

# Doing Things!

#### **Public Works**

#### **Work Session Presentation**

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Division Managers
January 19, 2016

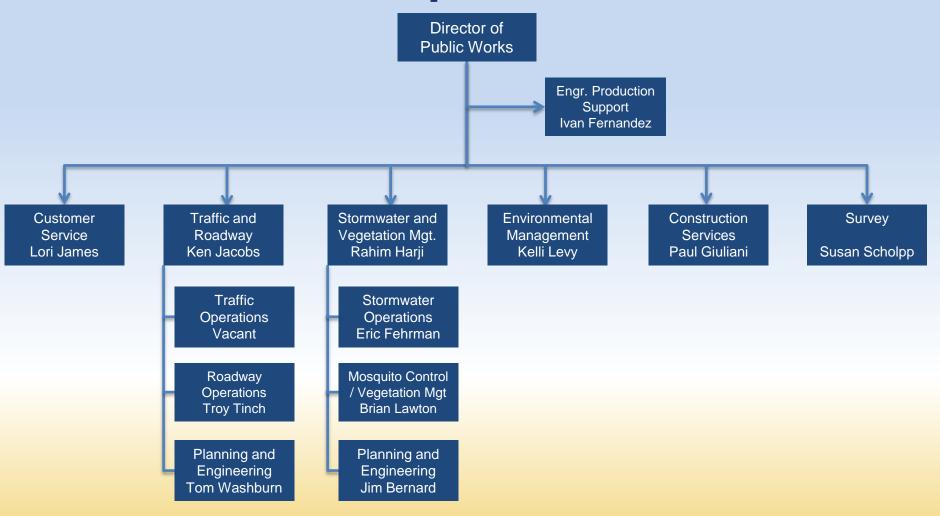


#### Who We Are

- 394 FTE (20.5% of workforce) in six divisions
  - Customer Service
  - Stormwater and Vegetation Management
  - Traffic and Roadway
  - Environmental Management
  - Construction Management
  - Survey



### **Public Works Department**





### What We Do: Business Systems

- Internal support
  - Customer service and dispatch
  - Inventory management
  - Work/asset management tools and analysis
  - Departmental training and licensing coordination
  - Budget and contract coordination



- Coastal and Freshwater Resources
  - Beach nourishment and inlet studies
  - Environmental monitoring and assessment
  - Water and navigation
- Watershed Management
  - Watershed and stormwater planning,
     floodplain management (CBS)
  - floodplain management (CRS)
  - TMDL implementation
  - Adopt-A-Pond and ecological services





- Vegetation and Mosquito Control
  - Manage mosquito populations, monitor for viral activity, public outreach
  - Control nuisance vegetation, habitat management
- Urban Forestry
  - Maintain and preserve the urban tree canopy



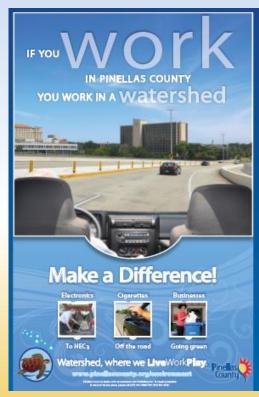


- Stormwater Management
  - Open conveyance maintenance and restoration
  - Management of ponds and other permitted systems
  - Street sweeping and other pollution prevention activities





- Watershed Protection
  - NPDES permit implementation, inspections, and compliance
  - Public outreach
  - Surface Water Assessment roll development, impervious area data management, and credit policy reviews





## BOARD OF COUNTY COMMISSIONERS

## **Ensure Public Health, Safety, and Welfare**

- 2.1 Provide planning, coordination, prevention, and protective services to ensure a safe and secure community
  - Plan, monitor, and maintain to reduce local flooding issues and to ensure our local waters are "fishable and swimmable"
  - Maintain waterway markers and remove derelict vessels to ensure safe, navigable waters
  - Reduce number of problematic mosquitoes







## Practice Superior Environmental Stewardship

- 3.2 Preserve and manage environmental lands, beaches, parks, and historical assets
  - Maintain the County Shore Protection Program in accordance with U.S. Army Corps of Engineers (USACE) standards
  - Implement a 1:1 tree replacement program
  - Ensure ecological success of county mitigation areas





## Practice Superior Environmental Stewardship

- 3.3 Protect and improve the quality of our water, air, and other natural resources
  - Improve quality of surface waters
  - Protect coastal resources
  - Maintain delegation for mangrove protection





## Foster Continual Economic Growth and Vitality

4.3 Catalyze redevelopment through planning

and regulatory programs

- Evaluate opportunities for regional stormwater systems
- Invest in the CRS program





## Foster Continual Economic Growth and Vitality

- 4.4 Invest in infrastructure to meet current and future needs
  - Implement the surface water assessment approved 10-year corrugated metal pipe (CMP) replacement program and channel maintenance cycles





