



Annual Report*

FISCAL YEAR 2017 / 2018

*Revised report. See Data Disclosure Statement on website.



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StreetTreeSF Overview

History & Background

In November 2016, San Francisco voters approved Proposition E, a ballot measure that transferred responsibility for the maintenance of the City’s street trees and tree-related sidewalk damage from property owners to San Francisco Public Works. The proposition established a dedicated annual fund (\$19 million) for street tree maintenance resulting in the creation of StreetTreeSF – Public Works Bureau of Urban Forestry’s program to professionally maintain and care for San Francisco’s 124,000-plus street trees. This document summarizes StreetTreeSF’s activities and accomplishments in its first year of operation, from July 2017 to June 2018.

On July 1, 2017, San Francisco Public Works officially received access to the \$19 million in funding and assumed maintenance responsibility for all the City’s street trees and tree-related sidewalk damage. Since that time, Public Works has been developing an efficient and cost-effective system to routinely inspect and prune the trees on a block-by-block basis. To support and operate the program, the Bureau of Urban Forestry began the process of hiring more staff and initiating contracts with private-sector tree care contractors to address the increased workload.

In FY 2017/18, StreetTreeSF’s crews and contractors pruned trees and repaired sidewalks throughout the City, with a focus on the “worst first.” These are street trees and sidewalks damaged by trees that pose a safety risk and are located near bus stops, schools and senior centers. Crews also concentrated efforts on emergency work, such as fallen limbs, pedestrian and visibility obstructions and trees damaged during storms. Details on the program’s FY 2017/18 activities and accomplishments are highlighted below and in the following pages.

Highlights from the Past Year

- Developed plan to address “worst first” street tree and sidewalk maintenance needs
- Pruned 13,159 street trees (6,026 by Public Works and 7,133 by contractors)¹
- Removed 1,938 unhealthy and structurally unsound trees²
- Planted 2,291 street trees in collaboration with community partners
- Completed 15,797 street tree inspection requests
- Repaired 214,063 square feet of tree-related sidewalk damage³
- Issued \$6.5 million in contracts to tree and concrete contractors
- Purchased \$3.5 million in new and replacement vehicles and equipment
- Hired 19 new Bureau of Urban Forestry staff
- Invested 813 hours in staff training and professional development



Approved by voters in 2016, Proposition E gave Public Works maintenance responsibility for the City’s street trees.

¹ Originally reported prune total: 13,204; originally reported Public Works and contractor breakdown: 6,384 and 6,820

² Originally reported removed total: 2,020

³ Originally reported repaired total: 9,679

- Broke ground on a new Public Works Arborist Operations Yard
- Developed and implemented StreetTreeSF outreach and communication strategy

Street Tree & Sidewalk Maintenance

StreetTreeSF drastically increased the scope of Public Works’ tree maintenance responsibilities. Prior to July 1, 2017, the Bureau of Urban Forestry was responsible for maintaining approximately 30,000 street trees, with private property owners and other government agencies responsible for the rest. The bureau is now responsible for the maintenance of all street trees throughout the City, many of which have been neglected or received inconsistent maintenance over the years. During StreetTreeSF’s initial start-up phase (2017-2021), the bureau is prioritizing the most urgent tree maintenance needs. Once baseline conditions have been improved, routine maintenance activities will begin including annual inspections of all street trees and pruning on a three- to five-year cycle, depending on the species of the tree.



Prior to StreetTreeSF, Public Works was responsible for maintaining 30,000 street trees and private property owners maintained 85,000 street trees.

Street Trees: The “Worst First”

In FY 2017/18, StreetTreeSF began addressing the City’s most problematic street trees or “worst first.” These are trees identified by the 2017 Street Tree Census that warrant priority pruning due to safety concerns, structural flaws or lack of clearance for overhead wires, traffic signs and signals, buildings and traffic flow. Areas of the City with a high density of priority tree removals and pruning needs are the focus of StreetTreeSF’s initial years.

