



FDOT DISTRICT 2 FREIGHT TRACKING INITIATIVE

Paul Misticawi for

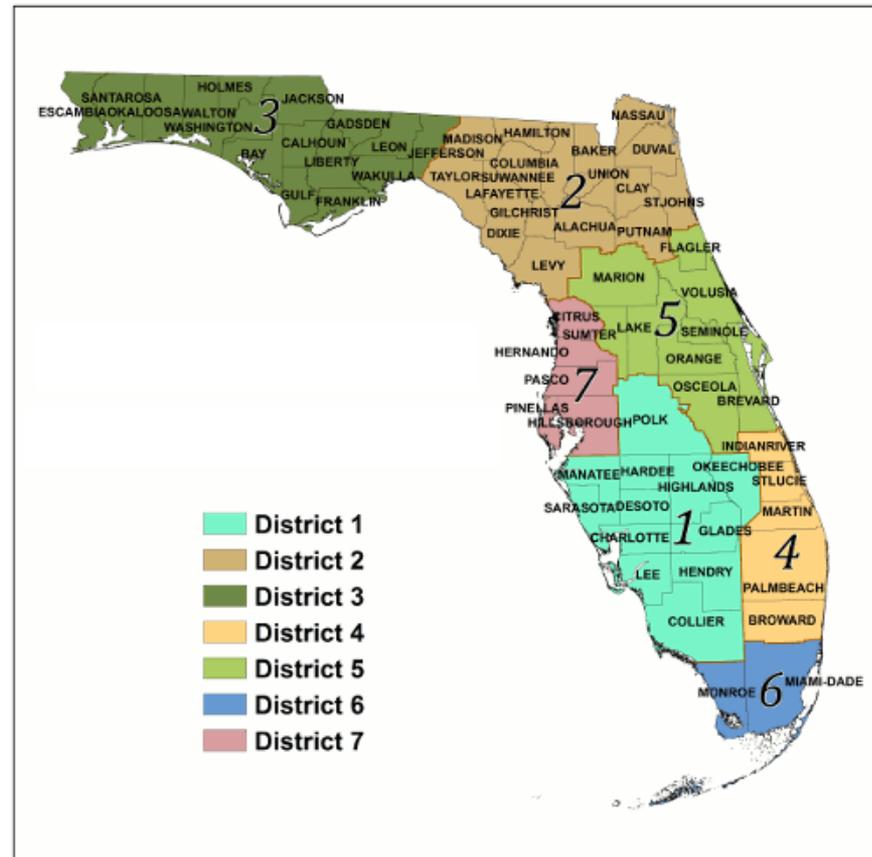
Peter Vega, P.E. - District Two TSM&O Program
Manager



FDOT DISTRICT TWO ITS OVERVIEW

➤ Geographic Overview:

- FDOT District 2 is comprised of 18 counties which cover nearly 12,000 square miles.
- One of the largest FDOT districts.



HISTORY OF BLUETOAD DEPLOYMENT IN DISTRICT TWO

- North Florida Transportation Planning Organization went with BlueToad because they:
 - Had excess CMAQ funds that needed to be used within existing fiscal year (6 months were left)
 - Desired something that could be used for Performance Measure analysis
 - Wanted the ability to acquire travel time data along arterial roadways
 - Liked the O/D data that could be generated
 - Hoped to be able to use the data for modeling
 - Looked at the opportunity to develop reports



HISTORY OF BLUETOAD DEPLOYMENT IN DISTRICT TWO

- District Two assisted by:
 - Seeking TERL approved technology to meet their needs
 - Developing a procurement contract to buy an O/D product recognized by TERL – BlueToad
 - Managing the purchase and deployment of BlueToad devices throughout north Florida
 - Deploying in NFTPO Counties of Clay, Duval, Nassau and St. Johns

