

# City and County of San Francisco

Office of the Controller – City Services Auditor

## Street Maintenance Benchmarking Report FY 2011



5/8/2012

## **CONTROLLER'S OFFICE**

### **CITY SERVICES AUDITOR**

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

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

#### Project Team:

Peg Stevenson, Director  
Andrew Murray, Deputy Director  
Michelle Schurig, Project Lead  
Kyle Burns, Analyst  
Wylie Timmerman, City Hall Fellow



# City and County of San Francisco

## Office of the Controller - City Services Auditor

Street Maintenance Benchmarking Report FY 2011

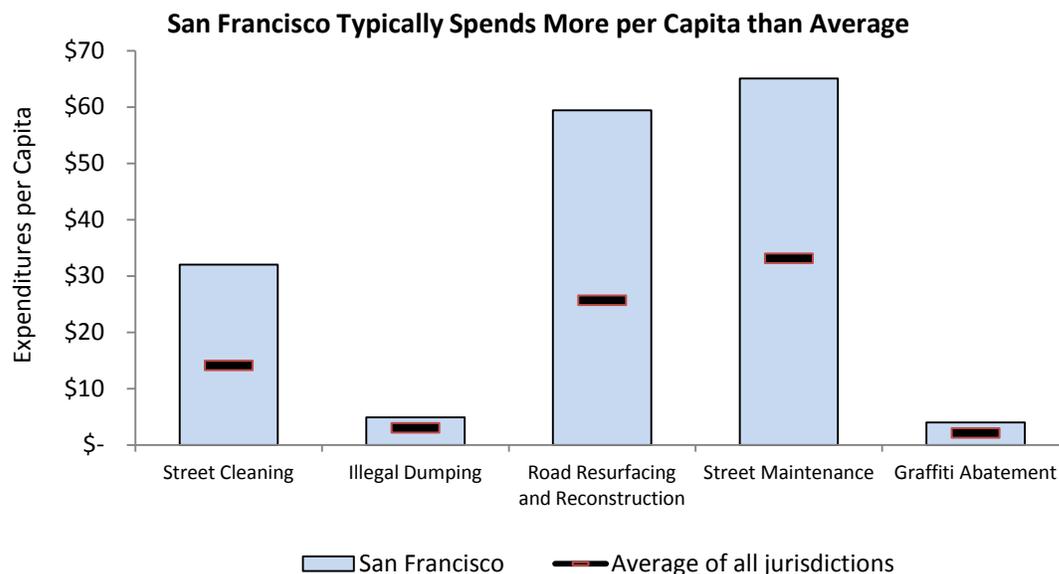
May 8, 2012

### Purpose

Appendix F, Section 101 of the City and County of San Francisco Charter requires that the City Services Auditor (CSA) monitor the level and effectiveness of services provided by the City and County of San Francisco. Specifically, CSA must assess measures of effectiveness including the quality of service provided, citizen perceptions of quality, and how well a service meets the needs for which it was created. This report, which includes data from FY 2010 – 2011, provides a benchmarking analysis for six service areas: street and sidewalk cleaning, illegal dumping, street maintenance, street trees, curb ramps and graffiti. Eight cities provided a sufficiently complete data set to compare. These are San Francisco, Chicago, Oakland, Sacramento, Seattle, San Jose, Washington, D.C., and Vancouver, Canada.

### Highlights

- San Francisco spends an average of \$17 more per capita for five services we tested. The largest gap occurs in road resurfacing and reconstruction. Please note: road resurfacing and reconstruction is included within the total street maintenance expenditures.



- San Francisco spends \$59 per capita on road resurfacing and reconstruction, the highest of all eight cities. While Chicago has a higher level of total expenditures, its per capita expenditures are roughly half as much as San Francisco's.

## Highlights (continued)

- San Francisco is below the survey average in terms of percentage of lane miles assessed as 'fair' or 'better' condition using the Pavement Condition Index (PCI) measure, while spending nearly four times the survey average per lane mile on road resurfacing and reconstruction.
- Sacramento has the highest percentage of lane miles assessed as 'fair' or 'better' condition using the PCI measure and has the highest percent of its street maintenance budget allocated to preventative maintenance (64 percent).
- San Francisco has more than twice the number of illegal dumping incidents (19,317) than the survey average. San Francisco also spends more per capita on illegal dumping incidents than other cities.
- Vancouver, Canada, handles more illegal dumping incidents than the survey average, responds more quickly, and spends the least compared to other cities.
- The total number of street trees maintained by San Francisco increased by 33 percent from FY2009 to FY2011.
- San Francisco spends \$4.03 per capita on graffiti abatement for public property, almost twice as high as the average. However, San Francisco's response time to graffiti on public property, at 72 hours, is lower than the survey average of 82 hours.



***Page intentionally left blank.***

# TABLE OF CONTENTS

## Quarterly Benchmarking Reports

<b>Scope of the Report .....</b>	<b>8</b>
<b>Findings .....</b>	<b>10</b>
A. Street and Sidewalk Cleaning .....	10
B. Illegal Dumping.....	12
C. Street Maintenance.....	14
D. Curb Ramps .....	21
E. Street Trees .....	22
F. Graffiti.....	25
<b>Appendices.....</b>	<b>27</b>
A. Letter to Peers.....	27
B. Survey Tool .....	28

***Page intentionally left blank.***

## **Scope of the Report**

---

The Street Maintenance Benchmarking Report FY 2011 is the first in a series of reports to benchmark San Francisco service expenditures and performance levels relative to other cities. The report highlights areas where San Francisco is performing high or low. The report is one part of a broad effort by the Controller's Office to conduct benchmarking, performance management and best practices comparisons of San Francisco's services. For more information, please visit the Controller's Website at [www.sfcontroller.org/index.aspx?page=75](http://www.sfcontroller.org/index.aspx?page=75)

This report provides service level and performance measurement results in six service areas: street and sidewalk cleaning, illegal dumping, street maintenance, street trees, curb ramps, and graffiti abatement.

In close collaboration with the San Francisco Department of Public Works (DPW), a 29-item survey was developed (Appendix B) and distributed to 11 cities in the United States and one in Canada. A total of eight cities responded.

Three types of measures were included in the report to understand how much service was provided, how much the service cost, and how well resources were used.

- Service level measures, which refer to the number, type, or amount of services provided to residents in cities. Service levels are largely influenced by the makeup of the population, the geographic layout of the cities, or other factors that affect demand for a service.
- Efficiency measures, which refer to how well cities use their resources. Examples are the average response time or the cost of cleaning up illegal dumping incidents per capita.
- Expenditures, which provide a simple measure of resources.

Cities were selected because they are large cities located in California or have at least some characteristics similar to San Francisco. San Francisco has unique characteristics compared with other cities. It is a consolidated city-county and has the highest population density of any U.S. city outside of New York City. Its topography is scattered with steep rolling hills and it is surrounded by water on three sides, making transportation in and out of the city limited when compared to other cities. In addition, San Francisco has a very high cost of living. These unique characteristics can have a significant influence on why San Francisco's results are higher or lower relative to other cities.

### Quick Facts

- ✓ This is the first in a series of reports by the Controller's Office to benchmark San Francisco services relative to other cities.
- ✓ The report covers six service areas: street and sidewalk cleaning, illegal dumping, street maintenance, street trees, curb ramps, and graffiti abatement.

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

City	Population	Population Density (persons per square mile)	Land Area (in square miles)
Chicago	2,695,600	11,374	237
San Jose	945,942	5,358	177
San Francisco	824,525	17,543	47
Seattle	606,660	7,251	84
Vancouver	603,502	13,623	44
Washington, D.C.	601,723	8,784	69
Sacramento	466,488	4,727	99
Oakland	390,724	5,009	78

Quick Facts

- ✓ Eight out of twelve cities responded to the Controller’s Office benchmarking survey.

