



US 92/International Speedway Blvd (ISB) Pedestrian Connectivity & Safety Assessment Study - Phase II

Field Evaluation Report

Prepared for:
Florida Department of Transportation District 5, DeLand, FL
Contract No. C9F27 TWO 74

September 2016



(This page intentionally left blank)



Table of Contents

List of Figures..... iii

List of Tables..... iii

1 INTRODUCTION 1

2 FIELD EVALUATION 3

 2.1 Existing Conditions 3

 2.2 Constraints 4

 2.3 Observations..... 4

3 SUMMARY OF OVERALL OBSERVATIONS..... 57

 3.1 Location Specific Observations and Resolutions..... 57

4 INNOVATIVE PEDESTRIAN & BICYCLE PROJECT EXAMPLES..... 67

 4.1 Streetside Design 67

 4.2 SR 806/Atlantic Avenue..... 69

 4.3 SR 13/San Jose Boulevard..... 70

 4.4 US 41/Tamiami Trail..... 71

 4.5 Edgewater Road (Formerly SR 424)..... 72

 4.6 City of Lakeland Pathways and Road Diet Program..... 73

5 NEXT STEPS 74

6 APPENDIX 75

 6.1 Acronyms 75



List of Figures

Figure 1: Project Study Area 2

Figure 2: US 92/SR 600/ISB Typical Cross Section (SR 5A/Nova Rd to US 1/Ridgewood Ave) 4

Figure 3: US 92/SR 600/ISB Typical Cross Section (US 1/Ridgewood Ave to Beach St) 4

Figure 5: US 92/SR 600/ISB Typical Cross Section Halifax River to SR A1A/Atlantic Ave 5

Figure 6: SR 5A/Nova Rd Typical Cross Section (George W. Engram Blvd to Dr. Mary McLeod Bethune Blvd)..... 5

Figure 7: SR 5A/Nova Rd Typical Cross Section (Dr. Mary McLeod Bethune Blvd to US 92/SR 600/ISB) 5

Figure 8: US 1/Ridgewood Ave Typical Cross Section 6

Figure 9: SR A1A/Atlantic Ave Typical Cross Section (Main St to US 92/SR 600/ISB)..... 6

Figure 10: SR A1A/Atlantic Ave Typical Cross Section (US 92/SR 600/ISB to Silver Beach Ave) 6

Figure 11: George W. Engram Blvd Typical Cross Section (SR 5A/Nova Rd to US 1/Ridgewood Ave)7

Figure 12: Fairview Ave Typical Cross Section..... 7

Figure 13: Main St Bridge Typical Cross Section..... 7

Figure 14: Main St Typical Cross Section (Halifax Ave to SR A1A/Atlantic Ave)..... 7

Figure 15: SR 441/Peninsula Dr Typical Cross Section..... 7

Figure 16: Orange Ave Typical Cross Section (SR 5A/Nova Rd to Seagrave St)..... 2

Figure 17: Orange Ave Typical Cross Section (Seagrave St to City Island Park)..... 2

Figure 18: Tom Staed Veterans Memorial Bridge Typical Cross Section..... 2

Figure 19: Silver Beach Ave Typical Cross Section (Halifax River to SR A1A/Atlantic Ave)..... 2

Figure 20: Observation Key Map..... 5

List of Tables

Table 1: Location Specific Observations 58

Table 2: Priority Descriptions from Volusia County ADA Transition Plan Phase 1 66



1 INTRODUCTION

The Pedestrian Connectivity and Safety Assessment (PCSA) Phase 2 study is a Florida Department of Transportation (FDOT, the Department) project in collaboration with the River to Sea Transportation Planning Organization (R2CTPO), Votran, City of Daytona Beach, Volusia County, International Speedway Boulevard (ISB) Coalition, and other stakeholders in the study area.

The core study area includes the geographic area generally bounded on the west by State Road (SR) 5A/Nova Road; on the east by SR A1A/Atlantic Avenue; on the north by George W. Engram Boulevard/Fairview Avenue/Main Street; and on the south by Orange Avenue/Silver Beach Avenue. In addition to the core study area, various community anchor institutions and regional activity centers were evaluated. These four “expanded” areas of study are situated around Chiles Academy along George W. Engram Boulevard and Ocean Center along SR A1A/Atlantic Avenue on the north; and between Orange Avenue and Loomis Avenue on the south. The combined study area is depicted in Figure 1.

The major purpose of the PCSA is to identify the existing pedestrian facilities along United States Highway (US) 92/SR 600/International Speedway Boulevard (collectively referred to in this report as US 92/SR 600/ISB), as well as along any neighboring roadways that connect to specific pedestrian-generating development. The report also determines/prioritizes improvements needed for enhanced pedestrian connectivity and safety.

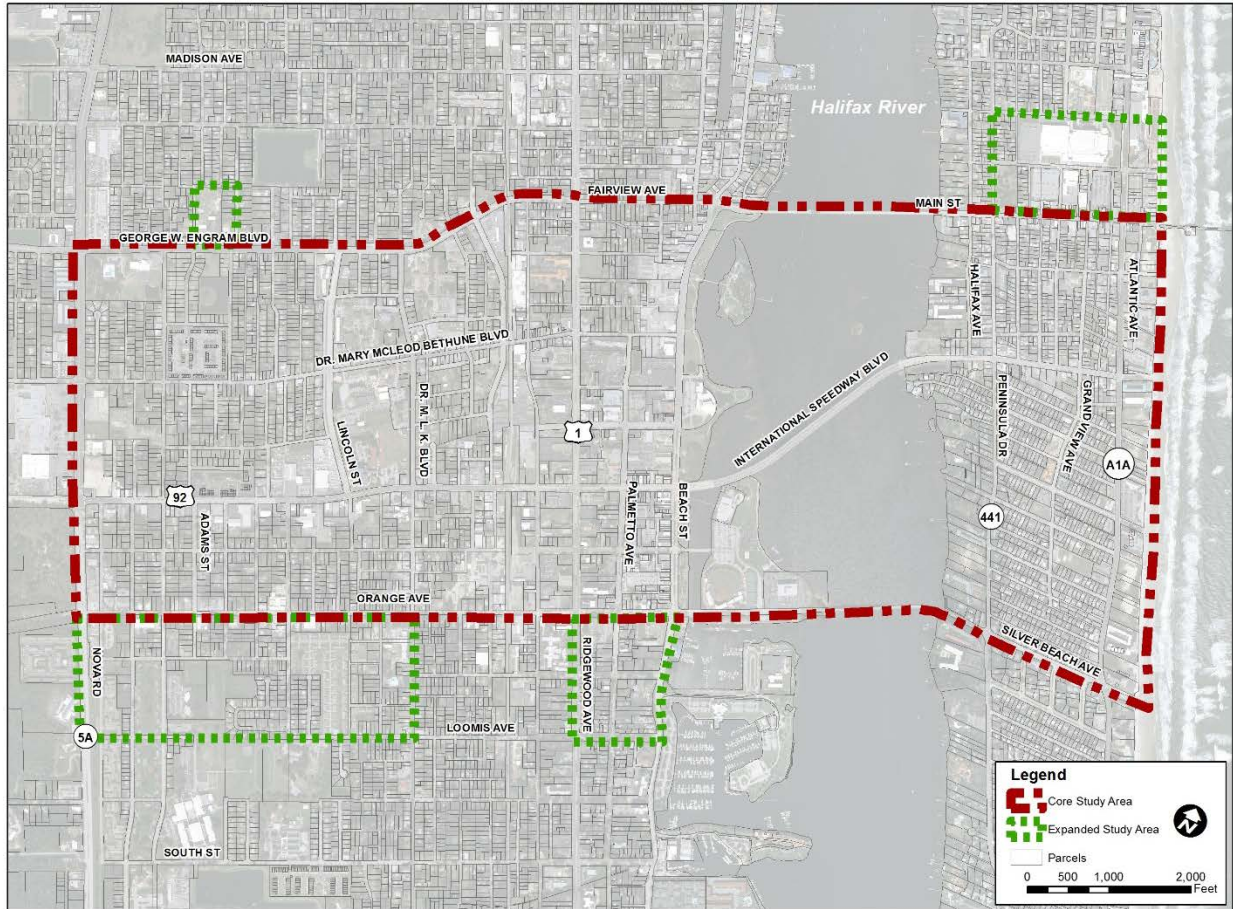
The project includes three major task areas, as listed below, and culminates in a final report which can be used by the Department as a guideline for future improvements.

- Task 1.0: Existing Conditions Summary Report
- **Task 2.0: Field Evaluation Report**
- Task 3.0: Development of Draft and Final Report

This project report addresses Task 2.0 and includes the following major sections:

- Field Observation
- Summary of Overall Observations
- Innovative Pedestrian & Bicycle Project Examples
- Next Steps

This report identifies, prioritizes, and advances critical improvements needed for multimodal connectivity and improved accessibility in the study area. It is principally comprised of narrative and annotated photos and graphics of observed existing conditions that identify the gaps, barriers, issues, and opportunities in the study area. It culminates with a preliminary list of pedestrian connectivity projects to improve accessibility between the origins and destinations within the study area.



Source: Volusia County Government. Map Created: 7/18/2016

Figure 1: Project Study Area



2 FIELD EVALUATION

On June 13, 2016, a field evaluation for the PCSA Phase II study area was conducted in a manner similar to a Pedestrian Roadway Safety Audit (PRSA). A PRSA is a performance examination of an existing or future road that qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. PRSAs provide more detail on pedestrian safety issues than the traditional road safety audit. With an emphasis on improved transit accessibility and pedestrian and bicycling connectivity, the goal of this evaluation was to highlight existing conditions within the corridor that validate the preliminary identification of Americans with Disabilities Act (ADA) compliant improvements to better connect origins and destinations within the PCSA study area. Unless otherwise noted, the photographs in this report were taken on June 13, 2016 and are courtesy of Ghyabi & Associates, Inc.

2.1 EXISTING CONDITIONS

Although focused on US 92/SR 600/ISB, the study area includes several other thoroughfares with varying levels of multimodal users and volume. Other principal arterials include SR 5A/Nova Road, US 1/Ridgewood Avenue and SR A1A/Atlantic Avenue. Minor roadways include George W. Engram Boulevard, Main Street, Beach Street, Fairview Avenue, SR 441/Peninsula Avenue, and Orange Avenue/Silver Beach Avenue.

Figures 2, 3, 4 and 5 depict the typical cross sections for US 92/SR 600/ISB within the study area. All cross sections include Type F curb and gutter and sidewalks on both sides of the facility throughout the study area.

The section of US 92/SR 600/ISB between SR 5A/Nova Road and US 1/Ridgewood Avenue is depicted in Figure 2. Within this section, US 92/SR 600/ISB is a four-lane roadway with a continuous center turn lane. The travel lanes are 10.5-feet wide and the center turn lane is 12-feet wide. There is an 80 LF ROW. There are 7-foot wide sidewalks and 4-foot wide bicycle lanes on both sides of the corridor.

The typical cross section for US 92/SR 600/ISB between US 1/Ridgewood Avenue and Beach Street is depicted in Figure 3. It features four, 12-foot through lanes, a 12-foot continuous turn lane and 8-foot parallel parking lanes on both sides of the street. In addition, there are 10-foot sidewalks located on both sides of the street. The right of way width for this section is 100 feet.

Figure 4 illustrates the typical cross section for US 92/SR 600/ISB over the Halifax River. This bridge includes four 12-foot through lanes separated by a concrete barrier wall. In addition, it includes 10-foot shoulders and 8-foot sidewalks on both sides of the bridge.

US 92/SR 600/ISB, between the Halifax River and SR A1A/Atlantic Avenue, is depicted in Figure 5. The typical cross section for this 80' wide corridor consists of four, 10-foot through lanes, and an 11-foot continuous center turn lane. Six-foot sidewalks and 6½-foot utility strips are located on both sides of the corridor.

The typical cross section for SR 5A/Nova Road is depicted in Figures 6 and 7. This facility features a six-lane urban section with a grass median. The right of way within the study area varies with a minimum width of 125 feet. The roadway has six, 12-foot through lanes, a 20-foot grass median and Type F curb and gutter on each side. It also includes 5-foot sidewalks on both sides of the corridor.

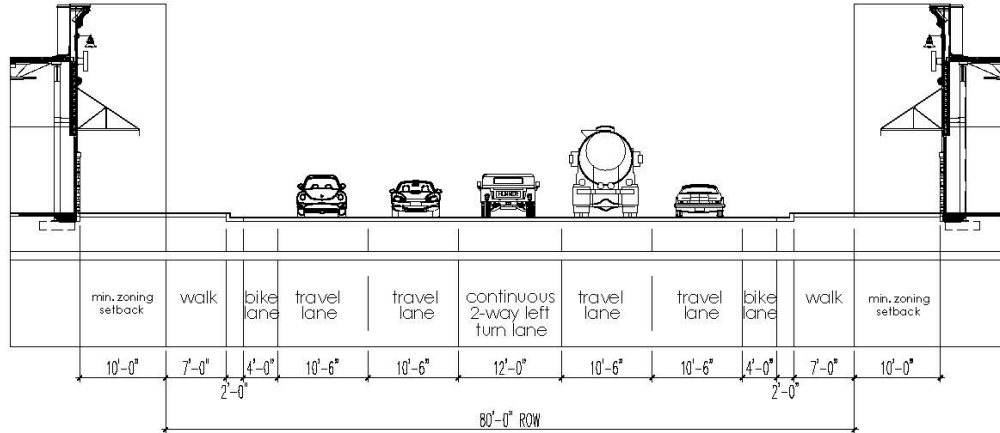


Figure 2: US 92/SR 600/ISB Typical Cross Section (SR 5A/Nova Rd to US 1/Ridgewood Ave)

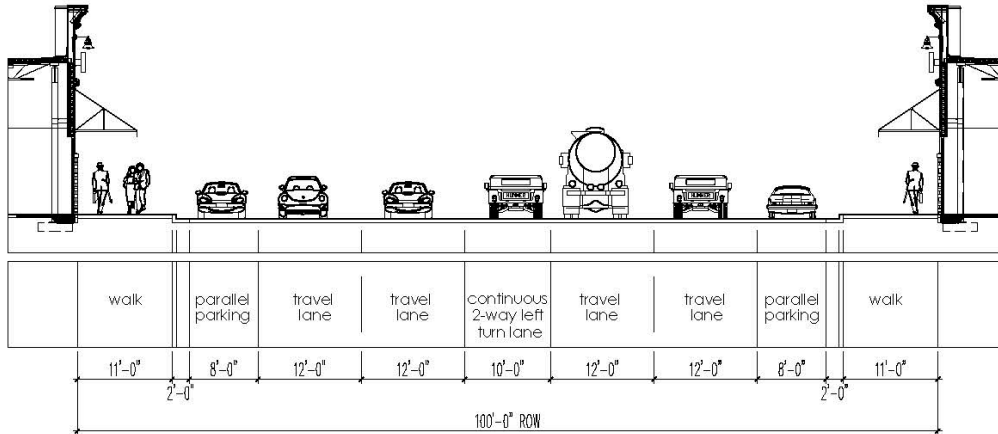


Figure 3: US 92/SR 600/ISB Typical Cross Section (US 1/Ridgewood Ave to Beach St)

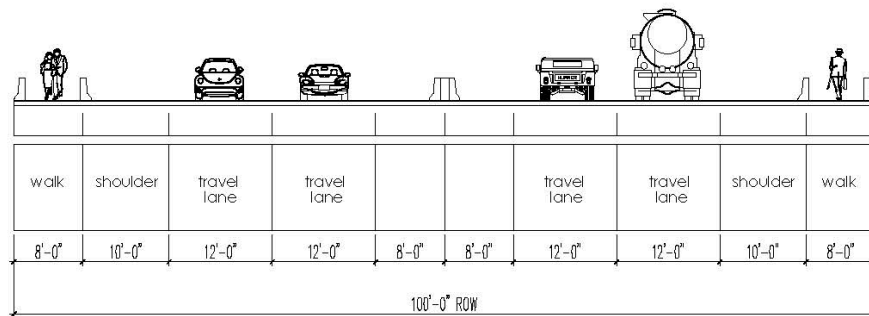


Figure 4: US 92/SR 600/ISB Typical Cross Section (Halifax River Bridge)

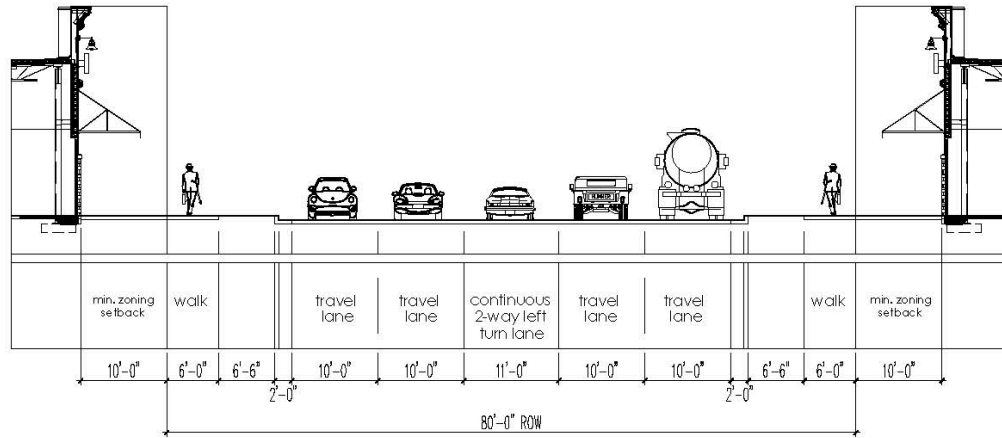


Figure 5: US 92/SR 600/ISB Typical Cross Section Halifax River to SR A1A/Atlantic Ave

