

Better Streets | Better Broward | Better Life

Walking Audit Report

City of Miramar

Miramar Parkway
from SW 172nd Avenue to
SW 160th Avenue

June 2022

Acknowledgments

The Broward Metropolitan Planning Organization (MPO) would like to extend special thanks to City of Miramar's City Commission as well as City staff for their personalized approach and time spent preparing for the Walking Audit workshop.

The Broward MPO extend their gratitude to the 25 individuals who participated in the Walking Audit, which was graciously hosted by Dolphin Bay Elementary School.

This Walking Audit Workshop was made possible by funding from the Broward MPO and their Complete Streets Initiative. Key staff members include Ricardo Gutierrez, Mobility Program Manager, Benjamin Restrepo, Mobility Initiatives Transportation Engineer, and Stephanie Garcia, Complete Streets Manager.

Partners

- City of Miramar
 - Vice Mayor Yvette Colbourne
 - Salvador Zuniga
 - DuSean Grant
 - Tria Lawton-Russell
- Florida Department of Transportation (FDOT), District Four
- Broward Metropolitan Planning Organization
- Dolphin Bay Elementary School (Host)

Special Participation

- City of Miramar City Commissioners
- Broward County Traffic Engineering Division
- AARP
- Community Members and Residents of the local and surrounding area.

Consultant Team

- Kimley-Horn and Associates
- Marlin Engineering

Executive Summary

The [Broward MPO Complete Streets Master Plan](#) identified Miramar Parkway from SW 172nd Avenue to SW 160th Avenue as a high-ranked priority corridor. The segment under review is roughly 1 mile long and 6 lanes wide, serving a wide variety of land uses. Community and stakeholder feedback is key to developing the project scope for a mobility project. To that end, The Broward Metropolitan Planning Organization (MPO) selected this corridor for a Walking Audit. A prior, successful, series of Walking Audits conducted by the Broward MPO in 2018 and 2019 for multiple cities were used as a guide for the process and recommendations herein. Collaboration from this Walking Audit will guide future project scopes by incorporating the needs and vision of the local communities who regularly travel near the study corridor.

A group of stakeholders from diverse agencies and community members gathered at Dolphin Bay Elementary School on Tuesday, April 12, 2022, with the goal of providing a multi-disciplinary review of existing and future conditions experienced by vulnerable users. The Walking Audit included the evaluation of the walking environment; existing infrastructure; bicyclist and pedestrian issues such as accessibility, connectivity, comfort, and safety; along with traffic patterns and roadway characteristics to identify elements that can improve the multi-modal network and enhance safety. Participants provided methods and solutions to address issues such as engineering treatments, policy changes, traffic calming, and enforcement measures. Representatives from different agencies provided unique insight on the feasibility of potential solutions through details about upcoming roadway projects, right-of-way (ROW) constraints, legal restrictions, and future developments. Observations and recommendations mentioned during the walks were recorded on the Field Survey App, which allowed the participants to take a photo and place a data point at the physical location of the comment. The outcome of evaluations and input from multiple agencies is a comprehensive analysis and vision for Miramar Parkway from SW 172nd Avenue to SW 160th Avenue.

The detailed findings and recommendations identified by the participants are compiled in this report and organized into Short (1-5 Years) and Long-Term Improvements (6+ Years). The findings and recommendations will help guide future investment in Complete Streets improvements on Miramar Parkway by developing a prioritized list of projects based on technical, data-driven analysis.

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Chapter 1. Background & Strategy

A Complete Street is planned, designed, and operated for all modes of transportation and all users regardless of age or ability. In 2012, the Broward MPO approved the Broward Complete Streets Guidelines that served as the foundation for Complete Streets policies in many local jurisdictions. The Broward Metropolitan Planning Organization (MPO) understands the importance of creating a transportation system that addresses the needs of all users of the road, including the needs of people who walk, bike, drive and take transit. To ensure that this is firmly embedded into the transportation planning process, the Broward MPO established the Complete Streets Initiative. The program is intended to provide the necessary tools to our local governments in implementing Complete Streets in their respective communities. It also serves as a platform to move active transportation projects forward into implementation. More information about the Complete Streets Initiatives can be found at: <http://www.browardmpo.org/index.php/major-functions/complete-streets-initiative>.



Rendering of a Complete Street from the Broward MPO Complete Streets [webpage](#)

Broward MPO identified the corridor of Miramar Parkway from SW 172nd Avenue to SW 160th Avenue as a priority within the [Complete Streets Master plan](#). The Complete Streets Master Plan was developed to guide future improvements to Broward County's roadways through technical, data driven analysis. The Complete Streets Master Plan provides initial

recommendations, such as continuous and accessible pedestrian facilities, premium bicycle facilities, and transit improvements. The Walking Audit thus serves to help inform the Master Plan for the Miramar Parkway roadway by taking into consideration the feedback provided as the scope is developed.

Broward MPO recognized the importance of collaborating with engineering professionals, local agencies, public services, and the community to create a transportation system that addresses the needs of all users of the road including bicyclists, people who walk, drive, and take transit. Multiple projects with an emphasis on multimodal improvements are planned or have been built on the corridors connecting to Miramar Parkway, including bike lanes and public transportation shelters. The project types focus on providing upgrades to enhance safety and convenience for walkers, cyclists, motorists, and those using public transit. Improvement opportunities include, but are not limited to, ADA modifications, intersection lighting improvements, bike/pedestrian improvements, signalization improvements, pavement correction and rehabilitation, and drainage improvements. Establishing scopes for these projects aligning with the goals and initiatives of several departments is critical to the success of the projects. Coordination with stakeholders allowed Broward MPO to gather valuable information that helps determine which improvements are most feasible for implementation such as future developments, property ownership, and other general commuting characteristics of the corridor.

The key objectives of conducting a Walking Audit are listed below:

- Conduct a multi-disciplinary review of the corridor
- Gather perspective of vulnerable users
- Document conditions experienced
- Assess infrastructure
- Identify elements that can improve the multimodal network and enhance safety

Study Corridor

Broward MPO has identified the Miramar Parkway corridor as having the potential to undergo multimodal street updates and modifications to improve safety and accessibility for users that walk, bike, roll, and take transit. These changes would connect the corridor to the existing multimodal transportation network.

Prior to the Walking Audit Event, a Pre-Walking Audit Corridor Assessment was conducted where existing conditions and infrastructure along Miramar Parkway were

documented to provide the Walking Audit Participants with background context. The study intersection is located in the City of Miramar near Miramar Regional Park, as shown in **Figure 1**. There are a mix of land uses on or near the corridor including commercial, institutional, and residential contributing to the diverse modes of travel, lane widths, and traffic patterns. Some destinations near the corridor include restaurants, schools, banks, offices, churches, and retail. 773 students attend Dolphin Bay Elementary School, which is located off SW 164th Avenue, along the subject corridor. Multiple residential communities are located adjacent to the study corridor, these communities and accompanying land uses generate frequent pedestrian and vehicle activity along both corridors.