There are several data limitations to keep in mind when interpreting the report findings. In instances where survey response data were lacking or inaccurate, these data were not included in the report. With the exception of lane miles, San Francisco was able to obtain all data for this report from a single agency, DPW. However, other cities needed to coordinate data collection across several agencies. In some cases these data were not available or were being collected in a different way.

The survey tool had some limitations. In some cases the survey questions were not specific enough to ensure consistent comparisons. For example, curb miles for mechanical street cleaning were not included in the report because cities may not have factored in frequency of street cleaning or counted both sides of the street.

Special notes:

- For Vancouver, Canadian dollars were converted to United States dollars based on a conversion rate of 0.9908 on April 2, 2012.
- For Chicago, Full-Time Equivalent (FTE) numbers are low due to the elimination of vacant positions.
- For Oakland, approximately 200 Public Works positions have been eliminated in the last eight years.
- For San Francisco, lane miles are provided by the Municipal Transportation Agency. At the time of this survey, the accuracy of these data could not be confirmed.
- San Francisco reports budget data, not actual expenditures for Fiscal Year (FY) 2011.

---

The San Francisco Department of Public Works (DPW) is responsible for the care and maintenance of San Francisco’s streets and much of its infrastructure. The department designs, builds, resurfaces and cleans streets; plants and maintains city street trees; designs, constructs and maintains city-owned facilities; conducts sidewalk and roadway inspections, constructs curb ramps, provides mechanical and manual street cleaning, removes graffiti from public property; and partners with the diverse neighborhoods in San Francisco.

## Findings

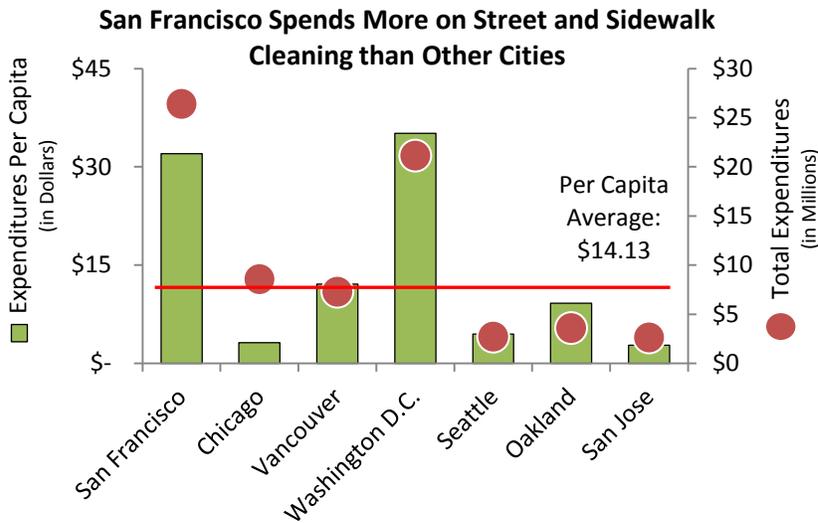
### A. Street and Sidewalk Cleaning

Street cleaning is a central piece of street maintenance, which reduces pollutants and provides a clean, pleasing appearance to a city. DPW uses mechanical street sweepers, litter receptacles, and manual cleaning to keep San Francisco streets clean.

The street cleaning figures below include both mechanical and manual street cleaning, and include salaries, benefits, equipment maintenance, equipment replacement, and contracts.

#### Quick Facts

- ✓ DPW cleans about 90 percent of San Francisco streets with mechanical sweepers, covering 150,000 curb miles and removing 25,000 tons of litter and debris every year<sup>2</sup>.



- San Francisco spends \$26.4 million for street and sidewalk cleaning, the highest of all cities. San Francisco's expenditures have decreased by \$3.6 million since 2009<sup>1</sup>.
- San Jose spends \$2.6 million for street and sidewalk cleaning, the lowest of all cities.
- Washington, D.C. spends more per capita than any city.
- Washington, D.C., Seattle, and San Francisco are the only cities with General Fund as the primary funding source for street and sidewalk cleaning.
- Washington, D.C. does not sweep arterial streets, nor does Seattle, except for leaf clean up during certain times of the year.

<sup>1</sup> Budget Improvement Project Benchmarking White Paper, San Francisco, Controller's Office, 2008-2009.

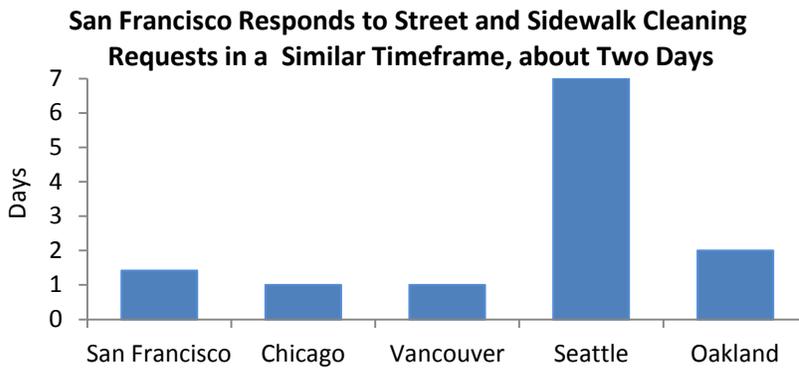
<sup>2</sup> <http://www.sfdpw.org/index.aspx?page=322> April 24, 2012

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

- Chicago reports spending about \$8.6 million on street and sidewalk cleaning. However, there are other funding sources that support its street cleaning services. For example, Special Service Areas (known as Business Improvement Districts in most cities), budgeted about \$4.6 million (excluding indirect costs) for streets and sidewalk cleaning in FY11<sup>3</sup>.

The 2011 San Francisco City Survey found that the City should emphasize infrastructure improvements in order to improve citizen satisfaction. Among the major categories of City services that were assessed on the survey, satisfaction with infrastructure (streets and sidewalks) was the most strongly correlated with overall satisfaction with City services.

A major determinant of resident satisfaction with street cleaning is the response time to cleaning requests. The figure below shows how quickly San Francisco and other cities respond to street and sidewalk cleaning requests.



- San Francisco responds to street and sidewalk cleaning requests in the same one to two day time frame as several other cities.
- Of the eight cities, Chicago responds the most quickly to street and sidewalk cleaning requests and at the lowest cost.

<b>Street and Sidewalk Cleaning Primary Funding Source</b>	
San Francisco	General Fund
Chicago	Vehicle Tax Fund
Vancouver	Property Tax
Washington, D.C.	General Fund
Seattle	General Fund
Oakland	Surcharge
San Jose	Storm Sewer Fund

<sup>3</sup> <http://chicagoinspectorgeneral.org/uncategorized/special-service-areas-2011-budgets-2/> May 7, 2012

## B. Illegal Dumping

Illegal dumping is the improper disposal of solid waste at any location other than a permitted landfill or facility. It is a form of blight and impacts the public's quality of life. Illegal dumping occurs when people dump and litter large furniture items and other materials on the public rights of way. These materials can normally be recycled or donated to organizations where they can be reused. Debris commonly dumped on the streets is mattresses, materials from private contractors, household garbage, and large items including television sets, sofas, and other appliances. Toxic materials such as paint and other dangerous liquids are also left behind.

In the 2011 Street and Sidewalk Perception Study, pedestrians reported being largely satisfied with the cleanliness of San Francisco's streets and sidewalks.

