

PLANNING CONTEXT

The Planning Context report is an objective document that summarizes relevant physical conditions and the adopted policies and recommendations from past planning studies in and around the Sunrise Mobility Hub study area. The resulting understanding of the transportation and development environment in the Sunrise Mobility Hub study area, together with an accompanying Automated Vehicle (AV) Shuttle Feasibility Assessment, informs the Mobility Hub Planning Framework. The Mobility Hub Planning Framework is a separate document that provides recommendations for undertaking infrastructure improvements with a particular emphasis on near-term priorities for investment.

With the assistance of the City of Sunrise Community 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 Mobility Hub study area. Current policies are supportive of multi-modal improvements. With significant ongoing development in the study area (as depicted in aerial view in Figure C-1), the consideration of both short-term and long-term mobility and multi-modal strategies is timely.

FIGURE C-1: AERIAL VIEW OF MOBILITY HUB STUDY AREA FROM THE SOUTHEAST

Source: CC BY-SA 4.0



The Mobility Hub study area is currently served by seven (7) Broward County Transit (BCT) routes, including a Florida Department of Transportation (FDOT) Park and Ride facility with express bus service and one (1) community shuttle system route. Future long-range plans identify this area as the terminus of some type of fixed rail service connecting to downtown Fort Lauderdale. Several studies have recommended the integration of these services into a Gateway Hub for optimal efficiency and convenience. The area is dominated by large-scale developments at varying levels of build-out, with the expectation for the occurrence of additional new development based on current market conditions.

This section documents relevant findings regarding:

- **REGIONAL CONTEXT** impacting the Sunrise Mobility Hub study area, including surrounding areas that can be better connected to the Sawgrass Mills Mall, BB&T Center, and corporate employment centers via multiple modes of travel;
- **TRANSPORTATION CONTEXT** including existing transit services, the existing roadway network, the existing pedestrian and biking environment and planned improvements to each system; and
- **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, and both in-person and online surveys to gather input from current and potential future transit riders.

Adopted Policies Reviewed

Documentation reviewed for this report included the following:

- **City of Sunrise Comprehensive Plan** (as amended April 2018).¹
- **Commitment 2045 – The Metropolitan Transportation Plan (MTP) for Broward County** (approved December 19th, 2019).²
- **City of Sunrise Future Land Use Map** (current through January 2019).³
- **Western Sunrise Area-Wide Transportation Needs Assessment Study**, 2017.⁴
- **Urban Land Institute, BB&T Center, Broward County, Florida, Advisory Services Panel Report**, (2016).⁵
- **Oakland Park Boulevard Transit Corridor Study**, (2014).⁶
- **Midtown Plantation and Southwest Sunrise Livability Study**, (2012).⁷
- **Sawgrass Area Intermodal Planning Study**, (2011).⁸
- **Development of Regional Impact (DRI) Development Order for Metropica**.⁹
- **DRI Development Order for Westerra**.¹⁰
- **City of Sunrise Zoning Map** (current through October 2018).¹¹
- **City of Sunrise Code of Ordinances** (current through October 31st, 2018).¹²
- **Broward County Ridership Reports** (seasonal peak March 2019).¹³

¹ <http://www.sunrisefl.gov/modules/showdocument.aspx?documentid=2084>
² <http://www.browardmpo.org/index.php/core-products/long-range-transportation-plan-lrtp>
³ <http://www.sunrisefl.gov/modules/showdocument.aspx?documentid=644>
⁴ http://www.browardmpo.org/images/OaklandParkOctMPONA-1_Attachment.pdf
⁵ <https://seflorida.uli.org/uli-resources/bbt-center-broward-county-florida-advisory-services-panel-report/>
⁶ <http://oaklandparkboulevardtransitstudy.com/>
⁷ <http://www.browardmpo.org/images/WhatWeDo/CongestionManagement/SunriseReport.pdf>