StreetTreeSF Maintenance Goals (2017-2021)

Year 1 2017 - 18	Year 2 2018 -19	Year 3 2019 - 20	Year 4 2020 - 21
<ul style="list-style-type: none"> • Priority 1 tree pruning and removal • Priority 1 sidewalk repair around bus stops, schools and senior centers 	<ul style="list-style-type: none"> • Priority 1 tree pruning • Priority 1 sidewalk repair 	<ul style="list-style-type: none"> • Priority 1 tree pruning • Priority 1 sidewalk repair 	<ul style="list-style-type: none"> • Priority 2 tree pruning • Priority 2 and other sidewalk repairs with damage in the pedestrian right of way
Production projections (percentage of tree inventory / number of trees)			
19% / 23,750	20% / 25,000	24% / 30,000	37% / 46,250

To ensure resources are used most efficiently, all trees along blocks within these priority areas will be pruned as part of StreetTreeSF’s “block pruning” approach. Block pruning is the practice of pruning all trees on a City block instead of only a single tree as part of an emergency or service request. This approach leverages economies of scale and reduces per-tree maintenance costs by utilizing labor, vehicles, equipment and traffic control for a larger volume of trees. In its first year, StreetTreeSF pruned 13,159 street trees⁴ Of these, 7,133 trees were pruned by contractors and 6,026 trees by internal crews.⁵ The bureau’s crews and contractors also removed 1,938 dead, dying or hazardous trees.⁶

Sidewalk Repair

As part of StreetTreeSF, Public Works now also is responsible for repairing all street tree-related sidewalk damage. In FY 2017/18, Public Works cement crews and sidewalk contractors repaired 214,063 square feet of sidewalk damage.⁷ StreetTreeSF is targeting repairs in areas with vulnerable populations and a high volume of pedestrians, such as near hospitals, senior centers, schools, transit stops and neighborhood commercial corridors, as well as and Vision Zero high-injury corridors.

Depending on the scale of damage, repairs are performed by either concrete slicing or sidewalk removal and replacement. Concrete slicing utilizes specialized equipment to shave down a raised or buckled sidewalk to remove tree-related tripping hazards. This is a fast and cost-effective approach to performing smaller sidewalk repairs. Where damage is more severe, removal and replacement of an existing sidewalk is required. Basin expansions also are being carried out by cutting concrete away to make room for expanding tree roots or larger trunks.



StreetTreeSF contractors remove tree-related tripping hazards from sidewalks in many locations through concrete slicing – a cost effective repair method that does not require removal and replacement of sidewalk squares.

Data Tracking & Monitoring

StreetTreeSF is using existing technological systems to efficiently track and monitor maintenance activities by in-house crews and contractors. The Bureau of Urban Forestry currently uses the Computerized Maintenance Management System (CMMS) and Tree Database (TreeDB) to record and track data on street tree maintenance. In the future, the bureau is interested in evaluating and integrating new systems or technologies to better and more efficiently monitor tree care work.

