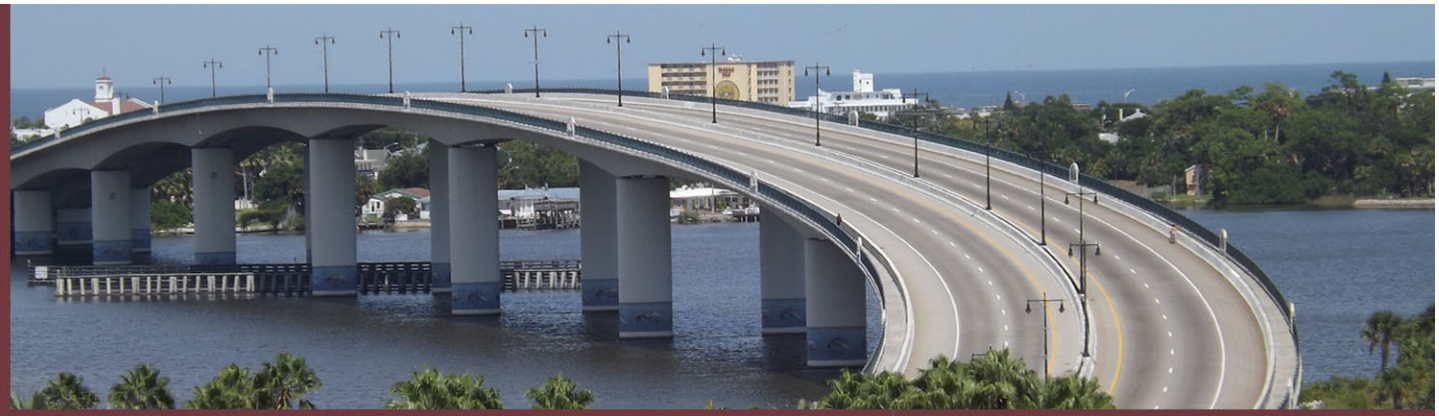

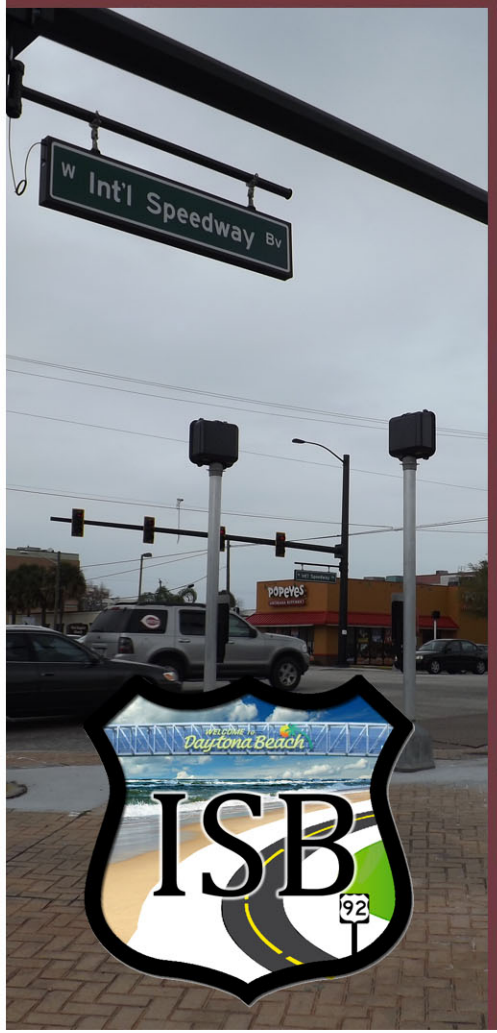

US 92 CORRIDOR MASTER MANAGEMENT PLAN

Final Report

November 2015

Prepared for:

Centennial FDOT 1915 ★ 2015

Prepared by Ghyabi & Associates, Inc.

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Appendix

1 INTRODUCTION

The United States Highway (US) 92/State Road (SR) 600/ International Speedway Boulevard (ISB) (collectively referred to as US 92/SR 600/ISB throughout the study) Corridor Master Management Plan (CMMP) is a Florida Department of Transportation (FDOT) project in collaboration with the International Speedway Boulevard Coalition (ISB Coalition), Volusia County, City of Daytona Beach, Daytona Beach International Airport, River to Sea Transportation Planning Organization (R2CTPO), Volusia County's Public Transit System (Votran), and other associated organizations.

The study area is centered on US 92/SR 600/ISB, located in the City of Daytona Beach, FL, between its intersections with I-4 on the west and SR A1A/Atlantic Avenue to the east. Figure 1 depicts the study area.

This report summarizes the recommended improvements and includes a Corridor Master Management Plan to include strategies for implementation and funding of the recommended improvements for the US 92/SR 600/ISB corridor. The project follows a series of six tasks, as shown below.

- Task 1.0: Public Involvement
- Task 2.0: Existing Conditions
- Task 3.0: Identification of Corridor Needs
- Task 4.0: Initial Corridor Assessment
- Task 5.0: Alternatives Evaluation
- **Task 6.0: Corridor Management Plan**

This project report addresses Task 6.0 and includes the following major sections:

- Purpose and Need
- Recommended Improvements
- Funding Options
- Implementation Strategies

This phase of the CMMP formulates an implementation strategy for advancing the recommendations identified in the Corridor Visioning Plan and Corridor Assessment Report. This document is the outcome of the visioning phase, including input received from the Project Visioning Team, to evaluate identified improvement strategies and provide further definition of the policy elements of the CMMP planning process. The recommendations illustrate the overall goals for the development of context sensitive improvements to ensure maximum effectiveness and return on investment of future transportation projects, given the rapid amount of new development under construction or proposed within the study area.

A summary of the alternatives comparison, supporting detail with respect to the engineering and environmental evaluations, project costs, policy considerations, and other supporting detail is provided.

A list of abbreviations used throughout the report is included in Appendix A.

Figure 1: Project Study Area

2 PURPOSE AND NEED

Although the US 92/SR 600/ISB corridor varies from the edges of rural Florida landscape to the urban development of a coastal destination, the need for multimodal accommodations is a uniform theme found in this corridor. The purpose of this study is to develop a framework that can ensure safe travel for all modes of transportation within the study corridor by applying the principles of context sensitive design, which have been useful in transforming corridors similar to this study area. In the future, this Master Plan will serve as a guiding document in the development of a balanced corridor between private sector and public sector improvements.

Many recent developments projects within the study area have been large retail outlets, which were designed with an automobile-context. The combination of large parcels with few connections between them adds to the difficulties encountered by bicyclists and pedestrians in the study area.

In addition, many area businesses cater specifically to tourists, who may visit the Daytona Beach area two or three times per year. It is important to provide a pleasant travel experience, both on and off road, to encourage visitors return to Daytona Beach in the future.

The CMMP identifies a range of solutions to address existing and future mobility needs and advance the long term vision for the study corridor. Incorporating context sensitive concepts, such as integrating transit service with a pedestrian and bike network that serves major destinations, will assist the area continue to keep its reputation as a major destination of Central Florida.

This illustration of the Midtown Master Plan's vision of ISB is one of several programmed improvements proposed within the CMMP's study area.

A Bethune-Cookman University student attempts to cross US 92/SR 600/ISB. A major purpose of this study is to develop a framework that ensures safe travel by all modes of transportation along the ISB corridor.

3 RECOMMENDED IMPROVEMENTS

3.1 SUMMARY

The recommended improvements include a variety of roadway and multimodal enhancements designed to create a more walkable urban thoroughfare that improves pedestrian, bicycle and transit facilities. The corridor has been divided into four segments:

- Segment 1 – the western most segment spanning from the I-4 On-Ramp to I-95.
- Segment 2 – begins just east of Segment 1 and includes the corridor from I-95 to SR 483/Clyde Morris Boulevard.
- Segment 3 – located between SR 483/Clyde Morris Boulevard and US 1/Ridgewood Avenue.
- Segment 4 – the area east of US 1/Ridgewood Avenue and continuing until SR A1A/Atlantic Avenue.

The overall project study area can be seen in Figure 1.

The Corridor Assessment Report outlines the recommended improvements for each of the four segments. In addition, improvements identified in previous studies, including the FDOT's *US 92 Pedestrian Connectivity Safety Assessment* and the *Intermodal Transit Station Study*, are recommended. Potential transit improvements that may be implemented, such as Premium Bus/Bus Rapid Transit (BRT) service, will be identified by Votran through an evaluation of transit alternatives according to MAP-21 provisions. FDOT is also currently undertaking the *Volusia Transit Connector Study* which includes the US 92/SR 600/ISB Corridor.

The *US 92 Pedestrian Connectivity Safety Assessment* recommended the construction of several sidewalks, shared use paths, and ADA ramps at high-use locations within the City of Daytona Beach. Although many of these locations are not directly within the right-of-way of US 92/SR 600/ISB, these locations do serve as major points of interest for similar trips to those taken along US 92/SR 600/ISB.

Suggestions from the *Intermodal Transit Station Study* indicated that the current study area does support the need for a second intermodal transit facility. Of the five potential locations, candidate "D", adjacent to the Daytona Beach International Airport, was the highest ranking location.

Several of the recommendations for the study include improvements which are incorporated into currently funded projects. These projects, as well as others that have been approved for funding and construction through the year 2019, can be seen within the Transportation Improvement Plan (TIP), which can be found in Appendix C.

Each project is assigned an identifying number. On page 6, Table 1 lists the project names and their designated numbers. In addition to the TIP, the City of Daytona Beach has designated streetscape projects along US 92/SR 600/ISB under City Project Number 2012-030.

Within these projects, specific improvements will be made to the US 92/SR 600/ISB corridor. Table 2, which begins on page 7, describes the improvements and identifies in which segment each occurs. Furthermore, the improvements are color-coded by the agency responsible for each improvement. Orange coordinates with FDOT projects and improvements associated with those projects. Green signifies the City of Daytona Beach, blue stands for private sector, and red represents Votran. Non-colored projects are those which have not been proposed or endorsed by any of the above agencies,

however, these improvements also contribute to the overall vision for the corridor.

Also depicted in the tables and maps are specific spot improvements for various locations throughout the corridor. These improvements have been identified in the Corridor Assessment Report and have met the evaluation criteria suggested in that report and throughout this project. Many of the suggested improvements are part of projects that are currently being constructed by FDOT. Furthermore, these improvements address unique issues within each of the four segments of the study area.

In Segment 1, the improvements are based on linking the corridor to nearby cities such as DeLand and Debary. This segment will serve as a gateway to many Central Florida attractions, and solidifying the connection to the transportation of Central Florida is a key recommendation to accomplishing that goal. Projects such as the new I-95 interchange and replacing the Tomoka River Bridges are key first steps for Segment 1. In addition, providing a shared use path within this Segment will help maintain the link to pedestrian destinations within Daytona Beach.

Within Segment 1, the City of Daytona Beach will be adding wayfinding signs where necessary.

Segment 2 is receiving an upgrade in pedestrian and bicycle facilities due to the US 92 Pedestrian Improvement Project. This 12-foot wide shared use path will accommodate a growing number of non-motorists who will be visiting new attractions such as One Daytona and Daytona Rising. In addition, enhancements will be made to the landscaping, street lighting and transit stops within the segment, which should foster a more inviting environment for pedestrians and bicyclists.

Within Segment 2, the City of Daytona Beach is the lead agency behind the ISB West Landscaping project from Midway Avenue to SR 483/Clyde Morris Boulevard. The city project number for this project is 2015-001. The City will also be adding wayfinding signs where necessary.

In Segment 3, many of the improvements are geared towards residents of the area who choose to travel by foot, bike or transit. A study should be done to determine if a pedestrian crossing near Highland Avenue is warranted, which may benefit Mainland High School and Daytona State College students. In addition, a number of raised median islands will also help alleviate the difficulties that pedestrians face when crossing US 92/ SR 600/ISB.

Within Segment 3, the City of Daytona Beach will be implementing a streetscape and landscape improvement project from SR 5A/Nova Road to Lincoln Street. The city project number for this project is 2011-027 and 2014-026. The City also has a landscaping project from SR 483/Clyde Morris Boulevard to SR 5A/Nova Road, which matches the project in Segment 2 with the City Project number of 2015-001. From Lincoln Street to US 1/Ridgewood Avenue, the City is doing a landscaping project and will be burying utilities. The City Project number is 2014-023. Lastly, the City will be adding wayfinding signs where necessary.

Segment 4 will be improved in a similar manner to Segment 3. In addition, bike lanes will be added at designated places where they were not previously installed. Sharrows instead of bike lanes will be added along US 92/SR 600/ISB for one block from Palmetto Avenue to Beach Street. Because this area is urban and a center of tourism for the region, additional landscaping will also be added to enhance the appearance of Segment 4.

Within Segment 4, the City of Daytona Beach will be implementing a streetscape project from US 1/Ridgewood Avenue to Beach Street. This project will include raised median islands, high visibility crosswalks, travel lanes being reduced to 11' and buried utility wires. This streetscape project will continue on the other side of the Halifax River up to SR A1A, with both sides receiving transit stop enhancements. The City Project number for this project is 2011-038. The City will also be creating a Halifax Greenway Trail from Beach Street to Riverfront Park. Finally, as with all other segments, the City will be adding wayfinding signs where necessary.

The recommended cross sections are depicted in Figures 6 through 13, which follow the Recommended and Programmed Improvements maps.

