

Votran TDP

Transit improvement for
International Speedway Blvd.
Presentation to ISB Coalition
Planning Committee

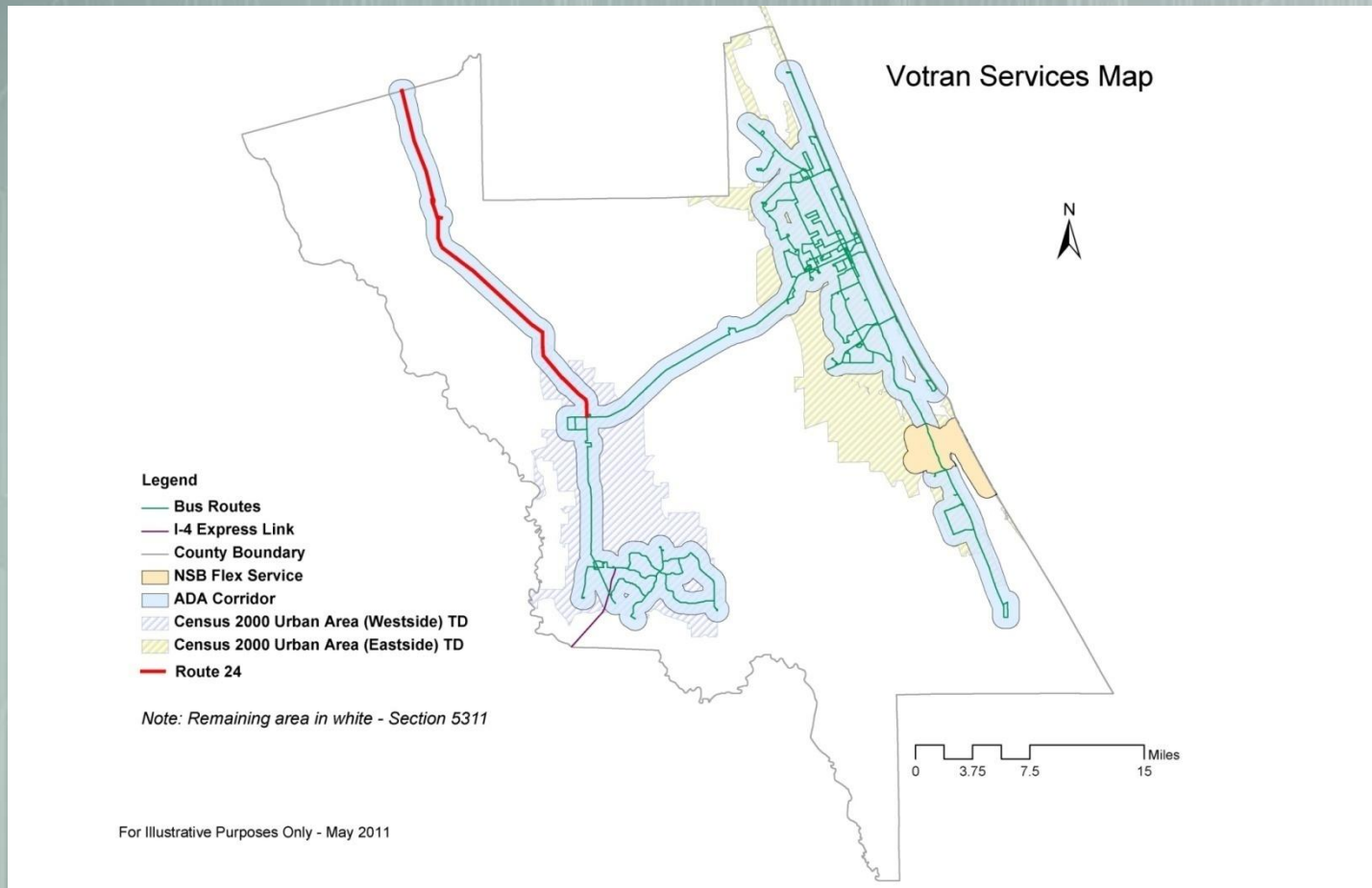
October 15, 2012

TDP Context

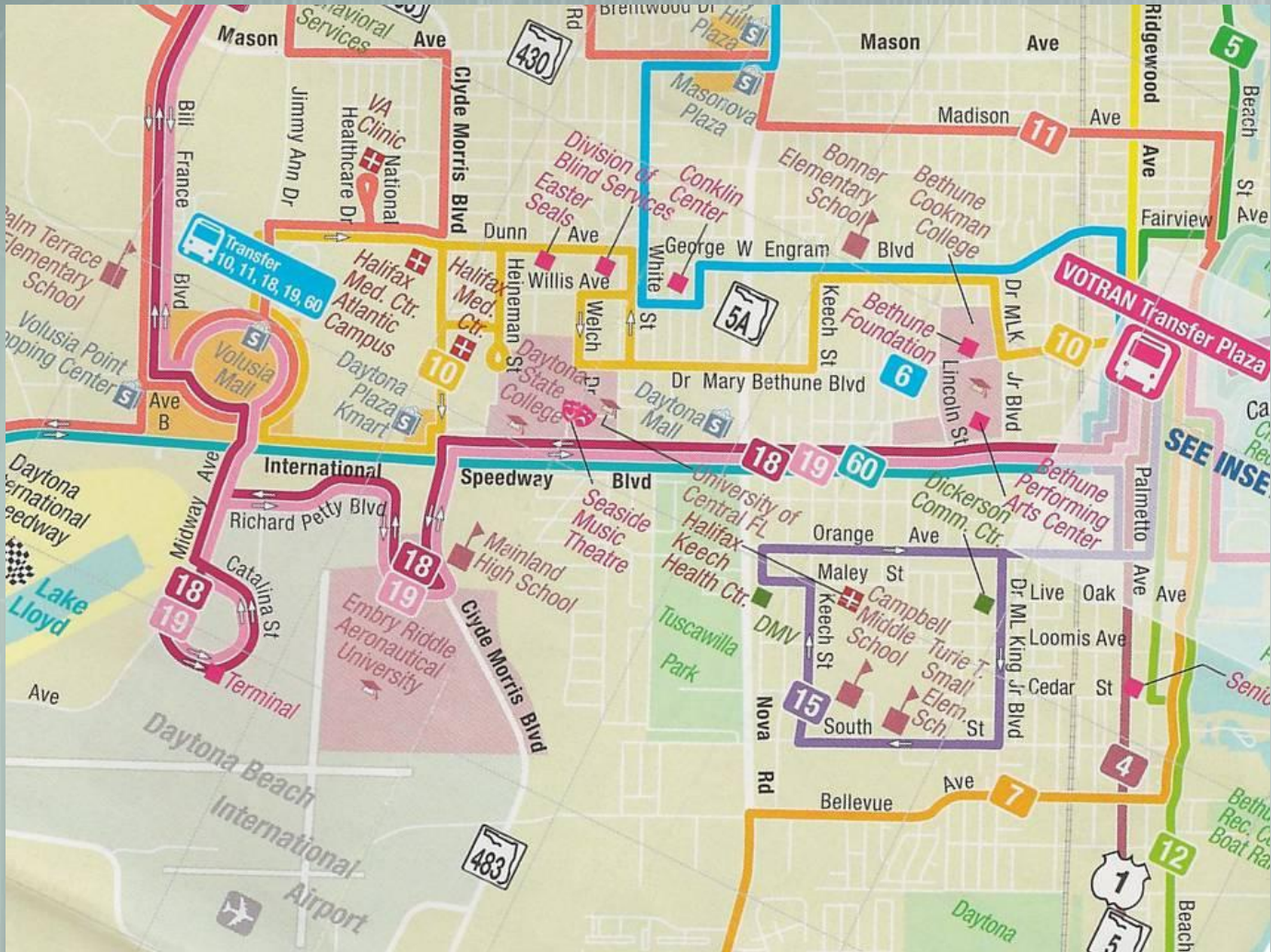
- **Geography:** Volusia County has 1,200 square miles with 16 cities
- **The Transit Development Plan (TDP)** is the community vision of transit improvements expected for the next ten years. It includes an array of operating, capital, planning and policy priorities. Votran uses the plan as the framework 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



