



PUBLIC WORKS DEPARTMENT OVERVIEW

City Council Study Session
Tuesday, March 14, 2023





Mission

The Public Works Department is dedicated to delivering vital services through efficient utilization and allocation of resources to provide the Costa Mesa Community with opportunities to enjoy an unsurpassed quality of life.



Staffing & Divisions

- The Public Works Department has 75 full-time staff members composed of 5 management, 6 clerical, and 64 professional / technical staff spread across 4 divisions.
- The Department's overall budget in FY 2022-2023 is \$27.4 million in All Funds, with \$20.2 million in General Funds.

Administration

- Administration
- Energy & Sustainability

Engineering

- Water Quality
- Streets and Parkway Improvements
- Storm Drain Improvements
- Development
- Real Property
- Park Development
- Construction Management

Transportation

- Traffic Planning
- Traffic Operations
- Active Transportation

Maintenance

- Park and Parkway Maintenance
- Facility Maintenance
- Fleet Maintenance
- Warehouse Operations
- Street and Traffic Operations



Department Operations

Administration

The **Administration Division** has 4 full-time and 1 part-time staff that:

- Oversees all four divisions of the department covering 22 municipal service functions.
- Develops and manages the department's Operating and Capital Improvement Program.
- Tracks the department's strategic goals and objectives.

About



Administration

Energy and Sustainability Services

- Key achievements include:
 - Achieving LEED Gold Certification for City
 - City Hall EV Charging Facility
 - Earth Day – Annual Celebration
- **Waste and Recycling Section**
 - Implementation of SB 1383 including Organics recycling and diversion of landfill waste
 - Administers City Waste Hauler Program

SB 1383 Organic Waste Reduction

Presented by
Mike Balliet
City Consultant





Engineering

Water Quality

Streets and
Parkway
Improvements

Storm Drain
Improvements

Development

Real Property

Park
Development

Construction
Management

The **Engineering Division** has a staffing of 23 FTE and 1.5 FTE part time staff, across 7 sections, with an operating budget of \$4.14 million, responsible for:

- Design and construction of the City's Capital Improvement Project.
- Design and development of all parks and open space facilities.
- Construction and management of public works improvements.
- Development review and processing.

Engineering

Water Quality

The **Water Quality Section** has 1 full-time staff that is responsible for:

- Implementing and monitoring the City's compliance with the National Pollutant Discharge Elimination System (NPDES)
- Managing the Santa Ana Regional Water Quality Board directives for compliance with the Clean Water Act
- Preparing Annual Program Effectiveness Assessment (PEA)
- Coordinating compliance with Newport Bay Total Maximum Daily Load (TMDL) regulations.



Engineering

Streets and Parkway Improvements

The **Streets and Parkway Improvements Section** has 5 full-time staff that is responsible for:

- The design and construction of street Capital Improvement Projects.
- Managing the parkway maintenance program including curbs, gutters and sidewalks.
- Administering the Pavement Management Program.
- Reviewing and approving engineering submittals, including improvement plans, material reports, utility work, engineering estimates, and Americans with Disabilities Act (ADA) accessibility.
- Securing federal, state, and local competitive grant funding for street improvement projects.



Engineering

Streets and Parkway Improvements

2022 Accomplishments

111,723
lineal feet

Roadways
rehabilitated

50

Curb ramps installed

10,104
lineal feet

Curb and gutter
constructed

69,100
lineal feet

New and improved
bicycle facilities
constructed

13,856
square feet

Driveways built

83.1
(Very
Good)

Pavement Condition
Index (PCI)

Engineering

Storm Drain Improvements

The **Storm Drain Improvements Section** has 2 full-time staff that is responsible for:

- The design and management of the construction of the City's Storm Drain System (approximately 65 miles of storm drain).
- Drafting, implementing, and executing the Storm Drain System Master Plan.



Engineering

Development

The **Development Section** has 4 full-time staff, responsible for:

- Reviewing private development submittals.
- Issuing encroachment permits for work in the public rights-of-way.
- Identifying development conditions for Planning Commission hearings.
- Administering the Subdivision Map Act requirements.