An illustration of a potential shared-use path at ISB and Thames Rd.

Key to Color Codes Used in Tables 1 and 2:

- Florida Department of Transportation (FDOT)
- City of Daytona Beach (CODB)
- Volusia County's Public Transit System (Votran)
- Private Sector
- ISB CMMP Recommendation

Table 1: FPID or City numbers for Existing Projects

Project Name	FPID Number	City Number
I-4 Widening from SR 44 to I-95	4084641	
US 92 widening from I-4 to Tomoka Farms Road	4226271	2008-007
Adaptive Signal Control	4347121	
I-95 Widening and Systems Interchange Reconstruction Design/Build	2427152	
US 92 Pedestrian Improvements	4348711	2014-035
US 92 Traffic Signal Mast Arms	4348831	
SR 483/Clyde Morris Boulevard Widening Study	4081781	
ISB - West Landscaping	4378571	2015-001
SR 5A/Nova Road Resurfacing	4324383	
US 92/SR 600/ISB Resurfacing	4324421	2013-059
US 92 Phase II Pedestrian Improvements and Landscaping	4044192	2011-027
ISB - West Phase II Streetscape		2014-023
Daytona Beach Wayfinding Program	4373111	2013-017
US 92 Drainage Improvements from Emmet Street to N. Charles Street	4368551	
ISB -East Streetscape		2011-038
Votran Service enhancements	4302851	
Halifax River Greenway Trail	4355341	
SR 441/Peninsula Drive Resurfacing	4306821	

Table 2: Recommended Improvements by Segment

Map No.	Segment	Improvement	FPID No.
1	1	I-4 widening from SR 44 to I-95	4084641
2	1	US 92 widening from 4 lanes to 6 lanes (I-4 to Tomoka Farms Road)	4226271
3	1	7' wide buffered bicycle lanes (I-4 to Tomoka Farms Road)	
4	1	10' wide WB Shared Use Path (Old DeLand Road to Tomoka Farms Road)	4226271
5	1	Add EB Left-Turn Lane at the intersection of US 92 and LPGA Boulevard	4226271
6	1	Add High Visibility Crosswalks at the intersection of US 92 and LPGA Boulevard	4226271
7	1	Add EB Sidewalk (5' wide) – LPGA Boulevard to Tomoka Farms Road	4226271
8	1	Replace two bridges at the Tomoka River	4226271
9	1	Close WB Left-Turn Lane at Hyde Storage Park	4226271
10	1	Extend EB Left-Turn Lane at the intersection of US 92 and Tomoka Farms Road	4226271
11	1	Add EB Left-Turn Lane at the intersection of US 92 and Tomoka Farms Road	4226271
12	1	Add High-Visibility Crosswalks at the intersection of US 92 and Tomoka Farms Road	4226271
13	1	Add Adaptive Signal Control at the intersection of US 92 and Tomoka Farms Road	4347121
14	1	Add NB Sidewalk (5' wide) on Tomoka Farms Road between Bellevue Road and McDonald's Restaurant	
15	1	Add WB Left-Turn Lane at the intersection of US 92 and Tomoka Farms Road	4226271
16	1	Add EB Sidewalk (5' wide) between Tomoka Farms Road and I -95	2427152
17	1	Add WB Shared Use Path (10' wide) between Tomoka Farms Road and I-95 NB Off-Ramp	
18	1	Add Wayfinding signs for major destinations	4373111
19	1	Add Landscaping between I-4 and I-95	
20	1	Upgrade transit stop enhancements between I-4 Ramp and I-95	
21	1	Install Accessible pedestrian signals at all signals in Segment One	
22	2	Reconstruct I-95 Interchange	2427152
23	2	Add High-Visibility Crosswalk at the intersection of US 92 and I-95 Off Ramp	
24	2	Add Adaptive Signal Control at the intersection of US 92 and I-95 NB Ramp	4347121
25	2	Add Landscaping between Tomoka Farms Road and Indigo Drive	2427155
26	2	Expand EB sidewalk width to 12' (I-95 NB Ramp to Indigo Drive)	
27	2	Add Adaptive Signal Control at the intersection of US 92 and Indigo Drive	4347121
28	2	Add High-Visibility Crosswalks at the intersection of US 92 and Indigo Drive	
29	2	Closed drainage system from Indigo Drive to Williamson Boulevard	
30	2	Expand EB and WB sidewalk width to 12' (Indigo Drive to Williamson Boulevard)	
31	2	Upgrade Street Lighting between Indigo Drive and Williamson Boulevard	

Table 2: Recommended Improvements by Segment

Map No.	Segment	Improvement	FPID No.
32	2	Add Adaptive Signal Control at the intersection of US 92 and Thames Road	4347121
33	2	Add High-Visibility Crossing at Thames Road	
34	2	Add Landscaping between Indigo Drive and Williamson Boulevard	
35	2	Upgrade transit stop enhancements between Indigo Drive and Williamson Boulevard	
36	2	Add Pedestrian channelization (fencing) between Indigo Drive and Williamson Boulevard	
37	2	Add Adaptive Signal Control at the intersection of US 92 and Williamson Boulevard	4347121
38	2	Add High-Visibility Crosswalks at the intersection of US 92 and Williamson Boulevard	4348711
39	2	US 92 and Williamson Boulevard intersection improvements	4348711
40	2	Extend WB Left-Turn Lane at the intersection of US 92 and Williamson Boulevard	4348711
41	2	Closed drainage system from Williamson Boulevard to Midway Avenue	4348711
42	2	Expand EB and WB sidewalk width to 12' (Williamson Boulevard to Midway Avenue)	4348711
43	2	Upgrade Street Lighting from Williamson Boulevard to Midway Avenue	4348711
44	2	Add Adaptive Signal Control at the intersection of US 92 and Turn One Drive	4347121
45	2	Add High-Visibility Crosswalks at the intersection of US 92 and Turn One Drive	
46	2	Add Landscaping between Williamson Boulevard and Midway Avenue	4348711
47	2	Upgrade transit stop enhancements between Williamson Boulevard and Midway Avenue	4348711
48	2	Pedestrian channelization (fencing) from Williamson Boulevard to Midway Avenue	4348711
49	2	Add Adaptive Signal Control at the intersection of US 92 and Fentress Boulevard	4347121
50	2	Add High-Visibility Crosswalks at the intersection of US 92 and Fentress Boulevard	
51	2	Add Adaptive Signal Control at the intersection of US 92 and Plaza Entrance	4347121
52	2	Expand bicycle lane width from 4' to 7' between I-95 Interchange and SR 483/Clyde Morris Boulevard	
53	2	Add Adaptive Signal Control at US 92 and Daytona Boulevard	4347121
54	2	Add High-Visibility Crosswalks at US 92 and Daytona Boulevard	
55	2	Add Pedestrian Overpass approximately 500' west of Bill France Boulevard	4348711
56	2	Add Adaptive Signal Control at the intersection of US 92 and Bill France Boulevard	4347121
57	2	Add High-Visibility Crosswalk at the intersection of US 92 and Bill France Boulevard	
58	2	Add Adaptive Signal Control at the intersection of US 92 and Midway Avenue	4347121
59	2	Add High-Visibility Crosswalk at the intersection of US 92 and Midway Avenue	
60	2	Replace span wire with mast arms at Midway Avenue	4348831
61	2	Expand EB and WB sidewalk width to 12' (Midway Avenue to SR 483/Clyde Morris Boulevard) – CODB ISB Streetscape Midway Avenue to SR 5A/Nova Road	
62	2	Closed drainage system from Midway Avenue to SR 483/Clyde Morris Boulevard – CODB ISB Streetscape Midway-SR 5A/Nova Road	

Table 2: Recommended Improvements by Segment

Map No.	Segment	Improvement	FPID No.
63	2	Upgrade Street Lighting from Midway Avenue to SR 483/Clyde Morris Boulevard – CODB ISB Streetscape Midway Avenue –SR 5A/Nova Road	
64	2	Add Adaptive Signal Control at the intersection of US 92 and Hagen Terrace	4347121
65	2	Add High-Visibility Crosswalks at the intersection of US 92 and Hagen Terrace – CODB ISB Streetscape Midway Avenue-SR 5A/Nova Road	
66	2	Add landscaping from Midway Avenue to SR 483/Clyde Morris Boulevard – CODB ISB Streetscape Midway Avenue-SR 5A/Nova	4378571
67	2	Upgrade transit stop enhancements between Midway Avenue and SR 483/Clyde Morris Boulevard – CODB ISB Streetscape Midway-SR 5A/Nova Road	
68	2	Bury utilities from Midway Avenue to SR 483/Clyde Morris Boulevard – CODB ISB Streetscape Midway Avenue-SR 5A/Nova Road	
69	2	Pedestrian channelization (fencing) from Midway Avenue to SR 483/Clyde Morris Boulevard	
70	2	Add Adaptive Signal Control at the intersection of US 92 and SR 483/Clyde Morris Boulevard	4347121
71	2	Add High-Visibility Crosswalks at the intersection of US 92 and SR 483/Clyde Morris Boulevard	
72	2	New 4’ bicycle lanes on US 92 at the intersection with SR 483/Clyde Morris Boulevard	
73	2	Replace span wire with mast arms at SR 483/Clyde Morris Boulevard	4348831
74	2	Widen SR 483/Clyde Morris Boulevard from 4 lanes to 6 lanes	4081781
75	2	New 4’ bicycle lanes on SR 483/Clyde Morris Boulevard	4081781
76	2	Add SB Sidewalk (5’ wide) on SR 483/Clyde Morris Boulevard north of US 92	4081781
77	2	Add SB Shared Use Path (12’ wide) on SR 483/Clyde Morris Boulevard south of US 92	4081781
78	2	Add Wayfinding signs for major destinations	4373111
79	2	Install Accessible pedestrian signals at all signals	
80	3	Widen EB and WB sidewalks from 5’ to 7’ from SR 483/Clyde Morris Boulevard to SR 5A/Nova Road	
81	3	Reduce travel lane width from 11’4” to 11’ from SR 483/Clyde Morris Boulevard to SR 5A/Nova Road	
82	3	Reduce raised median width from 22’ to 18’ from SR 483/Clyde Morris Boulevard to SR 5A/Nova Road	
83	3	Additional study for improved pedestrian crossing between Highland Avenue and Central Avenue	
84	3	Expand bicycle lane width from 4’ to 7’ between SR 483/Clyde Morris Boulevard and SR 5A/Nova Road	
85	3	Add Landscaping between SR 483/Clyde Morris Boulevard & SR 5A/Nova Road – (CODB Streetscape)	4378571
86	3	Bury utilities from SR 483/Clyde Morris Boulevard to SR 5A/Nova Road	
87	3	Add WB Left-Turn Lane at the intersection of US 92 and Hilton Avenue	
88	3	Add High-Visibility Crosswalks at the intersection of US 92 and White Street	
89	3	Add Adaptive Signal Control at the intersection of US 92 and White Street	4347121

Table 2: Recommended Improvements by Segment

Map No.	Segment	Improvement	FPID No.
90	3	Add High-Visibility Crosswalks at the intersection of US 92 and Seneca Street	
91	3	Add Adaptive Signal Control at the intersection of US 92 and Seneca Street	4347121
92	3	Extend EB Right-Turn Lane between Seneca Street and SR 5A/Nova Road	
93	3	Add High-Visibility Crosswalks at the intersection of US 92 and SR 5A/Nova Road	
94	3	Add Adaptive Signal Control at the intersection of US 92 and SR 5A/Nova Road	4347121
95	3	Improve bicycle connectivity on SR 5A between US 92 and Orange Avenue	
96	3	Mill and resurface SR 5A/Nova Road from Beville Road to US 92	4324383
97	3	Mill and resurface US 92 from SR 5A/Nova Road to US 1/Ridgewood Avenue	4324421
98	3	CODB ISB – West Streetscape Phase II Pedestrian improvements and landscaping from SR 5A/Nova Road to Lincoln Street	4044192
99	3	Replace span wire with mast arms at the intersection of US 92 and Adams Street	4348831
100	3	Add High-Visibility Crosswalks at the intersection of US 92 and Adams Street	4324421
101	3	Add Adaptive Signal Control at the intersection of US 92 and Adams Street	4347121
102	3	Raised median islands, where feasible, between SR 5A/Nova Road to US 1/Ridgewood Ave	
103	3	Add Adaptive Signal Control at the intersection of US 92 and Lincoln Street	4347121
104	3	Add Adaptive Signal Control at the intersection of US 92 and Dr. MLK, Jr. Boulevard	4347121
105	3	Additional study for improved pedestrian crossings between SR 5A/Nova Road and FEC Railroad	
106	3	US 92 drainage improvements from Emmet Street to N. Charles Street	4368551
107	3	Upgrade transit stop enhancements between SR 483/Clyde Morris Boulevard and US 1/Ridgewood Avenue	
108	3	Add Wayfinding sings for major destinations	4373111
109	3	Add Landscaping between Lincoln Street and US 1/Ridgewood Avenue – CODB West ISB Streetscape Phase III	2014-023
110	3	Bury utilities between SR 5A/Nova Road and US 1/Ridgewood Avenue	2011-027 2014-023
111	3	Install Accessible pedestrian signals at all signals in Segment Three	
112	3	Add High-Visibility Crosswalks at the intersection of US 92 and US 1/Ridgewood Avenue	4324421
113	3	Add Adaptive Signal Control at the intersection of US 92 and US 1/Ridgewood Avenue	4347121
114	3	Votran service enhancement improve bus service to 30 minutes frequencies (routes 3 & 4)	4302851
115	4	Add bicycle lanes on US 1/Ridgewood Avenue between Bay Street and Magnolia Avenue	
116	4	Add bicycle lanes between Seagrave Street and Palmetto Avenue	
117	4	Raised median islands, where feasible, between US 1/Ridgewood Ave and Palmetto Avenue	2011-038
118	4	Add High-Visibility Crosswalks at the intersection of US 92 and Palmetto Avenue	2011-038
119	4	Add Adaptive Signal Control at the intersection of US 92 and Palmetto Avenue	4347121