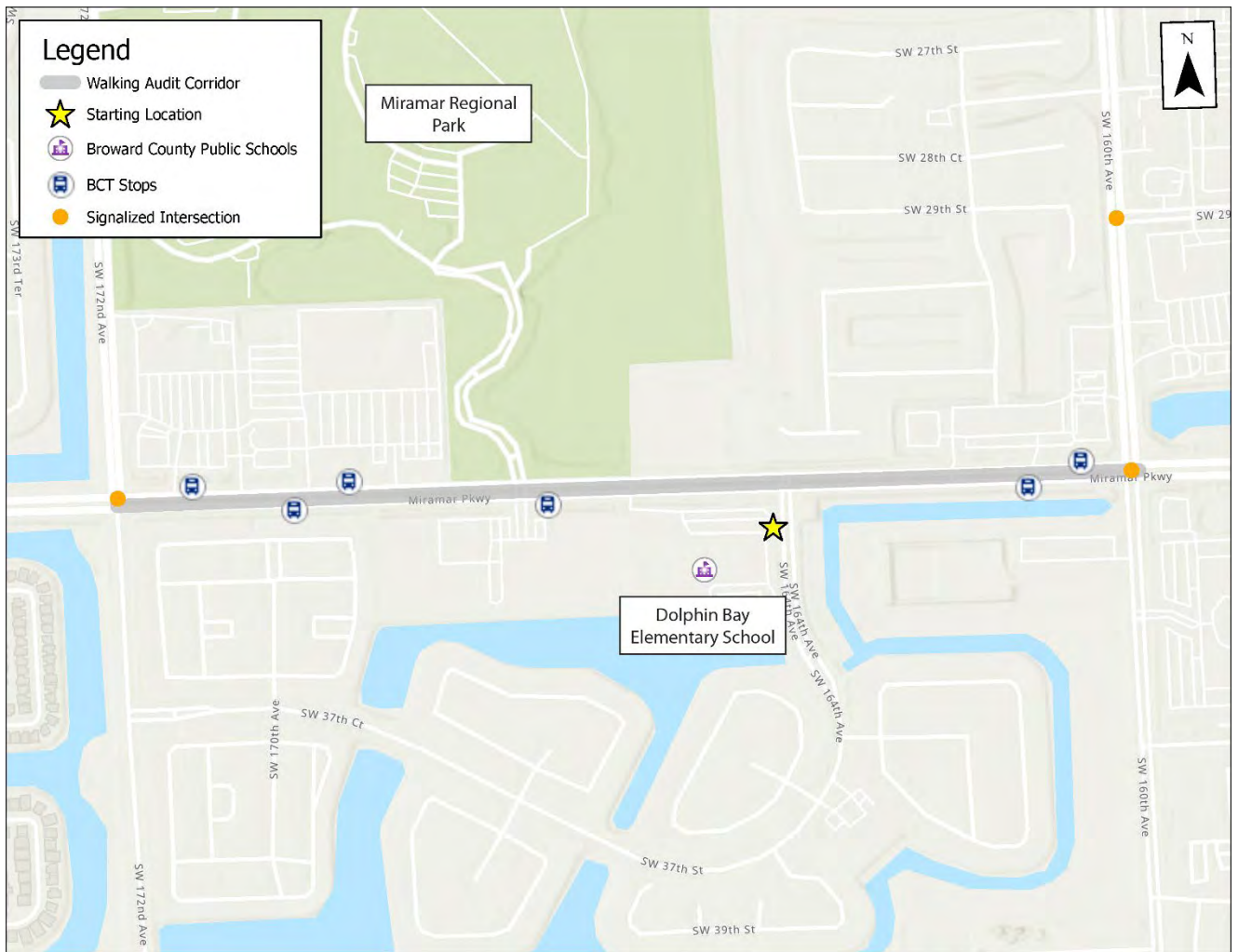


Figure 1. Study Corridor

Planned and Programmed Projects along Miramar Parkway

- SR-858/Miramar Parkway Mobility Improvements Project
 - SW 184th Avenue from SW 40th Street/Bass Creek Road to Miramar Parkway and Miramar Parkway from SW 184th Avenue to SW 172nd Avenue.
 - https://www.d4fdot.com/bcfdot/sr_858_miramar_parkway_mobility_improvements_project.asp
- Miramar Parkway from SW 184th Avenue to SW 172nd Avenue
 - Bike Path and Trail- Managed by FDOT
- Dykes Road; 196th Avenue; NW 10th Street Mobility Improvements
 - Bike Path and Trail- Managed by FDOT

The speed limit on Miramar Parkway corridor is 45 miles per hour (MPH). The functional classification designated by the Florida Department of Transportation (FDOT) of Miramar Parkway is an Urban Minor Arterial. Additionally, the entire corridor has received a preliminary systemwide provisional context classification (SPCC) of C3R-Suburban Residential, indicating that the surrounding land use type is primarily single and multi-family residential. The suburban-style development results in long block lengths, limited pedestrian access to commercial and office uses, and sparse roadway connectivity. The 2021 Average Annual Daily Traffic (AADT) on Miramar Parkway is shown below:

- 34,500 AADT between SW 172nd Avenue and SW 160th Avenue

Miramar Parkway is a six-lane divided roadway with sidewalks on both sides and limited bicycle facilities- see below page for existing roadway section.



Current roadway section on Miramar Parkway from SW 172nd Avenue to SW 160th Avenue.

Lane widths range from 10-12 feet throughout the corridor. The largest medians throughout the corridor are approximately 20 feet wide. Sidewalk width ranges between

5-10 feet. Currently, there is little to no buffer between the sidewalk and the roadway on the south side of Miramar Parkway. There is a landscape buffer between the sidewalk and the roadway ranging between 2-15 feet throughout most of the corridor on the north side of Miramar Parkway. Other conditions noted during the Pre-Walking Corridor Assessment include lack of audible pedestrian signals, no pedestrian connections to residential neighborhoods along the corridor, inconsistent and faded bike lane designations, and lack of mid-block crossings.



Crosswalk at SW 172nd Avenue needs re-striping and audible signals.



Bicycle lane striping along the south side of Miramar Parkway is now worn away and hard to discern.



Outdated and worn ADA detectable warning surface at the SW 160th Avenue intersection.



Cracked and vertically deflected sidewalk at the SW 160th Avenue intersection.

Broward County Transit (BCT) Route 28 and Express Route 106 operate along Miramar Parkway. Along the corridor there are six (6) transit stops, including one stop serving Express Route 106 at the Northeast corner of the SW 172nd Avenue and Miramar Parkway intersection. Three bus stops have a shelter and three (3) stops do not have a shelter. Various stops include trash receptacles, route maps, and seating. The BCT full system map can be found at: <http://www.broward.org/BCT/Documents/SystemMap.pdf>. Route 28 experiences some of the highest ridership in the BCT system as shown in **Table 1**, which displays the ridership totals for Routes 28 & 106 (entire routes) in February 2022.

Table 1. BCT Route 28 Ridership, February 2022

Route No.	Average Weekday	Average Saturday	Average Sunday
28	2,445	1,776	913
106	375	Not in Service	Not in Service

Bicycle and Pedestrian Crash Analysis

Examining bicycle and pedestrian crash data helped identify dangerous and problematic areas near the intersection for vulnerable users. Crash types and locations from the previous six years (2015-2021) were included in the analysis and there were five (5) crashes that involved bicyclists and six (6) crashes that involved pedestrians and as shown in **Figure 2**. When including crashes between motorists, there were 16 within the study area.



Figure 2. Bicycle & Pedestrian Crash Data

Most crashes on Miramar Parkway occurred near the intersection of Miramar Parkway and SW 172nd Avenue. Out of the 11 total crashes involving bicyclists and pedestrians, 10 resulted in injury. Four of those crashes occurred in dark conditions.

Chapter 2. Walking Audit Overview

On Tuesday, April 12, 2022, from 4:00 pm to 6:00 pm members from FDOT, Broward MPO, and the City of Miramar, along with AARP Volunteers, nearby residents, and workers gathered at Dolphin Bay Elementary School to conduct a Walking Audit. The Walking Audit began with a brief explanation of goals and objectives and staff introductions. Participants then divided into two (2) groups led by a Consultant team member who used the ArcGIS Field Maps application to document observations and recommendations and attach photos with geolocated points.

Groups walked approximately 0.5 miles in each direction along the corridor to examine existing infrastructure, document commuting trends from multiple mode types, and identify possible elements to improve the multimodal network. Each group consisted of members from different agencies to ensure that different perspectives were provided.



Objectives

The Walking Audit was crafted specifically to meet the following objectives through community participation:

- Provide an experiential hands-on exercise that evaluated the walking environment.
- Identify pedestrian and bicyclist issues such as safety, access, connectivity, comfort, and convenience.
- Identify potential alternatives or solutions such as engineering treatments, policy changes, or education and enforcement measures.

The Walking Audit aimed to summarize findings and propose recommendations that will provide the City of Miramar with a clear understanding of critical issues identified by the community.

Presentation

Event facilitators presented a slide deck to participants providing background information about the purpose of the Walking Audit, the vision the Broward MPO has with the Complete Streets Master Plan, and key photos along the study corridor to guide their focus during the Walking Audit. [Appendix B](#) includes the presentation.

Teams and Routes

Participants were organized into two (2) groups of about 10 to 15 people to provide diverse viewpoints and feedback from conditions experienced while walking the study area. A group leader was responsible for documenting observations and recommendations from the participants using the ArcGIS Field Maps application. The application, which accessible through a cellular device, allows the user to place a point on an online map and write notes along with uploading a photo attached to the area referenced in the recommendation.