2022 Accomplishments

900

Development
reviews conducted

660

Encroachment
permits issued

\$978k

Collected in
encroachment
permit fees

Engineering

Real Property

The **Real Property Section** is made up of 1 full-time staff who is responsible for

- Managing easements, vacation and abandonment of public rights-of-way, and agreements.
- Negotiating easements.
- Preparing real property documents.
- Administers consultant services related to the acquisition and relinquishment of real property as it relates to Public Works projects.



Engineering

Park Development

The **Park Development Section** consists of 2 full-time staff managing, responsible for:

- The development and renovation of park facilities.
- Administering the design and construction of new park projects and renovation of existing park facilities.
- Helping secure park and open space competitive grant funding.



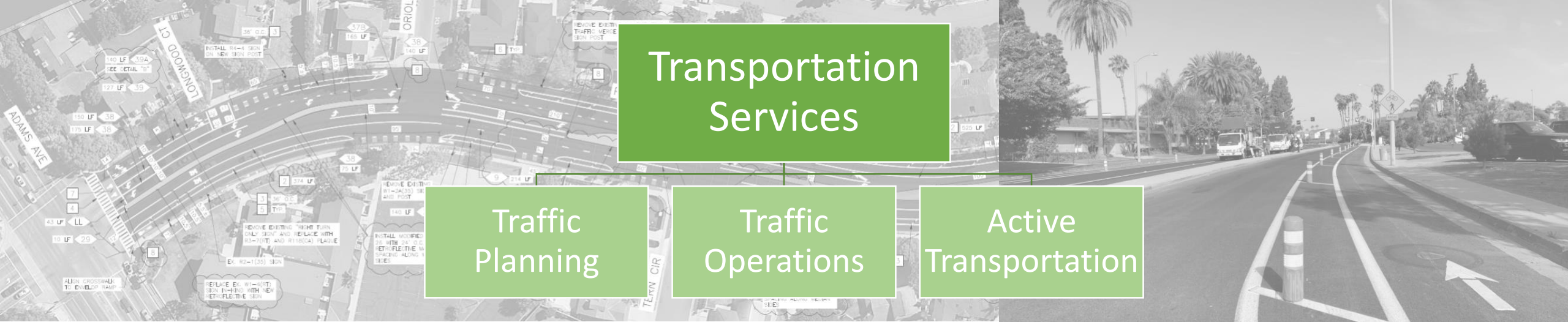
Engineering

Construction Management

The **Construction Management Section** comprises 5 full-time staff, responsible for:

- Administering construction and executing construction management contracts.
- Managing and inspecting construction activities and projects in the public rights-of-way, facilities and parks
- Overseeing the construction and implementation of the City's Capital Improvement Program (CIP).
- Administer compliance with federal and state labor laws, including Prevailing Wage Regulations, Disadvantaged Business Participation, Equal Opportunity Employment Practices, and Public Contract Laws.





The **Transportation Services Division** is comprised of 7 full-time staff and 2 part-time staff across 4 sections, with an operating budget of \$3 million, responsible for:

- Managing over 25 multi-modal transportation CIP projects:
 - Active transportation
 - Traffic calming
 - Street and traffic signal design
 - Signing and striping
 - Traffic signal synchronization
 - Intersection improvements
 - Safety planning studies
- Maintenance of the City's traffic operations infrastructure.
- Design of transportation projects.
- Active transportation.
- Transportation planning.
- Development review.
- Residential permit parking program.

Transportation Services

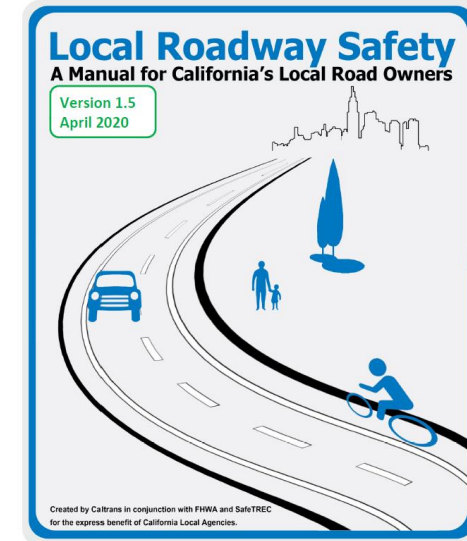
Traffic Planning

The **Traffic Planning Section** has 3.5 FTEs responsible for:

- Implementation of the Circulation Element of the General Plan and Local Road Safety Plan, which includes:
 - Multi-Modal transportation planning and design Activities
 - Studies and implements short and long range improvements
 - Applies for grant funding
- Reviewing and monitors development projects.
- Administering the Traffic Impact Fee Program.
- Coordinating with other agencies on transportation related activities including OCTA, Caltrans, and SCAG.
- Managing contracts for 19 school crossing guards.
- Manages bus shelter contract, film permit applications, and oversize load permits.