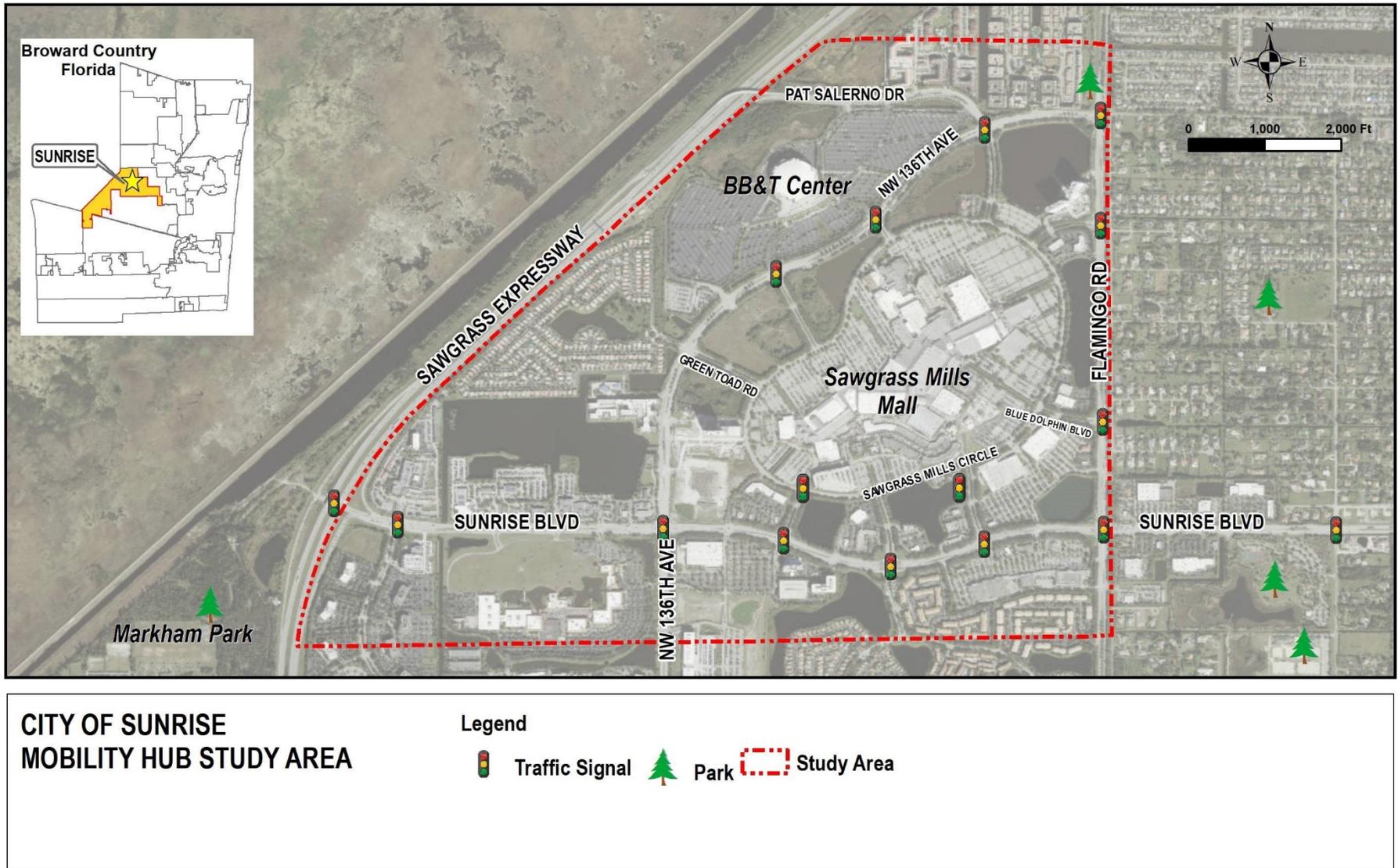
REGIONAL CONTEXT

The study area for the Sunrise Mobility Hub Master Plan encompasses the area contained within Flamingo Rd on the east, the Sawgrass Expressway on the west, 1,000 feet north of Pat Salerno Drive, and 1,000 feet south of Sunrise Boulevard. Major developments in this area include: Sawgrass Mills Mall, the Metropica Development, the BB&T Center, the Westerra Development, and adjacent parcels. The study area is comprised of large-scale entertainment, commercial, multi-family, and residential uses. The Sawgrass Mills Mall is the second most popular tourist destination in Florida with approximately 36 million visitors per year, approximately 6,500 employees, and sales of nearly \$2 billion a year. Metropica and Westerra are large-scale residential and commercial planned developments that have not been built out. There are plans for the redevelopment of the BB&T Center site with mixed-use residential and commercial development. If all plans come to realization, the study area will essentially become a new suburban downtown.

Highway access to the study area is provided by the Sawgrass Expressway, immediately adjacent to the west, via a full interchange at Sunrise Boulevard and a partial interchange at Pat Salerno Boulevard. Alternate access is provided by NW 136th Avenue and Flamingo Road to Interstate I-595 approximately two (2) miles to the south. Figure C-2 depicts the focused study area for the Mobility Hub that is documented and discussed in this report.

⁸ <http://www.browardmpo.org/index.php/major-functions/congestion-management-process-livability-planning>
⁹ <https://officialrecords.broward.org/AcclaimWeb/Image/DocumentPdfAllPages/32340114>
¹⁰ <https://officialrecords.broward.org/AcclaimWeb/Image/DocumentPdfAllPages/36754235>
¹¹ <http://www.sunrisefl.gov/modules/showdocument.aspx?documentid=5034>
¹² https://library.municode.com/fl/sunrise/codes/code_of_ordinances
¹³ <https://www.broward.org/BCT/Resources/Documents/RidershipReports/March2019Ridership.pdf>

FIGURE C-2: STUDY AREA FOR MOBILITY HUB DATA COLLECTION



TRANSPORTATION CONTEXT

This section contains a summary of information regarding current and planned transit service in the Sunrise Mobility Hub study area, including community shuttle service. 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 “baseline” understanding of the existing mobility network upon which recommendations for Hub-related multimodal investments and longer-term mobility initiatives may be developed.

TRANSIT SERVICE

Existing Service

There are seven (7) Broward County Transit (BCT) Routes and one (1) of the City's three (3) Community Shuttle Routes, for a total of eight (8) transit routes serving the Mobility Hub Study area. The BCT monthly ridership numbers are from BCT's *March 2019 Ridership Report*. March is essentially a country transit standard for analysis since it has no legal holidays, school is in session, and it is part of the peak tourist season, which ranges from mid-December to April. Currently, BCT charges a one-way cash fare of \$2.00.

Route 22

- A major east-west line providing service along Broward Boulevard from Broward County's Central Terminal in Fort Lauderdale to Sawgrass Mills Mall.
- Services 80,833 passengers monthly.
- Operates Monday through Friday beginning at 5:00 a.m. to 11:25 p.m., Saturday's beginning at 5:25 a.m. to 11:05 p.m. and Sunday's from 8:15 a.m. to 9:15 p.m.

Route 23

- A north-south line providing service in western Broward County from the Pembroke Lakes Mall in Pembroke Pines to Sawgrass Mills Mall.
- Services 5,314 passengers monthly.
- Operates Monday through Friday beginning at 6:10 a.m. to 6:50 p.m.

