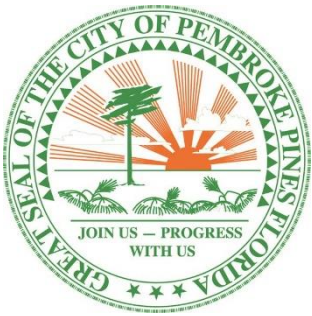


Better Streets | Better Communities | Better Broward

# Walking Audit Report



## City of Pembroke Pines

SR 817/University Drive  
from County Line Road  
to Taft Street

August 2019



# Walking Audit Report

## Acknowledgments

The Broward Metropolitan Planning Organization (MPO) would like to extend special thanks to Pembroke Pines' City Commission and staff from many departments for their personalized approach and preparation for the Walking Audit workshop. The Walking Audit was conducted on Saturday, June 15, 2019, but was originally scheduled for Saturday, January 26, 2019. A presentation, open discussion, and bus tour were held on the original scheduled date, but the walk could not be completed due to heavy rains. Thanks to the City of Pembroke Pines' dedication and passion to evaluate the needs of the corridor, the Walking Audit was rescheduled. The Broward MPO extends their gratitude to the 25 individuals who participated in the Walking Audit, which was graciously hosted at Studio 18 in the Howard Forman Health Park.



*Providing background information to participants, January 26, 2019.*

Support from the City of Pembroke Pines leadership was evident, with the presence and participation at the June 15, 2019 Walking Audit from Mayor Frank Ortis and City Commissioner Thomas Good Jr. Michael Stamm Jr., Director of Planning and Economic Development, Joseph Yaciuk, Planning Administrator, Cole Williams, Planner/Zoning Technician, and Karl Kennedy, City Engineer, from the City of Pembroke Pines, provided support leading up to and during the event including planning expertise and logistical coordination.

# Walking Audit Report



*Pembroke Pines City Commission and Broward MPO staff taking a selfie, June 15, 2019*

This Walking Audit Workshop was made possible by funding from the Broward MPO and their Complete Streets Initiative. Key staff members include Ricardo Gutierrez, Livability/Mobility Program Manager; Stephanie Garcia, Livability/Mobility Program Associate Planner; and Anthea Thomas, Public Outreach Manager.

## Partners

- City of Pembroke Pines
- AARP
- Florida Department of Transportation (FDOT), District Four

## Special Participation

- Broward County Housing Action
- City of Dania Beach

## Consultant Team

- Kimley-Horn and Associates
- Urban Health Partnerships
- Marlin Engineering

# Walking Audit Report

## Executive Summary

The Broward MPO *Complete Streets Master Plan* identified SR 817/University Drive from County Line Road to Taft Street as a high ranked priority corridor. Community and stakeholder feedback is key to developing a project scope. To that end, the Broward MPO selected this corridor for a Walking Audit. This will ensure a future project scope incorporating the needs and vision of the local communities who regularly travel along this corridor.

The Pembroke Pines Walking Audit brought together a diverse group of participants on Saturday, June 15, 2019 to evaluate SR 817/University Drive from County Line Road to Taft Street. A prior Walking Audit was held on Saturday, January 26, 2019, but the weather was rainy and the walk portion of the event could not be completed. Thanks to the City of Pembroke Pines' dedication and passion to evaluate the needs of the corridor, the Walking Audit was rescheduled and completed fully on June 15, 2019. The Walking Audit provided an experiential hands-on exercise that evaluated the walking environment, identified pedestrian (and bicyclist) issues such as safety, access, connectivity, comfort, and convenience and identified potential alternatives or solutions such as engineering treatments, policy changes, or education and enforcement measures. Most importantly, the Workshop provided a mechanism for the community to acknowledge what they considered successful and to identify what they would like to see changed along the corridor.

The detailed findings and recommendations identified by the participants are compiled in this report and organized using a SWOT (Strengths, Weakness, Opportunity, or Threat) analysis. The findings and recommendations will help inform the scoping of the study corridor that is envisioned to be incorporated into the Broward MPO's Transportation Improvement Program (TIP) for funding.

# Walking Audit Report

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Appendix D: Aerial Maps – Participant Results

# Walking Audit Report

## 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. Complete Streets policies in Broward County were first established in 2014 when they were adopted by the Broward County Board of County Commissioners into the Broward County Comprehensive Plan. The Broward Metropolitan 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 developed 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>.

In line with the initiative, the development of the *Complete Streets Master Plan* is 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. The *Complete Streets Master Plan* identified SR 817/University Drive from County Line Road to Taft Street as a high ranked priority corridor. This corridor was selected for a Walking Audit, as feedback from Broward residents and partners is key to developing the scope that meets the needs of local communities. The *Complete Streets Master Plan* can be downloaded at: <http://www.browardmpo.org/index.php/complete-streets-master-plan>.

Additionally, the Broward MPO endorsed the Broward Complete Streets Guidelines manual on July 12, 2012. The manual provides a template that can be adopted to replace existing local manuals and can be modified to meet respective community's needs and desires. Local governments, such as the City of Pembroke Pines, depend on manuals for design guidance on new streets, as well as for retrofitting and modifying existing streets with new development. The Broward Complete Streets Guidelines can be downloaded at: <http://www.browardmpo.org/index.php/broward-complete-streets-guidelines>.

# Walking Audit Report

## City of Pembroke Pines

The *City of Pembroke Pines Comprehensive Plan* reflects the City's commitment to increase multimodal mobility and improve associated facilities. Some of the policies that demonstrate this goal include the following. City of Pembroke Pines Comprehensive Plan weblink: <https://www.ppines.com/374/Comprehensive-Plan>.