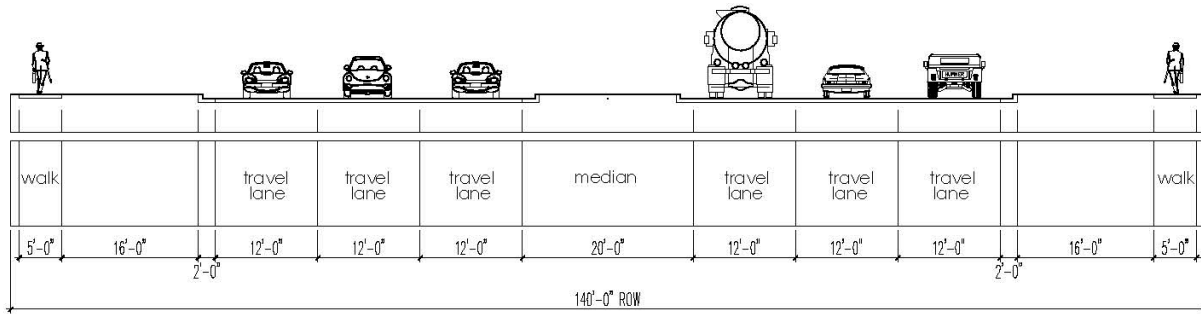


Figure 6: SR 5A/Nova Rd Typical Cross Section (George W. Engram Blvd to Dr. Mary McLeod Bethune Blvd)

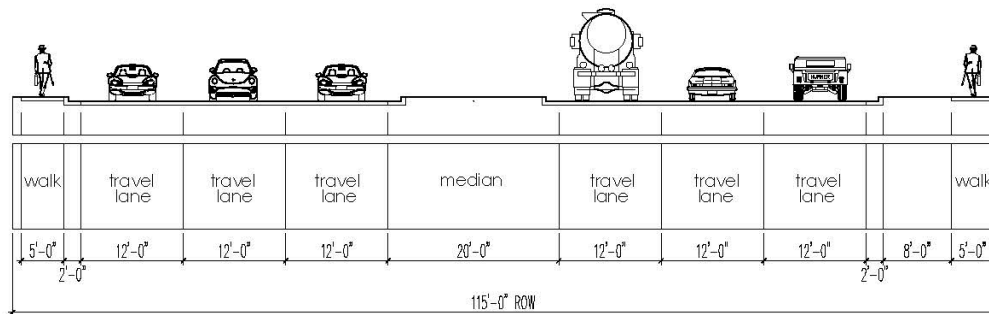


Figure 7: SR 5A/Nova Rd Typical Cross Section (Dr. Mary McLeod Bethune Blvd to US 92/SR 600/ISB)

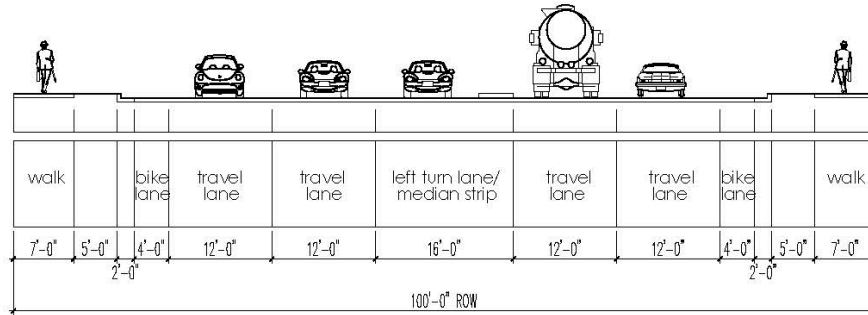


Figure 8: US 1/Ridgewood Ave Typical Cross Section

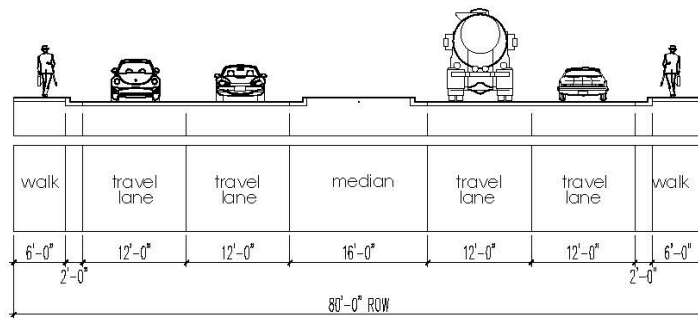


Figure 9: SR A1A/Atlantic Ave Typical Cross Section (Main St to US 92/SR 600/ISB)

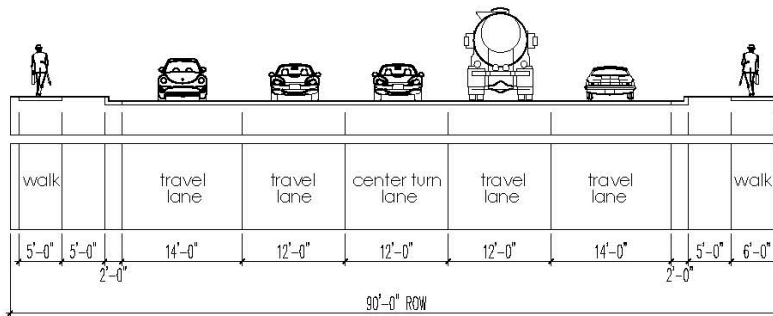


Figure 10: SR A1A/Atlantic Ave Typical Cross Section (US 92/SR 600/ISB to Silver Beach Ave)

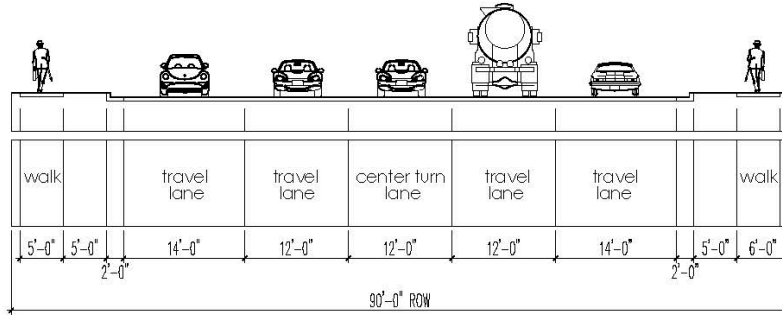


Figure 11: George W. Engram Blvd Typical Cross Section (SR 5A/Nova Rd to US 1/Ridgewood Ave)

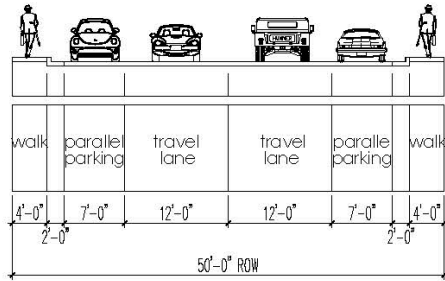


Figure 12: Fairview Ave Typical Cross Section

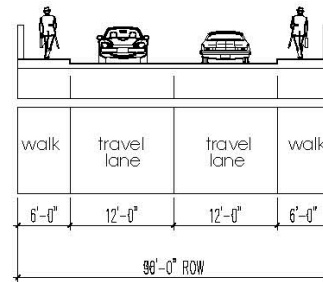


Figure 13: Main St Bridge Typical Cross Section

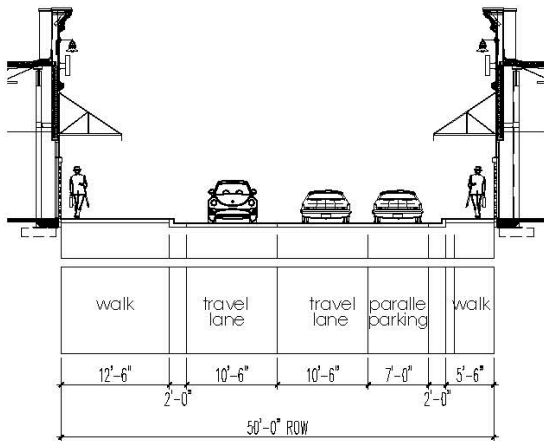


Figure 14: Main St Typical Cross Section (Halifax Ave to SR A1A/Atlantic Ave)

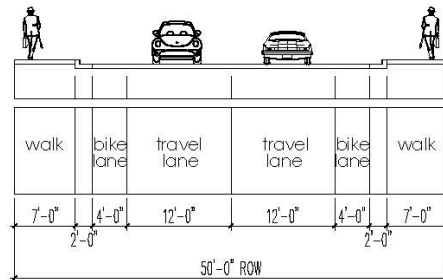


Figure 15: SR 441/Peninsula Dr Typical Cross Section

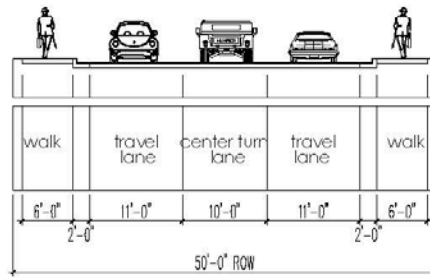


Figure 16: Orange Ave Typical Cross Section (SR 5A/Nova Rd to Seagrave St)

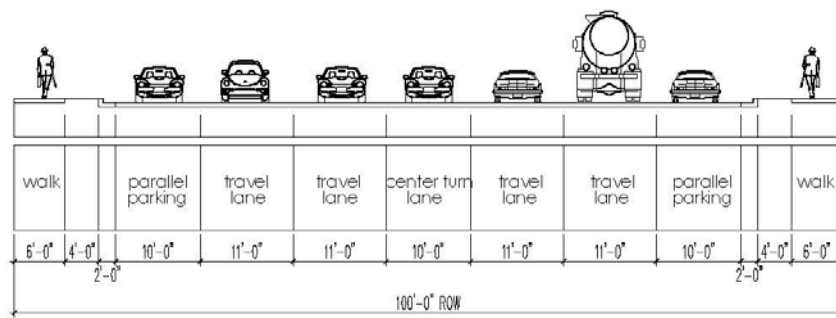


Figure 17: Orange Ave Typical Cross Section (Seagrave St to City Island Park)

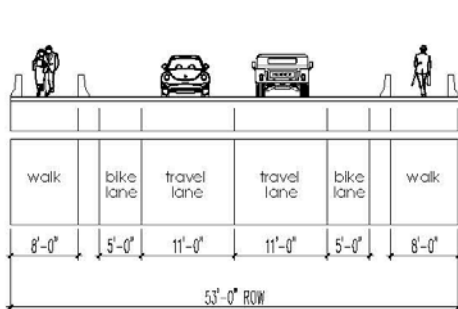


Figure 18: Tom Staed Veterans Memorial Bridge Typical Cross Section

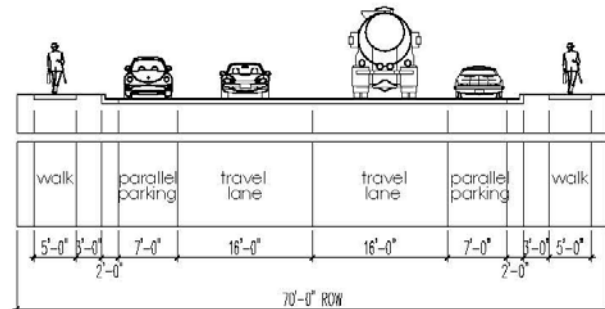


Figure 19: Silver Beach Ave Typical Cross Section (Halifax River to SR A1A/Atlantic Ave)



Figure 8 depicts the typical cross section for US 1/Ridgewood Avenue, which has a four-lane urban section with grass median. The right of way within the study area is 100 feet wide. This roadway features four, 12-foot through lanes and a 16-foot grass median. The roadway section also features Type F curb and gutter, 4-foot bike lanes, 5-foot utility strips and 7-foot sidewalks on both sides of the corridor.

SR A1A/Atlantic Avenue, north of US 92/SR 600/ISB, is depicted in Figure 9. It features four 12-foot through lanes, a 16-foot raised median, Type F curb and gutter and 6-foot sidewalks on both sides. This segment of the arterial roadway has a right of way width of 80 feet.

SR A1A/Atlantic Avenue, south of US 92/ISB, is depicted in Figure 10. It features four 12-foot through lanes, a 12-foot continuous center turn lane, and Type F curb and gutters. It includes an 8-foot sidewalk on the east side of the corridor and a 5-foot sidewalk on the west. This segment of the arterial roadway has a right of way width of 80 feet.

Minor arterials within the study area include SR 441/Peninsular Drive south of US 92/SR 600/ISB, George W. Engram Boulevard/Fairview Avenue/Main Street, Orange Avenue and Silver Beach Avenue. Figures 11 through 19 depict the typical cross sections for these minor arterials within the study area.

Beach Street is the only four-lane collector roadway within the study area. Two-lane collectors include Peninsula Drive north of US 92/SR 600/ISB, Dr. Mary McLeod Bethune Boulevard, Dr. Martin Luther King, Jr. Boulevard, Seagrave Street south of US 92/SR 600/ISB Boulevard, and Halifax Avenue.

Generally, posted speed limits on major roadways within the study area are between 30 and 40 miles per hour. However, SR 5A/Nova Road, forming the study's west boundary, has posted speed limits of 45 miles per hour.

While there are sidewalks on both sides of most major roadway facilities within the study area, significant gaps within the sidewalk network are present on a number of roadways within the Midtown Redevelopment Area. Outside of the Halifax River Greenway, the existing bicycle network within the study area also has a lack of connectivity, as most bicycle lane projects have been added in recent years as part of isolated FDOT roadway milling and resurfacing projects.

Transit service within the PCSA study area is provided by Votran with bus stops located throughout the study area. There are twelve bus routes with 60-minute headways and three with 30-minute headways. These routes serve a variety of commercial, entertainment, educational and residential uses within the study area. During field evaluation, numerous people were observed walking, biking and using transit within the PCSA study area.

2.2 CONSTRAINTS

Pedestrian and bicyclist safety and connectivity are key issues for the PCSA Phase II study area. Despite a significant number of commercial and institutional uses within the area, the multimodal network could be improved. Bike lanes are limited and, where they do exist, their location adjacent to high speed traffic lanes negatively impacts their utilization. As cited in Smart Growth America's *Dangerous by Design 2014* (May 2014), the risk of death for bicyclists and pedestrians on roads with 45 mph speed limits is 11 times greater than that for roads with 20 mph speed limits.

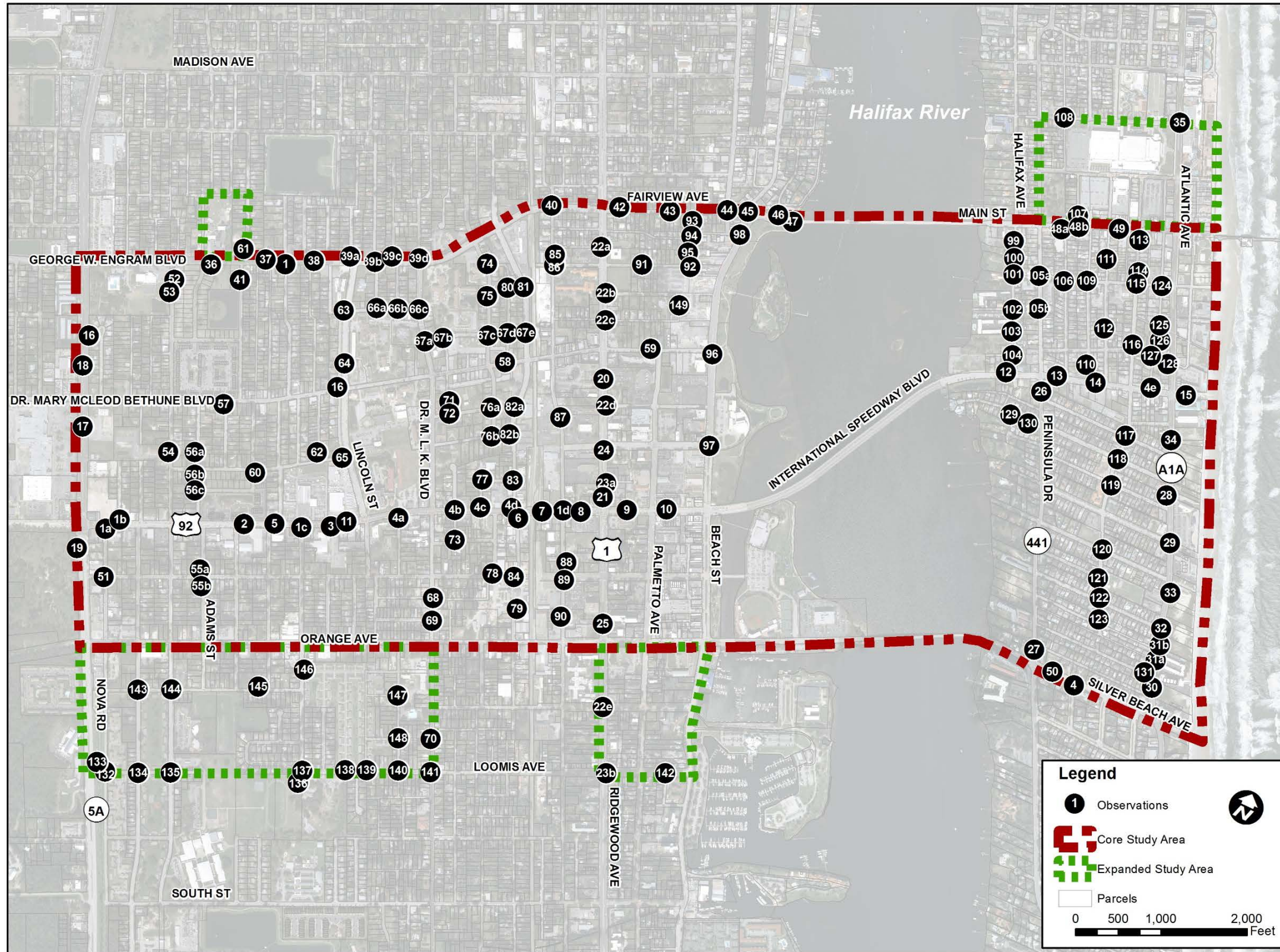
The sidewalk network within the study area lacks strong connectivity along arterial corridors, discouraging pedestrian use and compromising pedestrian safety. As depicted in the photo below, pedestrians were observed crossing at unmarked locations. Although there are marked crosswalks at signalized intersections, the distance between them plays a role in pedestrians' decisions to cross midblock.



