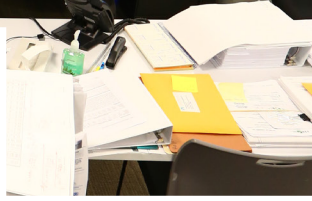


2021

CITY OF ORLANDO
**PUBLIC WORKS
ANNUAL REPORT**



CITY OF
ORLANDO
PUBLIC WORKS



Moving Forward, 24/7



what goes where?

NEVER IN EITHER

- Refrigerators or air conditioning units, heat exchangers
- Auto parts
- Flammable liquids
- Flammable solids
- Per waste
- Toxic materials (paint, solvents, chemicals)
- Flammable gases
- Metal (Plastic) bags
- Metal (Plastic) cans

FOOD WASTE DROP-OFF

- Meat (Dry)
- Soft-shell
- Butter, Spreads, Dressings
- Cheese, Yogurt, etc.
- Shredded cardboard
- Newspapers + Paper
- Crusts and Hair + Fur
- Stumps + Key
- Wood chips

BACKYARD COMPOSTING

- Yard waste
- Shredded cardboard
- Newspapers + Paper
- Crusts and Hair + Fur
- Stumps + Key
- Wood chips

A woman in a green polo shirt is smiling and standing in front of the graphic. A green reusable shopping bag is visible in the foreground.

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Message from the Mayor



Due to the many impacts of COVID-19, 2021 was again a challenging year filled with uncertainties for every person in our city. What was certain during the year was that residents and businesses still relied on the City of Orlando to provide essential municipal services.

The services provided by our Public Works Department are without a doubt essential. During the pandemic, it was so reassuring for residents and businesses that City of Orlando staff continued to be there for them. During a difficult time, knowing that Public Works employees were still working for our community was such a relief for so many. The work that our Public Works staff does is so vital for our city every day, and it was especially critical in 2020 and 2021 as many residents spent more time at home.

I am so proud of our Public Works employees for their efforts during the pandemic. They adapted to keep each other safe and keep our community moving forward. Their commitment, professionalism and compassion were so evident.

Our community is so appreciative of their efforts, which are detailed in this report. I hope you find it informative.

Sincerely,

A handwritten signature in blue ink that reads "Buddy Dyer". The signature is written in a cursive, flowing style.

Buddy Dyer
Mayor, City of Orlando

Letter from the Director



I am pleased to present the 2021 annual report for the City of Orlando Public Works Department - Moving Forward 24/7. This year has been a particularly challenging period as we continued to safely deliver services 24 hours a day, 7 days a week during the COVID-19 pandemic and into 2021. Our dedicated team arrived daily at the worksite to provide essential services including the removal of solid waste and recyclables from your homes and businesses, providing waste water (sewer) treatment and disposal, and maintaining the roadway network, all while maintaining personal safety. We accomplished this by wearing face masks, taking employee temperatures before entering the workspace, practicing safe distancing, adding more shifts to stagger the size of work groups, and utilizing additional fleet vehicles so employees could deliver services individually while in a confined space. I am proud to report that our teams pulled

together in unique and creative ways to ensure there was no disruption to these critical services.

Where possible, some employees worked remotely. These staff members utilized various on-line tools including Zoom and Microsoft Teams meetings, email, and electronic document signing. Our engineers, scientists, and professionals were actively engaged and were able to remotely provide successful project management and oversight.

Some noteworthy projects accomplished during the pandemic period and forward included improvements to the Colonialtown Drainage project, and the rehabilitation of Oregon Street with brick replacement. We also undertook several major projects including completion of Fire Station No.9 and The Rosemont Gym. The construction of the Orange Center Boulevard Sanitary and Roadway Improvement project as well as the development of a community amenity at the new Packing District; which will include a large park, amphitheater, tennis center, and a community garden. We are currently under construction for the innovative and hands-on learning facility at the new Wetlands Park Education Center. Other future projects under development include the novel Under I Park project, several community fire stations, and various Smart City enhancements, allowing us to move forward as a progressive and technology enabled city.

This year's report also highlights individual employees and teams that developed fresh ideas to save taxpayer money, promote sustainability, or increase efficiency in service delivery. Even during the pandemic, our employees continued to focus on enhancements and timely service to customers - our citizens, visitors, and businesses.

I hope you find this report interesting and that it conveys the dedication, professionalism, and strong commitment of our staff to serving your needs, especially during these unusual times.

Sincerely,

Richard Howard, P.E.
Director of Public Works, City of Orlando



CITY OF ORLANDO

ELECTED OFFICIALS



BUDDY DYER
Mayor



JIM GRAY
District 1 Commissioner



TONY ORTIZ
District 2 Commissioner



ROBERT F. STUART
District 3 Commissioner



PATTY SHEEHAN
District 4 Commissioner



REGINA I. HILL
District 5 Commissioner



BAKARI F. BURNS
District 6 Commissioner

The Public Works Department gratefully acknowledges the strong support of the Mayor and City Commissioners.

Public Works Administration

Continuing to Deliver Service

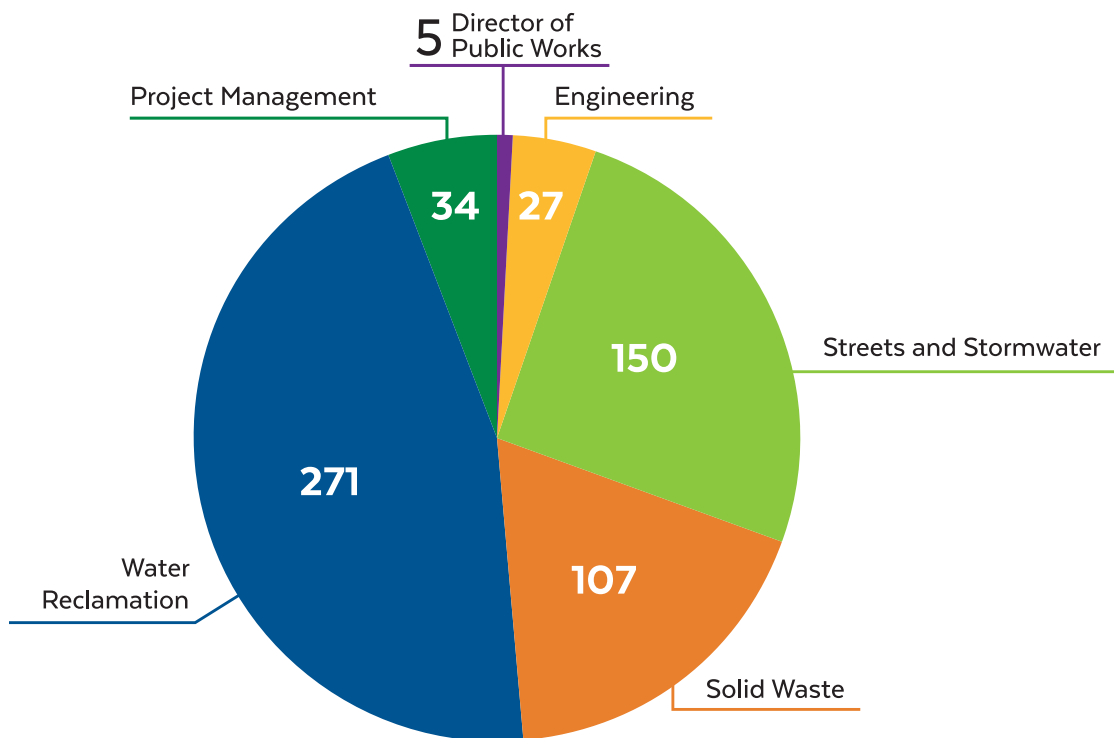
The Public Works Department continued to deliver services to the citizens of Orlando throughout COVID-19. Through collaborative efforts, we developed and utilized a variety of creative methods to maintain employee safety while performing services without any significant interruptions. In the Administration Division, we were able to successfully utilize technology as a tool to bridge the gap between working in close proximity to one another to working in remote locations. The objective was to maintain



appropriate social distancing. We found that group meetings, brainstorming sessions, critical decision making, providing sensitive feedback, even onboarding of employees, all could be accomplished remotely.

As we oversaw operating divisions, our emphasis was on both safety and continuity of services. We developed new protocols for Divisions that required close physical proximity between employees such as solid waste collection, construction management and inspection, sanitary sewer repair, roadway maintenance, stormwater maintenance, and scientific trades. In these divisions we deployed staff fully equipped with appropriate Personal Protection Equipment (PPE). We also brought in alternative vehicles from fleet so that many employees could work alone, thereby allowing for social distancing protocols. We determined that with careful planning, and the use of PPE and alternate vehicles, we could continue serving the citizens of Orlando in a safe, reliable, and consistent manner.

