made available for the NFS component.

SCHEDULE AND PERCENT COMPLETE

All three components have slightly over one year of delays.

		Original	Projected/Actual	Variance	% Projects
Component	Dept. Lead	Completion Date	Completion Date	(days)	Complete
Public Safety Building	Public Works	3/13/2014	4/28/2015	411	100%
Neighborhood Fire Stations	Public Works	5/1/2017	6/30/2018	425	96%
Auxiliary Water Supply System (AWSS)	PUC	9/30/2018	12/13/2019	439	55%

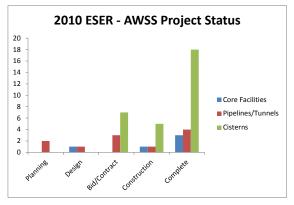
Auxiliary Water Supply System (AWSS)

PUC has completed 26 of this component's 47 projects. All projects are scheduled to be completed by December 2019. While the component was scheduled to be completed on time one year ago, there has been a delay to Pump Stations 1 and 2. Pump Station 1 was delayed to October 2016 due to a large change order to replace its diesel fuel system to meet current standards, requiring Commission approval. Pump Station 2's bid

and award phase has been delayed to allow work on the Pump Station 1 project to be finished to avoid simultaneously taking two major AWSS facilities out of service, and to allow for Federal and State permits for Pump Station 2 to be finalized.

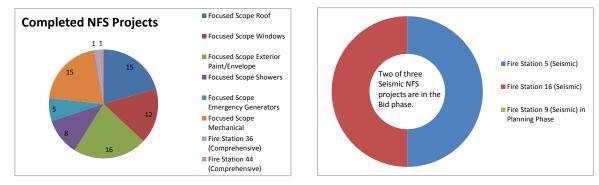
Neighborhood Fire Stations (NFS)

Public Works has completed 73 of this component's 76 projects. While this represents 96% of projects, it is 48% of the NFS budget since the completed projects are the Focused Scope and Comprehensive projects, which have relatively small budgets; the three larger seismic projects remain. For Seismic Projects,



Station 5 is receiving bids on June 1, 2016, and Station 16 is receiving bids later this year, while Station 9 is in the planning phase.

The NFS component is scheduled to be completed by June 2018, six months earlier than was reported last year. The change in schedule is due to the removal of Fire Station 35 from the ESER 2010 bond, which will be funded under the ESER 2014 bond as described in the Scope section above.



Public Safety Building (PSB)

The PSB was substantially completed on April 28, 2015, just over one year behind its original schedule. As reported one year ago, this delay was primarily due to four main factors:

- 1. Difficulty in coordinating utility relocations;
- 2. A design error due to conflicting surveys between the developer and the City Surveyor;
- 3. A progressive release of partially incomplete bid documents to capitalize on favorable market bidding conditions, which eventually resulted in some schedule delays; and
- 4. A lack of IT coordination during the design phase which caused changes and subsequent delays during construction.

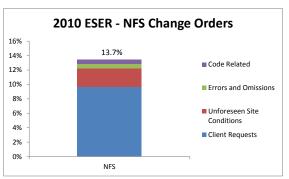
CHANGE ORDERS

Auxiliary Water Supply System (AWSS)

As of March 2016, AWSS total change orders amounted to 4.3% of base contract costs for change orders attributable to original work,¹¹ well below contract contingencies of 10%.

Neighborhood Fire Stations (NFS)

As of March 2016, NFS total change orders amounted to 13.7% of base contract, with the largest percentage being client requests (9.7%). Errors and omissions were 0.7%, well below the standard



¹¹ In addition, five projects were added to existing contracts: Twin Peaks Reservoir Joint Sealing \$633,590, Jones Street Manifold Valve Motorization \$511,908, Jones Street Tank Valve House Evaluation \$5,862, PS1 Tunnel \$166,454, and PS1 Fuel System \$41,904.

3% performance threshold.

Public Safety Building (PSB)

The PSB was substantially complete at the time of the previous release of this report one year ago, and total change orders amounted to 7.0% of base contract with errors and omissions being 4.7%, with about a third of these change orders finalized after the building's substantial completion due to the completion of negotiations on outstanding change orders.

LESSONS LEARNED

One of the successes of the bond program was involving the client early in the process, especially in the case of the Public Safety Building, which helped set expectations and also get insights into how the building design would accommodate its end users. At the same time, a lack of IT expertise from the client department was a significant challenge, since technology requirements prioritizing what a model police facility will need can have a significant impact on building design.



In addition to delivering state-of-the-art facilities, Public Works

recognizes that more should be done to require all building system-related contractors to document and provide maintenance schedules for building system components that the City can use to proactively maintain and keep building system components in a state of good repair.

2011 ROAD REPAVING AND STREET SAFETY

SUMMARY

In November 2011, voters passed Proposition B with 68% approval for a \$248 million Road Repaving and Street Safety (RRSS) bond. As of March 2016, \$165.4 million (66.1% of project budget) has been expended, and all project components are scheduled to be completed between one and three years beyond original schedules.

SCOPE

The 2011 RRSS bond was approved to repave deteriorating streets in neighborhoods throughout San Francisco; repair and strengthen deteriorating stairways, bridges, and overpasses; improve safety for pedestrians and bicyclists; improve disabled access to sidewalks; and construct and renovate traffic infrastructure to improve San Francisco Municipal Railway (Muni) transit reliability and traffic flow on local streets.

The 2011 RRSS bond consists of five components:

- 1. **Sidewalk and Accessibility Improvements:** led by Public Works, the component includes three subprograms:
 - Accelerated Sidewalk Abatement Program (ASAP) is a complaint-driven program to repair 152,544 square feet of damaged sidewalks;
 - Sidewalk Inspection and Repair Program (SIRP) is a condition-driven program to repair 646 square blocks of the City's sidewalks; and
 - **Curb Ramp Program** will upgrade 1,563 curb ramps to provide better accessibility in accordance with the Americans with Disabilities Act (ADA).