Table 2: Recommended Improvements by Segment

Map No.	Segment	Improvement	FPID No.
120	4	Reduce travel lane width from 12' to 11' from US 1/Ridgewood Avenue to Beach Street	2011-038
121	4	Raised median islands, where feasible, between Palmetto Avenue and Beach Street	2011-038
122	4	Bury utilities between US 1/Ridgewood Ave and Beach Street	2011-038
123	4	Add High-Visibility Crosswalks at the intersection of US 92 and Beach Street	2011-038
124	4	Add Adaptive Signal Control at the intersection of US 92 and Beach Street	4347121
125	4	Halifax River Greenway Trail (Beach Street to Riverfront Park)	4355341
126	4	Restripe shoulders on Halifax River Bridge to accommodate bicycle lanes	
127	4	Add raised median island between the Halifax River and Halifax Avenue	
128	4	Add High-Visibility Crosswalks at the intersection of US 92 and Halifax Avenue	
129	4	Reconstruct Roadway from Halifax Avenue to SR A1A/Atlantic Avenue (add sidewalks, medians, lighting)	
130	4	High-Visibility Crosswalks at the intersection of US 92 and SR 441/Peninsula Avenue	4306821
131	4	Mill and resurface SR 441/Peninsula Avenue to Silver Beach Avenue	4306821
132	4	Additional study for pedestrian crossings between SR 441/Peninsula Avenue and SR A1A/Atlantic Avenue	
133	4	Upgrade transit stop enhancements between US 1/Ridgewood Avenue and SR A1A/Atlantic Avenue	
134	4	Add High-Visibility Crosswalks at the intersection of US 92 and Grandview Avenue	
135	4	Bury utilities between Halifax River & SR A1A	
136	4	Add Landscaping between US 1/Ridgewood Avenue and SR A1A/Atlantic Avenue – COBD East ISB Streetscape	
137	4	High-Visibility Crosswalks at the intersection of US 92 and SR A1A/Atlantic Avenue	
138	4	Add Wayfinding signs for major destinations	4373111
139	4	Install Accessible Pedestrian signals at all signals in Segment Four	