## Deliver First Class Services to the Public and our Customers

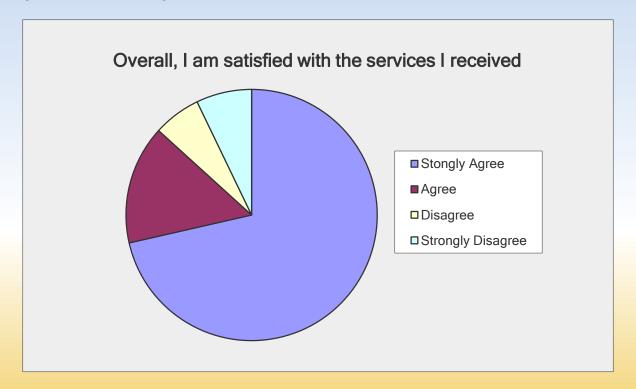
- 5.1 Maximize partner relationships and public outreach
  - Promote Watershed "Live, Work, Play,"
     Surface Water Utility at Work; and CRS Plan for Public Information outreach campaigns
- 5.2 Be responsible stewards of the public's resources
  - Maintain Effective and responsible asset management





## Deliver First Class Services to the Public and our Customers

- 5.4 Strive to exceed customer expectations
  - Request, respond, and learn from feedback





### **Opportunities**

Succession planning

#### **Doing Things:**

- Internal professional development programs to ready staff for the next level (1.2)
  - Career ladders
  - Cross functional projects and programs
- Effective information transfer from retiring staff (1.1)



### **Opportunities**

Focus on Surface Water Fund Stability
Doing Things:



- Streamline processes and operations
- Re-visit impervious area calculations and billing options
- Seek grant funding/cost share opportunities
- Improve transfer of responsibility process resulting from annexations



### **Key Measures**

- % of Division staff that participate in training (1.2)
- Overall reduction in preventable accidents compared to goal (1.3)
- Reductions in problem mosquitoes (2.1)
- % of waterway markers inspected annually (2.1)





### **Key Measures**

- % of nourished beaches that meet USACE minimum berm width standards (3.2)
- Pollutants removed through street sweeping (3.3)
- % NPDES permit requirements achieved (3.3)
- Ratio of trees planted vs.
   trees removed (3.3)





### **Key Measures**

- Miles of corrugated metal pipe (CMP)
   replaced or restored compared to goal (4.4)
- % of operational budget supported by outside resources (5.1)
- % of emergency/high priority work requests completed within prescribed timeframes (5.3)
- % satisfactory or better satisfaction rating (5.4)



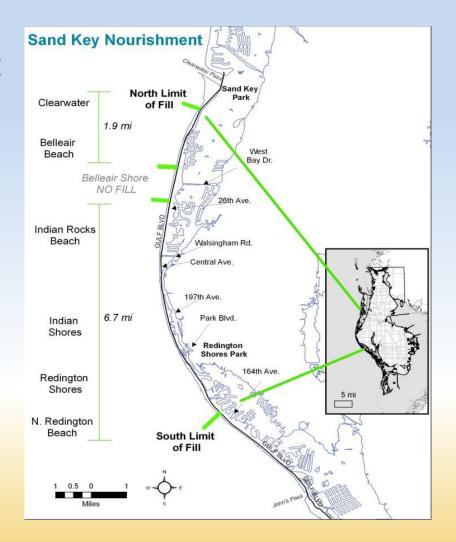
### **2016 Doing Things**

- Replace or retore 2.4 miles of CMP
- Restore 30+ miles of open conveyance
- Begin the construction on the permanent t-groins at Upham Beach
- Complete CRS implementation plan towards goal of improved rating
- Finalize the Joe's Creek Watershed Management and TMDL Implementation Plans
- Improve on 2015 Tree City USA designation



## Coming in 2017

Sand Key Nourishment





Our Vision: To Be the Standard for Public Service in America



- Traffic Engineering and Design
  - Traffic Safety
     Engineering studies
  - Pedestrian, bicycle, sidewalk and trail coordination
  - Right of Way permit coordination



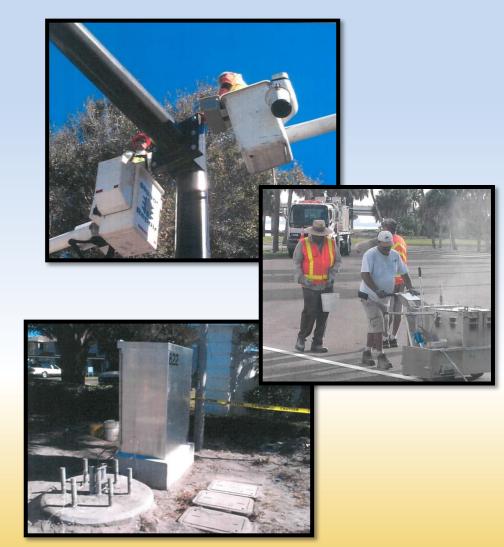


- Traffic Engineering and Design
  - Advanced Traffic
     Management System
     (ATMS)/Intelligent
     Transportation System
     (ITS)
  - Operate the Traffic
     Management Center





