2011 Road Repaving and Street Safety Bond

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Executive Summary

Safe, accessible, and well-maintained infrastructure is at the very core of services a city provides its residents. Whether you walk, take public transit, bike, or drive; people rely on a safe, smooth, and accessible route to exercise or travel to and from work, school, parks, libraries, or local shops, everyday. San Francisco's recently adopted 10-year Capital Plan proposes a General Obligation Bond this November to infuse one-time capital funds for critical infrastructure and safety improvements to the City's streets, bikeways, sidewalks, curb ramps, crosswalks, bridges, tunnels and stairways. While repaving a street and building a curb ramp is important, it is also critical to modernize and improve street design to better accommodate all of the ways that today's citizens utilize street space. Streetscape improvements better integrate the needs of pedestrians and bicyclists, with those of motorists and transit-riders, to create a public realm that encourages universal use of the street and prioritizes safety for all modes of travel.

Decades of underinvestment have caused more than 25% of our streets to deteriorate to the point where they will cost up to five times more to reconstruct and rebuild than normal repaving and other regular measures to extend a street's useful life. To control these costs now and avoid paying more to make these repairs in the future, the City's Capital Planning Committee recommends that the Mayor and Board of Supervisors place a $248 million Road Repaving and Street Safety General Obligation Bond on the November 2011 ballot. The proposed Bond will:

- Repave deteriorated City streets
- Reduce potholes, which can cost Bay Area motorists $706 annually in car repairs[1] and are dangerous for cyclists
- Seismically strengthen street structures such as bridges, stairways and tunnels
- Install curb ramps and reconstruct sidewalks to meet the City's goal to provide equal access in accordance with the Americans with Disabilities Act (ADA)
- Redesign streetscapes to improve safety pedestrian and bicycle safety, contribute to ecological sustainability, and promote economic activity
- Upgrade traffic, pedestrian, and transit signals and provide other safety features that speed traffic flow and decrease congestion
- Create approximately 1,600 jobs in San Francisco

[1] **Hold the Wheel Steady: America's Roughest Rides and Strategies to Make our Roads Smoother, TRIP, 2010.**

- Will NOT raise property tax rates for San Francisco homeowners

The 2011 Road Repaving and Street Safety Bond proposal features:

- **$148.8 million for Street Repaving and Reconstruction**. The funds will be allocated for repaving, repair, reconstruction and new construction of approximately 1,389 street segments throughout San Francisco's neighborhoods. Streets will be selected based on criteria that include street condition score, type of street and usage frequency, coordination and clearance with utility companies and other City agencies, geographic location, and complaints.

- **$ 7.3 million for Street Structure Rehabilitation and Seismic Improvement.** There are over 100 City maintained street structures (bridges, tunnels, viaducts, retaining walls, and stairways) that require repairs and improvements. This bond will rehabilitate and seismically strengthen some of these street structures and ensure that they are safe to use.

- **$ 22.0 million for Sidewalk and Accessibility Improvements.** San Francisco is obligated to provide safe and accessible paths of travel for pedestrians; specifically those with disabilities. This bond ensures the City continues to implement the *American with Disabilities Act Transition Plan for Curb Ramps and Sidewalks* to meet its legal obligation. $14 million will help build approximately 1,900 curb ramps and $8 million will repair and improve approximately 125,000 square feet of sidewalk maintained by the City.

- **$ 50.0 million for Streetscape, Pedestrian and Bicycle Safety Improvements.** This bond will allow the City to modernize streets to include universal street design and important safety components to make streets more functional, such as: separated bicycle lanes and bike safety features, pedestrian lighting and countdown signals, curb bulb-outs, tree planting, landscaping, and stormwater management features that reduce sewer overflows and street flooding.

- **$ 20.3 million for Transit Signal Infrastructure Improvements**. The bond funds will be used to rehabilitate existing traffic signal street infrastructure and allow for transit signal priority along key Muni routes, improving transit efficiency and relieving traffic congestion.

The 2011 Safe Streets and Road Repair Bond will adhere to strict accountability measures, including:

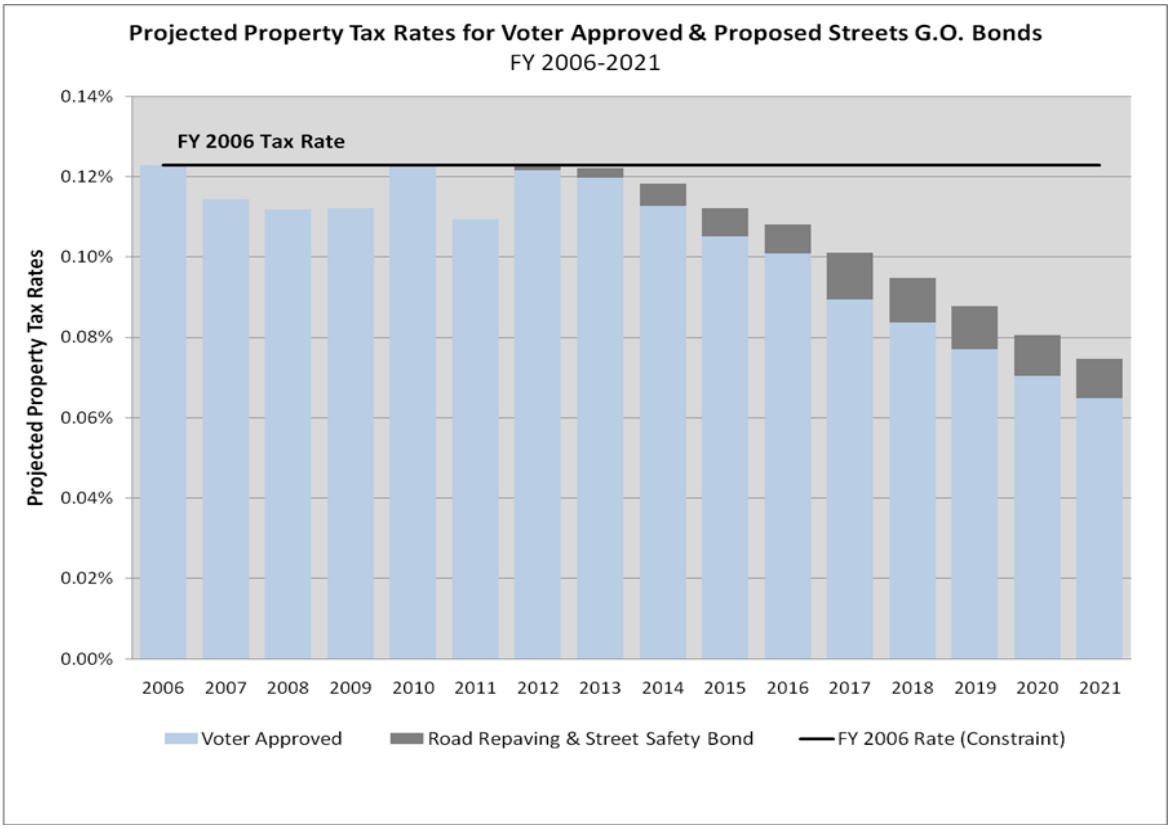
- Compliance with the City's policy to constrain property tax rates at or below 2006 levels
- Prioritizing of projects based on objective and transparent selection criteria
- A dedicated web page that will list project schedules, scope and budgets
- Public hearings before the Capital Planning Committee and the Citizens' General

Obligation Bond Oversight Committee (CGOBOC). The CGOBOC can stop future bond sales if the funds are not spent in accordance with the express will of the voters

- Annual reports submitted to the Mayor and Board of Supervisors by CGOBOC.

City & County of San Francisco Ten-Year Capital Plan (FY2012-2021)

The City & County of San Francisco's Capital Plan is a ten-year constrained expenditure plan for city-owned facilities and infrastructure. The document is developed biennially and enables policymakers to make strategic decisions about how to fund maintenance, expansion and replacement of capital assets. First adopted by the Mayor and Board of Supervisors in 2005, the Ten-year Capital Plan prioritizes basic, critical capital projects that impact the public's safety and well being; places strong emphasis on accountability and transparency; and most importantly demonstrates the highest levels of fiscal restraint and responsibility.



