

Better Streets | Better Broward | Better Life

# Walking Audit Report

City of Fort Lauderdale

SW/SE 17<sup>th</sup> Street  
from SW 9<sup>th</sup> Avenue to  
Cordova Road

June 2022

## Acknowledgments

The Broward Metropolitan Planning Organization (MPO) would like to extend special thanks to the City of Fort Lauderdale's Mayor's Office and 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 29 individuals who participated in the Walking Audit, which was graciously hosted by Broward Health Medical Center.

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 Fort Lauderdale
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  - Renee Manchoy, Commissioner Sorensen's Office
  - Karen Warfel
  - Istvan Virag
  - Judy Erickson
- Florida Department of Transportation (FDOT), District Four
- Broward Metropolitan Planning Organization

## Special Participation

- Broward Health Medical Center (Host)
- City of Fort Lauderdale Mayor's Office
- City of Fort Lauderdale City Commissioners
- Broward County Traffic Engineering Division
- Poinciana Park Civic Association
- Harbordale Civic Association
- 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 SW/SE 17<sup>th</sup> Street from SW 9<sup>th</sup> Avenue to Cordova Road as a high-ranked priority corridor. Community and stakeholder feedback is key to developing the scope for a mobility project. To that end, the Broward 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 gathered at the intersection of SW/SE 17<sup>th</sup> Street and S Andrews Avenue, adjacent to Broward Health Medical Center on Thursday, April 14, 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. Suggestions and comments brought up during the walks were recorded on the Field Survey App, which allowed the participants to take a photo and note the physical location of the comment. The outcome of evaluations and input from multiple agencies is a comprehensive analysis and vision for SW/SE 17<sup>th</sup> Street from SW 9<sup>th</sup> Avenue to Cordova Road.

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 SW/SE 17<sup>th</sup> Street 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 SW/SE 17<sup>th</sup> Street from SW 9<sup>th</sup> Avenue to Cordova Road 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 future investment for SW/SE 17<sup>th</sup> Street 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 SW/SE 17<sup>th</sup> Street. These projects include multimodal improvements such as constructing bike lanes, altering the pedestrian realm to provide shading and increase walking space, and upgrading bus stops to include seating, wayfinding, and shelters. The completed and planned projects have created safer environments for all modes of transportation, along with enhancing 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

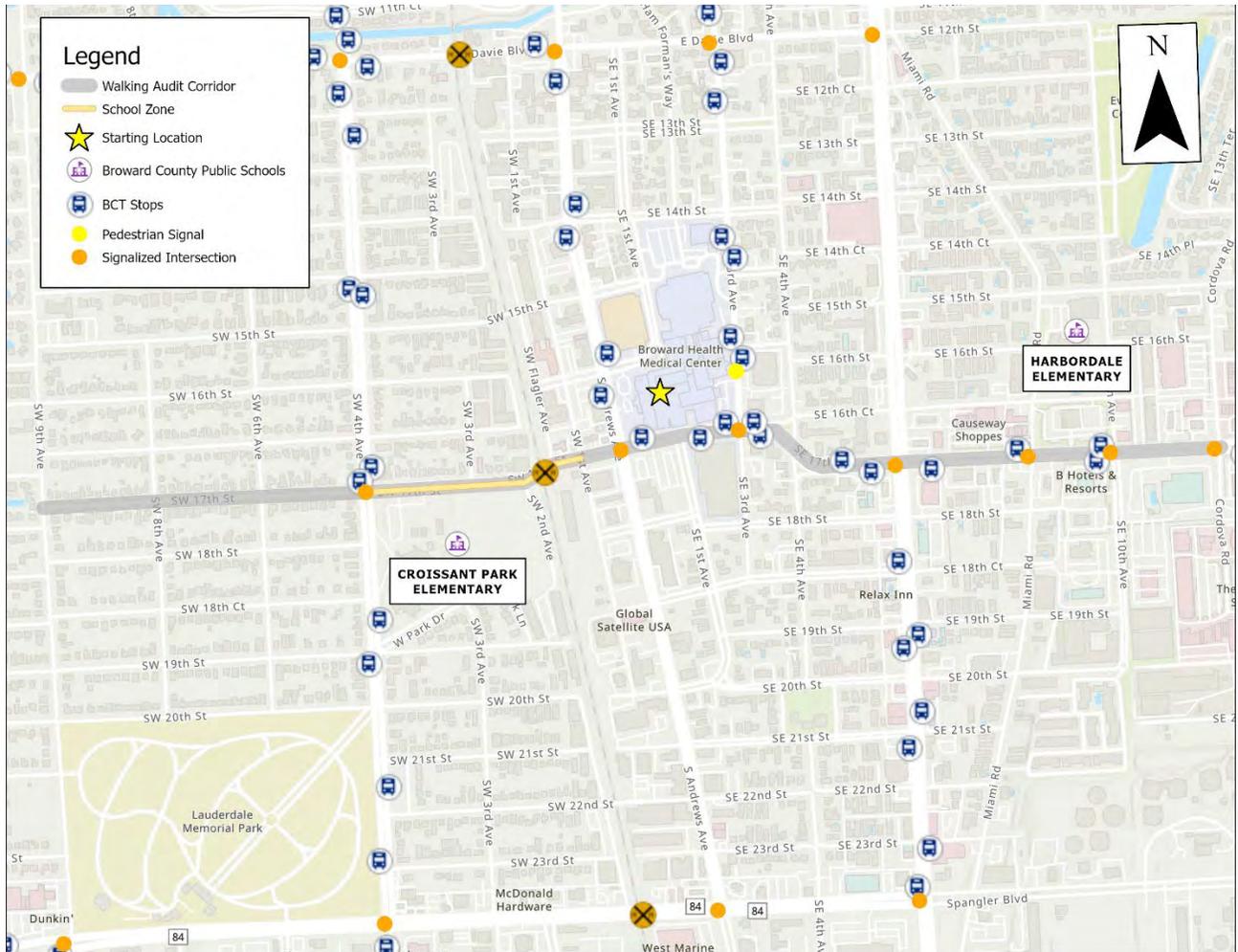
## Study Corridor

Broward MPO has identified the SW/SE 17<sup>th</sup> Street 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.

The project team conducted a Pre-Walking Audit Corridor Assessment to document existing conditions and infrastructure along SW/SE 17<sup>th</sup> Street to provide context for the Walking Audit participants. The study corridor is located in the City of Fort Lauderdale and is just south of downtown Fort Lauderdale, as shown in **Figure 1**. There are a mix of land uses on or near the corridor including commercial, institutional, industrial, and residential contributing to the diverse modes of travel, lane widths, and traffic patterns. Some destinations near the corridor include grocery stores (Whole Foods, Publix, Winn-Dixie), the Broward Health Medical Center Complex (716 total beds w/ 3,100 staff), banks, offices, auto-repair, fire services, and restaurants. 708 students attend Croissant Park Elementary, which is located within the subject corridor at SW 17<sup>th</sup> Street and SW 4<sup>th</sup> Avenue. Multiple residential communities are located within the study corridor, primarily concentrated in the western portion of the study corridor. These uses and destinations generate frequent pedestrian and vehicle activity along both corridors.

## Planned and Programmed Projects along SW/SE 17<sup>th</sup> Street

- SR-A1A/17th Street over the Mercedes River Bridge Project
  - FM# 444009-1-52-01
  - [https://www.d4fdot.com/bcfdot/sr\\_a1a\\_17\\_street\\_over\\_mercedes\\_river\\_bridges\\_rehabilitation\\_project.asp](https://www.d4fdot.com/bcfdot/sr_a1a_17_street_over_mercedes_river_bridges_rehabilitation_project.asp)
- Broward MPO Complete Streets Master Plan
- SR-A1A ATMS Deployment
  - ATMS - Arterial Traffic Management- Managed by FDOT
- SR-A1A Multimodal Study
  - Urban Corridor Planning- Managed By FDOT



**Figure 1. Study Corridor**

The speed limit on SW/SE 17<sup>th</sup> Street is 35 miles per hour (MPH) between US-1 and Cordova Road, 30 MPH between the FEC Railroad and US-1, and 25 MPH between SW 9<sup>th</sup> Avenue and SW 4<sup>th</sup> Avenue. Additionally, there is a 15 MPH school zone from SW 4<sup>th</sup> Avenue to west of SW 1<sup>st</sup> Avenue. The functional classification designated by the Florida Department of Transportation (FDOT) of SW/SE 17<sup>th</sup> Street is an Urban Minor Collector from SW 9<sup>th</sup> Avenue to SW 4<sup>th</sup> Avenue and an Urban Minor Arterial from SW 4<sup>th</sup> Avenue to Cordova Road. SW/SE 17<sup>th</sup> Street is a local road from SW 9<sup>th</sup> Avenue to US-1 and changes to a state road from US-1 to Cordova Road. Additionally, the entire corridor has received a preliminary systemwide provisional context classification (SPCC) of C4-Urban General. The FDOT Context Classification is used to understand who the typical roadway users are, what the regional and local travel demand of the roadway is, and the challenges

and opportunities of each roadway user. In a C4- Urban General context, roadway users will typically interact with nearby uses through various modes of transportation. Uses and destinations in this environment are also located within short distances, encouraging frequent multimodal activity. The 2019 Average Annual Daily Traffic (AADT) for SW/SE 17<sup>th</sup> Street is listed below:

- 2,500 AADT between SW 9<sup>th</sup> Avenue to S Andrews Avenue
- 10,300 AADT between S Andrews Avenue to US-1
- 40,500 AADT between US-1 to Cordova Road

SW/SE 17<sup>th</sup> Street is a four to six lane divided roadway with sidewalks on both sides and no existing bicycle facilities- see next page for existing roadway sections. Typical lane widths range between 10-16 feet. Typical median widths throughout the corridor range between 6-20 feet. Sidewalk width ranges between 5-10 feet, and currently there is little to no buffer between the sidewalk and the roadway. Other conditions noted during the Pre-Walking Corridor Assessment include lack of clear signage, incomplete (segments without) sidewalks, faded crosswalks and pavement markings, and barriers to ADA accessibility.



Train crossing warning blocked by overgrown street trees. Located by Croissant Park.



Incomplete residential sidewalk section on SW 17<sup>th</sup> Street, west of SW 4<sup>th</sup> Avenue.

SW 17<sup>th</sup> Street from SW 9<sup>th</sup> Avenue to SW 4<sup>th</sup> Avenue- 50' ROW



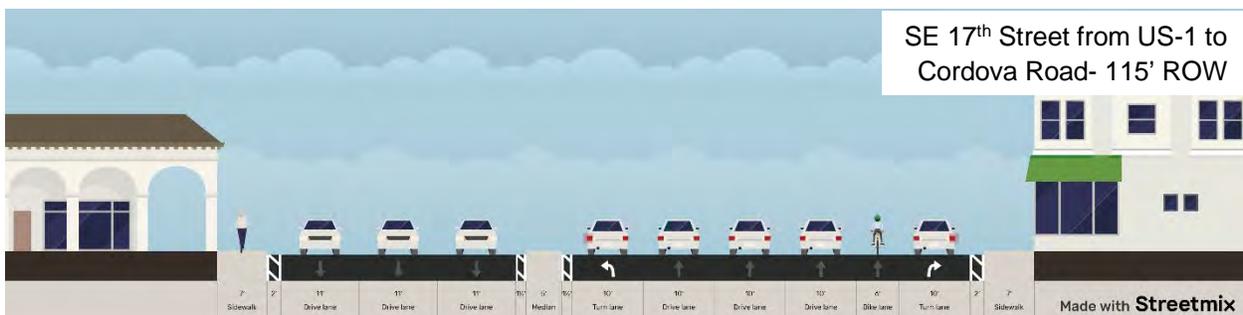
SW 17<sup>th</sup> Street from SW 4<sup>th</sup> Avenue to FEC Railroad- 100' ROW



SW/SE 17<sup>th</sup> Street from FEC Railroad to US-1- 100' ROW



SE 17<sup>th</sup> Street from US-1 to Cordova Road- 115' ROW





Non-ADA compliant sidewalk access and road crossing.



Faded pedestrian crosswalk at SW 4<sup>th</sup> Avenue.

Broward County Transit (BCT) Route 1 operates on SE 17<sup>th</sup> Street from SE 3<sup>rd</sup> Avenue to US-1 & Route 40 operates along SE 17<sup>th</sup> Street from S Andrews Avenue through Cordova Road. Along the corridor, there are four transit stops for Route 1, and 10 transit stops for Route 40. Shelters are not provided at 8 stops. 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>.

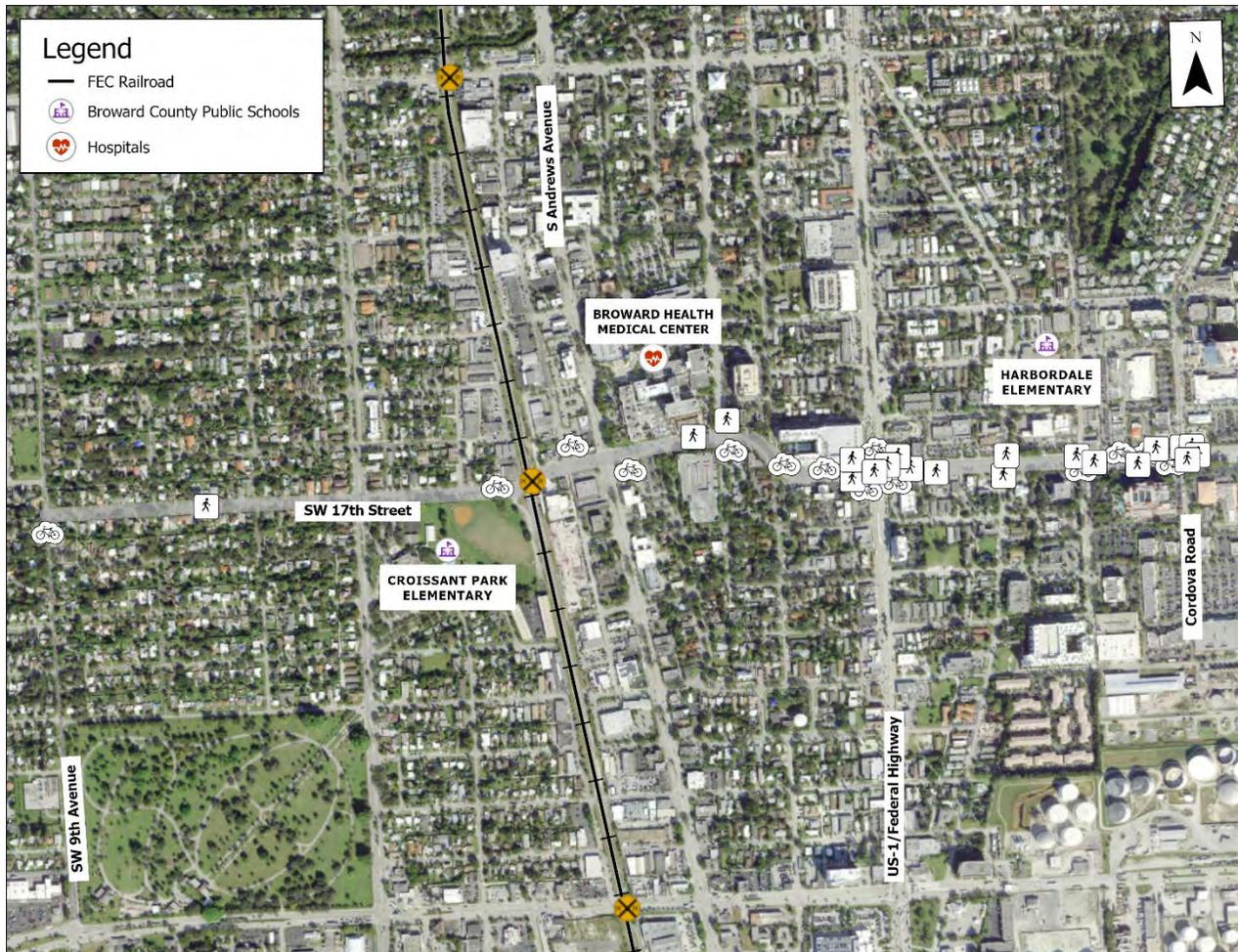
Ridership totals for Route 1 (entire route) & Route 40 (entire route) in February 2022 is shown in **Table 1**.

**Table 1. BCT Routes 1 & 40 Ridership, February 2022**

Route No.	Average Weekday	Average Saturday	Average Sunday
1	3,159	3,240	2,360
40	1,875	1,489	982

## Bicycle and Pedestrian Crash Analysis

Examining bicycle and pedestrian crash data helped identify dangerous and problematic areas within the corridor for vulnerable users. Crash types and locations from the previous six years (2016-2021) were included in the analysis and there were 15 crashes that involved bicyclists and 20 crashes that involved pedestrians and as shown **Figure 2**. When including crashes between motorists, there were 57 within the study area.



**Figure 2. Bicycle & Pedestrian Crash Data**

Most crashes on SW/SE 17<sup>th</sup> Street occurred east of the FEC Railroad, and one was located in the school zone near Croissant Park. Out of the 35 total crashes involving bicyclists and pedestrians, 30 resulted in injury, including one fatality. 11 of those crashes occurred in dark conditions.