Pedestrians cross US 92/SR 600/ISB at an unmarked location within the study area.

2.3 OBSERVATIONS

Field observation efforts within the PCSA Phase II study area occurred throughout the day on June 13, 2016. The observations noted in the following sections begin with state and county maintained roadways and end with local roadways. Observations within the study area are ordered from east to west. Observation locations are depicted in Figure 20.



Source: Ghyabi & Associates. Map Created: 7/18/2016

Figure 20: Observation Key Map

US 92/SR 600/International Speedway Boulevard

1. On US 92/SR 600/ISB, the existing marked crosswalk paint has faded at the following intersections between SR 5A/Nova Road and US 1/Ridgewood Avenue:

- a) Jean Street (Eastbound)
- b) Harney Street (Westbound)
- c) Lockhart Street (Eastbound)
- d) Seagrave Street (Westbound)



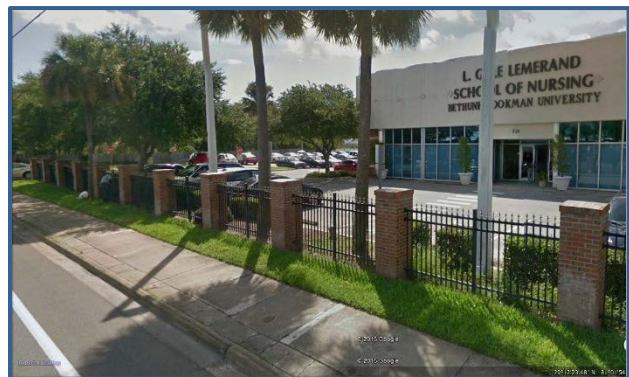
An example of a faded marked crosswalk at US 92/SR 600/ISB and Jean St.

2. There are no marked pedestrian crossings over a 0.36-mile stretch of US 92/SR 600/ISB between Adams Street and Lincoln Street.



There is a lack of marked pedestrian crossings on US 92/SR 600/ISB in this section.

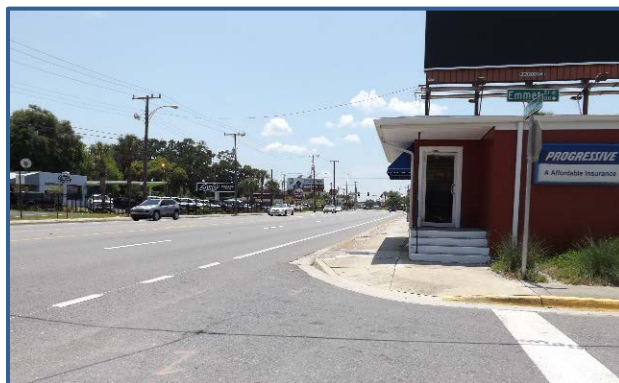
3. There is no pedestrian connection between the eastbound sidewalk and Bethune-Cookman University's (BCU) School of Nursing.



A fence blocks a potential pedestrian connection between US 92/SR 600/ISB and the entrance to Bethune-Cookman University's School of Nursing. Photograph courtesy of Google Streetview.

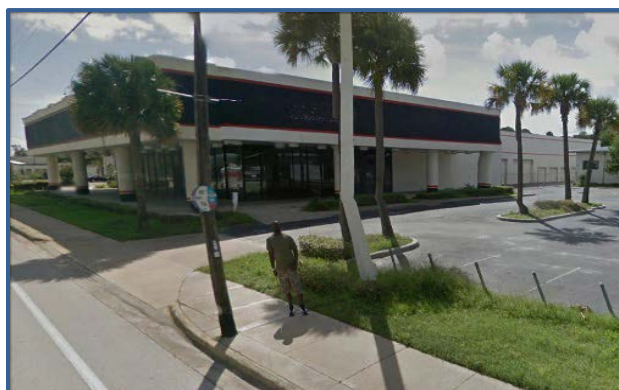
There are no marked crosswalks on US 92/SR 600/ISB at the following intersection locations between SR 5A/Nova Road and SR A1A/Atlantic Avenue:

- a) Helme Place (Eastbound and Westbound)
- b) Jessie Street (Eastbound)
- c) Emmet Street (Westbound)
- d) Charles Street (Eastbound and Westbound)
- e) Coates Street (Westbound)



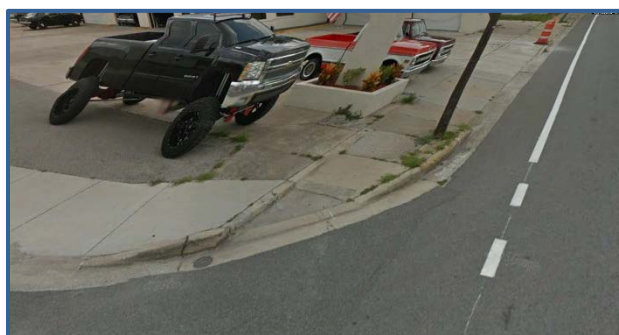
There is no marked crosswalk at US 92/SR 600/ISB and Emmet St.

- 4. Bus stops on US 92/SR 600/ISB between SR 5A/Nova Road and the Florida East Coast Railroad (FECR) lack amenities.



This bus stop at US 92/SR 600/ISB and Reva St lacks amenities. Photograph courtesy of Google Streetview taken in July 2015.

- 5. The eastbound sidewalk on US 92/SR 600/ISB at South Charles Street lacks an ADA accessible sidewalk ramp connection.



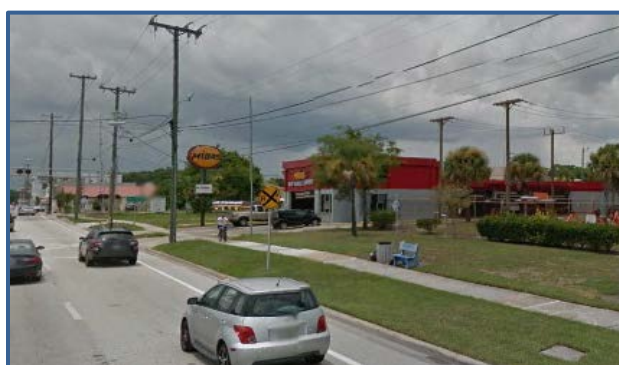
The eastbound sidewalk ramp at US 92/SR 600/ISB and South Charles St. Photograph courtesy of Google Streetview taken in June 2015.

- 6. There are no marked pedestrian crossings across a 0.36-mile stretch of US 92/SR 600/ISB between Dr. MLK, Jr. King Boulevard and US 1/Ridgewood Avenue.



US 92/SR 600/ISB, looking east between Dr. MLK, Jr. Blvd and US 1/Ridgewood Ave.

- 7. The bus stops along US 92/SR 600/ISB at Seagrave Street are non-ADA compliant.



The westbound bus stop along US 92/SR 600/ISB at Seagrave St. Photograph courtesy of Google Streetview.

- 8. There is a 0.33-mile gap in the bike lane network, along US 92/SR 600/ISB between Seagrave Street and Beach Street.
- 9. Bicycles are prohibited on sidewalks along US 92/SR 600/ISB between Palmetto Avenue and Beach Street.
- 10. The location of concrete utility poles compromise the usable width of the eastbound sidewalk of US 92/SR 600/ISB just east of Lockhart Street to Dr. MLK, Jr. Boulevard.



Bicycles are prohibited on sidewalks along US 92/SR 600/ISB between Palmetto Ave and Beach St.

11. The US 92/SR 600/ISB westbound bicycle lane does not extend to Halifax Avenue.
12. There are no bicycle facilities along US 92/SR 600/ISB between Halifax Avenue and SR A1A/Atlantic Avenue.



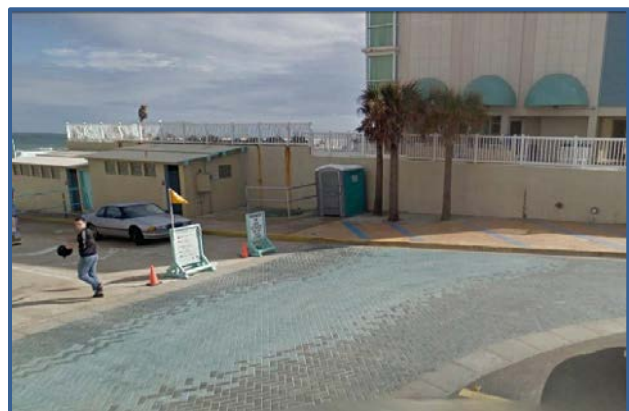
*The US 92/SR 600/ISB westbound bicycle lane at Halifax Ave.
Photograph courtesy of Google Streetview.*

13. Several bus stops located along US 92/SR 600/ISB between SR 441/Peninsula Drive and SR A1A/Atlantic Avenue are not ADA compliant.



An eastbound bus stop along US 92/SR 600/ISB at Wild Olive Ave.

14. The sidewalks along ISB lack ADA accessible ramps at the crosswalk one block east of SR A1A/Atlantic Avenue.



Bicycles are prohibited on sidewalks along US 92/SR 600/ISB between Palmetto Ave and Beach St.

SR 5A/Nova Road

15. On the east side of SR 5A/Nova Road, between George Engram Boulevard and Dr. Mary McLeod Bethune Boulevard, vegetation obstructs the sidewalk. Trees, bushes, and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation reduces the useable width of sidewalks on SR 5A/Nova Rd.

16. There are no bicycle facilities along SR 5A/Nova Road within the study area north of US 92/SR 600/ISB. Due to high automobile speeds within the corridor, cyclists frequently utilize the sidewalks rather than travelling on the roadway, creating a potential conflict with pedestrians.



Cyclists ride on the sidewalk along SR 5A/Nova Rd.

17. Street lights are located within the sidewalks between George Engram Boulevard and Orange Avenue. Although it appears that its location exceeds the ADA minimums, consideration should be given to relocating the pole outside of the sidewalk in the event of a future roadway project.



A utility pole located in the sidewalk at Midtown Plaza on SR 5A/Nova Rd.

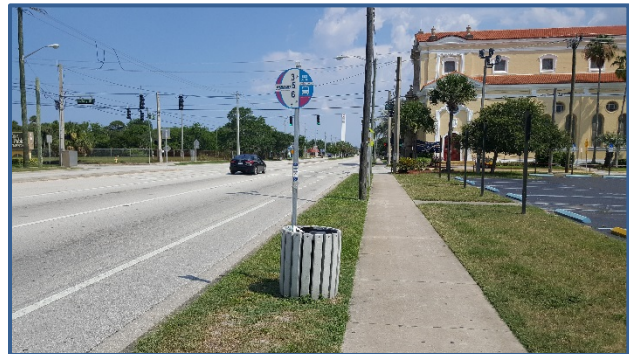
18. The sidewalk on the west side of SR 5A/Nova Road, varies width in front of Tuscawilla Park, just south of US 92/SR 600/ISB. Consideration should be given to widening the existing sidewalk into a shared use path for both cyclists and pedestrians.



The sidewalk width on the west side of SR 5A/Nova Rd varies.

US 1/Ridgewood Avenue

19. Several bus stops located along US 1/Ridgewood Avenue between George W. Engram Boulevard/Fairview Avenue and US 92/SR 600/ISB are not ADA compliant.



A cattle trail exists between the sidewalk and the curb at this bus stop near Mulally St.

20. There is a gap in the bicycle facilities along US 1/Ridgewood Avenue between Bay Street and Magnolia Avenue.



The northbound bicycle lane on US 1/Ridgewood Ave ends at Magnolia Ave.

21. There are no marked crosswalks on US 1/Ridgewood Avenue at the following intersection locations within the study area:

- a) Hobart Avenue (Southbound)
- b) First Avenue (Northbound and Southbound)
- c) San Juan Avenue (Northbound and Southbound)
- d) Third Avenue (Northbound)
- e) Live Oak Avenue (Northbound and Southbound)



An unmarked crossing at US 1/Ridgewood Ave and Hobart Ave.

22. US 1/Ridgewood Avenue, the existing marked crosswalk paint has faded at the following intersections within the study area:

- a) Dowling Court (Northbound)
- b) Loomis Avenue (Northbound)



A faded crosswalk at the intersection of US 1/Ridgewood Ave and Loomis Ave.

23. There is no eastbound crosswalk at the signalized intersection of US 1/Ridgewood Avenue and Bay Street.



The intersection of US 1/Ridgewood Ave and Bay St lacks a crosswalk on the south side.

24. Several bus stops located along US 1/ Ridgewood Avenue between US 92/SR 600/ISB and Loomis Avenue are not ADA compliant.



A non ADA compliant bus stop on US 1/Ridgewood Ave.

SR 441/Peninsula Drive

25. There is a gap in the bicycle facilities along SR 441/Peninsula Drive between US 92/SR 600/ISB and Vermont Avenue.



Bike facilities on SR 441/Peninsula Dr end one block south of US 92/SR 600/ISB. February 2016 aerial courtesy of Google Earth.

26. There is a gap in the bicycle facilities along SR 441/Peninsula Drive between Phoenix Avenue and Silver Beach Avenue.



There are no bicycle facilities on SR 441/Peninsula Dr between Phoenix Ave and Silver Beach Ave.

SR A1A/Atlantic Avenue

27. Several southbound bus stops located along SR A1A/Atlantic Avenue between US 92/SR 600/ISB and Silver Beach Avenue are not ADA compliant and lack amenities.



A southbound non-ADA compliant bus stop on SR A1A/Atlantic Ave. July 2015 photograph courtesy of Google Streetview.

28. There is a gap in the sidewalk network at the intersection of SR A1A/Atlantic Avenue and Revilo Boulevard.



A cattle trail in the sidewalk network at SR A1A/Atlantic Ave and Revilo Blvd. July 2015 photograph courtesy of Google Streetview.

29. There are no marked pedestrian crossings along a 0.42-mile stretch of SR A1A/Atlantic Avenue from just north of Revilo Boulevard to Silver Beach Avenue.



SR A1A/Atlantic Ave does not have marked pedestrian crossings between Revilo Blvd and Silver Beach Ave.

30. There are no marked crosswalks on SR A1A/Atlantic Avenue at the following intersection locations within the study area:

- a) Eastwood Lane (Southbound)
- b) Frances Terrace (Southbound)

31. There are ADA accessible ramps along SR A1A/Atlantic Avenue at Ribault Avenue, suggesting that a mid-block crossing may have once been considered or existing at this location. This location is the mid-point between an existing mid-block crossing just north of Revilo Boulevard and Silver Beach Avenue.



An ADA accessible sidewalk ramp at Ribault Ave without a marked crosswalk. July 2015 photograph courtesy of Google Streetview.

32. Several northbound bus stops located along SR A1A/Atlantic Avenue between US 92/SR 600/ISB and Silver Beach Avenue lack amenities.

33. There are no bike facilities on SR A1A/Atlantic Avenue within the study area.



A northbound bus stop without amenities at SR A1A/Atlantic Ave and Revilo Blvd. July 2015 photograph courtesy of Google Streetview.

34. A traffic signal obstructs the sidewalk on the north side of Earl Street at SR A1A/Atlantic Avenue.



A traffic signal impacts the sidewalk width on Earl St.

George W. Engram Boulevard

35. At Chiles Academy School, the sidewalk on the south side of George W. Engram Boulevard does not connect with the marked mid-block crossing just east of Laura Street. Consideration should be given to providing an ADA compliant connection at this location.



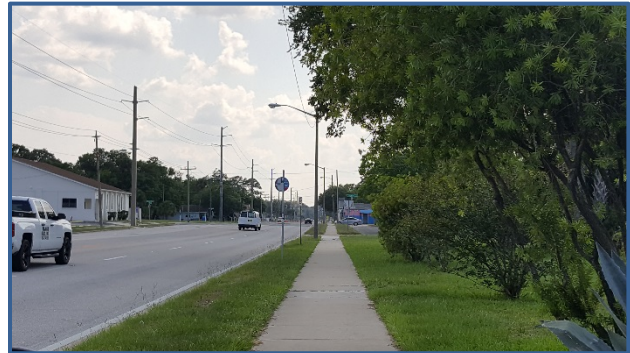
Consideration should be given to providing an ADA compliant connection at Chiles Academy School.