The Capital Plan recommends the 2011 Road Repaving and Street Safety Bond as part of a citywide debt issuance strategy to address critical capital improvement needs. To ensure that new general obligation bond debt does not increase property tax rates above 2006 levels, the City only sells new bonds as old bonds are repaid.

Proposed $ 248 Million Bond Program Summary

The proposed $248 million bond allocates funds for streets and right-of-way capital programs over the next three years. Program descriptions, including estimated costs and anticipated funding over and above this bond are detailed in subsequent programmatic sections of the report.

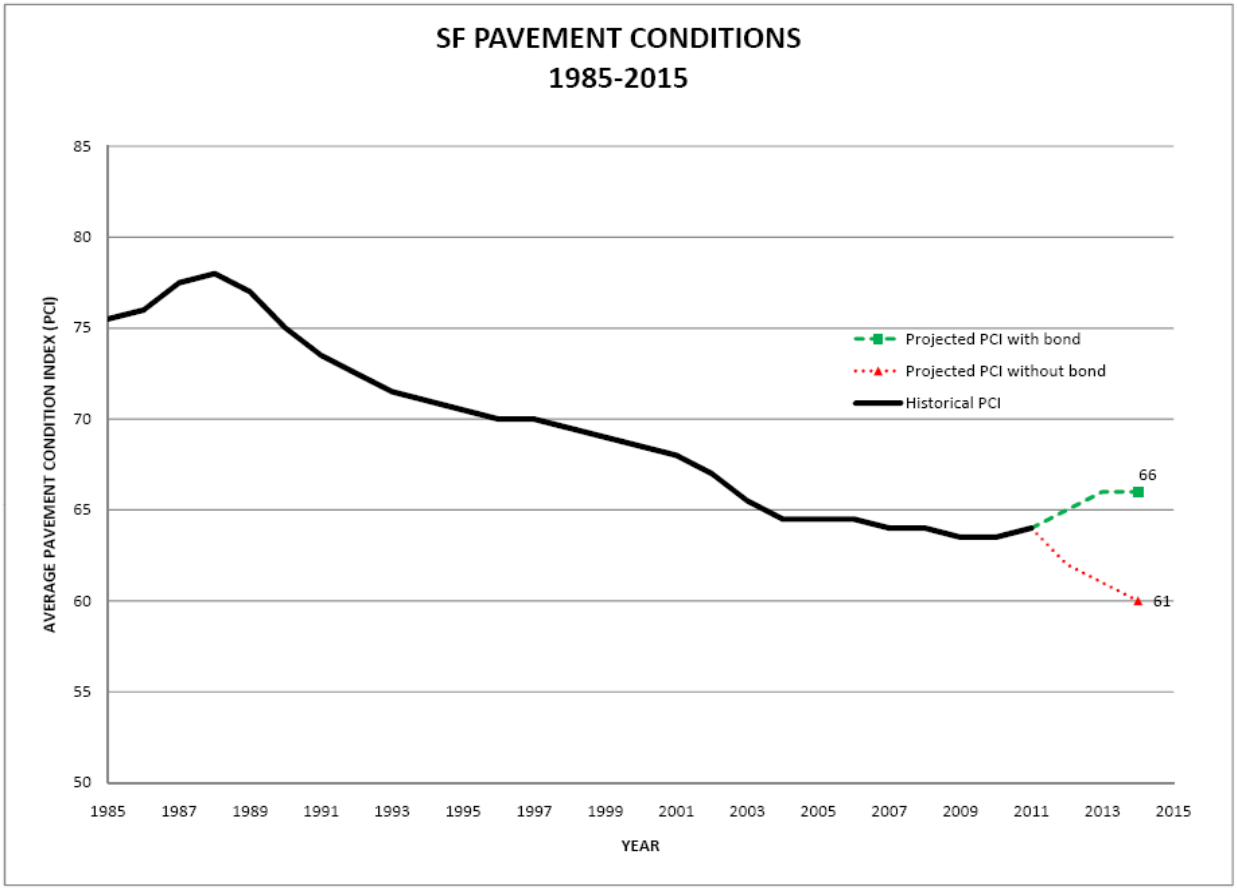
$248 GO Bond Proposed Budget ($ in millions)			
Program	Project Costs	Audit, oversight and issuance	Total Bond
Street Repaving and Reconstruction	146.3	2.1	148.8
Sidewalk Accessibility Improvements *(Curb Ramps and Sidewalks)*	21.7	0.3	22.0
Street Structures Rehabilitation	7.2	0.1	7.3
Streetscape, Pedestrian, and Bicycle Safety Improvements	49.3	0.7	50.0
Transit Street Signal Infrastructure	20.0	0.3	20.3
Total	244.5	3.5	248.0

Street Repaving and Reconstruction

A. Background

Streets connect people to jobs, hospitals, shopping centers, transit; places that are vital to our day-to-day way of life. Providing smooth and pothole-free streets is essential to reducing the costs of road induced damage and preventing accidents for bicyclists and drivers who must swerve to avoid dangerous spots in the road. The City is responsible for maintaining approximately 865 miles of streets and roadways comprising of 12,855 street segments. Currently, the statewide average Pavement Condition Index (PCI) score is 66, while here in San Francisco, the PCI is 64. The condition of our streets is at a critical juncture. If we do not invest in improving the PCI score, costs will skyrocket, street degradation will continue, and the backlog of streets needing reconstruction will grow exponentially. Delaying these investments now will significantly increase the costs to make these improvements in the future.

Under this bond, the City will invest $65.5 million (increasing 5% with inflation each year) annually in street repaving, getting us on track to improve the PCI to 66 by 2015. If funding is stabilized at this level for the subsequent seven years, the PCI will improve to 70 by 2021. If the bond does not pass, and the City has to rely on projected funding sources which average $26 million per year, the PCI will fall to 61 by 2015 and to 55 in ten years.



B. Program Description

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

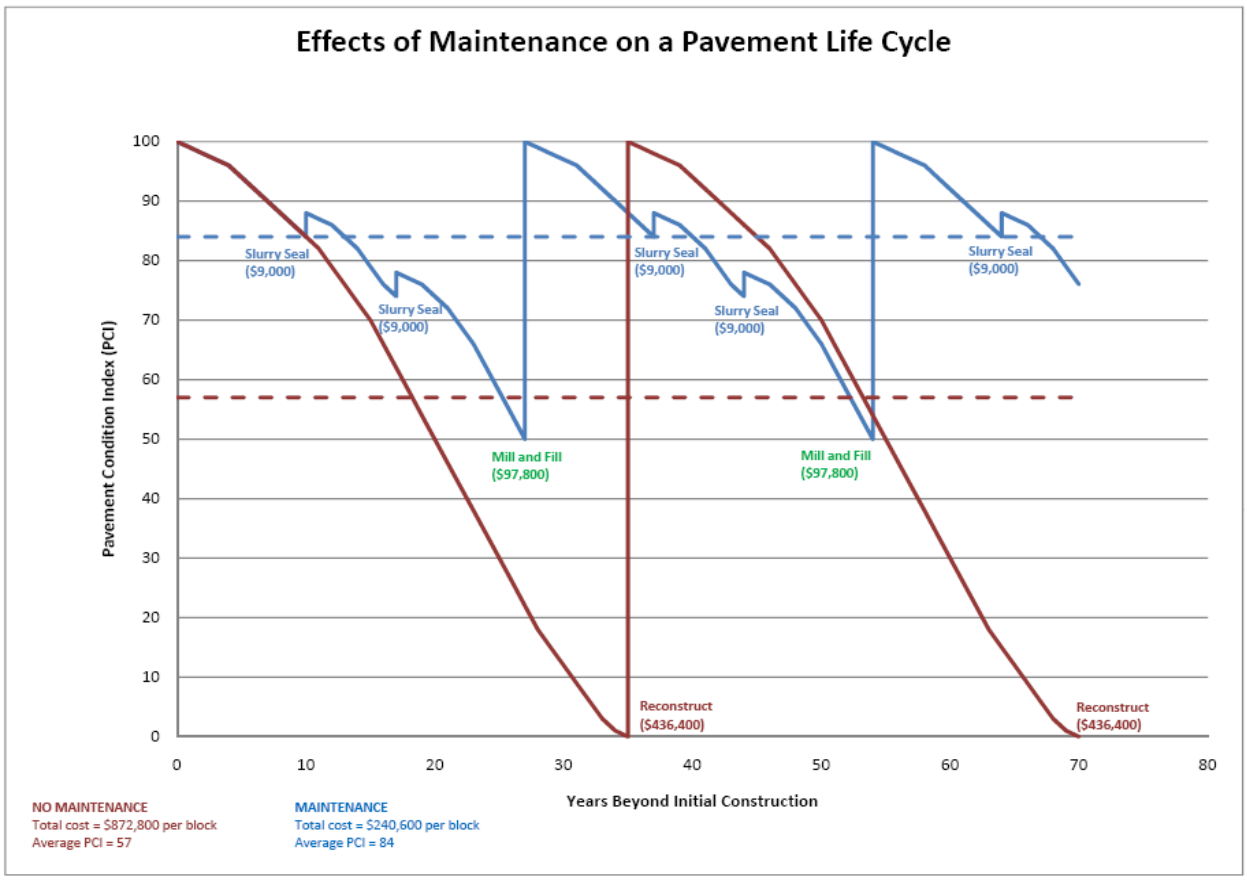
To track the impact of wear, erosion, and age on each street segment, the City uses a Pavement Management and Mapping System (PMMS). This system assesses street deterioration by establishing a rating for each street segment based on a visual survey done by DPW engineers. Each segment is evaluated based 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

