City of Plantation Multimodal Master Transportation Plan

August 2023





City of Plantation Multimodal Master Transportation Plan Table of Contents







Chapter 1: Introduction	3
Chapter 2: Project Approach	
Chapter 3: Methodology	12
Chapter 4: Focus Roadways	29
Chapter 5: Recommendations	58
Chapter 6: Cost Estimates:	129

Chapter 1: Introduction





Chapter 1: Introduction



The City of Plantation, like much of Southeast Florida, faces a growing population and opportunities for redevelopment in the coming decades. A strong multimodal transportation plan, which plans for improvements for all roadway users including pedestrians, bicyclists, transit riders, and automobiles, is needed to support growth, while managing access and safety.

The City of Plantation's Multimodal Master Transportation Plan ("MMTP") identifies recommendations to improve overall roadway safety, as well as specific improvements for pedestrians, bicyclists, and transit users.

Purpose:

The Multimodal Master Transportation Plan will address the City's current and future multimodal transportation needs by developing strategies to comprehensively improve safety, and increase multimodal connectivity. The MMTP is consistent with City of Plantation priorities of reducing congestion, fostering economic vibrancy, while addressing environmental concerns and sustainability. Notably, the MMTP is intended to guide and prioritize effective transportation investments to serve a growing, multimodal city, while maintaining the "hometown" feel of the City of Plantation.

Multimodal Transportation

The availability of transportation options using different methods within a system or corridor. Examples of these methods include biking, walking, and public transit.



Strategy:

The MMTP planning effort consisted of two distinct phases:

Phase 1: Needs Assessment and Identification of Short-term Improvements

Phase 2: Needs Assessment and Identification of Mid- and Long-Term Improvements.

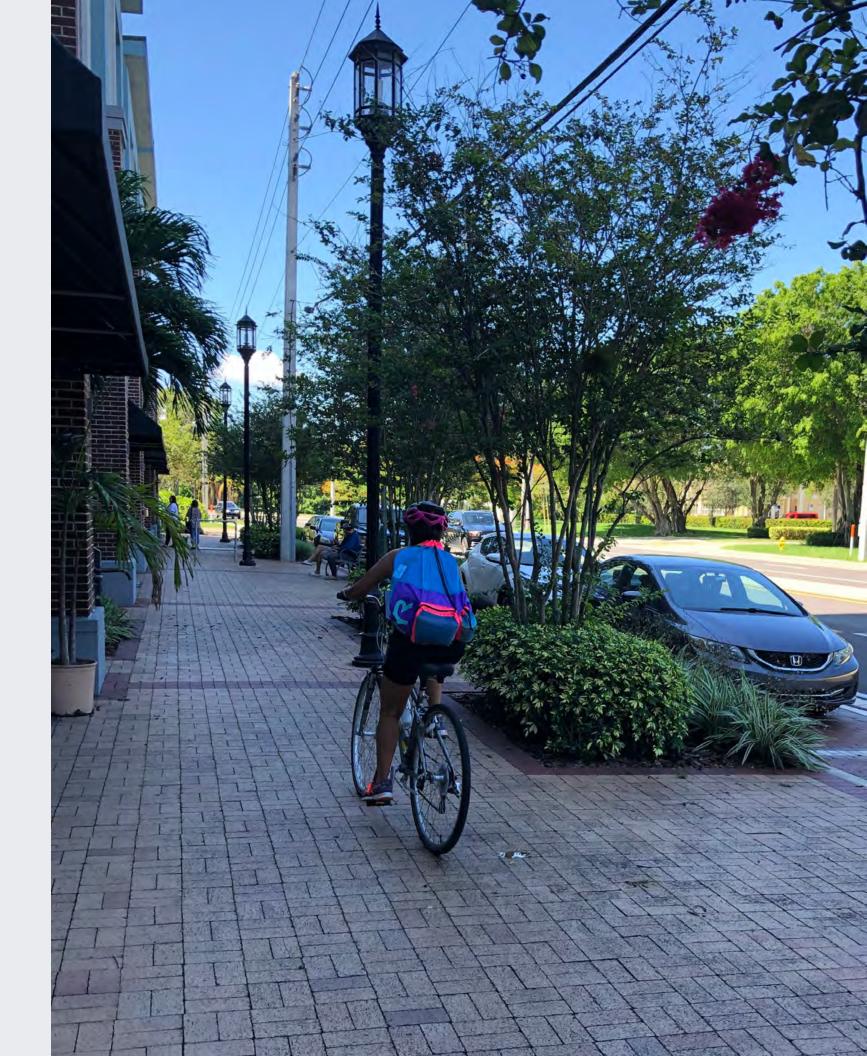
MMTP Organization

The MMTP is the result of a corroborative planning effort that is both data-driven and reflective of community priorities and desires. The planning effort detailed in this report is organized as follows:

- Chapter 2: Project Approach
- Chapter 3: Methodology
- Chapter 4: Focus Roadways
- Chapter 5: Recommendations
- Chapter 6: Cost Estimates and Funding Opportunities



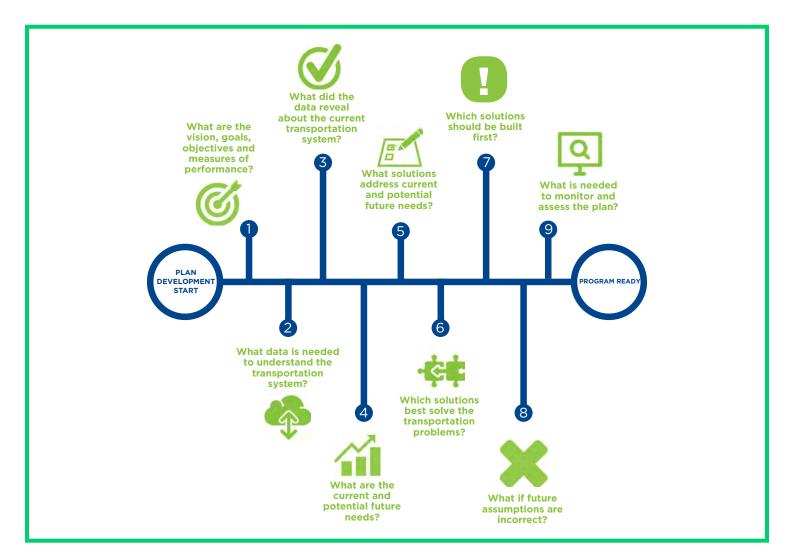






Introduction

This chapter describes the multifaceted project approach utilized throughout the development of the MMTP. To address the City's short-term and long-term multimodal transportation needs, the MMTP was guided by an integrated technical approach consistent with the "How to Develop a Transportation Plan" process described in the Broward Metropolitan Planning Organization ("Broward MPO") Transportation Planning Guidebook (January 2018). This step-by-step process was utilized to ensure the recommendations were data-driven and community supported.



"How to Develop a Transportation Plan" process described in the Broward MPO Transportation Planning Guidebook (January 2018)

Collaboration

The MMTP is a result of a collaborative, facilitated partnership between the City of Plantation and the Broward MPO. The Broward MPO collaborates with its partner governments in their efforts to plan, prioritize, and fund diverse transportation options. Throughout the development of the MMTP, Broward MPO Staff facilitated meetings, provided project management support, assisted with stakeholder engagement, and prepared planning documents. Collaboration with facility owners, Broward County and FDOT, was essential for building support for the City's multimodal recommendations.

City Staff Working Group

A City Staff Working Group was created at the outset of the MMTP. It included representatives from the following City Departments: Engineering, Planning, Zoning, & Economic Development, City Administration, Public Works, and Police Department.

City Staff Working Group meetings were held on the following dates to discuss the listed topics:

- · September 14, 2021: Project Kick-Off
- October 12, 2021: Guiding Themes / Selection of Focus Roadways
- November 9, 2021: Existing Conditions Progress
- January 12, 2022: Selection of Focus Locations
- April 7, 2022: Short Term Recommendations Workshop #1
- April 26, 2022: Short Term Recommendations Workshop #2
- July 21, 2022: Phase 2 Kick Off
- · August 17, 2022: Phase 2 Guiding Themes
- September 29, 2022: Phase 2 Selection of Focus Roadways
- November 16, 2022: Long Term Recommendations Workshop #1
- January 11, 2023: Long Term Recommendations Workshop #2

A copy of the Staff Working Group meeting presentations is included in Appendix, Section A.



Broward County

Several of the roadways identified for multimodal improvements in the MMTP intersect with Broward County-owned facilities. Further, the City of Plantation and Broward County have a longstanding interlocal agreement for the maintenance of traffic control devices and other infrastructure for several city-owned roadways.

Meetings with staff from Broward County Highway Construction and Engineering Division and Broward County Traffic Engineering Division were held on the following dates to discuss the listed topics:

- · April 21, 2022: Recommendations for Nob Hill Rd and Cleary Blvd
- October 4, 2022: Needs Assessment for Cleary Blvd corridor
- January 4, 2023: Recommendations for Cleary Blvd intersections: Hiatus Rd and Pine Island Road

Additionally, staff from Broward County Highway Construction and Engineering Division and Broward County Traffic Engineering Division participated in field audits of Cleary Blvd and University Dr.

A copy of the meetings presentations are included in Appendix, Section A.



Florida Department of Transportation (FDOT)

Upon identifying University Dr as one of the MMTP focus roadways, engagement with the facility-owner, FDOT, commenced.

Meetings with staff from FDOT District 4 were held on the following dates to discuss the listed topics:

- September 12, 2022: MMTP Introduction
- December 21, 2022: Recommendations for University Dr

Additionally, staff from FDOT District 4 participated in field audits of University Dr.

A copy of the meetings presentations are included in Appendix, Section A.





Data Collection and Analysis

The data collection and analysis effort provided a detailed assessment of the existing multimodal environment and helped to identify which short-term improvements were needed, possible, and appropriate.

Existing Plans and Studies

One of the first steps in the development of the MMTP was an analysis of existing planning reports and studies relevant to the city's existing and planned transportation system. These included studies by the City and from other government agencies. Broward MPO Staff facilitated meetings, provided project management support, assisted with stakeholder engagement and prepared planning documents.

Following is a list of the reviewed plans and studies:

City of Plantation:

Zoning Code • Zoning Map • Comprehensive Plan • Annual CIE FY 2020-21 Update (2020) • Future Land Use Plan Map • Plantation Midtown District Conceptual Master Plan (2016) • Midtown Bridge PD&E Study (ongoing) • Parks & Recreation Master Plan (2020); Development Projects (Summer 2021) • Gateway CRA Community Redevelopment Plan (2006) • Public Outreach Meeting Presentations for "Proposed Cypress Road Sidewalk Improvement Project" and "Citywide Traffic Calming Project: NW 11th Place & Cypress Road" (2021) • Community Shuttle approved routes • Numerous site plans.



City of Plantation Parks & Recreation Master Plan (2020)

City of Plantation Police Department:

Traffic Citations • Approved School Drop-Off and Pick-Up Routes for Central Park Elementary and Plantation Elementary Schools (2021)

Broward County:

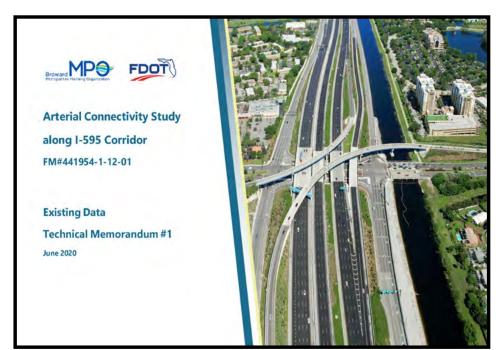
Transit System Map and Route Maps • Transit Development Plan Annual Update 2021 – 2030 • Broward NEXT • Broward County Trafficways Plan (2022)

Broward MPO:

2045 MTP • Complete Streets Master Plan; Sunrise Blvd Study (2003) • Broward Blvd Corridor Transit Study (2012) • Midtown Plantation Livability Study (2012) • University Drive Study (2015) • 441 Multimodal Study (2015) • Bike & Ped Safety Plan (2018) • Plantation Mobility Hub (2020)

Florida Department of Transportation (FDOT):

Arterial Connectivity Study along I-595 Corridor (2020) • Transit Improvements for SR 7 / US 441 • Safety Study SR 838 (Sunrise Boulevard) and NW 43rd Avenue Section No. 86110000, Milepost 3.720 • SR 817/University Dr from SR 84 to NW 1st Street Mobility Improvements Project • SR 842/ Broward Boulevard Resurfacing, Restoration and Rehabilitation (RRR)



FDOT Arterial Connectivity Study along I-595 Corridor (2020)



Crash Data

In order to identify crash causes and trends, data from Signal Four Analytics was analyzed. Signal Four Analytics is an interactive, web-based system that enables users to map and analyze crashes based on information from the Florida Department of Highway Safety and Motor Vehicles.

Crashes during a six-year period (2015 to 2021) were reviewed. The crash information analyzed included location of crashes, type / severity of injuries, roadway users, crash type (rear end, left turn), time and date, lighting conditions, roadway conditions, and a multitude of additional data. The crash data analysis assisted in the selection of focus roadways, identified high-crash locations on the roadways, and informed the recommended improvements. *Highlights from the crash data analysis are included in Chapter 5*.

The complete crash data collected from Signal Four Analytics is included in Appendix Section B.



Signal Four Analytics "Florida Traffic Safety Dashboard" depicting data from City of Planation Police Department for the year 2016.



Field Audits

Multiple field audits were performed in order to observe, document, and photograph existing conditions of various roadways and locations. Esri ArcGIS Survey123 was utilized during the field audits. This interactive, web-based tool allows data to be collected via cell phone and in response to custom questionnaires.

Four custom questionnaires were developed for the field audits to document pedestrian and bicyclist activity, transit stop conditions, existing multi-modal facility conditions, missing facility gaps, existing intersection conditions, speeding, ADA facility conditions, and similar qualitative and quantitative observations.

The dates, locations, and specific topics of the field audits are as follows:

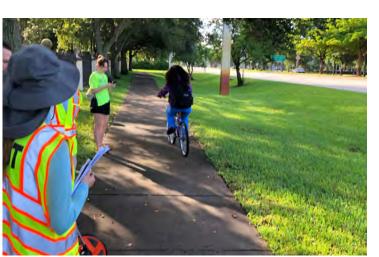
- November 3, 2021: Cypress Rd, NW 46th Av, NW 5th St (general observations)
- November 12, 2021: Cleary Bl, 84th Av, SW 6th St, SW 78th Av (general observations)
- November 16, 2021: Nob Hill Rd (general observations)
- December 21, 2021: NW 46th Av, NW 5th St (Crime Prevention Through Environmental Design)
- February 3, 2022: Eight city-owned roadways (Afternoon pedestrian activity)
- March 23, 2022: Eight city-owned roadways (Street lighting)
- September 20, 2022: University Dr (Broward Blvd to NW 5th St)
- September 21, 2022: University Dr (Sunrise Blvd to Cleary Blvd Afternoon)
- September 22, 2022: University Dr (Sunrise Blvd to Cleary Blvd Morning)
- September 23, 2022: Cleary Blvd (County-owned intersections)
- October 6, 2022: Intersection of University Dr and Sunrise Blvd (Lunchtime pedestrian activity)
- October 11, 2022: University Dr and Cleary Blvd (intersection safety)

As described in Chapter 3, the information gathered during the field audits was instrumental in identifying focus locations and the short-term recommendations. Summaries of the field audit observations are included in Chapter 4 and Chapter 5.

A copy of the photographs taken during the field audits are included in Appendix Section C.



MPO Staff photographing bicyclist riding on sidewalk



School-aged bicyclist riding on the sidewalk along University Dr.



A field audit of University Dr and Sunrise Blvd during a heavy rain storm.



MPO Staff observing existing conditions during field audit of SW 6th St



Bicyclist is observed riding on sidewalk and then crossing street not at crosswalk



Transit riders frequently observed jaywalking to / from bus stops



Public Engagement

In order to develop recommendations that reflect the priorities and concerns of people who live, work, and visit Plantation, public engagement was conducted throughout the development of the High-Level Multimodal Needs Assessment and Identification of Short-term Improvements.

Web Survey

The first major public engagement effort was a web survey. The web survey was available from October 2021 to February 2022 on SurveyMonkey.com. A total of 672 surveys were completed. The survey requested general information about the respondent, opinions regarding existing multimodal facilities, overall goals for transportation in the City, and opinions on specific multimodal improvements citywide. While the survey was not roadway specific, it did include several questions about Midtown Plantation and the area of the City adjacent to US 441.

The survey was promoted by the City via social media postings (Facebook, Twitter). Additionally, the Broward MPO staff presented information about the MMTP and survey at two City Advisory Board meetings as follows:

- October 20, 2021: Gateway Advisory Board
- · January 20, 2022: Plantation Midtown Advisory Board

Highlights of the web survey results include:

Question #4 "What should be the primary goals of the Transportation within the City (rank 8 options)": The top three responses were ranked almost evenly:

- 1. Improve Traffic Flow
- 2. Improve Pedestrian Safety and Access
- 3. Improve Traffic Safety

34% of respondents selected "Improve Traffic Flow" as the #1 transportation goal for the City.



Question #9 "What are the primary issues and / or concerns for roadways within the City (select all that apply – 13 options)".

The top two responses were almost evenly selected:

- 1. Speeding Traffic
- 2. Too Much Traffic



Social Media promotional graphic for Web Survey

Question #10 "How comfortable do you feel walking in the City of Plantation? (1 star being very uncomfortable to 5 stars being very comfortable)"



The average rating was 3.3 stars

Question #11 "How comfortable do you feel biking in the City of Plantation? (1 star being very uncomfortable to 5 stars being very comfortable)
The average rating was 2.5 stars

The full results from the Web Survey are included in Appendix Section D.



Community Meetings

Throughout the MMTP plan development Community Meetings were held to obtain feedback from residents and other stakeholders on existing community concerns and for the proposed recommendations. The below table includes an overview of the Community Meetings. Promotional materials, sign-in sheets, presentations, and comments are included in Appendix Section F.

Community Meetings			
Meeting Name	Date & Time	Location	Topic
Community Open House	3/1/22 at 6:00 p.m.	Jim Ward Community Center	Document existing community concerns for Phase 1 Eight Focus Roadways
Community Meeting	3/21/22 at 6:00 p.m.	Virtual	MMTP introduction, overview of Phase 1 Eight Focus Roadways, and document existing community concerns
Lauderdale West HOA	3/23/23 at 4:30 p.m.	Lauderdale West Community Center	MMTP introduction and document existing concerns for roadways adjacent to neighborhood
Lauderdale West HOA	3/23/23 at 4:30 p.m.	Lauderdale West Community Center	MMTP introduction and document existing concerns for roadways adjacent to neighborhood
Rock The Park	2/3/23 6:00 p.m.	Central Park	General Outreach for MMTP and promote upcoming Community Meetings
Community Meeting: University Dr projects	2/28/23 at 6:00 p.m.	City Hall	Obtain feedback on recommended improvements for University Dr
Community Meeting: Cleary Blvd projects	3/14/23 at 6:00 p.m.	Central Park Multi-Purpose Building	Obtain feedback on recommended improvements for Cleary Blvd (Phase 2) and Nob Hill Rd (Phase 1)
Broward Mall	4/1/23 at 2:00 p.m.	Broward Mall	General Outreach for MMTP and obtain feedback on projects in Midtown Plantation
Park East HOA	4/18/23 at 7:00 p.m.	Jim Ward Community Center	MMTP introduction and present recommendations for NW 46th Av and NW 5th St



Community Open House (3/1/22)



Community Open House (3/1/22)



Community Meeting (2/28/23) for the University Dr recommendations



Community Meeting (3/14/23) for the Cleary Blvd recommendations



Community Meeting (3/14/23) for the Cleary Blvd recommendations



Outreach event at the Broward Mall (4/1/23)



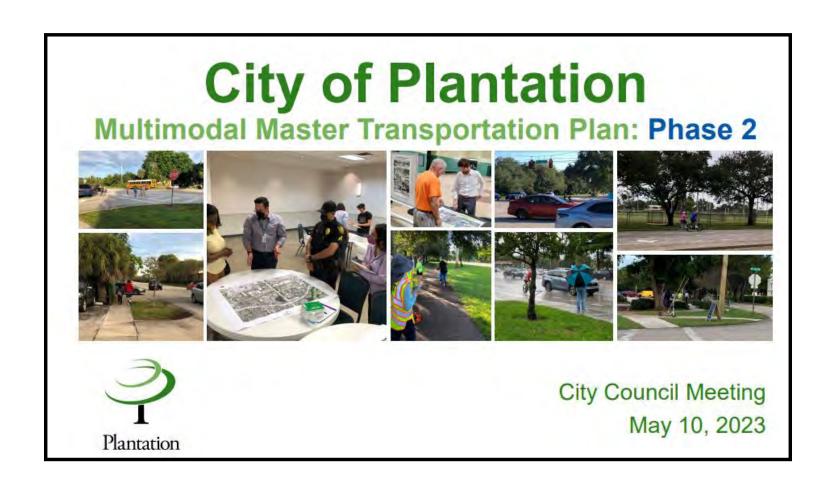
Advisory Board Meetings and City Council Workshops

Presentations were made to various City Advisory Boards throughout the development of the MMTP. City Council Workshops were held at the culmination of both Phase 1 and Phase 2.

The below table includes an overview of these meetings.

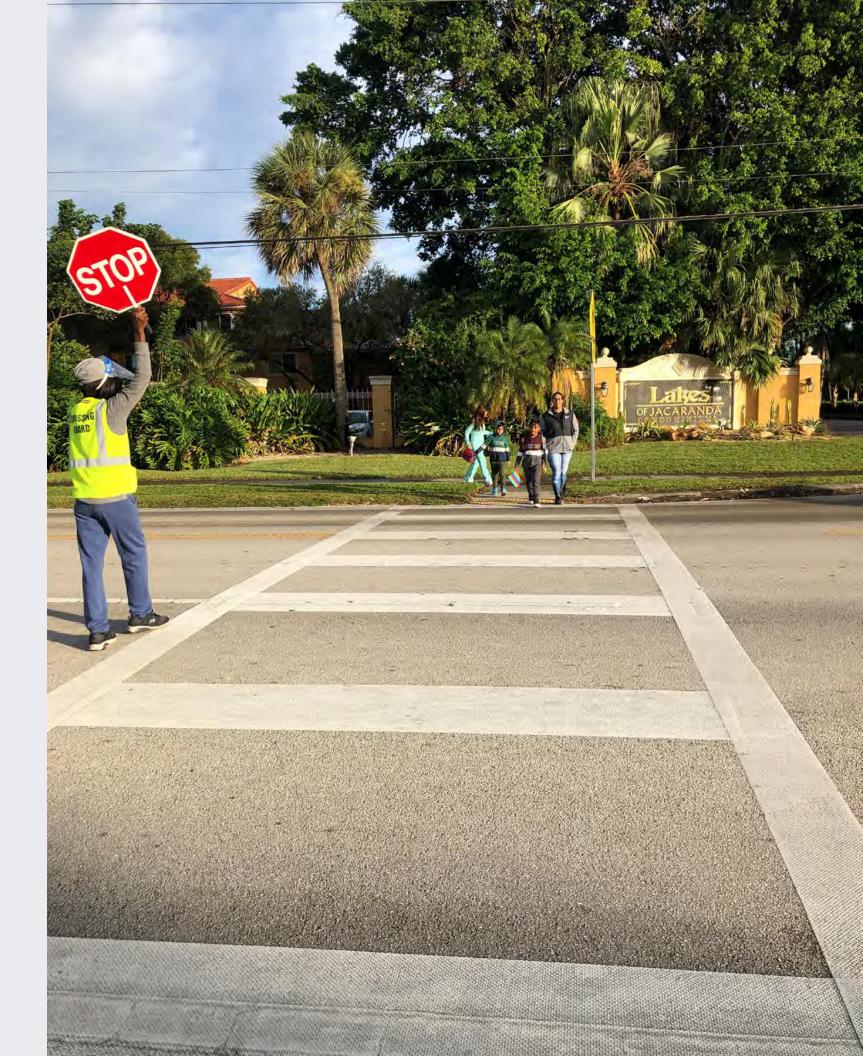
Copies of the meeting agendas and presentations are included in Appendix Section F.

Advisory Board Meetings and City Council Workshops			
Meeting Name	Date & Time		
Gateway Advisory Board	10/20/21 at 11:00 a.m.		
Midtown Plantation Advisory Board	1/20/22 at 11:00 a.m.		
City Council Workshop	8/24/22 at 5:00 p.m.		
Midtown Plantation Advisory Board	3/16/23 at 10:00 a.m.		
Planning and Zoning Board	4/11/23 at 6:00 p.m.		
Gateway Advisory Board	4/19/23 at 10:00 a.m.		
City Council Workshop	5/10/23 at 5:00 p.m.		



Chapter 3: Methodology







Introduction

The MMTP was composed of two distinct phases. This chapter describes the methodology utilized throughout the two phases for selecting the focus roadways and identifying the recommended improvements.

Phase 1 Methodology

Phase 1 focused on a select group of city-owned roadways that were identified as critical for multi-modal transportation improvements. A tiered methodology was utilized to help narrow the focus from citywide to focus roadways, then further narrowed to focus locations, and finally to the development of short-term recommendations. This methodology created data-driven, community aligned recommendations centered on the MMTP purpose: guide and prioritize effective transportation investments that could be implemented in the short-term.

The following graphic depicts the Phase 1 methodology:



Central to the Phase 1 methodology was two guiding principals: Locational Readiness and Plan Themes. These criteria were identified in the beginning of the planning process and, as shown in the Phase 1 methodology graphic, were central to the determination of the focus roadways.

Locational Readiness

Since the intent of the Phase 1 was the identification of improvements that could feasibly be implemented in a five-year time period, locational readiness was one of the core criteria considered. Locational Readiness contributes to the likelihood of a project to advance from design to funding to implementation. The location of a project can impact the ability to make a project Program Ready including, but not limited to, project cost, ownership and stakeholder support, and project complexity.





For the purposes of the Phase 1 methodology, the primary indicators of Locational Readiness were:

Location

- This indicator included locational issues that would impact the likelihood of being able to develop projects within the short-term such as roadway ownership, right-of-way ownership, as well as locational impediments such as utilities or adjacent land uses.
- In recognition of the time typically required to coordinate projects with other roadway owners, it was decided that for the purposes of the short-term improvements, only city-owned roadways would be eligible to be focus roadways.

Scope of Work

• This indicator included programming issues resulting from the location of a project such as the complexity of a proposed project, anticipated project costs, necessity to acquire additional right-of-way, and necessary studies needed.

Community Support

- This indicator included demonstrated public interest for the location of a project such as prior planning efforts, reference to the location in existing planning documents, and results of the web survey and other public engagement.
- This indicator was consistent with the importance of demonstrated community support when applying for competitive grant funding.







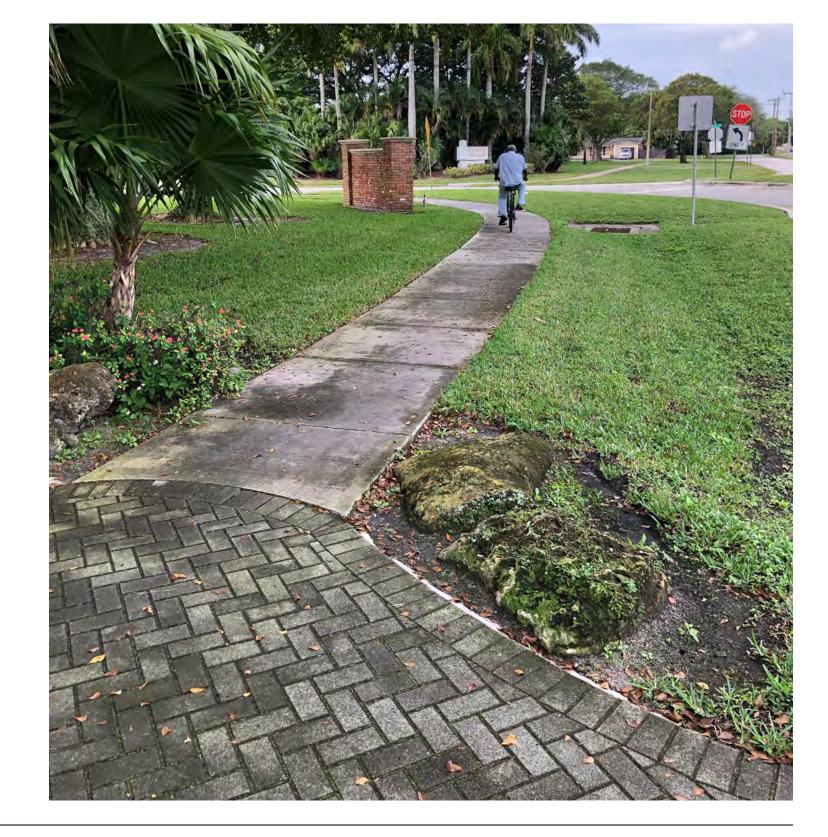




Location

Scope of Work

Community Support





Phase 1 Plan Themes

A set of plan themes was laid out by the City Staff Working Group early in the planning process. The three themes and guided decision making throughout Phase 1 planning process.

The Phase 1 Plan Themes are:

Safety

- Safety is the US Department of Transportation's (USDOT) and FDOT's top priority. Both have committed to a comprehensive approach to make roadways safe for all roadway users by significantly reducing serious injuries and deaths on highway, roads, and streets.
- Safety is a data-driven theme that considers historic crash statistics and trends. It contemplates which roadway (or right-of-way) characteristics are contributing to the crash trends.
- Safety also includes qualitative considerations from public engagement about perceived safety.

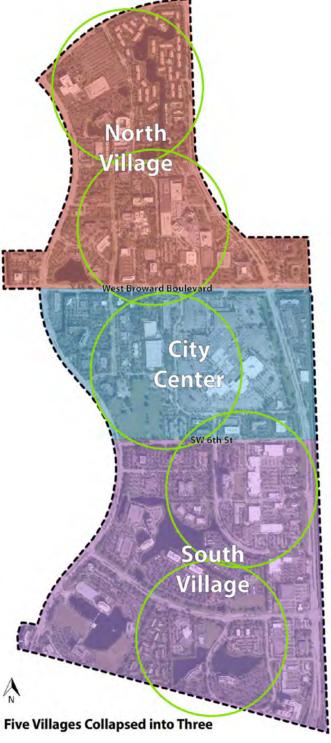
Perceived Safety

Conditions such as speeding or poor lighting which make pedestrians feel unsafe and therefore discourage walking and biking.



Midtown Connectivity

- Midtown Plantation is the City's central business district and is undergoing redevelopment from a suburban office / retail area to a true town center, encouraging mixed used redevelopment.
 Envisioned as three interconnected Urban Villages, part of the vision of Midtown Plantation is to be pedestrian friendly, by linking the areas throughout Midtown through walkable pathways, overcoming major vehicular barriers.
- The Midtown Connectivity theme includes multimodal connectivity into and within Midtown Plantation.
- This theme focuses on the facilities needed so that residents / visitors who live outside of Midtown can safely, comfortably, and conveniently walk, bike, or use transit to travel to Midtown.
- The theme also focuses on the facilities needed so that residents, workers, and visitors who are in Midtown Plantation can park once, and then safely, comfortably, and conveniently walk, bike, or use transit to travel to other destinations throughout Midtown.



Midtown Plantation Three Villages (Plantation Midtown District 2023, Update of the Conceptual Master Plan)



Traffic Calming

- Throughout the city there are neighborhoods whose local roads are designed in a manner that unintendedly encourages speeding and/or cut through traffic.
- The primary purpose of traffic calming is to support the livability and vitality of neighborhoods by implementing roadway improvements to reduce vehicle speeds and/or volume.
- Traffic calming is also intended to increase the safety and comfort of people walking and bicycling.



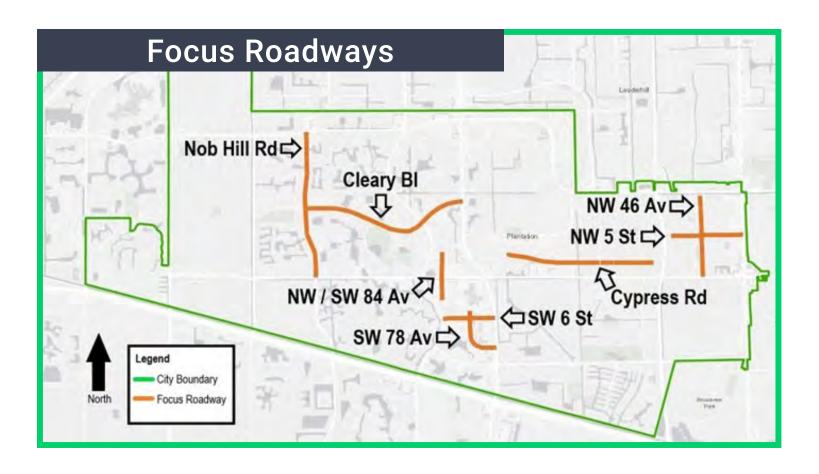




Phase 1 Focus Roadways

The first significant decision in the planning process was determining the Phase 1 Focus Roadways. The decision-making criteria was Locational Readiness and the Plan Themes.

All city-owned roadways were reviewed by the City Staff Working Group based on Locational Readiness and the Plan Themes. Eight roadways were selected to be Focus Roadways. The Focus Roadways Selection Criteria table lists the roadways and the applicable plan themes. In numerous ways the Focus Roadways features, characteristics, and challenges are typical for roadways throughout the City. Therefore, it is anticipated that the resulting short-term recommendations could be applied to roadways throughout the City.



Phase 1 Focus Roadways Selection Criteria					
	Plan Theme				
City-Owned Roadway	Safety	Midtown Connectivity	Traffic Calming		
Nob Hill Rd • From Broward Blvd to Sunrise Blvd • Excluding intersections at: Broward Blvd and Sunrise Blvd	X				
Cleary Blvd • From Nob Hill Rd to University Dr • Excluding intersections at: Pine Island Rd and University Dr	X	X			
NW / SW 84th Ave • From NW 5th St to SW 3rd St (Midtown Plantation)	X	X			
SW 6th St • From Pine Island Rd to University Dr (Midtown Plantation) • Excluding intersections at: Pine Island Rd and University Dr		X			
SW 78th Av • From Federated Rd to University Dr (Midtown Plantation) • Excluding intersection at: University Dr		X			
Cypress Rd • From western end to E. Acre Rd	Х		Х		
NW 46th Av • From Broward Blvd to NW 9th Ct • Excluding intersection at: Broward Blvd	X		X		
NW 5th St • From NW 49th Av to US 441 • Excluding intersection at: US 441	Х		Х		



Phase 1 Focus Locations

The second significant decision-making step was the determination of the Focus Locations. The criteria was Injury Crash Trends, Missing Facilities, and Traffic Calming. Observations from field audits, analysis of crash data, review of traffic citation information, and public engagement feedback were essential to the identification of the Focus Locations.

Injury Crash Trends

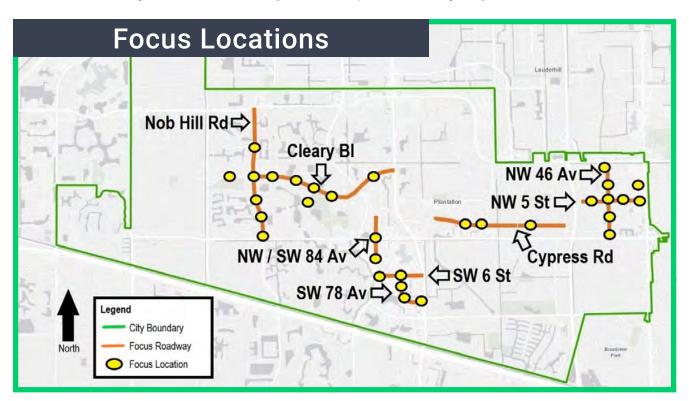
Crashes resulting in injuries during the period of January 1, 2015 to December 15, 2021 were analyzed in order to identify cluster locations and crash trends. Preliminary analysis of the location was undertaken to determine if an engineering solution could mitigate the observed injury crash trends.

