



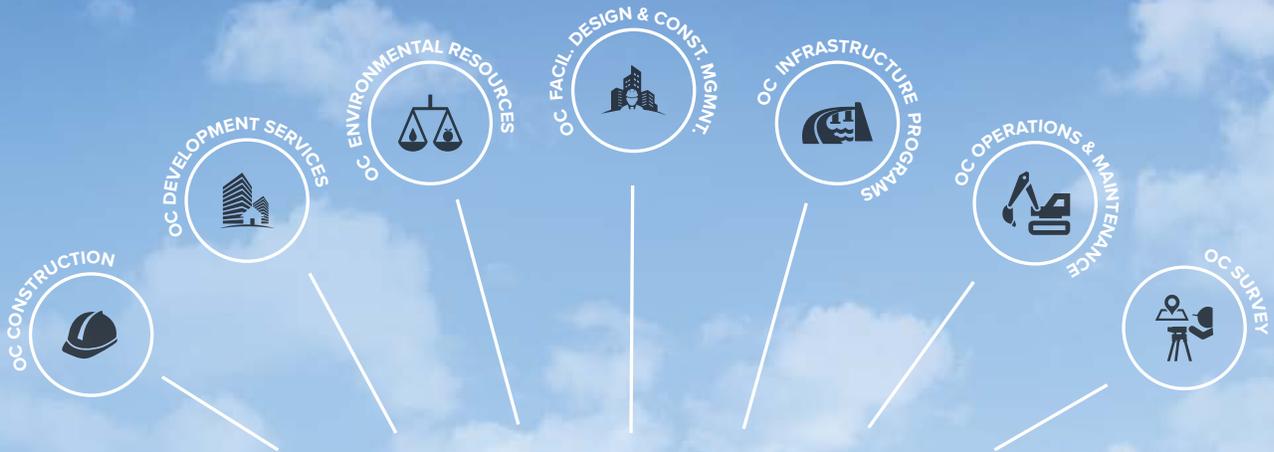
2019-2021
STATE OF THE
DEPARTMENT

 Public Works

VISIT ORANGE COUNTY, CALIFORNIA'S NEW

ocpublicworks.com

Access projects and services from throughout our department.





BOARD OF SUPERVISORS



DOUG CHAFFEE
CHAIRMAN
4th District



DONALD P. WAGNER
VICE CHAIRMAN
3rd District



ANDREW DO
SUPERVISOR
1st District



KATRINA FOLEY
SUPERVISOR
2nd District



LISA A. BARTLETT
SUPERVISOR
5th District

* Reflecting 2022 positions.

1ST DISTRICT

Cities: Cypress, Fountain Valley, Garden Grove*, Huntington Beach, La Palma, Los Alamitos, Seal Beach, Westminster

Unincorporated Areas: Midway City, Rossmoor

2ND DISTRICT

Cities: Anaheim*, Garden Grove*, Orange*, Santa Ana, Tustin*

Unincorporated Areas: North Tustin

3RD DISTRICT

Cities: Anaheim*, Irvine*, Lake Forest, Mission Viejo, Orange*, Rancho Santa Margarita, Tustin*, Villa Park, Yorba Linda

Unincorporated Areas: Modjeska, North Tustin, Silverado, Trabuco Canyon, Williams Canyon

4TH DISTRICT

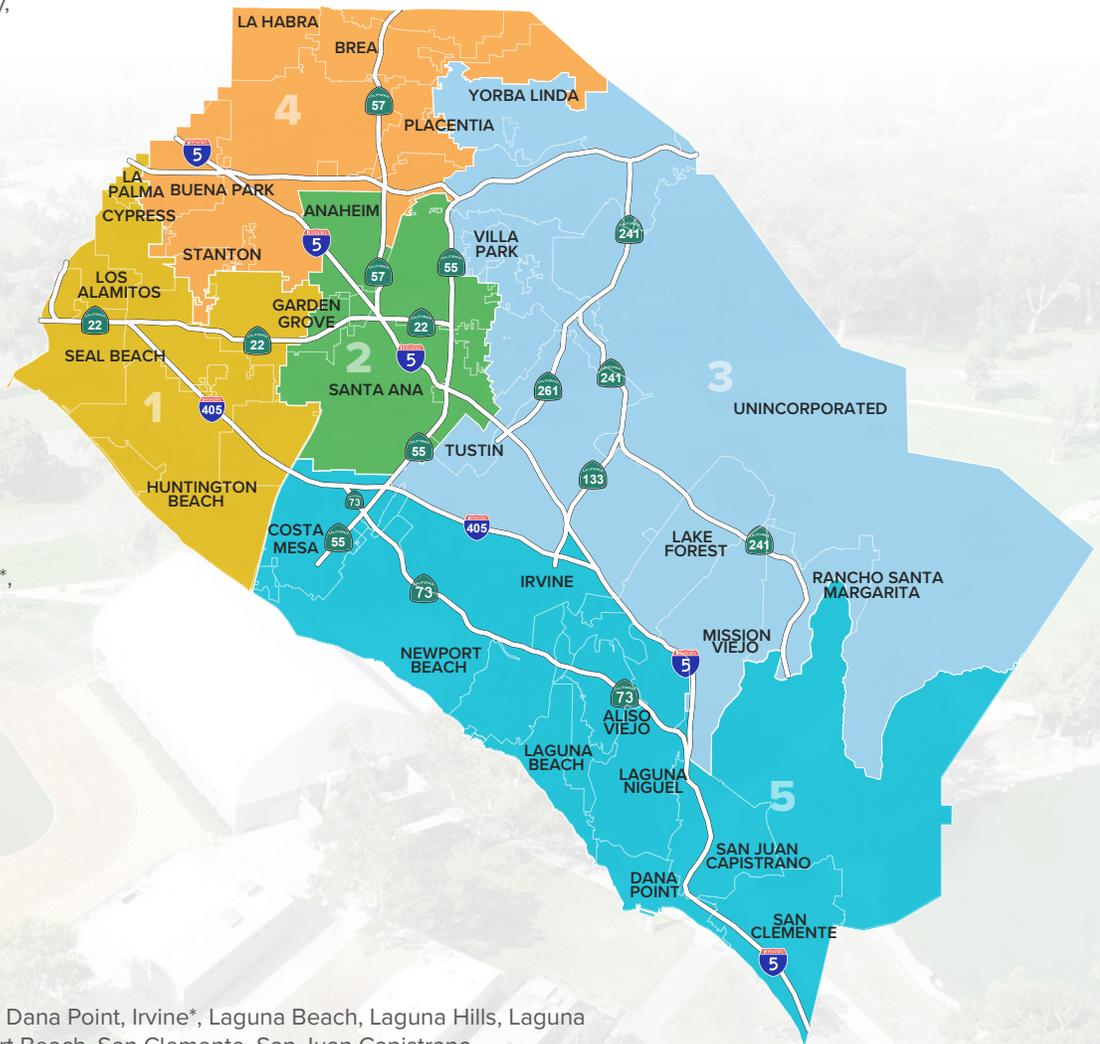
Cities: Anaheim*, Brea, Buena Park, Fullerton, La Habra, Placentia, Stanton

5TH DISTRICT

Cities: Aliso Viejo, Costa Mesa, Dana Point, Irvine*, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Newport Beach, San Clemente, San Juan Capistrano

Unincorporated Areas: Coto de Caza, Ladera Ranch, Las Flores, Rancho Mission Viejo

*City/CDP split by district.



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Produced by OC Public Works' Strategic Communications

A MESSAGE FROM OUR DIRECTOR

Welcome to the 2019-2021 State of the Department for Orange County Public Works.



ADAPT AND OVERCOME. We all do that in our daily lives, especially in today's times as the world has battled the COVID-19 pandemic for over two years. From families to educators, from retail workers to healthcare professionals and care givers – we all strive to overcome challenges to help make Orange County an amazing place to live, work and play.

The same rings true for the over 800 men and women who comprise our teams at OC Public Works. It is because of our staff – their commitment, expertise, hard work, ingenuity and more -- that OC Public Works remains dedicated to delivering high-quality services and projects to the communities we serve. From designing award-winning projects, to implementing innovative technology to streamline our operations, to working in the field through late hours of the night to ensure the public is safe, we take great pride in our teams' unwavering commitment to service and results. Our department has remained flexible during turbulent times, yet focused on continuing to deliver these services and projects that better your community.

2022 marks 95 years since the formation of the Orange County Flood Control District, which plays the leading role for flood protection throughout Orange County. With a long-term vision, the Orange County Flood Control District completed a comprehensive report in 1955 with a plan to construct channel improvements, dams and retarding basins throughout the county. This led to the 380 miles of flood control channels, four dams, eight pump stations and various water retention basins that we operate today to protect Orange County communities from floods.

Additionally, 2022 marks 48 years since the formation of the County's Environmental Management Agency, which would later evolve into OC Public Works. Our focus – efficiently delivering critical services and infrastructure – has remained unchanged throughout the decades.

I invite you to read through our 2019-2021 State of the Department to learn more about our various service areas, our accomplishments and our projects and services that are helping to shape and protect Orange County, now and in the future.

James Treadaway

James Treadaway, P.E., S.E.

Director, OC Public Works



MISSION

Protect and enrich Orange County communities through sustainable delivery of projects and services.

VISION

Provide world class projects and services through collaboration, innovation and stewardship.

GUIDING PRINCIPLES

Safety, Integrity,
 Quality, Teamwork,
 Adaptability

Headquarters

County Administration South
 601 North Ross Street
 Santa Ana, CA 92701

Orange County

Over 3.176 million people living in a region consisting of 798 square miles. Sixth most populous county in the United States.

Unincorporated County Area

205 square miles

Authorized Positions

863

Fiscal Year 2021-22 Budget

\$737,924,019

7-Year Capital Improvement Program

\$1,018,167,657

Roadways

340 miles

Flood Channels

380 miles

Dams 4

Pump Stations 8

Partner Agencies

OCPW regularly partners with other County departments to deliver critical services and capital projects, including:

- OC Parks
- OC Health Care Agency
- John Wayne Airport
- OC Public Libraries
- OC Sheriff's Department
- CEO Real Estate
- OC Probation



APWA Accredited Agency

OC Public Works is proud to be an American Public Works Association Accredited Agency.
apwa.net

MANAGEMENT TEAM



James Treadaway, P.E. & S.E.

Director



Tim Corbett

Chief Deputy Director



Kevin Onuma, P.E.

County Engineer



Kevin Hills, P.L.S.

OC SURVEY

Deputy Director



Nardy Khan, P.E., P.M.P.

OC INFRASTRUCTURE PROGRAMS

Deputy Director



Ron Vienna

ADMINISTRATIVE & FLEET SERVICES

Deputy Director



Edward Frondoso, P.E.