**2015-2035
General Plan**



Transportation Services

Traffic Planning

2022 Accomplishments

723

Building plan checks
conducted

199

Resident requests
responded

4

Traffic calming pilot
projects implemented
and evaluated

300

Traffic control plans
reviewed for
encroachment permits

46

Film permit applications
processed

150

Planning development
reviews conducted

168

Oversize load permits
processed

Transportation Services

Traffic Operations

The **Traffic Operations Section** has 2.5 FTEs responsible for:

- Maintaining, operating, and updating traffic signals, traffic control devices, and streets lights in the City.
- Managing overall traffic flow through ITS elements including:
 - Traffic signal coordination
 - Closed circuit television cameras (CCTV)
 - Video detection for all users
 - Emergency vehicle preemption system
 - Centralized Traffic Management Center
- Planning, designing and implementing multi-modal traffic operations improvements including:
 - Radar speed feedback signs
 - Bicycle timing
 - Enhanced pedestrian crossing improvements



Transportation Services

Traffic Operations

2022 Accomplishments

130

Traffic signals operated and maintained

3

HAWK traffic signals operated and maintained

60

Traffic speed devices operated and maintained

- Radar speed feedback signs
- Retro-reflective rapid flashing beacons

26

Intersections designed for LPI and signal timing

- Part of Baker-Placentia-Victoria-19th St Traffic Signal Synchronization Project

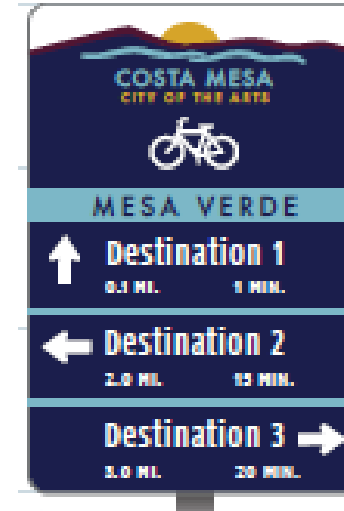


Transportation Services

Active Transportation

The **Active Transportation Section** has 2 FTEs responsible for:

- Implementation of the Active Transportation Plan component of the Circulation Element.
- Addressing bikeway and pedestrian issues and requests.
- Planning, designing, and constructing bicycle and pedestrian facility improvements and complete street solutions
- Implementing the Citywide bicycle rack program.



Transportation Services

Active Transportation

2022 Accomplishments

13

Elementary schools participated in **Walk to School** events

9

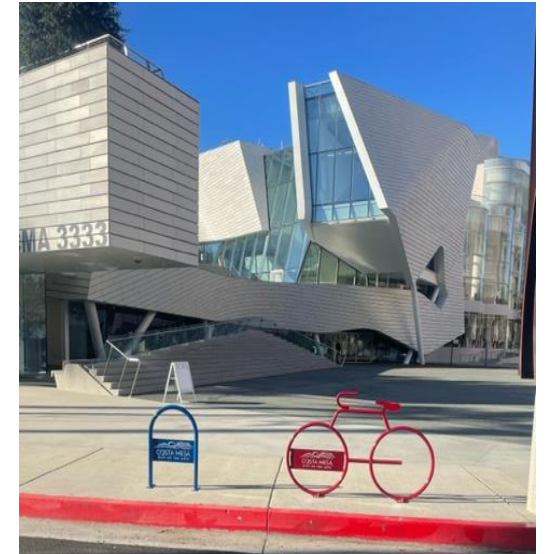
Elementary schools participated in **Bike to School** events