36. There are no marked pedestrian crossings over a 0.45-mile stretch of George W. Engram Boulevard between Chiles Academy School and Dr. MLK, Jr. Boulevard.



George W. Engram Blvd is a wide roadway with limited opportunities for pedestrians to cross between SR 5A/Nova Road and Dr. MLK, Jr. Blvd.

37. Several bus stops located along George W. Engram Boulevard between SR 5A/ Nova Road and US 1/Ridgewood Avenue are not ADA compliant and lack amenities.



A non ADA compliant bus stop on George W. Engram Blvd at Pleasant St.

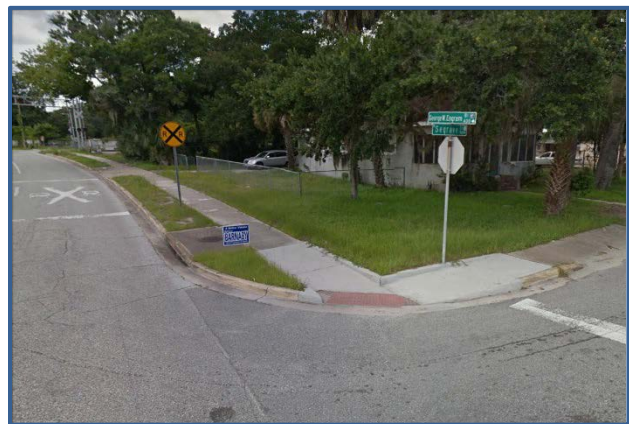
38. On George W. Engram Boulevard, the existing marked crosswalk paint has faded at the following intersections between SR 5A/Nova Road and US 1/Ridgewood Avenue:

- a) Lincoln Street (North side)
- b) Model Street (North and South sides)
- c) Pleasant Street (North side)
- d) Dr. MLK, Jr. Boulevard (North side)



A faded existing marked crosswalk at Dr. MLK, Jr. Blvd.

39. There is no marked crosswalk on the north side of George W. Engram Boulevard at Seagrave Street.



There is no marked crosswalk on the north side of George W. Engram Blvd at Seagrave St. Photograph courtesy of Google Streetview.

40. There is a gap within the sidewalk network on Rose Avenue just south of George W. Engram Boulevard.



This sidewalk on Rose Ave abruptly ends 280' south of George W. Engram Blvd.

Fairview Avenue (County)

41. The sidewalk on the north side of Fairview Avenue is less than 3' wide, 100' east of US 1/Ridgewood Avenue.



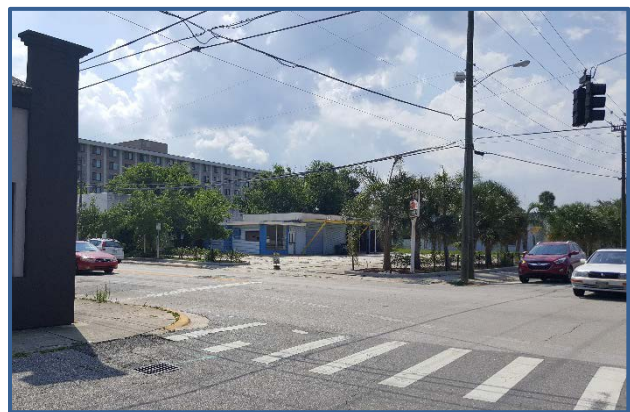
Just east of US 1/Ridgewood Ave, the sidewalk width on the north side of Fairview Ave is not ADA compliant.

42. Excluding the Central Manor Apartments bus stop on the north side of Fairview Avenue, all bus stops between US 1/Ridgewood Avenue and Beach Street lack amenities.



A bus stop with no amenities at Fairview Ave and Daytona Street. July 2015 photograph courtesy of Google Streetview.

43. At Beach Street, despite existing sidewalks on four sides of the signalized intersection, there are no crosswalks on the north, west and east sides. On the north side of the street, there are no ADA accessible sidewalk ramps.



An unmarked crosswalk location at the intersection of Fairview Ave and Beach St.

- 44. The sidewalks on the west side of the Fairview Avenue/Ballough Road intersection lack ADA accessible sidewalk ramps. In addition, the crosswalk on the south side of Fairview Avenue does not align with existing ADA accessible sidewalk ramps.



The intersection of Fairview Ave and Ballough Rd.

- 45. There is no marked crosswalk on the north side of Fairview Avenue at Bowman Avenue.



There is no marked crosswalk at Fairview Ave and Bowman Ave.

- 46. Despite the presence of ADA accessible sidewalk ramps, there is no marked crossing for the Halifax River Greenway where it crosses Fairview Avenue.



The Halifax River Greenway multi-use path at Fairview Ave.

Main Street

47. There are no marked crosswalks on Main Street at the following intersections:
- a) Hollywood Avenue South
 - b) Hollywood Avenue North



The intersection of Main St and Hollywood Ave does not have a marked crosswalk.

48. On Main Street, the use of bicycles on sidewalks is prohibited despite the corridor lacking dedicated bicycle facilities.



Bicycles are not allowed on Main St.

Silver Beach Avenue

49. Despite the existing width of the street, there are no bicycle facilities on Silver Beach Avenue, between the Veterans Memorial Bridge and SR A1A/Atlantic Avenue.



Silver Beach Ave looking west towards SR 441/Peninsula Ave.

Jean Street

50. The sidewalk connection on the west side of Jean Street at Magnolia Avenue lacks ADA accessible sidewalk ramps.



There are no ADA accessible ramps on the west side of the Jean St and Magnolia Ave intersection.

Keech Street

51. There is a gap in the sidewalk connection on the east side of Keech Street between George W. Engram Boulevard and Pinehaven Drive.



A gap in the sidewalk network on Keech St, north of Pinehaven Dr.

52. There are no sidewalk facilities on the west side of Keech Street between Dr. Mary McLeod Bethune Boulevard, despite the presence of transit service, Cypress Park and Chiles Academy School. Consideration should be given to the development of ADA compliant bus stops and sidewalk connections where “cattle trails” exist.



A cattle trail to a non ADA compliant bus stop on Keech St.

53. Vegetation is obstructing the sidewalk on the west side of Keech Street just north of Oak Street. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Keech St.

Adams Street

54. Vegetation is obstructing the sidewalk on the west side of Adams Street just north (a) and south (b) of Magnolia Avenue. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Adams St.

55. There are several sidewalk gaps on the west side of Adams Street in the vicinity of Oak Street.



A sidewalk on Adams St abruptly ends.

Dr. Mary McLeod Bethune Boulevard

56. There is a utility pole that compromises the width of the sidewalk and ADA accessible sidewalk ramp on Dr. Mary McLeod Bethune Boulevard at Desoto Street.



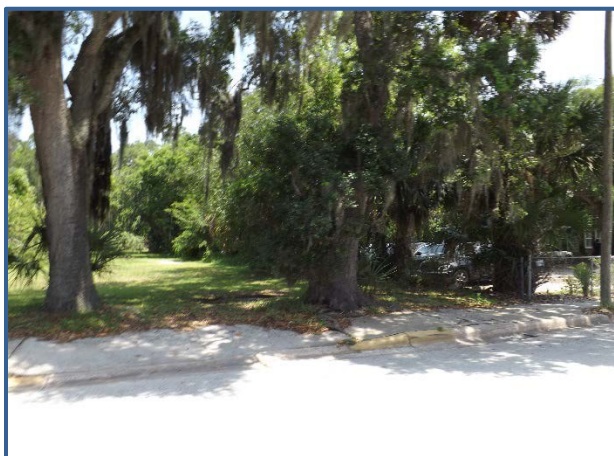
A utility pole obstructs the sidewalk on Dr. Mary McLeod Bethune Blvd.

57. There is a utility pole that compromises the width and use of the ADA accessible sidewalk ramp at the northwest corner of Dr. Mary McLeod Bethune Boulevard and Weaver Street.



A streetlight obstructs the sidewalk ramp at Weaver St.

58. Sections of the sidewalk on the north side of Dr. Mary McLeod Bethune Boulevard, near Palmetto Avenue, are cracked and broken. As this may cause a tripping hazard, they should be repaired as soon as practical.



Vegetation obstructs the sidewalk on Keech St.

Fulton Street

59. The sidewalk at the intersection of Oak Street and Fulton Street lacks an ADA accessible sidewalk ramp.



This sidewalk abruptly ends at Oak St and Fulton St.

60. Vegetation is obstructing the sidewalk on the west side of Fulton Street adjacent to the Chiles Academy, just north of George W. Engram Boulevard. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded



Vegetation obstructs the sidewalk on Fulton St.

Jefferson Street

61. There is a gap in the existing sidewalk running on the west side of Jefferson Street between Oak Street and Dr. Mary McLeod Bethune Boulevard.



Sidewalk gaps exist on the west side of Jefferson St.

Lincoln Street

62. At the intersection of Lincoln Street and State Street, the sidewalk connections on the west lack ADA accessible sidewalk ramps.



There are no ADA accessible ramps at the intersection of Lincoln St and State St.

63. Lincoln Street, between George W. Engram Boulevard and US 92/SR 600/ISB does not have adequate bicycle facilities, despite the existing right-of-way being 130 feet in width. The 4-lane corridor also has an Average Annual Daily Traffic (AADT) count of less than 10,000.



Lincoln St is 130' in width near Bethune-Cookman University.

64. There are no ADA accessible sidewalk ramps on the west side of Lincoln Street at Oak Street.



There are no ADA accessible ramps at the intersection of Lincoln St and Oak St.

State Street

65. The State Street intersections at the following streets lack ADA accessible sidewalk ramps:

- a) Model Street
- b) Pleasant Street
- c) Dr. MLK, Jr. King Boulevard

Consideration should be given to rectifying this situation as soon as reasonably feasible.



There are no ADA accessible ramps at intersections along State St.

McLeod Avenue

66. The McLeod Avenue intersections at the following streets lack ADA accessible sidewalk ramps:

- a) Dr. MLK, Jr. King Boulevard
- b) Green Street
- c) Walnut Street
- d) Weaver Street
- e) Charles Street

Consideration should be given to rectifying this situation as soon as reasonably feasible.



Several intersections along the McLeod Ave corridor lack ADA accessible sidewalk ramps.

Dr. MLK, Jr. Boulevard

67. The sidewalk connection at the northeast corner of Dr. MLK, Jr. Boulevard and Eldorado Street lacks an ADA accessible sidewalk ramp.



There are no ADA accessible ramps at the intersection of Dr. MLK Blvd and Eldorado St.

68. There are no ADA accessible sidewalk ramps at the intersection of DR. MLK, Jr. Boulevard and Cherry Street.



There are no ADA accessible ramps at the intersection of Dr. MLK Blvd and Cherry St.

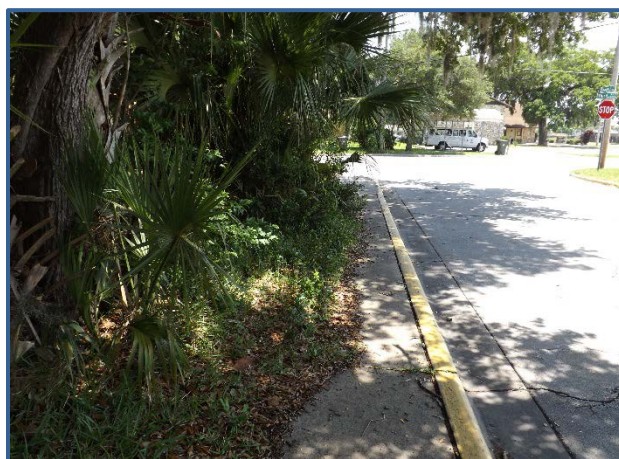
70. There are no ADA accessible sidewalk ramps at the intersection of Dr. MLK, Jr. Boulevard and Verdell Street.



There are no ADA accessible ramps at the intersection of Dr. MLK Blvd and Verdell St.

Green Street

71. Vegetation is obstructing the sidewalk on the east side of Green Street just north of Third Avenue. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Green St.

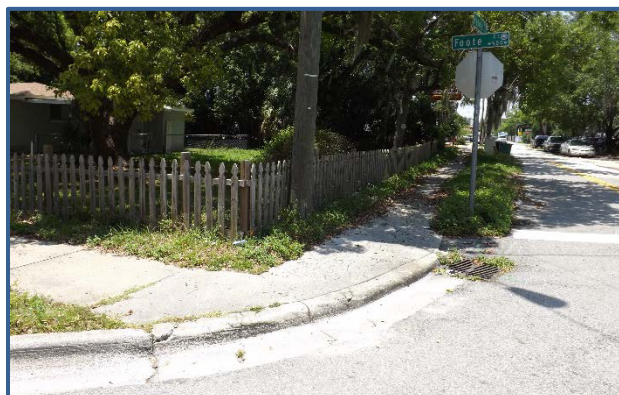
72. There are no ADA accessible sidewalk ramps at the intersection of Green Street and Third Avenue.



There are no ADA accessible ramps at the intersection of Green St and Third Ave.

Helme Place

73. There are no ADA accessible sidewalk ramps at the intersection of Helme Place and Foote Court.



There are no ADA accessible ramps at the intersection of Green St and Foote Ct.

Walnut Street

74. There are no ADA accessible sidewalk ramps at the intersection of Walnut Street and Weaver Street.



There are no ADA accessible ramps at the intersection of Walnut St and Weaver St.

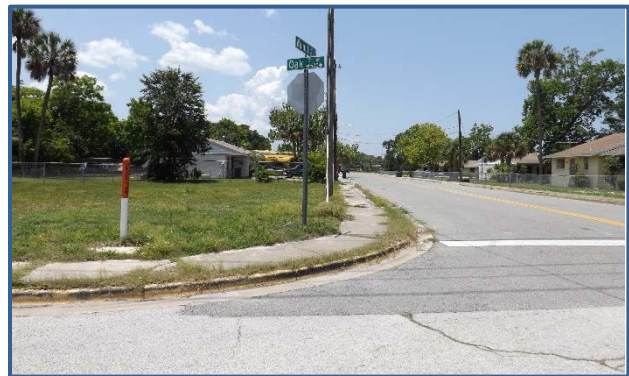
75. There is a gap within the sidewalk network on the west side of Walnut Street midway between Weaver Street and McLeod Avenue.



A gap in the sidewalk network along Walnut St.

76. There are no ADA accessible sidewalk ramps on Walnut Street at the following intersections:

- a) Third Avenue
- b) Oak Street



There are no ADA accessible ramps at the intersection of Walnut St and Oak St.

Emmet Street

77. There are no ADA accessible sidewalk ramps at the intersection of Emmet Street and West Street.



There are no ADA accessible ramps at the intersection of Emmet and West Sts.

Marion Street

78. There is a utility pole that compromises the width and use of the ADA accessible sidewalk ramp at the intersection of Marion Street and Magnolia Avenue.



A utility pole obstructs the sidewalk on Marion St.

79. There are no ADA accessible sidewalk ramps on the east sidewalk in the 200 block of Marion Street.



There are no ADA accessible sidewalk ramps in the 200 block of Marion St.

Weaver Street

80. Vegetation is obstructing the sidewalk on the west side of Weaver Street just east of Walnut Street. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Weaver St.

Charles Street

81. Charles Street is a 4-lane thoroughfare with an AADT count of less than 10,000 between George W. Engram Boulevard and Oak Street.



Charles St is a 4-lane thoroughfare with an AADT count of less than 10,000.

82. There are no ADA accessible sidewalk ramps where Charles Street intersects with the following streets:

- a) Weaver Street
- b) Oak Street



There are no ADA accessible sidewalk ramps at the intersection of Charles St and Weaver St.

83. There are no ADA accessible sidewalk ramps at the intersection of Charles Street and West Street.

84. There are no ADA accessible sidewalk ramps at the intersection of Charles Street, Magnolia Avenue and Marion Street.



There are no ADA accessible sidewalk ramps at the intersection of Charles St and West St.

Seagrave Street

- 85. There is a gap in the sidewalk network on the east side of Seagrave Street between Hobart Avenue and Mulally Street.



A gap in the sidewalk network at Seagrave St and Mulally St.

- 86. The intersection of Seagrave Street and Mulally Street lacks ADA accessible sidewalk ramps despite being adjacent to the Basilica School of Saint Paul.



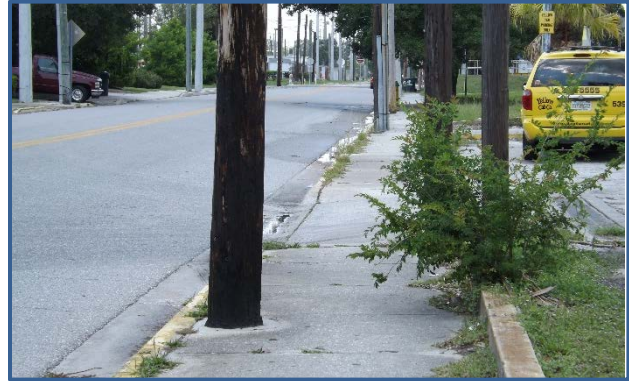
There are no ADA accessible ramps at the intersection of Seagrave St and Mulally St.

- 87. There is a gap in the sidewalk network on the east side of Seagrave Street between Dr. Mary McLeod Bethune Boulevard and Bay Street.