- **Policy 2.1.11.11** The proposed development would promote public transportation, which means development that directly affects the provision of public transit, including transit terminals, transit lines and routes, separate lanes for the effective use of public transit services, transit stops (shelters and stations), and office buildings or projects that include fixed-rail or transit terminals as part of the building.
- **Policy 2.1.21** The City of Pembroke Pines, in coordination with Broward County shall encourage the provision of pedestrian and bicycle infrastructure linking neighborhoods to the transit system.
- **Policy 2.4.2.1** The Environmental Services Division shall continue to maintain land development regulations requiring accessible sidewalks for new development and redevelopment.
- **Policy 2.4.2.2** The Environmental Services Division shall continue to require safe and interconnected pedestrian ways within educational facilities, recreation and open space areas, and employment centers.

The City of Pembroke Pines and Broward County Transit (BCT) have partnered to provide the community bus service. The community bus service provides strategic connections to BCT routes, making destinations in and around the City of Pembroke Pines more accessible through public transit. This service is free for all users and there are three (3) different route schedules; Blue, Green, and Gold. For more information regarding the Community Mini Bus Service can be found at: <https://www.ppines.com/218/Community-Bus-Service>.

## Study Corridor

SR 817/University Drive from County Line Road to Taft Street was selected as the study corridor for the walking audit. The *Complete Streets Master Plan* ranked the corridor as 16 out of 152. The proposed recommendations for the 3.6-mile section includes an enhanced bus corridor, buffered bicycle lanes (bike lane gaps), continuous pedestrian zone (sidewalk gaps), and furnishing zone. The study corridor is located in the City of Pembroke Pines and the City of



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Miramar as shown in Figure 1. The City of Miramar limits are from Miami-Dade/Broward County Line to SR 824/Pembroke Road and the City of Pembroke Pines limits are from SR 824 /Pembroke Road to SR 822/Sheridan Street. The Broward MPO partnered with the City of Pembroke Pines to host the Walking Audit community-based event on Saturday, June 15, 2019.

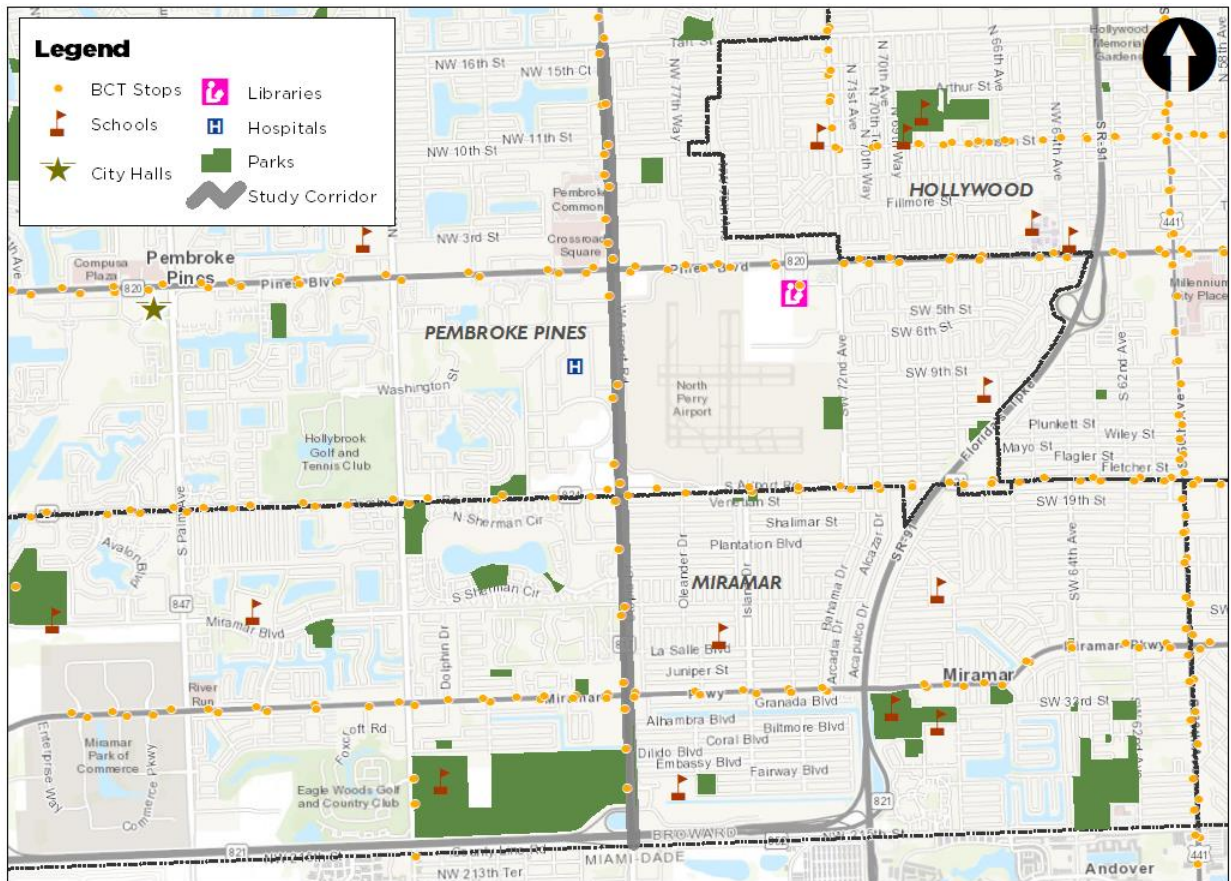


Figure 1. Study Corridor

SR 817/University Drive is a 6-lane divided state road. The study corridor has a posted speed limit of 45 miles per hour (MPH) and a 2018 Average Annual Daily Traffic (AADT) of 57,500 to 59,000. The functional classification for the roadway is an urban principal arterial. Access for non-motorized users is provided along the entirety of the west side of SR 817/University Drive and majority of the east side except from County Line Road to SR 820/Pines Boulevard. There

# Walking Audit Report

are guardrails on the east side of the corridor between the edge of pavement and sidewalk serving as a buffer. Occasionally, there is a furnishing zone on the west side of the corridor.