\$630k

Grant awarded to develop a Safe Routes to School Action Plan

15

Bicycle racks installed

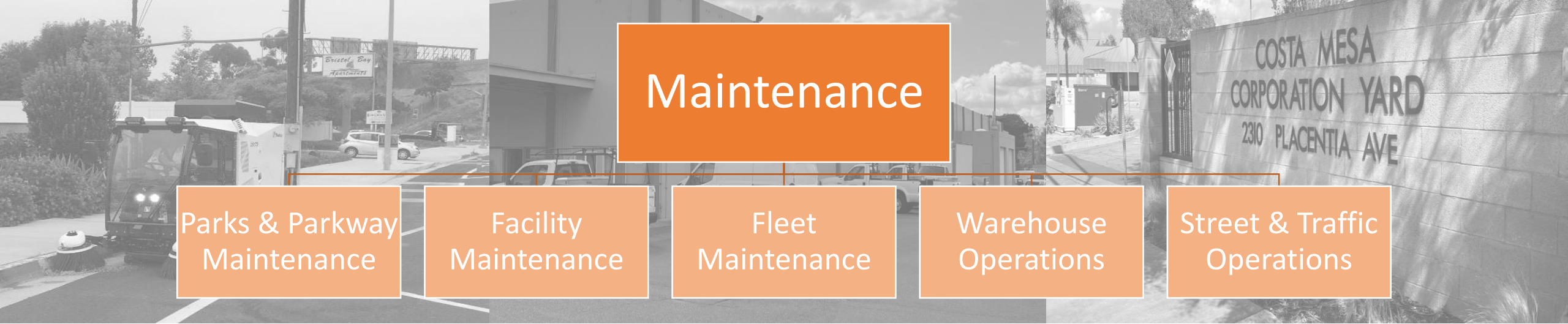


Completed draft Pedestrian Master Plan



Designed bicycle facilities on Bristol, Wilson, Placentia, and W 19th





The **Maintenance Services Division** is comprised of 38 full-time staff and 7 part-time field staff across 5 sections, with an operating budget of \$12 million. This division is responsible for:

- Care, maintenance, repair, and alteration of City's municipal facilities.
- Maintenance of vehicles and equipment, parks and parkways, trees, traffic signs and markings, street sweeping, and more.

Maintenance Services

Parks & Parkway Maintenance

The **Parks and Parkway Maintenance Section** has 7 full-time staff that is responsible for:

- Overseeing the contract for the maintenance of **over 226 acres** of landscape, which include:
 - Parks and Playgrounds
 - Sports fields, field preps and renovations
 - Landscape around City facilities
 - Bike trails
 - Parkways and medians
- Maintaining and managing the City's Urban Forest containing nearly **24,000 trees**.
- Providing support related to landscape, irrigation and playgrounds for all Capital Improvement Projects.

