Item 3 File 11-0655 **Departments:** Controller's Office of Public Finance (OPF), Department of Public Works (DPW), and Municipal Transportation Agency (MTA)

### **EXECUTIVE SUMMARY**

### **Legislative Objective**

• The proposed resolution would (1) determine and declare that the public interest and necessity demand (a) repaving and reconstruction of roads, (b) rehabilitation and seismic improvement of street structures, (c) replacement of sidewalks, (d) installation and renovation of curb ramps, (e) redesign of streetscapes to include pedestrian and bicycle safety improvements, and (f) construction, rehabilitation and renovation of traffic infrastructure and the payment of related costs necessary or convenient for the foregoing purposes; (2) find that the estimated cost of \$248,000,000 for such improvements is too great to be paid out of the ordinary annual income and revenue of the City and will require incurring bonded indebtedness; (3) find that the proposed bond is not a project under the California Environmental Quality Act (CEQA); (4) find the proposed bond is in conformity with the priority policies of Planning Code Section 101.1(b) and with the General Plan consistency requirement of Charter Section 4.105 and Administrative Code Section 2A.53; (5) provide for the City to declare its official intent to reimburse prior expenditures; and (6) waive the time limits set forth in Administrative Code Section 2.34.

### **Key Points**

- The proposed \$248,000,000 General Obligation (GO) Bond would be used to fund street and sidewalk upgrades pertaining to five programs: (1) Street Repaving and Reconstruction; (2) Sidewalk Accessibility Improvements; (3) Street Structures Rehabilitation; (4) Streetscape, Pedestrian, and Bicycle Safety Improvements; and (5) Transit Street Signal Infrastructure for the Municipal Transportation Authority (MTA).
- The expenditure of GO Bond proceeds to finance any project or portion of any project will be subject to appropriation approval of the Board of Supervisors subsequent to completion of planning and any further required environmental review under CEQA for those projects.
- On April 28, 2009 and October 15, 2010, the Board of Supervisors previously approved issuances of Certificates of Participation (COPs) totaling \$90,000,000 to finance similar ongoing street improvement projects including street repaving, curb ramps and sidewalk repairs.

### **Fiscal Impact**

- The proposed GO Bond is estimated to have an interest rate of 6.0 percent, resulting in a total debt service of \$437,249,617 over 24 years (\$248,000,000 in principal plus \$189,249,617 in debt financing), or an average annual debt service of \$18,218,734 per year.
- The proposed GO Bond would result in increased Property Taxes, for a single family residence assessed at \$500,000, averaging \$37.33 annually over 24 years, after deduction for the \$7,000 homeowners exemption.

#### Recommendation

• The Budget and Legislative Analyst considers inclusion of the \$148.4 million to be used for Street Repaying and Reconstruction and the \$20.3 million to be used for MTA's Transit Street Signal Infrastructure Improvements in the proposed GO Bond to be policy matters for the Board of Supervisors.

# **MANDATE STATEMENT & BACKGROUND**

#### **Mandate Statement**

According to San Francisco Charter Section 9.118, any agreement with a term of over ten years or expenditures of over \$10,000,000 is subject to approval by the Board of Supervisors. The proposed issuance of \$248,000,000 in General Obligation bond debt requires the City to enter into an agreement which exceeds ten years and \$10,000,000.

## **Background**

Road resurfacing and reconstruction, street repairs, installation of curb ramps, pedestrian safety features and the repair of the City's sidewalks and street structures have historically been funded with a combination of General Fund monies, State and local transportation revenues including Gas Tax revenues, and Federal grants. However, according to Mr. Douglas Legg, Budget and Finance Manager with DPW, the historical and current sources of funding for City street and sidewalk improvements do not provide consistent or sufficient revenues to fund such infrastructure projects.

According to Mr. Legg, over the past five years, the budget for street resurfacing has averaged \$42 million annually, which is \$23.5 million less than the estimated \$65.5 million which DPW, at this time, considers to be necessary to improve street pavement conditions. This shortfall has produced backlog of streets in need of repair. As a result, San Francisco's streets currently have a Pavement Condition Index (PCI) score<sup>1</sup> of 64, which is the bottom of the "good" rating range, as shown in Table 1 below. Without increased funding in street repairs, DPW projects that San Francisco's PCI score would drop to 61, a "fair" rating, in only three years. As shown in Table 1 below, the lower the PCI score, the higher the average cost of repairing each street block.

**Table 1: Pavement Condition Index (PCI) Scoring Descriptions** 

Percent of SF Streets	PCI Score	Treatment	Average Cost/Block
19%	85 – 100 "excellent"	No improvement needed	\$0
30%	64 – 84 "good"	<u>Pavement preservation</u> – slurry sealing or crack sealing to extend life of street	\$9,000
28%	50 – 63 "fair"	Repave grind off and replace the top two inches of asphalt	\$97,800
23%	0 – 49 "poor"	Reconstruction reconstruct the street including concrete base and top layer of asphalt; or Resurface with base repair grind off and replace the top two inches of asphalt and complete localized repairs to the concrete base	\$436,400; or \$140,000

<sup>&</sup>lt;sup>1</sup> The PCI scoring system was developed by the U.S. Army Corps of Engineers to evaluate roadway conditions.