Votran Service on ISB

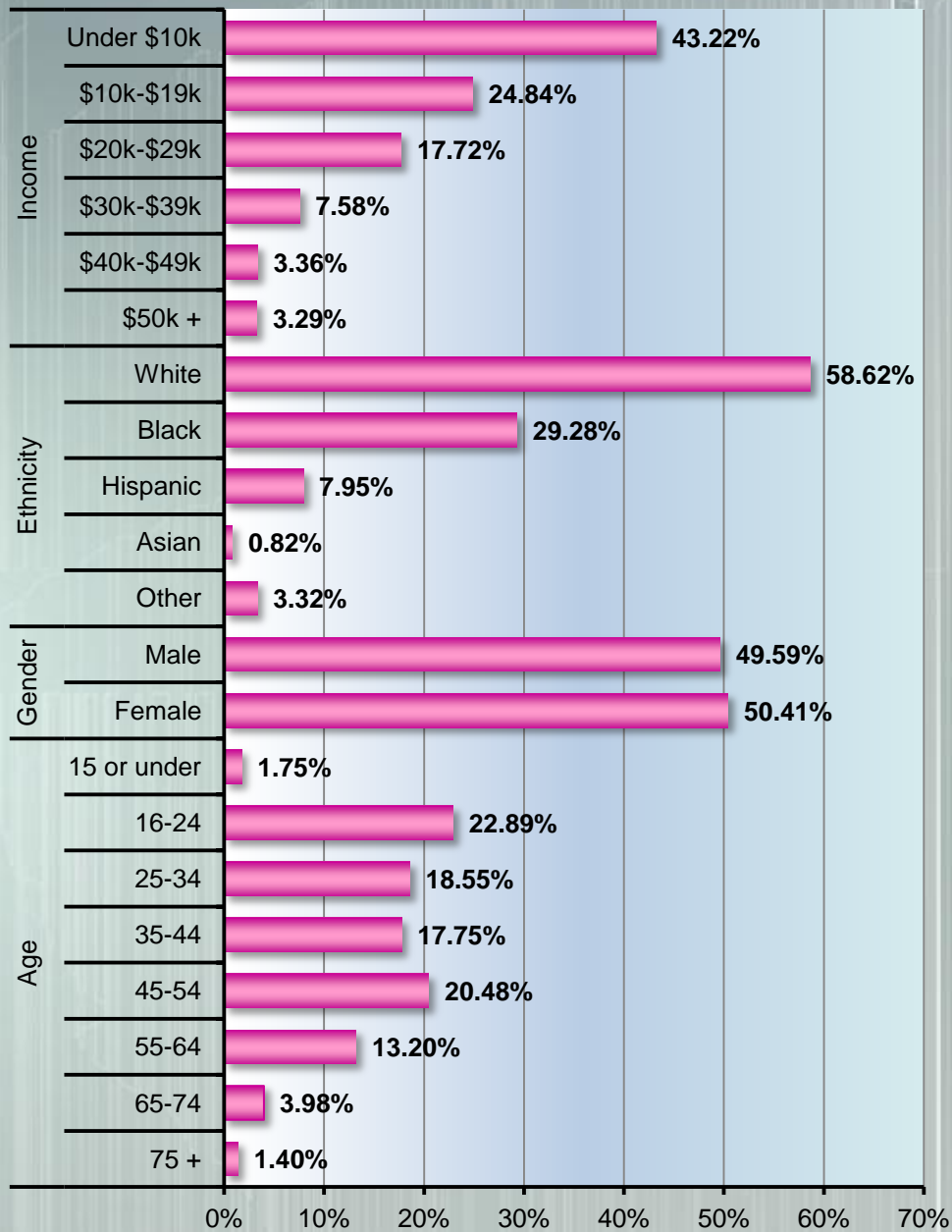


Route 10 has 30 minute frequency and where Routes 18/19 over lap with Route 60 there is 30 minute service

Existing Route Service

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



Relevant TDP Priorities

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

Corridor Approach

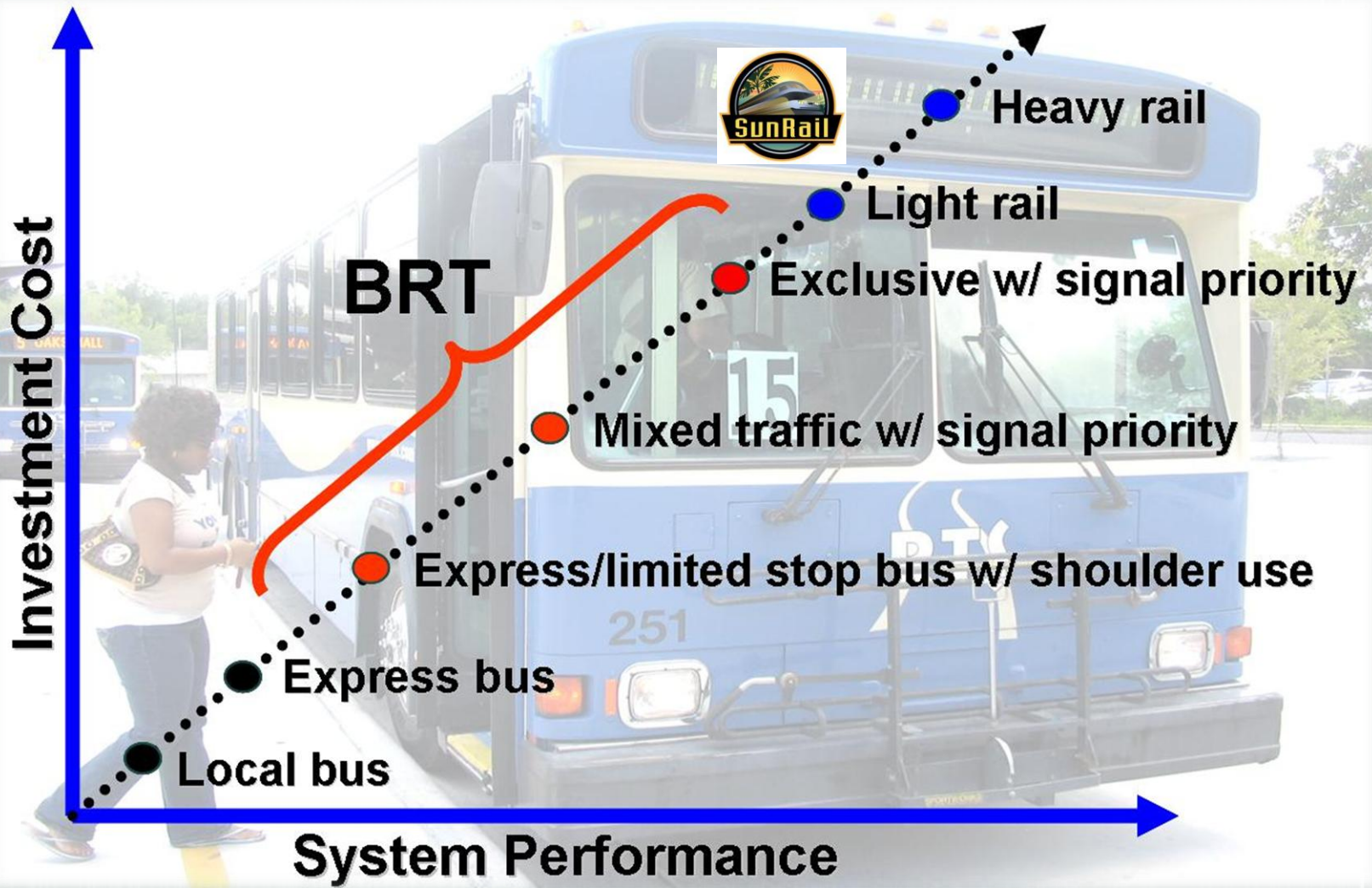
- The TDP described a group of most heavily-traveled corridors in the county with existing fixed-route bus service operating at high ridership levels. The ISB Corridor has been identified in the TDP as one of these corridors.
- A transit corridor is geographically focused to maximize the impact of investment, 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 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



