



LAKE COUNTY
FLORIDA



Department of Public Works
Budget Workshop

April 19, 2016

Purpose



- To provide the BCC with an overview of the Public Works Operations (excluding Solid Waste) and their proposed FY 2017 Budgets

Presentation Outline



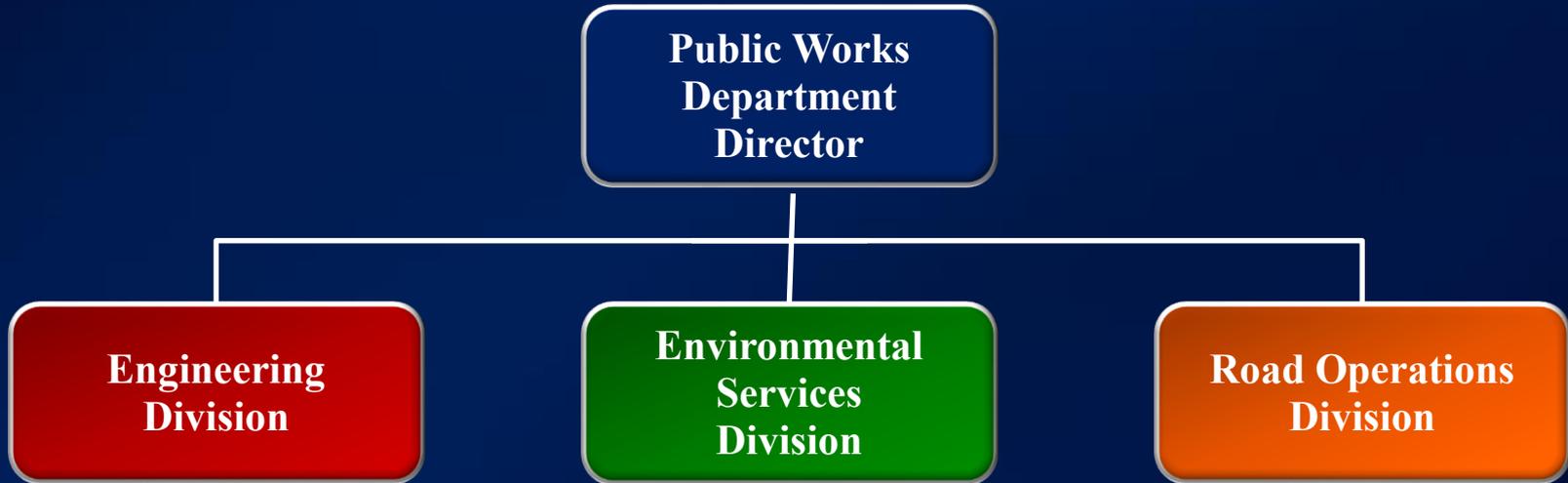
- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Public Works Department Organizational Chart



Public Works Department – 194 FTE

Public Works Department Mission Statement



- The mission of the Public Works Department is to provide timely services in a courteous and fiscally responsible manner which includes the engineering, construction and maintenance of roads and storm water systems; solid waste collection, recycling, and disposal; and protect the public health through effective and environmentally safe methods of mosquito and aquatic plant control.

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Road Operations Division Organizational Chart



**Road Operations
(75 FTE)**



Road Operations Division Sections



Maintenance	51 FTE
Special Projects	9 FTE
Outsourcing Contracts	2 FTE
Construction Inspection	6 FTE
<u>Administration</u>	<u>7 FTE</u>
Total	75 FTE

Road Operations Division Maintenance Areas



LAKE COUNTY
FLORIDA

Maintenance Area I - Griffin Road, Leesburg

Maintenance Area II - Disston Avenue, Minneola

Maintenance Area III - East Fifth Street, Umatilla



Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - **Mission**
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Road Operations Division Mission Statement



The Road Operations Division's mission is to directly or indirectly be responsible for the construction and maintenance of the roadways, rights-of-way, and drainage contained in the County maintained road network.

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - **Levels of Service**
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Road Operations Division

Levels of Service



The County maintained road network includes the following:

	Asphalt:	1,245 miles
	Clay:	120 miles
	DST:	25 miles
	Concrete:	2 miles
	Brick:	0.15 miles

Roadway: 1,392 miles

	Bridges:	27
---	----------	----

	Sidewalk:	193 miles
---	-----------	-----------

	Guardrail:	20 miles
--	------------	----------

Road Operations Division Levels of Service



- Clay road grading (annually)
 - 116 miles graded every two weeks by County staff
 - 3.5 miles graded per interlocal every four weeks for the City of Umatilla and every six weeks for the Forestry Service



Road Operations Division

Levels of Service



- **Right-of-way Mowing (April to November)**
 - 765 roadway miles mowed every 5 weeks by County staff (neighborhood roads)
 - 288 roadway miles mowed every 4 weeks under contracted service (collector roads)
 - 60 miles of sidewalk mowed every 5 weeks by County staff
 - 25 miles of sidewalk, vacant lot and bridge approaches mowed every 3 weeks under contracted service
 - 339 roadway miles and 108 sidewalk miles mowed by others or are scheduled as requested
- **Guardrail Trimming (May to October)**
 - 20 miles of guardrail maintained every 5 weeks under contracted service



Road Operations Division

Levels of Service



- **Right-of-way Litter & Debris Removal - Roads**

- 765 roadway miles of neighborhood roads cleaned every 5 weeks by County staff during mowing season (April-November)
- 288 roadway miles of collector roads cleaned every 4 weeks under contracted service (annual contract)
- 114 roadway miles cleaned a minimum of 4 times per year by the 41 Adopt-A-Roadway volunteer groups
- 990 roadway miles are cleaned by others or are scheduled as requested outside the mowing season
- 225 roadway miles are not addressed by schedule and are cleaned by others or are scheduled as requested



Road Operations Division

Levels of Service



- **Right-of-way Litter & Debris Removal – Sidewalks and other areas**

- 60 miles of sidewalk cleaned every 5 weeks by County staff during mowing season (April-November)
- 25 miles of sidewalk, vacant lot and bridge approaches annually cleaned every 3 weeks under contracted service (annual contract)
- 168 sidewalk miles are cleaned by others or are scheduled as requested outside the mowing season
- 108 sidewalk miles are not addressed by schedule and are cleaned by others or are scheduled as requested

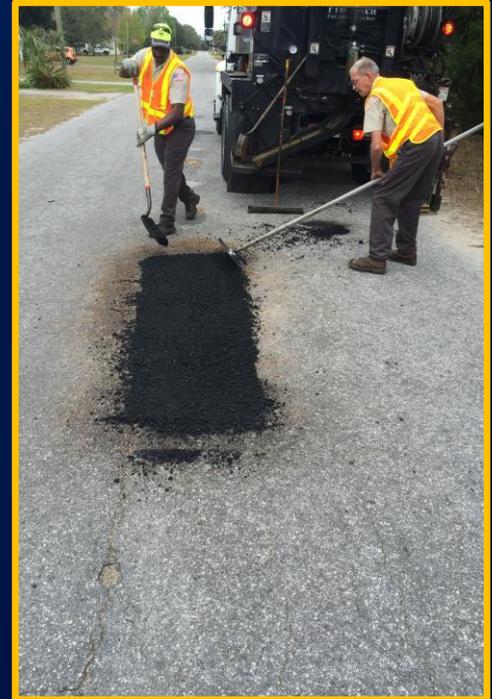


Road Operations Division

Levels of Service



- Inspect and evaluate 1,245 miles of paved roads (annually)
- Pot hole repair
- Tree removal & tree trimming
- Shoulder rehabilitation and swale restoration
- Storm pipe cleaning and repair
- Pavement preservation projects



Road Operations Division

Levels of Service



- Bid and inspect projects in accordance with approved construction plans for compliance with County standards, applicable codes, engineering specifications, and State guidelines
 - Road, stormwater, and sidewalk/trail projects
 - Residential developments
 - Commercial site plans
- Coordinate with FDOT on Local Agency Program projects
- Develop Five-Year Transportation Construction Program
- Issue Right-of-Way Utilization & Commercial Driveway Permits
- Coordinate development review (construction plans & final plats)
- Administer the Special Assessment Program