## Chapter 2. Walking Audit Overview

On Thursday, April 14, 2022 from 3:00 pm to 6:00 pm members from FDOT, Broward MPO, City of Fort Lauderdale Mayor's Office, and Broward Health Medical Center, along with AARP Volunteers, nearby residents, and workers gathered at the intersection of SW/SE 17<sup>th</sup> Street and S Andrews Avenue to conduct a Walking Audit. The Walking Audit began with a brief explanation of goals and objectives and staff introductions. Participants then divided into four (4) 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.



Each group walked approximately one mile 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, nearby residents, and workers of the area 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 improvements that will provide the City of Fort Lauderdale and Broward MPO with a clear understanding of critical issues identified by the community and stakeholders. Findings and proposed improvements from the Walking Audit will also be used to establish the final scope of the Complete Streets Masterplan Project to be programmed into the MPO TIP.

## 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.

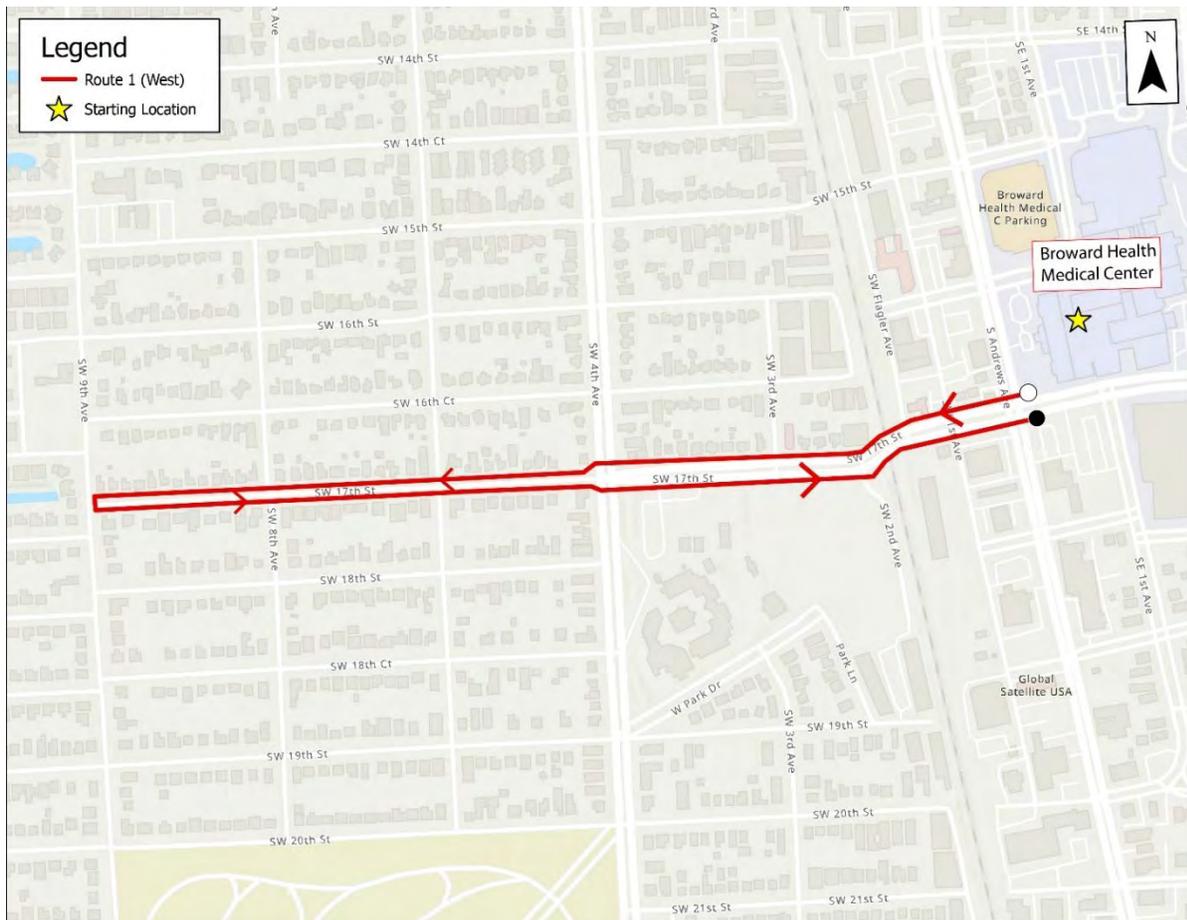


## Teams and Routes

Participants were organized into four (4) groups of about 5 to 10 people to provide diverse viewpoints and feedback from conditions experienced while walking the study area. The application used to document observations and recommendations from the participants,

which is 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.

Two groups were assigned to walk the western portion of the corridor, Route 1 – West, and two groups were assigned to walk the eastern portion of the corridor, Route 2 – East. Each group consisted of participants from different agencies, nearby residents, and workers of the area 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 0.8 miles in length. Participants traveled from Broward Health Medical Center to the intersection of SW/SE 17<sup>th</sup> Street and S Andrews Avenue where they began walking west on the north side of SW 17<sup>th</sup> Street

before turning at SW 9<sup>th</sup> Avenue to walk on the south side of SW 17<sup>th</sup> Street back to Broward Health Medical Center.

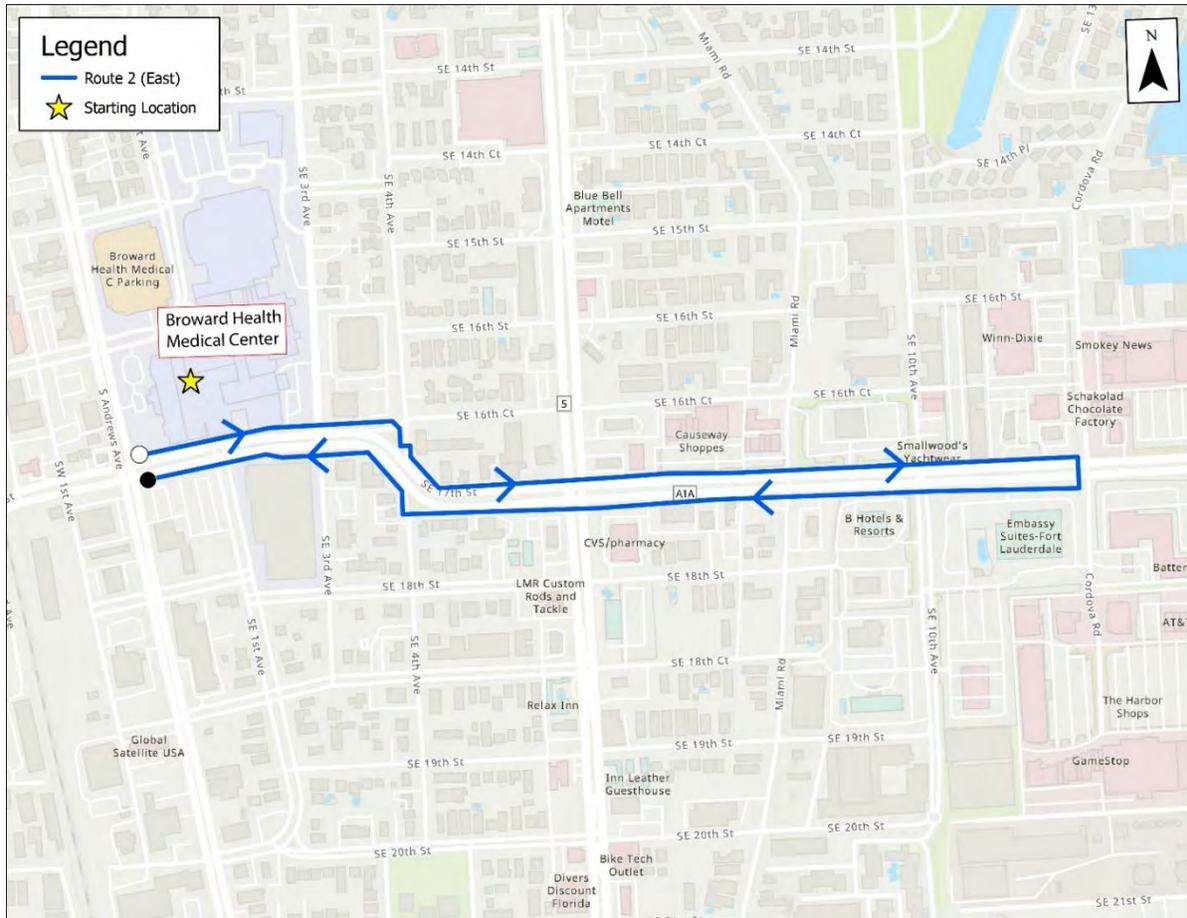


Figure 4. Route 2 – East

Figure 4 displays Route 2 (blue line) and is approximately 1.4 miles in length. Participants traveled from Broward Health Medical Center to the intersection of SW/SE 17<sup>th</sup> Street and S Andrews Avenue where they began walking east on the north side of SW 17<sup>th</sup> Street before turning at Cordova Road to walk on the south side of SW 17<sup>th</sup> Street back to Broward Health Medical Center.