The land use immediately adjacent to the study corridor is primarily commercial and residential as shown in Appendix A. Some examples of destinations along the corridor includes restaurants, gas stations, banks, Pembroke Plaza Shopping Center, College Plaza, Family Medical Center, and, Fletcher Art and Cultural Center. Fletcher Park, located on Johnson Street east of SR 817/University Drive, has several baseball fields. Miramar Pineland Park located on SR 817/University Drive just north of County Line Road, is around 160 acres and includes gazebos, picnic areas, nature trails, playgrounds, and more. The North Perry Airport is on the east side of the corridor from SR 824/Pembroke Road to SR 820/Pines Boulevard.

Broward County Transit (BCT) Route 2 operates along SR 817/University Drive. Route 2 brings riders to destinations including Memorial Pembroke Hospital, Westfield Mall, and Fountain Shoppes. Table 1 displays the ridership for Route 2.

Table 1. Route 2 Ridership

Weekday	Saturday	Sunday
6,205	4,279	2,100

There are several stops located on SR 817/University Drive and some of the stops include seating. Additional routes, such as Routes 7, 5, and 28 serve the surrounding area along Pines Boulevard, Pembroke Road, and Miramar Parkway, respectively. The BCT full system map can be found at: <http://www.broward.org/BCT/Documents/SystemMap.pdf>.

# Walking Audit Report

## Chapter 2. Walking Audit Overview

On Saturday, June 15, 2019, from 9:00 a.m. to 11:00 a.m., 25 residents, community members, and staff gathered at Studio 18 in the Howard Forman Health Park to conduct the Walking Audit along SR 817/University Drive from Pines Boulevard to Taft Street. A prior Walking Audit had been held on Saturday, January 26, 2019. A presentation, open discussion, and bus tour were held at the January 26 event, but the walk could not be completed due to heavy rains. The Walking Audit was rescheduled and completed fully on Saturday, June 15, 2019. This walking audit segment is a representative portion of the entire corridor identified in the *Complete Streets Master Plan*, SR 817/University Drive from County Line Road to Taft Street. The Walking Audit Workshop began with an opening presentation and staff introductions, followed by participant division into two groups and assignment of groups to two routes. Each group identified a leader who was given an iPad connected to a Typeform survey with questions aimed toward evaluating the pedestrian environment of SR 817/University Drive. Typeform is user-friendly and all online, allowing for seamless participation and for the results to be accessed immediately. Appendix B includes the results from the Typeform survey.



*Walking Audit Venue – Studio 18 in Howard Forman Health Park*

# Walking Audit Report

## Objectives

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

- Provide an experiential hands-on exercise that evaluates 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 Pembroke Pines with a clear understanding of critical issues identified by the community.

## Presentation

Event facilitators presented a PowerPoint Presentation 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 C](#) includes the PowerPoint Presentation.



*Providing background information to participants – Studio 18 in Howard Forman Health Park*

# Walking Audit Report

## Teams and Routes

Participants were organized into two groups of about ten to thirteen people to provide meaningful and thoughtful conversations throughout the Walking Audit. Each group was assigned to a route as shown in [Figure 2](#) and [Figure 4](#). Participants were encouraged to form groups with a diverse background. In addition to the group leader operating the iPad to fill out the Typeform survey to obtain consensus feedback, a group member was identified as the photographer, in order to keep a photo log throughout the Walking Audit.

[Figure 2](#) displays Route 1, SR 817/University Drive from Pines Boulevard to Johnson Street. Participants took a shuttle bus from Studio 18 in Howard Forman Health Park to Fletcher Park, located southeast of SR 817/University Drive and Johnson Street. Route 1 walked in a loop, beginning southbound on the east side of SR 817/University Drive from Johnson Street to Pines Boulevard and then returning northbound on the west side. The shuttle bus picked up participants at the same location they were dropped off and brought them back to Studio 18 in Howard Forman Health Park. The total length of Route 1 is 1 mile.

