

# PLANNING CONTEXT

The Plantation Mobility Hub Master Plan builds upon the existing physical context in and surrounding the Hub study area, and the policy context provided by prior and ongoing planning efforts. This Planning Context section summarizes relevant physical conditions and the relevant adopted policies and recommendations from recent planning efforts of the City and others. The resulting understanding of the transportation and development environment in the Plantation Hub study area, together with the accompanying Market Analysis, informs the Mobility Hub Planning Framework.

With the assistance of the Planning, Zoning and Economic Development Department, the consulting team conducted site visits, stakeholder outreach and a review of relevant documentation to gain an understanding of factors impacting the need for mobility improvements in the Hub study area. Current policies are supportive of multi-modal improvements, but lack specific direction for implementation priorities. The Hub study area is already a regional hub for transit service, but better integration of multi-modal features is needed. The existing development pattern and strong market demand offer opportunities for successful near-term and long-term multi-modal strategies.

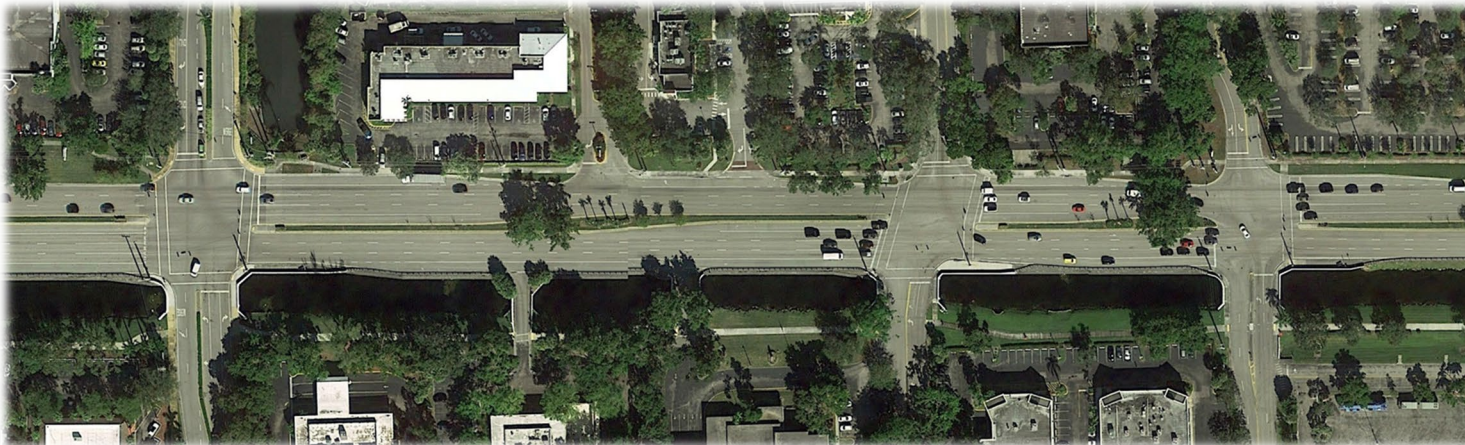
Figure C-1 below provides an aerial view of Broward Boulevard through the core of Midtown, a primary focus area for implementing high-profile mobility improvements.

This section documents relevant findings regarding:

- the **REGIONAL CONTEXT** impacting the Plantation Hub study area, including greater Midtown and points of regional access;
- the **TRANSPORTATION CONTEXT**, including existing and former transit services, the existing roadway network, and the existing pedestrian and biking environment; and
- the **DEVELOPMENT CONTEXT**, including existing land use, current zoning, and the prevailing development character in the area.

Feedback collected during **STAKEHOLDER OUTREACH** early in the planning process is also summarized. Outreach consisted of meetings with agencies, meeting with the Midtown Advisory Board, and both in-person and online surveys to gather input from current and potential future transit users.

**FIGURE C-1: BROWARD BOULEVARD CORRIDOR IN MIDTOWN**



**Adopted Policies Reviewed**

Documentation reviewed for this report included the following:

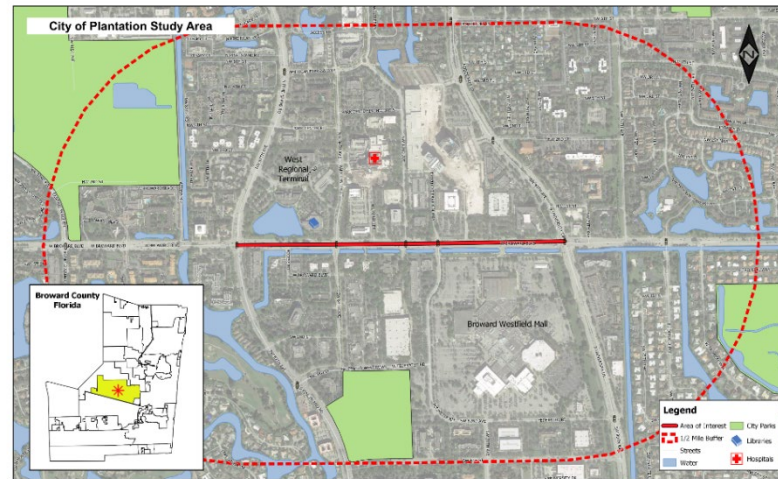
- **City of Plantation Comprehensive Plan**, Effective January 2008.<sup>1</sup>
- **City of Plantation Future Land Use Map** (current through October 2016).<sup>2</sup>
- **Plantation Midtown District 2023: Update of the Conceptual Master Plan**, September 2016.<sup>3</sup>
- **Midtown Plantation and Southwest Sunrise Livability Study Action Plan**.<sup>4</sup>
- **Broward Boulevard Corridor Transit Study**, July 2012.<sup>5</sup>
- **City of Plantation Zoning Map** (current through January 2016).<sup>6</sup>
- **City of Plantation Code of Ordinances** (current through July 25, 2018).<sup>7</sup>

**REGIONAL CONTEXT**

The Hub study area for the Plantation Mobility Hub Master Plan is at the core of the broader area defined as Plantation Midtown, a regional concentration of commercial and employment activity centrally located within the City of Plantation. Midtown extends from I-595 on the south to Cleary Boulevard on the north, and from Pine Island Road on the west to University Drive on the east. It is bisected east-west by Broward Boulevard. Surrounding residential neighborhoods, adjacent communities, and a significant daytime employee population are served by the Westside Regional Medical Center, Westfield Broward Mall and other medical and commercial uses in Midtown. Regional access from I-595 is provided directly via ramps at University Drive and Pine Island Road, with a concentration of higher education uses located just across I-595 to the southeast. Figure C-2 depicts the focused study area for the Plantation Mobility Hub that will be addressed in detail in this report, and Figure C-3 depicts the broader context.

As depicted on Figure C-2, the study area for the Master Plan encompasses the major intersection of Broward Boulevard and University Drive to the east, and Broward County Transit’s (BCT) West Regional Terminal (WRT) near the intersection of Broward Boulevard and Pine Island Road to the west. The WRT is located adjacent to the Broward County Emergency Operations Center (EOC). Understanding multi-modal mobility need and opportunities within this study area will guide both near-term investments and recommendations building on ongoing redevelopment interest in Midtown. The implications of a potential opportunity to modify or relocate the West Regional Terminal associated with a potential future expansion of the EOC will be addressed.

**FIGURE C-2: STUDY AREA FOR MOBILITY HUB DATA COLLECTION**  
(not to scale)



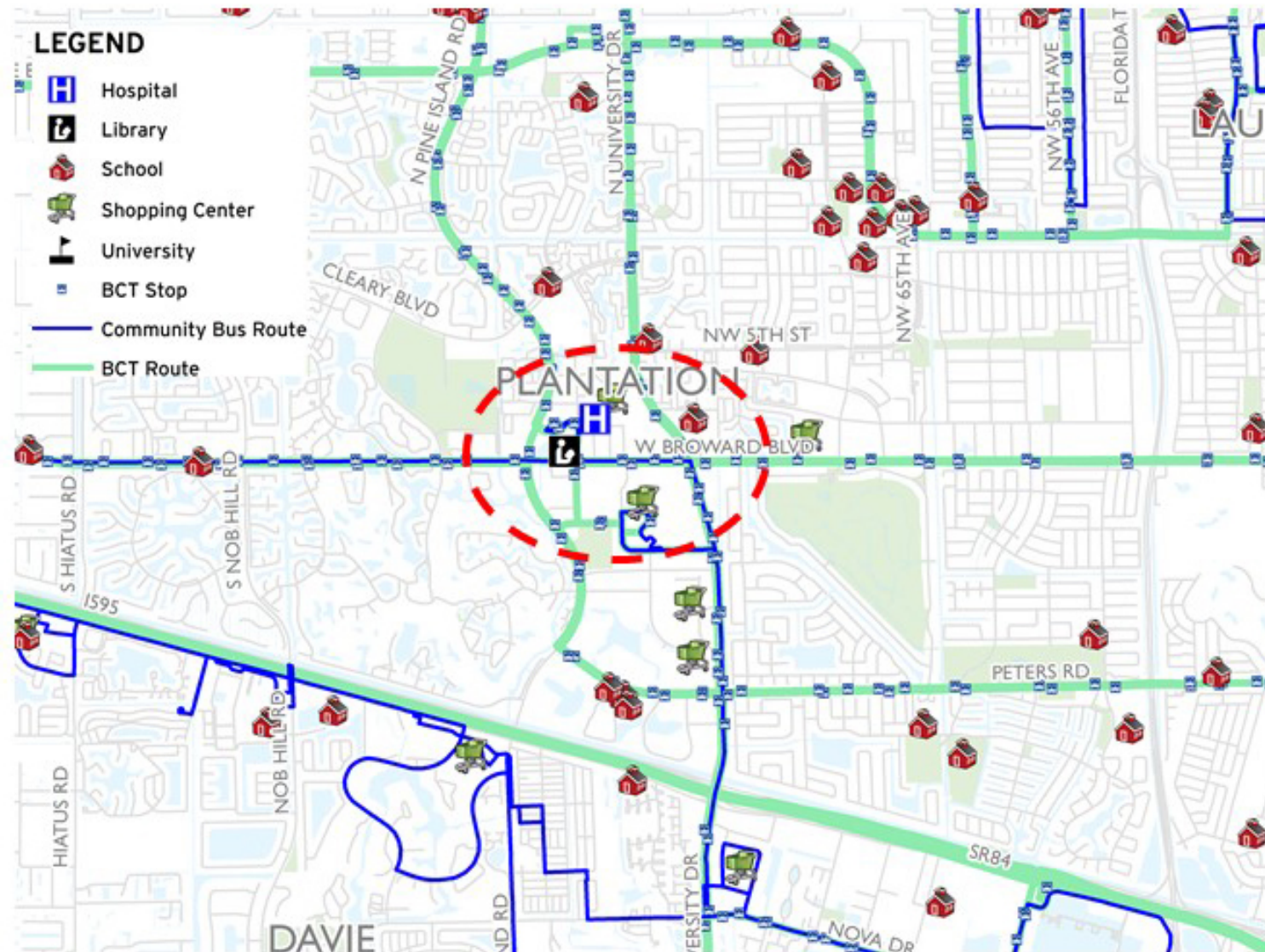
<sup>1</sup> <http://www.plantation.org/Planning-Zoning/comprehensive-plan.html>  
<sup>2</sup> [http://www.plantation.org/wp-content/uploads/2013/04/CP\\_FutureLandUse\\_2016.pdf](http://www.plantation.org/wp-content/uploads/2013/04/CP_FutureLandUse_2016.pdf)  
<sup>3</sup> [http://www.plantation.org/wp-content/uploads/2013/05/Plantation\\_Midtown\\_Print.pdf](http://www.plantation.org/wp-content/uploads/2013/05/Plantation_Midtown_Print.pdf)  
<sup>4</sup> <http://www.browardmpo.org/images/WhatWeDo/PltnSunriseReport.pdf>

<sup>5</sup> <http://www.browardmpo.org/images/WhatWeDo/BrowardBlvdCorridorTransitStudy.pdf>  
<sup>6</sup> [http://www.plantation.org/wp-content/uploads/2016/07/Zoning\\_Map.pdf](http://www.plantation.org/wp-content/uploads/2016/07/Zoning_Map.pdf)  
<sup>7</sup> [https://library.municode.com/fl/plantation/codes/code\\_of\\_ordinances](https://library.municode.com/fl/plantation/codes/code_of_ordinances)



FIGURE C-3: REGIONAL CONTEXT OF THE PLANTATION MOBILITY HUB STUDY AREA

(not to scale)



## TRANSPORTATION CONTEXT

Information regarding current and planned transit service in the Plantation Hub study area is summarized in this section, including a summary of prior community shuttle service that was discontinued several years ago. Documentation of the existing pedestrian and bicycle network and the roadway network is also included. Relevant planning recommendations from prior planning studies are also summarized. The information provides a consistent “baseline” understanding of the existing mobility network upon which recommendations for Hub-related multimodal investments and longer-term mobility initiatives can be developed.