The City's ten-year Capital Plan sets a goal of improving San Francisco's streets PCI score from 64 to 70 in ten years, or by 2021. According to Mr. Legg, increasing the City's average PCI score to 70 in ten years, the City would need to appropriate \$65.5 million annually, increasing 5 percent per year. Anticipated funding from Sales Tax, local vehicle license fees, and Federal and State grant funds are projected to be insufficient to maintain the current condition of the City's streets. Figure 1, below, illustrates the increased funding that would be needed to achieve a PCI score of 70 in ten years.

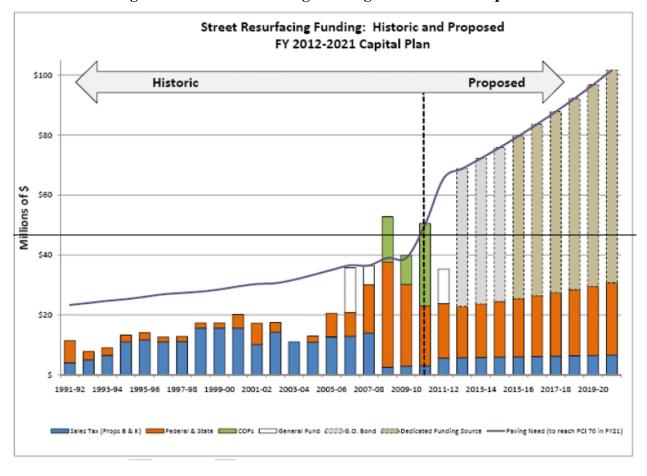


Figure 1: Street Resurfacing Funding: Historic and Proposed

DPW has estimated that without additional revenue, the PCI score could fall to 54 in 10 years, or by 2021.

Two years ago, on April 28, 2009, the Board of Supervisors (File 09-0404) approved the issuance of \$42,000,000 in Certificates of Participation (COPs) to finance the same categories of street improvement projects, and on October 26, 2010, the Board of Supervisors (File 10-1159) approved the issuance of an additional \$48,000,000 COPs issuance, with the main difference being the specific streets and locations of those projects.

In addition to street paving needs, DPW has identified funding needs to improve sidewalk accessibility and condition, street structures, and pedestrian and bikeways, and the Municipal Transportation Agency (MTA) has identified funding needs to improve transit street signal infrastructure.

# **DETAILS OF PROPOSED LEGISLATION**

The proposed resolution pertaining to street and sidewalk improvements would (1) determine and declare that the public interest and necessity demand (a) the repaving and reconstruction of roads, (b) the rehabilitation and seismic improvement of street structures, (c) the replacement of sidewalks, (d) the installation and renovation of curb ramps, (e) the redesign of streetscapes to include pedestrian and bicycle safety improvements, and (f) the construction, rehabilitation and renovation of traffic infrastructure and the payment of related costs necessary or convenient for the foregoing purposes; (2) finding that the estimated cost of \$248,000,000 for such improvements is and will be too great to be paid out of the ordinary annual income and revenue of the City and County and will require incurring bonded indebtedness; (3) finding that the proposed bond is not a project under the California Environmental Quality Act ("CEQA"); (4) finding the proposed bond is in conformity with the priority policies of Planning Code Section 101.1(b) and with the General Plan consistency requirement of Charter Section 4.105 and Administrative Code Section 2A.53; (5) providing for the City to declare its official intent to reimburse prior expenditures; and (6) waiving the time limits set forth in Administrative Code Section 2.34.

The proposed Safe Streets and Road Repair General Obligation Bond (GO Bond) would provide \$248,000,000 in GO Bond fund revenues to five street and sidewalk improvement programs, shown in Table 2 below. Ultimately, approval of the GO Bond would be decided by a supermajority of San Francisco voters. The subject resolution is the first of two steps required to put the proposed GO Bond before the San Francisco voters in November 2011. The second piece of legislation, File 11-0654, which would call and provide for a special election, was introduced on May 17, 2011 and is currently pending in the Budget and Finance Committee.

The use of GO Bond proceeds to finance any project or portion of any project would be subject to future appropriation approval of the Board of Supervisors subsequent to completion of planning and any further required environmental review under CEQA for those individual projects.

Ms. Nadia Sesay of the Office of Public Finance (OPF) anticipates issuing the not-to-exceed \$248,000,000 GO Bonds in three issuances between 2012 and 2016. As shown in Table 2, below, the estimated issuance of \$248,000,000 in GO Bond would fund \$244,500,000 in project costs for five programs, and \$3,500,000 in financing costs. Attachment I to this report includes expanded descriptions of the five street and sidewalk improvement programs.