## 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, traffic patterns, and the Florida East Coast (FEC) railway 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 (ROW), planned projects, city initiatives, and public support, which helped form the list of proposed improvements in the next chapter.



Observation 52:  
"Flashing lights are blocked by palm tree."



Observation 53:  
"Narrow Sidewalk"



Observation 71:  
“Consider a bike path near Croissant  
Park”



Observation 32:  
“Wrap Utilities in Art”

Upon returning to Broward Health Medical Center participants were encouraged to write and voice any additional comments while being able to view the corridor from an aerial perspective.

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

## Example 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



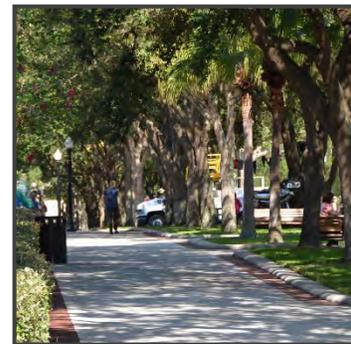
Intersections/Crossings



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)

- Maintain the existing crosswalks to restore the pavement markings and prevent additional fading and pedestrian visibility issues at the following intersections: SW 17<sup>th</sup> Street & SW 4<sup>th</sup> Avenue (east, north, and west crosswalks), SW 17<sup>th</sup> Street & S Andrews Avenue (all four), SW 17<sup>th</sup> Street & SE 3<sup>rd</sup> Avenue (all four), SW 17<sup>th</sup> Street & S Federal Highway (all four), SW 17<sup>th</sup> Street & Miami Road (south and north crosswalks), SW 17<sup>th</sup> Street & SE 10<sup>th</sup> Avenue (all four), SW 17<sup>th</sup> Street & Cordova Road (all four)

**Responsible Party:** City of Fort Lauderdale, FDOT (for the State Highway System section of SE 17<sup>th</sup> Street/SR-A1A)

- Maintain the existing sidewalks along SW/SE 17<sup>th</sup> Street to restore the cracked and damaged areas to ensure safe pedestrian travel. Reference the “Pedestrian” map and table in Appendix A to view location and details of sidewalk-specific observations.

**Responsible Party:** City of Fort Lauderdale, FDOT (for the State Highway System section of SE 17<sup>th</sup> Street/SR-A1A)

- Maintain the local median and buffer landscape to clear visibility issues with signage and lighting. The following examples were noted:
  - FEC railroad sign blocked by tree eastbound on SW 17<sup>th</sup> Street.
  - Neighborhood speed limit signs.
  - School zone speed reduction sign and light eastbound, prior to the intersection of SW 17<sup>th</sup> Street and SW 4<sup>th</sup> Avenue.

**Responsible Party:** City of Fort Lauderdale

- Construct ADA-standard curb ramps and implement detectable warning surfaces at the following intersections:
  - SE 17<sup>th</sup> Street and SE 1<sup>st</sup> Avenue
  - SW 17<sup>th</sup> Street and SW 1<sup>st</sup> Avenue
  - SW 17<sup>th</sup> Street and SW Flagler Avenue
  - SW 17<sup>th</sup> Street and SW 3<sup>rd</sup> Avenue
  - SW 17<sup>th</sup> Street and SW 4<sup>th</sup> Avenue

**Responsible Party:** City of Fort Lauderdale

- Evaluate the sidewalk and curb-ramp conditions at all intersections and driveways in the study area to ensure the following ADA standards are met:
  - A cross slope of 1% (2% maximum).
  - A stamped paver crosswalk and detectable warnings on curb ramps.
  - A hard-surface, unobstructed 5'x8' ADA landing pad (5 feet measured parallel to the curb; 8 feet measured perpendicular to the curb) and shelters at BCT stops.
  - Uneven and vertically deflected sidewalk is corrected.

**Responsible Party:** City of Fort Lauderdale

- Implement art wrapping on local utilities to enhance the sense of community.

**Responsible Party:** City of Fort Lauderdale

- Improve bicycle, pedestrian, and ADA accessibility and safety at the FEC railroad crossing by constructing a gated and channelized connection to the pedestrian railroad crossing. Additionally, install detectable warning surfaces at the stop-bar along with a pedestrian stop line and construct a continuous concrete path connecting to the railroad tracks.

**Responsible Party:** FEC Railroad, City of Fort Lauderdale

- Provide a marked and signed mid-block crosswalk located between SW 4<sup>th</sup> Avenue and SW 3<sup>rd</sup> Avenue, adjacent to Croissant Park Elementary School. This would facilitate connection to the school and the surrounding residential neighborhood. A further study may be necessary to determine the appropriate safety device such as either a Pedestrian Hybrid Beacon (PHB) or Rectangular Rapid Flashing Beacon (RRFB).

**Responsible Party:** City of Fort Lauderdale

- Encourage residents to maintain landscape and irrigation systems to be free of interference with the legal ROW.

**Responsible Party:** City of Fort Lauderdale

- Construct continuous sidewalk extensions to the roadway (SW 17<sup>th</sup> Street) in the residential neighborhoods west of SW 4<sup>th</sup> Avenue.
  - Ensure that sidewalk extensions meet ADA criteria for curb ramps, detectable warning surfaces, and clearance.
  - Ensure that adequate crosswalk markings are provided where sidewalk extensions are constructed. Special emphasis markings are preferred.

**Responsible Party:** City of Fort Lauderdale

### Long-Term Improvements (6+ years)

- Provide a continuous furnishing zone with streets trees, bus stop infrastructure, and other street furnishings to enhance the separation of the sidewalk from the roadway and to provide shade along the uncovered portions of the SW/SE 17<sup>th</sup> Street sidewalk.
- Incorporate the discussions and proposals put forth by the City of Fort Lauderdale’s Transportation & Mobility Department and the local Croissant Park Neighborhood Association for the area of SW 17<sup>th</sup> Street west of S Andrews Avenue.
  - These discussions included proposed multimodal improvements, supported by the residents, designed to address safety and travel concerns along SW 17<sup>th</sup> Street. Two (2) options were selected and had support of the neighborhood association.
    - Option A, 100’ ROW: Proposed 4-lane roadway with 11’ vehicle lanes and providing a raised & curbed/separated 5’ bicycle lane on each side of the road. The center 20’ median and the 5’ landscaped buffer/5’ sidewalk on each side would remain. See Streetmix typical section below.



- Option B, 100' ROW: Proposed 4-lane roadway, with 11' lanes. This option also proposes a 7-foot shared-use path on the north side of 17<sup>th</sup> Street. The south side will consist of two 5' bicycle lanes in each direction and a 6' sidewalk to be protected & separated by 7 feet of landscaping. See Streetmix typical section below.