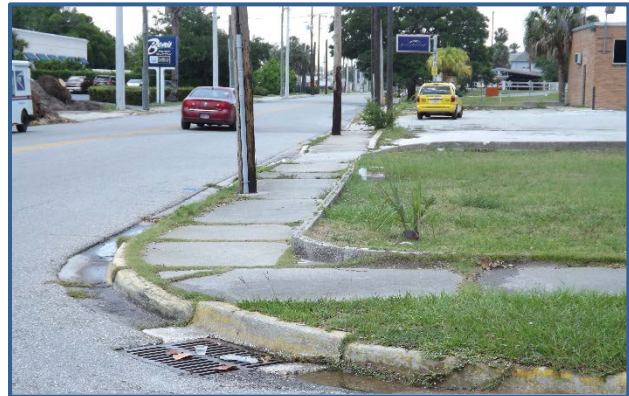
A gap in the sidewalk network on Seagrave St, just north of Bay St.

88. Vegetation is obstructing the sidewalk on the east side of Seagrave Street just north of Magnolia Avenue. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Seagrave St.

89. There are no ADA accessible sidewalk ramps at the intersection of Seagrave Street and Magnolia Avenue.



There are no ADA accessible sidewalk ramps at the intersection of Seagrave St and Magnolia Ave.

90. Utility pole infrastructure and wiring are obstructing the sidewalk on the west side of Seagrave Street, just north of Orange Avenue.



Utility pole infrastructure and wiring obstructing the sidewalk on Seagrave St.

Mulally Street

91. Vegetation is obstructing the sidewalks on both sides of Mulally Street between US 1/Ridgewood Avenue and Daytona Street. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Mulally St.

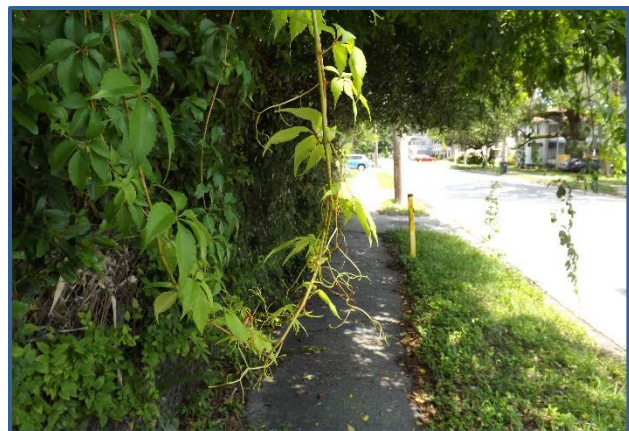
92. There are no ADA accessible sidewalk ramps at the intersection of Mulally Street and Daytona Street.



There are no ADA accessible sidewalk ramps at the intersection of Mulally St and Daytona St.

Daytona Street

93. Vegetation is obstructing the sidewalk on Daytona Street between Michigan Avenue and Fairview Avenue. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Daytona St.

94. There are no ADA accessible sidewalk ramps at the intersection of Daytona Street and Michigan Avenue.



There are no ADA accessible sidewalk ramps at the intersection of Daytona St and Michigan Ave.

95. There is a small gap in sidewalk connectivity on Daytona Street, just south of Michigan Avenue.



A small sidewalk gap on Daytona St.

Beach Street

96. At the intersection of Beach Street and Dr. Mary McLeod Bethune Boulevard, the existing marked crosswalk paint has faded.



A faded marked crosswalk at Beach St and Dr. Mary McLeod Bethune Blvd.

97. At the intersection of Beach Street and Bay Street, the existing marked crosswalk paint has faded.



A faded marked crosswalk at Beach and Bay St.

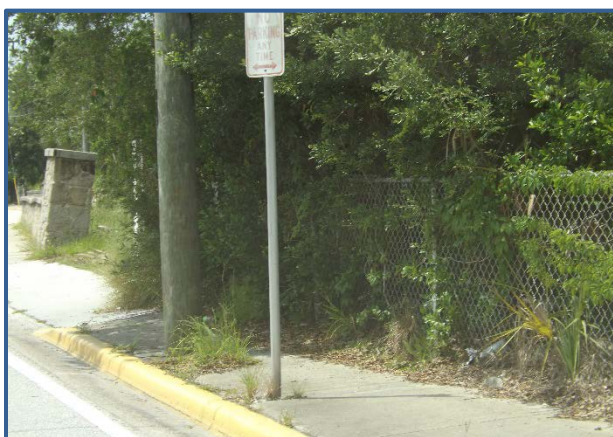
98. There are no ADA accessible sidewalk ramps at the intersection of Beach Street and Michigan Streets.



There are no ADA accessible sidewalk ramps at the intersection of Beach St and Michigan St.

Halifax Avenue

99. Vegetation is obstructing the west sidewalk on Halifax Avenue 400 feet south of Main Street. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Halifax Ave.

100. Width of west sidewalk on Halifax Avenue is compromised by the location of a masonry retaining wall just north of Harvey Avenue.



A retaining wall compromises the sidewalk width along Halifax Ave.

101. There are no ADA accessible sidewalk ramps at the intersection of Halifax Avenue and Harvey Avenue.



There are no ADA accessible sidewalk ramps at the intersection of Halifax Ave and Harvey Ave.

102. There are no ADA accessible sidewalk ramps at the intersection of Halifax Avenue and Mitchell Place.



There are no ADA accessible sidewalk ramps at the intersection of Halifax Ave and Mitchell Pl.

103. The location of a no parking sign compromises ADA accessibility and width of the east sidewalk on Halifax Avenue just south of Mitchell Place.



Street signage compromises the useable width of the sidewalk along Halifax Ave.

104. There are no ADA accessible sidewalk ramps at the intersection of Halifax Avenue and Hewen Place.



The intersection of Halifax Ave and Hewen Pl lacks ADA accessible sidewalk ramps.

Peninsula Drive (US 92/SR 600/ISB to Main Street)

105. There are no ADA accessible sidewalk ramps on Peninsula Drive at the following intersections:
- a) Harvey Avenue
 - b) Mitchell Place



The intersection of Peninsula Dr and Harvey Ave lacks ADA accessible sidewalk ramps.

Hollywood Avenue

106. The southwest curb of Hollywood Avenue and Harvey Avenue lacks and ADA accessible sidewalk ramp.



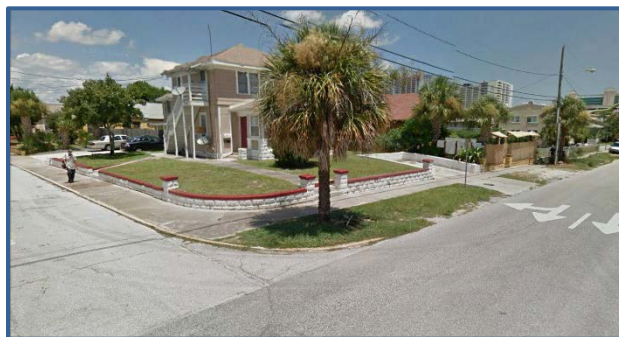
The southwest curb of Hollywood Ave lacks an ADA accessible sidewalk ramp at Harvey Ave.

107. Vegetation is obstructing the sidewalks on both sides of Hollywood Avenue between Main Street and Auditorium Boulevard. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Hollywood Ave.

108. There are no ADA accessible sidewalk ramps on the north side of the intersection of Hollywood Avenue and Earl Street.



At Hollywood Ave and Earl St, the north side of the intersection lacks ADA accessible sidewalk ramps.

Oleander Avenue

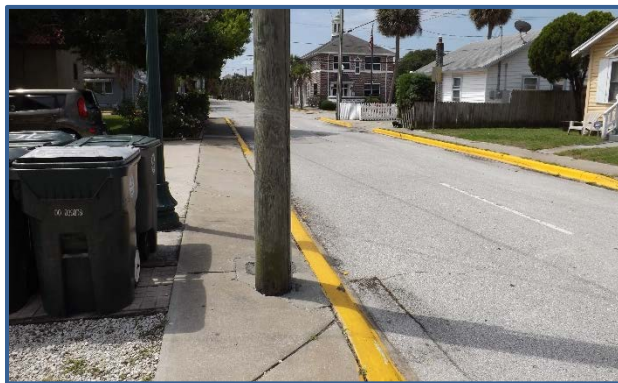
109. The southwest curb of Oleander and Harvey Avenue lacks an ADA accessible sidewalk ramp. The intersection's northeast curb ramp is obstructed by the location of a replica historic street light fixture.
110. Vegetation is obstructing the west sidewalk on Oleander Avenue just north of US 92/SR 600/ISB. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



A street light fixture obstructs a sidewalk ramp at Oleander Ave and Harvey Ave.

Wild Olive Avenue

111. The location of a utility pole compromises ADA accessibility and width of the east sidewalk on Wild Olive Avenue between Main Street and Harvey Avenue.



A utility pole obstructs the sidewalk on Wild Olive Ave.

112. Just north of 5th Avenue, there is an edge drop-off from the west sidewalk on Wild Olive Avenue. This creates a potential hazard for pedestrians and could be especially problematic for elderly pedestrians or others with mobility disadvantage. As with roadways, the ground should be brought up flush with the sidewalk travel surface and maintained at that level.



The sidewalk is damaged along Wild Olive Ave.

Grandview Avenue

113. The east sidewalk on Grandview Avenue abruptly ends just south Main Street.



The sidewalk abruptly ends on Grandview Ave.

114. A structurally failing fence is obstructing the east sidewalk at the intersection of Grandview Avenue and Harvey Avenue.



A damaged fence obstructs the sidewalk width on Grandview Ave.

115. The intersection of Grandview Avenue and Harvey Avenue lacks ADA accessible sidewalk ramps and faded crosswalk paint. In addition, there is a fire hydrant obstruction at the southeast corner of the intersection.



A faded crosswalk at the intersection of Grandview Ave and Harvey Ave.

116. The intersection of Grandview Avenue and 5th Avenue lacks ADA accessible sidewalk ramps.



There are no ADA accessible sidewalk ramps at the intersection of Grandview Ave and 5th Ave.

117. The curb ramps on the west side of the intersection of Grandview Avenue and Vermont Avenue lack ADA accessible sidewalk ramps.



There are no ADA accessible sidewalk ramps on the west side of the intersection of Grandview Ave and Vermont Ave.

118. The curb ramps at the intersection of Grandview Avenue and Goodall Avenue lack ADA accessible sidewalk ramps.



There are no ADA accessible sidewalk ramps at the intersection of Grandview Ave and Goodall Ave.

119. The intersection of Grandview Avenue and Braddock Avenue lacks ADA accessible sidewalk ramps.



The intersection of Grandview Ave and Braddock Ave lacks ADA accessible sidewalk ramps.

120. The curb ramps located at the northwest, northeast and southeast corners of Grandview Avenue and Lenox Avenue lack ADA accessible sidewalk ramps.



Three of four corners at the intersection of Grandview Ave and Lenox Ave lack ADA accessible sidewalk ramps.

121. The southwest curb at the intersection of Grandview Avenue and Sears Avenue lacks an ADA accessible sidewalk ramp.



The southwest corner of Grandview Ave and Sears Ave lacks an ADA accessible sidewalk ramps.

122. The southwest, northwest and northeast curb locations at the intersection of Grandview Avenue and Ribault Avenue lack ADA accessible sidewalk ramps.



A corner lacking ADA accessible sidewalk ramps at the intersection of Grandview Ave and Ribault Ave.

123. The sidewalks on Grandview Avenue abruptly end 75' north of Frances Terrace.



Sidewalks on Grandview Ave end just north of Frances Terr.

Coates Street

124. The intersection of Coates Street and Harvey Avenue lacks ADA accessible sidewalk ramps.



There are no ADA accessible sidewalk ramps at the intersection of Coates St and Harvey Ave.

125. The east sidewalk at the intersection of Coates Street and Kemp Street lacks ADA accessible sidewalk ramps.



Sidewalk curbs lacking ADA accessible ramps at Coates St and Kemp Streets.

126. The location of a utility pole on the west sidewalk of Coates Street, just north of 5th Avenue obstructs the sidewalk's width and ADA accessibility.

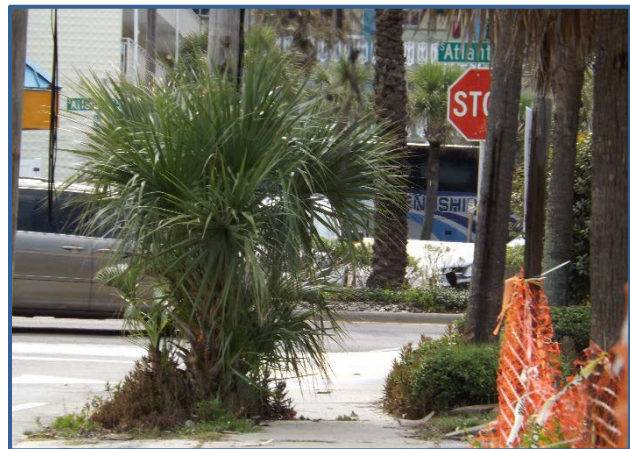


A utility pole obstructs the sidewalk on Coates Street.

127. The sidewalk curb ramps on the north side of the Coates Street intersection with 5th Avenue lack ADA accessible sidewalk ramps.

5th Avenue

128. Overgrown vegetation and deteriorating sidewalk conditions obstruct and create tripping hazards on the south side of 5th Avenue between Coates Street and SR A1A/Atlantic Avenue.



Vegetation obstructs the sidewalk on 5th Avenue.

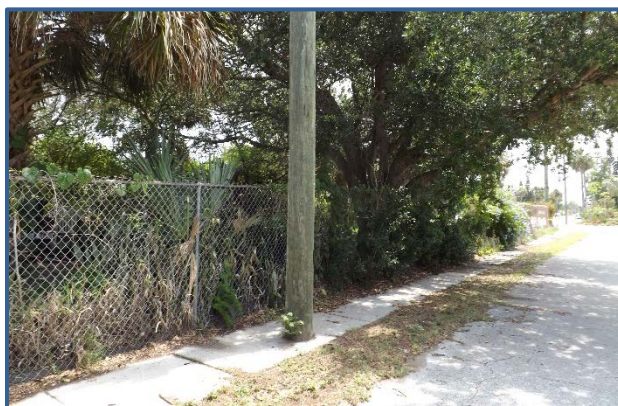
Goodall Avenue

129. A structurally failing fence obstructs the north sidewalk on Goodall Avenue near Sunset Drive.



A broken fence obstructs the sidewalk on Goodall Ave.

130. The location of a utility pole on the north sidewalk of Goodall Avenue, west of SR 441/Peninsula Drive, obstructs the sidewalk's width and ADA accessibility.



A utility pole obstructs the sidewalk on Goodall Ave.

Phoenix Avenue

131. There is a gap in the sidewalk network on the north side of Phoenix Avenue between SR 441/Peninsula Drive and SR A1A/Atlantic Avenue.



A gap in the sidewalk network on Phoenix Ave.

Loomis Avenue

132. There are no ADA accessible sidewalk ramps at the intersection of Jean Street and Loomis Avenue.



There are no ADA accessible sidewalk ramps at the intersection of Jean St and Loomis Ave.

133. There is a 40' gap within the sidewalk network between the intersection of Jean Street and Loomis Avenue and the existing 12' multi-use path on the west side of Jean Street.



There is a gap in the sidewalk network between the SR 5A/Nova Rd multi-use path and Jean St.

134. There are no ADA accessible sidewalk ramps at the intersection of Loomis Avenue and Caroline Street.



There are no ADA accessible sidewalk ramps at the intersection of Loomis Ave and Caroline St.

135. There are no ADA accessible sidewalk ramps at the intersection of Loomis Avenue and Keech Street.



There are no ADA accessible sidewalk ramps at Loomis Ave and Keech St.

136. A three block long “cattle trail” through the property of Campbell Middle School connects the intersections of Loomis Avenue with Cedar Street and Lockhart Street.



A three block long “cattle trail” exists between Cedar St and Lockhart St.

137. There are no ADA accessible sidewalk ramps at the intersection of Loomis Avenue and Lockhart Street.



There are no ADA accessible sidewalk ramps at the intersection of Loomis Ave and Lockhart St.

138. There are no ADA accessible sidewalk ramps at the intersection of Loomis Avenue and Whitney Street.



There are no ADA accessible sidewalk ramps at the Loomis Ave and Whitney St intersection.

139. The sidewalk curb at the northeast corner of Loomis Avenue and Hudson Street does not have an ADA accessible sidewalk ramp.



The northeast corner of Loomis Ave and Hudson St is lacking an ADA accessible sidewalk ramp.

140. There are no ADA accessible sidewalk ramps at the northwest, northeast and southeast corners at the intersection of Loomis Avenue and Henry Butts Drive.



The intersection of Loomis Ave and Henry Butts Dr is lacking ADA accessible sidewalk ramps.

141. The sidewalk on the west side of Loomis Street and Dr. MLK, Jr. Boulevard does not have ADA accessible sidewalk ramps.



The west side of Loomis Street and Dr. MLK Boulevard lacks ADA accessible sidewalk ramps.

142. There is a gap in the sidewalk network at the intersection Loomis Avenue and Gardiner Court.



The sidewalk does not extend to the curb at the intersection of Loomis Avenue and Gardiner Court.

Maley Street

143. The intersection of Maley Street and Caroline Street lacks ADA accessible sidewalk ramps.



There are no ADA accessible sidewalk ramps at Maley and Caroline Streets.

144. The intersection of Maley Street and Keech Street lacks ADA accessible sidewalk ramps.



There are no ADA accessible sidewalk ramps at Maley St and Keech St.

