Daytona Beach Greyhound Bus Terminal Connector

Introduction

Daytona Beach is a seasonal town with large groups of out-of-towners descending upon the city for various events, most notably for Speed weeks in early February when over 200,000 NASCAR fans come to attend the season-opening Daytona 500. Other events include the NASCAR Coke Zero 400 race in July, Bike Week and spring break in early March, Biketoberfest in mid October, and the Rolex 24 Hours of Daytona endurance race in January. Daytona Beach Greyhound provides one way and round trip bus transportation services to Jacksonville, Orlando, Miami, and other major cities around the state. The bus terminal includes a Ticket Office, a Western Union window, Security Lockers, and a Southern Komfort Taxi station and the terminal operates from 7:00 am to 10:30 pm. Daytona Beach Greyhound Bus Terminal Connector as shown in Figure 2E-1provides direct access for buses between the subject hub and I-95, a Florida Interstate Highway System facility.

The bus terminal meets distance criterion as the terminal is located greater than 50 miles from the nearest SIS hub of the same type, and meets Emerging SIS minimum size criteria as the terminal handles 50,000 interstate or interregional passengers per year.

Existing Conditions

The connector is a 5.1-mile segment and traverses US 92 and US 1. Land use along the connector is primarily retail and residential as shown in Figure 2E-2. VOTRAN Routes 9, 10, 11 and 60 are operational on the connector. Sidewalks are present along US 92 providing walk access from primarily retail facilities to fixed route VOTRAN service. Daily Level of Service (LOS) analysis for the segments of the connector was conducted using FDOT Generalized Quality Level of Service tables and is summarized in Table 2E-1. It indicates that segment of US 92 between Williamson Boulevard and Bill France Boulevard is currently operating deficiently. The results of PM peak-hour intersection LOS analysis conducted using SYNCHRO is shown in Table 2E-2. It indicates that the US 92 intersections, at Williamson Boulevard, Nova Road and at US 1 are operating deficiently. Existing intersection geometry including turn-radius, lane width, etc. is shown in Figures 2E-3a through 2E-3e.

Table 2E-1: Existing Daily Arterial LOS

Road Name	From	To	Section Length (mi)	Area Type	Facility Type	Lanes	Year 2007 AADT	T_{24} (%)	Peak Hour Directional Volumes	FDOT LOS Std.	Year 2007 LOS
US 92	I-95 Ramps	Williamson	0.71	urban	arterial	6	48,500	5.28	2,465	D	D
US 92	Williamson	Bill France	1.13	urban	arterial	6	49,500	5.12	2,622	D	E
US 92	Bill France	Clyde Morris	0.86	urban	arterial	6	42,500	5.28	2,198	D	D
US 92	Clyde Morris	Nova Road	0.93	urban	arterial	6	45,000	4.18	2,328	D	D
US 92	Nova Road	MLK Blvd.	0.78	urban	arterial	4	29,000	5.28	1,674	D	D
US 92	MLK Blvd.	US 1	0.38	urban	arterial	4	28,000	5.28	1,661	D	D
US 1	Orange Ave.	US 92	0.30	urban	arterial	4	32,000	5.45	1,552	D	D

Table 2E-2: Existing PM Peak-Hour Intersection LOS

Intersection	Adopted LOS	2007 Intersection LOS
I-95 NB off-ramp @ US 92	D	D
US 92 @ Indigo Dr.	D	C
US 92 @ Thames Rd.	D	A
US 92 @ Williamson Blvd.	D	E
US 92 @ Kennel Club	D	A
US 92 @ Fentress Blvd.	D	C
US 92 @ Best Buy	D	A
US 92 @ Industrial Pkwy.	D	A
US 92 @ Bill France Blvd.	D	C
US 92 @ Midway Ave.	D	C
US 92 @ Hagen Terrace	D	C
US 92 @ Clyde Morris Blvd.	D	D
US 92 @ White St.	D	C
US 92 @ Senaca Blvd.	D	B
US 92 @ Nova Rd.	D	E
US 92 @ Adams St.	D	B
US 92 @ Lincoln St.	D	B
US 92 @ Martin Luther King Blvd.	D	B
US 92 @ US 1	D	E

Planned/Programmed Improvements

FDOT adopted FY2008-2013 Work Program includes resurfacing of US 92 from 0.2 miles west of CR 415 to Clyde Morris Boulevard (SR 483) (Item # 4195951) and widening of Clyde Morris Boulevard from 4 lanes to 6 between Beville Road (SR 400) and US 92 (SR 600, International Speedway Blvd), including sidewalks (Item # 4081781).

Future Conditions and Recommendations

Figure 2E-4 shows the proposed and approved development projects in the immediate vicinity of the connector. Table 2E-3 provides summary of PM peak-hour intersection LOS analysis for the years 2020 and 2030 for both no-build and build conditions. The recommendations for build conditions are listed in Table 2E-4 for phased implementation.