**Table 2: Uses of GO Bond Proceeds** 

Five Programs	Scope	Project Costs (millions)	Audit, oversight, & issuance (millions)	Total (millions)
Street Repaving and Reconstruction	Slurry sealing, repaving, re-construction and new construction of approximately 2,540 street segments	\$146.3	\$2.1	\$148.4
2. Sidewalk Accessibility Improvements	Design and construct approximately 1,900 curb ramps citywide and improve 125,000 square feet of City responsibility sidewalks	21.7	0.3	22.0
3. Street Structures Rehabilitation	Rehabilitate, repair and improve aging street infrastructure such as bridges, guardrails, tunnels, viaducts, retaining walls and stairs.	7.2	0.1	7.3
4. Streetscape, Pedestrian, and Bicycle Safety Improvements	Pedestrian/bicycle safety and streetscape improvements such as pedestrian countdown signals and lighting, sidewalk extension, bulb-outs, bicycle improvements, tree planting and landscaping.	49.3	0.7	50.0
5. Transit Street Signal Infrastructure	Rehabilitate and upgrade existing traffic signal infrastructure to reduce travel time along key Muni routes and improve transit reliability.	20	0.3	20.3
Total		\$244.5	\$3.5	\$248.0

With regard to the Street Repaving and Reconstruction Program, as shown above in Table 2, DPW anticipates that the GO Bond revenue of \$146,300,000 would allow the DPW to increase the City's Pavement Condition Index (PCI) score from 64 to 66 in three years. According to Mr. Legg, with regard to the City's goal of achieving a PCI score of 70 in ten years, the proposed GO Bond would serve as a stopgap, providing the City three years to identify additional sources of dedicated revenue for the ongoing Street Repaving and Reconstruction Program (Program 1 in Table 2, above). Programs 2 through 5 would not impact the City's PCI score.

### FISCAL IMPACTS

According to Ms. Nadia Sesay, Director of the Office of Public Finance in the Controller's Office, the proposed General Obligation (GO) Bond issuance plan calls for the issuance of the proposed \$248,000,000 GO Bonds in three issuances (series) between 2012 and 2016.

Attachment II, provided by the Office of Public Finance, shows the estimated debt service requirements for the proposed \$248,000,000 GO Bond issuance. As shown in Attachment II, once all \$248,000,000 of the GO Bond have been sold, the estimated total debt service

requirement between July 1, 2011 and June 30 of 2035, a period of 24 years, will be \$437,249,617, or an average annual debt service of \$18,218,734 per year (\$248,000,000 in principal plus \$189,249,617 in interest at an assumed interest rate of 6 percent).

Charter Section 9.106 requires that outstanding General Obligation bonded indebtedness cannot exceed three percent of the City's assessed value of all taxable real and personal property located within the City.

As shown in Attachment III, provided by Ms. Sesay, the City's total General Obligation debt capacity is currently \$4,735,979,441 or three percent of the City's estimated net assessed property valuation of \$157,865,981,382 for FY 2010-2011. As of May 22, 2011, the City had \$1,481,159,429 in outstanding General Obligation bonds or approximately 0.94 percent of the net assessed property valuation. With the addition of the proposed \$248,000,000 in General Obligation Bonds, outstanding bonds would be \$1,729,159,429. As shown on Attachment III, based on this outstanding principal amount, without the consideration of other bond issuances, the \$1,729,159,429 in outstanding principal represents 1.10 percent of the net assessed valuation of \$157,865,981,382 (\$1,729,159,429 ÷ \$157,865,981,382) with available debt capacity of \$3,006,820,012.

## Impact on Property Taxes

The proposed \$248,000,000 GO Bond principal and the estimated \$189,249,617 of related interest expense, would be repaid from increased Property Taxes on all property owners in the City. Attachment II illustrates the impact of the proposed GO bond debt service requirements on Property Taxes. Authorization of the proposed bond funds would result in increased Property Taxes, for a single family residence assessed at \$500,000 of \$37.33 annually after deduction for the \$7,000 homeowner's exemption. Pursuant to Chapter 37 of the Administrative Code (Residential Rent Stabilization and Arbitration Ordinance), residential landlords who are subject to rent control would be permitted to pass through 50 percent of the Property Tax increase to the tenants in buildings constructed after 1979.

According to Ms. Sesay, the timing of the issuance of the proposed GO Bonds would occur such that increases in Property Taxes from the proposed GO Bonds would be offset by reductions in Property Taxes as the City's existing GO Bonds are being redeemed. Therefore, according to Ms. Sesay, the City's projected Property Tax rates to be assessed to residential and commercial property owners should remain at or below the FY 2005-06 Property Tax rates. Figure 2 below provided by DPW, illustrates the expected impact of the proposed GO Bond (shown in gray) on the City's projected Property Tax rates, assuming no additional GO Bond debt is issued by the City.