*North Hancock Road Extension under construction
looking north from Old Hwy 50/N. Hancock Rd*

Road Operations Division As Needed Services



- ESF-3 function in ECOC during an emergency event
 - First Push to open roadways
 - Co-manage debris management contract with Solid Waste Division
- Non-maintained roads



Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - **Accomplishments**
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Road Operations Division Accomplishments in 2015



Maintenance Section (in-house & contract labor)

- Took 3,464 citizen calls
- Completed 2,965 work orders
- Resurfaced 24 miles of roadway
- Micro-surfaced 6 miles of roadway
- Restored 21 miles of shoulder
- Removed 56 hazardous trees
- Trimmed 53 miles of trees
- Cleaned and/or video recorded 78 stormwater pipes
- Completed 15 stormwater/drainage repair projects
- Demolished 1 building in conjunction with road construction projects
- Removed 46 tons of debris/tires from the right-of-way

Construction Section

- Processed 421 r/w utilization permits
- Processed 490 residential d/w permits
- Processed 36 commercial d/w permits
- Bid, inspected and constructed 5 construction projects \$3M
 - Three road projects \$2.5M
 - Two sidewalk projects \$.5M
- Performed 93 site inspections
- Approved 7 subdivision construction plans
- Recorded 3 final plats

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - **Efficiencies**
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Road Operations Division

Efficiencies



- Services outsourced for cost effectiveness and efficiency
 - 45% of the Division's expenditures are outsourced by consultants, maintenance vendors, and construction contracts
 - Examples of outsourcing include: mowing, pavement & base repairs, asphalt, and drainage projects
- Asphalt overlay projects are estimated and evaluated for best value and response time
 - Overlay project performed in-house at \$36,800 (contractor cost \$44,100)
 - Overlay project performed in-house at \$94,800 (contractor cost \$147,500)

Road Operations Division Efficiencies



- Heavy equipment leased instead of purchased (motor graders & front-end loaders)
 - Motor grader example: Four-year lease for one motor grader \$100,500; Purchase price \$215,243
 - Maintenance cost is included in the lease, which tends to be expensive with owning the equipment

Presentation Outline

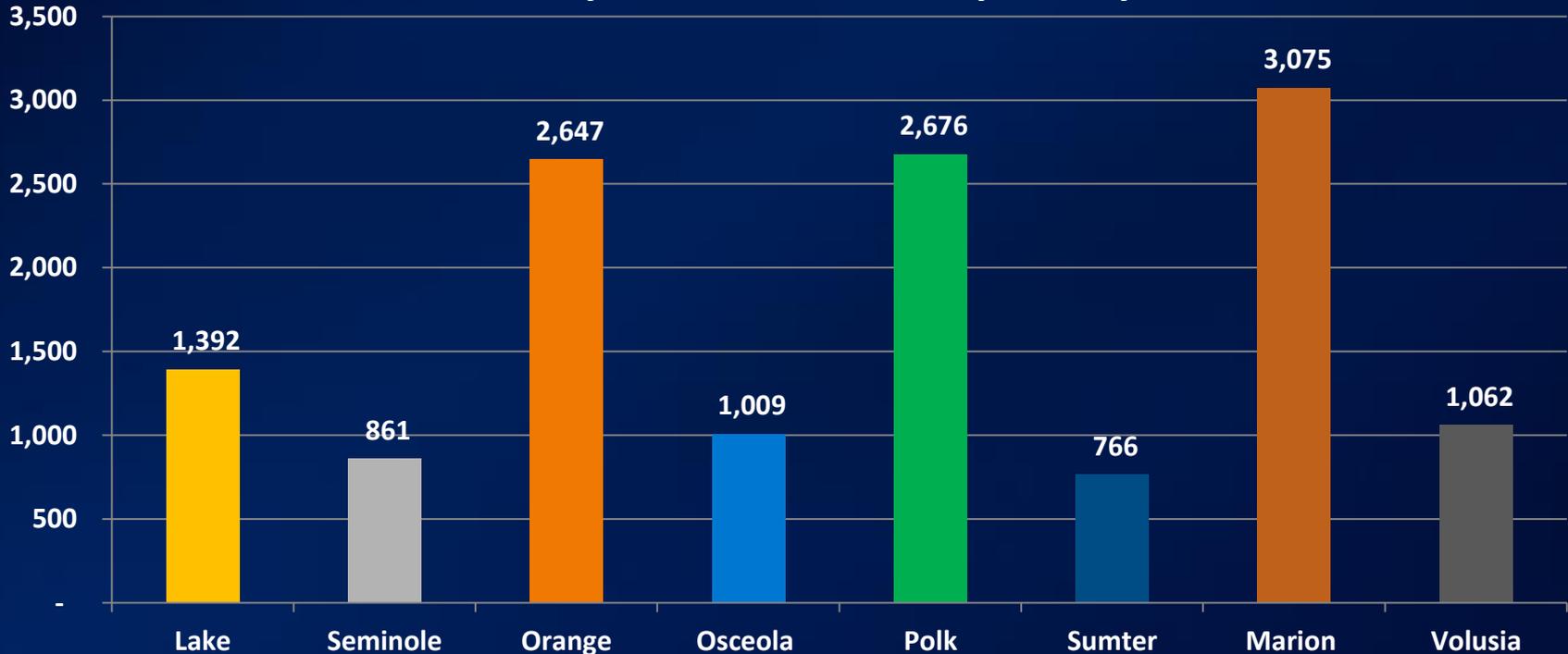


- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Road Operations Division Benchmarks – Road Miles