C. Criteria for project selection

The City will develop a yearly priority list of candidates cross referenced to the Five-year Excavation Plan. This plan is a schedule of anticipated street excavations coordinated through monthly meetings of the Committee of Utility Liaison Coordination of Projects (CULCOP). The CULCOP meetings bring City agencies together with private utilities to present projects, discuss conflicts, and coordinate joint opportunities. This synchronization improves the planning process, minimizes disruption to the neighborhood and public transit, and protects newly repaved roadways from being cut into. Through the five-year plan, the City imposes a five-year moratorium on excavation by utility companies and other agencies on newly resurfaced streets.

Once a street is cleared for all public and private utility work, the City can determine the type of treatment needed and program the street for paving. This bond proposes to repave or reconstruct approximately 1,389 street segments. Street resurfacing improvements will be equitably distributed among the various neighborhoods and commercial districts throughout the City. Repairs will be implemented along contiguous blocks to ensure cost efficiency.

The street repaving program will prioritize projects using the following criteria:

- Multi-modal Routes
  Project lists will be divided and categorized by the mode of traffic it carries (Muni routes, bicycle routes, Muni and bicycle routes, or a non-Muni/bicycle route). Streets with high volumes of transit and bicycle traffic will receive priority for consideration. The City will collaborate with other agencies and community organizations to determine how routes within the bike network are selected and prioritized.

- PCI Score
  The PMMS generates a list of accepted[2] streets that have PCI scores of 84 and below. These streets are then categorized as either requiring preservation treatment (PCI 64 - 84), or requiring pavement renovation—resurfacing or reconstruction (PCI 63 and below). (Refer to Map 1).

- Functional Classification

[2] Streets that are formally "accepted" for maintenance through ordinance of the Board of Supervisors.

The list of streets generated by PMMS divided by treatment type: a) preservation and b) pavement renovation are then sorted by mode and functional classification. Grouping streets by function helps understand the nature of how a street is used. Arterials and collectors, carry heavy to moderate bike, car, and transit traffic in and around the City; while local streets, carry low volume residential traffic. The City will work with other agencies and community organizations to create an objective prioritization criteria for routes within the bike network.

- Project Readiness/ Coordination with Utility Companies and City Agencies
  Project readiness is primarily dependent upon utility clearances. If a paving project is being coordinated with another agency, the project is reliant upon the schedule of each varied element. To maximize use of bond dollars, priority will be given to projects that have utility clearances. Those projects that are jointly coordinated with other agencies must synchronize with the paving project schedule to facilitate prompt use of bond funds.

- Equitable Distribution Across the City
  Geographic equity is monitored to ensure that paving projects are distributed to all parts of the City. Based on the estimated number of street segments to be paved, each of the City's neighborhoods and commercial districts will receive an equitable distribution over a five year rolling duration. The distribution is based on the functional class inventory and PCI score as it relates to the overall city network.

- Complaints
  When the City receives complaints from the public regarding paving issues, engineers follow a protocol to investigate, evaluate and make recommendations. If the street is found to be in need of repaving and meets requirements for a paving candidate, priority for resurfacing is considered. The street is verified against the Five-year Plan for conflicts and/or joint opportunities. If there are no utility conflicts, the street may be programmed for the earliest available paving date.

D. Estimated costs and funding

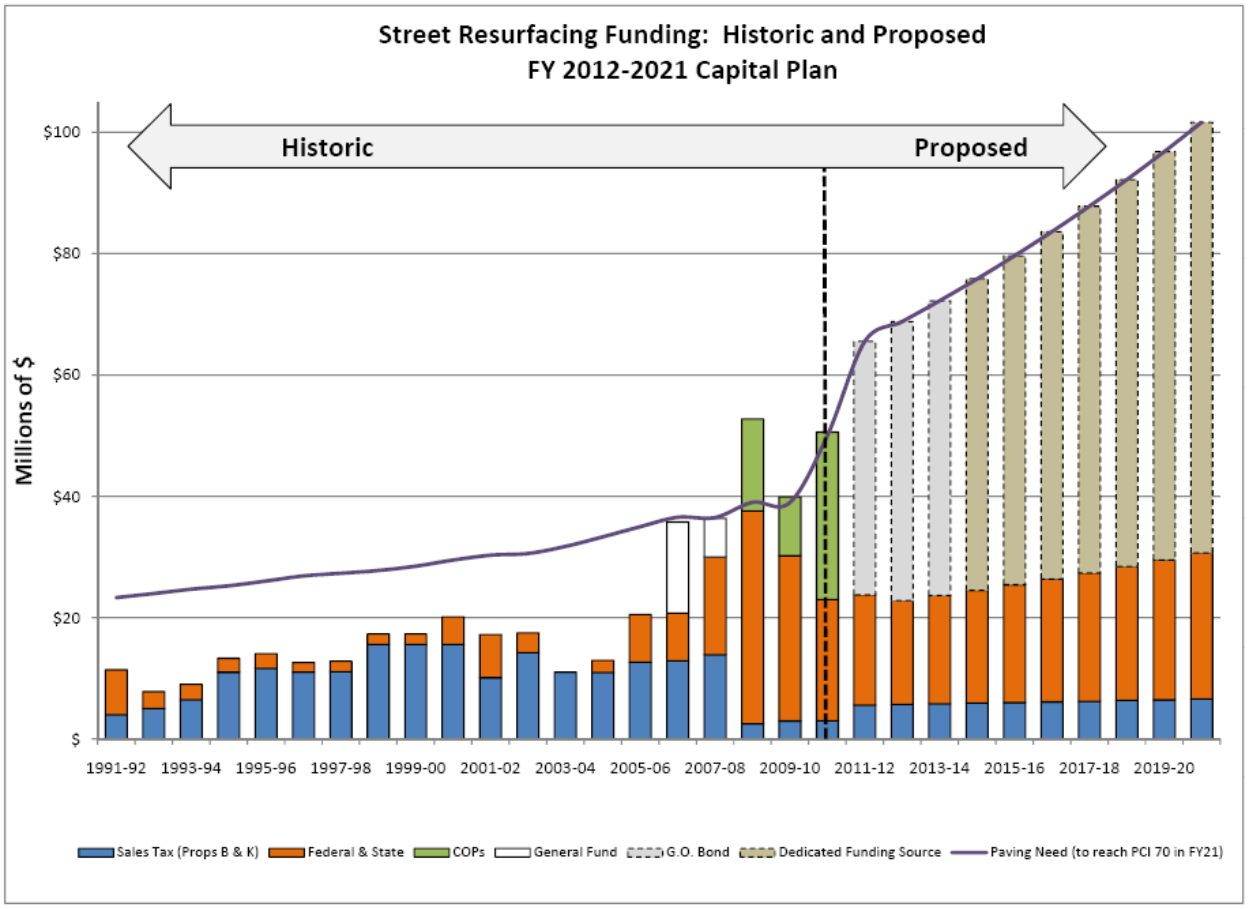
Annual Need and Deferred Backlog

There are two important aspects of the Street Repaving Program with respect to financial need: the annual need and the backlog. The estimated annual need is the City's cost to maintain current conditions. At present, the City's average PCI score is 64. Maintaining streets at this level over the next ten years requires an investment of $50 million per year, increasing approximately 5 percent per year in the future.