### Quick Facts

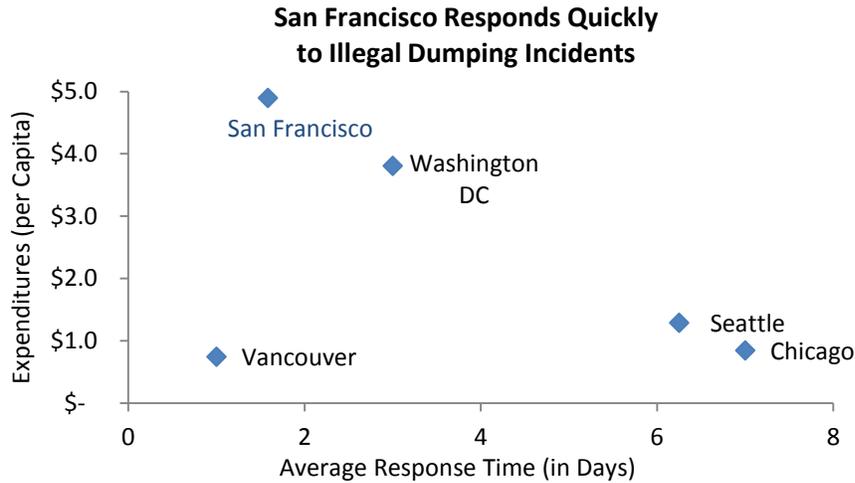
- ✓ DPW receives about 17,000 reports of illegal dumping and hauls off nearly 10,000 tons of garbage and debris, costing taxpayers more than \$4 million every year<sup>4</sup>.



- While San Francisco's expenditures for illegal dumping per capita are higher than most cities, San Francisco responds to a higher number of illegal dumping incidents.
- A portion of Seattle's illegal dumping expenditures includes payments made to the Department of Corrections, as well as the costs of cleaning illegal encampments.
- Washington, D.C. includes "nuisance vacant lots and rat harborages" in their illegal dumping expenditures.

<sup>4</sup> <http://www.sfdpw.org/index.aspx?page=1369> April 24, 2012

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**



- While San Francisco spends more per capita on illegal dumping than other cities, its average response time, 1.6 days, is lower than Seattle, Chicago, and Washington, D.C.
- The survey average response time for completing illegal dumping public service requests is 3.5 days<sup>5</sup>.
- Vancouver handles more illegal dumping incidents than average, responds more quickly, and spends the least compared to other cities.

**Illegal Dumping Primary Funding Source**

San Francisco	General Fund
Chicago	Corporate Fund
Vancouver	Property Tax
Washington D.C.	General Fund
Seattle	Solid Waste Tonnage Tax
Oakland	Surcharge
San Jose	Integrated Waste

<sup>5</sup> San Jose did not report its average response time to illegal dumping incidents.

## C. Street Maintenance

Street maintenance is the preservation and repair of city streets. Among the major street maintenance activities included in this report are preventative maintenance, road resurfacing and reconstruction, and pothole repair.

One key aspect of street maintenance is preventative maintenance. According to the U.S. Department of Transportation, Federal Highway Administration, preventive maintenance is typically applied to pavements in good condition with significant remaining service life. As a major component of pavement preservation, preventive maintenance extends the pavement's service life by applying cost-effective treatments to the surface or near-surface of structurally sound pavements. Examples of preventive treatments include asphalt crack sealing, chip sealing, slurry or micro-surfacing, thin and ultra-thin hot-mix asphalt overlay, concrete joint sealing, and diamond grinding<sup>6</sup>.

In November 2011, San Francisco passed a bond measure for street improvement. This bond is being implemented and used to repave streets citywide over the next three years<sup>8</sup>. This three year investment will improve the condition of streets and is expected to increase the PCI from 64 to 66. Simultaneously, the City's goal is to continue investing in streets at this level. San Francisco will work to identify dedicated funding after the three years, which will put the city on a trajectory to improve to a PCI score of 70 in ten years. As the overall condition of the streets improve, preventative maintenance expenditures will likely increase as a percentage of the street maintenance budget to ensure cost-effective long-term preservation of the pavement's service life.

### Quick Facts

- ✓ Pavement management strategies pay dividends by reducing the greenhouse gas emissions associated with both vehicle use and roadway construction<sup>7</sup>.

#### **Street Maintenance Primary Funding Source**

San Francisco	Certificates of Participation General Fund/Gas Tax Debt
Chicago	Bond and Capital Funding
Vancouver	Property Tax
Washington D.C.	General Fund
Seattle	Property Tax and General Fund
Oakland	State Tax
San Jose	State Gas Tax and Federal Grants

<sup>6</sup> <http://www.fhwa.dot.gov/pavement/preservation/091205.cfm> April 24, 2012

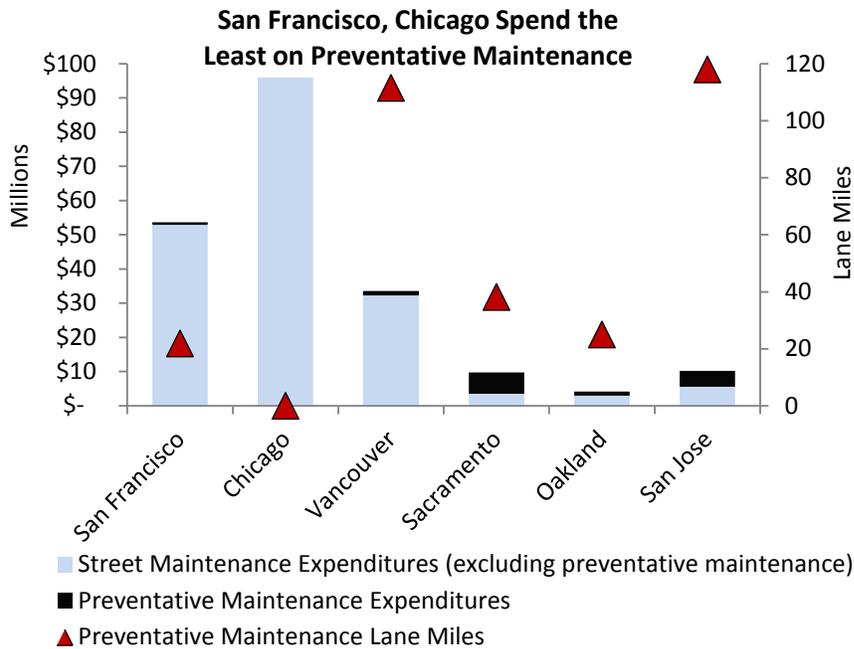
<sup>7</sup> [www.pavementpreservation.org/wp-content/uploads/2011/06/2011-MTC-Pothole\\_Report.pdf](http://www.pavementpreservation.org/wp-content/uploads/2011/06/2011-MTC-Pothole_Report.pdf) April 24, 2012

<sup>8</sup> <http://www.sfdpw.org/index.aspx?page=1580> May 7, 2012

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

**Preventative Maintenance**

Quick Facts

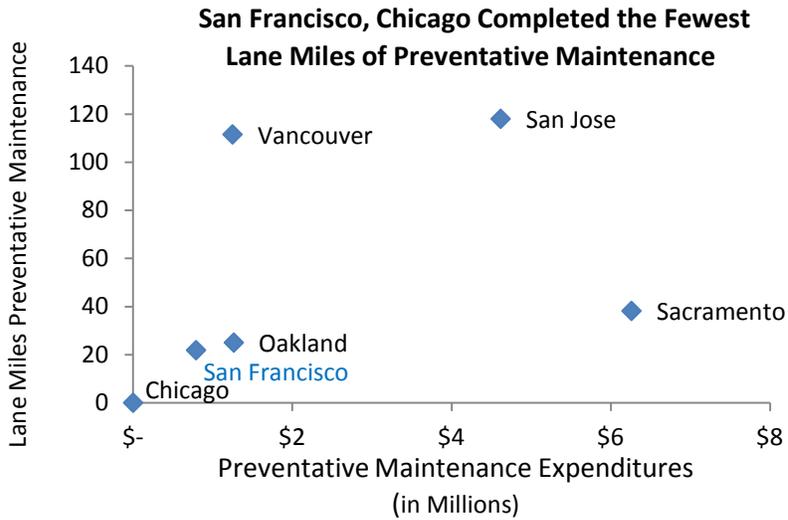


- ✓ More frequent, low-cost treatments produce fewer emissions than do major rehabilitation projects made necessary by deferred maintenance<sup>9</sup>.