Number of employees funded by division



Post-Pandemic Supply Chain Challenges

In 2021 and into 2022, Orlando Public Works began experiencing the effects and associated cost increases related to supply chain bottlenecks. This was a pandemic consequence of shrinking supplies and pent-up aggregate demand. Some of the factors contributing to increased costs include shortages in the labor market, lack of product availability, and delays in timely deliveries due to trucking and resource backlogs. Public Works also saw an increase in material costs for construction products, chemicals for water reclamation, and fuel costs impacting all divisions.

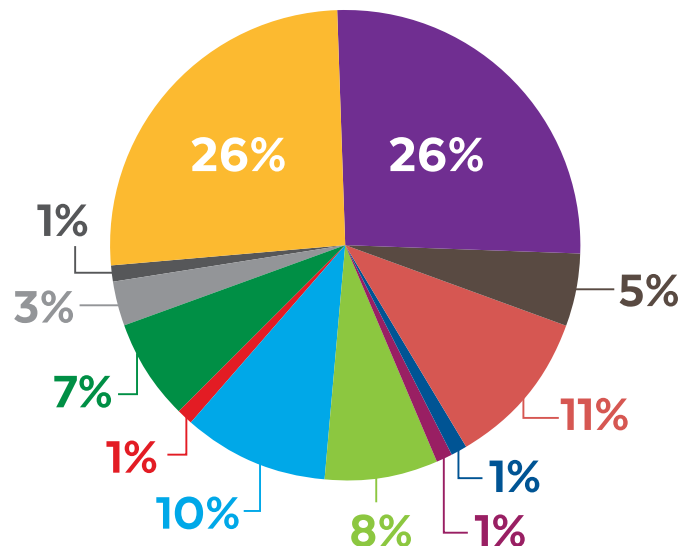
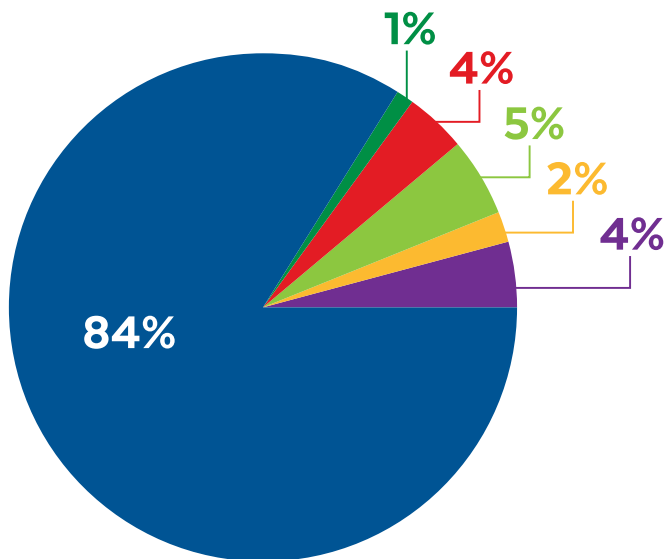
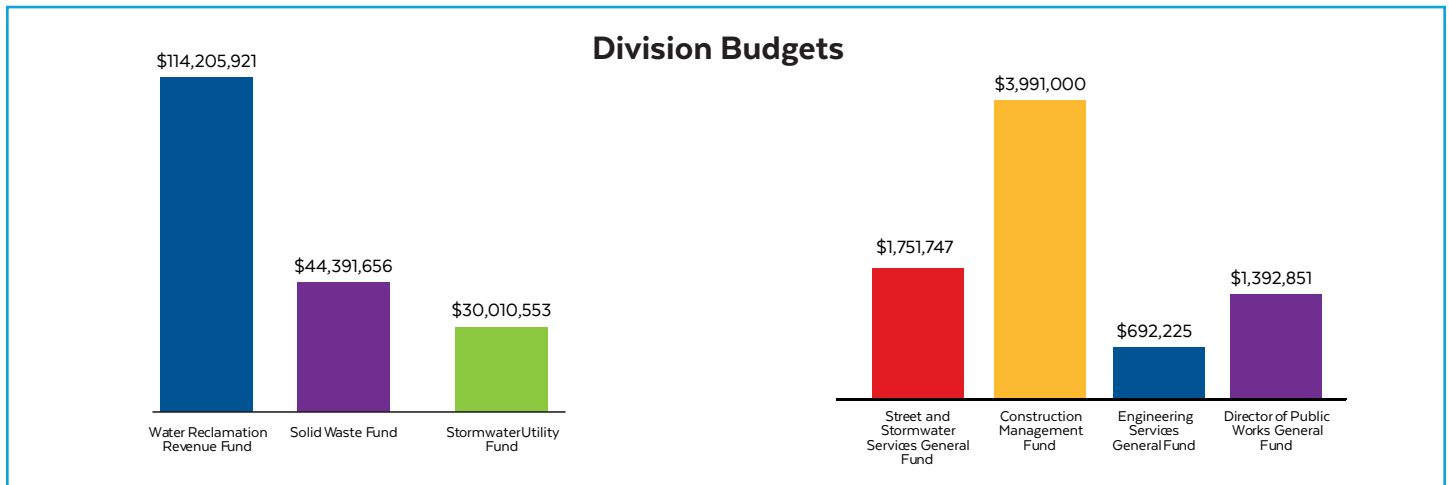
To combat these supply chain issues, we are employing a variety of strategies to mitigate negative effects of the current economic and business climate. Our goal is to manage overall business costs consistent with

municipal industry standards. One significant strategy is expanding and seeking new suppliers to ensure continuity and maintenance of inventory levels thereby supplying our divisions with resources to maintain operations at peak performance. Another strategy surrounds improving demand forecasting models to incorporate potential outsourcing, and in some cases, product substitution. Lastly, management is reevaluating and prioritizing critical business functions in each division so that effective contingency and continuity of operations plans are in place to maintain service during periods of economic downturn and commodity shortages.



By the Numbers

Orlando’s roads and infrastructure must be safe and well maintained to preserve our quality of life. The Public Works budget is a forecast of expected revenues and expenditures for the upcoming fiscal year, which is a twelve-month period from October 1st to September 31st. The City of Orlando uses the annual budget cycle to apportion public funds to the various divisions to provide for operations and capital expenditures for each division to plan, maintain, and create a better Orlando.



- Charges for Service
- Franchise Fee
- Intergovernmental (i.e. service payments from other governments)
- Other Revenues (i.e. interest earnings)
- Internal Service Revenues
- Transfer In (i.e. payments for administration from enterprise funds)

- Salaries and Wages
- Supplies
- Contractual Service
- Other Operating Expenses
- Travel
- Utilities
- Fleet and Facilities Charges
- Debt Service
- Enterprise Dividend
- Cost Allocation Plan Fee
- Capital Outlay
- Transfer Out

Engineering

Engineering Services Division

One of the many purposes of the Engineering Services Division is to ensure the city’s compliance with the National Pollution Discharge Elimination System (NPDES) permit. To accomplish this objective, this group manages engineering contracts as well as reviews site engineering related permits in accordance with the city’s engineering standards manual. In addition, for efficiency and to save on consulting costs, they provide engineering design services to the city’s Water Reclamation, Streets and Stormwater, and Transportation Divisions. Their design complies with the requirements of the NPDES permit, federal, state, and local rules and regulations.

During 2020, the Engineering Services Division maintained and exceeded service and discharge targets despite the special demands associated with COVID. Throughout the year, we continued to provide innovative solutions for the citizens of Orlando. Whether it is maintaining critical infrastructure or improving the water quality of our lakes. Engineering staff worked to bring you services 24/7.

You will further see in this report some of the unique stories of staff developing creative ways to be economical or find better ways to be more efficient. The group of businesses that comprise Engineering Services are: Site Review, Engineering Design, Survey Services, and Floodplain Management. These groups provide services that are the foundation for quality living and sustainability within our community.



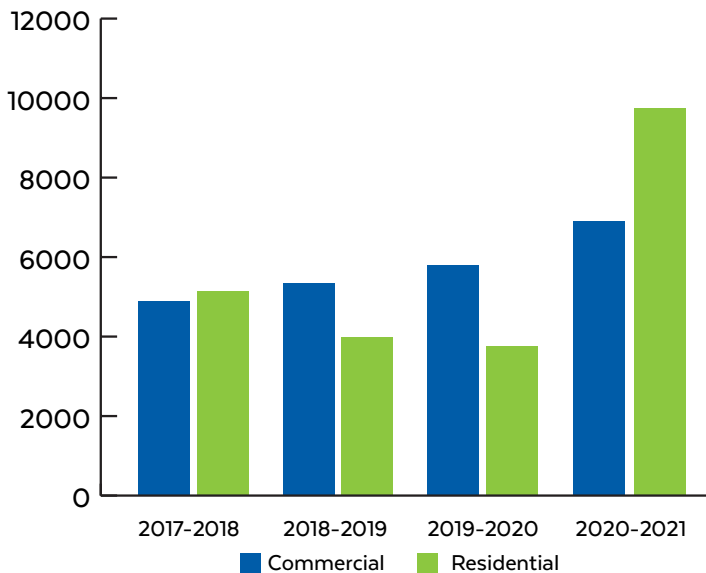
Site Review Group

The site review group, which is a part of Engineering Services, works across multiple city departments reviewing site plans involving different types of construction including:

- Commercial development
- Residential development
- Stormwater management
- Water reclamation
- Street construction

The purpose of our work is to ensure that infrastructure projects follow the rigorous safety and construction guidelines of the city’s Engineering Standards Manual. These internal and external projects are subject to a detailed review by competent engineering professionals in a time-sensitive and efficient manner.