Missing Facilities

The amount, comfort, and safety of multimodal activity can be greatly impacted by facilities including: sidewalks, bike paths, crosswalks, pedestrian-scaled lighting, and pavement markings. Missing facilities were noted, as well as those is substandard condition.

Traffic Calming

Roadway or right-of-way features that might contribute to speeding and/or cut through traffic were identified. Notably, this included long, uninterrupted roadway segments.

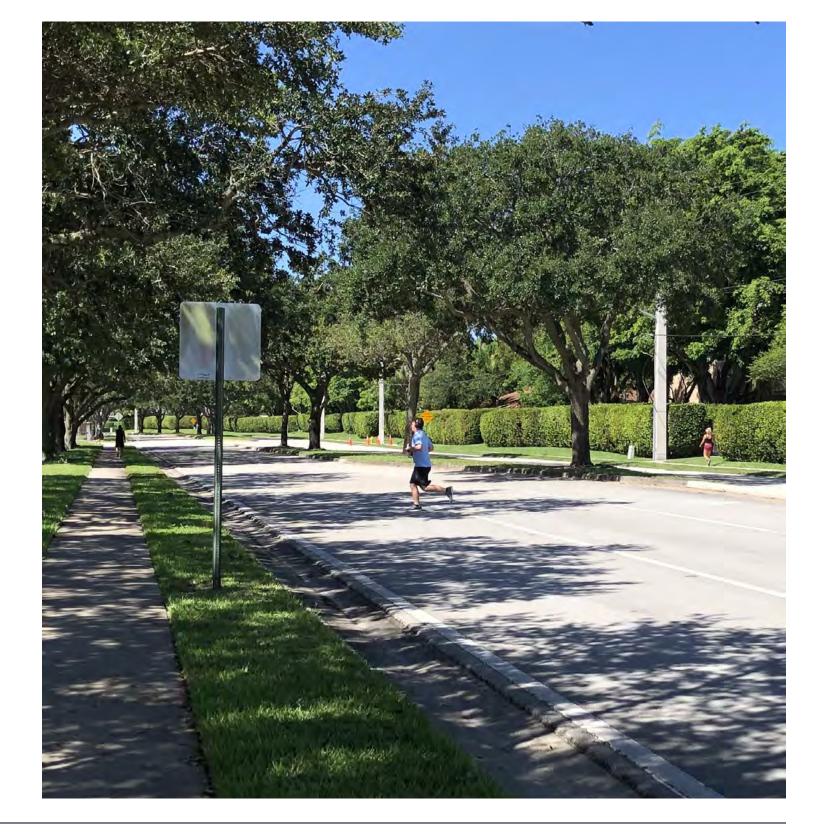


Phase 1 Focus Locations: Selection Criteria				
Focus Roadway	Focus Location	Injury Crash Trends	Missing Facilities	Traffic Calming
Nob Hill Rd	Entire Roadway / Study Area		Yes	Yes
Nob Hill Rd	Intersection at NW 4th Ct	Yes	Yes	
Nob Hill Rd	Intersection at NW 6th St / Central Park PL	· I		
Nob Hill Rd	School Crosswalk at entrance to Sunset Park			
Nob Hill Rd	Intersection at Cleary Bl	Yes		
Nob Hill Rd	Intersection at NW 12th St	Yes	Yes	
Cleary Bl	Entire Roadway / Study Area		Yes	Yes
Cleary Bl	East entrance to Plantation Promenade Shopping Center	Yes	Yes	Yes
Cleary Bl	Intersection at Central Park Pl	Yes	Yes	
Cleary Bl	Intersection at Central Park Dr	Yes	Yes	
Cleary Bl	Central Park Entrances (Central Park Dr & NW 91st Av)		Yes	
Cleary Bl	Multiblock area from Lauderdale West Dr to American Exp Way / Midtown North	Yes	Yes	Yes
SW 84th Av	Intersection at SW 3rd St		Yes	Yes
NW / SW 84th Av	Intersection at Broward Bl	Yes	Yes	
SW 6th St	Entire Roadway / Study Area		Yes	Yes
SW 6th St	Intersection at SW 78th Av Yes Yes			

Table continues on the following page



Phase 1 Focus Locations: Selection Criteria				
Focus Roadway	Focus Location	Injury Crash Trends	Missing Facilities	Traffic Calming
SW 78th Av	Entire Roadway / Study Area		Yes	
SW 78th Av	Intersection at SW 6th Ct	Yes	Yes	
SW 78th Av	Intersection at Crossroads to Yes 1041 S. University Dr			
Cypress Rd	Entire Roadway / Study Area Yes		Yes	Yes
Cypress Rd	Intersection at NW 70th Av	Yes		
Cypress Rd	Intersection at NW 69th Av Yes			
NW 5th St	Intersection at NW 48 Av			Yes
NW 5th St	Intersection at NW 46 Av Yes		Yes	
NW 5th St	Multiblock area from NW 45 Ter to NW 43 Av	Yes		Yes
NW 5th St	NW 42 Av to 441	Yes		
NW 5th St	NW 42nd Av north to Elementary School		Yes	Yes
NW 46th Av	Entire Roadway / Study Area	Yes		Yes
NW 46th Av	Multiblock area From NW 3rd St to NW 4th Ct	Yes		Yes
NW 46th Av	Intersection @ NW 6th Ct	Yes	Yes	Yes
NW 46th Av	Intersection of NW 47th Av, NW 9 Ct, and NW 9 Dr	Yes		Yes





Phase 1 Recommendations

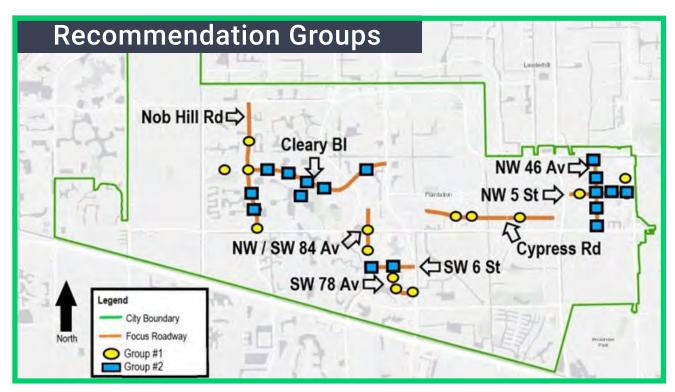
The final step in the Phase 1 planning process was the determination of the Short-Term Recommendations. This step included designating the focus locations within two recommendation groups, followed by identification of the recommended improvements.

Recommendations Groups

The Focus Locations were divided into two "Recommendations Groups". Group #1 were analyzed for a set of safety treatments and mobility improvements. Group #2, however, were analyzed for more intensive recommendations such as intersection control conversions, turn movement restrictions, roadway realignments, raised crosswalks, or similar features.

The assignment of the Focus Locations into the two Recommendations Groups was based on indepth analysis of roadway and right-of-way conditions, input from the City Staff Working Group, and feedback from the Public Engagement.

As can be seen in the Recommendations Groups map, the Focus Locations were almost evenly divided into Group #1 and Group #2.



Recommendations Identification and Evaluation

As previously noted, a list of low-impact, but proven safety countermeasures and mobility improvements was considered for each Group #1 location. Whereas individual concepts were developed for each of the Focus Locations in Group #2.

After the initial identification of improvements, the recommendations for both groups were then reviewed for consistency with public engagement feedback; those that were inconsistent were eliminated from further consideration.

Next, the recommendations time frame was considered: those that were not feasible and/or preferred in the short-term were reserved for additional study in the next phase of the MMTP.

Further, multiple workshops were held with the City Staff Working Group to discuss the concepts developed for the locations in Group #2. Based on feedback from the workshops, the concepts were further refined and cost estimated were prepared.

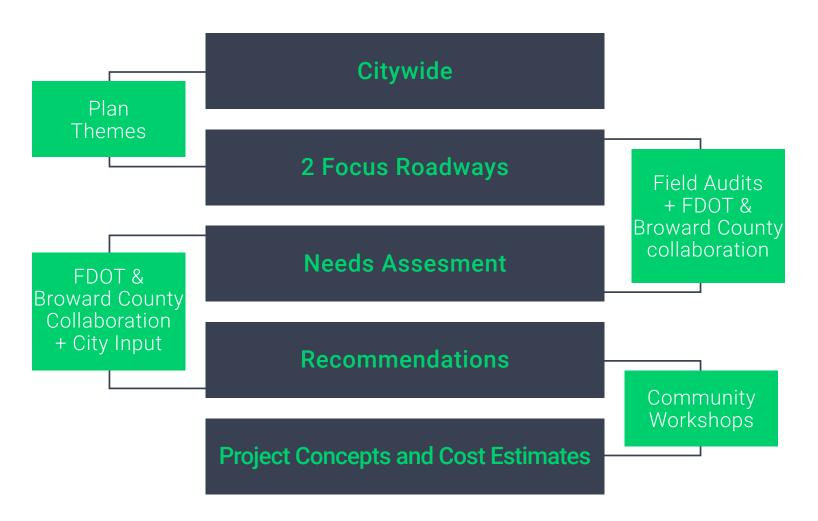
Finally, a meeting with representatives from Broward County Traffic Engineering was held to discuss the recommendations for Nob Hill Rd, Cleary Bl, and the intersection of NW/SW 84th Av and Broward Bl. While city-owned, both Nob Hill Rd and Cleary Bl are subject to a Traffic Engineering Agreement between Broward County and City of Plantation which governs the responsibilities and duties for planning, installation, operation and maintenance of traffic control devices for several city-owned roadways. Based on this Agreement and subsequent amendments, Broward County has jurisdiction to approve all improvements on Nob Hill Rd and Cleary Bl. Additionally, the intersection of NW/SW 84th Av and Broward Bl. is owned by Broward County and therefore the County has full jurisdiction over this intersection. Feedback from this meeting informed the final selection of recommendations for all locations along Nob Hill Rd, Cleary Bl, and the intersection of NW/SW 84th Av and Broward Bl.



Phase 2 Methodology

The MMTP Phase 2 commenced after the completion of Phase 1. Similar to Phase 1, the methodology began with a Citywide view and utilizing Plan Themes, narrowed the focus to two Focus Roadways. However, unlike the roadways assessed in Phase 1, Phase 2 focused on larger corridors.

The following graphic depicts the Phase 1 methodology:



Phase 2 Plan Themes

A set of plan themes was laid out by the City Staff Working Group early in the planning process. The two themes guided decisions making though out Phase 2. Phase 2 Plan Themes are listed below:

Connectivity

- **Connectivity Within Midtown** focused on safe, convenient, and comfortable multi-modal access between properties and to the abutting right-of-way.
- Connectivity Across Midtown focused on overcoming barriers to safe, convenient, and comfortable multimodal connectivity and overall Midtown cohesion, particularly the impact of Broward Blvd and Peters Rd bisecting Midtown.
- Connectivity Into Midtown focused on overcoming the barriers to safe, convenient, and comfortable multimodal access to Midtown from adjacent residential areas, and particularly the impact of University Dr and Pine Island Rd bordering Midtown.
- **Connectivity Via Midtown** focused on the opportunity for pathway systems through Midtown to reconnect the City as a whole.

Strategic

- **Funding Opportunities** focused on future design and construction funding sources and partners (and their priorities) at the beginning of project identification.
- **Private Investment** focused on opportunities to leverage redevelopment to fund safe, convenient, and comfortable multimodal improvements.
- Phased focused on identifying priority locations for safe, convenient, and comfortable multimodal improvements, as well as identifying locations that would benefit from near to long-term improvements.
- **Partnerships** focused on opportunities to coordinate projects with internal partners, adjacent municipalities, and roadway facility owners.



Phase 2 Focus Roadways

The first significant decision in the planning process was determining the Phase 2 Focus Roadways All arterial and collector roadways were considered, regardless of ownership. The City Staff Working Group came to consensus on two significant corridors: N. University Dr. (Broward Blvd to Sunrise Blvd) and Cleary Blvd. (Hiatus Rd to University Dr). The rationale and criteria for selecting these two roadways is as follows:



Plan Theme	Criteria	Applicability
Connectivity	Within Midtown	Opportunity to improve pedestrian facilities over the frontage road between University Dr. and private properties.
	Across Midtown	Opportunity to improve one of the most significant barriers to connectivity across Midtown: Broward Blvd. Improvements to Broward Blvd. intersection are needed for multimodal access to Broward Mall, Government Center, and Plantation Walk.
	Into Midtown	Opportunity to improve connectivity into Midtown, especially from neighborhoods east and north of Midtown.
	Via Midtown	Opportunity to improve citywide east-west connectivity via Midtown particularly via the intersections between Cleary Blvd and Broward Blvd, by providing connections to existing or planned shared use paths. Opportunity to improve citywide north-south connectivity via Midtown by providing enhanced pedestrian facilities along University Dr that connect to upcoming improvements on University Dr between SR 84 and Broward Blvd.
Strategic	Funding Opportunities	State-owned facility with several high-volume, high-crash intersections.
	Private Investment	Adjacent to areas identified for redevelopment including Midtown Plantation (Broward Mall) and near Sunrise Blvd.
	Phased	Near-term improvements, such as pavement markings, are needed as well as long-term, higher-cost projects (such as pedestrian bridge). FDOT may be able to implement the near-term improvements via push button contracts.
	Partnerships	Broward County Transit (Premium Mobility Plan / PREMO Network identifies University Dr for Bus Rapid Transit), City of Sunrise, FDOT, Plantation Midtown.



	Foous Poor	dway Assessment: Cleary Blvd
	Focus Road	way Assessment. Cleary bivu
Plan Theme	Criteria	Applicability
Connectivity	Within Midtown	Opportunity to improve connectivity within Midtown with pedestrian facilities in Cleary Blvd's southern ROW between Pine Island Rd and University Dr, including at NW 82nd Ave.
	Across Midtown	N/A
	Into Midtown	Opportunity to improve connectivity into Midtown, from neighborhoods east of Midtown (University Dr intersection), west of Midtown (Pine Island Rd intersection), and north of Midtown (Lauderdale West Dr and NW 82nd Ave intersections).
	Via Midtown	Opportunity to improve citywide east-west connectivity via a continuous shared use path along Cleary Blvd starting at University Dr, as well as improvements to intersections of University Dr and Pine Island Rd.
Strategic	Funding Opportunities	City-owned facility with several high-volume, high-crash County or state-owned intersections.
	Private Investment	Eastern end of roadway is adjacent to Midtown Plantation.
	Phased	Near-term improvements, such as pavement markings, are needed as well as long-term, higher-cost projects (such as pedestrian bridge). City may be able to implement some of the near-term improvements.
	Partnerships	Midtown Plantation, Broward County School Board, Broward County, FDOT.

Phase 2 Focus Locations

Unlike Phase 1 which focused on specific intersections or similar locations, the entire corridors including all signalized intersections, public ROW, and city-owned frontage roads, were assessed.

Phase 2 Recommendations

The final step in the planning process was the determination of Recommendations. Preliminary recommendations were identified based on the Phase 2 themes Connectivity and Strategic, and focused on improving safety, comfort, and convenience for all roadway users. Based on feedback from the City Staff Working Group, Broward County, and FDOT, the preliminary recommendations were refined.

The University Dr recommendations are intended to eliminate University Dr from acting as a "wall" separating the City and to connect existing and new residents to redevelopment occurring both at the area adjacent to Sunrise Blvd as well as to Midtown Plantation. Therefore the recommendations are intended to improve both cross-access connectivity as well as north/south connectivity. Further, opportunities for alternative bike routes were a primary consideration.

The Cleary Blvd recommendations are intended to transform the roadway into a multimodal boulevard seamlessly connecting the neighborhoods west of Hiatus Rd, adjacent to Cleary Blvd, and east of University Dr not only to each other, but also to all of the community facilities and amenities along Cleary Blvd. Further, the recommendations are intended to encourage multimodal access to and from Midtown Plantation.





Terminology

Throughout the remaining chapters in this technical memo, transportation features and terminology are noted. The following descriptions and images are intended to give a broad overview of certain transportation features and terminology.

Transportation Feature

Accessible Pedestrian Signals

Provides auditory, visual and tactile information so that a person with vision and/or hearing loss will know when it's safe to cross at an intersection.



Chicanes

A series of alternating curves that are located in order to reduce the speed at which a motorist is comfortable travelling through the feature.



Crosswalk Signage: Advanced

Advance crosswalk warning signs should be used where pedestrian crossings may not be expected by motorists, especially if there are many motorists who are unfamiliar with the area.



Transportation Feature

Crosswalk Signage: In-Street

Pedestrian crossing signs placed within the roadway, either between travel lanes or in a median.

Curb Ramps

The transition from the curbed sidewalk to a crosswalk or roadway.

Detectable Warning Surface

Tiles or mats with a colorful, raised texture that are adhered to a curb ramp to help delineate the edge of the street for a pedestrian who has vision impairment.

Directional Median

A raised median designed to control or prohibit certain turn movements (such as U-turns or left-turns).





Transportation Feature

High-Visibility Pavement Markings

Pavement markings at crosswalks that are more visible than standard parallel pavement markings. They are sometimes referred to as ladder or zebra stripes.



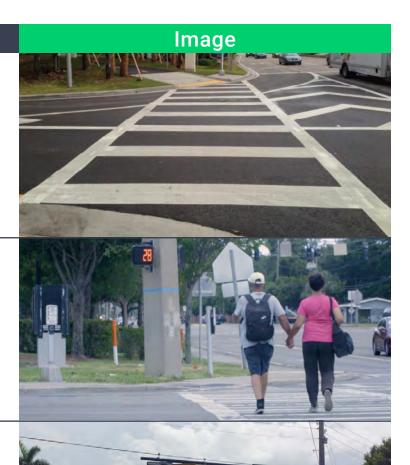
A leading pedestrian interval (LPI) gives pedestrians the opportunity to enter the crosswalk at an intersection 3-7 seconds before vehicles are given a green indication.

Mast Arm (Conversion)

The conversion of span and wire traffic signal infrastructure to mast arm infrastructure.

Mid-block Crosswalk

Crosswalks placed between intersections. They look similar to intersection crosswalks, but often incorporate several design features to increase safety.



Pedestrian Refuge

A median with a refuge area that is intended to help protect pedestrians who are crossing a road.

Rectangular Rapid Flashing Beacons (RRFB)

RRFBs consist of two, rectangular- shaped yellow indications that flash with an alternating high frequency. They are frequently used at midblock crosswalks or unsignalized intersection crosswalks.

Transportation Feature

Raised Crosswalk

Ramped speed tables spanning the entire width of the roadway, often placed at midblock crossing locations. The crosswalk is demarcated with paint and/or special paving materials and allow the pedestrian to cross at grade with the sidewalk. Raised crosswalks can be on multi-lane roadways or on 2-lane roadways.

Image

Pedestrian-Scale Lighting

Outdoor lighting designed to illuminate sidewalks or other pedestrian areas in order to improve pedestrian comfort, security, and safety.







Recommendation Feature

Roadway Reconfiguration / Lane Reduction

Typically involves converting an existing four-lane undivided roadway to a three-lane roadway consisting of two through lanes and a center two-way left-turn lane. The prior roadway space is redeveloped in order to provide better mobility and access for all road users.

Roundabout

An intersection with a circular configuration that have channelized, curved approaches that improves traffic circulation, reduce vehicle speed, entry yield control that gives right-of-way to circulating traffic, and counterclockwise flow around a central island that minimizes conflict points.

Mini-Roundabout

A type of roundabout characterized by a small diameter and traversable islands (central island and splitter islands). They are typically found in a single-lane configuration.

Ouick Build Mini Roundabout

A mini-roundabout constructed of low-cost modular materials, such as plastic bollards, rubber armadillos, or similar items.



Recommendation Feature

Shared Lane Markings

Road markings used to indicate a shared lane environment for bicycles and automobiles

Speed Cushions / Modular Speed Cushions

A raised road surface that include wheel cutouts to allow large vehicles to pass unaffected, while reducing passenger car speeds. Modular speed cushions are made of rubber or similar materials and can be installed on top of the roadway surface.

Speed Radar Sign

Dynamic speed limit signs that use a radar to detect and display the speed of passing vehicles.





Additional definitions of transportation features and terminology used in this chapter can be found at the following websites.

- USDOT, Federal Highway Administration, Traffic Calming "Toolbox of Individual Traffic Calming Measures": https://safety.fhwa.dot.gov/speedmgt/ePrimer_modules/module3.cfm#mod31
- USDOT, Federal Highway Administration "Proven Safety Countermeasures": https://safety.fhwa.dot.gov/provencountermeasures/

Chapter 4: Focus Roadways





Chapter 4: Focus Roadways



Introduction

This chapter provides the results of the needs assessment for the Phase 1 and 2 Focus Roadways. The Focus Roadways are as follows:

- 1. Nob Hill Road (Phase 1)
- 2. Cleary Boulevard (Phase 1 & 2)
- 3. NW / SW 84th Avenue (Phase 1)
- 4. SW 6th Street (Phase 1)
- 5. SW 78th Avenue (Phase 1)

- 6. Cypress Road (Phase 1)
- 7. NW 46th Avenue (Phase 1)
- 8. NW 5th Street (Phase 1)
- 9. University Drive (Phase 2)

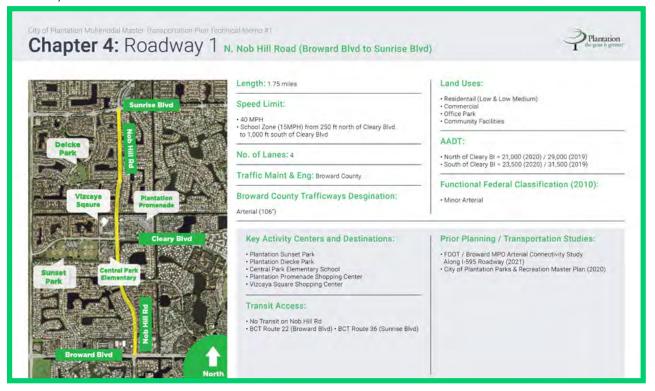
How to Use the Focus Roadways Profile Pages

Data and assessment for the Phase 1 Focus Roadways is presented in a series of three "Profile Pages". The information for SW 6th St and SW 78th Av is presented in the same Profile Pages.

Phase 2 Focus Roadways have a fourth Profile Page.

Profile Page 1 – General Roadway Information

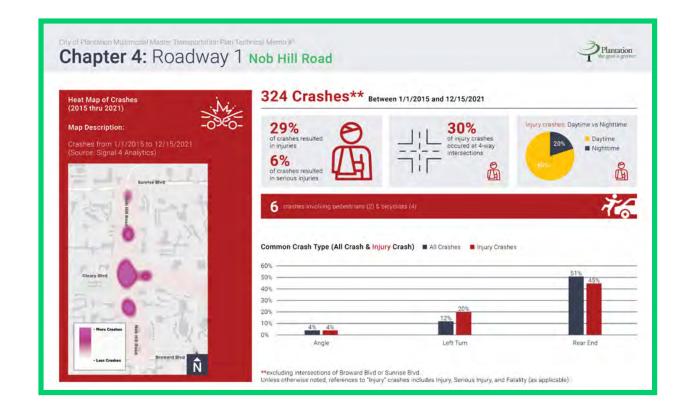
The first profile page (example shown below) includes general information about the Focus Roadway. Also included is a list and map of key activity centers and destinations, prior planning (or transportation) studies, and transit access.



Profile Page 2 - Crash Data and Trends

The second profile page (example shown below) presents crash information for the Focus Roadway during the time period of 2015 to 2021. Significant crash trends are highlighted, as well as injury crash trends. Also included is a map showing the concentration of crashes (aka crash clusters).

The complete crash data is included in Appendix Section B.



Chapter 4: Focus Roadways



Profile Page 3 – Observations and Community Comments

The third profile page (example shown below) includes a list of observations from the numerous field audits and photographs taken during the field audits. Also included is the feedback from the public engagement. Due to the length of the Phase 2 Focus Roadways, this information is presented in two Profile Pages

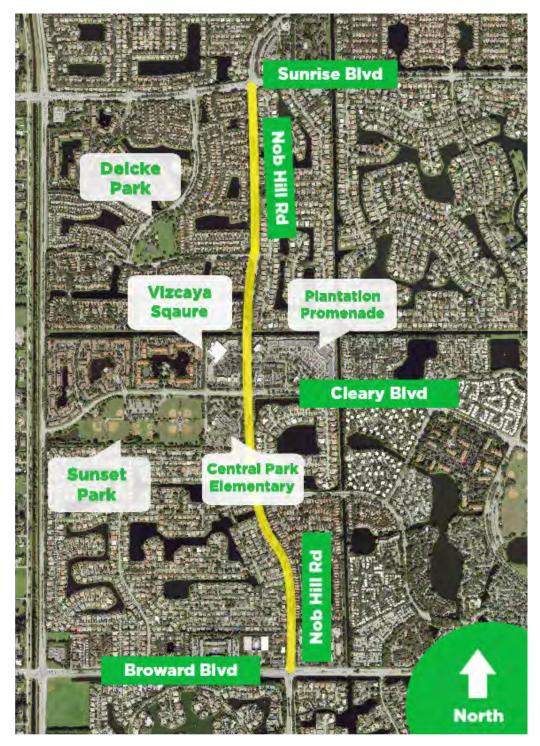
Additional photographs taken during the field audits are included in Appendix Section C.



Chapter 4: Roadway 1 Nob Hill Road



Focus Roadway with Key Activity Centers and Destinations



Length: 1.75 miles

Speed Limit:

- 40 MPH
- School Zone (15MPH) from 250 ft north of Cleary Blvd to 1,000 ft south of Cleary Blvd

No. of Lanes: 4

Traffic Maint & Eng: Broward County

Broward County Trafficways Desgination:

Arterial (106")

Land Uses:

- Residentail (Low & Low Medium)
- Commercial
- Office Park
- Community Facilities

Annual Average Daily Traffic (AADT):

- North of Cleary BI = 21,000 (2020) / 29,000 (2019)
- South of Cleary BI = 23,500 (2020) / 31,500 (2019)

Functional Federal Classification (2010):

Minor Arterial

Key Activity Centers and Destinations:

- Plantation Sunset Park
- Plantation Diecke Park
- · Central Park Elementary School
- Plantation Promenade Shopping Center
- · Vizcaya Square Shopping Center

Transit Access:

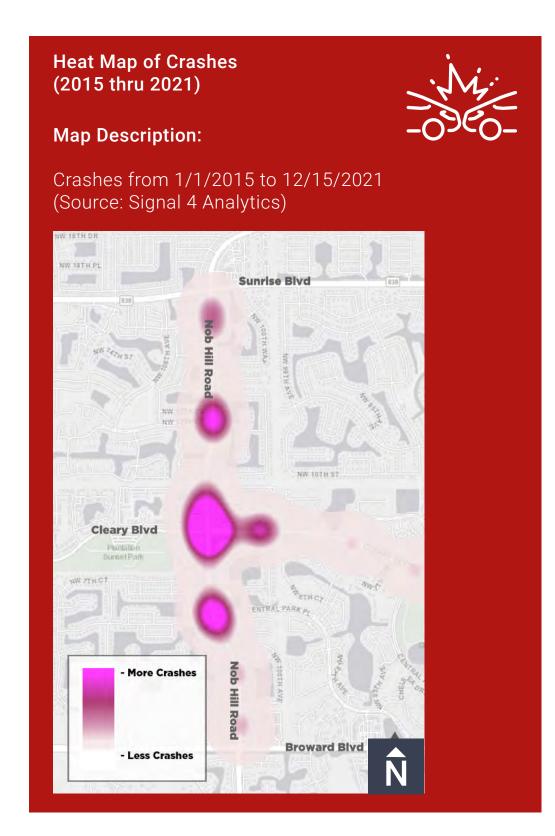
- No Transit on Nob Hill Rd
- BCT Route 22 (Broward Blvd) BCT Route 36 (Sunrise Blvd)

Prior Planning / Transportation Studies:

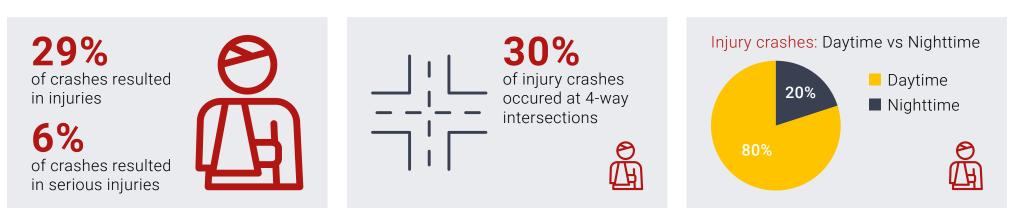
- FDOT / Broward MPO Arterial Connectivity Study Along I-595 Roadway (2021)
- City of Plantation Parks & Recreation Master Plan (2020)

Chapter 4: Roadway 1 Nob Hill Road

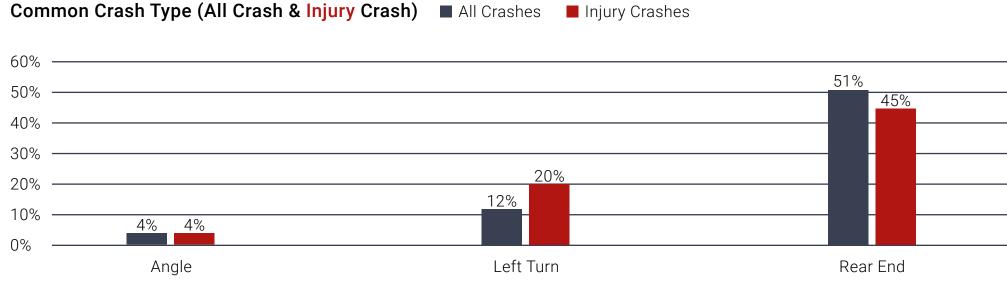




324 Crashes** Between 1/1/2015 and 12/15/2021







^{**}excluding intersections of Broward Blvd or Sunrise Blvd.
Unless otherwise noted, references to "Injury" crashes includes Injury, Serious Injury, and Fatality (as applicable).

Chapter 4: Roadway 1 Nob Hill Road





Cleary BI intersection (SE view): Morning drop-off for Central Park Elementary School. Heavy pedestrian activity in crosswalks



5-ft wide sidewalk obstructed by hedges



NW 12th St intersection (NW view); Typical infrastructure and no left turn signal on cross-streets.



Many bicyclists riding on sidewalks

Field Audit Observations:

- No sidewalk within western right-of-way, south of Central Park Elementary School
- No left turn signals at intersections (except Cleary BI)
- No bike facilities; Bicyclists riding primarily on sidewalks
- No pedestrian access (crosswalks) from NW 4th Ct to sidewalk in eastern right-of-way
- No pedestrian-scaled lighting
- Missing detectable warning surfaces at intersections and crosswalks
- Low visibility crosswalks
- Observed speeding
- Overgrown hedges / landscaping obstructing sidewalks
- Vehicular traffic pattern and limited turn movements at intersection of Cleary Blvd and west to Sunset Park associated with Central Park Elementary School's morning drop-off and afternoon pick-up
- Heavy pedestrian activity within crosswalks at intersection of Cleary Blvd associated with Central Park Elementary School

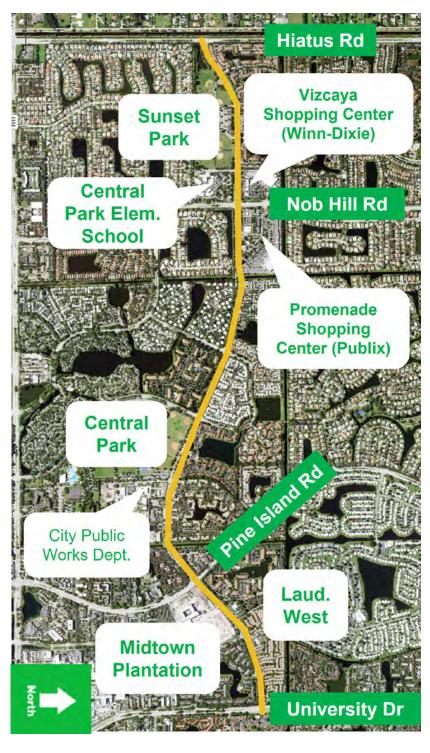
Summary of comments from Community Meetings:

- · Maintain sidewalks better on Nob Hill Rd
- Add a multi-purpose path / widen sidewalks in the entire area / sidewalks are too narrow
- No sidewalks near school on west side
- Visibility issues at pullout onto Nob Hill from NW 4th Court
- A guard rail be installed to prevent cars from getting into backyard (NW corner of Nob Hill & NW 6th St)
- A lot of crashes at Broward / Double green light at Broward / Signals are confusing, move signals to align with the lanes
- The bike lanes needs to be wider and have better protection / Could a road diet to reduce from 4 to 2 lanes occur on Nob Hill to add protected bike lanes
- Heavy peak hour traffic
- · Sprinklers are spraying water into the road
- Flooding in Nob Hill Estates / Nob Hill Rd floods
- BCT stop 4237 has no shade sidewalk or shelter
- Lot of pedestrian traffic at the intersection of Cleary and Nob Hill
- Bus Rapid Transit lanes on Sunrise, Cleary, and Broward
- A lot of pedestrian traffic to synagogue in Publix shopping center

Chapter 4: Roadway 2 Cleary Boulevard



Focus Roadway with Key Activity Centers and Destinations



Length: 2 Miles (Hiatus Rd to University Dr)

Speed Limit:

- 40 MPH
- School Zone (15MPH) from 500 ft east of Nob Hill Rd

No. of Lanes: 4

Traffic Maint & Eng: Broward County

Broward County Trafficways Desgination:

Arterial (106")

Land Uses:

- Residentail (Low, Low Medium, Medium)
- Commercial
- Park
- Utilities

Annual Average Daily Traffic (AADT):

- Hiatus Rd to Nob Hill Rd: 7,100 (2021)
- Nob Hill Rd to University Dr: 9,200 (2021)

Functional Federal Classification (2010):

Major Collector

Key Activity Centers and Destinations:

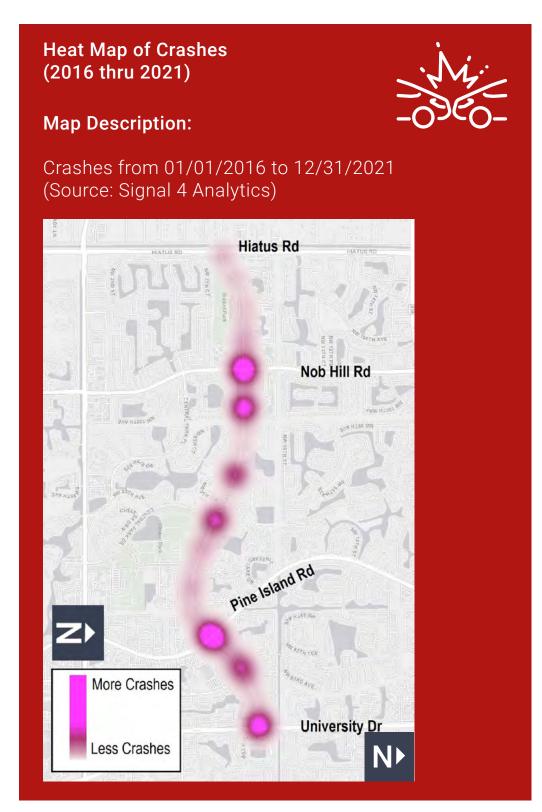
- Plantation Sunset Park
- Plantation Central Park
- Central Park Elementary School
- Plantation Promenade Shopping Center
- · Vizcaya Square Shopping Center
- City of Plantation Public Works
- Midtown Plantation
- Transit Access:
- BCT Route 88 (Pine Island Rd)
- BCT Route 2 (University Dr)
- Future Community Shuttle stops planned for area between NW 82nd Ave and Laud West Dr (Midtown Route)

Prior Planning / Transportation Studies:

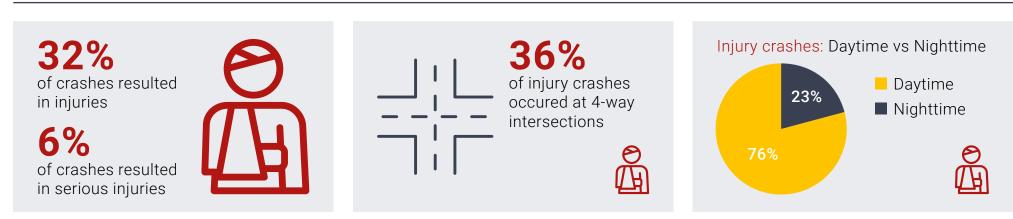
- Midtown Master Plan Update (2016)
- City of Plantation Parks & Recreation Master Plan (2020)
- University Drive Mobility Improvements Planning Study (2013)
- Broward MPO Complete Streets Master Plan

Chapter 4: Roadway 2 Cleary Boulevard



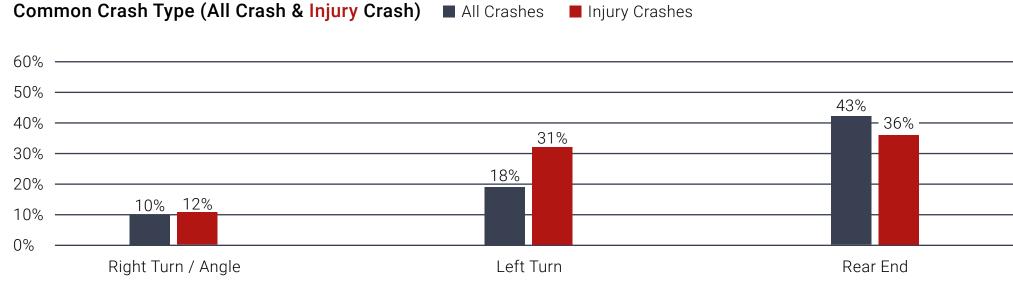


626 Crashes Between 01/01/2016 to 12/31/2021



18 crashes involving pedestrians (10) & bicyclists (8)

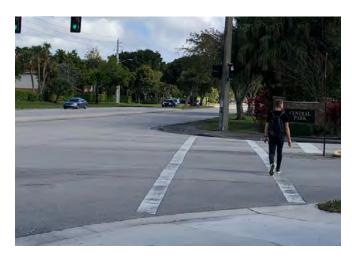




Unless otherwise noted, references to "Injury" crashes includes Injury, Serious Injury, and Fatality (as applicable).