Table 2E-3: Future PM Peak-Hour Intersection LOS

Intersection	Adopted LOS	2020 No-Build LOS	2020 Build LOS	2030 No-Build LOS	2030 Build LOS
I-95 NB off-ramp @ US 92	D	D	D	D	D
US 92 @ Indigo Dr.	D	C	C	D	D
US 92 @ Thames Rd.	D	A	A	B	B
US 92 @ Williamson Blvd.	D	F	D	F	D
US 92 @ Kennel Club	D	B	B	B	B
US 92 @ Fentress Blvd.	D	C	C	C	C
US 92 @ Best Buy	D	A	A	A	A
US 92 @ Industrial Pkwy.	D	A	A	B	B
US 92 @ Bill France Blvd.	D	D	D	D	D
US 92 @ Midway Ave.	D	D	D	D	D
US 92 @ Hagen Terrace	D	C	C	C	C
US 92 @ Clyde Morris Blvd.	D	E	D	E	D
US 92 @ White St.	D	D	D	D	D
US 92 @ Senaca Blvd.	D	B	B	B	B
US 92 @ Nova Rd.	D	E	D	F	D
US 92 @ Adams St.	D	B	B	B	B
US 92 @ Lincoln St.	D	B	B	B	B
US 92 @ Martin Luther King Blvd.	D	B	B	B	B
US 92 @ US 1	D	F	D	F	D

Table 2E-4: Daytona Beach Greyhound Bus Terminal Connector Recommended Improvements

Improvement Category	Phase I (Immediate Improvements)	2008 PDC Costs**	Phase II (2009 - 2020) Improvements	2008 PDC Costs**	Phase III (2021 - 2030) Improvements	2008 PDC Costs**
Geometric*	-	-	-	-	-	-
Operational	Add second SB right turn at Williamson Blvd. ***	$1,166,400	Add a second EB left turn lane at US 92 and Nova Rd.	$1,267,200	Add a second NB left turn lane at US 92 and Williamson Blvd. ***	$619,200
	Modify SB through and shared right turn to exclusive through and right turn lanes at US 92 and Nova Rd.(add a right turn lane)	$460,800	Modify SB through and shared right turn to exclusive through and right turn lanes at US 92 and US 1(add a right turn lane)	$388,800	Add a second SB left turn lane at US 92 and Williamson Blvd. ***	$403,200
			Modify NB through and shared right turn to exclusive through and right turn lane at US 92 and US 1(add a right turn lane)	$446,400	Modify NB through and shared right turn to exclusive through and right turn lanes at US 92 and Nova Rd.(add a right turn lane)	$475,200
Other	Directional signage improvements along the connector.	$50,000	-	-	-	-
Total	-	**$1,627,200**	-	**$2,102,400**	-	**$1,497,600**

* Assume WB-62FL design vehicle.
** Costs of right-of-way, right-of-way support, landscaping, lighting, utility relocations and wetland mitigation are not included.
*** These recommended improvements are common for Greyhound Bus Terminal Connector and Greyhound Daytona Beach Connector

Strategic Intermodal System (SIS) Highway Connectors Assessment

Daytona Beach Greyhound Bus Terminal Connector - Overview

Figure 2E-1

Roadway ID: 7906000
Beginning MP: 16.025
Ending MP: 20.804

Roadway ID: 7901000
Beginning MP: 32.593
Ending MP: 32.696

Daytona Beach Greyhound Bus Terminal

I-95 to US 92 to Ridgewood Ave to Entrance

Daytona Beach International Airport

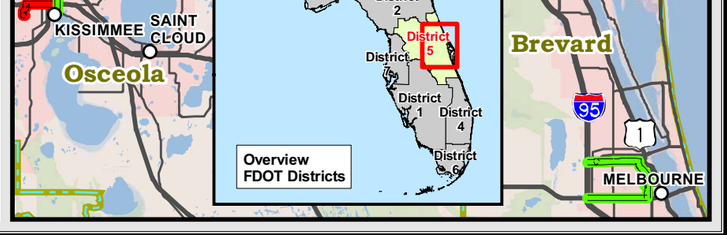
Daytona Beach

South Daytona

- SIS Highway Connector
- Emerging SIS Highway Connector
- Daytona Beach Intl. Airport Connector
- City Limits
- Bus Route & Route #*
- Bus Stop*

* SOURCE: VOTRAN 2009

0 0.4 0.8 1.2 Miles



Strategic Intermodal System (SIS) Highway Connectors Assessment

Daytona Beach Greyhound Bus Terminal Connector - Existing (Year 2007) Land Use

Figure 2E-2

SIS Highway Connector
Emerging SIS Highway Connector
Daytona Beach Intl. Airport Connector
City Limits
FEMA Floodplain*
Wetland*