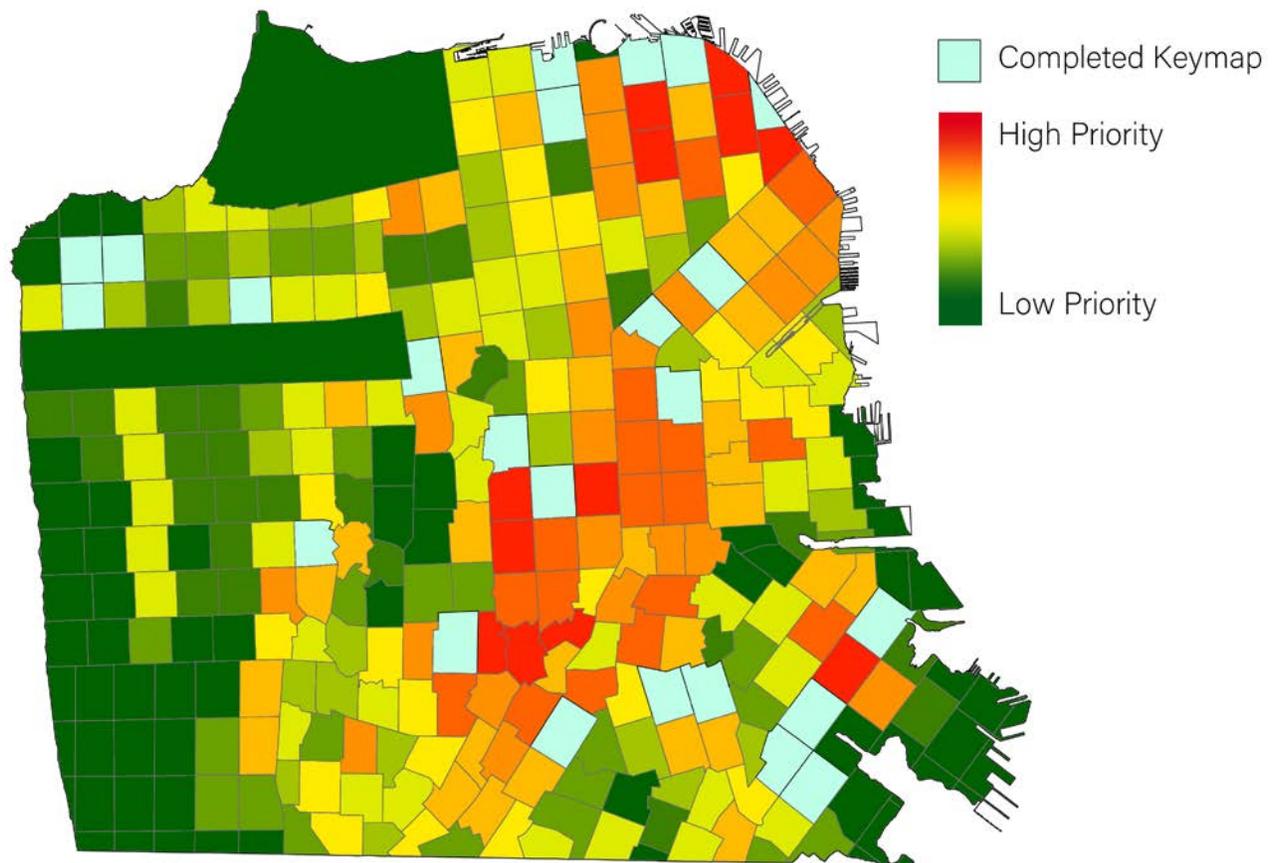
⁴ Originally reported prune total: 13,204