Chapter 4: Roadway 2 Cleary Boulevard





Central Park Dr intersection (East view). Low visibility crosswalks and no left-turn signals.



Most sidewalks are setback and shaded but portions are obstructed by hedges.



Hiatus Rd: The western end of Cleary Blvd. No crosswalks over Hiatus Rd.



NW 82nd Av intersection (SW view). Northern entrance to Midtown Plantation but has no crosswalks or wayfinding signage.



University Dr: The eastern end of Cleary Blvd. Crosswalk missing over University Dr.



Central Park PI intersection (NW view). Minimal streetlights and no pedestrian-scale lights.



Pine Island Rd: Tall vegetation in NW corner significantly obstructs visibility of / from SB traffic.

Field Audit Observations:

- No bike facilities; Bicyclists riding on sidewalks
- Heavy pedestrian activity in vicinity of Central Park Elementary School (parents park at shopping centers on north side of Nob Hill Rd intersection and walk children through intersection)
- Significant traffic congestion between Nob Hill Rd and Hiatus Rd, related to morning drop-off at Central Park Elementary School
- No pedestrian-only entrances to Central Park or Sunset Park (pedestrians must walk through parking lots, with no designated routes)
- No sidewalk within southern ROW between Sunset Park and Hiatus Rd (1/2 mile)
- Frequent jaywalking observed near NW 82nd Av and near Central Park
- Need wayfinding for Midtown and park distances and entrances
- Overgrown hedges / landscaping obstructing sidewalks
- No sidewalk in southern ROW between Hiatus Rd and eastern entrance to Sunset Park
- · School bus stops between Nob Hill Rd and Hiatus Rd
- Many pedestrians observed exercising near Central Park
- Low visibility crosswalks at all signalized intersections, except Nob Hill Rd
- At Pine Island Rd, wall and tall landscaping in NW corner are significant sight obstruction for EB traffic. EB cars frequently stop in or east of crosswalk. SB drivers can not see pedestrians in western crosswalk.
- At Pine Island Rd, substandard Pedestrian signals
- At University Dr, no crosswalk over north leg
- No crosswalks over Hiatus Rd.
- At NW 91st Av (Central Park's eastern entrance and entrance to City Public Works facility) mix of Industrial vehicles and pedestrians

Chapter 4: Roadway 2 Cleary Boulevard





Pine Island Rd: Due to adjacency to multifamily developments and Central Park, residents often exercise along Cleary Blvd



East of Central Park, Cleary Blvd has a significant curvature.



north of Central Park Elementary School and then walk their children in the same location. through the intersection.



Sunset Park: Many parents walk their children to Central Park Elementary via the mid-block crosswalk near Sunset Park



Hiatus Rd: Cleary Blvd ends at Hiatus Rd, due to the canal. There are currently no crosswalks over Hiatus Rd.



Nob Hill Rd: Rather than wait in the drop-off line, many parents park

Sunset Park: There are several school bus stops



NW 91st Av: The eastern entrance to Central Park is also the access to the City's Public Works facilities.



Central Park Dr (Central Park Pl East): Central Park is located at this intersection. Though there are no pedestrian entrances.



Sunset Park: There is no sidewalk for pedestrians to enter Sunset Park.

Summary of Comments from Community Meetings and Survey:

- Sunset Park: More Streetlights needed; Ensure entrances are child safe if playing at fields
- Pedestrian Bridge over Hiatus Rd Canal: Rustic design is not good. Prefers modern, sculptural design; Love the bridge! It would save me 10+ minutes biking to Midtown area; Love pedestrian bridge
- Shared Use Path: Space for bike vs ped needs to be defined; Concerned that bikes, scooters, and pedestrians will be crowded on shared use path, would like a separate bike path in the future
- Bike Paths: Prefer curbed bike paths; Prefer armadillos; "Definitely need buffering"; 6 ft not sufficient bike lane width to pass (recommend at least 7 ft)
- Roundabouts: Crosswalks next to the roundabout should be raised as well. Worried that cars will block the crosswalks while waiting to enter roundabout; Single lanes leading to roundabout will squeeze cyclists, or cars go around counterclockwise. Requires signage to share the road; Supportive of roundabouts at Lauderdale West Dr and 82nd Ave.
- Crosswalks: Prefer RRFB / Flashing Beacons at crosswalks (vs overhead signals); Make Sure Raised Crosswalk are actually raised enough to force cars to slow down.
- "Main problem is that during school days, parents park on the road itself and block everything for hours. Street needs more trees, protected bike lanes, and wider sidewalks, along with a "safe route to school" designation so parents walk or cycle with children rather than drive... I would love to have a ped/bike bridge over the Hiatus Canal, it would allow me to save half an hour on a walk into the rest of the city."
- "Cleary east of 63rd Ave is attracting crazy drivers that do not care about speed limits whatsoever."
- "I use the Hiatus Greenway for exercise several times a week... Bicyclists are safer when cars go slower, and when they have dedicated lanes at a minimum, and even better, paths with grass or barriers protecting them from cars."
- "Cleary & Laud. West Dr. more & more dangerous each day."
- "More traffic enforcement is needed before and after school especially in the area surrounding Central Park Elem...Any improvement around the school is vital and necessary. A roundabout at the intersection is a good idea."
- "As President of Laud. West, I attended the meeting with several other board members last night and we were excited to hear that we will finally be able to exit on Cleary Blvd safely. Laud. West Comm Assn fully supports the proposal and all of the improvements for Cleary Blvd. We have been fighting for something to be done at the dangerous intersection of Lauderdale West Dr. and Cleary Blvd for the past 10 years!"
- "Like what I see here. The idea of connecting communities (and the Greenway) using a bridge over the Hiatus canal is great. Protected bike lanes for safety, less motorized lanes, and traffic circles will create a safer, more community spirited roadway."
- · "Love the plan in general. This will be dense area, should promote pedestrians and cyclists over cars!"

Chapter 4: Roadway 3 NW / SW 84th Avenue



Focus Roadway with Key Activity Centers and Destinations



Length: 3,600 feet

Speed Limit:

• 30 MPH

No. of Lanes: 2

Traffic Maint & Eng: City of Plantation

Broward County Trafficways Desgination:

None

Land Uses:

- Commercial
- Park
- Community Facilities

Annual Average Daily Traffic (AADT):

Unknown

Functional Federal Classification (2010):

Local Road

Key Activity Centers and Destinations:

- Plantation Pine Island Park
- Westside Regional Medical Center
- West Regional Courthouse
- West Regional Library
- BCT West Terminal
- Midtown Plantation

Transit Access:

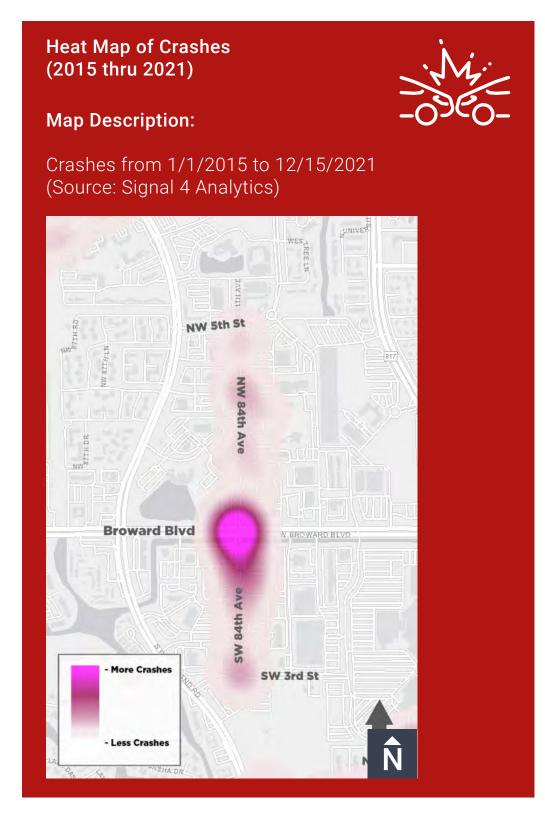
- BCT Routes 22 and 88 (SW 84th Ave)
- BCT Routes 2, 22, and 81 (Broward Blvd)
- BCT Routes 2, 22, 31, 81 and 88 (NW 84th Ave)
- Future Community Shuttle stops planned along roadway (Midtown Route)

Prior Planning / Transportation Studies:

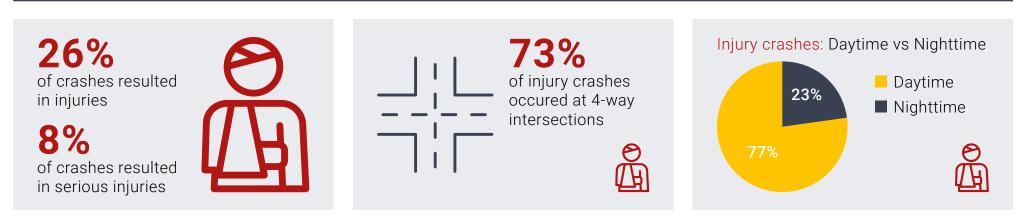
- Midtown Master Plan Update (2016)
- Broward MPO Plantation Mobility Hub Master Plan
- Broward MPO Midtown Plantation and SW Sunrise Livability Study (2012)
- City of Plantation Parks & Recreation Master Plan (2020)

Chapter 4: Roadway 3 NW / SW 84th Avenue

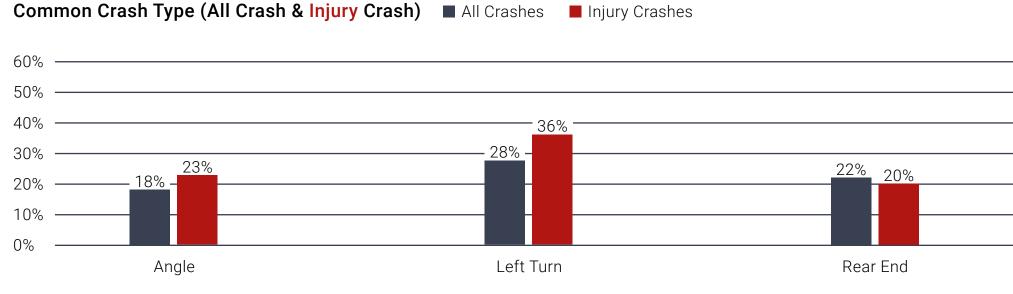




125 Crashes Between 1/1/2015 and 12/15/2021







Unless otherwise noted, references to "Injury" crashes includes Injury, Serious Injury, and Fatality (as applicable).

Chapter 4: Roadway 3 NW / SW 84th Avenue





Broward BI intersection (SE view); Inadequate pedestrian facilities and no left turn signals (on cross street)



BCT Bus Stop on SW 84th Av. The bus bench faces away from roadway and ADA-compliant concrete pad is missing.



SW 3rd St intersection (SE view). Raised intersection with stop sign only on SW 84th Av. Pine Island Park abuts intersection



Greenway south of Broward BI (western terminus at SW 84th Av). Connection over roadway is missing.



Broward BI intersection. SW corner curb is very narrow due to canal.

Field Audit Observations:

- Bus stops that are not accessible (missing wheelchair landing pad) and with benches facing away from roadway
- Bus stops without shelters, benches, and other transit-friendly features
- No bike facilities
- At Broward BI intersection, infrastructure: span and wire traffic signals, low visibility crosswalks, no leading pedestrian intervals, low visibility crosswalks, and no left turn signal for 84th Av
- At Broward Bl intersection, numerous utility poles / boxes
- At Broward BI intersection, a lot of BCT vehicles using intersection, including turning buses
- At Broward BI intersection, extremely narrow curbs on south side of Broward BI intersection, due to canal
- No connectivity over SW 84th Ave for Greenway south of canal
- Pedestrians observed jaywalking through landscaped median in area adjacent to Greenway
- Greenway has no lighting
- No pedestrian connectivity to Pine Island Park
- No signage indicating bikes can use shared use paths
- Speeding vehicles at intersection at intersection of SW 3rd St (and along SW 3rd St)
- No traffic control on SW 3rd St (stop signs only on SW 84th Av)
- No street lights at intersection of SW 3rd St (and along SW 3rd St)

Summary of comments from Community Meetings:

- Resident was in a traffic accident in the mall area (Midtown)
- Monorail for work commute
- No walkability in the area of Broward Blvd.
- Resident suggested pedestrian intersection
- Too much traffic on 84th and Broward to bike
- · Make proposed WAWA area (Broward and Pine Island) more pedestrian friendly by having a crosswalk
- Broward and 84th resident suggested a pedestrian circle
- · Add another roundabout on 84th
- Resident uses SW 84th to cute thru to go to bagel place but commented use of road is complicated and has to make U-turns, there are no direct turn into library
- Land pattern (a lot of parking lots abutting roadway) is making area less walkable
- · Resident suggested a Bus lane on Broward all the way to Las Olas
- Shuttle connecting midtown to Central Park or safe bike lanes

Chapter 4: Roadways 4 & 5 sw 6th Street & SW 78th Avenue



Focus Roadways with Key Activity Centers and Destinations



Length: • SW 6th St = 3,175 ft • SW 78th Av = 3,600 ft

Speed Limit:

• 30 MPH

No. of Lanes: • SW 6th St = 4 • SW 78th Av = 4

Traffic Maint & Eng: City of Plantation

Broward County Trafficways Desgination:

None

Land Uses:

- Commercial
- Park
- Office Park

Annual Average Daily Traffic (AADT):

- SW 6th St = 2,150 (2020) / 3,140 (2019)
- SW 78th Av = = 8,900 (2020) / 9,400 (2019)

Functional Federal Classification (2010):

Local Roads

Key Activity Centers and Destinations:

- Pine Island Park; Broward Mall
- Fountains Shopping Center
- Cornerstone Office Park
- LA Fitness (at Market on University)

Transit Access:

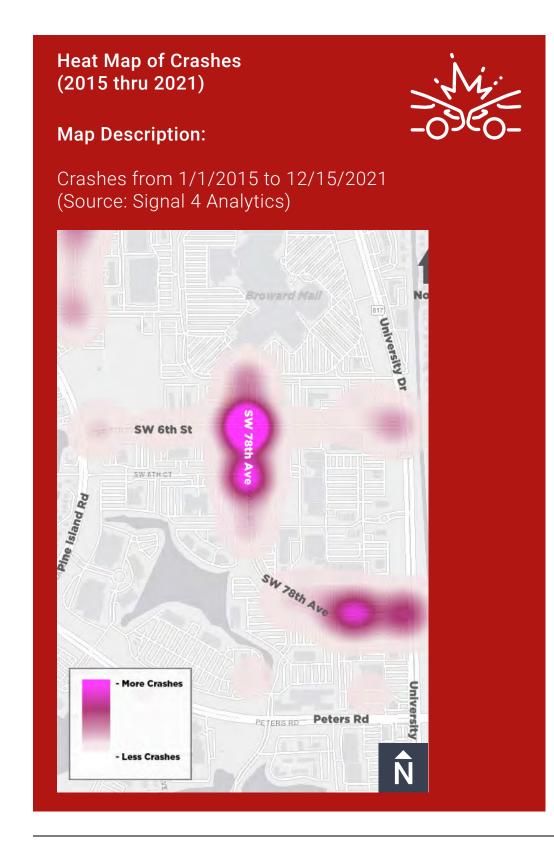
- BCT Route 22 and 88 (Federated Rd)
- BCT Route 12 (University Dr)
- BCT Route 30 (Pine Island Rd)
- Future Community Shuttle stops (Midtown Route)

Prior Planning / Transportation Studies:

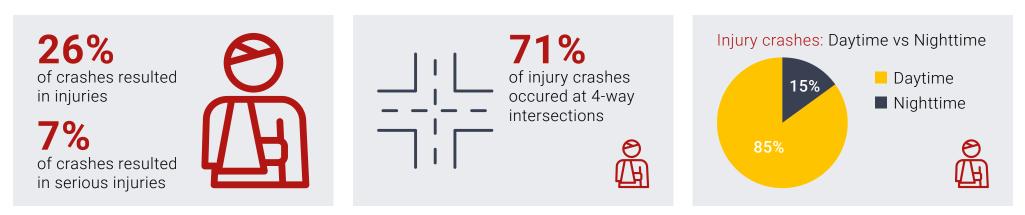
- FDOT SR 817 (University Dr) Roadway Improvement Project
- FDOT / Broward MPO Arterial Connectivity Study Along I-595 Roadway (2021)
- Broward MPO Midtown Plantation and SW Sunrise Livability Study (2012)
- Midtown Master Plan Update (2016)
- City of Plantation Parks & Recreation Master Plan (2020)

Chapter 4: Roadways 4 & 5 sw 6th Street & SW 78th Avenue



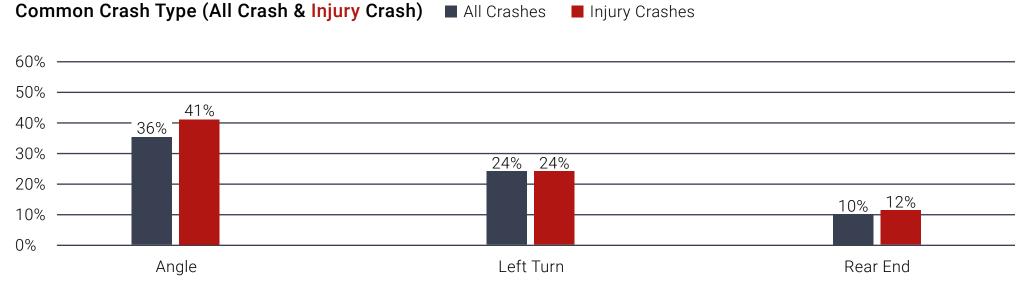


103** Crashes Between 1/1/2015 and 12/15/2021



3 crashes involving bicyclists





^{**}excluding intersections of Pine Island Rd and University Dr.
Unless otherwise noted, references to "Injury" crashes includes Injury, Serious Injury, and Fatality (as applicable).

Chapter 4: Roadways 4 & 5 sw 6th Street & SW 78th Avenue





SW 6th St and SW 78th Av intersection (SE view). 4-way stop intersection missing most pedestrian features and minimal street lighting.



SW 78th Av and SW 6th Ct intersection (SE view). Minimal pedestrian features, including no crosswalk over northern led



Low visibility crosswalk over SW 78th Av



Western end of SW 6th St (east view). Sidewalks located at the curb. No pedestrian entrance to abutting Pine Island Park.

Field Audit Observations:

- On SW 6th St, majority of sidewalks abut roadway curb or are setback only 2 to 3 feet
- On SW 78th AV, majority of sidewalks are setback only 2 to 3 feet
- On SW 78th AV, utility poles / boxes or landscaping may limit widening of sidewalks
- Within northern ROW for SW 6th St, FPL poles abutting northern edge of sidewalk
- No bike facilities
- No pedestrian-scale lighting along sidewalks or at intersections (except in front of new development)
- No signalized intersections
- · Substandard curbs and crosswalks at intersection of SW 6th St and SW 78th Av
- Missing detectable warning mats along sidewalks and at intersections
- Low visibility crosswalks
- No pedestrian access to Pine Island Park
- Two-way stop intersection at Crossroads Office Park / Fountains has no pedestrian-scaled lighting and roadway curvature may impact sight distance

Summary of comments from Community Meetings:

- Resident uses SW 78th to cut thru
- More connectivity between plazas would make it easier to walk
- Residents have seen many accidents on SW 78th Ave as 4-way stops are not used correctly
- Use roundabout instead of 4-way stop
- Resident would like to park once and walk in Midtown
- Tree canopy is heavy in some areas affecting lighting
- Perimeter Rd. has no sidewalks
- There is no safe walk from the Fountains to Target
- Resident suggests a bike lane on 78th instead of shuttle
- Resident suggested electric bikes and scooters
- Resident suggested a Bus lane or rapid traffic on University Dr.
- Resident says they do biking on sidewalk because of safety concerns
- · Resident would like safer biking in the area
- Resident suggested a biking grid system in small section around residential and commercial areas of Midtown
- Land pattern (a lot of parking lots abutting roadway) is making area less walkable
- Shuttle connecting midtown to Central Park or safe bike lanes
- City should acquire private roadways in order to obtain grant funds to improve roads

Chapter 4: Roadway 6 Cypress Road



Focus Locations for Recommendations



Length: • 1.75 miles

Speed Limit:

West of Canal: 30 MPHEast of Canal: 25 MPH

No. of Lanes: • 2 lanes • NW 70th Av is 4 lanes

Traffic Maint & Eng: City of Plantation

Broward County Trafficways Desgination:

- Cypress Rd & NW 69th Ave = None
- NW 70th Ave = Arterial (100')

Land Uses:

West of Canal:

- Residential (Medium High; Medium and Low-Medium)
- Commercial
- Community Facilities

East of Canal:

- Estate
- Park

Annual Average Daily Traffic (AADT):

- Cypress Rd & NW 69th Ave = Unknown
- NW 70th Ave = 4,400 (2020) / 17,300 (2019)

Functional Federal Classification (2010):

· Local Roads

Key Activity Centers and Destinations:

- Plantation Marketplace
- Plantation Towne Square
- Helen B Hoffman Library (temporary location)
- Deicke Auditorium
- Plantation Community Church

Transit Access:

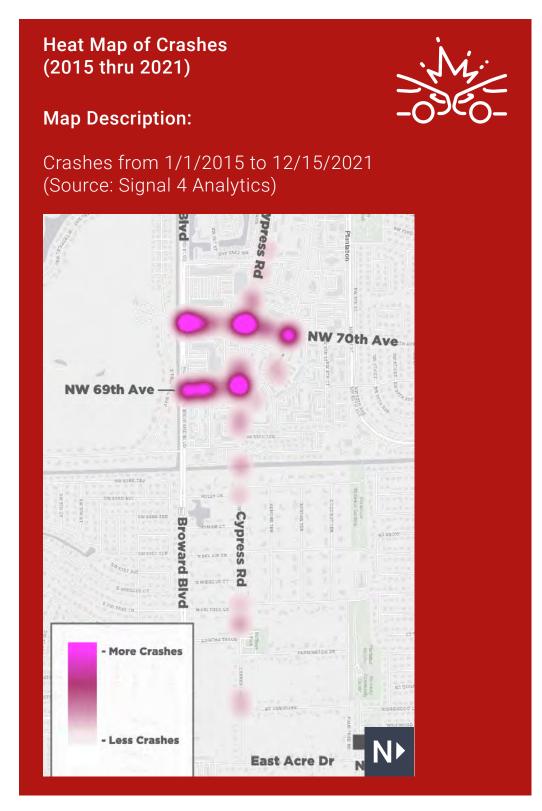
- BCT Route 56 (on Cypress Rd between NW 69th Av and NW 70th Av)
- BCT Route 22 on Broward Blvd
- Future Community Shuttle stops (East Route)

Prior Planning / Transportation Studies:

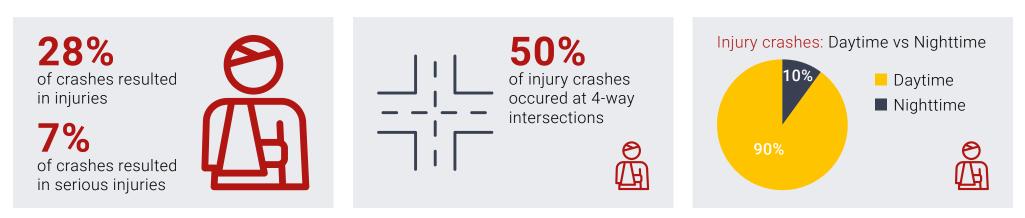
- Plantation Gardens Historic District Neighborhood Plan Report (2003)
- FDOT SR 842/Broward Boulevard Resurfacing, Restoration and Rehabilitation (RRR)
- City of Plantation Parks & Recreation Master Plan (2020)

Chapter 4: Roadway 6 Cypress Road

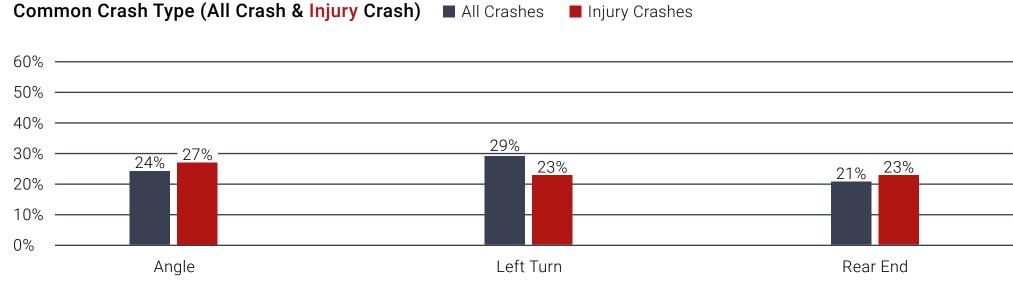




86** Crashes Between 1/1/2015 and 12/15/2021







^{**}excluding intersections of Broward Bl
Unless otherwise noted, references to "Injury" crashes includes Injury, Serious Injury, and Fatality (as applicable).

Chapter 4: Roadway 6 Cypress Road





Cypress Rd, just east of Holloway Canal (east view). Pedestrians, bicyclists, and cars share the road.



Western ROW of NW 69th Av (south view). Frequent jaywalking observed.



Cypress Rd and NW 70th Av intersection (west view); Cypress Rd widens to include striped median. Curbs and crosswalks are in poor condition.



SE corner of Cypress Rd and NW 69th Av (west view); Faded crosswalks and adjacent sidewalk veers into parking lot.

Field Audit Observations:

- East of canal, missing sidewalk on north side of Cypress Rd from NW 65 Av to Fig Tree Ln and on south side of Cypress Rd from NW 65 Av to E Acre Dr
- Cut through traffic
- No bike facilities; Bicyclists riding in roadway
- 4-way stop at NW 69th Av with low visibility crosswalks, missing detectable warning surfaces, no pedestrian scaled lighting, and minimum street lights.
- Adjacent to SW corner of NW 69th Av, sidewalk veers into Cypress Square Shopping Center's parking lot and is not separate from drive aisle
- A lot of pedestrian activity in area adjacent to NW 69th Av.
- No crosswalks from condominiums on east side of NW 69th Ave to Plantation Towne Square (jaywalking observed)
- Intersection infrastructure at NW 70th Av: span and wire traffic signals, substandard curbs, low visibility crosswalks, no detectable warning mats, no left turn signal.
- No pedestrian scale lighting (particularly needed in area west of canal)
- Insufficient streetlights at intersections

Summary of comments from Community Meetings:

- Concerns about speed bumps and that they are an inconvenience for residents
- Residents like to ride bikes in this area
- Cypress Rd would be better for a protected bike lane, biking is too dangerous on Broward Blvd
- Plan for shared use path on Cypress Rd to connect to NW 74th Terr, to NW 74th Ave to NW 5th St, to Park
- Lots of parking lots
- Need sidewalks on Cypress Rd
- Need pedestrian crossing to get to park on NW 5th Street
- NW 70th Av: Need pedestrian signals
- NW 69th Av: drivers speed going south in order to make the light at Broward Bl
- NW 69th Av: Older community that walk across road to Publix; Need a crosswalk to Publix
- Put ornamental trees in roundabouts; make sure to accentuate roundabout
- NW 69th Ave and NW 70th Ave: A lot of accidents
- 4-way stops are frustrating; prefer roundabouts.
- Roundabouts keep cars moving and decrease pollution
- Would like Transit Oriented Development

Chapter 4: Roadway 7 NW 5th Street



Focus Roadway with Key Activity Centers and Destinations



Length: • 4,550 FT

Speed Limit:

25 MPH

No. of Lanes: 2 lanes

Traffic Maint & Eng: City of Plantation

Broward County Trafficways Desgination:

None

Land Uses:

- Residential (Low)
- Local Activity Center

Annual Average Daily Traffic (AADT):

Not Available

Functional Federal Classification (2010):

Local Road

Key Activity Centers and Destinations:

- Plantation General Hospital (recently closed)
- Plantation Elementary School
- Medical Offices
- US 441 Commercial Area

Transit Access:

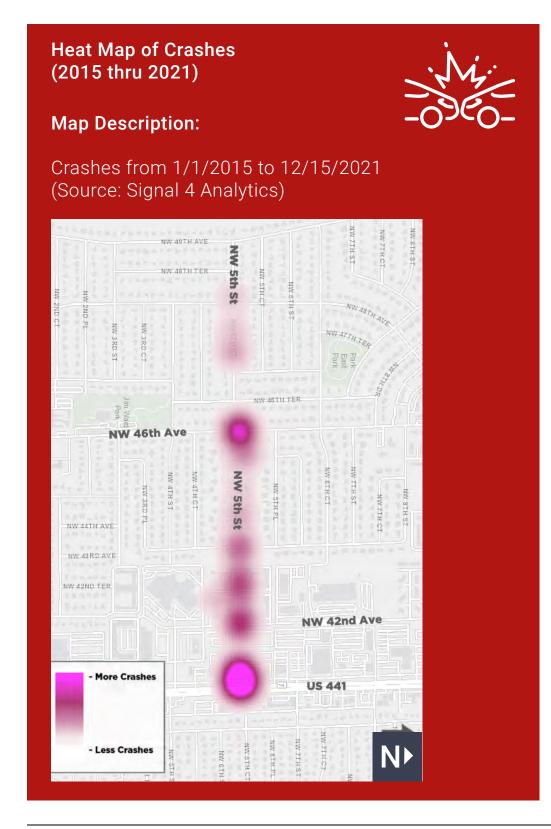
- No transit on NW 5th Street
- BCT Routes 18 and 441 Breeze on US 441
- Future Community Shuttle stops (East Route)

Prior Planning / Transportation Studies:

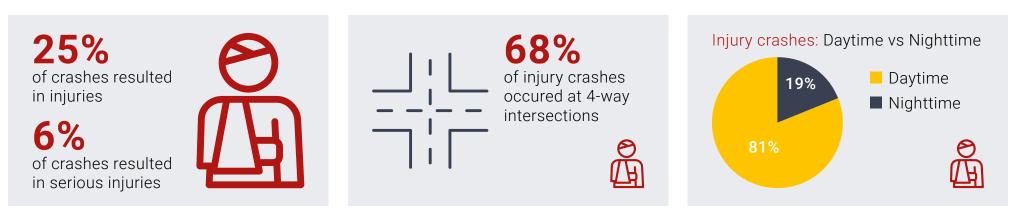
- FDOT SR 7 (US 441) Transit Roadway Improvements
- Plantation Park East Neighborhood Plan Report (2000)
- Gateway Community Redevelopment Agency,
- Community Redevelopment Plan (2006)
- City of Plantation Parks & Recreation Master Plan (2020)

Chapter 4: Roadway 7 NW 5th Street



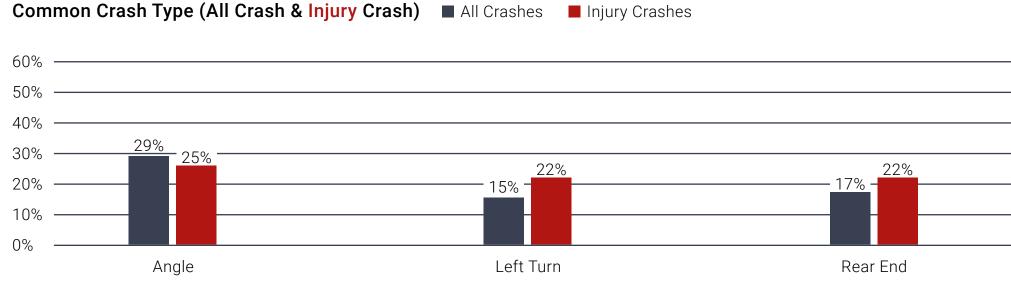


114** Crashes Between 1/1/2015 and 12/15/2021



3 crashes involving pedestrians (2) & bicyclists (1)





^{**}excluding intersection of US 441
Unless otherwise noted, references to "Injury" crashes includes Injury, Serious Injury, and Fatality (as applicable).

Chapter 4: Roadway 7 NW 5th Street





Neighborhood gateway columns east of NW 43rd Av (east view). Location is the transition to the single-family neighborhood



Bicyclists frequently observed riding on sidewalks



NW 42nd Av intersection (SW view); Low visibility crosswalks are worn out, detectable warning surfaces are missing, and there is no left turn signal.