145. Sections of the sidewalk on the north side of Maley Street are broken just west of Franklin Street. As this may cause a tripping hazard, they should be repaired as soon as possible.



A stretch of broken sidewalk on Maley St.

Lockhart Street

146. The sidewalk at the northeast corner of Lockhart and Hawk Streets lacks an ADA accessible sidewalk ramp.



There is no ADA accessible sidewalk ramp at the northeast corner of Lockhart St and Hawk St.

Henry Butts Drive

147. The intersection of Henry Butts Drive and Heron Street lacks an ADA accessible ramp along the east sidewalk.



There is no ADA accessible sidewalk ramp on the east side of Henry Butts Dr at Heron St.

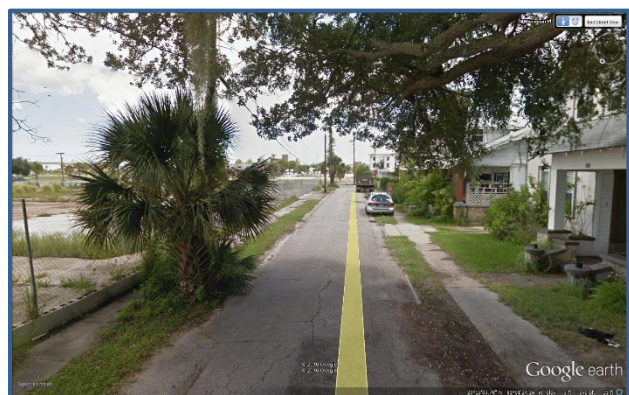
148. The intersection of Henry Butts Drive and Verdell Street lacks ADA accessible sidewalk ramps.



There are no ADA accessible sidewalk ramps at Henry Butts Dr and Verdell St.

Wisconsin Place

149. Vegetation is obstructing the east sidewalk on Wisconsin Place between 1st Avenue and San Juan Avenue. Trees, bushes and other vegetation should be maintained such that pedestrian movement is not impeded.



Vegetation obstructs the sidewalk on Wisconsin Pl. Photograph courtesy of Google Streetview.



Night Time Observations

US 92/SR 600/International Speedway Boulevard

150. Along US 92/SR 600/ISB, between SR 5A/Nova Road and Lockhart Street, the roadway is inadequately lit. On average, there is one street light per block on each side of the corridor, resulting in poorly lit sidewalk conditions. In addition, several streetlights were not in operation.
151. On US 92/SR 600/ISB, between Lockhart Street and Lincoln Street, no streetlights were observed, with lighting from commercial establishments allowing partial visibility of the sidewalks.
152. The presence of pedestrian oriented lighting provide good visibility on US 92/SR 600/ISB between Lincoln Street and Dr. MLK, Jr. Boulevard.
153. US 92/SR 600/ISB is inadequately lit between Dr. MLK, Jr. Boulevard and Palmetto Avenue. On average, there is one street light per block on each side of the corridor, resulting in poorly lit sidewalk conditions. In addition, several streetlights were not in operation.
154. The presence of pedestrian oriented lighting between Palmetto Avenue and Beach Street provide good visibility on US 92/SR 600/ISB.
155. Street lighting is provided in the median of US 92/SR 600/ISB on the Halifax River Bridge structure between Beach Street and Halifax Avenue. Combined with the presence of concrete barrier walls separating the sidewalk from travel lanes, leads to poorly lit sidewalk conditions.
156. US 92/SR 600/ISB is inadequately lit between the Halifax River and SR A1A/Atlantic Avenue, due to sparse lighting locations. On average, there is one street light per block on each side of the corridor, resulting in poorly lit sidewalk conditions. In addition, several streetlights were not in operation.

SR 5A/Nova Road

157. On Nova Road, from Dunn Avenue to US 92/SR 600/International Speedway Boulevard, street lighting is sparse; however, there is an adequate amount of lighting coming from commercial facilities. The sidewalk in front of the Midtown Plaza is very well lit due to commercial lighting. There was adequate street lighting at both the Dunn Avenue and US 92/SR 600/International Speedway Boulevard intersections.

US 1/Ridgewood Avenue

158. Streetlights on both sides of US 1/Ridgewood Avenue, combined with commercial storefronts and business signage provide good visibility between US 92/SR 600/ISB and George W. Engram Boulevard/Fairview Avenue.
159. Streetlights are provided on both sides of US 1/Ridgewood Avenue, south of US 92/SR 600/ISB, at similar spacing to lighting fixtures provided north of US 92/SR 600/ISB. However, this segment penetrates the South Beach Street Historic District. The combination of a mature



landscape, large oak trees and buildings being set back further from the street create pockets of poor sidewalk lighting conditions.

SR 441/Peninsula Drive

160. Street lights were observed only on the southbound side of SR 441/Peninsula Drive between US 92/SR 600/ISB and Silver Beach Avenue, creating large pockets of low visibility conditions along the northbound sidewalk.

SR A1A/Atlantic Avenue

161. The presence of pedestrian oriented street lighting and additional illumination from adjacent storefronts provide good visibility on SR A1A/Atlantic Avenue, north of US 92/SR 600/ISB.
162. Streetlights on both sides of SR A1A/Atlantic Avenue provide good visibility between US 92/SR 600/ISB and Silver Beach Avenue.

George W. Engram Boulevard

163. Streetlights are sporadically located on both sides of George W. Engram Boulevard between SR 5A/Nova Road and Seagrave Street, creating occasional dark sidewalk and bus stop lighting conditions.

Fairview Avenue

164. Streetlights on Fairview Avenue between Seagrave Street and US 1/Ridgewood Avenue are sparsely located on the south side of the street. A mature landscape limits the effectiveness of the sparsely located streetlights. The north side of the road lacks visibility typically provided from either streetlights or commercial lighting.
165. Street lighting is provided on between US 1/Ridgewood Avenue and Beach Street on the south side of Fairview Avenue only, with partial blockage from trees. Sparse lighting is originating from houses serves as the only lighting on the north side of the street.

Main Street

166. The presence of pedestrian oriented street lighting and additional illumination from adjacent storefronts provide good visibility on Main Street between Peninsula Drive and Ocean Avenue.
167. Streetlights provided at intersections, along the Main Street Bridge and commercial storefronts combine to create good visibility along Main Street between Beach Street and Peninsula Drive.

Silver Beach Avenue

168. Street lights were observed only on the north side of Silver Beach, creating large pockets of low visibility conditions along the south side of the street.

Orange Avenue

Orange Avenue is currently under reconstruction. No night time observations were recorded.

**Lincoln Street**

169. Sparsely located streetlights were observed only on the east side of Lincoln Street between US 92/SR 600/ISB and George W. Engram Boulevard. Night lighting conditions are poor on the west side of the street.

Dr. MLK, Jr. Boulevard

170. Dr. MLK, Jr. Boulevard between George W. Engram Boulevard and US 92/SR 600/ISB contains sparsely located streetlights. Outside of the occasional streetlight, sidewalks along this section of Dr. MLK, Jr. Boulevard are dominated with large stretches of inadequate lighting conditions.
171. On Dr. MLK, Jr. Boulevard, from US 92/SR 600/ISB to Loomis Street, street lighting is sparse, resulting in inadequate lighting conditions. However, there appears to be an adequate amount of lighting in nodes where occupied commercial buildings with limited front setbacks are located.

Dr. Mary McLeod Bethune Boulevard

172. Street lighting is sparse on Dr. Mary McLeod Bethune Boulevard between SR 5A/Nova Road and Lincoln Street. While sufficient lighting conditions exist at major intersections, there are large stretches of roadway where sidewalk lighting conditions are inadequate.
173. Between Lincoln Street and Dr. MLK, Jr. Boulevard, street lighting conditions are good in the vicinity of the recently completed dormitory at Dr. Mary McLeod Bethune Boulevard and Lincoln Street. East of this project, sidewalk lighting conditions were inadequate.
174. The presence of pedestrian oriented street lighting and additional illumination from adjacent storefronts provide good visibility on Dr. Mary McLeod Bethune Boulevard between Dr. MLK, Jr. Boulevard and US 1/Ridgewood Avenue.

Beach Street

175. Streetlights on Beach Street between Fairview Avenue and Bay Street are sparsely located on both sides of the street. Poor sidewalk lighting conditions exist between Michigan Avenue and Dr. Mary McLeod Bethune Boulevard where there are no commercial storefronts or signage.
176. Street lighting conditions provided good visibility on Beach Street between Bay Street and Magnolia Street. Considered the centralized core of downtown Daytona Beach, lighting conditions in this section of Beach Street benefit from pedestrian streetlight fixtures and illumination from commercial storefronts.
177. Streetlights on Beach Street between Orange Avenue and Loomis Street are sparsely located on both sides of the street. Occasional blockage from trees and other vegetation make it difficult to read street signs in certain locations due to poor visibility.



Overall

Many bus stops were not well lit or visible to vehicles on the road. This visibility issue potentially causes a risk for pedestrians who are using transit services at night. There are also areas in which the majority of lighting comes from commercial facilities, rather than street lighting. However, excellent examples of pedestrian scaled lighting exists on several corridors throughout the downtown and beachside areas of the study area. Furthermore, blockage from trees and other vegetation was minimal on most roads. Overall, marked crosswalks and signs were visible in the nighttime environment. In addition, there were several streetlights observed throughout the study area that were not operational.



3 SUMMARY OF OVERALL OBSERVATIONS

3.1 LOCATION SPECIFIC OBSERVATIONS AND RESOLUTIONS

This report has identified a number of preliminary resolutions that potentially may improve bicycle and pedestrian safety performance and connectivity within the PCSA Phase II study area. A number of these, such as refurbishment of crosswalks and maintenance of vegetation, are low cost and can be implemented fairly quickly.

For each identified location specific deficiency, Table 1 includes the responsible agency and potential resolution. Implementation of the resolutions, where feasible, will improve mobility and safety for pedestrians and bicyclists.

**Table 1: Location Specific Observations**

ID	Location	Description	Lead Agency	Potential Resolution
1	US 92/SR 600/ISB	Faded crosswalk markings at Jean St, Harney St, Lockhart St and Seagrave St	FDOT	Repaint marked crosswalks
2	US 92/SR 600/ISB from Adams St to Lincoln St	Pedestrians make mid-block crossings due to no marked crossings being available (0.36 mile stretch)	FDOT/City of Daytona Beach	Consider providing mid-block crossing as a part of ISB West Phase II Project
3	US 92/SR 600/ISB at BCU	No connection between EB sidewalk and BCU School of Nursing	BCU	Construct sidewalk connection
4	US 92/SR 600/ISB	No marked crosswalks at Jessie St, Helme Pl, Emmet St, Charles St and Coates St	FDOT	Install marked crosswalks
5	US 92/SR 600/ISB	Bus stops between SR 5A/Nova Rd and the FEC Railroad lack amenities	City of Daytona Beach	Provide ADA accessible stops
6	US 92/SR 600/ISB at Charles St	No curb ramp on south side of street	FDOT	Install curb ramp
7	US 92/SR 600/ISB between Dr. MLK, Jr. Blvd and US 1/Ridgewood Ave	Pedestrians make mid-block crossings due to no marked crossings being available (0.36 mile stretch)	FDOT	Consider providing mid-block crossing as a part of ISB West Phase III Project.
8	US 92/SR 600/ISB at Seagrave St	The EB bus stop not ADA compliant	City of Daytona Beach	Provide ADA compliant stop
9	US 92/SR 600/ISB from Seagrave St to Beach St	Gap (0.33 mi) in bike lane network	FDOT	Coordinate with the City of Daytona Beach to seek designation of safe routes that parallel corridor
10	US 92/SR 600/ISB from Palmetto Ave to Beach St	Bicycles are prohibited on sidewalks	FDOT	Provide bicycle share road signage and pavement markings
11	US 92/SR 600/ISB between Lockhart St and Dr. MLK, Jr. Blvd	Concrete utility poles obstruct sidewalk	FDOT/City of Daytona Beach	Widen sidewalks as redevelopment occurs
12	US 92/SR 600/ISB at Halifax Ave	WB bicycle lane does not extend to intersection	FDOT	Extend Bicycle Lane
13	US 92/SR 600/ISB	No bicycle facilities east of Halifax Ave	FDOT	Include as a part of Corridor Management Plan Update
14	US 92/SR 600/ISB	Bus stops east of SR 441/Peninsula Dr are not ADA compliant	City of Daytona Beach	Provide ADA compliant bus stops
15	US 92/SR 600/ISB at SR A1A/Atlantic Ave	No curb ramps at crosswalk one block east of intersection	FDOT	Install curb ramps
16	SR 5A/Nova Rd south George W Engram Blvd	Vegetation obstructs east sidewalk	FDOT	Maintenance of vegetation
17	SR 5A/Nova Rd throughout study area	There are no bicycle facilities within corridor. Cyclists ride on the sidewalks.	FDOT	Coordinate with the City of Daytona Beach to seek designation of safe routes that parallel corridor



ID	Location	Description	Lead Agency	Potential Resolution
18	SR 5A/Nova Rd throughout study area	Utility poles are located in sidewalk	FDOT	Verify the clearance meets minimal ADA accessibility requirements
19	SR 5A/Nova Rd south of US 92/SR 600/ISB	Sidewalk abruptly changes width on west side of roadway north of Orange Ave	FDOT	Consider widening sidewalk into a shared use path paralleling SR 5A/ Nova Rd
20	US 1/Ridgewood Ave north of Magnolia Ave	Several bus stops are not ADA compliant	City of Daytona Beach	Provide ADA compliant bus stops
21	US 1/Ridgewood Ave between Bay St and Magnolia Ave	There is a gap in the bicycle lane network	FDOT	Coordinate with the City of Daytona Beach to seek designation of safe routes that parallel corridor
22	US 1/Ridgewood Ave	There are no marked crosswalks at First Ave (NB and SB), San Juan Ave (NB and SB), Third Ave (NB) and Live Oak Ave (NB and SB)	FDOT	Install crosswalks
23	US 1/Ridgewood Ave	Existing marked crosswalk are faded at Dowling Ct (NB) and Loomis Ave (NB)	FDOT	Repaint crosswalks
24	US 1/Ridgewood Ave at Bay St	There is no south crosswalk at the intersection	FDOT	Install marked crosswalk
25	US 1/Ridgewood Ave south of Magnolia Ave	Several bus stops are not ADA compliant	City of Daytona Beach	Provide ADA compliant bus stops
26	SR 441/Peninsula Dr at US 92/SR 600/ISB	There is a gap in the bicycle facilities between US 92/SR 600/ISB and Vermont Ave	FDOT	Include connection as a part of ISB Corridor Management Plan Update
27	SR 441/Peninsula Dr at Silver Beach Ave	There is a gap in the bicycle facilities between Phoenix Ave and Silver Beach Ave	FDOT	Install bicycle share road signage and markings
28	SR A1A/Atlantic Ave throughout study area	Several SB bus stops are not ADA compliant and lack amenities	City of Daytona Beach	Provide ADA accessible bus stops
29	SR A1A/Atlantic Ave at Revilo Blvd	There is a gap in the sidewalk network	FDOT	Construct sidewalk
30	SR A1A/Atlantic Avenue south of Revilo Blvd	Pedestrians make mid-block crossings due to no marked crossings being available (0.42 mile stretch)	FDOT	Consider providing mid-block crossing
31	SR A1A/Atlantic Ave	There are no marked crosswalks at Eastwood Ln and Frances Ter	City of Daytona Beach	Install marked crosswalks
32	SR A1A/Atlantic Ave at Ribault Ave	There are curb ramps at intersection suggesting that a mid-block crossing may have once been considered or existing at this location	FDOT	Install marked crosswalk
33	SR A1A/Atlantic Ave south of US 92/SR 600/ISB	Several northbound bus stops lack amenities.	City of Daytona Beach	Add bus stop amenities



ID	Location	Description	Lead Agency	Potential Resolution
34	SR A1A/Atlantic Ave throughout study area	There are no bike facilities	FDOT	Coordinate with the City of Daytona Beach to seek designation of safe routes that parallel corridor
35	SR A1A/Atlantic Ave between Mobile Ave and Silver Beach Ave	Vegetation obstructs the west sidewalk	FDOT	Maintenance of vegetation
36	George W. Engram Blvd at Child's Academy School	The sidewalk on the south side of street does not connect with the marked mid-block crossing	Volusia County	Install curb ramp and sidewalk connection
37	George W. Engram Blvd between Child's Academy School and Dr. MLK, Jr. Blvd	Pedestrians make mid-block crossings due to no marked crossings being available (0.45 mile stretch)	Volusia County	Consider providing mid-block crossing
38	George W. Engram Blvd	Several bus stops are not ADA compliant and lack amenities	City of Daytona Beach	Add ADA compliant bus stops
39	George W. Engram Blvd at Lincoln St, Model St and Pleasant St	Existing marked crosswalk paint has faded	Volusia County	Repaint crosswalks
40	George W. Engram Blvd at Seagrave St	There is no marked crosswalk on the north side of intersection	Volusia County	Install marked crosswalk
41	George W. Engram Blvd at Rose Ave	There is a gap in sidewalk connection at Rose Ave	Volusia County	Construct sidewalk
42	Fairview Ave 100' east of US 1/ Ridgewood Ave	The north sidewalk is less than 3' wide	Volusia County	Repair sidewalk
43	Fairview Ave from US 1/Ridgewood Ave to Beach St	Excluding the Central Manor Apartments bus stop, all bus stops lack amenities	City of Daytona Beach	Add bus stop amenities where feasible
44	Fairview Ave at Beach St	There are no crosswalks on the north, west and east sides of intersection. On the north side of the street, there are no curb ramps.	Volusia County	Install marked crosswalks and curb ramps
45	Fairview Ave at Ballough Rd	The west sidewalk lacks curb ramps and the south crosswalk does not align with existing curb ramps	Volusia County	Install curb ramps and realign crosswalk
46	Fairview Ave at Bowman Ave	There is no marked crosswalk on the north side of intersection	Volusia County	Install marked crosswalk
47	Fairview Ave at Halifax River Greenway	Despite the presence of ADA accessible sidewalk ramps, there is no marked crossing	Volusia County	Install marked crosswalk
48	Main St at Hollywood Ave	There are no marked crosswalks	Volusia County	Install marked crosswalks
49	Main St	The use of bicycles on sidewalks is prohibited	Volusia County	Provide bicycle share road signage and pavement markings.