# Walking Audit Report

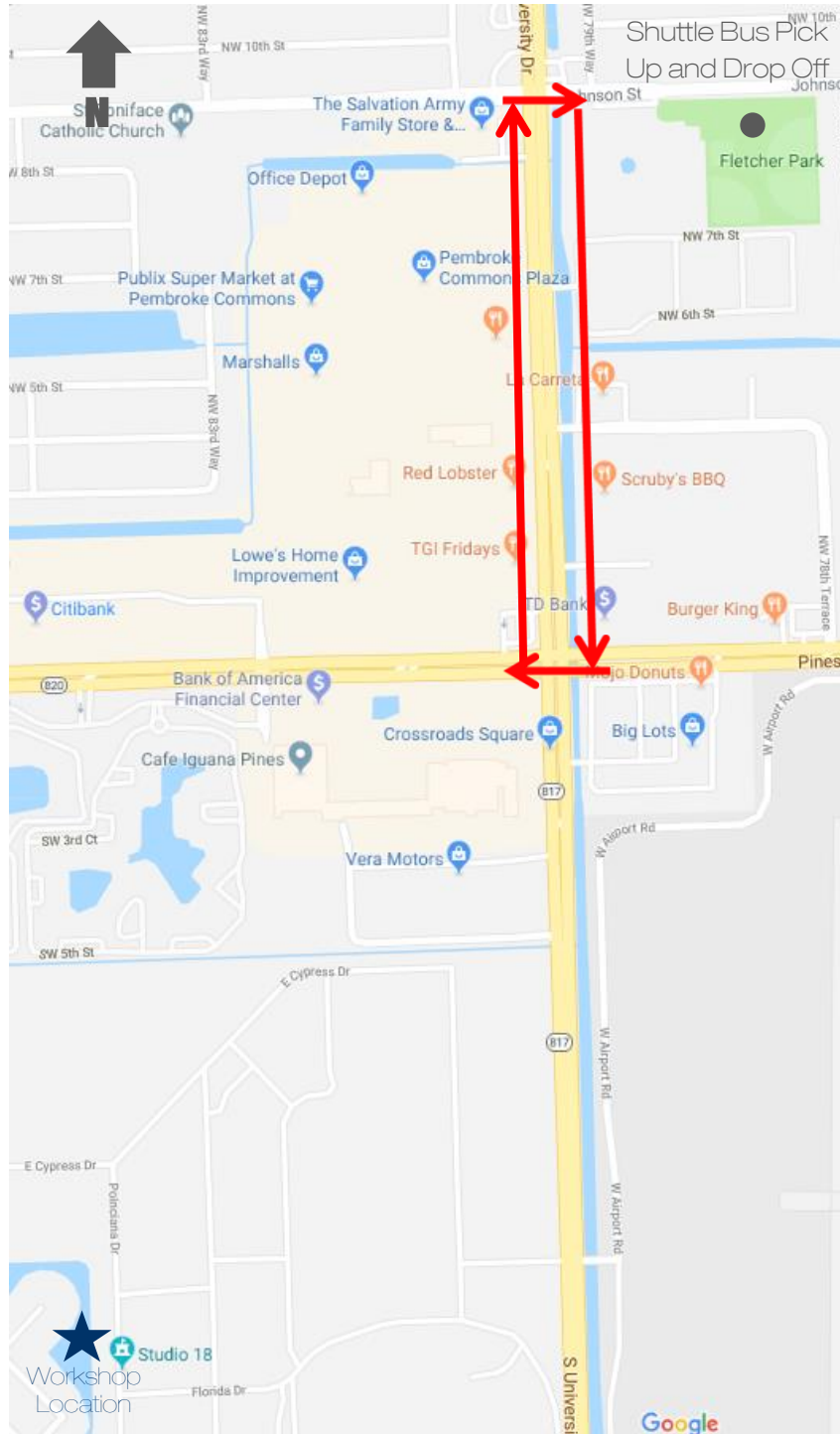


Figure 2. Walking Audit Route 1 – Group 1

# Walking Audit Report

Shown in Figure 3 are the different destinations along Route 1. The western side of SR 817/University Drive includes gas stations, banks, restaurants, and a shopping plaza. The east side of SR 817/University Drive includes banks, restaurants, a residential area, and the Fletcher Art & Cultural Center. Additionally, there is a canal along the eastern side of SR 817/University Drive. The western side of the corridor has more roadway connectivity, as there are more access points such as driveways along the western side. Appendix A displays the different destinations along Route 1.

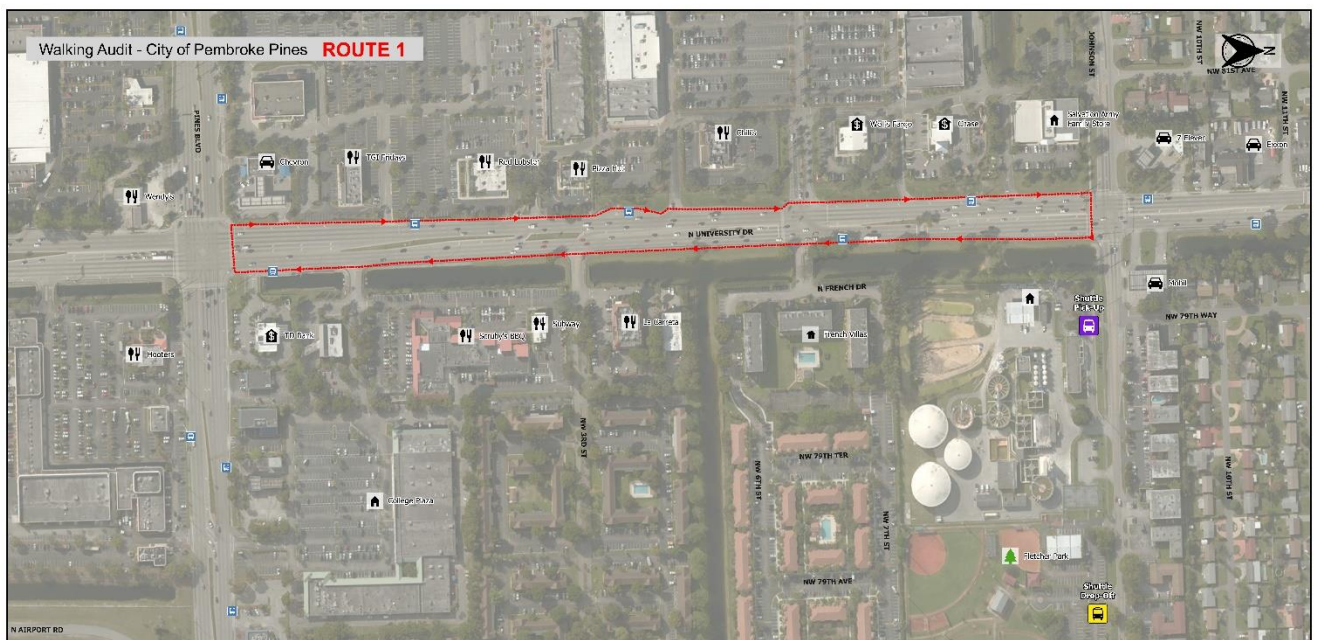


Figure 3. Walking Audit Route 1 – destinations

Figure 4 displays Route 2, SR 817/University Drive from Johnson Street to Taft Street. Participants took a shuttle bus from Studio 18 in Howard Forman Health Park to Fletcher Park, located southeast of SR 817/University Drive and Johnson Street. Route 2 walked in a loop, beginning northbound on the east side of University Drive from Johnson Street to Taft Street and returning southbound on the west side. The shuttle bus picked up participants at the same location they were dropped off and brought them back to Studio 18 in Howard Forman Health Park. The total length of Route 2 is 1 mile.