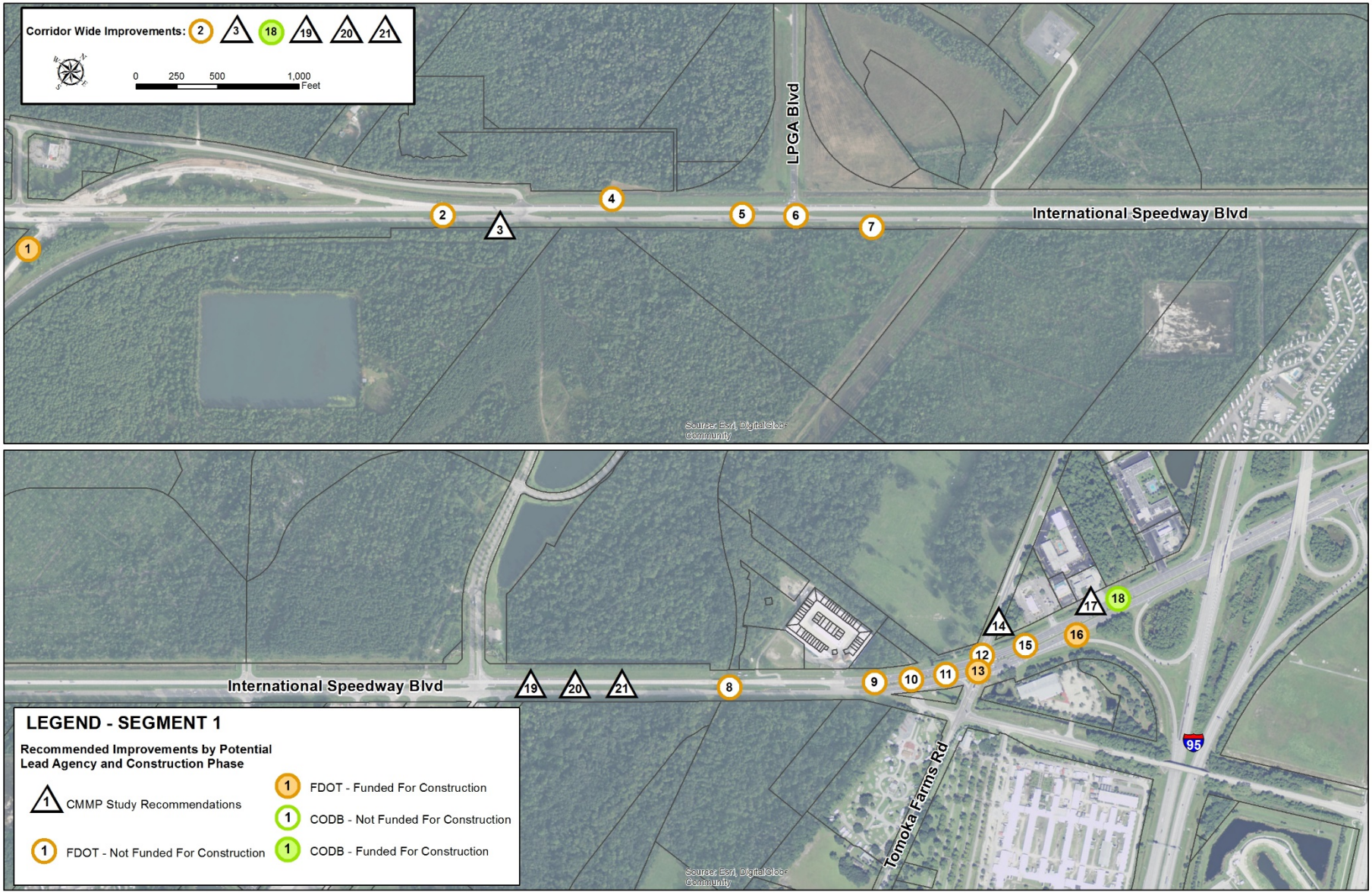


Figure 2: Segment 1 – Programmed and Recommended Improvements

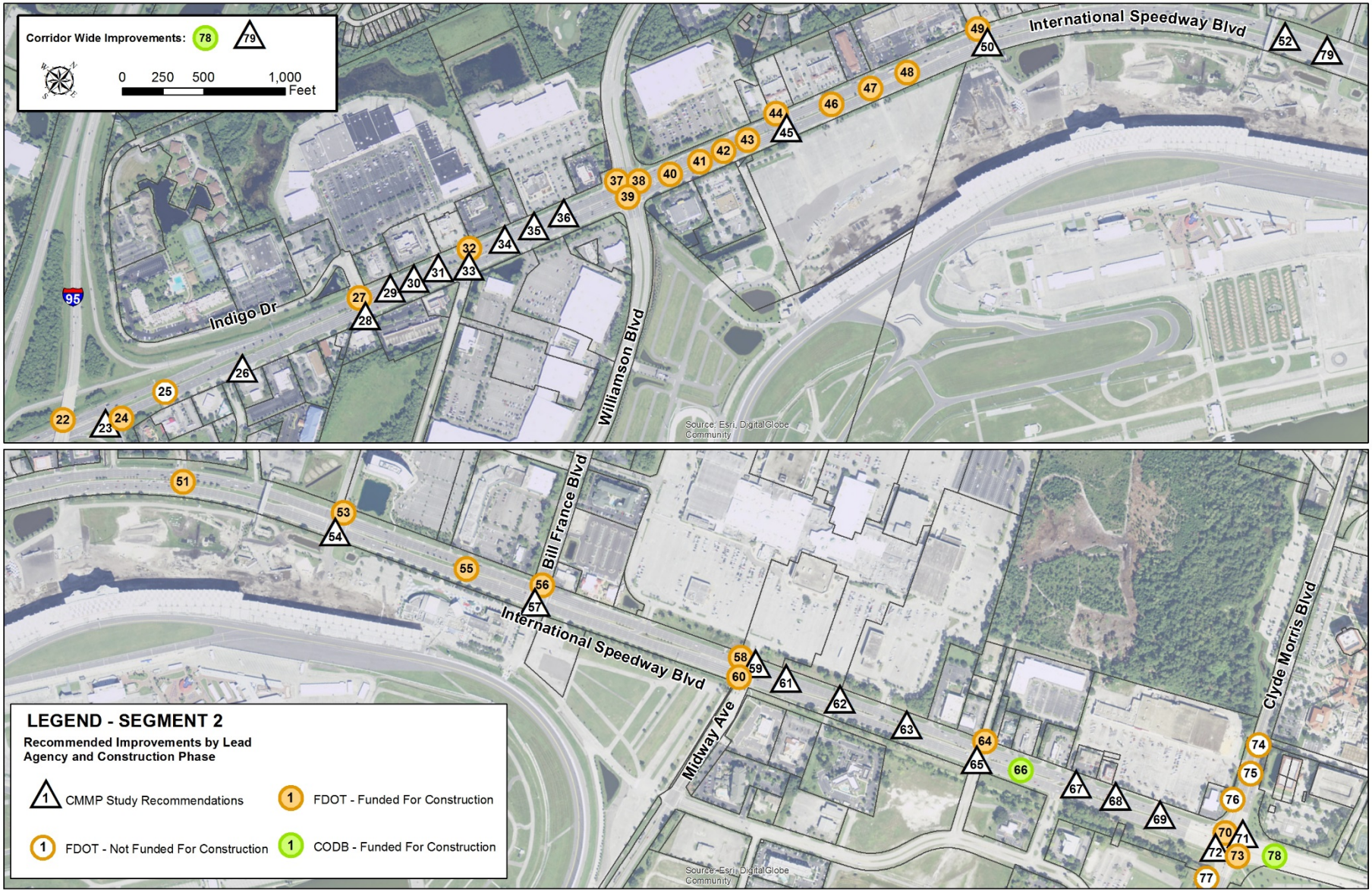


Figure 3: Segment 2 – Programmed and Recommended Improvements

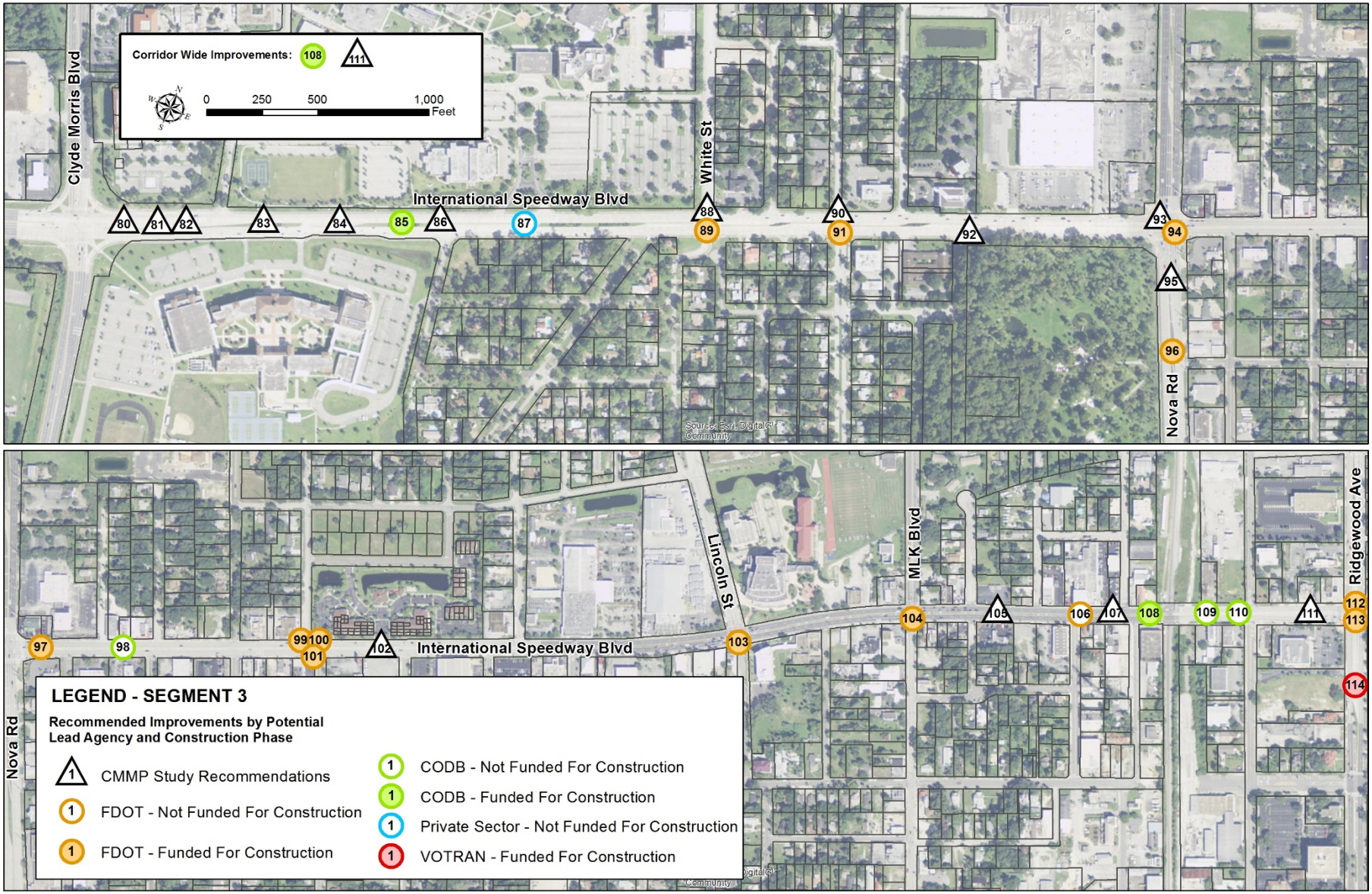


Figure 4: Segment 3 – Programmed and Recommended Improvements

Figure 5: Segment 4 – Programmed and Recommended Improvements

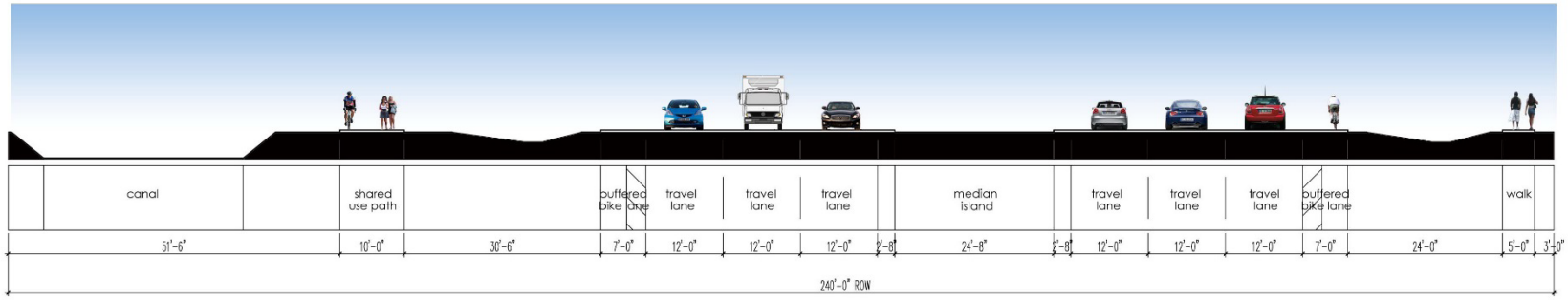


Figure 6: Segment 1 (I-4 to I-95)

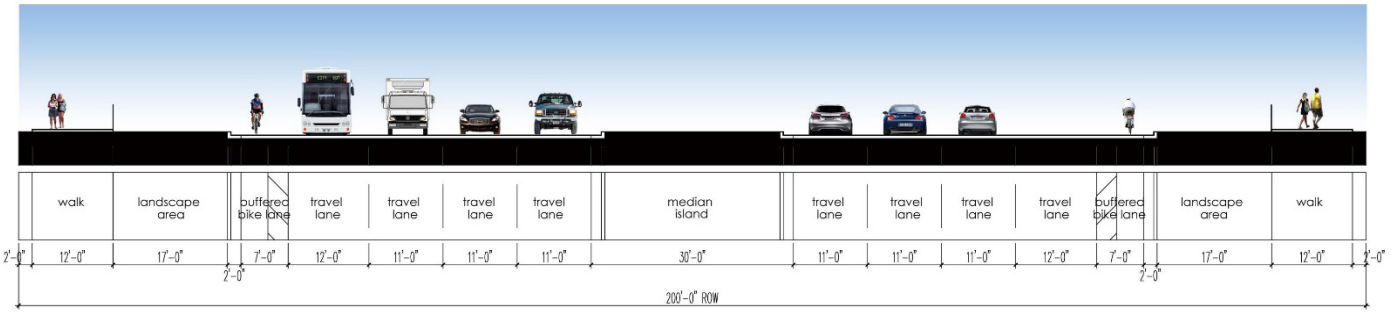


Figure 7: Segment 2 (I-95/Indigo Drive to Midway Avenue)

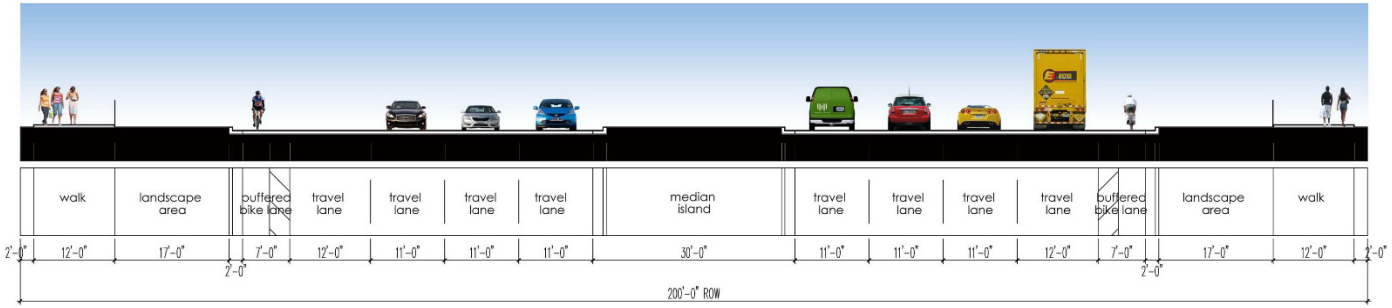


Figure 8: Segment 2 (Midway Avenue to Clyde Morris Boulevard)

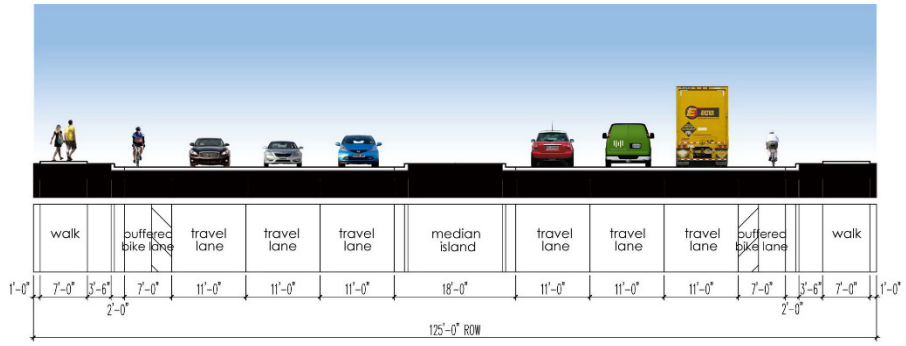


Figure 9: Segment 3 (Clyde Morris Boulevard to Nova Road

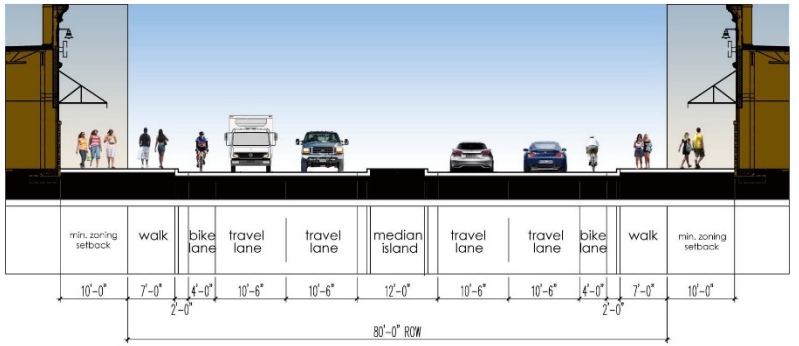


Figure 10: Segment 3 (Nova Road to Ridgewood Avenue)

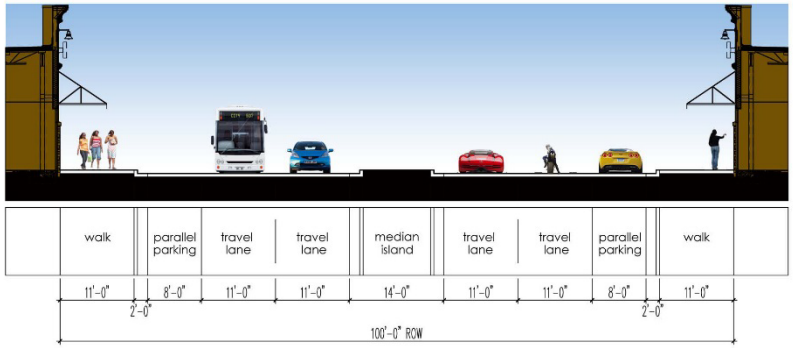


Figure 11: Segment 4 (Ridgewood Avenue to Beach Street)

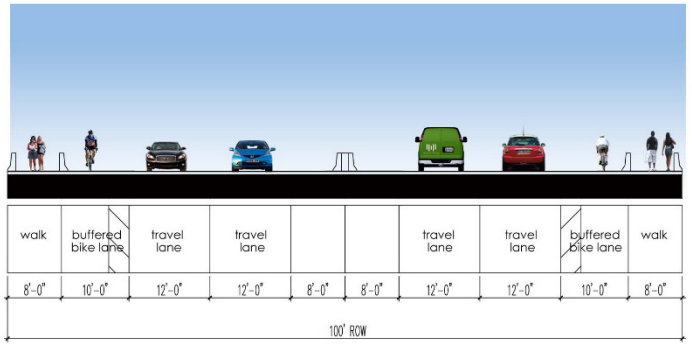


Figure 12: Segment 4 (Halifax River Bridge)

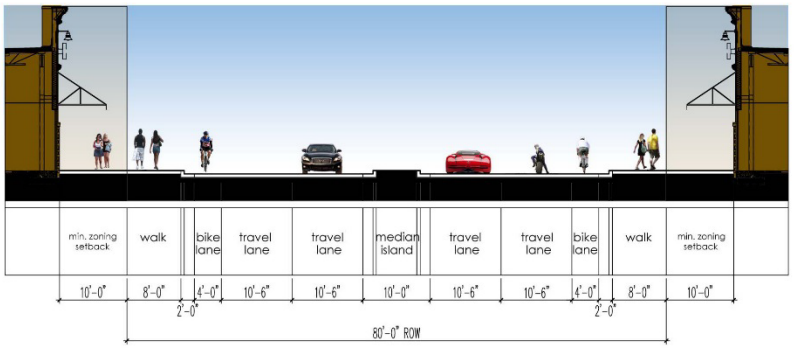


Figure 13: Segment 4 (Halifax River to Atlantic Avenue)

4 FUNDING OPTIONS

Funding for transportation projects can occur from a variety of federal, state and/or local sources and can be relatively simple or extremely complex. A variety of funding mechanisms may be applicable to the CMMP, particularly if separated into individual projects based on timing, scope or applicability of funding sources.

The following sections detail funding mechanisms from federal, state, local and private sources based on revenue generated by fuel taxes, excise vehicle taxes, motor vehicle fees, rental car surcharges, tolls and concessions, documentary stamps, and other miscellaneous revenue sources that are typically used for transportation improvement projects. It should be noted that some of these funding mechanisms may not be applicable to all sections of the study area.

4.1 FEDERAL

4.1.1 MAP-21

Moving Ahead for Progress in the 21st Century (MAP-21) is the Federal-aid transportation reauthorization program passed by the U.S Congress and signed into law by the President in July 2012 for fiscal years 2013 and 2014. It was extended until 2015. It consolidates many of the prior Federal programs into fewer categories and seeks to reduce duplicative programs. MAP-21 eliminates earmarks and has a goal of expediting project delivery while continuing environmental protections in previous transportation authorization programs.

Core programs incorporated into MAP-21 include:

- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP)
- Highway Safety Improvement Program (HSIP)
- Congestion Mitigation and Air Quality Program (CMAQ)
- Transportation Alternatives Program (TAP)

Of particular interest for multimodal strategies that may be included in the ISB corridor is the Transportation Alternatives Program (TAP). This is a new program that provides for a variety of alternative transportation projects, including many that were previously eligible activities under separately funded programs. The TAP replaces funding from programs such as Transportation Enhancements, Recreational Trails, Safe Routes to Schools and several other discretionary programs that were used to fund multimodal transportation facilities including sidewalks, bicycle paths and landscaping/streetscape projects. An amount equal to two percent of the total amount authorized from the Highway Account of the Highway Trust Fund for Federal-aid highways is to be reserved for the TAP each fiscal year. Eligible activities for which TAP may be used include the construction, planning and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation.

Federal funds authorized by MAP-21 can be directed by a variety of State, Metropolitan Planning Organizations (MPOs), local governments, transportation authorities, and other political subdivisions. Projects planned with federal participation must be included in the State Transportation Improvement Program (STIP), which is a federally mandated document listing projects with federal funding for the next four fiscal years. For funding issues, the R2CTPO is the region's MPO.

Traditionally in Florida, federal funds are passed through to the FDOT for inclusion into the Five-Year Work Program; however, organizations such as MPOs have been given increased ability to direct certain federal and state funds within their jurisdictions. In Florida, MPOs in larger urbanized areas (greater than 200,000 in population) can allocate a portion of federal Urban Attributable (XU) Funds toward eligible projects. In addition, transit agencies receive federal allocations based on a variety of factors and have some discretionary authority on spending federal funds that are included within the STIP.