To increase the average PCI score to 70 after ten years, the City would need to appropriate $65.5 million annually (increasing 5% per year). Over the last five years, the budget for street resurfacing has averaged $42 million annually, which is $23.5 million less than what is needed to improve pavement condition. This shortfall has produced backlog of streets in need of repair.

The approximate average age of streets in need of rehabilitation ranges between 22 and 30 years. This longer paving cycle causes pavement to further deteriorate which increases the cost of repair. If adequate funding is not available, these repairs are deferred.

The table below shows the historic and projected need and funding for street resurfacing. If the City only received anticipated funding (sales tax, local vehicle license fee, federal & state funds) over the next ten years, the average pavement condition score could fall to 54 by 2021. This funding level is based on projected funding without the proposed bond, General Fund appropriations or a future dedicated funding source.



The second aspect of financial need for street resurfacing is the deferred backlog. The backlog consists of the paving need that has been generated from deferring road work in the past. The PMMS currently estimates 6,536 segments of City-maintained streets are in need of rehabilitation, which would cost approximately $460 million if the work were undertaken today. If the City does not pave these streets within the optimal period, streets that normally only require “mill and fill” (grinding off and replacement of pavement) may need to be reconstructed at almost five times the cost. Underfunding street repaving in the present only exacerbates the backlog and future cost of repairs.

Current Funding

San Francisco faces myriad challenges and uncertainties in stabilizing funding for street repaving. Beginning in FY 2011-12, funding to repair and repave San Francisco streets is expected to drop from prior years. On average, the City will receive $26 million per year over the next ten years, a $16 million reduction from average revenues over the past five years, and a $39.5 million shortfall if we aim to improve the PCI to 70 in ten years. The following sections detail the projected revenue sources over the next few years.

Federal

September 30, 2009 was the official expiration date of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-Lu). Signed in 2005, the transportation authorization bill provided $15.5 million in Surface Transportation Program funds for San Francisco streets and road projects. Since 2009, Congress has approved six extensions of the funding bill, and a new authorization bill may be drafted for consideration later this year. Although the contents of the new re-authorization bill are unknown, DPW does not expect the bill to provide greater levels of funding than SAFETEA-Lu. Therefore the annual estimated federal contribution is maintained at $2.5 million per year for the next ten years. Additional one time sources such as the 2009 American Recovery and Reinvestment Act that provided $13.54 million for the repaving of San Francisco street and road projects are unlikely.

State

In March 2010, AB 6 eliminated the sales tax on fuel and replaced it with a 17.3 cent excise tax on gas. This replacement tax is expected to provide an average of $17.5 million per year for street resurfacing over the next 10 years.

Proposition 1B, the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, was passed by the voters of California in November of 2006. The act authorized the sale of $20 billion in bond debt to finance transportation projects within the State. Specifically, the bond money was available for expenditure by various state agencies and for grants to local agencies and transit operators upon appropriation by the Legislature. In total, the bond allocated $2 billion to repair and rehabilitate local streets and roads; of that amount, $40 million was anticipated for San Francisco over a period of 10 years. The State accelerated the distribution of funds, allocating more than $1 billion over three years. To-date San Francisco has received all expected allocations of Proposition 1B funds totaling $39.4 million; exhausting this funding source.

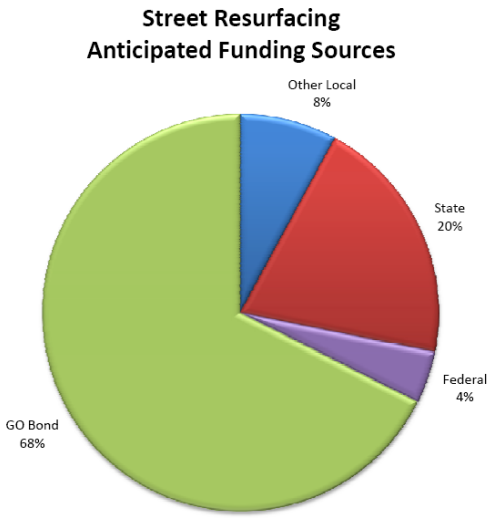
Local

The Proposition K Expenditure Plan included $135 million for street resurfacing over a 30-year period or $4.5 million annually. However, in the transition from Proposition B—which allocated an average of $15 million annually—to Proposition K, the Transportation Authority adopted a spending plan that accelerated allocations of Prop K from FY 2005-06 through FY 2007-08. In FY 2008-09 the funding dropped to approximately $3 million annually and is expected to phase out by 2024, ten years before the end of the sales tax.

In November 2010, voters approved Proposition AA, a local Vehicle License Fee dedicated to funding local road repairs, pedestrian safety improvements, and transit reliability improvements throughout the City. The expenditure plan sets aside 50% of the funds for street resurfacing with an emphasis on coordinated complete street efforts. Annually, the fee will yield $2.5 million for street resurfacing beginning in FY 2011/12.

Funding summary

Over the next three years, the City projects a total of $216.6 million is needed be on a trajectory toward improving the street pavement score to 70 (from 64) in 10 years. A dedicated funding source would be required to continue funding streets at this level. Based on the recommendations of the Street Resurfacing Finance Working group, the City will develop a plan for sustainably funding street capital improvements beyond the term of this proposed bond. The ten-year Capital Plan summarizes the four most viable options:



- vehicle license fee (requires passage of SB 223 proposed by State Senator Mark Leno);
- conditional general tax (e.g. business, sales, utility users tax) that could only be collected if the City spent a certain dollar threshold in the previous year on repaving;
- citywide benefit assessment district based on the boundaries of a proposed district;
- parcel tax, potentially based on vehicle trip generation.

The proposed bond allocation of $148.4 million (includes $2.1 million for issuance and oversight) combined with projected sources of $70.2 million will aid in preserving, repaving, constructing or reconstructing over 2,525 street segments therefore improving the PCI from 64 to 66, after three years. Bond funds will only be used to repave or reconstruct approximately 1,389 street segments.

Sidewalk Accessibility Improvements

Curb Ramp Improvements

A. Background

San Francisco is committed to full and fair access for people with disabilities in addition to those that use wheelchairs, walkers, canes, scooters, and parents that use strollers so that they can get to work, the store, to medical appointments, public transportations, schools, parks, and to visit family and friends safely.

The law requires that the City provide curb ramps to make the public right-of-way accessible. Regardless of this legal requirement, our City wants and needs to make this investment in order to protect the safety of people with disabilities and to create a pedestrian environment that is welcoming to everyone. Under the bond proposal, approximately 1,767 curb ramps will be designed and constructed.

Legal Requirements

San Francisco, along with all local jurisdictions, is required under the Americans with Disabilities (ADA) Plan to develop a plan for accessibility of its public rights-of-way. The ADA requires cities to survey their public rights-of-way, develop a plan for completion of required curb ramps, identify funding and develop a construction schedule.

Steiner & Grove before

Steiner & Grove after

San Francisco has created such a plan, the "ADA Transition Plan for Curb Ramps and Sidewalks." The plan is an aggressive, but realistic approach to ensure access to the City's sidewalks. While eventually, every corner in the City will have a curb ramp, the Plan creates a detailed priority scheme so that resources will first go to the areas where curb ramps are needed most. The ADA Transition Plan incorporates feedback from residents with disabilities to prioritize curb ramp repair and reconstruction around transit stops, local stores, work locations, and schools.

The Rehabilitation Act of 1973, Section 504, was the first law to require that curb ramps be included in any public right-of-way project receiving Federal funds. The Americans with Disabilities Act of 1990, (ADA) recognizing the crucial importance of the public path of travel, specifically requires the construction of curb ramps in the public rights-of-way. At 28 CFR 35.150 the ADA implementing regulations require that:

> *"If a public entity has responsibility or authority over streets, roads, or walkways, its transition plan shall include a schedule for providing curb ramps or other sloped areas where pedestrian walks cross curbs, giving priority to walkways serving entities covered by the Act, including State and local government offices and facilities, transportation, places of public accommodation, and employers, followed by walkways serving other areas."*

B. Program Description

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. (Refer to Map 2). 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.