Morning traffic heading west to intersection at NW 46th Av

Field Audit Observations:

- Speeding Observed
- Cut through traffic
- Long straight roadway
- Limited crosswalks and those that are there are low visibility
- Neighborhood entry columns (between NW 43rd Av and NW 42nd Av) are not calming traffic
- Traffic pattern associated with Plantation Elementary School's morning drop-off and afternoon pick-up (intersections at NW 42nd Av and NW 46th Av)
- No bike facilities; Bicyclists riding on sidewalks
- NW 42nd Av intersection infrastructure: low visibility crosswalks, no detectable warning mats, no left turn signal, no pedestrian-scaled lighting.
- No wayfinding to adjacent parks
- No wayfinding for walking to Plantation Elementary School
- No pedestrian scaled lighting (particularly needed in area of NW 42nd Av to US 441)
- Limited streetlights, that are obstructed by trees

Summary of comments from Community Meetings:

- Overall poor lighting conditions in the neighborhood
- Road safety concerns
- · Concerned about speeding
- Students from Plantation Elementary walking in the street
- Landscaping needs to be enhanced along NW 5th St, especially east of NW 42nd Av
- NW 43rd Ave: the sidewalk is shared between peds and bicycles
- NW 43rd Ave: There should be a crosswalk at the intersection of NW 5th St
- School buses run the stop signs
- Positive reaction from residents regarding roundabouts, tabletop speed bumps and pedestrian lighting
- One resident stated they do not want roundabouts on NW 5th Street at NW 42 Ave or NW 43 Ave
- · Car dealerships are using NW 42nd Ave for road testing
- NW 6th Court is being used as a cut through for school traffic (students are driven to pedestrian only entrance)
- Partying / after hours gatherings at Multicultural park on NW 43rd Av

Chapter 4: Roadway 8 NW 46th Avenue



Focus Locations for Recommendations



Length: • 5,100 FT

Speed Limit:

• 25 MPH

No. of Lanes: • 2 lanes

Traffic Maint & Eng: City of Plantation

Broward County Trafficways Desgination:

None

Land Uses:

- Residential (Low; Low-Medium, & Medium-High)
- Local Activity Center
- Community Facilities
- Park

AADT:

Not Available

Functional Federal Classification (2010):

· Local Road

Key Activity Centers and Destinations:

- Jim Ward Community Center
- Park East Park
- Broward Junior Academy/Seventh Day Adventist Church
- First Baptist Church
- Apostolic Christian Church
- Retail / Office on NW 9th Court

Transit Access:

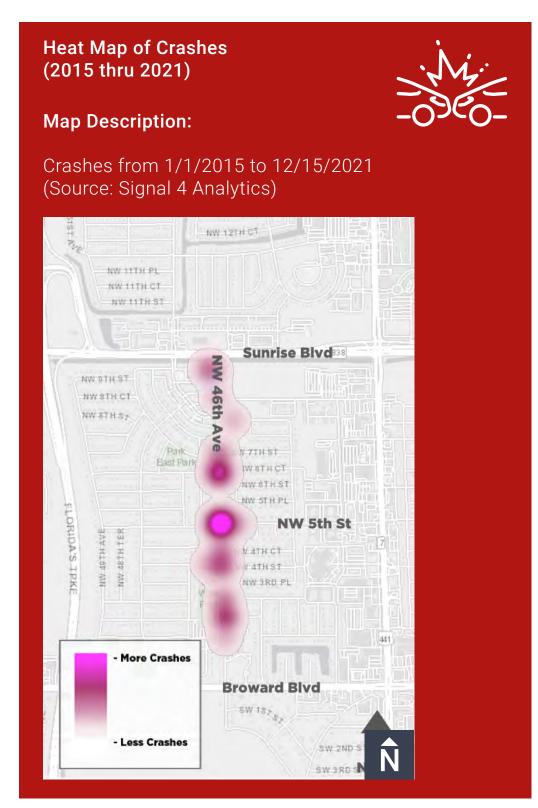
- No transit on NW 46th Ave
- BCT Route 22 (Broward Blvd)
- Future Community Shuttle stops (East Route)

Prior Planning / Transportation Studies:

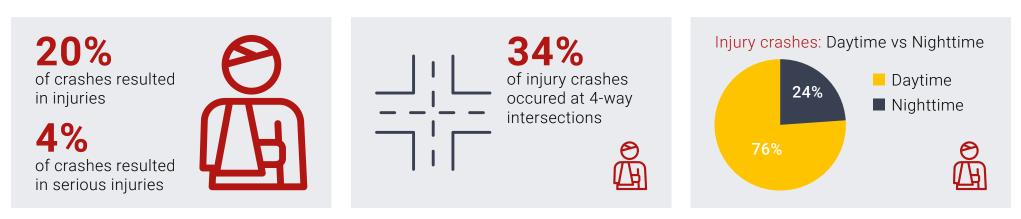
- Plantation Park East Neighborhood Plan Report (2000)
- City of Plantation Parks & Recreation Master Plan (2020)

Chapter 4: Roadway 8 NW 46th Avenue



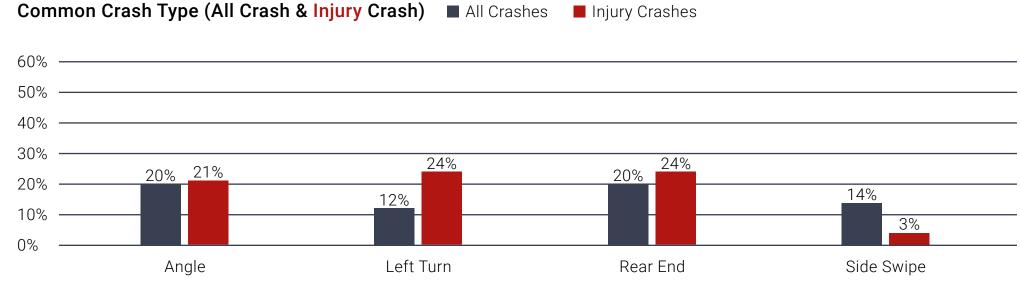


160** Crashes Between 1/1/2015 and 12/15/2021



2 crashes involving pedestrians





^{**}excluding intersection of Broward BI and Sunrise BI
Unless otherwise noted, references to "Injury" crashes includes Injury, Serious Injury, and Fatality (as applicable).

Chapter 4: Roadway 8 NW 46th Avenue





NW 46th Av (south view). The road's layout and location has resulted in a popular cut-through street with speeding cars.



View of school bus stop in front of the Jim Ward Community Center.



Northern end of NW 46th Ave, roadway becomes one-way only.



Bicyclists riding on the sidewalks, likely due to speeding vehicles.



NW 5th St intersection (NW view). Mature shade trees often obstruct the one streetlight.



NW 6th Ct intersection (north view). Leads to Plantation Elementary School's pedestrian entrance but is missing high-visibility pedestrian features.

Field Audit Observations:

- Observed Speeding
- Cut through traffic
- Multiple signs at northern and southern ends of roadway asking drivers to slow down
- No signalized intersections
- No bike facilities; Bicyclists observed riding on sidewalks
- Long straight roadway
- No wayfinding to adjacent parks and greenway
- Unusual / one-way traffic pattern at northern section of roadway
- Low visibility cross walks
- Crosswalks missing at most intersections
- No wayfinding to pedestrian entrance to Plantation Elementary School at NW 6th Ct
- No pedestrian scaled lighting
- Limited streetlights, that are obstructed by trees
- "Donut" tire marks in various intersections

Summary of comments from Community Meetings:

- Overall poor lighting conditions in the neighborhood
- Road safety concerns
- Concerned about speeding and cut through traffic
- Students from Plantation Elementary walking in the street
- · Children are playing in the street on NW 5th Ct, NW 6th Ct, NW 6th St, and in front of Jim Ward
- Landscaping needs to be enhanced along NW 5th St, especially east of NW 42nd Av
- NW 43rd Ave: the sidewalk is shared between pedestrians and bicycles
- NW 43rd Ave: There should be a crosswalk at the intersection of NW 5th St
- School buses run the stop signs
- Positive reaction from residents regarding roundabouts, tabletop speed bumps and pedestrian lighting
- The greenway south of Sunrise Blvd Canal does not feel safe, even during the day; Greenway needs lighting
- Uncomfortable walking even during daytime, but especially at nighttime
- Crosswalk needed at the intersection of NW 9th Dr and NW 46th Ave
- NW 6th Court is being used as a cut through for school traffic (students are driven to pedestrian only entrance)



Focus Roadway with Key Activity Centers & Destinations



Length: • 2 Miles (Broward Blvd to Sunrise Blvd)

Speed Limit:

• 45 MPH

No. of Lanes: • 6 lanes

Roadway Ownership: FDOT

Broward County Trafficways Desgination:

Arterial (200')

Land Uses:

- · Commercial (Retail / Office)
- Government
- Multifamily Residential
- Single-Family Residential

AADT:

- Broward Blvd to Cleary Blvd: 53,500 (2021)
- Cleary Blvd to Sunrise Blvd: 58,500 (2021)

Functional Federal Classification (2010):

Principal Arterial

Key Activity Centers and Destinations:

- Broward Mall
- Broward County Government Center West
- Plantation Walk
- Plantation Pointe (Office Park and Retail)
- Midtown Plantation

- Broward County LibraryBroward County Courthouse
- Westside Hospital
- City Parks: Veterans Memorial, Marcano Estates, Liberty Tree Lauderdale West senior community

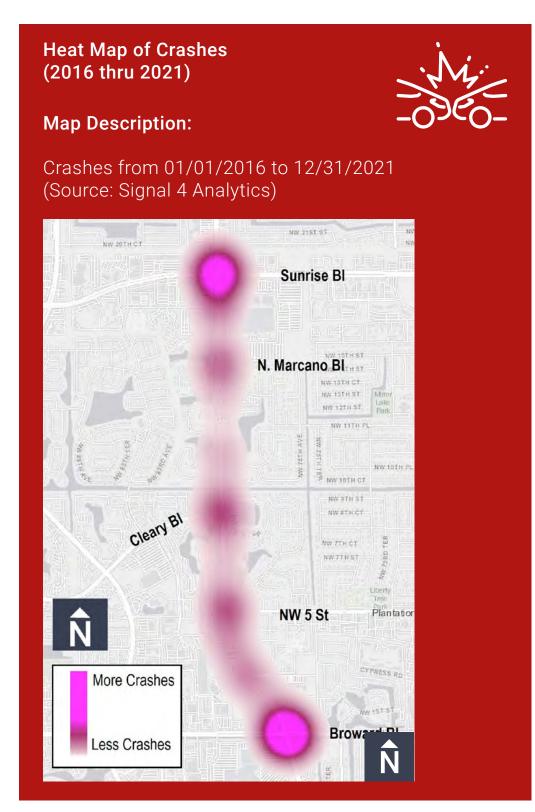
Prior Planning / Transportation Studies:

- Midtown Plantation and Southwest Sunrise Livability Study (2012)
- Sunrise Blvd Multimodal Corridor Study (2003)
- Broward Boulevard Corridor Transit Study (2012)
- University Drive Mobility Improvements Planning Study (2013)
- Midtown Master Plan Update (2016)
- Broward MPO Complete Streets Master Plan
- Plantation Mobility Hub Master Plan (2020)

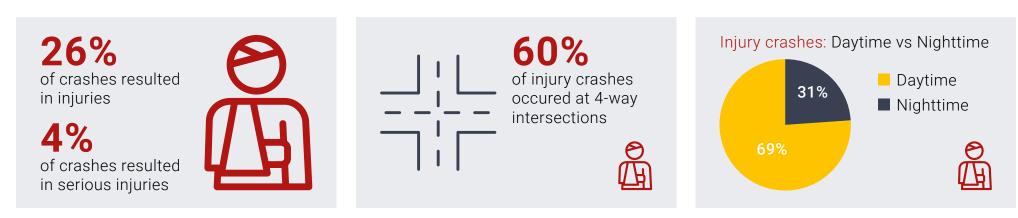
Transit Access:

- BCT Routes 02 and 81
- Broward Blvd BCT Route 22
- Sunrise Blvd BCT Route 36



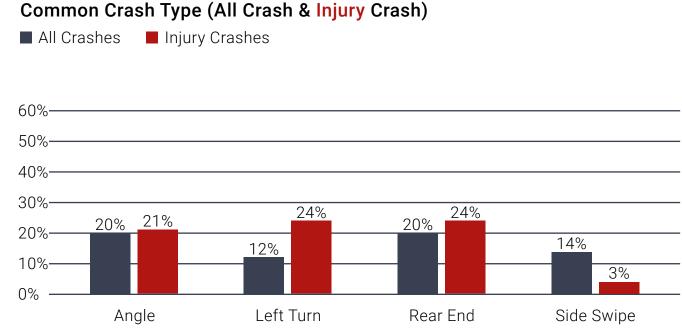


1756 Crashes Between 01/01/2016 to 12/31/2021



35 crashes involving pedestrians (17) & bicyclists (18)







Unless otherwise noted, references to "Injury" crashes includes Injury, Serious Injury, and Fatality (as applicable).





Broward Blvd: SB to WB right-turn vehicle stops in crosswalk during Pedestrian Signal Phase



NW 3rd St: Bicyclist riding against traffic on sidewalk



SB BCT Bus Stop north of Marcano Bvld: No shelter and no access to sidewalk on Access Rd



NW 5 St: As seen from the western frontage road (Merritt Dr), where the University Dr sidewalks are locate



Sunrise Blvd: WB to NB right-turn vehicle almost hits pedestrian during Pedestrian Signal Phase



NW 79 Te: University Dr's sidewalks are located here. There are sidewalk gaps, no crosswalks, and non-ADA compliant curbs.



Sunrise Blvd: Above-ground utility in NW corner requires EB to SB right-turn vehicles to stop in crosswalk to see SB traffic.



NB BCT Stop south of NW 3rd St: With no garbage can, bags of garbage are tied to pole or just left on bench.



Broward Blvd: Pedestrians and transit riders need to nine drive lanes at this intersection, which is in the heart of Midtown

Field Audit Observations:

- All BCT Stops have benches, several have no shelter
- Most pedestrian and BCT activity in vicinity of Broward Blvd and Sunrise Blvd
- BCT riders frequently jaywalking in vicinity of Broward Blvd and Sunrise Blvd
- No or substandard access from BCT stops to frontage road sidewalks
- Seven signalized intersections; most missing all or some crosswalks
- Several signalized intersections prohibit U-turns
- No crosswalks over University Dr between Sunrise Blvd to south side Cleary Blvd (1 mile)
- Frequent jaywalking observed (both at and away from intersections)
- Many bicyclists riding on sidewalks; few observed riding in bike lanes
- · Bike lanes provided on University Dr, but are not protected or buffered
- Right-turn vehicles not yielding to pedestrian during pedestrian signal phase
- Right-turn vehicles stopping in crosswalk
- Wide sidewalks provided adjacent to new development near Sunrise Blvd
- Existing sidewalks are narrow and frequently located directly at curb
- No sidewalks along western side of University Dr between NW 17th Ct and C-12 canal (3,900 ft) and between entrance to St Tropez to NW 3rd St (1,475 ft)
- No sidewalks along eastern side of University Dr between N. Marcano Blvd to S. Marcano Blvd (1,475 ft)
- Sidewalks are only located within frontage roads but there is no or substandard access to frontage road sidewalks (Access Rd, NW 79 Te, and Merritt Dr)
- Vehicles speeding, particularly north of Cleary Bl





Broward Blvd: SB to WB right-turn vehicle stops in crosswalk during Pedestrian Signal Phase



riders riding on sidewalks / crosswalks.



Cleary Blvd: One of the signalized intersections missing a crosswalk over University Dr.



S. Marcano Blvd: The eastern ROW sidewalk ends. There is no signage for pedestrians to use sidewalk within NW 79 Te



Broward Blvd: Jaywalking was frequently observed, as well as bike NW 2 St: One of the signalized intersections missing a crosswalk over University Dr.



SB BCT Bus Stop at Sunrise Blvd: Heavy transit activity at this



Sunrise Blvd: Most bicyclists were observed riding on the



Sunrise Blvd: New development "Plantation Pointe" rebuilt the sidewalks. They are shaded, wide, and set-back from roadway.



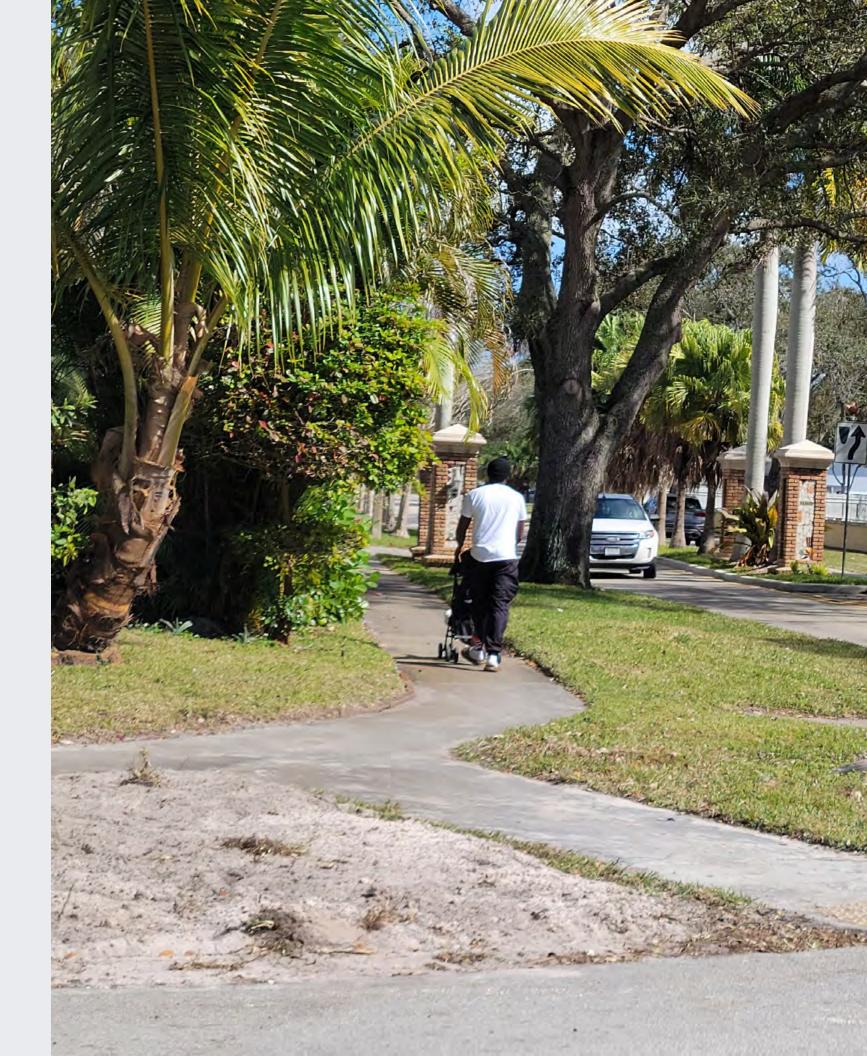
SB BCT Bus Stop south of N. Marcano Blvd: No shelter and no access to sidewalk on Access Rd

Summary of Comments from Community Meetings and Survey:

- · Access Rd Options: Cycle Track (protected) always better than shared use path
- Shared Use Path need to be marked to show bike / pedestrian sides.
- Ped bridge over C-12 Canal is great. Make sure it is wide enough to accommodate cyclists.
- Green Tree Lane: Prefer a dedicated bike lane vs sharrows
- · Need for human-scale wayfinding and placemaking along all improved areas
- NW 5th St NE corner: Cars do not stop with right-turn. It causes a lot of danger, specifically with kids.
- "University Dr is horrible for pedestrians and cyclists. The street is too wide, with almost no crosswalks. The buildings are set too far back from the street. The street is designed for cars to go 70 mph, cycling is very dangerous. Sidewalks are always closed due to some construction or other, and are very confusing, as a pedestrian I'm not sure when I need to go to the access road and where the sidewalk on University itself ends. The sidewalk around the Broward Mall is horrible and forces peds into the ditch or around the other side of the mall. Right-size the lanes to 10 feet or 11 feet, make the cycle lanes protected, remove setbacks and plant trees, and replace general traffic lanes with transit only lanes."
- "In general would like to hear about the plans for better connected transit"
- "The traffic light timing needs to be adjusted. The amount of traffic is too high for the road. High congestion especially southbound from Cleary and north bound after tower shops. The drivers are crazy sometimes cutting across lanes not to mention overt disregard for traffic rules. The new bus stop they made North bound on east side of University defies logic as now it's going to cause even more congestion."
- "The only way you can solve the mess made of University Dr. is to have a feeder side road that could feed cars into University from every strip mall and apartment building. Then you could remove many of the traffic lights except for a few main intersections."
- "Please, no more fast food in our Univ & Sunrise neighborhood."
- "Time the lights. Traffic backs up at 1595 and 84. Way too much going on at that intersection."
- · "University Dr. has extremely too much traffic congestion especially in the State Rd 84/Davie area. The improvements that are going now close to Peter's Rd is taking entirely too long to complete."
- "So much to fix. Several good ideas here as well as bad. Forget "sharrows" and "share the road" signage. Use infrastructure like continuous sidewalks (raised) and protected bike lanes to protect pedestrians and cyclists... lets prioritize safety."

Chapter 5: Recommendations





Chapter 5: Recommendations



Introduction

This chapter presents the recommendations developed with the methodology described in Chapter 3.

Timeframes

Projects included in this plan are intended to address the current or long-term needs of the Focus Roadways. Near-term improvements typically consist of smaller and/or more critical projects, where as short-term projects may be phased in over a longer time frame. Near-term projects are intended to be implemented before or concurrent with the short-term projects. Long-term projects are typically of a higher cost, complexity, or include coordination with facility owners. Ultimately, implementation of the projects is dependent on funding availability.

The feasibility of the timeframes is based on planning level analysis of existing conditions, including roadway ownership, right-of-way ownership, right-of-way width, property appraiser information, visible utilities, project costs and roadway jurisdiction.

The timeframes do not, however, include coordination with utilities, potential acquisition of right-of-way, stakeholder support for a preferred local alternative, environmental assessments, and partner-agency coordination. For locations not owned by the City, additional approvals may be required from the facility owner, including Broward County, FDOT, private property owners, or Old Plantation Water Control District.

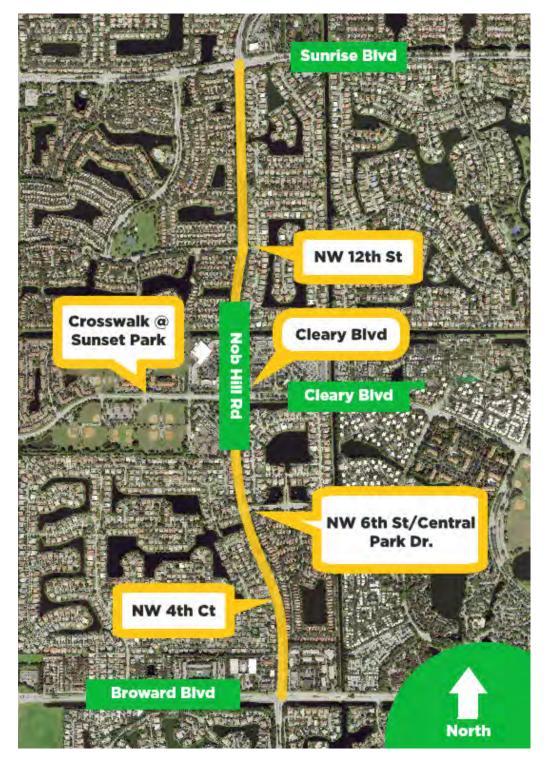
Warrant Studies

Additional studies may be required to demonstrate a specific improvement is warranted. This is particularly true if the City is seeking funding assistance from a partner agency, such as Broward County, FDOT, or the Broward MPO. The studies might include signal warrant analysis, traffic counts, and pedestrian counts. During the development of Phase 1 pedestrian traffic counts were obtained for four Focus Roadways: SW 6th St, Cypress Rd, NW 5th St, and NW 46th Av. The traffic counts are included in Appendix Section G.





Focus Locations for Recommendations



Focus Location

Intersection at NW 12th St: Recommendation Group #1



Intersection at Cleary BI: Recommendation Group #1



Intersection at NW 6th St / Central Park Dr: Recommendation Group #2



Intersection at NW 4th Ct: Recommendation Group #2



Crosswalk at Sunset Park : Recommendation Group #1



Entire Roadway : Recommendation Group #1





Recommendations Group #1: Safety Treatments and Mobility Improvements				
Location	School Crosswalk at Entrance to Sunset Park	Intersection at Cleary Blvd	Intersection at NW 12th St	Entire Roadway
High Visibility Pavement Markings			Yes, over Nob Hill Rd	
Ped-Scale Lighting	Yes, southside only	Yes	Yes	
Crosswalk Signage: Advanced	Yes		Yes	
Crosswalk Signage: In-Street	Yes			
Detectable Warning Surface		Yes	Yes	Yes
Rectangular Rapid Flashing Beacons (RRFB)	Yes			
Mast Arm Conversion		Yes	Yes	
Leading Pedestrian Interval (LPI)		Yes	Yes, over Nob Hill Rd	
Left Turn Signal			Yes, request warrant study	
Other	• Radar Speed Limit Signs	• Accesible Pedestrian Signals	• Accesible Pedestrian Signals	 Remove sidewalk obstructions/ overgrown landscaping. Radar speed limit signs





Location: Intersection at NW 4th Court

Observations / Missing Facilities:

- Unsignalized T-Intersection
- All turn movements allowed
- No southbound U-turn storage area
- No pedestrian facilities or lighting
- No sidewalk in western ROW
- No crosswalk from western neighborhood over Nob Hill Rd to sidewalk in eastern ROW
- Observed Speeding

Objectives

- ✓ Improve intersection safety
- ✓ Reduce collisions to / from NW 4th Court
- ✓ Create pedestrian access to sidewalk on east side
 of Nob Hill Rd

24

Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

40%

of injury crashes were caused by rear end collisions



42%

of crashes resulted in injuries



50%

of injury crashes occurred on wet roads



Improvements

Near Term (0 - 2 years):

- Extend sidewalks on NW 4th Court to Nob Hill Road's right-of-way
- Create a crosswalk over NW 4th Court including:
- Detectable warning surfaces
- High-visibility pavement markings

Short Term (2 - 5 years):

- 1. Install directional median on Nob Hill Rd prohibiting left turns from NW 4th Ct
 - NW 4th Court to allow right-turns out only
- 2. Create crosswalk over Nob Hill Road including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Crosswalk Signal / Beacon

Pedestrian Refuge Island
 Lighting
 Signage







Location: Intersection at NW 6th Street

Observations / Missing Facilities:

- Observed Speeding
- Span and Wire Traffic Signals
- No left turn signals on NW 6th St / Central Park Pl
- No sidewalk on western side of Nob Hill Rd
- No sidewalk on southern side of Central Park Pl
- Low visibility crosswalks
- Curb ramps missing detectable warning surfaces

Objectives

- ✓ Improve safety of intersection
- ✓ Reduce rear-end collisions on Nob Hill Road
- ✓ Increase intersection visibility
- ✓ Crosswalk visibility enhancements

79Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

52% of injury crashes were caused by rear end collisions



37%

of crashes resulted in injuries (vs Nob Hill Rd = 29%)



21%

of injury crashes occurred during nighttime



Improvements

Near Term (0 - 2 years):

- Install pedestrian-scale lighting at eastern corners of intersection
- Install signage: pedestrian crossing
- Refurbish crosswalk pavement markings to high-visibility pattern
- Install detectable warning surfaces at curb ramps

Short Term (2 – 5 years):

- 1.Replace traffic signal infrastructure with mast arms
- 2. Add left turn signals for NW 6th Street and Central Park Place





Focus Locations for Recommendations



Focus Location

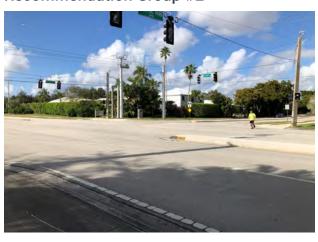
Eastern Entrance to Plantation Promenade: Recommendation Group #2



Intersection at Central Park PI: Recommendation Group #2



Intersection at Central Park Dr: Recommendation Group #2



Eastern Entrance to Central Park: Recommendation Group #2



Multiblock area from Lauderdale West Dr to NW 82nd Av: Recommendation Group #2







Location: East entrance to Plantation Promenade Shopping Center 1

Observations / Missing Facilities:

- Speeding
- Unsignalized T-Intersection / driveway
- U-turns prohibited
- Sidewalks missing detectable warning pads
- No crosswalks from southern ROW sidewalk
- No pedestrian-scaled lighting
- Parents park in shopping center for morning drop-off to Central Park Elementary School

Objectives

- ✓ Improve safety of intersection
- ✓ Reduce left-turn collisions to / from shopping center
- ✓ Reduce vehicle speeds / traffic calming on Cleary Blvd
- ✓ Improve pedestrian facilities
- ✓ Create pedestrian access from Cleary Blvd southern sidewalk

34 Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

56% of injury crashe

of injury crashes were caused by left turn collisions



47% of crashes resulted



100/

in injuries

of injury crashes occurred during nighttime



Improvements

Near Term (0 - 2 years):

- Install Speed Radar Feedback Signs east / west of intersection
- Create advanced stop bar for southbound vehicles
- Install detectable warning surfaces at sidewalk connections to shopping center's driveway

Option #1 Short Term (2 - 5 years):

- 1. Install directional median on Nob Hill Rd prohibiting left turns from shopping center
 - Shopping center driveway to allow right-turns out only
- 2. Create crosswalk over Cleary Blvd including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Refuge Island
 - Lighting
 - RRFBs
 - Signage







Location: East entrance to Plantation Promenade Shopping Center 2

Observations / Missing Facilities:

- Speeding
- Unsignalized T-Intersection / driveway
- U-turns prohibited
- Sidewalks missing detectable warning pads
- No crosswalks from southern ROW sidewalk
- No pedestrian-scaled lighting
- Parents park in shopping center for morning drop-off to Central Park Elementary School

Objectives

- ✓ Improve safety of intersection
- ✓ Reduce left-turn collisions to / from shopping center
- ✓ Reduce vehicle speeds / traffic calming on Cleary Blvd while maintaining traffic flow
- ✓ Improve pedestrian facilities
- ✓ Create pedestrian access from Cleary Blvd southern sidewalk

34 Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

56% of injury crashes were caused by left turn collisions



47% of crashes resulted in injuries



19% of injury crashes occurred during nighttime



Improvements

Near Term (0 - 2 years):

- Install Speed Radar Feedback Signs east / west of intersection
- Create advanced stop bar for southbound vehicles
- Install detectable warning surfaces at sidewalk connections to shopping center's driveway

Option #2 Short Term (2 - 5 years):

- 1. Reduce Cleary Blvd Speed limit to 30 MPH
- 2. Convert intersection to Mini-Roundabout
- 3. Create crosswalk over Cleary Blvd including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Refuge Island
 - Lighting
 - Signage

Option #2 Rendering

BOULEVARD

N





Location: Intersection at Central Park Place North

Observations / Missing Facilities:

- Span and wire traffic signals
- Low visibility crosswalks
- No detectable warning surfaces
- No left turn signals
- Traffic calming (textured pavement) on Central Park Pl, just south of the intersection

Objectives

- ✓ Improve intersection safety
- ✓ Reduce left turn collisions
- ✓ Reduce vehicle speeds / traffic calming on Cleary Blvd
- ✓ Increase intersection visibility
- ✓ Improve traffic flow
- ✓ Crosswalk visibility enhancements

22 Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

50%



of injury crashes were caused by left turn collisions

of crashes resulted

in injuries



of injury crashes occurred during nighttime



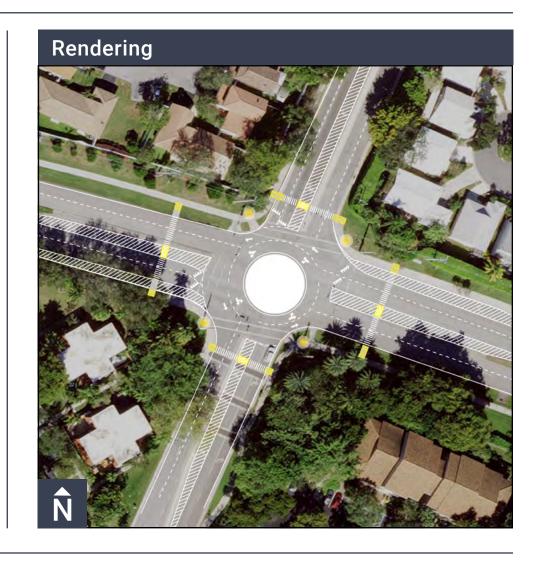
Improvements

Near Term (0 - 2 years):

- Install pedestrian-scale lighting (all corners)
- Install signage: pedestrian crossing
- Refurbish crosswalk pavement markings to high-visibility pattern
- Install detectable warning surfaces at curb ramps

Short Term (2 - 5 years):

- 1. Reduce Cleary Blvd Speed limit to 30 MPH
- 2. Convert intersection to Mini-Roundabout
- 3. Create new crosswalks including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Refuge Island
 - Signage







Location: Intersection at Central Park Drive

Observations / Missing Facilities:

- Span and wire traffic signals
 Low visibility crosswalks
- No detectable warning surfaces No left turn signals
- No pedestrian-scaled lighting Directly abuts Central Park
- Double sidewalk on Central Park Dr, north of intersection
- A lot of pedestrian activity in intersection for accessing Central Park

Objectives

- ✓ Improve intersection safety
- ✓ Reduce left turn collisions
- ✓ Reduce vehicle speeds / traffic calming on Cleary Blvd
- ✓ Increase intersection visibility
- ✓ Improve traffic flow
- ✓ Crosswalk visibility enhancements
- ✓ Improve multimodal access to Central Park

31

Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

69%

of injury crashes were caused by left turn & angle collisions



48%

of crashes resulted in injuries



19%

of injury crashes occurred during nighttime



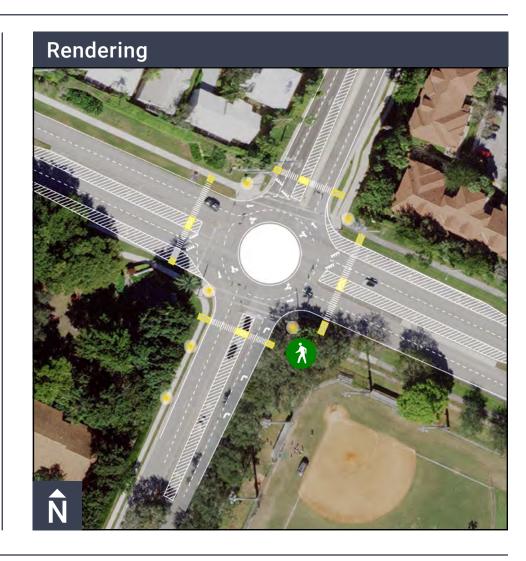
Improvements

Near Term (0 - 2 years):

- Install pedestrian-scale lighting (all corners)
- Install pedestrian-scale lighting along western Central Park Dr sidewalk
- Install signage: pedestrian crossing
- Refurbish crosswalk pavement markings to high-visibility pattern
- Install detectable warning surfaces at curb ramps
- Create pedestrian-only entrance to Central Park close to intersection

Short Term (2 – 5 years):

- 1. Reduce Cleary Blvd Speed limit to 30 MPH
- 2. Convert intersection to Mini-Roundabout
- 3. Create new crosswalks including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Refuge Island
 - Signage







Location: Entrances to Central Park

Observations / Missing Facilities:

- No pedestrian access to Central Park from Cleary Bl (pedestrian access is via parking lots)
- Jaywalking at both park entrances
- On Central Park Dr, bicyclists riding facing traffic in turn lane
- No crosswalk across Cleary BI to park entrance at NW 91st Av
- Mix of pedestrians & industrial vehicles at intersection of NW 91st Av
- Bicyclists riding on sidewalks
- City employees use northern parking lot at NW 91st Av

Objectives

- ✓ Improve pedestrian access to Central Park (reduce jaywalking)
- ✓ Encourage more multimodal transportation to / from Central Park
- ✓ Minimize potential multimodal conflicts at NW 91st Ave
- ✓ Reduce vehicle speeds / traffic calming on Cleary Blvd

Improvements

Near Term (0 – 2 years):

At NW 91st Avenue:

- Mark crosswalk over NW 91st Avenue with high-visibility pattern
- Install detectable warning surfaces at curb ramps
- Install signage: pedestrian crossing
- Install crosswalk lighting

At Central Park Dr:

- Create a crosswalk over Central Park Dr including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Lighting
 - Signage
 - RRFBs

Create pedestrian-only park entrances in adjacency to NW 91st Ave and Central Park Dr

Short Term (2 - 5 years):

- 1. Reduce Cleary Blvd Speed limit to 30 MPH
- 2. Adjacent to NW 91st Avenue, Install raised crosswalk over Cleary Blvd including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Refuge Island
 - Z-crossing Danish offset pedestrian crossing
 - Lighting
 - Signage







Location: Multiblock area from Lauderdale West Dr to NW 82nd Av

Observations / Missing Facilities:

- Speeding
- No signalization between University Dr and Pine Island Rd
- No crosswalks / pedestrian access from north side of Cleary Bl to Midtown
- Jaywalking over Cleary Bl at NW 82nd Av
- No wayfinding at NW 82nd Av (for Midtown Plantation)
- School Bus stops on Cleary Bl, adjacent to Lauderdale West Dr