Site Engineering Permits Reviewed





Floodplain Management

Every year, flooding causes hundreds of millions of dollars' worth of damage to homes and businesses around the country. Our Floodplain Management group oversees the floodplain program which incorporates data and requirements from the National Flood Insurance Program(NFIP) and the Community Rating System(CRS). Our staff reviews construction projects and determines whether the improvements or development conform to legally established requirements and engineering standards regarding floodplains.

This program achieved and maintained a CRS classification of class 6 which provides Orlando citizens a 20% savings on their flood insurance. The CRS is a voluntary program where FEMA recognizes and encourages floodplain management activities that exceed minimum standards set forth by the NFIP.

12
CERTIFIED
Floodplain
Managers

7
MAJOR
Watersheds

123
SUBBASINS
Managed within
the 7 Watersheds

Survey Services

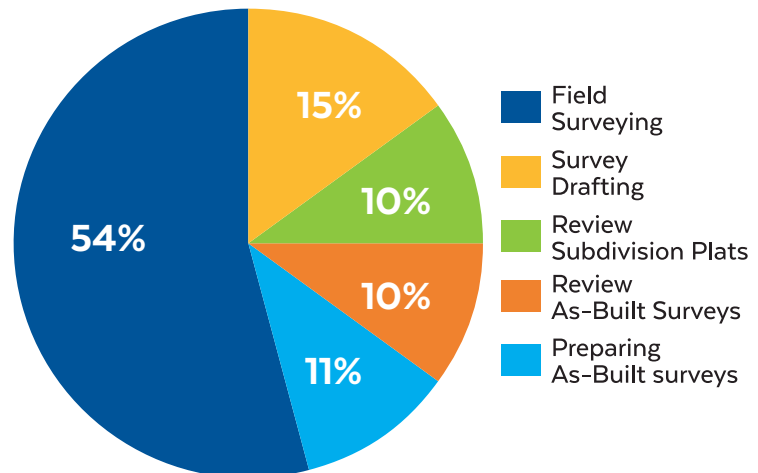
The city's Engineering Survey Services program is tasked with providing survey services for the organization, providing survey review and guidance, and publishing control for use in all facets of development and refurbishment of city infrastructure. The program establishes protocols for surveying and mapping, ensures compliance of standards with state, federal, and local laws and codes. This includes conducting mapping research, performing boundary analysis, and preparing boundary descriptions for property acquisitions. They provide professional review and preparation for public improvement projects and working to insure vertical and horizontal integrity of the as-built survey data. The survey team works with internal and external stakeholders to provide guidance and support to engineers, surveyors, and other professionals in the development and public infrastructure segments.



9503
ACRES
Floodplains
Currently
Under Study

473
ACRES
Floodplains
Mapped in 2021

6524
ACRES
Preserved Open
Lands Incorporating
Flood Hazard Area



Survey Metrics 2020-21 Fiscal Year

3150
EMPLOYEE
HOURS
Spent reviewing
survey platting

3000
EMPLOYEE
HOURS
Spent reviewing
as-built surveys

3500
EMPLOYEE
HOURS
Spent preparing
as-built surveys

16,640
EMPLOYEE
HOURS
Spent field
surveying

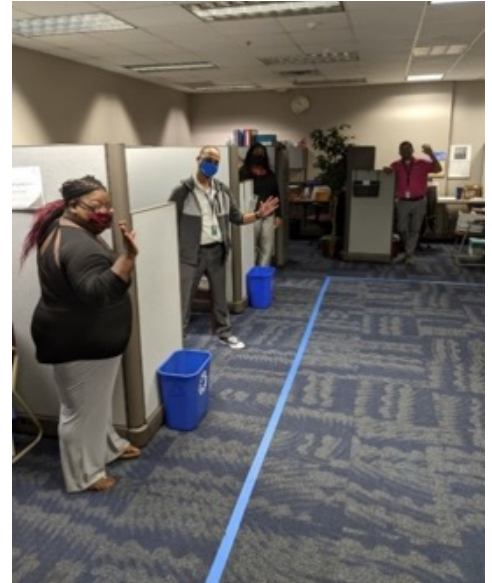
4500
EMPLOYEE
HOURS
Spent drafting

211
NUMBER OF
SURVEY
Projects prepared

Solid Waste

Customer Service Response to COVID-19

During the trying times of this pandemic, the Solid Waste customer service team focused their efforts on making the workplace a safe, clean, and productive environment. Precautionary measures include extended cubicle walls, Plexiglas shields, temperature checks, social distancing, and mandatory mask wearing were established office wide as the division continued to move forward with its mission of customer service. In addition, within a matter of days, the division was able to seamlessly transition a team of nine employees to work remotely by outfitting them with city cellphones and laptops thereby allowing them to continue operating at full capacity. Due to growth, and to maintain the level of quality and professionalism that our customers have come to expect, the division hired two additional personnel (an operator and a customer service associate).



Pictured Customer Service staff Alex Urquilla, Candice Cameron, Eric Paniagua, and Elaine Tucker maintaining normal operations with heightened safety protocols.

Employee Spotlight

Above and Beyond!

Donald Chance, Solid Waste Dispatcher and Communications Specialist, continued to show dedication and adaptability throughout the pandemic. During the pandemic, Don administered training to new and veteran drivers and refuse collectors, creating a new level of efficiency across city waste collection routes.

Don is always improving upon existing recycling routes in a way that allows the Solid Waste Division to accommodate the rapid influx of new recycling customers responding to the city's commercial and multifamily recycling requirements. Don's work ethic was exemplified during the city's response to COVID-19. Don, along with many other Solid Waste staff, worked long hours ensuring services consistently continued with little or no interruption. Don stepped up to perform roles outside his traditional scope of work and was quick to take the lead on new and challenging tasks which led to increased productivity and success division wide. As a veteran solid waste professional, Don is a shining star on the Public Works team, and we are grateful to call him our colleague.



Solid Waste Dispatcher, Donald Chance, carrying out his duties while following COVID-19 safety measures



GREEN WORKS ORLANDO

Sustainability Projects Working in Concert with Greenworks.

The City of Orlando’s Solid Waste division has joined a continuously growing list of municipal departments that have begun to aggressively implement policies on sustainability. In particular, the Solid Waste Division is working in tandem with the city’s Greenworks team to achieve the Mayor’s overarching goal of Zero Waste to the Landfill by 2040. In order to meet that goal, a new policy was created delineating a phased in approach to citywide, mandatory recycling for all commercial and multifamily properties.

Since its implementation in 2019, the ordinance has successfully completed three of its four phases and aims to conclude its fourth phase by 2023. To date, the city and other local private haulers have provided the opportunity to recycle by increasing Orlando’s recycling availability by approximately 18,512 cubic yards with the potential to divert up to an additional 852 tons annually. Additionally, over 6,000 educational materials have been created and distributed to address questions associated with commercial and multifamily recycling. These figures are projected to grow as the ordinance matures and new recycling programs are implemented.



Reusable recycling totes distributed to multifamily properties in an effort to increase participation and reduce trash to the landfill. .



Bilingual education material supplied to the city’s solid waste customers highlighting what can and cannot be recycled.





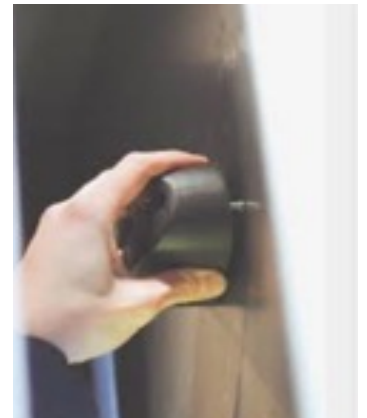
ORLANDO FUTURE- READY CITY MASTER PLAN



New Technology, Asset Management and Cost Savings

Throughout 2020 and 2021, the Solid Waste Division embarked upon a journey to better optimize its route organization and increase efficiency. Using new technologies, Solid Waste has modernized many operations to provide our customers with a higher level of service as well as quality of work-life improvements for their employees. This ever-increasing list of technologies includes:

- **Nordsense**, which provides a low-cost solution for providing collection confirmation to customers.
- **Routeware**, which provides route tracking and re-routing capabilities.
- Ongoing integration between software (such as SeeClickFix and Simplify i3).



A Nordsense unit installed on a city dumpster to track volumetric and usage/collection frequency.