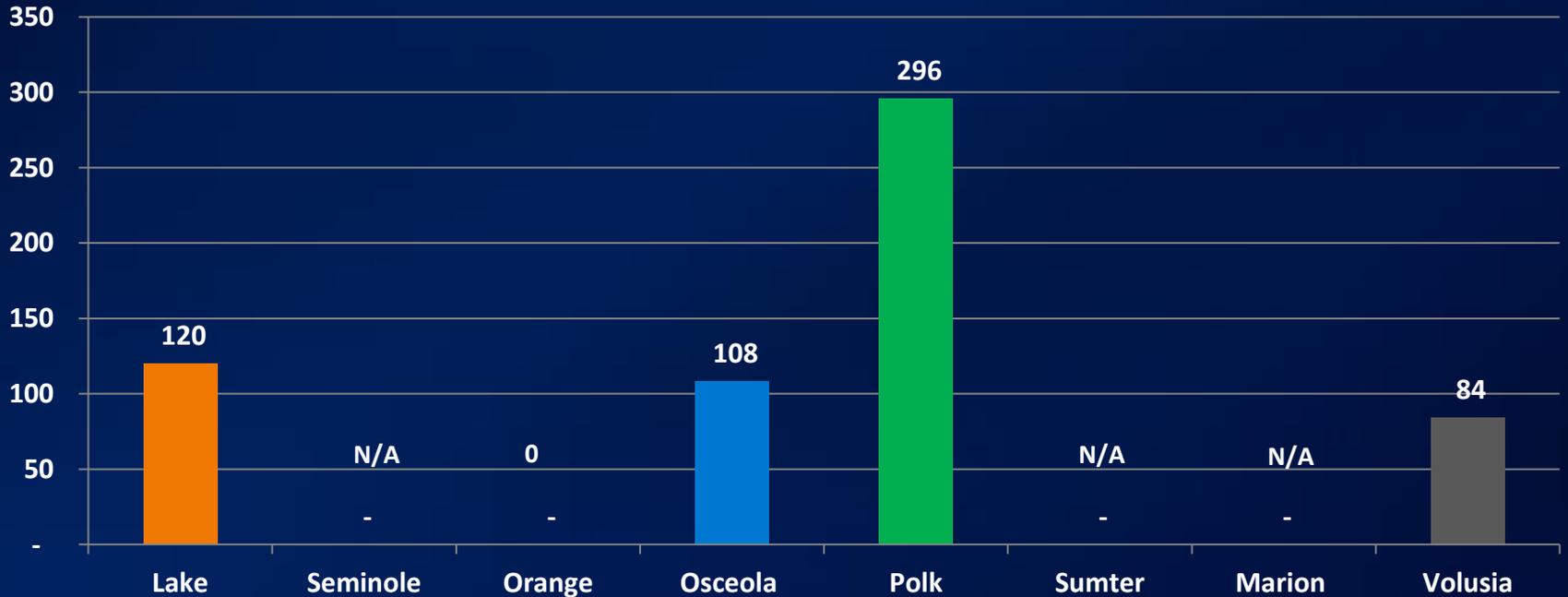
Roadway Miles Maintained by County



Road Operations Division Benchmarks – Clay Roads



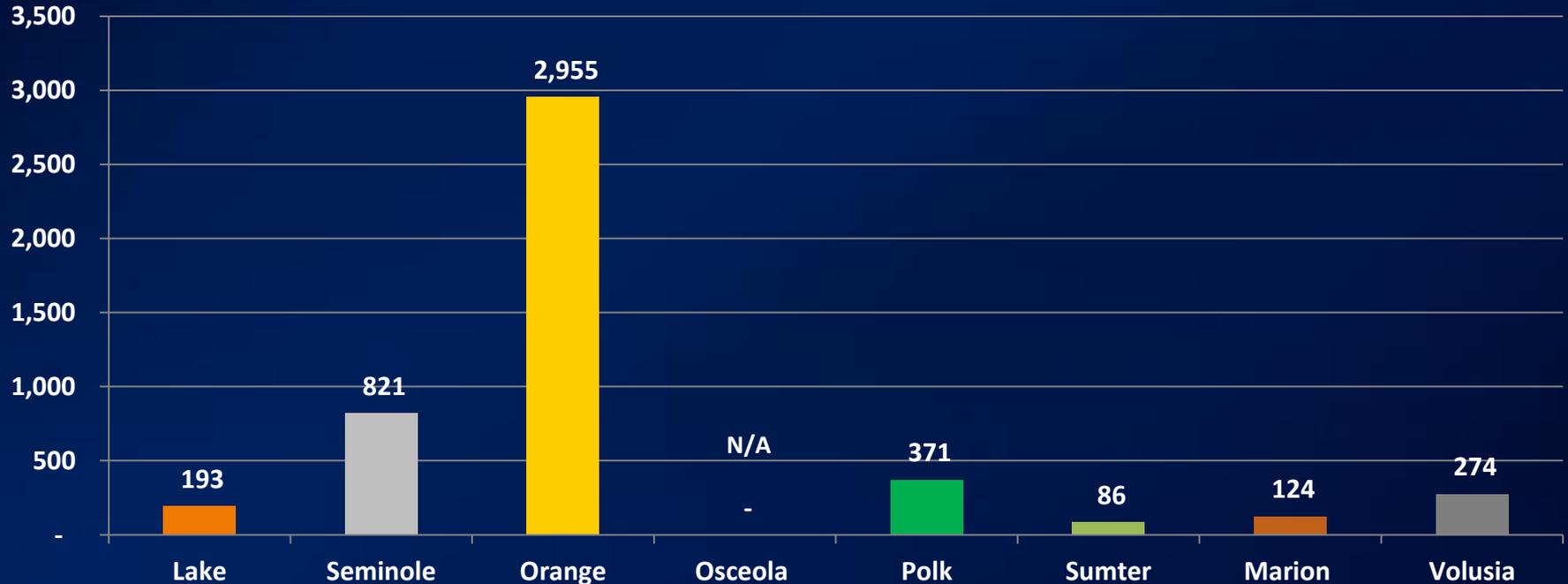
Clay Road Miles Maintained by County



Road Operations Division Benchmarks – Sidewalks



Sidewalk Miles Maintained by County



Road Operations Division

Benchmarks – Gas Tax \$



FY 2016 Estimated Gas Tax Revenue by County

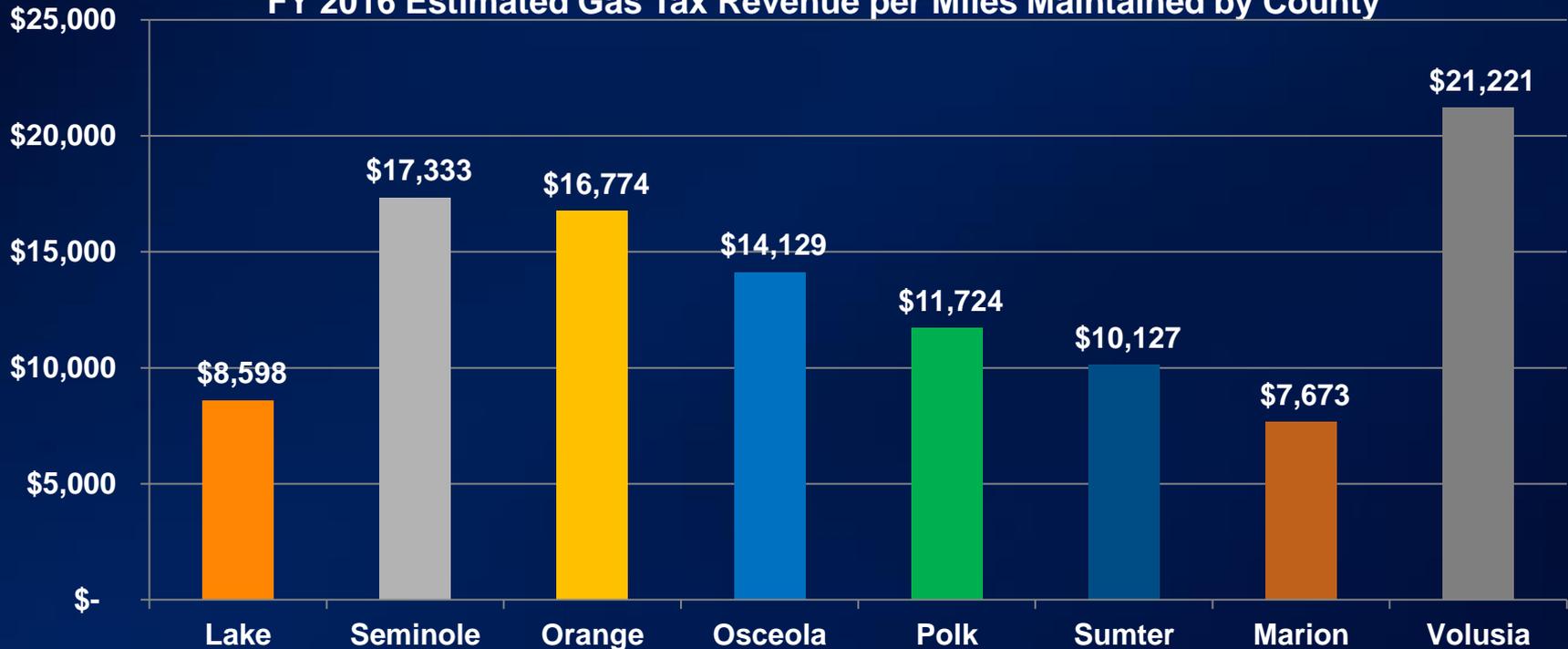


Road Operations Division

Benchmarks – Revenue/Mile



FY 2016 Estimated Gas Tax Revenue per Miles Maintained by County



Other Counties use additional funding sources for road maintenance such as general fund and revenue sharing.