Projected Property Tax Rates for Voter Approved & Proposed Streets G.O. Bonds FY 2006-2021 0.14% FY 2006 Tax Rate 0.12% **Projected Property Tax Rates** 0.10% 0.08% 0.06% 0.04% 0.02% 0.00% 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Road Repaving & Street Safety Bond FY 2006 Rate (Constraint) Voter Approved

Figure 2: Impact of Proposed GO Bond on City Property Tax Rates

Source: DPW

According to Mr. Legg, \$3 to \$4 million in General Fund monies will be included in DPW's FY 2011-2012 budget for Sidewalk Accessibility Improvements, one of the programs that would be funded under the proposed GO Bond issuance. Mr. Legg advises that if the proposed \$248,000,000 GO Bond is approved by the San Francisco voters in November 2011, \$3 to \$4 million of the GO Bond fund revenues would be subsequently appropriated, subject to Board of Supervisors approval, to reimburse the General Fund revenues which were advanced for the Sidewalk Accessibility Improvements.

# **POLICY CONSIDERATIONS**

# The Subject Resolution Is the First of Two Steps Required to Put the Proposed GO Bond Before the Voters in November 2011

As is noted above, the subject resolution is the first of two steps required to put the proposed GO Bond before San Francisco voters in November 2011. According to Mr. Legg, if the Board of Supervisors approves the subject resolution, the Board of Supervisors will be requested to approve File 11-0654, an ordinance calling for and providing for a special election to be held in the City on November 8, 2011. File 11-0654 was introduced on May 17, 2011 and is currently pending in the Budget and Finance Committee.

# The Proposed GO Bond, in Itself, Is Insufficient to Achieve the City's Ten-Year Goal of a Pavement Condition Index (PCI) Score of 70, Without an Eventual Increase in Additional Dedicated Funding

As noted in the DPW's "2011 Road Repaving and Street Safety Bond" report, if the proposed GO Bond is approved by the Board of Supervisors and then by San Francisco's voters on November 8, 2011, DPW estimates that the City's PCI score would be increased from 64 to 66. According to Mr. Legg, following the three years of proposed GO Bond funding, the City would need to identify a dedicated funding source to continue funding streets at a level that would allow the City to achieve a PCI score of 70 by 2021, a goal established in the City's ten-year Capital Plan.

Therefore, although the proposed GO Bond funds would expend \$146.3 million (see Table 2 above) on street repaying and reconstruction, such funds are insufficient for the City to achieve its goal of a Pavement Condition Index (PCI) score of 70.

# Instead of Using the Proposed GO Bonds, the Municipal Transportation Authority (MTA) Could Finance the Transit Street Signal Infrastructure Improvements with an SFMTA Debt Instrument If and When the MTA's Financial Condition Improves

Proposition A, approved by voters in 2007, authorized the MTA

"to issue or cause to be issued bonds, notes, certificates of indebtedness, commercial paper, financing leases, certificates of participation or any other debt instruments.... provided 1) the Controller first certifies that sufficient unencumbered balances are expected to be available in the proper fund to meet all payments under such obligations as they become due; and 2) any debt obligation, if secured, is secured by revenues or assets under the jurisdiction of the Agency."

Therefore, the MTA has the authority to incur debt for its own projects. Based on calculations by the Budget and Legislative Analyst, the average annual debt service for the MTA's proposed

\$20,300,000 (see Table 2 above) Transit Street Signal Infrastructure Project, including principle and interest, is estimated to cost \$1,349,752 of the \$18,218,734 average annual debt service cost for the proposed \$248,000,000 GO Bond issuance.

According to Ms. Sonali Bose, Chief Financial Officer for the MTA, despite the Passage of Proposition A in 2007, the MTA has been unable to issue any voter authorized debt instruments because of the MTA's financial condition. Furthermore, Ms. Bose notes "we will not be able to issue any debt instrument for the foreseeable future unless MTA addresses its operating deficit."

Because the MTA has its own debt authority for which to finance the cost of the Transit Street Signal Infrastructure Improvements – irrespective of the MTA's current financial standing – the Budget and Legislative Analyst considers inclusion of the \$20,300,000 for Transit Street Signal Infrastructure Improvements in the proposed GO Bond to be a policy matter for the Board of Supervisors.

# The Budget and Legislative Analyst Considers Pay-As-You-Go to be a More Appropriate Approach than Long-Term Bond Financing for Street Repaving and Reconstruction Improvements

The Budget and Legislative Analyst notes that long term debt, including GO Bonds, is typically issued to finance large one-time capital improvement projects such as (a) the construction of new City buildings, (b) the acquisition of new equipment, or (c) the significant remodeling of existing assets such as Laguna Honda Hospital or San Francisco General Hospital, and that long term debt, including GO Bonds, is not typically issued for projects which are routine and/or ongoing in nature and which simply extend the life of existing assets.