One group was assigned to Route 1 and one group was assigned to Route 2 as shown in [Figure 3](#) and [Figure 4](#). Each group consisted of participants from different agencies to ensure that different perspectives and diverse backgrounds were provided.



Figure 3. Route 1 – West

Figure 3 displays Route 1 (red line) and is approximately 0.95 miles in length. Participants walked from Dolphin Elementary School on the south side of Miramar Parkway to SW 172nd Avenue, crossed Miramar Parkway and proceeded back to Dolphin Elementary School on the north side.

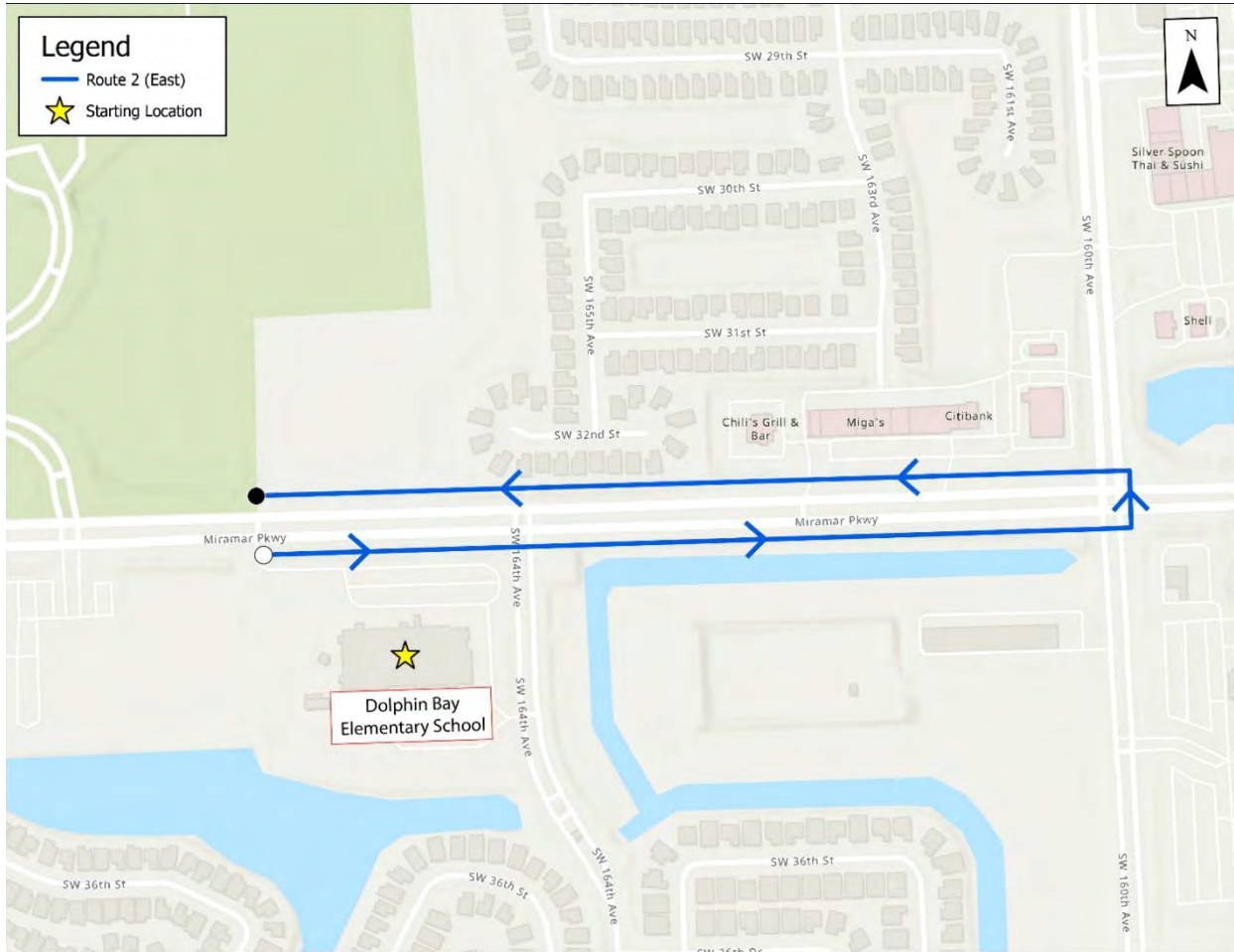


Figure 4. Route 2 – East

Figure 4 displays Route 2 (blue line) and is approximately 1.01 miles in length. Participants walked from Dolphin Elementary School on the south side of Miramar Parkway to SW 160th Avenue, crossed Miramar Parkway and proceeded back to Dolphin Elementary School on the north side.

Chapter 3. Group Observations

The ArcGIS Field Maps application allowed groups to track recommendations on an online map of the study area. While on the Walking Audit, group members aimed to identify concerns of bicycle and pedestrian safety along with elements that could improve the multimodal network. When group members discussed these topics, the group facilitator placed a point in the ArcGIS Field Maps application, wrote a brief note related to the discussion, and took a photo of the area.

Discussions within the groups primarily centered around elements of existing infrastructure or roadway conditions that could be improved to enhance the multimodal experience. Matters related to signal timing, sidewalk condition, bicycle/pedestrian crossing habits, users of the existing amenities, and traffic patterns were frequently noticed by participants. The various agencies then provided approaches to how these issues could be addressed given the knowledge on available right-of-way, planned projects, city initiatives, and public support, which helped form the list of proposed improvements in the next chapter.



Observation 12:
“Sign removed and leaning on tree, near a public bus stop.”



Observation 14:
“No light poles on south side.”



Observation 24:
“Pedestrian connection to the uses along
the Miramar Parkway.”



Observation 28:
“Raised utility cover where concrete has
settled unevenly around the covering.”

Upon returning to Dolphin Elementary School participants were encouraged to highlight/pinpoint locations on aerial maps and placing a dot on the Mobility Continuum. Participants were encouraged to write and voice any additional comments while being able to view the corridor from an aerial perspective.

Additional comments, observations, and photos with their associated locations from the Walking Audit can be found in [Appendix A](#).

Examples of Complete Streets Elements

Below are examples of complete streets elements that may be included; however, recommendations are not limited to these elements.



Conventional Bicycle Lanes



Buffered Bicycle Lanes



Separated Bicycle Lanes



Shared-Use Path



Separated Sidewalks



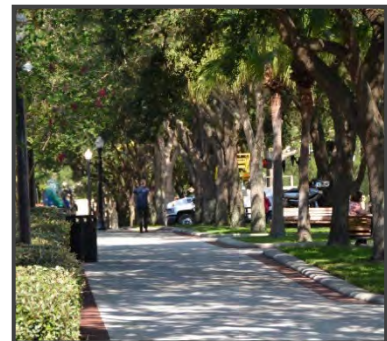
Intersections/Crossings



Traffic Calming



Street Furniture/Benches



Shading/Trees

Chapter 4. Project Improvements

This concluding Chapter of the Walking Audit report is focused on corridor-level analysis and on providing project-level recommendations. The proposed recommendations have been organized into two (2) tiers of implementation based on time needed to initiate the project construction, funding requirements for improvements, and overall complexity of project integration. The recommendations in this Chapter are developed around Complete Streets concepts and are intended to promote corridor-level safety improvements for the benefit of all users.