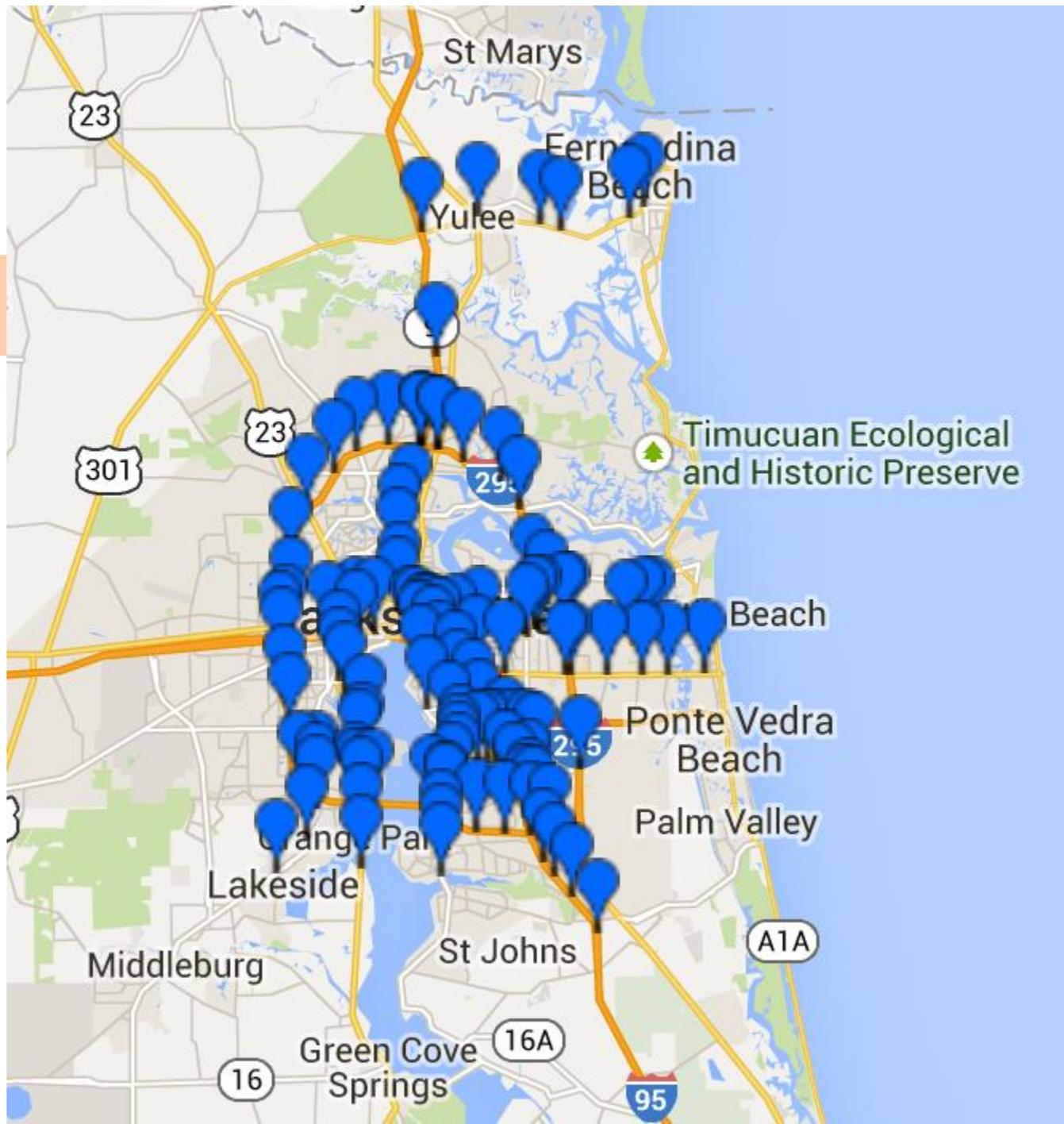


TRACKING FREIGHT MOVEMENTS

- FDOT District Two currently has Deployed BlueToad on or near:
 - ALL Interstates in and around Northeast Florida
 - Major arterial roadways in Clay, Duval, Nassau and St. Johns Counties
 - JaxPort
 - Port of Fernandina
 - Jacksonville International Airport
 - Warehousing Areas
 - CSX and FEC
- FDOT District Two plans on deploying BlueToad on or near:
 - Gainesville
 - I-10 from Jacksonville to Tallahassee
 - I-75 from Micanopy to Georgia