ID	Location	Description	Lead Agency	Potential Resolution
50	Silver Beach Ave	There are no bicycle facilities	Volusia County	Add bicycle lanes as part of future roadway resurfacing project
51	Jean St at Magnolia Ave	The sidewalk connection on the west side of street lacks curb ramps	City of Daytona Beach	Install curb ramps
52	Keech St from George W Engram Blvd to Pinehaven Dr	There is a gap in the east sidewalk	City of Daytona Beach	Construct sidewalk connection
53	Keech St from Dr. Mary McLeod Bethune Blvd to George W Engram Blvd	There are no sidewalk facilities on the west side of street despite the presence of transit service	City of Daytona Beach	Construct sidewalk and add ADA accessible bus stops
54	Keech St north of Oak St	Vegetation is obstructing the sidewalk on the west side of street	City of Daytona Beach	Maintenance of vegetation
55	Adams St at Magnolia Ave	Vegetation is obstructing the west sidewalk just north and south of Magnolia Ave	City of Daytona Beach	Maintenance of vegetation
56	Adams Street at Oak St	There are several sidewalk gaps on the west side of street	City of Daytona Beach	Construct sidewalk connection
57	Dr. Mary McLeod Bethune Blvd at Desoto St	A utility pole compromises the width of the sidewalk and curb ramp	City of Daytona Beach	Widen sidewalk around utility pole
58	Dr. Mary McLeod Bethune Blvd at Weaver St	A street light fixture that compromises the width and use of curb ramp at the NW corner of intersection	City of Daytona Beach	Reconstruct curb ramp or relocate street light fixture
59	Dr. Mary McLeod Bethune Blvd near Palmetto Ave	Broken sections of sidewalk	City of Daytona Beach	Repair broken sidewalk sections
60	Fulton St at Oak St	No curb ramp	City of Daytona Beach	Install curb ramp
61	Fulton St north of George W Engram Blvd	Vegetation is obstructing the sidewalk on the west side of street	City of Daytona Beach	Maintenance of vegetation
62	Jefferson St between Oak St and Dr. Mary McLeod Bethune Blvd	There is a gap in sidewalk network on west side of street	City of Daytona Beach	Construct sidewalk connection
63	Lincoln St at State St	No curb ramps on west side of intersection	City of Daytona Beach	Install curb ramp
64	Lincoln St from George W Engram Blvd to US 92/SR 600/ISB	Corridor does not have adequate bicycle facilities, despite the existing right-of-way being 130 feet wide	City of Daytona Beach	Install bicycle infrastructure as part of future roadway resurfacing project.
65	Lincoln St at Oak St	No curb ramps on west side of intersection	City of Daytona Beach	Install curb ramps
66	State St	The intersections at Model St, Pleasant St and Dr. MLK, Jr. Blvd lack curb ramps	City of Daytona Beach	Install curb ramps



ID	Location	Description	Lead Agency	Potential Resolution
67	McLeod Ave	The intersections at Dr. MLK, Jr. King Blvd, Green St, Walnut St, Weaver St and Charles St lack curb ramps	City of Daytona Beach	Install curb ramps
68	Dr. MLK, Jr. Blvd at Eldorado St	No curb ramps at NE corner of intersection	City of Daytona Beach	Install curb ramp
69	Dr. MLK, Jr. Blvd at Cherry St	No curb ramps	City of Daytona Beach	Install curb ramps
70	Dr. MLK, Jr. Blvd at Verdell St	No curb ramps	City of Daytona Beach	Install curb ramps
71	Green St at Third Ave	Vegetation is obstructing the sidewalk on the east side of Green St just north of Third Ave	City of Daytona Beach	Maintenance of vegetation
72	Green St at Third Ave	No curb ramps	City of Daytona Beach	Install curb ramps
73	Helme Pl at Foote Ct	No curb ramps	City of Daytona Beach	Install curb ramps
74	Walnut St at Weaver St	No curb ramps	City of Daytona Beach	Install curb ramps
75	Walnut St	There is a gap within the sidewalk network on the west side of street midway between Weaver St and McLeod Ave	City of Daytona Beach	Construct sidewalk connection
76	Walnut St at Third Ave and West St	No curb ramps	City of Daytona Beach	Install curb ramps
77	Emmett St at West St	No curb ramps	City of Daytona Beach	Install curb ramps
78	Marion St at Magnolia Ave	A utility pole that compromises the width and use of the curb ramp	City of Daytona Beach	Widen sidewalk around utility pole if ROW available
79	220 Marion St	No curb ramps	City of Daytona Beach	Install curb ramps
80	Weaver St at Walnut St	Vegetation is obstruction the sidewalk on the west side of street just east of Walnut St	City of Daytona Beach	Maintenance of vegetation
81	Charles St from George W Engram Blvd to Oak St	Charles St is a 4-lane thoroughfare with an AADT count of less than 10,000	City of Daytona Beach	Add bicycle lanes as part of future roadway resurfacing project
82	Charles St at Weaver St and Oak St	No curb ramps	City of Daytona Beach	Install curb ramps
83	Charles St at West St	No curb ramps	City of Daytona Beach	Install curb ramps
84	Charles St at Magnolia Ave and Marion St	No curb ramps	City of Daytona Beach	Install curb ramps
85	Seagrave St from Hobert Ave to Mulally St	There is a gap in the sidewalk network on the east side of street	City of Daytona Beach	Construct sidewalk connection
86	Seagrave St at Mulally St	No curb ramps	City of Daytona Beach	Install curb ramps



ID	Location	Description	Lead Agency	Potential Resolution
87	Seagrave St from Dr. Mary McLeod Bethune Blvd to Bay St	There is a gap in the sidewalk network on the east side of street.	City of Daytona Beach	Construct sidewalk connection
88	Seagrave St east of Walnut St	Vegetation is obstructing the sidewalk on the west side of street	City of Daytona Beach	Maintenance of vegetation
89	Seagrave St at Magnolia Ave	No curb ramps	City of Daytona Beach	Install curb ramps
90	Seagrave St north of Orange Ave	Utility pole infrastructure and wiring are obstructing the sidewalk on the west side of street	City of Daytona Beach	Remove obstruction
91	Mulally St from US 1/Ridgewood Ave to Daytona St	Vegetation is obstructing the sidewalk on both sides of street	City of Daytona Beach	Maintenance of vegetation
92	Mulally St	No curb ramps	City of Daytona Beach	Install curb ramps
93	Daytona St from Michigan Ave to Fairview Ave	Vegetation is obstructing the sidewalk	City of Daytona Beach	Maintenance of vegetation
94	Daytona St at Michigan Ave	No curb ramps	City of Daytona Beach	Install curb ramps
95	Daytona St at Michigan Ave	There is a small gap in sidewalk connectivity	City of Daytona Beach	Construct sidewalk connection
96	Beach St at Dr. Mary McLeod Bethune Blvd	The existing marked crosswalk paint has faded	City of Daytona Beach	Repaint marked crosswalk
97	Beach St at Bay St	The existing marked crosswalk paint has faded	City of Daytona Beach	Repaint marked crosswalk
98	Beach St at Michigan St	No curb ramps	City of Daytona Beach	Install curb ramps
99	Halifax Ave 400' south of Main St	Vegetation is obstructing the west sidewalk	City of Daytona Beach	Maintenance of vegetation
100	Halifax Ave at Harvey Ave	Width of west sidewalk is compromised by the location of a masonry retaining wall	City of Daytona Beach	Relocate retaining wall
101	Halifax Ave at Harvey Ave	No curb ramps	City of Daytona Beach	Install curb ramps
102	Halifax Ave at Mitchell Pl	No curb ramps	City of Daytona Beach	Install curb ramps
103	Halifax Ave south of Mitchell Pl	A no parking sign obstructs the sidewalk	City of Daytona Beach	Relocate signage
104	Halifax Ave at Hewen Pl	No curb ramps	City of Daytona Beach	Install curb ramps
105	Peninsula Dr at Harvey Ave and Mitchell Pl	No curb ramps	City of Daytona Beach	Install curb ramps
106	Hollywood Ave at Harvey Ave	No curb ramps	City of Daytona Beach	Install curb ramps
107	Hollywood Ave north of Main St	Vegetation is obstructing both sidewalks	City of Daytona Beach	Maintenance of vegetation



ID	Location	Description	Lead Agency	Potential Resolution
108	Hollywood Ave at Earl St	No curb ramps on north side of intersection	City of Daytona Beach	Install curb ramps
109	Oleander Ave at Harvey Ave	The SW corner lacks a curb ramp. The NE curb ramp is obstructed by the location of a street light fixture.	City of Daytona Beach	Install curb ramp and relocate light fixture
110	Oleander Ave north of US 92/SR 600/ISB	Vegetation is obstructing the west sidewalk	City of Daytona Beach	Maintenance of vegetation
111	Wild Olive Ave from Main St to Harvey Ave	A utility pole compromises ADA accessibility and width of the east sidewalk	City of Daytona Beach	Relocate utility pole
112	Wild Olive Ave north of 5 th Ave	A drop-off exists at the edge of the west sidewalk	City of Daytona Beach	Repair grade to make ground flush with sidewalk travel surface
113	Grandview Ave south of Main St	The east sidewalk ends abruptly	City of Daytona Beach	Construct sidewalk connection
114	Grandview Ave at Harvey Ave	A structurally failing fence is obstructing the sidewalk	Private Sector	Remove or repair fence
115	Grandview Ave at Harvey Ave	The existing marked crosswalk paint has faded and there are no curb ramps	City of Daytona Beach	Repaint marked crosswalk and add curb ramps
116	Grandview Ave at 5 th Ave	No curb ramps	City of Daytona Beach	Install curb ramps
117	Grandview Ave at Vermont Ave	No curb ramps	City of Daytona Beach	Install curb ramps
118	Grandview Ave at Goodall Ave	No curb ramps	City of Daytona Beach	Install curb ramps
119	Grandview Ave at Braddock Ave	No curb ramps	City of Daytona Beach	Install curb ramps
120	Grandview Ave at Lenox Ave	No curb ramps	City of Daytona Beach	Install curb ramps
121	Grandview Ave at Sears Ave	The SW corner of the intersection lacks a curb ramp	City of Daytona Beach	Install curb ramp
122	Grandview Ave at Sears Ave	The SW, NW, and NE corners of the intersection lacks curb ramps	City of Daytona Beach	Install curb ramps
123	Grandview Ave	The sidewalks end abruptly 75' north of Frances Ter	City of Daytona Beach	Construct sidewalk connection
124	Coates St at Harvey Ave	No curb ramps	City of Daytona Beach	Install curb ramps
125	Coates St at Kemp St	The east sidewalk lacks curb ramps	City of Daytona Beach	Install curb ramps
126	Coates St north of 5 th Ave	A utility pole obstructs the west sidewalk	City of Daytona Beach	Install bulb-out
127	Coates St at 5 th Ave	There are no curb ramps on north side of intersection	City of Daytona Beach	Install curb ramps
128	5 th Ave from Coates St to SR A1A/Atlantic Ave	Overgrown vegetation and deteriorating sidewalk conditions obstruct and create tripping hazards on the south side of street	City of Daytona Beach	Maintenance of vegetation and repair broken sidewalk sections
129	Goodall Ave near Sunset Dr	A broken fence obstructs the sidewalk	City of Daytona Beach	Remove obstruction



ID	Location	Description	Lead Agency	Potential Resolution
130	Goodall Ave near Sunset Dr	A utility pole obstructs the sidewalk	City of Daytona Beach	Expand sidewalk width
131	Phoenix Ave between SR 441/ Peninsula Ave and SR A1A/Atlantic Ave	There is a gap in the sidewalk network on the north side of the street	City of Daytona Beach	Construct sidewalk connection
132	Loomis Ave at Jean St	No curb ramps	City of Daytona Beach	Install curb ramps
133	Loomis Ave from Jean St to SR 5A/ Nova Rd	There is a 40' gap within the sidewalk network between Loomis Ave and the existing 12' multi-use path on SR 5A/ Nova Rd	City of Daytona Beach	Construct sidewalk connection
134	Loomis Ave at Caroline St	No curb ramps	City of Daytona Beach	Install curb ramps
135	Loomis Ave at Keech St	No curb ramps	City of Daytona Beach	Install curb ramps
136	Campbell Middle School from Cedar St to Lockhart St	A three-block long "cattle trail" connects the intersections of Loomis Ave with Cedar St and Lockhart St	City of Daytona Beach	Provide sidewalk connection
137	Loomis Ave at Lockhart St	No curb ramps	City of Daytona Beach	Install curb ramps
138	Loomis Ave at Whitney St	No curb ramps	City of Daytona Beach	Install curb ramps
139	Loomis Ave at Hudson St	No curb ramp at NE corner of intersection	City of Daytona Beach	Install curb ramp
140	Loomis Ave at Henry Butts Dr	There are no curb ramps at the NW, NE, and SE corners at the intersection	City of Daytona Beach	Install curb ramps
141	Loomis Ave at Dr. MLK, Jr. Blvd	No curb ramps on the west side of street	City of Daytona Beach	Install curb ramps
142	Loomis Ave at Gardiner Ct	There is a gap in the sidewalk network	City of Daytona Beach	Construct sidewalk connection
143	Maley St at Caroline St	No curb ramps	City of Daytona Beach	Install curb ramps
144	Maley St at Keech St	No curb ramps	City of Daytona Beach	Install curb ramps
145	Maley St west of Franklin St	Sections of the sidewalk on the north side of street are broken	City of Daytona Beach	Repair broken sidewalk sections
146	Lockhart St at Hawk St	The NE corner of intersection has no curb ramp	City of Daytona Beach	Install curb ramp
147	Henry Butts Dr at Heron St	No curb ramps on east sidewalk	City of Daytona Beach	Install curb ramps
148	Henry Butts Dr at Verdell St	No curb ramps	City of Daytona Beach	Install curb ramps
149	Wisconsin Pl	Vegetation is obstructing the east sidewalk between 1 st Ave and San Juan Ave	City of Daytona Beach	Maintenance of vegetation



Because of the broad range of possible connectivity improvements that should be considered within the PCSA Phase II study area, the priority classification utilized for the Volusia County ADA Transition Plan and displayed in the table below should be considered when determining the priority of the suggested improvements.

Table 2: Priority Descriptions from Volusia County ADA Transition Plan Phase 1

Priority		Description
High	Highest 1A	Existing Curb Ramp with running slope greater than 12%; Sidewalk Cross Slope greater than 2% located within ½ mile of a Hospital, School, Transit Stop, Government Building or Similar Facility
	1B	No Curb Ramp or Flares where sidewalk or pedestrian path exists; Information Barriers (intersection detection, lack of street crossing information); Insufficient Pedestrian Signals located within ½ mile of a Hospital, School, Transit Stop, Government Building or Similar Facility
<hr/>		
Medium	2A	Existing Curb Ramp with running slope greater than 12%; Sidewalk Cross Slope greater than 2% located more than ½ mile away from a Hospital, School, Transit Stop or Government Building
	2B	No Curb Ramp or Flares where sidewalk or pedestrian path exists; Information Barriers (intersection detection, lack of street crossing information); Insufficient Pedestrian Signals located more than ½ mile away from a Hospital, School, Transit Stop or Government Building
<hr/>		
Low	3	Insufficient Sidewalk Surface (trip hazards, surface materials, grating, changes in level/elevation, uneven transitions and improper landing pads)
	4	Movement Barriers (obstructions, insufficient widths, sidewalk gaps, median or island crossings that are inaccessible)

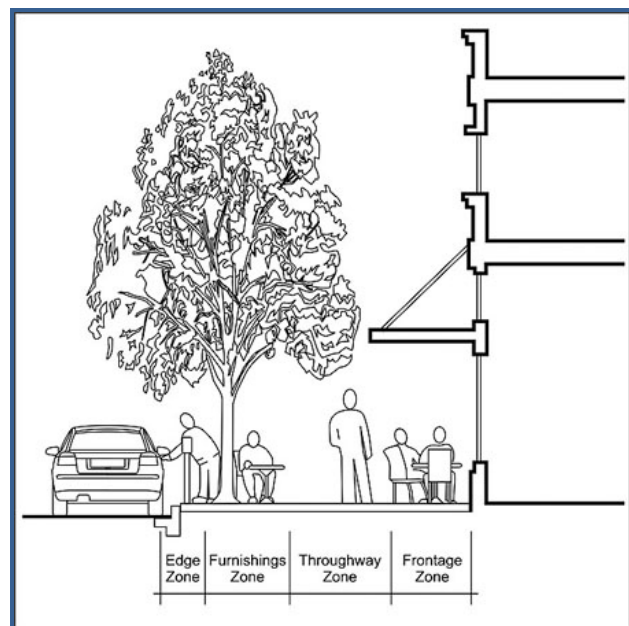
4 INNOVATIVE PEDESTRIAN & BICYCLE PROJECT EXAMPLES

When identifying and evaluating recommended pedestrian and bicycle improvements that can better connect origins and destinations within the PCSA Phase II study area, understanding a thoroughfare's streetside and the specific elements that compromise the streetside are important considerations. The streetside is the portion of the thoroughfare that accommodates the non-vehicular activity – walking as well as the business and social activities – of the street. It extends from the face of the buildings or edge of the private properties to the face of the curb. A well-designed streetside is an important component of a thoroughfare's function as a "public place."