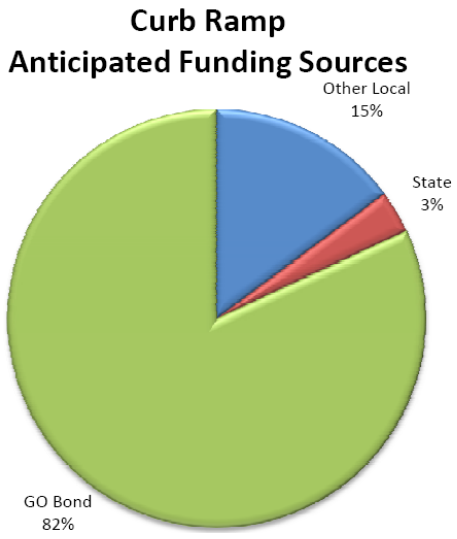
C. Criteria for project selection

The City prioritizes the curb ramp locations according to guidelines established under the Americans with Disabilities Act. The top priorities are locations that residents with disabilities have identified as curb ramps they need in order to safely get to transit stops, civic buildings, or work areas. Once these locations have been addressed, the City will install curb ramps in areas serving civic buildings, transportation routes, and commercial areas. (Within those categories, there are also priorities according to whether a corner has no ramp, an old, non-functioning curb ramp, or a single curb ramp.)

The DPW ADA/Disability Access Coordinator and the Mayor's Office on Disability will review and prioritize new curb ramp requests consistent with these priorities and with the City's ADA Transition Plan for Curb Ramps and Sidewalks.

D. Estimated Costs and Funding

The City estimates that a total of $17.6 million is needed over the next three years to address complaint driven curb ramp construction and repair. DPW estimates that approximate funding from state and local sources over that time will total $3.8 million. The proposed bond would provide $14 million for curb ramp projects, including $0.2 million for issuance and oversight.



Sidewalk Replacement and Improvement

A. Background

Just like streets, the 5,000 blocks of sidewalk are an important part of the City's infrastructure; providing paths of travel for people to get around, to and from their destinations every day. A broken or buckling sidewalk can be hazardous to public safety and can cause barriers for people with mobility and vision deficiencies. Based on existing inspections and complaints, the amount of broken and buckled sidewalks around City maintained trees and properties, is significant. In San Francisco, both property owners and the City are responsible for repairing the sidewalk fronting their properties. Under this bond proposal, funding will be allocated toward fixing sidewalks that are the responsibility of the City.

B. Program Description

Sidewalk Inspection and Repair Program

Consistent with San Francisco's ADA Transition Plan for Curb Ramps and Sidewalks, the Sidewalk Inspection and Repair (SIRP) is a proactive approach to inspect and repair sidewalks. Each year, the SIRP inspects and improves 200 square blocks of the City's most heavily traveled sidewalks, ensuring that the City's 5,000 plus street segments are inspected on a 25-year cycle, the recommended industry standard.

Cracked and buckled sidewalk

Repaired sidewalk

The SIRP helps property owners, private businesses, and City agencies comply with local and state mandates to provide accessible throughways. Prior to inspecting, the City reaches out to the property owners to inform them of their legal responsibilities and explain the proper way to maintain and repair the sidewalk in front of their property. After the initial outreach, inspections are performed and notices are sent to property owners who have damaged sidewalks. These property owners are provided an opportunity to discuss the amount of damage they are responsible to repair at a DPW Departmental Hearing. In addition, utility agencies and other public agencies receive a similar notice to make repairs. Funding for private property or public agency sidewalk reconstruction comes from the responsible party either through direct payment or special property tax assessment bills.

Through the proactive SIRP, the proposed bond will repair to 75,000 square feet of damaged sidewalk that are the responsibility of the City, and maintained by DPW.

Accelerated Sidewalk Abatement Program

This year, the City will implement a new program to address complaints on public and private properties outside of the SIRP areas, which are limited to a specific subset of blocks each year. The Accelerated Sidewalk Abatement Program (ASAP) will inspect specific locations referred through complaints and issue notices to those responsible. If the public agency or property owner does not promptly repair the sidewalk, the City will automatically conduct the repair and the charge the cost of inspection and abatement to the responsible party.

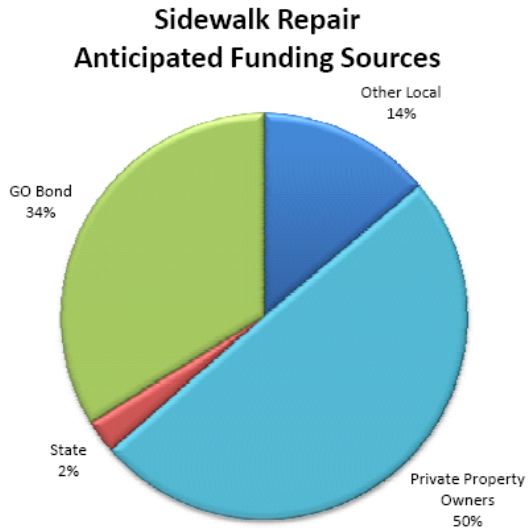
Through ASAP, the proposed bond will fund the repair of damaged sidewalks around City maintained street trees, brick sidewalks, schools, City, state, & federal buildings, and other public lands. DPW estimates that a total of 50,000 square feet of damaged public sidewalks will be repaired through ASAP.

C. Criteria for project selection

In accordance with Title II of the ADA, high priorities for repair will include locations around State and local government buildings, schools, hospitals, commercial corridors, Muni routes, and key walkways that link neighborhoods to transportation and commerce. The project list will be based on the following criteria: 1) accidents/claims; 2 level of pedestrian use and presence of public facilities; 3) condition of sidewalk and extent of damaged area and 4) complaints. The SIRP program will annually inspect and make necessary repairs to 200 blocks per year based on pedestrian usage and geographic equity. (Refer to Map 3).

Estimated cost and funding

The Capital Plan estimates that over the next three years, the cost to inspect and repair City responsibility sidewalks through SIRP and ASAP will be $21.9 million. Approximately $ 14 million will be funded by private property owners, local and state sources. The proposed bond will allocate $8.0 million (including $0.1 million for issuance and oversight) to replace approximately 125,000 square feet of public responsibility sidewalks.



Street Structure Rehabilitation & Seismic Strengthening

A. Background

The City maintains over 300 street structures including stairways, retaining walls, pedestrian and vehicular bridges, viaducts and tunnels. This network of structures is critical to providing bicycle, pedestrian, vehicle and transit access to the City's larger street and roadway system.

In order to assure safe use of these structures, timely repairs are required to prevent further deterioration and any threat to public safety. Although the City has performed seismic retrofits of bridges, pedestrian overpasses and viaducts in recent years, many other street structures still need significant improvement.

B. Program Description

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.

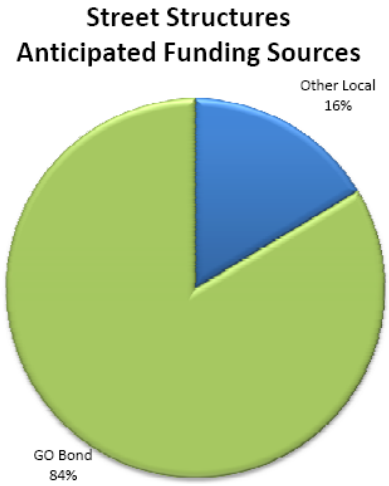
C. Criteria for project selection

The City developed a methodology and set of criteria to prioritize structural repairs and will utilize this scoring to set strategic priorities across various structure types. Street structures will be selected based on structural assessment scores, which range from 0 to 100; a 0 representing the worst condition and a 100 representing a structure in perfect condition. Scores will be developed using the following criteria:

1. Is the structure on the City emergency priority routes network and will failure inhibit access in the event of an emergency or major disaster?
2. Life and Safety: Does the structure pose any imminent life and safety hazard?
3. Trip & Slip Hazard: Does the structure present a tripping hazard, have a slippery surface, or have corrosion or exposed steel that could present a danger to pedestrians?
4. Code Violations: Does the structure have missing or non-conforming hand rails or guardrails; does the stairway's rise and run conform to code requirement?
5. Slope Instability Potential: Are there signs of distress, movement, settlement or undermining of the foundation.
6. Level of deterioration: Is the asset structurally deficient and at a critical point for repair?
7. Usage frequency: How often is the structure used?
8. Consideration of alternative ingress/egress routes: Is this the only means of access?