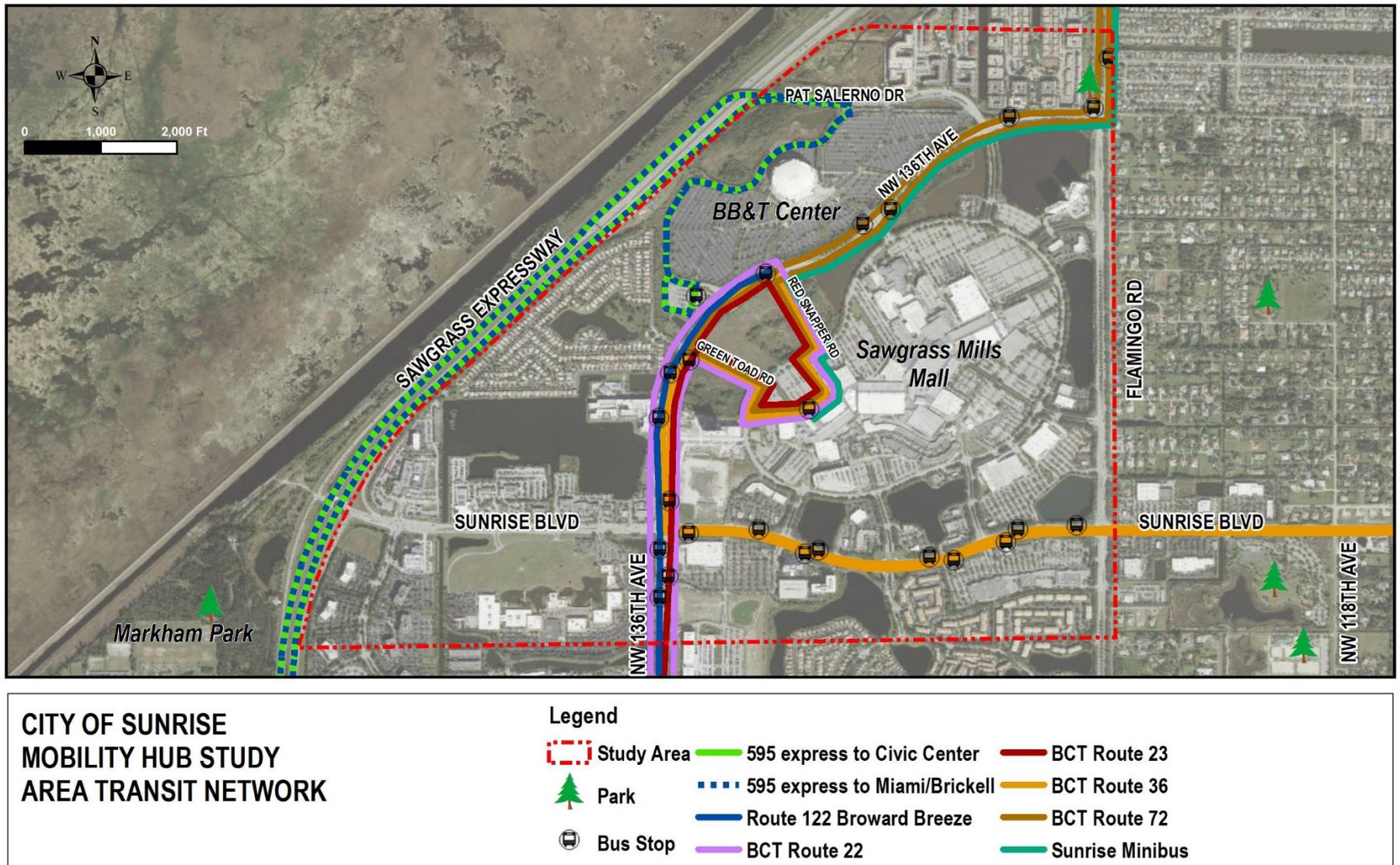
Route 36

- A major east-west line providing service along Sunrise Boulevard from State Road A1A in Fort Lauderdale to the Sawgrass Mills Mall.
- Services 117,371 passengers monthly.
- Operates Monday through Friday beginning at 5:00 a.m. to 12:03 a.m., Saturday's beginning at 5:35 a.m. to 11:05 p.m. and Sunday's beginning at 7:10 a.m. to 8:10 p.m.
- One (1) of the top five (5) performing routes in the County.

Route 72

- A major east-west line providing service along Oakland Park Boulevard from Galt Mile in Lauderdale-By-the-Sea to the Sawgrass Mills Mall.
- Services 135,961 passengers monthly.
- Operates Monday through Friday beginning at 5:00 a.m. to 12:14 a.m., Saturday's beginning at 5:21 a.m. to 11:22 p.m. and Sunday's beginning at 7:50 a.m. to 8:50 p.m.
- One (1) of the five (5) highest ranked routes for ridership throughout the County.

FIGURE C-3: MOBILITY HUB STUDY AREA TRANSIT NETWORK



Route 110 (595 Express)

- An express route providing service between the City of Sunrise and Miami/Brickell in Miami-Dade County via the expressway.
- Services 9,064 passengers monthly.
Operates Monday through Friday during peak periods, morning peak operations begin at 5:20 a.m. to 8:10 a.m., afternoon peak operations begin at 3:00 p.m. to 6:40 p.m.

Route 114 (595 Express)

- An express route providing service between Sunrise and the Miami Civic Center in Miami-Dade County via the expressway.
- Services 8,821 passengers monthly.
- Operates Monday through Friday during peak periods, morning peak operations begin at 5:05 a.m. to 7:05 a.m., afternoon peak operations begin at 3:15 p.m. to 8:15 p.m.

Route 122 (Broward Breeze)

- A major east-west line providing limited stop service along Broward Boulevard from the Broward Health Medical Center in Fort Lauderdale to the Sawgrass Mills Mall in Sunrise.
- Services 2,575 passengers monthly.
- Operates Monday through Friday during peak periods, morning peak operations begin at 5:40 a.m. to 9:10 a.m., afternoon peak operations begin at 4:05 p.m. to 7:40 p.m.