## TRANSIT SERVICE

### Existing Service

A total of eight Broward County Transit (BCT) Routes serve the Hub study area, including six local bus routes and limited stop service provided by the University Drive Breeze/Route 102 and Broward Breeze/Route 122. The Hub study area is also served by the Town of Davie Blue Route providing Community Shuttle service. The area includes the BCT West Regional Terminal (WRT), located in proximity to the northeast corner of the Broward Boulevard/Pine Island Road intersection. The terminal serves eight routes including seven BCT routes and the Davie Blue Route. A description of the services from the WRT are provided below.

#### **BCT Route 122 (Broward Breeze)**

- A limited stop service running east-west along Broward Boulevard from the Sawgrass Mills Mall in Sunrise to Broward Health Medical Center in downtown Fort Lauderdale
- This route diverts into the WRT from Broward Boulevard
- This service began January 14, 2019

#### **BCT Route 2**

- A major north-south line provides local service along University Drive from Westview Drive in Coral Springs to NW 207<sup>th</sup> Street in Miami-Dade County

- Services 1,227,607 passengers annually (July 2017 – July 2018)

#### **BCT Route 12**

- A north-south/east-west feeder line provides local service from Dania Beach, Hollywood, Davie and Plantation
- Services 278,583 passengers annually (July 2017 – July 2018)

#### **BCT Route 22**

- A major east-west line provides local service along Broward Boulevard from the Central Terminal in downtown Fort Lauderdale to the Sawgrass Mills Mall in Sunrise
- Services 832,607 passengers annually (July 2017 – July 2018)

#### **BCT Route 30**

- An east-west feeder line provides local service between the Central Terminal in downtown Fort Lauderdale to West Regional Terminal, traveling primarily along Davie Boulevard/Peters Road
- Services 444,705 passengers annually (July 2017 – July 2018)

#### **BCT Route 81**

- A major east-west line providing local service from Central Terminal in downtown Fort Lauderdale to West Regional Terminal through the cities of Lauderdale Lakes, Lauderhill and Plantation
- Services 743,141 passengers annually (July 2017 – July 2018)

#### **BCT Route 88**

- A north-south line providing local service from Heron Bay Plaza in Coral Springs to West Regional Terminal along Pine Island Road
- Services 131,104 passengers annually (July 2017 – July 2018)

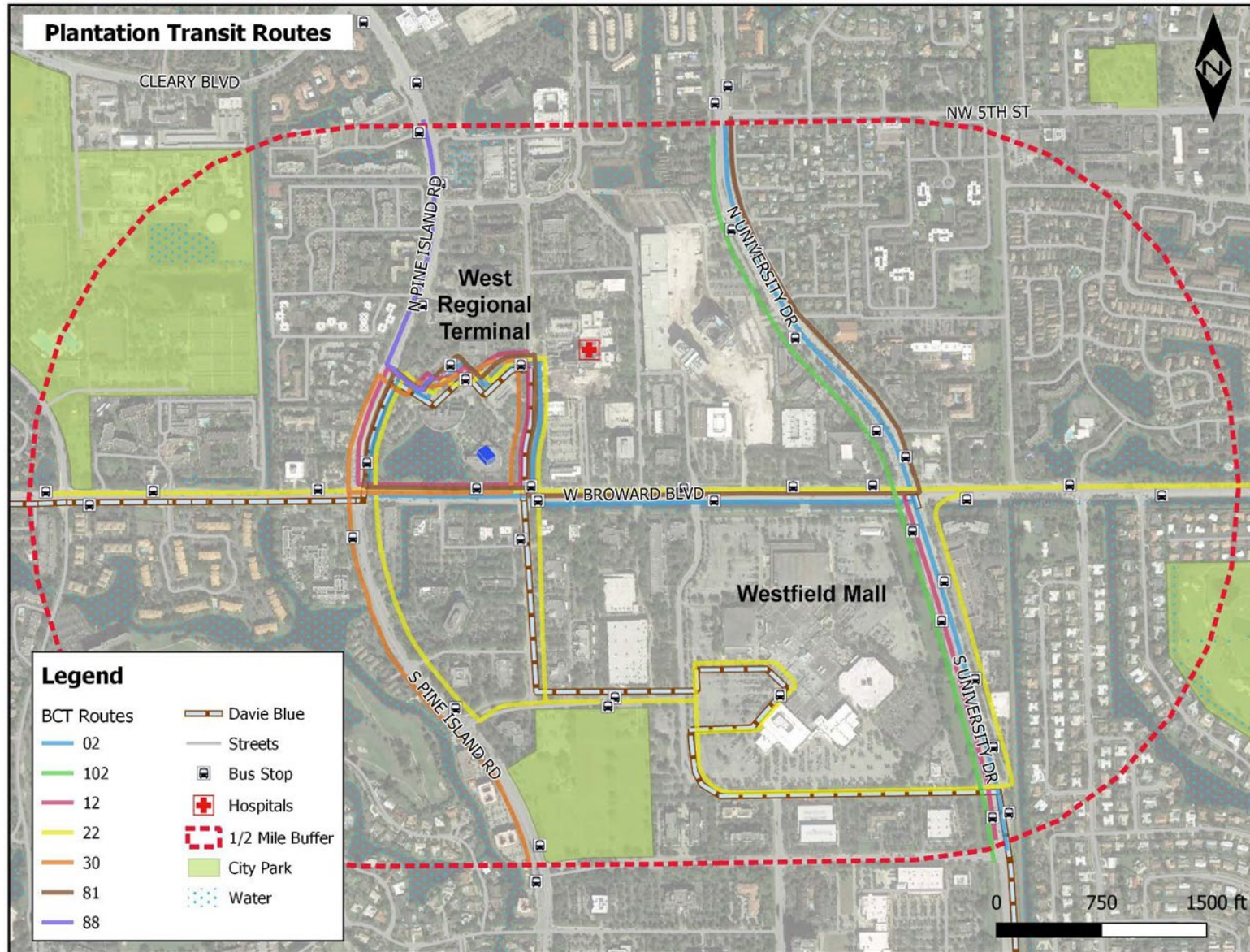
#### **Davie Blue Route**

- An east-west line providing community shuttle service primarily for the Town of Davie along I-595 with stops at the West Regional Terminal and Westfield Broward Mall in Plantation
- Services 71,642 passengers annually (July 2017 – July 2018)
- Free Service

Figure C-4 shows the transit network in the Hub study area.



FIGURE C-4: TRANSIT NETWORK



The eighth BCT route in the Hub study area does not serve the WRT.

**BCT Route 102 (University Breeze)**

- A major north-south line provides limited service stops along University Drive from Westview Drive in Coral Springs, Florida to the Golden Glades Park and Ride in Miami-Dade
- Services 155,778 passengers annually (July 2017 – July 2018)

**Transportation Options (TOPS)** is a county paratransit service the provides service within the Hub study area. The service costs \$3.50 per one-way trip. The service provided 719,850 rides annually (July 2017-July 2018), but ridership data specific to the Hub study area is not available.

**Headways and Span of Service**

All routes provide services weekday, Saturday and Sunday service. Table C-1 provides a summary of the weekday service. The local routes provide good spans of service with most routes exceeding 15 hours per day except for Routes 12 and 88. Headways are fair as there is only one route providing 15-minute headways while the others range from 19 minutes to one hour (59 mins). A summary of the University Drive Breeze/Route 102 is also provided based on service at the Broward Boulevard stop.

**Bus Stop Types and Activity**

There are five different scales of bus stops ranging from a simple bus stop sign with no street furniture or amenities to a signature bus shelter provided on Broward Boulevard serving the Broward County Government Center West site. There are also stops that have been designed specifically as a brand for the City of Plantation.

Figure C-5 provides a map of the bus stops showing bus stop typologies and Figures C-6 and C-7 show boardings and alightings. Note the most current boarding and alighting data available from BCT is for the year 2014.

**TABLE C-1. WEEKDAY TRANSIT HEADWAYS AND SPAN OF SERVICE**

West Terminal Weekday Services								
Route	Span of Service Weekday [Hours]:[Min]		Ave Span of Service Weekday [Hours]:[Min]	Peak Hour Headway Weekday [minutes]				Peak Hour Headway Weekday Ave [minutes]
	NB	SB		NB AM	SB AM	NB PM	SB PM	
Route 2	18:50	17:54	18:22	0:23	0:26	0:19	0:19	0:22
Route 12	11:16	9:54	10:35	1:07	0:58	0:56	0:58	0:59
Route 22	18:36	17:55	18:15	0:15	0:15	0:15	0:15	0:15
Route 30	17:07	16:20	16:43	0:20	0:20	0:18	0:20	0:19
Route 81	18:38	15:50	17:14	0:29	0:20	0:33	0:25	0:26
Route 88	13:45	14:02	13:53	0:40	0:41	0:41	0:41	0:40
Broward Blvd & University Dr Bus Stop								
Route 102	13:37	13:44	13:40	0:36	0:36	0:30	0:31	0:33

Figures C-6 and C-7 show that there are three locations that have significant transit activity with the West Terminal experiencing 1,517 boardings and 1,448 alightings followed by a grouping of stops in proximity to University Drive with 687 boardings and 418 alightings and the on-site Westfield Mall transit stop with 131 boardings and 176 alightings.

Field observations indicate that most of the activity at the West Regional Terminal are bus-to-bus transfers and that activity at University Drive and Broward Boulevard and at the Westfield Mall are employment and shopping trips.