**Current
Deployment**

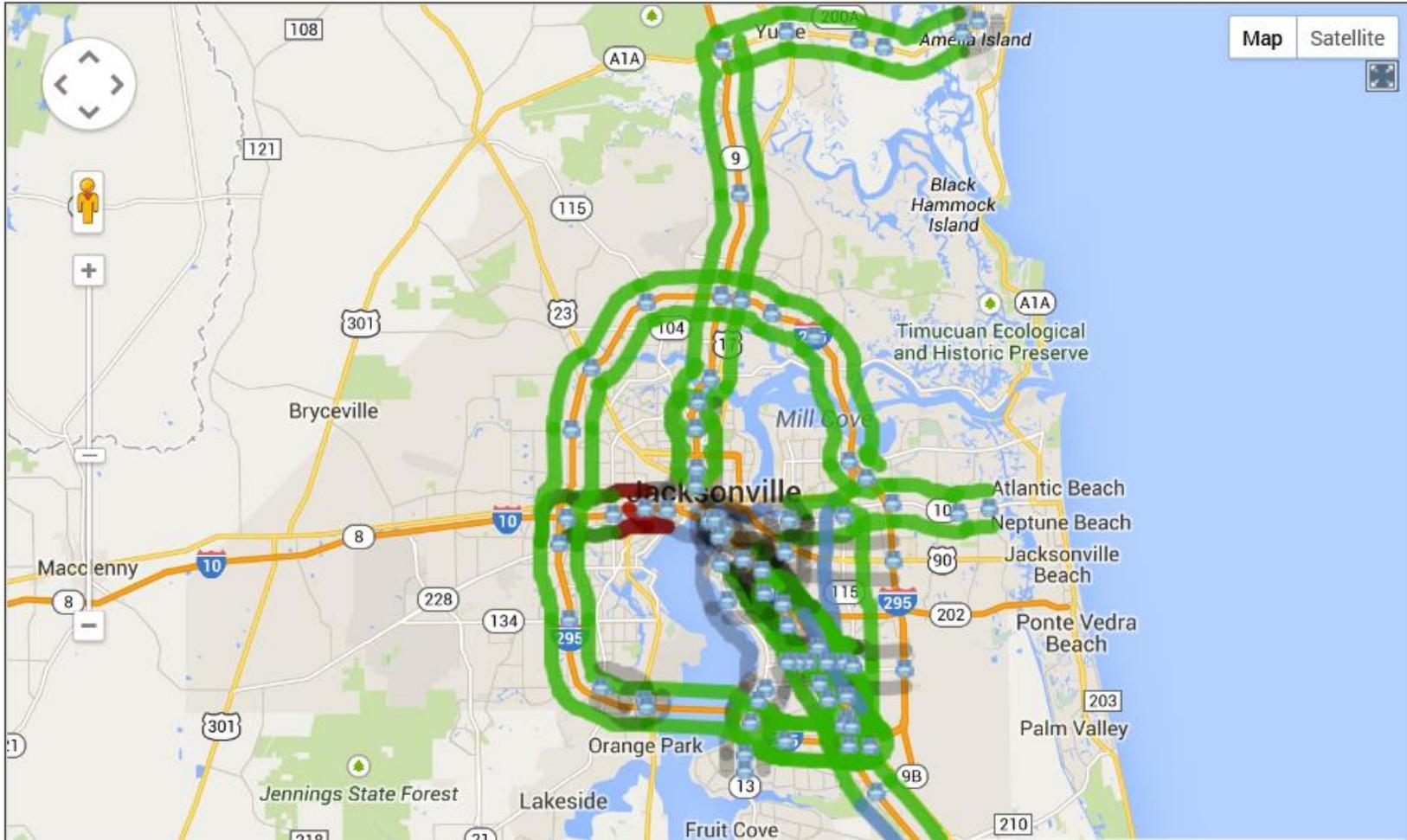


Speed Map - Jacksonville

Select a route:

Show all pairs

Show all pairs



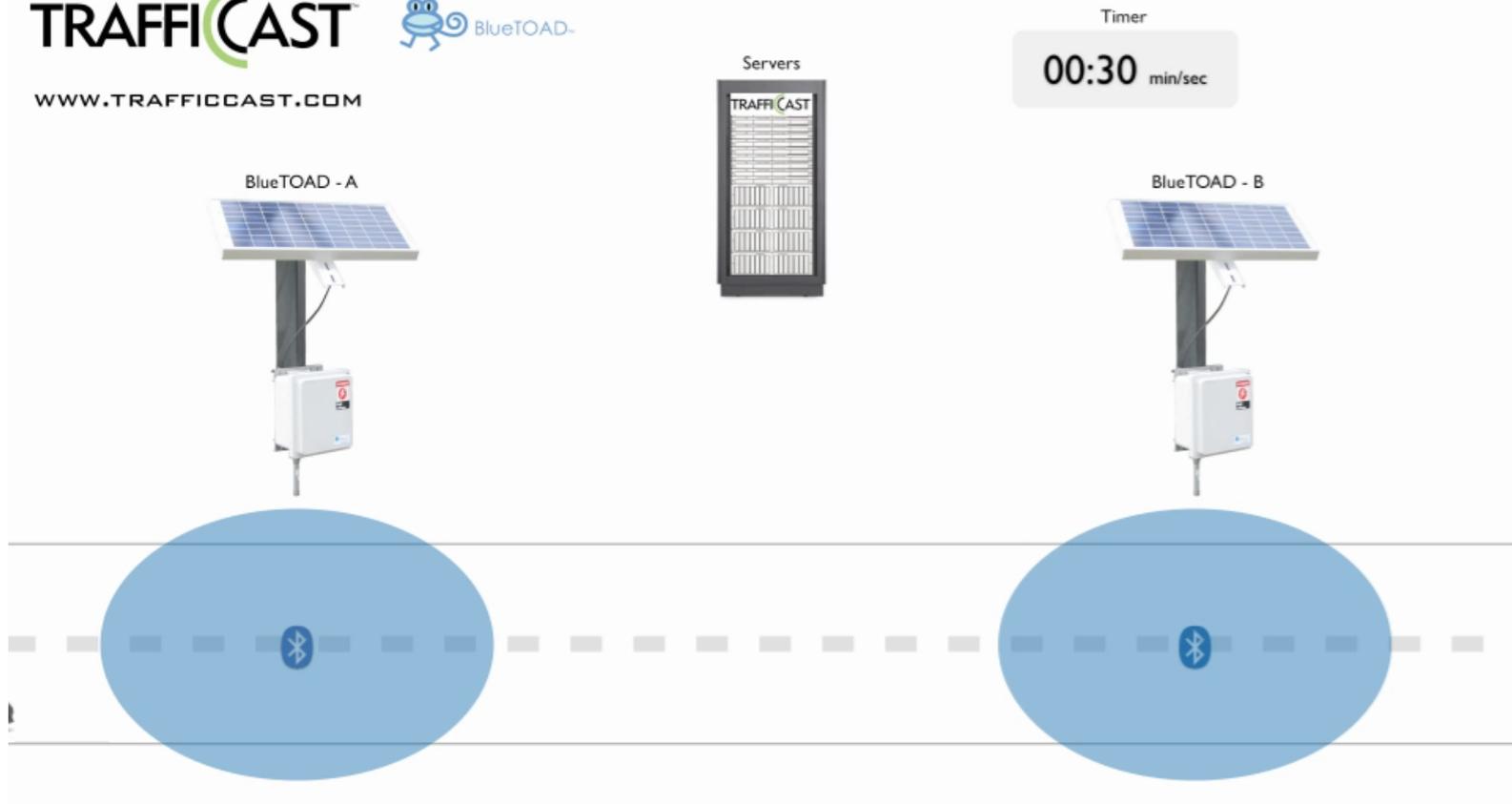
Data Collection Area for TT and O/D



HOW DOES BLUETOAD WORK?

- Collects MAC address from passing Bluetooth devices
- Matches MAC address for deployed BlueToad pairs
- Collects timestamp at device for each MAC address
- Uses timestamp and BlueToad pairing to:
 - Determine roadway speeds
 - Calculate travel times
 - Collect Origin-Destination data
- TrafficCast handles data for District Two by:
 - Filtering outliers and monitoring “heart beat”
 - Providing website access to data and reports
 - Modifying the website based on NFTPO needs
 - Archiving the data
 - Generating desired reports





BlueTooth readers determine the distance between two points by picking up the MAC address of a BlueTooth device at multiple points and calculating the travel time by the pre-defined distance between the readers and how long the vehicle took to travel between the two readers.



