Truck Parking Availability System Florida's Unique Approach

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# Florida International University (FIU) Research (2011)

Identified current supply and demand of public parking:

- Needs to "balance" parking use.
- Technology deployment for information availability.

University of Florida (UF) Research (2016)

- Evaluation of in-ground sensors to examine their capabilities
    - Tested four different vendors
- Ground-truth data through video logs
- Three products listed on FDOT's Innovative Products List (IPL)
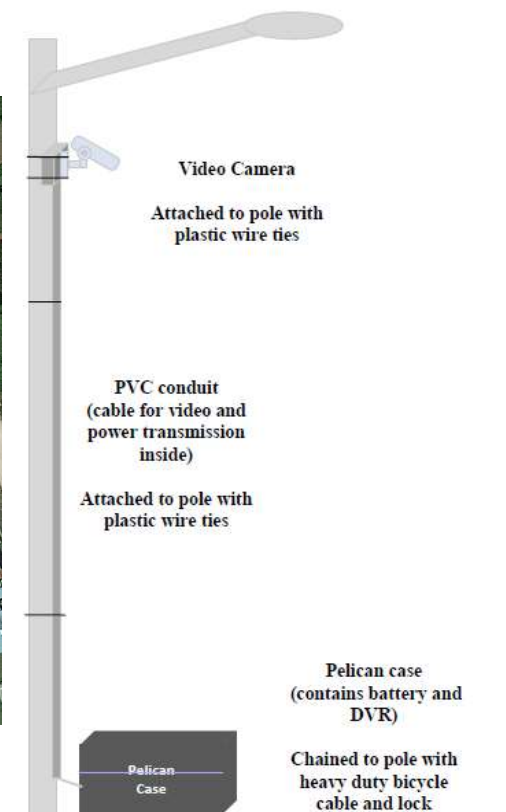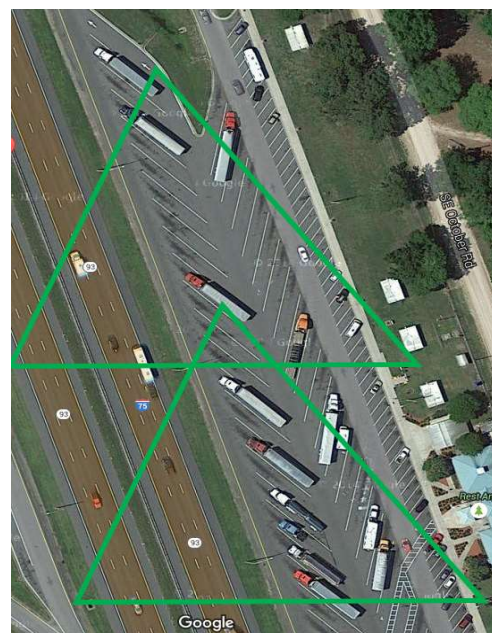
Video Camera Mounting Details

University of Florida (UF) Research (2016)

Performance Accuracy Requirements

- Turnover Accuracy – 90%

- Occupancy Accuracy – 95%

- Detection system test conducted over two 15-hour (6:00 p.m. to 9:00 a.m.) sessions

Developmental Specification 660

VEHICLE DETECTION SYSTEM.
(REV 12-20-16)

> ARTICLE 660-2 is expanded by the following:

> **660-2.5 Truck Parking Detection System:** Furnish and install a truck parking detection system in accordance with the details shown in the Plans. The detection system must be capable

Project Delivery

STAGE 1 — Implementation of technology to accurately assess and disseminate the availability of truck parking

STAGE 2 — Development of predictive analysis for future parking availability

STAGE 3 — Incorporation of private parking locations for systemwide resource utilization