- Aside from Chicago, which reports no expenditures for preventative maintenance, San Francisco spends the least on preventative maintenance of all cities (1.5 percent of its total expenditures).
- Oakland spends the least, \$4.2 million on street maintenance, but spends a high percentage of its street maintenance expenditures on preventative maintenance.
- Sacramento spends the greatest percentage of street maintenance expenditures on preventative maintenance (64 percent). Sacramento also has the highest percentage of lane miles with a Pavement Condition Index (PCI) score of 60 or better, which indicates ‘fair’ condition of the pavement. (For more information on PCI, please see page 18)

<sup>9</sup> [http://dn.engr.ucdavis.edu/images/GHG\\_Report.pdf](http://dn.engr.ucdavis.edu/images/GHG_Report.pdf) April 24, 2012

Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011



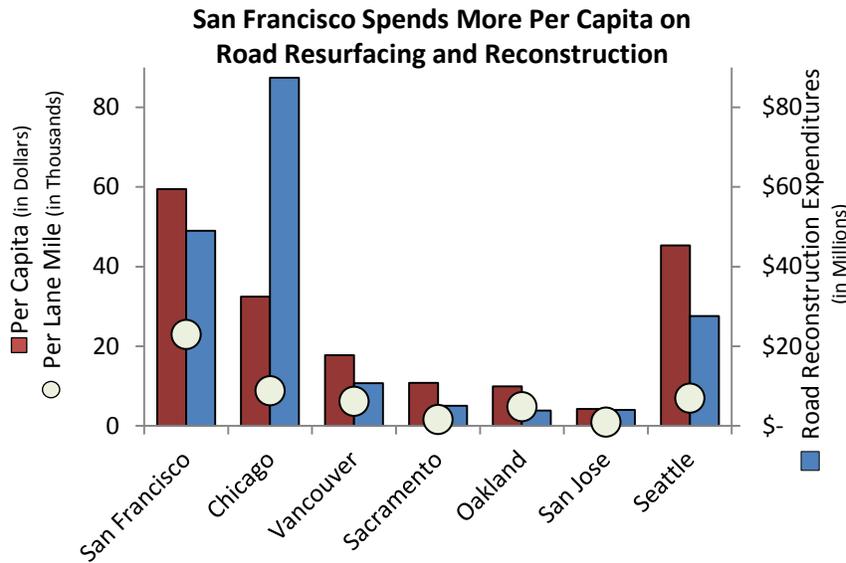
- Of those cities with preventative maintenance spending, San Francisco spends the least. It also completes the fewest number of lane miles of preventative maintenance, 22.
- Sacramento spends the most on preventative maintenance and completes 38 lane miles of preventative maintenance.
- Vancouver completes more than five times as many lane miles of preventative maintenance than San Francisco while spending only \$1.2 million.



**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

Quick Facts

**Road Resurfacing and Reconstruction**



✓ The Better Streets Plan (BSP) took effect on January 16, 2011. It will be a citywide policy document that will provide, for the first time, a unified set of standards and guidelines that govern the design of all city streets<sup>10</sup>.

- San Francisco spends \$59 per capita on road resurfacing and reconstruction, the highest of all eight cities. While Chicago has a higher level of total expenditures, its per capita expenditures are roughly half as much as San Francisco’s.
- In total, San Francisco spends \$49 million on road resurfacing and reconstruction.
- Despite its high population density, Vancouver’s road resurfacing and reconstruction expenditures are low compared to other dense cities.
- Chicago’s lane miles figure includes an extensive network of alleyways that are maintained by the City.
- Sacramento’s road and reconstruction expenditures are low, typically around \$9 million annually.



<sup>10</sup> <http://www.sfplanning.org/ftp/BetterStreets/proposals.htm> April 24, 2012

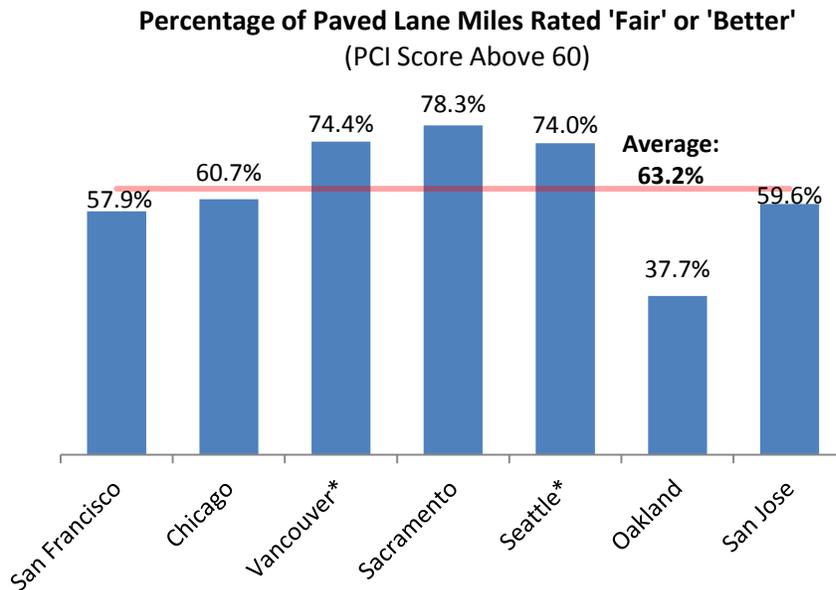
## Office of the Controller, City Services Auditor Street Maintenance Benchmarking Report FY 2011

Pavement Condition Index (PCI) indicates the condition of the pavement based on a scale of 0 to 100. Scores that are between 60-69 are considered 'fair', and scores that are between 70-79 are considered 'good'.

Addressing cracks in the pavement as soon as they surface is the most cost-effective way to maintain a roadway. According to the Metropolitan Transportation Commission in the San Francisco Bay Area, properly maintaining streets through preventative maintenance is five to ten times less expensive than having to pay for rehabilitating streets after they fail. With an average PCI score of 66, the Bay Area's city streets and county roads are nearing the pavement life-cycle curve, after which pavement may decline rapidly and repair costs increase<sup>11</sup>.

### Quick Facts

- ✓ In 2011, a \$248 million bond measure was approved by voters to repair San Francisco's street and sidewalks.
- ✓ The bond measure includes \$148 million for street repaving for three years<sup>12</sup>.