FIGURE C-5: BUS STOP TYPES

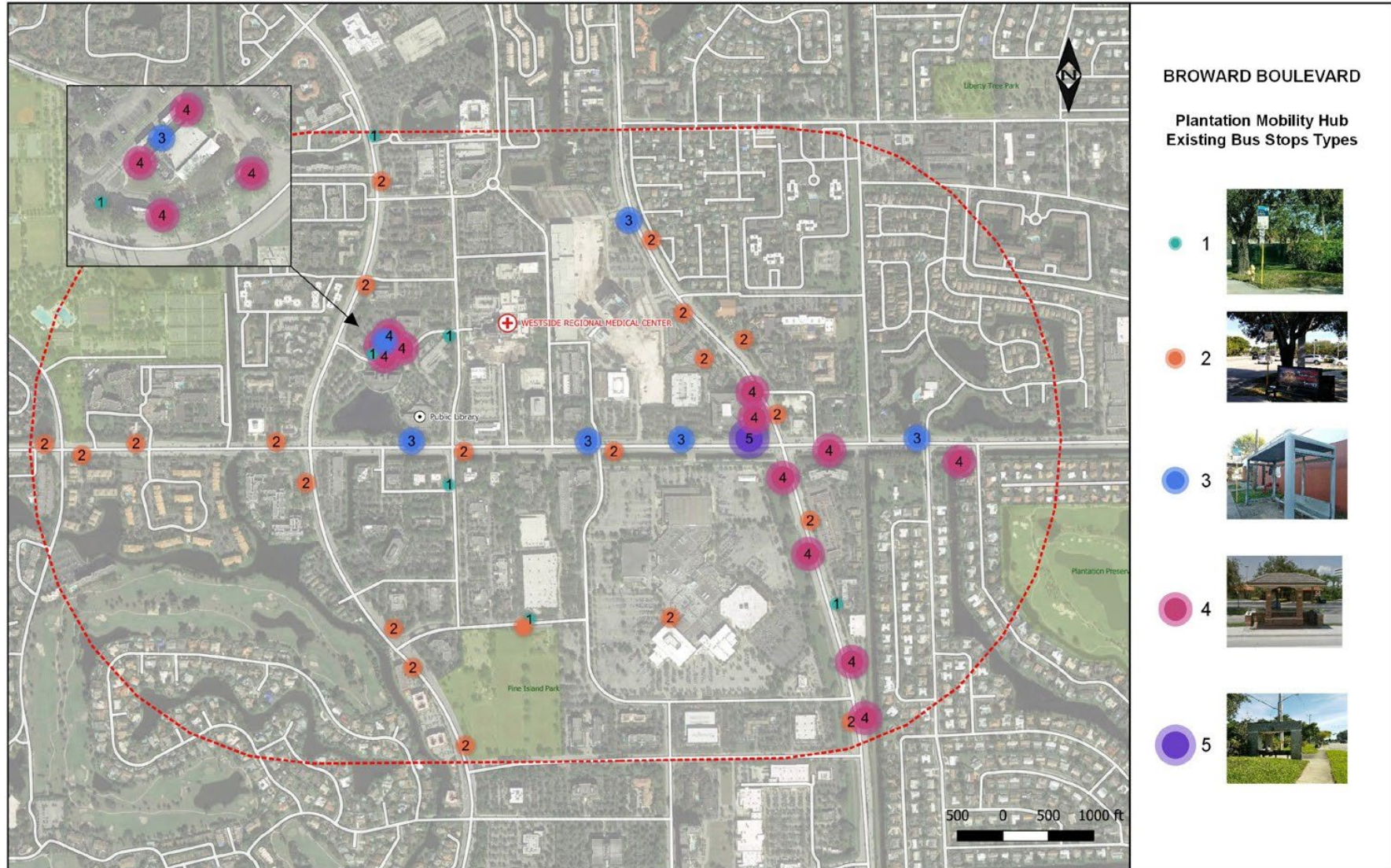
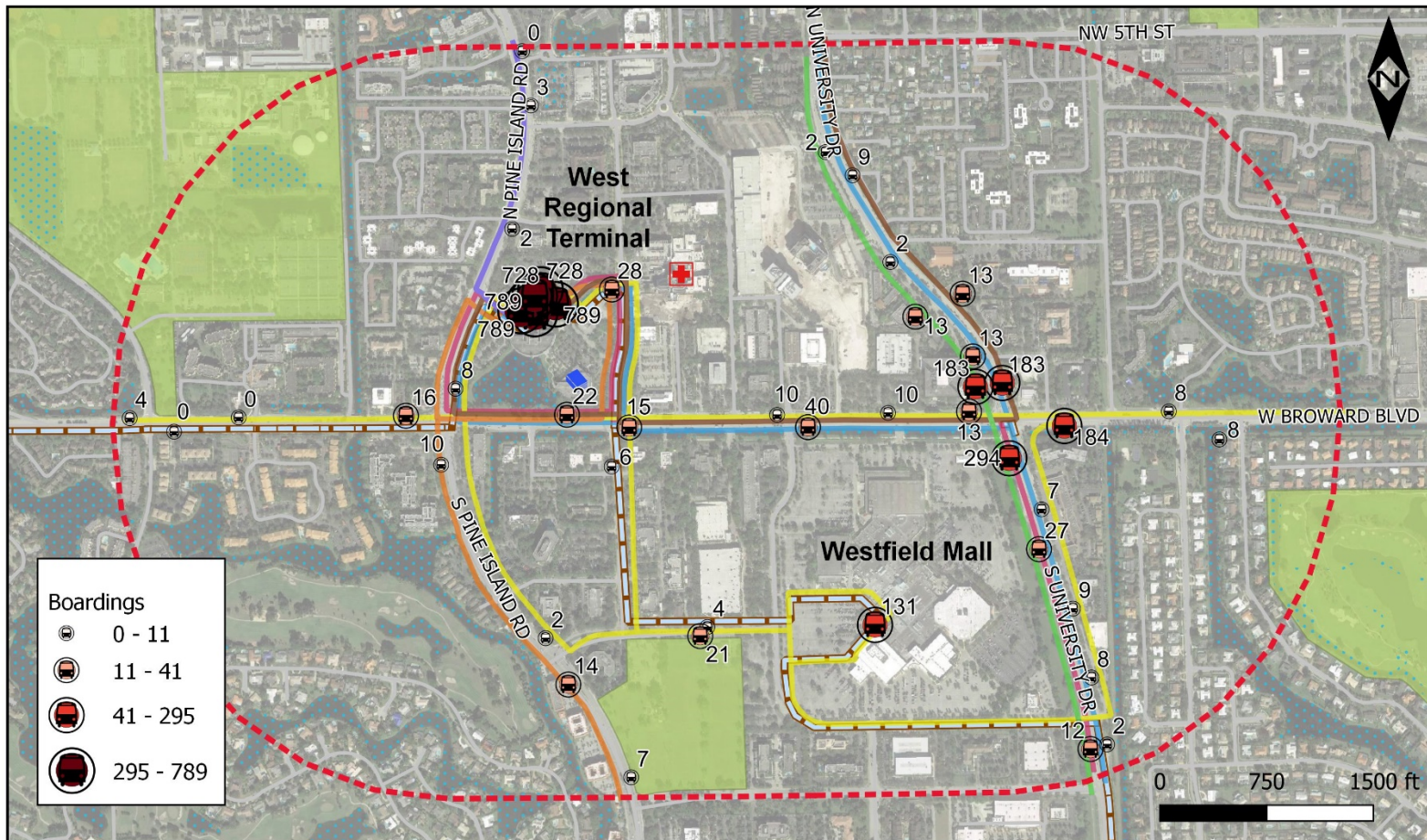




FIGURE C-6: TRANSIT BOARDING ACTIVITY



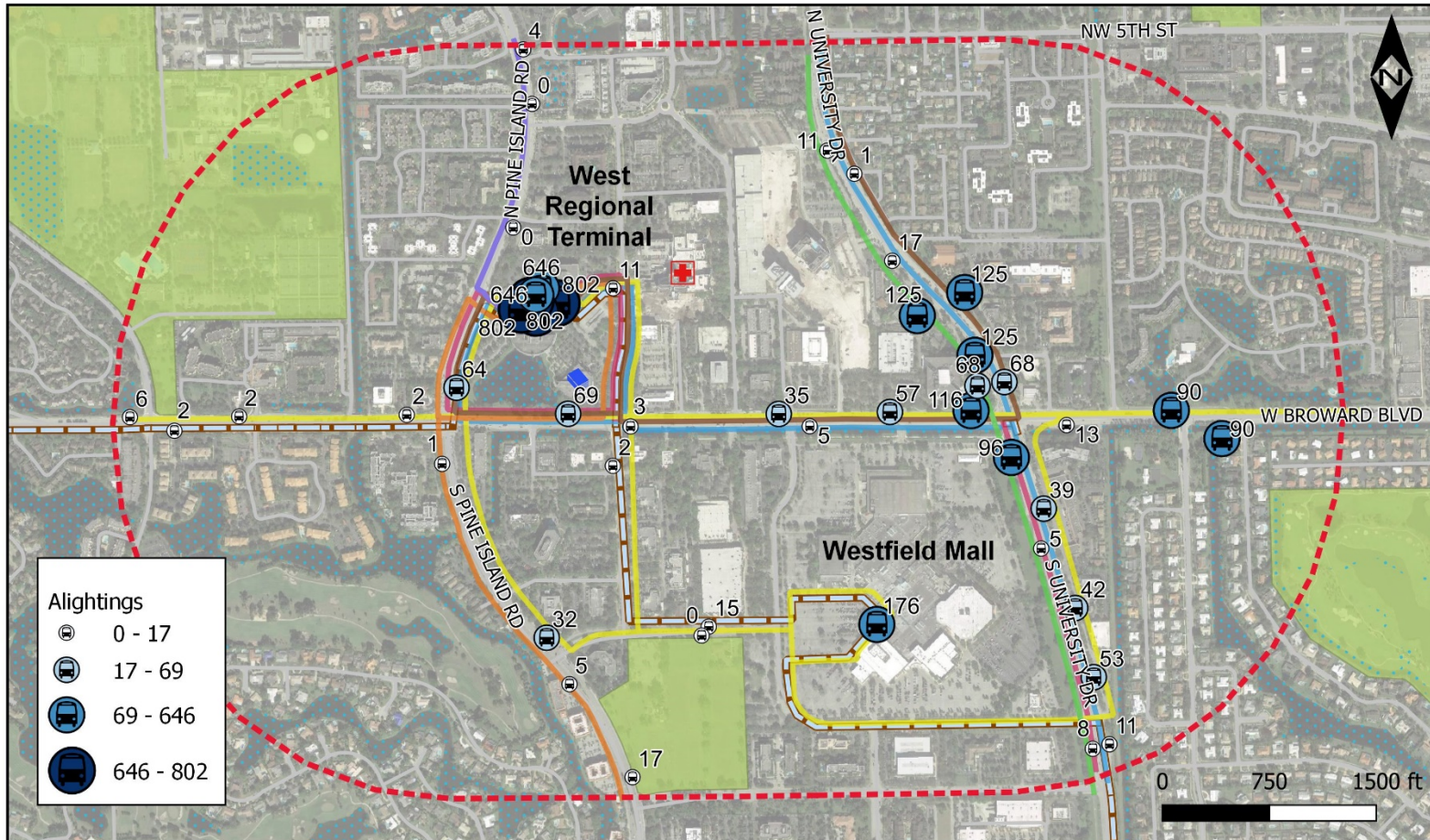
**CITY OF PLANTATION BUS RIDERSHIP DATA  
BOARDINGS & ALIGHTINGS  
Weekdays - Daily Average**

Bus Routes	12	81	Streets	Water
02	22	88	1/2 Mile Buffer	City Park
102	30	Davie Blue		

Disclaimer: This data is based on available weekday samples from Automatic Passenger Counters (APC) between Jan. 19, 2014 - Mar 2, 2014. Please note that BCT has known technical issues with APC sensors that have caused sampling and counting errors. It is recommended that all APC ridership statistics are validated with on-board surveys. 3/22/2019



FIGURE C-7: TRANSIT ALIGHTING ACTIVITY



**CITY OF PLANTATION BUS RIDERSHIP DATA  
BOARDINGS & ALIGHTINGS  
Weekdays - Daily Average**

Bus Routes	12	81	Streets	Water
02	22	88	1/2 Mile Buffer	City Park
102	30	Davie Blue		

Disclaimer: This data is based on available weekday samples from Automatic Passenger Counters (APC) between Jan. 19, 2014 - Mar 2, 2014. Please note that BCT has known technical issues with APC sensors that have caused sampling and counting errors. It is recommended that all APC ridership statistics are validated with on-board surveys. 3/22/2019

### History of Local Transit Service

The City of Plantation provided community shuttle service, but discontinued it in 2014. The service saw significant ridership, carrying between 10,000 and 18,000 per month. The City and Broward County provided this service to increase the number of destinations that could be reached through public transit and connect to other existing BCT routes. In 2014 the City implemented a fare and ridership dropped dramatically to 6,100 to 8,000 per month and service was discontinued (see Figure C-8). Figure C-9 provides a map of the route (green is Tram Route A, and black is Tram Route B).

Additionally, a community-wide Trolley service also served Midtown. This route provided access to activity centers including the Jacarda Park of Commerce, the Fountain Shops, the Broward Mall, and the Westside Regional Medical Center. This service also connected to other BCT routes, including the BCT West Terminal. Figure C-10 provides a map of the service from 2008.