TRACKING FREIGHT MOVEMENTS

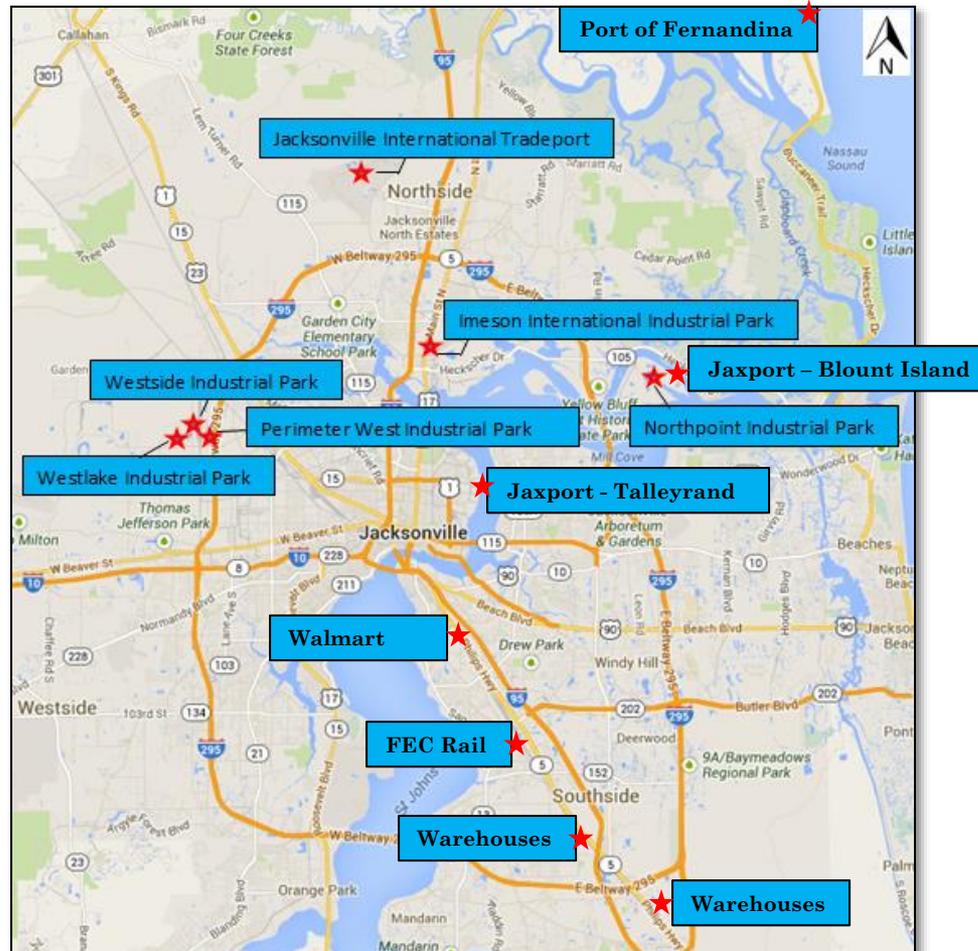


- Northeast Florida has become one of the fastest growing regions in the United States.
- Important freight center with deep water ports, major rail carriers (CSX and FEC), an international airport and major interstate highways.
 - I-10 east/west across country
 - I-95 runs parallel to Atlantic Ocean to northern Maine
 - I-295 creates a beltway around downtown Jacksonville
 - I-75 connects Miami, Florida to Detroit, Michigan.



