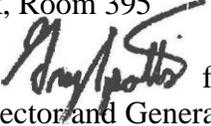


CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: March 1, 2022

TO: Honorable Members of the Los Angeles City Council
c/o City Clerk, Room 395

FROM: Keith Mozee  for
Executive Director and General Manager
Bureau of Street Services (StreetsLA)

SUBJECT: CF 21-1130 MOTOR SWEEPING OF THE ON-STREET BIKE LANE NETWORK

The Los Angeles City Council (Council) instructed the Bureau of Street Services (StreetsLA) to report on motor sweeping of the on-street bike lane network and the emerging opportunity to perform such sweeping with zero-emission or reduced emission equipment (CF 21-1130).

REDUCED STAFFING FOR CLEANING STREETS

Over the past 13 fiscal years (FY), the number of authorized positions within StreetsLA tasked with maintaining a clean and nuisance-free streetscape has been reduced from 308 positions in FY 2008-09 to 98 positions in FY 2021-22. The core Streets Sweeping program has been reduced from 263 regular positions in FY 2008-09 to just 91 positions in FY 2021-22, with another 7 resolution positions devoted to specialty cleaning of on-street bikeways and the Great Streets corridors. The Street Sweeping program was reduced significantly during the pandemic due to 18 employees leaving city service via the Separation Incentive Program. As a result of the reduced staffing, the sweeping frequency of posted routes was reduced from weekly to biweekly in early 2021.

The companion Weed Abatement program, which had 45 positions in FY 2008-09, was eliminated in the FY 2017-18 budget. In addition to inspecting and cleaning vacant lots, the weed abatement program provided as-needed mechanized cleaning of accumulated debris in streets and alleys, serving as surge capacity to meet community needs.

SPECIALTY RESOURCES FOR CLEANING THE ON STREET BIKEWAY NETWORK

In FY 2018-19, six new resolution positions were established to focus attention on cleaning the on-street bikeway network: two supervisors, two motor sweeper operators, and two truck drivers to haul away the collected debris. The onset of this small crew created the opportunity for continuous proactive inspection of the bike lanes for the first time. This inspection process results in proactive street cleaning and pothole repair across the bikeway network, improving cleanliness and safety for cyclists. According to the Los Angeles Department of Transportation (LADOT), there are currently 1,120 lane miles of on-street bikeway citywide, which includes striped bikeways, protected bikeways, sharrows, and bike routes denoted by signage rather than pavement markings. LADOT's current workplan anticipates installing an average of 10 lane miles of protected bikeways annually.

CURRENT BIKEWAY CLEANING PROGRAM:

The current sweeping frequency of the on-street bikeway network is listed below for each category of bikeway:

Downtown LA Protected Bikeway Network:	Weekly using Electric Mini-Sweeper
Protected Bikeways Outside of Downtown:	Every 4-6 weeks using Propane Mini-Sweepers
Non-Protected Bikeways Citywide:	Every 4-6 weeks using full size CNG Sweepers

The downtown program demonstrates StreetsLA’s commitment to sustainability, providing frequent cleaning of zero-emissions transportation facilities with a zero-emissions battery-electric mini-sweeper. At just four feet wide, the Dulevo D2 is the only sweeper operated by StreetsLA that can fit in the narrow gaps between the curb face and the concrete bus boarding platforms along Los Angeles Street and Figueroa Boulevard. (StreetsLA’s other two minesweepers are powered by propane and are five feet wide, which enables them to fit into all the bollard-protected bikeways outside of downtown.)

Staffed with only six employees and three mini-sweepers, the On-Street Bikeway Network Cleaning Program is vulnerable to lapse in service due to equipment downtime or staff absences. Furthermore, the current program does not provide sufficient cleaning frequency outside of downtown to ensure bikeways that are free of litter, leaves, dirt and debris.

OPTIMUM BIKEWAY CLEANING PROGRAM:

An optimum on-street bikeway cleaning program would be staffed and equipped to provide weekly sweeping of the entire on-street bikeway network, with the resources to continue weekly service throughout staff absences or equipment downtime. In equipping bikeway staff, StreetsLA would aspire to utilize zero-emissions equipment wherever possible and utilize reduced-emissions equipment when a battery-electric model is not yet available in the market.