4.1.2 Federal Transit Capital, Urban & Rural Funds

This is the Federal Transit Administration's (FTA) primary grant program for funding major transit capital investments, including rapid rail, light rail, bus rapid transit, commuter rail and ferries. This category includes the New Starts, Small Starts and Core Capacity Improvements grants.

4.1.3 Transit Enhancements

This grant funds transit capital needs and capitalized operating expenses in urban areas. It includes bus shelters, bus stop amenities, pedestrian access and walkways, and bicycle access. The Transportation Equity Act for the 21st Century (TEA-21) created the "transit enhancements" provisions in the Urbanized Area Formula Program administered by the FTA. TEA-21 established the requirement that a minimum of one percent of FTA's Urbanized Area Formula Program funding for urbanized areas with populations 200,000 and over must be made available for activities that are transit enhancements.

4.1.4 Highway Bridge Replacement and Rehabilitation

This program funds bridge replacements and rehabilitative activities for bridges. Funds become available at the beginning of each fiscal year and 12-35% of these funds must be used on public roads.

4.1.5 The Trust for Public Land Conservation Services

The Trust for Public Land (TPL) uses public funds for acquisition of public land to build trails, sidewalks, etc., and ensures completion of the transaction. However, this is not a grant and expenditures by the TPL must be reimbursed.

4.1.6 Federal Lands Highway Program

The primary purpose of the this program is to provide financial resources and technical assistance for a coordinated program of public roads that service the transportation needs of Federal and Indian lands. Funding includes improvements to transportation infrastructure within federally owned lands.

4.1.7 Community Development Block Grant

This grant, through the US Department of Housing and Urban Development, provides funding for property acquisition, improvements to neighborhood parks and facilities, new and resurfaced streets and sidewalk installation.

4.1.8 Rails-to-Trails

The Rails-to-Trails Conservancy, an American nonprofit, offers funds for acquisition of land for greenways and trails. The goal is to create a network of trails from former rail lines.

4.1.9 TIGER Grant Program

The Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grant program, provides funds for road, rail, transit and port projects that have significant national interest. This is a highly competitive program that was started as part of the American Recovery and Reinvestment Act (ARRA) in 2009. Organizations including State, local governments, transit agencies, Metropolitan Planning Organizations, port authorities and other political subdivisions of State or local governments are eligible to apply for TIGER Grants.

4.1.10 Energy Efficiency and Conservation Block Grant

The US Department of Energy awards this grant to provide funding for projects that increase energy efficiency and promote conservation. Some transportation projects funded by this grant include signal-retiming and streetlight installation.

4.2 STATE

4.2.1 Urban and Community Forestry Grant

The Urban and Community Forestry Grant can be used for tree ordinance development or revision, tree inventories, management plans, master plans, in-house training, temporary staffing, student internships, and equipment purchases.

4.2.2 Florida Communities Trust Program

The Florida Communities Trust Program is a Florida Department of Environmental Protection (FDEP) program that can provide funding for local governments to acquire land for parks, open space and greenways.

4.2.3 Transportation Disadvantaged Trust Fund

The Transportation Disadvantaged Trust Fund is an account managed by FDOT that is funded through the Agency for Health Care Administration and through vehicle registration fees. These funds can be used by qualified transportation coordinators or operators in each county in Florida. In Volusia County, Votran is the operator that schedules transit service for disadvantaged individuals.

4.2.4 Strategic Intermodal System

The Strategic Intermodal System (SIS) designation is a program that ranks transportation infrastructure around the state and groups each by criteria that measure its importance to multiple modes of transportation. Airports, highways, and waterways can be labeled as SIS facilities, and for highways, connections to a national highway system facility helps distinguish them from ordinary roads. Being a SIS facility makes projects eligible for funds from the State Transportation Trust Fund. In addition, these facilities are included in the statewide Strategic Intermodal System Strategic Plan, developed by FDOT.

4.2.5 Economic Development Transportation Fund

The Economic Development Transportation Fund is an incentive tool designed to alleviate transportation problems that adversely impact a specific company's location or expansion decision. The elimination of the problem must serve as an inducement for a specific company's location, retention, or expansion project in Florida.

4.2.6 Property Assessed Clean Energy (PACE)

The purpose of PACE funding is to provide long-term financing for structural improvements that encourage renewable generation, energy efficiency and wind resistance. Any county in Florida may subscribe by resolution to making this financing opportunity available for its community.

Pasco County recently subscribed to the PACE program. Property owners in Pasco County now have access to financing for improvements which provide hurricane protection and energy savings.

4.3 LOCAL

4.3.1 City of Daytona Beach Five-Year Capital Program

The City of Daytona Beach has $600,000 set aside for ADA sidewalk compliance construction between 2014 and 2019.

4.3.2 Volusia County Sidewalk Improvement Trust Fund

The Volusia County Sidewalk Improvement Trust Fund sets aside funds for the purpose of constructing pedestrian and bicycle facilities in areas determined by the county to be needed for the safety and convenience of the pedestrians and bicyclists of the county.

In lieu of construction of the required sidewalks, development application may approve the payment of money into the trust fund. The current cost is $24 per linear foot of sidewalk.

4.3.3 Volusia ECHO Grants in Aid

The Volusia Environmental, Cultural, Historical and Outdoor (ECHO) program provides grant funds to finance acquisition, restoration, construction or improvement of facilities to be used for environmental, cultural, historical and outdoor recreational purposes.

4.3.4 Community Redevelopment Area (CRA) Trust Fund

CRAs are special districts in which any future increases in property values are set aside to support economic development projects within that district. These projects can be land acquisition, streetscapes etc. Existing CRAs are depicted in Figure 14.

4.3.5 The Capital Projects Fund

A portion of the City of Daytona Beach's funds are set aside for capital projects each year. This includes funding for street and sidewalk projects.

4.3.6 Community Foundation of Volusia and Flagler Counties

This is a local organization that improves local access to health and human services.

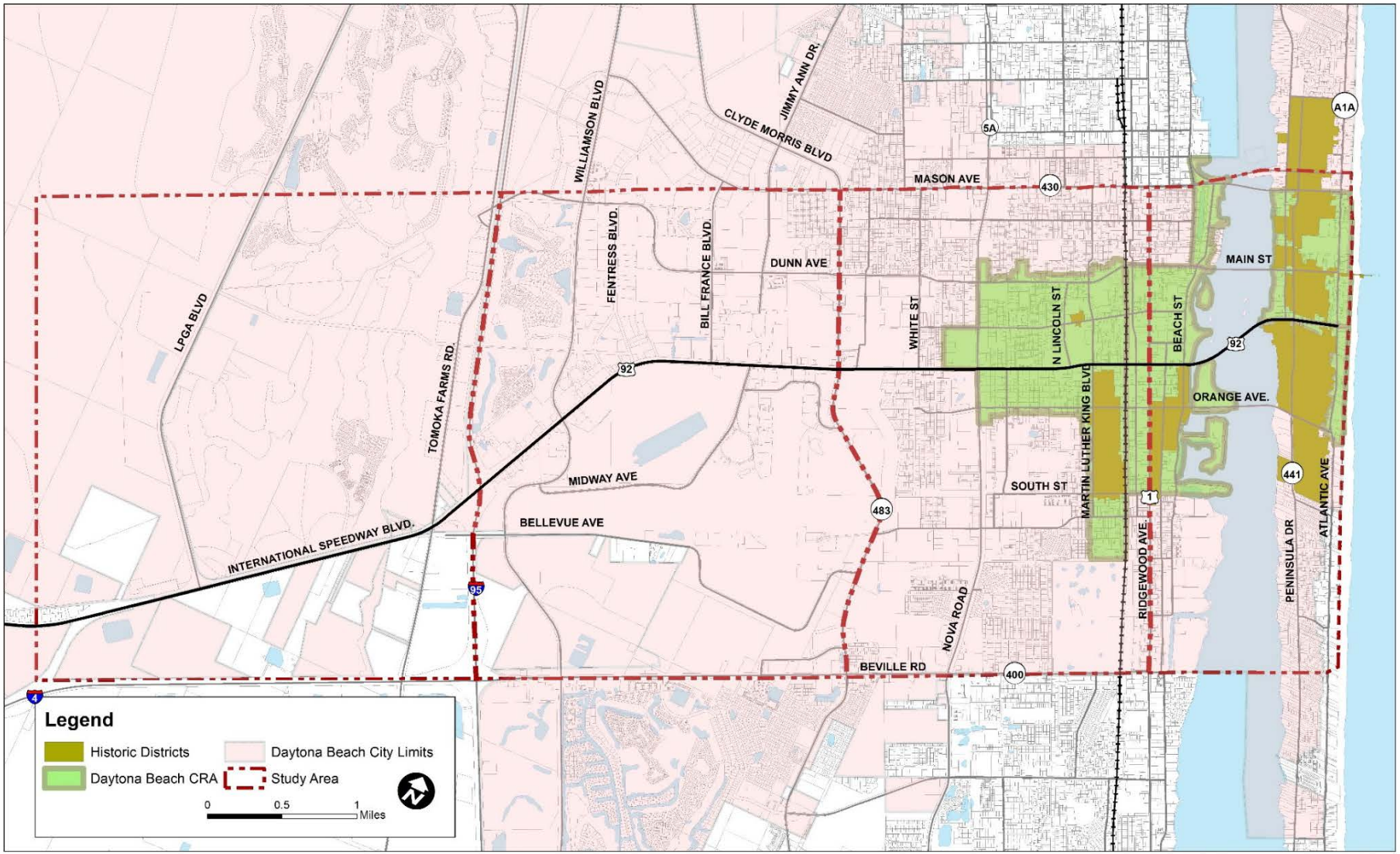


Figure 14: Historic Districts and CRAs

4.4 PUBLIC-PRIVATE PARTNERSHIPS (PPP)

Public-Private Partnerships (PPPs) for transportation projects are typically used in conjunction with road pricing or tolling. However, other types of PPPs include partnerships such as granting development rights around major transit stations (Transit-Oriented Developments), concession fees and concessionaire rights, advertising, and other arrangements to bring private financing to public improvement projects.

Additionally, Community-Based Partnerships (CBP) may be created to implement mobility improvements. These may be Transportation Management Organizations (TMOs) or Transportation Management Associations (TMAs) created specifically to address broad transportation needs, or relatively simple private-sector partnerships that exist to maintain landscaping or streetscape along a roadway.

TMO's and TMA's provide a forum for property owners, developers, business owners, merchants, along with public sector agencies to collectively establish programs, policies, and funding mechanisms to address mobility needs along a corridor or within a designated area, and often focus on reducing traffic congestion through multi-modal improvements and transportation demand management techniques such as staggered work hours, and carpooling/vanpooling. TMO's and TMA's are generally successful when there is broad consensus for action from the private sector, and private sector funding is leveraged with public sector funds to address traffic congestion and mobility issues.

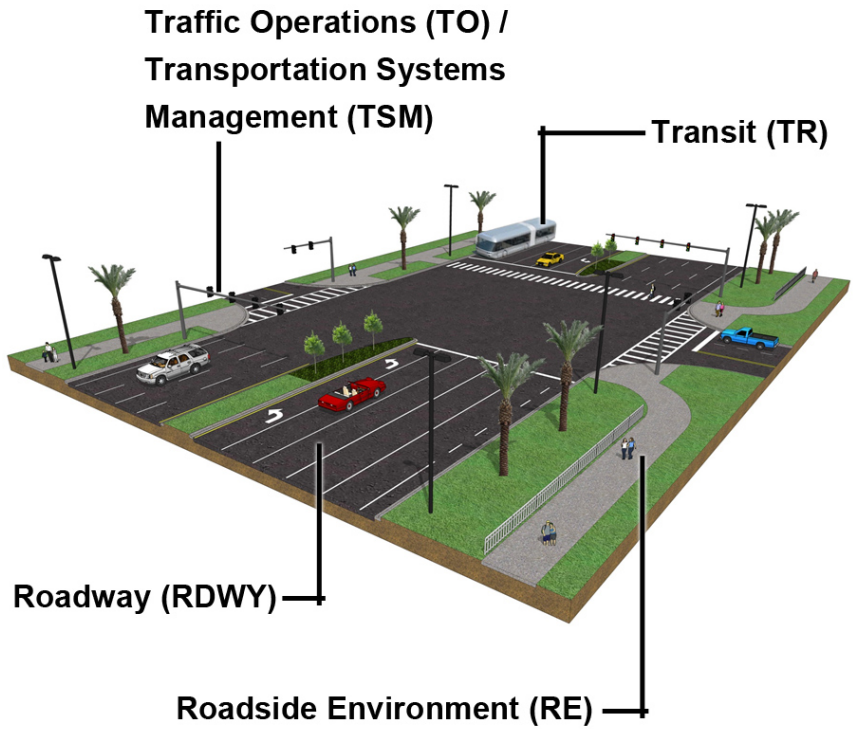
5 IMPLEMENTATION STRATEGIES

The US 92/SR 600/ISB CMMP has identified a range of transportation improvements to create a more walkable urban thoroughfare with multimodal options ranging from traffic operations improvements, access management modifications, sidewalks, bicycle and pedestrian facilities, and transit improvements. These improvements can be funded and constructed as one large project, or implemented as a series of smaller projects with different timeframes, funding sources, and responsible agencies executing the implementation. With the varied nature of the improvements, a strategy of implementing smaller projects that can be funded using different funding sources may be prudent. Individual projects can be categorized by type, timing and responsibility, in order to facilitate their successful implementation over a period of time.