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Road Operations Division Proposed Budget



FY 2017 Proposed Budget

Personal Services	\$3,766,256
Operating Expenses	\$4,772,185
Capital Outlay	\$ 115,000

Total Expenditures \$8,653,441

Revenue Source: Transportation Trust Fund

- Reflects a status quo budget
- Maintains current levels of service
- Capital outlay is for double surface treatment to one road



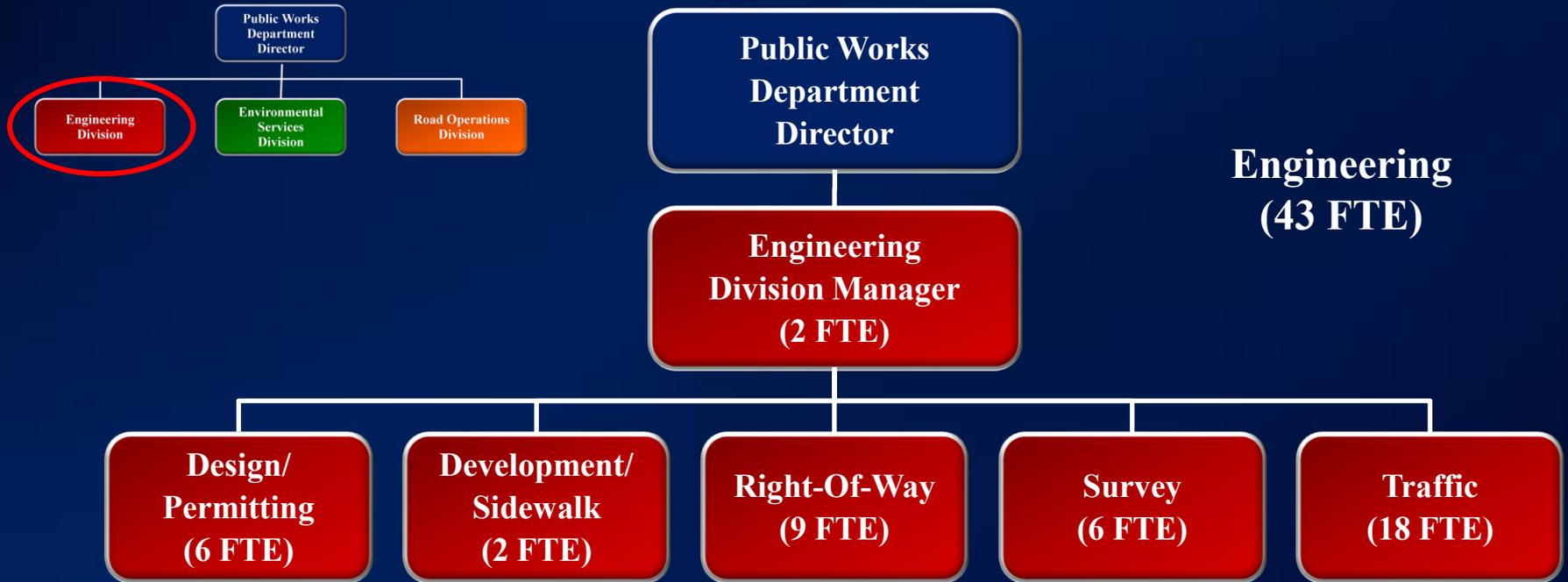
Engineering Division

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - **Organizational Chart**
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Engineering Division Organizational Chart



Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, **Engineering**, Environmental Services**
 - Organizational Chart
 - **Mission**
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Engineering Division Mission Statement



- The Engineering Division's Mission is to enhance and protect the quality of life, health, and safety of the citizens of Lake County by delivering excellent engineering, surveying, and project management support through the efficient use of available manpower and resources; and working to provide for the safe and efficient movement of pedestrians, cyclists and vehicular traffic within the County.

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - **Levels of Service**
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Engineering Division Levels of Service



Overall Division

- The Engineering Division provides engineering support services to the Public Works Department and the County.
- The Engineering Division provides many areas of expertise which are needed to implement and construct Board of County Commissioner programs which include:
 - Engineering Design & Permitting
 - Development Review & Sidewalk Program
 - Right-of-Way research and acquisition
 - Surveying
 - Traffic Engineering, Operations & Maintenance

Engineering Division Levels of Service



The Division Also:

- Seeks out opportunities for public/private partnerships for the construction of new roadways which are presented to the Board of County Commissioners for approval
- Coordinates projects with FDOT, LSMPO, Cities, and Towns
- Holds Public Meetings to inform citizens of project plans
- Review and coordination of right-of-way deeds and easements for capital improvement program projects and developer requirements
- Maintain right-of-way records and providing access to these records to the citizens
- Manages county traffic operational infrastructure and maintains the signs, signals and striping on County roads

Engineering Division Levels of Service



Design

- Support & Conduct Departmental engineering and permitting needs including new construction and maintenance
- Manage projects on the Transportation Construction Program from PD&E through design, permitting, right of way and bid preparation. Assist throughout construction



Engineering Division Levels of Service



Development and Sidewalks

- Implement the adopted ADA Public Right of Way Plan utilizing an annual budget of \$500,000
- Evaluate the LSMPO Safe Access to Schools Plan and implement needed BCC improvements in coordination with the ADA PROW Plan
- Provide timely customer service and responsiveness on development issues and coordinate with FDOT and cities



Engineering Division Levels of Service



Right of Way

- Research and provide information on right of way and property boundaries for County projects
- Customer Support: Walk-ins & online right of way maps
- Collaborate with the County Attorney on all right of way acquisitions



Engineering Division

Levels of Service



Right of Way (Continued)

- \$4.1 Million in Right of Way Acquisition (\$3.9 Million in Right of Way purchases and \$200,000 in Donations).
- Total land acquired is 25 Acres in aggregate
- 1,359 walk in customers
- 65 Deeds prepared and 29 secured
- 10 Road Vacation Petitions and Releases
- 357 Tax Certificate maps for Clerk of Courts
- 107 Title Searches
- 35 Appraisals & Purchase Agreements
- 11 Right of Way Acquisition Projects completed
- 10 Parcels acquired by County Attorneys Office with Right of Way Staff assistance



South Lake Trail

Engineering Division Levels of Service



Surveying

- Provide surveying support to the Public Works Department
- Maintain a countywide control network and benchmark system
- Plat review and approval



Surveying for a sidewalk project on Grassy Lake Road at Minneola Elementary School

Engineering Division Levels of Service



Traffic Operations – Countywide Service

- Maintain 407 Traffic Signals and Devices
- Maintain 32,900 Traffic Signs
- Maintain 1,245 miles of roadway striping and 3,725 stop bars
- Responded to 742 Signal / Sign emergency Calls of 1,296 personnel hours



A new sign is installed

Engineering Division Levels of Service



Traffic Engineering

- Respond to citizen requests with regard to traffic signals, stop signs, speed limit signs, street lights and other traffic study requests
- Maintain and update traffic signal timings
- 25 Traffic Studies performed including Signal Warrant and Safety Studies resulting in safety improvements throughout Lake County
- Signal timing evaluation/implementation of 48 intersections throughout the county



Engineering Division Levels of Service



Transportation Engineering

- Evaluate current and future County Road network needs for funding in the Five Year Transportation Construction Program
- Support the Community Traffic Safety Team which also helps to bring FDOT Safety Funds to the County for Traffic Signals, Sidewalks, and bike lanes
- Coordinate with FDOT and the LSMPO for project funding



MOCK DUI Demonstration of the Lake County CTST at Eustis High School

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - **Accomplishments**
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Engineering Division Accomplishments



CR 466A

Funding to date

- FDOT
 - \$8.35M FDOT and State EDT funds including \$2.75M FY17 new funding approved by legislature
- Private
 - \$5.3M Villages construct Phase 2 for future impact fee credits
- Lake County
 - \$6.3M Transportation Impact Fee Fund (IMF)

Construction & Right of Way

- Phase I Begin Construction June 2016
- Phase 2 Completion Date June 2016
- Phase 3 Right of Way funded



Engineering Division Accomplishments



N. Hancock Road (CR 50 north to CR 561A)

Funding

- FDOT
 - \$28 Million FDOT Turnpike Interchange
 - \$2.0 Million for Lake County Phase 1
- Private
 - \$3.8 Million Family Dynamics
- Lake County
 - \$8.9 Million IMF & IST

Construction

- Phase 1 by Lake County Completion May 2016
- Phase 2 Turnpike interchange, Completion June 2017
- Phase 3 by Family Dynamics, Completion May 2017



*Construction at the intersection
of N. Hancock Rd. and CR 50*

Engineering Division Accomplishments



Citrus Grove Road (US 27 to N. Hancock Road)