The DPW considers that all of the proposed street improvement projects are capital improvements, and are not ongoing or routine maintenance. Although the proposed Street Repaving and Reconstruction program (see Table 2 above) is not considered by DPW to contain ongoing or routine maintenance projects, the Budget and Legislative Analyst notes that the same types of projects will likely be required for other streets which are not included in the proposed GO Bond financing.

The Budget and Legislative Analyst considers the proposed \$148.4 million in GO Bonds for Street Repaving and Reconstruction projects to be routine and ongoing when considering the entirety of the City's street system, and therefore finds that such projects would be most appropriately financed on a pay-as-you-go basis, without the issuance of the proposed GO Bonds, which will result in long term debt to the City. Therefore, the Budget and Legislative Analyst considers approval of the proposed ordinance to be a policy matter for the Board of Supervisors.

# **RECOMMENDATION**

The Budget and Legislative Analyst considers inclusion of the \$148.4 million to be used for Street Repaying and Reconstruction and the \$20.3 million to be used for the Municipal Transportation Agency's Transit Street Signal Infrastructure Improvements in the proposed GO Bond to be policy matters for the Board of Supervisors.

# Summary of Safe Streets and Road Repair General Obligation Bond Programs

The following is a summary of the program descriptions for the five programs that would be paid for under the proposed Safe Streets and Road Repair GO Bond. It is adapted from DPW's 2011 Road Repair and Street Safety Bond Report. The five projects are:

- 1. Street Repaying and Reconstruction
- 2. Sidewalk Accessibility Improvements (Curb Ramps and Sidewalks)
- 3. Street Structures Rehabilitation
- 4. Streetscape, Pedestrian, and Bicycle Safety Improvements
- 5. Transit Street Signal Infrastructure

# 1. Street Repaying and Reconstruction: \$148.8 Million

Causes of Pavement Deterioration

The City's roadway system is complex and streets deteriorate over time. However, three major factors can accelerate deterioration:

- 1. Heavy wear and tear In San Francisco, streets and roads have an average useful life of 14 to 21 years. However, a street's lifecycle depends on how heavily that street is used, particularly by heavy buses and trucks. For example, a street with heavy traffic can deteriorate seven years sooner than a street that carries lighter traffic.
- 2. Excavation Underneath our streets exist a vast network of underground utility lines; pipes and cables. Each time one of these utility lines or services needs repair or replacement; utility companies must cut a trench in the pavement, leaving a vulnerable spot in the street. Over time these vulnerable spots in the street can reduce the life span of the street.
- 3. Deferred work Without adequate funding in place, work that is needed will be deferred. This increases the occurrence of street degradation, including potholes, and greatly increases the cost of repairing that street in the future.

### Pavement Management Strategy and Treatment

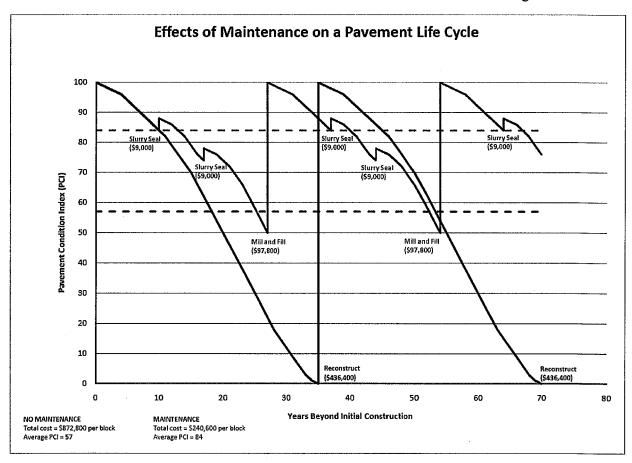
To track the impact of wear, erosion, and age on each street segment, the City uses a Pavement Management and Mapping System (PMMS). This system assesses street deterioration by establishing a rating for each street segment based on a visual survey done by DPW engineers. Each segment is evaluated based on ride quality, cracking, and raveling of the roadway. The ratings are used to create a Pavement Condition Index (PCI) score for each street segment using a scale of 0 – the worst score— to 100—a freshly paved street. Refer to Map 1 for an overview of the City's streets by PCI score.

The table below summarizes the current condition of the City's streets, required pavement treatment and the cost for the associated PCI range.

% of SF Streets	PCI Score	Treatment	Average Cost/Block
19%	85 – 100 "excellent"	No improvement needed	\$0
30%	64 – 84 "good"	Pavement preservation – slurry sealing or crack sealing to extend life of street	\$9,000
28%	50 – 63 "fair"	Repave - grind off and replace the top two inches of asphalt	\$97,800
23%	0 – 49 "poor"	Reconstruction - reconstruct the street including concrete base and top layer of asphalt Resurface with base repair - grind off and replace the top two inches of asphalt and complete localized repairs to the concrete base	\$436,400 \$140,000

The most cost-effective pavement management strategy is to preserve streets in good condition instead of letting them deteriorate. The lower the PCI score, the more expensive it is to fix. While new pavements generally remain in good-to-excellent condition for several years with little or no upkeep, the rate of deterioration increases rapidly after 7-20 years, depending on the type and use of the street. By reducing the frequency of asset replacement, research shows that preservation treatments can increase the life-cycle and reduce the cost by 75-90 percent.