- Traffic Maintenance and Installation
  - Traffic signals and flashers
  - Street lights
  - Traffic signs and pavement markings





- Traffic Maintenance and Installation
  - ITS devices (CCTV cameras, message boards (DMS), fiber-optic cable and network communications)
  - Inspection services for traffic-related construction





## **Ensure Public Health, Safety, and Welfare**

- 2.5 Enhance pedestrian and bicycle safety
  - Increase miles of bicycle and pedestrian facilities
  - Reduce bicycle and pedestrian accidents, injuries, and fatalities.
  - Increase bicycle and pedestrian safety projects in the Capital Improvement Program



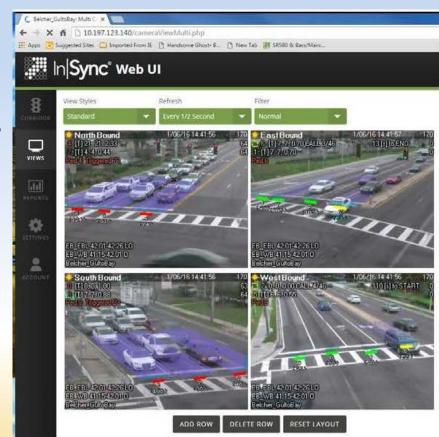






## Practice Superior Environmental Stewardship

- 3.3 Protect and improve the quality of our water, air and other natural resources
  - Reduce air pollutants by retiming traffic signals





## Practice Superior Environmental Stewardship

- 3.4 Reduce/reuse/recycle resources including energy, water, and solid waste
  - Convert to LED street lighting
  - Use solar powered traffic control devices







## Foster Continual Economic Growth and Vitality

- 4.5 Provide safe and effective transportation systems to support the efficient flow of motorists, commerce, and regional connectivity
  - Capitalize use of ATMS/ITS systems
  - Increase safety studies





### **Opportunities**

 Ever increasing maintenance volume and contractual requirements

#### **Doing Things:**

- Evaluate maintenance activities to determine most cost effective approach for each task
  - Develop optimal intergovernmental service agreements
- Partner with FDOT to update maintenance criteria



#### **Opportunities**

 Increase awareness and benefits of the Smart Tracs ATMS / ITS system

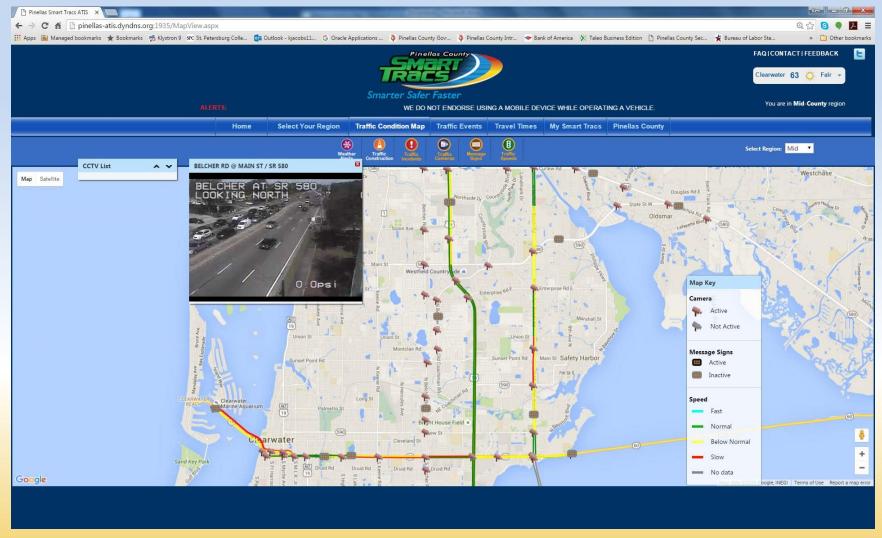
#### **Doing Things:**

- Initiate a Public Awareness Campaign
  - Complete the Smart Tracs website
  - Provide access to CCTV cameras to additional media outlets
  - Update ATMS / ITS videos that define benefits and other valuable traffic related information
  - Provide public with annual report on system





### **Smart Tracs ATMS / ITS system**





### 3.4 Key Measures

Energy consumption



### 4.5 Key Measures

- % of traffic signs maintained per year
- % of centerline miles of roadway with markings refurbished per year
- % traffic studies completed within 21 days