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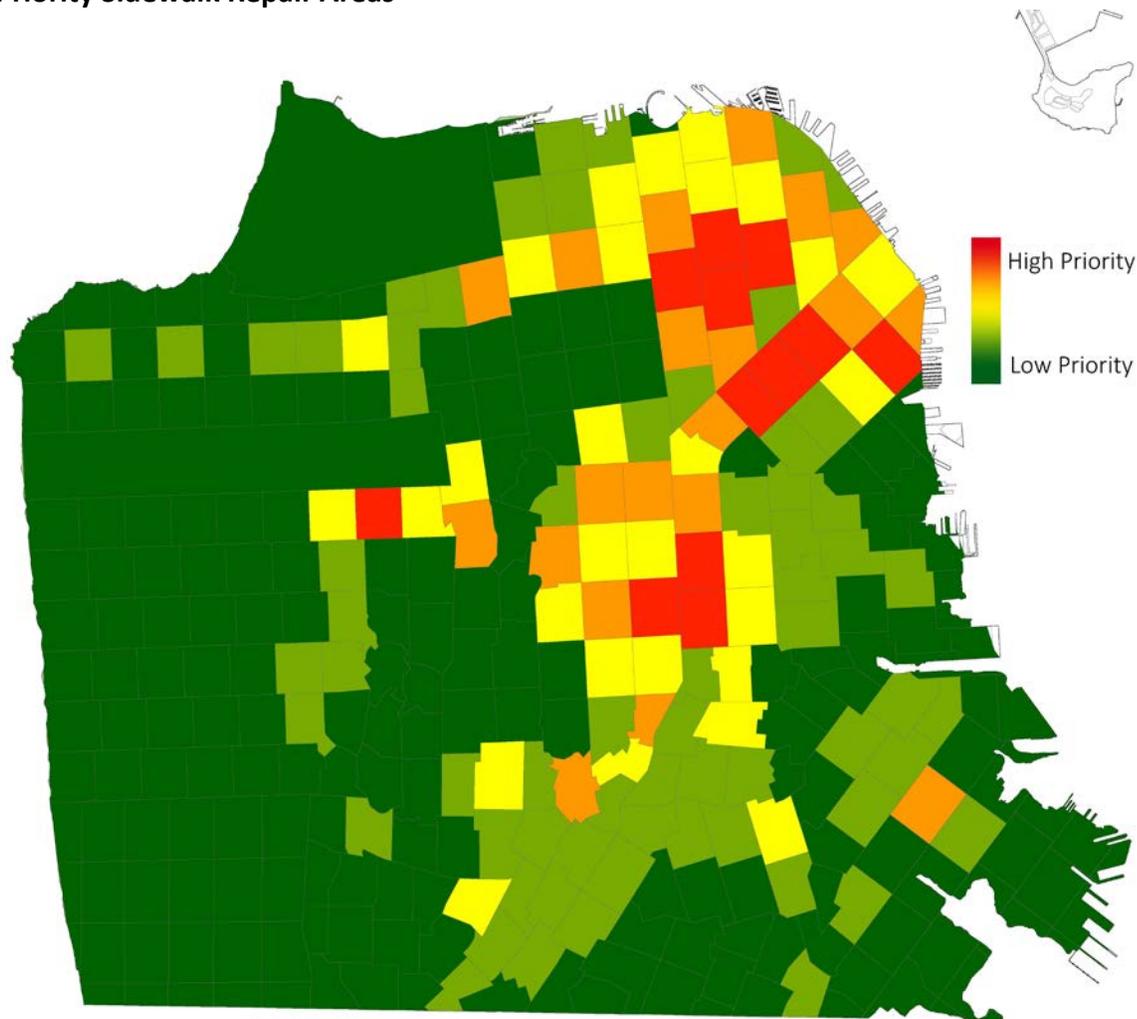
⁷ Originally reported repaired total: 9,679

Priority Street Tree Pruning Areas



San Francisco Public Works' Key Map system divides the City into smaller geographic units, or keymaps, to help plan and coordinate maintenance activities. Keymaps containing higher concentrations of trees with priority pruning needs – worst first – are being prioritized for maintenance. Crews also are pruning all street trees on blocks within these priority keymaps as part of StreetTreeSF's block pruning approach. Areas highlighted in light blue were completed during StreetTreeSF's first year. A total of 13,204 street trees were pruned in these keymaps in FY 2017/18.

Priority Sidewalk Repair Areas



StreetTreeSF is prioritizing repair of street tree-related sidewalk damage in areas located near neighborhood commercial corridors, schools, hospitals, senior centers and the Vision Zero's high-injury network as reflected on the map.

Street Tree Planting

The City’s Urban Forest Plan set a goal of growing San Francisco’s street tree population by 30,000, from 125,000 to 155,000, trees. This represents the estimated full stocking level of street tree capacity under current conditions.