The figure below illustrates potential cost savings that can be realized through the proper application cycle in order to preserve and extend the life of a street. If the appropriate treatment is applied in a timely manner, a street with a PCI starting at 100 could be maintained over the course of two life cycles for an average cost of \$240,600 per block and yield a "very good" average PCI score of 84. If this methodology is not followed and a street is allowed to reach a point where reconstruction is required, the cost more than triples to \$872,800 and results in an "at-risk" average PCI score of 57.



Roadway resurfacing work under this bond may include, but will not be limited to:

- Pavement preservation treatments to extend the life of the street
- Mill and fill asphalt surface over concrete base; perform repairs to the concrete base
- Reconstruct concrete streets
- Replace concrete parking strip, and concrete medians
- Replace concrete bus pads
- Replace concrete curb edge
- Reconstruct concrete sidewalk
- Reconstruct concrete curb ramps with detectable surface tiles
- Traffic routing, adjusting City-owned manhole frames and covers, castings, and catch basin frames and gratings to grade related to paving and reconstruction projects

# 2. Sidewalk Accessibility Improvements

Curb ramps are an essential link in the public path of travel. For people with disabilities, many seniors, parents with strollers, and others, curb ramps provide safe navigation over public street intersections and sidewalks. Curb ramps are also key to the full social integration of people with mobility disabilities and people who are blind or have low-vision. Accessible walkways allow people with disabilities to be independent, and fully integrate both socially and professionally. For people with disabilities, being able to move around the City independently reduces social isolation and dependence on expensive services such as Paratransit.

San Francisco has been building curb ramps for years; however many of the City's corners still lack curb ramps. Some of the existing ramps are too old, too steep, or too narrow, and others are in disrepair. The inventory indicates that we need to build 22,959 ramps at approximately at various locations throughout the City. (The total cost to build 22,959 ramps is \$177 million. Although many of the ramps will be built through paving, sewer, or private development projects; some will need to be constructed as standalone curb ramp projects. This ensures that a full and navigable path of travel is accessible to everyone who needs it.

Design and construction of approximately 1,767 curb ramps will be completed at various locations throughout the City. Work may include, but will not be limited to:

- Design engineering of curb ramps
- Construction of curb ramps
- Related work needed to bring the curb ramp to current standards, which may include reconstruction of concrete gutters, curbs and parking strips; relocation or adjustment of utility poles, utility pull boxes, castings, relocation or construction of sewer catch basins and reconstruction of adjacent sidewalks.

# 3. Street Structure Rehabilitation & Seismic Strengthening

The City, under the jurisdiction of DPW, has an on-going program to identify repairs needed on the 307 City street structures maintained by DPW (Refer to Map 2). Out of the 307 City-maintained structures, approximately 100 have been identified for rehabilitation. These street structures are used by the public every day. Consequently, failure to correct these deficiencies increases the risk to public safety.

Funding from the bond may be used to repair or replace the following:

- cracked/spalled concrete and exposed steel reinforcement
- structural movement, including tilting, settlement, and damaged construction joints
- deteriorated and damaged concrete and metal railings
- structure lighting improvements
- mechanical and electrical equipment repair and stabilization of bridges and tunnels
- structural deficiencies on City maintained bridges and street structures

Failure to correct these conditions will increase the City' exposure to liability and result in additional costs when corrective actions are no longer discretionary, but immediately required. The proposed bond funds allocated to street structures may also provide a match to supplement other financing, such as federal or state grants and private gifts, which often require matching local funds.

# 4. Streetscape, Pedestrian and Bicycle Safety Improvements

Between 200 and 2005, San Francisco implemented few major streetscape improvement projects. Recognizing a need and regional prioritization of comprehensive public realm improvements, the Great Streets Program was created in 2005. Since its inception, the program has implemented six capital streetscape improvement projects throughout the City San Bruno Avenue, Valencia Street, Leland Avenue, Polk Street, Divisadero Street, and Van Ness Avenue.