Park and Ride

Park and ride facilities are valuable ancillary resources supporting the transportation infrastructure. They vary in size and are often used by commuters as a means to park their vehicle and commute to work via carpool, vanpool, and bus or rail transit. These facilities can serve as multimodal hubs encouraging use of alternate forms of travel rather than the single-occupant vehicle. The Florida Department of Transportation (FDOT) is responsible for inventorying, monitoring, evaluating, and reporting on each facility throughout its life. Broward County Transit owns, operates and maintains a park and ride facility within the Mobility Hub study area. The facility is located on the southwestern portion of the BB&T Center parking lot, located west of NW 136th Avenue (see Figure C-4).

According to the most recent Park and Ride Inventory conducted on October 31st, 2017, there are a total of 301 parking spaces at this facility. The facility has: a kiss-and-ride location for drivers to pick-up or drop off passengers, Americans with Disabilities Act (ADA) accessibility and parking, internal and external pedestrian access, bicycle parking, lights, benches, trash cans, shelters, bulletin boards and two emergency call boxes.

The facility is free to use and is typically 71% occupied on a weekday. Two (2) 595 Express Routes serve the facility, BCT Route 110 and 114, providing service from Sunrise to employment centers around Downtown Miami, during morning and afternoon peak periods.

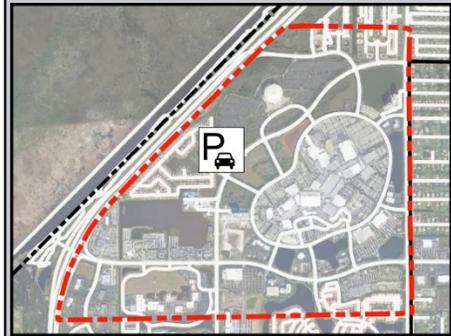
FIGURE C-4 PARK AND RIDE FACILITY



PHOTOS OF PARK AND RIDE



SUNRISE STUDY AREA



**CITY OF SUNRISE
MOBILITY HUB STUDY
PARK AND RIDE LOCATION MAP**

Legend

- 595 express to Civic Center
- 595 express to Miami/Brickell
- Route 122 Broward Breeze
- BCT Route 22
- BCT Route 23
- BCT Route 36
- BCT Route 72

- Park and Ride Lot
- Park and Ride Bus Stop
- Sign with Bench Bus Stop

Headways and Spans of Service

Headways and the span of service are indicators related to the levels of transit service and ridership. Both headway and span of service affect ridership through availability and reliability of service.

Headways is the service frequency or how often buses arrive at a particular stop.

Span of service is a measure that relates to the capacity of a transit system. It is the number of hours and days when service operates. The longer period of time that service is available, the greater the capacity of the system.

Transit routes with headways of less than 20 minutes are within the acceptable maximum wait time according to transit industry standards, while headways of more than 20 minutes are seen as unattractive to choice riders. Choice riders are usually higher-income customers who own a vehicle and are choosing to use transit when they believe it provides a better option than driving.

Table C-1 provides a summary of the weekday service provided by all routes within the Mobility Hub study area. It shows that the buses servicing the Sawgrass Mills Mall have headways that are within the range of acceptable maximum wait times, and have a span of service that covers most of day.

TABLE C-1: SPAN OF SERVICE AND HEADWAYS FOR SAWGRASS MILLS MALL AND CITY OF SUNRISE PARK AND RIDE

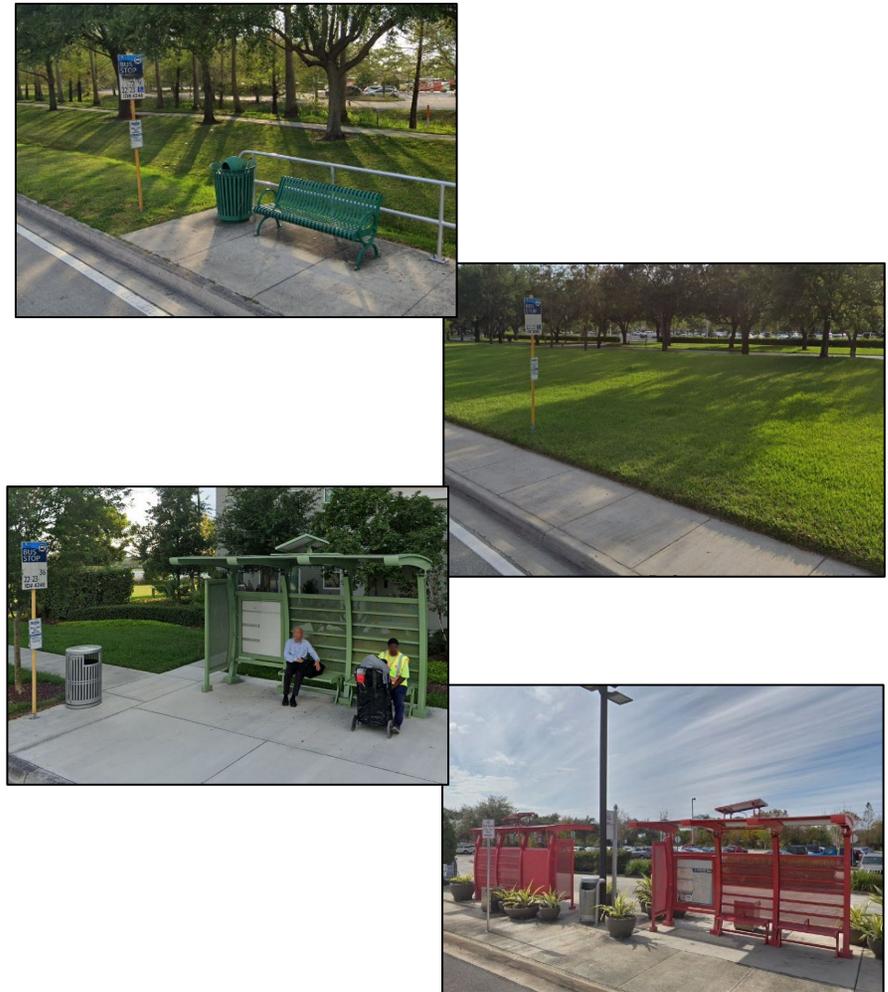
Sawgrass Mills Mall							
Route	Weekday Average			Weekend Average			
	Daily Headway	Peak Hour Headway	Span of Service	Saturday Headway	Saturday Span of Service	Sunday Headway	Sunday Span of Service
22	0:31	0:30	16:55	0:30	16:08	0:30	11:50
36	0:22	0:20	17:33	0:22	17:24	0:29	12:14
72	0:19	0:18	18:06	0:20	17:46	0:22	12:27
Sunrise Park and Ride							
23	0:44	0:45	6:13	No Weekend Service (All data in h: min)			
110	0:27	0:26	3:45				
114	0:27	0:27	5:35				
122	0:31	0:32	4:31				