In FY 2017/18, the Bureau of Urban Forestry, in collaboration with community partners, planted 2,291 street trees in San Francisco. Of those, 784 street trees were planted by the bureau and 1,507 trees were planted by the nonprofit Friends of the Urban Forest, with funding from Public Works and grants. Additional street trees were planted as part of streetscape capital projects and new development requirements. These plantings, however, represent only a small portion of the estimated 41,803 empty street tree planting sites in San Francisco.

To achieve the envisioned growth of the City’s urban forest, annual street tree planting must increase exponentially. A major challenge to achieving planting targets in San Francisco is the lack of funding for street tree planting and establishment, including the labor-intensive first three years of watering.

Under law, StreetTreeSF’s dedicated funding stream for tree maintenance cannot be used to fund the planting and establishment of new trees. Limited funding for street tree planting is available through capital projects, grants and community partnerships. The Bureau of Urban Forestry is actively working to identify additional funding sources that can be used to support increased street tree planting in San Francisco.

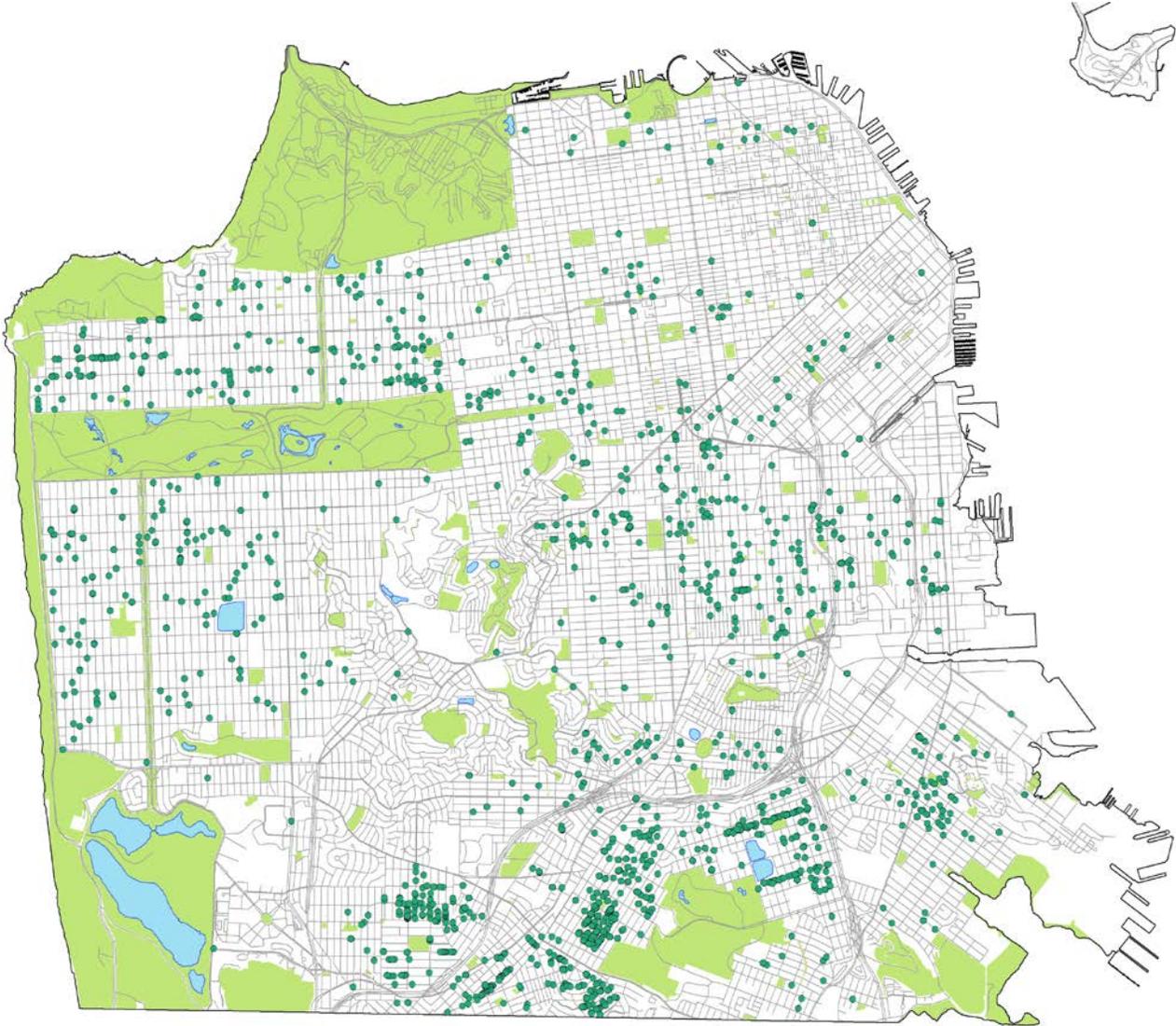


Five hundred street trees were planted in District 11 by Public Works and volunteers during a community event organized by Supervisor Ahsha Safai in August 2017.



*Source: Street Tree Census (2017) and FY 17/18 Public Works street tree removals.

Street Tree Planting Locations – FY 2017/18



In FY 2017/18, the Bureau of Urban Forestry, in collaboration with community partners, planted 2,291 street trees in San Francisco. The bureau planted 784 street trees and 1,507 trees were planted by the nonprofit Friends of the Urban Forest. Additional street trees were planted as part of streetscape capital projects and new development requirements (not displayed on map). An estimated 41,803 vacant street tree basins exist throughout the City. The bureau is actively working to identify funding sources for increased street tree planting in San Francisco.