**FIGURE C-8: HISTORIC RIDERSHIP - TRAM ROUTES A & B**

Source: BCT

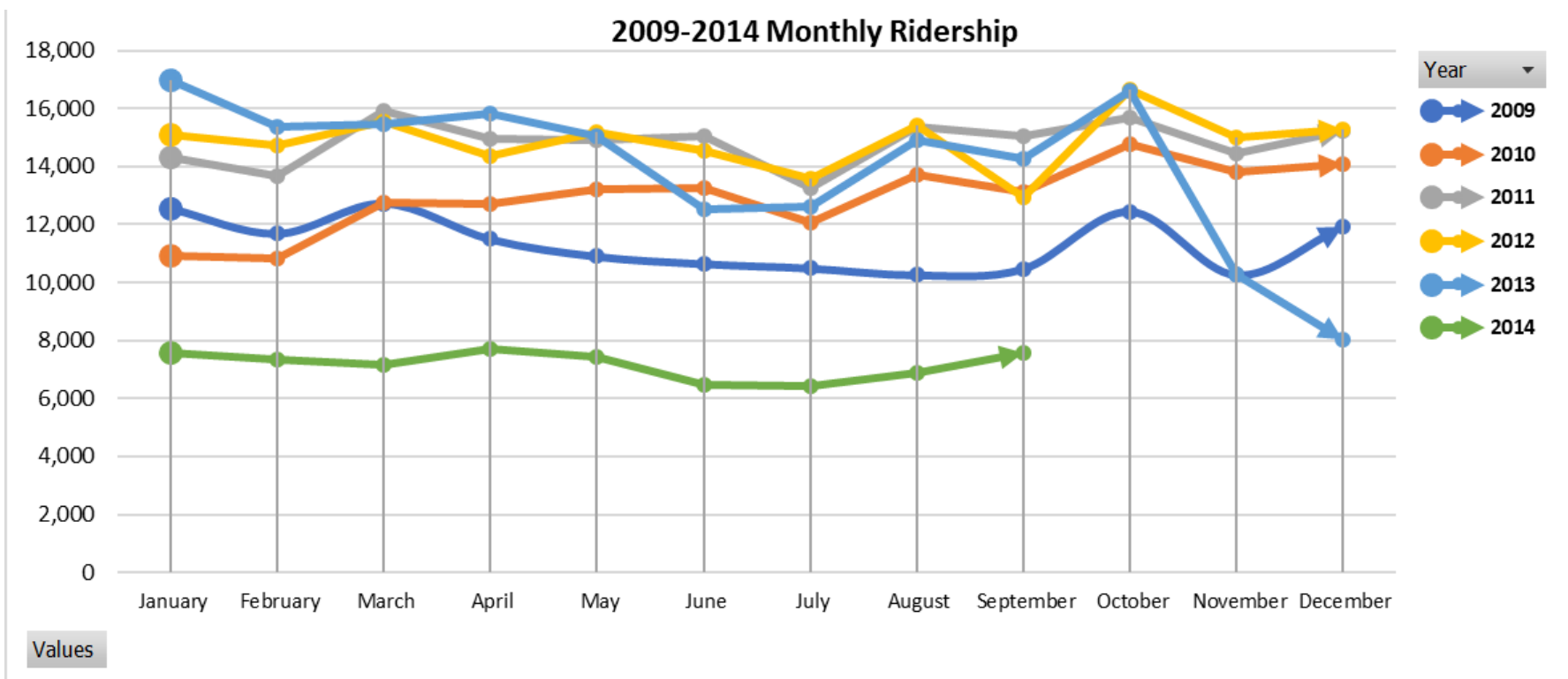
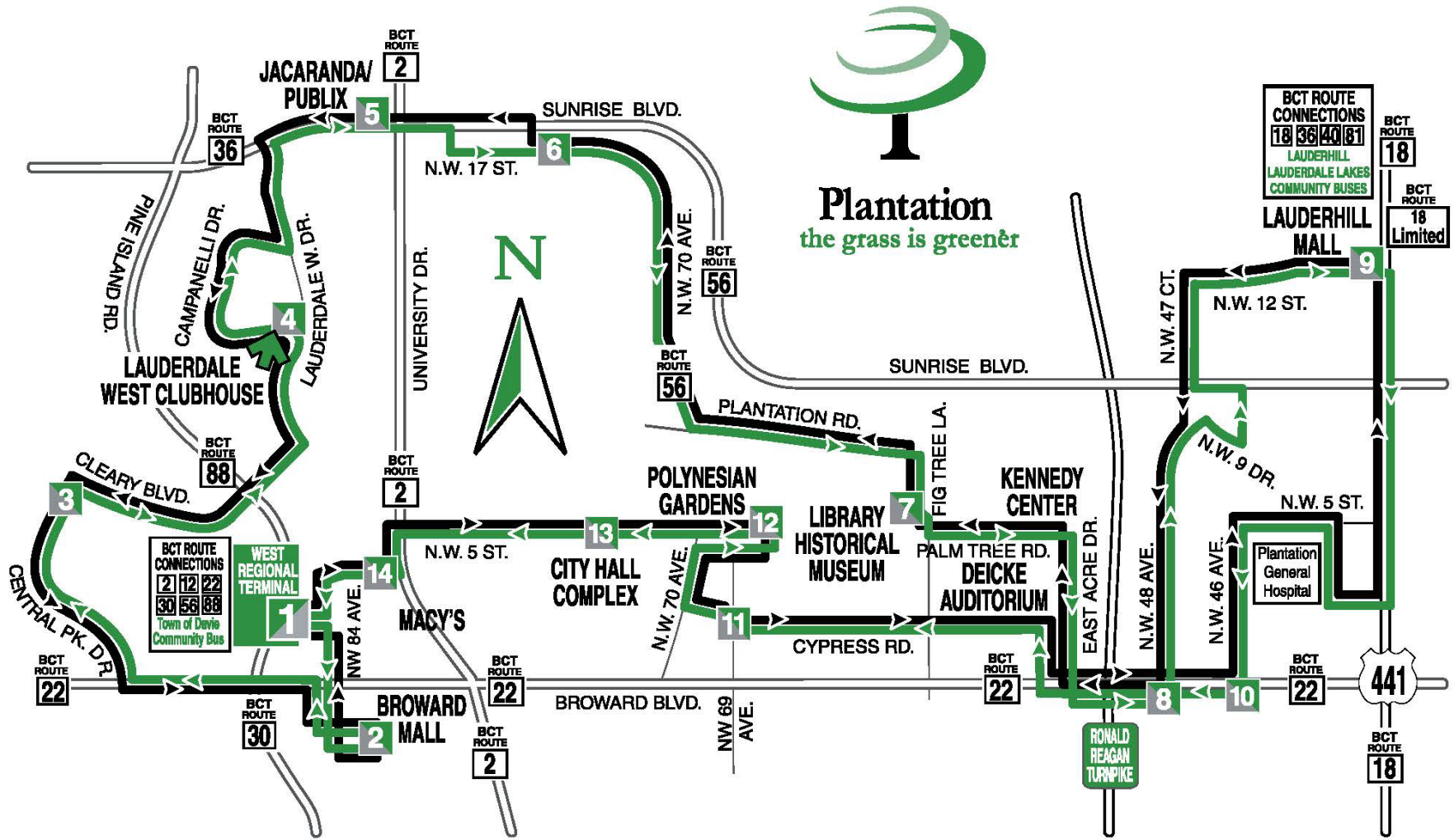


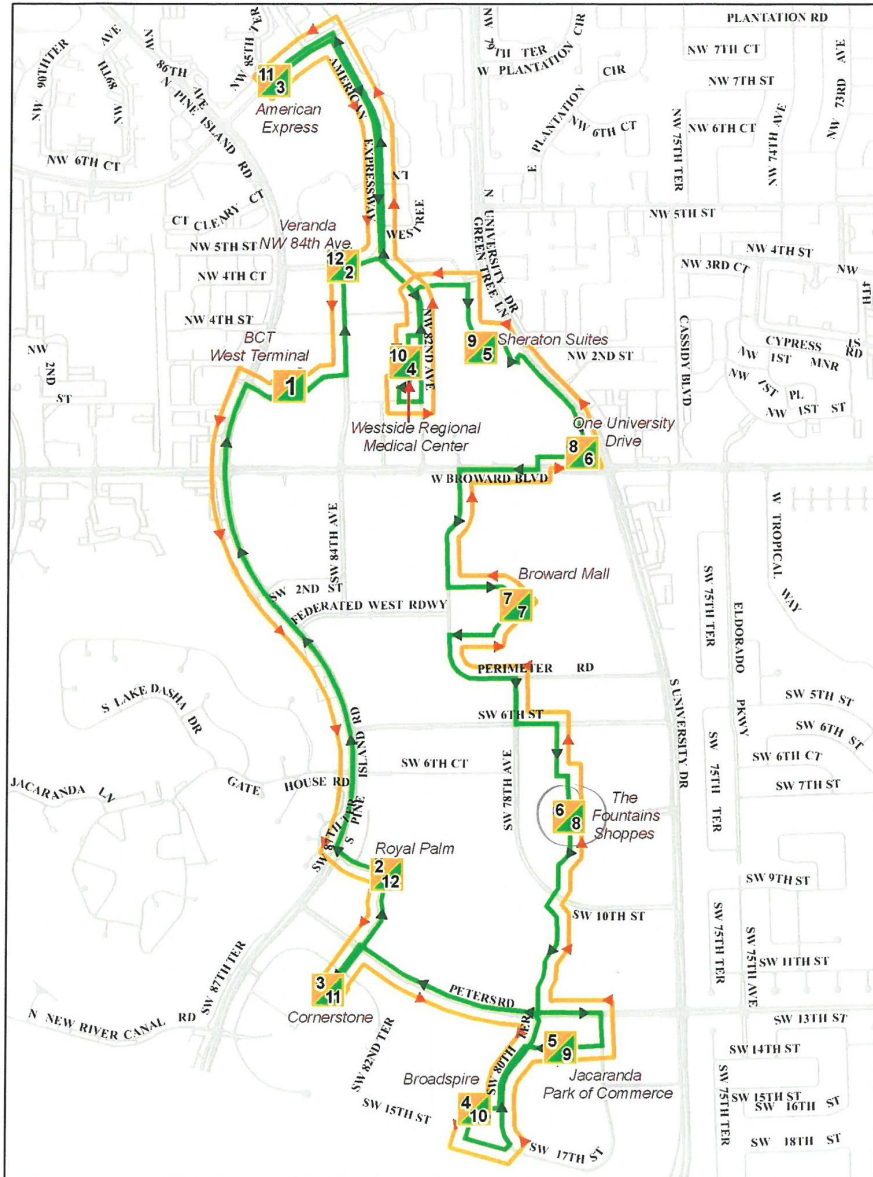


FIGURE C-9: FORMER PLANTATION TRAM ROUTES A (GREEN) & B (BLACK)



Source City of Plantation

FIGURE C-10: FORMER MIDTOWN TROLLEY ROUTE



Source: City of Plantation

Field Observations of Transit Use

Observations at the West Regional Terminal indicate the terminal is in a state of disrepair where there is uneven pavement, a lack of connected pedestrian facilities, and ADA access issues. Most of the pavement markings to and from the terminal are faded or completely worn out. Passengers walking to and from the terminal were following direct desire lines across the access road and cutting through the surrounding parking lots, hedges, and drainage ditches. People were observed being dropped off at the terminal, using the access road as an unofficial “kiss and ride” lane. There is some wayfinding signage at the Terminal but it is in a location away from the passenger activity.

Field observation using video documentation undertaken at the West Regional Terminal is fully documented under separate cover in a report entitled “City of Plantation Pines Data Collection and Transit Count Summary.” The results of the observation are summarized below.

MIOVision Cameras were deployed on December 17, 2018 and placed at five (5) locations within and around the West Regional Terminal to document pedestrian, bicycle, and transit use entering/exiting the terminal area and transferring within the terminal area over a 24-hour period. Videos were viewed by engineering technicians to document peak period activity from 7 AM to 9 AM and 4 PM to 6 PM.

Figure C-11 provides bus bay assignments per Broward County Transit. Table C-2 provides a summary of total buses during morning and evening peak periods (according to the Route Schedules) that travel to/from the West Regional Terminal. A total of 59 buses are scheduled to travel to/from the Terminal during morning peak periods and 64 buses during the evening peak periods.



FIGURE C-11: BUS BAY ASSIGNMENTS



TABLE C-2: SCHEDULED BUSES AT WEST REGIONAL TERMINAL

Route	Total Buses During AM Peak Period	Total Buses During PM Peak Period
2	12	12
12	5	4
22	15	16
30	11	13
81	7	8
88	6	6
Davie Blue	3	5
<b>TOTAL</b>	<b>59</b>	<b>64</b>



*Top left: Sidewalk to Terminal in disrepair. Top center: "Cow path" to access Terminal. Top right: Signage at Pine Island Road leading into the County Complex. Bottom left: View of Access Road with car parked awaiting passenger. Bottom right: Lack of pedestrian access to Terminal from Pine Island Road.*

The data collection results at the West Terminal indicate that there was a total of 462 transit riders accessing the terminal between 7 AM to 9 AM and 4 PM to 6 PM on December 18, 2018. Morning Peak use was 255 transit riders and Evening Peak use was 207 transit riders, with approximately 10% more transit riders in the morning than evening. Most of the users, 269 or 58%, were transfer riders from bus to bus at the station while 193 riders were observed entering and exiting the Terminal area to/from a bus. MIOVision cameras captured a total of 48 buses during the morning peak and 36 buses during the PM peak periods, consistently fewer than the schedule indicates.

Observation of access/egress to the West Regional Terminal illustrates that several riders were seen being dropped off at the terminal from the Access Road on the southeast side of the Terminal. Some of the pedestrians accessing/egressing the terminal utilized existing crosswalks, however many pedestrians were observed crossing the Access Road, cutting through the landscape hedges and entering or exiting the property via all areas of the surrounding parking lot to the west.

It is important to note that more than twice as many people entered (77) the Terminal during evening peak hours than exited (36). This is significantly different than the number of people who entered (38) and exited (42) the Terminal during AM Peak hours which were similar.

Bay G is serviced by the Davie Shuttle; all other bus bays were used by the different buses traveling through the Terminal. Buses did not appear to use their “assigned” bays (per Figure C-11) consistently.

Eleven fewer buses were observed than scheduled during the AM peak period and 28 fewer buses were observed than scheduled during the PM peak period. The discrepancy in the number of buses scheduled and the number of buses observed can most likely be attributed to traffic congestion causing several Routes to miss their scheduled times.

Key findings from the field observation of transit use include:

- The West Regional Terminal is primarily used as a transfer point with 58% of users transferring at this location, and approximately 10% more transit users during morning peak periods than even peak periods.

- Passengers are using the Access Road as a pick-up and drop-off location, and pedestrians are entering/exiting the Terminal from all directions.
- Twice as many pedestrians accessed the West Regional Terminal during evening peak periods than exited; this number is also higher than morning peak period ingress or egress.
- Twelve (12) more buses serviced the West Regional Terminal during morning peak periods than evening peak periods.
- Bay G was the only bay consistently serviced by the Davie Shuttle; all other bays were used intermittently by all other bus routes servicing the West Regional Terminal.
- There were significant differences in the number of scheduled buses versus the number of buses observed, most likely due to traffic congestion.
- The wayfinding signage that is provided is in a low passenger activity location.

## BIKE AND PEDESTRIAN NETWORK

### Existing Network

The Hub study area overall has a lack of clarity for drivers, pedestrians and bicyclists. The area has been planned and developed for compartmentalized, single use development. There also exists a patchwork of disconnected parking lots. This patchwork has created a use pattern of public and private roadways that are indistinguishable and used interchangeably. Most of the parking lots have been designed without any bicycle or pedestrian facilities.

Figure C-12 provides an inventory of pedestrian and bicycle facilities for the primary and secondary roadway network. The map shows that for the most part sidewalks exist on both sides of the road for all major arterial and collector roads, but continuity is lacking.