TRACKING FREIGHT MOVEMENTS

- Map of Jacksonville/Northeast Florida Industrial Parks

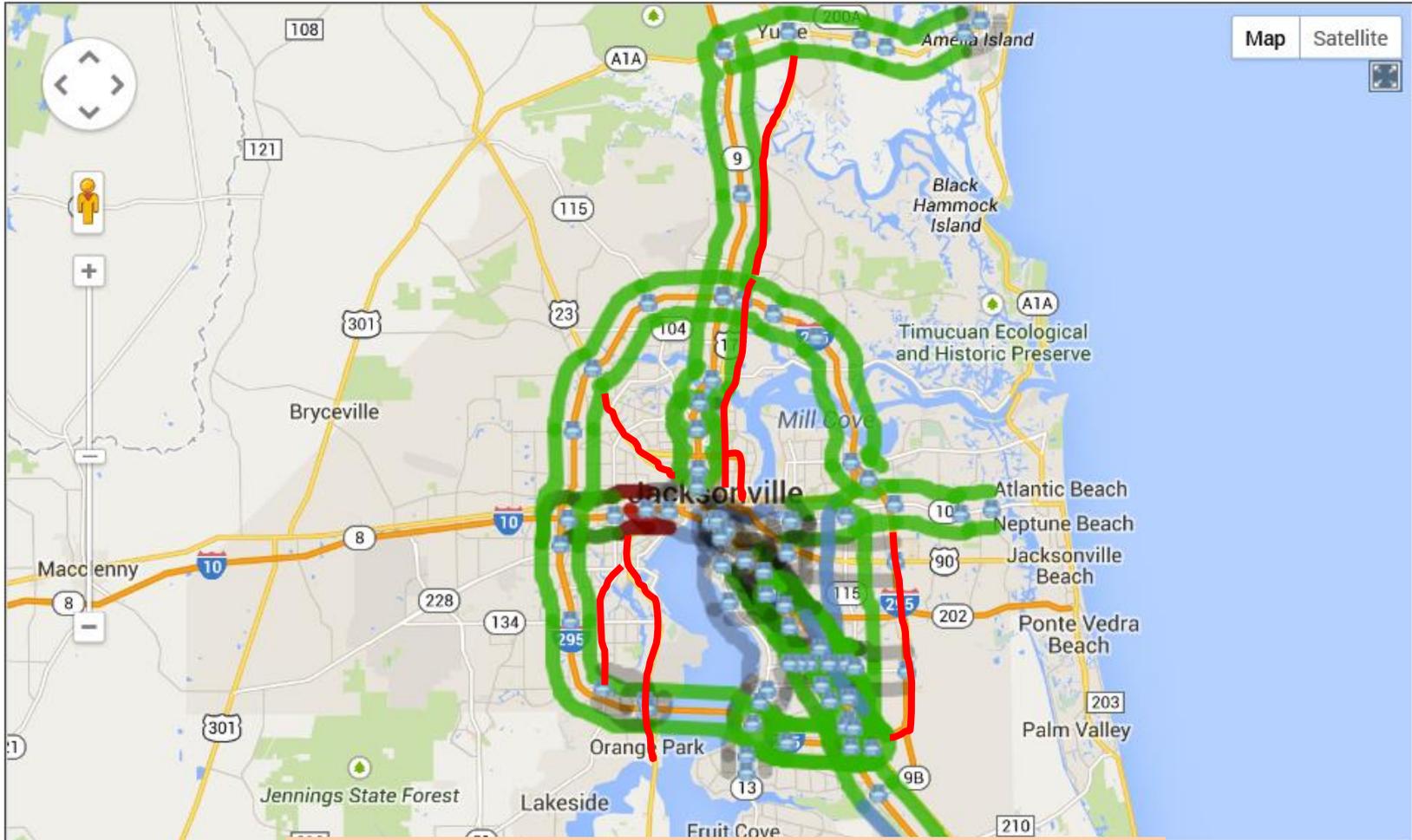


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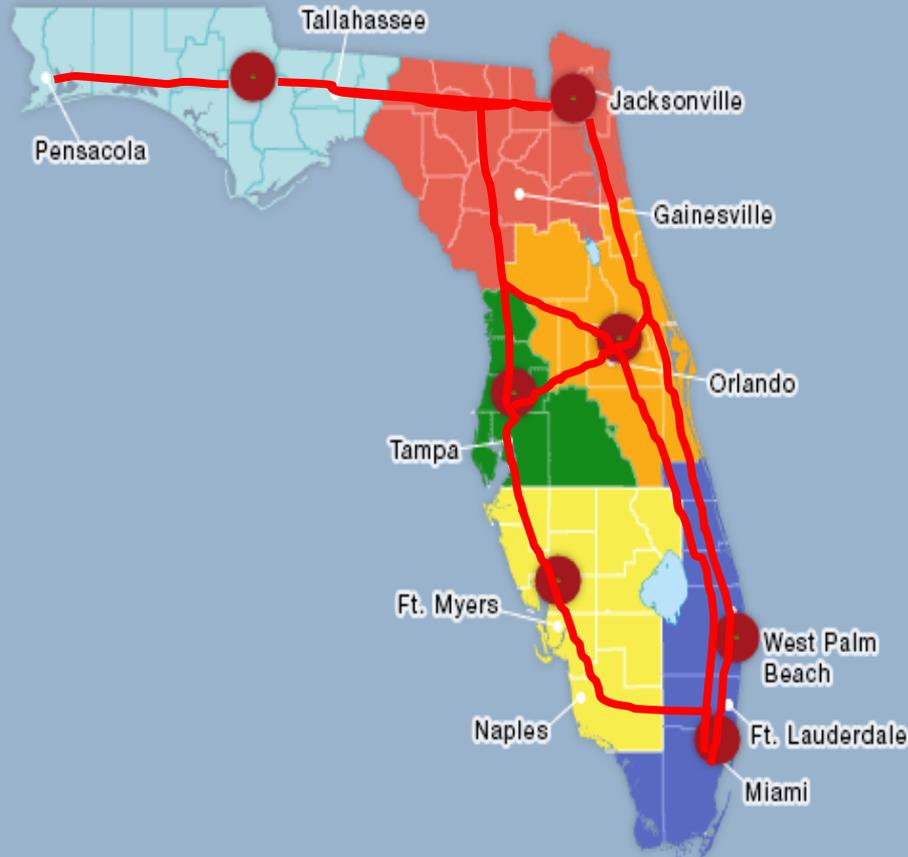
Show all pairs