Bus Stop Types and Activity

There are four (4) different types of bus stops provided within the Mobility Hub study area servicing the Sawgrass Mills Mall and surrounding area, ranging from a bus stop sign to a standard BCT shelter. All of the benches and shelters other than those at the Park and Ride facility green. The following images show examples of bus stops within the study area. Figure C-6 also shows the existing bus stops by type.

Some of the routes servicing the area have with the highest ridership in the County. The ridership at the Sawgrass Mills Mall is very high with approximately 1,750 boardings and over 1,500 alightings a day, as depicted in Figures C-7 and C-8. The majority of the other stops in the area have less than 100 riders each day. Figure C-9 shows the number of boardings and alightings by stop type. There are three (3) stops (two (2) on NW 136th Avenue and one (1) on Sunrise Boulevard) that level of activity indicates that more than a pole sign is warranted.

FIGURE C-5: MOBILITY HUB STUDY AREA BUS STOPS



Top left: Bus Stop 4246, NW 136th Avenue & Park and Ride Access Road, Bus Bench
Middle right: Bus Stop 3599, NW 136th Avenue & Yellow Toucan Road, Pole Sign
Middle left: Bus Stop 4248, NW 136th Avenue & NW 21st Street Court, Shelter
Bottom right: Bus Stop 6011, Sunrise Park & Ride, BCT Shelter

