



Legislation Details (With Text)

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ENGINEERING AND MAINTENANCE ACTIVITIES (CITY COUNCIL)
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Report to Mayor and City Council

Tuesday, April 05, 2022

Discussion

SUBJECT:

**CONSIDER A PRESENTATION BY DIRECTOR OF PUBLIC WORKS ON PUBLIC
WORKS ENGINEERING AND MAINTENANCE ACTIVITIES (CITY COUNCIL)**

I. SUMMARY

At the request of the City Council, this staff report provides an update on the engineering and maintenance activities in Public Works over the last year and some of the scheduled activities in the next 12-24 months. This report is a comprehensive summary of the ambitious efforts and dedication of Public Works staff to improving the quality of the City's assets, including streets, sidewalks, and trees. The Public Works Department has been focused on numerous activities over the last year and they include the following major areas:

- Streets
 - Crack sealing
 - Slurry sealing
 - Grind & overlay

- Bike lanes-protected
 - Tree strategy and planting
 - Incorporating stormwater in designs and construction
- Medians (urban greening)
 - Drought tolerant plants
 - Updated medians throughout the city
 - Recycled Water (RW) for irrigation
- Parks
 - ADA compliant sidewalks
 - Irrigation improvements
 - Drought tolerant landscapes
 - Lighting improvements
- Work with IT on broadband options
- Wayfinding & Signage
 - Key locations (City hall, Community center, parks, CSUDH, Porsche Experience, South Bay Pavilion, etc.)
 - Bike signage
 - City monument signage
 - Park signs
- Facilities & Resiliency
 - HVAC upgrades at all facilities
 - Improve all city facilities' water and energy consumption
 - Review broadband and other safety components required for emergencies (Cooling centers, etc.)
 - Carpet upgrades at City Hall
 - Corp Yard cubicle installation of electrical, phone and internet

- Stormwater (SW) compliance
 - Maintaining required inspection schedule
 - SW projects for watershed compliance
 - Green streets (urban greening)
 - Complete streets
 - Low Intensity Development (LID) for developments (keeping track of flows)

In addition to the areas listed above, Public Works has been partnering with outside regional agencies. This work is beyond what is on our CIP and focused further on using industry connections to benefit the City. Public Works has and continues to increase the quantity of infrastructure projects and productivity through partnering with external resources to create partnerships to benefit the residents of Carson. We work collaboratively to improve Carson and the quality of life and environment of our residents. Below lists a few examples:

- LACDPW. Working together on Dominguez Channel rehabilitation and restoration; submitted \$30M WRDA grant and in the process of submitting a \$10M grant through LA Office of the Army Corps of Engineers
- Caltrans. 91 Freeway redesign; partnering on re-design to lessen air pollution and add aesthetics to the 91 re-design in Carson for Carson residents
- California Public Utilities Commission (CPUC). Lomita Railroad Crossing safety design; selected for 100% reimbursement of up to \$16M. This will be in partnership with the City of LA
- Lomita Blvd. improvements. Working on a Federal Department of Transportation RAISE (successor to TIGER) grant for up to \$100M in partnership with the City of LA in 2023
- Metro ATP6. Carson Neighborhood Villages Bike Plan; working on a grant to improve biking in Carson AND traffic signals for City; submitting with Metro ATP6 grant team
- Metropolitan Water District. Working on improvements for Carson on the Pure water project at the LACSD water reclamation plant site

Other areas where maintenance has been leading include the following:

- Reconnecting Communities Grant
- Median renovations
- Foisia and Dominguez Park Renovations
- Bus & Bus Facilities Competitive Grants
- Corporate Yard energy efficiencies
- Parking covers with solar panels,

- Communications - antenna and broadband opportunities
- Carriage Crest Park bus storage and grounds storage, new construction

II. RECOMMENDATION

1. RECEIVE AND FILE

III. ALTERNATIVES

Take another action the City Council deems appropriate consistent with the requirements of the law.

IV. BACKGROUND

The Department of Public Works is charged with providing the community with a safe, clean, and healthy environment through the design, construction, operation, maintenance, and management of the vital municipal infrastructure system.