To build upon the important work of the Great Streets Program, the proposed bond will fund the next phase of streetscape improvement projects. Streetscape improvements can vary from simple plantings on street medians to the complete revitalization of the street, site furnishings, landscaping and infrastructure. As such, project costs can range between \$55,000 per block to \$2,000,000 per block. A streetscape improvement project may include one or several of the following elements:

- Sidewalk extension Increase the usable sidewalk space for pedestrians and greening
- Bulb-out shorten the street crossing distance and provide visibility for pedestrian safety
- Crosswalk treatment Highlight pedestrian crossing areas for pedestrian safety
- Pedestrian countdown signals/lighting Install pedestrian countdown signals and pedestrian upgrade lighting for energy efficiency and safety
- Utility undergrounding—Remove visible utility overhead service wires and poles and install conduits underground to connect services to homes
- Street tree planting Provide traffic calming and ecological benefits
- Roadway median expansion and/or planting provide traffic calming and ecological benefits
- Sidewalk and roadway lighting—Improve and upgrade street lighting for safety and energy efficiency
- Bicycle improvements Separated bicycle lanes, bicycle racks or other amenities to improve bicycle conditions
- Public art elements Create a sense of place, interest, and neighborhood identity
- Site furnishings Provide resting areas, bicycle racks, trash receptacles
- Stormwater elements (Low Impact Design) Improve drainage and reduce flooding

### 5. Traffic Signal Improvements

The City has an on-going program to replace and upgrade of the deteriorated or obsolete signal hardware for over 1,100 signalized intersections, including controllers and foundations, vehicle and pedestrian signal heads, poles, conduit, pull boxes, wiring and loop detectors. Additionally, a goal of this program is to modify signal operations to improve safety and efficiency by installing signal mast arms where necessary to improve visibility.

This program was originally identified in the City's Transit First legislation of 1973. The SFMTA works with other City departments repair and replaced aged traffic infrastructure to streets with a high volume of rail vehicles and/or buses, in order to reduce delays to transit services, increase reliability and improve access.