Funding to date

- FDOT
 - \$2.0 Million FDOT & State EDT Funding
 - \$1.5 Million FY 17 new funding approved by legislature
- Private
 - \$2.0 Million Founders Ridge

Design

- Preliminary design completed through Founders Ridge Phase 2
- Contract negotiation on Phase 1 for design



*Construction of the new Minneola
Turnpike Interchange*

Citrus Grove Road



Map of the Citrus Grove Road connection from US 27 east to N. Hancock Road & the Florida Turnpike Interchange

Engineering Division Accomplishments



Design and Survey

- \$28 million of Road Projects Project Management of design/right-of-way/permitting
- 40 projects surveyed for the Public Works Department
- Provide engineering for storm water and drainage projects
- Provide construction engineering assistance
- Project Bid and Construction Management of the Fuel Remediation site with \$500,000 in FDEP funding



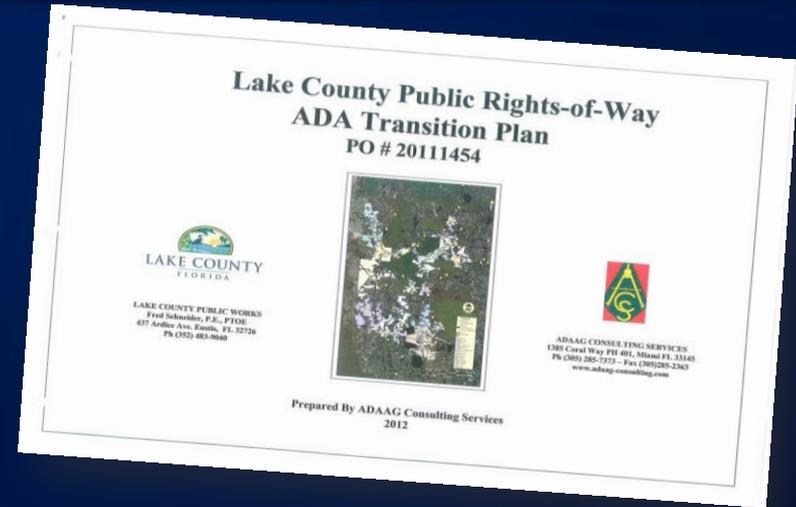
South Lake Trail

Engineering Division Accomplishments



Development and Sidewalks

- Sidewalks: ADA Public Right of Way & Safe Access to School
 - 128 sidewalk projects consisting of new, repairs and retrofits completed since FY 2011 at a cost of \$2.9M
 - Addressed 11 priorities of the Safe Access to Schools Study
- Coordinate with FDOT and Municipalities on Development issues associated with county roadways



Engineering Division Accomplishments



Traffic Operations & Maintenance

- Maintain all traffic signals & devices in the County including 13 towns and cities
- Maintain all signage and striping on the County road network
- Coordinate with FDOT for funding of traffic signal maintenance, parts & equipment, and assistance



Engineering Division Accomplishments



Traffic Operations & Maintenance

- Traffic Signal Maintenance Agreements:
 - New agreement with FDOT provides additional funding per traffic signal (\$120,300 FY 16 revenue, increase of \$55,000 over FY 15)
 - Re-negotiated the Traffic Signal Maintenance Agreements with 13 cities for additional revenues of \$68,000 for signal maintenance
- Sign Maintenance
 - Maintain street signage for Clermont and Tavares with a maintenance agreement



Inspecting a sign for FHWA reflectivity requirements

Engineering Division Accomplishments



Traffic Engineering /Transportation Planning

- Evaluate current and future County Road network needs for inclusion in the Five Year Transportation Construction Program
- Provided 25 Traffic Study/Safety Evaluations resulting in safety improvements throughout Lake County
- Support the Community Traffic Safety Team which also helps to bring FDOT Safety Funds to the County for Traffic Signals, Sidewalks, and bike lanes
- Applied for and Received \$13.7 Million in Safety Fund projects since 2001 which includes roadway striping, paved shoulders, sidewalks, traffic signals, and turn lanes

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, **Engineering**, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - **Efficiencies**
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Engineering Division Efficiencies



- Fuel Remediation Facility: \$31,200 annual savings, routine maintenance is performed by County staff instead of contract
- Provide in-house Surveying & Engineering Services to the Solid Waste Program (landfill & transfer stations) in lieu of consultant for a cost savings of \$55,452
- Utilize Engineering Staff for design of smaller projects such as Stormwater, sidewalks, intersections and minor road projects. (One project savings of \$25,000 over estimated \$33,000 contract cost)
- Contract Traffic Signal services for reconstruction and rebuilds
- Engineering Staff acts as Project Manager over consultants

Presentation Outline

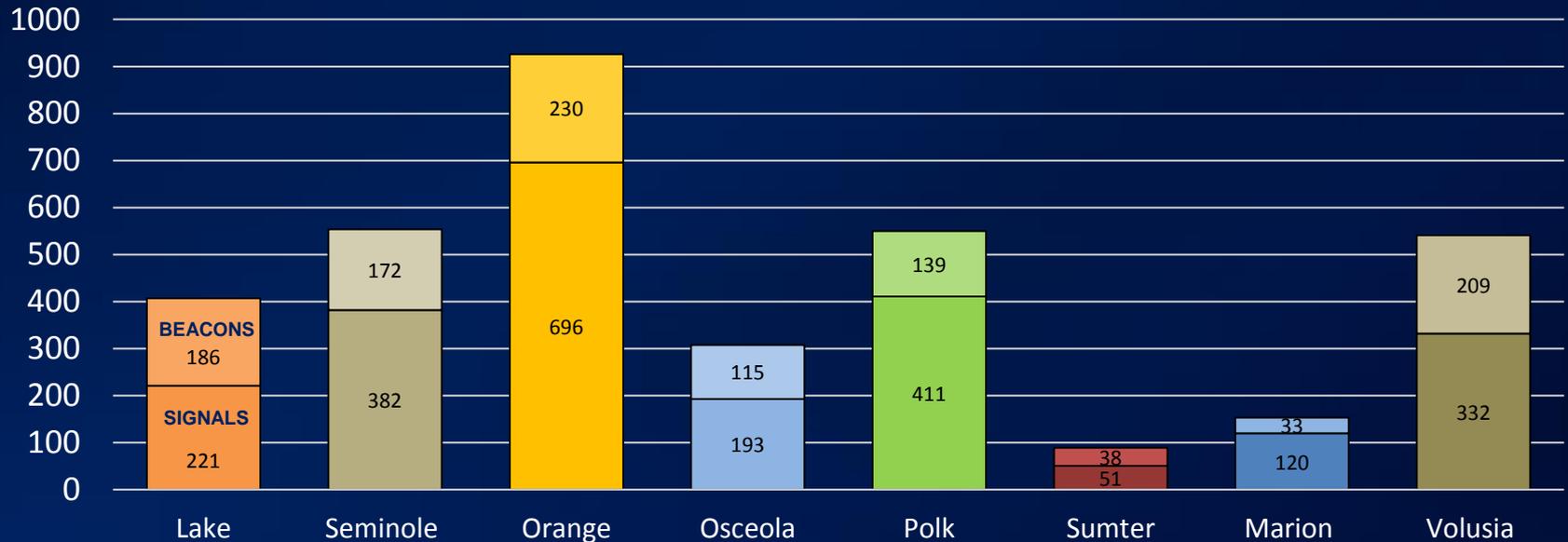


- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Engineering Division Benchmarks – Traffic Signals