- On Broward Boulevard from east of Pine Island Road to University Drive where there are intermittent sidewalks on the southside of the road, as a result of the canal extending into the Broward Boulevard right-of-way. There



are sidewalks on the south side of the canal that are disjointed and frequently interrupted by access bridge driveways.

- The unnamed access road into the West County Complex from Pine Island Road does not have sidewalks on either side of the road. The piece of sidewalk that does exist functions as part of the internal bus terminal passenger network. There are virtually no sidewalks accessing the Terminal.
- Perimeter and Federated Roads surrounding the mall do not have sidewalks, and there are no direct sidewalk connections from the perimeter into the mall property for safe shopper access.

Figure C-12 shows that bicycle lanes are only provided on portions of the primary roadway network. University Drive has 5-foot bike lanes through the Hub study area. Under today’s FDOT Design Manual these are substandard, but improvements are being planned.

Areas of more recent developments, including NW 84<sup>th</sup> Avenue east of the new Publix-anchored shopping center, provide a comfortable walking environment. These isolated examples of walkability offer an example of the streetscape character that the City desired to expand further.

**Pedestrian Bicycle Crashes**

FDOT crash data for 2013 to 2017 pedestrian and bicycle related crashes was obtained for this area and is shown on Figure C-13. The Figure shows that the crash history is focused on the Broward Boulevard corridor with 22 total non-motorized crashes occurring including:

- 3 Pedestrian Fatalities
- 12 Pedestrian Crashes with Injuries
- 1 Pedestrian Crashed without Injury
- 6 Bicycle Crashes with Serious Injuries



*Top left and right: Sidewalk along south side of drainage canal, with frequent interruptions at bridge crossings. Right: Bike lane on Pine Island Road (similar upgrade planned on University Blvd). Bottom left: Typical parking lot condition with no delineated pedestrian paths. Bottom right: Typical crossing condition across Broward Boulevard.*

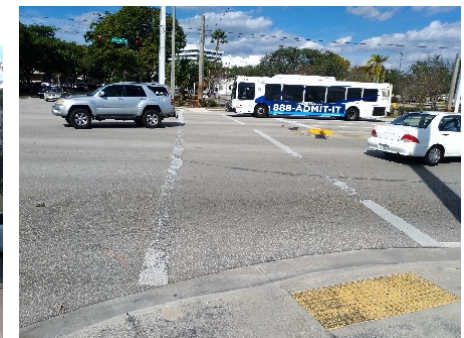


FIGURE C-12: PEDESTRIAN AND BICYCLE NETWORK

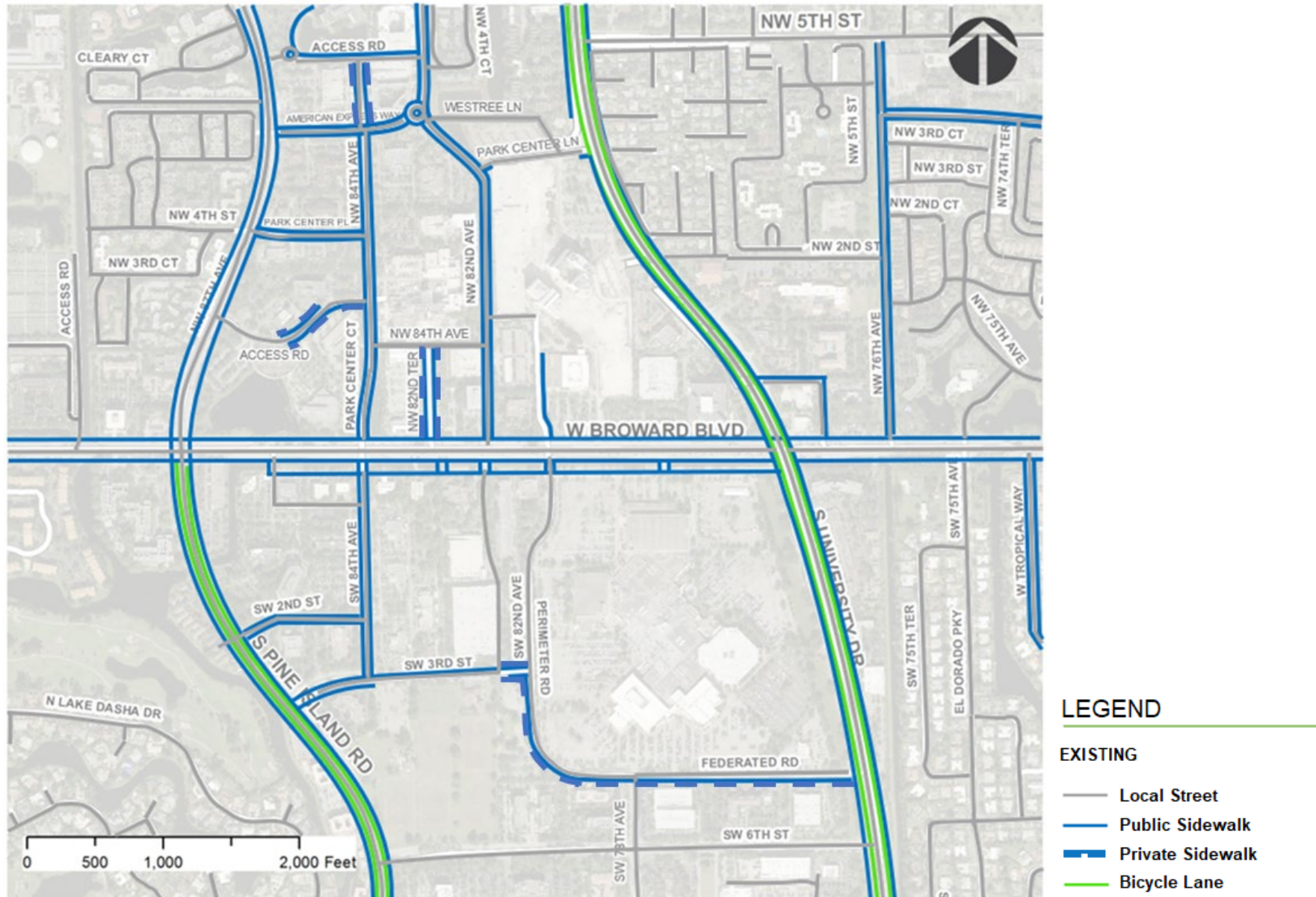
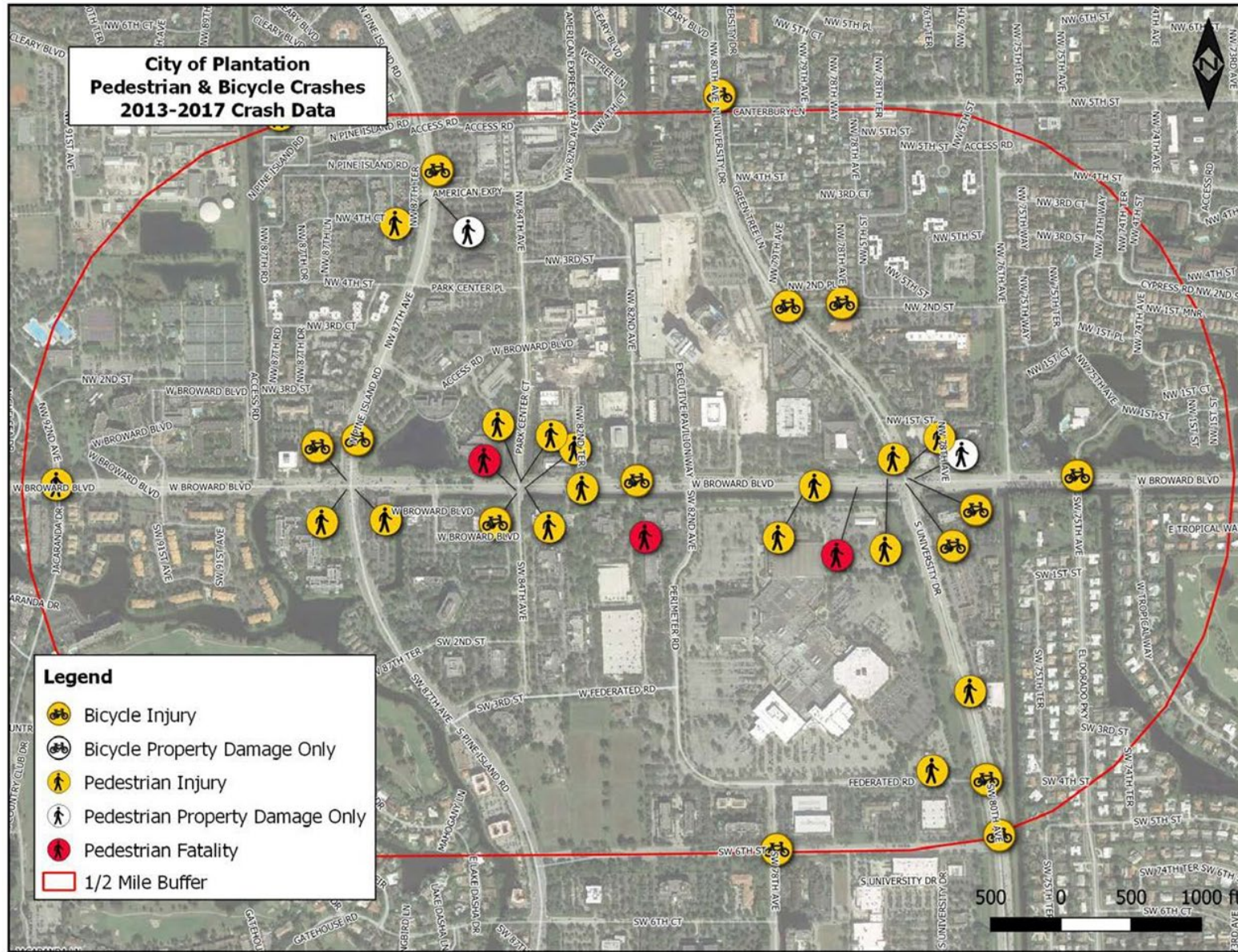




FIGURE C-13: PEDESTRIAN AND BICYCLE CRASH HISTORY





## ROADWAY NETWORK

Figure C-14 depicts the jurisdictions of roadways and location of signalized intersections in the Hub study area for ease of reference. The network is clearly hierarchical, with primary access from Pines Boulevard and Palm Avenue to local public streets at limited points, and then to neighborhoods comprised primarily of private streets. This pattern is reinforced by the barriers created by detention facilities throughout the study area.

Field observation undertaken at three intersections along Broward Boulevard in the Hub study area is fully documented under separate cover in a report entitled “City of Plantation Data Collection and Transit Count Summary.” The results of the observation are summarized below.

MIOVision Cameras were placed at the intersections of SW 82<sup>nd</sup> Avenue, SW 84<sup>th</sup> Avenue and Perimeter Road with Broward Boulevard to obtain multi-modal turning movement counts on December 18, 2018. Video detection technology was used to count pedestrians, bicycles, heavy trucks, buses and vehicle turning movements over a 24-hour period. Finally, traffic counters were also deployed on Broward Boulevard between Perimeter Road and SW 84<sup>th</sup> Avenue to collect daily traffic counts for a period of 24 hours.

The analysis was conducted using Synchro simulation software and the results indicate that all three study area intersections operate at acceptable conditions with a LOS of C for Broward Boulevard and SW 84<sup>th</sup> Avenue and Perimeter Road intersections and a LOS B for the Broward Boulevard and SW 82<sup>nd</sup> Avenue intersection, during both morning and evening peak hour. Furthermore, all the approaches of these intersections also operate acceptably during peak hours except for the signalized intersection of W Broward Boulevard at SW 82<sup>nd</sup> Avenue whose southbound operates at LOS F during evening peak hour. SB and NB have exclusive left turn lanes, but do not have a protected left turn signal. Thus, vehicles turning left must yield to traffic and pedestrians before turning, the likely reason for the increased delay of SB traffic which resulted in LOS F for the SB approach.