Short-Term Improvements (1-5 years)

- Conduct a safety study at the intersection of Miramar Parkway & SW 172nd Avenue to identify issues with pedestrian visibility.
Responsible Party: City of Miramar
- Implement Solar Flashing LED Speed Limit Signs within the corridor to increase awareness of vehicle operating speeds.
Responsible Party: City of Miramar
- Maintain the existing landscaping to clear any visibility issues with signing and lighting. There are multiple locations throughout the corridor where bicycle/pedestrian signage is blocked by foliage.
Responsible Party: City of Miramar
- Install pedestrian countdown signals at the intersection of Miramar Parkway & SW 160th Avenue.
Responsible Party: Broward County Engineering
- Upgrade all crossings at the signalized intersections of Miramar Parkway & SW 172nd Avenue and Miramar Parkway & SW 160th Avenue to high emphasis crosswalks.
Responsible Party: Broward County Engineering
- Replace the section of sidewalk that is causing vertical deflection approximately 120 feet east of Bus Stop ID# 2653 on the south side of Miramar Parkway.
 - See Recommendation #7 in [Appendix A](#) on the Infrastructure map.
Responsible Party: City of Miramar
- Replace outdated/worn ADA ramps and detectable warning surfaces at the signalized intersections of Miramar Parkway & SW 172nd Avenue and Miramar Parkway & SW 160th Avenue.
Responsible Party: City of Miramar

- Upgrade pedestrian crossing signage at the signalized intersections of Miramar Parkway & SW 172nd Avenue and Miramar Parkway & SW 160th Avenue.
Responsible Party: Broward County Engineering
- Install pedestrian lighting on the south side of Miramar Parkway to improve pedestrian and vehicle visibility.
Responsible Party: City of Miramar
- Move Bus Stop ID# 4502 serving westbound Route 28 and Bus Stop ID# 2653 serving eastbound Route 28 closer to the intersection to reduce the possibility of pedestrians crossing at an unmarked location after exiting the bus. The stop is currently located approximately 300 feet east of the intersection of Miramar Parkway & SW 172nd Avenue.
Responsible Party: Broward County Transit
- Move Bus Stop ID# 3803 serving eastbound Route 28 closer to the intersection to reduce the possibility of pedestrians crossing at an unmarked location after exiting the bus. The stop is currently located approximately 450 feet west of the intersection of Miramar Parkway & SW 160th Avenue.
Responsible Party: Broward County Transit
- Study the possibility of restricting eastbound turns out of the Shoppes at Silver Isles (approximately 900 feet west of the intersection of Miramar Parkway & SW 160th Avenue). Turning left from the driveway creates hazardous conditions for motorists and has resulted in multiple crashes.
Responsible Party: City of Miramar
- Consider increasing the countdown time on the pedestrian signals on all crossings at the signalized intersections of Miramar Parkway & SW 172nd Avenue and Miramar Parkway & SW 160th Avenue. Pedestrians frequently have issues making it through the crossings at a normal walking pace. City of Miramar will need to coordinate with Broward County Traffic Engineering Division to determine appropriate countdown times on pedestrian signals.
Responsible Party: Broward County Engineering
- Add “Turning Vehicles Stop for Pedestrians” signs at the signalized intersections of Miramar Parkway & SW 172nd Avenue and Miramar Parkway & SW 160th Avenue.
Responsible Party: Broward County Engineering

Long-Term Improvements (6+ years)

- In line with the Complete Streets Master Plan, replace the existing conventional bike lanes on both sides of the roadway with a widened sidewalk of 10-12 feet to accommodate multimodal travel- see Streetmix typical section provided below.
 - On the south side of Miramar Parkway, the existing curb and sidewalk should be extended into the roadway, replacing the existing conventional bike lane.
 - On the north side of Miramar Parkway, the existing curb and sidewalk should be extended into the roadway, replacing the existing conventional bike lane. There is an existing landscape buffer between the sidewalk and roadway throughout most of the corridor that should be reimplemented between the roadway and widened sidewalk space if ROW permits.



- Install traffic signalization at the intersection of Miramar Parkway and the Miramar Regional Park entrance. Include high emphasis crosswalks and audible pedestrian signals to increase pedestrian accessibility to Miramar Regional Park and Dolphin Bay Elementary School, along with the upcoming senior living facility located on the property directly west of the Elementary School, which will be served by the intersection.
 - Currently it is one mile between signalized crossings of Miramar Parkway, which is an unrealistic distance for people to walk to cross the street.
 - A signalized intersection would also improve conditions for left-turning, eastbound vehicles from the park, as they currently have to cross 3+ lanes of westbound traffic and analyze eastbound traffic conditions before completing the turn.
 - See Recommendation # 3 in [Appendix A](#) on the Traffic map
- If moving Bus Stop ID# 2653 closer to the intersection of Miramar Parkway and SW 172nd Avenue, arrange a property easement with the Homeowners

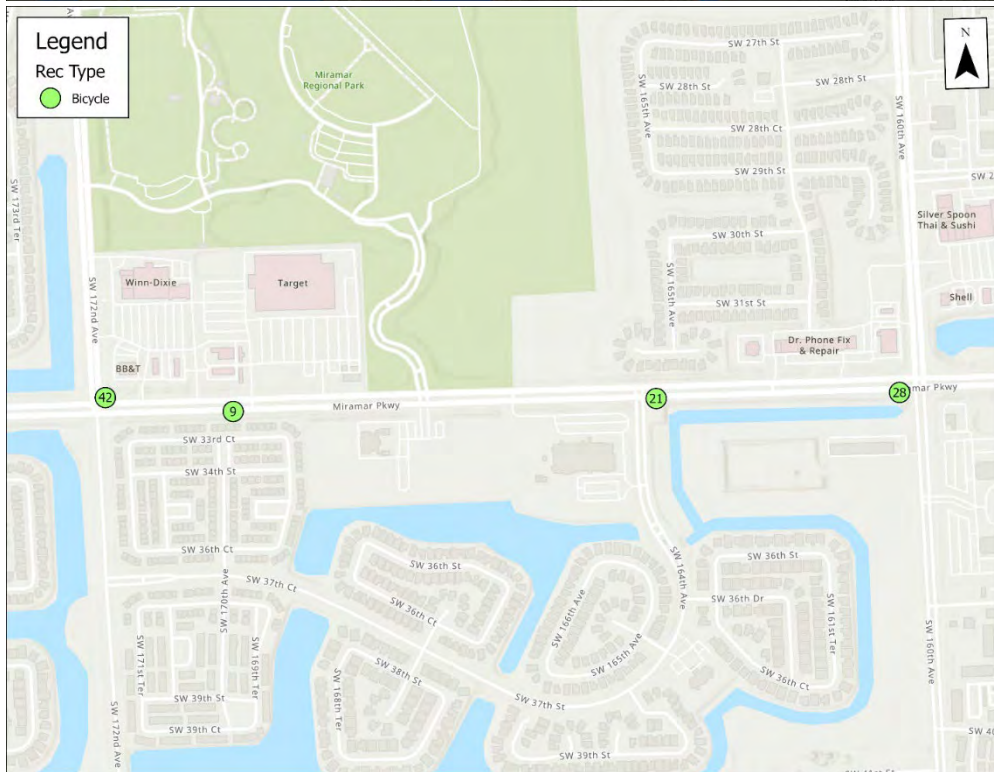
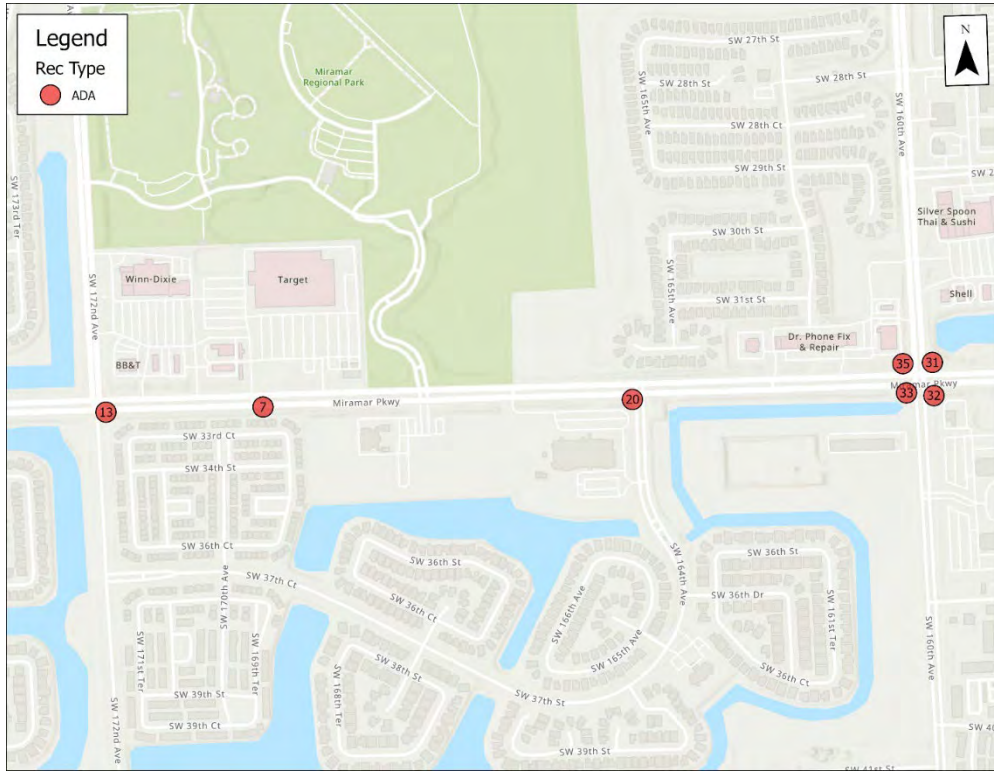
Association (HOA) to construct a bus bay near the intersection to reduce conflicts and congestion caused by buses stopping near the intersection.