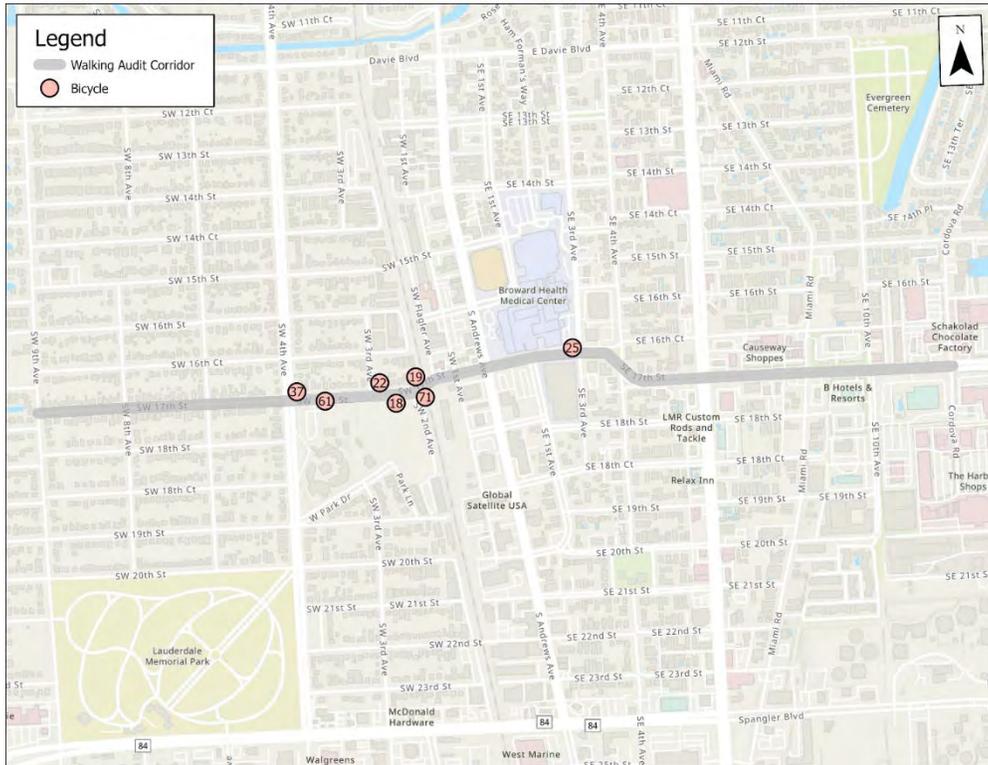
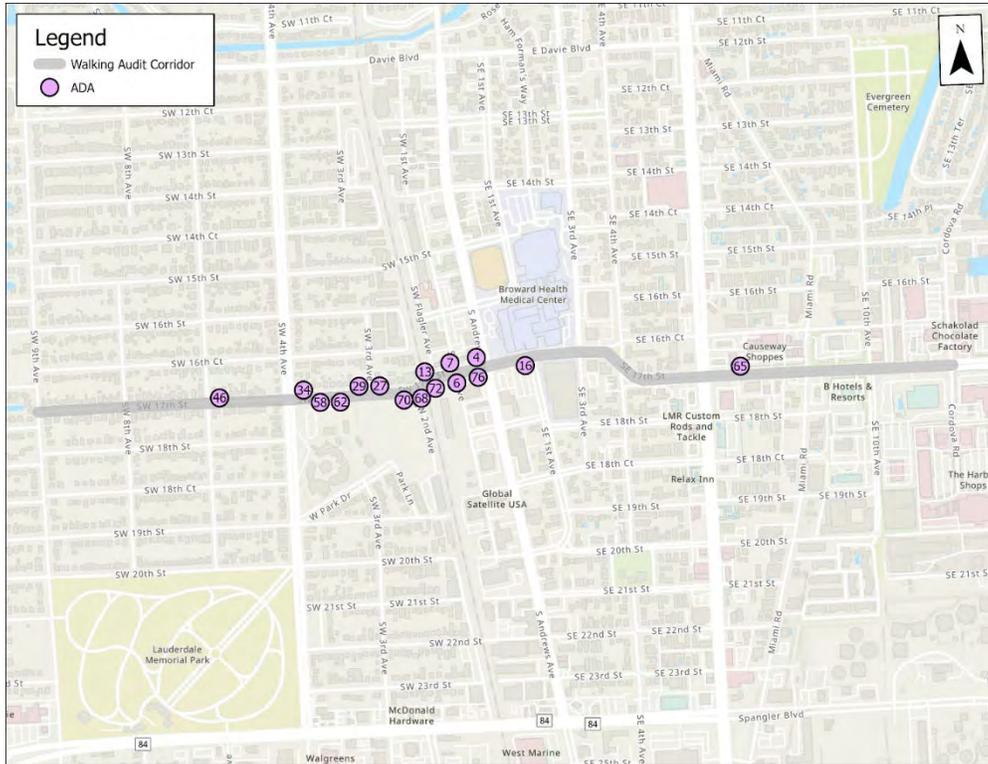
- Evaluate opportunities to expand the sidewalk width west of SW 4<sup>th</sup> Avenue to accommodate non-motorized transportation.
  - On-street parking on the north/south side of SW 17<sup>th</sup> Street could be reconfigured or eliminated to increase sidewalk width.
- Incorporate bicycle and pedestrian infrastructure into future development designs. Elements such as bicycle parking, wide sidewalks, and tree canopies should be provided similar to the Whole Foods/Avalon Apartments development located at the corner of Federal Highway and SE 17<sup>th</sup> Street.
- Collaborate with the City of Fort Lauderdale and local neighborhood associations to create a bicycle facility between S Andrews Avenue and NE 3<sup>rd</sup> Avenue with an emphasis on providing potentially buffered bike lanes to enhance bicycle mobility and safety in the corridor. The incorporation of a bicycle facility within this segment may require a lane repurposing effort.
- Fill in sidewalk gaps on SW 17<sup>th</sup> Street, west of SW 4<sup>th</sup> Avenue.
- Provide pedestrian-oriented lighting to increase the perception of safety and encourage use of the area after dark along SW 17<sup>th</sup> Street from SW 9<sup>th</sup> Avenue to SW 2<sup>nd</sup> Avenue.
- Reduce the turn radii at all corners of the intersection to reduce the risk for high-speed collisions with pedestrians at SW 4<sup>th</sup> Avenue.
  - Fix ADA non-compliance associated with the drainage structures.
- Provide a designated bike lane from Cordova Road to US 1.
  - This may require a lane utilization study at the intersection of SE 17<sup>th</sup> Street and US 1 to determine if the fourth westbound lane from the left (through-

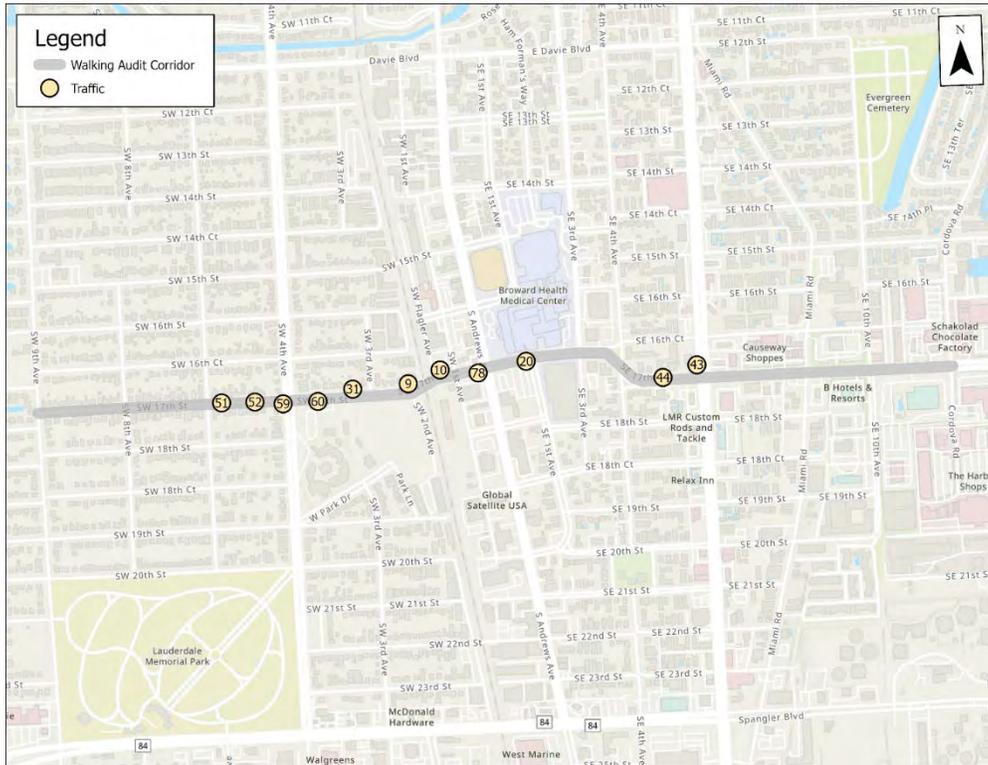
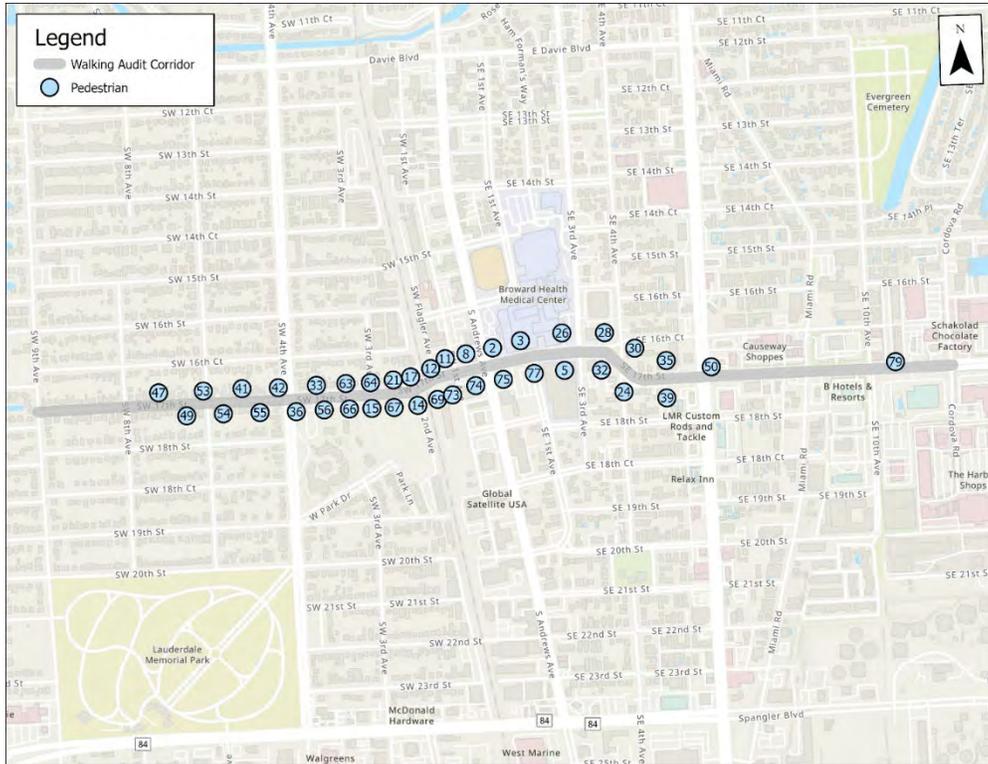
only lane) could be repurposed to provide a through bicycle lane. This lane was observed not to be well-utilized because the primary westbound movements at the intersection are turning movements. Westbound through traffic also can share the outside left-turn (3<sup>rd</sup> of the triple left-turn) lane.

