Votran TDP

Transit improvement for International Speedway Blvd.

Presentation to ISB Coalition Planning Committee

October 15, 2012

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TDP Context

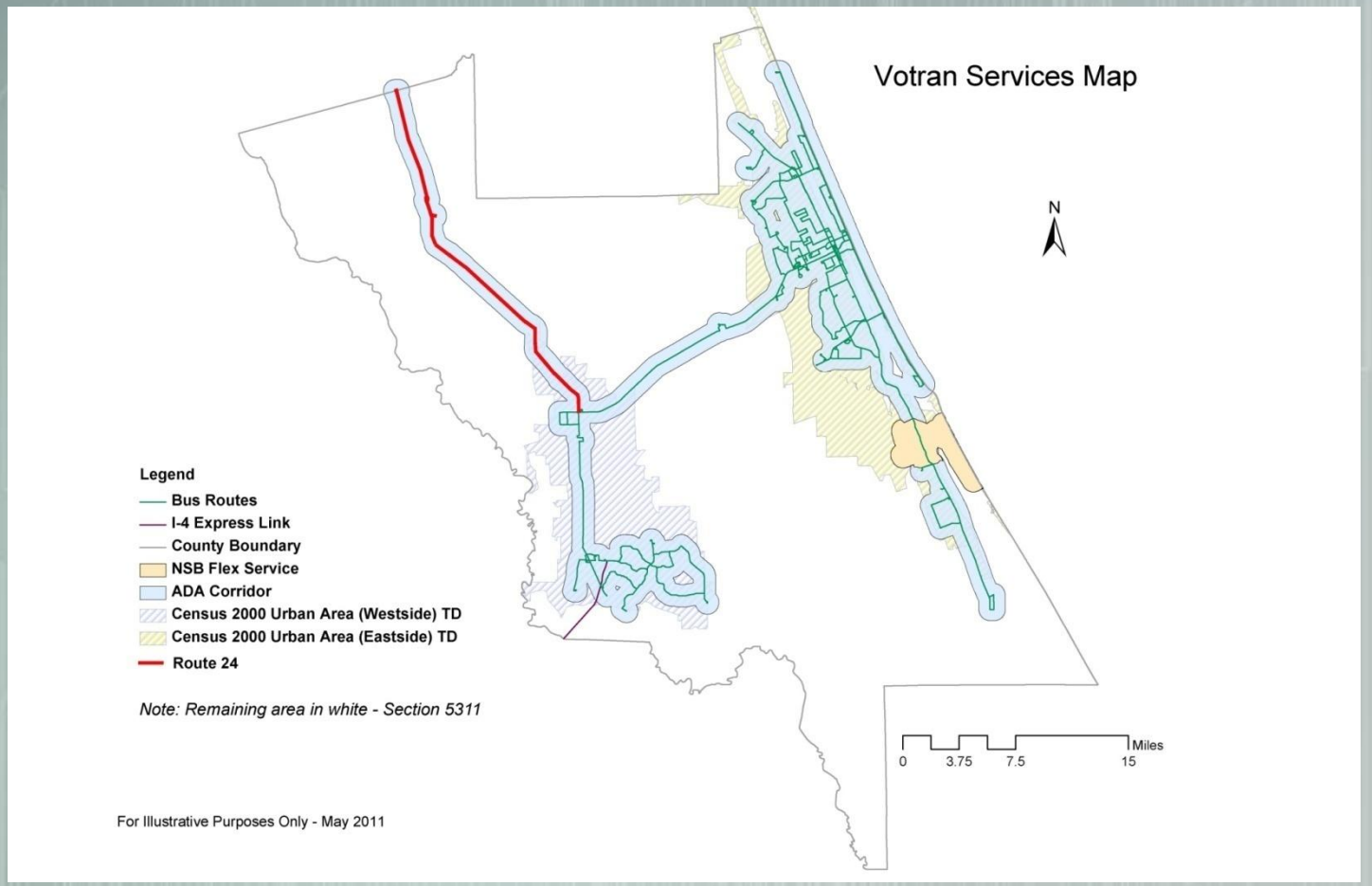
- **Geography:** Volusia County has 1,200 square miles with 16 cities

- **The Transit Development Plan (TDP)** is the community vision of transit improvements expected for the next ten years. It includes an array of operating, capital, planning and policy priorities. Votran uses the plan as the framework for identifying improvements and the corresponding funding components.

- **The ISB Corridor** is central to the core service area of public transportation in Volusia County. The Transfer Plaza is the service hub located just north of the corridor. Another major transfer location is Volusia Mall directly in the ISB corridor.

Coordinated Transit

Challenges



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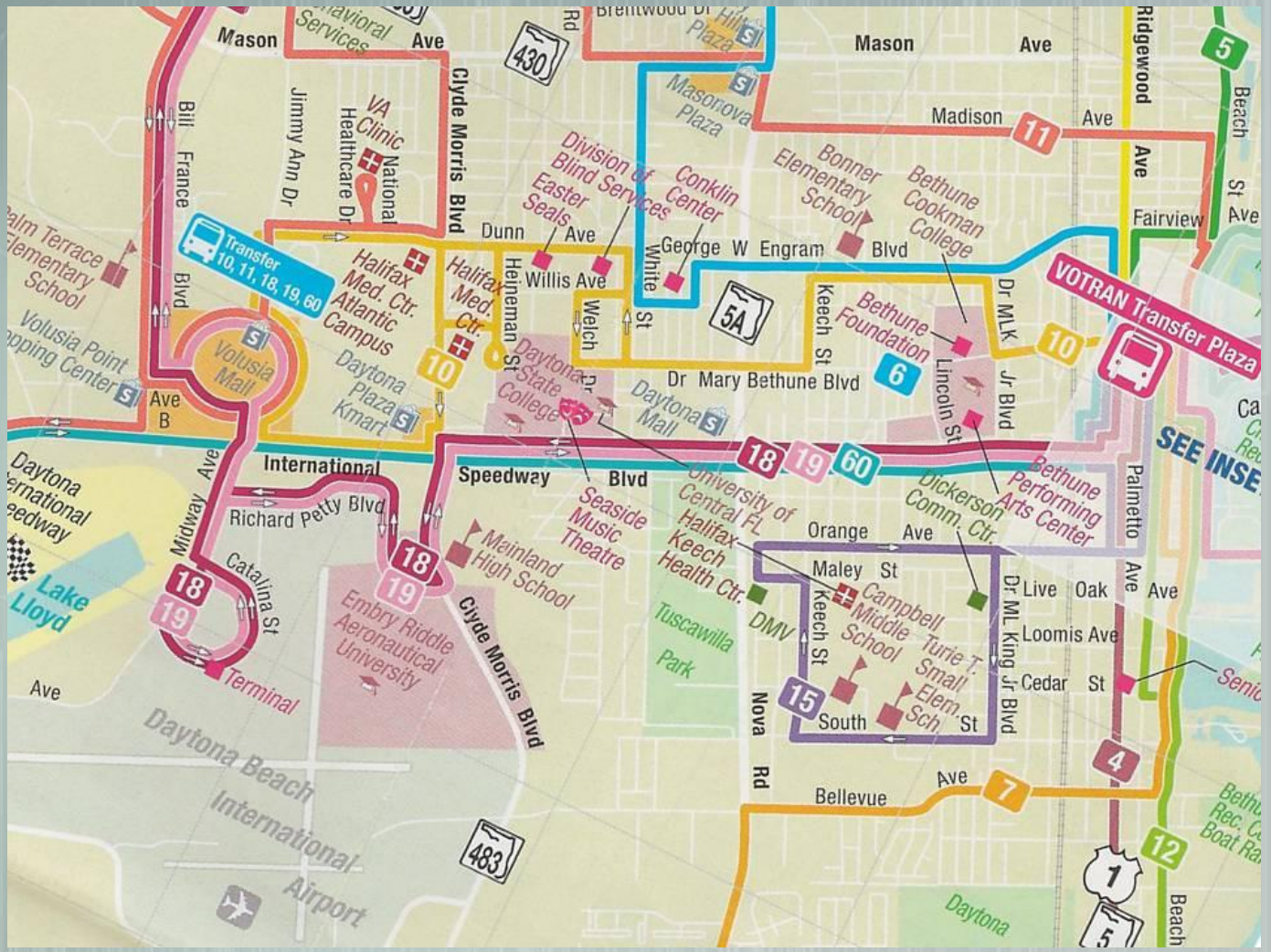
Votran Service on ISB