Staffing

Staffing Plan & Hiring Update

To meet the increased workload and demands of StreetTreeSF, the Bureau of Urban Forestry has projected a total staffing need of 52 new employees over the next three to four years (see table). In FY 2017/18, the Bureau hired 19 of these positions, but continues to encounter challenges finding qualified Arborist Technician applicants due to a limited pool of candidates. In FY2018/19, the bureau will continue working to fill vacant positions with a focus on arborists, urban forestry inspectors, a database manager and assistant superintendent positions.

StreetTreeSF Staffing Plan (2017-2021)

Job Title	Class Number	Existing Positions	Prop E Funded Positions	Total
Arborist Tech	3434	13	14	27
Arborist Supervisor I	3436	3	3	6
General Laborer	7514	0	14	14
Principal Administrative Analyst	1824	0	1	1
Public Information Officer	1312	0	1	1
Urban Forestry Inspector	3435	5	2	7
Senior Clerk	1406	1	1	2
Cement Finisher Supervisor I	7227	0	1	1
Cement Mason	7311	0	4	4
Operating Engineer	7328	0	1	1
Truck Driver	7355	3	1	4
Manager IV	0932	0	1	1
Principal Business Analyst	1054	0	1	1
Management Assistant	1842	0	1	0
Apprentice Arborist Tech	3408	3	8	11
Clerk	1404	0	1	1
TOTAL		28	55	83

Training & Staff Development

In FY 2017/18, the bureau invested 813 hours in staff training to ensure safe operations and delivery of high quality service. All staff are required to complete at least 10 hours of professional development training annually. Trainings completed by bureau staff include:

- Line Clearance Arborist Certification (Arborists)
- Cone Delineation / Traffic Control Techniques (Arborists, Cement, Laborers)
- Defensive Driving (All)
- Safety / Code of Safe Practice (All)
- Stump Grinding (Arborists)
- City Pruning Standards (Arborists)

Equipment, Vehicles & Facilities

To accommodate the increased workload and staffing, the Bureau of Urban Forestry is utilizing StreetTreeSF’s funding to purchase equipment and vehicles, as well as to develop a new facility for arborists.