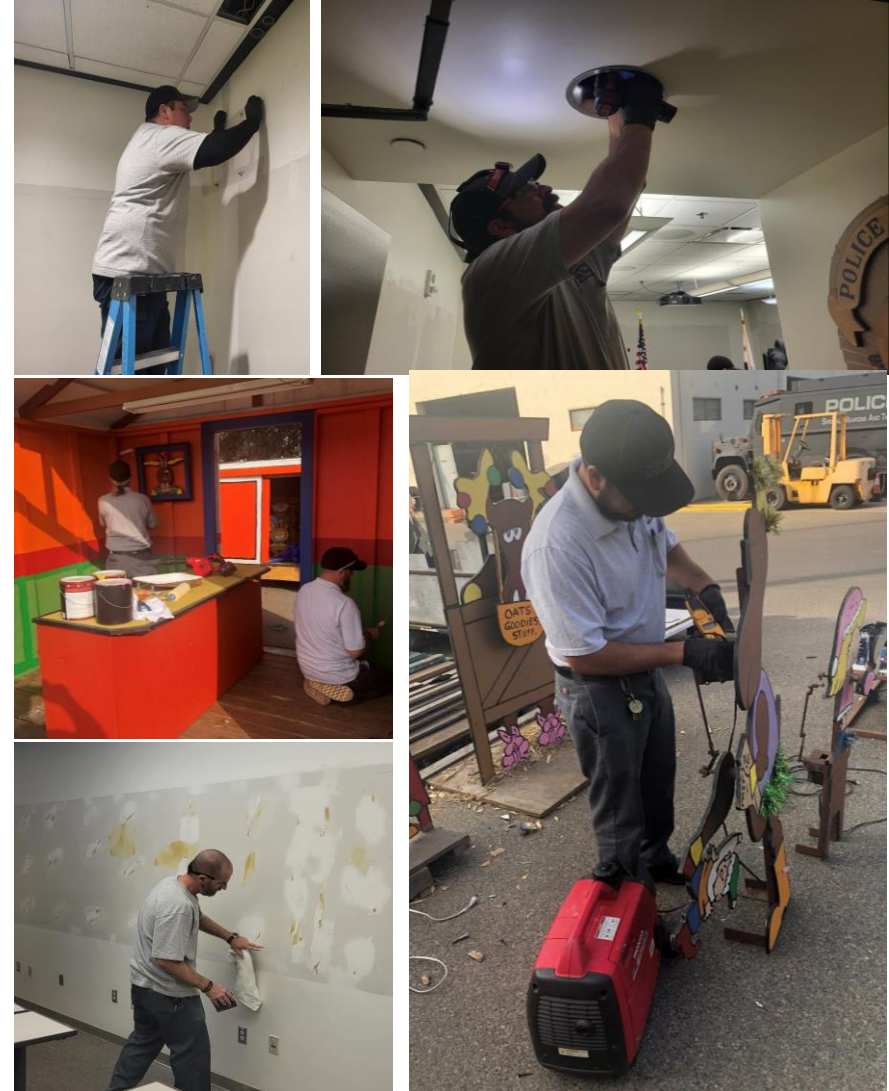


Maintenance Services

Facility Maintenance

The **Facility Maintenance Section** has 9 full-time and 2 part-time staff and is responsible for:

- Maintaining and repairing **23 City-owned buildings**, totaling **314,606 square feet** including:
 - 8 first responder buildings and 1 shelter that operate 24/7
 - Buildings leased from and to outside agencies
- Responding to **over 1,100 requests for service** or repair to City owned buildings annually.
- Administering and supervising all contract services required for maintaining City owned facilities.
- Providing support for all CIPs related to building and facility improvements.
- Administering smaller Building Modification Projects for building and facility projects under \$30K.



Maintenance Services

Fleet and Equipment Maintenance

The **Fleet and Equipment Maintenance and Warehouse Sections** have 7 full-time and 3 part-time staff and is responsible for:

- Maintaining and repairing City's fleet, including:
 - Fire apparatus
 - Police vehicles
 - Motorcycles
 - Maintenance trucks
 - Heavy equipment
 - Emergency backup generators
- Monitoring all City fuel storage sites according to County Regulations.
- Overseeing warehouse operations to order, stock, and deliver essential goods and materials for the City.



1,200

Preventative maintenance services conducted

330

Vehicles and equipment maintained

14

Fuel storage sites monitored

1,110

Oil changes performed

520

Brake services conducted

Maintenance Services

Streets Maintenance

The **Streets Maintenance Sections** has 12 full-time and 2 part-time staff and is broken-down into the five subsections teams below:

1. Street Cleaning
2. Street Maintenance
3. Signs and Markings
4. Storm Drain Maintenance
5. Graffiti Abatement



Maintenance Services

Street Maintenance

Street Cleaning

The **Street Cleaning** Team:

- Oversees the contracted services for street sweeping, of **over 850 miles** of residential, commercial and arterial roadway lanes within the City.
- Operates a City owned sweeper to respond to emergencies and to maintain a portion of the Santa Ana River Bike Trail from Adams Avenue to Pacific Coast Highway.
- Operates a mini-sweeper to maintain newly established bike lanes on Merrimac Way and Bristol Street.
- Removes **over 1,500 tons of debris** annually preventing it from entering waterways.
 - Over 90% of that material is converted into compost.



Maintenance Services

Street Maintenance

Street Maintenance

The **Street Maintenance** Team:

- Maintains **approximately 525 lane miles** of streets
- Maintains **15 miles** of City alleys and miscellaneous easements.
- Removes **over 6,000 bulky items** and **500 abandoned mattresses** from City parkways annually.
- Responds to and repairs potholes **within 24 hours** of reporting.
- Since 2018, installed **93 bike racks** throughout the City.



Maintenance Services

Street Maintenance

Signs and Markings

The Signs and Markings Team:

- Installs and maintains all street and traffic signage and pavement markings City wide.
- Responds and completes an average of **75 work orders** prepared by the Transportation Division annually.