OC CONSTRUCTION

Deputy Director

OC OPERATIONS & MAINTENANCE

Interim Deputy Director



Joe Seybold

OC FACILITIES DESIGN, CONSTRUCTION MANAGEMENT & CENTRAL UTILITY FACILITY

Deputy Director



Amanda Carr

OC DEVELOPMENT SERVICES

Interim Deputy Director

OC ENVIRONMENTAL RESOURCES

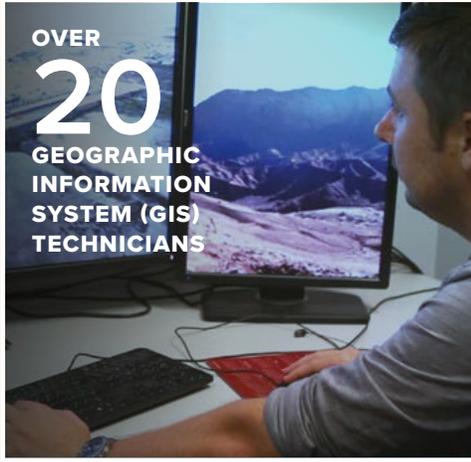
Deputy Director



Tim Gonsalves

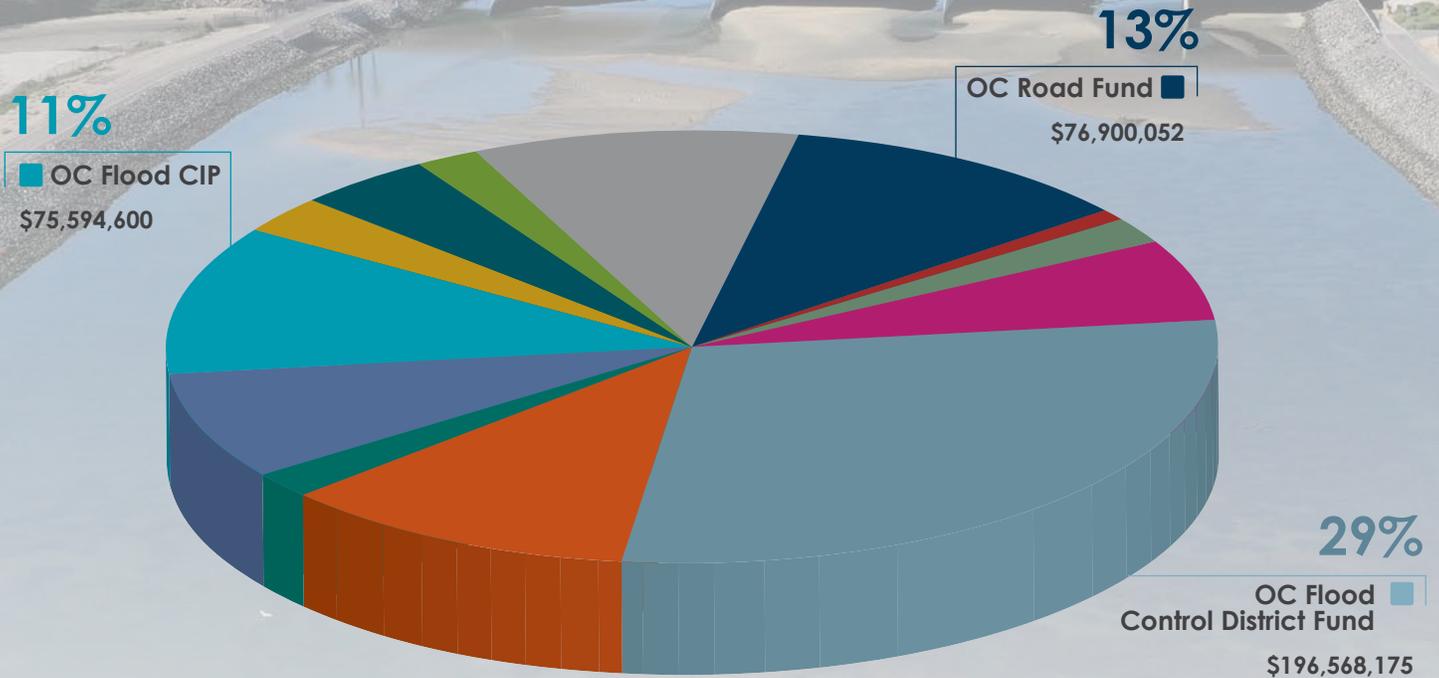
OC FACILITIES MAINTENANCE

Deputy Director



FISCAL YEAR 2020-2021 DEPARTMENT FINANCIALS

Expenses



Description	Expenses
OC Watersheds	\$ 17,948,636
Utilities	\$ 30,387,665
Building & Safety	\$ 14,443,241
OC Public Works General Fund	\$ 64,433,039
OC Road Fund	\$ 76,900,052
Parking Facilities	\$ 5,648,954
South County Roadway Improve Prog (SCRIP)	\$ 10,300,000

OC Fleet Services	\$ 41,773,164
OC Flood Control District Fund	\$ 196,568,175
OC Flood (SARM/Prado)	\$ 74,682,963
OC Civic Center Parking/Maintenance	\$ 12,309,522
OC Road - CIP	\$ 53,701,242
OC Flood - CIP	\$ 75,594,600

Budget Controls < \$2M

Building & Safety - Operating Reserve	\$ 214,800
Survey Monument Preservation	\$ 137,189
Air Quality Improvement	\$ 208,260
Foothill Circulation Phasing Plan	\$ 247,605
OC Service Area #13 - La Mirada	\$ 20,749
Compressed Natural Gas Enterprise Fund	\$ 158,152

Total \$675,678,008

CAPITAL IMPROVEMENT PROGRAMS



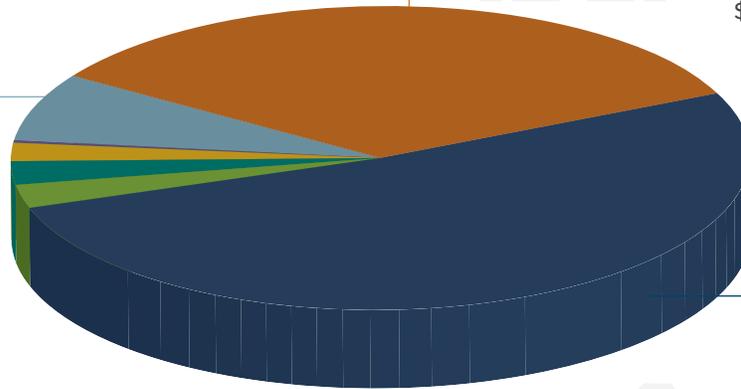
Horizontal
7-Year CIP Funding Sources
Fiscal Years 2021/22-2027/28

34%

OC Road
\$347,379,159

7%

Federal, State, Other
\$71,015,627



52%

OC Flood
\$524,432,100

Road/Bridge	\$	408,517,755
Flood	\$	524,432,100
Bikeway	\$	85,217,802
Total	\$	1,018,167,657

*7% of funding sources include:

Bikeways	\$26,484,071
M2 Local	\$24,500,000
Road Fee	\$19,267,839
M2	\$5,088,860

Data Source:
OCPW 7-Year CIP Program
Road, Bridge, Flood and Bikeway Projects
Fiscal Years 2021/22-2027/28



Vertical
Current Projects
Fiscal Years 2018/19-2019/20

40%

**Civic Center
New Buildings**
\$207,521,748

Client
Portfolios
<\$10M

CEO CIP
\$29.4M

Probation
\$30.2M

OC
Parks
\$37.5M

HCA
\$41.3M

John Wayne Airport - CIP
\$119,674,865

23%

*8% of projects include:

CE- \$	7,010,453
District Attorney	\$ 6,668,765
OCPW Parking	\$ 6,037,923
SSA	\$ 3,310,746
OC Data Center	\$ 1,782,827
OC Sheriff	\$ 1,723,279
Fac. Maintenance and Central Utility Fac.	\$ 1,086,210
OCPW	\$ 970,411
OC Flood	\$ 371,844
JWA-MP	\$ 159,245
Registrar of Voters	\$ 159,245

Projected Portfolio Value \$526.94M

Data Source:
A&E Project Management
February 2021





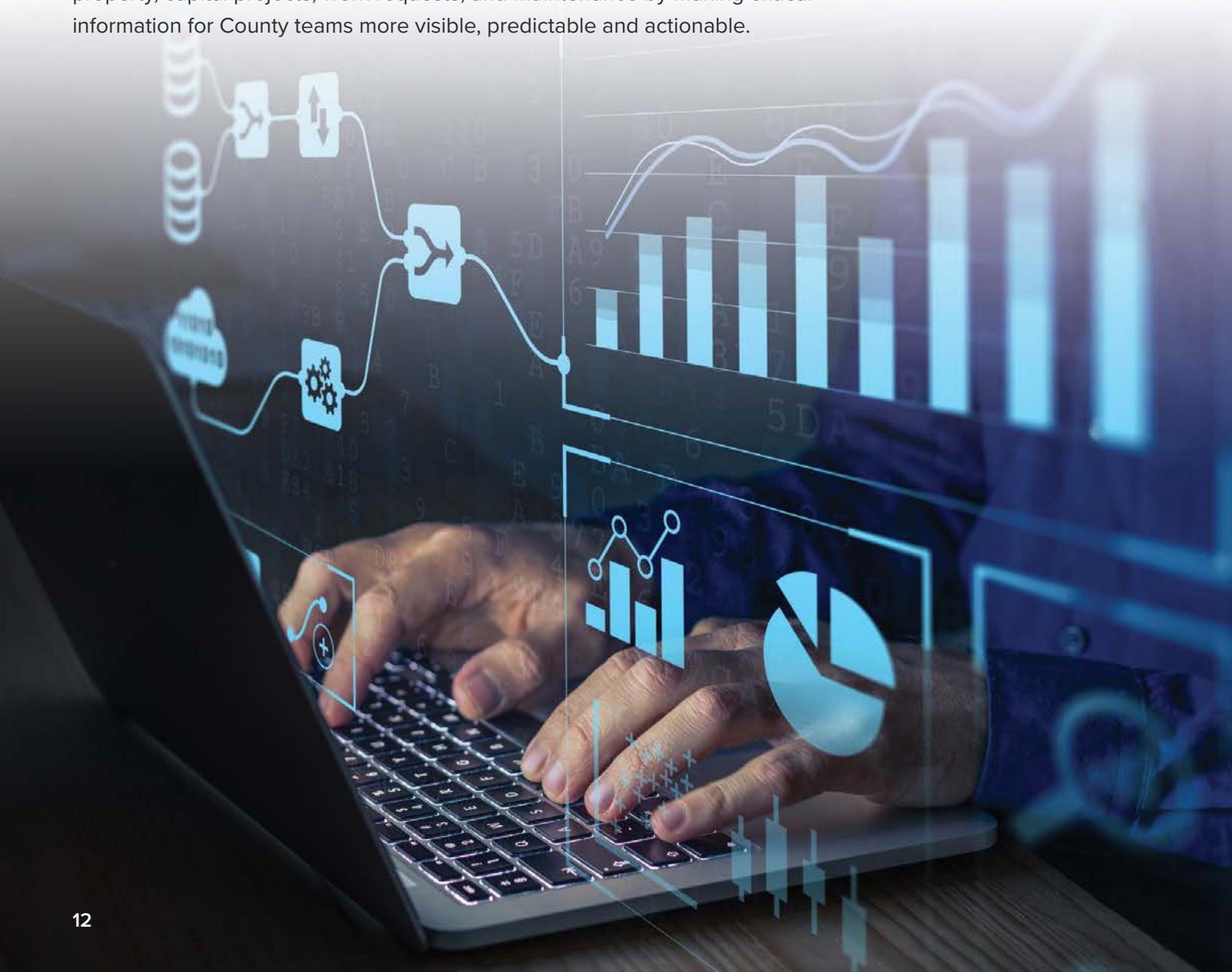
KEY INITIATIVES

KEY INITIATIVES

Asset Management Business Solution

OC Public Works, in conjunction with the County's Real Estate office and OC Sheriff's Department, launched its new and innovative AiM enterprise business solution ("ReADY / AiM / Go"), a comprehensive capital planning, work order, data analysis, asset management and inventory platform that is boosting efficiency and visibility. We are integrating key County department processes into one unified system with a solution that more effectively manages County facilities and automates processes such as work requests, work order tracking and other workflow processes with real-time data and analytics.

Led by OC Public Works, the AiM enterprise business solution is transforming County asset management from a system of various platforms and spreadsheets to one simple, automated tool. The ReADY / AiM / Go solution is managing property, capital projects, work requests, and maintenance by making critical information for County teams more visible, predictable and actionable.



KEY INITIATIVES

myOCeServices

OC Public Works launched its myOC eServices customer relationship management system in April 2018. The innovative web-based portal offers residents, businesses and visitors an easy way to navigate and submit requests online, 24/7, for a wide range of County services.



This convenient tool is a true demonstration of OC Public Works continually enhancing customer service — making it better, faster, simpler. With its 5-year anniversary on the horizon, we’ve counted over **25,000** service requests that have been processed through the myOC eServices system. OC Public Works continues to increase efficiencies through technology and enhance the customer experience for the communities we serve.



Service Requests and Complaints



Apply for...



Information



myOC eServices Account



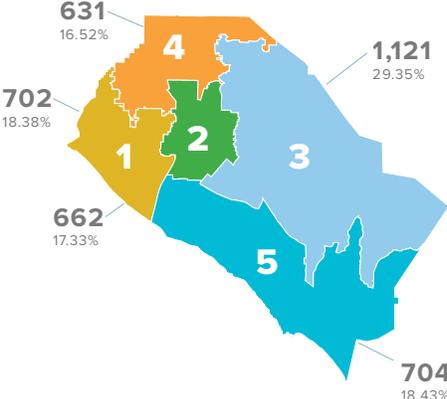
Research Map



Make Payments

Looking Back

4,448 service requests were submitted through myOCeServices.ocgov.com in 2021. More Orange County residents are now reaching out to OC Public Works via the website instead of by phone.

myOC eServices Accounts	Service Requests by Supervisorial Districts	Most Requested Service																		
<p>As of the end of 2021, there are more than</p> <p>21,300</p> <p>active myOC eServices user accounts.</p> 	 <table border="1"> <caption>Service Requests by Supervisorial Districts</caption> <thead> <tr> <th>District</th> <th>Count</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>702</td> <td>18.38%</td> </tr> <tr> <td>2</td> <td>662</td> <td>17.33%</td> </tr> <tr> <td>3</td> <td>1,121</td> <td>29.35%</td> </tr> <tr> <td>4</td> <td>631</td> <td>16.52%</td> </tr> <tr> <td>5</td> <td>704</td> <td>18.43%</td> </tr> </tbody> </table>	District	Count	Percentage	1	702	18.38%	2	662	17.33%	3	1,121	29.35%	4	631	16.52%	5	704	18.43%	<p>Graffiti Removal</p>  <p>1,080 REQUESTS</p>
District	Count	Percentage																		
1	702	18.38%																		
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4	631	16.52%																		
5	704	18.43%																		



Community members in unincorporated area of North Tustin utilized myOC eServices most often, with a total of **299** service requests submitted in the 2020-2021 fiscal year! Strong winds during October 2020 knocked down trees that prompted many of these requests for service.