Public Works Education

In response to city, state, and nationwide health and safety mandates, the Solid Waste Division has been able to maintain its educational and informational footprint during the pandemic by shifting many of its communication and outreach efforts to virtual platforms. Over the past year, the division has hosted several online workshops for a variety of audiences. Among these are:

- Five commercial and multifamily recycling workshops (three for the public and two for local property management organizations). Property management workshops were designed to inform and prepare property managers to implement recycling programs in accordance with the Mandatory Recycling Ordinance.
- Kitchen recycling workshops - In partnership between the City of Orlando and UF/IFAS. Participants learned about the city's residential grease prevention initiative, food waste program, and home composting.
- Food waste workshops- Launched in 2020, the program supports Orlando's goal of becoming a zero waste community by eliminate sending solid waste to landfills by 2040.

New Projects

There are several new projects on Solid Waste's horizon that utilize Simplify i3, one of the division's primary software tools. These tools include thematic mapping for easier field use, the creation of a push notification tool, generating an automatic customer notification feature, and developing mobile-friendly application access for customers.

New Programs/Initiatives

Solid Waste's food waste and composting initiative continues to move forward. The city has partnered with Compost USA to continue providing food collection and processing services to many of our commercial customers. Additionally, the residential food waste drop-off location at the Audubon Farmer's Market continues to receive approximately 75-150 pounds of food waste weekly. Solid Waste, in tandem with Green Works, aims to implement several new drop-off locations throughout the city as a recent pilot project has proven its value and ability to generate 100+ pounds of weekly food waste.

Operational Success During COVID-19

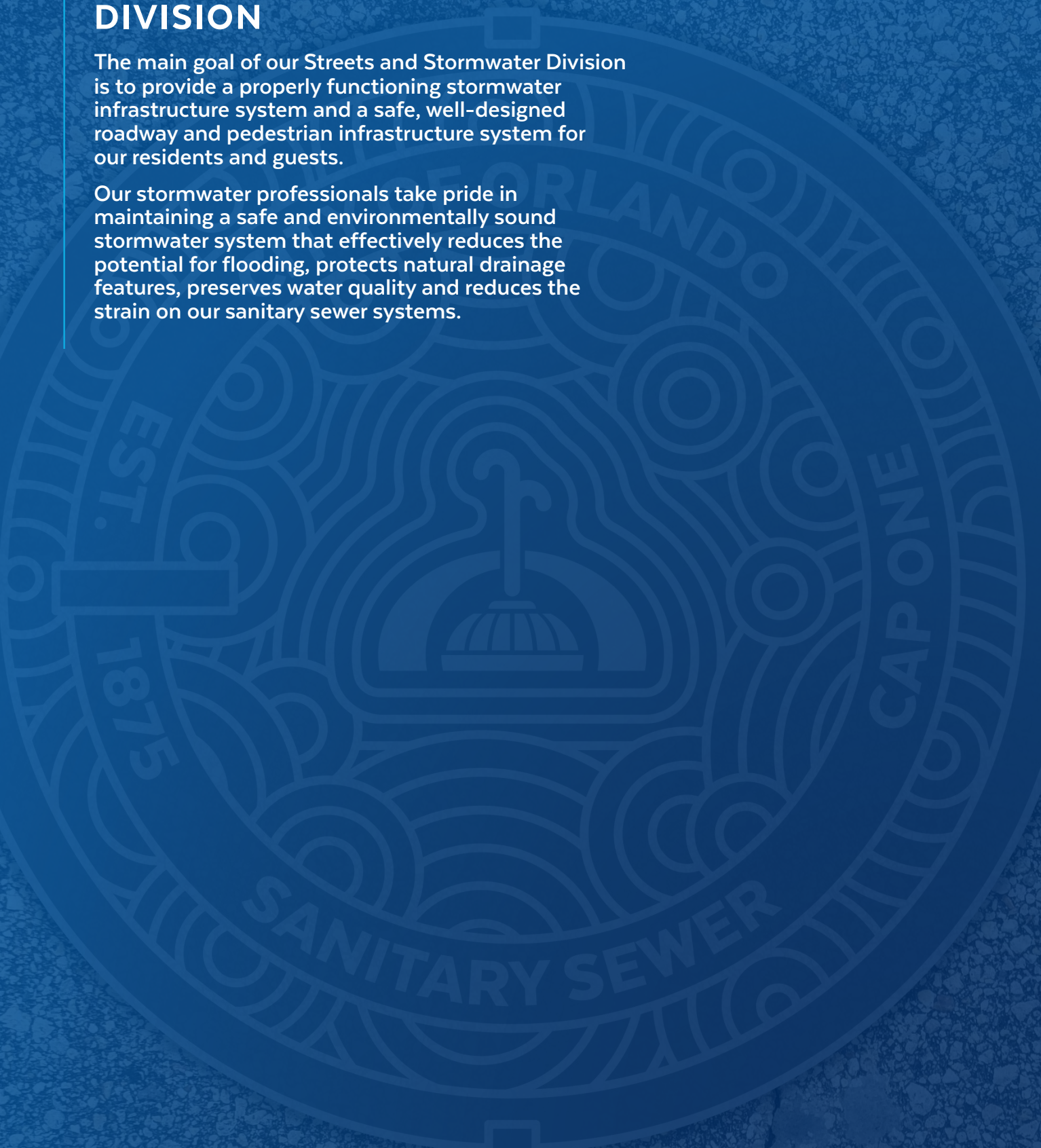
During COVID, the division was able to maintain its operational load with no prolonged interruptions of service. This was accomplished by shifting service where, when, and as needed, despite a significant number of refuse collectors, drivers, and staff contracting COVID-19. Indeed, not only was the operational wing able to quickly adapt to difficulties presented by the pandemic, **but the division also collected and hauled a combined 164,388 tons of Municipal Solid Waste (MSW) and yard waste in fiscal year 2020-21.** This reflects a slight decrease from prior fiscal years 2019-2020 and 2018-2019 as a direct result of business closings during the pandemic.



Streets and Stormwater DIVISION

The main goal of our Streets and Stormwater Division is to provide a properly functioning stormwater infrastructure system and a safe, well-designed roadway and pedestrian infrastructure system for our residents and guests.

Our stormwater professionals take pride in maintaining a safe and environmentally sound stormwater system that effectively reduces the potential for flooding, protects natural drainage features, preserves water quality and reduces the strain on our sanitary sewer systems.



Streets and Stormwater

The City of Orlando's Streets and Stormwater main goal is to "Maintain and operate the city's roadways and rights-of-way to achieve their maximum design life and to ensure the continuation of efficient and safe transit on all city streets and pedestrian ways." As well as to, "...Maintain and improve the city's drainage facilities to ensure they perform to design capacity and that all receiving bodies meet state and federal water quality standards."

2021 Workplace: Organizing Employees Differently

Managing under the special demands of COVID, these past two years were very challenging for the Streets and Stormwater Division. Since Streets & Stormwater personnel are considered "essential employees" most of the employees were not able to work from home. It took planning to manage our 150 employees throughout this pandemic, with one of the biggest challenges being social distancing. A good example of this is routine tasks such as "punching" the time clock each day. You wouldn't think this would be an issue,

but when 150 employees must "punch" in and out at the same time, it can be very tedious from a management perspective. To solve this problem, we created maps of our workplace so employees knew where to stand and which time clock to "punch."

In addition to social distancing, temperature checks and various PPE (Personal Protection Equipment) were required. Temperatures were conducted by supervisors as employees and contractors entered our offices. Also, anyone entering the building had to wear a mask. Additionally, we had to monitor doors to ensure anyone entering the building was wearing a mask. Transportation to and from job locations was also a challenge. We ordered several temporary vehicles from fleet. This would allow employees to have individual vehicles to go to job sites. Overall these precautions worked. Developing a new "normal" was the biggest hurdle, but our staff met the challenge.

During the whole pandemic period, our division has not missed a beat. Sidewalks are continuously repaired, potholes filled, streets and right of ways are maintained and the lakes are kept clean and monitored. Additionally, KOB was able to KEEP ORLANDO BEAUTIFUL. All our employees should be complimented for managing through these difficult conditions.

Teamwork: Extraordinaire!

During 2021 Lake Davis was tested by our Stormwater Compliance Group and it was determined that it had a high fecal count. A Lake Alert was issued at that time. Lake Davis is a popular venue for folks to walk their dogs around the lake, so it was determined the high fecal count in the lake was probably due to the presence of dog waste.

Our right-of-way (ROW) maintenance team came up with the idea to post signs around the lake to encourage dog walkers to pick up after their dogs. But how? Well, our maintenance folks in their daily routine pick up trash including the advertisement signs that are placed in the medians and right-of-ways. To save printing and distribution cost, they re-purposed the signs by ordering decals and put them on the old signs and placed them around the lake. Because of the success of the Lake Davis sign campaign, they have now received several requests to put them up in other neighborhoods. This was a joint effort with ROW Maintenance, Keep Orlando Beautiful, Public Awareness and Stormwater Compliance.



STREETS AND STORMWATER METRICS

The following metrics for streets and stormwater highlight the work we accomplish on an annual basis. The metrics also explain the enormity of maintaining and servicing these structures and our goal to support and provide a safer, cleaner, and sustainable quality of life for our community.