D. Estimated Cost and Funding

The estimated need for street structure inspection, repair and replacement over the next three years is $8.1 million. The inspection work will be funded by general funds totaling $900,000. The bond will provide $7.3 million which will meet the unfunded need of $7.2 million as well as provide for bond issuance and oversight costs of $0.1 million.



Streetscape, Pedestrian and Bicycle Safety Improvements

A. Background

Streets make up approximately 25 percent of San Francisco's land area, more space than is found in the city's parks. While improvements to the driving surface are important to moving people safely and efficiently, so is the quality of the sidewalk area for pedestrians. As one of the Bay Area's oldest cities, San Francisco's infrastructure has not been upgraded to accommodate increased street usage by pedestrians and bicyclists. San Francisco must modernize street design to completely incorporate the needs of pedestrians and bicyclists, people with disabilities as well as car and transit traffic. Each neighborhood in San Francisco is unique; streetscape improvements include a range of safety and greening features customized for that particular environment—maximizing the use of public space.

Example "complete street" provides street greening as well as dedicated lanes for bikes and vehicles

Improved and enhanced streetscapes will provide a wide range of benefits, including:

- Decreasing the likelihood of pedestrian injuries and fatalities: Streets that are designed with the safety of pedestrians and cyclists in mind will decrease the likelihood of pedestrian, bike, and auto collisions.

- Increasing accessibility for all street users: Streets and sidewalks must have a clear, accessible path of travel and are free from barriers and obstructions will increase convenience for all users regardless of travel-mode.

- Supporting a transit-first city: Every transit trip begins and ends with a walking trip. Well-designed streets that are safe for pedestrians, have amenities that people need, and connect to important transit lines will encourage greater use of public transit.

- Promoting public safety: Streets that are active will enhance residents' sense of safety and security from crime and violence.

- Minimizing the impact of global climate change and local air pollution: Streets that are designed to promote and encourage walking, cycling, and transit use will help to minimize San Francisco's contribution to global climate change, and reduce local air pollution.

- Minimizing sewer/stormwater overflows into the Bay: Streets can be designed such that they detain a certain percentage of water during big storms. This helps reduce overflows of the City's combined stormwater and sewer infrastructure into the bay, and also reduces local flooding problems.

- Supporting the City's local shopping districts and small businesses: A street system that encourages people to walk to neighborhood commercial districts rather than drive to regional shopping centers for their daily needs helps to support the small commercial areas and small businesses that make up an important part of San Francisco's character.

- Providing new open space in areas that do not have access to parks or waterfront: As San Francisco's population grows and infill development continues; there is an increasing need to balance this growth and preserve open space. The existing right of way can be activated to create new green spaces and facilitate connections to existing open space, particularly for underserved communities that currently lack access to these resources.

- Retaining families in San Francisco: Streets that are safe from fast-moving traffic, are clean and well-maintained, and have spaces for neighbors to gather or children to play will help to retain families in San Francisco, much like affordable housing or good public schools will do the same.

- Supporting neighborliness, civic interaction, and identity: Cities depend on peaceful social interactions of colleagues, neighbors, and individuals who share a collective identity and pride as the residents of a place. Well-designed streets that include places to sit, stop, gather, and play create space for this interaction to take place.

- Enhancing the everyday quality of life for San Francisco's residents and beautifying neighborhoods: Above all, a well-designed street system will enhance the livability—pleasant places to stroll or sit, opportunities for neighborly interaction, freedom from excessive noise and pollution, and a green, attractive cityscape—for San Francisco's residents.

B. Program Description

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.

Mendell Plaza before

Mendell Plaza after

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
- Alleyway improvements – Improve mobility, accessibility and safety of City alleyways
- 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

C. Criteria for project selection

The Streetscape Improvement Program will select projects based upon a set of criteria informed by the Better Streets (Ord. 33-06 #051715) Complete Streets (Ord. 209-05, #050591) and Transit First (SF City Charter, Section 8A.115) policies. The criteria was developed by a

multi-agency working group that includes: the Department of Public Works (DPW), Municipal Transportation Agency (MTA), San Francisco County Transportation Authority (SFCTA), Planning Department, SF Public Utilities Commission (SFPUC) and approved upon by the City's Capital Planning Committee.

Along with the criteria listed below, the selection of projects will occur in consultation with existing plans and program efforts the City. These include the Better Streets Plan, the Bicycle Plan, Transit Effectiveness Project (TEP), MTA's Pedestrian and Bicycle Programs, the SFCTA's Neighborhood Transportation Plans, the Planning Department Neighborhood Plans, the PUC's Stormwater Design Guidelines and Wastewater Master Plan and Community Based Streetscape Improvement plans. The final project list will be brought before the Capital Planning Committee for review, and proposed to the Board of Supervisors for appropriation.

The streetscape improvements program will use the following prioritization methodology to identify potential improvement projects:

- Community Supported Plans & Programs
  Programming of projects will start with existing publicly supported streetscape improvement plans.

- Commercial Corridors
  Priority is given to neighborhood commercial corridors that have a large volume of pedestrian, bicycle, or transit traffic.

- Transit and Bicycle Routes
  Presence of transit vehicles and bicycle traffic gives a street higher priority for streetscape improvements.

- Greenway Connections
  Projects that make connections to open spaces, such as parks or plazas will be given priority. The connections may be via bicycle route, transit route or a heavily used pedestrian route.

- Equitable Distribution Across the City
  Geographic equity will be applied to the final project list to ensure that streetscape improvements are equally distributed to all areas of the City.

- Coordination with Utility Companies and City Agencies
  Priority is given to ready-to-go projects that partner with other funded projects, such as area infrastructure improvements, street resurfacing, curb ramps, or pedestrian safety projects. Priorities will be set primarily by utility clearances and coordination with utility companies through the 5- Year Excavation Plan.

D. Potential Areas for Improvement

From the City's ongoing planning efforts, the following are corridors that may be targeted for future improvement. All of the projects are contained either in existing community supported priority development area plans (Rincon Hill, Market and Octavia, Balboa Park, Eastern Neighborhoods), the five year street resurfacing program plan or other ongoing planning efforts. Funds from the proposed bond may be used to make improvements that enhance the livability and safety of these streets.

21st Avenue today

21st Avenue simulation of potential streetscape improvements

- 17th Street, as contained in the Mission Area Plan
- 23rd Street, as contained in the Mission Area Plan
- Alemany Boulevard
- Brannan Street, as contained in the East Soma Area Plan
- Broadway Street, as contained in the Broadway Streetscape Masterplan
- Chinatown Alleyways, as contained in the Chinatown Alleyways Masterplan
- Cesar Chavez Street (east of 101), undergoing planning process
- Guerrero Street, as contained in the Mission Area Plan
- Hampshire Street, as contained in the Mission Area Plan
- Harrison Street, as contained in the Rincon Hill Area Plan and East Soma Area Plan
- Holloway Avenue, as contained in the Balboa Park Area Plan
- Noriega Street, as contained in the five year paving plan
- O'Shaughnessy Boulevard , as contained in the five year paving plan
- Potrero Street, as contained in the Showplace/Potrero Area Plan
- South Van Ness Avenue, as contained in the Mission Area Plan
- Webster Street, as contained in the Japantown Area Plan
- York Street, as contained in the Mission Area Plan
- Jefferson Street, as contained in the Fisherman's Wharf Public Realm Plan
- Market Street, undergoing planning process

E. Estimated Costs and Funding

Past Funding

Since FY 2005-06, 18 Great Streets projects have been funded primarily through federal and state grants leveraged by General Fund and Prop K local match. Of the $41 million secured to date, federal or state sources represented 77%. Projects completed over the last four years include the **Valencia Street** from 15th to 19th ($6.1 million) **Leland Avenue** from Bayshore to Cora ($4 million), **Divisadero Street** from Haight to McAllister ($3.4 million), **Van Ness Avenue** from Market to McAlliser ($1.1 million), **Polk Street** from O'Farrell to Sacramento ($0.98 million), and **San Bruno Avenue** from Silver to Mansell ($0.5 million).