KEY INITIATIVES

Orange is the New Green: General Plan Update

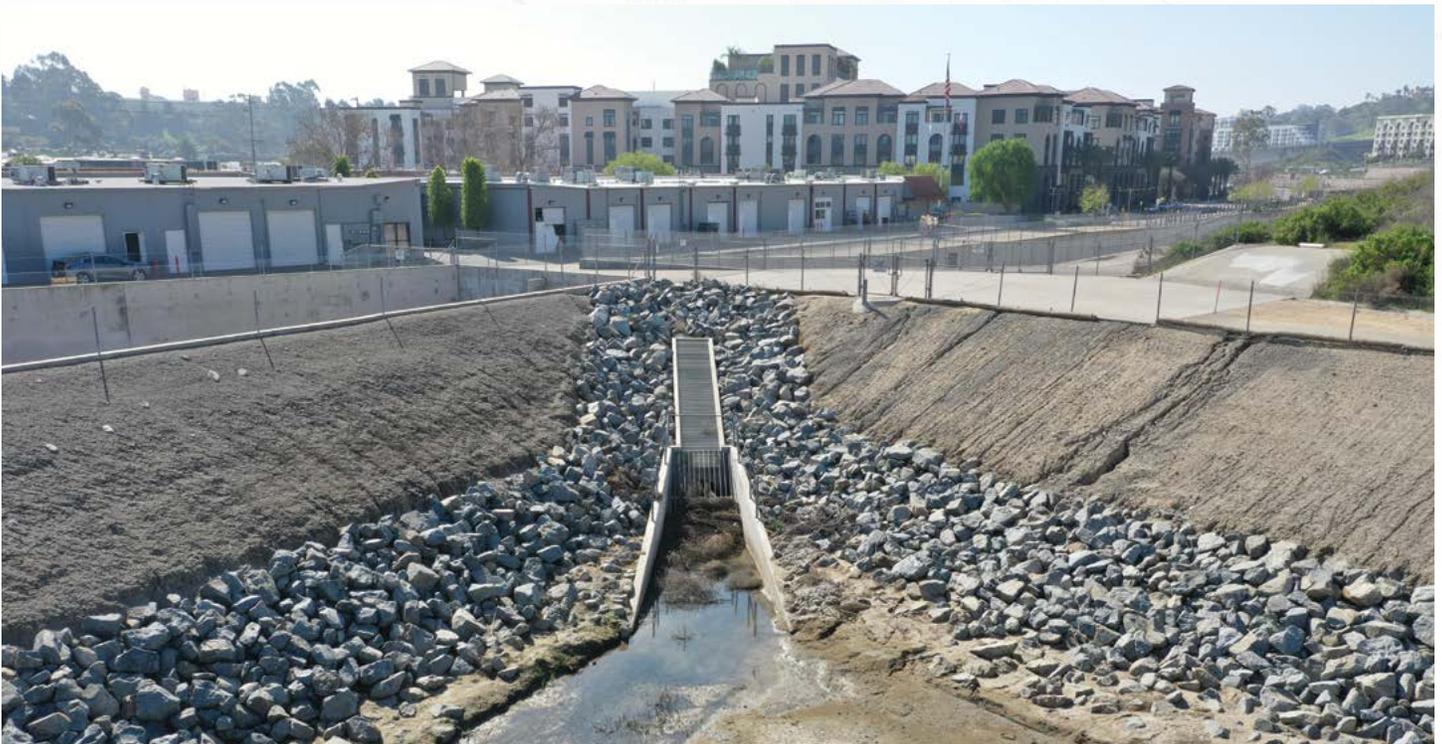
In 2021, OC Public Works led its “Orange is the New Green” effort to update the County’s General Plan, the first update to the County’s zoning code guidelines in nearly 20 years. Receiving approval from both the Orange County Planning Commission and the Board of Supervisors, the update set forth land use regulations that apply to unincorporated areas located throughout Orange County. The regulations were reviewed through a series of public workshops and are intended to protect the value and enjoyment of property by defining appropriate land uses and minimizing the impact of certain uses on less intense uses.



South County Water Quality Improvement Plan

Developed over a two-year collaborative public stakeholder process, the South OC WQIP guides the efforts of the County of Orange and the eleven cities of the South Orange County Watershed Management Area in managing stormwater runoff from urbanized areas and improving overall watershed health.

In 2021, a new Water Quality Management Plan (WQMP) template was implemented for OCPW projects, and training for staff, to help guide design staff through the process of drafting a project specific WQMP, with a simplified checklist to ensure all critical steps are documented.



Galivan Retarding Basin, Laguna Niguel.

KEY INITIATIVES

Supporting “Operation Independence” to Slow the Spread of COVID-19

OC Public Works joined other agencies and departments for the County’s “Operation Independence,” a major effort in 2020 to vaccinate all Orange County residents and workers through mass vaccination sites during the COVID-19 (Coronavirus) pandemic. For several months, OC Public Works team members played a key role in supporting the vaccination effort through various functions, including:

- Volunteering at multiple vaccination locations
- Producing and coordinating public information materials and events
- Providing logistical and purchasing support
- Providing delivery service for materials at various Operation Independence locations
- Constructing temporary outdoor booths with electrical service to ensure that critical OC Clerk-Recorder office services can safely continue for the public

Safety of the Public and Employees at County Facilities

OC Public Works made a number of adjustments to keep the public and employees safe during the ongoing COVID-19 pandemic, with critical funding provided through the federal CARES Act to support such measures. These measures at County office locations included:

- Completing “Return to Work” checklists for OCPW locations to identify needs and ensure employees’ safe return to the office
- Modifying employee cubicles
- Installing touchless faucets
- Making hand sanitizer supplies available to employees and visitors
- Increasing janitorial staff by 25%
- Staggering employee work schedules and seating within OCPW offices
- Installing COVID-19 safety measure signs and postings
- Increasing the use of virtual meetings among OCPW teams and others





PROVIDING SERVICES

PROVIDING SERVICES

In alignment with our mission of protecting and enriching communities, OC Public Works delivers a wide array of services for the public with efficiency and innovation. Our teams work throughout the year to help ensure that communities and homes are safe, your waterways are clean, retail consumers are protected, and more.

Our services are a major part of what we do every day for Orange County residents, businesses and visitors, including:

Removes graffiti from public areas

Conducts traffic studies to keep roads safe

Repairs potholes and deteriorating sections of public roads

Reviews and processes permit requests and property information for property owners

Reviews, monitors and approves building and grading plans

Tests water quality and provides resources to keep creeks, beaches and other waterways clean

Inspects gasoline stations to ensure products meet established standards, dispensing devices contain required information for grade and octane, and that price signs conform to state law requirements

Removes trash and debris from areas such as roads and flood control channels

Performs land surveying and mapping services

Provides sandbags to residents in unincorporated areas for the protection of homes from rain and mud



PROVIDING SERVICES

(continued)

Deploys crews during significant rain storms and natural disasters to maintain roadway access for the public and support other public safety agencies during emergencies

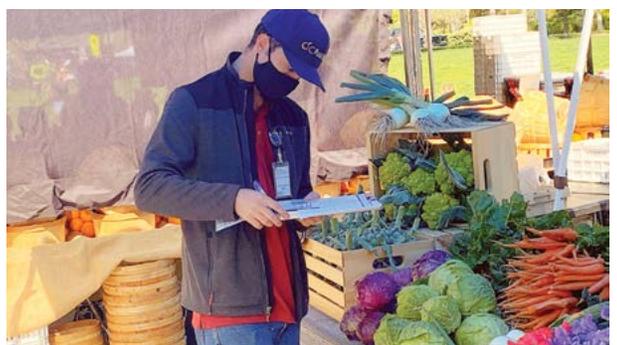
Inspects and certifies commercial weighing measuring devices and price scanners at retail stores to ensure they are accurate

Inspects fruit and commodities from many areas (Central America, Hawaii, Europe, North Africa, Southeast Asia) to identify pests and diseases that can greatly damage agricultural crops

Inspects farmers markets throughout Orange County to verify that each vendor has been certified as growing each agricultural product brought to market

Inspects retail plant nurseries for pest cleanliness, proper labeling and prohibited weed species

Enforces pesticide use regulation and conducts pesticide-related illness investigations



MAJOR PROJECTS

OSO PARKWAY BRIDGE



“The partnership between County of Orange, Transportation Corridor Agencies and Caltrans was essential in the successful delivery of the new Oso Parkway Bridge.”

— Kevin Tran , Senior Civil Engineer
OC Construction

Construction Cost
\$40M (TCA funded)

Date of Completion
January 2021

Location
Unincorporated South Orange County

OC Public Works oversaw the construction of the Oso Parkway Bridge Project – a multi-agency collaboration between the County, TCA and Caltrans, that improves safety, mobility and connectivity in the region.

The Oso Parkway Bridge offers six lanes of travel (three in each direction) and provides a direct connection between the 241 Toll Road and Los Patrones Parkway. The project also adds dedicated bike lanes, and a new sidewalk on the south side of Oso Parkway enhances safety for students and families accessing Tesoro High School.

The new bridge improves mobility and connectivity in South Orange County, diverting traffic from congested surface streets and providing improved access to businesses and restaurants in communities such as Rancho Mission Viejo, Ladera Ranch, Mission Viejo and Rancho Santa Margarita.

EDINGER AVENUE BRIDGE REPLACEMENT



Construction Cost
\$14M

Date of Completion
May 2019

Location
Huntington Beach, CA

The project replaced a 51-year old timber bridge that crosses the Bolsa Chica Channel to connect travelers with the Sunset Aquatic Marina on the west side of Huntington Beach.

The new bridge structure is wider and was constructed with concrete, replacing the wood structure of the previous bridge. OCPW also upgraded the barrier railing and increased the clearance for projected flood water elevations in the channel.

More than 3,000 cubic yards of concrete were used for the bridge, which spans 340 feet and is 48.5 feet wide. There are two 12-foot travel lanes, two 8-foot shoulders, a 5-foot sidewalk on one side and includes 2 bike lanes. The new bridge is expected to last 75 years.

FULLERTON CREEK CHANNEL IMPROVEMENTS



Phase 1

Construction Cost
\$10M

Date of Completion
September 2018

Phase 2

Construction Cost
\$40M

Date of Completion
January 2021

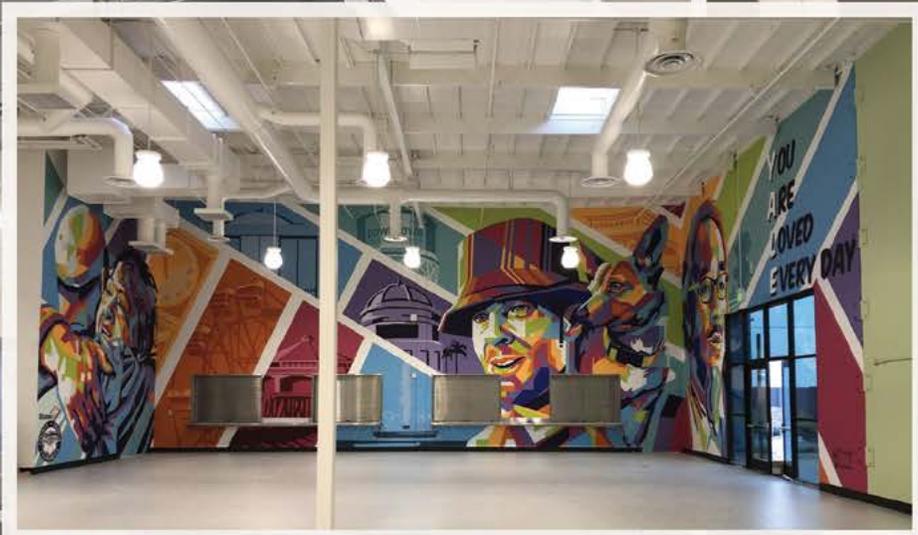
Phase 1 (Western Avenue to Beach Boulevard)

Modified the channel walls to increase depth and capacity to convey more stormwater.

Phase 2 (Beach Boulevard to the 5 Freeway)

Reconstructed the flood control channel from a trapezoid-shape channel to a U-shape channel. This provides greater flood protection by increasing channel capacity and conveying a greater amount of water during major rain events.