## 4.5 Key Measures

- ATMS Performance Index
- Traffic Studies Performance Index

Travel Time Index: Average travel time/free flow







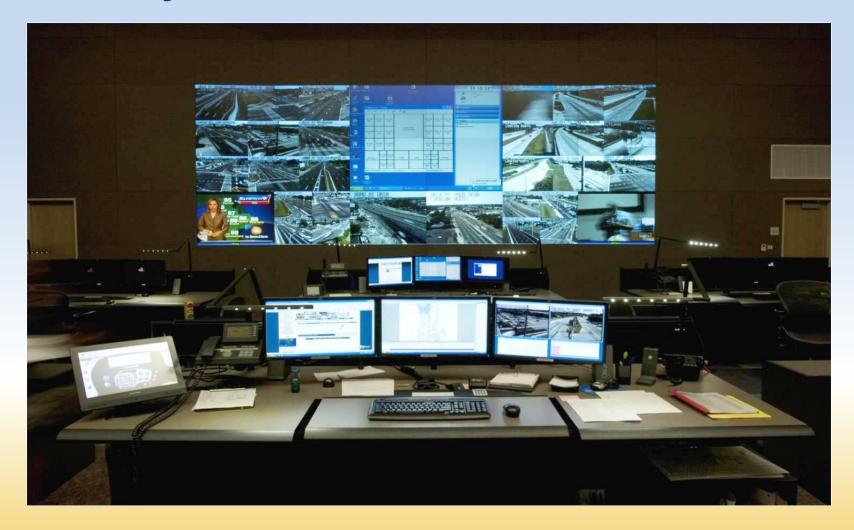


ATMS
Performance
Index = 92%





## Thank you





#### What We Do: Infrastructure

- Roadway Section
  - Repair and maintain roadways
  - Repair and replace stormwater pipes, curbs, drainage structures, roadway underdrain, and sidewalks







#### What We Do: Infrastructure

- Bridge Section
  - Inspect, maintain, & repair of County-owned bridges
    - Sidewalks, handrails, guardrails, seawalls



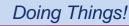




#### What We Do: Infrastructure

- Municipal Separate Storm Sewer Systems (MS4)/Response Section
  - Stormwater conveyance system inspection
    - Drainage structures
    - Open conveyance ditch
    - Stormwater pipe
  - Emergency calls/hazards
    - Removing debris from roadway
    - Temporary pothole patches







## **Ensure Public Health, Safety, and Welfare**

- 2.5 Enhance pedestrian and bicycle safety
  - Comply with Americans with Disabilities Act (ADA) requirements
  - Maintain roadways and sidewalks to facilitate pedestrian and bicycle safety





# Practice Superior Environmental Stewardship

- 3.3 Protect and improve the quality of our water, air, and other natural resources
  - Improve quality of surface water
    - Inspect and maintain stormwater pipes and structures (MS4 conveyance system)



# Foster Continual Economic Growth and Vitality

- 4.2 Invest in communities that need the most
  - Focus MSTU paving program on roads in underserved communities
- 4.4 Invest in infrastructure to meet current and future needs
  - Continue repair and replacement of aging or damaged infrastructure



### **Opportunities**

 Loss of institutional knowledge; lack of longevity

#### **Doing Things:**

- Provide staff with training opportunities (1.1)
- Offer interdepartmental promotional opportunities when available (1.2)
- Develop defined career ladders (1.2)



### **Opportunities**

Meeting citizen's anticipated level of service

#### **Doing Things:**

- Define the expected level of service (5.3 & 5.4)
- Provide timely response to work requests (5.3)



## 2.1 Key Measures

- Health index of bridges
  - County goal of 85 based on (FDOT) standard
    - Pinellas County bridges currently have an overall health index of 81.5





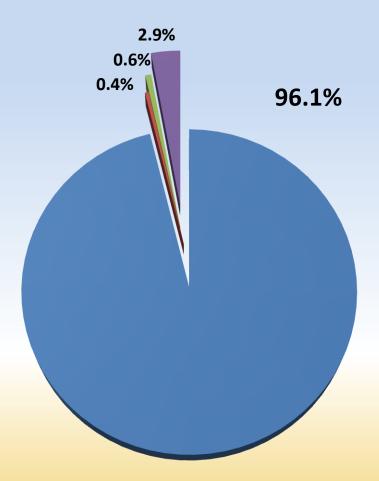
## 2.5 Key Measures

Percent of potholes
 repaired within 72 hours
 of work requests on
 arterial and collector
 roadways

**24 - 48 HRS** 

48 - 72 HRS

>=72 HRS



**Timeframe Potholes Filled - FY15** 



## Thank you