Leland Avenue Streetscape Improvement

Estimated Project Costs

Outside of large infrastructure or roadway projects, the streetscape improvement program in San Francisco is relatively new. The Capital Plan estimates that if the City implements full streetscape improvements along 10 blocks per year, at an average cost of $2 million, the program cost would be $20 million annually. Besides the funds proposed in this bond, DPW has not secured funding for the streetscape improvement projects listed above. In total, the bond will allocate $50.0 million for streetscape, pedestrian and bicycle improvements. These funds could also be used to leverage federal, state and local grants.

Traffic Signal Improvements

A. Background

The City owns and operates the eighth-largest public transportation system in the United States. Within San Francisco, the San Francisco Municipal Transportation Agency (SFMTA) maintains and operates nine subways and 24 surface light rail stations; 6.6 miles of subways and tunnels; 80 miles of track for rail and cable car operations; 220 miles of overhead wires; thousands of buses, and other transit vehicles; as well as traffic signals, signs, parking meters, bike lanes, and transportation communications networks that are critical to the day to day functionality of the transit system.

To manage traffic congestion in the city and improve the overall reliability of the transportation system the City must replace obsolete and deteriorating traffic signal infrastructure. In 2004 the Countywide Transportation Plan reported that the City's transit system is losing mode share (the percentage of overall trips taken by transit) because it can't compete with the comfort and reliability of the car. Reliability is one of the most important factors influencing a person's decision to ride on public transportation and is the most important factor of service quality, according to Muni customer surveys. By replacing transit street signal infrastructure, buses can be given priority at signalized intersections, which will reduce delays and congestion at red lights.

B. Program Description

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.

C. Criteria for Project Selection

Bond funds for traffic signal improvements will be distributed based on established criteria that include the following:

1) Priority Transit Network
Given the priority for advancing the City's Transit First Policy, it is important to give greater consideration to designated rapid network corridors.

2) Replace Obsolete and Deteriorating Infrastructure
A primary goal of the program is to improve the City's obsolete traffic signals and the overall effectiveness of the transportation system. Priority will be given to corridors with obsolete and deteriorating infrastructure.

3) High Traffic Volumes
Signal infrastructure upgrades benefit corridors that carry a high amount of traffic involving different type of transportation. Traffic flow in these high volume corridors are the most susceptible to slow downs due to traffic incidents, breakdowns or emergencies.

4) Emergency Routes
Priority will also be given streets and roadways that are part of the Emergency Priority Routes network. These are routes designed to facilitate the movement of emergency response personnel and resources in the event of a major emergency, such as an earthquake or other major disaster.

5) Joint Projects
Coordinating project planning, design, and construction with utilities, the State and other local agencies helps to reduce overall project costs, makes better use of project resources, and minimizes service disruption and downtime in the field. To the extent possible, improvements requiring roadway excavations (e.g., interconnect conduits) will be jointly coordinated to minimize excessive street excavations and disruptions.

D. Estimated Cost and Funding

The estimated need for transit street signal infrastructure over the next three years is $32.8 million. Of that amount approximately $2.6 million in local Proposition K sales taxes are available for this purpose. Therefore remaining unfunded need for repair and replacement is $30.2 million, of which $20.4 million is proposed to be funded through bond proceeds. These funds will allow the SFMTA to address the most critical streets first and leverage these dollars against federal or state sources if they become available.

Accountability Measures

The Road Repaving and Street Safety bond will include strict standards of accountability, fiscal responsibility and transparency. The measures include detailed information for each project highlighting the name and other specifics associated with the work. In addition to California state bond requirements, the City will undergo a comprehensive public oversight and accountability process.

The following principles apply to all related programs funded through the 2011 Road Repaving and Street Safety Bond:

- The bond sets aside funds for Citizen's General Obligation Bond Oversight Committee (CGOBOC) to conduct regular audits of bond expenditures as required by the Administrative code (Section 5.30 to 5.36). In addition, accountability bond reports will be submitted to the Clerk of the Board, Controller, Treasurer, Director of Public Finance and Budget Analyst in accordance with Administrative Code Section 2.70 – 2.74.

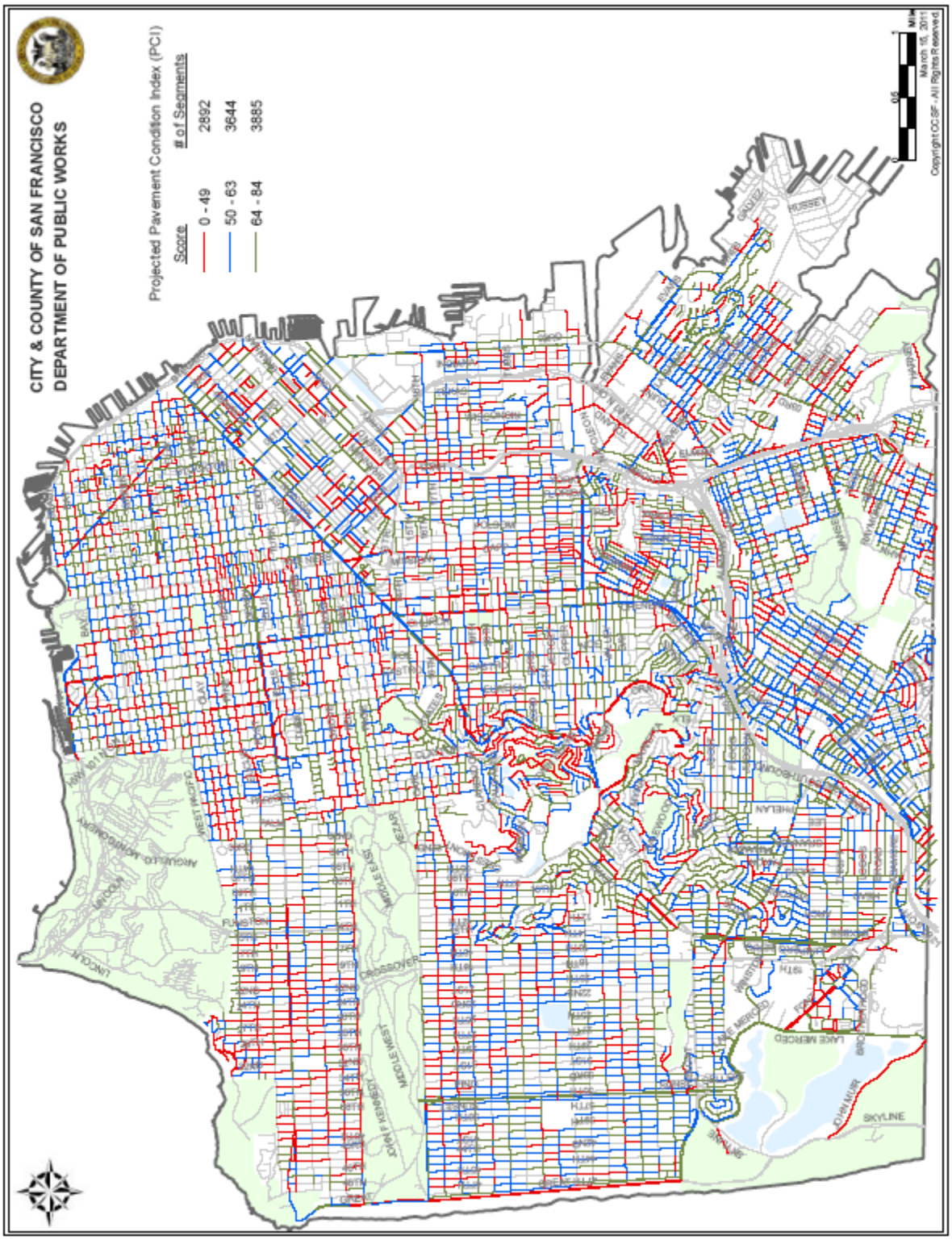
- The proposed bond funds are subject to the approval processes and rules described in the San Francisco Charter Administrative Code. CGOBOC will conduct an annual review of bond spending, and provide an annual report of the bond program to the Mayor and the Board of Supervisors.