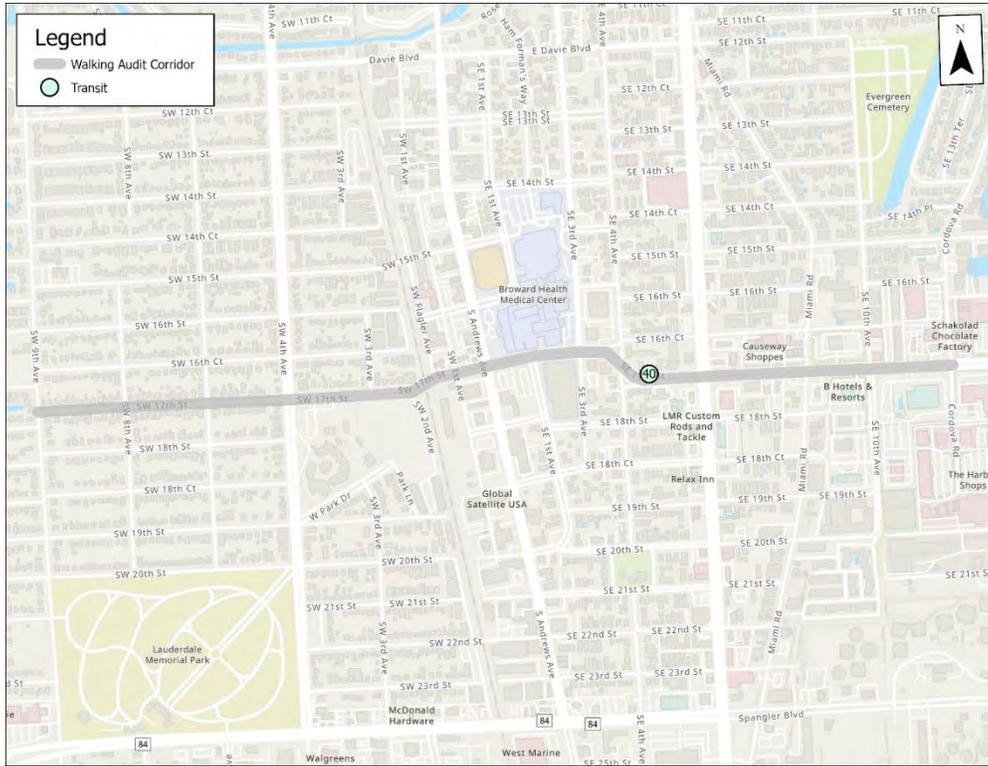
Broward MPO Walking Audit Website: <http://www.browardmpo.org/index.php/walking-audits>

# Appendix A

## Walking Audit Observations, Recommendations, and Information







ADA	
Observation Number	Observations/Notes
4	No pedestrian ramp at S Andrews Avenue.
6	No ADA ramp at SW 1st Avenue provided. ADA must go into the street to cross.
7	No ramp at the intersection of SW 1st Avenue and SW 17th Street.
13	No ADA warning map westbound on SW 17th Street prior to the FEC railroad.
16	No curb ramp on both sides of the road, west bound on SW 17th Street prior to the railroad.
27	No ramp at SW 3rd Avenue and SW 17th Street.
29	No ADA ramp or warning mat at SW 3rd Avenue and SW 17th Street.
34	Sidewalk Ramp/Driveway about 100 feet east of the SW 4th Avenue intersection on the North side of SW 17th Street are not ADA.
46	No connection, ADA ramp, sidewalk extension, or crosswalk at all legs of intersection
58	There is no crossing at school entrance. Sidewalk throughout corridor is angled in way that is difficult for ADA to use
62	Sloping issue at school entrance of SW 17th Street.
65	ADA Mats are lifting under constant water. Reconstruction of ramps with modern mats is recommended.
68	No ADA ramp at the sidewalk access to the median section east of SW 2nd Avenue, across from Croissant Park.

70	No marked crossing at park corner, leading to rail crossing. No ADA ramp on east side of road. No ADA surfaces. Bikers and pedestrians must walk through grass to access firewall again, or must walk in road until they meet with railroad
72	Bicycle or wheelchairs wheel can get stuck at the top of the railroad tracks.
76	No marked crossing at the south west portion of the S Andrews and SW 17th Street section. Good Ada facilities provided near fire station.

## Bicycle

Observation Number	Observations/Notes
19	Wide outside lane along SW 17th Street could be reduced to accommodate a dedicated bicycle facility.
22	Bicyclists riding in the roadway on SW 17th Street, west of the railroad.
25	Potential suggestions for a permanent bicycle facility alongside Broward Health. This includes delineated bike lanes or potentially armadillos.
37	Bicyclist seen crossing the SW 4th Avenue intersection with child. Indicating a need for delineated bike paths.
61	Adequate outside lane width to implement a marked bike lane discussed on the section of SW 17th Street near the elementary school
71	Consider a bike path near the park alongside SW 17th Street and SW 2nd Avenue.

## Pedestrian

Observation Number	Observations/Notes
2	Outdated signage, but audible crossing is provided. Crosswalk is faded at all legs of the S Andrews Avenue intersections.
3	Consider adding trees for shading along the northside of SW 17th Street by Broward Health Center.

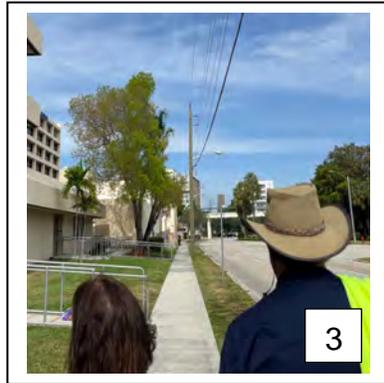
5	Consider adding trees for shading along the southside of SW 17th Street by Broward Health Center parking lot.
8	Cracks in pavement Infront of the commercial building on the northside of SW 17th Street, about 200 Feet to the west.
11	Sidewalk blocked in front of the commercial/industrial building right before the railroad crossing along the northside of SW 17th Street.
12	Equipment blocking sidewalk path prior to the railroad crossing.
14	Damaged sidewalk at the crossing of SW 2nd Avenue.
15	Damaged sidewalk in front of Croissant Elementary School. Across from SW 3rd Avenue.
17	Uneven sidewalk, potentially a tripping hazard. 100 Feet west of the railroad.
21	Uneven sidewalk, potentially a tripping hazard. 300 Feet west of the railroad.
24	Faded Crosswalk and No Landing Pad at the crossing of SE 4th Avenue.
26	Signage indicating no pedestrian crossing through median by SE 3rd Avenue, underneath Broward Health Pedestrian bridge.
28	Faded Crosswalk at the northside of the crossing of SE 3rd Avenue.
30	Faded Crosswalk at the northside of the crossing of SE 4th Avenue.
32	Consider wrapping utilities, such as generator boxes, with art.
33	There is concrete in the median adjacent to Croissant Elementary School. There is no crosswalk connecting but there is the potential for mid-block crossing connecting directly to school
35	Wide sidewalks with designated signage for pedestrian crossing provided by new Avalon development.
36	Faded Crosswalks at the south side of the intersection of SW 4th Avenue.