Three-stage approach to statewide comprehensive truck parking solution
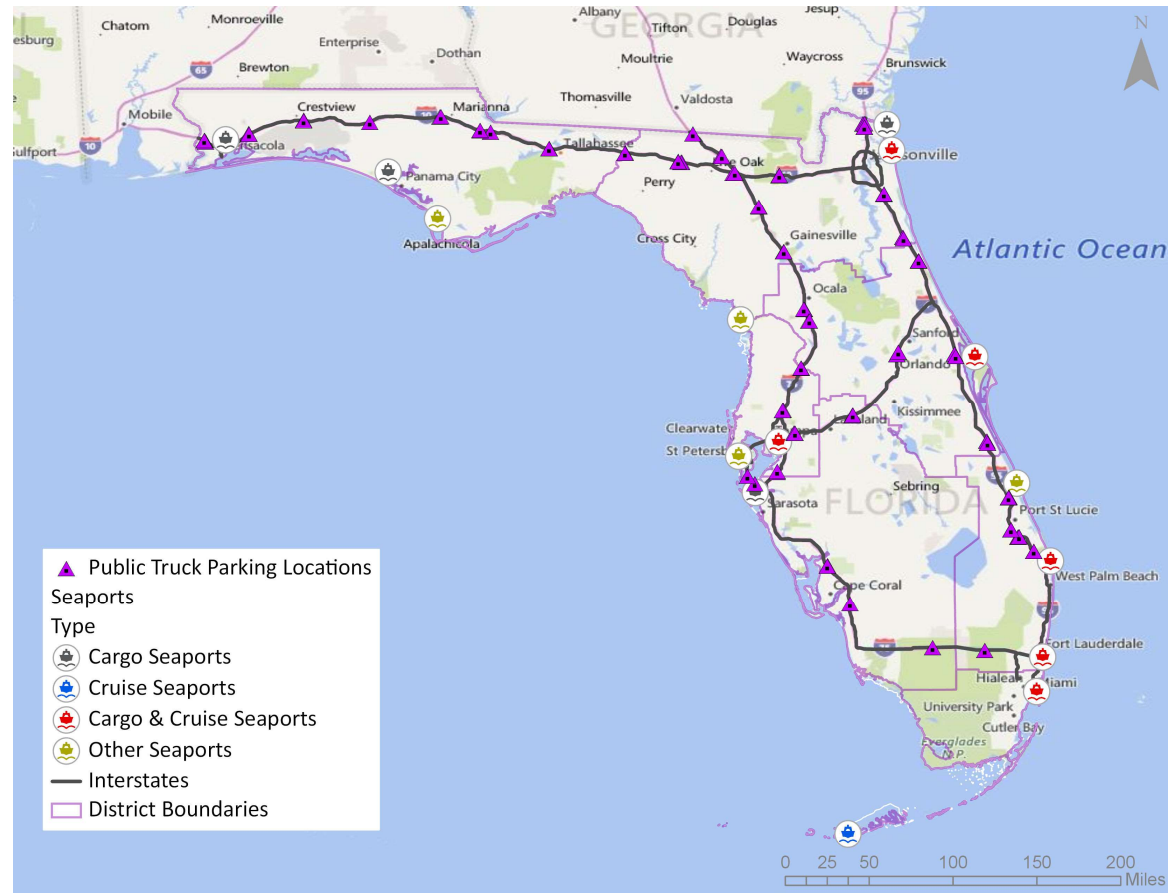
TPAS Locations

- 45 rest areas
- 20 weigh stations
- Three (3) welcome centers
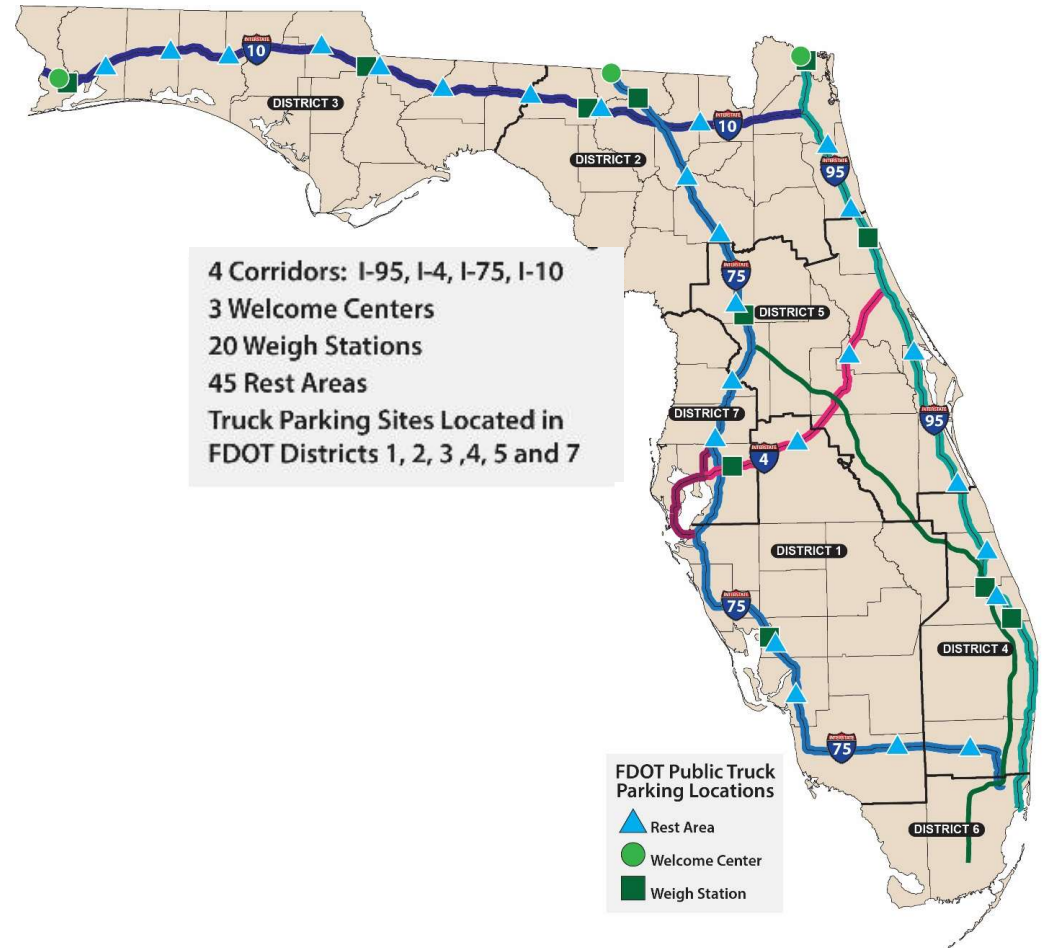
Number of Truck Parking Spaces Monitored	2,352
Wireless Detection System (WDS)	1,875
Microwave Vehicle Detection System (MVDS)	477