2. Street Resurfacing: led by Public Works, this component will repave,

repair, and reconstruct 1,281 blocks of streets to improve surface quality and ensure safety for all road users.¹²

- 3. **Streetscape, Pedestrian Safety, and Bicycle Safety:** led by Public Works in coordination with the San Francisco Municipal Transportation Agency (SFMTA), this component consists of 69 projects, including 24 large-scale projects to improve the street design quality and environment, and 45 smaller projects (referred to as Follow-the-Paving projects) that focus on pedestrian and bicycle safety improvements.
- 4. **Street Structures:** led by Public Works, this component will repair a total of 40 of the City's approximately 350 street structures (including stairways, retaining walls, pedestrian bridges, vehicular bridges, viaducts, and tunnels).
- 5. **Traffic Signal Improvements:** led by the SFMTA in coordination with Public Works, this component will improve or replace traffic signals at 456 intersections, including adding Transit Signal Priority at 440 intersections, new traffic signals, and traffic signal infrastructure such as conduit work.

The Sidewalk and Accessibility Improvements programs are almost complete, with a greater scope than originally projected. Under ASAP 155,544 square feet of sidewalks were repaired (102% of original goal, an increase of 3,544 square feet from projects one year ago). Under SIRP 646 square blocks were repaired (108% of original goal, but a 19% decrease from projections one year ago). Curb ramps will be completed in October 2016; 1,563 curb ramps have been constructed as of March 2016 (92% of original goal, 116% of revised target).

The scope of some bond components has changed slightly over the past year. The number of street structure

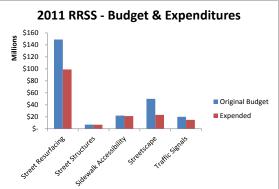
¹² Public Works originally planned on repaving 1,389 blocks and has since revised the total blocks to 1,281, primarily as the result of an assessment by project engineers during the design phase.

sites to be repaired increased from 36 to 40 because surplus bond funds were available and were used to initiate projects that will be completed using a General Fund capital allocation. Public Works selected structures to repair based on the condition score, which assesses the structural and geotechnical conditions, as well as code conformance for life safety and accessibility.

Compared to the original scope, seven Follow-the-Paving projects were cancelled or placed on hold in the Streetscape, Pedestrian Safety, and Bicycle Safety component due to feasibility concerns stemming from higher-than-projected costs, schedule changes due to interdepartmental coordination, environmental review, or more extensive public outreach needs.

BUDGET

As of March 2016, 66.1% of the revised bond program budget has been expended and all components are within their original budgets. Over the last four years, the bond accrued \$2.3 million of interest that will be appropriated to the Streetscape component as deemed appropriate by Public Works and the Controller's Office of Public Finance.



SCHEDULE AND PERCENT COMPLETE

As shown in the table below, the current project completion dates are between one and three years beyond their original schedules. These completion dates were revised by 12 to 18 months beyond what was reported a year ago. Now that most projects are entering the construction phase, Public Works anticipates fewer delays because the planning, public outreach, and design work is complete.

		Original	Projected/Actual	Variance	% Projects
Component	Dept. Lead	Completion Date	Completion Date	(days)	Complete
Street Resurfacing	Public Works	1/31/2016	12/31/2018	1065	87%
Street Structures	Public Works	6/30/2015	6/30/2016	366	95%
Sidewalk Accessibility	Public Works	12/31/2014	10/31/2016	670	ASAP: 102% SIRP: 108% Curb ramps: 116%
Streetscape	Public Works	12/31/2017	12/31/2018	365	62%
Traffic Signal Improvements	MTA	5/31/2016	5/31/2017	365	67%

Street Resurfacing

The schedule for street resurfacing has been delayed the longest, by 18 months since last year. Paving work is typically the last element of a project to be implemented and is highly dependent on other agencies' project schedules. As of March 2016, Public Works has completed resurfacing of 1,114 of its goal of 1,281 blocks.

In addition to the number of blocks paved, the Street Resurfacing component's performance is based on the condition of City streets, measured by using the Pavement Condition Index (PCI). The PCI, developed by the United States Army Corps of Engineers, is a numerical index used to indicate the general condition of the pavement. The method is based on a visual survey of the number and types of distresses in a pavement surface, and ranges from 0 (worst possible condition) to 100 (best possible condition). The PCI score increased one point from calendar year 2014 to 2015 (from a score of 67 to 68). Public Works has set a target score of 69 for 2016, and 70 by 2020.

Street Structures

This component has been delayed 11 months since last year due to unforeseen conditions discovered during construction and delivery delays for materials. As of March 2016, Public Works had completed 38 of the 40 street structures projects. The remaining two have expended 98% of bond funds allocated to them. For purposes of the RRSS bond program, Public Works' estimated end date for this component is June 30, 2016, though the

two remaining projects will be completed in FY17 using general fund monies.

Sidewalk Accessibility

The curb ramp program has constructed 1,563 curb ramps, compared to a goal of 1,350, and a small amount of funds remain for further work.¹³ Completion for the curb ramp work is estimated for October 31, 2016, which is one year behind the projected schedule reported last year and nearly two years behind the original schedule.

The delays are primarily due to unknown existing site conditions, resulting in increased project costs. To address project cost overruns, Public Works decreased the component's bond-funded scope. However, the Curb Ramp, SIRP, and ASAP programs are also funded on a regular basis with general fund money in addition to the funding appropriated to them from the bond program's first two sales. These sales were scheduled upfront because the projects were already planned and ready for implementation compared to other components of the bond.

Streetscape, Pedestrian Safety, and Bicycle Safety

This component is scheduled for completion by December 31, 2018, which is one year beyond the original completion estimate. The delay is due to more community outreach needs and more time needed to address public concerns about decisions such as parking removal, which were originally underestimated. Additionally, Public Works and PUC decided to coordinate to include needed water and sewer upgrades, which extended both the design and construction project schedules.

As of March 2016, of the total 69 projects, 43 (62%) are complete, 10 of which are streetscape and 33 of which are Follow the Paving projects. Two of the Follow-the-Paving projects were planned to be funded with RRSS bond funds, but were instead completed with other funds.