0 0.4 0.8 1.2
Miles

Daytona Beach Greyhound Bus Terminal

I-95 to US 92 to Ridgewood Ave to Entrance

Daytona Beach International Airport

Daytona Beach

South Daytona

Existing Land Use*

* SOURCE: Florida Geographic Data Library (FGDL)

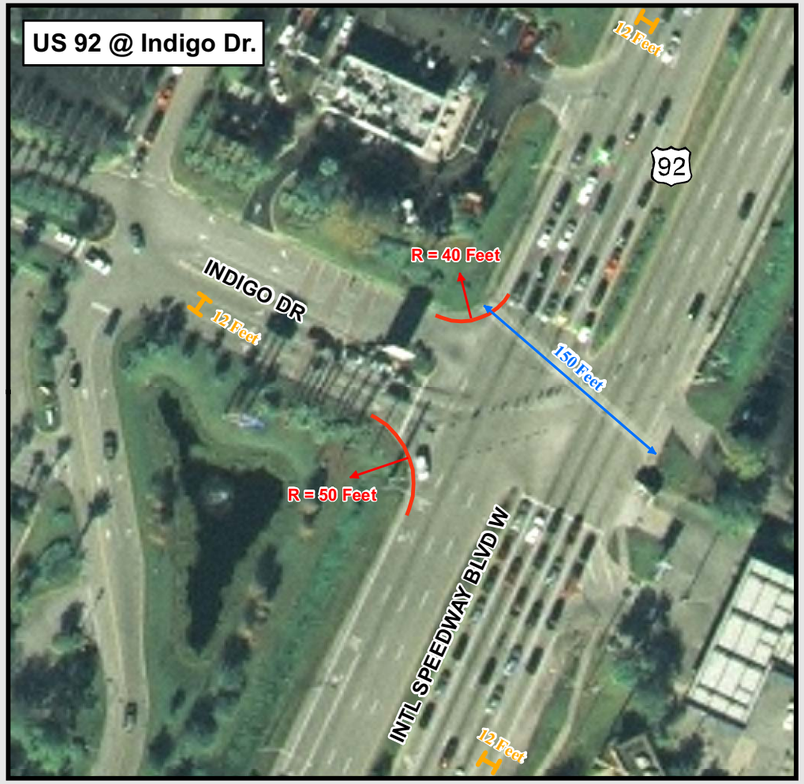
- Acreage not zoned for agriculture
- Agricultural
- Centrally assessed
- Industrial
- Institutional
- Mining
- Other
- Public / semi-public
- Recreation
- Residential
- Retail / Office
- ROW
- Vacant / non-residential
- Vacant residential
- Water

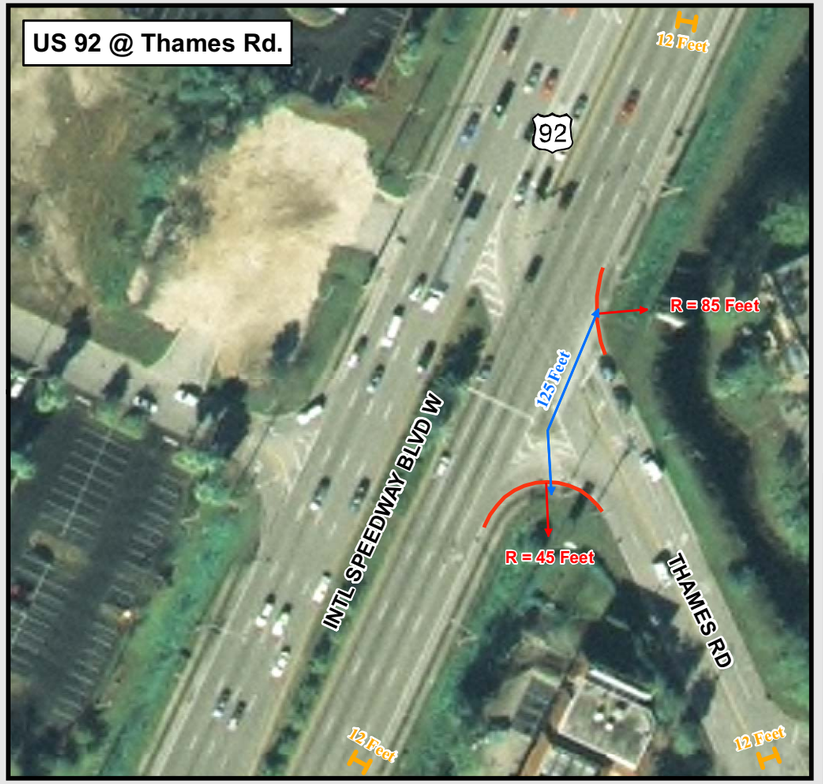
Daytona Beach Greyhound Bus Terminal Connector

