



AGENDA REPORT

TO: Steven Falk
Interim City Administrator

FROM: G. Harold Duffey
Director, Oakland Public Works

SUBJECT: Street Sweeping Program
Informational Report

DATE: March 27, 2023

City Administrator Approval *SSJ AM*

Date: Apr 14, 2023

RECOMMENDATION

Staff Recommends That The City Council Receive An Informational Report Regarding An Update On The City Of Oakland's Street Sweeping Program (SSP).

EXECUTIVE SUMMARY

This report provides an overview of the City of Oakland (City) Street Sweeping Program (SSP), including an outline of program structure, challenges, and efforts underway to improve the efficacy and sustainability of the SSP as well as to advance the goal of providing equitable service to all Oakland residents. The SSP's mission is to maintain clean streets throughout the City to promote clean and safe neighborhoods and protect waterways from environmental pollutants.

BACKGROUND / LEGISLATIVE HISTORY

The SSP is housed within the Keep Oakland Clean and Beautiful Division of the Bureau of Environment in Oakland Public Works (OPW), and is dedicated to maintaining, improving, and preserving Oakland's infrastructure and environment for residents, businesses, and visitors by routinely providing cleanly swept streets. The SSP also helps to protect waterways and wildlife by performing trash containment activities to reduce the amount of waste that flows into the storm drain system, creeks, lakes, and ultimately into the San Francisco Bay. Although not a specifically mandated activity, street sweeping is one of the primary ways that the City achieves compliance with trash reduction mandates in its National Pollution Discharge Elimination System (NPDES) Municipal Regional Stormwater Permit (MRP).

To maximize the efficacy of the SSP, vehicle owners are required to observe the posted parking restrictions and comply by moving their vehicles at the appropriate times to ensure street sweeping equipment can reach all parts of the street. The Oakland Department of Transportation (OakDOT) is responsible for enforcing the posted parking restrictions. Street

sweepers frequently encounter other obstructions that impinge on the ability to fully sweep a street, including garbage cans, low-hanging tree limbs or downed trees, large waste items, abandoned automobiles, and other obstructions.

The SSP sweeps an average of six hundred and thirty-eight (638) routes each month. There are fifty-one (51) street sweeping maps that include ninety-six (96) controlled street sweeping routes, which are serviced by day and nightshift operations. The SSP dayshift operation sweeps the majority of residential areas five days a week from 9:00 am to 12:00 noon and from 12:30 pm to 3:30 pm. Mixed use areas such as commercial/industrial or commercial/residential are swept six days a week from 12:00 am to 3:00 am and from 3:00 am to 6:00 am, during nightshift operations. A map of Street Sweeping routes can be found on the City of Oakland website at <https://arcg.is/Hizrj>.

The SSP is budgeted for a total of twenty (20) Street Sweeper Operator (SSO) positions. Of those budgeted positions thirteen (13) are allocated to the dayshift and seven (7) SSO are allocated to the nightshift. There are three (3) vacancies each on both the dayshift and the nightshift resulting in ten (10) filled dayshift positions and four (4) filled nightshift positions. OPW is awaiting recruitment of the SSO positions, however, as a cost savings measure considering projected shortfalls, KOCB has proposed freezing 2.00 positions in the FY 2023-25 Biennial Budget.

A percentage of street sweeping routes are canceled each month due to staffing, equipment, or weather issues. Typically, shortage of available staff is the primary reason for the cancellation of street sweeping routes. To help alleviate this issue, this spring the SSP offered an SSO Training Course to existing City employees seeking an opportunity to become a SSO. Certifying additional operators creates more personnel who can act in an operator position when there is an illness or temporary vacancy and creates a pathway to hire from within the organization when there is a permanent vacancy. The unfreezing and filling of SSO vacancies is critical to ensuring full service of street sweeping operations.

The dayshift sweeps an average of three hundred eight-four (384) routes each month, and the nightshift sweeps an average of two hundred fifty-four (254) routes each month. Below is a month-by-month breakdown of the percentage of missed routes in 2022:

- January 2022 – 9%
- February 2022 – 10%
- March 2022 – 11%
- April 2022– No Data
- May 2022 – 12%
- June 2022 – No Data
- July 2022 – 12%
- August 2022 – 5%
- September 2022 – 5%
- October 2022 – 5%
- November 2022 – 12%
- December 2022 – 12%

When the SSP determines that a route will be missed due to any of the aforementioned issues, OPW staff immediately contact OakDOT Parking Enforcement to report the street sweeping route interruption in an effort to avoid, to the maximum extent possible, parking citations issued for vehicles blocking the sweeping route. Staff from OPW and OakDOT are working together to improve coordination and reduce the number of citations issued.

The SSP operates eighteen (18) units of sweeper equipment, including thirteen (13) large Broom Bear sweepers and four (4) medium Tympeco sweepers, and recently the SSP also added a mini-sweeper to its fleet that can access and clean protected bike lane areas that were previously inaccessible to heavy equipment. Staff is working on efficient deployment of this unit to these areas.