YALE NAVIGATION CENTER



Construction Cost
\$28M

Date of Completion
January 2021

Location
Santa Ana, CA

The County of Orange purchased and repurposed an existing commercial building into a modernized service center with 425 beds to replace its temporary Courtyard homeless shelter located in the Santa Ana Civic Center.

The 70,000 square foot Yale Navigation Center now provides trauma informed emergency shelter services with an emphasis on stabilization, permanent housing placements and re-integration of participants back into the community.

Facility features include: commercial –grade kitchen, occupant storage area, shower facilities, dining hall, separate men/women/family dormitories and more.

COUNTY ADMINISTRATION SOUTH





Construction Cost

\$160M

Date of Completion

August 2019

Location

601 North Ross Street
Santa Ana, CA 92701

The first in a multiple building, multi-year Civic Center Facilities Strategic Plan, the new County Administration South features a “one-stop” public service center to provide efficient public access to services of multiple County agencies, such as the Clerk-Recorder, Auditor-Controller, Treasurer-Tax Collector, OC Public Works and OC Waste and Recycling.

County Administration South features:

- 250,000 gross square feet of office space
- Event and Conference Center
- LEED (Leadership in Energy and Environmental Design) Silver certification for its efficiency and environmental sustainability
- Cold and hot water filtration system
- Coffee and food concession counter for the public and employees
- Employee fitness center
- Employee wellness center with support staff and tele-doctor capability
- Two levels of secure underground employee parking

OC ZOO — LARGE MAMMAL EXHIBIT



Construction Cost

\$10M

Date of Completion

April 2022

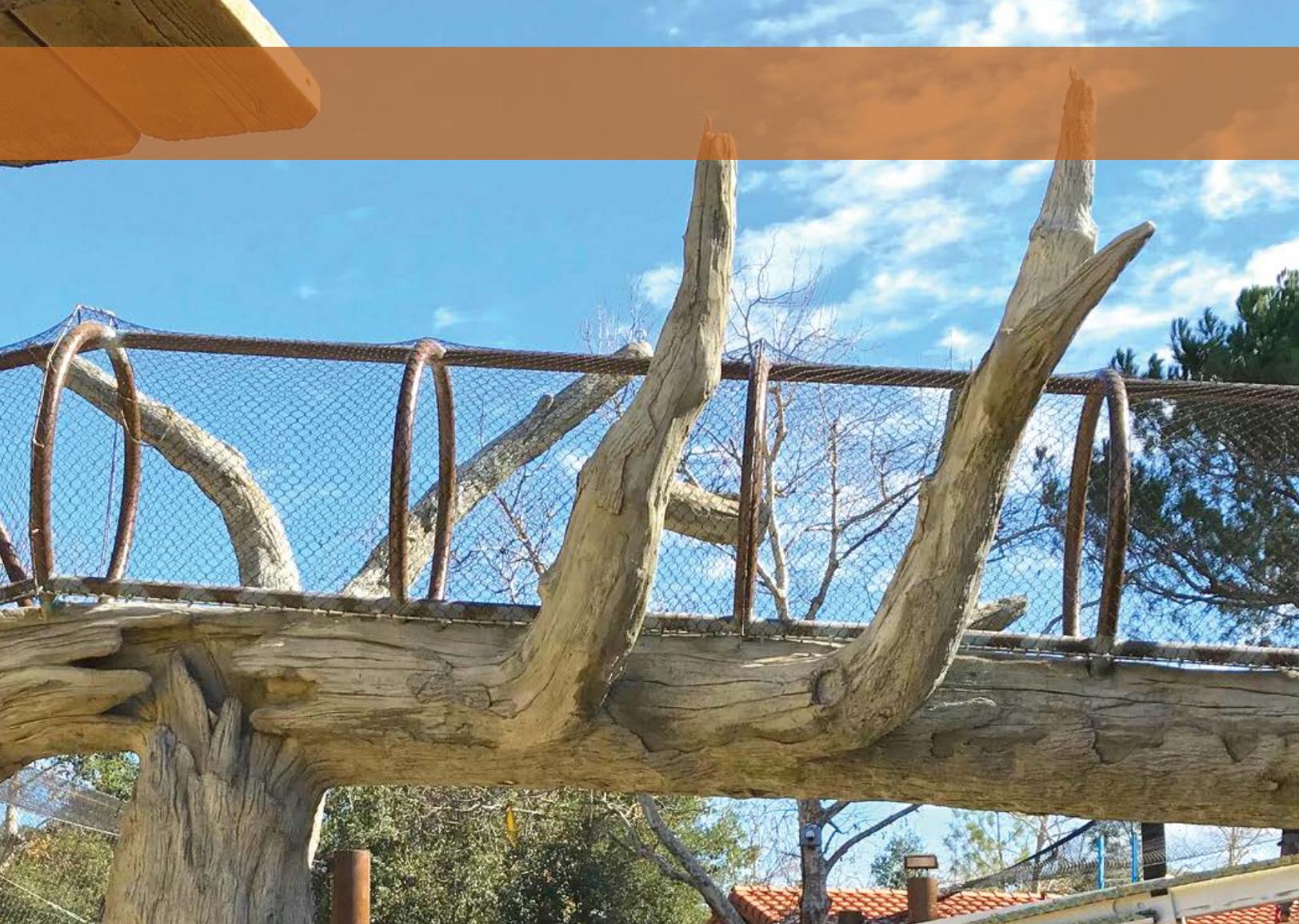
Location

Irvine Regional Park
1 Irvine Park Road
Orange, CA 92869

This new feature constructed by OC Public Works at the OC Zoo recreates the appearance and sense of the animal's natural environment. It provides improved animal viewing opportunities for zoo patrons and features natural-looking rock walls, climbing platforms, a waterfall element and secure fencing to protect the public and minimize injury to the animals.

The large mammal exhibit is 87,120 square feet (2 acres) and gives visitors an exciting and safe up-close look at:

- An adult mountain lion, a male mountain lion cub, a pair of mountain lion cub sisters, and an adult jaguar
- Two animal-only bridges allow large cats to pass above zoo visitors
- Wayfinding and tutorial information signs
- Americans with Disabilities Act (ADA) features along visitor paths and in animal holding buildings
- New decorative shrubs and shade trees throughout the exhibit for visitor enjoyment and comfort



EAST GARDEN GROVE-WINTERSBURG CHANNEL



Construction Cost

\$85M

Anticipated Date of Completion

Late 2022

Location

Huntington Beach, CA

Spanning from Warner Avenue to Goldenwest Street

OC Public Works is transforming a section of an existing flood control channel to meet today's design standards, which will increase stormwater capacity and enhance flood protection for surrounding communities.

Previously an earthen, trapezoid-shape flood control channel, crews are constructing a series of design elements necessary for the channel to meet current design criteria to convey a 100-year storm event, as well as meet federal requirements for national flood insurance.

This significant project includes:

- Installing dual-row steel sheet piles to form a protective “wall” along both sides of the channel
- Widening the channel by changing its trapezoid-shape levees to vertical walls
- Mixing concrete into soil along the channel sides to form another flood protection barrier, and;
- Installing water quality Best Management Practices (BMPs).



SERVICE AREAS

OC Public Works is comprised of 10 service areas.



ADMINISTRATIVE SERVICES

Administrative Services leads the financial and administrative operations for the department. This includes management of public information, policies and procedures, fee studies, strategic financial planning, budgets, goods and services procurement, public records requests, and parking and building administration.

Core Services

+ Business Services

Manages the daily operation of County office spaces, building services, franchises, and parking facilities.

+ Finance Services

Builds and maintains budgets, establishes encumbrances and reviews job codes.

+ Procurement Services

Oversees County utilities payments and procures construction contracts, design, services and commodities. Also administers compliance services (including Title VI of the Civil Rights Act).

+ Revenue Streams

Manages fees and rates development, audit coordination and monitoring, and cashing.

+ Strategic Communications

Develops public information materials and activities for projects and programs, processes public records requests and subpoenas, and manages the department's Agenda Staff Report process for preparing items to be considered by the Board of Supervisors.



Delivers important project and emergency response information to the public through television, radio, print and online news media outlets.



Manages over **6,100** parking spaces at 11 locations in the Santa Ana Civic Center.

Produces and distributes

thousands of public notification materials and social media announcements for road, flood control and county facility construction projects.



Receives and processes over **3,000+** records for storage at the County Records Center each year.

Submits and obtains approval for OCPW budgets totaling over

\$600M+ every year

with over **\$125M+** dedicated for capital improvement projects

OC PW EMPLOYEE PROFILE



Learner Home



Transcript



Performance (Coming Soon)

Welcome to Eureka – the County’s talent management system.

Eureka is a one-stop shop for all your learning needs. Find courses and playlists on professional development, leadership, technology, and so much more. Click "Learner Home" above to access the learning system.



MICHELLE LORENZO



Staff Development Specialist

OC ADMINISTRATIVE SERVICES

A Navy veteran, Michelle helps manage trainings and educational programs to keep staff up-to-date with current industry standards and ensure they have the tools and knowledge to effectively serve our communities.



OC DEVELOPMENT SERVICES

OC Development Services oversees the planning and development entitlement requirements for private and public projects within the County’s unincorporated areas. This includes permit processing, inspection services and management of zoning, building and code regulations – all to ensure safe and responsible property development and community standards.

Core Services

+ Building & Safety

Ensures public safety by reviewing, monitoring, and approving, building plans, grading plans, water quality management plans and geotechnical reports. In addition, delivers community code enforcement services through the Neighborhood Preservation division.

+ Inspection Services

Provides professional building inspection, grading inspection, subdivision and encroachment inspection services for the unincorporated areas of Orange County.

+ Land Development

Manages the County’s role in the planning, design, financing, plan checking and construction of master planned communities.

This includes public and privately-owned flood control facilities, highways, streets and all related infrastructure built or funded by master developers.

+ Planning

Ensures the positive growth and development of the County’s unincorporated areas through the implementation of the zoning code, planned communities, local coastal plans, specific plans and General Plan. Reviews environmental documents for both private and public development projects.

+ Permitting

Assists customers with permit submissions and issuance, research requests, property information and other inquiries through the public permit counter and the online myOC eServices/Land Management System platform.



Since the January 2019 addition of the Land Management System to

myOCeServices



42K+
Building inspections completed on average per year



11,000+
Building & grading permits initiated on average per year

3,200+ permits submitted
1,000+ applications submitted

2.8K+
street improvement inspections completed on average per year





DEYSI MUÑOZ



Permit Technician, Encroachment Permits

OC DEVELOPMENT SERVICES

Deysi enjoys assisting the public in the use of OCPW's customer service website, myOCeServices.ocgov.com. She guides them through basics such as setting up an account and processes such as permit applications.



OC FACILITIES DESIGN & CONSTRUCTION MANAGEMENT

OC Facilities Design & Construction Management provides professional architectural and engineering related services in support of vertical capital projects and programs to various County of Orange agencies.

Core Services

+ Facilities Admin

Manages procurement, budget and contract processes in support of service area activities.

+ Project Management

Partners with a variety of stakeholders in addition to County departments and staff, including architectural and engineering firms, contractors, and suppliers to provide project management for County assets on vertical capital projects using a variety of delivery methodologies to meet the client needs.



County Administration North (\$195M) is scheduled for overall building completion by July 2022. During 2021, OC Facilities Design & Construction Management oversaw the completion of structural elements and the underground parking structure.

Managed over

\$700M in design and construction for capital improvement and maintenance projects.



The Yale Navigation Center in Santa Ana was completed on December 2020. The Center now provides trauma informed emergency shelter services.

Passed ★ ★ ★ ★ ★ ★ ★ ★ ★ ★



120

Monthly Inspections



11

Annual Certifications



11

Secondary Containment Tests



6

Annual CARB Vapor Recovery Tests

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Completed major renovation projects of

4 County Public Libraries

(Cypress Library, El Toro Library, Rancho Santa Margarita Library and Westminster Library)





RICK DE JONG



Senior Project Manager

OC FACILITIES DESIGN & CONSTRUCTION MANAGEMENT

Having worked with OC Public Works for over 8 years, Rick says the brand new large mammal exhibit at the OC Zoo has been the most interesting project in his portfolio of County projects to date!



OC FACILITIES MAINTENANCE & CENTRAL UTILITY FACILITY

Ensures the efficient and innovative operation of County facilities through maintenance management services, after-hours emergency support, building automation and utility management. A major component is the Central Utility Facility, a combined heat and power facility that provides cooling, heating and/or electricity to 20 buildings within the Santa Ana Civic Center area.

Core Services

+ Central Utility Facility

Manages the County's "microgrid" utility that provides a combination of electricity, cooling, heating and chilled water to 20 government buildings in the Santa Ana Civic Center.