# Walking Audit Report

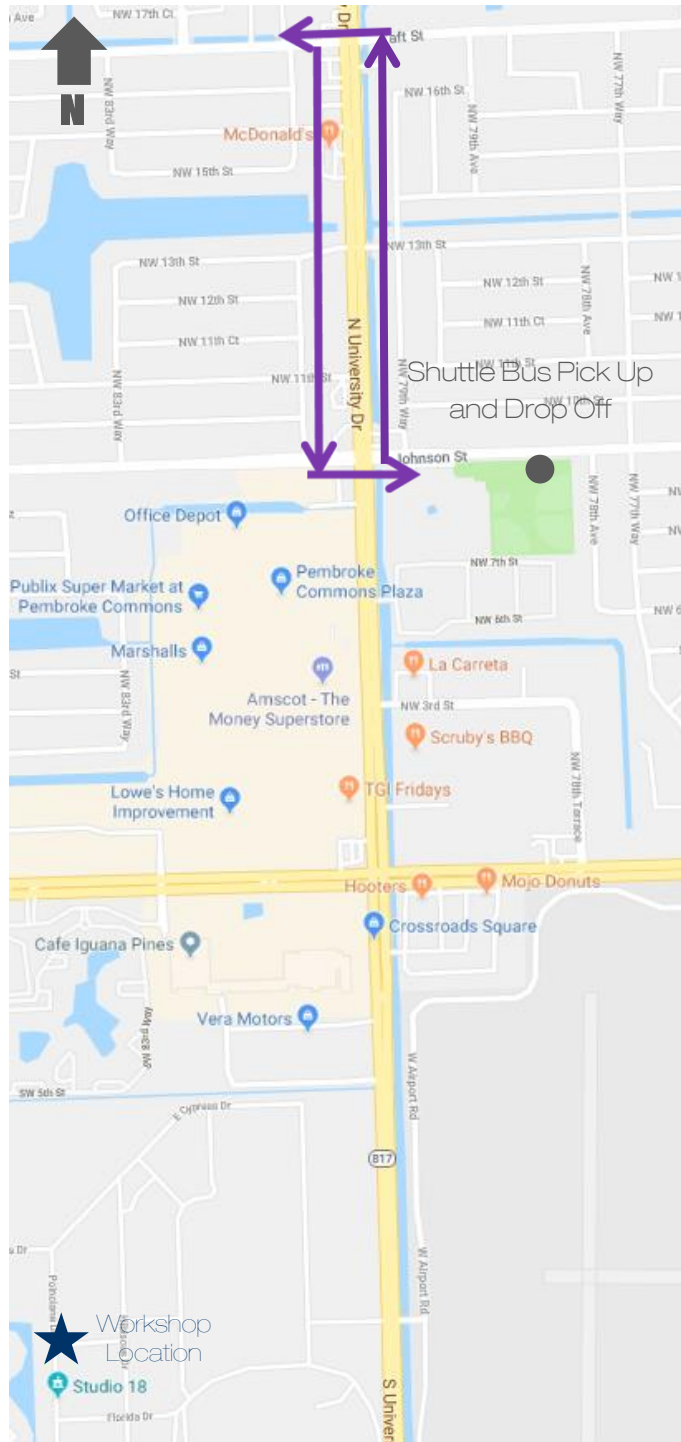


Figure 4. Walking Audit Route 2 – Group 2



# Walking Audit Report

Shown in Figure 5 are the different destinations along Route 2. The western side of SR 817/University Drive includes gas stations, restaurants, and a medical center. The east side of SR 817/University Drive includes gas stations and a residential area. Additionally, there is a canal along the eastern side of SR 817/University Drive. The western side of the corridor has more roadway connectivity, as there are more access points such as driveways along the western side. Appendix A displays the different destinations along Route 2.



Figure 5. Walking Audit Route 2 – destinations

# Walking Audit Report

## Chapter 3. Team Findings & Route-Level Discussion

The Typeform survey provided a more in-depth context for considering the meaning of the needs and opportunities for the study corridor. Group leaders entered the consensus feedback from the walking audit participants. Table 2 summarizes the average rating questions from the Typeform survey. Appendix B includes the results from the Typeform survey.

Table 2. Participants Average Rating

Question	Average Rating (Out of 5)	Rating Description
In general, do vehicles seem to be traveling a safe and comfortable speed?	4.50	5 being <i>Too Fast</i>
On average, how is the sidewalk pavement condition?	2.50	5 being <i>Good as New</i>
On average, are bus stop amenities provided (shade, seating) and easily accessed?	3.00	5 being <i>High Quality</i>
Do the pedestrian areas feel safe and secure?	3.00	5 being <i>Very Safe and Secure</i>
Are public plazas and parks available and inviting?	1.00	5 being <i>Available and Inviting</i>
Do the buildings enhance the pedestrian environment or detract?	1.50	5 being <i>Inviting, Cater to Sidewalk</i>
I felt safe while walking along this corridor...	3.00	5 being <i>Very Safe</i>
I would choose to walk along this corridor in the future...	2.00	5 being <i>Definitely</i>
This corridor appears accessible to all types of users...	2.50	5 being <i>Completely</i>

# Walking Audit Report

The top four cross-section elements that are present but need to be upgraded are sidewalk, buffer between the sidewalk and road, bus stop seating and bike lanes. The top four cross-section elements that currently do not exist or that have significant gaps along the study corridor and are needed are bike lanes, buffer between the sidewalk and road, bus stop seating, and sidewalk.