5.1 IMPROVEMENT CATEGORIES

In order to facilitate the implementation and funding of these improvements, separate improvement categories were identified so that funding might occur through a variety of funding sources if the project cannot be feasibly implemented as a single construction project. The identified improvements can be divided into the following categories, although overlap may exist in terms of both funding and implementation. In addition, each of these categories may have certain funding opportunities and restrictions.

1) Roadway (RDWY)
2) Roadside Environment (RE)
3) Traffic Operations/Transportation Systems Management (TO/TSM)
4) Transit (TR)



5.2 TIMING

In order to implement the recommended improvements, it may be necessary that they be developed as individual, or a group of projects, according to whether they are more feasible in the short-term or long-term. For the purposes of this discussion, the following time frames are established:

- Short-term: 2015 – 2019
- Mid-term: 2020 – 2025
- Long-term: 2026 – 2035

5.2.1 Short-Term

It is feasible that funding could be identified and placed into the FDOT's Five-Year Work Program for Short-Term projects. Projects that can be advanced without a required Project Development & Environmental (PD&E) Study might be included in this category, as well as other relatively low-cost projects without significant right-of-way acquisition.

5.2.2 Mid-Term

Larger, more complex projects, especially those requiring environmental clearance through a PD&E Study or through other National Environmental Policy Act of 1969 (NEPA) provisions typically require more time to be fully implemented. These may also include projects that entail more complex engineering and design or have Maintenance of Traffic issues to be addressed, and possible right-of-way acquisition. For transit options, these may include projects that have additional costs for operation and maintenance (O&M) that may have significant funding requirements.

5.2.3 Long-Term

Long-term projects are those that require a PD&E Study and may involve complex engineering analysis and design, in addition to possible right-of-way acquisition. These projects tend to be higher cost and may require more complex funding mechanisms.

5.3 PROJECT DEVELOPMENT & OWNERSHIP

While the improvements identified through the US 92/SR 600/ISB Corridor Study are located within or adjacent to existing State right-of-way, other entities might assume control of the funding, implementation, and even ownership of the facilities that are constructed. Examples include transit facilities, equipment and service that are owned and operated by Votran and traffic signals that are maintained by Volusia County.

In addition, funding from private sources might be used to supplement public funds to advance project development. One example is the redevelopment of a parking lot located along US 92/SR 600/ISB. Daytona State College envisions replacing the parking with educational facilities, cresting synergy between the buildings, the sidewalk and street. Coordination between the City and the College will be helpful in creating an engaging and walkable section of US 92/SR 600/ISB.

Table 3: Project Implementation

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
1	1	4084641	I-4 Widening	SR 44 to I-95	I-4 widening from SR 44 to I-95	RDWY	FDOT	Short-Term	CST FY 2011/12 – 2015/16	
2	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	US 92 widening from 4 lanes to 6 lanes (I-4 to Tomoka Farms Road)	RDWY	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
3	1			I-4 Ramps to Tomoka Farms Rd	7' wide buffered bicycle lanes (I-4 to Tomoka Farms Rd)	RDWY	FDOT	Mid-Term		
4	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	10' wide WB Shared Use Path (Old DeLand Rd to Tomoka Farms Rd)	RE	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
5	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Add EB Left-Turn lane at the intersection of US 92 and LPGA Blvd	RDWY, TO	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
6	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Add High Visibility Crosswalks at the intersection of US 92 and LPGA Blvd	RDWY	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
7	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Add EB Sidewalk (5' wide) – LPGA Blvd to Tomoka Farms Rd	RE	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
8	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Replace two bridges at the Tomoka River	RDWY	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
9	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Close WB Left-Turn Lane at Hyde Storage Park	RDWY, TO	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
10	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Extend EB Left-Turn Lane at the intersection of US 92 and Tomoka Farms Rd	RDWY, TO	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
11	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Add EB Left-Turn lane at the intersection of US 92 and Tomoka Farms Rd	RDWY, TO	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
12	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Add High-Visibility Crosswalks at the intersection of US 92 and Tomoka Farms Rd	RDWY	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded
13	1	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Tomoka Farms Rd	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
14	1			Bellevue Rd to McDonald's north of US 92	Add NB Sidewalk (5' wide) on Tomoka Farms Rd between Bellevue Rd and the McDonald's Restaurant	RE	FDOT, Volusia County	Mid-Term		
15	1	4226271	US 92 Widening	I-4 Ramps to Tomoka Farms Rd	Add WB Left-Turn lane at the intersection of US 92 and Tomoka Farms Rd	RDWY, TO	FDOT	Mid-Term	ROW FY 2018/19 – 2019/20	CST – Not Funded

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
16	1/2	2427152	I-95 Widening and Systems Interchange Reconstruction Design/Build	North of US 92 to North of SR 44	Add EB Sidewalk (5' wide) between Tomoka Farms Rd and I-95	RE	FDOT	Short-Term	CST FY 2015/16 – 2017/18	
17	1			Tomoka Farms Rd to I-95 Off-Ramps	Add WB Shared Use Path (10' wide) between Tomoka Farms Rd and I-95 NB Off-Ramps	RE	FDOT	Mid-Term		
18	1	4373111	Daytona Beach Wayfinding Program	All ISB CMMP Segments (within city limits)	Add Wayfinding signs for major destinations	TO, TSM	CODB	Short-Term	CST FY 2014/15	
19	1			I-4 to I-95	Add Landscaping between I-4 and I-95	RE	FDOT	Mid-Term		
20	1			I-4 to I-95	Upgrade transit stop enhancements between I-4 Ramp and I-95	TR	CODB	Mid-Term		
21	1			Segment One Intersections	Install Accessible Pedestrian Signals at all signals in Segment One	RE	FDOT	Short-Term		
22	2	2427152	I-95 Widening and Systems Interchange Reconstruction Design/Build	North of US 92 to North of SR 44	Reconstruct I-95 Interchange	RDWY	FDOT	Short-Term	CST FY 2014/15 - 2017/18	
23	2			US 92 and I-95 Off-Ramp Intersections	Add High-Visibility Crosswalk at the intersection of US 92 and I-95 Off-Ramp	RDWY	FDOT	Mid-Term		
24	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and I-95 NB Ramp	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
25	2	2427155	I-95 Landscaping	Tomoka Farms Rd to Indigo Drive	Add Landscaping between Tomoka Farms Rd and Indigo Drive and gateway features at I-95 Interchange	RE	FDOT	Short-Term	CST FY 2018/19	
26	2			I-95 NB Ramp to Indigo Drive	Expand EB sidewalk width to 12' (I-95 NB Ramp to Indigo Drive)	RE	FDOT	Mid-Term		
27	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Indigo Drive	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
28	2			US 92 and Indigo Drive Intersection	Add High Visibility Crosswalks at the intersection of US 92 and Indigo Drive	RDWY	FDOT	Mid-Term		
29	2			Indigo Dr to Williamson Blvd	Closed drainage system from Indigo Drive to Williamson Blvd	RE	FDOT	Mid-Term		
30	2			Indigo Dr to Williamson Blvd	Expand EB and WB sidewalk width to 12' (Indigo Drive to Williamson Blvd)	RE	FDOT	Mid-Term		

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
31	2			Indigo Dr to Williamson Blvd	Upgrade Street Lighting between Indigo Drive and Williamson Blvd	RDWY,RE	FDOT	Mid-Term		
32	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Thames Rd	RE	FDOT	Short-Term	CST FY 2014/15	
33	2			Thames Rd and US 92 intersection	Add High Visibility Crossing at Thames Rd	TO, TSM	CODB	Mid-Term		
34	2			Indigo Dr to Williamson Blvd	Add Landscaping between Indigo Drive and Williamson Blvd	RE	FDOT	Mid-Term		
35	2			Indigo Dr to Williamson Blvd	Upgrade transit stop enhancements between Indigo Drive and Williamson Blvd	TR	CODB	Mid-Term		
36	2			Indigo Dr to Williamson Blvd	Add Pedestrian channelization (fencing) between Indigo Drive and Williamson Blvd	RE	FDOT	Mid-Term		
37	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Williamson Blvd	RDWY	FDOT	Short-Term	CST FY 2014/15	
38	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Add High-Visibility Crosswalk at the intersection of US 92 and Williamson Blvd	RDWY	FDOT	Short-Term	CST FY 2015/16	
39	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	US 92 and Williamson Blvd intersection improvements	RDWY	FDOT	Short-Term	CST FY 2015/16	
40	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Extend WB Left-Turn Lane at the intersection of US 92 and Williamson Boulevard	RE	FDOT	Short-Term	CST FY 2015/16	
41	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Closed drainage system from Williamson Blvd to Midway Ave	RE	FDOT	Short-Term	CST FY 2015/16	
42	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Expand EB and WB sidewalk width to 12' (Williamson Blvd to Midway Ave)	TO, TSM	FDOT	Short-Term	CST FY 2015/16	
43	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Upgrade Street Lighting from Williamson Blvd to Midway Ave	RDWY	FDOT	Short-Term	CST FY 2015/16	
44	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Turn One Drive	RE	FDOT	Short-Term	CST FY 2014/15	
45	2			US 92 and Turn One Drive Intersection	Add High Visibility Crosswalks at the intersection of US 92 and Turn One Drive	RDWY	FDOT	Short-Term		

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
46	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Add Landscaping between Williamson Blvd and Midway Ave	RE	FDOT	Short-Term	CST FY 2015/16	
47	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Upgrade transit stop enhancements between Williamson Blvd and Midway Ave	TR	FDOT	Short-Term	CST FY 2015/16	
48	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Pedestrian channelization (fencing) from Williamson Blvd to Midway Ave	RE	CODB	Short-Term	CST FY 2015/16	
49	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Fentress Blvd	RDWY, TO	FDOT	Short-Term	CST FY 2014/15	
50	2			US 92 and Fentress Blvd Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and Fentress Blvd	RDWY	CODB	Short-Term		
51	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Plaza Entrance	RDWY, TO	FDOT	Short-Term	CST FY 2014/15	
52	2	4348711	US 92 Pedestrian Improvements	US 92 and Plaza Entrance Intersection	Expand bicycle lane width from 4' to 7' between I-95 Interchange and SR 483/Clyde Morris Blvd	RDWY	FDOT	Mid-Term		
53	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at US 92 and Daytona Blvd	RDWY, TO	FDOT	Short-Term	CST FY 2014/15	
54	2			US 92 and Daytona Blvd Intersection	Add High-Visibility Crosswalk at US 92 and Daytona Blvd	RDWY	FDOT	Short-Term		
55	2	4348711	US 92 Pedestrian Improvements	Williamson Blvd to Midway Ave	Add Pedestrian Overpass approximately 500' west of Bill France Blvd	RDWY	FDOT	Short-Term	CST FY 2015/16	
56	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Bill France Blvd	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
57	2			US 92 and Bill France Intersection	Add High-Visibility Crosswalk at the intersection of US 92 and Bill France Blvd	RDWY	FDOT	Short-Term		
58	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Midway Ave	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
59	2			US 92 and Midway Ave Intersection	Add High-Visibility Crosswalk at the intersection of US 92 and Midway Ave	RDWY	FDOT	Short-Term		
60	2	4348831	US 92 Traffic Signal Mast Arms	At Midway Ave and Adams St	Replace span wire with mast arms at Midway Ave	RDWY, TO	FDOT	Short-Term	CST FY 2014/15	

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
61	2			Midway Ave to Clyde Morris Blvd	Expand EB and WB sidewalk width to 12' (Midway Ave to SR 483/Clyde Morris Blvd)	RE	FDOT	Long-Term		
62	2			Midway Ave to Clyde Morris Blvd	Closed drainage system from Midway Ave to SR 483/Clyde Morris Blvd	RE	FDOT	Long-Term		
63	2			Midway Ave to Clyde Morris Blvd	Upgrade Street Lighting from Midway Ave to SR 483/Clyde Morris Blvd	RDWY, RE	CODB	Long-Term		
64	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Hagen Terrace	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
65	2			US 92 and Hagen Terr Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and Hagen Terrace	RDWY	CODB	Long-Term		
66	2	4378571	ISB – West Landscaping	Midway Ave to Clyde Morris Blvd	Add Landscaping from Midway Ave to SR 483/Clyde Morris Blvd	RE	CODB	Long-Term		
67	2			Midway Ave to Clyde Morris Blvd	Upgrade transit stop enhancements between Midway Ave and SR 483/Clyde Morris Blvd	TR	FDOT	Long-Term		
68	2			Midway Ave to Clyde Morris Blvd	Bury utilities from Midway Ave to SR 483/Clyde Morris Blvd	RE	FDOT	Long-Term		
69	2			Midway Ave to Clyde Morris Blvd	Pedestrian channelization (fencing) from Midway Ave to SR 483/Clyde Morris Blvd	RE	FDOT	Mid-Term		
70	2	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and SR 483/Clyde Morris Blvd	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
71	2			US 92 and Clyde Morris Blvd Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and SR 483/Clyde Morris Blvd	RDWY	FDOT	Mid-Term		
72	2			US 92 and Clyde Morris Blvd Intersection	New 4' bicycle lanes on US 92 at the intersection with SR 483/Clyde Morris Blvd	RDWY	FDOT	Mid-Term		
73	2	4348831	US 92 Traffic Signal Mast Arms	Midway Ave to Adams St	Replace span wire with mast arms at SR 483/Clyde Morris Blvd	RDWY, TO	FDOT	Short-Term	CST FY 2014/15	
74	2	4081781	SR 483/Clyde Morris Blvd Widening	Mayberry Ave to SR 400/Beville Rd	Widen SR 483/Clyde Morris Blvd from 4 lanes to 6 lanes	RDWY	FDOT	Mid-Term	ROW 2017/18 – 2019/20	CST – Not Funded