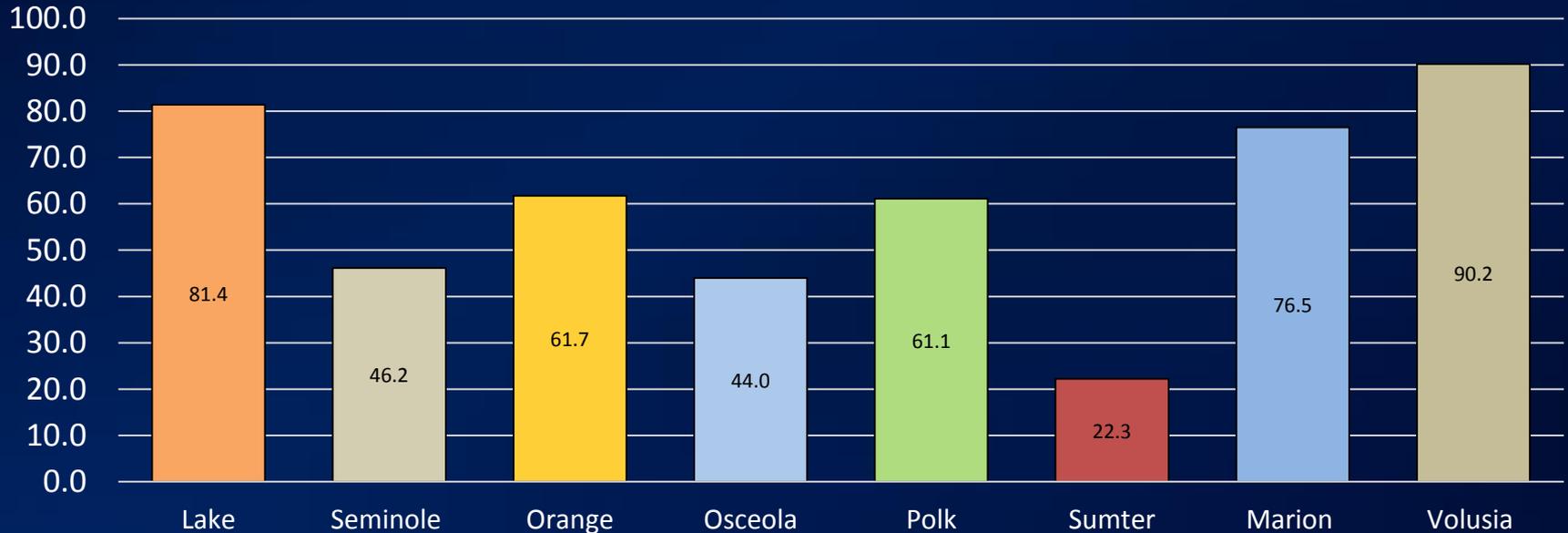
Total Number of Traffic Signals & Flashing Beacons