There are sidewalks provided along the entirety of the west side of SR 817/University Drive. However, there is a significant gap in the sidewalk along the east side of the corridor. The gap occurs from County Line Road to SR 820/Pines Boulevard with the exception of three short sidewalk segments in front of bus stops. Aside from the sidewalk segments in front of bus stops, when there is sidewalk present on the east side of SR 817/University Drive, guardrails are present to provide a buffer between the sidewalk and the road. There are paved shoulders from County Line Road to SR 820/Pines Boulevard, for the most part on both the east and west side of the corridor.

*East side of SR 817/University Drive  
south of Taft Street*



# Walking Audit Report



Aerial map of Route 2

Upon returning to Studio 18 in Howard Forman Health Park, participants were encouraged to pinpoint locations on aerial maps using stickers. Participants assessed strengths, opportunities, weaknesses, and threats along the corridor, using green stickers for the former two and red stickers for the latter two. For each of the two routes, participants identified weaknesses and threats at a higher

rate than they identified strengths and opportunities. Additionally, participants placed stickers on a mobility continuum to represent how they believed the corridor functions, from functioning as a through corridor to functioning with the intent to move cars within the corridor. [Appendix D](#) includes the participant results.



## Mobility Continuum

Place your dot according to whether you think the corridor functions more as a through corridor or more to provide mobility within the corridor. Placing your dot at the left-most mark would indicate that you think the corridor functions purely as a through corridor. Similarly, placing your dot at the right-most mark would indicate that you think the corridor solely provides mobility within the corridor.



Participants identified how they believe the corridor functions in the Mobility Continuum exercise

# Walking Audit Report

## 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



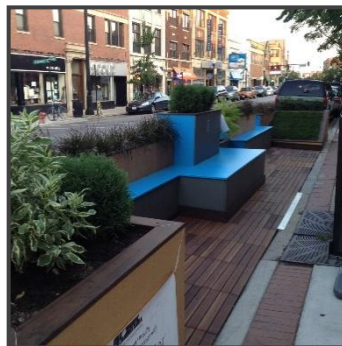
Sidewalks



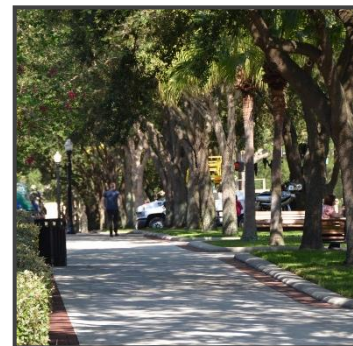
Intersections/Crossings



Traffic Calming



Street Furniture/Benches



Shading/Trees

# Walking Audit Report

## Chapter 4. Corridor-Level SWOT Analysis

The walking audit workshop provided the community an opportunity to experience the corridor and provide valuable perspectives. The findings were analyzed and organized by the SWOT categories (Strengths, Weaknesses, Opportunities and Threats) as described below.

**Strengths** – Characteristics of the public right-of-way that have been identified as assets and recommended for inspiring replication or a continuation of successful elements.

**Weakness** – Long-term or potential obstacles to overcome, including both physical and policy-driven limitations, and that are potential detriments to Complete Streets principles.

**Opportunities** – Aspects of the public right-of-way that could be further expanded upon, including long-range planning and traffic engineering plans.

**Threats** – Characteristics of the public right-of-way that have been identified to be detrimental to users of the roadway, including hazards that should be immediately resolved.

### Strengths & Recommendations

#### Primary Strengths



Marked crosswalk with detectable warnings on curb ramps is present at SR 817/ University Drive at NW 13<sup>th</sup> Street which is an east-west road that leads to residential neighborhoods.



The intersection of Johnson Street and Taft Street has special emphasis crosswalk markings with pedestrian pushbuttons.

# Walking Audit Report



East side of SR 817/University Drive south of Taft Street

The east side of SR 817/University Drive Street has aluminum fencing by the canal and guardrails between the edge of pavement and sidewalk. There are trees on the canal bank which provide shade to people on the sidewalk.



There is a typical 5 feet sidewalk with a narrow grass strip on the west side of SR 817/University Drive Street south of Taft Street. Sidewalks provide a safe path for people to walk along and the narrow grass strip provides additional separation for non-motorized users and motor vehicles.



West side of SR 817/University Drive south of NW 15<sup>th</sup> Court

The sidewalk at McDonald's provides a flat driveway crossing that is at least three feet wide with a side slope of less than 2%.



West side of SR 817/University Drive south of NW 15<sup>th</sup> Court

Private development such as Popeyes and Exxon provides pedestrian access to sidewalks and streets.

# Walking Audit Report



The minimum width of a pedestrian access route is 5 feet and where there are street fixtures, the pedestrian access route may be reduced to 4 feet.



BCT Stop ID# 4566 has a bus turnout also known as bus bay.



Pedestrian push button signs are present along the corridor.



# Walking Audit Report

## Recommendations



Maintain the landscaping in the furnishing zone throughout the corridor on the west side of SR 817/University Drive.



Provide special emphasis crosswalk markings at the following signalized locations along SR 817/University Drive.