FIGURE C- 6: BUS STOP TYPES

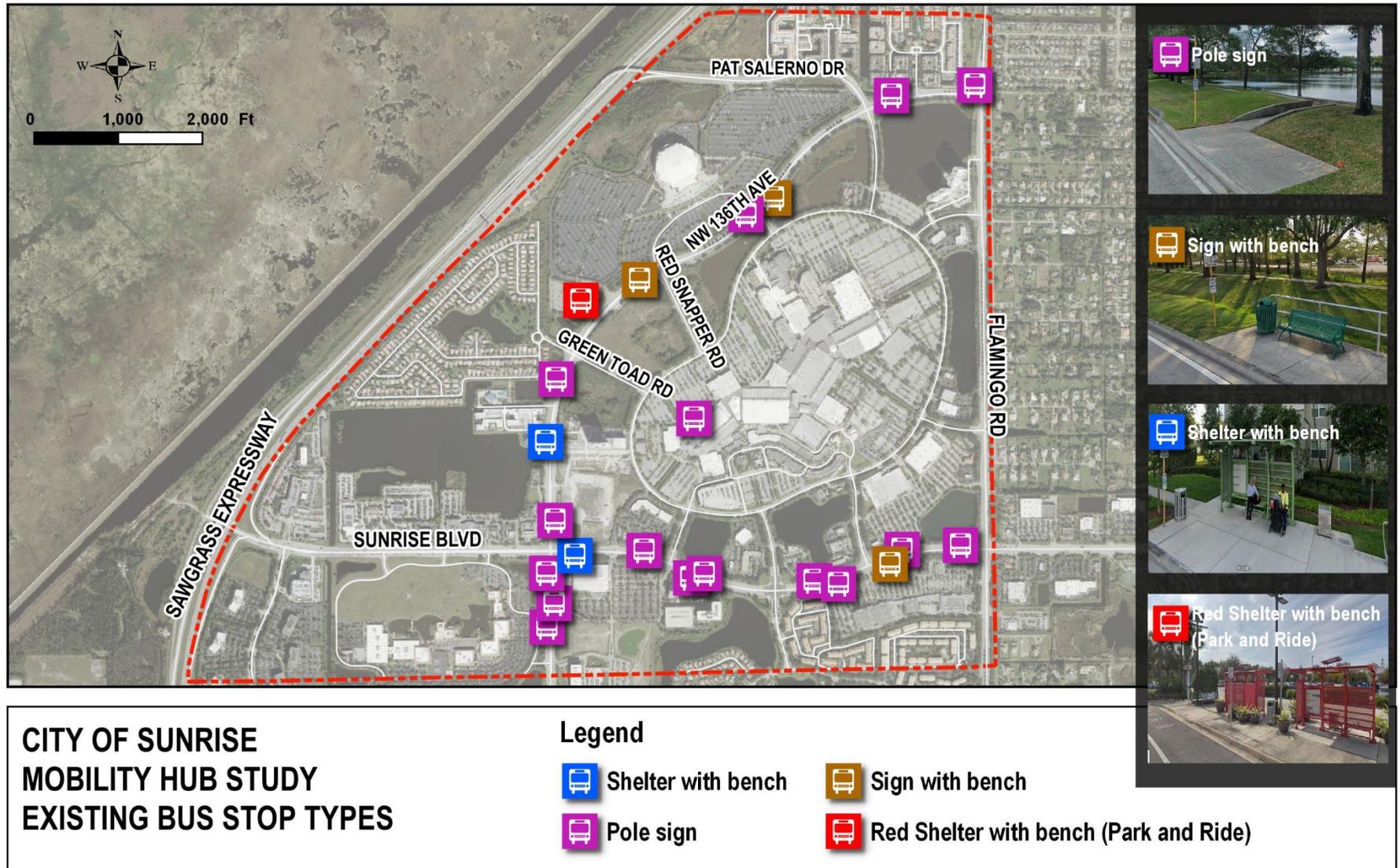
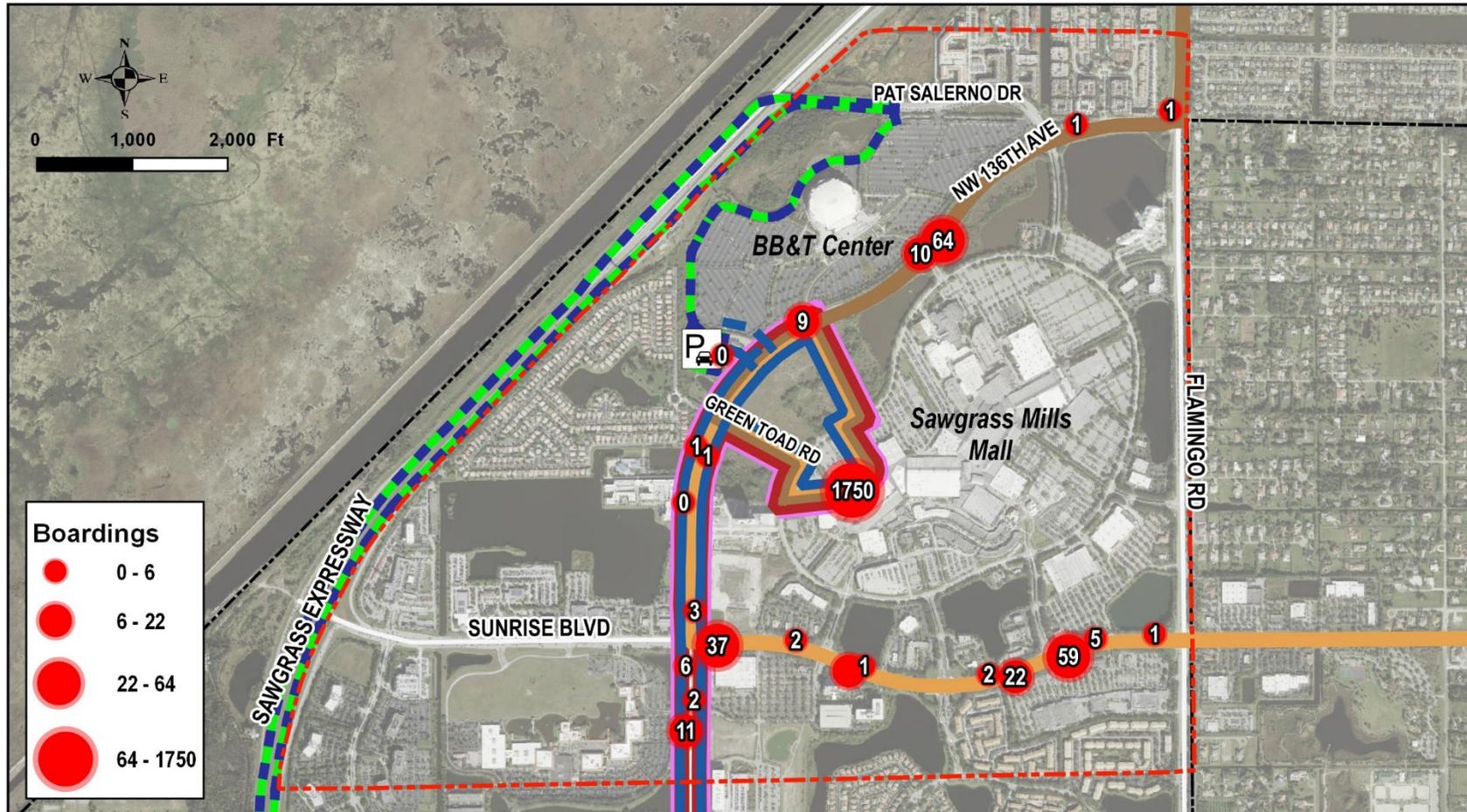


FIGURE C-7: TRANSIT BOARDING ACTIVITY

Source: Broward County Transit Automatic Passenger Counters January 19th – March 2nd, 2014



**CITY OF SUNRISE
MOBILITY HUB STUDY
BOARDINGS
WEEKDAYS - DAILY AVERAGE**

Legend

- Study Area
- City Boundary
- P Park and Ride
- 595 express to Civic Center
- 595 express to Miami/Brickell
- BCT Route 22
- BCT Route 23
- BCT Route 36
- BCT Route 72

FIGURE C-8: TRANSIT ALIGHTING ACTIVITY

Source: Broward County Transit Automatic Passenger Counters January 19th – March 2nd, 2014