Volusia
Seminole
Orange
Osceola
Brevard

Atlantic Ocean

Overview FDOT Districts





Strategic Intermodal System (SIS) Highway Connectors Assessment

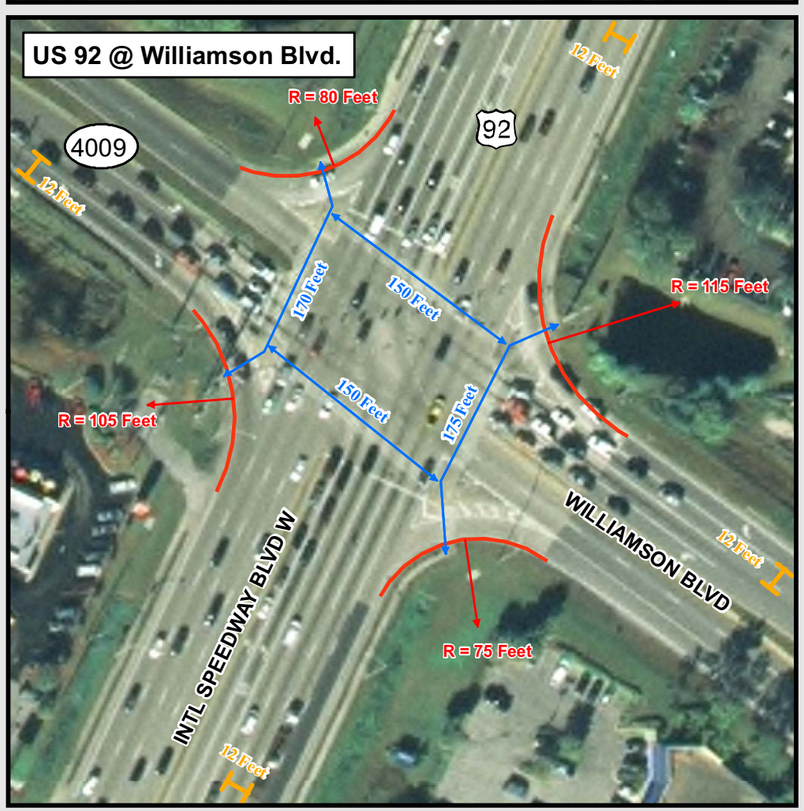
Daytona Beach Greyhound Bus Terminal Connector Intersection Geometry