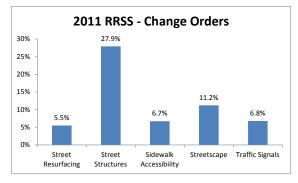
Traffic Signals

As of March 2016, this component is 67% complete and projected to be completed one year late in May 2017. MTA has installed Transit Signal Priority at 300 of the 440 planned intersections, and has installed traffic signal infrastructure upgrades at 6 intersections.

CHANGE ORDERS

The statewide benchmarking standard for total construction change orders is 10% of base contract costs, and the national standard for change orders for errors and omissions is 3% of base contract.

Change orders for Street Resurfacing, Sidewalk Accessibility, and Traffic Signals are within the standard 10% threshold. Sidewalk Accessibility change orders are only for curb ramps, since sidewalk repairs do not typically encounter change orders. Streetscape, Pedestrian, and Bicycle Safety Improvements are just



over the 10% threshold, though this component has only expended 45% of its budget, with many projects in construction over the next two and a half years.

The Street Structures component reported total change orders amounting to 27.9% of base contract amount, well above the 10% benchmarking standard. These change orders were primarily the result of unforeseen conditions and an increase in scope due to the availability of additional funds from a General Fund capital allocation.

LESSONS LEARNED

A significant challenge to the bond program has been the extra time needed for public outreach for joint projects

¹³ The most recent target for curb ramp work is 1,350 curb ramps, but the original target was 1,700; under the original target, the component is 92% complete.

with the SFMTA, which was not sufficient in original project schedules. While there may be overall support for streetscape projects, communities may not embrace initial plan details, especially with regards to loss of parking spaces or Muni stop relocation.

While it has also increased project schedules, one of the successes of the bond program has been an increase in coordination between Public Works, the PUC, and the SFMTA to minimize the number of times the street is disrupted, combining road repaying, streetscape projects, and utility work when possible. Public Works would like to improve communications with the public to better inform them that the increased duration of street projects is due to the consolidation of the number of times the street will be disrupted.

2012 CLEAN AND SAFE NEIGHBORHOOD PARKS

SUMMARY

In November 2012, San Francisco voters approved Proposition B with 72% approval for a \$195 million Clean and Safe Neighborhood Parks (2012 CSNP) bond. As of March 2016, \$33.7 million (17.5% of project budget) has been expended. Of the 27 projects in the program, two are complete.

SCOPE

The 2012 CSNP bond provides funding to continue the work of the 2008 CSNP bond program, including making the following improvements: (1) fix and improve park restrooms citywide; (2) eliminate serious earthquake safety risks in neighborhood, citywide, and waterfront parks; (3) renovate parks and playgrounds in poor physical condition; (4) replace dilapidated playfields; (5) repair nature trail systems in the City's parks; and (6) attract matching community and philanthropic support. The bond program's scope benefitted from being able to take advantage of the extensive community process and stakeholder meetings that helped shape the 2008 bond.

The 2012 CSNP bond program consists of four components:

- 1. **Citywide Parks:** led by the Recreation and Park Department (RPD), this component focuses on the restoration of natural features (such as lakes and landscapes), the building of recreational assets (such as playgrounds and courts), and the improvement of connectivity and access (such as roads and pedestrian safety) of three parks that serve the entire City.¹⁴ This component is new compared to the 2008 bond.
- 2. Citywide Programs: led by RPD, this component consists of five subprograms:
 - **Failing Playgrounds:** renovate or replace the most dilapidated of the more than 170 playgrounds;
 - Forestry Projects: continue the work from the 2008 bond of assessing and repairing trees;
 - Water Conservation: correct water usage issues found in a 2009 PUC audit, reduce waste, and improve irrigation in sites throughout City parks;
 - **Trails:** repair and reconstruct park nature trails, pathways, and connectivity in Golden Gate and John McLaren Park; and
 - **Community Opportunity Fund:** expand upon the existing program from the 2008 bond and establish a Partnership Projects Fund to support larger-scale projects.
- 3. **Neighborhood Parks:** led by RPD, this component includes capital improvements to 15 neighborhood parks selected based on community feedback, physical condition, amenities offered, seismic risk, and neighborhood density (a proxy for park usage).
- 4. **Waterfront Parks:** led by the Port of San Francisco (Port), this component has 4 projects that will improve new waterfront areas as well as complete the work on the first phase of Crane Cove Park, funded by both the 2008 and 2012 CSNP bonds.

The previous annual report noted that Joe DiMaggio North Beach Playground, the first RPD project constructed in this bond program, had undergone changes in scope due to unforeseen site conditions, and a competitive construction environment suggested an unfavorable bid environment for the remaining 14 Neighborhood Parks. Despite this challenge, RPD has kept the same number of projects in scope for its three bond program components. To remain within budget, however, amenities are now being bid as additive alternates.

The Port has reduced the number of projects in the Waterfront Parks component from seven to four. Based on community and stakeholder feedback, the Port decided to remove three projects and redirect their funding to Crane Cove Park. The Fisherman's Wharf Plaza was removed since it was deemed infeasible to deliver a

¹⁴ Golden Gate Park, McLaren Park, and Lake Merced Park were identified by RPD as parks that serve the entire City.

significant park given the budget. Warm Water Cove Park and Pier 70 Park were removed since they are in the vicinity of Crane Cove Park and community and park advocates preferred a more complete park from Phase 1 of Crane Cove. Crane Cove Park is receiving \$10.3 million from the 2008 CSNP bond, \$14.3 million from the

2012 CSNP bond, and \$6.9 million from the Port; future sources may fund a second phase of improvements.

BUDGET¹⁵

As of March 2016, there have been no changes to the overall or component-level budgets for the bond program, and all changes have been at the project level. Of the total \$193 million budget for projects, \$33.7 million (17.5%) has been expended.

SCHEDULE AND PERCENT COMPLETE

RPD is currently scheduled to complete the Citywide Parks and Citywide Programs components on time. Over the last year, the Neighborhood Parks component schedule has been pushed back three months from its original timeline due to complex site conditions and additional coordination requirements, including the need to coordinate construction at the Margaret S. Hayward Playground with the Department of Emergency Management due to an emergency operations facility on site.