- The City will also hold an annual public hearing of bond expenditures and the program before the Capital Planning Committee and the Citizen's General Obligation Bond Oversight Committee. This will allow for public participation and an open forum for the community to provide feedback.

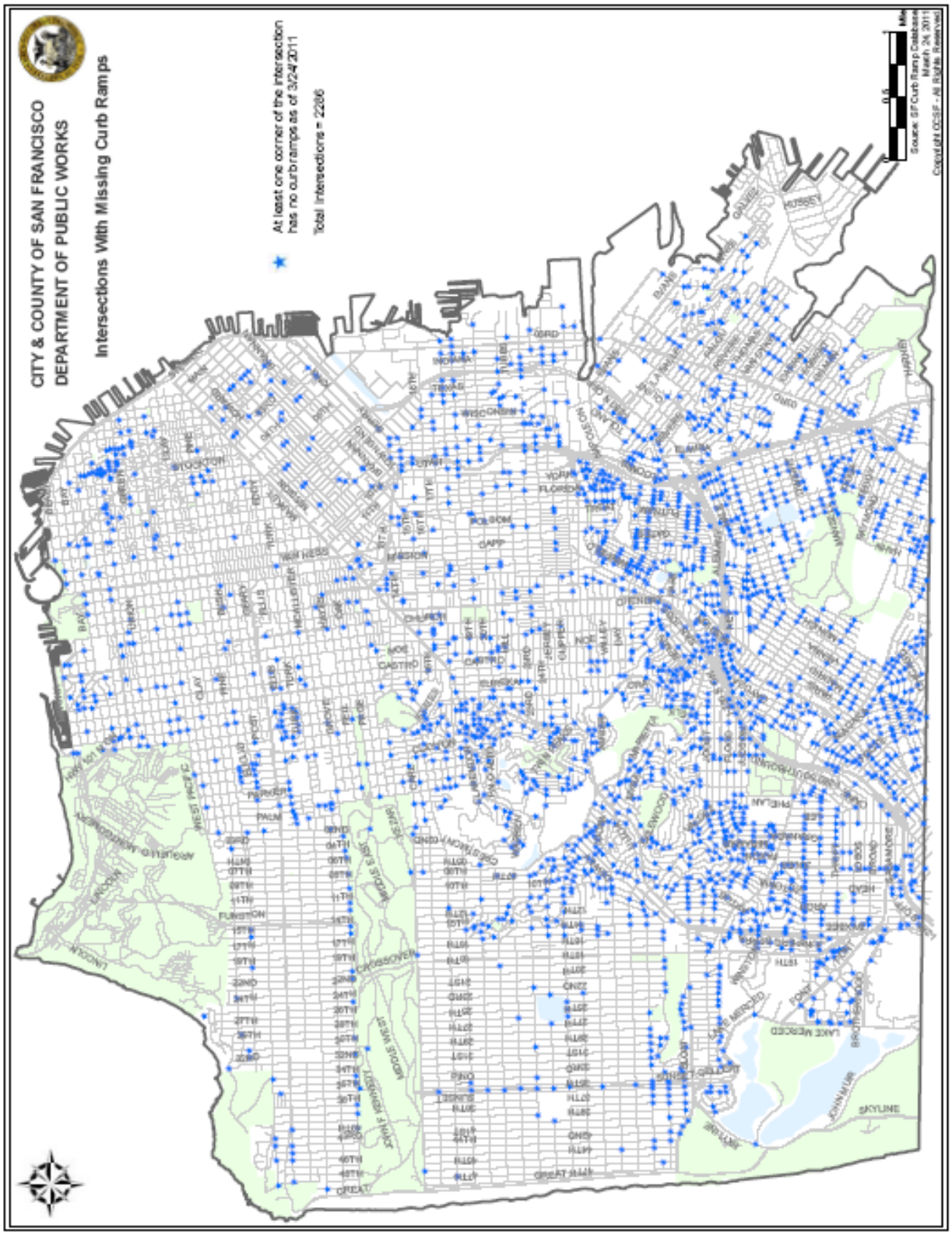
    - Proposed changes in funding, scope, or priorities in the bond programs will be presented before the Capital Planning Committee and undergo a hearing, a review, and an approval process, should any changes be necessary.

- The City will create and maintain a dedicated Web page outlining and describing the bond program, progress, activity updates, bond budget, and will include project names and estimated construction schedules.

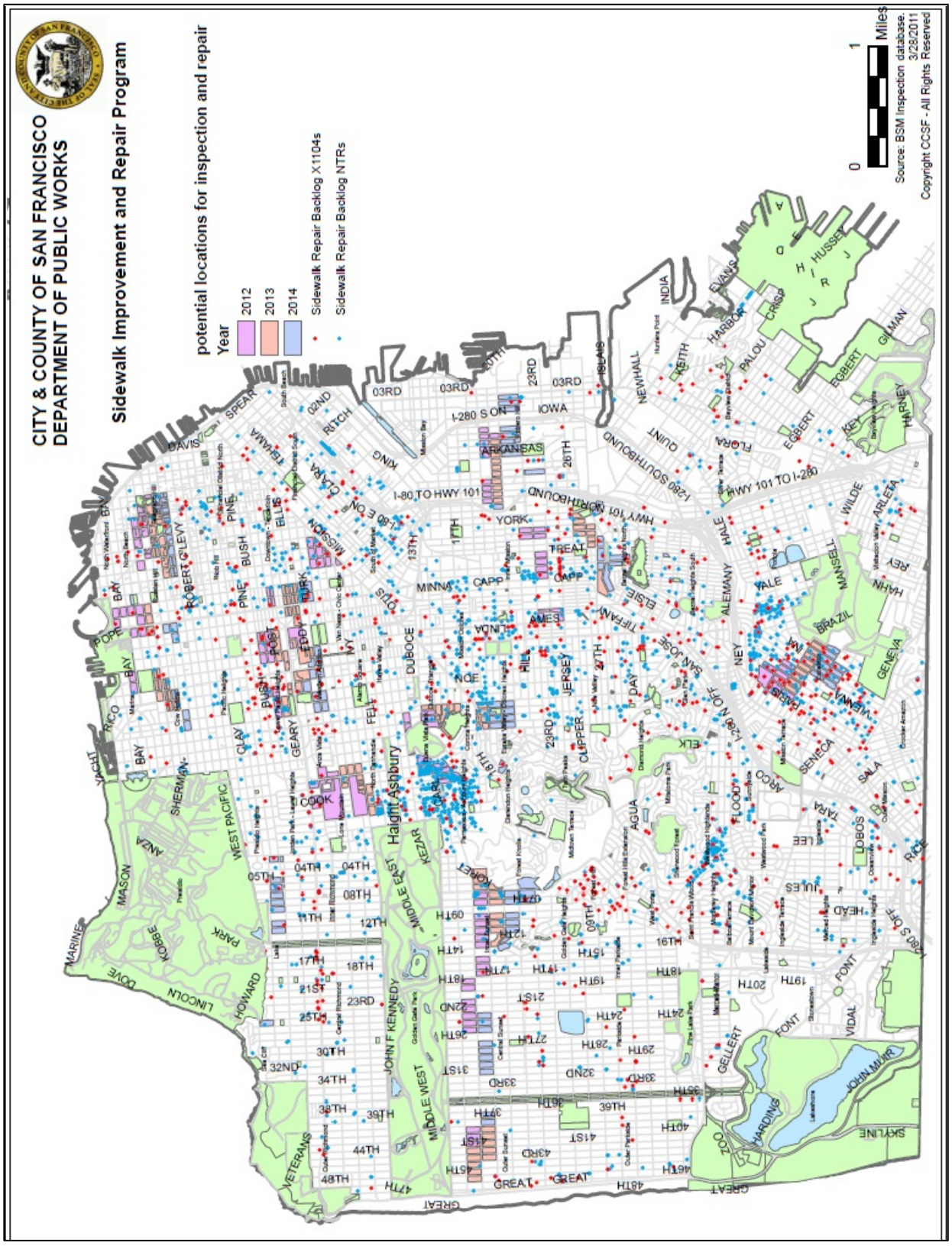
Map 1 Street Repaving



Map 2 Curb Ramps



Map 3 Sidewalk Repair



Map 4 Street Structures