Existing Route Service



Route 10 has 30 minute frequency and where Routes 18/19 over lap with Route 60 there is 30 minute service

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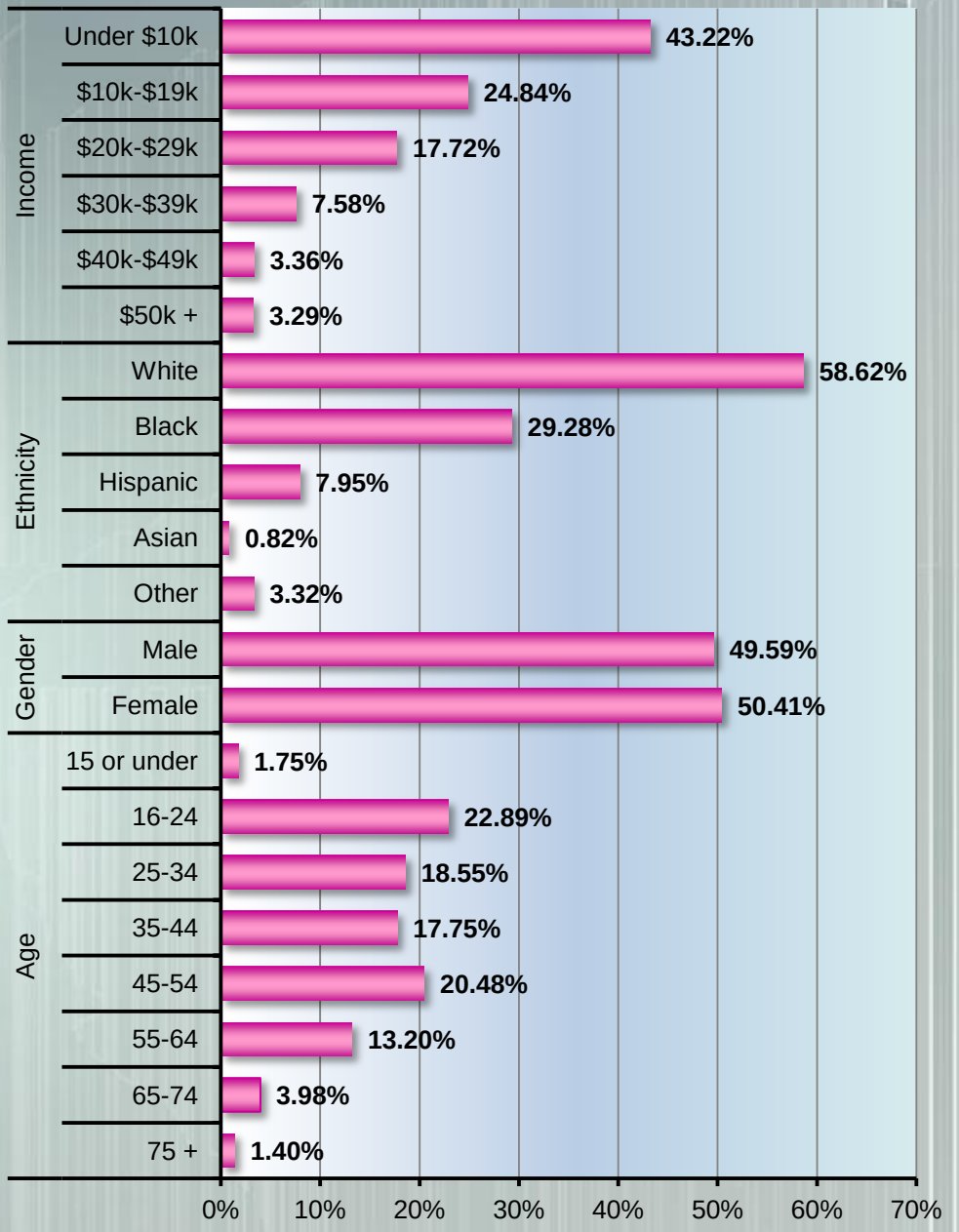
2011 On Board Survey

- Average rider profile
  - Age: 16-24
  - Female
  - White
  - Earning under $10,000
- There is little difference between the responses in the age and gender categories



Cross County Service

Challenges

Priorities

Relevant TDP Priorities

- Corridor approach for planning improvements
- Infrastructure improvements and Traffic control features
- Development Review

Corridor Priority

Corridor Approach

- The TDP described a group of most heavily-traveled corridors in the county with existing fixed-route bus service operating at high ridership levels. The ISB Corridor has been identified in the TDP as one of these corridors.

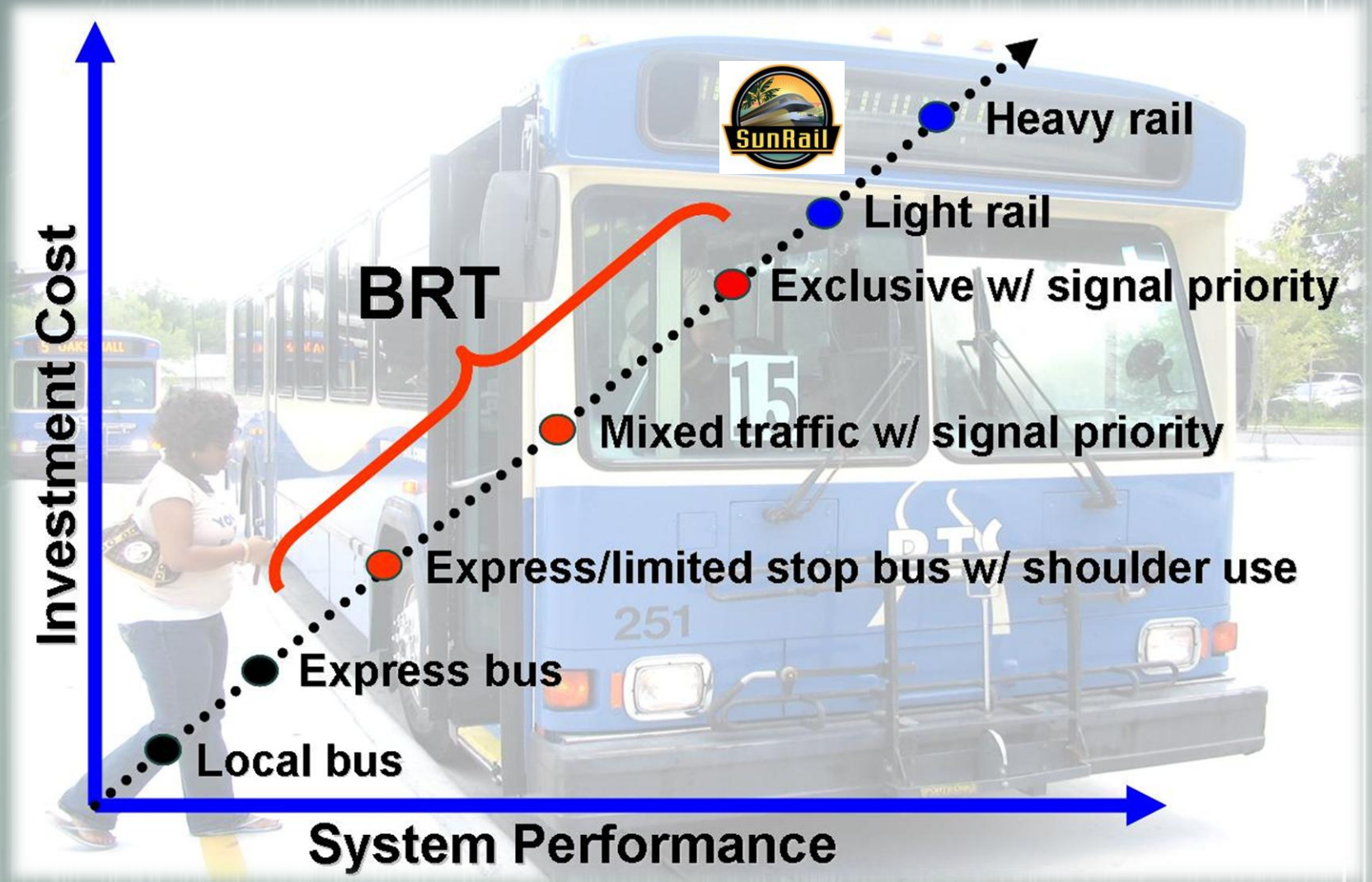
- A transit corridor is geographically focused to maximize the impact of investment, which could include many of these features:
Premium service means a combination of factors that contribute to the image that attracts a choice rider. **Easy-to-recognize stops** and stations. Artful enhancements to structures. **Frequency of service** that remains on high profile thoroughfares.