Infrastructure Improvements

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

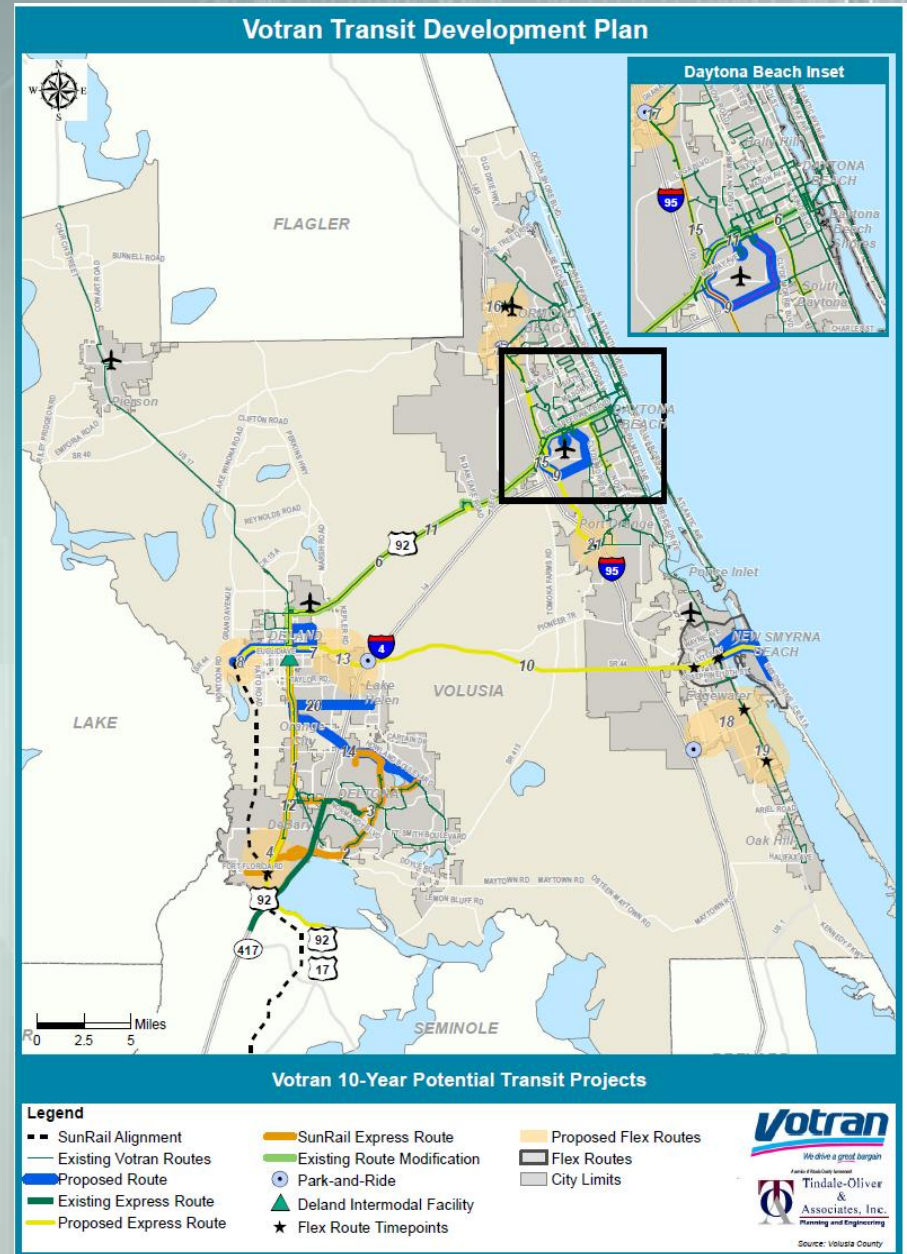
- **Information displays** may include “you are here” that profiles points of interest within walking distance of the stop. Schedule information could be provided through “next bus” technology.
- **Ticket Vending Machines (TVM)** are another passenger amenity for major stop locations and especially suited for super stops.
- **Traffic control features** such as signal prioritization and dedicated lanes.