Equipment & Vehicles

In FY 2017/18, the bureau purchased 27 new and replacement vehicles and other equipment, valued at approximately \$3.5 million. Over the next three years, the bureau estimates the need for 19 new vehicles and pieces of equipment, including an expanded vehicle fleet (aerial lift bucket trucks, water truck, mini-dump and utility trucks) and equipment inventory (chippers, stump grinders, backhoe loader and compressor).

New Equipment & Vehicle Needs (2017-2021)

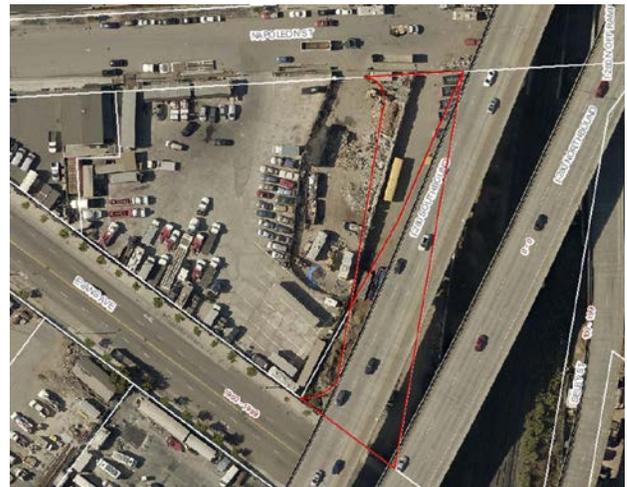
Item	Quantity
Utility Truck	6
Mini Dump Truck	2
Water Truck	2
Aerial Lift Bucket Truck	2
Chipper Truck	1
Chipper	2
Stump Grinder	2
Backhoe Loader	1
Compressor	1
TOTAL	19

Arborist Operations Yard

A major accomplishment in FY 2017/18 was the development of a new facility for the Bureau of Urban Forestry. The Arborist Operations Yard is located on a 28,000-square-foot site at 1920 Evans Avenue owned by Caltrans. The Department of Real Estate and Public Works negotiated a lease agreement with the property owners and are completing various site improvements, including installation of perimeter fencing, office trailers and sewer/power connections. Arborists are expected to move from the current Public Works Yard at 2323 Cesar Chavez Street to the new facility by summer 2019.

Key elements of the facility include:

- Office trailers
- Utility infrastructure (water, sewer, electricity, fiber optics)
- Parking and maneuverability for 48 vehicles
- Storage containers for tools and equipment
- Security (gates, fencing, lighting)
- Phone/computer network
- Bathrooms and showers
- Lockers for staff



Public Works broke ground on a new Arborist Operations Yard at 1920 Evans Street (red parcel) that will house StreetTreeSF’s growing staff and fleet of vehicles.

Contractor Summary

StreetTreeSF utilizes both in-house staff and contractors to perform tree pruning and sidewalk repair in an effort to deliver the most cost-effective maintenance program. In FY 2017/18, the Bureau of Urban Forestry established \$16.5 million in master as-needed contracting capacity and \$4.2 million in general as-needed contracting capacity. Public Works issued \$6.5 million in contracts to seven tree contractors and two concrete contractors. Contractors pruned a total of 6,820 street trees. This number is expected to increase in future years as pruning of more labor intensive, worst first, trees, is completed.

Urban Forest Inspection

In FY 2017/18, Bureau Urban Forestry Inspectors completed 15,797 public and internal inspection requests. Inspectors prioritized inspection of keymap areas prior to contractor maintenance. Additional activities performed include responding to public service requests, assessing tree and sidewalk conditions and reviewing development and tree removal permits.