- Pembroke Commons/French Drive
- Taft Street



Provide pedestrian access to businesses with ADA compliant detectable warnings and ramps.



Plant trees on the canal bank on the east side of SR 817/University Drive to provide shade where it is feasible.

# Walking Audit Report

## Weaknesses & Recommendations

### Primary Weaknesses



NW 13<sup>th</sup> Street, an east-west road, does not have sidewalk connectivity to University Drive. NW 13<sup>th</sup> Street is one of the few roads that provides direct access to residential homes.



The driveway apron goes through the sidewalk/pedestrian crossing at BP Gas Station, which is located at the southwest corner of SR 817/University Drive at Taft Street.



*West side of SR 817/University Drive south of Taft Street*

Unmaintained bushes and shrubs may cause discomfort for non-motorized users since it encroaches the sidewalk area.



*East side of SR 817/University Drive south of Taft Street*

There is a lack of bicycle facilities throughout the corridor resulting in bicyclists riding in the pedestrian zone.

# Walking Audit Report



West side of SR 817/University Drive south of Taft Street

The installation of the bus shelter for BCT Stop ID#0297 could have potentially be set back to the edge of concrete providing a wider space for the pedestrian zone.



West side of SR 817/University Drive south of NW 3<sup>rd</sup> Street

Unmaintained landscape.



Desire path on the west side of SR 817/University Drive south of Johnson Street showing pedestrians would rather walk on the grass to be under the shade instead of using the existing sidewalk facility.



BCT Stop ID# 2356 located on the west side of SR 817/University Drive north of SR 820/Pines Boulevard does not have a shelter or other amenities such as bicycle racks, trash receptacles, etc.

# Walking Audit Report

## Recommendations



Implement a campaign to raise awareness to cross at marked crosswalks and install MUTCD R9-2 "Cross Only at Crosswalks" or MUTCD R9-3 "No Pedestrian Crossing symbol" signs.



*This photo is an example in Fort Lauderdale*

Provide a buffered bicycle lane.



*This photo is an example in Margate*

Provide pedestrian lighting on the west side of SR 817/University Drive.



*Northeast corner of SR 817/  
University Drive at  
Johnson Street*

Evaluate the pedestrian countdown signal at the intersection of SR 817/University Drive and SR 820/Pines Boulevard because it was not working during the Walking Audit.

# Walking Audit Report

## Opportunities & Recommendations

### Primary Opportunities & Recommendations



Conduct further study to evaluate providing a mid-block signed and marked crosswalk along SR 817/University Drive between Johnson Street and Taft Street (one-half mile with no safe crossing opportunities).

## Threats & Recommendations

### Primary Threats



A motorist making a U-turn and a pedestrian crossing simultaneously near NW 13<sup>th</sup> Street could have been a collision.



BCT Stop ID# 3931 does not provide an ADA landing pad of at least 5 feet wide and 8 feet deep adjacent to the curb and does not provide a shelter.

# Walking Audit Report



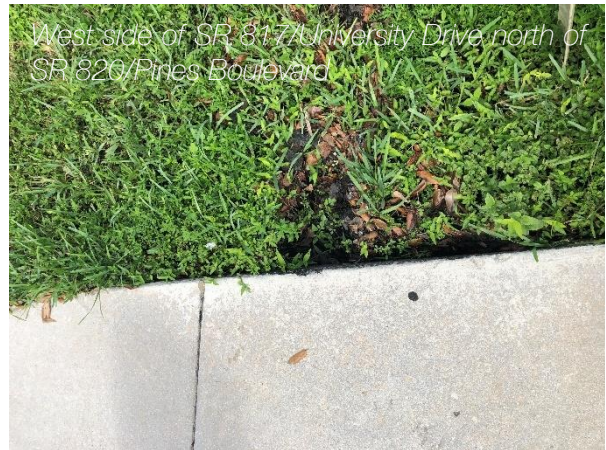
Cracked sidewalk/trip hazards along the sidewalk.



Broward County Transit provides wheel-chair accessible buses that are identified by the International Symbol of Access decal, located near the front door. But it is important to understand if the bus is not wheel-chair accessible, users will have a difficult time taking transit.



BCT Stop ID# 0299 does not have a hard surface concrete pad for the placement of the bench and is lacking amenities such as a shelter, bicycle racks, trash receptacles, etc.



Soil wash out/erosion of subbase underneath concrete sidewalk.

# Walking Audit Report



*Northwest corner of SR 817/University Drive at SR 820/Pines Boulevard*

An intentional cut within the sidewalk.



At a few locations on the east side of SR 817/University Drive south of Taft Street, there were gaps between the aluminum fencing and guardrail.



There is a lack of furnishing zone along the west side of SR 817/University Drive north of SR 820/Pines Boulevard.



*West side of SR 817/University Drive north of SR 820/Pines Boulevard*

Motorists pulling into a marked crosswalk when leaving the plaza prohibits non-motorized users ability to use the space provided

# Walking Audit Report



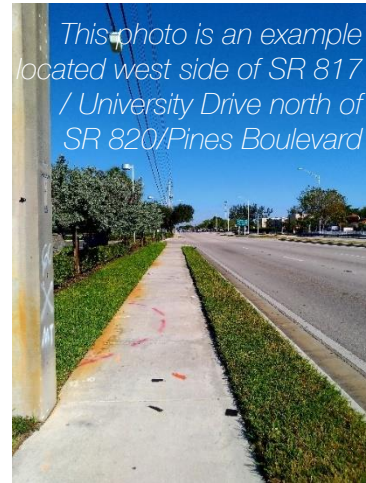
Motorist pulling forward at the intersection of SR 817/University Drive and SR 820 /Pines Boulevard which blocks the marked crosswalk.