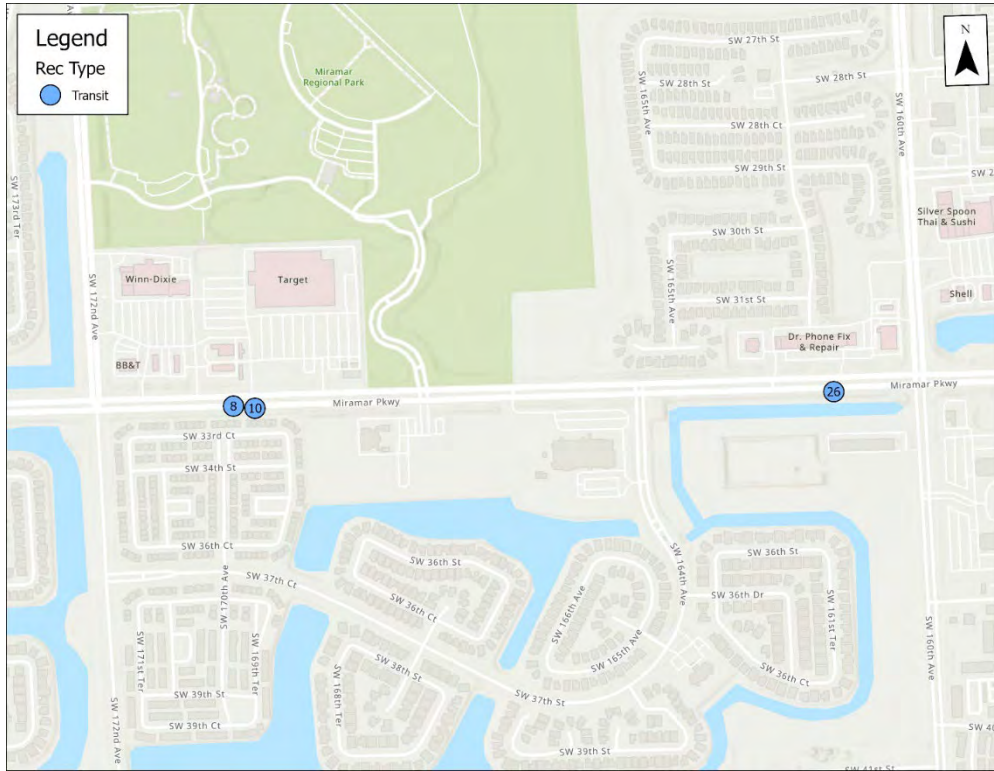
- Evaluate locations near the residential neighborhood at the southwest corner of the Walking Audit limits to construct multimodal paths linking the neighborhood to Miramar Parkway.
 - The following locations were identified as potential locations during the Walking Audit:
 - Between the homes closest to Miramar Parkway along SW 33rd Court.
 - Behind the homes along SW 169th Terrace in the undeveloped landscape space.

Broward MPO Walking Audit Website: <http://www.browardmpo.org/index.php/walking-audits>

Appendix A

Walking Audit Observations, Recommendations, and Information





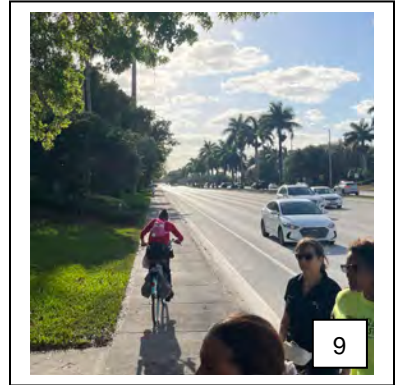
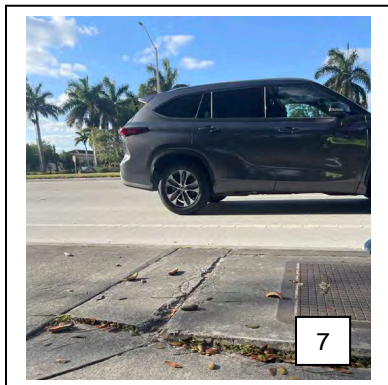
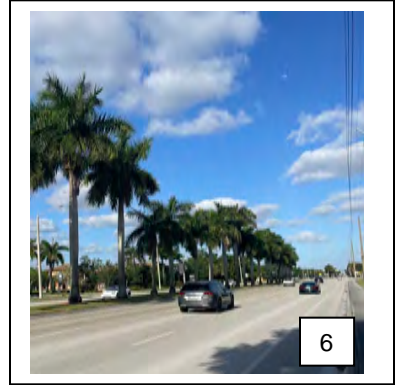
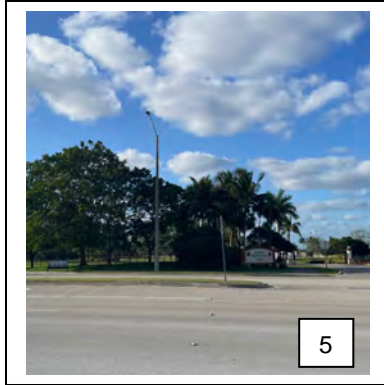
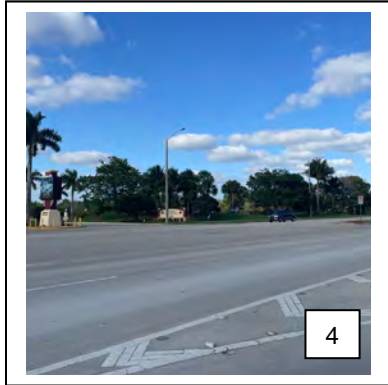
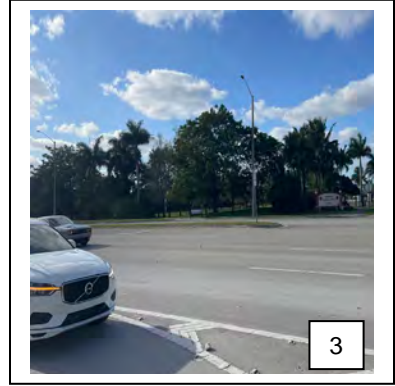
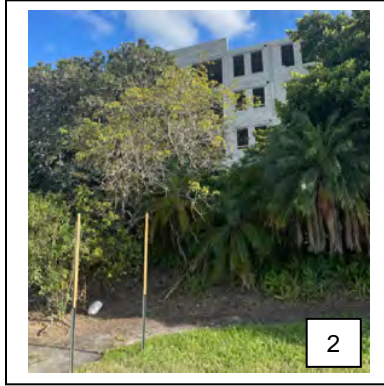
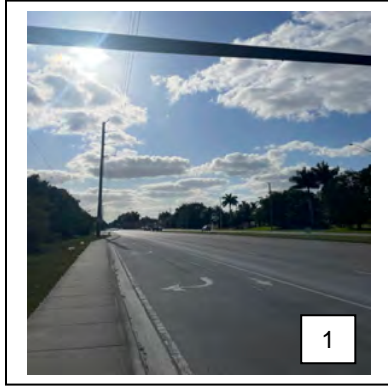
ADA	
Observation Number	Observations/Notes
7	Non-ADA compliant vertical deflection. There is a utility cover where concrete has settled differently around the covering, creating a raised surfacing. Concrete would need to be reset.
13	ADA ramp needs replacing.
20	Incline slope not to code, looks like it is missing it's tactile.
31	Cracked pavement is a tripping hazard.
32	Ramps are missing landing pads.
33	Standard crosswalks should be high emphasis.
35	Well shaded but sidewalk lifted and is a tripping hazard.
Bicycle	
Observation Number	Observations/Notes
9	Noted a bicyclist using the sidewalk. Does not look like they are comfortable using conventional bike lane
21	Faded bike markings.
28	Additional bike and pavement markings faded.
42	All crossings at 172nd Street and Miramar parkway will be upgraded to special emphasis crossings. Buffered bike lanes to be added west of 172nd Street