1M
feet

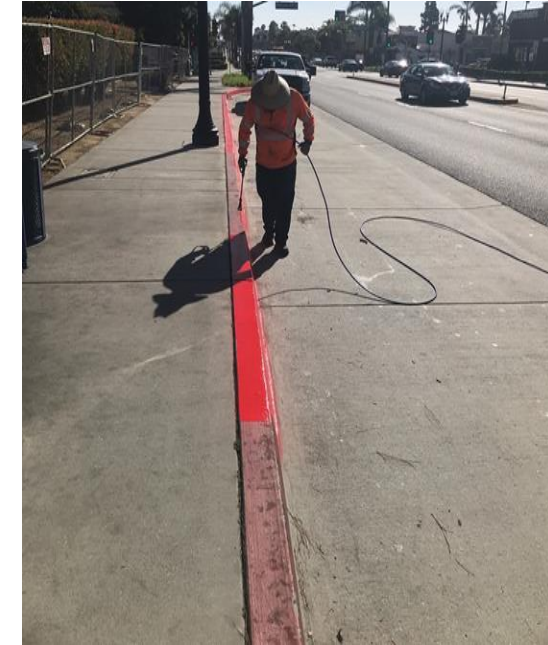
Lane striping
repainted

70k+
linear
feet

Residential red
curb painting

9

Crosswalks
repainted



Maintenance Services

Street Maintenance

Storm Drain Maintenance

The **Storm Drain Maintenance** Team:

- Maintains the City's storm drain system.
- Cleans 1,165 catch basins.
- Performs inspections and clearing of storm drains prior to rain events.
- Responds to spills and emergency cleanup on City streets.



Maintenance Services

Street Maintenance

Graffiti Abatement

The **Graffiti Abatement** Team:

- Removes graffiti in the public right-of-way, public parks, City-owned facilities and on private structures where it is visible from the public right-of-way.
- The team removes graffiti within 24-hours of notification.
- Pressure washes playground equipment.
- Pressure washes high traffic bus stops and sidewalks.
- Pressure washes walkways around City facilities.

6,500

Calls for graffiti removal received and responded.



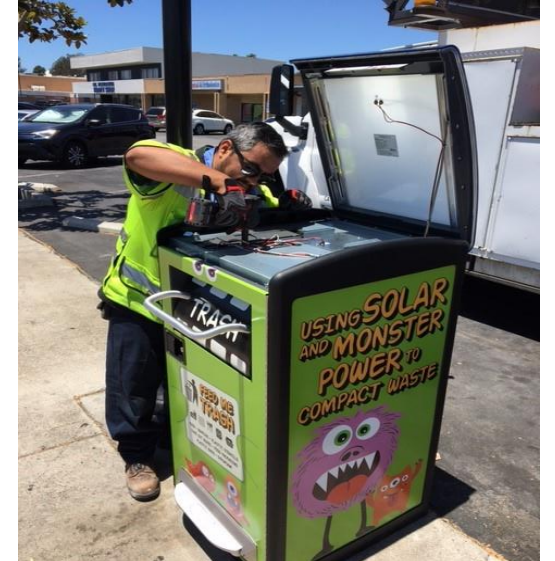
Maintenance Services

The Maintenance Services Division also supports **special projects** and **events**, including:

- Snoopy Event at City Hall
- LA Chargers Training Camp
- Love Costa Mesa Day
- Arbor Day
- Earth Day



Special Events



Committees & Commissions

Department-Led Committees

Active Transportation Committee

Meets once per month

Group of **20 individuals**

- 11 voting members
- 2 alternate members
- 2 City Council liaisons
- 1 NMUSD representative
- 1 Chamber of Commerce representative
- 3 department staff

Advisory body in matters related to active transportation

Traffic Impact Fee (TIF) Ad Hoc Committee

Meets annually

Group of **11 individuals**

- 5 voting members:
 - 1 Small Developers' Representative
 - 1 Major Developers' Representative,
 - 2 At-Large Representatives
 - 1 Chamber of Commerce Representative
- 2 City Council liaisons
- 1 Planning Commission liaison
- 3 department staff

Reviews annual accounting of TIF program and revisions to TIF calculations for recommendations to Council