There are over 203 centerline miles of roadways of which 49.2 miles are arterials, 5.7 miles are secondary arterials, 18.1 miles are collectors, and 130.1 miles are residential streets. The 203 centerline miles equates to approximately 45.9 million square feet (s.f.) of roadway surface. Public Works is responsible for the repair and maintenance of these streets. Roads and pavements are one of the City's most valuable assets.

Right of Way Maintenance

The Right of Way Maintenance Division responsibilities include maintaining and repairing potholes in the streets, sidewalks, signs, and striping. They perform their regular maintenance and repair based on the available staff, equipment, and funds budgeted. There have always been numerous requests for repairs from the residents and motorists based on the existing conditions of streets and sidewalks. In particular, sidewalks which have been uplifted are a matter of concern. ROW has updated some of its 20+ year old equipment, which is increasing productivity, especially in concrete replacement (sidewalks).

Engineering

The City's Engineering Division is responsible for overseeing, managing, analyzing, planning, designing, and constructing major repairs and maintenance of the city's streets and bridges. This requires the engineering division to understand the needs and requirements of the streets and bridges and to determine a schedule for repair and upgrades. The maintenance and repair strategies include appropriate treatment such as filling cracks (crack sealing), surface slurry seals and overlays.

The engineering division participates in numerous local and regional committees and applies for major funding for repairs, upgrades, and maintenance. Funding sources include:

- South Bay COG
- State and local earmarks
- Metro/ MTA

Every 3-4 years, an analysis on the condition of the pavement is scheduled and a score is provided by street as well as the overall condition. This analysis is called a Pavement Management Program (PMP). The PMP has been updated and will be presented in May. This report will be the roadmap for planning which streets are in critical need of repair and will present a preventive maintenance schedule with corresponding costs to improve and maintain the City's overall roadway system network.

There are several additional grants and applications for street improvements that the City is applying for and, if successful, will allow additional miles to be added.

The current funding for the Annual Crack and Slurry Sealing program is \$1,000,000 and for the Annual Grind and Overlay program is \$1,600,000. The amounts vary each year and are from the following:

- State - California's Gas Tax (SB 1)
- Regional (Metro's Measure M and Measure R).

Due to cost increases on materials and labor, currently the City will only be able to Crack and Slurry Seal a maximum of 1,500,000 square feet (8.9 miles) per year, and Grind and Overlay only 528,000 square feet (1.25 miles of arterial street) per year. However, with the additional ARPA funds, engineering will be able to determine where is the best use of the funds for street improvements.

Tree Maintenance

The Landscape Maintenance activities are currently focused on trimming existing trees throughout the City. There are currently over 18,000 trees throughout the city and approximately 200 tree species. Over the next few years, there will be a focus on only planting trees that are beneficial to residents and provide cooling and improve air quality. Below are a few items that are focuses for this division:

- Tree Canopy - changing what trees we plant to include high shade trees to create shade canopies to reduce heat island effect
- Adding Tree Maintenance contractors to catch up with the City's maintenance activities that have been neglected
- Median Planting - low water usage, installing recycled water lines, and selecting drought tolerant plants
- Low volume irrigation for medians - installing drip irrigation in place of sprinklers

Trees that the city is responsible for are those in city parks as well as in the city Right of Way. Staff responsibilities include evaluating trees based on their health and well-being as well as making sure that they are not obstructing lights and signs. In addition to trimming trees, staff who work on tree maintenance assist the Right of Way crews and trim roots that are uplifting sidewalks. These roots are trimmed down using a root grinder and require the input from a certified arborist so that the tree is not damaged and remains healthy.

There is a regular cycle of tree trimming based on tree species. In general, the tree crew

trims trees every 1-5 years based on tree species. In comparison, the City of Los Angeles trims its trees every 7 years. Staff performs their regular maintenance cycle based on the available staff, equipment, and funds budgeted.

Recently, there have been numerous individual requests for tree trimming from the residents. The tree crews are currently in the process of evaluating the replacement of some of their 20+ year old equipment which should increase productivity. Table 5 presents the number and type of requests that have been addressed since the beginning of 2021.

V. FISCAL IMPACT

None, this staff report is for information only, no funding is requested as part of the report.

VI. EXHIBITS

None.

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