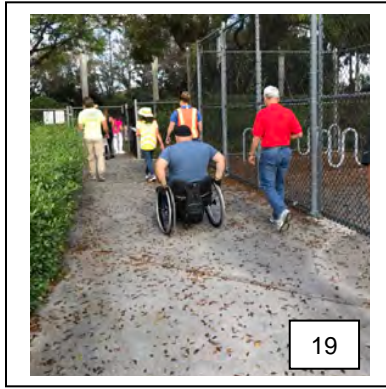
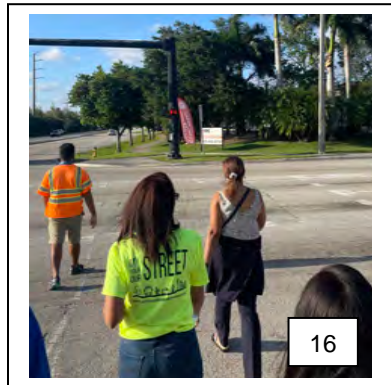
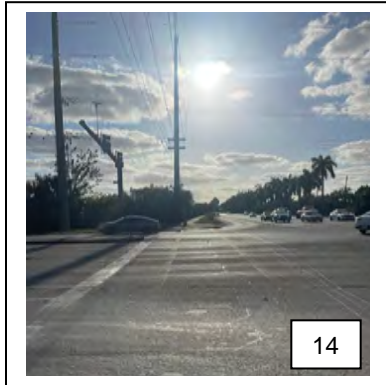
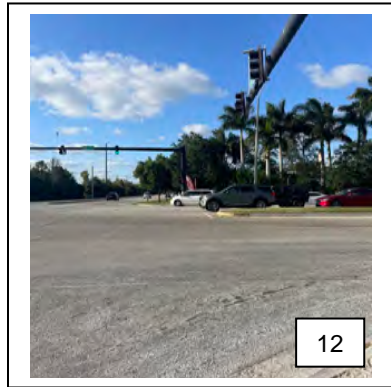
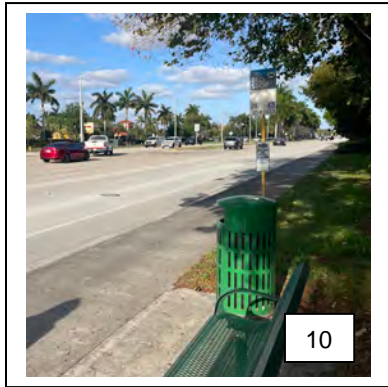
Pedestrian	
Observation Number	Observations/Notes
2	Senior assisted living facility located near the corridor. Likely to create frequent walking traffic from senior citizens
3	Should be a signalized intersection at Miramar regional park entrance. That would enable implementation of crosswalk and traffic signal. This would increase pedestrian access into the park as current access is primarily for vehicles
5	Consider a pedestrian bridge. However, cost may not be reasonable given distance. An at-grade facility may be more reasonable given the location.
11	Little connection between sidewalk/roadway and the neighboring residential homes. Connections are limited to signalized crossings, or neighborhood access roads that are not along the corridor.
14	Parent noted that a crossing guard is very helpful tool for crossing the road and suggested that more crossing guards be present. At 4:30 there is a crossing guard at Miramar Pkwy and 172nd Street.
15	Suggested all-pedestrian time for only pedestrians to cross and all traffic be stopped. A possible time do this would be during school hours.
16	We did not make it through the intersection before the countdown signal stopped. A possibility would be to extend the countdown time. Potentially consider a no-right turn sign when pedestrians crossing for NB/EB right turning vehicles as Right and Left turning (SB to EB) vehicles are also allowed to turn while walk signal is on
19	Kids have route to walk and bike when needing to head east while Kids not encouraged to walk west.
25	Pedestrian sign removed and leaning on tree, near bus stop. Needs replacement or replanting.
27	No light poles on south side, so residents don't feel comfortable walking at night, it gets very dark.
29	Signage not to standard, as crossing distance may be too far.
34	Signal heads do not countdown.

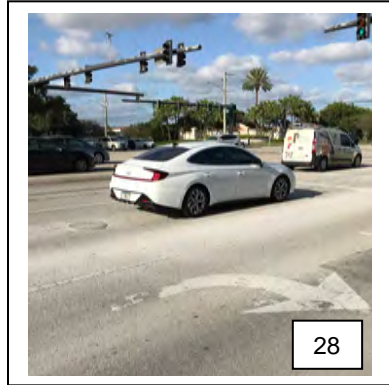
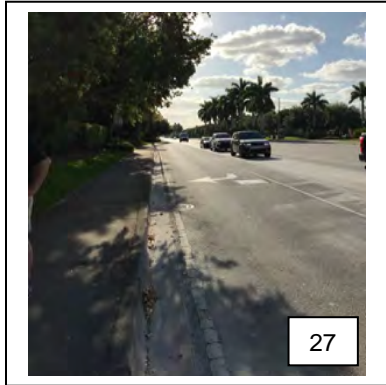
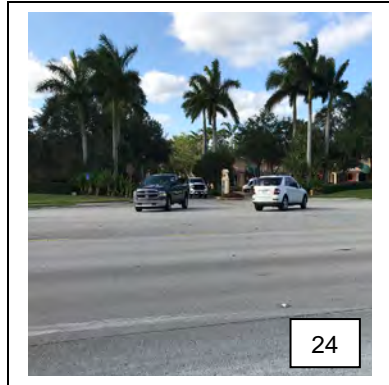
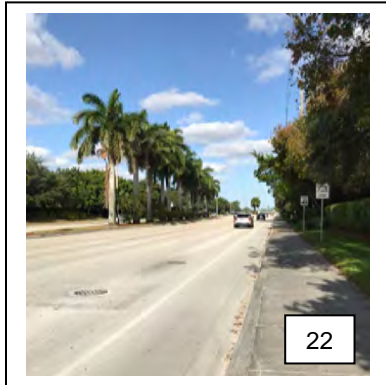
37	Nice pedestrian connection to shopping center.
38	Observed a pedestrian crossing and walking along median mid-block, potentially a location for a crosswalk.
39	Pedestrian crossing sign in need of crossing standards update at the SW 160th Avenue intersection.
40	Potential pedestrian hazard in exposed drainage piping.
41	Litter throughout the pedestrian walking area and roadway.
Traffic	
Observation Number	Observations/Notes
1	Visibility issues for WB vehicles, especially at 172nd Street. It is hard to see pedestrians.
4	Left turn out of park is difficult, having to cross 3+ lanes WB and analyze EB traffic can be difficult for most drivers. Consider less spacing between signalized intersections.
6	Many issues with speeding vehicles. Noted that there are many police out radaring.
12	Noted issues with right turn on red vehicles (NB turning EB) and Left turning (SB) vehicles while trying to cross.
17	Wide shoulder near left turn lane meant for emergency vehicles. Some regular vehicles use this to make left turns.
22	Average speed limit is about 58 mph per Police Department.
23	Difficult to exit shopping center, many people use this exit to head east. This has caused a number of accidents.
24	Accident almost occurred at the exit of the commercial plaza located near SW 160th Avenue, on the northside of Miramar Parkway. Designated left turn lane almost hit car exiting plaza via left turn.