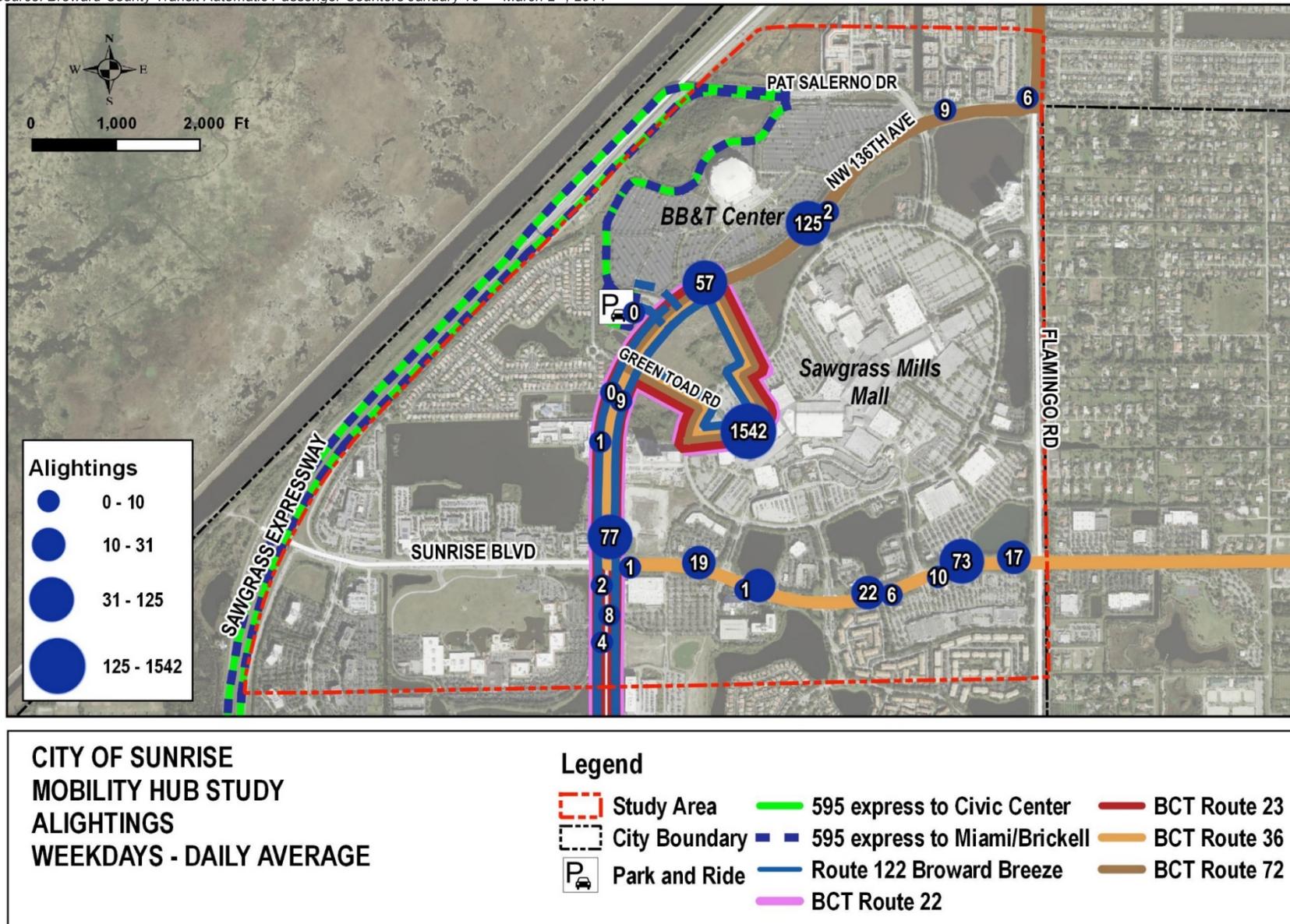
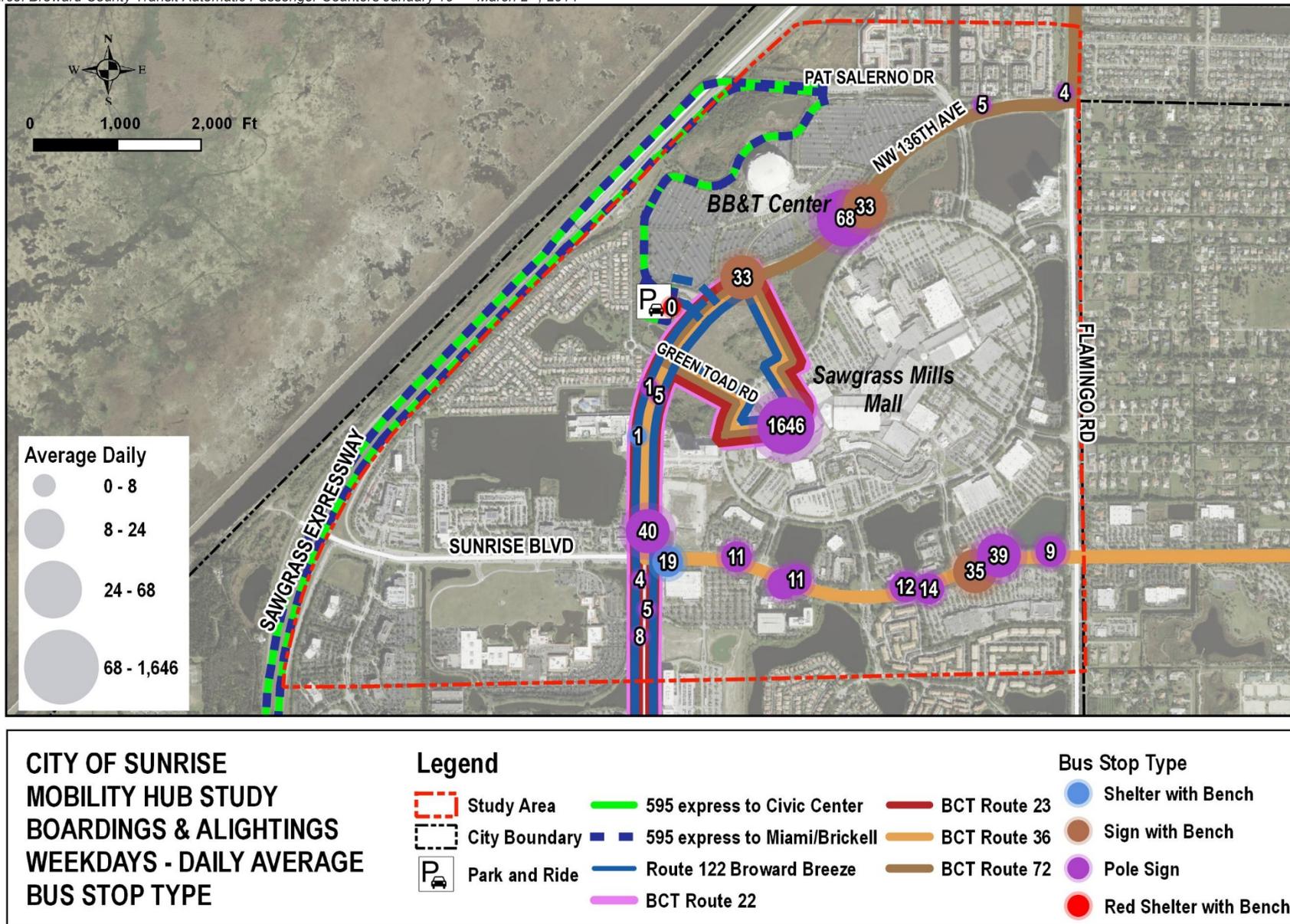