Supported Commissions

Planning Commission

Meets twice per month

City Engineer provides support at each meeting

Provides Conditions of Approval for Conditional Use Permits (CUPs) and other development approvals

Provides staff support for transportation section of environmental documents

Processes General Plan amendments related to Circulation Element

Parks & Community Services Commission

Meets once per month

Maintenance Services Manager provides support at each meeting

Prepares and presents agenda reports on tree removal and memorial plaque requests

Solicits input on public works projects as it relates to the Commission

Provides updates on park maintenance activities

Collaboration: Agency Partners



Awards



Challenges & Opportunities

Department Challenges

- Staffing – Recruitment, Retention
- Large CIP – Number and complexity of projects exceed available resources
- Ageing Facilities – Need a Facilities Master Plan and an Implementation Program
- Rising construction and commodity prices
- Increased workloads addressing routine issues, projects and community needs

Department Opportunities

- Support from elected officials, City leadership and community for Public Works projects and services
- Policies to maintain infrastructure at high quality
- Council goals and priorities provide a roadmap for the department and will help direct resources
- Cooperation and Collaboration with all City Departments
- Motivated, dedicated and committed staff



Questions?





PUBLIC WORKS GRANT PROJECTS

City Council Study Session
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Grants

- City secured **\$14.4 million** in grant funds for various park improvements.
- Staff is seeking direction on specific grant-funded parks projects to allow Department leadership to schedule projects and plan for appropriate staff and consultant resources.

\$10 million



State Senator
Dave Min

- LED Athletic Field Lighting – Jack Hammett Sports Complex
- LED Athletic Field Lighting – TeWinkle Park and Athletic Complex
- Fairview Park: Bluff Stabilization and Restoration & Mesa Restoration
- Shalimar Park Improvements
- Other Improvements

\$1.2 million



State Assembly Member
Cottie Petrie-Norris

- Ketchum-Libolt Park Expansion

\$3.2 million



OC Supervisor
Katrina Foley

- Lions Park Cafe
- Costa Mesa Skate Park Expansion

Grant Allocation

- Restricted by specified locations
- Amount allocation based on project needs

No restrictions;
seeking Council direction

- Restricted by specified locations
- Have a predefined scope and amount allocation

\$1.2 million



OC Supervisor
Katrina Foley

Lions Park Cafe

- **\$1.8 million** estimated project cost
 - **\$1.2 million** in grant funds
- **Predefined Scope:**
 - Construction of the Café adjacent to the lawn north of the Donald Dungan Library
 - Café will providing outdoor dining to complement the event lawn and the Lions Park campus
 - Revitalize the area and improve service to residents



\$2 million



OC Supervisor
Katrina Foley

Skate Park Expansion

- **\$2 million** estimated project cost
 - **\$2 million** in grant funds
- **Predefined Scope:**
 - Expansion of the existing Skate Park at TeWinkle Park
 - Provide dedicated area for young/beginning skaters
 - Provide new elements like pump track
 - Develop designs in collaboration with local skating community



\$1.5 million



State Assembly Member
Cottie Petrie-Norris

Ketchum-Libolt Park

- **\$1.5 million** estimated project cost
 - **\$1.5 million** in grant funds
- **Predefined Scope:**
 - Expand the park by incorporating the parkway between the existing park and Victoria Street sidewalk
 - Provide more play elements
 - Engage community during the design of park expansion