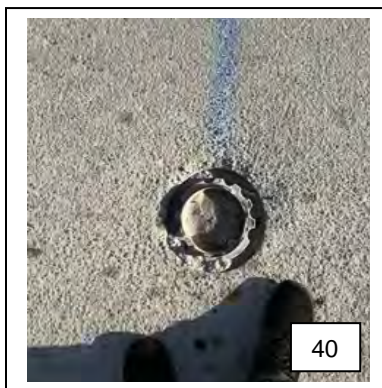
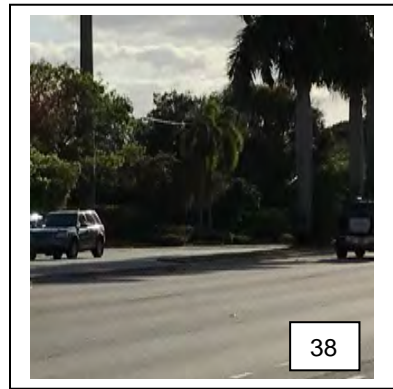
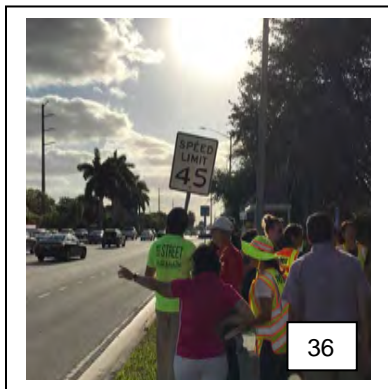
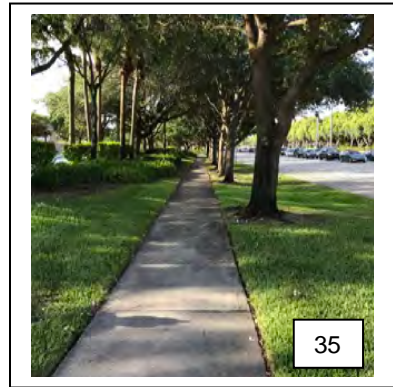
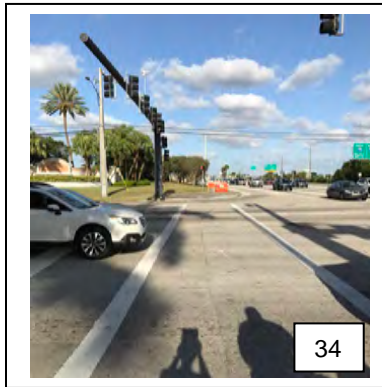
36	Speed limit sign leaning and peeling. Needs replacement or repainting.
Transit	
Observation Number	Observations/Notes
8	Bus stopped for pickup.
10	Advocate for signalized crosswalks near bus stops. Most riders will have to cross the street at either the beginning or end of their trip to access their destinations.
26	Bus stop is far from signal. There are three bus stops along Miramar Parkway but no access to residential between 160 and 172.

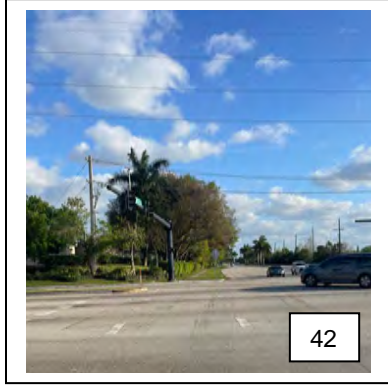
Photos from the Walking Audit (Number correlates to Observation Number in above tables)











Appendix B

Walking Audit Presentation



WALKING AUDIT

City of Miramar
Miramar Parkway from SW 172nd Ave to SW 160th Ave

BROWARD 

COMPLETE STREETS

Better Streets • Better Broward • Better Life

Commitment and Evolution of Complete Streets

WALKING AUDIT ROLES

Host

City of Miramar
Dolphin Bay ES



Organizer



Event

Coordinators

Kimley-Horn and Marlin
Engineering



TODAY'S AGENDA

- Introduction
- Brief presentation
- Walking audit
- Group discussion



BROWARD COMPLETE STREETS
Better Streets • Better Broward • Better Life

Join Us for a **Walking Audit** in the City of Miramar!

Walk with us to evaluate sections of Miramar Parkway between SW 172nd Avenue and SW 160th Avenue. Provide a community perspective and help us identify ways to improve this corridor.

WHY Walking audits help identify concerns regarding safety and access for those who walk and bike. Help us transform it into a Complete Street*.
*A street designed for all modes of transportation

WHEN + WHERE **Date:** Tuesday, April 12, 2022
Time: 5:00 p.m. - 7:00 p.m.
Meeting Location: Dolphin Bay Elementary
16450 Miramar Pkwy, Miramar, FL 33027

DETAILS Walking distance will be approximately 1 mile with water and snacks provided. This is an outdoor event so please be sure to wear sunscreen and comfortable shoes.

SCAN ME

tinyurl.com/MiramarWalk

RSVP For more information about the walking audit, including a route map, please visit Browardmpo.org/walking-audits. Please contact Benjamin Restrepo at restrepob@browardmpo.org for more information.

 @SpeakUp_Broward @SpeakUpBroward @SpeakUpBroward

 **Broward MPO**
Metropolitan Planning Organization

 **MIRAMAR**
QUALITY AND PROGRESS
EVERY DAY

For complaints, questions or concerns about civil rights or nondiscrimination; or for special requests under the Americans with Disabilities Act, please contact: Carl Ema, Title VI Coordinator at (954) 876-0052 or emac@browardmpo.org

WALKING AUDIT PURPOSE

- Highlight **corridors** and **areas** that could benefit from a street assessment to better promote all modes of transportation.
- **Aims to engage** public stakeholders, technical staff, elected officials, and representatives of non-traditional transportation partners.



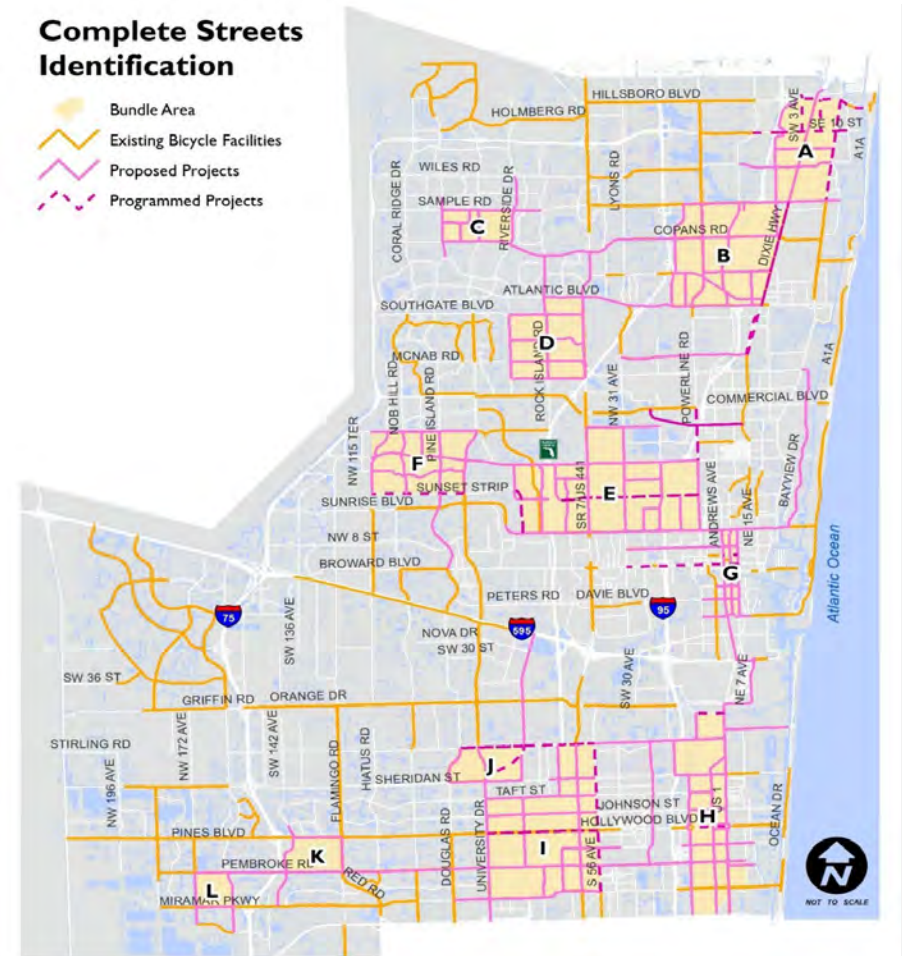
COMPLETE STREETS MASTER PLAN

Intended to guide future investment in Complete Streets improvements by developing a prioritized list of projects based on technical, data-driven analysis, including access to transit.