Engineering Division Benchmarks – Traffic Signals



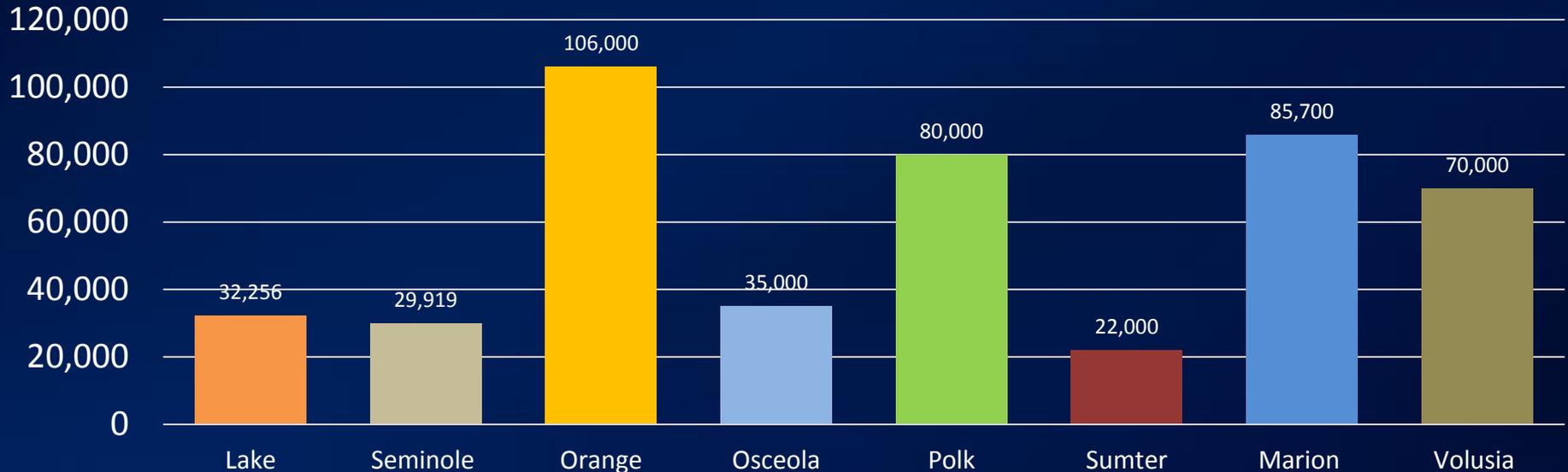
Total Signals/Flashers Per Technician



Engineering Division Benchmarks – Traffic Signs



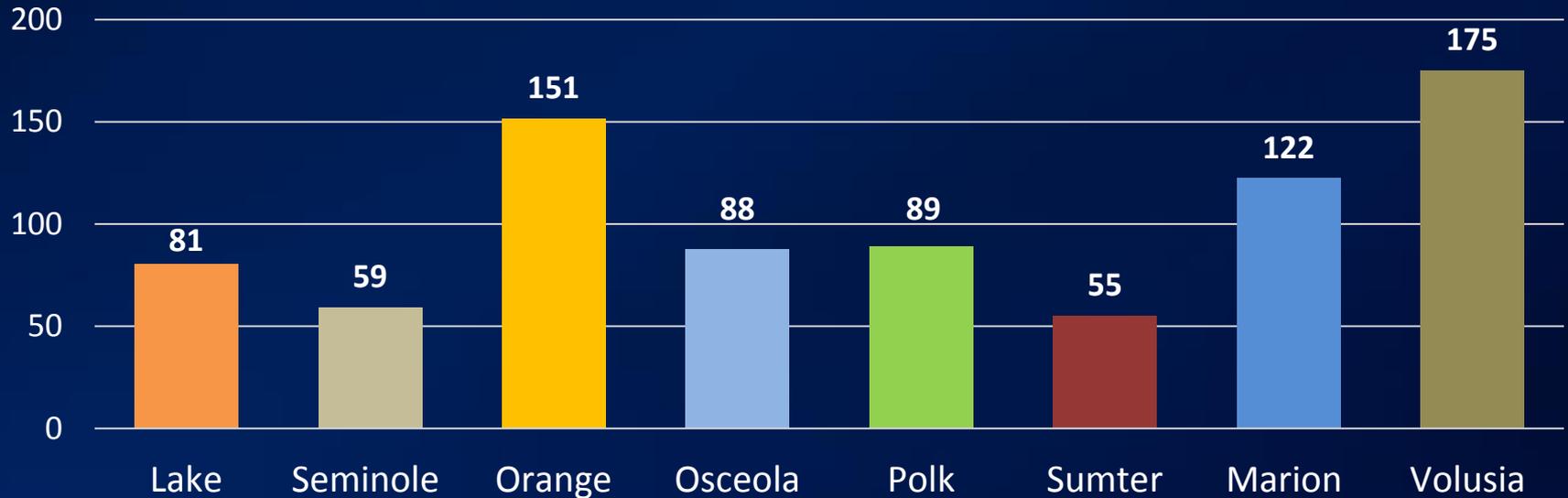
Number of Traffic Signs



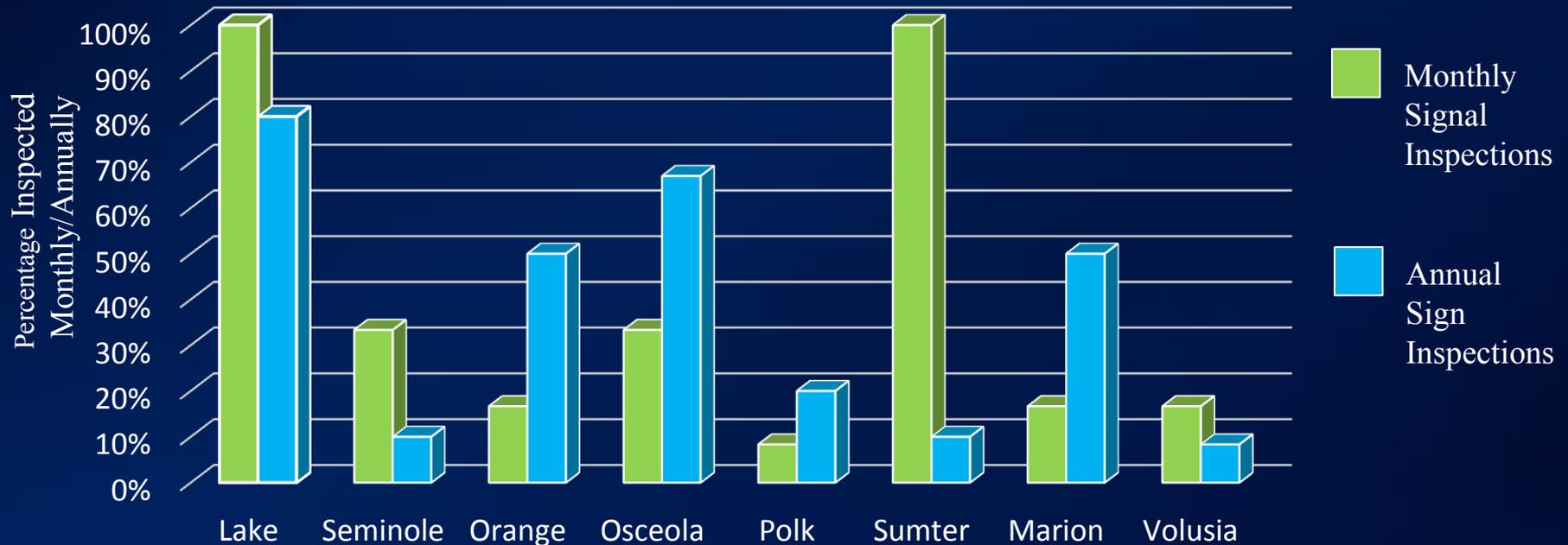
Engineering Division Benchmarks – Traffic Signs



Signs per Sign Technician



Traffic Signal and Traffic Sign Inspection Program Benchmark



Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, **Engineering**, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Engineering Division Proposed Budget



FY 2017 Proposed Budget

Personal Services	\$2,760,495
Operating Expenses	\$2,187,084
Capital Outlay	\$175,065
LSMPO	\$86,993

Total Expenditures **\$5,209,637**

*Revenue Source: Transportation Trust Fund and
General Fund for Fuel Remediation project*

- Reflects a status quo budget
- Maintains current levels of service
- Personal Services
 - 1 New Traffic Signal Technician & Equipment
- New Capital Items:
 - ATMS Traffic Software \$99,000
 - Roadway Striping Handliner \$13,000
 - Traffic Signal Cameras (4) \$30,000
 - ITS/Signal fiber optic \$30,000

Operating Expenses include consulting contracts, street lighting, railroad crossing agreements, countywide road striping, traffic signals and maintenance, city signal/sign maintenance agreements, and fuel remediation facility costs.

Engineering Division Proposed Budget



- **The addition of one Traffic Signal Technician position is included for safe and proper maintenance of the increase in signalized intersections and traffic signal devices in Lake County and the municipalities**
- **The available funding is from the County Transportation Fund**
 - \$52,956 for Personal Services, Operating and Capital needs
 - \$111,000 for a signal bucket lift truck from Public Works portion of sales tax
- **New Annual Revenues for traffic signal maintenance totaling \$123,760**
 - FDOT Signal Agreement for \$57,895
 - City Signal Agreements: \$65,865
 - This additional annual revenue will offset the cost of this position and save overtime costs
- **This position will be responsible for inspection and maintenance of traffic signal devices and the related wireless infrastructure and network switches**



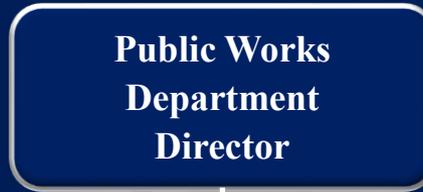
Environmental Services Division

Presentation Outline

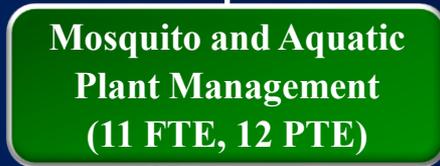


- Overview of Department
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Environmental Services Division Organizational Chart



**Environmental
Services
(55 FTE, 12 PTE)**



Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - **Mission**
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Environmental Services Division

Mission Statement



- The Environmental Services Division provides for the planning, design, and construction of water quality related stormwater improvements. The Division also protects public health through effective and environmentally safe methods of mosquito and aquatic plant control. The Division also includes the Solid Waste collection and disposal programs, hazardous waste collection, and partnering with local law enforcement for the collection of unwanted prescription medication.

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - **Levels of Service**
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Environmental Services Division

Levels of Service



- **Mosquito and Aquatic**

- Treated 796,480 acres with 12 part-time spray truck operators
- Treated 3,278 acres invasive aquatic plants with 1 Aquatic Biologist and 3 Biological Associates

- **Water Lab/Adopt a Lake**

- Processed 3,399 samples
- Evaluated 15,263 analytes

Environmental Services Division

Levels of Service



- **Stormwater**

- 2,392 Information Requests resulting in 521 Flood Zone Determinations, 73 Flood Permits and 27 Map Changes
- 2,634 Residential Lot Grading Inspections
- 2,082 Stormwater Component Inspections & Mapping
- Constructed \$1.09M of Stormwater Capital Improvements

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - **Accomplishments**
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Environmental Services Division Accomplishments



- Mosquito Control
 - The success of reducing elevated health risks involved from arborviral disease transmission and amplification of such diseases as West Nile Virus (WNVE), Eastern Equine Encephalitis (EEE), St. Louis encephalitis (SLE), Dengue and Chikungunya viruses, and the recent introduction of the Zika Virus (ZIKV) into Lake County.
- Aquatic Plant Management
 - The success in eradicating invasive exotic aquatic plants, including water hyacinths, water lettuce and hydrilla, to ensure positive recreational opportunities for Lake County residents and visitors.

Environmental Services Division Accomplishments



Installation of new ULV unit



Deployed New Jersey Light Trap



Environmental Services Division Accomplishments



Bear Lake, Mascotte Water Hyacinth Infestation



After treatment



Environmental Services Division Accomplishments



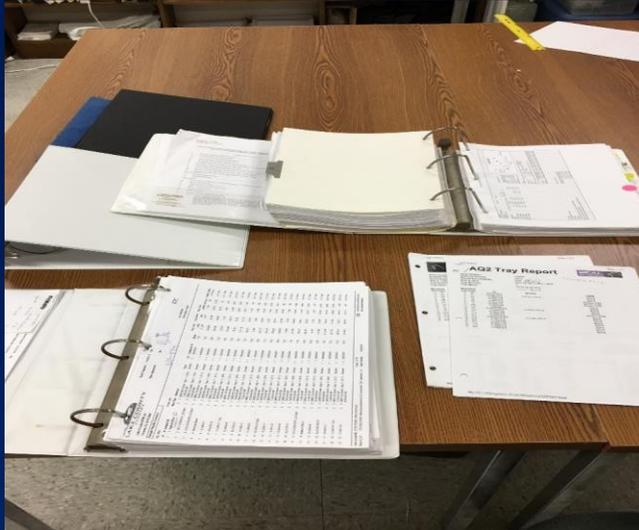
- **Water Lab/Adopt-a-Lake**

- Completed first 3rd Party NELAC audit and Certification
- Multiple lake clean up events held resulting in over 800 LBS of litter removed from our waterbodies
- Increased citizen water analysis service by 60%+

Environmental Services Division Accomplishments



NELAC Lab Certification



Lake Clean Up Events



Environmental Services Division Accomplishments



- **Stormwater**

- Completed Lake Saunders Outfall flood improvement project
- Completed final phase of Washington Avenue water quality project
- Wolfbranch Drainage and Water Quality Improvements under construction
- Hosted Florida Erosion Control Inspector certification classes for staff and contractors at no cost

Environmental Services Division Accomplishments



Lake Saunders Outfall Project



Washington Ave Water Quality



Environmental Services Division Accomplishments



Began Utility Adjustments for Wolf Branch Sink Project



WOLF BRANCH SINK DRAINAGE IMPROVEMENTS



Project will retrofit treatment onto
a portion of Wolf Branch Rd.

Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - **Efficiencies**
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Environmental Services Division Efficiencies



- **Mosquito and Aquatic**

- Utilizing CO₂ as an attractant to NJ Light and CDC traps, and in-house developed mosquito collection devices that provide quick and easy deployment to suspected Zika Virus locations for under \$15 utilizing old trap parts

- **Water Lab/Adopt a Lake**

- Updated Bacteriological testing process to the Quanti-tray method-improved sensitivity with reduced labor

Environmental Services Division Efficiencies



- **Stormwater**

- Improved coordination of Stormwater inspections and GIS mapping with targeted maintenance by Road Operations
- Cross training and certifications - 3 Certified Floodplain Managers (CFM) now on staff
- Effective phasing of projects to complete within budgetary limits

Presentation Outline



- Overview of Department
- Overview of Road Operations, Engineering, **Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- Proposed Budget

Environmental Services Benchmarks - Mosquito



Mosquito Expenditures Per Capita



Environmental Services Benchmarks - Mosquito



Mosquito Expenditures Per Acre



Environmental Services Benchmarks - Stormwater



Stormwater Expenditures Per Capita



Presentation Outline



- **Overview of Department**
- **Overview of Road Operations, Engineering, Environmental Services**
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Environmental Services Proposed Budget



- Environmental Services Division Funding Sources
 - General Fund
 - Stormwater MSTU
 - State Grants

Mosquito Budget



FY 2017 Proposed Budget

Personal Services	\$	726,901
Operating Expenses	\$	482,643
Grants & Aids	\$	0
Capital Outlay	\$	60,000
Reserves	\$	0

Total Expenditures **\$1,269,544**

- Maintains current levels of service
- Reflects an increase in general funding for capital outlay
- Funding Source:
 - General Fund
 - Mosquito State Fund

Mosquito Budget



- Requested \$60,000 for the purchase of five (5) ADAPCO Guardian 95ES ULV Spray units and 4S monitors
 - Cost per unit: \$12,000 replacing 20 year old equipment no longer supported by the vendor
 - Second year of three year replacement plan

Water Lab/AAL Budget



FY 2017 Proposed Budget

Personal Services	\$	127,052
Operating Expenses	\$	103,020
Grants & Aids	\$	0
Capital Outlay	\$	72,360
Reserves	\$	0

Total Expenditures \$ **302,432**

- Maintains current levels of service
- Includes replacement of LIMS (Lab Info Mgmt System)
- Funding Source:
 - General Fund
 - AAL Restricted Fund

Water Lab/AAL Budget



- Requested \$2,360 for the purchase of rugged laptop for lab field use
- Requested \$70,000 for the purchase of a lab information management system (LIMS)
 - Split funded: Adopt-a-Lake restricted funds \$55,000 and General Fund \$15,000

Stormwater MSTU Budget



FY 2017 Proposed Budget

Personal Services	\$ 391,890
Operating Expenses	\$ 144,815
Grants & Aids	\$ 0
Capital Outlay	\$ 765,000
Reserves	\$ 36,939

Total Expenditures **\$ 1,338,644**

- Reflects a status quo budget
- Maintains current operational levels of service
- No new capital projects
- Funding Source:
 - MSTU

Stormwater MSTU Budget



- \$ 50,000 Royal Trails Design
- \$165,000 Royal Trails Construction
- \$300,000 Lake Lucy/Lake Emma Construction
- \$250,000 Magnolia Lane Construction
 - Match for legislative appropriation

Presentation Outline



- Overview of **Department**
- Overview of Road Operations, Engineering, Environmental Services
 - Organizational Chart
 - Mission
 - Levels of Service
 - Accomplishments
 - Efficiencies
- **Benchmarks**
 - Seminole, Orange, Osceola, Polk, Sumter, Marion, and Volusia
- **Proposed Budget**

Public Works Budget



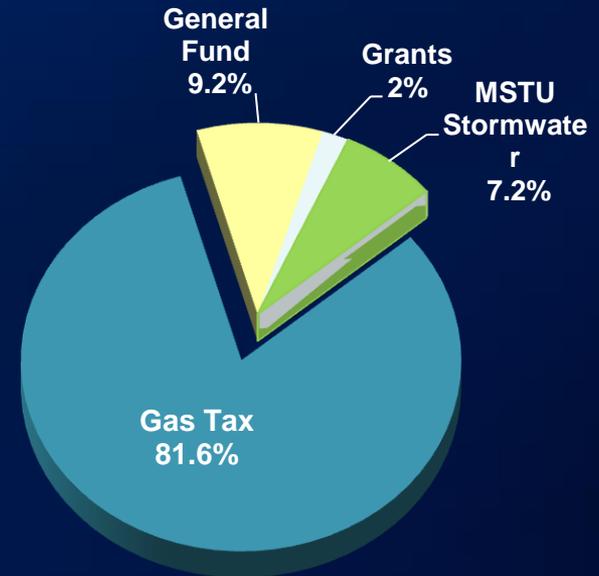
Estimated Revenue FY 2017

Gas Tax	\$	12,882,977
General Fund	\$	1,598,765
MSTU Stormwater	\$	605,210
Grants	\$	339,411
Statutory Deduction	\$	(666,535)

Total Operating Revenue \$ **14,759,828**

Estimated Fund Balance \$ 2,555,175

Total Revenue \$ **17,315,003**



Public Works Budget



FY 2017 Proposed Budget

Personal Services	\$	8,235,194
Operating Expenses	\$	7,768,452
Stormwater Capital Proj.	\$	765,000
Capital Outlay	\$	422,425
Aid to Gov't Agency (LSMPO)	\$	86,993
Stormwater Reserve	\$	36,939

Total Expenditures **\$ 17,315,003**

Public Works Budget



Expenditures

	<u>Budget</u>	<u>% of Budget</u>
Personal Services	\$8,235,194	47.6%
Road R&M, striping, materials	\$4,868,481	28.1%
Operating tools, chemicals, supplies	\$1,011,714	5.8%
Stormwater Capital Projects	\$765,000	4.4%
Fuel	\$647,360	3.7%
Vehicle R&M	\$562,881	3.3%
Capital Outlay	\$422,425	2.4%
Facilities R&M, utilities, insurance	\$332,605	1.9%
Office needs, computer, reprographics	\$240,344	1.4%
Other charges (travel, dues, training)	\$105,067	.6%
LSMPO contribution	\$86,993	.5%
Stormwater Reserve	\$36,939	.2%
<i>Total Expenditures</i>	\$17,315,003	100%

Public Works Budget



FY 2017 Proposed Capital

DST Double Surface Treatment to one road	\$	115,000
ATMS Regional Traffic Control module	\$	99,000
Handliner for Thermoplastic	\$	13,000
Traffic Signal Cameras - 4	\$	30,000
ITS/Signal Fiber Optic project	\$	30,000
Rugged Laptop for Lab field use	\$	2,360
Lab Info Management System (LIMS)	\$	70,000
Mosquito Cold Aerosol Generators & software	\$	60,000
New Signal Technician: laptop & ground tester	\$	3,065
Total Capital Outlay	\$	422,425

Public Works Summary



- Request for one new Signal Technician position which is supported by the increase in signal maintenance revenue from FDOT and the cities
- All 2017 operating budgets are status quo
- The General Fund capital equipment items are replacement of outdated, unsupported software for the Lab and outdated, inefficient equipment in the Mosquito program
- The 2017 budget will exhaust the Stormwater MSTU fund of available funding for any further capital projects



LAKE COUNTY
FLORIDA