\$10 million



State Senator
Dave Min

Recommended Allocation

Project Description	Option 1	Option 2	Option 3
Jack Hammett Sports Field LED Lighting	\$900,000	\$900,000	\$900,000
Tewinkle Park Athletic Complex Sports Field Lighting	\$850,000	\$850,000	\$850,000
Shalimar Park Improvements	\$1,000,000	\$1,000,000	\$1,000,000
Fairview Park			
- Mesa Restoration (Partial)	\$2,500,000	\$2,000,000	\$2,000,000
- Bluff Stabilization and Restoration (Localized Improvements)	\$2,000,000	\$1,750,000	\$1,750,000
- Wetlands Improvements (Recirculation system, pump station)	\$1,000,000	\$800,000	\$800,000
<i>Subtotal</i>	<i>\$5,500,000</i>	<i>\$4,550,000</i>	<i>\$4,550,000</i>
Additional Improvements			
- Tewinkle Amphitheater	\$850,000	\$750,000	\$500,000
- Enhanced Signage at TeWinkle Park	\$100,000	\$100,000	\$100,000
- Tennis Center Improvements	\$400,000		
- Bark Park Turf Improvements	\$400,000		\$400,000
- Tewinkle Lakes Renovation		\$1,000,000	\$1,000,000
- Baseball Field Drainage, Netting, Batting Cage Improvements		\$300,000	\$300,000
- Bark Park LED Lighting		\$130,000	
- Tennis Center LED Lighting		\$420,000	
- Pickleball Courts at Tennis Center			\$400,000
<i>Subtotal</i>	<i>\$1,750,000</i>	<i>\$2,700,000</i>	<i>\$2,700,000</i>
Total	\$10,000,000	\$10,000,000	\$10,000,000

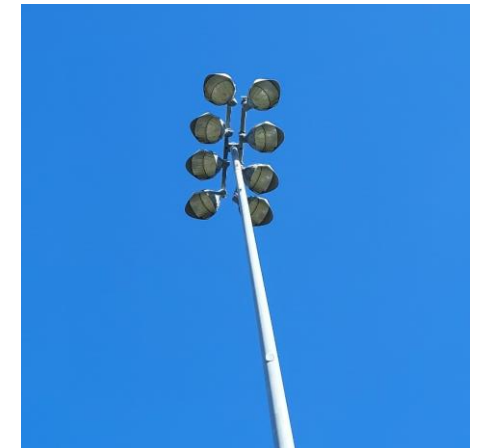
- Restricted by specified locations
- Amount allocation based on project needs

No restrictions;
seeking Council direction



LED Field Lighting

- **\$1.75 million** estimated project cost
- Restricted to following locations:
 - Jack Hammett Sports Complex
 - TeWinkle Athletic Complex
- Predefined scope
 - LED field lighting upgrades
 - Energy efficient upgrades improve reliability of field lighting as well as reduce operating costs



- **\$1 million** estimated project cost
- Restricted to Shalimar Park
- Predefined scope
 - Engage community during the design of park improvements
 - Add more play elements
 - Potentially increase park space



- **\$3-6 million** estimated project cost
- Restricted to Fairview Park
- Predefined scope
 - **Bluff Stabilization and Restoration**
 - Enhance slope stability, bluff trail safety
 - Restore native coastal bluff scrub habitat
 - **Mesa Restoration**
 - Remove deposited debris, install protective cap, preserve cultural resources
 - Restore grassland and coastal bluff scrub habitat
 - Engage local & tribal community
 - **Wetlands Improvements**
 - Enhance water supply reliability, water quality
 - Recirculation, aeration, communications & operational improvements



TBD



State Senator
Dave Min

Other Improvements

Seeking Council direction on priority projects:

\$500,000 - \$850,000	TeWinkle Amphitheater Renovation	<ul style="list-style-type: none">• Additional seating• Concrete improvements• Lighting and utilities	\$300,000	Baseball Field Drainage, Netting and Batting Cage	<ul style="list-style-type: none">• Address ongoing drainage issues• Improve field netting• Add batting cages
\$100,000	TeWinkle Signage Enhancement	<ul style="list-style-type: none">• Wayfinding signage• Modernize all signs in park	\$550,000	LED Upgrades: TeWinkle, Tennis Center, & Bark Park	<ul style="list-style-type: none">• Convert existing lighting to LED• Improves reliability and reduces maintenance and operating costs
\$400,000	Tennis Center Improvements	<ul style="list-style-type: none">• Restroom renovation• Shade structure• Concrete improvements	\$400,000	Pickleball Courts	<ul style="list-style-type: none">• Construct new pickleball courts adjacent to the Tennis Center
\$400,000	Bark Park Turf Improvements	<ul style="list-style-type: none">• Renovation of turf• Other amenities			
	\$1,000,000	TeWinkle Park Lakes Renovation			<ul style="list-style-type: none">• Lakes in need of repair – Eroded shoreline, significant daily water loss due to damaged lake membrane, outdated pumping and water management system• New water treatment system• New lake flooring and shoreline• Upgraded pump system• Enhanced landscaping



Questions?