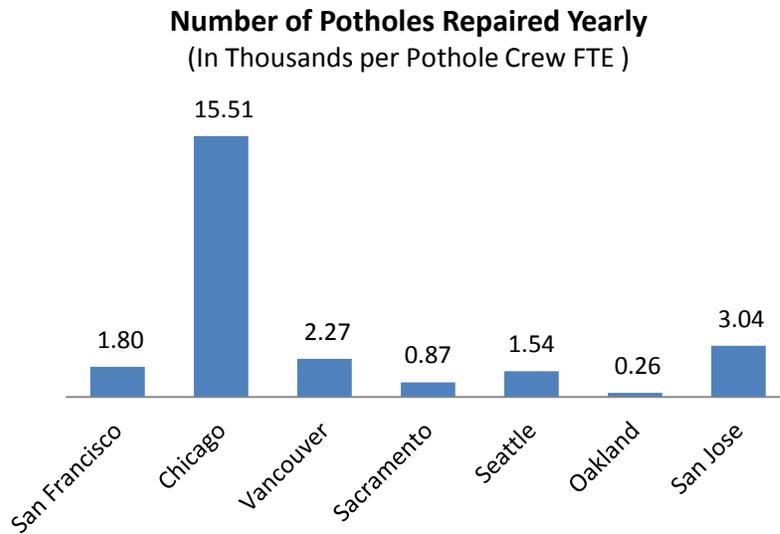
\*Seattle and Vancouver assessed 'fair' as a PCI rating above 56.

- For San Francisco, nearly 58 percent of the 2,134 paved miles assessed are considered to be in 'fair' or 'better' condition using the PCI measure, which is slightly lower than the survey average of 63 percent.
- At the same time, San Francisco spends nearly four times as much (\$22,966) per lane mile on road resurfacing and reconstruction compared to the survey average of \$4,898 for the other cities.

<sup>11</sup> [www.pavementpreservation.org/wp-content/uploads/2011/06/2011-MTC-Pothole\\_Report.pdf](http://www.pavementpreservation.org/wp-content/uploads/2011/06/2011-MTC-Pothole_Report.pdf)

<sup>12</sup> <http://www.sfdpw.org/index.aspx?page=1580> May 7, 2012

**Pothole Repairs**



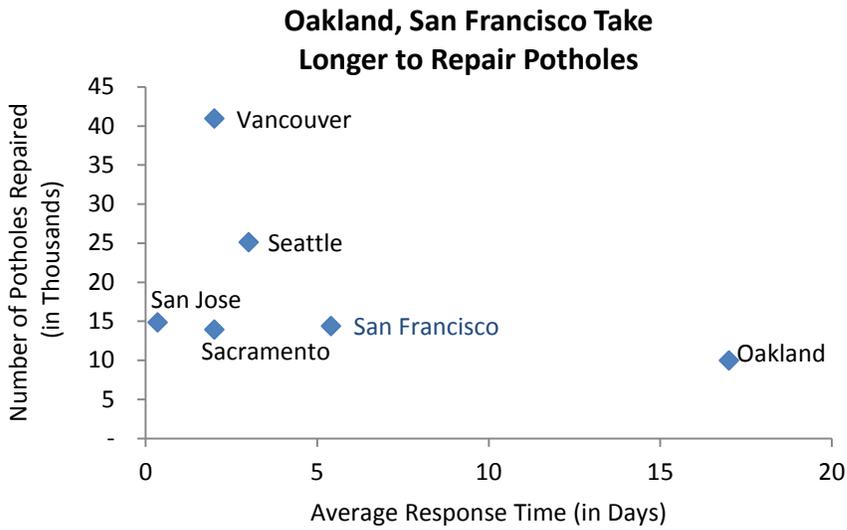
- The survey average for pothole repairs yearly per pothole crew Full Time Equivalent (FTE), excluding Chicago, is 1,630.
- Chicago's figure of 15,509 repairs per pothole crew may be impacted by Chicago's extensive network of alleyways and by the winter climate conditions, not present in the other cities.
- The survey average of potholes repaired is 19,860, with San Francisco reporting 14,374. Aside from San Jose, San Francisco has the fewest number of pothole crew FTEs (only eight).



Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011

Quick Facts

- ✓ 311 reports 6,159 annual service requests categorized as pavement defects, which may include more than one pothole per service request<sup>13</sup>.



- Chicago repairs more potholes than any other city at 620,365. (Note: Chicago was not included on the graph above due to space limitations).
- San Francisco repairs 14,374 potholes and has an average response time of five days. Oakland repairs 9,967 potholes and has an average response time of 17 days.
- San Jose repairs a similar number of potholes as San Francisco and Sacramento (14,842) and responds quicker than other cities (eight hours).



<sup>13</sup> <https://data.sfgov.org/Service-Requests-311-/Case-Data-from-San-Francisco-311/vw6y-z8j6> May 7, 2012

## D. Curb Ramps

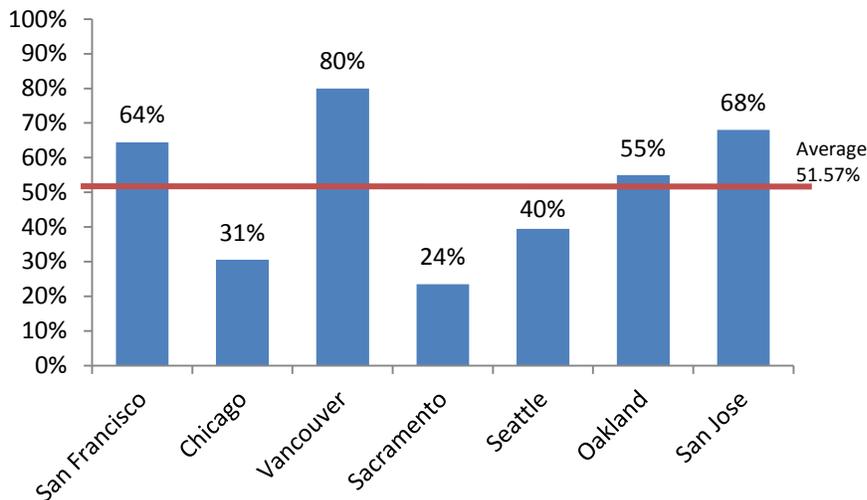
Curb ramps provide an accessible path of travel along city sidewalks for persons with mobility issues.

San Francisco has made a significant and long-term commitment to improving the accessibility of the public right of way. DPW has been the primary leader in these efforts, with collaboration from the Mayor's Office on Disability. The Mayor's Office on Disability also helps in prioritizing and funding curb ramp construction under the American Disability Act (ADA) Transition Plan for Curb Ramps and Sidewalks. On January 9, 2008 DPW issued a comprehensive update to its ADA Transition Plan for Curb Ramps, which has received significant funding and commitments from the City's 10 Year Capital Plan, and is committed to aggressively removing barriers in the public right of way.

### Quick Facts

- ✓ In San Francisco, a person with a disability can request a curb ramp to provide sidewalk access near their residence, a City facility, a transportation service, or their place of work by calling 311.<sup>14</sup>

**Percentage of Corners With Curb Ramps**



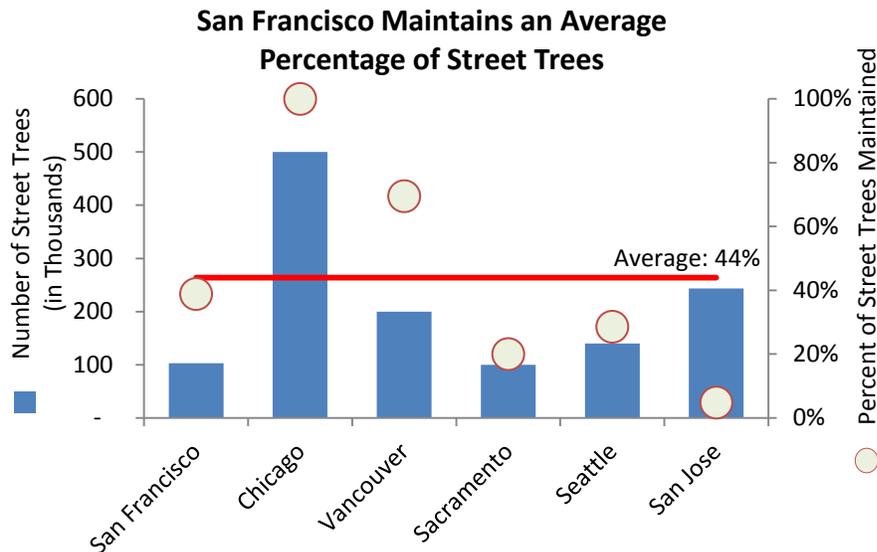
- 64 percent of San Francisco street corners have curb ramps, higher than the survey average of 52 percent. San Francisco has a lower number of corners (27,703) than other cities (42,530 is the survey average for all cities, excluding Seattle).
- Please note: Seattle tracks curb ramps by block faces, rather than curb ramps.