Key findings from observation of intersections include:

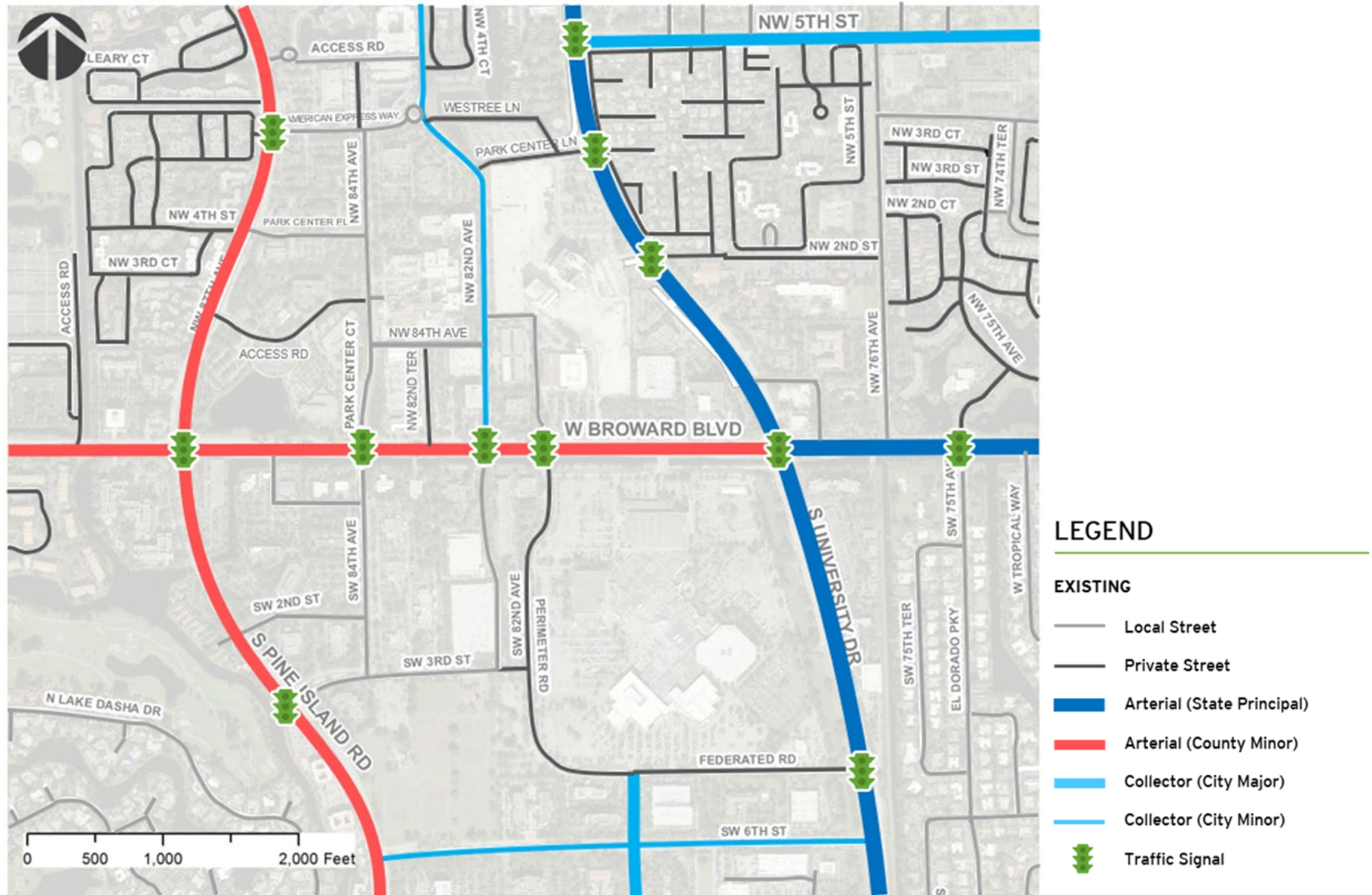
- Very little pedestrian and bicycle activity on Broward Boulevard was observed. A total of 80 pedestrians and 13 bicyclists were noted at the three Broward Boulevard intersections during the four (4) hour peak period. Most of the pedestrians utilized the sidewalk on the northside of Broward Boulevard. Sidewalk access on the south side of Broward Boulevard is primarily located on the south side of the canal, with limited access only to bus stops on the north side of the canal.
- The southbound approach at Broward Boulevard and SW 82 Avenue operated at level of service (LOS) F during evening peak hours, most likely as a result of not having a protected left turn.
- Westbound, northbound, and southbound approaches at all intersections experienced significant higher traffic volumes during the evening than the morning. Eastbound approaches at Broward Boulevard and SW 82 Avenue, SW 84 Avenue and Perimeter Road experienced higher traffic volumes during the morning than the evening.

*Top right: Newer roundabout at NW 82<sup>nd</sup> Avenue and American Express Way. Bottom right: Bridge over canal at Broward Blvd with no pedestrian access. Bottom left: Typical well-landscaped internal Midtown roadway south of Broward Blvd.*





FIGURE C-14: EXISTING ROADWAY NETWORK



## SELECTED PREVIOUS RECOMMENDATIONS

Various transportation-related planning recommendations exist within the documents and ordinances listed in the Planning Context introduction. These recommendations vary from regionwide to district specific. The most relevant recommendations from these plans/ordinances are summarized below.

### Plantation Midtown Master Plan (2016)

The Plantation Midtown Master Plan was updated in 2016, building upon the 2002-2016 Conceptual Master Plan for Plantation’s Midtown District which was chartered in 1988 as a Safe Neighborhood Improvement District. Plantation’s Midtown District is approximately 1-1/3 square miles bordering I-595/New River Canal to the South, Cleary Boulevard/NW 8<sup>th</sup> Street to the North, University Drive to the East and Pine Island Road to the West.

The Plan calls for an increase in residential density to support the existing transit hubs, while also identifying traffic challenges in the longer-term. Fifteen strategies are identified within the plan to realize the urbanizing vision for the district. The primary recommendations include:

- Increasing residential density to 50 units/acre; consider activity center designation; achieve more street side dining, parks and public plazas.
- Distinguish three “urban villages” through naming, branding, wayfinding and design distinctions (see diagram at right).
- Adopt a Special Area Entertainment Plan which would be anchored by a central gathering place such as an Amphitheater.
- Connect City Center to North Village by solving the Broward Blvd barrier.
- Connect Peters Road to SW 10<sup>th</sup> Street with a public road/pedestrian corridor; add links to New River Greenway and the internal network of other pedestrian pathways.

The document indicates that by 2023, the population of Midtown Plantation could increase from 4,671 (or 2,104 housing units) to 11,437 (or 3,048 housing units). Currently, Midtown Plantation comprises 5% of the City’s population and 6% of the City’s land area. The plan emphasizes increasing the allowable density for an

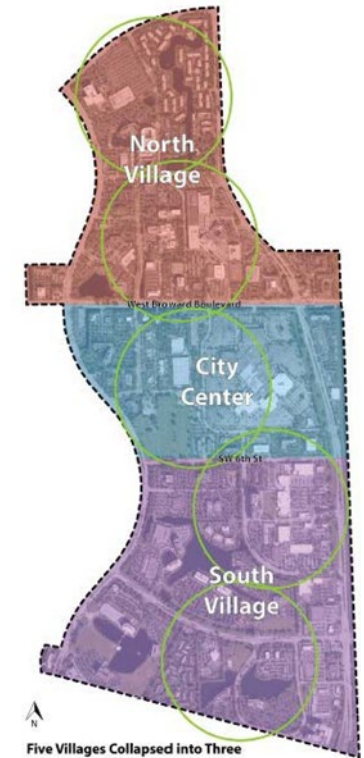
increase in residential units and population to reach the urbanization goal of the district.

The plan update does not recommend major transit projects for two stated reasons:

- The prior plan emphasized transit, including a county transit center and regional multi-modal center; the center was realized and not the multi-modal feature.
- Forecast density, per an associated market analysis, would not be high enough to support or sustain transit.

The plan identifies goals within the current Hub study area to achieve the City’s vision, including:

- Placemaking, wayfinding, branding/marketing of the three villages
- Revising regulations to increase density
- Improve walkability
- Realignment of Federated Road to better connect the Fashion Mall and Westfield Broward Mall
- Establish shared parking, parking structures, and favor car-sharing and energy efficient cars
- Support housing options
- Install additional amenities along roads and pedestrian corridors
- Establish a committee to redevelop Westfield Broward Mall
- Pedestrian Corridors/Greenway



Source: Plantation Midtown District 2023



Several projects identified in the original 2002 Master Plan are incomplete, but the updated Master Plan identifies the following projects as complete within the current Hub study area:

- District Gateway, Architectural Features, Landscaping and Signage
- NW/SW 84th Ave Street Improvements (Broward Blvd. to Federated Rd.)
- NW 82nd Ave Street Enhancements & Improvements
- East-West Greenway Project (Library Site to University Dr.)
- Southside of Broward Blvd Greenway Project (Pine Island Rd. to University Dr.)

Several barriers have been identified to impeding connectivity, these barriers include: Broward Boulevard, private roadway ownership, private properties lacking pedestrian facilities, and roads lacking sidewalks on one or both sides.

Three alternatives are proposed for improving connectivity across Broward Boulevard:

- Enhancing the crossing at NW 84<sup>th</sup> Avenue, utilizing the existing sidewalks to connect the “urban villages” North and South of Broward Boulevard.
- Enhancing the crossing at NW 82<sup>nd</sup> Avenue and creating links south of Broward Boulevard.
- Construction of a pedestrian bridge across Broward Boulevard located at NW 82<sup>nd</sup> Avenue to the North and the Sears parcel at Westfield Broward Mall to the South. This option would require the realignment of Federated Road.

Furthermore, the plan suggests creating an Entertainment District within the City Center Village, south of Broward Boulevard, to create additional public space which could encourage additional retail and residential, in addition to creating a pedestrian and traffic link from Broward Boulevard to Peters Road.

### **Commitment 2040 – The Long Range Transportation Plan for Broward County (2018)**

Broward County’s Long-Range Transportation Plan, amended in April 2018, is a multi-modal transportation plan which expands over 20 years, looking at the region and future needs. The plan emphasizes moving people, creating jobs, and strengthening communities. The Metropolitan Planning Organization (MPO) is the agency responsible for creating local transportation policy and identifying the best use of Federal and State tax dollars on transportation projects.

The Plan builds on existing transportation assets, identifies deficiencies in these facilities, and recommends actions that maintain or improve quality of life. The Plan seeks to update the Mobility Hub concept to maximize a Mobility Hub’s economic and transit potential, in addition to providing a list of 50 regionally significant projects (10 transit and 40 roadway) to construct, operate, and maintain by and through 2040.

Within the Hub study area, the University Drive corridor has been identified as one of the most important north-south corridors. The plan seeks to allocate funds to enhance bus services along the corridor to improve mobility and access to the corridor’s key employment and educational centers. Surveys taken by BCT show that 55% of riders use this route as their primary means to work and 17% use it as their primary means to access educational facilities.

This study is a direct result of the Long Range Transportation Plan along with several other bicycle and pedestrian improvements within and surrounding the Hub study area.

### **Broward Boulevard Corridor Transit Study (2012)**

The Broward Boulevard Corridor Transit Study was prepared in 2012. The goals of the study were to increase mobility, access to transit, and transit ridership from Pine Island Road in Plantation to U.S. 1 in Ft. Lauderdale. The purpose of the study was to identify geometric and operational improvements that would reduce bus travel times and improve access to bus stops. The study identified 39 plans and projects related to Broward Boulevard as of 2012. Key findings for the current Hub study area include:

- Broward Boulevard is operating well west of I-95 except for the signalized intersection of University Drive and Broward Boulevard which is at or over capacity.
- Broward County Transit (BCT) Route 22 traverses Broward Boulevard through the Hub study area. The route deviates from Broward Boulevard at two locations including the West Regional Terminal and Westfield Broward Mall.
- The West Regional Terminal serves a high number of transfers from Route 22 to other regional buses.
- Westfield Broward Mall has higher than average boarding activity beginning at midday and continuing through the evening. This demonstrates the need to continue servicing this area despite the diversion.
- For trips starting or ending in Plantation, roadway congestion is not a significant deterrent to driving. Personal vehicle travel is faster than Route 22. A combination of off route detours and local stops make it difficult for Route 22 to compete with the automobile.
- Transit operating on Broward Boulevard is impacted more than automobiles by traffic congestion due to frequent stops along the corridor which takes buses off the signal progression flow.

The study also identified a 2010 transit passenger survey conducted by Broward County Transit to understand the origins and destination of passengers; approximately 315 surveys were used in the analysis. Of the surveyed passengers for Route 22, boarding at the Central Broward Terminal in Downtown Fort Lauderdale, approximately 10% ended their trips at the West Regional Terminal. Of the passengers who boarded from SR 441/U.S. 441 approximately 40% of passengers were heading to Westfield Broward Mall and about 15% for the West Regional Terminal.

Furthermore, the study identified nine goals for transit which included implementable solutions within a two- to three-year timeframe, along with several alternative strategies to meet the purpose and goals of the study. Strategies related to the Hub study area include:

- West Regional Terminal Renovations
- New Bus Shelters and Amenities
- New Buses
- Median Landscaping
- Transit Signal Priority
- 84<sup>th</sup> Avenue at Broward Boulevard Intersection Improvements
- Special Signal Phasing at Pine Island Road and University Drive
- Secure Bicycle Storage at the West Regional Terminal
- Pedestrian Countdown Signals
- Pedestrian Mobility Connections
- Transit Signage / Wayfinding
- Queue Jumps at University Drive and Broward Boulevard
- Limited Stop Service that would not divert from the corridor
- Park-and-Ride Lot at West Regional Terminal
- Pedestrian Crossing at Westfield Broward Mall

### Midtown Plantation and Southwest Sunrise Livability Study Action Plan

The Livability Study was completed in August 2012 by the Broward Metropolitan Planning Organization (MPO), with the purpose of conceptually identifying a variety of improvements that contribute to transit-supportive development, with a 25-year planning horizon. The plan identifies a Gateway Hub at University Drive and Broward Boulevard, along with an Anchor Hub at Pine Island Road and University Drive.