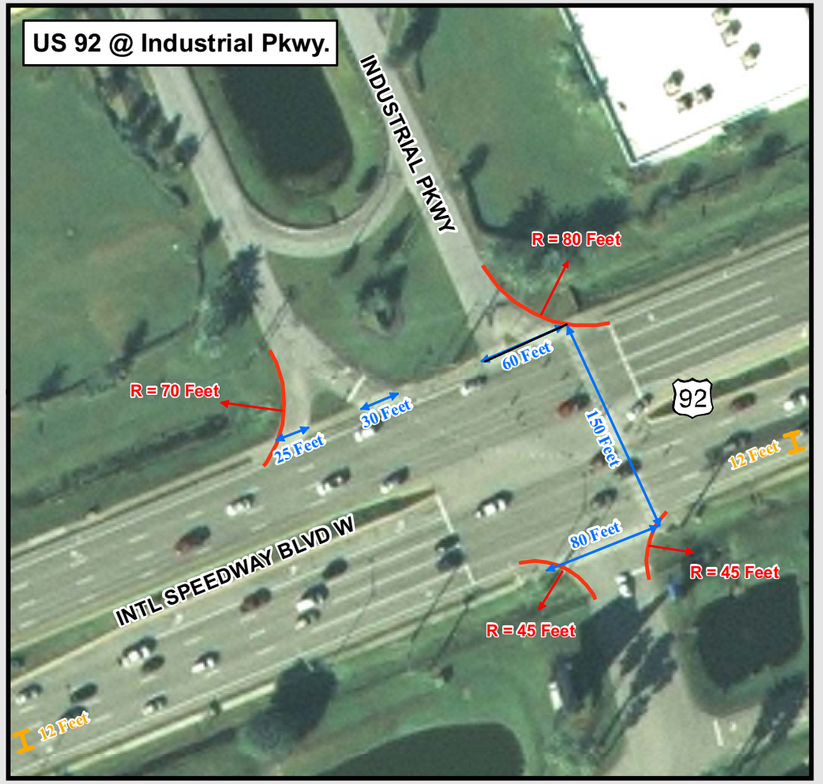
Figure 2E-3a

Scale: 1 Inch = 100 Feet

0 100 200 300

Feet





Strategic Intermodal System (SIS) Highway Connectors Assessment

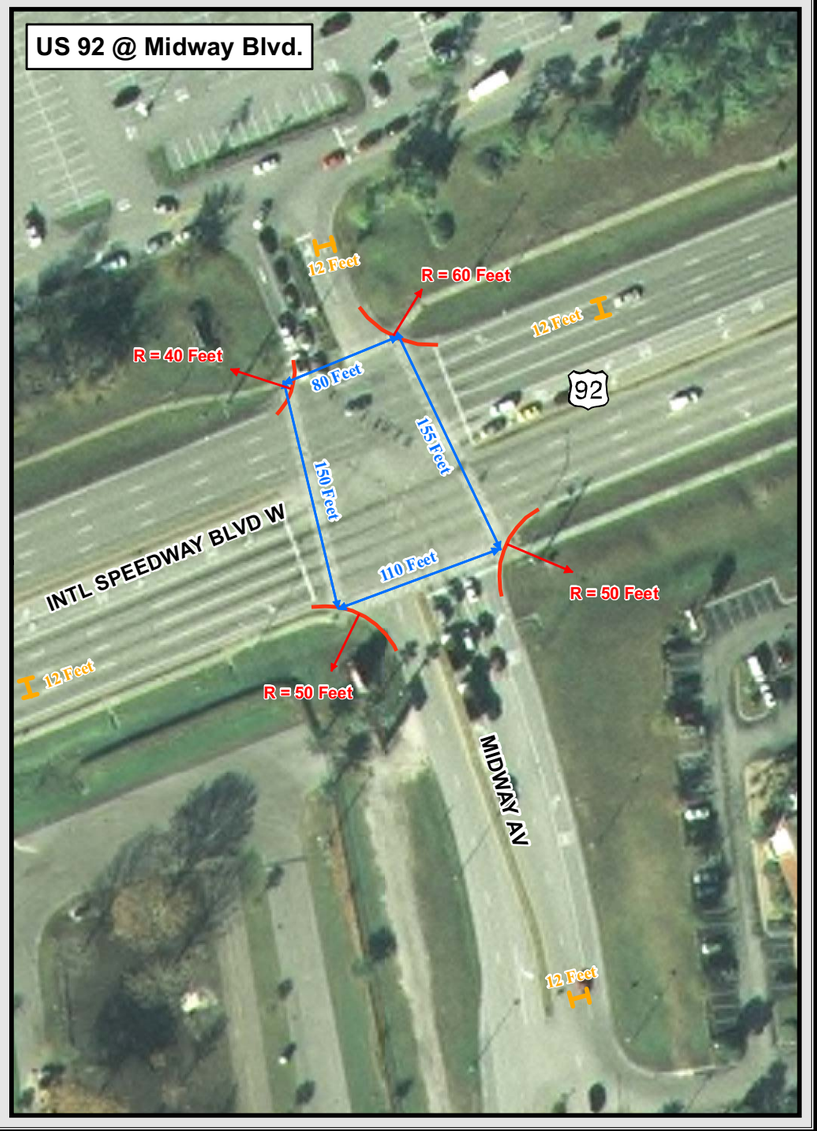
Daytona Beach Greyhound Bus Terminal Connector Intersection Geometry