+ Facility Solutions

Manages contract vendors providing maintenance support for County facilities.

+ Maintenance & Engineering Unit

Oversees proper operation and repair of OCPW facilities, processes customer requests for all County facilities and provides after-hours emergency services. Manages trade teams such as electrical, elevator, plumbing, carpentry, locksmith, metalsmith and HVAC (heating, ventilation and air conditioning).

+ Utility / Energy Unit

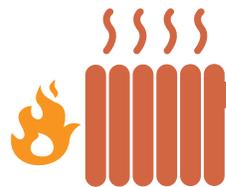
Provides long-range energy planning, energy efficiency analyses and utility monitoring and delivers retrofit projects that provide energy cost savings for the County.



The CUF utilizes **cogeneration**, which is the simultaneous production of electricity and heat, to provide Civic Center buildings with electricity, steam and chilled water.



Combustion Turbine



Heat Recovery Steam Generator

The CUF produces 31 million pounds of steam per month, on average

Chillers



The CUF produces 770 million BTU of chilled water per month

The CUF can cool up to 6,400,000 square feet at the Civic Center Campus

The turbines are filled with 2.3 million cubic feet of air per hour

Each turbine spins at **14,951 RPM!**



JOLYN CALDERON

 **Metalsmith**
OC FACILITIES MAINTENANCE & CENTRAL UTILITY FACILITY

Jolyn tackles a welding project at the OC Zoo. Her father was an OC Public Works employee and she followed in his footsteps when she joined OC Public Works.



OC FLEET SERVICES

Delivers vehicle management services to County-owned vehicles and equipment in County agencies and departments. This includes general maintenance, repair services and managing enforcement of vehicle rules and regulations.

Core Services

+ Fleet Operations

Provides repair services to over 3,000 County-owned vehicles and equipment and enforces vehicle rules and regulations to ensure that County vehicles are operated safely and efficiently.

+ Fleet Administration

Oversees regulatory, financial and equipment contract activities for operating Fleet Services, including managing funds for all County fleet costs, State funds received and natural gas fueling funds.



Manages the County's fleet of light, medium, and heavy duty vehicles with a replacement value in excess of **\$100M**



Vehicles serviced by Automotive Service Excellence certified technicians



Purchases, commissions and places into service over

100 public safety emergency vehicles



3,125

Light Duty Vehicles, Medium/Heavy Equipment, and Component/Trailers/Generators

District Attorney	31
Health Care Agency	110
John Wayne Airport.....	138
OC Public Works	724
OC Sheriff.....	1,189
OC Waste & Recycling.....	136
OC Community Resources	542
Probation	166
Registrar of Voters	23
Social Services Agency	52
Misc.....	14



Maintains an over **80%**

time commitment to vehicle service by all mechanics and technicians



100%

of all standard A-level preventative maintenance is performed in under **1.5 hours per vehicle**

660

total hours of annual training for mechanics

6.5

years is the improved average age that each fleet vehicle was reduced to, down from 7.4, with the implementation of **fleet modernization efforts**



PAUL SOBOLEW

 **Supervising Fleet Technician**
OC FLEET SERVICES

Paul has worked at OCPW for 10 years helping to keep the County's fleet of vehicles operational and compliant with regulations. The most interesting part of his job? He says it is ensuring his team keeps up with the constant evolution of vehicles and technology.



OC CONSTRUCTION

OC Construction provides construction management services for road, bridge, bikeway and flood control capital improvement and maintenance projects, manages the County's pavement maintenance program, and performs quality assurance testing of construction materials for County construction projects.

Core Services

+ Construction Management

Manages and inspects County road, bridge, bikeway and flood control capital improvement projects.

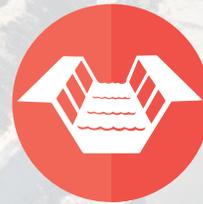
+ Materials Laboratory

Provides geotechnical engineering, pavement analysis, and quality assurance testing of construction materials for County and customer agency construction projects.

+ Special Projects

Develops pavement maintenance strategies for County-maintained roads and delivers road, bridge, bikeway and flood control maintenance construction projects through the County's Job Order Contracting (JOC) program.

Completes construction of **ROAD, BRIDGES, FLOOD CONTROL** and **BIKEWAY** projects totaling over **\$100M** annually.



Fullerton Creek Channel Improvement Project

\$10M



Increased channel capacity for enhanced flood protection

Raised the County's Pavement Condition Index from

79 to 80

(State average is 67)

Completes over 100 Job Order Contract (JOC) projects annually totaling over

\$33M



Wagon Wheel Creek Restoration & Stormwater Management Project



Improvements for creek stabilization, erosion control, habitat restoration and water quality.



TEEJAY AREOPAGITA



Civil Engineer
OC CONSTRUCTION

A 15-year department veteran, Teejay manages construction activities and contractors for major capital projects, including the Huntington Beach/Talbert Channel sheet pile repair project pictured here.



OC ENVIRONMENTAL RESOURCES

Manages the OC Watersheds and OC Agricultural Commissioner/Sealer of Weights and Measures programs, which protect public health and safety, promote environmental quality, certify consumer weights and measures, and sustain business competitiveness through education, regulation and collaborative regional programs.

Core Services

+ Watersheds

Countywide Compliance

Protects and improves water quality in local water bodies and beaches, while facilitating countywide compliance with state and federal stormwater runoff regulations.

OC Watershed Management Areas (North & South Regions)

Coordinates watershed management efforts with stakeholders and facilitates large-scale integrated water resource projects. Collects, manages and assesses water quality, hydrologic and meteorological data.

+ Agricultural Commissioner/Weights and Measures

Agricultural Services

Prevents invasive pests and certifies the safety of plant shipments arriving in Orange County.

Pest Management

Enforces pesticide use regulation and conducts pesticide-related illness investigations and integrated pest management activities.

Weights and Measures

Inspects and certifies commercial weighing measuring devices and investigates complaints.

Operates the **ALERT** flood warning system



130 sensors at **80** locations

Collaborates with **192** municipalities, water districts and other partners on **local and regional water quality improvement** projects and programs



Performed **75,000+** laboratory analyses to assess environmental conditions of Orange County waters



160,000+ weighing and measuring devices certified



770+ fueling stations certified



22,000+ retail checkout / price scanners certified

Earns "A" grades from **Heal the Bay** for **over 90%** of Orange County's **100+ beach monitoring stations** during summer months (5 year average)

Protecting Orange County's

\$100M agricultural industry from invasive species and pests.



Staff inspected over **27,000** plant shipments and rejected **130** shipments due to presence of exotic pests in 2018.



GHEORGHE SIMIONESCU



Environmental Resource Specialist I
OC ENVIRONMENTAL RESOURCES

Gheorghe has been a proud employee of the County of Orange for 20 years. His favorite part of working with OC Watersheds is being able to work outdoors at beautiful places like Monarch Beach, where he collects water samples to be tested in the lab.



OC INFRASTRUCTURE PROGRAMS

OC Infrastructure Programs provides engineering services for roadways in unincorporated areas and regional flood control facilities throughout Orange County. This includes programming, design, legislation tracking, project management, traffic safety, and development support services.

Core Services

+ Design Services

Manages the design of the County's horizontal infrastructure, roadways, bridges, bikeways, channels, storm drains, dams, pump stations and other drainage related facilities.

+ Flood Programs

Coordinates floodplain management services with agencies such as the Federal Emergency Management Agency (FEMA) and others on behalf of the Orange County Flood Control District. Oversees local sponsor role in the Santa Ana River Mainstem project.

+ Funding Services

Secures funding to implement the County's Capital Improvement Plan, including facilities in the Master Plan of Arterial Highways, bridges, flood channels and other roadway improvement projects.

+ Traffic Safety Services

Implements signal operations and conducts traffic investigations in unincorporated areas of Orange County.

+ Development Support Review Services

Reviews permits for encroachments, access, or modifications of county roadways and flood control facilities, along with proposed developer infrastructure that will become part of the County system.



Develops the 7-Year **Capital Improvement Program** of **ROAD**, **FLOOD CONTROL** and **BIKEWAY** projects equating to over **\$1B**

The **Orange County Flood Control District**, formed in 1927, manages

380 miles of channels and has completed over

\$226M of improvement projects since 2010



500

County Property Permit submittals reviewed each year, on average



Percent homeowners saved on flood insurance due to County's participation in the **Community Rating System**



The County's first **Traffic Management Center** went live in 2017 to reduce congestion, improve citizen commutes, and reduce emergency response





DENISE ESGUERRA



Civil Engineering Assistant
OC INFRASTRUCTURE PROGRAMS

As a member of the Traffic Investigations and Studies Unit, Denise reviews traffic concerns received from residents and develops recommended actions such as painting red curbs, installing traffic safety signs and assigning crossing guards at school crosswalks.



OC OPERATIONS & MAINTENANCE

OC Operations & Maintenance enhances and protects communities through the operation and maintenance of public infrastructure, while serving a critical role in responding to the aftermath of devastating earthquakes, fires, storm events and other general emergencies. OC O&M is responsible for the maintenance of 340 miles of unincorporated roadways, 380 miles of flood channels and 145 miles of underground drainage facilities and also provides support for various contracted cities and agencies.

Core Services

+ City Contracts

Manages services for contract cities/agencies, graffiti abatement and traffic markings.

+ Equipment Operations

Provides construction and heavy equipment services in support of maintenance projects and emergency response efforts.

+ General Maintenance

Oversees general maintenance services on County properties such as right-of-way trimming, fence installation and repairs, trash and debris removal, pump station operation and maintenance, sign fabrication and installation, and welding.

+ Maintenance Programs

Maintenance services such as inspection of road and flood control facilities, scheduling, and contracted operations. Inspects and identifies maintenance needs in unincorporated roadways and flood control facilities. Plans and schedules maintenance work, and manages contracted workforce to supplement in house staff.



Provides **30,000+** sandbags annually in preparation of storm season



Each year, over **1,500 TONS** of trash and debris

are removed from flood control channels, of which

210 TONS

are captured and removed from trash barriers before reaching the ocean



Cleans approximately



2,500 catch basins
4 times a year, mitigating
9,000 tons of trash



ABEL BANUELOS



Power Equipment Operator II
OC OPERATIONS & MAINTENANCE

Abel leads crews performing general maintenance projects along County roadways and facilities. He also drives heavy equipment for the department, including construction equipment and vacuum trucks (pictured here).



OC SURVEY

OC Survey provides innovative surveying and mapping services that support the public's land-use needs and the design and construction of projects throughout the County. This includes supporting the acquisition and sale of property, maintenance of land information and geographic information systems for all parcels within the County.

Core Services

+ Map Check and Right-of-Way Services

Provides subdivision map checking services, determines parcel boundaries and acreage, reviews annexation documents and maps and assists the public survey records research. Also prepares real estate property records, processes real property transactions and assists Investigations and Inspections in the analysis of claims.

+ Survey Business Services

Manages service procurement and contracts, map checking services for cities, the County's parcel-level digital basemap of over 687,000 subdivision parcels (Landbase) and other general survey administrative activities.

+ Geospatial Services

Manages land information systems, geodetic control and Geographic Information System (GIS) activities, including creating interactive GIS maps for easier public access to project information. Also captures aerial images using unmanned aerial vehicles (drones) to document project site conditions and create innovative 3D modeling.

+ Field Services

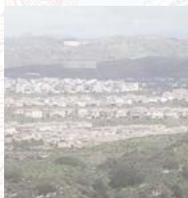
Manages alignment analysis and various land surveys, such as real property boundaries, claims investigation, construction, deformation, GPS and high definition.

CUTTING EDGE LiDAR and aerial photography

to monitor the progress of all ongoing projects and to capture the as-built conditions



Land Information System contains **685,000+** legal parcels for all of Orange County



Every year, reviews and records hundreds of



tract maps
parcel maps
records of survey

Completed **695** reviews of subdivisions, records of survey and corner records



543 Corner record maps filed



60 topographic surveys completed



Developed Web/Mapping Applications

for the Bond Fire Emergency, County Water Quality Improvement Plan, CIP Projects and more!



MARIE AQUINO

 GIS Specialist
OC SURVEY

Marie serves Orange County communities through the development of geospatial data for mapping services. She is the creator of a 3D planning application that has improved John Wayne Airport operations by providing visualization of obstruction data.

OC Environmental Resources team member Rita Abellar assesses water quality in the San Juan Creek, using specialized equipment to measure the physical characteristics (pH, temperature, dissolved oxygen, conductivity and flow) and bacteria level of the water.



A large Hyundai excavator is shown working on a rocky shore. The excavator's arm is extended, and it appears to be in the process of moving or placing large rocks. The background shows a body of water and a cloudy sky. The entire image has a warm, orange-brown tint. The text 'APPENDIX OF ACCOMPLISHMENTS' is overlaid in large, bold, white capital letters across the center of the image.