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

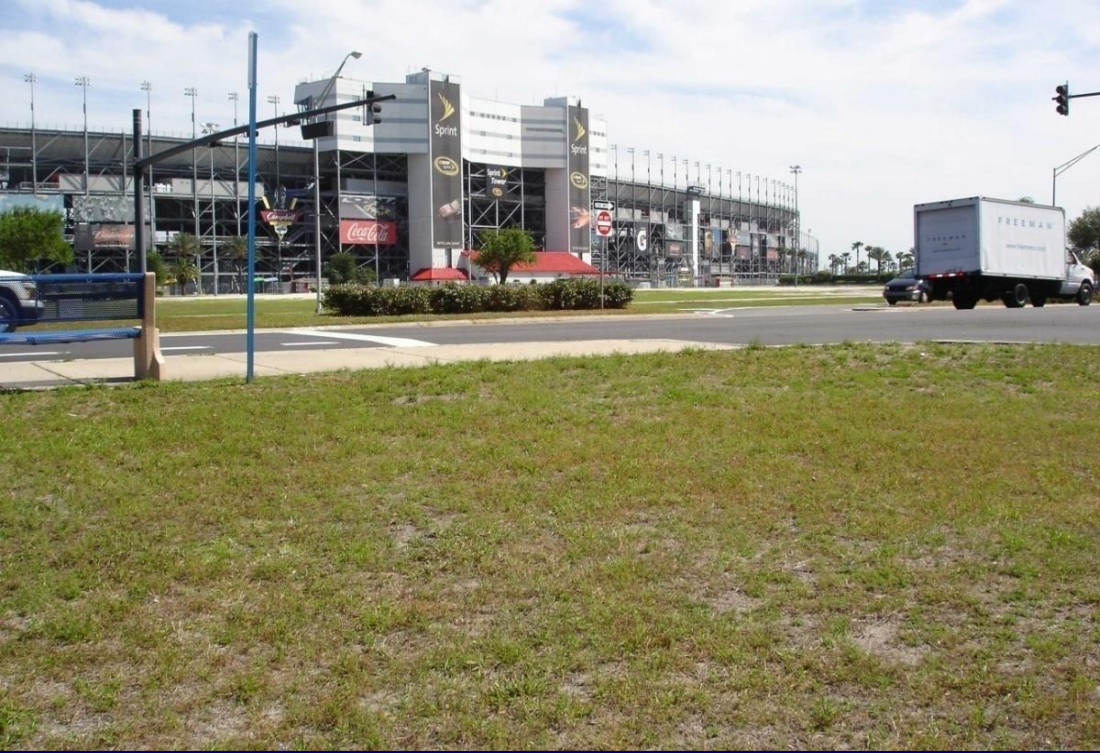
Future Direction - Map

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



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

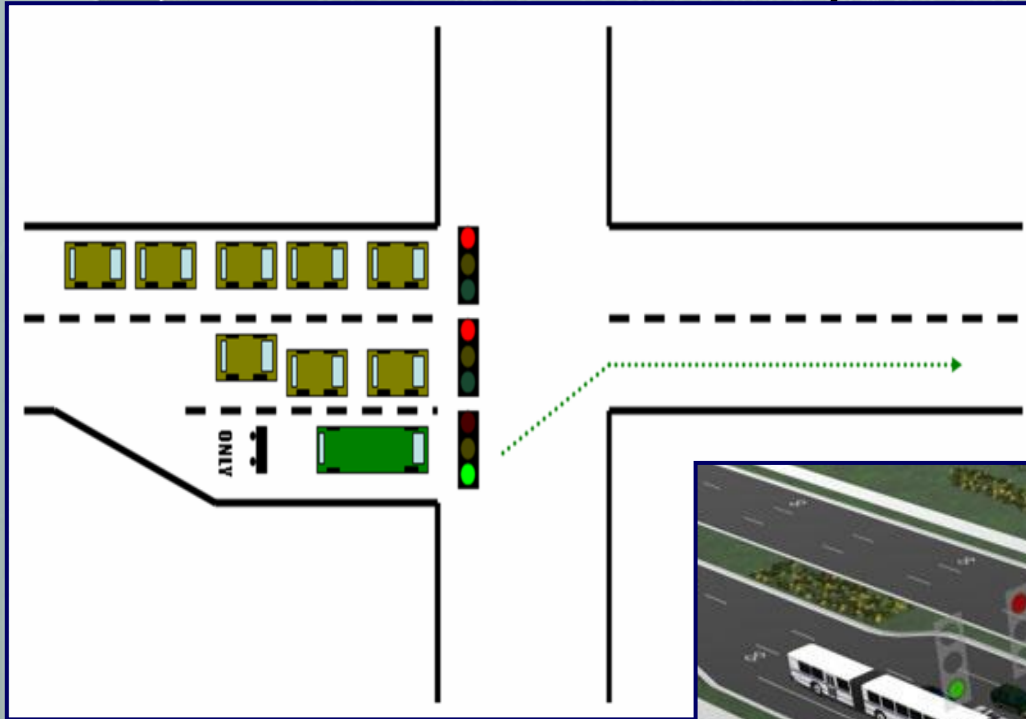
Mixed-use redevelopment begins with the construction of three –to-five story buildings along the service road. These buildings will house retail on the ground floor along with office and residential above.