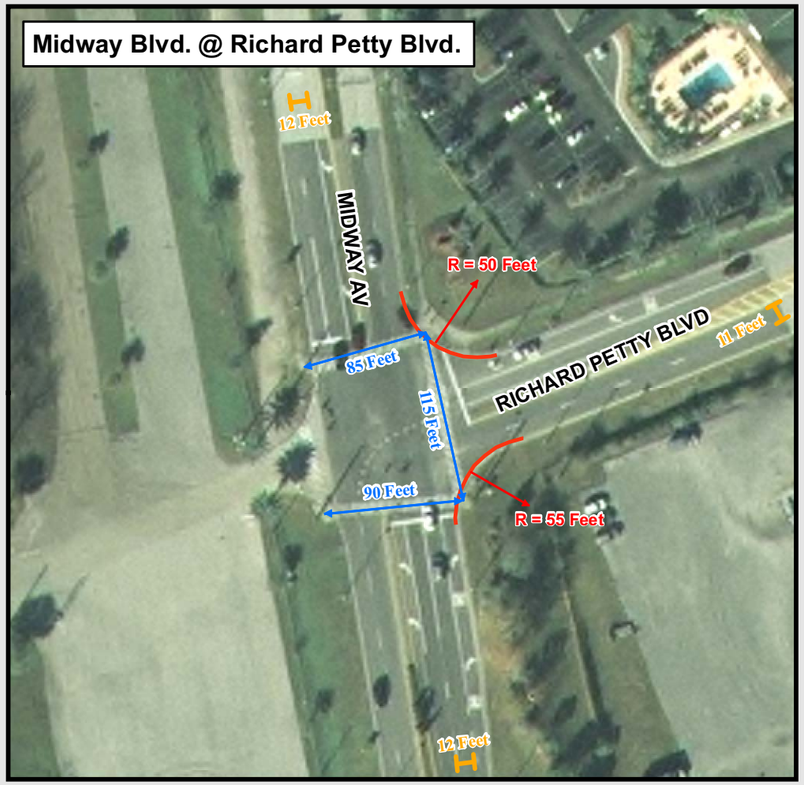
Figure 2E-3b

Scale: 1 Inch = 100 Feet

0 100 200 300

Feet





Strategic Intermodal System (SIS) Highway Connectors Assessment

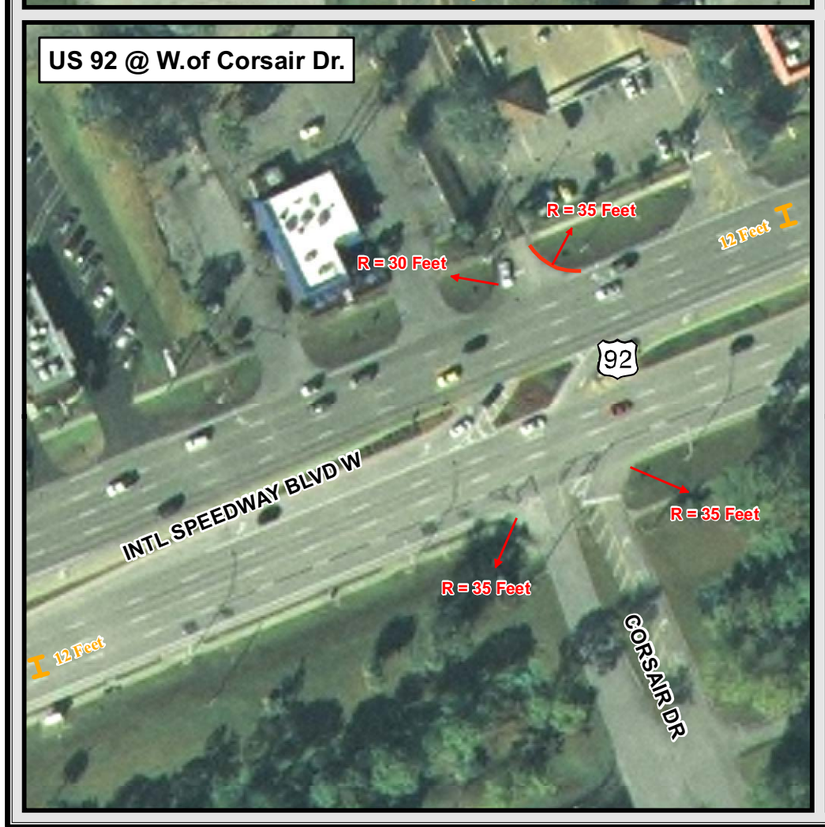
Daytona Beach Greyhound Bus Terminal Connector Intersection Geometry