Monthly maintenance costs are based on the type of sweeper and usage, as shown below:

- 5 Large Sweepers, Maintenance Class 7771 = \$22,677.19 monthly, for a total of \$113,385.95 per month
- 8 Large Sweepers, Maintenance Class 7771n = \$22,424.29 monthly, for a total of \$179,394.32 per month
- 4 Medium Size Sweeper, Maintenance Class 7772n = \$17,538.12 monthly, for a total of \$70,152.48 per month
- 1 Small sidewalk Sweeper, Maintenance Class 9413 = \$418.00 month, for a total of \$5016.00 per year

The total annual maintenance cost for the fleet of sweepers is \$4,360,209.00. Due to continual use of the sweepers and the large volume of debris swept, the average lifespan of a sweeper truck is 5 to 7 years. The large sweepers cost approximately \$500,000; medium sweepers, \$350,000; and small sweepers, \$130,000 - \$200,000. When purchasing replacement sweepers, the OPW Equipment Services Division prioritizes upgraded models that are more efficient and effective than the previous generation. Beginning in 2024, the cost to purchase a new large sweeper will increase by approximately \$300,000 due to new regulations from the California Air Resource Board that require State and local governments to purchase zero-emission vehicles amounting to 50% of all additions to their fleets. This will raise the the cost of a new large sweeper to approximately \$800,000.

ANALYSIS AND POLICY ALTERNATIVES

As described below, there are multiple initiatives underway to improve the efficiency and efficacy of the street sweeping program.

Implementation of Street Sweeping ArcGIS (Geographic Information System) HUB initiative and Public Notifications – Staff are preparing to roll-out a new automated street sweeping ArcGIS HUB initiative that will allow residents to sign-up to receive notification if their street's sweeping route is canceled or interrupted due to staffing shortages, equipment issues, weather, obstructions, or other issues, relieving residents from having to move their vehicles. Additionally, the Street Sweeping ArcGIS HUB will be equipped to send notifications to residents in advance of their upcoming street sweeping day as a reminder to move vehicles and

avoid being ticketed. Residents are already able to view street sweeping routes and schedules through an online map as mentioned above, however, this new interactive tool will increase public visibility and engagement with the street sweeping program.

Improve Coordination Between Street Sweeping and Parking Enforcement – Staff routinely receive complaints from residents who were ticketed for failure to move their vehicle out of the path of a street sweeping route, even if the route is cancelled and does not get swept. OPW and OakDOT staff are working to improve coordination between the Street Sweeping and Parking Enforcement Programs to reduce ticketing when a street does not get swept. The implementation of the Street Sweeping ArcGIS HUB will also help strengthen coordination and communication between these programs for the benefit of residents.

Increase the Pollutant Removal Efficacy Without Additional Resources - Staff are looking at high trash volume areas to determine if routes can be adjusted to sweep those areas more frequently and reduce sweeping where trash volumes are not as high. This adjustment is consistent with the SSP's equity goals, as it would increase service in neighborhoods most impacted by trash, which typically include frontline communities of color and commercial areas.

Increase Pollutant Reduction Credit from Street Sweeping – As previously mentioned, street sweeping is one of the primary activities the City uses to meet trash reduction mandates in its MRP stormwater discharge permit. The MRP also offers additional pollutant reduction credit for enhanced street sweeping in industrial areas where heavy metals such as mercury and copper, and polychlorinated biphenyls (PCBs) have been found to be present in higher concentrations. Staff continue to explore opportunities to receive additional regulatory credit in high volume pollutant areas.

FISCAL IMPACT

This item is for informational purposes only and does not have a direct fiscal impact or cost.

The Street Sweeping Program has an annual labor budget of \$4,853,895.00 for 20.00 full-time equivalent (FTE) staff, and an annual Operations and Maintenance budget of \$163,454.46.

PUBLIC OUTREACH / INTEREST

This item is for informational purposes, therefore no outreach was deemed necessary for the proposed policy action beyond the standard City Council agenda noticing procedures.

COORDINATION

This report has been prepared in coordination between the OPW divisions of Keep Oakland Clean and Beautiful and Equipment Services, and with OakDOT, Parking Enforcement Division.

SUSTAINABLE OPPORTUNITIES

Economic: Dirty, unkempt streets due to insufficient or inconsistent street sweeping may adversely impact Oakland's economy if Oaklanders and visitors limit or stop patronizing local businesses because the surrounding area feels unpleasant or unsafe for passage. Clean, safe streets are vital to Oakland businesses.

Environmental: Street sweeping is a trash and contaminant reduction activity that protects Oakland's waterways. In addition to removing large debris such as litter, sweepers also remove smaller pollutants such as heavy metals and PCBs that attach to sediments in the roadway, all of which can flow into waterways and the San Francisco Bay if not removed. Street Sweeping is one of the primary ways the City meets the trash reduction mandates in its stormwater discharge permit. Providing clean streets also aids in creating safe and healthy environments for the city's residents and wildlife.

Race & Equity: OPW staff continually strive to avoid reductions in street sweeping service that would be felt disproportionately by low-income communities of color. As mentioned above, staff are considering updates and changes that restructure the SSP to increase service to these areas where possible, without requesting additional resources. Additionally, OPW and OakDOT staff continue to evaluate programmatic and/or policy changes that can reduce citations when service is not provided, to reduce the economic burden of citations.

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends that the City Council receive an Informational Report regarding an update on the City of Oakland's Street Sweeping Program (SSP).

For questions regarding this report, please contact John Hillmon, Operations Manager, Keep Oakland Clean and Beautiful Division, Bureau of Environment at jhillmon@oaklandca.gov.

Respectfully submitted,



G. HAROLD DUFFEY
Director, Oakland Public Works

Prepared by:
Kristin Hathaway, Assistant Director
Bureau of Environment