Corridor Priority

Corridor Approach

- Identify corridors for transit emphasis
- Determine type and level of development
  - Density
  - Form
- Determine appropriate premium modes and service levels
- Develop supportive underlying network
- Plan enhanced infrastructure and amenities
- Direct investment

Transit Demand -Modes



Corridor Priority

Corridor Component

Infrastructure Improvements

Features that make passengers more comfortable and help them navigate the system, including shelters and benches

- **Information displays** may include "you are here" that profiles points of interest within walking distance of the stop. Schedule information could be provided through "next bus" technology.

- **Ticket Vending Machines (TVM)** are another passenger amenity for major stop locations and especially suited for super stops.

- **Traffic control features** such as signal prioritization and dedicated lanes.

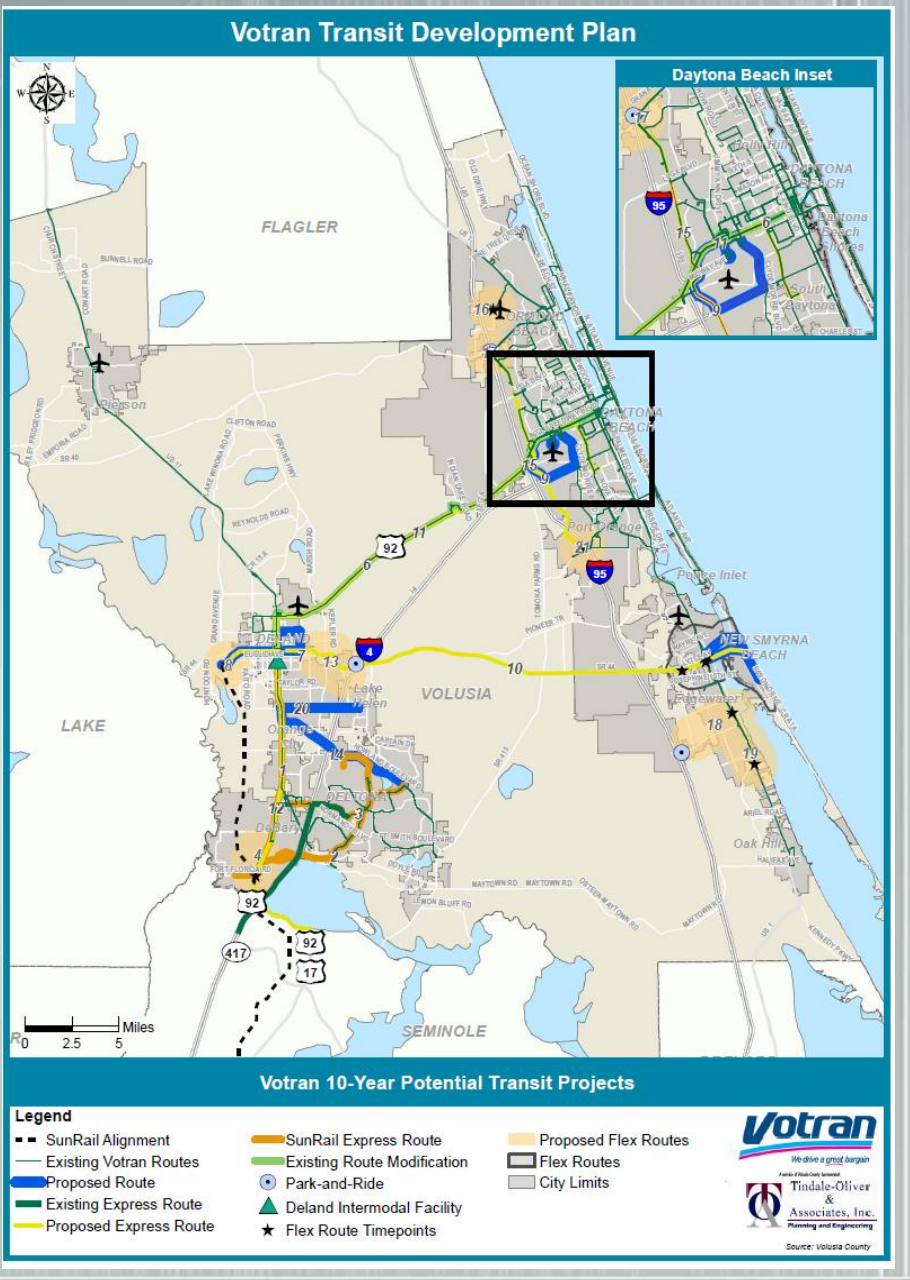
Planning Coordination

Development Review

- Context of existing service and funding
- Modal split analysis for new development
- Votran is a Service of Volusia County, subject to budgets that are set by the County Council
- Votran role in development review will be defined with County Growth and Resource Management.
- Transit Oriented Development and Municipal Planning Departments

Future Direction - Map

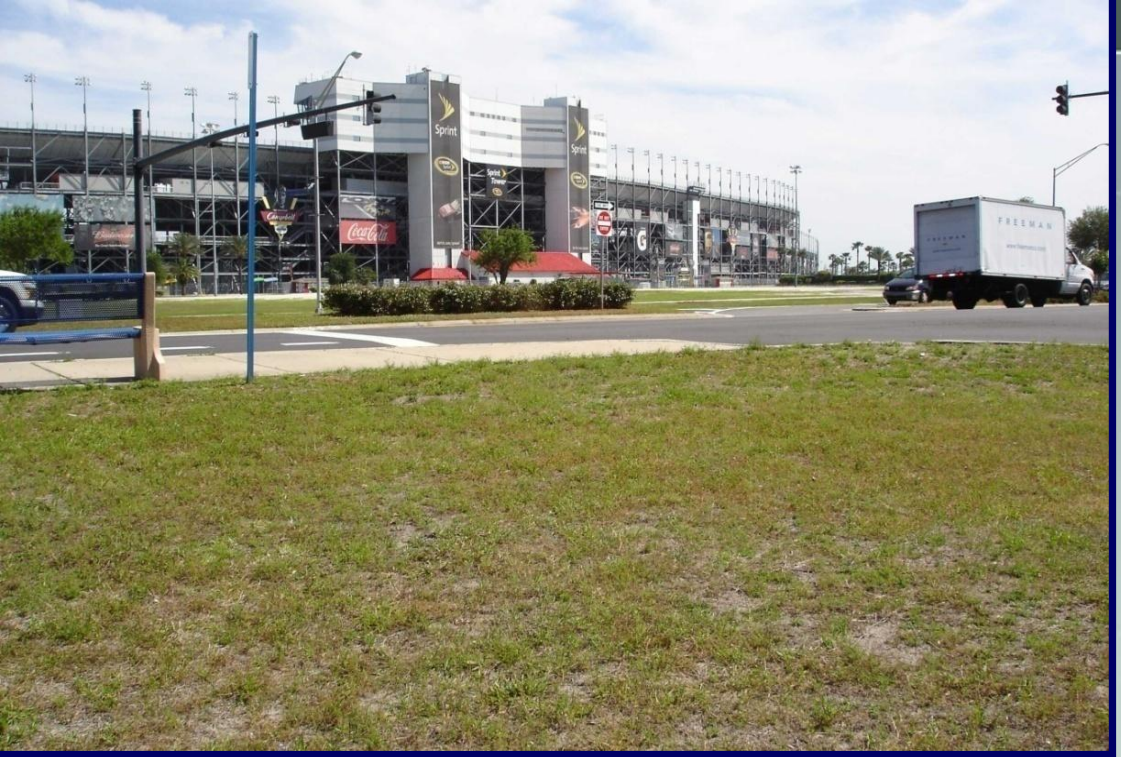
- East-west connectivity
- Local circulation
- Connectivity to trails, airports and other attractors



Community Needs Identified

Unfunded TDP Initiatives

- **ISB Circulator:** New circulator service that loops around the airport using ISB, Clyde Morris, Beville and Williamson.
- **Route 60:** This is the cross county route that begins at the Transfer Station and travels ISB to Northgate Plaza in Deland. Extension of service to Deland ITF, frequency improvements to 30 minutes, extended hours for night and Sunday service.
- **Sunrail Station connection to Daytona Beach**: New express service to be defined.
- **Williamson Blvd from Port Orange to Ormond Beach**: New service from Pavillion in Port Orange to Ormond Beach.
- **Route 18/19:** From the Transfer Plaza travels along ISB to serve the airport, Volusia Mall, taking Bill France to LPGA, to Williamson, to Walmart on Granada, to A1A, south on A1A to the Ocean Center, then returning to the Transfer Plaza via A1A and ISB. Frequency to 30 minutes and longer hours.