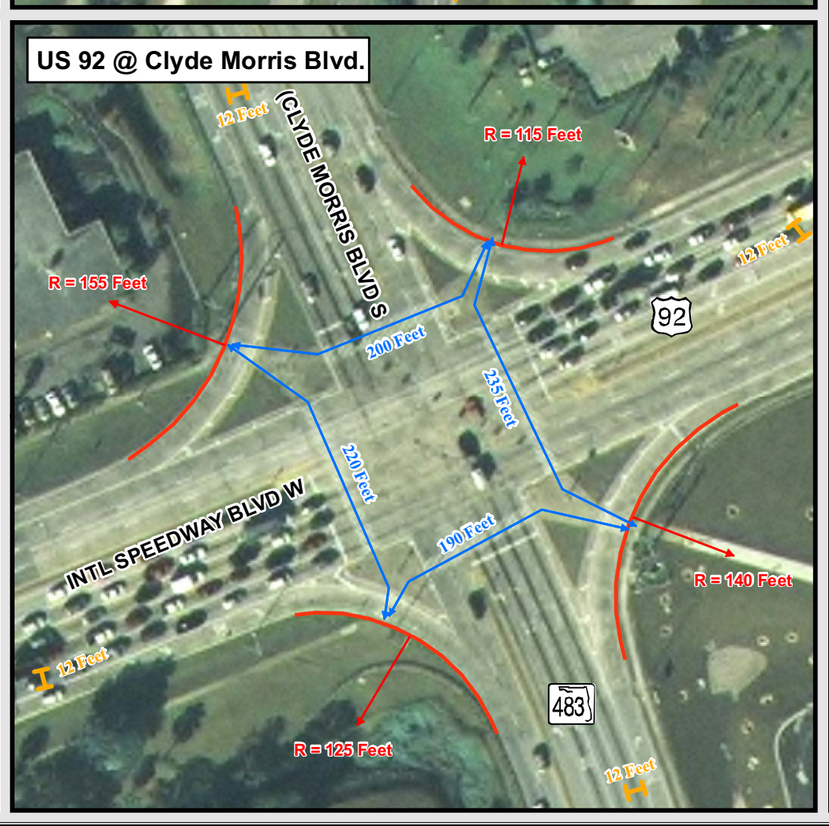
Figure 2E-3c

Scale: 1 Inch = 100 Feet

0 100 200 300

Feet





Strategic Intermodal System (SIS) Highway Connectors Assessment

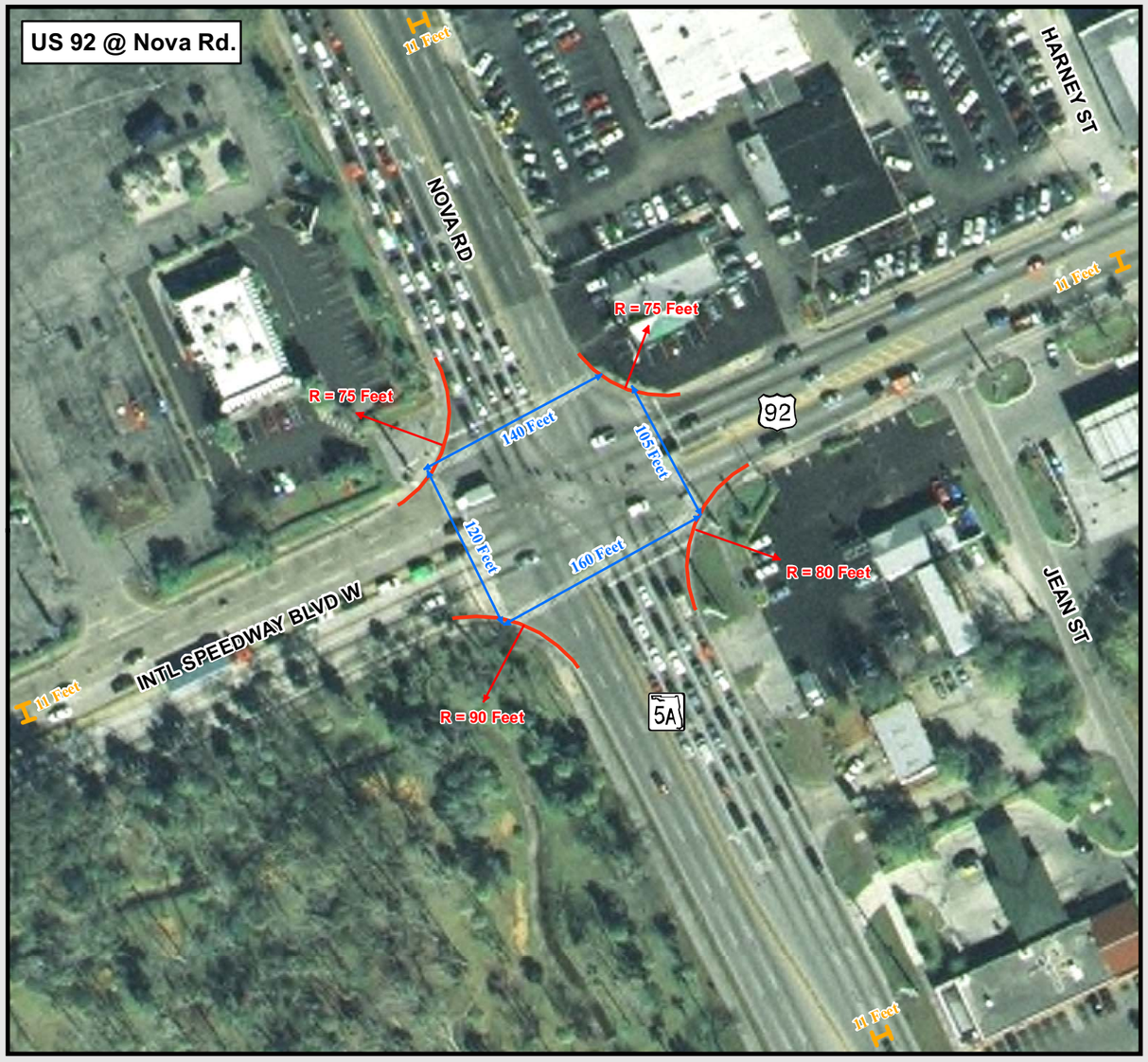
Daytona Beach Greyhound Bus Terminal Connector Intersection Geometry