COMPLETE STREETS MASTER PLAN

- Complete Streets Projects
 - Projects within a Bundle Area
- Super Connectors
 - Projects connecting Bundle Areas/Existing Facilities



OVERVIEW



Methodology



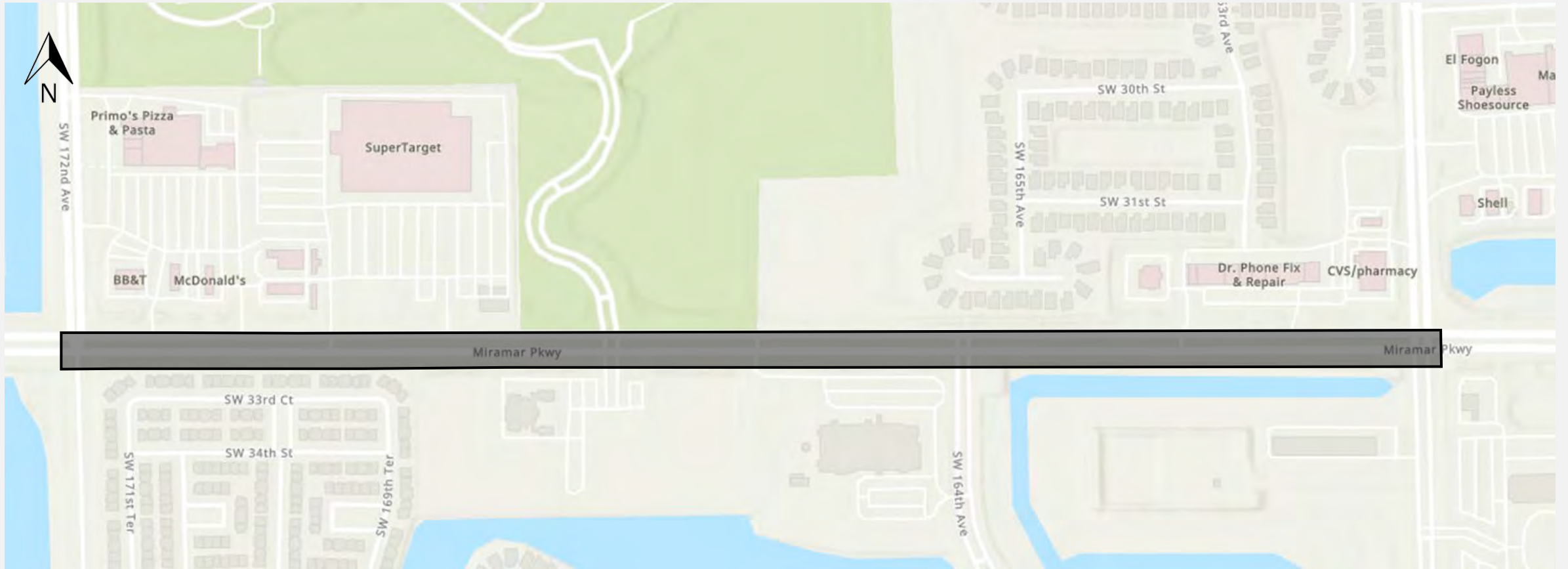
Audit



Workshop



WALKING AUDIT AREA



WALKING AUDIT AREA

Miramar Pkwy from SW 172nd Ave to SW 160th Ave

- Length: ~1 mile
- Roadway: 6-lane divided
- Traffic: 34,500 per day
- Speed: 45 miles per hour
- 15-mph school zone in front of Dolphin Bay Elementary School
- Bike lanes
- Sidewalks
- Lack of crosswalks at driveways



WALKING AUDIT AREA

Roadway Context Classification (SPCC): **C3R Suburban Residential**

- Primarily residential uses
- Large block lengths
- Minimal access points into residential neighborhoods
- Disconnected roadway network

FDOT *Completing* **FLORIDA'S STREETS** **Context Classification System**

- At the heart of Complete Streets
- Puts the context in "context-based design"
- Based on the common "transect" system
- Allows fine-tuned designs beyond "urban/rural"
- Help determine design criteria, including appropriate design speed

MORE RURAL **MORE URBAN**

C1	C2	C2T	C3R	C3C	C4	C5	C6
Preserve	Rural	Rural Town	Suburban Residential	Suburban Commercial	Urban General	Urban Center	Urban Core



SW 172 AVE

SW 172 AVE

7

7









MIRAMAR
REGIONAL PARK
16801







H

↑

BUS STOP
28. ID #3754

MyRide
See time of
ARRIVAL
citibar

Green trash can

Green metal bench

White car, Red car, Silver car

Palm trees



200 F



NORTH SOUTH
75 75 TO Turnpike
Naples Miami
KEEP LEFT KEEP RIGHT





MIRAMAR

MIRAMAR
REGIONAL PA
1680



WALKING AUDIT

- Organize into 2-4 groups
- Group sizes can range from 5-15 people
- Group leaders will be responsible for leading the discussion and enter feedback and data
- Participants are encouraged to take notes and photos

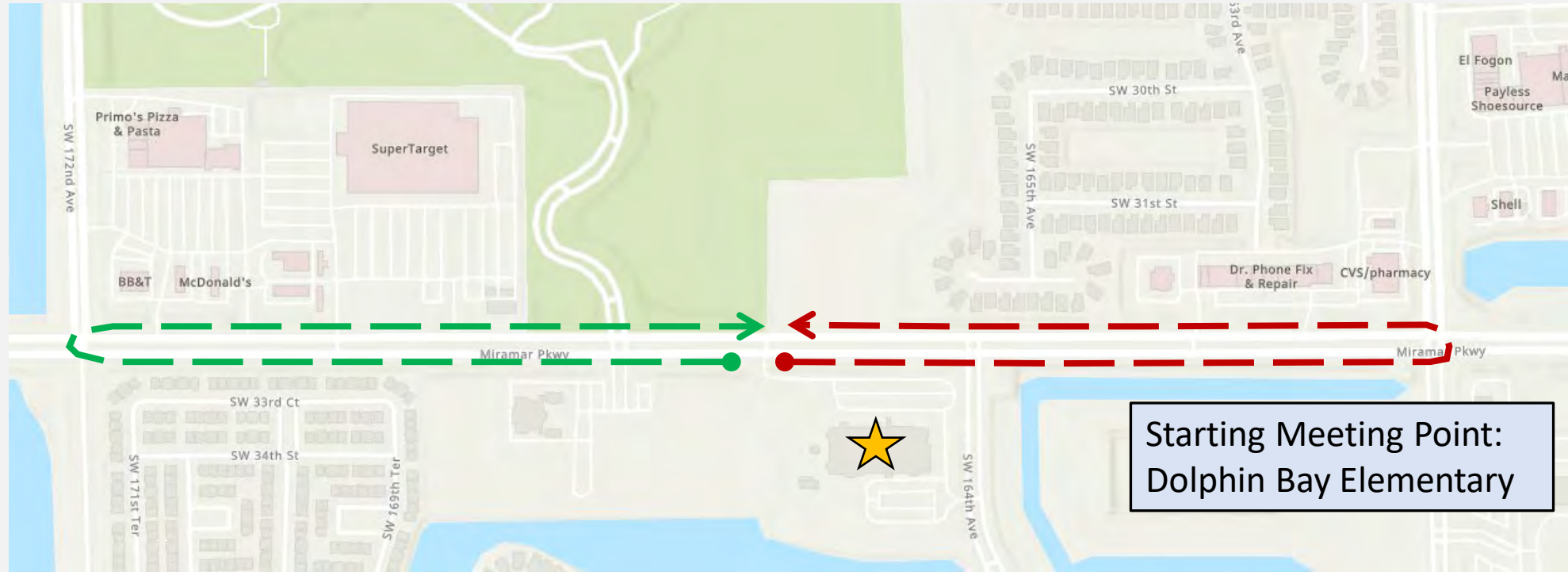


WALKING AUDIT

Route 1

Group A ●

Group B ●



GROUP DISCUSSION

- Conclusion of the walking audit
- Aerial map of the corridor
- Summarize findings and mark-up map





Contact Us

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