Objectives

- ✓ Improve safety of Lauderdale West Dr intersection
- ✓ Reduce left-turn collisions to / from Lauderdale West Dr
- ✓ Reduce vehicle speeds / traffic calming on Cleary Blvd while maintaining traffic flow
- ✓ Minimize potential impacts from additional traffic from Midtown Plantation developments
- ✓ Create pedestrian access from Cleary Blvd northern sidewalk (reduce jaywalking)

47
Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

58% of injury crashes were caused by left turn collisions



25% of crashes resulted in injuries



of injury crashes occurred on wet roads



Improvements

Near Term (0 - 2 years):

- Install detectable warning surfaces at curb ramps and sidewalk / driveway connections
- Create midblock crosswalks over Cleary Blvd at east of Lauderdale West Dr and west of NW 85th Te including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - · Lighting · Signage · RRFBs

At Lauderdale West Dr:

- Refurbish crosswalk pavement markings to high-visibility pattern
- · Curb extensions to both corners
- Install pedestrian-scale lighting both corners
- Crosswalk Signage

At NW 82nd Ave:

- Refurbish crosswalk pavement markings to high-visibility pattern
- Curb extensions to both corners
- Install pedestrian-scale lighting both corners

Install signage:

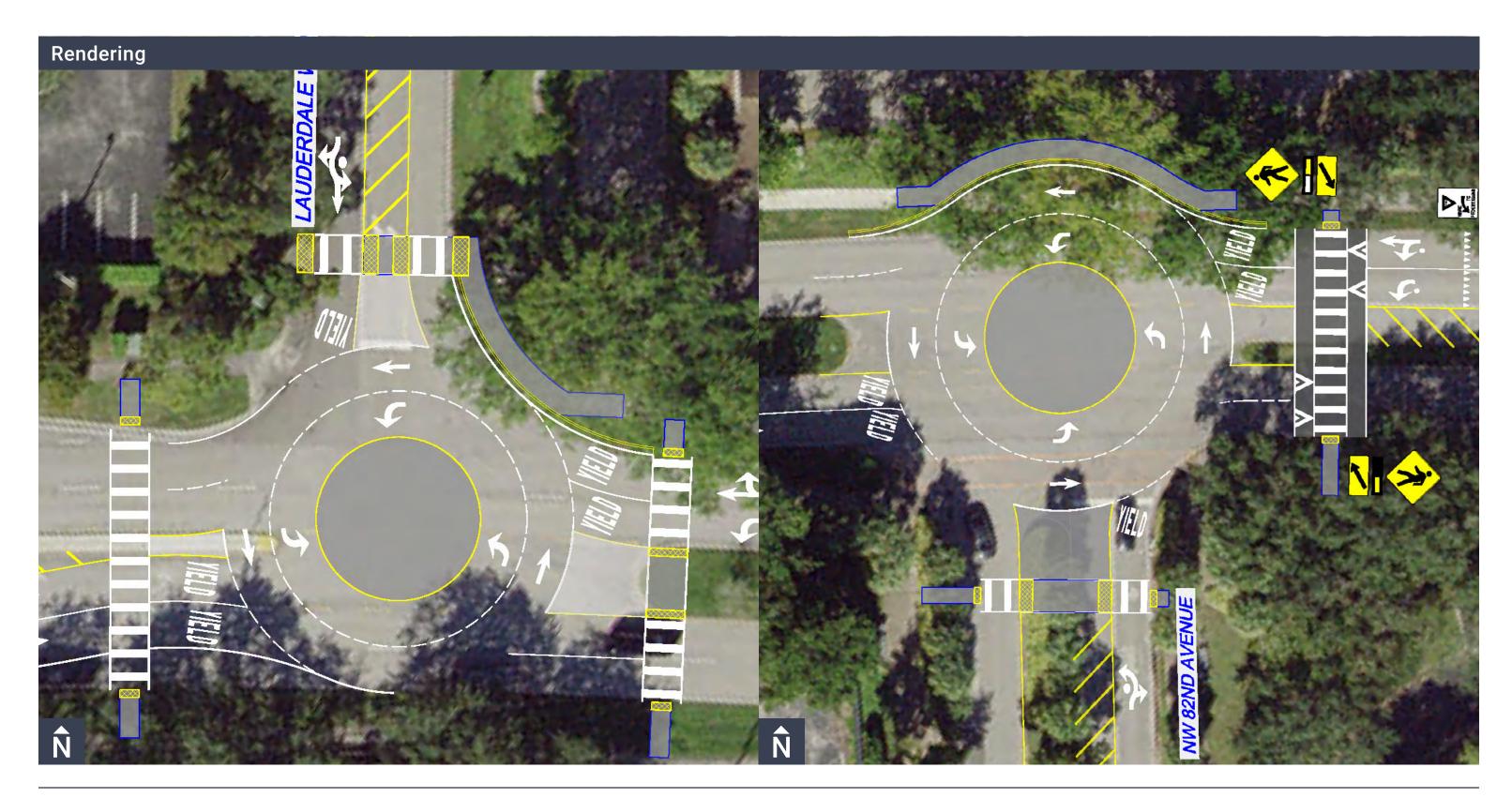
- Wayfinding for Midtown Plantation
- Shared Use Path signage
- Crosswalk

Short Term (2 - 5 years):

- Reduce Cleary Blvd speed limit to 30 MPH
- Install raised crosswalk over Cleary Blvd east of NW 82nd Av including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Refuge Island
 - LightingSignageRRFBs
- Convert intersections to Roundabouts at Lauderdale West Dr and at NW 82nd Ave
- Create new crosswalks at Roundabouts including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Refuge Island
 - Signage

(Rendering is on the next page)

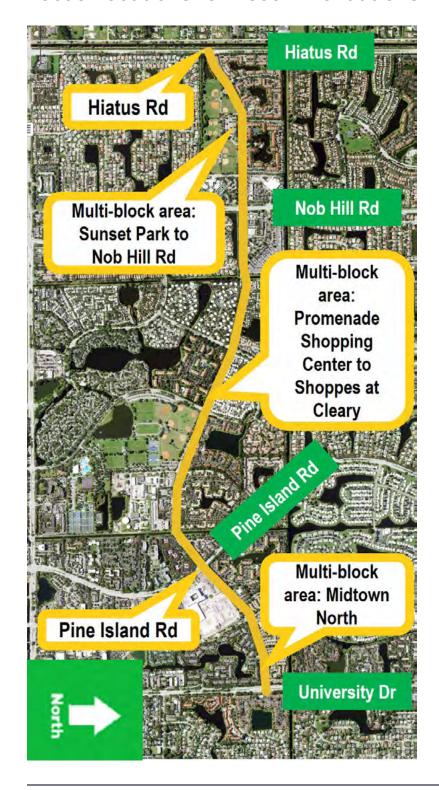




Chapter 5: Recommendations: Roadway 2 Cleary Boulevard Phase 2 Plantation the grass is greener



Focus Locations for Recommendations









Location: Hiatus Rd

Observations / Missing Facilities:

Signalized T intersection with 4-lane divided Arterial and 2-lane Collector

- Cleary Bl: Additional 1 left and 1 right-turn lanes at intersection; Terminates just west of intersection (Hiatus Rd Canal)
- Hiatus Rd: Additional 2 left and 1 right-turn lanes at intersection

Crosswalks:

- 1 crosswalk over eastern leg
- Nearest crosswalk to north is 1 mile
- Nearest crosswalk to south is 3.700 ft

Sidewalks

- No sidewalk in western ROW
- No sidewalk east of intersection in southern ROW
- Observed Speeding
- No Street Lights
- Sunset park is located directly at SE corner, but no pedestrian access to park (closest entrance to park is 1,400 ft to east but no sidewalk)
- NB Hiatus Rd has a U-Turn Lane
- Maintenance parking area on western side of intersection
 Directly west of intersection is Hiatus Rd canal and Plantation Acres neighborhood
- Bicyclists on both Hiatus Rd and Cleary Bl observed riding on sidewalks

30

Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

57%

of injury crashes were caused by left turn collisions



47%

of crashes resulted in injuries



Injury Crash involved a bicyclist







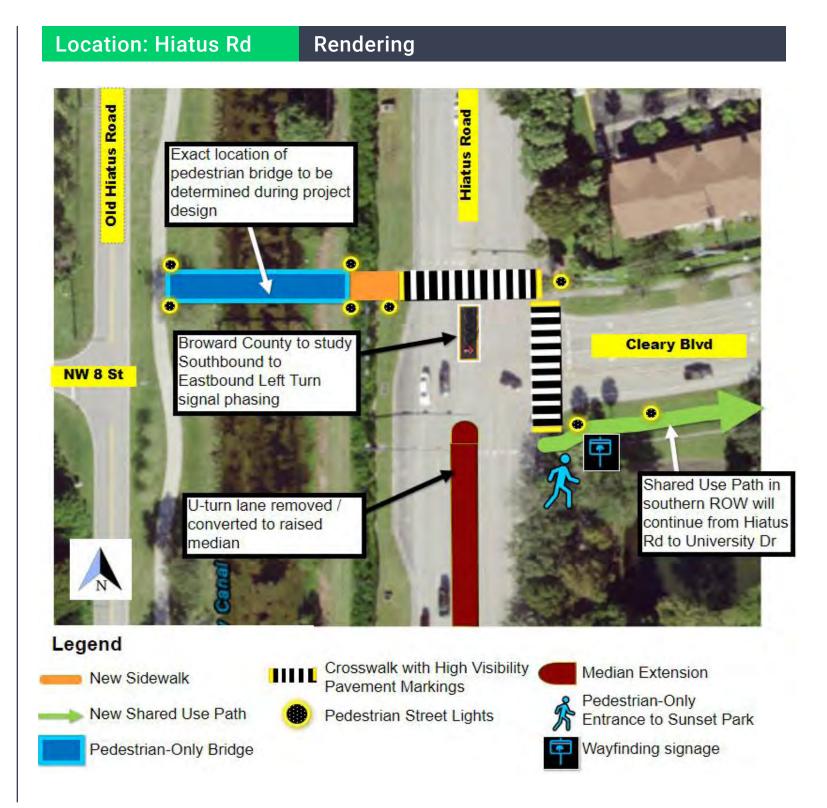


Objectives

- ✓ Address crash trends, particularly SB to EB left-turn crashes
- ✓ Manage vehicular turning speeds
- ✓ Improve pedestrian safety at intersection
- ✓ Provide pedestrian connectivity to Hiatus Rd Greenway and Plantation Acres neighborhood
- ✓ Encourage walk and bike-to-school (Central Park Elementary School)
- ✓ Enhance pedestrian visibility
- ✓ Provide pedestrian access to Sunset Park

Improvements

- Construct a prefabricated pedestrian bridge of shared use path width from the north side of the signalized intersection across the Hiatus Canal to connect to the Hiatus Greenway
- Construct a signalized pedestrian crossing across the north leg of Hiatus Road including special emphasis crosswalk markings, countdown timers, and ADA-compliant curb ramps
- Construct a shared use path to connect proposed north leg crosswalk to proposed bridge over the Hiatus Canal
- Construct a pedestrian-only park entrance from the Hiatus Road/Cleary Blvd intersection into the Sunset Park trail near the southeast corner of the intersection
- Provide signage and pavement markings for shared use path
- Install pedestrian-scale lighting
- Remove the northbound U-turn lane and repurpose this space into the Hiatus Road median
- Adjust signal timing for the southbound to eastbound left-turn movement







Location: Multiblock Area from Sunset Park to Nob Hill Rd

Observations / Missing Facilities:

 $\ensuremath{\mathcal{V}}_2$ mile multiblock area from western end of Sunset Park to intersection with Nob Hill Rd

Signalized intersection with 4-lane Arterial and 2/4-lane Collector

- Additional 1 left and 1 right-turn lanes at intersection **Crosswalks**:
- Crosswalks at intersection with special emphasis markings
- One unsignalized, mid-block crosswalk at eastern entrance to Sunset Park, with special emphasis markings
- No crosswalk leading to western entrance to Sunset Park

- No sidewalk in southern ROW between Hiatus Rd and eastern entrance to Sunset Park = 2,100 ft
- Central Park Elementary School is located at SW corner of intersection
 - Very heavy vehicular traffic for morning drop-off on EB Cleary Blvd from Hiatus Rd
 - Very heavy pedestrian activity for morning drop-off both at mid-block crosswalk and at intersection's western crosswalk
- School bus stops located in northern ROW at entrances to multifamily communities
- No pedestrian path at Sunset Park's western entrance; pedestrians must walk in drive lane to enter park
- ${}^{\textstyle \cdot}$ No bicycle facilities on Cleary Blvd, bicyclists observed riding in northern sidewalk

111

Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

43%

of injury crashes were caused by left turn collisions



33%

of crashes resulted in injuries



2

Serious Injury crash involved a pedestrian







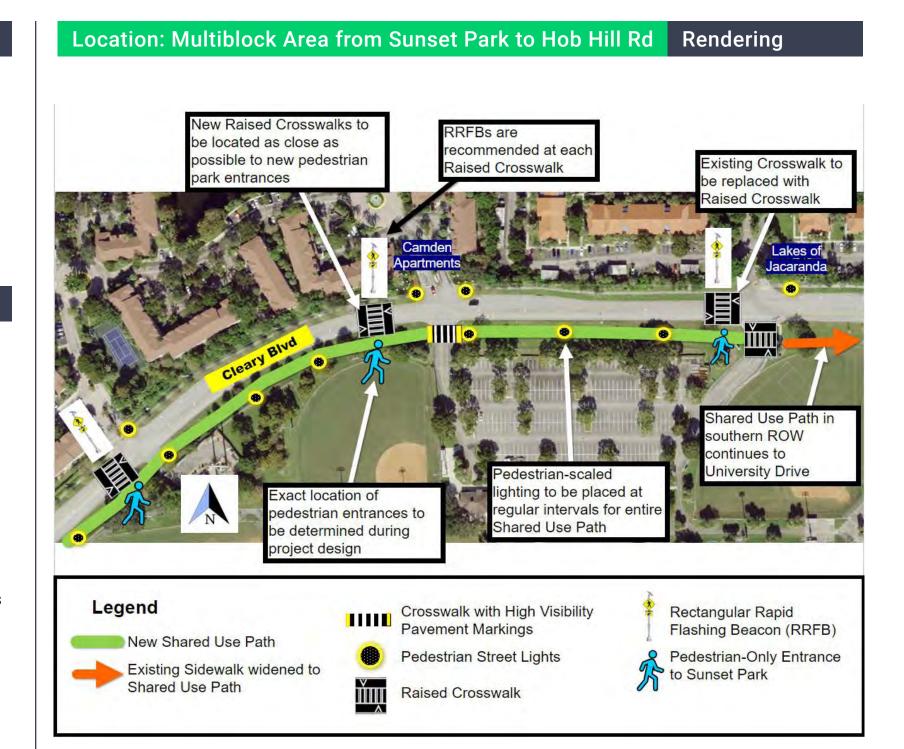


Objectives

- ✓ Address crash trends
- ✓ Reduce vehicular speeds
- ✓ Increase crosswalk opportunities along Cleary Blvd
- ✓ Provide bicycle facility on Cleary Blvd
- ✓ Fill in critical sidewalk gaps
- ✓ Encourage walk-to-school
- ✓ Enhance pedestrian visibility
- ✓ Provide pedestrian access to Sunset Park
- ✓ Provide corridor-wide shared use path in Cleary Blvd's southern ROW

Improvements

- Construct a shared use path on the south side of Cleary Blvd from Hiatus Rd to the Sunset Park east entrance
- Reconstruct existing sidewalk on the south side of Cleary Blvd to shared use path standards from Sunset Park east entrance to Nob Hill Road and eliminate 90-degree bends
- Reconstruct ADA curb ramps at intersections and driveways to shared use path standards
- Provide signage and pavement markings for shared use path
- Install pedestrian-scale lighting at regular intervals along the shared use path and intersection
- Construct a raised crosswalk across Cleary Blvd with implement appropriate signage and pavement markings at NW 110th Terrace, NW 108th Avenue, and Lakes of Jacaranda entrance
- Widen the curb ramps on the south leg of the intersection to shared use path width to accommodate the proposed shared use path on the south side of Cleary Blvd
- Reconstruct sidewalks on the approaches to the intersection to shared use path standards







Location: Multiblock Area from Promenade Shopping Center to Shoppes at Cleary

Observations / Missing Facilities:

1-mile multiblock area extending from the eastern entrance of the Promenade Shopping Center (10000 block) to the entrance of the Shoppes at Cleary (8900 block).

- Two signalized intersections (Central Park Pl and Central Park Dr) with 4-lane local roadways
- Five unsignalized intersections permitting right and left-turns in and out
- Crosswalks only located at the signalized intersections. No mid-block crosswalks
- No driveways in southern ROW

- No bicycle facilities on Cleary Blvd, most bicyclists observed riding in sidewalks
- Pedestrian entrance from Cleary Blvd to Central Park established in 2023
- Central Park is starting a master plan update and may include additional pedestrian entrances along Cleary Blvd
- Observed speeding
- Many pedestrians observed exercising
- Promenade Shopping Center includes a Public grocery store and Orthodox Jewish synagogue
 - Pedestrians observed walking to synagogue

94Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

40%

of injury crashes were caused by left turn collisions



45%

of crashes resulted in injuries



4

Serious Injury crash involved a pedestrian







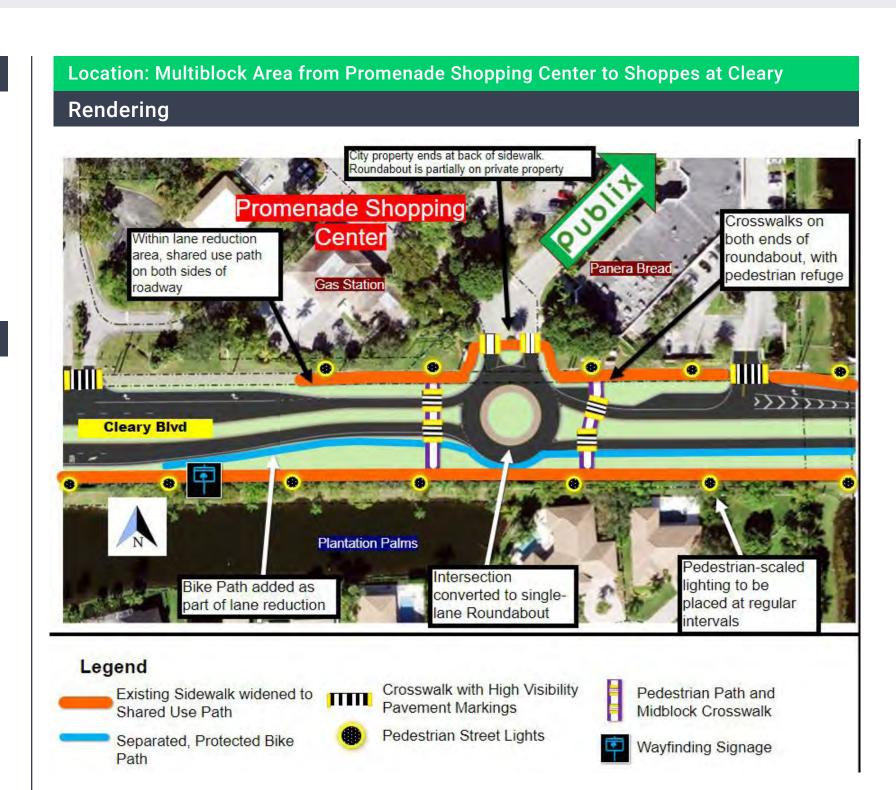


Objectives

- ✓ Address crash trends, especially left-turn crashes
- ✓ Reduce vehicular speeds while maintaining traffic flow
- ✓ Increase crosswalk opportunities along Cleary Blvd
- ✓ Provide bicycle facility on Cleary Blvd
- ✓ Encourage walk-to-school
- ✓ Enhance pedestrian visibility
- ✓ Provide pedestrian access to Central Park
- ✓ Provide corridor-wide shared use path in Cleary Blvd's southern ROW

Improvements

- Repurpose one travel lane in each direction from Plantation Promenade to Shoppes at Cleary and provide separated bicycle lanes
- Reconstruct the sidewalk on the south side of Cleary Boulevard to shared use path standards
- Reconstruct ADA curb ramps at intersections and driveways to shared use path standards
- Provide signage and pavement markings for shared use path
- Provide space for maintenance pull outs and bus bays for potential future transit service
- Install pedestrian-scale lighting at regular intervals and to illuminate crossings at roundabouts
- Reconstruct four intersections as single lane roundabouts with pedestrian crossings and bicycle lane ramps to the shared use path: (1) Plantation Promenade (2) Central Park Place (3) Central Park Drive and (4) Shoppes at Cleary
- Construct a raised crosswalk across Cleary Boulevard at NW 91st Ave (eastern entrance to Central Park)

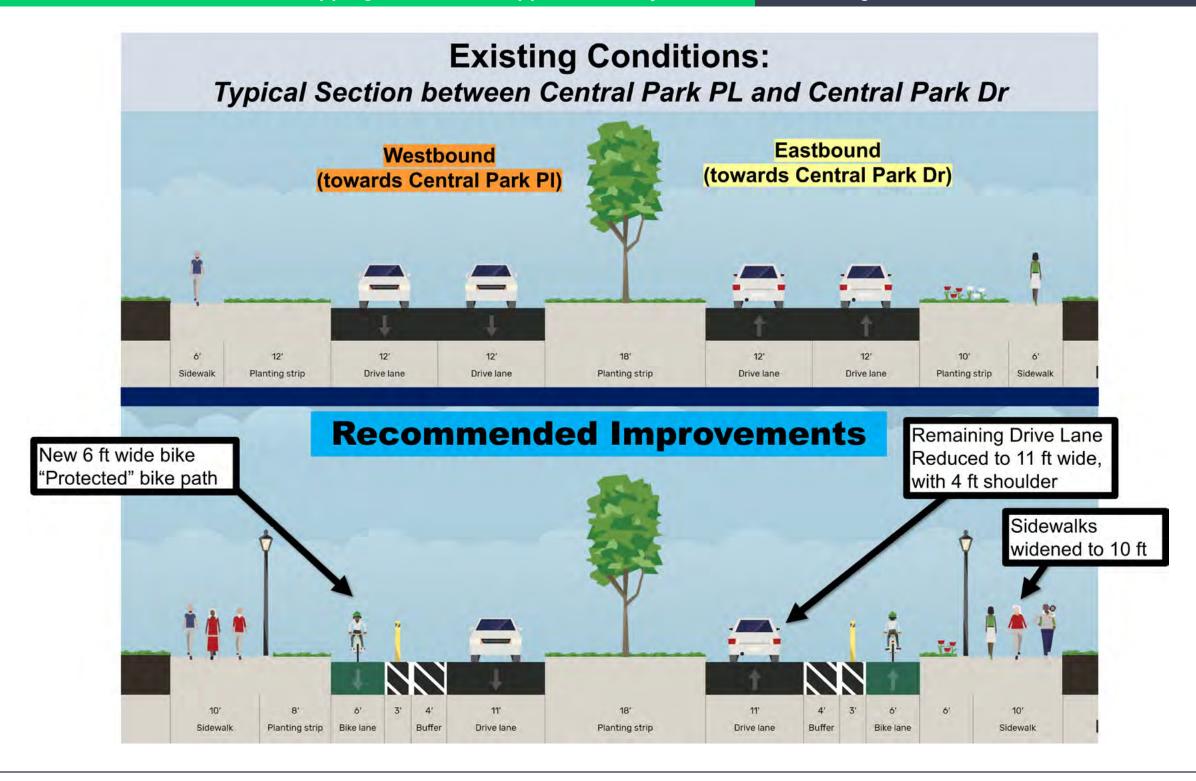


FINAL REPORT - August 2023 78

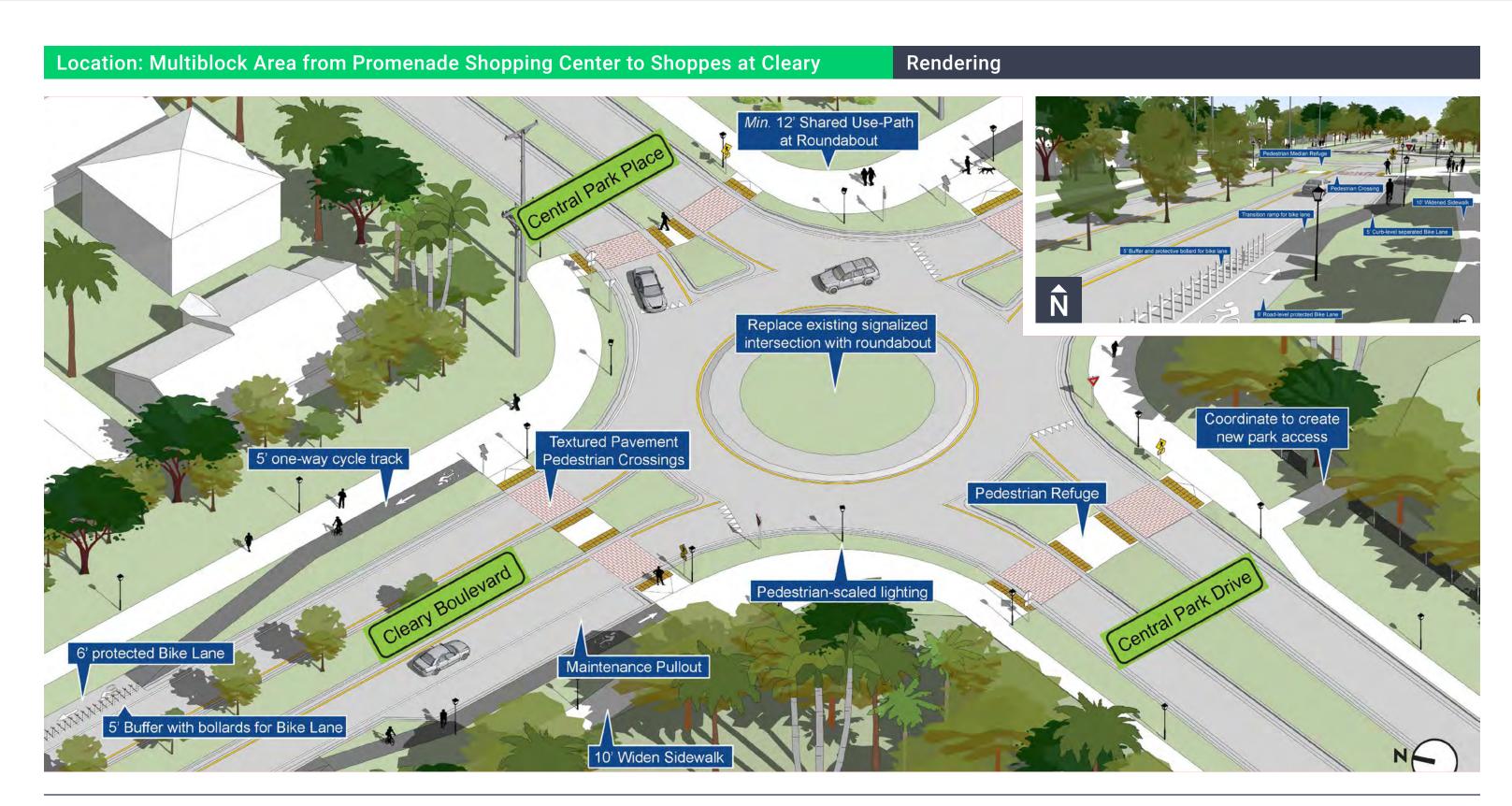


Location: Multiblock Area from Promenade Shopping Center to Shoppes at Cleary

Rendering











Location: Pine Island Rd

Observations / Missing Facilities:

Signalized intersection with 6-lane Arterial and 4-lane Collector

Additional 1 left and 1 right-turn lanes at intersection

- Crosswalks over all intersection legs, with standard markings
- NB / SB BCT stop 125 ft north of intersection. No shelter.
- The view of SB traffic from western leg is severely obstructed due to vegetation and wall in the NW corner and the intersection's curved alignment.
- Vehicles waiting to make a EB to NB left turn or EB to SB right turn

on yield frequently stop in or past crosswalk in order to see SB traffic.

- Pedestrians observed exercising
- Bicyclists observed riding on sidewalks
- SE corner under construction; to be redeveloped from office use to mixed-use (multifamily residential, retail, and office)

108 Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

42%

of injury crashes were caused by rear end collisions

32% of crashes resulted in injuries



Injury crash involved a bicyclist







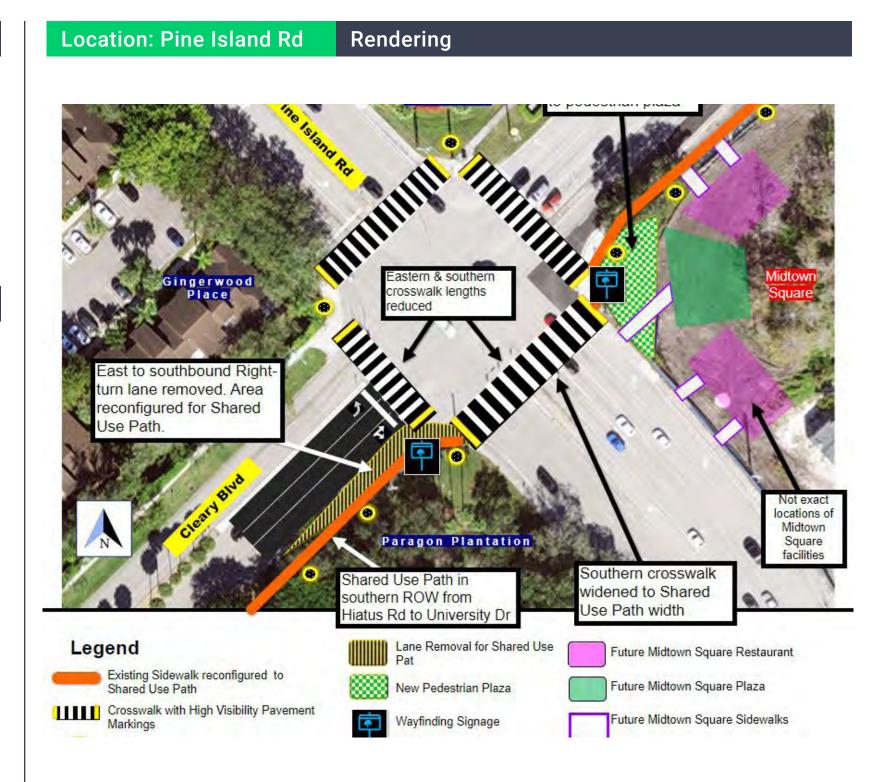


Objectives

- ✓ Address crash trends
- ✓ Improve pedestrian safety at intersection
- ✓ Enhance pedestrian visibility
- ✓ Provide pedestrian access and wayfinding to Midtown Plantation
- ✓ Provide corridor-wide shared use path in Cleary Blvd's southern ROW

Improvements

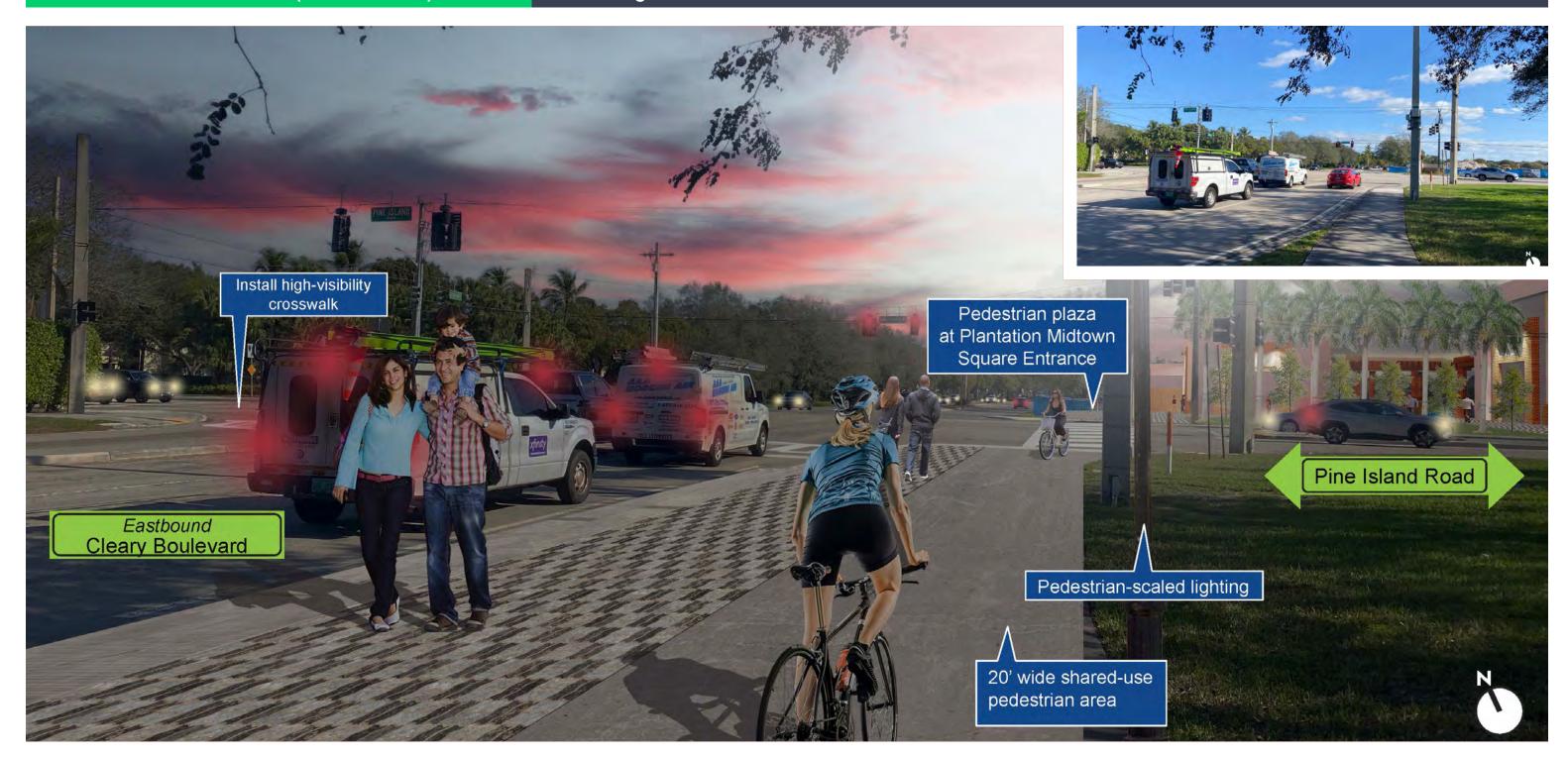
- Repurpose the eastbound-to-southbound right-turn lane to accommodate a shared use path on the south side of Cleary Boulevard
- Reconstruct the curb ramps on the southwest and southeast corners of the intersection to accommodate shared use path width and tighten the curb radii
- Install pedestrian-scale lighting
- Connect the sidewalk in the southeast corner of the intersection to the planned improvements at the Midtown Square development
- Refurbish all crosswalks with high-visibility pavement markings
- Improve pedestrian signalization
- Provide signage and pavement markings for shared use path





Location: Pine Island Rd (eastern view)

Rendering







Location: Midtown North (Multiblock Area)



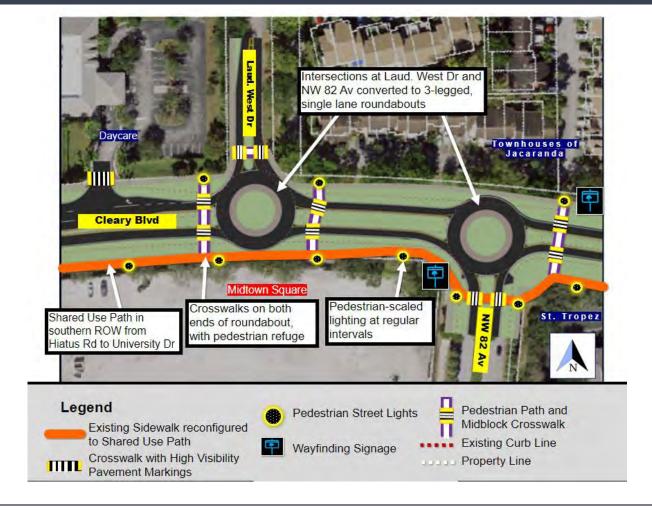
Objectvies:

- ✓ Address crash trends, especially left-turn crashes
- ✓ Reduce vehicular speeds while maintaining traffic flow
- ✓ Increase crosswalk opportunities along Cleary Blvd
- ✓ Provide bicycle facility on Cleary Blvd
- ✓ Enhance pedestrian visibility
- ✓ Provide pedestrian access and wayfinding to Midtown Plantation
- ✓ Provide corridor-wide shared use path in Cleary Blvd's southern ROW

Improvements

- Repurpose one travel lane in each direction from east of Pine Island Road to west of University Drive and provide separated bicycle lanes
- Install pedestrian-scale lighting at regular intervals and to illuminate crossings at roundabouts
- Reconstruct two intersections as single lane roundabouts with pedestrian crossings and bicycle lane ramps to the shared use path: (1) Lauderdale West Drive and (2) NW 82nd Avenue
- Reconstruct the sidewalk on the south side of Cleary Boulevard to shared use path standards
- Reconstruct ADA curb ramps at intersections and driveways to shared use path standards
- Provide signage and pavement markings for shared use path

Rendering





Focus Locations for Recommendations



Focus Location

Intersection at Broward BI: Recommendation Group #1



Intersection at SW 3rd St: Recommendation Group #1



Multiblock area from Greenway to SW 3rd St: Recommendation Group #1



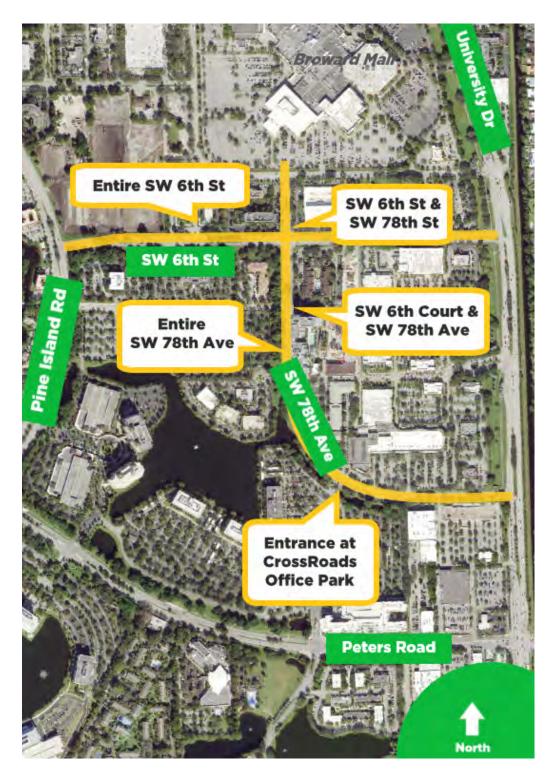




recommendations credp "	1: Safety Treatments and Mobility	· ·	Intersection at SW 3rd St	
Location	Intersection at Broward Blvd	SW 84th Av (from Greenway to SW 3rd St)		
High Visibility Pavement Markings	Yes	Yes, at new/designated Greenway Crossing	Yes, over SW 3rd St	
Ped-Scale Lighting	Yes	Yes, at/along Greenway	Yes, over SW 3rd St	
Crosswalk Signage: Advanced	Yes	Yes Yes, at new/designated Greenway Crossing		
Crosswalk Signage: In-Street			Yes	
Detectable Warning Surface		Yes, at new/designated Greenway Crossing	Yes	
Rectangular Rapid Flashing Beacons (RRFB)		Yes, at new/designated Greenway Crossing	Yes, over SW 3rd St	
Mast Arm Conversion	Yes			
Leading Pedestrian Interval (LPI)	Yes			
Left Turn Signal	Yes (84th Av)			
Other	Accessible Pedestrian Signals Realign eastern crosswalk / pavement markingsto allow for pedestrian refuge in the median	 Create Greenway crosswalk over SW 84th Av through the landscaped median (similar to SW 82nd Av) Signage for designated Greenway path over SW 84th Av Add Shared Use Path signage for sidewalks Install ADA required landing pad at bus stops Orient bus benches to face roadway 	Create pedestrian-only entrance to Pine Island Park in close proximity to SW 84th Av • Quick Build Mini-Roundabout	



Focus Locations for Recommendations



Focus Location

SW 6th St / Entire Roadway: Recommendation Group #2



SW 78th Av/ Entire Roadway: Recommendation Group #1



Intersection at SW 6th St & SW 78th Av: Recommendation Group #2





SW 78th Av – Entrance at Crossroads

Intersection at SW 6th Ct & SW 78th Av: **Recommendation Group #1**







Recommendations Group #1: Safety Treatments and Mobility Improvements						
Location	Intersection at SW 6th Ct	Entrance at Crossroads Office Park	SW 78th Av (Entire Roadway)			
High Visibility Pavement Markings	Yes, at new crosswalk over SW 78th Av		Yes, at all crosswalks over SW 78th Av			
Ped-Scale Lighting	Yes	Yes	Yes, at regular intervals			
Crosswalk Signage: Advanced	Yes		Yes, at all crosswalks			
Crosswalk Signage: In-Street	Yes	Yes	Yes, at mid-block crosswalks			
Detectable Warning Surface	Yes		Yes			
Rectangular Rapid Flashing Beacons (RRFB)	Yes, over SW 78th Av	Yes, over SW 78th Av	Yes, at mid-block crosswalks			
Mast Arm Conversion						
Leading Pedestrian Interval (LPI)						
Left Turn Signal						
Other	Add crosswalk over SW 78th Ave at northern end of intersection, with high-visibility pavement markings	• Quick-Build Mini Roundabout	• Radar Speed Limit Signs			





Location: SW 6th Street, from Pine Island Rd to University Dr

Observations / Missing Facilities:

- Sidewalks located directly at curb line or minimally set back
- No pedestrian-scale lighting, crosswalks, detectable warning pads
- No pedestrian entry to Pine Island Park (all entrances are via parking lots)
- Cut through traffic
- Excess capacity
- New residential development under construction

Objectives

- ✓ Improve pedestrian facilities
- ✓ Encourage multimodal transportation
- ✓ Traffic calming while maintaining traffic flow
- ✓ Minimize potential impacts from additional traffic from Midtown Plantation development

45

Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

78%

of injury crashes were caused by left turn collisions



31%

of crashes resulted in injuries



Injury Crash involved a bicyclist



Improvements

Near Term (0 - 2 years):

- Install detectable warning surfaces at all sidewalk / driveway connections
- Improve existing mid-block crosswalk over SW 6th St including:
 - Lighting
 - Signage
- New mid-block crosswalk over SW 6th St adjacent to Pine Island Park:
 - Curb Ramps
 - Detectable warning surfaces
 - · High-visibility pavement markings
 - Pedestrian Refuge Island
 - Lighting
 - Signage
- Create pedestrian-only entrance to Pine Island Park

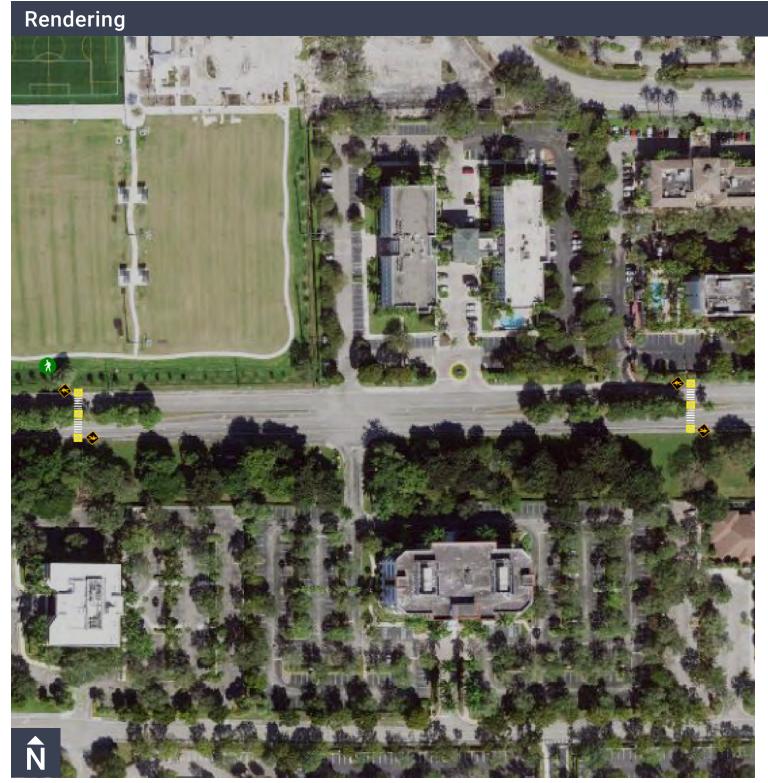
Short Term (2 - 5 years):

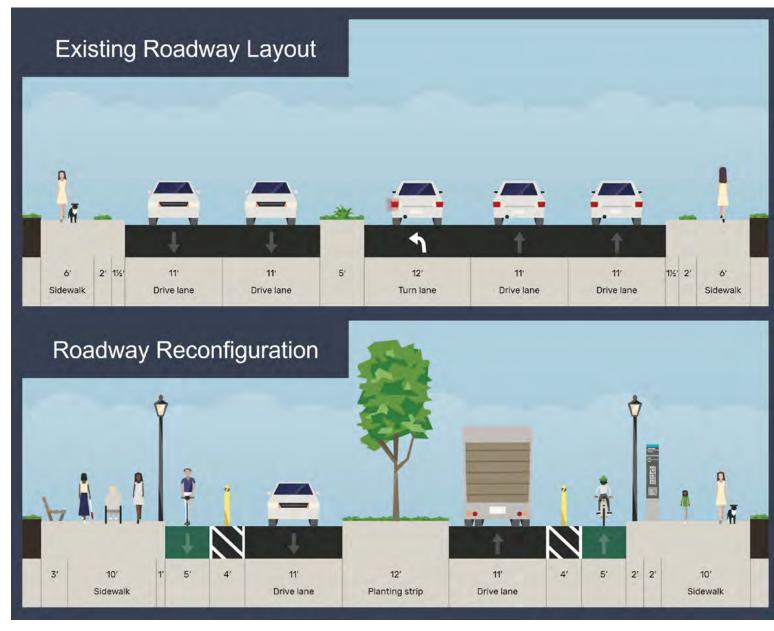
- Roadway reconfiguration from 4-lane to 2-lanes:
 - 10 ft wide sidewalks
 - 4 ft wide furnishing / pedestrian lighting zones
 - 5 ft wide bicycle paths separated from roadway by 4 ft wide barrier / raised curb
 - Two 11 ft wide travel lanes
 - 12 ft wide center turn lane
- Install RRFBs at midblock crosswalks

(Rendering is on the next page)

Plantation the grass is greener

Chapter 5: Recommendations: Roadways 4 & 5 sw 6th Street & SW 78th Avenue









Location: Intersection of SW 6th Street and SW 78th Avenue

Observations / Missing Facilities:

- No pedestrian-scale lighting, crosswalks, or detectable warning pads
- 4-way stop intersection
- Only intersection connecting traffic from University Dr to Pine Island and internal Midtown roads
- Minimal auto-oriented lighting
- Stormwater drains within crosswalk areas

Objectives

- ✓ Improve pedestrian facilities
- ✓ Encourage multimodal transportation
- ✓ Traffic calming
- ✓ Minimize potential impacts from additional traffic from
- ✓ Midtown Plantation developments

38 Crashes from Jan 2

Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

78%

crashes were caused by left turn/angle collisions



37%

of crashes resulted in injuries



2

Crashes resulted in Serious Injury



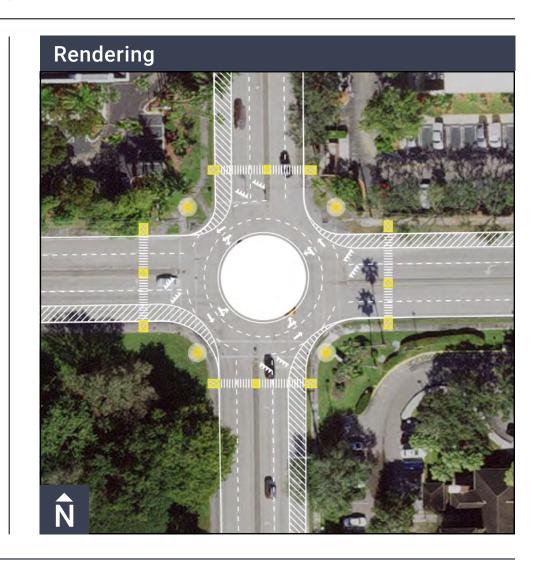
Improvements

Near Term (0 - 2 years):

- Install Pedestrian-Scale Lighting (all corners)
- Install signage: pedestrian crossing
- Refurbish crosswalk pavement markings to high-visibility pattern
- Install detectable warning surfaces at curb ramps

Short Term (2 – 5 years):

- Convert intersection to Roundabout
 (At current 4-lane configuration or with 2-lane reconfiguration on SW 6th Street)
- 2. Create new crosswalks including:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Pedestrian Refuge Island
 - Signage



Chapter 5: Recommendations: Roadway 6 Cypress Road



Focus Locations for Recommendations



Focus Location

Intersection at NW 70th Av: Recommendation Group #1



NW 69th Av (block south of Cypress Rd): Recommendation Group #1



Intersection at NW 69th Av: Recommendation Group #1



Multiblock area from Holloway Canal to E Acre Dr.: Recommendation Group #1



Chapter 5: Recommendations: Roadway 6 Cypress Road



Recommendations Group #1: Safety Treatments and Mobility Improvements						
Location	Intersection at NW 70th Av	Intersection at NW 69th Av	NW 69th Av (between Cypress Rd & Broward Bl)	Cypress Rd east of Holloway Canal		
High Visibility Pavement Markings	Yes	Yes	Yes, at new midblock crosswalk			
Ped-Scale Lighting	Yes	Yes	Yes, at new midblock crosswalk			
Crosswalk Signage: Advanced	Yes	Yes	Yes, at new midblock crosswalk			
Crosswalk Signage: In-Street		Yes (on NW 69th Av)	Yes, at new midblock crosswalk			
Detectable Warning Surface	Yes	Yes	Yes, at new midblock crosswalk	Yes, at Deicke Auditorium and at all intersections (with sidewalks)		
Rectangular Rapid Flashing Beacons (RRFB)		Yes (over NW 69th Av - south side)	Yes, at new midblock crosswalk			
Mast Arm Conversion	Yes					
Leading Pedestrian Interval (LPI)						
Left Turn Signal	Yes (Warrant Study)					
Other	• Refurbish curb ramps • Accessible Pedestrian Signals	• Quick-Build Mini Roundabout	Midblock crosswalk is needed at location of frequent jaywalking (north of entrance to Plantation Towne Square / Publix Shopping Center)	 Shared Lane Markings "Bicyclists may use road" signs Add in missing sidewalk on northern side of roadway Modular Speed Cushions Radar Speed Limit Signs 		



Focus Locations for Recommendations



Focus Location

Intersection at NW 46th Ave: Recommendation Group #2

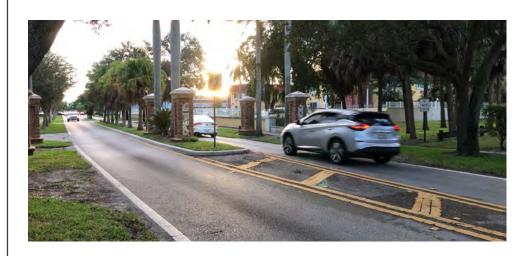


Intersection at NW 42nd Ave: Recommendation Group #2



Multiblock area from NW 45th Te to NW 43rd Av: Recommendation Group #2









Location: Multiblock area from NW 42nd Av to US 441

Observations / Missing Facilities:

- Intersection of NW 42nd Av: Missing / Low visibility crosswalks, no detectable warning mats, no left turn signals, no pedestrian-scaled lighting, and no wayfinding that NW 42nd Av leads directly to school
- · No pedestrian scaled lighting within multiblock area
- Heavy traffic during school's morning drop-off and afternoon pick up
- Bicyclists riding on sidewalks
- Cut through traffic

Objectives

- ✓ Improve intersection safety
- ✓ Reduce left turn collisions
- ✓ Reduce vehicle speeds on NW 5th St while maintaining traffic flow
- ✓ Reduce cut-through traffic on NW 5th St
- ✓ Increase area lighting
- ✓ Improve pedestrian facilities
- ✓ Enhance awareness of walk-to-school
- ✓ Encourage bicycle riding in roadway

41
Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

54%

of injury crashes were caused by left turn / angle collisions (27% by rear-end collisions)



of crashes resulted in injuries



Injury crash involved a pedestrian



Improvements

Near Term (0 - 2 years):

- At NW 42nd Avenue intersection refurbish crosswalk pavement markings to high-visibility pattern
- Improve signage for walk-to-school
- Install detectable warning surfaces at intersection curb ramps and all sidewalk / driveway connections
- Install pedestrian-scale lighting between NW 42nd Av and US 441
- Create new mid-block crosswalk between NW 42nd Av and US 441:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Signage RRFB

Short Term (2 - 5 years):

- 1. Roadway reconfiguration to chicane
- 2. Convert mid-block crosswalk to raised crosswalk

Rendering

NW 42nd Av





Location: Multiblock area from NW 45th Te to NW 43rd Ave

Observations / Missing Facilities:

- Traffic calming just east of NW 43rd Av is not effective
- No additional traffic calming
- Wide openings to side streets
- Heavy westbound traffic (leading to intersection at NW 46th Avenue)
- No wayfinding at NW 43rd Ave to indicate proximity to elementary school or nearby parks
- Bicyclists riding on sidewalks

Objectives

- ✓ Reduce collisions at side streets entrances
- ✓ Reduce vehicle speeds on NW 5th St
- ✓ Reduce cut-through traffic on NW 5th St
- ✓ Increase area lighting
- ✓ Improve pedestrian facilities
- ✓ Enhance awareness of walk-to-school
- ✓ Encourage bicycle riding in roadway

25
Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

44%

of injury crashes were caused by left turn / angle collisions



36%

of crashes resulted in injuries



22% of injury crast

of injury crashes occurred during nighttime



Improvements

Near Term (0 - 2 years):

- Install Speed Radar Feedback Signs
- Install modular speed cushions at mid-block locations
- Quick build chicane in general location of NW 45th Te
- · At side street entrances:
 - Refurbish pavement markings
 - Tighten intersection radii
- At NW 43rd Avenue intersection
 - Refurbish crosswalk pavement markings to high-visibility pattern
 - Install pedestrian-scale lighting at corners
 - Quick Build Mini-Roundabout

Short Term (2 – 5 years):

- 1. Roadway reconfiguration to chicane at location of quick-build chicane
- 2. Replace quick-build mini-roundabout with permanent mini roundabout.

Rendering

NW 48RD AVENUE

NW





Location: Intersection at NW 46th Avenue

Observations / Missing Facilities:

- No pedestrian-scale lighting
- Low-visibility crosswalks
- 4-way stop intersection
- Heavy traffic during morning rush hour

Objectives

- ✓ Improve intersection safety
- ✓ Improve intersection visibility / lighting
- ✓ Reduce vehicle speeds on NW 5th St and NW 46th Ave
- ✓ Reduce cut-through traffic on NW 5th St and NW 46th Ave
- ✓ Improve pedestrian facilities
- ✓ Enhance awareness of walk-to-school or nearby parks
- ✓ Encourage bicycle riding in roadway

44

Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

50%

of injury crashes were caused by left turn / angle collisions (27% by rear-end collisions)



32%

of crashes resulted in injuries



21%

of injury crashes occurred during nighttime



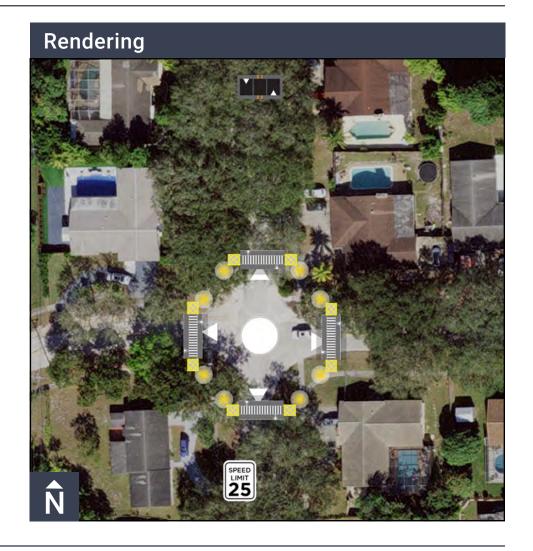
Improvements

Near Term (0 - 2 years):

- Install Speed Radar Feedback Sign south of intersection (for NB traffic)
- Install pedestrian-scale lighting at corners
- Install Quick Build Mini-Roundabout
- Install modular speed cushion north of intersection

Short Term (2 – 5 years):

- 1. Replace quick-build mini-roundabout with permanent mini-roundabout.
- 2. Install raised crosswalks on all intersection legs:
 - High-visibility pavement markings
 - Signage





Focus Locations for Recommendations



Focus Location

One-way traffic area (NW 9th Ct): Recommendation Group #2



Multiblock area adjacent to Jim Ward Community Center: Recommendation Group #2



Intersection at NW 6th Ct: Recommendation Group #2









Location: Multiblock area adjacent to Jim Ward Community Center

Observations / Missing Facilities:

- Several school bus stops in this location
- Bicyclists riding on sidewalks
- Speeding
- A lot of walkers using walking paths at Jim Ward Community Center
- Signalized crosswalk in front of Jim Ward Community Center with low visibility crosswalks

Objectives

- ✓ Reduce vehicle speeds on NW 46th Ave
- ✓ Reduce cut-through traffic on NW 46th Ave
- ✓ Reduce collisions at side streets entrances
- ✓ Increase area lighting
- ✓ Improve pedestrian facilities
- ✓ Enhance awareness of pedestrians
- ✓ Encourage bicycle riding in roadway

29Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

45%

of injury crashes were caused by left turn / angle collisions



41%

of crashes resulted in injuries



of injury crashes occurred during nighttime



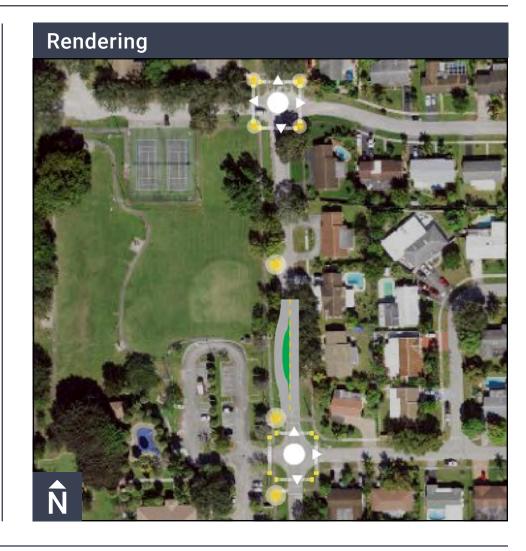
Improvements

Near Term (0 - 2 years):

- Install Speed Radar Feedback Sign south of NW 3rd St (for NB traffic)
- Install Crosswalk Signage In-Street
- Refurbish crosswalk pavement markings to high-visibility pattern
- Install Quick Build Mini-Roundabouts at NW 3rd Ct and NW 4th St
- Create new mid-block crosswalks south of NW 3rd St and north of NW 4th Ct:
 - Detectable warning surfaces
 - High-visibility pavement markings
 - Signage

Short Term (2 – 5 years):

- Roadway reconfiguration to chicane in right-of-way abutting JimWard Community Center
- Replace quick-build mini-roundabouts with permanent mini-roundabouts
- Convert mid-block crosswalks to raised crosswalks







Location: Intersection at NW 6th Ct

Observations / Missing Facilities:

- Intersection leads to rear entrance (pedestrian only access) to Plantation Elementary School
- No wayfinding for school or Park East Park
- No crosswalks
- Bicyclists riding on sidewalks
- Speeding

Objectives

- ✓ Reduce vehicle speeds on NW 46th Ave
- ✓ Reduce cut-through traffic on NW 46th Ave
- ✓ Improve intersection visibility / lighting
- ✓ Improve pedestrian facilities
- ✓ Enhance awareness of walk-to-school
- ✓ Encourage bicycle riding in roadway

12 Crashes from Jan 2015 to Dec 2021

Injury Crash Data / Trends

60%

of injury crashes were caused by rear-end collisions (40% by angle collisions)



50%

of crashes resulted in injuries



] njury c

Injury crash involved a pedestrian



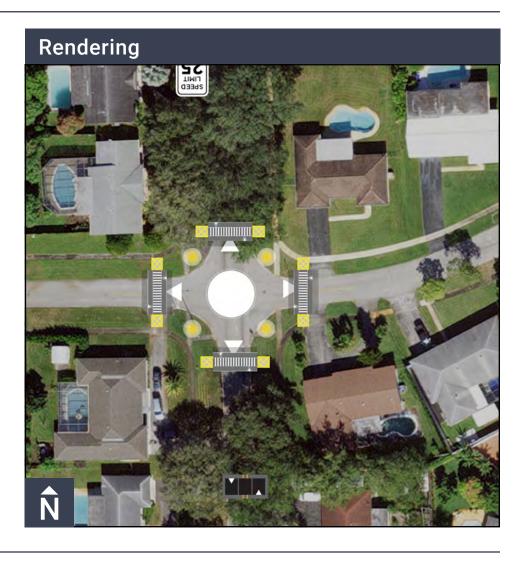
Improvements

Near Term (0 - 2 years):

- Refurbish crosswalk pavement markings to high-visibility pattern
- Install Crosswalk Signage In-Street
- Install Speed Radar Feedback Sign north of intersection (for SB traffic)
- Install pedestrian-scale lighting at corners
- Install Quick Build Mini-Roundabout
- Install modular speed cushion north of intersection

Short Term (2 – 5 years):

- 1. Replace quick-build mini-roundabout with permanent mini-roundabout.
- 2. Install raised crosswalks on all intersection legs
 - High-visibility pavement markings
 - Signage







Multiblock area on NW 9th Ct and NW 9th Dr

Observations / Missing Facilities:

- Roadway splits into one-way traffic patterns
- No crosswalks adjacent to the T-intersection
- Southbound cars speed up after turn onto NW 46th Av
- Bicyclists riding on sidewalks
- No wayfinding for connectivity to / from Greenway

Objectives

- ✓ Reduce vehicle speeds on NW 46th Ave
- ✓ Reduce cut-through traffic on NW 46th Ave
- ✓ Increase area lighting, including greenway lighting
- ✓ Improve pedestrian facilities
- ✓ Encourage bicycle riding in roadway



Intersection at NW 8th St, NW 46th Av, and NW 9th Dr (looking west), At this location, all west bound traffic is diverted north to NW 9th Ct.

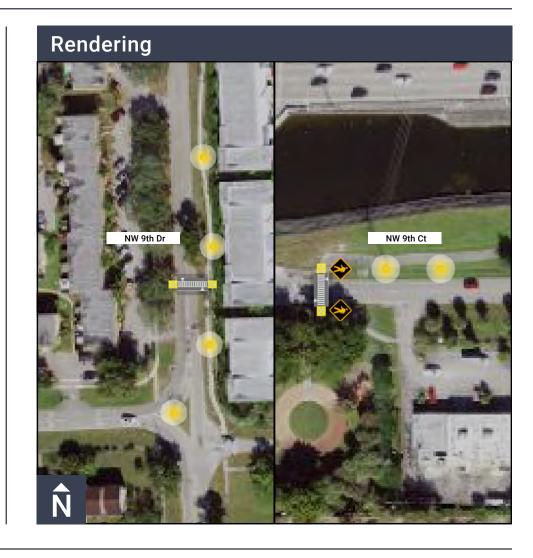
Improvements

Near Term (0 - 2 years):

- Install pedestrian-scale lighting within eastern right-of-way NW 46th Ave
- Install pedestrian-scale lighting in right of way abutting greenway along NW 9th Ct
- Install lighting in landscaped median at intersection of NW 46th Av and NW 8th St
- Install modular speed cushions midway between NW 8th St and NW 9th Ct, and on NW 9th Ct
- Refurbish existing crosswalks on NW 9th Court
- Install RRFB at existing crosswalks on NW 9th Court

Short Term (2 – 5 years):

- 1. Replace existing crosswalks on NW 9th Court with raised crosswalks:
 - High-visibility pavement markings
 - Signage





Focus Locations for Recommendations









Location: Sunrise Blvd

Observations / Missing Facilities:

- Signalized intersection with two 6-lane divided highways
 - Additional 2 left and 1 right turn lanes at intersection
 - U-turns prohibited
- High visibility markings on all crosswalks
- BCT stops set approximately 175 to 275 ft from intersection
- Many transit riders, including high school students and senior citizens
- Jaywalking in adjacency to BCT Stops
- Pedestrians utilizing crosswalks outside of Pedestrian Phase

- Many bicyclists riding on sidewalks
- Vehicles turning right during Pedestrian Phase and pedestrians in crosswalks
- NW corner: Above-ground utility located directly at NW corner:
 - Sidewalk is set far back and pedestrians walking in street
 - Significantly restricts visibility for EB to SB right-turn vehicles
- SW corner: Right-turn vehicles stopping in western crosswalk due to restricted visibility
- SE corner: adjacent property redeveloped with retail and office uses

272Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

57%

of injury crashes were caused by rear-end collisions



24%

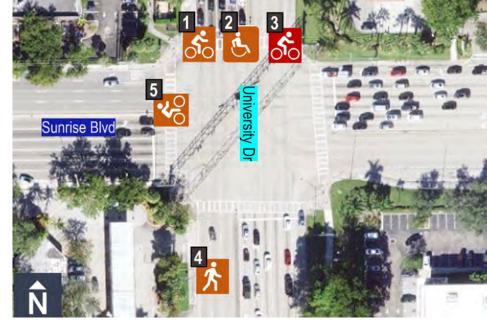
of crashes resulted in injuries



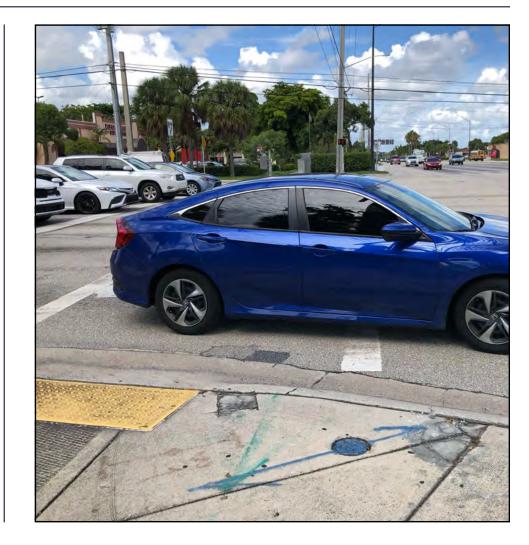
70

Serious Injury/Fatality crash involved a pedestrian





- Serious Injury: Jan. 2016; Bicycle; Daytime; Bicyclist fault; In crosswalk
- Injury: July 2018; Motorized Wheelchair; Daytime; Unknown fault; In crosswalk
- Fatality: May 2016; Bicycle; Nighttime; Unknown fault; In crosswalk
- Injury: June 2019; Pedestrian; Nighttime; Pedestrian fault; Jaywalking south of intersection
- Injury: April 2021; Bicycle; Daytime; Driver fault; In crosswalk





Objectives

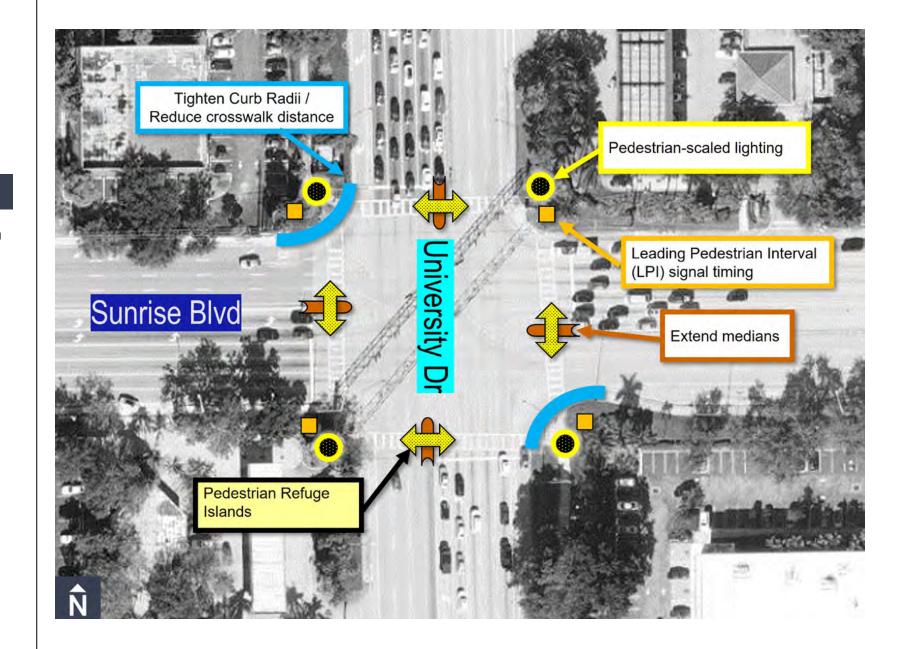
- ✓ Address crash trends
- ✓ Reduce nighttime crashes
- ✓ Improve pedestrian safety at intersection
- ✓ Improve walkability for pedestrians accessing adjacent land uses and bus stops/transfers
- ✓ Reduce crossing distances by tightening the intersection.
- ✓ Manage vehicular turning speeds

Improvements

- Reconstruct the southeast and northwest corner curb radii to match the existing minimum radius of 25 feet, which currently exists on the northeast and southwest corners
- Reconstruct shorter crosswalks as a result of tightening the intersection radii
- Upgrade all signalized crosswalks to FDOT standard special emphasis crosswalks
- Extend existing concrete traffic separators to accommodate the revised crosswalk alignments including curb cuts/pedestrian refuge
- Install pedestrian-scale lighting near the intersection and driveways adjacent to the intersection
- Install leading pedestrian interval (LPI) signal timing
- Request FDOT identify improvements to reduce excessive nighttime crashes

Location: Sunrise Blvd

Rendering







Location: N. Marcano Blvd

Observations / Missing Facilities:

Signalized intersection with 6-lane divided highway and local roadway

- University Dr. Additional 1 left and 1 right-turn lanes at intersection
- N. Marcano Bl: 1 lane divided local roadway. Terminates just west of intersection at frontage road (Access Road). Additional 1 left and 1 right-turn lanes at intersection

Crosswalks:

- 1 crosswalk over eastern leg
- No crosswalks over University Dr
- Nearest University Dr crosswalk to north is 1,850 ft

- Nearest University Dr crosswalk to south is 3,300 ft
- NB BCT stop 125 ft north of intersection. No shelter.
- · Sidewalks:
 - No sidewalk in western ROW
 - · No sidewalk in eastern ROW, south of intersection
 - Sidewalks are located within adjacent city-owned frontage roads
 - No paved access to/from western side of intersection to sidewalks in frontage road (Access Rd)
 - No crosswalk to/from SE corner sidewalk to sidewalks within frontage road (NW 79th Te)
- NE corner: adjacent property redeveloped with office uses