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
75	2	4081781	SR 483/Clyde Morris Blvd Widening	Mayberry Ave to SR 400/Beville Rd	New 4' bicycle lanes on SR 483/Clyde Morris Blvd	RDWY	FDOT	Mid-Term	ROW 2017/18 – 2019/20	CST – Not Funded
76	2	4081781	SR 483/Clyde Morris Blvd Widening	Mayberry Ave to SR 400/Beville Rd	Add SB Sidewalk (5' wide) on SR 483/Clyde Morris Blvd north of US 92	RE	FDOT	Mid-Term	ROW 2017/18 – 2019/20	CST – Not Funded
77	2	4081781	SR 483/Clyde Morris Blvd Widening	Mayberry Ave to SR 400/Beville Rd	Add SB Shared Use Path (12' wide) on SR 483/Clyde Morris Blvd south of US 92	RE	FDOT	Mid-Term	ROW 2017/18 – 2019/20	CST – Not Funded
78	2	4373111	Daytona Beach Wayfinding Program	All ISB CMMP Segments (within city limits)	Add Wayfinding signs for major destinations	TO, TSM	CODB	Short-Term	CST FY 2014/15	
79	2			Segment 2 Intersections	Install Accessible Pedestrian Signals at all signals in Segment Two	RE	FDOT	Mid-Term		
80	3			Clyde Morris Blvd to Nova Rd	Widen EB and WB sidewalks from 5' to 7' from SR 483/Clyde Morris Blvd to SR 5A/Nova Rd	RE	CODB	Long-Term		
81	3			Clyde Morris Blvd to Nova Rd	Reduce travel lane width from 11'4" to 11' from SR 483/Clyde Morris Blvd to SR 5A/Nova Rd	RDWY	FDOT	Long-Term		
82	3			Clyde Morris Blvd to Nova Rd	Reduce raised median width from 22' to 18' from SR 483/Clyde Morris Blvd to SR 5A/Nova Rd	RDWY, RE	FDOT	Long-Term		
83	3			Highland Ave to Central Ave	Additional study for improved pedestrian crossing between Highland Ave and Central Ave	TO, TSM	FDOT	Mid-Term		
84	3			Clyde Morris Blvd to Nova Rd	Expand bicycle lane width from 4' to 7' between SR 483/Clyde Morris Blvd and SR 5A/Nova Rd	RDWY	FDOT	Long-Term		
85	3	4378571	ISB – West Landscaping	Clyde Morris Blvd to Nova Rd	Add Landscaping between SR 483/Clyde Morris Blvd & SR 5A/Nova Rd	RE	CODB	Short-Term		
86	3			Clyde Morris Blvd to Nova Rd	Bury utilities from SR 483/Clyde Morris Blvd to SR 5A/Nova Rd	RE	FDOT	Long-Term		
87	3			US 92 and Hilton Ave Intersection	Add WB Left-Turn lane at the intersection of US 92 and Hilton Ave	RDWY, TO	Private Sector	Short-Term		
88	3			US 92 and White St Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and White St	RDWY	FDOT	Long-Term		

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
89	3	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and White St	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
90	3			US 92 and Seneca St Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and Seneca St	RDWY	FDOT	Long-Term		
91	3	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Seneca St	TO, TSM	FDOT	Short-Term	CST FY 2014/15	Under Construction
92	3			Seneca St to Nova Rd	Extend EB Right-Turn lane between Seneca St and SR 5A/Nova Rd	RDWY, TO	FDOT	Short-Term		
93	3			US 92 and Nova Rd Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and SR 5A/Nova Rd	RDWY	CODB	Short-Term		
94	3	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and SR 5A/Nova Rd	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
95	3			US 92 to Orange Ave on Nova Rd	Improve bicycle connectivity on SR 5A/Nova Rd between US 92 and Orange Ave	RDWY	CODB	Mid-Term		
96	3	4324383	SR 5A/Nova Rd Resurfacing	US 92/SR 600/ISB to SR400/Beville Rd	Mill and resurface SR 5A/Nova Rd from SR 400/Beville Rd to US 92	RDWY	FDOT	Short-Term	CST FY 2016/17	
97	3	4324421	US 92 Resurfacing	Nova Rd to US 1/Ridgewood Ave	Mill and resurface US 92 from SR 5A/Nova Rd to US 1/Ridgewood Ave	RDWY	FDOT	Short-Term	CST FY 2015/16	
98	3	4044192	US 92 Phase II Pedestrian Improvements and Landscaping	Nova Rd to Lincoln St	CODB ISB – West Streetscape Phase II Pedestrian improvements and landscaping from SR 5A/Nova Rd to Lincoln St	RE	CODB	Short-Term	FY 2015/16	
99	3	4348831	US 92 Traffic Signal Mast Arms	Midway Ave to Adams St	Replace span wire with mast arms at the intersection of US 92 and Adams St	RDWY, TO	FDOT	Short-Term	CST FY 2014/15	
100	3	4324421	US 92 Resurfacing	Nova Rd to US 1/Ridgewood Ave	Add High-Visibility Crosswalks at the intersection of US 92 and Adams St	RDWY	FDOT	Short-Term	CST FY 2015/16	
101	3	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Adams St	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
102	3			Nova Rd to US 1/Ridgewood Ave	Raised median islands, where feasible, between SR 5A/Nova Road and US 1/Ridgewood Ave	RDWY, TO	CODB	Mid-Term		
103	3	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Lincoln St	TO, TSM	Private Sector	Short-Term	CST FY 2014/15	

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Funding Phase	Construction Phase
104	3	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Dr. MLK, Jr. Blvd	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
105	3			Nova Rd to FEC Railroad	Additional study for improved pedestrian crossing between SR 5A/Nova Rd and FEC RR	TO, TSM	FDOT	Mid-Term		
106	3	4368551	US 92 Drainage Improvements	Emmet St to N. Charles St	US 92 drainage improvements from Emmet St to N. Charles St	RDWY, RE	FDOT	Short-Term	ROW FY 2016/17 – 2017/18	CST FY 2017/18
107	3			Clyde Morris Blvd to Ridgewood Ave	Upgrade transit stop enhancements between SR 483/Clyde Morris Blvd and US 1/Ridgewood Ave	TR	CODB	Mid-Term		
108	3	4373111	Daytona Beach Wayfinding Program	All ISB CMMP Segments (within city limits)	Add Wayfinding sings for major destinations	TO, TSM	CODB	Short-Term	CST FY 2014/15	
109	3	2014-023 (CODB)	ISB – West Phase III	Lincoln St to Ridgewood Ave	Add Landscaping between Lincoln St and US 1/Ridgewood Ave	RE	CODB	Mid-Term		
110	3	2011-027 2014-023 (CODB)	ISB – West Phase II & III Streetscape	Nova Rd to Ridgewood Ave	Bury utilities between SR 5A/Nova Rd and US 1/Ridgewood Ave	RE	CODB	Mid-Term		
111	3			Segment Three Intersection	Install Accessible Pedestrian Signals at all signals in Segment Three	RE	FDOT	Mid-Term		
112	3	4324421	FDOT Roadway Resurfacing	US 92 and Ridgewood Ave Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and US 1/Ridgewood Ave	RDWY	FDOT	Short-Term	CST FY 2015/16	
113	3	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and US 1/Ridgewood Ave	RDWY, TO	FDOT	Short-Term	CST FY 2014/15	
114	3	4302851	Votran Transit Service Enhancements	Routes 3 and 4 on US 1/Ridgewood Ave.	Improve bus service to 30 minute frequencies (routes 3 & 4)	TR	VOTRAN	Short-Term	CST FY 2015/16 (Complete)	
115	4			Bay St to Magnolia Ave on Ridgewood Ave	Add bicycle lanes on US 1/Ridgewood Ave between Bay St and Magnolia Ave	RDWY	FDOT	Long-Term		
116	4			Seagrave St to Palmetto Ave	Add bicycle lanes between Seagrave St and Palmetto Ave	RDWY	FDOT	Long-Term		
117	4	2011-038 (CODB)	ISB – East Part I Streetscape	Ridgewood Ave to Palmetto Ave	Raised median islands, where feasible, between US 1/Ridgewood Ave and Palmetto Ave	RDWY, TO	CODB	Mid-Term	Conceptual Design	Preliminary Design

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
118	4	2011-038 (CODB)	ISB – East Part I Streetscape	US 92 and Palmetto Ave Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and Palmetto Ave	RDWY	CODB	Mid-Term	Conceptual Design	Preliminary Design
119	4	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Palmetto Ave	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
120	4	2011-038 (CODB)	ISB – East Part I Streetscape	Ridgewood Ave to Beach St	Reduce travel lane width from 12' to 11' from US 1/Ridgewood Ave to Beach St	RDWY	CODB	Mid-Term	Conceptual Design	Preliminary Design
121	4	2011-038 (CODB)		Palmetto Ave to Beach St	Raised median islands, where feasible, between Palmetto Ave and Beach St	RDWY, TO	CODB	Mid-Term	Conceptual Design	Preliminary Design
122	4	2011-038 (CODB)	ISB – East Part I Streetscape	Ridgewood Ave to Beach St	Bury utilities between US 1/Ridgewood Ave and Beach St	RE	CODB	Mid-Term	Conceptual Design	Preliminary Design
123	4	2011-038 (CODB)	ISB – East Part I Streetscape	US 92 and Beach St Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and Beach St	RDWY	CODB	Mid-Term	Conceptual Design	Preliminary Design
124	4	4347121	US 92 SIS Connector Signal Improvements	Tomoka Farms Rd to Beach St	Add Adaptive Signal Control at the intersection of US 92 and Beach St	TO, TSM	FDOT	Short-Term	CST FY 2014/15	
125	4	4355341	Halifax River Greenway Trail	Beach St to Riverfront Park	Halifax River Greenway Trail (Beach St to Riverfront Park)	RE	CODB	Short-Term	CST FY 2014/15	
126	4			Halifax River Bridge	Restripe shoulders on Halifax River Bridge to accommodate bicycle lanes	RDWY	FDOT	Long-Term		
127	4			Halifax River to Halifax Ave	Add raised median island between the Halifax River and Halifax Ave	RDWY, RE	FDOT	Long-Term		
128	4			US 92 and Halifax Ave Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and Halifax Ave	RDWY	FDOT	Long-Term		
129	4			Halifax Ave to SR A1A	Reconstruct Roadway from Halifax Ave to SR A1A/Atlantic Ave (add sidewalks, medians, lighting)	RDWY	FDOT	Long-Term		
130	4	4306821	SR 441/Peninsula Dr. Resurfacing	US 92/SR 600/ISB to Silver Beach Ave.	High-Visibility Crosswalks at the intersection of US 92 and SR 441/Peninsula Ave	RDWY	FDOT	Short-Term	CST FY 2014/15	
131	4	4306821	SR 441/Peninsula Dr. Resurfacing	US 92/SR 600/ISB to Silver Beach Ave.	Mill and resurface SR 441/Peninsula Ave from US 92 to Silver Beach Ave	RDWY	FDOT	Short-Term	CST FY 2014/15	
132	4			Peninsula Ave to SR A1A	Additional study for pedestrian crossings between SR 441/Peninsula Ave and SR A1A/Atlantic Ave	TO, TSM	FDOT	Long-Term		
133	4			Ridgewood Ave to SR A1A	Upgrade transit stop enhancements between US 1/Ridgewood Ave and SR A1A/Atlantic Ave	TR	FDOT	Long-Term		

Table 3: Project Implementation (cont'd)

Map No.	Segment No.	FPID No.	Official Project Name	Project Limits	Recommended Improvements	Category	Lead Agency	Timing	Current Phase	Next Phase
134	4			US 92 and Grandview Ave Intersection	Add High-Visibility Crosswalks at the intersection of US 92 and Grandview Ave	RDWY	FDOT	Long-Term		
135	4			Halifax River to SR A1A	Bury utilities between Halifax River & SR A1A	RE	FDOT	Long-Term		
136	4			Ridgewood Ave to SR A1A	Add Landscaping between US 1/Ridgewood Ave and SR A1A/Atlantic Ave	RE	FDOT	Long-Term		
137	4			US 92 and SR A1A Intersection	High-Visibility Crosswalks at the intersection of US 92 and SR A1A/Atlantic Ave	RDWY	FDOT	Long-Term		
138	4	4373111	Daytona Beach Wayfinding Program	All ISB CMMP Segments (within city limits)	Add Wayfinding signs for major destinations	TO, TSM	CODB	Short-Term	CST FY 2014/15	
139	4			Segment Four Intersections	Install Accessible Pedestrian signals at all signals in Segment Four	RDWY	FDOT	Mid-Term		

Abbreviations:

CBP – Community-Based Partnership
FDOT – Florida Department of Transportation
RDWY – Roadway
RE – Roadside Environment
TO – Traffic Operations
TPO – River to Sea Transportation Planning Organization
TR – Transit
TSM – Transportation Systems Management

5.4 PHASED IMPLEMENTATION PLAN

The grouping of un-programmed CMMP recommended improvements by proximity, logical sequence and funding opportunities allows for recommendations identified in Tables 2 and 3 to be grouped into larger bundled projects for phased implementation. This phased approach may enable high-priority projects to proceed on a fast-track while design and funding sources for more complicated projects materialize.