STREET AND SIDEWALK MAINTENANCE

STREETS

81,517

Miles of street cleaning annually

882

Miles of roads maintained by the City of Orlando

13.5

Miles of asphalt street repairs

SIDEWALKS

1,027

Miles of concrete sidewalks

23.74

Miles of grinding, construction, and repairs

48,454

Individual grinding repairs annually

TYPES OF ROAD MAINTAINED

Brick 58 miles

Concrete 2 miles

Asphalt 810 miles



STORMWATER MAINTENANCE

40,279
110+

Feet of Stormwater pipes repaired annually
Lakes maintained and/or tested annually

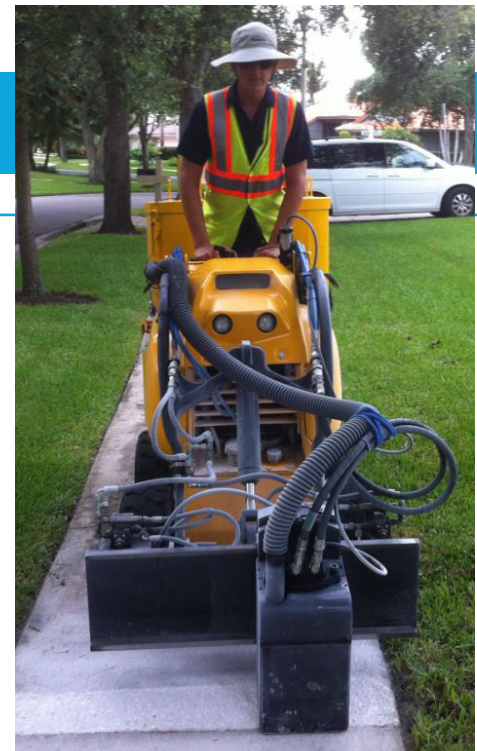
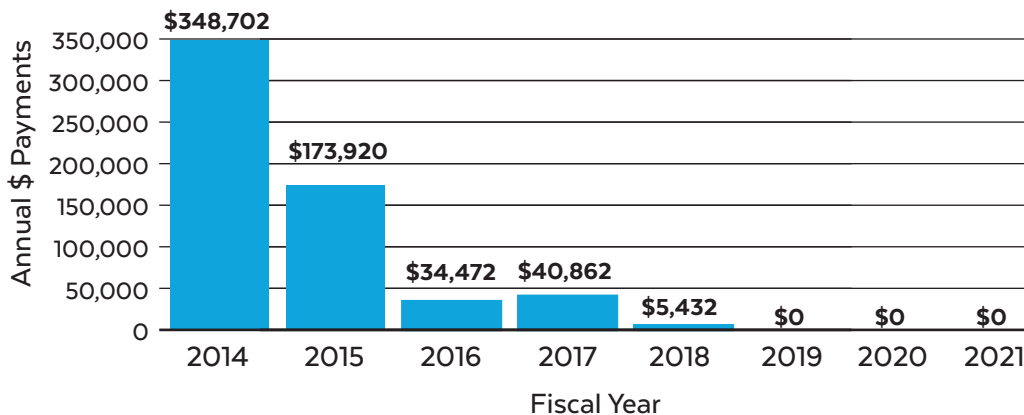
STORMWATER ASSETS AND DATA

10BG
1,060
123
31,001
11,772
298
3
21
7
2
132
9,203
4,055
18,614

Annual amount of stormwater collected, conveyed, treated, and stored
Miles of stormwater culverts
Lakes
Inlet structures
Manholes
Miles of stormwater open channels
Large wetland facilities
Pump stations
Major drainage basins (watersheds)
Water management districts (St. Johns & South Florida)
Drain wells
Stormwater outlets
Stormwater outfall to lakes/ponds
Curb inlets

SIDEWALK MAINTENANCE

Sidewalk grinding technology results in significantly reduced annual trip and fall claim payments



Keep Orlando Beautiful 2021 Accomplishments



4,470
volunteer
hours



1986
volunteers
engaged



42
Facilitated
community
improvement
events



34,421
pounds
of electronic
waste recycled



1,200+
educated
on Keep Orlando Beautiful
and proper recycling



112
miles of local
lake shoreline
cleaned



25,273
pounds
of litter and debris
collected





5,480
pounds
of textiles recycled/
upcycled



87
native plants
and trees
planted



478
graffiti sites
removed

OUR MISSION IS TO ENGAGE,
EDUCATE, AND EMPOWER THE
COMMUNITY TO TAKE PRIDE IN
THEIR ENVIRONMENT THROUGH
LITTER PREVENTION, RECYCLING,
AND BEAUTIFICATION EFFORTS.



Water Reclamation Division

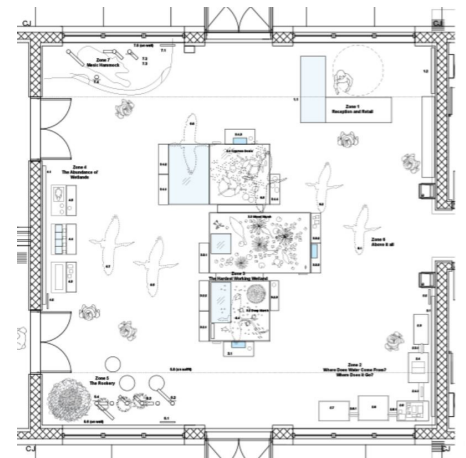
2021: Modifying and Adapting the Workplace.

The Water Reclamation team learned very quickly during the pandemic and into 2021 that adopting a “Can-do” attitude was critical to the success of our division.

Throughout the pandemic and going forward, most of the Water Reclamation Division (WRD) continued working in the field, in the treatment plants, and at our workstations. While many of the administrative staff worked from home, those coming into work put up partitions, temperature monitoring stations, wore masks, traveled separately, and did what was needed “to get the job done.” Within the first 60 days of the pandemic, the WRD suffered a temporary but significant loss of some 20-25 personnel (about 10% of the workforce) due to COVID related issues.

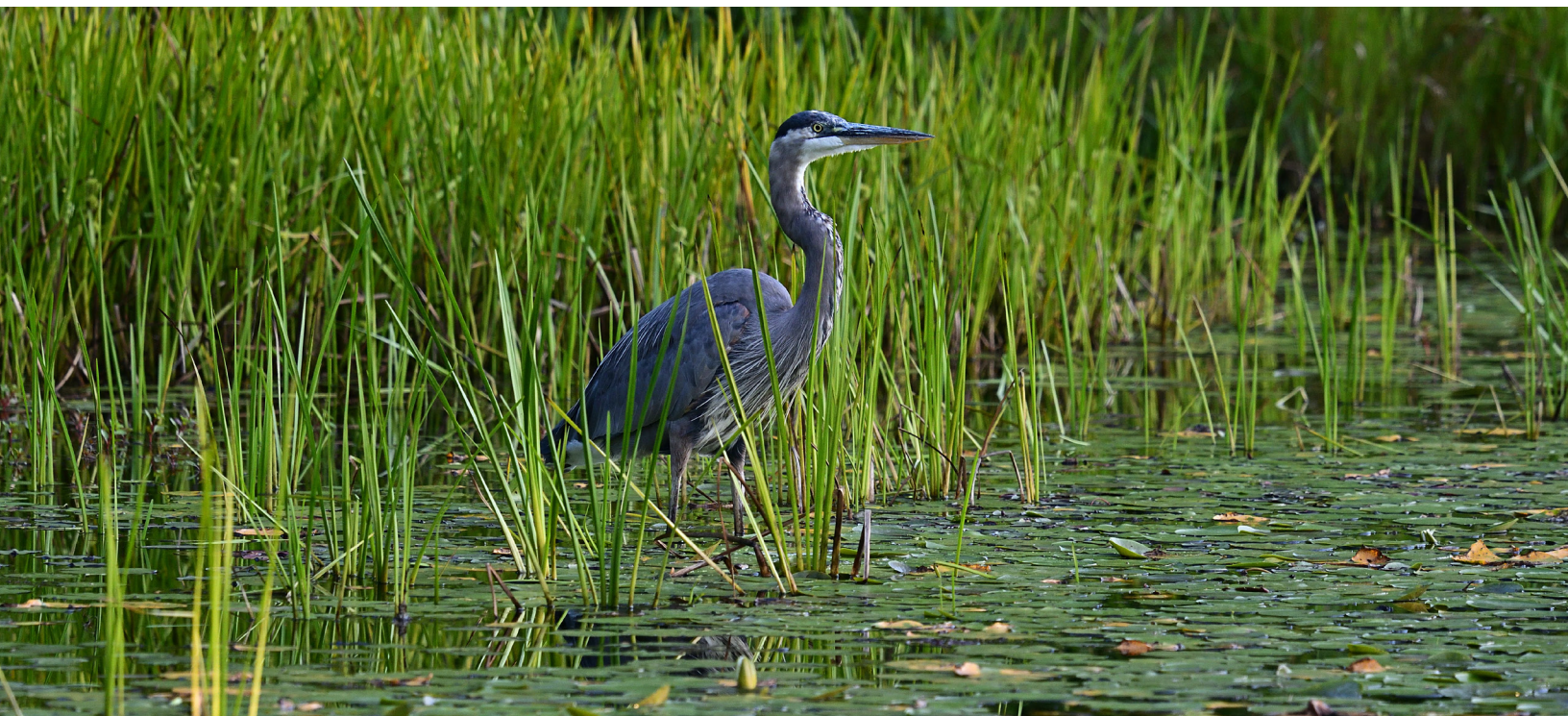
Even with that temporary loss, the division continued to maintain sanitary operation and maintenance, relying on many hours of overtime and an “all hands-on deck” attitude. The engineering and mapping section continued coming into work, reviewing permits, inspecting construction projects, and helping to assure the sanitary system is up to standards.