48
Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

62%

of injury crashes were caused by rear-end collisions



27%

of crashes resulted in injuries

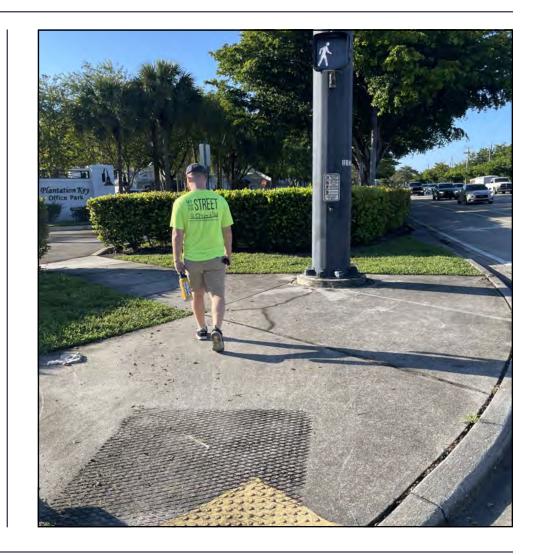


54

of injury crashes occured during nighttime









Objectives

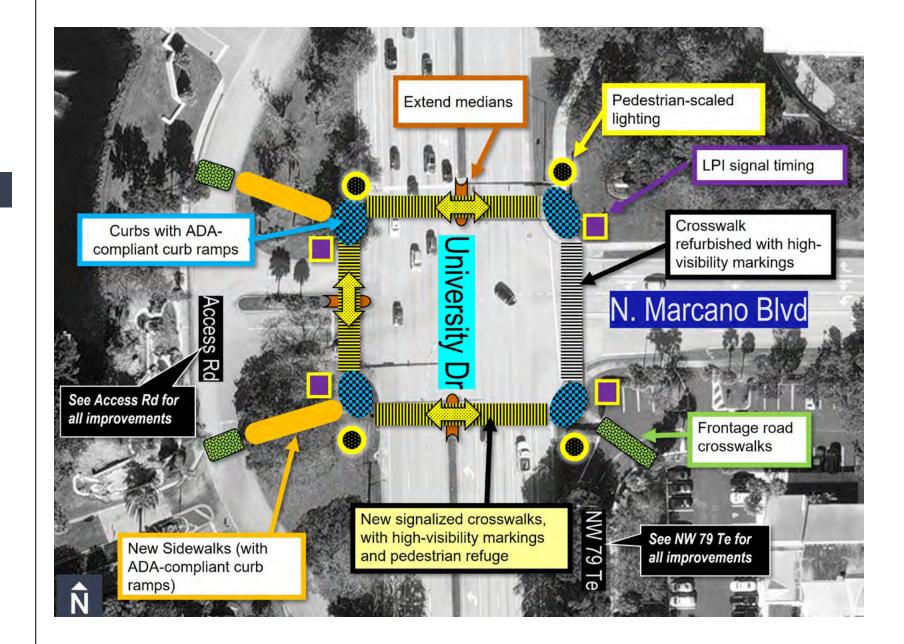
- ✓ Reduce distance between crosswalks on University Dr
- ✓ Provide access from sidewalks located on frontage roads (Access Rd and NW 79th Te) to intersection (and proposed crosswalks).
- ✓ Enhance pedestrian visibility
- ✓ Improve access to BCT bus stops

Improvements

- Construct signalized pedestrian crossings on the north, south, and west of this signalized intersection including special emphasis crosswalk markings, countdown timers, and ADA compliant curb ramps
- Reconstruct existing curbs on the east side to accommodate new signalized pedestrian crossings
- Construct new curb ramps on the west side
- Build new sidewalks through the "teardrop" landscaping areas to connect to existing sidewalk on the West Side Access Road
- Install pedestrian-scale lighting near the intersection

Location: N. Marcano Blvd

Rendering







Location: S. Marcano Blvd

Observations / Missing Facilities:

- Un-signalized / Directional median prohibits left-turn out of S. Marcano Blvd
- S. Marcano Blvd terminates just west of intersection at frontage road (Access Road)
- 1 crosswalk over eastern leg
- NB and SB BCT stops located 150 ft south of intersection.
- Marcano Estates Park located approximately 600 feet east of intersection
- SE corner: Preschool

- · Sidewalks:
 - No sidewalk in western ROW
 - No sidewalk in eastern ROW, north of intersection
 - Sidewalks are located within adjacent city-owned frontage roads
 - No paved access to/from western side of intersection to sidewalks in frontage road (Access Rd)
 - Connection to sidewalk in eastern frontage road (NW 79 Te) is set far back from intersection and not marked as public accessway

15 Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

71% of injury crashes were caused by rear-end collisions



47%

of crashes resulted in injuries



43% of injury crashes occured on wet roads









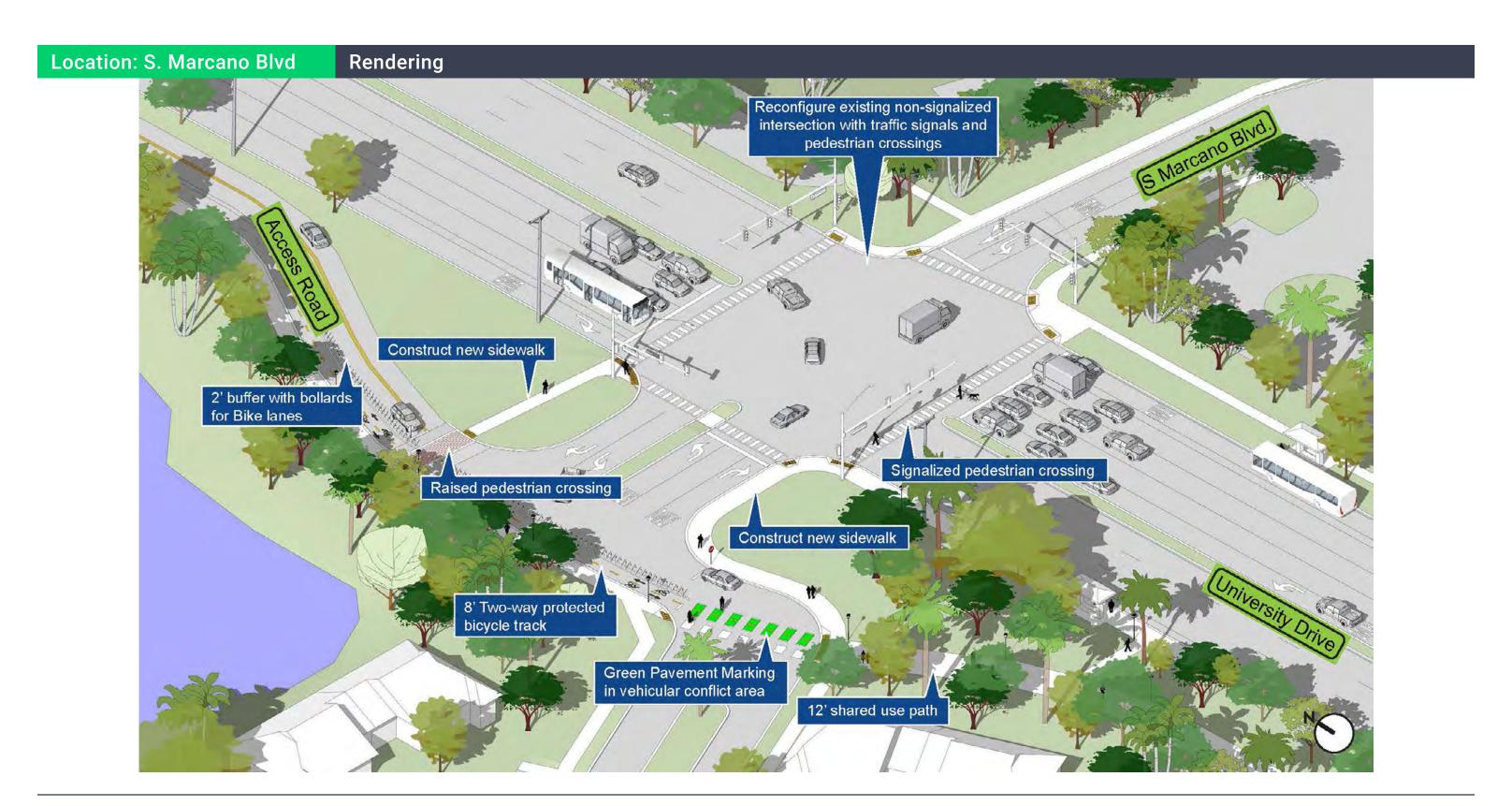
Objectives

- ✓ Reduce distance between crosswalks on University Dr
- ✓ Reduce U-turn movements
- ✓ Improve traffic flow
- ✓ Provide access from sidewalks located on frontage roads (Access Rd and NW 79th Te) to intersection (and proposed crosswalks).
- ✓ Enhance pedestrian visibility
- ✓ Improve access to BCT bus stops

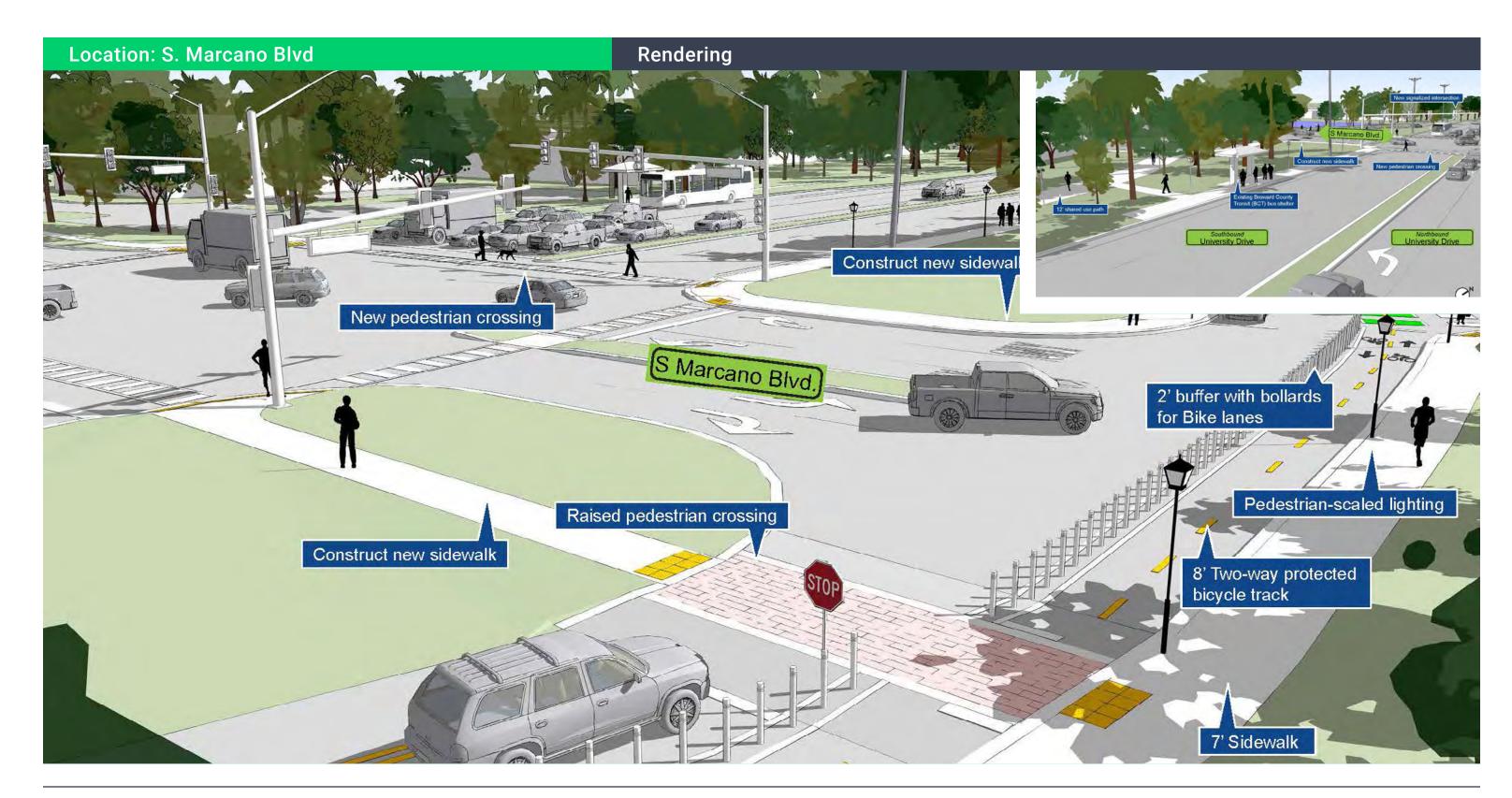
Improvements

- · Reconstruct existing directional median opening intersection into a fully signalized intersection
- Add signalized pedestrian crosswalks across all four legs of the intersection
- Reconstruct existing curbs to accommodate new signalized pedestrian crossings
- Construct new curb ramps on the west side
- Build new sidewalks through the "teardrop" landscaping areas to connect to existing sidewalk on the West Side Access Road
- Install leading pedestrian interval (LPI) signal timing
- Install pedestrian-scale lighting near the intersection
- Reconfigure sidewalks in southeast ROW to shared use path













Location: Cleary Blvd

Observations / Missing Facilities:

- Signalized intersection with 6-lane divided highway and local roadway
 - University Dr SB: Additional 1 left and 1 right-turn lanes at intersection
 - University Dr NB: Additional 2 left and 1 right-turn lanes at intersection
 - Cleary Bl: 2-lane divided local roadway terminates at eastern end of intersection. Additional 1 left at intersection
 - NW 79th Te: Private driveway / entrance to multifamily development
- NB BCT stop located at intersection. No shelter.
- SB BCT Stop located 100 ft south of Intersection.
- No crosswalk on northern leg. Steep slope on northern leg may prohibit

new crosswalk

- The crosswalk on southern leg is the first crosswalk south of Sunrise Blvd (approx. 1 mile)
- All crosswalks have standard markings
- Sidewalks north of intersection are located directly at curb
- Deep stormwater ditch in NW and NE city-owned swales
- Bicyclists riding on sidewalk
- Exercising pedestrians
- Intersection is northern entry to Midtown Plantation

103

Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

63%

of injury crashes were caused by rear-end collisions



23%

of crashes resulted in injuries

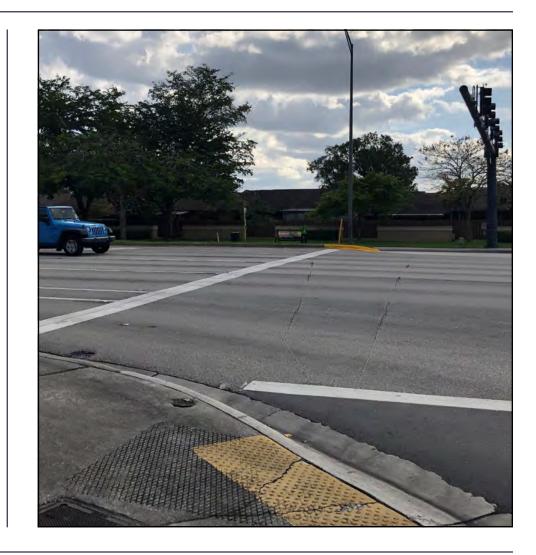


38%

of injury crashes occured during nighttime









Objectives

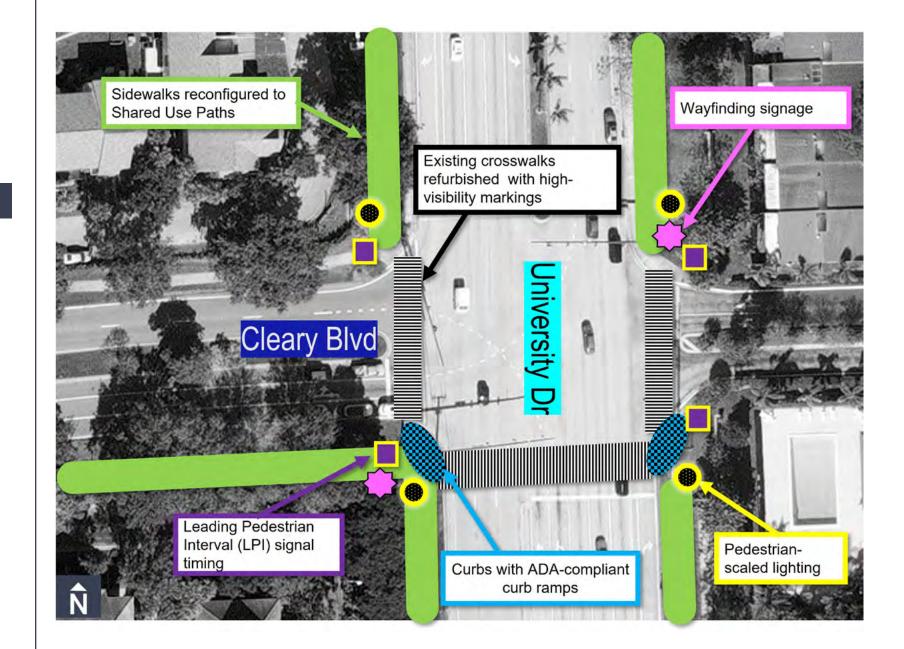
- ✓ Provide north/south pedestrian connectivity and wayfinding to Midtown Plantation
- ✓ Provide east/west pedestrian connectivity and wayfinding to community facilities along Cleary Blvd
- ✓ Enhance pedestrian visibility
- ✓ Improve access to BCT bus stops
- ✓ Provide low-stress bicycle facilities
- ✓ Minimize jaywalking

Improvements

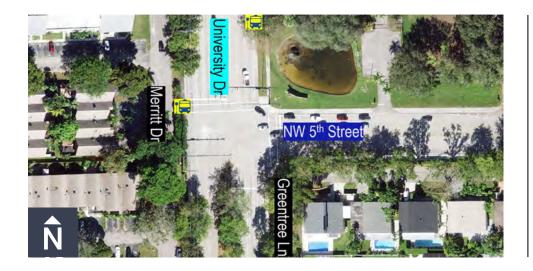
- Upgrade all signalized crosswalks to FDOT standard special emphasis crosswalks
- Install leading pedestrian interval (LPI) signal timing
- Install pedestrian-scale lighting near the intersection
- Install signage to encourage pedestrians to cross University Drive on the south leg of the intersection
- Reconfigure sidewalks in eastern and western ROW to Shared Use Path

Location: Cleary Blvd

Rendering







Location: NW 5th Street

Observations / Missing Facilities:

- Signalized T-intersection with 6-lane divided highway and local roadway
 - University Dr SB: Additional 2 left-turn lanes at intersection
 - University Dr NB: Additional 1 right-turn at intersection
 - U-turns prohibited on University Dr
 - NW 5 St: 2-lane divided local roadway terminates at western end of intersection. Additional 1 left at intersection.
- Bicyclists predominantly riding on sidewalks
- SB BCT stop located at intersection. No shelter.
- NB BCT stop located 165 ft north of intersection. No shelter.

- No sidewalk within western ROW
 - Sidewalk is located within the frontage road (Merritt Dr)
 - No crosswalk to/from the frontage road sidewalk
- · Crosswalks:
 - No crosswalk over southern leg
 - Northern crosswalk's western terminus is raised median with no crosswalk to sidewalk in western frontage road (Merritt Drive)
 - All crosswalks are low-visibility
- NE corner: Places of worship, including daycare and school

78Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

52%

of injury crashes were caused by rear-end collisions



31%

of crashes resulted in injuries



30%

of injury crashes occured on wet roads









Objectives

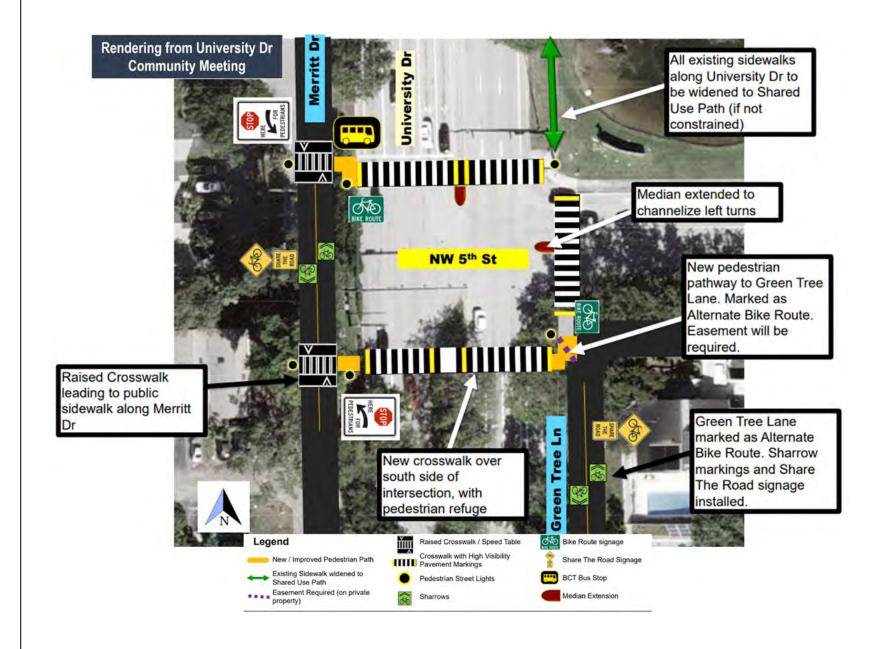
- ✓ Address crash trends
- ✓ Provide pedestrian connectivity and wayfinding to Midtown Plantation
- ✓ Provide access from sidewalk located on western frontage road (Merritt Dr) to intersection.
- ✓ Enhance pedestrian visibility
- ✓ Improve access to BCT bus stops
- ✓ Provide low-stress bicycle facilities in adjacent frontage roads
- ✓ Increase crosswalk opportunities along University Dr

Improvements

- Construct signalized pedestrian crossing on the south leg of this signalized intersection including special emphasis crosswalk markings, countdown timers, and ADA-compliant curb ramps
- Upgrade all signalized crosswalks to FDOT standard special emphasis crosswalks
- Install pedestrian-scale lighting near the intersection
- Install leading pedestrian interval (LPI) signal timing
- Extend existing concrete traffic separators to accommodate crosswalk alignments including curb cuts/pedestrian refuge
- Construct sidewalks and raised crosswalks to connect to Merritt Drive and Greentree Lane on the south side

Location: NW 5th Street

Rendering







Location: NW 3rd Street

Observations / Missing Facilities:

- Signalized T-intersection with 6-lane divided highway and private driveway
 - University Dr SB: Additional 1 right-turn lane at intersection. U-turns prohibited.
 - University Dr NB: Additional 1 left-turn lane at intersection
 - NW 3 St: private driveway / entrance to mixed-use development (Plantation Walk). Terminates at eastern end of University Dr. 2 left and 1 right-turn lanes at intersections.
- Intersection is former site of Fashion Mall, vacant for 5+ years.

- SB BCT stop located 175 ft south of intersection. No shelter.
- No sidewalk within western ROW, north of intersection. Sidewalk is located within the western frontage road (Merritt Dr) but there is no crosswalk to the frontage road sidewalk.
- No crosswalk over northern leg Jaywalking observed
- All crosswalks are low-visibility
- Dedicated pedestrian access to abutting eastern frontage road (Greentree Ln) is in very poor condition
- Bicyclists predominantly riding on sidewalks

?? Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

??%

of injury crashes were caused by rear-end collisions



??%

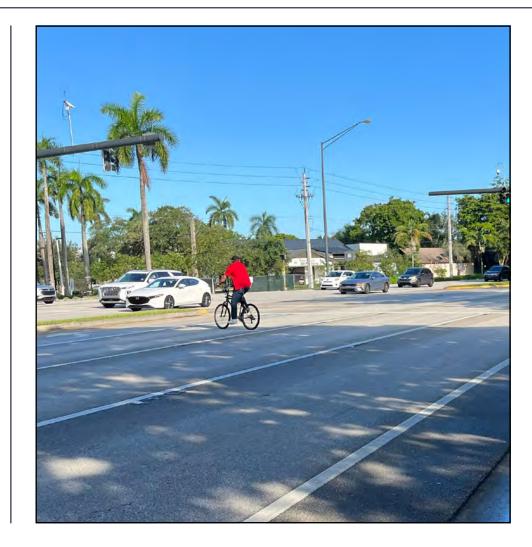
of crashes resulted in injuries



??%

of injury crashes occure during nighttime









Objectives

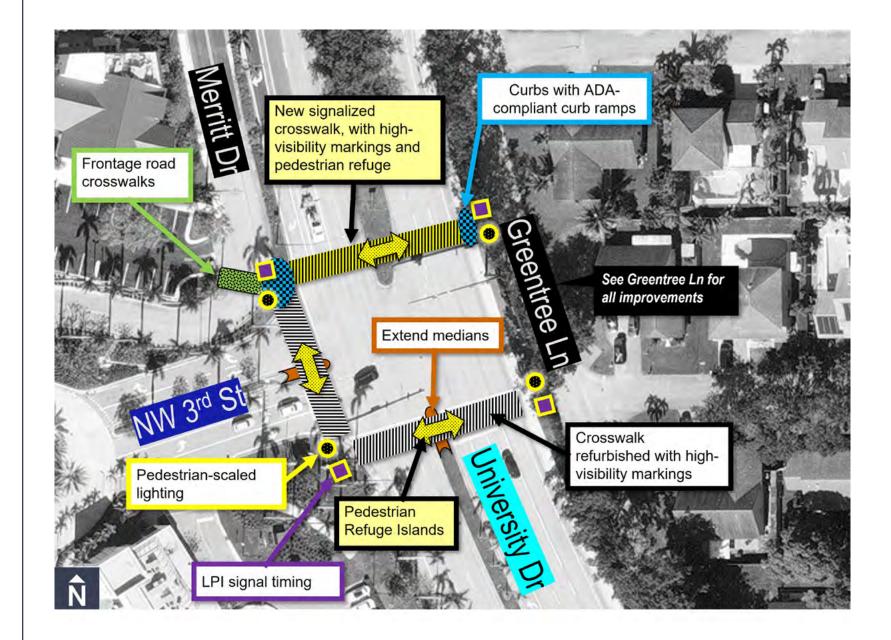
- ✓ Provide pedestrian connectivity and wayfinding to Midtown Plantation
- ✓ Provide access from sidewalk located on western frontage road (Merritt Dr) to intersection.
- ✓ Enhance pedestrian visibility
- ✓ Improve access to BCT bus stops
- ✓ Provide low-stress bicycle facilities in adjacent frontage roads
- ✓ Increase crosswalk opportunities along University Dr

Improvements

- Upgrade all signalized crosswalks to FDOT standard special emphasis crosswalks
- Construct signalized pedestrian crossing on the north leg of this signalized intersection including special emphasis crosswalk markings, countdown timers, and ADA-compliant curb ramps
- Install pedestrian-scale lighting near the intersection
- Install leading pedestrian interval (LPI) signal timing
- Construct sidewalk and crosswalk to connect to Merritt Drive and Greentree Lane
- Extend existing concrete traffic separators to accommodate crosswalk alignments including curb cuts/pedestrian refuge

Location: NW 3rd Street

Rendering







Location: NW 2nd Street

Observations / Missing Facilities:

- Signalized with 6-lane divided highway and private driveway
 - University Dr SB: Additional 1 right-turn lane at intersection. U-turns prohibited.
 - University Dr NB: Additional 1 left-turn lane at intersection
 - NW 2 St: private driveway / entrance to mixed-use development (Plantation Walk) and Place of Worship. Additional 1 left and 1 right-turn lanes at intersections.
- Intersection is former site of Fashion Mall, vacant for 5+ years.

- Bicyclists predominantly riding on sidewalks
- SB BCT stop located 150 ft south of intersection.
- No crosswalk over northern leg Jaywalking observed
- All crosswalks are low-visibility
- Porkchop island located in eastern leg; both eastern and southern crosswalks connect to porkchop
- No sidewalks on NW 2nd St, east of intersection

43Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

64% of injury crashes

of injury crashes were caused by rear-end collisions



31%

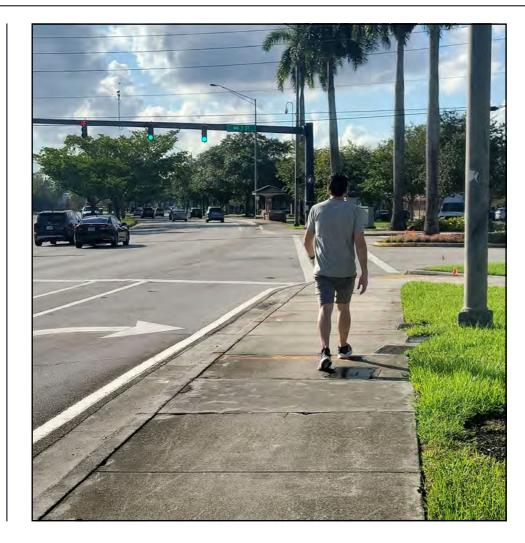
of crashes resulted in injuries

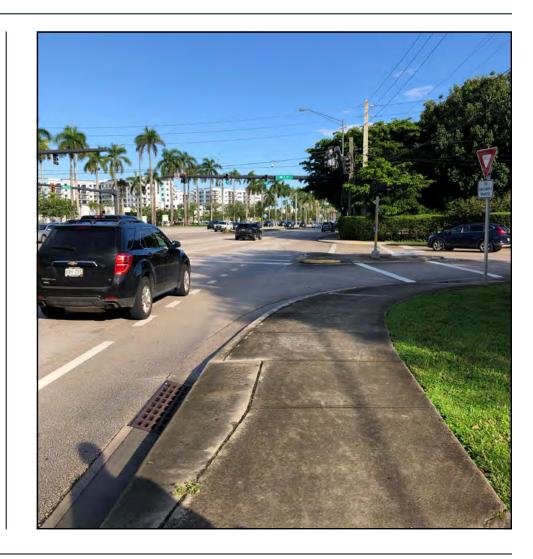


64%

of injury crashes occure during nighttime









Objectives

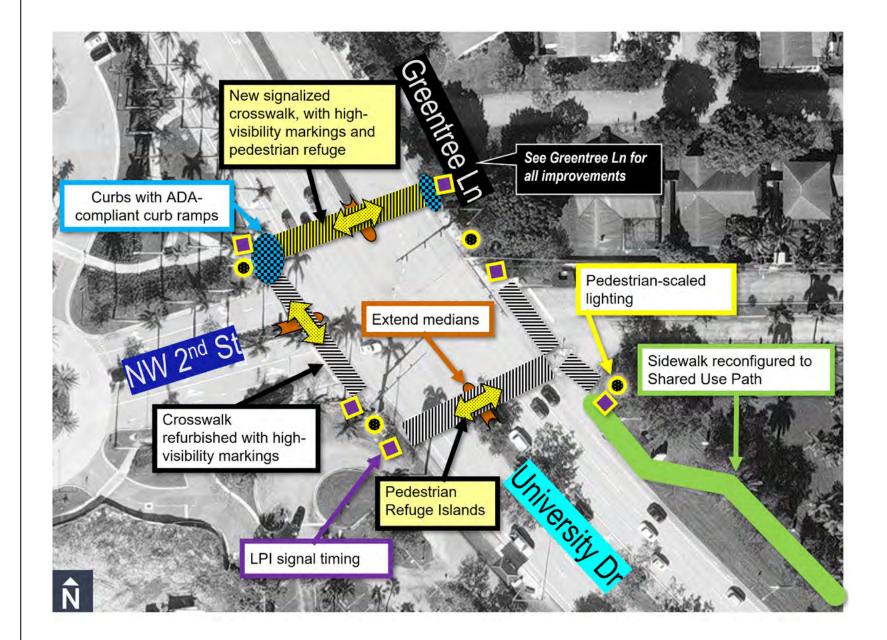
- ✓ Address crash trends
- ✓ Provide pedestrian connectivity and wayfinding to Midtown Plantation
- ✓ Provide access from sidewalk located on western frontage road (Merritt Dr) to intersection.
- ✓ Enhance pedestrian visibility
- ✓ Improve access to BCT bus stops
- ✓ Provide low-stress bicycle facilities in adjacent frontage roads
- ✓ Increase crosswalk opportunities along University Dr

Improvements

- Upgrade all signalized crosswalks to FDOT standard special emphasis crosswalks
- Construct signalized pedestrian crossing on the north leg of this signalized intersection including special emphasis crosswalk markings, countdown timers, and ADA-compliant curb ramps
- Install pedestrian-scale lighting near the intersection
- Install leading pedestrian interval (LPI) signal timing
- Construct sidewalk and crosswalk to connect to Merritt Drive and Greentree Lane
- Extend existing concrete traffic separators to accommodate crosswalk alignments including curb cuts/pedestrian refuge

Location: NW 2nd Street

Rendering







Location: Broward Blvd

Observations / Missing Facilities:

- Signalized intersection with two 6-lane divided highways
 - Additional 2 left and 1 right turn lanes at intersection
- High visibility markings on all crosswalks
- BCT stops set approximately 175 to 275 ft from intersection
- Most pedestrian activity observed in northern and western crosswalks
- Jaywalking in adjacency to BCT Stops
- Many transit riders observed
- No sidewalk in southern ROW, west of intersection. The sidewalk is located

south of canal. Pedestrians observed walking in paved area, abutting roadway.

- Pedestrians utilizing crosswalks outside of Pedestrian Phase
- Many bicyclists riding on sidewalks
- Vehicles turning right during Pedestrian Phase and pedestrians in crosswalks
- Intersection is entryway to Midtown Plantation
- SW Corner: Broward Mall anticipated redevelopment
- NW Corner: Broward County Government Center
- Construction underway for FDOT project 432066-9-52-01, 02, and 03

489

Crashes from Jan 2016 to Dec 2021

Injury Crash Data / Trends

65%

of injury crashes were caused by rear-end collisions



24%

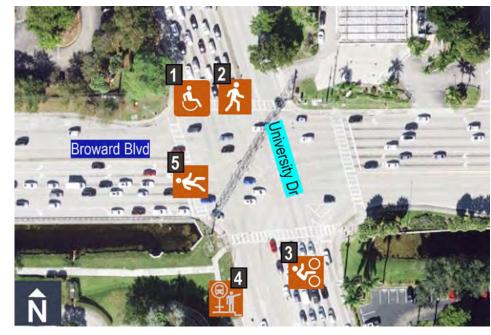
of crashes resulted in injuries



39%

of serious injury/fatality crashes occured during nighttime





- Serious Injury: Jan. 2016; Bicycle; Daytime; Bicyclist fault; In crosswalk
- Injury: July 2018; Motorized Wheelchair; Daytime; Unknown fault; In crosswalk
- Fatality: May 2016; Bicycle; Nighttime; Unknown fault; In crosswalk
- Injury: June 2019; Pedestrian; Nighttime; Pedestrian fault; Jaywalking south of intersection
- Injury: April 2021; Bicycle; Daytime; Driver fault; In crosswalk







Objectives

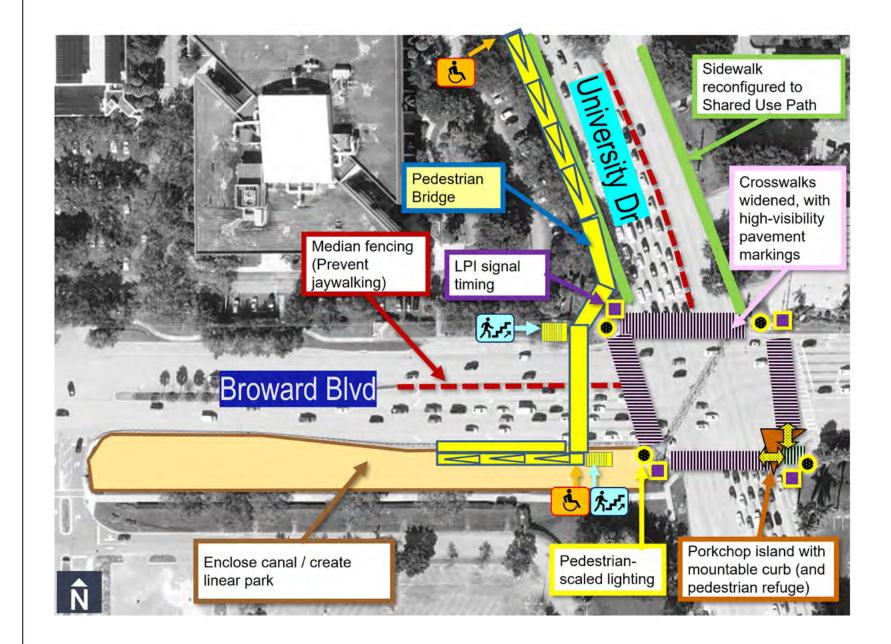
- ✓ Address crash trends
- ✓ Improve pedestrian safety at intersection
- ✓ Reduce jaywalking
- ✓ Improve walkability for pedestrians accessing adjacent land uses and bus stops/transfers
- ✓ Improve overall Midtown Plantation cohesion
- ✓ Provide gateway feature for entrance to Midtown Plantation
- ✓ Slow the speed of turning vehicles at the intersection

Improvements

- Enclose the canal on the south side of Broward Blvd to create a linear park greenway between the Broward Mall driveway and University Drive
- Construct a pedestrian bridge across Broward Boulevard on the west side of the intersection
- Install fencing in the median on the west side of the intersection between the Broward Mall driveway and University Drive
- Upgrade all signalized crosswalks to FDOT standard special emphasis crosswalks
- · Widen crosswalk widths to 15 feet
- Install pedestrian-scale lighting near the intersection
- Install leading pedestrian interval (LPI) signal timing
- Construct a porkchop island with mountable curb on the southeast corner of the intersection

Location: Broward Blvd

Rendering















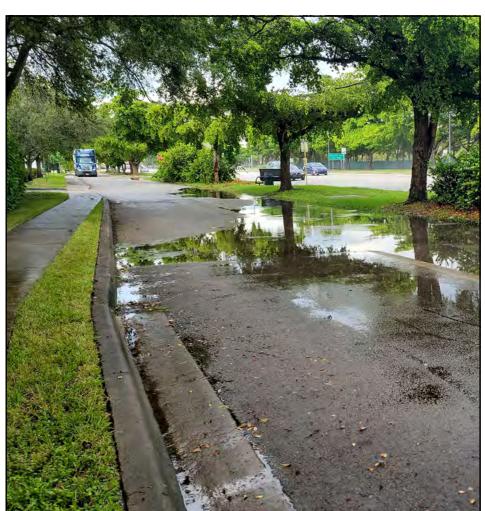
Location: Access Rd (frontage road)

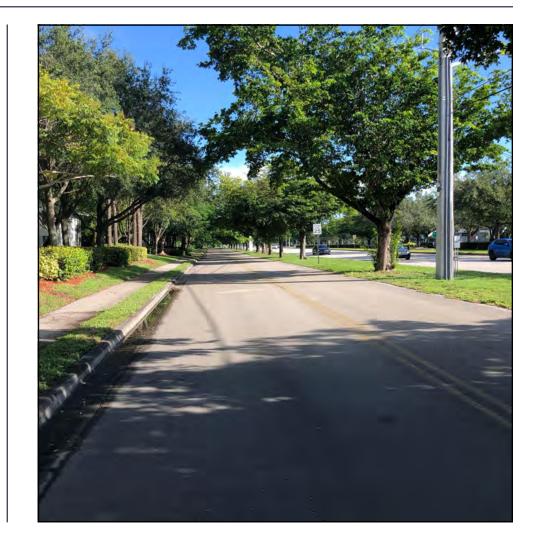
Observations / Recommendations:

- 40 ft wide city-owned ROW dedicated via Plat
- Located along the west side of University Dr, from NW 17th Ct to C-12 canal
- South of S. Marcano Blvd, the roadway ends and continues as a sidewalk only.
- Two 12-ft travel lanes
- Vehicular access from University Dr at two locations: 1701 block, N.
- · Marcano Blvd (signalized), and S. Marcano Blvd
- Vehicular access to 3 large multifamily communities

and 2 commercial properties.