RPD has completed only one of its 15 Neighborhood Parks projects, while another four are in construction. The remaining 10 projects are in design, with conceptual designs forthcoming in summer and fall 2016. Design work has also begun on playgrounds to be funded under the Citywide Programs component. All Citywide Parks projects are currently in planning.

		Original	Projected/Actual	Variance	% Projects
Component	Dept. Lead	Completion Date	Completion Date	(days)	Complete
Citywide Parks	RPD	11/30/2018	11/30/2018	0	0%
Citywide Programs	RPD	11/30/2018	11/30/2018	0	0%
Neighborhood Parks	RPD	11/30/2018	2/28/2019	90	7%
Waterfront Parks	Port	1/31/2018	1/31/2018	0	25%

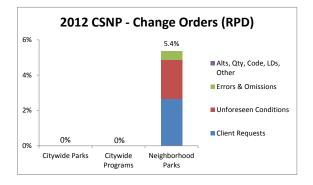
The Port has completed only one of the four Waterfront Parks (the Cruise Terminal Plaza & Pier 27/29 Tip),

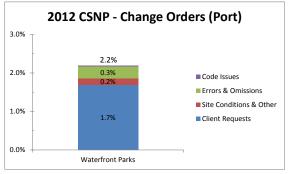
although this represents 46% of the total component budget. The first of the park's two phases of construction was completed in advance of the 2013 America's Cup, and the second phase was completed in 2014.

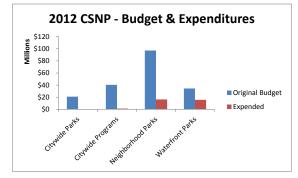
The Port delayed the Agua Vista Park project's timeline by five months in order to allow coordination with the Mission Bay Bayfront Park, which will be directly adjacent and is being developed by the Office of Community Investment and Infrastructure (OCII). Both Agua Vista Park and the Mission Bay Bayfront Park are also adjacent to the planned 16th Street Mission Bay Ferry Landing and proposed Warriors Arena, causing design and scheduling dependencies among all four projects. Any further delay in the Agua Vista Park's delivery could cause a delay to the completion of the overall Waterfront Parks bond component.

CHANGE ORDERS

Due to the limited spending thus far on the 2012 CSNP and the completion of only 2 of 27 projects, there have been limited change orders (amounting to 5.4% of base contract amount for







¹⁵ For consistency with other CSNP bond reporting, these figures exclude cost of issuance.

RPD and 2.2% for the Port projects).

LESSONS LEARNED

RPD implemented lessons learned from the 2008 CSNP bond program by scheduling construction of parks with more complicated historic preservation issues later in the bond program timeline and starting the planning and permitting process earlier to effectively manage project schedules. However, the 2012 CSNP bond has provided new challenges with regards to philanthropic funds, which provide an opportunity to expand the bond's programmatic scope, but require substantial ongoing staff effort to obtain.

2014 EARTHQUAKE SAFETY AND EMERGENCY RESPONSE

SUMMARY

In June 2014, voters approved Proposition A with 79% approval for a \$400 million Earthquake Safety and Emergency Response (2014 ESER) bond. As of March 2016, \$40.1 million (10% of project budget) has been expended. Of the total 115 projects in the program that vary in size and scope, 61 are complete.

SCOPE

The 2014 ESER bond continues the work of the 2010 ESER bond to improve or construct facilities identified in the City's Capital Plan that support earthquake safety and emergency response, and includes three new components of work.

- 1. Neighborhood Fire Stations (NFS): led by Public Works in coordination with the San Francisco Fire Department (SFFD), the NFS component continues the work of the 2010 ESER bond with seismic upgrades, retrofitting, and other health and safety improvements. The component comprises 69 projects located at 23 of the stations that did not receive improvements under the 2010 ESER bond. As with the 2010 ESER bond, there are three subcomponents: Focused Scope, Comprehensive, and Seismic projects.
- 2. **Emergency Firefighting Water System (EFWS):** led by the Public Utilities Commission (PUC), this component is an extension of the Auxiliary Water Supply System (AWSS) work from the 2010 ESER bond. The scope and location of improvements were prioritized based on reliability scores from probabilistic modeling of the availability of firefighting water in case of a major earthquake.
- 3. **Police Facilities:** led by Public Works in coordination with the San Francisco Police Department (SFPD), this component funds 10 projects that will improve up to 12 facilities. The improvements include all ten district stations except for the Southern Station, which is located in the new Public Safety Building that was funded by the 2010 ESER bond. The other three Police facilities are the Pistol Range (at Lake Merced), the Academy (in Diamond Heights), and the Stables (in Golden Gate Park). The projects focus on compliance with state and federal mandates (such as ADA accessibility), critical building maintenance such as plumbing, and seismic safety.
- 4. **Traffic Company and Forensic Services Division Facility:** led by Public Works in coordination with the San Francisco Police Department (SFPD), this relocates and seismically upgrades the facilities for the SFPD's motorcycle unit and the crime lab. The Traffic Company is currently located in the seismically-deficient Hall of Justice, which is slated for demolition, while the crime lab is located at the Hunters Point Naval Shipyard which is also slated for future demolition.
- 5. Office of the Chief Medical Examiner: led by Public Works in coordination with the San Francisco General Services Agency (GSA), this component constructs a new Office of the Chief Medical Examiner to relocate the facility that is currently located at the Hall of Justice. The new facility will be better aligned with accreditation standards and will provide more modern facilities.



NFS project identification and prioritization followed a similar approach to the 2010 ESER bond. An updated assessment of neighborhood fire stations was performed between November 2014 and January 2015 to update identified capital needs. All but one of the stations that did not receive improvements under the 2010 ESER bond were included in the 2014 ESER bond, and projects were prioritized that would improve emergency response and seismic readiness and mitigate water intrusion. The 2014 ESER bond includes Fire Station 35, which was originally planned to be delivered under the 2010 ESER bond program but was delayed due to the relocation of the Warriors Arena as described in the 2010 ESER bond program overview.