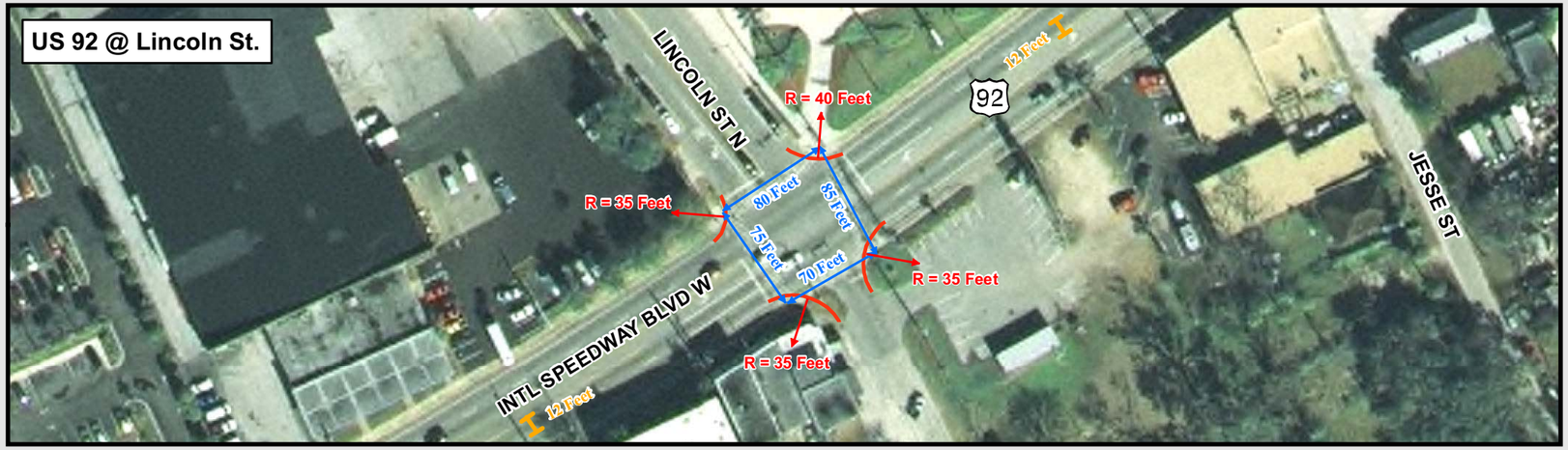
Figure 2E-3d

Scale: 1 Inch = 100 Feet

0 100 200 300

Feet





Strategic Intermodal System (SIS) Highway Connectors Assessment

Daytona Beach Greyhound Bus Terminal Connector Intersection Geometry

Figure 2E-3e

Scale: 1 Inch = 100 Feet

0 100 200 300

Feet

Strategic Intermodal System (SIS) Highway Connectors Assessment

Daytona Beach Greyhound Bus Terminal Connector - DRIs within 5 Miles from Connector

Figure 2E-4

- SIS Highway Connector
- Emerging SIS Highway Connector
- Daytona Beach Intl. Airport Connector
- City Limits
- Approved DRI*
- Proposed DRI*

* SOURCE: FDOT 2009

0 0.7 1.4 2.1 Miles

Daytona Beach Greyhound Bus Terminal

Halifax Harbor Marina

Daytona Beach International Airport

Daytona Beach Int'l Airport

Airport Executive Park

LPGA

Holy Hill

Adams Mark

Daytona Beach

South Daytona

Port Orange

CR 4019 (LPGA BLVD)

I-95 S

I-95 N

CR 483 (CLYDE MORRIS BLVD N)

CR 4017 (JIMMY ANN DR)

CR 4026 (8TH ST)

SR 5A (NOVA RD N)

CR 4015 (DERBYSHIRE RD)

US HWY 1 (RIDGEWOOD AV)

CR 4011 (RIVERSIDE DR)

HYDROLOGY

A1A

SR 430

SR 430 (MASON AV)

CR 4040 (MAIN ST)

CR 4040 (GEORGE W ENGRAM BLVD)

CR 430 (MASON AV)

CR 4009 (WILLIAMSON BLVD N)

SR 483 (CLYDE MORRIS BLVD N)

CR 4050 (ORANGE AV)

US HWY 92 (INT'L SPEEDWAY BLVD W)

US HWY 1 (RIDGEWOOD AV S)

SR 5A (NOVA RD S)

CR 4009 (WILLIAMSON BLVD S)

CR 4068 (BELLEVUE AV)

CR 415 (TOMOKA FARMS RD)

SR 400 (BEVILLE RD)

CR 433 (CLYDE MORRIS BLVD S)

CR 4072 (BIG TREE RD)

CR 4078 (REED CANAL RD)

I-4 W I-4 E