

# SIGNAL OPTIMIZATION

# **PROJECT**

COMMUNITY DEVELOPMENT DEPARTMENT

Find Your Florida

# **Presentation Objective**

To provide City Council with implementation costs for Phase 1 of the Signal Optimization Project and receive City Council approval.



#### **Strategic Action Plan**

- Objective 1.1: To enhance infrastructure in order to maintain quality neighborhoods and business districts
- Objective 1.2: To assess the need to expand infrastructure for sustainable growth
  - Strategy 1.2.2: Coordinate facility capacity upgrades to meet the City's growth needs appropriately
- Objective 5.2: Enhance safety measures throughout the community
  - Strategy 5.2.2: Continue to enhance safety improvements at intersections and along roadways



# **Proposed Plan**



#### **Safer and More Efficient**

MAXIMIZE CAPACITY of our roadways and make them <u>SAFER</u>

# **Advanced Traffic Management System (ATMS)**



#### **ATMS Benefits**

#### Benefits provided by implementing ATMS\*

- Travel Time Reductions: 8 35%
- Increase in Average Speed: 8 17%
- Fuel Consumption Reduction: 5 13%
- Emissions Reduction: 8 15%
- Stop Reduction: 11 75%
- Delay Reduction: 7 93%
- Crash Reduction: 28 31%



<sup>\*</sup>Data Provided by the U.S. Department of Transportation

### **ATMS Components**

- Fiber Optic Cable FiberNet
- Closed Circuit Television Cameras (CCTV)- Traffic Control Cameras
- Traffic Controllers
- Vehicle Detectors
- Traffic Management Center (TMC)







# **Priority Corridors**

#### FY 2016

Palm Coast Pkwy – Florida Park Drive to Pine Cone Drive - (12)

#### FY 2017

- Belle Terre Pkwy Pine Lake Pkwy to Palm Coast Pkwy (WB) (5)
- Belle Terre Pkwy East Hampton Blvd to Whiteview Pkwy (4)
- SR 100 Belle Terre Pkwy to I-95 (6)
- Palm Coast Pkwy Pine Lakes Pkwy to Corporate Drive & Clubhouse Drive to Palm Harbor Pkwy – (7)





#### Recommendations

#### Approve the following expenditures for Phase 1

- Purchase & installation of ATMS Software and Hardware components \$90,700
- Fiber connection at 34 intersections \$229,341.50
- Installation of CCTV cameras and communications switches at 12 intersections \$40,436
- Creation of a small scale Traffic Management Center \$67,579.35
- Acquiring Testing Equipment for traffic signal components \$17,800
- Upgrading Pedestrian Signal Heads to Countdown Type at 9 intersections \$6,116
- Contingency (10%) \$45,197.29

Total Expenditures: \$497,170.14

Remaining FY 2016 Budget: \$515,000.00





## **Next Steps**

• FY 2016: Implement initial Traffic Management System as approved by City Council

• FY 2017 – FY 2019: Incorporate future phases in 5 year CIP





# Questions?