## Recommendations



*West side of SR 817/  
University Drive north of  
SR 820/Pines Boulevard*

Evaluate the sidewalk condition to ensure a cross slope of 1% (2% maximum) to meet ADA standards.



*This photo is an example  
located west side of SR 817/  
University Drive north of  
SR 820/Pines Boulevard*

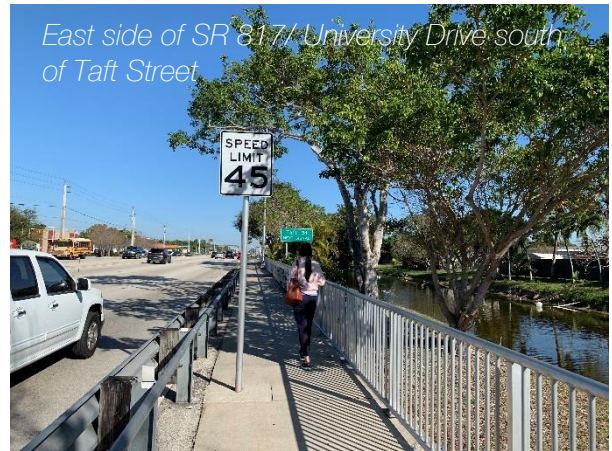
Provide a continuous sidewalk facility on the east side of SR 817/University Drive from County Line Road to SR 820/Pines Boulevard. In addition, provide a sidewalk facility along NW 13<sup>th</sup> Street, east of SR 817/University Drive.



# Walking Audit Report



Provide a clear unobstructed 5'x8' ADA landing pad (5 feet measured parallel to the curb; 8 feet measured perpendicular to the curb) and provide amenities such as bench, shelter, trash receptacle, bike racks, lighting and a handrail at BCT stops.



Provide an electronic dynamic speed display since SR 817/University Drive is a six-lane divided roadway with a speed limit of 45 miles per hour (MPH) but motorists are driving above the speed limit.



Install MUTCD W11-2 (Pedestrian Crossing) at driveways to promote motorists to look for non-motorized users in both directions especially at plazas.



Install MUTCD R10-15b (Turning Vehicles Stop for Pedestrians) on all approach corners at the following signalized intersections.

- SR 817/University Drive and SR 820/Pines Boulevard
- SR 817/University Drive and Johnson Street
- SR 817/University Drive and Taft Street

# Walking Audit Report

## Chapter 5. Conclusion

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 three tiers of implementation based on time needed to initiate the project construction, funding requirements for improvements, and overall complexity of project integration. The proposals 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 Projects (1-2 years)

- Replace the pedestrian signs to install MUTCD R10-3i (Pedestrian Signs and Plaques) and include roadway name at the following signalized intersections.
  - SR 817/University Drive and SR 820/Pines Boulevard
  - SR 817/University Drive and Johnson Street
  - SR 817/University Drive and French Drive/Pembroke Commons
  - SR 817/University Drive and Taft Street
- Install MUTCD R10-15b (Turning Vehicles Stop for Pedestrians) on all approach corners at the following signalized intersections.
  - SR 817/University Drive and SR 820/Pines Boulevard
  - SR 817/University Drive and Johnson Street
  - SR 817/University Drive and Taft Street
- Maintain the landscaping in the furnishing zone throughout the corridor on the west side of SR 817/University Drive.
- Provide special emphasis crosswalk markings at the following signalized locations along SR 817/University Drive.
  - Pembroke Commons/French Drive
  - Taft Street
- Evaluate the pedestrian countdown signal at the intersection of SR 817/University Drive and SR 820/Pines Boulevard because it was not working during the Walking Audit.
- Provide an electronic dynamic speed display since SR 817/University Drive is a six-lane divided roadway with a speed limit of 45 miles per hour (MPH) but motorists are driving above the speed limit.
- Install MUTCD W11-2 (Pedestrian Crossing) at driveways to promote motorists to look for non-motorized users in both directions especially at plazas.

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## Intermediate Projects (2-5 years)

- Reduce the curb radii at the following signalized intersections.
  - SR 817/University Drive and SR 820/Pines Boulevard
  - SR 817/University Drive and Johnson Street
  - SR 817/University Drive and Taft Street
- Provide pedestrian access to businesses with ADA compliant detectable warnings and ramps.
- Implement a campaign to raise awareness to cross at marked crosswalks and install MUTCD R9-2 “Cross Only at Cross Walks” or MUTCD R9-3 “No Pedestrian Crossing symbol.”
- Provide a buffered bicycle lane from County Line Road to Taft Street.
- Evaluate the sidewalk condition to ensure a cross slope of 1% (2% maximum) to meet ADA standards.
- Provide a clear unobstructed 5'x8' ADA landing pad (5 feet measured parallel to the curb; 8 feet measured perpendicular to the curb) and provide amenities such as bench, shelter, trash receptacle, bike racks, lighting and a handrail at BCT stops.

## Long-Term Projects (5-8 years)

- Plant trees on the canal bank on the east side of SR 817/University Drive to provide shade where it is feasible.
- Provide pedestrian lighting on the west side of SR 817/University Drive.
- Provide a continuous sidewalk facility on the east side of SR 817/University Drive from County Line Road to SR 820/Pines Boulevard.
- Provide a connecting sidewalk facility along NW 13<sup>th</sup> Street, east of SR 817/University Drive.
- Relocate fixtures from pedestrian zones or if unable, provide additional space to maintain ADA compliant width.
- Conduct further study to evaluate providing a mid-block signed and marked crosswalk along SR 817/University Drive between Johnson Street and Taft Street (one-half mile with no safe crossing opportunities).

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