Current Freight Tracking Capabilities



FLORIDA FREIGHT DATA COLLECTION OPPORTUNITIES



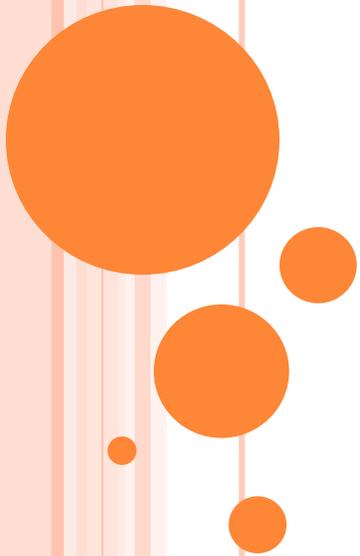
Legend

- Central
- Northeast
- Panhandle
- Southeast
- Southwest
- Tampa Bay



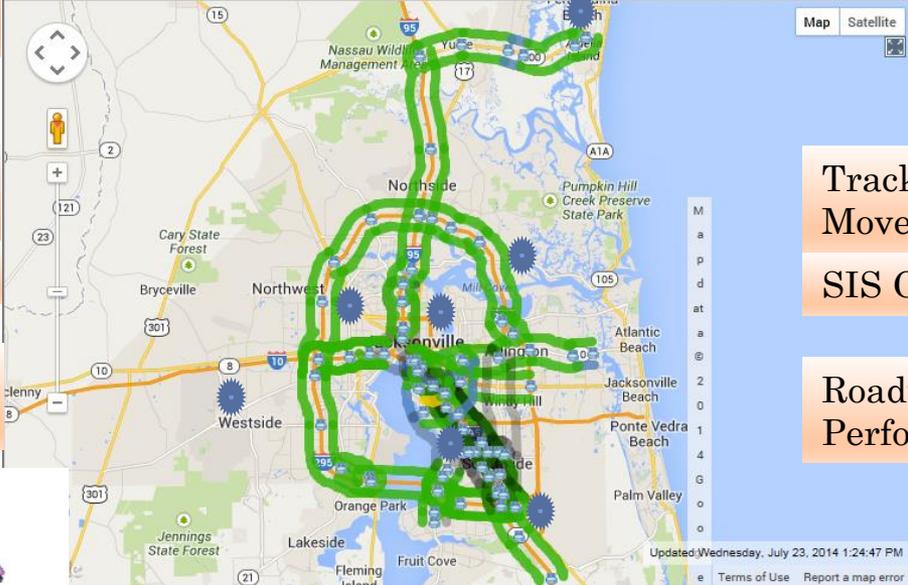
AND IN THE NEAR FUTURE?