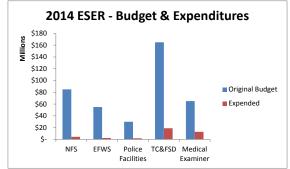
EFWS is a continuation of the Auxiliary Water Supply System (AWSS) work from the 2010 ESER bond. In addition to Auxiliary Water Supply Systems, this bond program also includes Flexible and Portable Water

Supply Systems (FWSS and PWSS), which provide alternative ways to supply water after an earthquake with lower-cost infrastructure.

Police Facilities followed a similar approach to NFS for project identification, performing assessments and studies at each station and prioritizing the most urgent work. Many of the district stations are in severe need of capital investments, with serious sewage and plumbing repairs needed, leaks from ceilings into work areas, poor ventilation and indoor air quality, and reliance on jerry-rigged repairs such as duct tape and extension cords in the absence of more durable building improvements. The current Police Facilities bond funding covers only a portion of essential improvements, and according to Public Works total capital needs for SFPD are approximately \$250 million.

BUDGET

As of March 2016, all components are spending within their original budget. The only budget revision is to the Office of the Chief Medical Examiner component, which has increased by 2% (from \$65 million to \$66.2 million) due to client requests for expansion of the scope.¹⁶ The PUC will continue to refine project budgets and will re-baseline the EFWS components after project schedules are established.



Public Works is currently working with SFPD to determine if it is possible to include facilities for technology to support SFPD's adoption of body cameras in the Traffic Company and Forensic Services Division building, but funding has not yet been identified for the approximately \$3 million of extra costs this would entail. Public Works is examining several potential scenarios to address this, which could be budget-neutral.

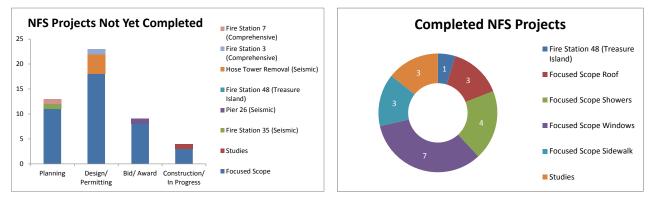
SCHEDULE AND PERCENT COMPLETE

Most components of the 2014 ESER bond are currently on schedule.

		Original	Projected/Actual	Variance	% Projects
Component	Dept. Lead	Completion Date	Completion Date	(days)	Complete
Neighborhood Fire Stations (NFS)	Public Works	3/31/2021	3/31/2021	0	30%
Emergency Firefighting Water System (EFWS)	PUC	12/31/2020	12/31/2020	0	44%
Police Facilities	Public Works	12/31/2020	12/31/2020	0	0%
Traffic Company and Forensic Services Division Facility	Public Works	12/31/2019	12/31/2019	0	0%
Office of the Medical Examiner	Public Works	12/31/2016	8/2/2017	214	0%

Neighborhood Fire Stations (NFS)

The NFS component is currently on schedule. Of the 70 projects, 21 have been completed, representing 5% of total funds since the projects completed are primarily smaller Focused Scope projects. Of the other 49 projects, three quarters are in planning or design.



¹⁶ The original budget of \$65 million includes estimated cost of issuance (COI), but the revised budget of \$66.2 million does not; a revised budget including estimated COI was not available.

Emergency Firefighting Water System (EFWS)

Twelve of the 27 projects are complete, representing 4.2% of total funds. The majority of the projects completed are assessments, and the majority (12 of 14) of the pipelines, tunnels, and flexible systems projects are in planning or design.

Police Facilities

The Police Facilities component is currently on schedule. One project (ADA Package 1) is currently in construction, one is in the bid phase (ADA Package 2), and two are in design (the

Mechanical/Electrical/Plumbing Project and the Northern Police Station). The remaining six projects are in predesign, with more studies necessary to determine the scope of improvements needed.

Traffic Company and Forensic Services Division Facility

As of March 2016, the project was completing conceptual design and thereafter moving into schematic design. The projected end date for the project has not changed.

Office of the Chief Medical Examiner

The project started construction on November 17, 2015. It is currently projected to be completed seven months behind the original schedule due to re-design necessitated by the discovery of contaminated soil, removal of existing concrete reinforced tilt-up panels in lieu of keeping them in place, and added scope of work requested by the client. The project is 33% complete.

CHANGE ORDERS

Neighborhood Fire Stations

NFS had \$27,341 in change orders as of March 2016, amounting to 5% of base contract. Only 0.3% of change orders were indicated as being for errors and omissions, well below the 3% standard performance threshold.

Emergency Firefighting Water System (EFWS)

EFWS has only had \$25,000 in change orders as of March 2016, a very small percentage of existing contracts. More change orders are expected as projects move into construction.

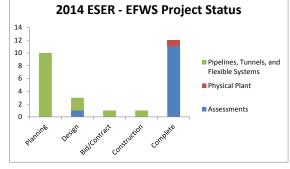
Other Components

The remaining components have not had substantial change orders to report. The Police Facilities have only had two very small change orders for concealing conduit, though more change orders are expected as more renovation projects move into construction. The Office of the Chief Medical Examiner has several potential change orders, but none have been finalized as of March 2016. The Traffic Company and Forensic Services Division Facility has not yet entered into construction, and as a result does not have change orders.

LESSONS LEARNED

The Office of the Medical Examiner project had a significant revision in schedule after their Construction Management/General Contractor (CM/GC) was hired and provided a detailed construction schedule, which was several months longer than the conceptual construction scheduled submitted by the estimating company that was part of the original A/E team. For future projects, it would be helpful to have hired the Construction Management Support Services (CMSS) team that provides expert scheduling and estimating services prior to issuing an RFP for the Construction Management/General Contractor and Architect & Engineer teams.

In addition, the NFS program has been at times challenging to deliver since fire stations are spaces where City employees both live and work, which is not the case for most City buildings. Public Works continues to work closely with the SFFD to minimize the disruption of construction activity for those who reside in the fire stations. It has also been beneficial to involve consultants who specialize in fire station design to lend expertise to City staff architects and engineers on best practices in the planning and design of these facilities.