APPENDIX OF ACCOMPLISHMENTS

ACCOMPLISHMENTS/2021

MAJOR DEPARTMENT ACCOMPLISHMENTS

SUPPORTING SPECIAL PROJECTS

COVID-19: Operation Independence Vaccination Super Points of Distribution (PODs) and Countywide Support

- Provided support for the 5-month County effort to set up and manage multiple COVID-19 vaccination Super PODs, including Public Information, Planning, and Logistics sections, volunteer staff at POD sites and delivery drivers.
- Designed and installed protective measures at County office locations, such as protective barriers and hands-free equipment.
- Supported OC Health Care Agency (HCA) in deployment of mobile hospital units throughout the county.
- Provided disinfection services for County work locations.

2021 Coastal Oil Spill

- Coordinated with multiple partner organizations, including CA Dept. of Fish & Wildlife, US Coast Guard, Huntington State Beach, Cities of Newport Beach and Huntington Beach, Army Corps of Engineers, Huntington Beach Conservancy and others, to minimize environmental impacts.
- Established large sand berms across Santa Ana River outlet and Talbert Channel outlet to prevent further spread of oil spill in sensitive marsh areas and other inland areas through tidal movement.
- Monitored environmental conditions of inland waters and coordinated efforts to protect biological resources.
- Deployed pumps to aerate water in order to increase dissolved oxygen that safeguarded marine life.
- Staff representation at the County Emergency Operations Center (EOC).

Bond Fire Burn Area Debris Flow Preparation & Response

- Coordinated with the Third District office and Unified Command partners (OC Sheriff's Department, OC Fire Authority, others) for preparations and response activities for significant mud & debris flows in Silverado, Modjeska and Williams Canyons.

- Activated personnel and heavy equipment during multiple rain and debris flow events in early and late 2021, removing thousands of cubic yards of materials from the area to maintain public access to County roadways.
- Deployed Building and Safety staff personnel to inspect affected homes and provided permit assistance for property owners.
- Coordinated and hosted the multi-agency debris flow coordination public town hall meeting for canyon residents.

DELIVERING MAJOR PROJECTS

Oso Parkway Bridge

- Completed construction of the \$40 million project on behalf of the Transportation Corridor Agencies (TCA) that improves mobility and connectivity in south Orange County, diverting traffic from congested surface streets and providing improved access to areas such as Rancho Mission Viejo, Ladera Ranch, Mission Viejo, Rancho Santa Margarita and other areas.

Yale Navigation Center

- Completed construction and received Certificate of Occupancy of the County's new homeless assistance and navigation facility located in Santa Ana.

County Administration North (CAN)

- Completed underground parking structure and the building's steel structure.

East Garden Grove-Wintersburg Channel Improvement Project

- Completed installation of over 16,000 linear feet of steel sheet piles between Warner Avenue and Goldenwest Street in Huntington Beach.

OC Public Libraries renovation projects

- Completed major renovation projects of four County public libraries: Cypress Library, El Toro Library, Rancho Santa Margarita Library and Westminster Library.

Santiago Canyon Road Safety Improvements Project

- Completed this significant corridor safety improvement project that included high-friction surface treatment, upgraded roadway caution signs, upgraded and new guardrails, and enhanced bikeway buffer.

OC Loop Bikeway, Segment H

- Completed segment that spans areas of Yorba Linda and Anaheim.

Capital Improvement Project (CIP) Approval

- Received Board of Supervisors approval of CIP valued at \$1 billion for flood capital and maintenance, road capital and maintenance, external road projects, bikeways, parks and library projects.

DEPARTMENT INITIATIVES

American Public Works Association (APWA) Reaccreditation

- Earned reaccreditation confirming OCPW compliance with recommended practices set in the Public Works Management Practices Manual for industry policies and procedures.
- OCPW is one of only five CA county agencies to receive APWA accreditation.

Project Delivery Manual

- Following a multi-month collaborative effort across OCPW service areas, produced the department's first Project Delivery Manual that serves as a written guide to align horizontal and vertical project processes Countywide.

New AiM asset management solution

- Launched the new AiM asset management platform, the AssetWorks enterprise business solution that is creating one master index of all capital and maintenance lifecycle costs.
- Implemented AiM platform with two OCPW service areas and OC Sheriff's Department with remainder of OCPW and other County departments slated for 2022.

Local Drainage Manual Approval

- Received Board of Supervisors approval for updated manual, delivering a complete overhaul of the document used as the basis of design for local drainage improvements in unincorporated County areas and many cities in design of their drainage facilities.

ENHANCING SAFETY

- Launched revamped department safety program and task force, with increased use of OC Safety platform, updated policies and procedures documents, new

safety trainings for staff, and creation of the department's safety coin to increase safety awareness.

- Completed annual OCPW facilities safety inspections, which included facilities, operations, and record keeping.

OVERALL ACCOMPLISHMENTS (COMPREHENSIVE LIST)

ADMINISTRATIVE SERVICES

COVID-19 Pandemic Response

- Supported and implemented County policies & procedures to reduce the spread of COVID-19.
- Created "Safe Return to Work" COVID-19 safety measures manual for County staff.
- Implemented numerous COVID-19 safety measures:
 - Modifications to County Administration South (CAS) building lobby, conference rooms, breakrooms, lunchroom and collaboration areas
 - Installed signs and floor markers promoting COVID-19 safety measures
 - Distributed sanitizing products to all CAS staff

PUBLIC AND EMPLOYEE COMMUNICATIONS

Bond Fire Burn Area Emergency Prep and Response

- Coordinated and hosted multi-agency public townhall meeting to provide overview of storm season/debris flow preparations.
- Coordinated responses to resident inquiries.
- Prepared and distributed public notifications for Kitterman Drive bridge maintenance (Silverado Canyon).
- Coordinated with County Emergency Operations Center (EOC) staff on public information announcements.

Projects and Initiatives Support

- Produced and distributed thousands of public notification materials and created social media announcements for over 25 projects and key initiatives, including:

Road Projects

- OC Loop Bikeway, Segment H Project
- Active Transportation Program Community Workshops

- Newland Street-Hazard Avenue Traffic Signal Upgrade Project
- North Tustin Americans with Disabilities Act (ADA) Curb Ramp Upgrades Project
- Midway City ADA Curb Ramp Upgrades Project
- Crawford Canyon Road Sidewalk Extension Project
- Gilbert Street Rail Crossing Improvement Project (Anaheim)
- Kellogg Drive Sidewalk Gap Closure Project (Yorba Linda)
- Unincorporated Anaheim Streets Resurfacing Project
- Katella Avenue Resurfacing Project (Anaheim)
- Rossmoor Resurfacing and Slurry Seal Projects
- Ladera Ranch Resurfacing Project
- Fairhaven-Foothill Resurfacing Project (North Tustin)
- Panorama Heights Resurfacing Project (North Tustin)
- Santa Ana Avenue Bridge Maintenance Project
- East Tustin Remedial Street Repairs / Surface Treatment Project
- Santiago Canyon Road Bridge Maintenance Project
- North Tustin Sidewalks/Curbs/Gutters Maintenance Project

Flood Control Projects

- East Garden Grove-Wintersburg Channel Improvements Project
- Huntington Beach Channel/Talbert Channel Sheet Pile Repair Project (including public meeting)
- Santa Ana River Outlet Annual Maintenance Project
- Talbert Channel Outlet Maintenance Project
- Laguna Canyon Channel Replacement Project
- Santa Ana Gardens Channel Improvement Project
- Walnut Canyon Channel Improvement Project
- Kempton Channel Improvement Project
- Richfield Channel Improvement Project

County Facilities

- County Administration North Building Project

Public Records

- **1,424:** Public Records Act (PRA) requests processed, a 52 percent increase from 2020.
- **3,260:** Records received and processed for storage at the County Records Center.

Board of Supervisors Meeting Support

- **132:** Agenda Staff Reports submitted for Board of Supervisors approval.

Media Relations

- Participated in interviews with television, radio, print and online news media regarding mud and debris flow events in Bond Fire burn area.
- Participated in seven other interviews with print and online news media regarding various OCPW projects and initiatives.

Key Initiatives Support

- Designed Department's first Project Delivery Manual in coordination with department subject matter experts.
- Expanded public awareness of the County's 2021 Housing Element Update.
- Promoted the 2021 H2O for HOAs, a multi-agency water education initiative for homeowner associations.

Website / Social Media

- Perform ongoing website page updates for key projects and announcements.
- Increased number of OCPW's social media followers who receive announcements regarding projects, events, services, and emergency response efforts:
 - Facebook: 4,005 to 4,181
 - Twitter: 4,047 to 4,220
 - Instagram: 891 to 1,152

Training and Safety

- Established Department Safety Program & Task Force, including core objectives, policies, procedures and workplace safety programs such as the department's safety coin
- Produced seven new e-learning courses for staff through the Eureka training system
- Processed 253 Educational Professional Reimbursement Program for staff completing additional education and training.

Policies & Procedures Analysis & Updates

- Updated 61 Policy & Procedure documents and uploaded to IntraOCPW intranet portal for staff access.

- Established a team of department subject matter experts and completed a review of over 70 Administrative P&P's for general cleanup and to identify additional P&P needs for the department.
- Achieved objective of tightening internal controls and promoting efficiency.

American Public Works Association (APWA) Re-Accreditation

- Successfully earned re-accreditation from national industry organization that recognizes public works agencies that go beyond the requirements of management practices established nationally in the public works industry.
- Coordinated re-accreditation materials across all OCPW service areas that included over 600 supporting documents.

OC CONSTRUCTION

- **\$201.5 million:** Value of infrastructure projects for which OC Construction managed construction and materials testing:

Flood Control Projects

- Fullerton Creek Channel Improvements (\$50M total)
- East Garden Grove Wintersburg Channel Improvements (\$78.7M)
- Huntington Beach Channel / Talbert Channel Improvements (\$62.7M)

Road Projects

- Santa Ana and University Drainage, Pavement Improvement and Community Park Project (\$1.9M (park transferred to City of Costa Mesa))
- Santiago Canyon Road Safety Improvements (\$2.6M)

Bikeway Projects

- OC Loop El Cajon Bikeway Segment H (Yorba Linda/Anaheim) (\$2.6M)

OC Parks Projects

- Muth Amphitheater Remodel Project (inspection services, \$500,000)
- Tri-City Fitness Equipment (inspection services, \$280,000)

CEO-Sponsored Projects

- Constructed El Toro 20-acre equipment storage yard (\$2.2M).
- Construction management of Orange County Public Work's first 2 Design-Build projects (East Garden Grove-Wintersburg Channel project and

Huntington Beach Channel Talbert Channel project)

- **Over 4,000:** Tests performed on soils, aggregates, Portland cement concrete and asphalt concrete.
- **44:** Projects for which OC Construction performed quality assurance testing, including three city projects and 11 Rancho Mission Viejo projects.
- **26:** Projects completed via Job Order Contracts (JOC) (\$8.5M).
- **24:** Pavement maintenance projects completed via JOC (\$16.6M).
- **1:** Traffic Signal Maintenance projects completed via JOC (\$560K).
- Provided testing services to the City of Costa Mesa for three federally funded projects.
- Signed a cooperative agreement with the City of Santa Ana to provide testing services.

OC DEVELOPMENT SERVICES

- Maintained continuous, uninterrupted permitting service to customers throughout the COVID-19 pandemic with permit activity consistent with 2020 numbers, including:
 - **3,638** Planning reviews
 - **9,888** Issued permits and revisions
 - **12,092** Plan check reviews
 - **24,350** customer portal inquiries and requested changes
 - **33,331** Building inspections
 - **\$11,958,869** Fees collected on issued permits
 - **\$301,796,359** Total valuation of new construction permits
- Played critical role in completion of major projects:
 - **Yale Shelter Project:** Seismic retrofit and mezzanine addition in existing manufacturing building to create a transitional center for the homeless
 - **Anita Behavioral Health Campus:** New 3-story building to support behavioral health that consists of Crisis Stabilization, Sobering Unit, Referrals, Wellness Social Services and Residential.
 - **St. Michaels Abbey:** Church and crypt (21,959 sq. ft.), monastery (55,925 sq. ft.) with covered walkway (6226 sq. ft.). Guest wing and administration offices (28,565 sq. ft.) with covered walkway (6391 sq. ft.)
- **Senate Bill (SB) 9 Urban Lot Split:** Completed urban lot split parcel map application submittal via the MyOCeServices.ocgov.com portal along

with public information checklist and submittal summary information

- **Accelerated Plan Check Review:** Implemented process for general community customers in order to expedite their plan check review timeframe.
- **Land Management System (LMS):** Completed additional online services enhancements to LMS, including new fee estimator and payment of invoices.
- **Cross Training:** Completed cross training for Permit Technicians on simple land use/planning reviews for permits to help expedite reviews on express type permits. Planning Plan Check reviews.