<sup>14</sup> <http://www.sfgov2.org/index.aspx?page=391> May 7, 2012

## E. Street Trees

Street trees are those trees in the public right of way that are planted to provide pedestrian shade, lessen the burden on drainage infrastructure, and improve the beauty of a neighborhood. Trees are an essential component of the ecosystem, and provide enormous environmental and social benefits. They help manage storm water, lessen air pollution and capture carbon, help save energy, increase property values, provide wildlife habitat, calm traffic, provide a more pleasant pedestrian experience, and benefit human health.

Depending on city policies, cities may plant, prune and otherwise maintain trees in the public right of way, as well as issue tree planting and removal permits to residents and provide emergency tree services.



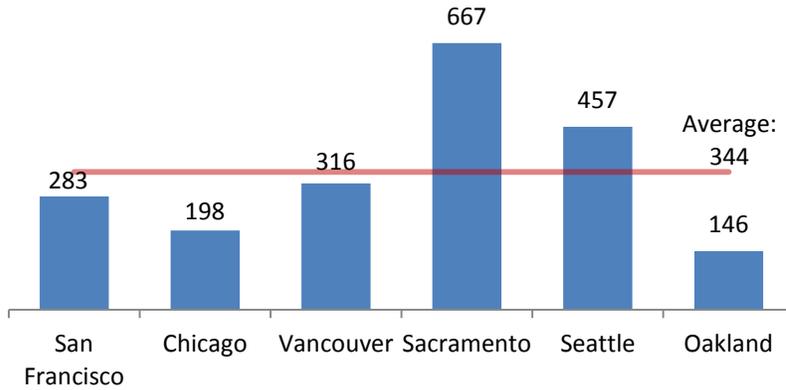
- San Francisco has roughly the same number of street trees as Sacramento and Seattle, but San Francisco maintains a higher percentage of these trees.
- The total number of street trees maintained by San Francisco increased by 33 percent from FY2009 to FY2011 (from roughly 30,000 in FY09<sup>15</sup> to 40,000 in FY11).
- San Jose maintains about 5 percent of its street trees. This is outsourced to an on-call contractor. In general, in San Jose, trees are maintained by the fronting property owners.

<sup>15</sup> Budget Improvement Project Benchmarking White Paper, San Francisco, Controller's Office, 2008-2009.

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

- In Vancouver, the Board of Parks and Recreation, a public agency funded by local taxes and use fees, maintains street trees.

**San Francisco Scores Below  
Average in Street Trees Pruned Annually  
per Tree Maintenance FTE**



Quick Facts

Number of city tree maintenance worker FTEs

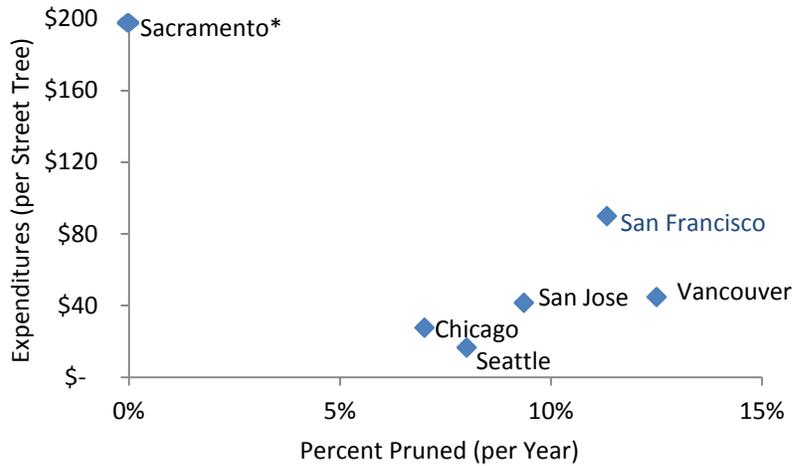
<i>San Francisco</i>	<i>16</i>
<i>Chicago</i>	<i>177</i>
<i>Vancouver</i>	<i>55</i>
<i>Sacramento</i>	<i>30</i>
<i>Seattle</i>	<i>7</i>
<i>Oakland</i>	<i>15</i>

- San Francisco prunes fewer trees annually per tree maintenance FTE than the survey average, and has fewer tree maintenance worker FTEs. Only Oakland and Seattle maintain their trees with fewer FTEs.
- Chicago notes that its FTE numbers are lower than usual due to the elimination of vacant positions.
- San Jose is not included in the above graph because it does not have City tree maintenance workers. San Jose outsources street tree maintenance to an on-call contractor.



**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

**San Francisco Prunes a Greater Percentage of Street Trees than Most**



Quick Facts

- ✓ Instead of pruning on a recommended three- to five-year cycle, DPW prunes trees on a ten to 12-year cycle because of budget cuts to DPW's Urban Forestry staff<sup>16</sup>.

\*Sacramento did not provide the percent of trees pruned per year

- San Francisco prunes about 11 percent of its street trees each year. The average for all cities reporting in this category is about 8 percent.
- San Francisco's total expenditures for street trees are roughly \$90 per tree. The survey average per tree expenditures is about \$38 per tree.
- At \$4 million per year and \$200 per street tree, Sacramento spends more on maintaining street trees than all cities.
- Sacramento's Urban Forestry staff was reduced by approximately 50 percent and its budget was reduced by 30 percent. Also, Sacramento increased outsourcing for this service by approximately 50 percent.

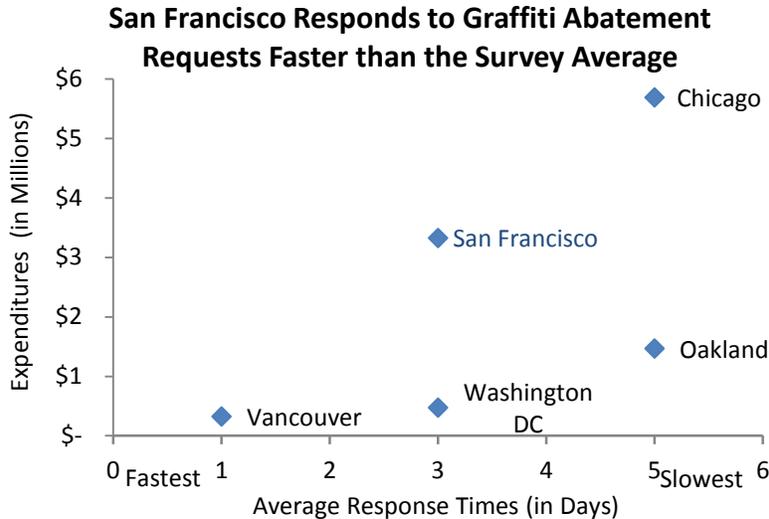
**Street Trees Primary Funding Source**

San Francisco	Gas Tax
Chicago	Corporate Fund
Vancouver	Park Board Capital
Seattle	General Fund/Tax Levy
Oakland	Assessment District
San Jose	General Fund

<sup>16</sup> <http://www.sfdpw.org/index.aspx?page=1478> May 7, 2012

## F. Graffiti Abatement

Graffiti abatement reduces the visual pollution and harm to community welfare brought on by unauthorized writing or spray painting on public and private property. San Francisco spends more than \$20 million annually on graffiti abatement, which is tackled by many city agencies including DPW, the Port, the Department of Recreation and Parks, and the Public Utilities Commission.