2014 TRANSPORTATION AND ROAD IMPROVEMENT

SUMMARY

In November 2014, San Francisco voters approved Proposition A with 72% approval for a \$500 million Transportation and Road Improvement bond. As of March 2016, \$2.6 million (0.5% of project budget) has been expended. The bond program is currently programmed to include 95 projects of varying size and scope. Of the projects in the program, none are yet complete, with most projects in either planning or design phases, and some in construction.

SCOPE

The 2014 Transportation and Road Improvement bond funds projects identified through extensive analysis of transportation capital needs. The selection of components and projects for the bond was driven by the Mayor's Transportation 2030 (T2030) Transportation Task Force Report, which outlined transportation system needs and funding gaps, as well as the San Francisco Municipal Transportation Agency (SFMTA) 20-Year Capital Plan, a financially unconstrained plan that identifies and prioritizes the agency's capital investment needs based on the SFMTA Strategic Plan, and the SFMTA's 5-year Capital Improvement Program, a five-year financially constrained plan of projects. The bond projects support San Francisco's commitment to achieving Vision Zero: zero traffic fatalities by 2024, and advance goals of providing faster and more reliable transit, safer work conditions for SFMTA employees, large corridor improvements, and a cohesive bike network.

The bond's projects fall into 8 components:

- 1. Muni Forward Rapid Network Improvements: This component will fund implementation of Muni Forward, developed through the multiyear Transit Effectiveness Project (TEP) planning effort. These projects will restructure transit service on Muni's high ridership lines to improve travel times and reliability, increase accessibility, and improve pedestrian safety. Prioritization criteria include benefits to transit riders, benefits to low income and minority communities, and pedestrian and transit safety issues.
- 2. Caltrain Upgrades: This component funds part of San Francisco's share of reliability and safety improvements to Caltrain, including a new Positive Train Control system mandated by the Railroad Safety Act of 2008, which will improve safety and system performance.
- **3.** Accessibility Improvements: This component will remove impediments to accessing transit for people with limited mobility or other disabilities. Projects may include modernizing or constructing new elevators, escalators, and boarding islands. One project under consideration is the installation of canopies over shared BART/Muni Metro station entrances. Such canopies would protect station escalators from the elements, improving reliability.
- **4. Muni Facility Upgrades:** This component funds the design and construction of projects to improve operations and accommodate expanded fleet needs at Muni's operations and maintenance facilities.
- **5. Major Transit Corridor Improvements:** This component upgrades streets that anchor the transit system to increase transit speed and reliability, and to ensure that people can safely and efficiently move

around the city. It complements Muni Forward improvements by funding projects identified outside of the TEP planning process, and focusing on entire corridors rather than segments of transit routes. The first bond issuance includes funds in this component for the design of the Better Market Street project.

6. Pedestrian Safety Improvements: This component funds targeted pedestrian safety projects identified through WalkFirst, a data-driven effort to deliver effective engineering improvements to high-risk



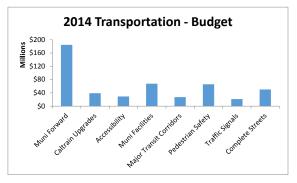


streets. These projects support the City's Vision Zero policy.

- 7. Traffic Signal Improvements: This component funds upgrades to traffic signals and operations to improve signal visibility and overall safety and efficiency of the roadway. The installation of Pedestrian Countdown Signals (PCS) and Audible Pedestrian Signals (APS) along with the upgraded signals will dramatically improve safety for people crossing streets, including the visually impaired. This component is currently planned to fund 29 traffic signal improvements on and adjacent to Market Street.
- 8. Complete Streets Improvements: This component provides funding for pedestrian and bicycle enhancements and public realm improvements, and complements that enable safe, convenient, and comfortable travel for all users and provide safer, well-defined bikeways.

BUDGET¹⁷

There have not been any changes to the budget. There have not been any projects bid substantially over budget, but the bid environment could change. If there are substantial changes to the budgets of larger projects in the future, scope will either change to match the available funds, other additional funding will be sought or the SFMTA will reprioritize projects for completion.



The 2014 Transportation and Road Improvement bond is one of multiple funding sources for many projects. The SFMTA aims to

leverage other funding sources, such as federal grants and local transportation sales tax, whenever possible. The canopies under consideration for the Accessibility Improvements component would receive substantial matching funding from BART.

SCHEDULE AND PERCENT COMPLETE

None of the projects in the bond have been completed, though elements of them have been completed (e.g., bulb outs/sidewalk extensions), and others are in construction.

		Original	Projected/Actual	Variance	% Projects
Component	Dept. Lead	Completion Date	Completion Date	(days)	Complete
Muni Forward Rapid Network Improvements	MTA	12/31/2022	12/31/2022	0	0%
Caltrain Upgrades	MTA	12/31/2020	12/31/2020	0	0%
Accessibility Improvements	MTA	12/31/2017	12/31/2017	0	0%
Muni Facility Upgrades	MTA	12/31/2022	12/31/2022	0	0%
Major Transit Corridor Improvements	MTA*	12/31/2022	12/31/2022	0	0%
Pedestrian Safety Improvements	MTA	12/31/2022	12/31/2022	0	0%
Traffic Signal Improvements	MTA	12/31/2022	12/31/2022	0	0%
Complete Streets Improvements	MTA	12/31/2022	12/31/2022	0	0%

* The Better Market Street project, funded by the first issuance of the Major Transit Corridor Improvements component, is managed directly by Public Works.

Possible pressures on the bond schedule include the public engagement process and interdepartmental coordination. While end dates for components have not changed, public engagement has shifted some project schedules within components. For example, in the Muni Forward component, changes based on community input have already caused a one-year delay to the 5-Fulton East of 6th Avenue (Inner) Rapid Project, though they have resulted in an innovative project that is expected to meet or exceed original reliability improvement goals. Likewise, the 28-19th Avenue Rapid project has been delayed to accommodate interdepartmental coordination with the SFPUC to add water and sewer scope under the same contract, extending the project timeline, but also minimizing disruptions to the corridor.