Communications & Outreach

Public information and outreach is essential to the success of StreetTreeSF. Creating awareness of the program, its priorities and pruning schedule were the focus of first-year outreach activities. Accomplishments in FY 2017/18 include:

- Hiring of a Public Information Officer to lead StreetTreeSF communications and outreach
- Updates to the Bureau of Urban Forestry's website, including program FAQs and an interactive StreetTreeSF pruning schedule map
- Development and distribution of multilingual outreach materials (signage, brochures and door hangers) to inform the public of tree maintenance activities
- Briefings for tree crew staff on information and resources to share with the public when approached in the field
- Updates to 311 mobile and web app to add information about the program and citywide pruning schedule
- Creation of a Street Tree Care class and "Don't Prune" campaign to educate citation recipients of proper tree care and the role of StreetTreeSF
- Briefings to the Board of Supervisors and Urban Forestry Council on StreetTreeSF's goals and progress

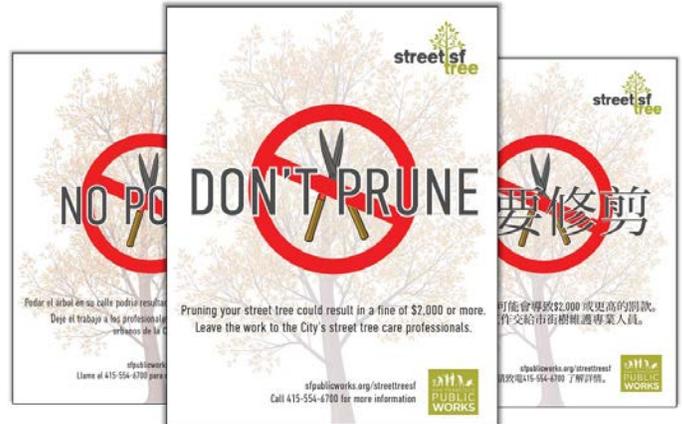
StreetTreeSF Public Information (FY 2017/18)

StreetTreeSF Brochure



The StreetTreeSF brochure provides general information to the public including answers to frequently asked questions and a link to the citywide pruning map and schedule.

Don't Prune Campaign



The "Don't Prune" Campaign was created to discourage improper pruning and inform the public that Public Works is the primary maintenance provider for the City's street trees.

StreetTreeSF Pruning Schedule Map



The interactive StreetTreeSF pruning schedule map was developed and made available on the Public Works website. <https://www.sfpublicworks.org>. Property owners can find estimated pruning dates for their particular street tree(s) by entering their address directly on the map.

Informational Signage



Informational signage is used to inform the public of tree maintenance work occurring throughout the City. Door hangers are distributed in neighborhoods where pruning will soon take place. Contractors and Public Works crews also display signage in the field while working.

Trees at Schools (San Francisco Unified School District)

StreetTreeSF’s annual funding includes up to \$500,000 for tree maintenance on SFUSD properties. The Bureau of Urban Forestry works with SFUSD to program these funds to address the school district’s tree-related priorities. In FY 2017/18, funding supported contracted maintenance work at Rooftop Elementary School, including the pruning of 93 trees and removal of 20 unsafe trees.



StreetTreeSF’s funding includes up to \$500,000 per year for tree maintenance at SFUSD schools. In FY17/18, tree pruning and removal work was performed at Rooftop Elementary School (443 Burnett Avenue).

Financial Summary

In FY 2017/18, StreetTreeSF’s annual budget totaled \$19 million. The full amount was programmed and encumbered with the largest amounts being dedicated to Bureau of Urban Forestry staff and tree maintenance contractors. Actual expenditures within the fiscal year amounted to \$15.3 million, as shown in the accompanying table. This reflects \$3.7 million in contracts and vehicles/equipment purchases that were processed but expended outside of the fiscal year.

FY 2017/18 Budget & Expenditures

Expense	Amount Budgeted	Actuals
Staff	\$7,600,000	\$7,400,000
Contractors	\$7,700,000	\$6,500,000
Equipment & Vehicles	\$3,700,000	\$1,400,000
Total	\$19,000,000	\$15,300,000