Looking toward Speedway from Barnes & Noble on ISB

Same stop as above in front of Barnes & Noble across from Speedway

Daytona Beach at the corner of International Speedway Boulevard & Clyde Morris Boulevard

In many respects, this site is a typical strip shopping center anchored by a “big box” retail outlet. However, under the right conditions, its neighboring uses, which include Halifax Hospital, Mainland High School, three colleges, Volusia Mall and the airport, could provide a sizable customer base with easy access of the site by foot or transit. The following series of images demonstrates how the outer perimeter of the parking lot could be developed to create a pedestrian-friendly, destination.

Phase I

A dedicated one-way service road is constructed to provide local access parallel to International Speedway Boulevard. Landscaping and a shelter are added to improve pedestrian comfort.

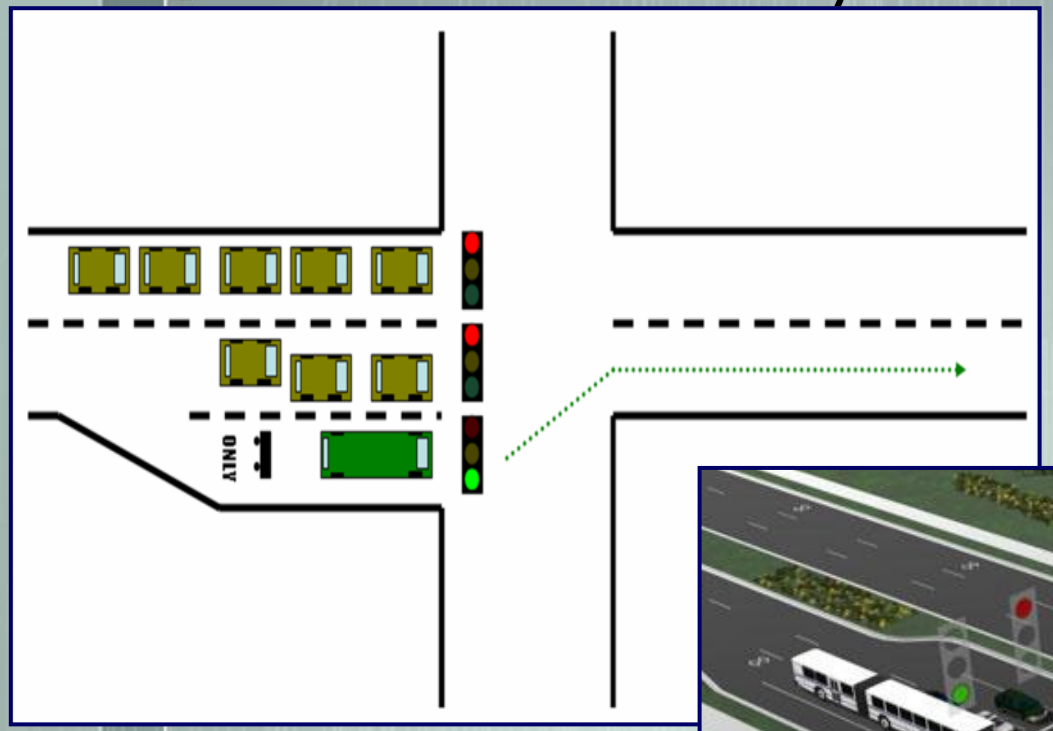
Phase II

Mixed-use redevelopment begins with the construction of three –to-five story buildings along the service road. These buildings will house retail on the ground floor along with office and residential above.

Phase III

Spurred by the success of Phase 2, the “streetscape” is completed with the construction of additional mixed-use buildings. This intensity and mix of uses creates a strong user base for transit providing more frequent bus service. All users now have a variety of convenient and comfortable travel options.

Bus Priority Jump Lanes



A jump lane consists of an additional travel lane on the approach to a signalized intersection.

The lane allows the bus to move in front of traffic to increase operational efficiency of the transit system (priority to people, rather than to cars).