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

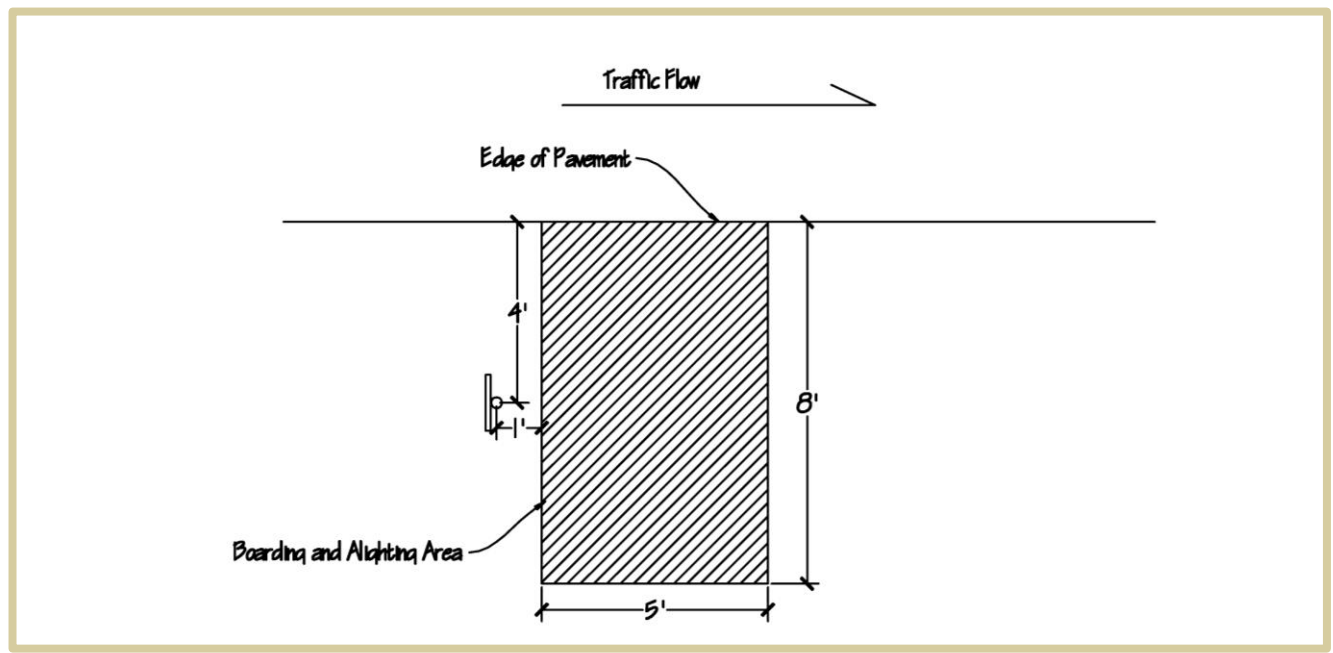
Standard Local Street Before BRT



Standard Local Street After BRT



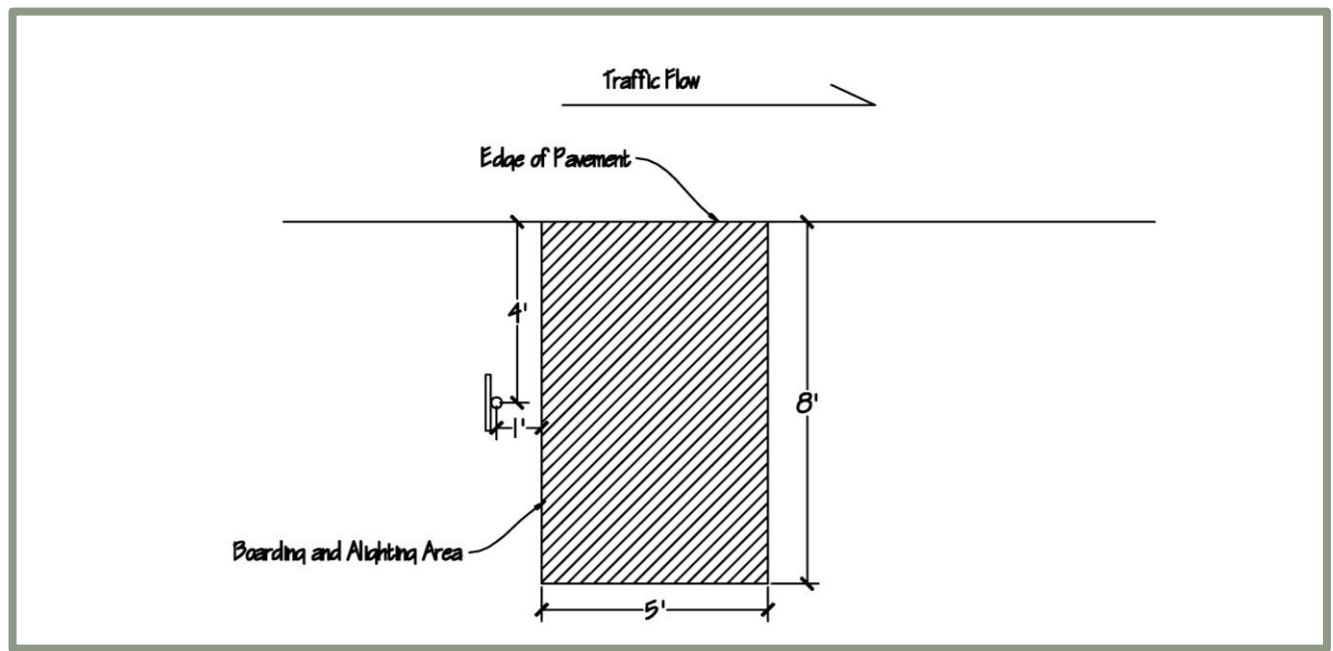
Bus Stop Pad Option 1



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



Basic Bus Stop Pad

2010 Dept. of Justice Standards for Accessible Design :

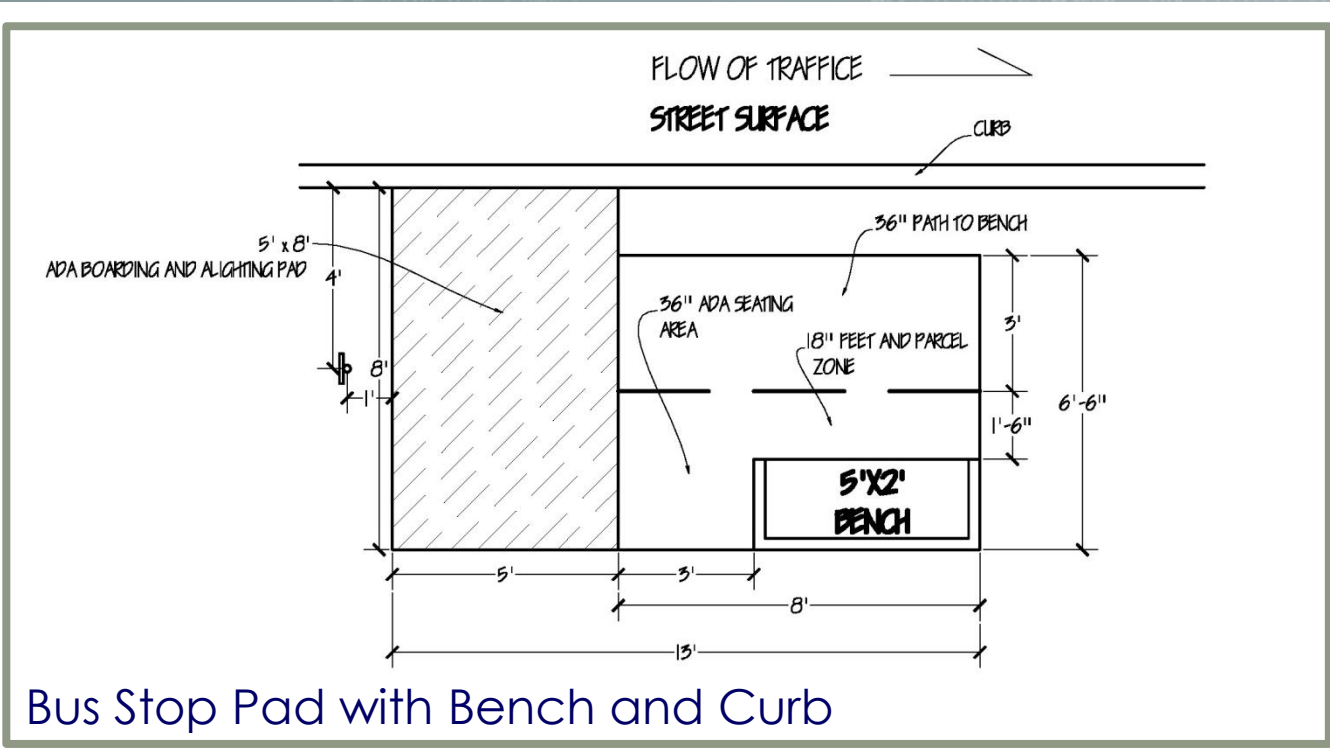
810.2.1 Surface. Bus stop boarding and alighting areas shall have a firm, stable surface.