OC ENVIRONMENTAL RESOURCES

OC AGRICULTURAL COMMISSIONER/ SEALER OF WEIGHTS AND MEASURES

- **\$804,605:** Amount expected to be received from the State's Unclaimed Gas Tax fund due to meeting the five-year average maintenance of effort (MOE) in resource allocation to support Orange County's local agricultural industry and for the protection of residents and the environment from the use of pesticides.

Weights and Measures

- **176,106:** Weighing and measuring devices registered at 603 gasoline stations.
- **30,574:** Registered weighing and measuring devices inspected at 460 gasoline stations.
- **4,276:** Retail checkout locations (with price scanners) registered.
- **1,155:** Registered retail locations inspected to verify consumers pay the advertised or posted price.
- **Over \$120,000:** Cost recovery that resulted from three consumer protection investigations, ensuring that the measurement standards, fuel quality and pricing of goods exist for value comparison and fair competition for consumers. OC District Attorney office's consumer protection trust fund also received \$25,000.
 - Worked closely the OCDA's office related to fuel contamination at a local gas station, overcharges occurring at JC Penney, and electric bill overcharges to county citizens

Pesticide Use Enforcement

- **3,466:** Pesticide use safety inspections conducted on various types of firms, including pest control businesses, identifying 265 safety violations.



- **51:** Pesticide related investigations conducted in response to complaints of pesticide misuse or pesticide human exposures.
- Collaborated with the CA Department of Pesticide Regulation and five additional counties in a case against a company that manufactured and sold an herbicide product marketed as organic and non-toxic. Product formulation sampling revealed presence of conventional, non-organic, pesticide ingredients. The case is under consideration with the State and EPA.

Integrated Pest Management

- **Over \$62,000:** Grant awarded from the CA Department of Food and Agriculture for control of emergent noxious weeds that could pose a risk to sensitive habitats.
- **1.4 million square feet (75 parcels):** Area of private and County-owned property for weed abatement activities to reduce the risk and property loss caused by wildfires.
- **Over 230 miles:** Residential roadways in unincorporated county areas where OCPW eliminated the application of herbicides and implemented a weed steaming program.
- Exceeded all National Pollution Discharge Elimination System permit related water quality testing as part of an Aquatic Pesticide Application Plan administered by State and Regional Water Quality Control Boards.

Agricultural Services

- **59,669:** Incoming plant shipments from other states and countries inspected at shipping distribution centers and plant nurseries in the county.
 - Inspectors issued 187 Notice of Rejection's and intercepted 203 pests of economic importance to our agricultural industry and natural environment.
- **Light Brown Apple Moth (LBAM):** Following years of coordination with agriculture industry, University of California and other stakeholders to detect, delimit and measure the impact of LBAM in California, the USDA's Animal and Plant Health Inspection Service (APHIS) reclassified LBAM as a non-quarantine pest and removed it from quarantine.
 - This brings successful conclusion of an eradication/management program that was a long-standing partnership with USDA, CDFA and the OC Agricultural Commissioner's Office and will allow for commercial plant material to move unimpeded throughout the United States.

OC WATERSHEDS

Mitigation Program

- **Haster Basin Recreational Field Project mitigation:** Received U.S. Army Corps of Engineers and Santa Ana Regional Water Quality Board approval acknowledging final performance criteria for the compensatory mitigation project have been met.
 - Installation of mitigation site was completed in February 2014 and includes 0.20 acre of seasonal wetland, 0.27 acres of basin wetland, 0.67 acres of wetland/mesic riparian habitat, and 0.67 acre of xeric riparian habitat. The least tern, a federal and State endangered bird species, has been observed at the basin.
- **La Pata Avenue Extension off-site mitigation:** Received a Commendation Award in the category of Water Resources by the American Council of Engineering Companies (ACEC) for mitigation project in Arroyo Trabuco Creek, contributing to the restoration of over 16 acres of riparian habitat and transforming it into a healthy, functioning riverine system.

Integrated Regional Water Management

- **Integrated Regional Water Management Implementation Grant Program funding:** A stakeholder-driven review and update of project scoring criteria was completed in advance of Proposition 1, Round 2 of program, of which \$7,175,543 is allocated for projects in North and Central Orange County.
- **Staff Leadership in the Community:** OCPW's Jenna Voss, who leads the Integrated Regional Water Management (IRWM) program for the South OC Watershed Management Area, was appointed co-chair of the Roundtable of Regions, a consortium of representatives from IRWM regions around the state.
- **Newport Bay Total Maximum Daily Load (TMDL) Report Cards:** Updated report cards were submitted to the State for the Nutrient, Sediment, and Selenium TMDL programs in the Newport Bay watershed, with targets achieved for Sediment and Nutrient TMDLs and improvements made for Selenium TMDL.
- **Newport Bay/San Diego Creek Sediment TMDL:** Along with TMDL monitoring and reporting requirement changes, saved labor time and related costs for the County, Orange County Flood Control District and Sediment TMDL Funding Partners through new streamlined method of incorporating required sediment removal activities in conjunction with routine vegetation maintenance requirements for San Diego Creek In-channel Basin 3.

OC Stormwater Program

- **Updated Training:** New training approach was launched, with first training on inspection of post-construction best management practices during the construction phase of installation. Training was recorded for on-demand viewing and had 120 attendees from the cities and various service areas within OC Public Works.
- **Monitoring and Reporting Program elements completed:** Required elements were successfully completed for each core NPDES and TMDL compliance program.
- **Evaluation of the Monitoring and Reporting Program:** Evaluation was completed, which is a critical part of the NPDES Stormwater Permit for North Orange County, with the final report and recommendations to be used to improve program effectiveness and efficiency.
- **Stormwater Best Management Practices (BMPs):** More than 16,000 structural stormwater BMPs have now been inventoried in OC Stormwater Tools, a web-based platform developed to assist municipalities with managing inspection, verification, and maintenance workflows associated with these assets.
 - The platform also enables the performance of an asset to be modeled, allowing municipalities to determine where additional structural water quality strategies may be needed.
- **"Watershed Appreciation" blog series:** The H2OC team (public education and outreach brand of OC Stormwater Program) developed series of blogs to increase familiarity with county watersheds.
 - First post about Aliso Creek Watershed in March 2021. The H2OC team also partnered with Moulton Niguel Water District to help organize and host the 2021 H2O for HOAs event held at the Lake Forest community center on October 19, 2021.
- **2021 H2O for HOAs Event:** H2OC team partnered with Moulton Niguel Water District to organize and host the 2021 H2O for HOAs event held at the Lake Forest Community Center in October 2021.

Water Quality Improvement Plan (WQIP) for South Orange County

- **"A" Grades for Beach Water Quality:** Received A grades from Heal the Bay for water quality at 88% of Orange County's 115 monitored beaches during summer dry weather.
 - Orange County beaches earned 10 spots on the organization's Honor Roll,

more than any other county, and had no beaches on the Beach Bummer list.

- Combination of both structural and non-structural strategies were implemented over the last 15 years for most receiving waters in south Orange County and the reduction in bacteria loading from a baseline period of 2003-2007 is estimated to be greater than 90%. This success was reflected in the excellent Green Infrastructure Program
- **Flow Ecology Special Study:** Completed study that prioritizes streams in south Orange County to address impacts caused by flow alteration brought about by urbanization.
 - Study was led by a team of scientists from the Southern California Coastal Water Research Project (SCCWRP) and hydrologic engineers from Geosyntec Consultants, with nine public workshops.
- **Green Infrastructure Program:** Implemented new Water Quality Management Plan (WQMP) template for OCPW projects, and training for staff, to help guide design staff through the process of drafting a project specific WQMP, with a simplified checklist to ensure all critical steps are documented.
 - The integrated checklist also helps provide documentation for projects that do not meet the requirements to develop a WQMP.

OC FACILITIES DESIGN & CONSTRUCTION MANAGEMENT

- **Over \$700 Million:** Managed the design and construction of capital improvement and maintenance projects.
- Yale Navigational Center: Completed construction and received Certificate of Occupancy for homeless facility (\$28 million).
- Osborne Building/District Attorney's Office: Completed facility and security upgrades to the (\$12 million).
- Public Library Renovation Projects: Completed major renovations of four County public libraries: Cypress Library, El Toro Library, Rancho Santa Margarita Library and Westminster Library (\$9 million).
- Orangewood Children and Family Center/ Social Services Agency: Completed replacements of air conditioning, heating and roofing (\$1.5 million).
- Health Care Agency Laboratory: Upgraded and completed installation of new testing equipment (\$600,000).

- OC Data Center: Completed installation of the Automatic Transfer Switch (\$4.3 million).
- Probation Facility: Completed the replacement of the chiller tower equipment at its 909 Main St. facility (\$1 million).
- OC Sheriff's Department/Brad Gates Building: Completed replacement of air conditioning mixing boxes (\$1.1 million).
- John Wayne Airport:
 - Completed the Airport Operations Center (\$15M)
 - Completed the terminal building curtain wall modifications (\$7M)
 - Completed packages 1 and 2 for rental car space reconfiguration (\$932K)
 - Initiated condition assessment and indexing of Mechanical, Electrical, Plumbing (MEP) infrastructure for AiM asset inventory/capital planning
- County Administration North Building: Completion of structural elements (final beam installed) and underground parking structure. Overall building completion scheduled for July 2022 (\$195M).
- Probation Multipurpose Rehabilitation Center (MRC) facility: Significant construction completion. Overall completion scheduled for March 2022 (\$25M).
- OC Zoo Large Mammal Exhibit: Significant construction completion. Overall completion scheduled for March 2022 (\$12M).
- Probation Youth Transition Center: Initiated Programming phase (\$70M project cost estimate).
- OC Health Care Agency (HCA) campus at El Toro: Initiated Programming phase (\$75M project cost estimate).
- County's Veteran Cemetery in Gypsum Canyon: Initiated Discovery/Scoping phase (Project cost TBD).

OC FACILITIES MAINTENANCE & CENTRAL UTILITY FACILITY (CUF)

AiM / Computerized Maintenance Management System (CMMS):

- Launched new AiM asset management platform, an enterprise business solution that contains a database of usable square footage & capital asset information throughout all County facilities.
- System includes space planning initiative to track and maximize office and common space usage.
- Cost Tracking: Migrated open and pending facilities work orders from

MaintStar system to AssetWorks CMMS, completed in October 2021. All labor & materials costs for Facilities Maintenance are now being managed in the new system.

- Work Management: Migrated existing open work orders from the legacy CMMS, Maintstar, to AiM at the same time ReADY, the customer facing Work Request portal, was implemented. Facilitates maintenance now receives all work through AiM where it is scheduled to technicians for completion.

COVID-19 Response

- Designed and installed clear protective shields at County's public-facing office locations.
- Supported HCA in the deployment of mobile hospital units throughout the County.
- Assessed HVAC systems to ensure adequate fresh air and proper filtration.
- Completed disinfection of 271 incidents of COVID-19 Countywide since August 2021 (94 incidents completed by OCPW staff).

Facilities Management and Support

- Transitioned the residents of the Courtyard homeless shelter to the newly constructed Yale Navigation Center.
- Supported work property conveyance of 401 Civic Center Drive building and Madero Facilities.
- Provided support for 2021 election, including utilities at Rancho Santa Margarita and El Toro Libraries.
- **8,634:** Work orders processed in 2021:
 - OCPW: 1,505
 - Social Services Agency: 689
 - Health Care Agency: 1,889
 - Probation: 1,330
 - OC Community Resources: 1,102
 - Miscellaneous: 2,119

Central Utility Facility (CUF)

- Generated approximately:
 - 36,725 megawatt hours (MWH) of electricity
 - 363,258 metric million British Thermal Units (MMBtu) of thermal energy
- Successfully and safely performed gas turbine engine and reduction gear changeout for GT101 after 30,000 hours of operation.
- Assisted contractors in electrical, steam and chilled water connections to the future County Administration North building.

- Successfully removed and replaced CUF's high-pressure condensers that reached the end of operational use.
- Removed and replaced CUF's Continuous Emissions Monitoring System to remain in compliance with the South Coast Air Quality Management District.
- Modified the duct burners for the heat recovery steam generators for more reliability and efficiency.

OC FLEET SERVICES

- **Facility Needs Assessment (FNA) for Operational Efficiency:** Produced data and metrics for an assessment of the entire fleet, including three maintenance facilities, resulting in recommendations regarding program square footage, required service bays, ancillary support space, site access and vehicle storage for vehicle intake and decommissioning activities.
 - Data to be used by County's CEO Real Estate to find a suitable site for the prescribed program
 - Data to be basis for bidding the Architect-Engineer services for the design and build phase of project

OC INFRASTRUCTURE PROGRAMS

Coastal Oil Spill Response

- Provided environmental support for the County's response to the major oil spill along Orange County's coast.