Examples of BRT Vehicles

Max, Las Vegas NV

Hochbahn, Hamburg, Germany

Rapid Bus, Austin TX

AC Transit, Oakland CA

MARTA, Atlanta GA

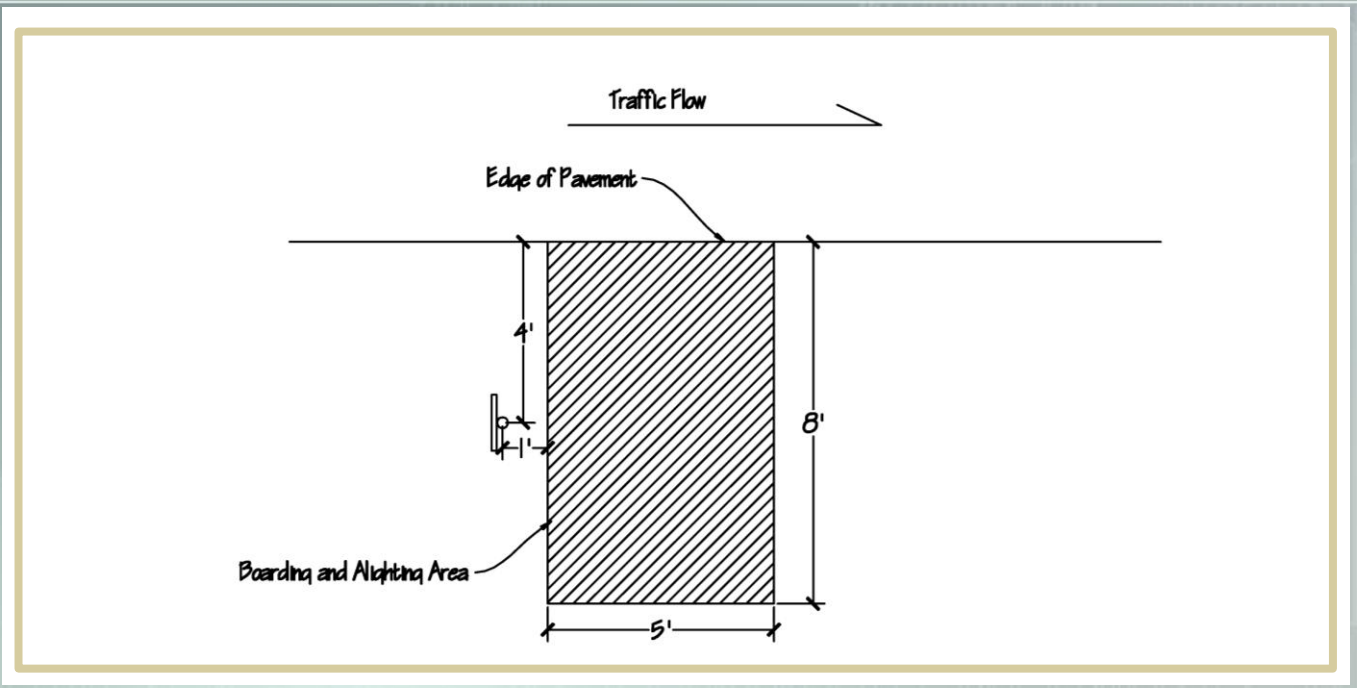
EmX, Eugene OR

Phileas Bus, Eindhoven, Netherlands


Standard Local Street
Before BRT

Standard Local Street
After BRT

Bus Stop Pad Option 1

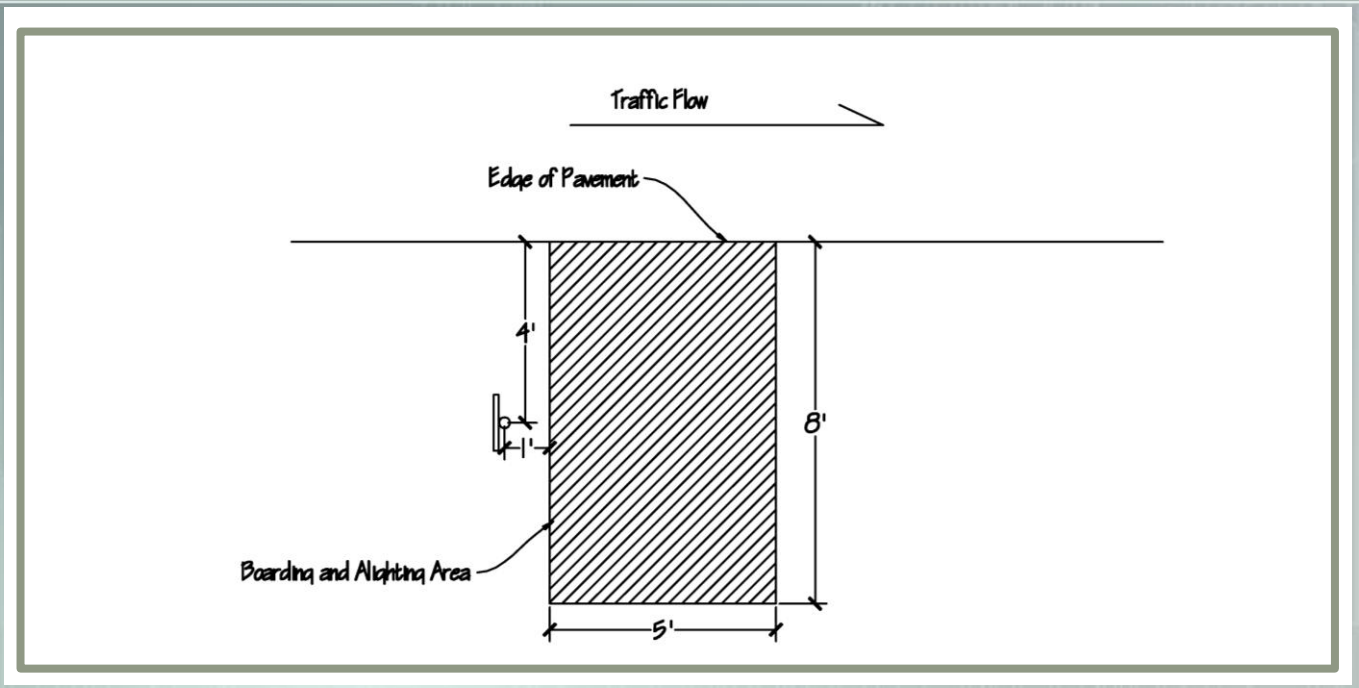


Basic Bus Stop Pad

Item		Estimated Cost
Concrete Pad		$991
Bus Stop Sign/Pole		$160
Total		$1,151

*Information on Pad Design taken from Accessing Transit Design Handbook for Florida Bus Passengers Version II, 2008

Bus Stop Pad Option 1



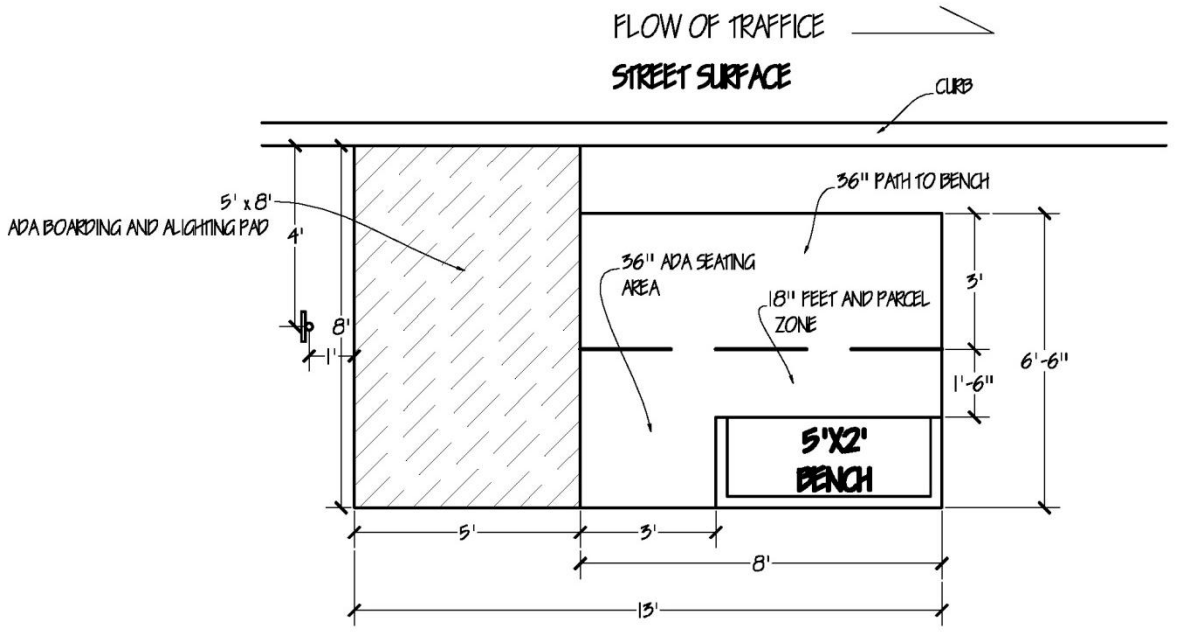
Basic Bus Stop Pad

2010 Dept. of Justice Standards for Accessible Design :

810.2.1 Surface. Bus stop boarding and alighting areas shall have a firm, stable surface.
810.2.2 Dimensions. Bus stop boarding and alighting areas shall provide a clear length of 96 inches (2440 mm) minimum, measured perpendicular to the curb or vehicle roadway edge, and a clear width of 60 inches (1525 mm) minimum, measured parallel to the vehicle roadway.
810.2.4 Slope. Parallel to the roadway, the slope of the bus stop boarding and alighting area shall be the same as the roadway, to the maximum extent practicable. Perpendicular to the roadway, the slope of the bus stop boarding and alighting area shall not be steeper than1:48.810.3

*Information on Pad Design taken from Accessing Transit Design Handbook for Florida Bus Passengers Version II, 2008

Bus Stop Pad Option 2

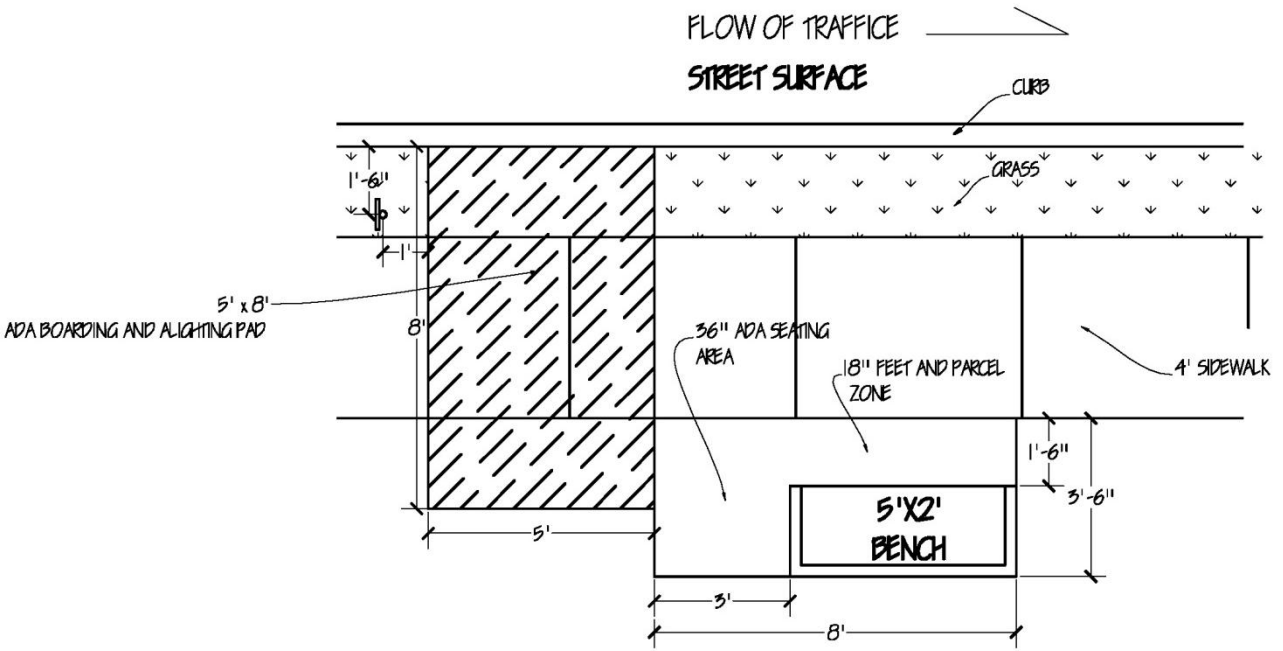


Bus Stop Pad with Bench and Curb

Item		Estimated Cost
ADA Boarding and Alighting Pad		$1,012
Bench Pad		$700
Bench		$800
Bus Stop Sign/Pole		$160
Total		$2,672*