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 than 1:48.810.3

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

Bus Stop Pad Option 2

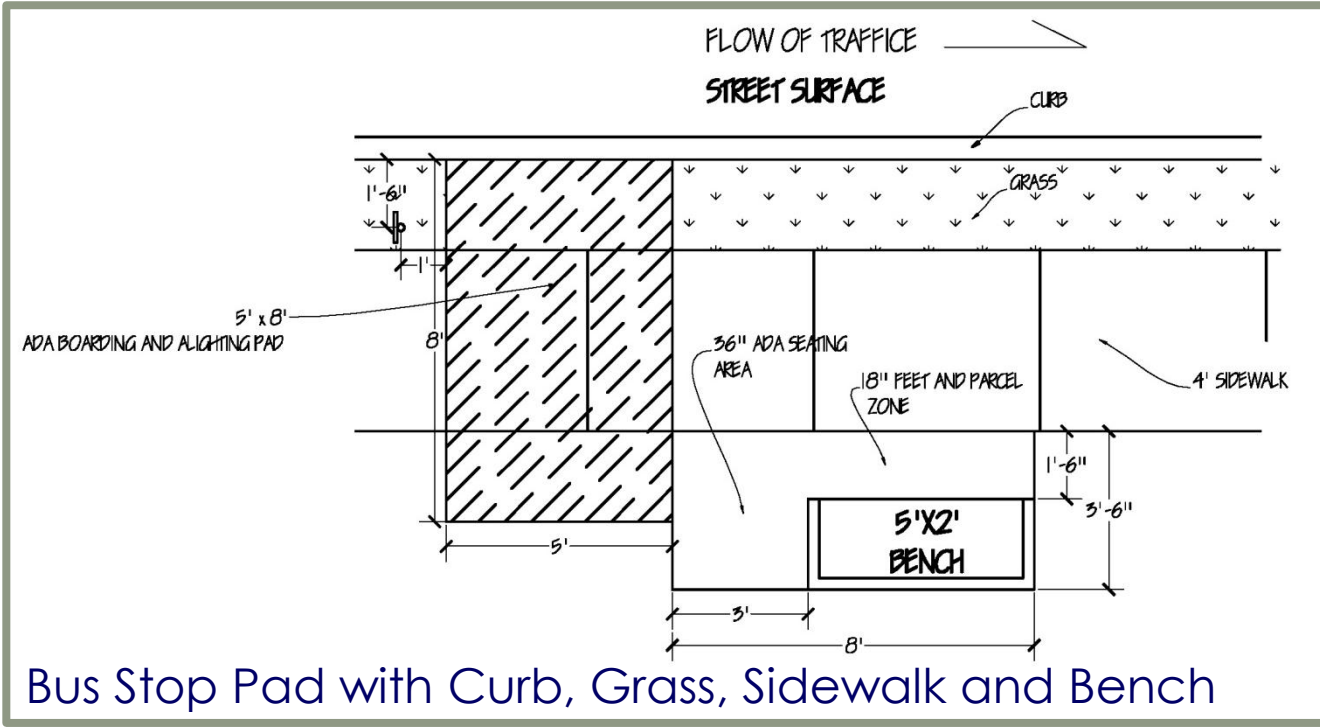


Bus Stop Pad with Bench and Curb

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

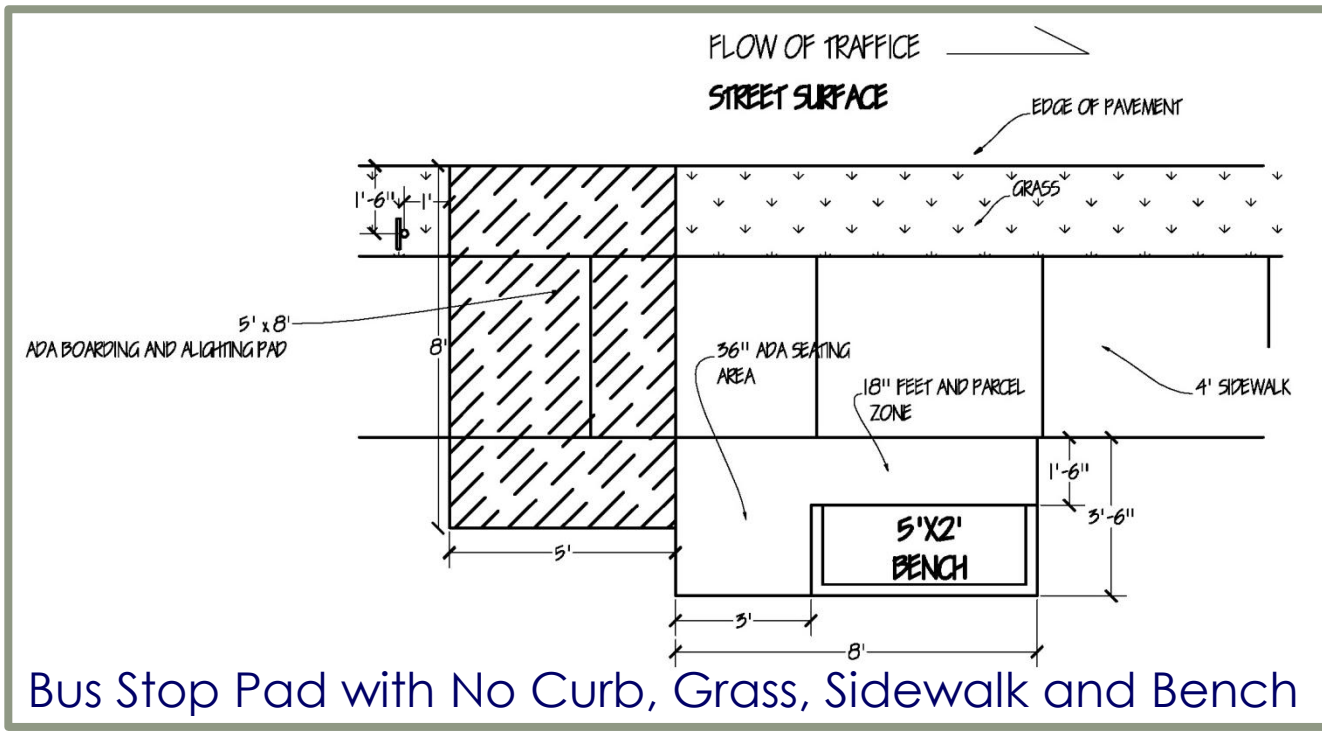


Bus Stop Pad with Curb, Grass, Sidewalk and Bench

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

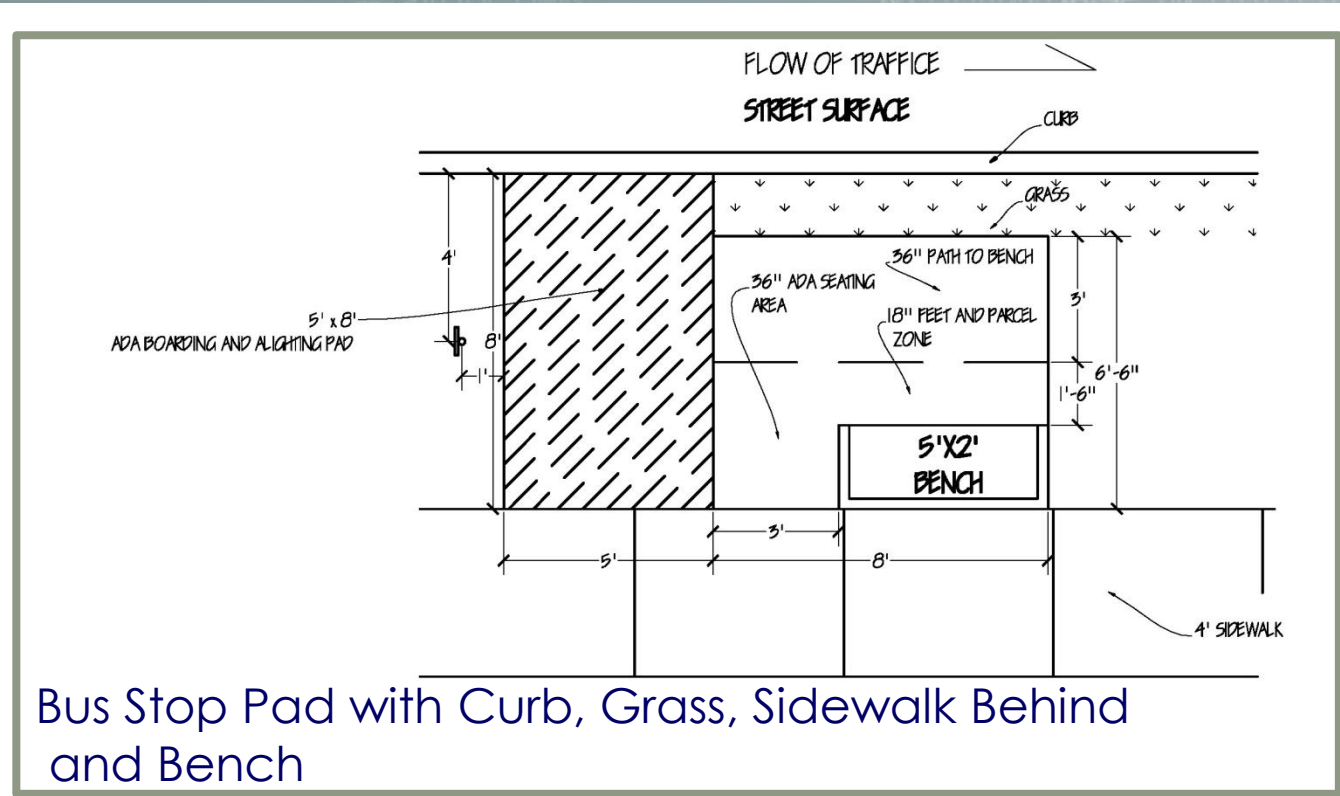
Bus Stop Pad Option 2



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

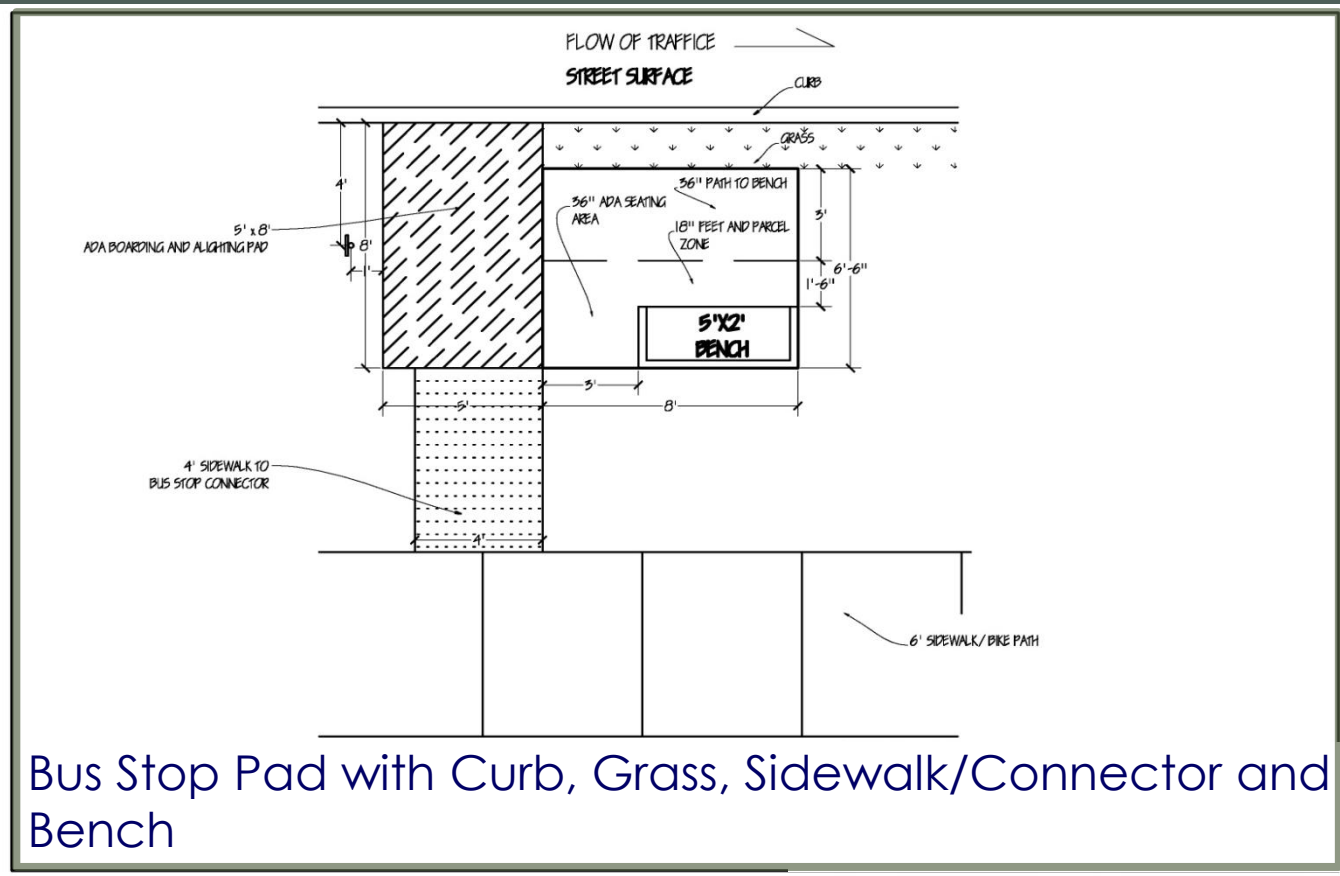


Bus Stop Pad with Curb, Grass, Sidewalk Behind and Bench

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

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*

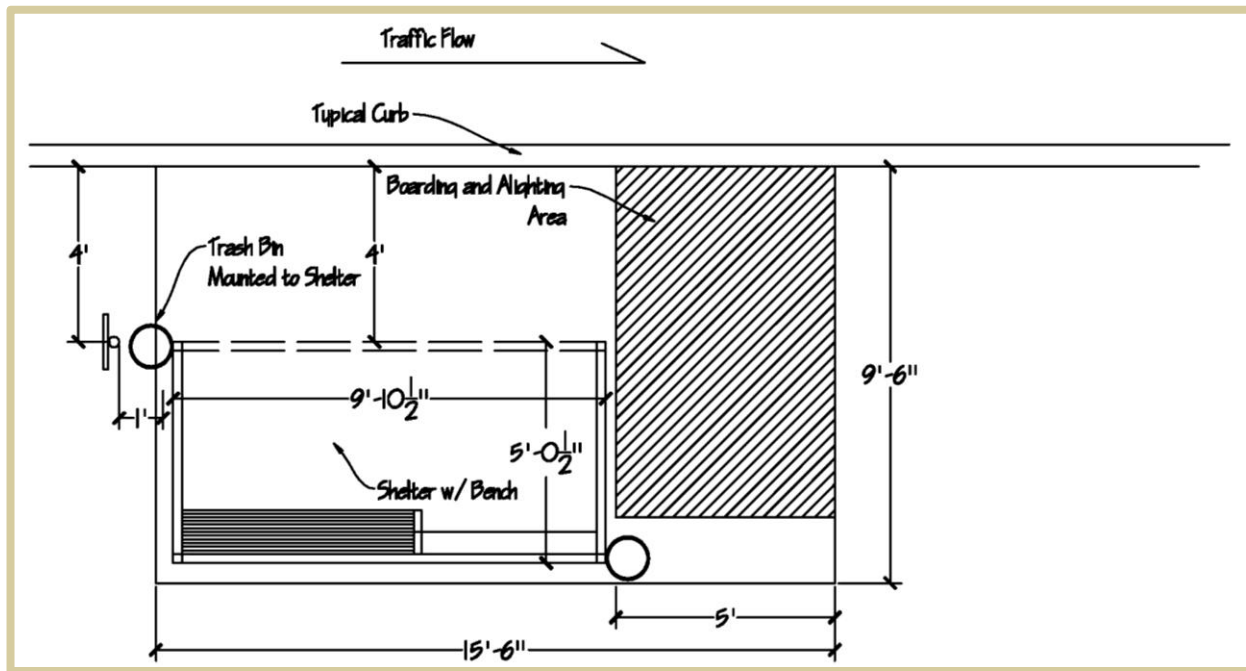
*Cost is based on as drawn diagram

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

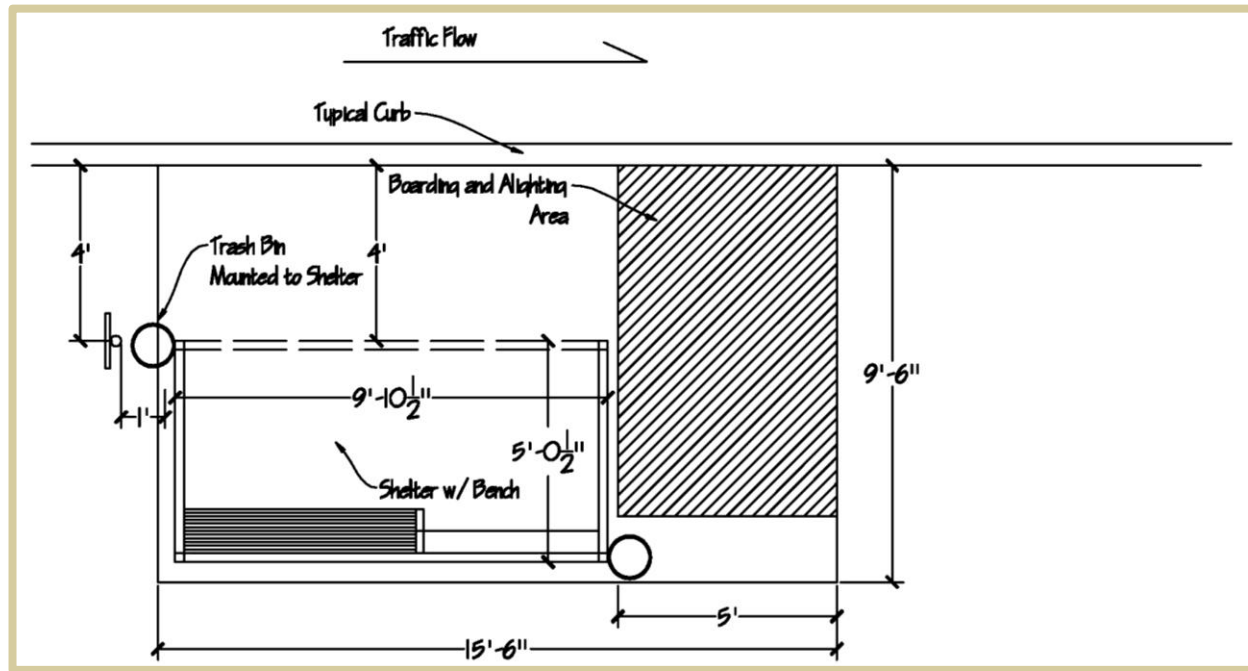
Bus Stop Pad Option 4



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



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

Votran Official Website - Volusia County's Public Transit System - Windows Internet Explorer

http://www.votran.org/

File Edit View Favorites Tools Help

Votran Official Website - Volusia County's Public Trans...

Votran
We drive a great bargain

Volusia County's public transit system
A Service of Volusia County Government


NEWS & EVENTS RIDING VOTRAN SPECIAL SERVICES COMMUTER ASSISTANCE
CAREERS BUSINESS OPPORTUNITIES ABOUT VOTRAN CONTACT US

translate - traduzca - traducez - traduca - übersetzen Sie - traduca

Text only
Welcome to Votran.org

Latest News