4 Corridors: I-95, I-4, I-75, I-10
3 Welcome Centers
20 Weigh Stations
45 Rest Areas
Truck Parking Sites Located in
FDOT Districts 1, 2, 3 ,4, 5 and 7

FDOT Public Truck
Parking Locations
▲ Rest Area
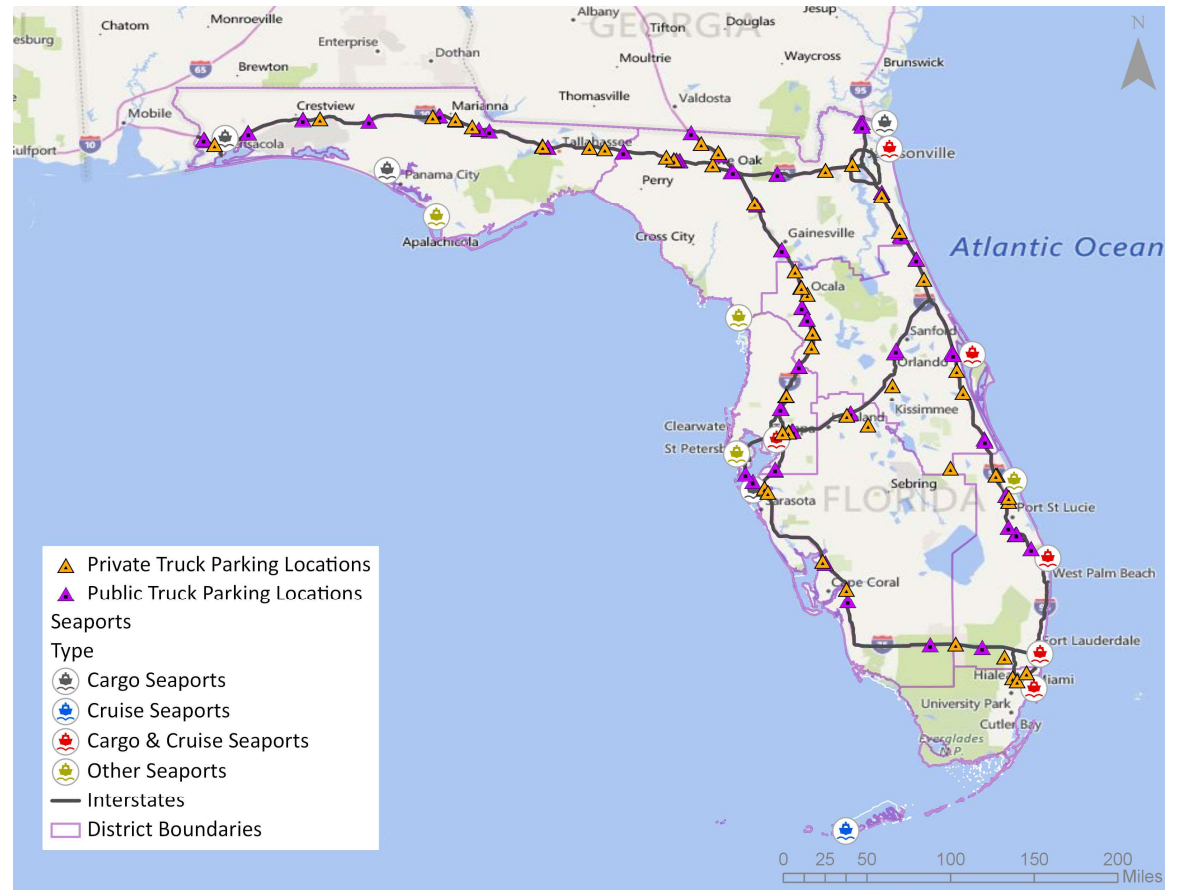● Welcome Center
■ Weigh Station