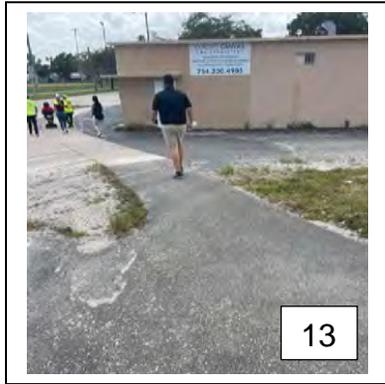
39	No crosswalk in front of medical office across from the Avalon / Wholefoods development.
41	Uneven sidewalk, potentially a tripping hazard. 100 Feet west of the railroad.
42	Countdown signal provided at all legs of the SW 4th Avenue intersection.
47	No sidewalk connection for the residential housing on the north side of SW 17th Street, between SW 8th Avenue and SW 6th Avenue.
49	Unfinished sidewalk connection for the residential housing on the south side of SW 17th Street, between SW 8th Avenue and SW 6th Avenue.
50	Stamped Asphalt Wearing Down at the Northeast section of the Federal Highway intersection.
53	Narrow sidewalk at SW 6th Avenue.
54	Sidewalk narrows to approximately 4 feet and loses grass buffer. Space decreases due to left turn lane at intersection of SW 4th Avenue.
55	Faded Crosswalk at the northbound crossing, along the west side, of the intersection at SW 4th Avenue.
56	Signage pointing to faded crosswalk at the northbound crossing, along the west side, of the intersection at SW 4th Avenue.
63	Consider mid-block crossing from park to north side of road, connects to market on north side.
64	Concrete space at SW 3rd Avenue could be the location of a mid-block crossing for the school.
66	Concrete space prior to SW 3rd Avenue could be the location of a mid-block crossing for the school.
67	No marking for the intersection of SW 2nd Avenue.
69	Damaged sidewalk on the south side of SW 17th Street, eastbound prior to the railway.
73	Faded railroad sidewalk markings on the south side of SW 17th Street, eastbound prior to the railway.

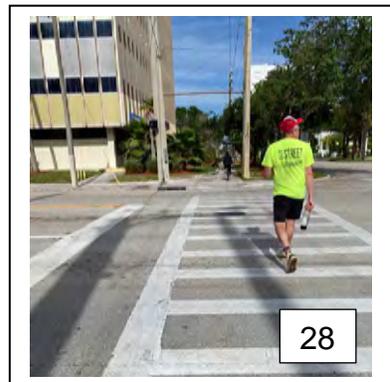
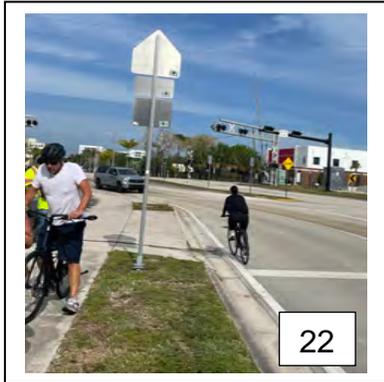
74	Truck in sidewalk area 500 feet west of the S Andrews Avenue intersections, on the south side of SW 17th Street.
75	No crossing marking in front of the Wells Fargo exit along the south side of SW 17th Street.
77	Crosswalk in need of high emphasis crosswalks at S Andrews Avenue.
79	Sidewalk Breaking Apart between SE 19th Avenue and Cordova Road. There were also utility poles located within the sidewalk area.
<b>Traffic</b>	
<b>Observation Number</b>	<b>Observations/Notes</b>
9	Railroad Warning Sign not visible heading westbound on SW 17th Street, prior to Railroad.
10	Signage blocked by tree. Sign indicates rail crossing along westbound SW 17th Street.
20	Loading for the Broward Health Center happens off the westbound lane of SW 17th Street.
31	Wide road width along SW 17th Street across from the school. Cars using extra space as part of the traffic lane.
43	Lowering Speed on Federal?
44	Island curb not doing enough to prevent traffic from leaving to the left from the whole foods building.
51	Vehicle's parking in grass awake/furnishing zone area along the residential portion of SW 17th Street.
52	Flashing School lights are blocked by palm tree heading eastbound on SW 17th Street, about 500 feet before the intersection with SW 4th Avenue. Consider trimming.
59	Sprinkler spraying into street, had to walk into the street to avoid. Could cause safety issues if motorist is not attentive.
60	Brand new pavement for the eastbound section of SW 17th Street along the school corridor.

78	Faded marking and wide road at S Andrews Avenue.
<b>Transit</b>	
<b>Observation Number</b>	<b>Observations/Notes</b>
40	Bad Place for a bus stop. Causes back up with people trying the exit the Avalon / Whole Foods building and the oncoming west bound traffic from across federal.

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

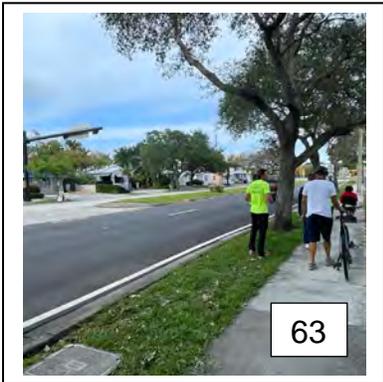
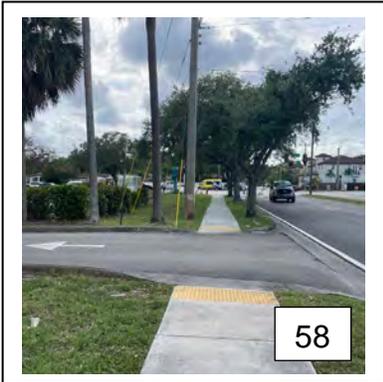


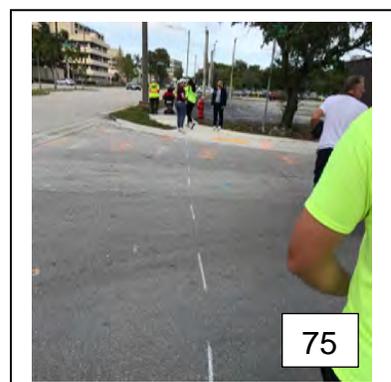
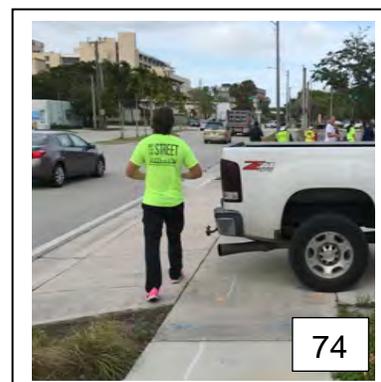
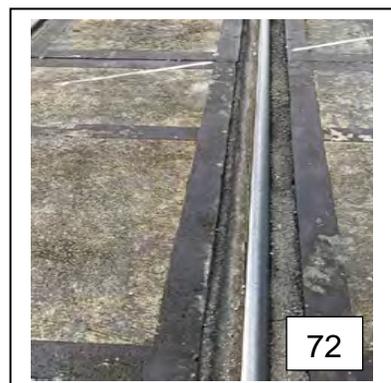
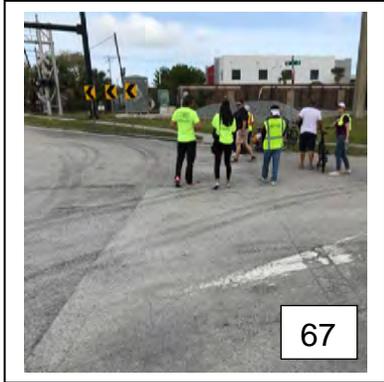


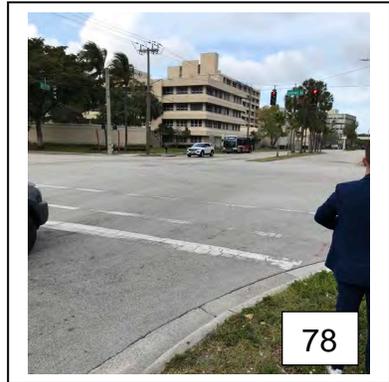
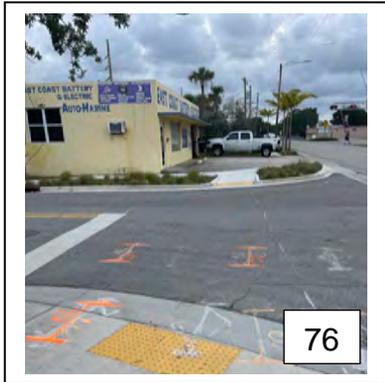












# Appendix B

## Walking Audit Presentation



# WALKING AUDIT

City of Fort Lauderdale  
SW/SE 17th St from SW 9th Ave to Cordova Rd

**BROWARD** 

# COMPLETE STREETS

Better Streets • Better Broward • Better Life

Commitment and Evolution of Complete Streets

# WALKING AUDIT ROLES

**Host** City of Fort Lauderdale

**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 Fort Lauderdale!

Walk with us to evaluate sections of SW/SE 17th Street between SW 9th Avenue and Cordova Road. 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:** Thursday, April 14, 2022  
**Time:** 4:00 p.m. - 6:00 p.m.  
**Meeting Location:** Broward Medical Center  
1600 South Andrews Avenue Fort Lauderdale, FL 33316

**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/FTLWalk

**RSVP** For more information about the walking audit, including a route map, please visit [Browardmpo.org/walking-audits](http://Browardmpo.org/walking-audits). Please contact Benjamin Restrepo at [restrepob@browardmpo.org](mailto:restrepob@browardmpo.org) for more information.