Votran Staff Awards at 2012 State Roadeo (Video)

more ▶

Start your own vanpool. 866.610.RIDE



Votran FLEX
New Smyrna Beach
 **Calculate your Savings**

Click to try Votran's Real Time schedule information

InfoPoint Route Tracker

Votran Commuter Assistance Program
More than 56,000 commuters live in Volusia County and work in Brevard, Orange and Seminole counties. Votran offers four Commuter Assistance Programs (CAP) which can benefit both employers and employees. These include: Volusia/Orlando I-4 Express; Park and Ride lots; RideShare matching; Van Pooling.

reThink
reThink your commute

SunRail


Ride Votran
to work, to play, to school every day.

Volusia County Florida

Votran · 950 Big Tree Road · South Daytona, Florida 32119-8815
(386) 356-7400 (Daytona Beach) (386) 434-6000 (Southwest Volusia) (386) 642-7000 (West Volusia) FAX (386) 356-7407

javascript:gotoshow() Internet 125%



Bus location

InfoPoint - Live estimated bus departures and bus locations. - Windows Internet Explorer

http://votranivl.availtec.com/

File Edit View Favorites Tools Help

★ Favorites ★ Suggested Sites M Free Hotmail Web Slice Gallery

InfoPoint - Live estimated bus departures and bus loc...

Votran Volusia County's Public Transit System

Routes Stops

Click on a stop for more info:

19 GRANADA

- 1018 N. A1A OB
- 1078 N. ATLANTIC OB
- 1089 GRANADA AVE. OB
- 121 E. GRANADA OB
- 1454 N. ATLANTIC OB
- 174 S. BEACH OB
- 1812 N. ATLANTIC OB
- 220 BILL FRANCE IB
- 2599 N. ATLANTIC OB
- 2700 N. ATLANTIC OB
- 2873 N. ATLANTIC OB
- 3072 N. ATLANTIC OB
- 346 BILL FRANCE IB
- 361 W. GRANADA WB
- 371 NORTH ATLANTIC OB
- 3RD ST. & PALMETTO IB