### Quick Facts

- ✓ DPW works with local agencies and community partners to prevent graffiti, helps people remove it quickly, and provide programs and rewards for people who want to get involved<sup>17</sup>.
- ✓ DPW removes graffiti from 1,000,000+ square feet of public property annually<sup>18</sup>.

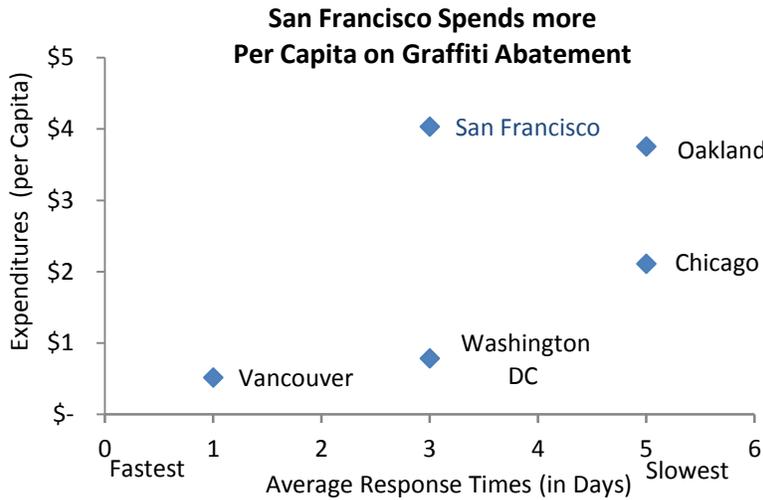
- Graffiti abatement expenditures vary widely between cities. Vancouver reports the lowest amount spent on graffiti abatement, \$323,668, while Chicago reports the highest amount, \$5.7 million.
- San Francisco spends \$3.3 million on graffiti abatement, above the survey average of \$2.3 million. The City's response time to graffiti on public property abatement requests, 72 hours, is lower than the survey average of 82 hours.
- Oakland maintains a policy of one free clean up of graffiti per property, which may affect its expenditures and performance.
- Chicago's graffiti abatement budget has been reduced by nearly 50 percent for FY11.

<sup>17</sup> <http://www.sfdpw.org/index.aspx?page=1099> April 24, 2012

<sup>18</sup> <http://www.sfdpw.org/index.aspx?page=1232> April 24, 2012

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

Graffiti Prevention Programs



- Per capita, San Francisco spends \$4.03 on graffiti abatement for public property, almost twice as much as the average.
- Vancouver spends the least per capita on graffiti abatement on public property and has the fastest response time to service requests compared to other cities.

- ✓ Graffiti Watch is a partnership between the City and its residents to keep graffiti off our streets and sidewalks for a safer and cleaner San Francisco<sup>19</sup>.
- ✓ The Graffiti Rewards Fund is a collaboration between several agencies offering a \$250 reward for information leading to the arrest and conviction of graffiti vandals<sup>20</sup>.



<b>Graffiti Abatement Primary Funding Source</b>	
San Francisco	General Fund
Chicago	Corporate Fund
Vancouver	Property Tax
Washington D.C.	General Fund
Oakland	Surcharge

<sup>19</sup> <http://www.sfdpw.org/index.aspx?page=342> April 24, 2012

<sup>20</sup> <http://38.106.4.205/index.aspx?page=344> April 24, 2012

## APPENDICES

---

### A. Letter to Peers



**CITY AND COUNTY OF SAN FRANCISCO**  
**OFFICE OF THE CONTROLLER**

**Ben Rosenfeld**  
Controller  
**Monique Zmuda**  
Deputy Controller

March 19, 2012

Insert Contact name  
County/City  
Email address

Dear Peer City,

The San Francisco Controller's Office, as part of its mandate to benchmark the City's services, is conducting analyses comparing San Francisco service levels and expenditures to peer cities. The first analysis will focus on street maintenance, including street cleaning, preventative maintenance, graffiti, and related issues.

We are asking for your participation in this effort. The Controller's Office will compile the results in a final report, expected to be released in April 2012, which we will share with all participating cities.

Enclosed is the survey that we kindly request you to complete and return via email by **April 2, 2012** to [michelle.schurig@sfgov.org](mailto:michelle.schurig@sfgov.org).

Please do not hesitate to contact Michelle Schurig at 415-554-7577 if you have any questions regarding the survey questions or this project. Your participation is greatly appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Ben Rosenfeld".

Ben Rosenfeld

Controller

cc: Mohammed Nuru

# Office of the Controller, City Services Auditor Street Maintenance Benchmarking Report FY 2011

## City and County of San Francisco, Office of the Controller Benchmarking Survey - Street Maintenance

Jurisdiction Name:	
Staff Name	
Title:	
Phone:	
Email:	

Thank you for agreeing to take part in the City and County of San Francisco Office of the Controller's Benchmarking Survey, containing a number of questions regarding your city's street maintenance services. Please complete the survey and return via email to [michelle.schurig@sfgov.org](mailto:michelle.schurig@sfgov.org) by April 2, 2012. If at any point you have a question regarding the survey do not hesitate to call Michell Schurig at 415-554-7577.

### INSTRUCTIONS

1. Please respond to survey questions included on the tab titled Survey Questions.
2. For all survey questions please respond using Fiscal Year 2011 actual data.
3. Responses to questions are only required for cells highlighted in yellow. Remaining cells will auto-populate using information entered in the highlighted cells. "Zero" and "None" answers should be entered as "0".
4. In order to maintain formulas only enter qualitative information in designated cells. Do not place any number descriptors in the highlighted cell when responding to numerical questions.
5. Enter any discrepancies or notes regarding data in the additional comments box at the end of survey.

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

Name of Jurisdiction:

Please respond in **YELLOW** Boxes.

**A. BUDGET**

Have there been any significant budgetary or program changes in the last three fiscal years that should be noted in relation to the service areas?

Indicate the primary funding source for the following service areas: (e.g. Street Cleaning: General Fund, Street Trees: Sales Tax)

Street Cleaning	<input style="background-color: yellow;" type="text"/>
Illegal Dumping	<input style="background-color: yellow;" type="text"/>
Street Maintenance	<input style="background-color: yellow;" type="text"/>
Street Trees	<input style="background-color: yellow;" type="text"/>
Curb Ramps	<input style="background-color: yellow;" type="text"/>
Graffiti	<input style="background-color: yellow;" type="text"/>

**B. GENERAL**

**Section B:** Please use 2010 US Census Bureau Data for your jurisdiction's population and land area in square miles. If your agency provides street cleaning and maintenance services to other jurisdictions, please include the population and square mileage of those jurisdictions in the figures below. For number of paved lane miles for which the jurisdiction is responsible, "paved" means asphalt or concrete. Exclude pathways for bikes or pedestrians separated from the roadway. ("Lane miles" are based on a standard dimension of 12 feet by 5280 feet).

- 1 Population  persons
- 2 Square miles of area served  square miles
- 3 Number of paved lane miles for which the jurisdiction is responsible  paved lane miles

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

**C. STREET CLEANING**

**Section C:** For all questions, please use Fiscal Year 2011 actual figures. For total expenditures for street and sidewalk cleaning, please include both mechanical and manual street cleaning, include the actual cost of salaries, benefits, equipment maintenance, equipment replacement, and contracts. Add expenditures regardless of the source of funds. Exclude the costs of waste disposal associated with sweeping, overhead for functions such as fleet management, IT, and human resources, and snow plowing or salting. For street cleaning, if a street requires multiple passes or is swept several times a year, count each of those passes in the totals below.