 @SpeakUp Broward  @SpeakUpBroward  @SpeakUpBroward

 **Broward MPO**  
Metropolitan Planning Organization

 **CITY OF FORT LAUDERDALE**

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](mailto: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.



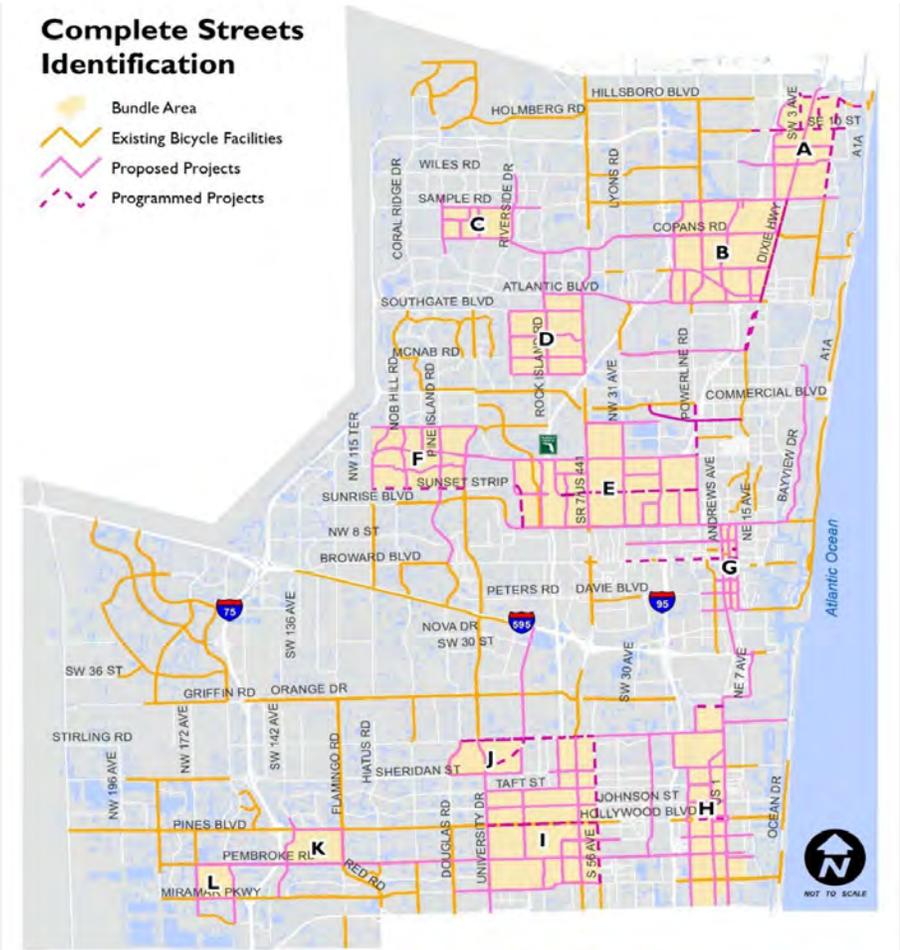
# COMPLETE STREETS MASTER PLAN

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

### SW/SE 17th St from SW 9th Ave to Cordova Rd

- Length: ~1.4 miles
  - 2019 AADT:
    - East of SW 9th Ave: 3,900
    - East of S Andrews: 14,900
    - East of US-1: 42,500
    - East of Miami Rd: 38,000
- 30 miles per hour
- 2 lane Undivided Roadway
- 4 to 6-Lane Divided Roadway
- Bicycle Gaps
- Need sidewalks
- Furnishing Zone
- Traffic Calming



# WALKING AUDIT AREA

## Roadway Context Classification (SPCC):

### C4 Urban General entire corridor

- Mix of uses
- Short block lengths
- Small setback distances
- Well-connected 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** →

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



AREA  
SPEED  
LIMIT  
25







END  
SCHOOL  
ZONE

SPEED  
LIMIT  
30



**NO  
TRAIN HORN**



**BUMP**



Home is where your story begins.

**JULIE LURIE**  
954.618.9749  
JulieSellsFL.com



JL  
JULIE LURIE  
TEAM

COMPASS





SE 3 AV

SE 3 RD





BROWARD HEALTH

BUS STOP  
1 ID #0118

H

Massage Envy  
26-6200  
\$70 MASSAGE FACIAL STRETCH  
IN THE HARBOR SHOPS  
OFF 17th ST CAUSEWAY

Public Restrooms  
Patient Center  
Visitor Center  
Physician Office  
Ambulance



DO NOT  
ENTER



NO  
PARKING





SE 10 Avenue  
Floor Shops

FOR LEASE  
RETAIL & OFFICE  
AVAILABLE  
305 938 4000

Publix  
Tj-max  
La Bamba  
Total Wine  
LA/FIT  
KORE



VILLAGE  
EAST  
COMMUNITY

## WALKING AUDIT

- Organize into 2-4 groups
- Group sizes can range from 5-10 people
- Group leaders will be responsible for leading the discussion and enter feedback and data
- Participants are encouraged to take notes and photos





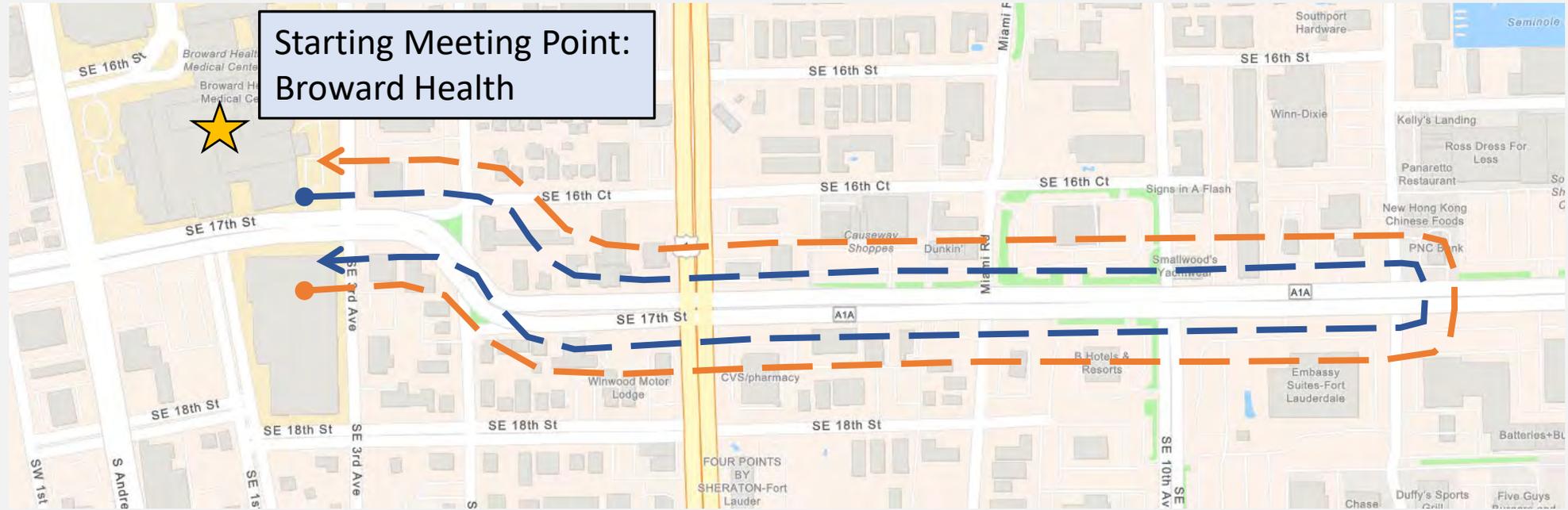
# WALKING AUDIT

**Route 2**

Group C



Group D



Starting Meeting Point:  
Broward Health



## GROUP DISCUSSION

- Conclusion of the walking audit
- Aerial map of the corridor
- Quickly summarize and look at the data





## Contact Us

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**Stewart Robertson, P.E.**

Kimley-Horn

[stewart.robertson@kimley-horn.com](mailto:stewart.robertson@kimley-horn.com)