- A *Gateway Hub* has been identified as places with two or more planned high-capacity transit lines, high-density mixed-use developments including transit-oriented corridors and transit-oriented development, and daily boardings and alightings of more than 2,200 passengers.
- An *Anchor Hub* has been identified as places with one planned high-capacity transit line, near major institutions, employment centers, local and regional shopping centers, and other activity centers.



Key actions recommended by the study include:

- Determine the locations of Mobility Hubs
- Improve multimodal connectivity around hubs and corridors
- Coordinate economic development measures around Mobility Hubs with municipalities to encourage private investment in commercial and housing opportunities that generate transit ridership
- Amend the Broward County Land Use plan to allow the appropriate level of mixed-use transit-supportive development at proposed Mobility Hubs
- Develop transit-supportive zoning and design guidelines for Mobility Hub areas and other locations along transit corridors
- Improve existing transit operations and infrastructure, with long-term plans for premium transit

The Plan identified several pedestrian improvements within our current Hub study area, these improvements include pedestrian intersection crossings along Broward Boulevard and Pine Island Road, existing pedestrian facilities in need of improvement at Federated Road, SW 3<sup>rd</sup> Street, NW 82<sup>nd</sup> Avenue, NW 84<sup>th</sup> Avenue and University Drive and a new pedestrian facility connecting the West Regional Terminal to NW 84<sup>th</sup> Avenue.

The Plan also identifies several bicycle improvements within the Plantation Midtown District, including multi-use paths, designated bicycle lanes and shared streets.

Additional programs and activities identified within the Hub study area include a Shuttle Feasibility within Midtown Plantation, Broward Boulevard Corridor Transit Coordination, Pedestrian Connectivity to private properties, marketing to improve pedestrian and bicycle safety, Transit Ambassadors to provide information to visitors and users at Gateway Hubs, Land Use Plan Amendments to promote mixed-use transit supportive development, and Premium Transit to improve connections with employment centers.

### Transportation Element of the Plantation Comprehensive Plan (2008)

The BCT West Regional Terminal (part of the West Regional County Complex) is identified as a major bus transfer terminal within the City of Plantation, serving BCT routes and the Davie Blue Route community shuttle. The Terminal can service up to nine routes, and the County Complex includes 989 parking spaces, some of which could be designated for commuter parking for park-and-ride operations.

Resolution No. 6779, adopted by the City Council on February 28, 1996, expresses opposition to any study for, or recommendation to, Broward County which proposes the extension of any fixed rail transit system or the construction of any additional vehicle travel lanes for operating a bus transit system within the portion of the University Drive Corridor located within the City.

The City adopted design guidelines for bus stop shelters within City limits, and the City has installed these shelters where space permits (bus stop type 4 in Figure C-5 depicts the City's desired standard).

The Plan includes a bicycle and pedestrian network inventory, along with a Pedestrian Facility Standard.

Level of Service (LOS) Standard for City roadways is "D". As of 2013, University Drive south of Broward Boulevard experienced a LOS of "F," with all other roadways within the Hub study area at "B" or "C." By 2030, Pine Island Road, University Drive and most of Broward Boulevard (except between University Drive and Pine Island Road) will experience a LOS of "F." Broward Boulevard between University Drive and Pine Island Road, will experience a LOS of "D." All other roads within the Hub study area will be at LOS A-C.

As of 2015, ten intersections within the City have been identified as the Highest Accident Locations based on Police Department records. Two of the ten fall within the current Hub study area: Broward Boulevard at University Drive (109 accidents) and at Pine Island Road (49 accidents).

Pine Island Road and University Drive have been identified as Hurricane Evacuation Routes (Broward Boulevard is not identified as an evacuation route).

Major Trip Generators identified within the Hub study area of Plantation include:

- West Regional Courthouse and Library
- Broward County Governmental Center
- West Regional Medical Center
- Westfield Broward Mall

The following Pedestrian Network Recommendations have been adopted in the Transportation Element of the Comprehensive Plan:

- Improve the Plantation Midtown District internal circulation (Policy 2.4.1).
- Activities to improve transit access, amenities, and infrastructure along transportation corridors.
- Pedestrian infrastructure improvement consistent with the City’s Priority Path System (PPS).
- Coordination and support of Broward County’s pedestrian network, and recreational network activities.
- Coordination and support of the Broward County Greenways network.

**City of Plantation Code of Ordinances (2018)**

The City has the power to construct, improve, and prevent obstruction of sidewalks to ensure appropriate pedestrian passage. The City and other governmental agencies have invested significant funds (and will continue to invest significant funds) within transportation corridors of the city, including improvements facilitating pedestrian, bicycle, motor vehicle, and mass transit circulation, and improvements increasing the aesthetic appeal of transportation corridors.

**PROGRAMMED AND PLANNED PROJECTS**

Planning and programming documents were reviewed including the Broward MPO Year 2019 to 2023 Transportation Improvement Program (TIP), the MPO 2040 Long Range Transportation Plan (LRTP) and projects identified to be funded with the recently approved Broward County 2018 Penny Surtax. The recent passage of the countywide surtax initiative now offers a new predictable and reliable funding source to increase transit routes and service levels over the long-term.

Tables C-3, C-4 and C-5 provide the planned and programmed improvements.

**TABLE C-3: BROWARD COUNTY TIP FY 2019-2023 PROJECTS**

TIP Number	Project	Description	Type of work	Fiscal Year
4402621	Broward Boulevard, Flamingo Road to Southwest 1st Avenue	Implementation of Broward Blvd. Limited stop service from Sawgrass Mall (Flamingo Rd.) to Broward Central Terminal (SW 1st Ave.) as recommended in the Broward Blvd. transit study.	Transit	2019 & 2020



TABLE C-4: BROWARD COUNTY 2040 LRTP PROJECTS

ID	Project	Description	Location	Cost	Time Period
10	SR 817/University Drive	Upgrades to support enhanced bus service	Golden Glades to north of SR 834/Sample Rd.	\$175.3 M	2015-2030
17	SR 842/Broward Blvd	Upgrades to support enhanced bus service	Sawgrass Mills Mall to SR 817/University Drive	\$5.9 M	2019-2020

TABLE C-5: BROWARD COUNTY 2018 PENNY SURTAX INITIATIVE PROJECTS

Description	Year	Capital Cost
Fiber optic network: Pine Island Rd.	2020	\$1,138,000
Video detection predictive maintenance	2020	\$1,680,000
Future technology adaptation	2020	\$47,500,000
New local bus routes: Nob Hill Road / Coral Ridge Dr.	2021	N/A
Adaptive signal control: University Dr.: Broward Blvd. to Griffin Rd.	2022	\$2,225,000
School zone safety improvement: Our Savior Lutheran private	2026	\$70,000
New local bus routes: Palm Ave.	2028	NA
Intersection improvement: University Dr.	2032	\$1,400,000
Rapid bus routes: University Dr.	2033	NA
Mast arm intersection upgrades: Broward Blvd.	2042	\$600,000

Note: 2019-2028 TDP projects are included in the 2018 penny surtax initiative.

## DEVELOPMENT CONTEXT

Plantation Midtown was designated in 1988 as a Safe Neighborhood Improvement District, pursuant to the state's Safe Neighborhood Act. The City of Plantation completed a "Safe Neighborhood Master Plan" and established a special taxing district, to leverage State and local financial resources to address public safety and support redevelopment efforts.<sup>8</sup> Since then updated versions of the Plan have been developed, the most recent of which was the Plantation Midtown District 2023 Plan Update completed in September 2016.

Midtown planning has focused on supporting redevelopment efforts and improving the physical character of the area. To a lesser extent, it has provided guidance regarding supporting pedestrian mobility and addressing increasing vehicular congestion. Significant private investment in office and commercial development has occurred, and more recently the focus has shifted to pursuing opportunities to increase Midtown housing options and realize mixed-use opportunities.

The sections that follow document the "baseline" development pattern and character features in the area, summarize relevant zoning and development standards, and present the elements of the "vision" for future development in Midtown that are particularly relevant for mobility planning. Mobility Hub recommendations will expand upon this broader vision to support the improved integration, function and visibility of multimodal options as Midtown continues to evolve.

## DEVELOPMENT PATTERN

Over the years, Midtown has become a well-established concentration of both office uses and commercial at varying scales. Figure C-15 depicts the current arrangement of land uses in the core of Midtown, generalized to show the overall pattern rather than parcel-level detail. A more generalized pattern of land use areas, and an understanding of the orientation of and access to these use areas, are most relevant to the development of multimodal strategies.

<sup>8</sup> <http://www.plantation.org/Planning-Zoning/Midtown.html>

**COMMERCIAL** uses (shown in red on Figure C-15) include the Westfield Broward mall at the southwest corner of Broward Boulevard and University Drive, flanked with large multi-tenant shopping centers extending south to I-595 and oriented east toward and accessed from University Drive. Commercial uses also include somewhat isolated and narrow parcels along the east side of University Drive, a Target store across Perimeter Road from the mall to the west, and a small shopping center anchored by a Publix along Pine Island Road at former American Express Way. There are also several commercial uses along Broward Boulevard, typically with separate parking areas which result in multiple curb cut access points.

**OFFICE** uses (shown in blue on Figure C-15) vary from newer large mid-rise corporate office buildings to older low-rise multi-tenant buildings that are predominantly occupied by various medical practices and banks. Larger office buildings surrounded by private parking lots in a "business park" setting are more predominant at the south end of Midtown, with smaller office buildings oriented toward and accessed from Broward Boulevard or Pine Island Road. These smaller-scale offices are also typically surrounded by a dedicated parking area.

**MIXED USE** (shown as orange on Figure C-15) includes the master-planned large-scale Plantation Walk redevelopment underway along (and oriented toward) University Drive north of Broward Boulevard, which will rely on reuse of a pre-existing parking structure on the site, and two high-rise residential towers on 78<sup>th</sup> Avenue, south of 6<sup>th</sup> Street, that include ground floor commercial space facing 78<sup>th</sup> Avenue (which remains vacant since construction).

**RESIDENTIAL** uses in Midtown (shown in yellow on Figure C-15) include well-established low-rise complexes to the north that are oriented toward and accessed from University Drive and 82<sup>nd</sup> Avenue, and newer mid-rise towers along 82<sup>nd</sup> Avenue with integral structured parking. One of the developments includes street-level townhome units at the base oriented toward 84<sup>th</sup>



Avenue. Current residential in Midtown is characterized by relatively isolated pockets of varying density within an office-oriented environment.

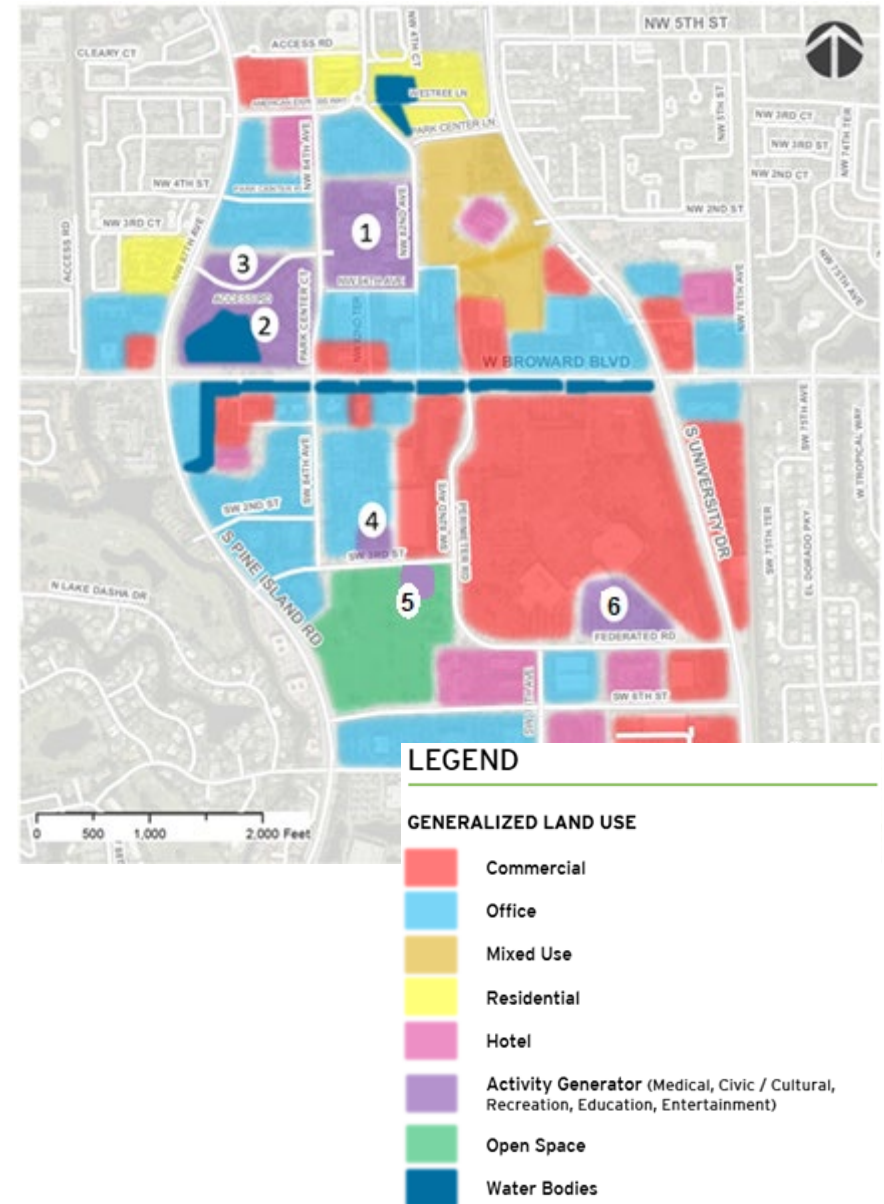
**HOTELS** (shown in pink on Figure C-15) are noted more specifically as they are scattered throughout Midtown, and present a potential opportunity to engage visitors to the area who might opt for alternatives to driving.