Through it all we persevered and continued to provide our residents and businesses the essential service of collecting wastewater, purifying it, and returning it back to the environment.



Coming Soon: The Orlando Wetlands Park Education Center

We are currently constructing the new Wetlands Park Education center. This 5000 square foot facility will have interactive educational displays and viewing/observation areas. Additionally, the education center will have offices and meeting rooms. The main purpose of the facility will be to educate and inform visitors via hands on activities, presentations, and tours. We are excited to add this new facility as it will provide another opportunity to educate our residents and visitors about Florida’s biodiversity and our most precious natural resource—water!



View our metrics

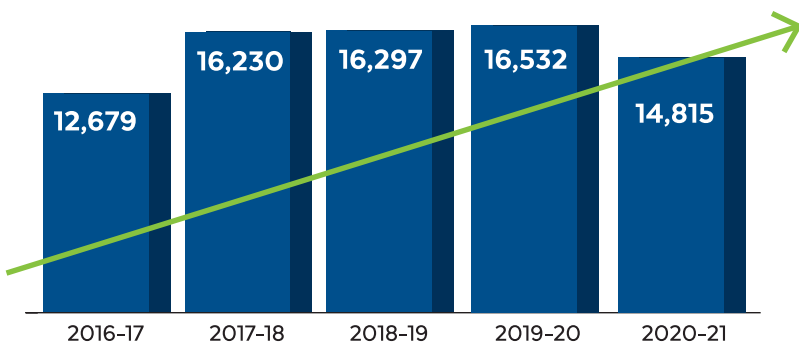
and understand the science of water reclamation. We are all about creating better livability and enhancing our environment for the citizens of Orlando.

1,113
62,192
15,626
70,076
7,734
16,400 MG
240
225
888
25,000
260

Water Reclamation Collection Assets and Data

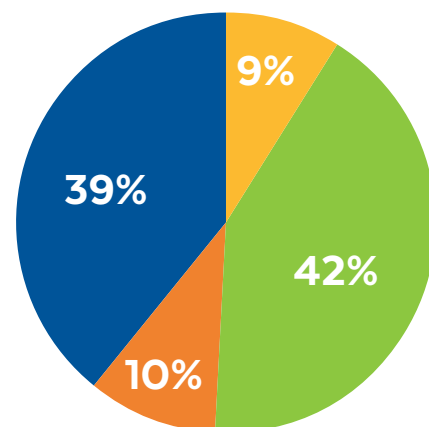
- Miles of collection system pipeline
- Residential sewage connections
- Commercial sewage connections
- Residential accounts
- Commercial accounts
- Amount of waste water collected and treated annually
- Lift stations
- Miles of force main
- Miles of gravity main
- Manholes and accompanying structures
- Miles of reclaimed water pipeline

Stable and Unstable Bio-Solids Total Output-Dry Tons



Bio-solids are an organic matter recycled from wastewater. Notably, for use in agriculture as fertilizer and soil amendments.

Distribution of Orlando Reclaimed Water

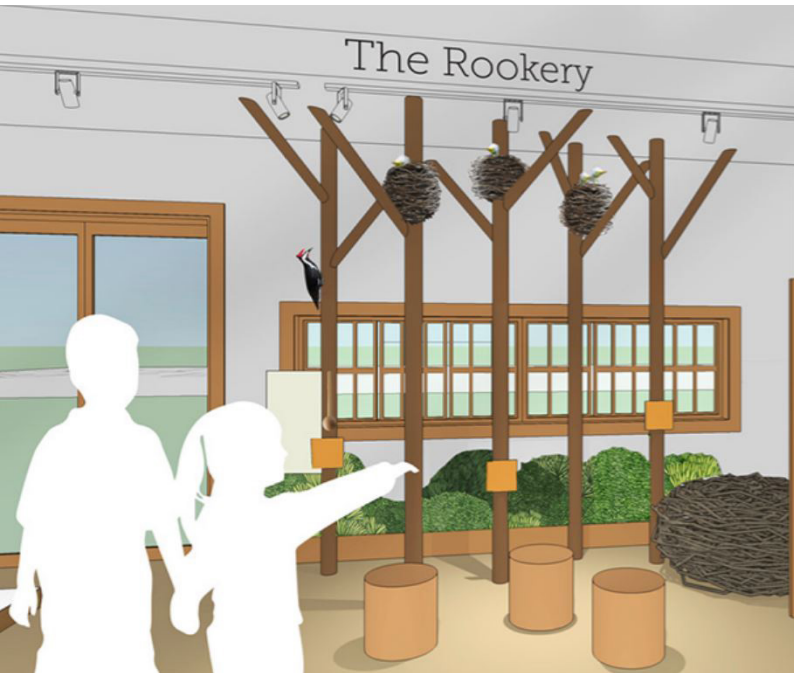


- Irrigation
- Wetlands Hydration
- Recharge
- Econlockhatchee River

Public Education and Outreach

Through the pandemic and into 2021, the Water Reclamation Division has continued to provide educational opportunities (albeit on a virtual and reduced scale). The Education Center has hosted education tours and other events via Microsoft Teams and Zoom, with approximately 1,500 residents and students attending. The division also conducted several virtual community outreach events in the past that were focused on bringing education regarding sanitary sewer issues to the public. The Water Reclamation Division continued to use social media during the pandemic to increase the outreach of the message of recycling used cooking oil and flushable wipes. The Education Center, located at the Conserv II Water Reclamation Facility, provides visitors with a unique opportunity of understanding the water reclamation process with the aid of unique models and displays. In addition, the Education Center enlightens the public as to ways they can help minimize negative impacts to the sanitary sewer system and ultimately reduce sanitary sewer overflows. The Water Reclamation Cooking Oil Recycling Effort (C.O.R.E.) program has 16 collection centers throughout the city to encourage residential oil and grease recycling. This program was the 2019 and 2021 recipient of the Florida Industrial Pretreatment C.O.R.E. award.





As for education outreach at the Orlando Wetlands Park, we have had to shift priorities, adjust to the “new normal”, and face the inherent limitations brought on by the pandemic. During this time, Education Programs at the Wetlands Park worked to answer guest questions and concerns as well as maintain existing facilities and educational materials for the record breaking over 60,000 visitors to the park. We also embraced this time and opportunity to reassess and develop better ways to communicate and educate the public. Projects have included developing new and improved wayfinding signs so that guests can better navigate the park. We have also been updating interpretive signs at the entrance pavilion in addition to developing new interpretive panels to be placed at the inflow and outflow structures. The biggest project over this past year has been planning and designing educational exhibits for the new Education Center, which is currently under construction. This process began by researching

and selecting an exhibit design firm, developing, and presenting design vision and goals, and collaborating with design companies to create the exhibits. The collaboration process has included brainstorming and feedback discussions via online meetings, writing exhibit text, curating photos, filming and editing videos, reviewing, and revising plans, and testing products/materials.

Though many volunteer activities, such as guided tours, were suspended, the Friends of the Orlando Wetlands volunteer group has remained active by continuing work in the gardens on Wednesdays - all while practicing pandemic safety protocols.



Project Management Division

Managing and Building Assets

The Project Management Division provides in-house project management, construction inspection and fiscal management to deliver capital improvement project programs. Additionally, we initiate all engineering, design, consultant, and construction contracts. Our in-house fiscal management professionals not only perform all accounting functions related to capital projects, they also help ensure compliance with grant requirements, State Statutes, and City Policies.