The proposed staffing for an on-street bikeway cleaning program would be as follows, providing dedicated staff to each of the four geographic areas of the city plus a downtown unit:

East Valley: 1 supervisor, 2 motor sweeper operators, 2 truck operators
West Valley: 1 supervisor, 2 motor sweeper operators, 2 truck operators
North Central: 1 supervisor, 2 motor sweeper operators, 2 truck operators
Bay Harbor: 1 supervisor, 2 motor sweeper operators, 2 truck operators
Downtown LA: 1 supervisor, 2 motor sweeper operators, 2 truck operators

The total staffing would be 25 positions, representing an increase of 19 positions beyond the 6 positions currently provided for on-street bikeway cleaning:

Qty	Class Code	Classification	Comments	Cost per Position	Total Additional Cost
5	4152-1	Street Services Supervisor I	Increased by 3	\$104,260	\$312,780
10	3583-0	Truck Operator	Increased by 8	\$68,491	\$547,928
10	3585-0	Motor Sweeper Operator	Increased by 8	\$81,864	\$654,912
25		<i>Total</i>	<i>Increased by 19</i>		<i>\$1,515,620</i>

StreetsLA’s current fleet of full-size CNG motor sweepers would be sufficient to support this optimized program for sweeping the non-protected on-street bikeway network. To provide additional capacity for sweeping the protected bikeway network, approximately \$1M in equipment funding would be needed for the purchase of three additional Dulevo electric mini-sweepers and the necessary accessories.

THE EMERGING OPPORTUNITY OF ZERO-EMISSIONS EQUIPMENT:

StreetsLA recently took delivery of the first two units of the new full size Elgin Hybrid Broom Bear Sweeper, which uses a CNG engine to transport the sweeper and a battery to power the cleaning functions, thus reducing carbon emissions and air pollution emissions by 25-30%. StreetsLA will evaluate the performance of these two initial hybrid units throughout 2022, with the aspiration of ordering more of these hybrid units in early 2023. This innovative product was developed at the City of Los Angeles’ request and is the result of years of development and testing of prototypes on Los Angeles streets, in collaboration with General Services Fleet Division, Elgin Sweeper and the Haaker dealership.

An enhanced on-street bikeway cleaning program could enable StreetsLA to pilot, rent or purchase reduced emissions or zero emissions full size sweepers and mini-sweepers as more products enter the market. Enhancing the bikeway cleaning program would also present opportunities for StreetsLA to pilot, rent, and/or purchase various battery-electric support vehicles including pickup trucks, medium duty trucks, and electric motorcycles or electric-assist bicycles which could be used to inspect the pavement condition and cleanliness of the bikeway network on bicycle rather than the traditional windshield inspect via pickup truck.

Within five years of the launch of the enhanced program, it may be possible for the entire on-street bikeway inspection and cleaning program to be equipped with zero emissions vehicles.

IMPROVING PAVEMENT CONDITION:

In July of 2018, StreetsLA staff inspected the pavement condition of the entire on-street bikeway network and identified 148 lane miles of asphalt bikeways in poor condition, and an additional 470 lane miles in fair condition. These findings were transmitted to Council in a joint StreetsLA and LADOT report under CF 17-1142-S1 and 15-0719-S17. Although StreetsLA has not been provided with dedicated staff positions to resurface asphalt bikeways, one-time funding of \$4M was provided in the FY 21-22 budget for bikeway resurfacing using existing staff on weekend overtime. From July 2021 through January 2022, approximately 10 lane miles of asphalt bikeway has been resurfaced using these funds, with an additional 15-20 lane miles expected to be completed by June 2022. In order to substantially improve the pavement quality of the on-street bikeway network, StreetsLA would need two new resurfacing crews of ten persons each dedicated to bikeway resurfacing.

If you have any questions or concerns please contact Assistant Director Greg Spotts at (213) 847-3333.

KM/GS