¹⁷ For consistency with other Transportation 2014 bond reporting, these figures exclude cost of issuance.

CHANGE ORDERS

As of March 2016, there have not been any change orders for projects funded by the bond program, though there inevitably will be as more projects move into construction. The bond program staff are deciding how best to track change orders. For projects delivered by Public Works, the same change order tracking system will be used as is used for its other bond programs. The SFMTA will independently track the projects it delivers. Since the Public Works change order tracking system is more robust, SFMTA change order reporting may be less detailed.

LESSONS LEARNED

It is still early on in the bond program, but there have been some lessons and challenges. Advanced coordination and proactive communication from the Muni Forward team to Public Works about upcoming workload has facilitated the quick delivery of early project elements. The SFMTA and Public Works have regular executive coordination meetings and monthly meetings at the Project Manager level to coordinate anticipated work, project issues, and repaving scheduling. In addition, effective public engagement to keep projects moving forward without significant



schedule changes is a continuous challenge, as is the planning of large, multi-year projects like Better Market Street.

APPENDIX A: CHANGES IN GO BOND BUDGETS

Citywide Programs 33,900,000 37,947,574 11.99 Neighborhood Parks 115,100,000 114,872,149 -0.29 Waterfront Parks 32,866,623 33,609,646 2.39 2008 Public Health and Seismic Facilities (SFGH Rebuild) \$ 887,400,000 \$ 887,400,000 \$ 2010 Earthquake Safety and Emergency Response \$ 412,300,000 \$ 412,300,000 - Public Safety Building (PSB) 243,000,000 \$ 51,000,000 - Neighborhood Fire Stations (NFS) 65,100,000 \$ 520,300,000 - Auxiliary Water Supply System (AWSS) 104,200,000 149,000,000 - Street Resurfacing 149,000,000 \$ 250,300,000 - Street Structures 7,000,000 \$ 2,000,000 - Street Structures \$ 0,000,000 \$ 2,000,000 - Street Structures \$ 195,000,000 \$ 2,000,000 - Citywide Parks \$ 21,000,000 \$ 2,000,000 - Citywide Parks \$ 21,000,000 \$ 2,000,000 - Citywide Parks \$ 400,000,000 <t< th=""><th>Bond Program and Component</th><th>Original Budget</th><th>Revised Budget</th><th>Percent Change</th></t<>	Bond Program and Component	Original Budget	Revised Budget	Percent Change
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2012 Clean and Safe Neighborhood Parks \$ 195,000,000 \$ 195,000,000 \$ Citywide Parks 21,000,000 21,000,000 \$ \$ \$ Citywide Programs 40,500,000 40,500,000 \$ \$ Neighborhood Parks 99,000,000 99,000,000 \$ \$ Waterfront Parks 34,500,000 \$ \$ \$ 2014 Earthquake Safety and Emergency Response \$ 400,000,000 \$ \$ \$ Neighborhood Fire Stations \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Streetscape	50,000,000	52,300,000	4.6%
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Citywide Programs 40,500,000 40,500,000 - Neighborhood Parks 99,000,000 99,000,000 - Waterfront Parks 34,500,000 \$ 401,233,024 0.39 2014 Earthquake Safety and Emergency Response \$ 400,000,000 \$ 401,233,024 0.39 Neighborhood Fire Stations 85,000,000 \$ 401,233,024 0.39 Neighborhood Fire Stations 85,000,000 \$ 55,000,000 - Emergency Firefighting Water System (EFWS) 55,000,000 55,000,000 - Police Facilities 30,000,000 30,000,000 - Traffic Company and Forensic Services Division Facility 165,000,000 165,000,000 - Office of the Chief Medical Examiner 65,000,000 66,233,024 1.99 2014 Transportation and Road Improvement \$ 485,000,000 - - Muni Forward Rapid Network Improvements 184,785,249 - - Caltrain Upgrades 39,000,000 39,000,000 - -	2012 Clean and Safe Neighborhood Parks	\$ 195,000,000	\$ 195,000,000	
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Neighborhood Fire Stations85,000,00085,000,000-Emergency Firefighting Water System (EFWS)55,000,000Police Facilities30,000,00030,000,000-Traffic Company and Forensic Services Division Facility165,000,000165,000,000-Office of the Chief Medical Examiner65,000,00066,233,0241.992014 Transportation and Road Improvement\$485,000,000-Muni Forward Rapid Network Improvements184,785,249184,785,249-Caltrain Upgrades39,000,00039,000,000-	Waterfront Parks	34,500,000	34,500,000	
Emergency Firefighting Water System (EFWS)55,000,00055,000,000-Police Facilities30,000,00030,000,000-Traffic Company and Forensic Services Division Facility165,000,000-Office of the Chief Medical Examiner65,000,00066,233,0241.992014 Transportation and Road Improvement\$485,000,000-Muni Forward Rapid Network Improvements184,785,249184,785,249-Caltrain Upgrades39,000,00039,000,000-	2014 Earthquake Safety and Emergency Response	\$ 400,000,000	\$ 401,233,024	0.3%
Police Facilities30,000,00030,000,000-Traffic Company and Forensic Services Division Facility165,000,000Office of the Chief Medical Examiner65,000,00066,233,0241.992014 Transportation and Road Improvement\$485,000,000-Muni Forward Rapid Network Improvements184,785,249184,785,249-Caltrain Upgrades39,000,00039,000,000-	Neighborhood Fire Stations	85,000,000	85,000,000	
Traffic Company and Forensic Services Division Facility165,000,000165,000,000-Office of the Chief Medical Examiner65,000,00066,233,0241.992014 Transportation and Road Improvement\$485,000,000\$485,000,000Muni Forward Rapid Network Improvements184,785,249184,785,249-Caltrain Upgrades39,000,00039,000,000-	Emergency Firefighting Water System (EFWS)	55,000,000	55,000,000	
Office of the Chief Medical Examiner 65,000,000 66,233,024 1.99 2014 Transportation and Road Improvement \$ 485,000,000 \$ 485,000,000 \$ Muni Forward Rapid Network Improvements 184,785,249 184,785,249 \$ \$ Caltrain Upgrades 39,000,000 39,000,000 \$ \$ \$	Police Facilities	30,000,000	30,000,000	
2014 Transportation and Road Improvement \$ 485,000,000 \$ 485,000,000 - Muni Forward Rapid Network Improvements 184,785,249 184,785,249 - Caltrain Upgrades 39,000,000 39,000,000 -	Traffic Company and Forensic Services Division Facility	165,000,000	165,000,000	
Muni Forward Rapid Network Improvements 184,785,249 184,785,249 - Caltrain Upgrades 39,000,000 39,000,000 -	Office of the Chief Medical Examiner	65,000,000	66,233,024	1.9%
Caltrain Upgrades 39,000,000 - 39,000,000 -	2014 Transportation and Road Improvement	\$ 485,000,000	\$ 485,000,000	
	Muni Forward Rapid Network Improvements	184,785,249	184,785,249	
	Caltrain Upgrades	39,000,000	39,000,000	
Accessibility Improvements 29,023,861 - 29,023,861 -	Accessibility Improvements	29,023,861	29,023,861	
Muni Facility Upgrades 67,722,343 -	Muni Facility Upgrades	67,722,343	67,722,343	
Major Transit Corridor Improvements 27,088,937 - 27,088,937 -	Major Transit Corridor Improvements	27,088,937	27,088,937	
Pedestrian Safety Improvements 65,787,419 - 65,787,419 -	Pedestrian Safety Improvements	65,787,419	65,787,419	
Traffic Signal Improvements 21,284,165 21,284,165 -	Traffic Signal Improvements	21,284,165	21,284,165	
Complete Streets Improvements 50,308,026 -	Complete Streets Improvements	50,308,026	50,308,026	