Performing During the Pandemic

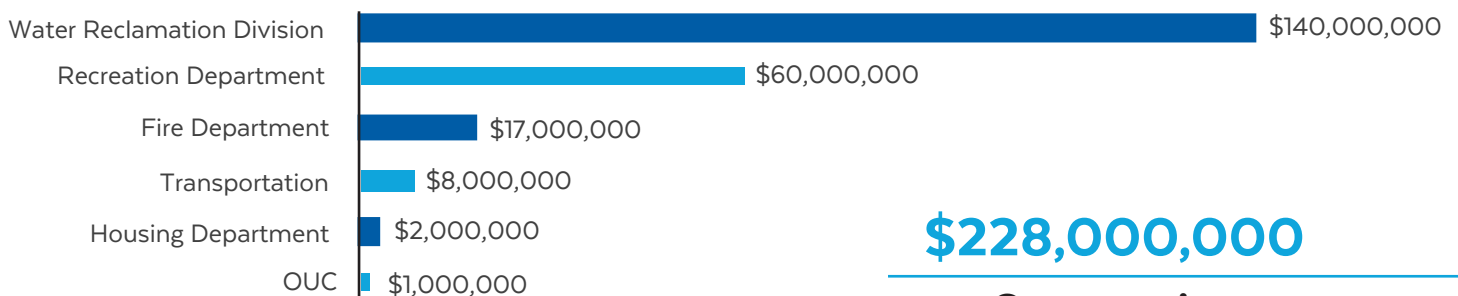
The pandemic has taught us all how to adapt and conduct business differently through innovative methods to keep projects moving forward. We use technology advancements that replaced gathering in groups, had virtual meetings, and worked from home to stem the spread of COVID. Face-to-face meetings were replaced by Zoom meetings and Microsoft Teams. Our inspectors, construction managers, and project managers all practiced safe distancing and used face masks both at the office and on construction sites.

Surprisingly enough, in certain cases, we completed capital projects faster than normal due to the quarantine period during the pandemic. We discovered our roadway projects finished faster because of reduced traffic due to the closure of schools and certain restaurants and businesses, and people working from home.

Capital Projects for a Vibrant Orlando.

The City of Orlando planning and engineering professionals have carefully developed city projects to attract business and residents as well as improve infrastructure like roadways, bridges, and buildings. The following sections will detail new projects, such as the **Under I-project**, a new and unique gathering space located under I-4 in downtown Orlando that will be used for both active and passive purposes. Also, pay special attention to the historic **Grand Avenue Elementary School** which is being preserved and repurposed as a youth and family recreation center. This project will eventually house our **Orlando Pottery Studio** and include the expansion of youth services for the Holden Heights neighborhood. Additionally, the city continues to invest in our first response assets including the recent ribbon cutting for new **Fire Station 9**. This fire station has an innovative design and special amenities to serve a diversified work force. Lastly, we have highlighted some of our **horizontal projects** for the Stormwater and Water Reclamation Division. These horizontal projects allow us to enjoy cleaner lakes, newer roadways, and more efficient sewer systems. These projects and many others continue to demonstrate how the City of Orlando is a world class venue to live, work, and play!

Public Works Construction in Process by Department and City Partners



\$228,000,000

Construction Dollars at Work!

19

CITY BUILDINGS WITH LEED CERTIFICATION



LEED GOLD

- Amway Center
- City of Orlando Fire Station #1
- City of Orlando Geico Garage
- City of Orlando Fire Station #7
- Rosemont Gymnasium



LEED SILVER

- City of Orlando Police Department Headquarters
- City of Orlando Fire Station #9
- Dr. Phillips Performing Arts
- Orlando Citrus Bowl-Camping World Stadium
- Orlando Police Department Crime Scene Facility



LEED CERTIFIED

- Orlando Permitting/Code Enforcement
- City of Orlando Fire Station #15
- City of Orlando Fire Station #16
- City of Orlando Fire Station #17
- City of Orlando Fire Station #14
- City of Orlando Fire Station #2
- Fire Station 6 - *Construction in progress*
- Fire Station 11 - *Construction in progress*
- Orlando Wetlands Education Center - *Construction in progress*



Recently Completed Projects Managed by Public Works



\$6.5 MILLION

Fire Station #9

As part of the city's investment in first response assets, we recently opened our newest fire station, FS No.9. The design of this facility emphasizes future solar energy upgrade in keeping with our green energy initiative, effective space utilization, as well as specialized amenities to serve a diverse workforce. The square footage for this facility is approximately 12,000 square feet.



\$6 MILLION

LIFT STATION #45

WATER RECLAMATION UPGRADE

Lift station 45 is located at 900 Fairvilla Road. Serving the south west area of Orlando. Last rehabilitation to this station was done in 1989 and the station has reached its useful life. This project will replace the station in its entirety with a more efficient station that complies with new codes and OSHA requirements.



\$1.8 MILLION

AMERICAN WAY SEWER REPLACEMENT

This project involved the replacement of aging sewer assets. This replacement will provide better efficiencies and reliability for the surrounding neighborhoods.



\$6.3 MILLION

SHINGLE CREEK TRAIL

The Shingle Creek Trail is a regional multi-use trail that, once completed, will connect the City of Orlando, Orange County, Osceola County, and the City of Kissimmee.

The trail is twelve feet wide and contains suburban and rural landscapes located adjacent to the Shingle Creek waterway. The trail starts at Eagle Nest Park, north of The Mall at Millenia, and runs south to Oak Ridge Road, east of the Orlando International Premium

Outlets. The newly completed 2-mile expansion extends the trail from Oak Ridge Road to Sand Lake Road where it meets the Orange County trail section, which extends from Sand Lake Road to Destination Parkway near the Orange County Convention Center. Key amenities include: Two-mile loop around Lake Fran, offering scenic views of the lake. The southern portion of the trail is suburban in nature and provides a direct connection to the International Drive Tourist Corridor. The newly opened extension to Sand Lake Road includes two overlook points which provide the perfect opportunity for photos and wildlife viewing.

FUTURE PROJECTS

\$16 MILLION

FIRE STATIONS #6, #11

As part of the city’s safety initiative, two older fire stations are being replaced with new up-to-date facilities. The city anticipates LEED certification for both of these stations. The design of these facilities emphasizes future solar energy utilization in keeping with our green energy initiative, effective space utilization, as well as specialized amenities to serve a diverse workforce. The anticipated square footage for both these facilities each, will be approximately 14,000 sqft.



\$22 MILLION

GRAND AVENUE COMMUNITY CENTER

The Grand Avenue Community Center is a project that repurposes the historic Grand Avenue Elementary School and revitalizes this city asset by creating a youth and family recreation center. Part of this project includes housing the city’s pottery studio and expanding our after-school programs including Parramore Kidz Zone (PKZ).

\$6.2 MILLION

ROSEMONT GYMNASIUM IMPROVEMENTS

The Rosemont Community Center Gymnasium is part of the City of Orlando’s ongoing efforts to expand amenities by providing a local venue for sporting events and other community uses. The expansion consists of a 12,000 square foot gymnasium that will feature two 84ft. regulation size basketball cross courts plus one NBA regulation size basketball court, additional locker rooms, retractable seating, storage rooms, and restrooms.



FUTURE PROJECTS CONTINUED



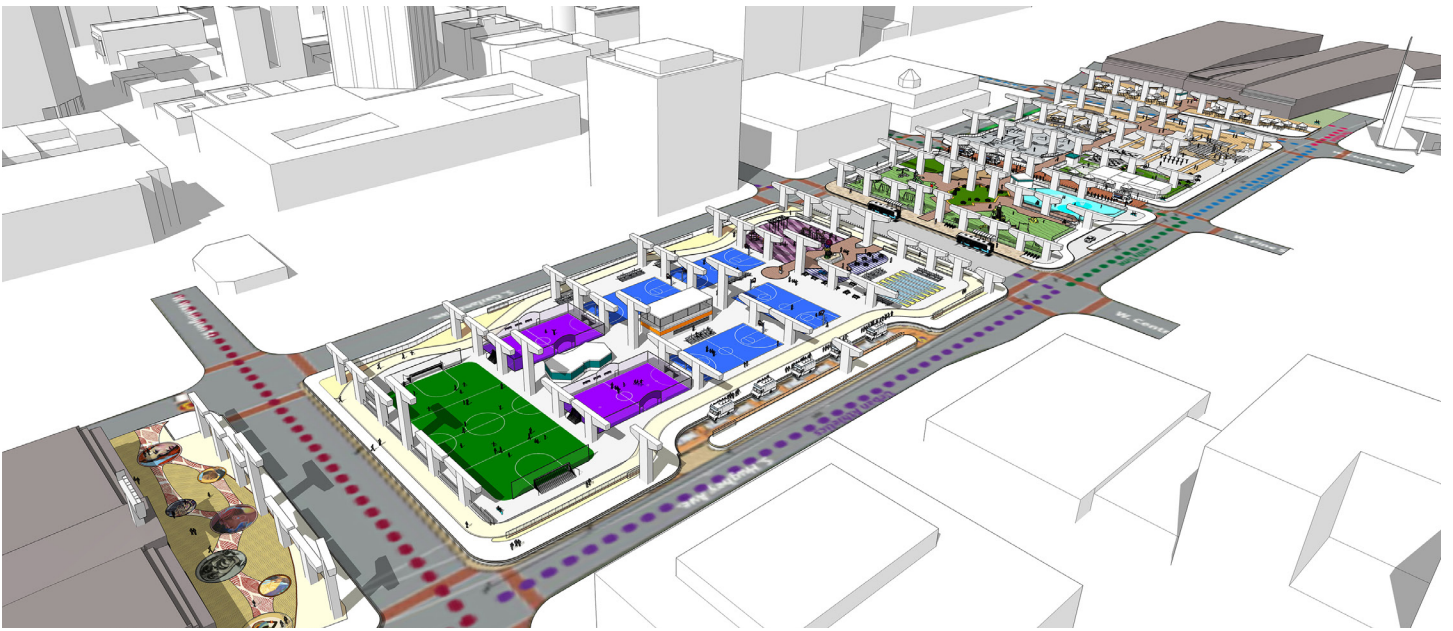
\$8.5 MILLION ORLANDO TENNIS CENTER

The city is in the process of relocating the Orlando Tennis Center within the city park at the Packing District located southeast of Princeton and John Young Parkway. This new facility will include an expanded number of tennis courts, (11 clay courts/6 hard courts), as well as a new club house with meeting rooms, locker rooms, and showers.