- 434 BILL FRANCE IB
- 555 W. GRANADA WB
- 715 S. ATLANTIC OB
- 764 BILL FRANCE IB
- A1A CARDINAL
- A1A & BROOKLINE AVE OB
- A1A & BYRON ELLINOR OB
- A1A & DRIFTWOOD OB

Map Satellite Hybrid

Tomoka State Park
Chelsea Lakes
Ormond Beach Municipal Airport
Ormond Professional Condo
Sandy Oaks
Shadow Crossings
Holly Hill
Eastbar Condo
Daytona Beach
Volusia
Daytona Beach

Map navigation controls: Home, Back, Forward, Print, Page, Safety, Tools, Help

Internet 125%

Bus stop information

InfoPoint - Live estimated bus departures and bus locations. - Windows Internet Explorer

http://votranivl.availtec.com/

File Edit View Favorites Tools Help

InfoPoint - Live estimated bus departures and bus loc...

Votran Volusia County's Public Transit System

Routes Stops

Click on a stop for more info:

19 GRANADA

- 1018 N. A1A OB
- 1078 N. ATLANTIC OB
- 1089 GRANADA AVE. OB
- 121 E. GRANADA OB
- 1454 N. ATLANTIC OB
- 174 S. BEACH OB
- 1812 N. ATLANTIC OB
- 220 BILL FRANCE IB
- 2599 N. ATLANTIC OB
- 2700 N. ATLANTIC OB
- 2873 N. ATLANTIC OB
- 3072 N. ATLANTIC OB
- 346 BILL FRANCE IB
- 361 W. GRANADA WB
- 371 NORTH ATLANTIC OB
- 3RD ST. & PALMETTO IB
- 434 BILL FRANCE IB
- 555 W. GRANADA WB
- 715 S. ATLANTIC OB
- 764 BILL FRANCE IB
- A1A CARDINAL
- A1A & BROOKLINE AVE OB
- A1A & BYRON ELLINOR OB
- A1A & DRIFTWOOD OB

Map Satellite Hybrid

Upcoming Departures from
DAYTONA BEACH INTL AIRPORT #1

ROUTE	DESTINATION	SDT	EDT
19 GRANADA	TRANSFER PLAZA	08:37	08:37
19 GRANADA	TRANSFER PLAZA	09:37	09:37
19 GRANADA	TRANSFER PLAZA	10:37	10:37

SDT = Scheduled Departure Time EDT = Estimated Departure Time
Last updated on: 2012-10-15 07:44

Done Internet 125%