		\$Over (Below)	Constraint	Per \$500K A.V.	(1.26)	(0.34)	(0.12)	(0.71)	(0.02)	(0.02)	(0.02)	(0.37)	(0.08)	(3.63)	(31.86)	(20.29)	(70.50)	(104.72)	(148.62)	(168.96)	(189.24)	(216.95)	(249.19)	(302.08)	(368.28)	(404.83)	(431.65)	(455.45)									•
		CPC FY2006	Prop Tax Rate	Constraint	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%									
	+ Capital Plan Proposed GO Bonds	Tax Per \$500K A.V.	Total Levy	Amount	604.86	605.78	605.99	605.40	60.909	60.909	606.09	605.74	606.03	602.53	574.69	556.52	236.60	502.85	459.57	439.51	419.52	392.20	360.41	308.25	242.98	206.95	180.50	157.04			1 1 1000 to	Annual Levy Far South A.V.	1,71,6	\$4/4.6/	\$000.09	\$15/.04	
	+ Capital P		Levy	Rate	0.1227%	0.1229%	0.1229%	0.1228%	0.1229%	0.1229%	0.1229%	0.1229%	0.1229%	0.1222%	0.1166%	0.1129%	0.1088%	0.1020%	0.0932%	0.0892%	0.0851%	0.0796%	0.0731%	0.0625%	0.0493%	0.0420%	0.0366%	0.0319%			•	Annual Lev	•	Moringe	HIDHIEXEN	Minimum	
	Existing + Auth/Unissued + Proposed	Tax Per \$500K A.V.	Total Levy	Amount	604.86	605.78	584.53	552.70	532.17	514.54	493.30	435.11	392.29	387.31	366.56	346.29	324.03	298.80	264.28	252.64	240.70	221.08	196.67	151.55	93.04	63.47	60.74	50.61			T 4 70000 C	Annual Levy Kat South A.V.	1000	\$334.71	4003.70	10000	
	Existing -	l	Levy	Rate	0.1227%	0.1229%	0.1186%	0.1121%	0.1079%	0.1044%	0.1001%	0.0883%	0.0796%	0.0786%	0.0744%	0.0702%	0.0657%	%9090.0	0.0536%	0.0512%	0.0488%	0.0448%	0.0399%	0.0307%	0.0189%	0.0129%	0.0123%	0.0103%				Annual		Morringe	Maximum	Minimum	
A.V.)		Tax Per \$500K A.V.	Total Levy	Amount	10.70	20.29	19.18	34.81	49.10	26.99	54.08	57.28	52.45	52.45	50.18	48.04	45.96	43.98	42.08	40.27	38.55	36.88	35.29	33.77	21.63	20.70	19.82	11.44			140000	Annual Levy Par \$500K A.Y.		\$57.33	\$37.20	\$10.70	
an Francisco igation Bonds Rate Per \$500K		l	Levy	Rate	_	_	0.0039%	0.0071%	0.0100%	0.0116%	0.0110%	0.0116%	0.0106%	0.0106%	0.0102%	0.0097%	0.0093%	0.0089%	0.0085%	0.0082%	0.0078%	0.0075%	0.0072%	0.0069%	0.0044%	0.0042%	0.0040%	0.0023%			;	•		Average		Minimum	
City and County of San Francisco Proposed General Obligation Bonds Summary of Tax Levy (Tax Rate Per \$500K A.V.)	) Bonds		Agg	Debt Service		6,554,400	6,346,400	11,829,607	17,135,460	20,782,300	20,608,400	22,811,300	21,827,600	22,809,100	22,804,400	22,812,200	22,809,500	22,809,500	22,804,500	22,807,100	22,814,000	22,806,900	22,808,400	22,809,600	15,266,900	15,269,100	15,271,600	9.216.700	\$437,249,617	248,000,000	189,249,617	Proposed US	\$18,218,/34	0.00/6%	0.01167	0.0022%	3437,449,617
	Proposed GO Bonds		SSRR	2016	•		i		5,629,560	7,191,400	7,013,400	9,216,400	8,232,900	9,215,900	9,215,200	9,215,700	9,216,500	9,216,700	9,215,400	9,216,700	9,219,400	9,217,300	9,219,500	9,214,500	9,216,400	9,218,400	9,219,000	9.216.700	\$175,536,960	98,190,000	77,346,960						
			SSRR	2014	•	1	•	5,785,207	6,051,500	6,051,500	6,054,300	6,054,300	6,051,200	6,049,700	6,049,200	6,054,100	6,053,500	6,052,100	6,049,300	6,049,500	6,051,800	6,050,300	6,049,400	6,053,200	6,050,500	6,050,700	6,052,600		\$120,763,907	69,335,000	51,428,907		Average Annual DS	Average Annual Levy Kate	rignest Annual Levy Kare	Lowest Annual Levy Kare	1 of al Liebt Service
			SSRR	2012	3,434,650 \$	6,554,400	6,346,400	6,044,400	5,454,400	7,539,400	7,540,700	7,540,600	7,543,500	7,543,500	7,540,000	7,542,400	7,539,500	7,540,700	7,539,800	7,540,900	7,542,800	7,539,300	7,539,500	7,541,900					\$140,948,750	80,475,000	60,473,750		Aver	Average An	rugnest Am	Lowest An	101
	) Bonds	Tax Per \$500K A.V.	Total Levy	Amount	594.16	585.49	565.35	517.89	483.07	457.55	439.22	377.82	339.84	334.86	316.38	298.26	278.07	254.81	222.20	212.37	202.15	184.20	161.38	117.78	71.41	42.76	40.93	39.17	Total Debt Service se	Total Principal al	Total Interest		Annual Levy Far \$500K A.V.	\$307.06	01.400	\$59.1/	
	Existing & Outstanding GO Bonds	Ta	Levy	Rate	0.1205%	0.1188%	0.1147%	0.1050%	0.0980%	0.0928%	0.0891%	0.0766%	0.0689%	0.0679%	0.0642%	0.0605%	0.0564%	0.0517%	0.0451%	0.0431%	0.0410%	0.0374%	0.0327%	0.0239%	0.0145%	0.0087%	0.0083%	0.0079%	To			;	Annual Levy	Average	Maximum	Minimum	
	Existing & (		Aggregate	Debt Service	190,639,405	189,173,377	187,049,352	175,971,598	168,572,164	166,851,759	167,374,949	150,459,249	141,421,893	145,620,423	143,776,709	141,639,796	137,994,891	132,143,543	120,414,895	120,267,225	119,634,707	113,914,327	104,291,306	79,539,971	50,394,750	31,538,200	31,541,550	31,542,700									
	l	ı	Net Assessed	Valuation	158,181,713,345	159,288,985,338	163,111,920,986	167,515,942,853	172,038,873,310	179,780,622,609	187,870,750,626	196,324,934,404	205,159,556,453	214,391,736,493	224,039,364,635	234,121,136,044	244,656,587,166	255,666,133,588	267,171,109,600	279,193,809,532	291,757,530,961	304,886,619,854	318,606,517,747	332,943,811,046	347,926,282,543	363,582,965,257	379,944,198,694	397,041,687,635		,							
				r Growth	2 0.20%	_			•			•		•			•	5 4.50%	•	•	8 4.50%	4	0 +.50%	•	,	•	•	2 4.50%									
			Fiscal	Kear	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	202	2030	2031	2032	2033	2034	2035									

Prepared by Controller's Office of Public Finance

# City and County of San Francisco General Obligation Bonds

Net Assessed value (August 1, 2010)	\$157,865,981,382
Bond debt limit 3%	
Bonding Capacity	\$4,735,979,441
Outstanding GO Bonds at 5/22/2011	\$1,481,159,429
Outstanding indebtness as % of Net AV	0.94%
Principal Amount of Proposed GO Bonds	\$248,000,000
Total Outstanding Indebtedness plus GO Bonds	\$1,729,159,429
Available Debt Capacity	\$3,006,820,012
Outstanding indebtedness plus Proposed GO Bonds as % of Net AV	1.10%
Authorized & Unissued bonds	\$1,164,889,772
Avail.D/C less Auth & Uniss. Bonds	\$1,841,930,240