**ACTIVITY GENERATORS** (shown in purple on Figure C-15) are a broad category that encompasses a variety of specialized and/or larger scale uses that warrant specific attention during the development of multimodal strategies. These include:

- The **Westside Regional Medical Center (1)**, north of Broward between 82<sup>nd</sup> and 84<sup>th</sup> Avenues. The emergency room entrance and parking structure are located off 84<sup>th</sup> Avenue, whereas the main entrance is located on the 82<sup>nd</sup> Avenue side.
- Broward County’s **West Regional Courthouse** and **West Regional Library (2)**, on the northeast corner of Broward Boulevard and Pine Island Road. BCT’s **West Regional Terminal (WRT)** and the County’s **Emergency Operations Center (EOC) (3)** are sited immediately north of the courthouse, across an access road that connects Pine Island Road to 84<sup>th</sup> Avenue.
- A **KinderCare (4)** facility and **fire station (5)** on 3<sup>rd</sup> Street and a multi-screen **Regal Cinema (6)** on the south side of the mall represent other activity centers in the study area that might generate unique travel patterns.

An **OPEN SPACE, Pine Island Park** (shown in green on Figure C-15) is noted as a significant recreational facility, extending between 3<sup>rd</sup> and 6<sup>th</sup> Streets with a parking lot accessed from 3<sup>rd</sup> Street. The Midtown 2023 Plan Update proposes a new event venue at the northeast corner of Pine Island Park, at 3<sup>rd</sup> Street and Federated Road, and an expansion of the parking lot is planned.

FIGURE C-15: GENERALIZED EXISTING LAND USE PATTERN



## DEVELOPMENT CHARACTER

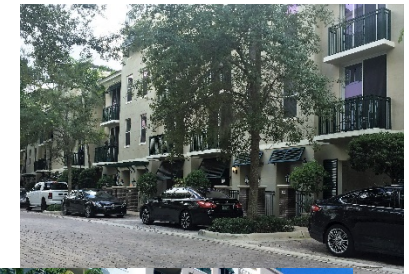
Midtown is dominated by large scale developments that are typically oriented outward, including Plantation Walk currently under development, and the Westfield Broward Mall and its vast surrounding parking lots. Broward Boulevard is wide with intermittent medians and an adjacent engineered drainage canal that physically divides the area, while also presenting a unique visual and open space opportunity. Midtown is typically perceived from Pine Island and University as buildings set back from a high-speed roadway behind a deep landscape buffer.

Larger scale public and medical uses predominate to the north of Broward Boulevard, also with dedicated parking lots. In this area, a significant hospital campus renovation is underway, and recent developments have incorporated high-quality and pedestrian-oriented streetscape elements.

A mix of smaller-scale office and retail uses extends along Broward Boulevard and into the area to the west of the mall. Smaller scale parking lots are well-landscaped but present challenges for business visibility and visitor orientation from Pine Island and internal Midtown roadways. Sidewalks are often present, but few parking lots provide pedestrian connections to building entrances.



*Group top right: Typical examples of Midtown commercial and office uses, including new Publix shopping center. Group bottom right: New residential uses with walkable street character. Group bottom center: Varying pedestrian character, at new commercial and at WRT. Group bottom left: Midtown identity and business signage with limited visibility.*







## STAKEHOLDER OUTREACH

The Broward MPO and consulting team met with the Plantation Midtown Advisory Board on October 17, 2018 to discuss the project and solicit input regarding local needs, concerns and priorities towards multimodal mobility. An earlier meeting with City personnel on August 30 included Planning and Engineering representatives. Meetings were also held with Broward County Planning and Engineering representatives on October 17, Florida Department of Transportation (FDOT) District 4 Planning and Operations representatives on October 17, and Broward County Transit representatives on October 18.

In addition, the City of Plantation solicited responses to an online survey regarding multimodal mobility experiences and needs. Quest Communications also deployed personnel at the West Regional Terminal and at Broward Mall to conduct intercept surveys with current public transit users.

The opinions expressed and insights shared regarding both near-term investment opportunities and long-term planning needs in the Plantation Hub study area collected from these outreach efforts are summarized below.

## CITY AND AGENCY MEETINGS

### PUBLIC TRANSPORTATION

- The BCT West Regional Terminal is hidden, and pedestrian mobility is a challenge due to many obstructions such as hedges and parking lots. Other Broward County facilities in the immediate area also lack effective connectivity to the Terminal or adjacent arterials.
- The West Regional Terminal could be relocated to the mall property to be more centralized, in a manner potentially similar to Palm Beach County's bus terminal at Boca Town Center. If it were to move to the mall, a long-term agreement or property purchase would be required to ensure the hub would remain operational, due to the potential for mall ownership turnover.
- The Broward County Department of Emergency Management is considering expanding the Emergency Operations Center (EOC). An expansion could require the relocation or redesign of the West Regional Terminal. If the EOC

expands, there would likely be no room for future expansion of the Terminal. It should remain in the same "general area" to continue to service the Broward County Library and Broward Courthouse, and the number of bus bays and the level of rider amenities should be increased.

- BCT's long-term goal is to electrify the bus fleet, so an enhanced or relocated West Regional Terminal should provide for the future ability to charge buses as they layover.
- Bus shelters in Plantation must adhere to the City's design standards; stops along the south side of Broward Boulevard do not have shelters due to limited space for the City's required shelters.
- "Kiss and ride" locations and drop-off locations for vehicles for hire such as Lyft and Uber should be identified in the area.

### ROADWAY, BICYCLE AND PEDESTRIAN NETWORK

- The intersection at Broward Boulevard and University Drive poses a challenge for pedestrians and bicyclists due to overall scale and traffic levels.
- Many of the traffic concerns in Plantation appear to be related to congestion originating further south in Davie; University Drive has also seen a lot of new development that is impacting impact traffic levels.
- Pine Island Road had already been expanded and there is no anticipated need for further improvements there.
- FDOT is evaluating signal timing on state roads in Davie, Plantation and Sunrise and conducting an areawide bottleneck analysis of hotspots. An arterial study is forthcoming.
- FDOT is developing a scope for an upcoming I-595 Arterial Study (from the Turnpike to 136<sup>th</sup> Avenue), which will consider improvements to north/south connector streets, including University Drive.
- There are currently few bike riders observed in the area, likely because of traffic levels and speeds on the two major thoroughfares, but there could be an opportunity for a bike share system internal to the area. B-Cycle is a coastal service that is not provided in Plantation.

## DEVELOPMENT PATTERN

- The drainage canal that runs parallel to the south side of Broward Boulevard belongs to the Old Plantation Water Control District (OPWCD). Options for providing transit infrastructure in the eastbound direction on Broward Boulevard are very limited. There are multiple canal bridges, some of which cannot safely support pedestrian traffic due to their limited width.
- Employees working north of Broward Boulevard occasionally walk to the mall to have lunch but would likely not consider walking to the Publix that is located north of the government center area due to the longer distance. Few pedestrians venture across the arterials because of the wide width and traffic level. Most employees drive their car to their lunch destination.
- Publix was approved with a reduced parking ratio to reflect its walkable proximity to new residential development nearby, and appears to be successful.
- There are drainage issues observed at the frontage road along University Drive just north of Broward Boulevard after rainfall events; ideally redevelopment efforts would alleviate this situation rather than exacerbate it.

## SURVEYS

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To assess mobility improvement needs as part of the planning phase, surveys were conducted in-person and online. The data collected identifies usage and user perception about transportation services and their facilities, and how mobility in Plantation’s Midtown area could be improved. Results are summarized below, with complete documentation available in a report entitled “Plantation Mobility Hub Planning Phase Survey Results” available under separate cover.

### Methodology

In-person surveys targeted qualified respondents, in this case, those observed using Broward County transit and community bus services, walking and/or cycling in the study area. The online surveys were available to anyone regardless of whether they currently use transit. The online surveys were distributed by the Broward Metropolitan Transportation Organization (MPO) and available for sharing. Both methodologies were used to provide a broader collection of opinions.

Opinions collected were focused on the following:

- Modes of mobility (transit, Transportation Network Companies (TNC), and walking/cycling) used in the area
- Purpose and frequency of mobility in the area
- Pros and cons of the current mobility services and facilities
- Mobility safety concerns

The in-person surveys were completed on wireless tablets with data collected through an online portal. The link to the online survey was shared electronically to the City of Plantation and through the BMPO’s communication channels. The survey also included links to the Hub study area map and overall program information. All completed information submitted on the tablets and online was reviewed and analyzed. The tabulation of data resulted in tables and charts (available under separate cover) to quantify transportation and mobility opinions of the City of Plantation’s Midtown area.

### Overall Summary

There were 153 completed surveys. Most of the respondents, similarly on both surveys, identified better connected sidewalks, crosswalks and bike paths as improvements to mobility in the Midtown area. While the in-person respondents identified lack of sidewalks and walkways as a safety concern, online respondents focused on traffic congestion and lack of traffic enforcement.

### In-Person Surveys

The in-person survey was conducted in Plantation’s Midtown on Wednesday, December 19, 2018, during the early morning, mid-day, and late afternoon/evening. A total of 71 questionnaires were completed at these locations:

- BCT West Regional Terminal area including areas near courthouse, library, government facilities, and hospital
- BCT Westfield Mall BCT and community bus terminal and area



Of the total 71 respondents,

- 39% live in Midtown, and of those,
  - 6% use transit,
  - 36% use TNCs, and
  - 29% walk/cycle in the area.
- 40% work in Midtown, and of those,
  - 100% use transit,
  - 27% use TNCs, and
  - 48% walk/cycle in the area.
- 14% both live and work in Midtown, and of those,
  - 98% use transit,
  - 18% use TNCs, and
  - 81% walk/cycle in the area.
- 34% neither live nor work in City Center, and of those,
  - 96% use transit,
  - 46% use TNCs, and
  - 58% walk/cycle in the area.

Overall, 97% of all in-person survey respondents used transit frequently (more than five times per month) to and from home and work and for shopping. Improvements to transit included those associated with schedule (frequency/wait times/timeliness).

TNC user (40% of all respondents) experience could be improved with better pricing and designated areas for pick-up and drop-off.

Transit facility lighting and garbage collection were rated poorly/fair and could be improved.

Of the overall respondents, 55% walk/cycle in the area. Timely bus schedules and improved crosswalks/sidewalks were identified as improvements to getting around.

Overall safety concerns were centered around lighting, lack of security and safer crosswalks/sidewalks, especially near bus facilities.

### Online Surveys

The online survey was conducted from December 17, 2018 through January 22, 2019. The highest response volume was December 31, 2018 and January 7, 2019. A total of 82 surveys were completed.

Of the total 82 respondents,

- 38% live in Midtown, and of those,
  - 4% use transit,
  - 36% use TNCs, and
  - 68% walk/cycle in the area.
- 40% work in Midtown, and of those,
  - 14% use transit,
  - 29% use TNCs, and
  - 57% walk/cycle in the area.
- 5% both live and work in Midtown, and of those,
  - 20% use transit,
  - 80% use TNCs, and
  - 100% walk/cycle in the area.
- 50% neither live nor work in City Center, and of those,
  - 6% use transit,
  - 24% use TNCs, and
  - 60% walk/cycle in the area.

Overall, a summary of all online respondents showed that 7% respondents use transit/community bus, 29% use TNCs, and 56% walk or cycle in the Midtown area. Transit/TNCs are used mostly for shopping and dining in the area.

Transit and pedestrian improvements include sidewalks, crosswalks, schedule (real time information and frequency), location, and benches. Those who frequently walk/cycle the area do so for exercise and/or recreation. Bike lanes, traffic congestion and lack of traffic enforcement were safety concerns for the respondents.