\$22 MILLION THE CITY PARK AT THE PACKING DISTRICT

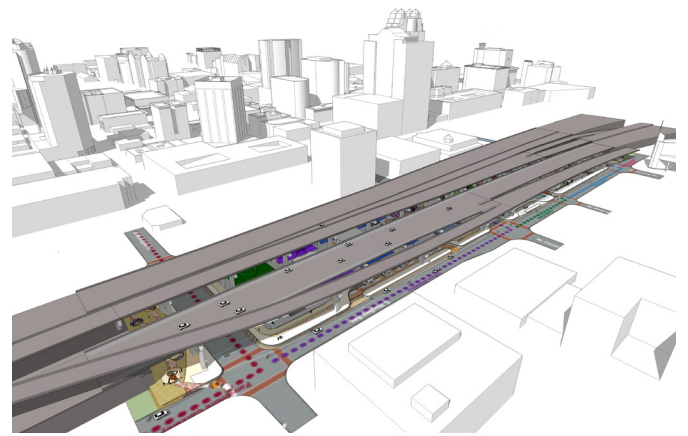
Building on the city's commitment to invest in our neighborhoods, the city park at the Packing District will become a new addition to the Orlando landscape near Princeton and John Young Parkway. This city park will span over 66 acres and include the following amenities: a new tennis center, bike and walking trails, increased green-space, and preserved wetlands. In order to accommodate growth in this area, additional infrastructure will include new roadways, on-site parking, and other public works upgrades to enhance smart growth and public safety.



THE UNDER-I

The Under-i Preliminary Vision Plan, while conceptual in nature for an anticipated opening in 2023 or 2024, illustrates the scale, aspirations, and potential of the Under-i project. The set of uses and their locations reflect a program that has evolved since the origin of the Under-i concept six years ago during the Project DTO initiative. However, the Preliminary Vision Plan layout and program are still conceptual in nature and will continue to be refined and finalized, during the development of the Vision Plan and 100% Design Documents.

This project will have five programmed blocks in the Under-i Preliminary Vision Plan that each contain a collection of similar activities that are intended to provide patrons with exceptional experiences. The block themes are: Heritage, Sports, Play, Unity, and Market.



Outreach

Community Outreach - Capital Projects, Stormwater, and Water Reclamation

The Orlando Public Works Community Outreach section continues our mission to provide information and education to citizens of Orlando that is both engaging and useful. Outreach staff utilize a variety of communication tools and advertising mediums to communicate important events and changes in service delivery. As we disseminate information, one of our key goals is accuracy and reliability, thereby building trust and credibility with those we serve.

The pandemic years presented unique challenges and opportunities for our outreach team. While in-person education and outreach were paused, the work of our team continued. We took advantage of available technology to interact with residents and our services-based website to respond to resident requests. Digital engagement through social media and electronic communication doubled from the previous year. Communication with our residents also continued through direct mail for important notices.

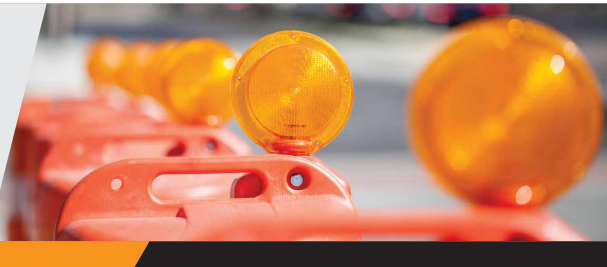
Social Media Impressions

953,008	Twitter
395,009	Facebook
239,073	Instagram
191,314	Nextdoor

Total annual engagements:

1,778,404

SOUTH MILLS AVENUE ROAD CLOSURE



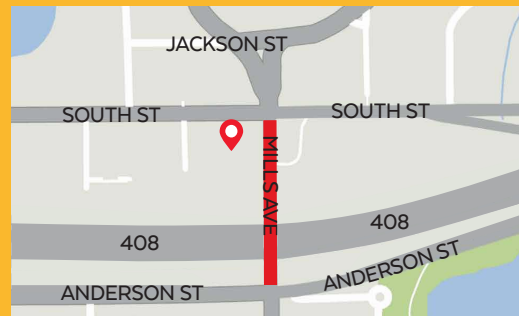
PROJECT OVERVIEW

South Mills Avenue will be closed between South Street and East Anderson Street, beginning Wednesday, November 6, 2019 and lasting for approximately three months, ending in February of 2020.

NEIGHBORHOOD IMPACTS

During this phase of the project, city residents will experience barricades and detours when approaching the project area. In the event of an emergency, first responders and emergency vehicles will have priority access and solid waste, recycling, mail, and other services will continue as scheduled. Those living near the project area will notice crews and equipment entering and exiting the project area. Residents should prepare for delays that may increase their commute times. Unforeseen circumstances and adverse weather can create delays that increase the project's duration.

For more information, please visit orlando.gov/liftstationone.

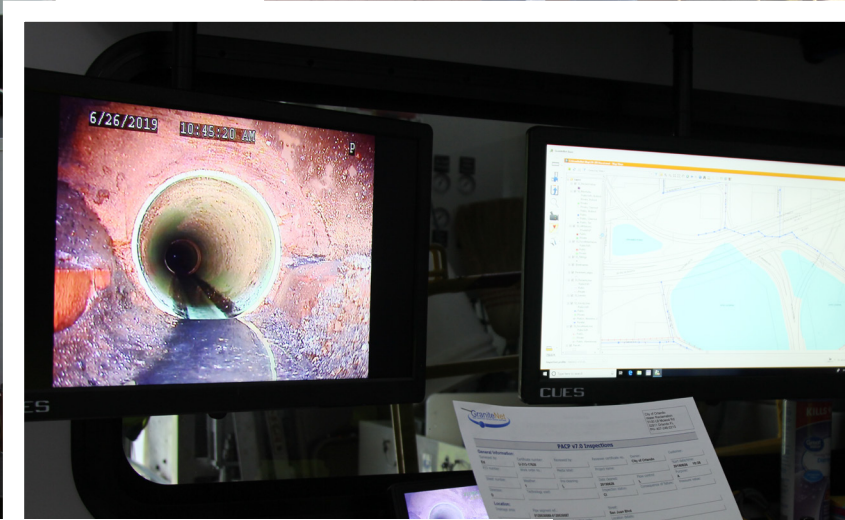


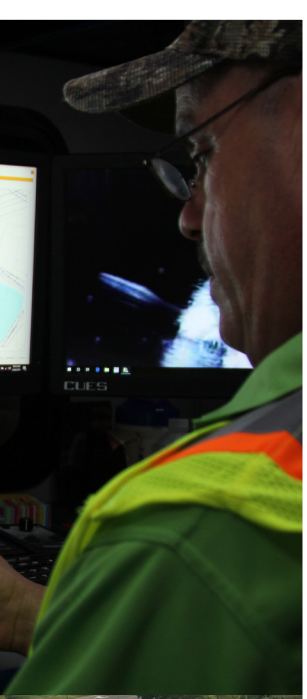
📍 Lift station location 🚧 Road Closure

Even though we were not able to engage face-to-face, we took this opportunity to implement virtual community meetings, workshops, education, and training and still meet our resident's needs. We were encouraged to see increased participation at these virtual events and were able to send recordings to those who were interested in the content but unable to attend. Looking to the future, we are excited to offer a hybrid of in-person and virtual opportunities to extend our reach into the community.

Whether it is informing citizens of capital project details involving road closures and detours, sanitary sewer replacements, smoke testing within the sewer system, or educating our younger people about the effects of stormwater runoff and water reclamation, Public Works community outreach is here to provide timely and useful information as well as education to our residents and businesses.







Contact

PUBLIC WORKS
400 South Orange Avenue
Orlando, FL 32801

407.246.2266

SOLID WASTE
1028 Woods Avenue
Orlando, FL 32805

407.246.2314

STREETS AND STORMWATER
1030 Woods Avenue
Orlando, FL 32805

407.246.2370

WATER RECLAMATION
5100 L B McLeod Rd #7407
Orlando, FL 32811

407.246.2213