- 5 ft wide sidewalk only in western portion of property
- The sidewalk is disconnected; no curbs or crosswalks at driveways
- There are no sidewalks in University Dr western ROW throughout the length of Access Rd. The Access Rd sidewalk is only sidewalk.
- There are no crosswalks from BCT stops fronting University Dr to theAccess Rd sidewalk
- No pedestrian connectivity from intersections at N. Marcano Bvld and S.
- Marcano Blvd to the Access Rd sidewalk
- No street lighting
- Property at corner NW 17th Ct recently redeveloped as mixed-use.







Objectives

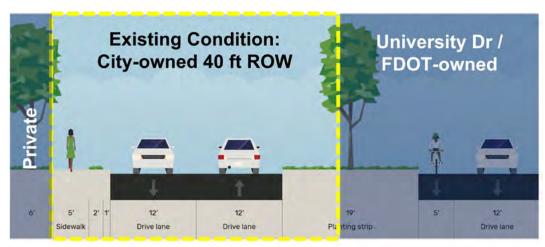
- ✓ Provide alternate bike route
- ✓ Improve city-owned property.
- ✓ Encourage north/south multimodal transportation
- ✓ Provide a continuous sidewalk, including ADA-compliant curb ramps and crosswalks
- ✓ Provide safe and visible access to BCT Stops
- ✓ Provide pedestrian access to N. Marcano Blvd and S. Marcano Blvd and the planned signalized crosswalks (east/west multimodal connectivity)

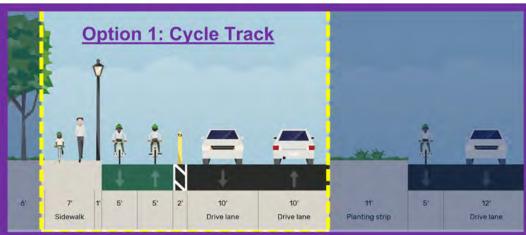
Improvements

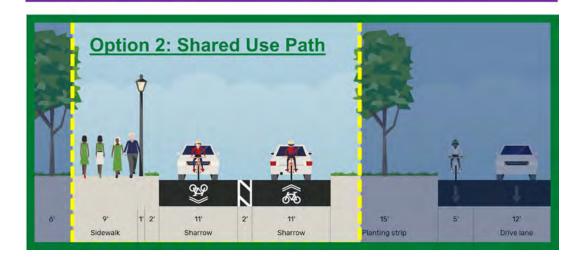
- Pedestrian Scale Lighting at regular intervals
- · Midblock crosswalks (Raised) leading to BCT Bus Stops
- Midblock crosswalks (Raised) connecting to new sidewalks at N. Marcano Blvd and S. Marcano Blvd intersections
- Alternate Bicycle Route Signage at access points at NW 17th Ct, C-12 Canal,
 N. Marcano and S. Marcano Blvd
- Reconfigure existing sidewalk located between of S. Marcano Blvd and C-12 Canal to Shared Use Path
- 2 Options for Roadway Reconfiguration between S. Marcano Blvd and NW 17 Ct
- Option 1: Cycle Track
 - Widen pavement to eastern property line
 - Narrow Drive Lanes width to 10 ft, shift to eastern property line
 - Widen sidewalk to existing curb line
 - 12 ft wide protected cycle track abutting sidewalk
- Option 2: Shared Use Path
 - Restripe Drive Lanes width to 11 ft, with 2 ft marked median
 - Sharrow Pavement Markings
 - · Widen sidewalk to Shared Use Path 12 ft width

Location: Access Rd (frontage road)

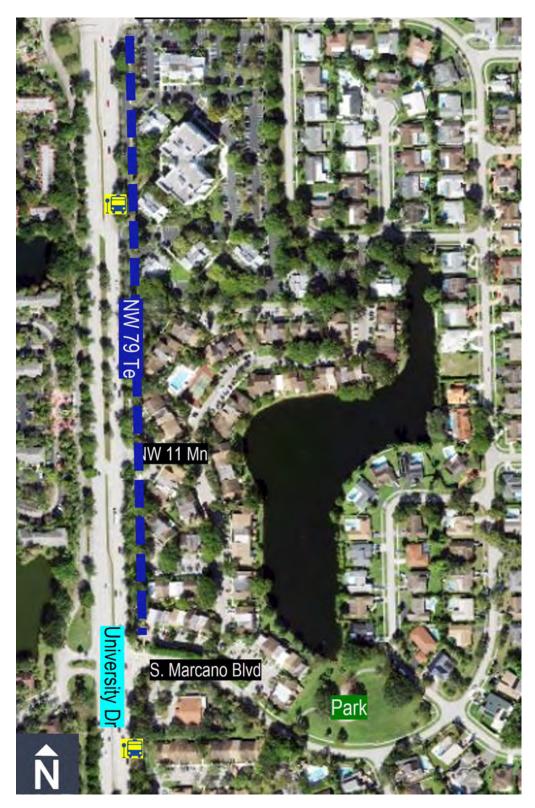
Rendering











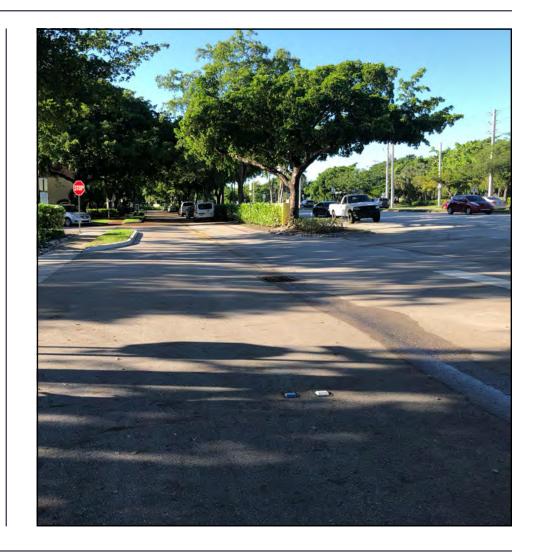
Location: NW 79 Te (frontage road)

Observations / Missing Facilities:

- 40 ft wide city-owned ROW dedicated via Plat
- Located along the east side of University Dr, from N. Marcano Blvd to S. Marcano Blvd
- Two 12-ft travel lanes
- Vehicular access to large multifamily community and office property.
- Vehicular access from NB University Dr at two locations: NW 11th Manor and driveway to Plantation Office Park
- 5 ft wide sidewalk only in eastern portion of property

- The sidewalk is disconnected; no curbs or crosswalks at driveways
- There are no sidewalks in University Dr eastern ROW throughout the length of NW 79 Te. The NW 79 Te sidewalk is only sidewalk.
- There are no crosswalks from BCT stops fronting University Dr to the Access Rd sidewalk
- No crosswalk at pedestrian access from N. Marcano Blvd
- Access from S. Marcano Blvd is not marked, and set far back.
- No street lighting
- On numerous visits, vehicles parking in street blocking western lane







Objectives

- ✓ Provide alternate bike route
- ✓ Improve city-owned property.
- ✓ Eliminate conflict points between pedestrians and vehicles
- ✓ Encourage north/south multimodal transportation
- ✓ Provide a continuous sidewalk, including ADA-compliant curb ramps and crosswalks
- ✓ Provide safe and visible access to BCT Stops
- ✓ Improve pedestrian access to N. Marcano Blvd and S. Marcano Blvd

Improvements

- Pedestrian Scale Lighting at regular intervals
- · Midblock crosswalks (Raised) leading to BCT Bus Stops
- Midblock crosswalks (Raised) connecting to pedestrian entrances at N. Marcano Blvd and S. Marcano Blvd
- Alternate Bicycle Route Signage at pedestrian entrances at N. Marcano and S. Marcano Blvd
- Fill in sidewalk gaps, including ADA compliant curb ramps and crosswalks over driveways
- Sharrow Pavement Markings
- Share the Road Signage
- Reconfigure vehicular access at NW 11th Manor to an exit-only configuration, extend existing median, and right-turn only signage

Location: NW 79 Te (frontage road)

Rendering

Share The Road Signage

Rendering from N. Marcano Blvd **University Dr Community Meeting**

Central Section / NW 11th Manor

Legend New Sidewalk / Pedestrian Path Existing Sidewalk widened to Shared Use Path Easement Required (on private Raised Crosswalk / Speed Table

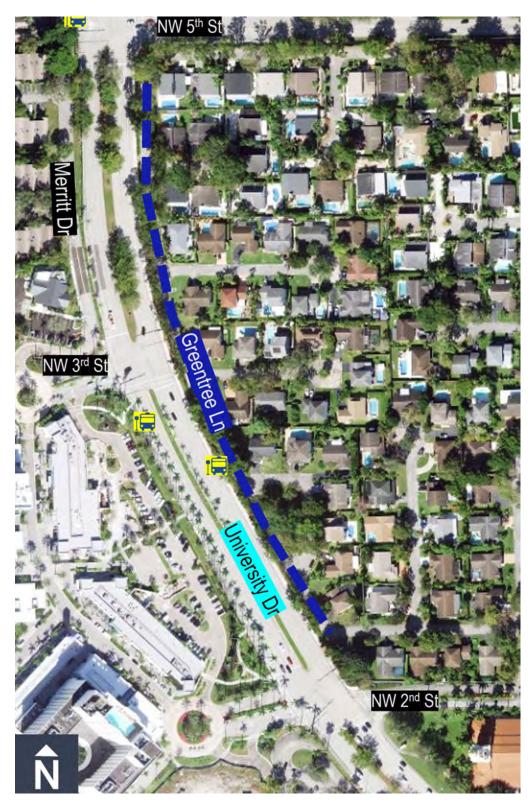
Northern section / N. Marcano Blvd

Crosswalk with High Visibility Pavement Markings Pedestrian Street Lights

Median Extension

Entrance / Exit at NW 11th Manor converted to Exit Only - Raised median extended **NW 11 Manor** Bike Route signage





Location: Greentree Ln (frontage road)

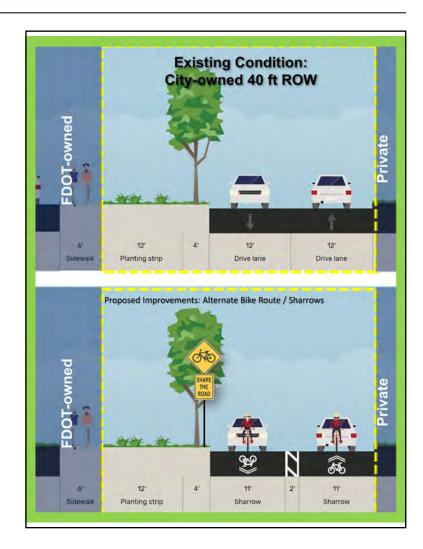
Observations / Missing Facilities:

- 40 ft wide ROW located along the east side of University Dr, from NW 5th St to NW 2nd St
 - City-owned roadway from NW 4th St to NW 2nd St (dedicated via plat)
 - Private roadway from NW 5th St to NW 4th St.
- Two 12-ft travel lanes
- Neighborhood roadway for single-family community.

- ✓ Pedestrian access from NB University Dr at southern crosswalk at NW 3rd St
- ✓ Restripe drive lanes to 11' width, with 2 ft striped median
- ✓ Improve existing pedestrian access at NW 3rd St
- ✓ Add in new pedestrian-only access at NW 5th St and NW 2nd St
- ✓ Designate as Alternate Bike Route with "Share The Road" signage and sharrow pavement markings











Location: NW 79 Te (frontage road)

Recommendations

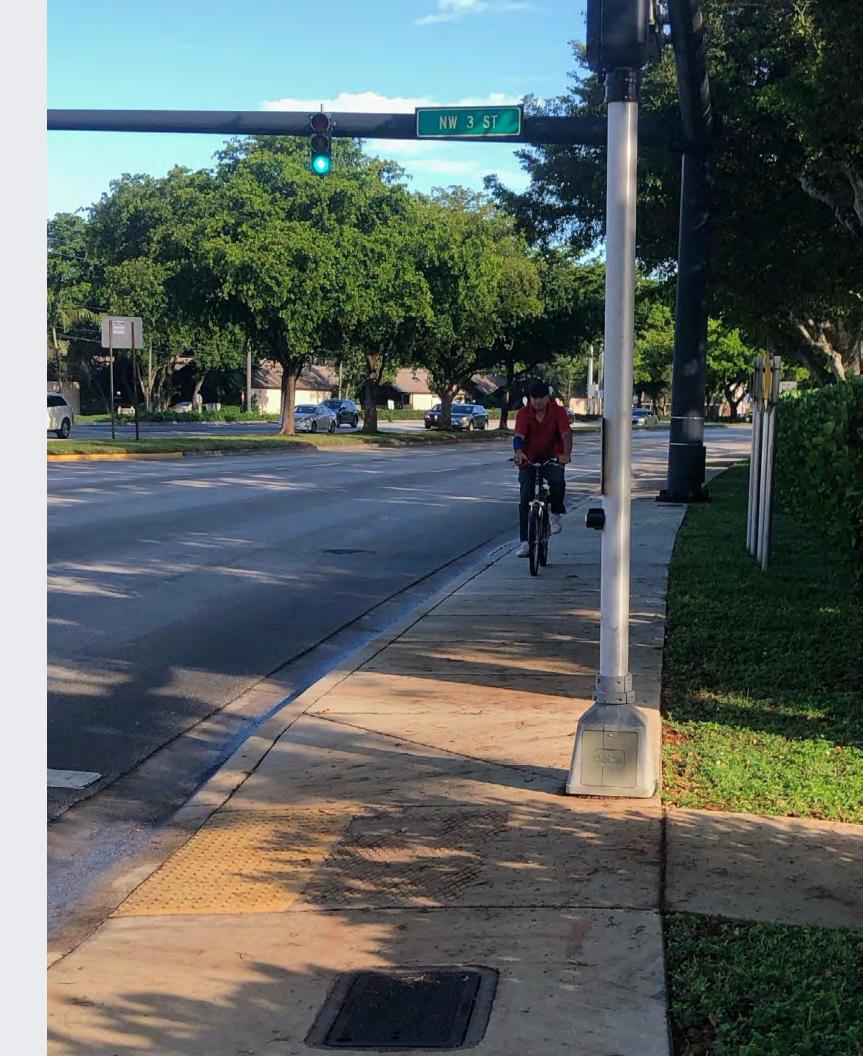
- Parallel Pedestrian-Only Bridges
- Shared Use Path Width
- Pedestrian-Scale Lighting Placed at entry points
- Reconfigure adjacent sidewalks to Shared Use Path and realign to connect directly to new Pedestrian bridge





Chapter 6: COST ESTIMATES AND FUNDING OPPORTUNITIES







Introduction

This chapter provides planning-level cost estimates and potential funding sources for Phase 1 recommendations (Recommendations Group #2 locations) and all Phase 2 recommendations. This information is provided in a consolidated "Cost Estimates and Funding Sources" Matrix.

Planning-Level Cost Estimates

Planning-level cost estimates were prepared using a bottom-up approach, which considered unit cost for key construction components required to construct or install the concept's improvements based upon FDOT Historical Item Average Unit Cost History for Broward County (Area 12), from March 2021 to March 2022 (Phase 1) or March 2022 to March 2023 (Phase 2). The costs were then adjusted for quantities as well as rounded up for planning purposes.

The cost estimates include construction costs as well as mobilization, maintenance of traffic, preliminary engineering/design and construction engineering and inspection, and additional overhead costs.

The cost estimates are based on the planning-level analysis and represent typical or prototype improvements. It is anticipated that the costs will be further refined during future project development.

Funding Sources

Potential funding sources include local, county, MPO, state, federal, and private grant funding sources. Consideration to the project timing, components, location, costs, and adjacent land uses was given in identifying potential funding sources. Additionally while funding sources are identified on a project location basis, certain funding sources may only be applicable for funding corridor-wide improvements.

Cost Estimates and Funding Sources Matrix

The Cost Estimates and Funding Sources Matrix is a consolidated table providing the costs and funding opportunities for each location. For Phase 1 Recommendations only, costs are separately listed for each location's near-term improvements and short-term improvements. Some specific recommendations, such as pedestrian-scaled lighting, are individually listed due to their cost and/or separate utility.

The individual costs sheets are included in Appendix Section H.





	Cost Estimates and Funding Opportunities Matrix ○ = Near-term project ○ = Short-term project □ = Primary Agency + = Secondary / Support Agency \$ = Funding Opportunity \$M = MPO Funding Opportunity	Near-term (0-2 Years)	Short-term (2-5 Years)	City of Plantation	Broward County	City of Plantation CIP	BMPO - Complete Streets and Localized Initiatives (CSLIP)	BMPO - Mobility Hub	BMPO - 2050 MTP	Broward County Surtax / MCP	Nonprofit Organization Grant	State Grant (Discretionary)	Federal Grant (Discretionary)	Construction Costs (2021 \$)	Mobilization / MOT / Contingency / Soft Costs (75%)	Total Costs (2021 \$)
	Project Location		me- me	Age	ncy		Fu	ındi	ing l	Prog	ram	s		Co	ost Estimate	es
	Intersection at NW 4 th Ct	0		Ø	+	\$								\$7,548	\$5,661	\$13,209
Nob Hill Rd	Intersection at NW 4 th Ct		0	図	+	\$	\$M							\$286,845	\$215,133	\$501,978
	Intersection at NW 6th St / Central Park PI	•		Ø	+	\$								\$117,225	\$87,919	\$205,143
	Total Costs for Nob Hill Rd								\$M	\$				\$411,617	\$308,713	\$720,330



	Cost Estimates and Funding Opportunities Matrix ○ = Near-term project ○ = Short-term project ☑ = Primary Agency + = Secondary / Support Agency \$ = Funding Opportunity \$M = MPO Funding Opportunity	Near-term (0-2 Years)	Short-term (2-5 Years)	City of Plantation	Broward County	City of Plantation CIP	BMPO - Complete Streets and Localized Initiatives (CSLIP)	BMPO - Mobility Hub	BMPO - 2050 MTP	Broward County Surtax / MCP	Nonprofit Organization Grant	State Grant (Discretionary)	Federal Grant (Discretionary)	Construction Costs (2021 \$)	Mobilization / MOT / Contingency / Soft Costs (75%)	Total Costs (2021 \$)
	Project Location		ne- me	Age	ncy		Fu	ındiı	ng P	rogr	am	s		Co	st Estimate	es
	East entrance to Plantation Promenade Shopping Center	0		Ø	+	\$								\$26,767	\$20,075	\$46,842
	East entrance to Plantation Promenade - Option 1 (Directional Median)		0	Ø	+	\$	\$M			\$				\$178,637	\$133,978	\$312,615
	East entrance to Plantation Promenade - Option 2 (Roundabout)		0	Ø	+	\$	\$M			\$				\$776,784	\$582,588	\$1,359,372
	Intersection at Central Park Place	0		Ø	+	\$								\$9,501	\$7,126	\$16,627
	Intersection at Central Park Place - Pedestrian Scaled Lighting	0		Ø	+	\$								\$118,913	\$89,185	\$208,098
	Intersection at Central Park Place		0	Ø	+	\$	\$M			\$				\$555,602	\$416,701	\$972,303
	Intersection at Central Park Drive	0		Ø	+	\$								\$17,304	\$12,978	\$30,281
Cleary BI	Intersection at Central Park Drive - Pedestrian Scaled Lighting	0		Ø	+	\$								\$118,913	\$89,185	\$208,098
(Phase 1)	Intersection at Central Park Drive		0	Ø	+	\$	\$M			\$				\$555,602	\$416,701	\$972,303
	Entrances to Central Park (Central Park Dr & NW 91st Av)	0		Ø	+	\$					\$			\$115,288	\$86,466	\$201,753
	Entrances to Central Park (NW 91st Av)		0	Ø	+	\$	\$M			\$	\$			\$228,604	\$171,453	\$400,057
	Midtown North / Lauderdale West Dr to NW 82nd Av	0		Ø	+	\$		\$M						\$93,396	\$70,047	\$163,443
	Midtown North / Lauderdale West Dr to NW 82nd Av		0	Ø	+	\$	\$M	\$M		\$				\$161,639	\$121,229	\$282,868
	Midtown North / NW 85 th Te	0		Ø	+	\$		\$M						\$52,648	\$39,486	\$92,134
	Midtown North / NW 85 th Te		0	Ø	+	\$	\$M	\$M		\$				\$138,414	\$103,811	\$242,225
Total Clea	ary Blvd (Phase 1) - with Plantation Promenade Option 1								\$M			\$	\$	\$2,372,738	\$1,779,554	\$4,152,292
Total Clea	ary Blvd (Phase 1) - with Plantation Promenade Option 2								\$M			\$	\$	\$2,970,885	\$2,228,164	\$5,199,049



	Cost Estimates and Funding Opportunities Matrix ○ = Near-term project ○ = Short-term project □ = Primary Agency + = Secondary / Support Agency \$ = Funding Opportunity \$M = MPO Funding Opportunity	Near-term (0-2 Years)	Short-term (2-5 Years)	City of Plantation	Broward County	City of Plantation CIP	BMPO - Complete Streets and Localized Initiatives (CSLIP)	BMPO - Mobility Hub	BMPO - 2050 MTP	Broward County Surtax / MCP	Nonprofit Organization Grant	State Grant (Discretionary)	Federal Grant (Discretionary)	Construction Costs (2021 \$)	Mobilization / MOT / Contingency / Soft Costs (75%)	Total Costs (2021 \$)
	Project Location		ne- me	Age	ncy		Fu	undin	g Pr	ogr	ams	5		Co	ost Estimat	es
	Entire Roadway	•		***		\$	\$M	\$M						\$143,209	\$107,406	\$250,615
	Entire Roadway / Roadway Reconfiguration		0			\$	\$M	\$M						\$739,346	\$554,509	\$1,293,855
SW 6th St	Entire Roadway / Pedestrian Scaled Lighting		0	**		\$	\$M	\$M						\$352,910	\$264,683	\$617,593
	Intersection at SW 78th Ave	•		*		\$	\$M	\$M						\$41,490	\$31,117	\$72,607
	Intersection at SW 78th Ave		0	**		\$	\$M	\$M						\$317,775	\$238,331	\$556,106
	Total Costs for SW 6th St								\$M	\$			\$	\$1,594,730	\$1,196,047	\$2,790,777



	Cost Estimates and Funding Opportunities Matrix ○ = Near-term project ○ = Short-term project ☑ = Primary Agency + = Secondary / Support Agency \$ = Funding Opportunity \$M = MPO Funding Opportunity	Near-term (0-2 Years)	Short-term (2-5 Years)	City of Plantation	Broward County	City of Plantation CIP	BMPO - Complete Streets and Localized Initiatives (CSLIP)		BMPO - 2050 MTP	Broward County Surfax / MCP	Nonprofit Organization Grant	State Grant (Discretionary)	Federal Grant (Discretionary)	Construction Costs (2021 \$)	Mobilization / MOT / Contingency / Soft Costs (75%)	Total Costs (2021 \$)
	Project Location	100	me	Age	ncy		F	und	ling	Prog	ıram	S		Co	st Estimat	es
	NW 42 Av and one block east	0		8		\$	\$M							\$77,036	\$57,777	\$134,814
	NW 42 Av and one block east / Pedestrian Scaled Lighting	0		***		\$	\$M							\$297,283	\$222,962	\$520,246
	NW 42 Av and one block east		0	***		\$	\$M							\$28,026	\$21,020	\$49,046
	Multiblock area from NW 45 th Ter to NW 43 rd Av	0		**		\$	\$M							\$53,197	\$39,898	\$93,094
NW 5 th St	Multiblock area from NW 45 th Ter to NW 43 rd Av / Quick-Build Mini Roundabout	0	4 1	**		\$								\$18,000	\$13,500	\$31,500
	Multiblock area from NW 45 th Ter to NW 43 rd Av		0	-00		\$	\$M							\$88,335	\$66,252	\$154,587
	Intersection at NW 46 th Av	0				\$	\$M							\$64,681	\$48,511	\$113,192
	Intersection at NW 46th Av: Quick-Build Mini Roundabout	0		**		\$								\$18,000	\$13,500	\$31,500
	Intersection at NW 46 th Av		0	**		\$	\$M							\$83,427	\$62,571	\$145,998
	Total Costs for NW 5th St		T						\$M	\$	\$	\$	\$	\$727,987	\$545,990	\$1,273,976



	Cost Estimates and Funding Opportunities Matrix ○ = Near-term project ○ = Short-term project ☑ = Primary Agency + = Secondary / Support Agency \$ = Funding Opportunity \$M = MPO Funding Opportunity Project Location	La La Near-term (0-2 Years)	Short-term (2-5 Years)	City of Plantation	S Broward County	City of Plantation CIP	BMPO - Complete Streets and Localized Initiatives (CSLIP)	BMPO - Mobility Hub	BMPO - 2050 MTP	Broward County Surtax / MCP	Nonprofit Organization Grant	State Grant (Discretionary)	Federal Grant (Discretionary)	Construction Costs (2021 \$)	Mobilization / MOT / Contingency / Soft Costs (75%)	Total Costs (2021 \$)
	Multiblock area adjacent to Jim Ward Community Center	O	ille	**		\$	\$M							\$130,870	\$98,153	\$229,023
	Multiblock area adjacent to Jim Ward Community Center / Enhanced Street Lighting	0				\$	\$M							\$154,440	\$115,830	\$270,270
	Multiblock area adjacent to Jim Ward Community Center / Quick-Build Mini Roundabouts	0				\$								\$36,000	\$27,000	\$63,000
	Multiblock area adjacent to Jim Ward Community Center		0	**		\$	\$M							\$168,000	\$126,000	\$294,000
NW 46 th Av	NW 5th Ct to NW 6 th Ct	0		**		\$	\$M							\$68,135	\$51,101	\$119,236
A.	NW 5th Ct to NW 6th Ct		0			\$	\$M							\$83,427	\$62,571	\$145,998
	Multiblock area at NW 9 Ct and NW 9 Dr	0				\$	\$M		,					\$86,898	\$65,173	\$152,071
	Multiblock area at NW 9 Ct and NW 9 Dr / Pedestrian Scaled Lighting	0				\$	\$M							\$297,283	\$222,962	\$520,246
	Multiblock area at NW 9 Ct and NW 9 Dr		0			\$	\$M							\$20,083	\$15,062	\$35,146
	Total Costs for NW 46th Av								\$M	\$	\$	\$	\$	\$1,045,137	\$783,853	\$1,828,990



	Cost Estimates and Funding Opportunities Matrix ☑ = Primary Agency + = Secondary / Support Agency \$ = Funding Opportunity \$M = MPO Funding Opportunity	City of Plantation	Broward County	FDOT	City of Plantation CIP	BMPO - Complete Streets and Localized Initiatives (CSLIP)	BMPO - Mobility Hub	BMPO - 2050 MTP	Broward County Surtax / MCP	Nonprofit Organization Grant	State Grant (Discretionary)	Federal Grant (Discretionary)	Construction Costs (2022 \$)	Mobilization / MOT / Contingency / Soft Costs (75%)	Total Costs (2022 \$)
	Project Location	Α	gend	у		Fu	ndi	ng F	rog	ram	s			Cost Estimates	
	Intersection at University Dr	团	+	Ø		\$M		\$M	\$		\$	\$	\$97,544.14	\$73,158.10	\$170,702.24
	Intersection at Hiatus Rd	Ø	図		\$	\$M		\$M	\$		\$	\$	\$388,539.58	\$291,404.69	\$679,944.27
	Multiblock Area from Sunset Park to Nob Hill Rd	团			\$	\$M		\$M	\$		\$	\$	\$747,777.73	\$560,833.30	\$1,308,611.03
	Intersection at Nob Hill Rd	Ø	+		\$	\$M		\$M	\$		\$	\$	\$98,515.61	\$73,886.71	\$172,402.31
Oleans	Multiblock Area from Promenade Shopping Center to Shoppes at Cleary / Lane Repurposing West	図	+					\$M	\$		\$	\$	\$3,236,099.39	\$2,427,074.55	\$5,663,173.94
Cleary Blvd	Intersection at Pine Island Rd	Ø	团		\$	\$M		\$M	\$		\$	\$	\$170,546.92	\$127,910.19	\$298,457.11
(<u>Phase 2</u>)	Midtown North / Lane Repurposing East (East of Pine Island Rd to West of University Dr)	Ø	+		\$			\$M	\$		\$	\$	\$1,442,116.93	\$1,081,587.70	\$2,523,704.62
	Corridor - Southern ROW Shared Use Path	図	+	+	\$			\$M	\$		\$	\$	\$2,355,989.65	\$1,766,992.24	\$4,122,981.89
	Ultimate Lane Reduction (with hardened separators)	团	Ø	Ø	\$			\$M	\$		\$	\$	\$996,880.61	\$747,660.46	\$1,744,541.07
	Quick Build Location #1 – Lane Repurposing West	図			\$			\$M					\$420,367.91	\$315,275.93	\$735,643.85
	Quick Build Location #2 – Intersection at Pine Island Rd	図	+		\$			\$M					\$4,907.66	\$3,680.75	\$8,588.41
	Total Costs for Cleary B	lvd (<u>F</u>	hase	2)				\$M					\$9,959,286.13	\$7,469,464.61	\$17,428,750.74



	Cost Estimates and Funding Opportunities Matrix	City of Plantation	Broward County	FDOT	City of Plantation CIP	BMPO - Complete Streets and Localized Initiatives (CSLIP)	BMPO - Mobility Hub	BMPO - 2050 MTP	Broward County Surtax / MCP	Nonprofit Organization Grant	State Grant (Discretionary)	Federal Grant (Discretionary)	Construction Costs (2022 \$)	Mobilization / MOT / Contingency / Soft Costs (75%)	Total Costs (2022 \$)
	Project Location	А	gend	у		Fu	ındi	ng P	rog	ram	s			Cost Estimates	
	Intersection at Sunrise Blvd	+	+	M		\$M	\$M	\$M	\$		\$	\$	\$167,663.35	\$125,747.52	\$293,410.87
	Intersection at N. Marcano Blvd	+		Ø		\$M	\$M	\$M	\$		\$	\$	\$173,031.93	\$129,773.94	\$302,805.87
	Intersection at S. Marcano Blvd	+	+	Ø		\$M	\$M	\$M	\$		\$	\$	\$738,080.55	\$553,560.42	\$1,291,640.97
	Intersection at Cleary Blvd	+		図		\$M	\$M	\$M	\$		\$	\$	\$97,544.14	\$73,158.10	\$170,702.24
	Intersection at NW 5 St	+		図		\$M	\$M	\$M	\$		\$	\$	\$140,425.06	\$105,318.79	\$ 245,743.85
	Intersection at NW 3 St	+		M		\$M	\$M	\$M	\$		\$	\$	\$128,054.08	\$96,040.56	\$224,094.64
University	Intersection at NW 2 St	+		Ø		\$M	\$M	\$M	\$		\$	\$	\$128,584.40	\$96,438.30	\$225,022.70
Dr	Intersection at Broward Blvd	+	+	Ø			\$M	\$M	\$		\$	\$	\$12,929,698.66	\$9,697,274.00	\$22,626,972.66
(<u>Phase 2</u>)	Access Rd (frontage road) Option 1 (Cycle Track)	Ø			\$	\$M	\$M	\$M	\$		\$	\$	\$565,794.48	\$424,345.86	\$990,140.34
	Access Rd (frontage road) Option 2 (Shared Use Path)	团			\$	\$M	\$M	\$M	\$		\$	\$	\$715,132.19	\$536,349.15	\$1,251,481.34
	NW 79 Te (frontage road)	团			\$	\$M	\$M	\$M	\$		\$	\$	\$547,688.55	\$247,723.32	\$795,411.87
	Merritt Dr (frontage road)	+		Ø	\$	\$M	\$M	\$M	\$		\$	\$	\$56,011.69	\$42,008.77	\$98,020.46
	Greentree Lane (frontage road)	团			\$	\$M	\$M	\$M	\$		\$	\$	\$51,374.41	\$38,530.81	\$89,905.22
	University Dr sidewalk conversion to Shared Use Path	团		+	\$	\$M	\$M	\$M	\$		\$	\$	\$828,140.95	\$621,105.72	\$1,449,246.67
	C-12 Canal Bridge	团		+	\$	\$M	\$M	\$M	\$		\$	\$	\$621,306.36	\$465,979.77	\$1,087,286.13
Total	Costs for University Dr (Phase 2) – with Acce	ss Rd (Optio	n 1			\$M	\$M	\$		\$	\$	\$17,173,398.61	\$12,717,005.88	\$29,890,404,49
Total	Costs for University Dr (Phase 2) – with Acce	es Rd (Ontio	n 2			\$M	\$M	\$		\$	\$	\$17,322,736.32	\$12,829,009.17	\$30,151,745.49









This Plan received federal funding from the Broward Metropolitan Planning Organization (Broward MPO) as part of its federally mandated planning activities within the metropolitan planning area.