

## Performance Audit of the Transportation and Stormwater Department's Street Sweeping Section

*To Improve Efficiency of Operations, the Street Sweeping Section Should Use Data to Effectively Monitor and Make Timely Adjustments to Route Priorities and Sweeping Frequencies*

### Why OCA Did This Study

Street sweeping cleans our communities and strategically targets trash and pollution. It also helps the City comply with water quality regulations. Keeping stormwater runoff free from harmful pollutants and from reaching our waterways protects wildlife populations and preserves water quality. The City's Transportation and Storm Water Department (TSWD) Street Sweeping Section (Street Sweeping) sweeps over 2,700 miles (215 routes) of improved streets. In FY19, it removed over 25,000 cubic yards of debris and other pollutants in that can be harmful to wildlife and water quality. The overall objective of this audit was to determine whether Street Sweeping has processes in place, follows industry best practices or other established criteria, to evaluate and prioritize street sweeping routes and schedules.

### What OCA Found

**Finding 1:** Although Street Sweeping has a comprehensive data collection process, it does not use data to analyze operations. Without data evaluation, Street Sweeping's ability to track and monitor the effectiveness of operations and make process improvements is limited. The inability to make timely adjustments to components such as sweeping priorities, frequencies, and posted routes limits Street Sweeping's potential to reduce, to the greatest extent possible, the amount of pollutants entering the City's waterways.

**Finding 2:** Without data analysis, we found that some routes with relatively high amounts of debris are swept less frequently than optimal, while at the same time, other routes with relatively low amounts of debris are swept at a higher than optimal frequency. This likely reduces the total amount of street sweeping debris collected. We also found that route priorities and sweeping frequencies should align with debris volume criteria and watershed pollutant priorities in accordance with best practices. Moreover, Street Sweeping should consider selectively adding posted routes to maximize the effectiveness of these routes. Lastly, Street Sweeping has not updated its street sweeping program in five years.

**Finding 3:** We found that Street Sweeping's current key performance indicator (KPI)—annual miles swept—does not reflect the effectiveness at achieving its purpose—removing debris and sediment from City's streets. Additionally, Street Sweeping should adjust its KPI goal to a more realistic target because it has not met this goal for the last four years. Furthermore, Street Sweeping would benefit from additional annual performance measures, such as total debris collected, and percent of miles completed. These performance measures reinforce best practices: concentrating on routes with the highest levels of debris.



Source: Transportation and Stormwater Department

### What OCA Recommends

We made a total of 4 recommendations to address the issues outlined in the report. Specifically, we recommend that TSWD:

- Develop and generate an annual report in EAM to capture data necessary to analyze operations.
- Develop and document a process to review route frequencies to determine if any route sweeping priorities need adjusting.
- Perform a comprehensive reassessment of all route frequencies, priorities, posting designations, staffing for shifts, sweeper types, and debris removal to ensure that these elements correlate with one another and that they account for debris levels and watershed areas. Incorporate results from this analysis into the municipal permit cycle.
- Conduct a trend analysis with each subsequent permit cycle or as frequently as possible.
- Request budget approval to selectively add posted routes and make any other improvements.
- Adjust its key performance indicator to exclude special sweeps and account for typical operational limitations.
- Add two KPIs—percent of miles completed, and total debris collected annually.

TSWD agreed with all 4 recommendations.

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