Bundled CMMP project recommendations are illustrated in Figure 15 and further described in the following sections.

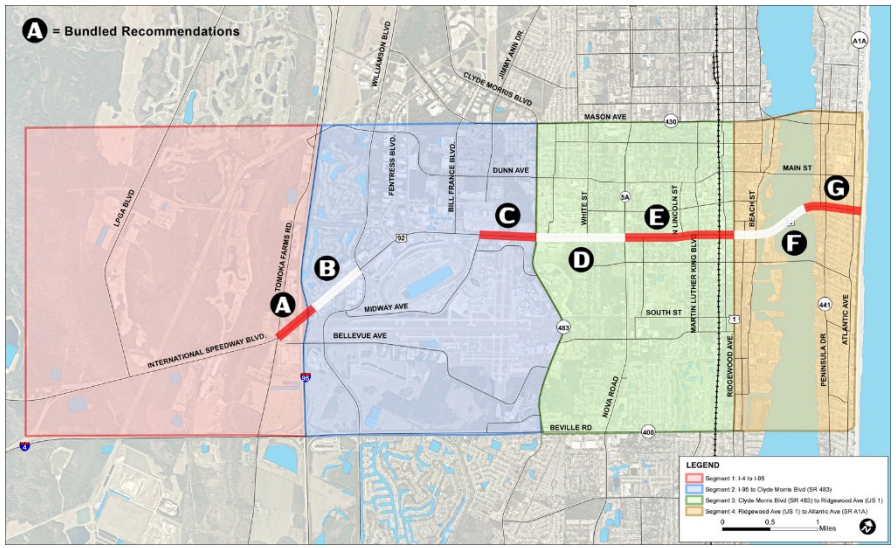


Figure 15: Bundled CMMP Project Recommendations

A – Tomoka Farms Road Pedestrian Improvements

(Tomoka Farms Rd. to I-95 NB Off-Ramp)

14 (Map Number) – Add 5' NB Sidewalk on Tomoka Farms Rd. between Bellevue Ave. and McDonalds Restaurant

17 – Add 10' WB Shard Use Path on ISB between Tomoka Farms Rd. and I-95 NB Off-Ramp

21 – Install Accessible Pedestrian Signals at Tomoka Farms Rd. and I-95 NB intersections

23 – Add High-Visibility Crosswalk at the intersection of US 92 and I-95 NB Off-Ramp (Milling & Resurfacing)

52 – Expand bicycle lane width from 4' to 7' between Tomoka Farms Rd. and I-95 NB Off-Ramp (Milling & Resurfacing)

B – US 92 Pedestrian Improvements *(I-95 to Williamson Blvd. Improvements)*

26 – Expand EB sidewalk width to 12' between I-95 NB Off-Ramp and Indigo Dr.

28 – Add High-Visibility Crosswalks at the intersection of US 92 and Indigo Dr. (Milling & Resurfacing)

29 – Closed drainage system from Indigo Dr. to Williamson Blvd.

30 – Expand EB and WB sidewalk width to 12' between Indigo Dr. and Williamson Blvd.

31 – Upgrade street lighting between Indigo Dr. and Williamson Blvd.

33 – Add high-visibility crosswalks at Thames Rd. (Milling & Resurfacing)

34 – Add landscaping between Indigo Dr. and Williamson Blvd.

35 – Upgrade transit stop amenities between Indigo Dr. and Williamson Blvd.

36 – Add pedestrian channelization (fencing) between Indigo Dr. and Williamson Blvd.

52 – Expand bicycle lane width from 4' to 7', I-95 NB Off-Ramp to Williamson Blvd segment only. (Milling & Resurfacing)

79 – Add accessible pedestrian signals at Indigo Dr. and Thames Rd. intersections

C – US 92 Pedestrian Improvements
(Midway Ave. to Clyde Morris Blvd.)

52 – Expand bicycle lane width from 4' to 7' between Midway Ave. and SR 483/Clyde Morris Blvd. (Milling & Resurfacing)

59 – Add high-visibility crosswalks at Midway Ave. (Milling & Resurfacing)

61 – Expand EB and WB sidewalk width to 12' between Midway Ave. and Clyde Morris Blvd.

62 – Closed drainage system from Midway Ave. and Clyde Morris Blvd.

63 – Upgrade street lighting between Midway Ave. and Clyde Morris Blvd.

65 – Add high-visibility crosswalks at Hagan Ter. (Milling & Resurfacing)

67 – Upgrade transit stop amenities between Midway Ave. and Clyde Morris Blvd.

69 – Add pedestrian channelization (fencing) between Midway Ave. and Clyde Morris Blvd.

71 – Add high-visibility crosswalks at the intersection of US 92 and Clyde Morris Blvd. (Milling & Resurfacing)

72 – New 4' bicycle lanes on US 92 at the intersection with Clyde Morris Blvd.

79 – Add accessible pedestrian signals at Midway Ave., Hagan Ter., and Clyde Morris Blvd. intersections

D – US 92 Pedestrian Improvements
(Clyde Morris Blvd. to Nova Rd.)

80 – Widen EB and WB sidewalks from 5' to 7' from Clyde Morris Blvd. to Nova Rd.

81 – Reduce travel lane width from 11'-4" to 11' from Clyde Morris Blvd. to Nova Rd.

82 – Reduce raised median width from 22' to 18' from Clyde Morris Blvd. to Nova Rd.

83 – Additional study for improved pedestrian crossing between Highland Ave. and Central Ave.

84 – Expand bicycle lane width from 4' to 7' between Clyde Morris Blvd. and Nova Rd.

88 – Add high-visibility crosswalks at the intersection of US 92 and White St.

90 – Add high-visibility crosswalks at the intersection of US 92 and Seneca St.

92 – Extend EB right-turn lane between Seneca St. and Nova Rd.

93 – Add high-visibility crosswalks at the intersection of US 92 and Nova Rd.

95 – Improve bicycle connectivity on Nova Rd between US 92 and Orange Ave.

107 – Upgrade transit stop amenities between Clyde Morris Blvd. and Nova Rd.

111 – Install accessible pedestrian signals at White St., Seneca St. and Nova Rd. intersections

E – US 92 Streetscape
*(Nova Rd. to Ridgewood Ave.)**

102 – Install raised median islands, where feasible, between Nova Rd. and Ridgewood Ave.

105 – Additional study for improved pedestrian crossings between Nova Rd. and FEC railroad.

107 – Upgrade transit stop amenities between Nova Rd. and Ridgewood Ave.

111 – Install accessible pedestrian signals at Adams St., Lincoln St. and MLK Blvd.

** - Combine recommendations with implementation of City of Daytona Beach's ISB – West Streetscape Phase II (FPID 4044192) and III (City No. 2014-023) projects.*

F – US 92 Downtown Streetscape
*(Ridgewood Ave. to Halifax River Bridge) ***

115 – Add bicycle lanes on Ridgewood Ave. between Bay St. and Magnolia Ave.
116 – Add bicycle lanes on US 92 between Seagrave St. and Palmetto Ave.

126 – Restripe shoulders on Halifax River Bridge to accommodate buffered bicycle lanes

139 – Install accessible pedestrian signals at Ridgewood Ave., Palmetto Ave. and Beach St.

*** - Combine recommendations with implementation of City of Daytona Beach ISB – East Part I Streetscape (City No. 2011-038) project.*

G – US 92 Beachside Streetscape *(Halifax River Bridge to Atlantic Ocean)* ***

127 – Install raised median islands, where feasible, between Halifax River Bridge and Halifax Ave.

129 – Reconstruct roadway from Halifax Ave. to one block east of SR A1A/Atlantic Ave. (add sidewalks, medians, lighting)

132 – Additional study for pedestrian crossings between Peninsula Ave. and Atlantic Ave.
139 – Install accessible pedestrian signals at Peninsula Ave. and Atlantic Ave.

*** - *Bundle G does not include roundabouts and associated Right-of-Way acquisition identified in City of Daytona Beach ISB – East Part II Streetscape (City No. 2011-038) project.*

5.4.1 Ranking of Bundled Projects

Table 4 depicts the cost estimates for each bundle as well as a ranking of each bundle from FDOT and a separate ranking from the Project Visioning Team (PVT).

The FDOT rankings for each bundle were based upon a variety of factors. These factors include: cost, available resources, crash data, safety, daily traffic and adjacent programmed projects. The top priority for FDOT was Bundle E.

The PVT rankings were a result of a Survey Monkey questionnaire. If funding were to come available, the PVT ranked the bundles as indicated in Table 4. The questionnaire received 46 responses with about 74% of respondents selecting Bundle G as the top priority.

Table 4: Bundled Recommendation Cost Estimates (Project Implementation)

Map No.	Bundled Recommendations	Construction Cost From LRE	Scope Contingency (25%)	Total Construction Cost	PE Design (15%)	CEI (15%)	Total Project Cost	#Bike/Ped Crashes (2008-12)	FDOT Ranking	PVT Ranking
A	Tomoka Farms Road to I-95 NB Off-Ramp	$935,402.42	$233,850.61	$1,169,253.03	$175,387.95	$175,387.95	$1,520,028.93	0/0	3	7
B	I-95 to Williamson Boulevard	$4,409,482.76	$1,102,370.69	$5,511,853.45	$826,778.01	$826,778.01	$7,165,409.47	0/4	4	3
C	Midway Avenue to SR 483/Clyde Morris Boulevard	$6,946,003.70	$1,736,500.92	$8,682,504.62	$1,302,375.69	$1,302,375.69	$11,287,256.00	4/1	6	4
D	SR 483/Clyde Morris Boulevard to SR 5A/Nova Road	$1,814,935.45	$453,733.86	$2,268,669.31	$340,300.40	$340,300.40	$2,949,270.11	7/7	5	5
E	SR 5A/Nova Road to US 1/Ridgewood Avenue	$250,510.16	$62,627.54	$313,137.70	$46,970.66	$46,970.66	$407,079.01	10/10	1	6
F	US 1/Ridgewood Avenue to Halifax River Bridge	$1,106,503.64	$276,625.91	$1,383,129.55	$207,469.43	$207,469.43	$1,798,068.41	3/2	2	2
G	Halifax River Bridge to SR A1A/Atlantic Avenue	$1,748,778.30	$437,194.58	$2,185,972.88	$327,895.93	$327,895.93	$2,841,764.74	1/5	7	1

Note:

1. Estimates were derived from FDOT Generic Cost Per Mile Model based off FDOT LRE system.
2. Bundled Project E is intended to complement programmed project FPID #4044192 (ISB-West Phase II, III, IV Streetscape and Sidescape projects).
3. Bundled Project F is intended to complement City of Daytona Beach (CODB) project #2011-038 (ISB-East Phase II Streetscape – Part I).
4. Bundled Project G excludes roundabout and associated Right-of-Way acquisition intended in CODB #2011-038 (ISB-East Phase II Streetscape – Part II).
5. 25% was added to the LRE construction cost for scope contingency.
6. 15% was added to the total construction cost for Preliminary Engineering (PE) Design.
7. 15% was added to the total construction cost for Construction Engineering and Inspection (CEI) services
8. The cost developed for this report should be used for preliminary estimating purposes only.

5.5 NEXT STEPS

Moving forward, the City of Daytona Beach will need to select at least one bundle for implementation. The City should utilize the R2CTPO's annual Call for Projects (typically January through March of each year) process to submit the bundle(s) for ranking and potential inclusion on the Long Range Transportation Plan (LRTP) Priority List.

Prepared for:

Centennial FDOT 1915 ★ 2015

Prepared by Ghyabi & Associates, Inc.

APPENDIX A

AADT –Annual Average Daily Traffic

ADA – Americans with Disabilities Act

ARRA – American Recovery and Reinvestment Act

BRT – Bus Rapid Transit

CRA – Community Redevelopment Area

CMAQ – Congestion Mitigation and Air Quality Program

CMMP – Corridor Master Management Plan

DBIA – Daytona Beach International Airport

ECHO – Environmental, Cultural, Historical, and Outdoor

FDEP – Florida Department of Environmental Protection

FDOT – Florida Department of Transportation

FTA – Federal Transit Administration

GIS – Geographic Information Systems

HSIP – Highway Safety Improvement Program

ISB – International Speedway Boulevard

LOS – Level of Service

LPGA – Lady's Professional Golf Association

LRTP – Long Range Transportation Plan

MAP-21 – Moving Ahead for Progress in the 21st Century

MLK – Martin Luther King, Jr.

MPO – Metropolitan Planning Organization

NEPA – National Environmental Policy Act

NHPP – National Highway Performance Program

O&M – Operations and Maintenance

PD&E – Project Development & Environment

R2CTPO – River To Sea Transportation Planning Organization

ROW – Right of Way

SR – State Road

STIP – State Transportation Improvement Program

STP – Surface Transportation Program

TEA-21 – Transportation Equity Act for the 21st Century

TAP – Transportation Alternatives Program

TIGER – Transportation Investment Generating Economic Recovery

TIP – Transportation Improvement Plan

TPL – Trust for Public Land

TSM – Transportation Systems Management