Major Projects

- **Capital Improvement Program (CIP):** Approval of 7-year CIP valued at \$1 billion for flood capital and maintenance, road capital and maintenance, external road projects, bikeways, parks and library projects.
- **Westminster-East Garden Grove Flood Risk Management Project:** Obtained approval of Assembly Bill (AB) 781 that authorizes subvention fund eligibility for the project.
- **Major Capital Improvement Project Management:** Awarded construction contracts for the following projects:
 - Huntington Beach & Talbert Channels Rehabilitation Project construction contract (\$69M)
 - Laguna Canyon Channel Replacement, design services contract
 - Santa Ana- Delhi Channel Improvement, design services contract (\$4.7M)
- **Los Patrones Parkway:** Completed an

independent Traffic Safety Evaluation for Los Patrones Parkway between Oso Parkway to Chiquita Canyon Road and developed mitigation measures.

- **Prado Dam Spillway Raise Project:** Submitted \$30M in claims eligible for federal reimbursements.
- **Rancho Mission Viejo permits:** Reviewed and processed 357 Rancho Mission Viejo and developer permit submittals related to planning, grading, drainage, tract maps, and infrastructure.
- **Plans, Specifications & Estimates (PS&E):** Completed 100 percent PS&Es for:
 - In-house design for the Santa Ana Gardens Bikeway Project (Phases 2,3,4)
 - In-house design for Midway City ADA Annual Upgrade Project
 - In-house design for Hazard Sidewalk Gap Closure Project

Programs and Initiatives

- **Project Delivery Manual (PDM):** Completed department's first PDM and posted internally for staff access.
- **Local Drainage Manual:** Updated this critical document and secured Board of Supervisors approval in May 2021.
- **Water Quality Basin Standards:** In collaboration with OC Watersheds, completed documented standards and secured Board of Supervisors approval in May 2021.
- **Active Transportation Program (ATP):** Completed Needs Assessment and several virtual community workshops for the County's first ATP.
- **Construction Manager at Risk (CMAR) project delivery method:** Secured CA State Association of Counties' support for the extension of the legislative authority to use the CMAR method for OCPW projects.
- **County Property Permits (CPP):** Reviewed and approved 964 CPPs related to flood, road and utility encroachments.
- **Road Fees:** Received \$1.2M in remitted road fees from participating cities.
- **Lands, Easements, Rights-of-Way, Relocations and Disposal areas (LERRD):**
 - Prepared four LERRD claims valued at \$50M to the U.S. Army Corps of Engineers
 - Prepared the first utility LERRD for the Santa Ana River Interceptor Line valued at over \$88M
- **Accessory Dwelling Unit (ADU):** Developed and launched an ADU fee estimator.

- **Long-Term Routine Maintenance Permitting Program:** Received approval of the fiscal year 2021/2022 Annual Work Plan for the Countywide program.
- **Plan Check Reviews:** Achieved a 98.7% response time on 1st plan check reviews, with a turnaround time of less than 15 business days.
- **OC Traffic Committee:** Obtained Committee and Board of Supervisors approval for eight traffic-related measures and established four resolutions.
- **Traffic Studies and Investigations:**
 - Completed 274 investigation requests and prepared 69 work orders to implement traffic improvements.
 - Reviewed and provided comments to traffic studies or related documents for six non-County lead projects
- **Traffic Implementation Manual:** Revised manual that establishes the fundamental guidelines for Traffic Impact Studies for future development projects within County areas.

OC OPERATIONS & MAINTENANCE

Coastal Oil Spill Response

- Moved 30,000 cubic yards of sand at the Santa Ana River Channel outlet.
- Moved 15,000 cubic yards of sand to established large sand berm at Talbert Channel outlet.
- Set up and operated equipment to aerate marsh water to protect wildlife and plants.

Post-Fire Debris Flow Emergency Response

- **27,100:** Cubic yards of debris flow material removed from Silverado Fire burn area (12,700 cubic yards from Agua Chionon and 14,400 cubic yards from canyon basins).
- **1,350:** Cubic yards of debris flow material removed from Silverado Canyon Road and drainage areas in Bond Fire burn area.

Maintenance Projects and Initiatives

- **98 Percent:** Rate achieved for mitigating and clearing encampments within 30 days from Orange County Flood Control District right-of-way.
- **44,400:** Cubic yards of trash, debris and sediment removed from County roads, catch basins, flood control channels and debris booms.
- **1.2 million:** Square feet of graffiti removed from flood control channels and road right-of-way.
- **100,000:** Cubic yards of sand removed from Santa Ana River and various beach outlets as part of our routine maintenance.

Sand deposited on nearby beaches as part of replenishment program.

- **79,500:** Square feet of sidewalk repaired.
- **680,000:** Feet of flood control channel cleared.
- **2,500:** Catch basins cleared (minimum of two times each).
- **10,150:** Trees trimmed in County right-of-way areas.
- **Over 10,000:** Filled sandbags provided to canyon area residents to protect their properties from storm runoff.
- **3,580:** Service requests processed via the myOC eServices system (January - early-December).
 - Trash/debris removal accounted for 25 percent of requests and information only requests accounted for 4 percent
- **Maintenance Improvement Plan (MIP):** Completed repair projects at 14 OC Flood Control District facilities.
- **Canyon Storm Season Roadway Preparations:** Completed annual road shoulder grading and sandbag placement along canyon area roadways in advance of annual storm season.
- **Department Operations Center:** Activated and responded to emergency rain events three times in December 2021, working in conjunction with County Emergency Operations Center (EOC).
- **1,253:** Homeless encampments addressed.
- **577:** Fencing repairs along County right-of-way due to individuals experiencing homelessness.
- **722:** “No Parking” signs replaced as requested by the City of Dana Point.
- **Over 600:** DA1 locks pinned and supplied to various County staff and agencies to replace locks that were stolen, damaged or vandalized.

Pump Station Maintenance

- **Seal Beach pump station:** Fabricated and installed new trash racks for flood control debris collection.
- **Haster, South Park and Rossmoor pump stations:** Installed new individual cylinder exhaust monitoring system for pump station engines.

Seven Oaks Dam

- Repaired cone valves to work remotely.
- Repaired and calibrated telemetry displays to ensure proper operation.
- Conducted investigation, troubleshooting and repairs to the piezometer equipment in the facility’s tunnel.

OC SURVEY

Map Check & Right-of-Way Services

- **695:** Completed reviews of subdivisions, records of survey and corner records.
- **543:** Corner record maps filed.
- **227:** Recorded records of surveys.
- **104:** Completed interrogatories (accident investigations to determine if County/unincorporated location).
- **43:** Recorded parcel maps.
- **38:** Recorded tract maps.
- **23:** Filed lot line adjustments.

Geospatial Services

- Research and development for use of LiDAR data on SCE power lines for Prado Basin project.
- Developed web/mapping applications:
 - Bond Fire emergency response mapping
 - Flood Programs for a presentation to various cities within the county
 - Toll road thoroughfare project and development fees for stakeholders
 - Stenciling and striping web app for OCPW’s Operations & Maintenance to manage maintenance schedules and identify areas of needed maintenance
 - County Water Quality Improvement Plan web mapping in order to set priorities
 - Public education/school outreach web application for “Where does your Stormwater Go?”
 - Debris boom, outlet, and stockpile locations for efficient Operations & Maintenance access
 - Newport coastal watershed drainage delineation
 - CIP projects currently in construction
 - OC Construction’s Job Order Contracts (JOC) field staff to conveniently view project footprints and associated documents
 - Enhanced road index web app to ensure data accuracy within the Maintstar database
 - Enhanced Inspector Viewer application for flood and road maintenance
- Manage the Data Management System (DMS) for the South Orange County Watershed Management Area (SOCWMA) Integrated Regional Watershed Management (IRWM) plan.
 - DMS portion of the site represents the State-required provision of access to data sets associated with the IRWM

plan, including project information, monitoring data and data associated with various planning documents (e.g. OC SWRP, WQIP)

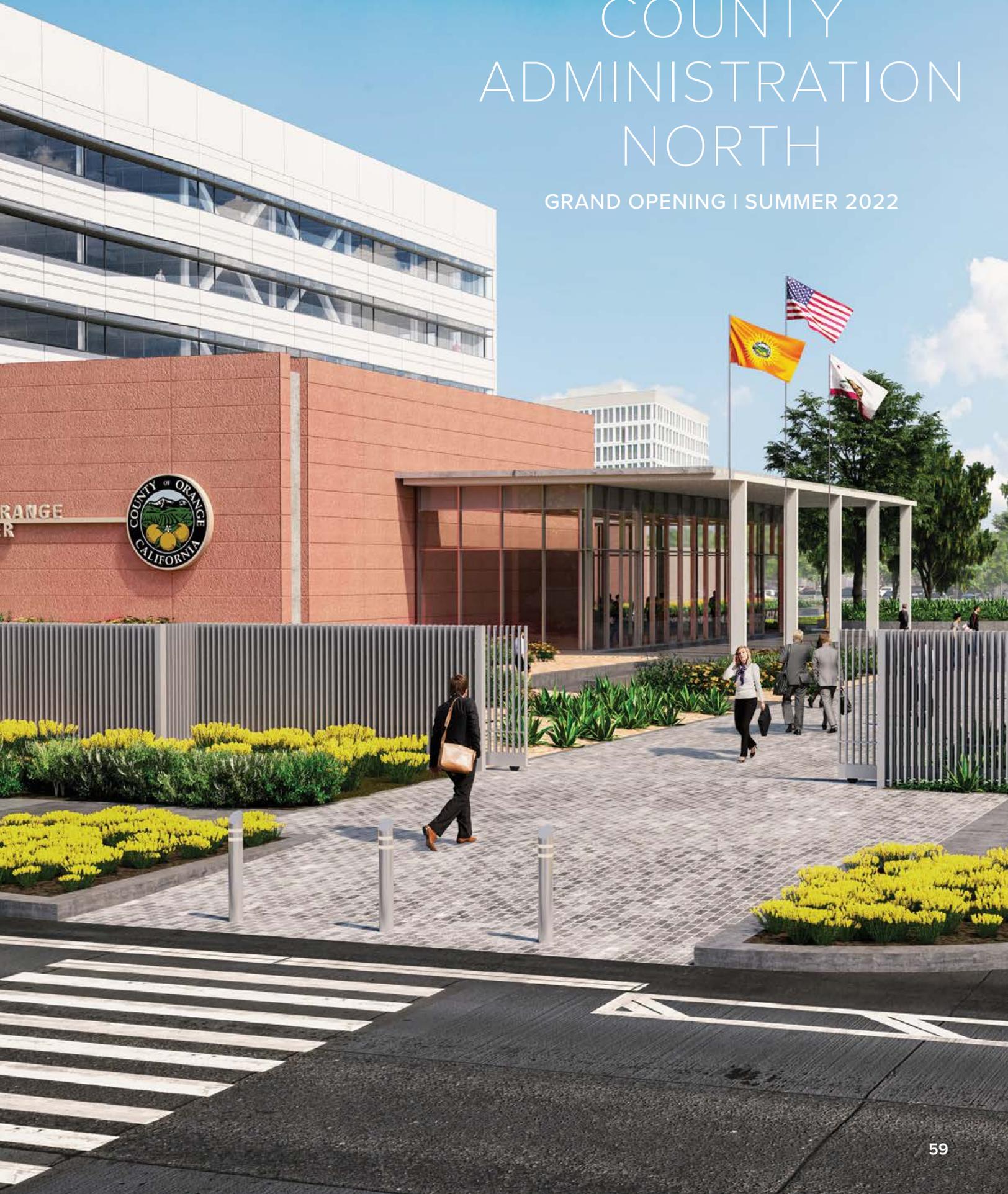
- DMS provides public access to IRWM plan information, provides opportunities to interact with documents and resources, and provides the mechanism for establishment and maintenance of the IRWM plan project list

Field Services

- **Over 600:** Corner records submitted.
- **210:** Survey requests serviced.
- **60:** Topographic surveys completed.
- **64:** Boundary surveys completed.
- **33:** Construction projects for which staking services were provided.
- **17:** Survey monument preservation projects for which survey services were provided.
- Incorporated LiDAR data into production.
- Digitized field forms for efficient data transfer.
- Overhauled corner records workflow to increase efficiency.

COUNTY ADMINISTRATION NORTH

GRAND OPENING | SUMMER 2022





ORANGE COUNTY

Safety, Integrity, Quality, Teamwork, Adaptability




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