Public Parking – Stage 1

- Complete 2019
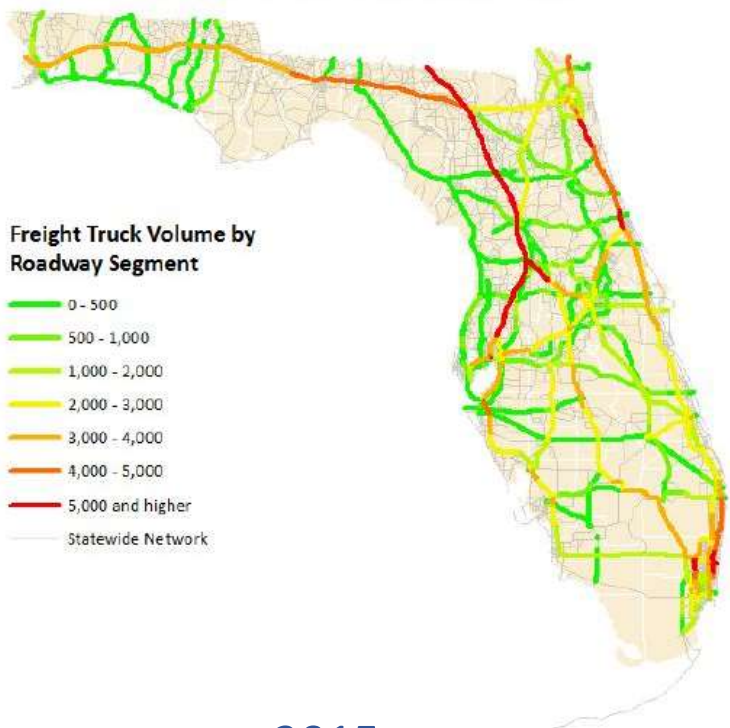- All public facilities
- Based on existing locations

Private Parking Availability – Stage 3

- Incorporation of private facilities

- Based on existing locations

- Can include new, strategic locations for staging near ports/freight generators
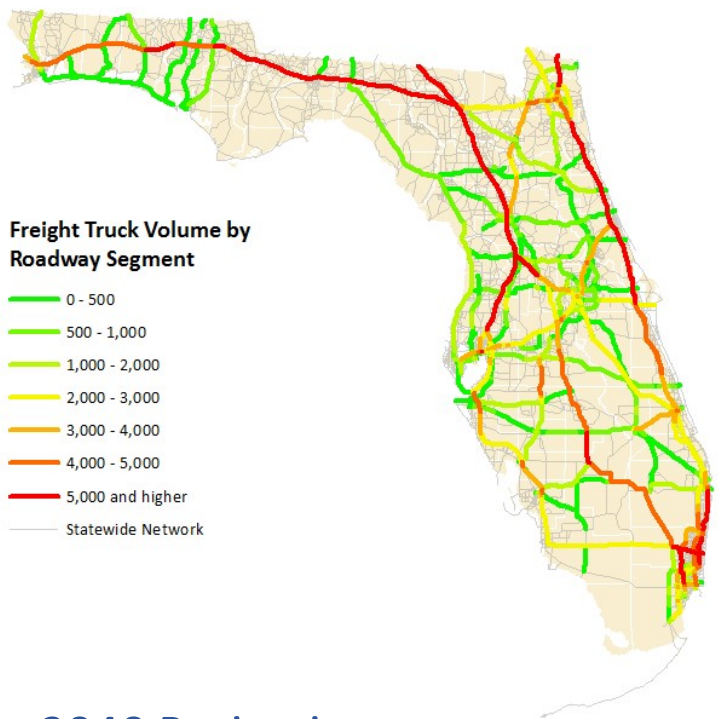
Freight Growth

2015

2040 Projections

Regional Freight Network – Communications

- Statewide fiber optic communication network

- Inter-connects weigh stations

- Establishes the backbone for freight network