- |          |   |  |                          |
|----------|---|--|--------------------------|
| <b>4</b> | Total expenditures for street and sidewalk cleaning<br>Total expenditures for street and sidewalk cleaning per capita   | <input type="text"/><br><input type="text"/>                         | dollars                  |
| <b>5</b> | Are expenditures for illegal dumping clean up included in your street cleaning expenditures?  | <input type="radio"/> Yes<br><input type="radio"/> No                |                          |
| <b>6</b> | Total number of residential curb miles mechanically swept<br>Number of residential curb miles in jurisdiction<br>Total number of residential curb miles mechanically swept per number of residential curb miles | <input type="text"/><br><input type="text"/><br><input type="text"/> | curb miles<br>curb miles |
| <b>7</b> | Average response time for street and sidewalk cleaning requests   | <input type="text"/>   | hours                    |
| <b>8</b> | Your city's standard for response time (e.g., 48 hours) to respond to street and sidewalk cleaning requests.  | <input type="text"/>   | hours                    |

**D. ILLEGAL DUMPING**

**Section D:** For all questions, please use Fiscal Year 2011 actual figures. Please include both internal and public service requests, unless otherwise noted.

- |           |   |  |                                      |
|-----------|---|--|--------------------------------------|
| <b>9</b>  | Total expenditures for illegal dumping incidents<br>Total expenditures for illegal dumping incidents per capita   | <input type="text"/><br><input type="text"/>                         | dollars                              |
| <b>10</b> | Total number of illegal dumping incidents   | <input type="text"/>   | incidents                            |
| <b>11</b> | Average response time for illegal dumping public service requests   | <input type="text"/>   | hours                                |
| <b>12</b> | Total number of illegal dumping incidents for public service requests<br>Total number of illegal dumping incident public service requests completed<br>Percentage of illegal dumping service requests completed | <input type="text"/><br><input type="text"/><br><input type="text"/> | service requests<br>service requests |

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

**E. STREET MAINTENANCE**

**Section E:** For all questions, please use Fiscal Year 2011 actual figures.

- |           |   |  |  |       |                  |                          |
|-----------|---|--|--|-------|------------------|--------------------------|
| <b>13</b> | Road resurfacing and reconstruction expenditures<br>Road resurfacing and reconstruction expenditures per capita<br>Road resurfacing and reconstruction expenditures per paved lane mile   | <table border="1" style="width: 100px; height: 30px; border-collapse: collapse;"> <tr><td style="background-color: yellow;"></td></tr> <tr><td style="background-color: white;"></td></tr> <tr><td style="background-color: white;"></td></tr> </table>  |  |       |                  | dollars                  |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |
| <b>14</b> | Paved lane miles assessed with a Pavement Condition Index (PCI) score of 60 or more<br>Total paved lane miles assessed<br>Paved lane miles assessed with a PCI score of 60 or more (i.e. 'fair' or better) as percentage of total paved lane miles assessed   | <table border="1" style="width: 100px; height: 30px; border-collapse: collapse;"> <tr><td style="background-color: yellow;"></td></tr> <tr><td style="background-color: yellow;"></td></tr> <tr><td style="background-color: white;"></td></tr> </table> |  |       |                  | lane miles<br>lane miles |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |
| <b>15</b> | If your city does not use the PCI to assess roads, please indicate the methodology used and the definition of a 'fair' or better score.   | <div style="border: 1px solid black; background-color: yellow; height: 30px; width: 400px;"></div>   |  |       |                  |                          |
| <b>16</b> | Total number of potholes repaired<br>Number of pothole crew full-time equivalent (FTE)<br>Number of potholes repaired yearly per pothole crew FTE   | <table border="1" style="width: 100px; height: 30px; border-collapse: collapse;"> <tr><td style="background-color: yellow;"></td></tr> <tr><td style="background-color: yellow;"></td></tr> <tr><td style="background-color: white;"></td></tr> </table> |  |       |                  | potholes<br>FTE          |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |
| <b>17</b> | Average response time to complete pothole repairs   | <table border="1" style="width: 100px; height: 15px; border-collapse: collapse;"> <tr><td style="background-color: yellow;"></td></tr> </table>  |  | hours |                  |                          |
|           |   |  |  |       |                  |                          |
| <b>18</b> | Total expenditures for street maintenance, repairs, rehabilitation, and reconstruction (including preventative maintenance)<br>Total expenditures for preventative maintenance<br>Percent of total expenditures for street maintenance, repairs, rehabilitation, and reconstruction spent on preventative maintenance | <table border="1" style="width: 100px; height: 30px; border-collapse: collapse;"> <tr><td style="background-color: yellow;"></td></tr> <tr><td style="background-color: yellow;"></td></tr> <tr><td style="background-color: white;"></td></tr> </table> |  |       |                  | dollars<br>dollars       |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |
| <b>19</b> | Total number of paved lane miles of street preventative maintenance completed<br>Total number of paved lane miles of street preventative maintenance completed per number of paved lane miles   | <table border="1" style="width: 100px; height: 30px; border-collapse: collapse;"> <tr><td style="background-color: yellow;"></td></tr> <tr><td style="background-color: white;"></td></tr> </table>  |  |       | paved lane miles |                          |
|           |   |  |  |       |                  |                          |
|           |   |  |  |       |                  |                          |

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

**F. STREET TREES**

**Section F:** For all questions, please use Fiscal Year 2011 actual figures. A street tree is any tree growing within the public right-of-way. A mature tree is at least three years old.

- 20 Total expenditures for maintaining street trees [ ] dollars
- 20 Number of city maintained street trees [ ] trees  
 Number of city maintained street trees per square mile [ ]
- 21 Total street trees in jurisdiction [ ] trees  
 Percentage of all street trees maintained by the city [ ]
- 22 Number of city tree maintenance worker FTEs [ ] FTEs  
 Number of city maintained street trees per tree maintenance worker FTE [ ]
- 23 Number of city maintained street trees pruned [ ] trees  
 Percentage of city maintained street trees pruned per year [ ]
- 24 Who is responsible for maintenance of street trees in:
 

	City	Private Property Owners	Other
residential neighborhoods?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
commercial corridors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
downtown areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please check all that apply.

If you selected 'other', please explain here:

**G. CURB RAMPS**

**Section G:** For all questions, please use Fiscal Year 2011 actual figures. A curb ramp is a short ramp cutting through a curb or built up to it that is constructed to be an accessible route for people with disabilities.

- 25 Number of street corners [ ] corners  
 Number of street corners with curb ramps [ ] corners  
 Percent of all street corners with curb ramps [ ]

**Office of the Controller, City Services Auditor  
Street Maintenance Benchmarking Report FY 2011**

**H. GRAFFITI**

**Section H:** For all questions, please use Fiscal Year 2011 actual figures. If your city does not separate the graffiti abatement budget between public and private property, please enter figure and make note in the comment section at end of survey. When possible please do not include budget or information for graffiti abatement on public transportation, water and sewer utilities, and parks.

- 26** Budget for graffiti abatement on public property  dollars  
Graffiti abatement for public property expenditures per capita
- 27** Average response time for graffiti abatement requests on public property  hours
- 28** Your city's standard response time to graffiti removal requests  hours
- 29** Does your City use public funds to abate graffiti on private property?  
 Yes  
 No

**Additional Comments (Please refer to the specific question number when making comments)**