*Cost is based on as drawn diagram

Bus Stop Pad Option 2

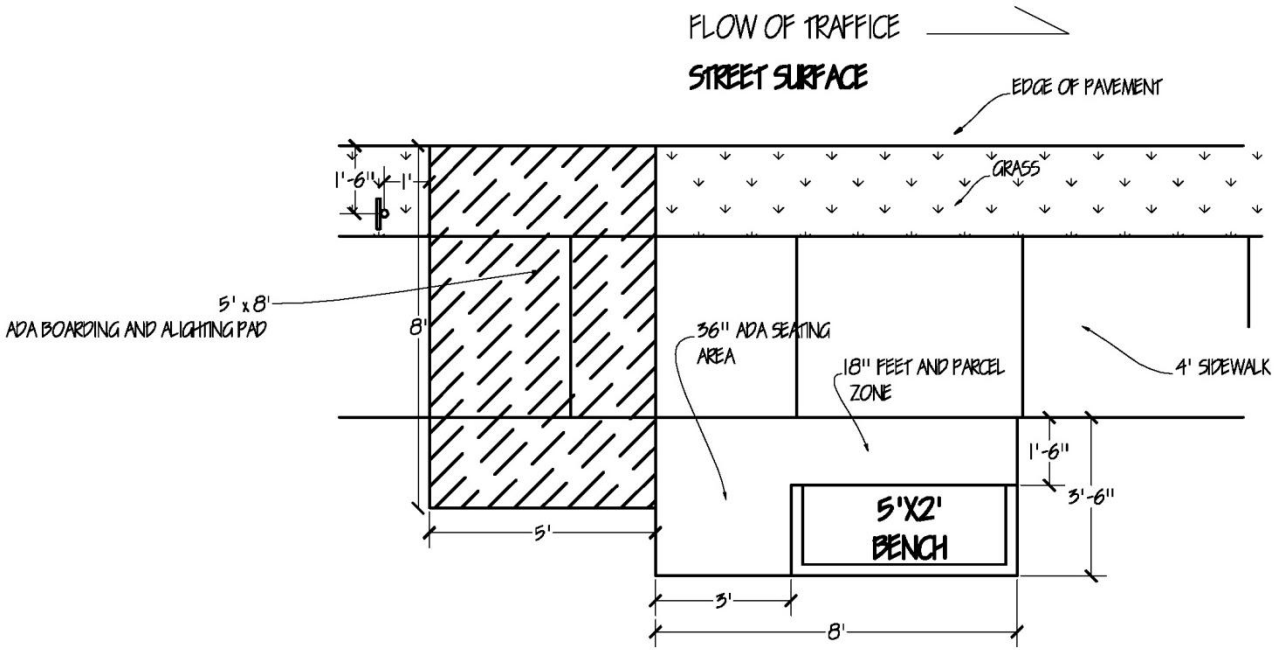


Bus Stop Pad with Curb, Grass, Sidewalk and Bench

Item		Estimated Cost
ADA Boarding and Alighting Pad		$1,012
Bench Pad		$700
Bench		$800
Bus Stop Sign/Pole		$160
Total		$2,672*

*Cost is based on as drawn diagram

Bus Stop Pad Option 2

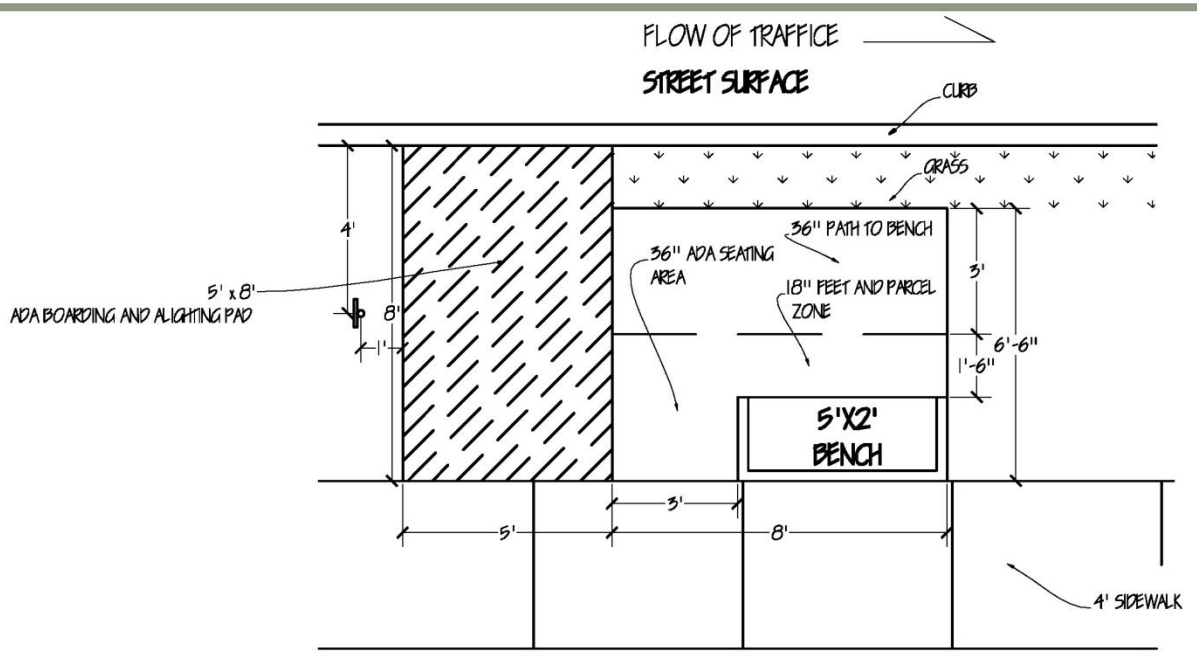


Bus Stop Pad with No Curb, Grass, Sidewalk and Bench

Item		Estimated Cost
ADA Boarding and Alighting Pad		$495
Bench Pad		$700
Bench		$800
Bus Stop Sign/Pole		$160
Total		$2,155*

*Cost is based on as drawn diagram

Bus Stop Pad Option 2



Bus Stop Pad with Curb, Grass, Sidewalk Behind and Bench

Item		Estimated Cost
ADA Boarding and Alighting Pad		$1,555
Bench Pad		$900
Bench		$800
Bus Stop Sign/Pole		$160
Total		$3,415*

*Cost is based on as drawn diagram

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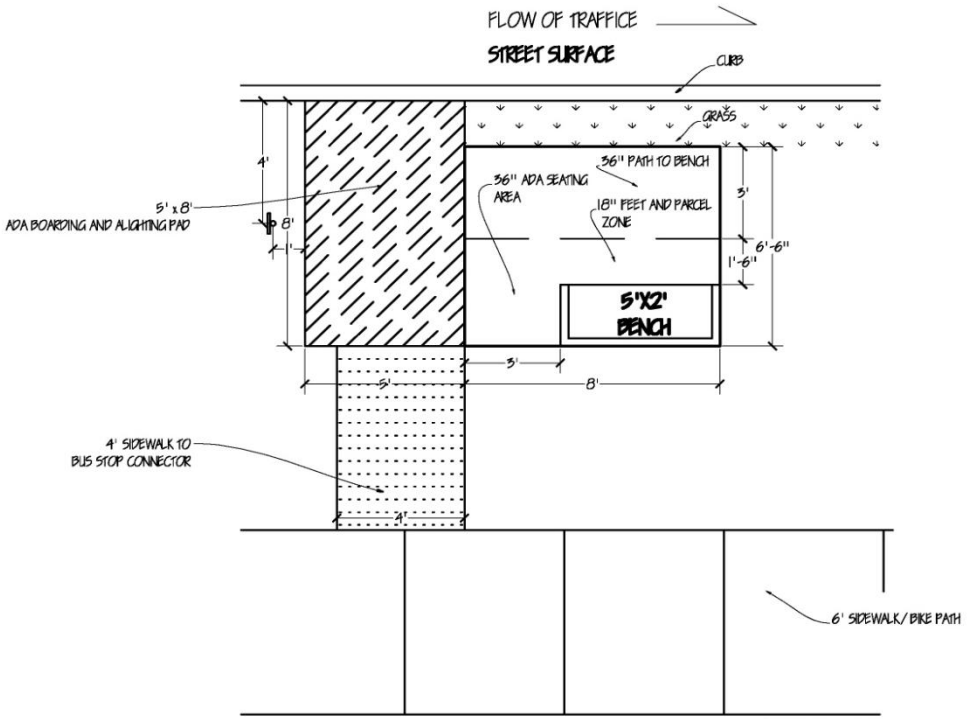
Bus Stop Pad Option 2