4.1 STREETSIDE DESIGN

Several principles should be included when creating a walkable environment that is inviting for pedestrians, encourages interaction between streetside activities and adjacent land uses, and provides inviting areas to wait for transit. Within the streetside, which is depicted in the illustration below, there should generally be well-defined zones so that the throughway zone is clearly delineated and clear of obstacles such as utilities, signage and landscaping.

The furnishings zone can contain a number of elements – street furniture, street lighting, transit stops with shelters, bicycle racks and landscaping – and should be located in a manner without interference with the pedestrian way ("throughway zone"). The various elements also serve as a barrier between the roadway and the pedestrian zone, which serves to increase pedestrian comfort. An important consideration in Florida's environment is the use of shade trees, canopies and/or shelters to provide shade and protection from the elements. The adjacent illustration depicts a typical streetside layout with commercial frontage. However, the principles of a free and clear pedestrian way and a clearly demarcated furnishings zone can also apply to other land uses as they exist within the PCSA Phase II study area.



Source: *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach.* (ITE)

Streetside design principles can be implemented through zoning or other land development regulations, such as special corridor overlay zones, and through investment in the public right-of-way such as the possible reconstruction of roadways with sidewalks, landscaping and streetscape amenities. As the PCSA Phase II study area redevelops in the future, commercial frontage with zero or minimal right-of-way setbacks can create opportunities for an inviting, pedestrian-scale environment. Even with the current context that has relatively large building setbacks, moving or relocating obstacles – such as signs and utility poles while adding lighting, landscaping and street furniture to the edge of the curb – can create a clear pedestrian way to facilitate pedestrian movements. An example of a well-defined Streetside Zone is shown in the following image.



US 23/Kings Rd, which passes through the campus of Edward Waters College in Jacksonville, FL is a good example of a walkable street. Photograph courtesy of Moderncities.com.

The following streetsides are examples of recent innovative pedestrian and bicycle safety and accessibility projects located in the State of Florida for roadways similar in design, scale and contextual landscape to those within the PCSA Phase II study area. Project innovation varies in each community, depending on the existing pedestrian and bicycle infrastructure and culture toward walking and biking. For example, walking and bicycling facilities that are common in some communities may be less familiar or have never been tried in another community.

4.2 SR 806/ATLANTIC AVENUE

Agency: FDOT District 4

City: Delray Beach, FL

Cost: N/A

Length: 0.90 miles

Potential Application: US 92/ISB Beachside and SR A1A/Atlantic Avenue

Project Description:

The Delray Beach Community Redevelopment Agency (CRA) was established in 1985 to turn around a downtown area that had become plagued by depressed property values. The CRA is funded through tax increment financing (TIF funding), which earmarks a specific portion of property tax dollars for redevelopment within the CRA District without levying any additional taxes. Completed in 1990, one of the CRA's first capital projects was the street beautification of SR 806/Atlantic Avenue from Swinton Avenue to US 1/NE 6th Avenue. To create a more multimodal friendly, context sensitive environment in the core of the downtown area, a five block segment of SR 806 was rerouted along two one-way parallel streets between Swinton Avenue and US 1/NE 6th Avenue. Ownership of this section was then given to the City of Delray Beach, who utilized TIF funding to add wider sidewalks, landscaping and decorative streetscape amenities. Between 1990 and 2010, additional street beautification projects along the four-lane sections of SR 806/Atlantic Avenue, between I-95 and SR A1A/Ocean Boulevard, have focused on sidewalk, lighting, crosswalk and landscaping enhancements.



Enhanced landscaping, pedestrian treatments and infill development along SR 806/Atlantic Ave. Photographs courtesy of Moderncities.com and dated December 2012.

4.3 SR 13/SAN JOSE BOULEVARD

Agency: FDOT District 2

City: Jacksonville, FL

Cost: \$4.5 million

Length: 4.7 miles

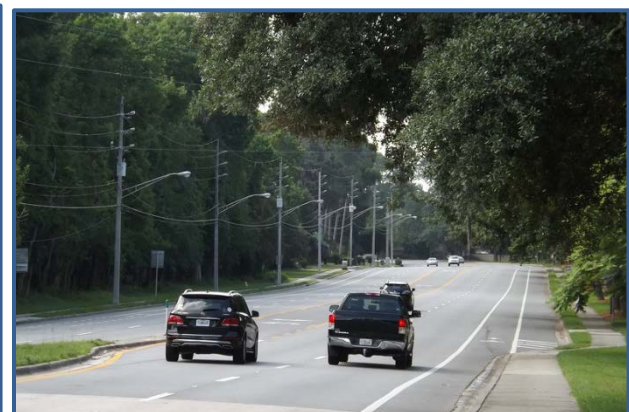
Potential Application: George W. Engram Boulevard, Lincoln Street, Charles Street, Dr. MLK, Jr. Boulevard, Palmetto Avenue and Peninsula Drive.

Project Description:

In August 2014, FDOT District 2 completed a \$4.5 million roadway resurfacing project on SR 13/San Jose Boulevard, between Sunbeam Road and Cornell Road.

The project, which began in January 2014, added new bicycle lanes, replaced traffic safety railings along bridges at Christopher Creek and New Rose Creek and repaired damaged sidewalks, curbs and drainage structures. To accommodate the addition of bicycle lanes, existing lane width was reduced on the 5-lane thoroughfare. Furthermore, to avoid impacts to commuters, schools and businesses, the project was completed during nighttime hours between 7pm and 7am.

As a continuation of this popular route for local bicyclists, FDOT District 2 is proposing to resurface three additional miles of SR 13/San Jose Boulevard/Hendricks Avenue from Cornell Road to San Marco Boulevard. Safety improvements included in this \$5.4 million project include the addition of bicycle lanes, replacement of existing pedestrian signals with countdown signals and the reconstruction of driveways into businesses at select locations and intersections. When complete in spring 2018, this three-mile gap in the bicycle network will be eliminated, providing nine continuous miles of dedicated bicycle facilities between downtown Jacksonville and SR 152/Baymeadows Road.



A view of SR 13/San Jose Blvd, shortly after the completion of a FDOT milling and resurfacing project. As a part of the project, existing roadway lane widths were "right-sized" to create space for new bicycle lanes. Photographs courtesy of Moderncities.com and dated August 2014.

4.4 US 41/TAMIAMI TRAIL

Agency: FDOT District 1

City: Bradenton, FL

Costs: \$1.6 million

Length: 2.75 miles

Potential Application: US 92/ISB, SR A1A/South Atlantic Avenue, George W. Engram Boulevard

Project Description:

According to the Federal Highway Administration, "pedestrian refuge islands," on average, reduce pedestrian accidents by 46 percent and motor vehicle crashes by 39 percent. In 2014, the Florida Highway Patrol investigated 11 pedestrian accidents, including a fatality on a roughly three-mile stretch of US 41/Tamiami Trail, from SR 684/Cortez Road to 69th Avenue West in Manatee County. In addition, nine accidents involving bicyclist were reported over the same time period.

As a result, in January 2015, FDOT District 1 began a \$1.6 million project to improve bicycle and pedestrian safety on the six-lane thoroughfare. Acknowledging that pedestrians will continue to cross the roadway away from signalized intersections, ten mid-block crossings were installed along the corridor to provide pedestrian refuges in the roadway's center turn lane.



A mid-block crossing under construction on US 41/Tamiami Trail between Florida Blvd and 68th Ave West in Manatee County. Photograph, courtesy of Google Streetview and dated July 2015.

4.5 EDGEWATER ROAD (FORMERLY SR 424)

Agency: City of Orlando/FDOT District 5

City: Orlando, FL

Cost: \$589,000

Length: 1.5 miles

Potential Application: Lincoln Street, Dr. MLK, Jr. Boulevard, Charles Street and Dr. Mary McLeod Bethune Boulevard

Project Description:

In November 2001, as a part of a FDOT roadway resurfacing project, Edgewater Drive in Orlando's College Park neighborhood was converted from a narrow undivided four-lane facility to a three-lane roadway featuring bike lanes and parallel parking. This complete streets road diet project involved a transfer of jurisdiction and maintenance from FDOT to the City of Orlando.

The restriping of Edgewater Lane played into "The Horizon Plan," an intended blueprint for planning future neighborhood improvement projects, in order to reinvent Edgewater Drive into a vibrant, pedestrian friendly commercial district with cafés and shops.

As a result of the road diet, Edgewater Drive has seen a 23% increase in pedestrian traffic (2,632 trips after versus 2,136 trips before), a 30% increase in bicycle traffic (486 trips after versus 375 trips before), and automobile travel delays increased by only 10 seconds during the morning peak hours. Furthermore, the automobile daily traffic volume for this roadway has decreased 12%, from 20,501 trips before improvements to 18,131 trips four months after the project's completion.



Edgewater Dr (formerly SR 424) road diet concept in Orlando's College Park neighborhood may be applicable to collector streets within the PCSA study area such as White St, Bill France Blvd, and Dr. Mary McLeod Bethune Blvd. Photographs courtesy of Moderncities.com and dated August 2010.

4.6 CITY OF LAKELAND PATHWAYS AND ROAD DIET PROGRAM

Agency: City of Lakeland

City: Lakeland, FL

Cost: N/A

Length: Citywide

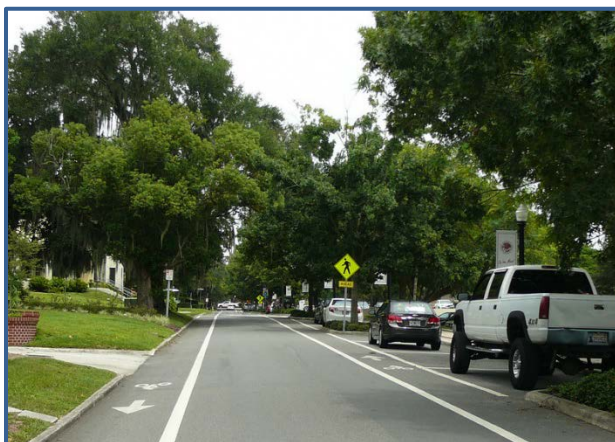
Potential Application: Local street network

Project Description:

Incorporating a strong focus on central city redevelopment, the City of Lakeland's Pathways and Road Diet Program takes advantage of the city's pre-World War II development pattern and associated grid street network. The Lake-to-Lake Greenway and Bikeway Network anchors the City's Pathways program. Featuring 11.3 miles of existing and 15.7 miles of proposed facilities, the network is a connected combination of on and off-road facilities, providing connections to the city's premier parks, lakes, historic neighborhoods, transit system and major destinations.

The city's road diet program focuses on "right sizing" four-lane undivided streets with daily volumes below 12,000 vehicles. Intended to reduce crossing barriers for pedestrians and eliminate gaps within the bicycle network, road diets are coordinated with resurfacing projects. In select cases involving state highways, FDOT provided resurfacing funds to City, with City accepting ownership with maintenance commitment from its Community Redevelopment Area (CRA) for these corridors. Other components of these programs include bicycle parking regulations, neighborhood traffic calming, a park-and-ride facility and a City traffic safety team.

In 2012, the City of Lakeland was designated a Bronze level Bicycle Friendly Community by the League of American Bicyclists for its commitment to cycling as a mode of transportation. The city is now among the few localities in Florida who have achieved such a level of recognition.



The City of Lakeland's Pathways and Road Diet Program includes the "right sizing" of roadways to provide on-street bicycle facilities and enhanced pedestrian crossings in select locations. Photographs courtesy of Moderncities.com and dated July 2014.



5 NEXT STEPS

The purpose of this report is to identify, prioritize and advance critical improvements needed for multimodal connectivity and improved accessibility in the study area. Project identification of needs were accomplished using methodology similar to that for pedestrian roadway safety audits but emphasizing improved transit accessibility and pedestrian and bicycling connectivity within the study area. Identified preliminary recommendations for review, focus on improvements that can better connect origins and destinations within the corridor and are ADA compliant.

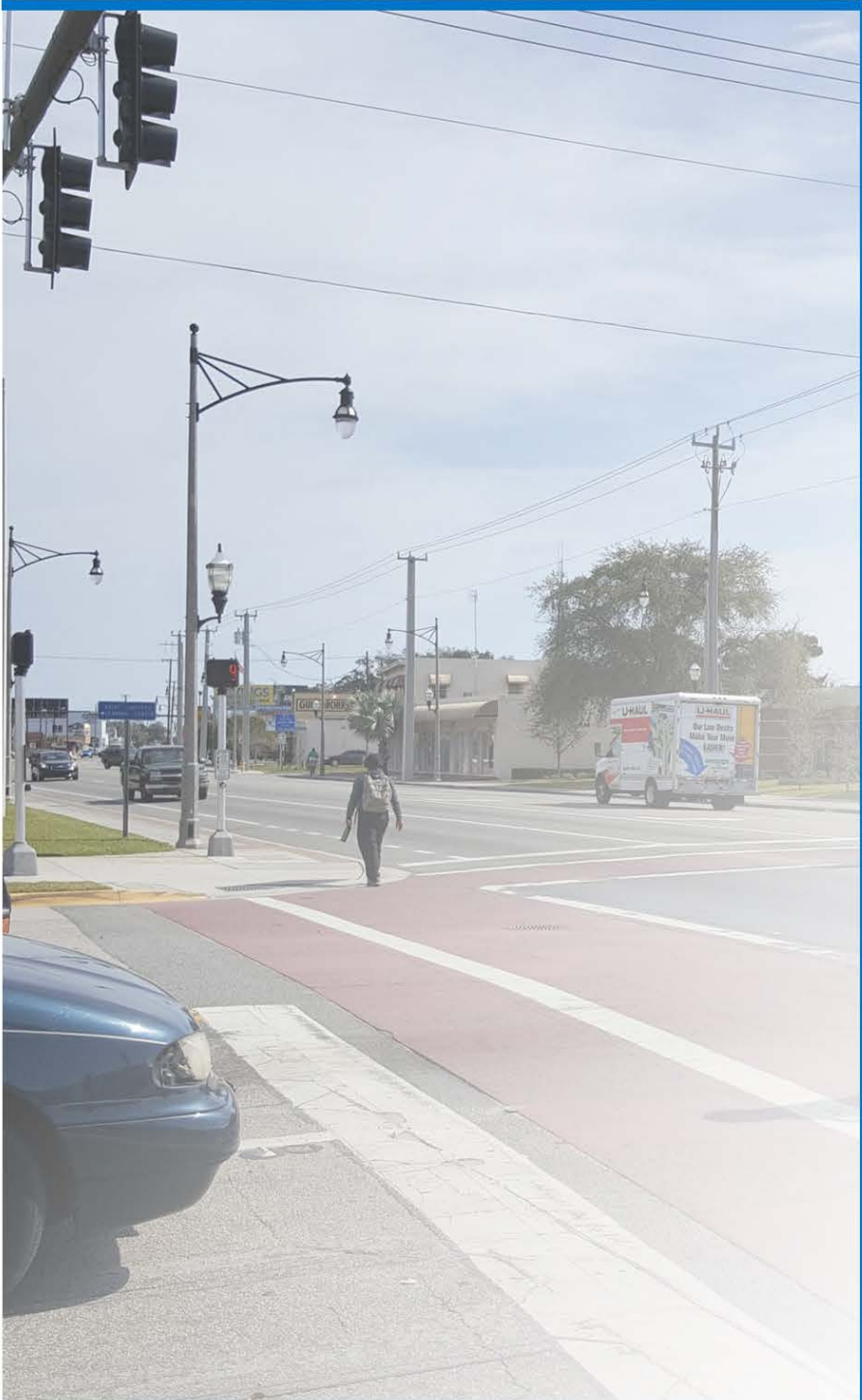
The next phase of the PCSA Phase II study will evaluate Long-Range Needs Assessment, Safety Needs (review of crash data), and include the development of Initial Concept Plans and Assessment following a context-sensitive approach that emphasizes the livability and multimodal planning vision for the corridor. This phase of the PCSA will conclude with the development of draft and final PCSA Phase II report.



6 APPENDIX

6.1 ACRONYMS

1. AADT – Average Annual Daily Traffic
2. ADA – American Disabilities Act
3. BCU – Bethune-Cookman University
4. CRA – Community Redevelopment Area
5. FDOT – Florida Department of Transportation
6. FECR – Florida East Coast Railway
7. ISB – International Speedway Boulevard
8. ITE – Institute of Transportation Engineers
9. PCSA – Pedestrian Connectivity & Safety Assessment
10. PRSA – Pedestrian Roadway Safety Audit
11. R2CTPO – River to Sea Transportation Planning Organization
12. ROW – Right of Way
13. SR – State Road
14. US – United States Highway



Prepared for:
Florida Department of Transportation District 5, Deland, FL



Prepared by: Ghyabi & Associates, Inc.