LET'S GO NATIONAL!!!!

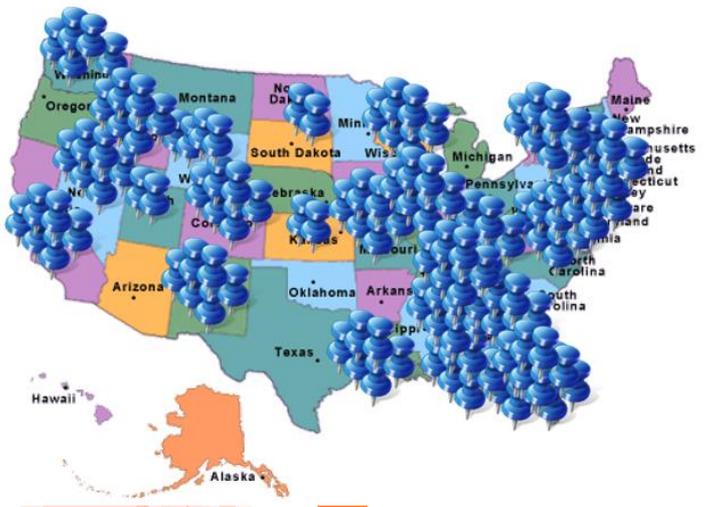


NORTHEAST FLORIDA BLUETOOTH AND FREIGHT

- Capture Freight Destination Info
- Capture Freight Origin Info
- Initiate Freight Parking Program



- Track Freight Movement
- SIS Corridor Focus
- Roadway Operational Performance

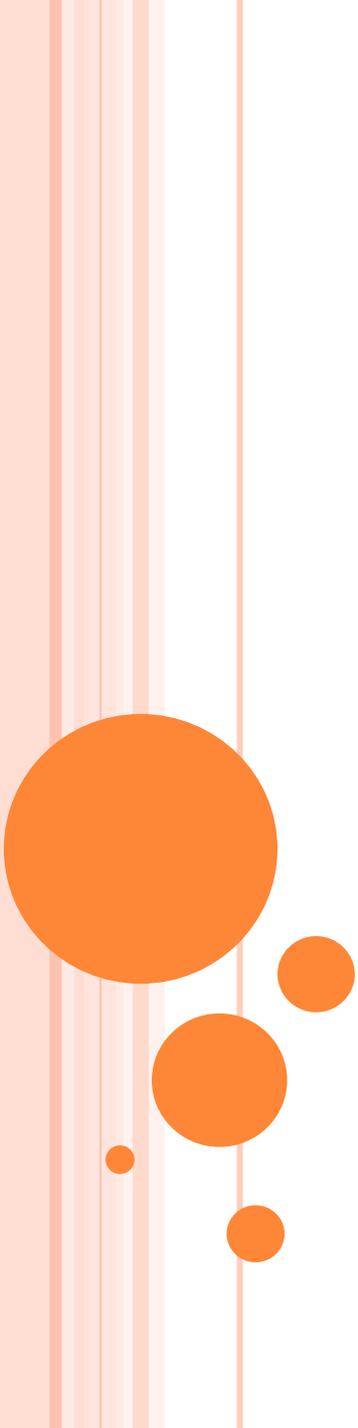


- National Data Sharing System
- National Freight Coalition Tool
- Enhance Economic Prosperity in Florida

GAME PLAN?

- Complete and test BlueToad deployment by April of 2015
- Complete BlueToad pairings in May 2015
- Initiate State and National BlueToad Freight Coalition in July 2015
- Move into the new North Florida RTMC in August 2015
- Begin tracking freight September 2015
- Implement full program Jan 2016





QUESTIONS?

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