Bus Stop Pad with Curb, Grass, Sidewalk/Connector and Bench

Item		Estimated Cost
ADA Boarding and Alighting Pad		$600
Bench Pad		$700
Connector { (L x 4') x $15 per SF		$XXXXX
Bench		$800
Bus Stop Sign/Pole		$160
Total		$XXXXX*

*Cost is based on as drawn diagram

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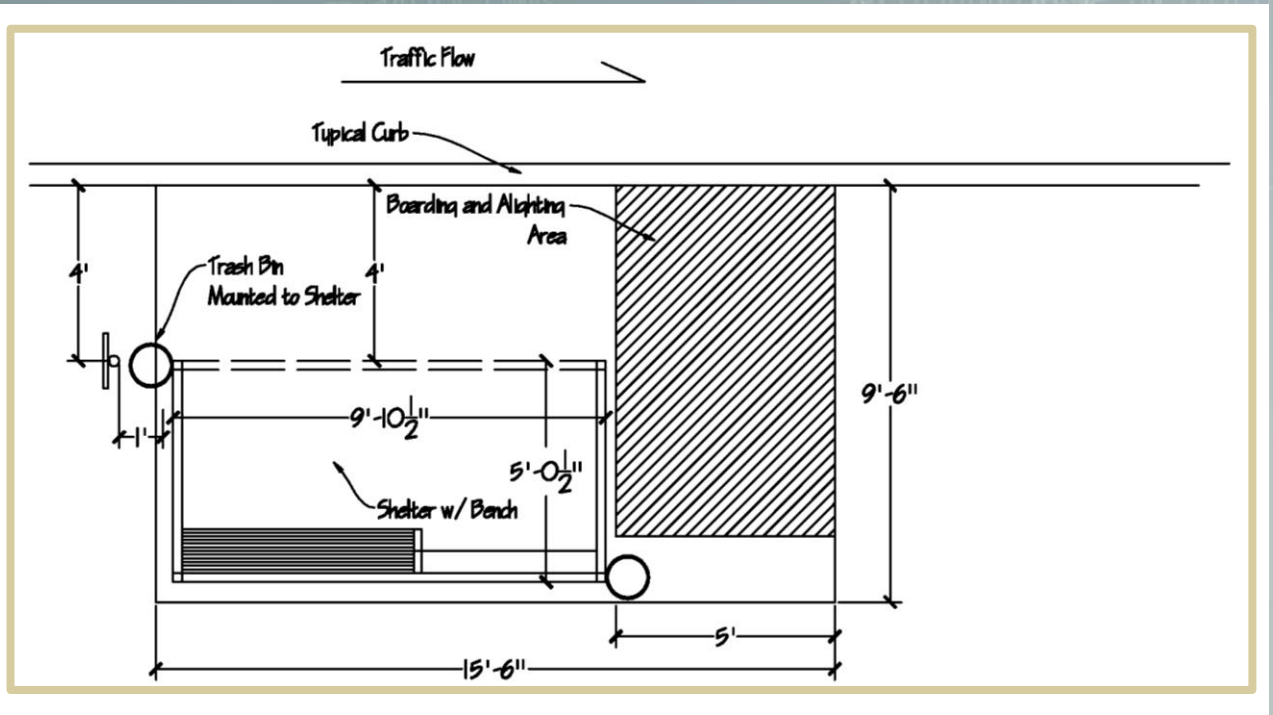
Bus Stop Pad Option 2

Design Criteria

For standards governing bus stop bench placement see:

- ❑FAC Rule 14-20-032 "Placement of Transit Bus Benches"
- ❑ Accessing Transit: Design Handbook for Florida Bus Passengers
- ❑FDOT Design Standards Section 700
- ❑ Florida Accessibility Code for Building Construction- Chapter 11
- ❑2010 Dept. Of Justice Standards for Accessible Design (ADA)
  - Section 810.2.1 Surface,
  - Section 810.2.2 Dimensions
  - Section 810.2.4 Slope
  - Section 903.1 General

Bus Stop Pad Option 4



Bus Stop Pad with Shelter and Trash Bin

Item		Estimated Cost
Concrete Pad		$2,420
Shelter w/Bench		$4,200
Bus Stop Sign/Pole		$160
Total		$6,780

*Information on Pad Design taken from Accessing Transit Design Handbook for Florida Bus Passengers Version II, 2008

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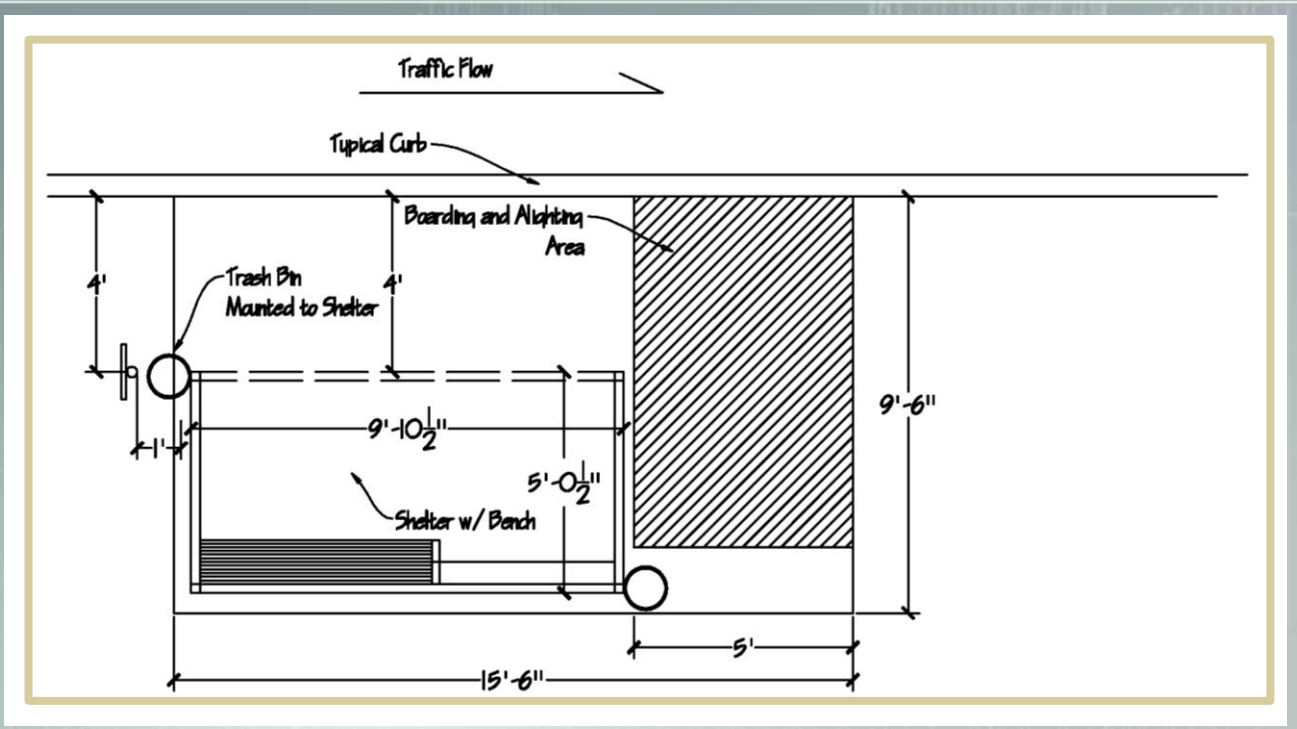
Bus Stop Pad Option 4