Note: All dollar amounts include cost of issuance except for (1) the revised budget of the Office of the Chief Medical Examiner, (2) the 2008 Clean and Safe Neighborhood Parks Bond, all components, and (3) the 2014 Transportation and Road Improvement Bond, all components.

APPENDIX B: SUMMARY OF 2015 BOND PROGRAM

In November 2015 and June 2016, the voters approved new general obligation bond measures.

2015 Affordable Housing Bond

In November 2015, San Francisco voters approved Proposition A with 74% approval. The \$310 million 2015 Affordable Housing bond will provide funds to build, buy, improve, and rehabilitate affordable housing in San Francisco, and assist middle-income City residents with purchasing their first home in the City. The bond aims to protect and expand low- and middle-income housing in San Francisco, and to serve the most vulnerable: low-income working families, veterans, seniors, and individuals with disabilities.

The bond program will be delivered by the Mayor's Office of Housing and Community Development (MOHCD). As of January 2016, MOHCD proposed four program categories for the bond:

- Public Housing (\$80 million)
- Affordable Housing up to 80% of Area Median Income (AMI) (\$100 million)
- Mission Area Plan Investments up to 120% of AMI (\$50 million)
- Middle Income Housing 80% of AMI and above (\$80 million)

Projects will be programmed and prioritized according to program-specific prioritization criteria (regarding project impact and location, urgency of need, and populations that will benefit), geographic and social equity, and funding source eligibility (to best leverage outside resources).

2016 Public Health and Safety Bond

In June 2016, San Francisco voters approved Proposition A with 79% approval. The \$350 million 2016 Public Health and Safety bond will provide:

- \$272 million of funds to renovate, expand, and enhance the earthquake safety of fire safety and healthcare facilities,
- \$58 million to construct a larger and more modern facility for City-owned ambulances and repair and modernize neighborhood fire stations, and
- \$20 million for homeless care facilities.

APPENDIX C: DEFINITION OF TERMS

- Actual Completion Date: Date the last project within a component reached substantial completion
- Appropriated Interest: Interest earned on held bond proceeds, minus any payments necessary to the IRS under federal arbitrage limitations; upon review, the outstanding interest on bond proceeds may be added to the bond program budget
- Bond Program: Overall bond improvements, including all of the individual components
- Component: A sub-program within a Bond Program
- Change Orders: Work that is added to or deleted from a contract's original scope of work, which then alters the original contract dollar amount and/or completion date. Change orders are classified by the following types:
 - Client Requests: Contractor and client request changes due to changing factors such as costs, schedule, any alterations to the existing contract
 - Errors and Omissions: Change in design, detailing, or documentation that requires repurchase of materials, reconstruction of work, revisions to make the project work properly and is the result from incorrect information or a lack of information or information that could/should have been included initially in the contract documents
 - o Unforeseen Conditions: Unavoidable or unanticipated occurrences that affect construction
 - Code Issues: Code compliance issues may include accessibility, safety, or other types of code related problems that could prevent building occupancy
- Expended: Includes all money that has been spent, and does not include encumbrances (money set aside for designated future expenses, which cannot be used for other purposes)
- Original Budget: Total bond funding anticipated to be spent derived during the component scoping phase
- Original Completion Date: Estimated completion date of the last project within a component derived during the component scoping phase
- Projected Completion Date: The estimated completion date of the last project as of March 2016
- Revised Budget: Total bond funding anticipated to be spent as of March 2016

APPENDIX D: METHODOLOGY

This report reviews the City and County of San Francisco's seven large GO bond programs. Each Program includes multiple components. In all but one instance (SFGH Rebuild), a component is broken into numerous projects or programmatic components that cover myriad capital improvements. In order to provide a high-level review of the City's GO bond programs, the City Services Auditor asked departments to provide budget and schedule data on each individual bond component based on the definitions defined within this report. In some instances, departments were able to provide additional performance measure data, such as number of projects in a given phase or the Pavement Condition Index.

The data presented in this report was collected from departmental reporting systems, Quarterly Bond Program Reports, websites, and bond program accountants. In addition to the project data collected from the departments, the Controller's Office interviewed seven bond program managers along with fourteen other bond program staff (including some bond component project managers) to document lessons learned, discuss project accomplishments, and to identify upcoming milestones.