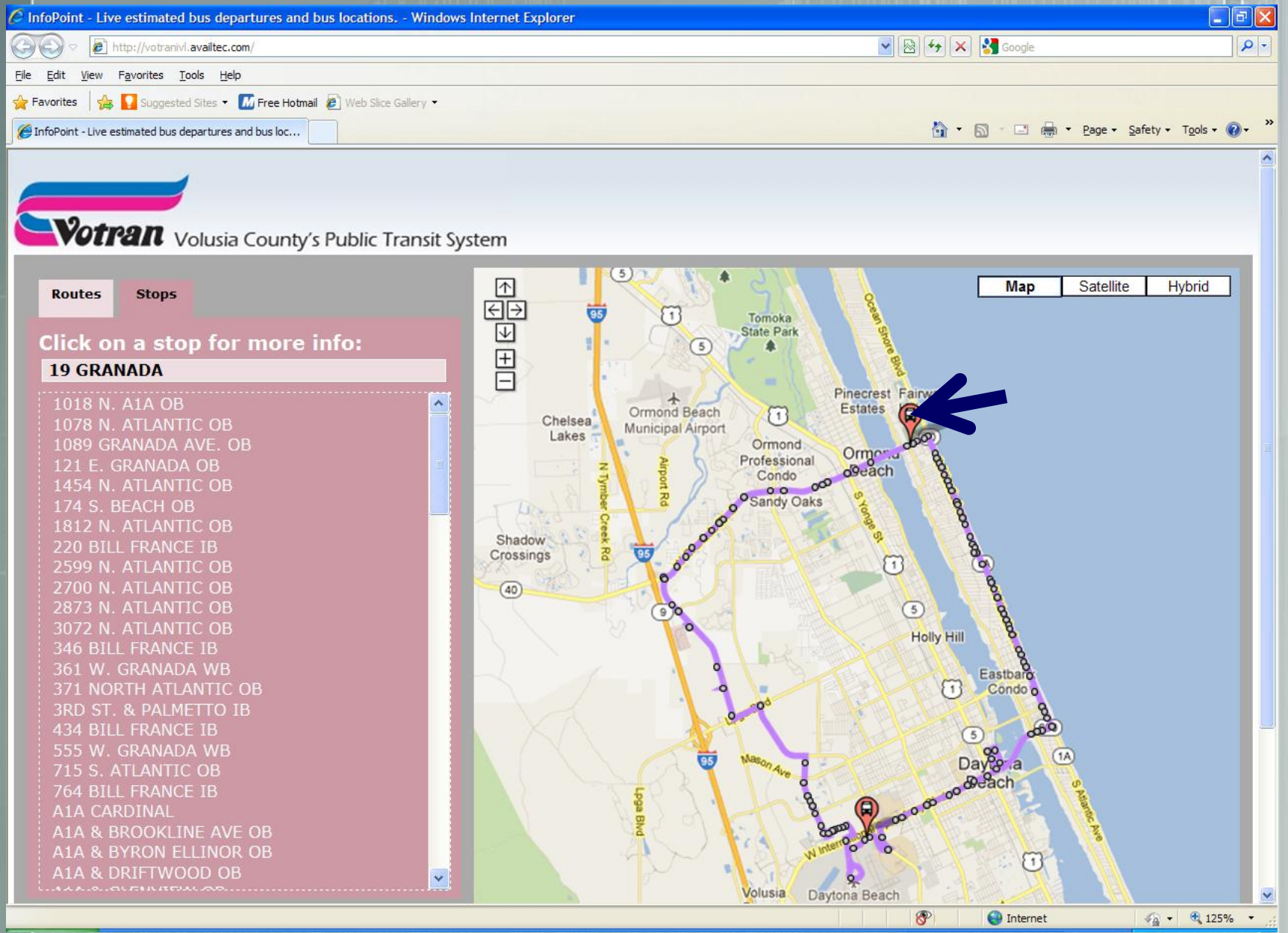
Design Criteria: Transit Bus Stop with Shelter

For standards governing bus stop bench placement see:

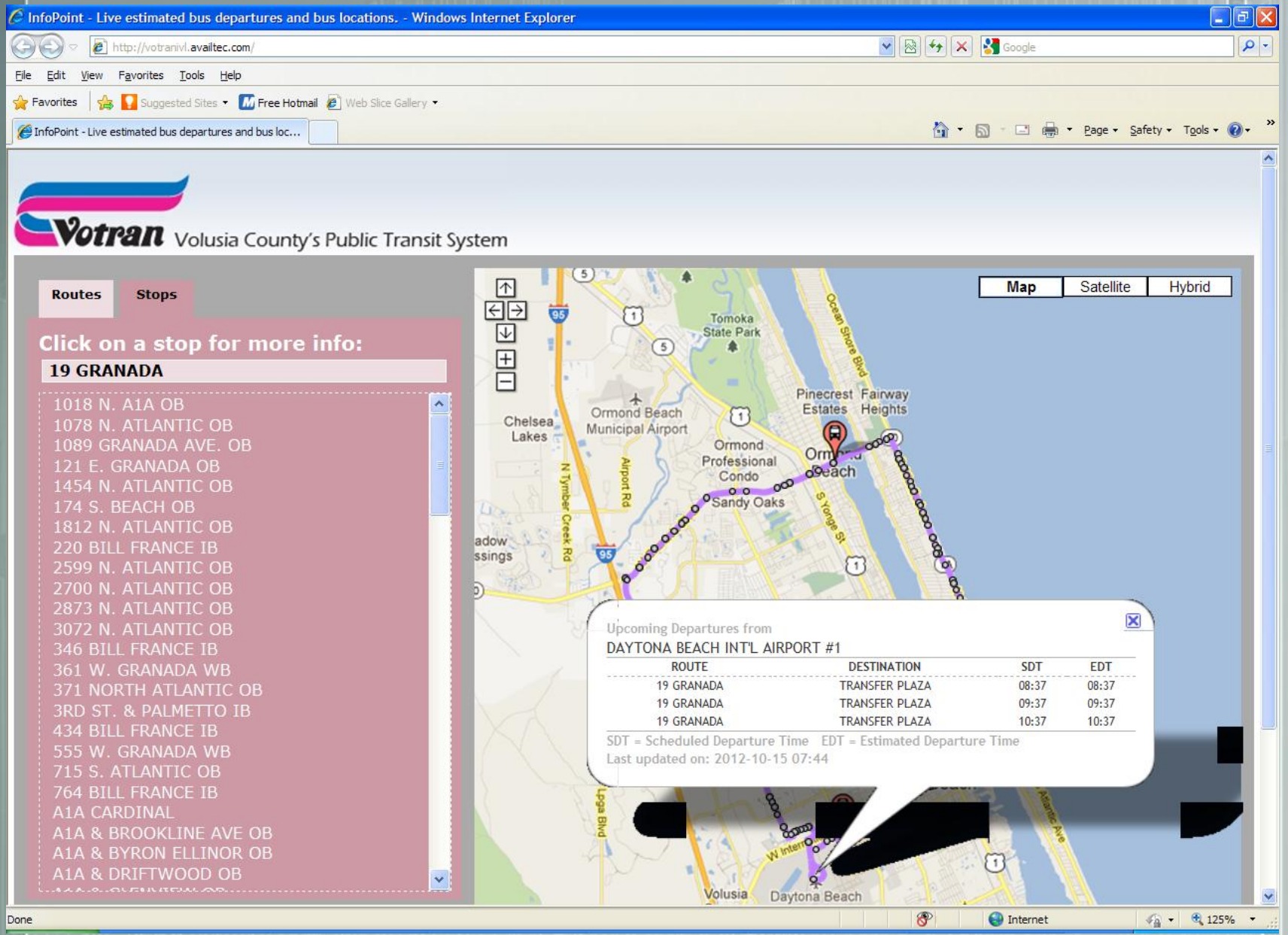
- ❑FAC Rule 14-20.003 "Placement of Transit Bus Benches"
- ❑FDOT Design Standards Section 700
- ❑Florida Accessibility Code for Building Construction- Chapter 11
- ❑2010 Dept. Of Justice Standards for Accessible Design -
  - Section 810.2.1 Surface,
  - Section 810.2.2 Dimensions
  - Section 810.2.4 Slope
  - Section 903.1 General

Real Time Web Data

Bus location



Bus stop information



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