FIGURE C-9: AVERAGE WEEKDAY BOARD & ALIGHTING WITH BUS STOP TYPE

Source: Broward County Transit Automatic Passenger Counters January 19th – March 2nd, 2014



Community Bus Services

The City of Sunrise owns and operates a Minibus shuttle service with six (6) routes within the City boundaries. They provide transportation services for medical appointments, wellness visits, recreational purposes and special events. They also provide transportation for Broward County school event volunteers for prequalified residents. The transportation services are under the direction of the City's Leisure Services Department. According to the City's Adopted Budget for Fiscal Year 2018/2019, the City averaged 7.75 riders per hour at a cost of \$29,810. They reported approximately 38,000 one-way bus riders for fiscal year 2017/2018. All routes run Monday through Friday, with only one (1) route serving the Mobility Hub study area (Route 6); service is not available on the weekends or during holidays. These services are primarily intended for seniors with origins that are predominantly 55 and over communities and shopping destinations. They are not integrated with BCT routes and schedules and are not intended for work commuters. Of all of the Sunrise Minibus Routes, only Route 6, which operates Wednesdays and Fridays, provides service from residential communities to the Sawgrass Mills Mall.

On April 26th, 2016 the City Commission suspended Minibus and medical transportation fees, as a temporary program in an attempt to gain additional ridership and assist residents in need. Since the suspension of fees, the City has conducted a ridership analysis that illustrated a 34% increase since the suspension of fees. Staff has recommended suspending transportation fees for an additional year at the City Commission meeting that took place on April 29th, 2019. Detailed ridership data was not available for the Sunrise Minibus routes.

BIKE AND PEDESTRIAN NETWORK

Existing Network

As shown on Figure C-10 the Mobility Hub study area has an existing sidewalk network on all major corridors with the exception of the south side of Sunrise Boulevard between the Sawgrass Expressway and NW 136th Avenue. There are no designated bicycle facilities within the Mobility Hub study area. The auto-centric design of the developments in the area with large areas of surface parking lots surrounding them creates challenges for walkability and connectivity.

Additionally, pedestrian access to the mall is largely missing. The ring road surrounding the mall, Sawgrass Mills Circle, lacks a sidewalk. Furthermore, most of the mall Access Roads have a sidewalk on only one (1) side of the roadway, connecting to the mall out parcels and oftentimes ending at the interior ring road. Purple Parrot Place, Azure Alley, and Orange Grove Road provide crosswalks on the ring road, while Orange Grove Road provides crosswalks from Access Road to the movie theater entrance. The crosswalk provided from Purple Parrot Place connects to a sidewalk network to the newest addition of the mall, the Colonnade Outlets.

Outside the boundaries of the study area is the Conservation Levee Trail, located on the west side of the Sawgrass Expressway, bordering the Everglades Conservation Area. Currently, there is no direct access to the Trail from the Mobility Hub study area. Broward County has aspirations of constructing a signature pedestrian and bicycle bridge from the BB&T Center property to the trail.

The *Bicycle and Pedestrian Master Plan*, of the City of Sunrise, adopted in January 2015, proposes a number of bicycle and pedestrian improvements for Sawgrass Mills Mall, Sunrise Boulevard, NW 136th Avenue, and Flamingo Road, shown in Figure C-10.

Pedestrian and Bicycle Crashes

Florida Department of Transportation crash data from 2016 to 2019 for pedestrian and bicycle related crashes is shown in Figure C-11. Crash incidents are focused on the Sunrise Boulevard Corridor, where five (5) of the nine (9) total crashes within the Mobility Hub study area occurred. Given the scale and travel speeds of the Sunrise Boulevard corridor, it is notable there were relatively few incidents and no fatalities during this period, and that incidents occurred at intersections rather than at mid-block locations.

Incidents are as follows:

- 4 Bicycle Injuries
- 3 Bicycle Property Damage
- 2 Pedestrian Injuries
- No Reported Fatalities within study area

FIGURE C-10: PEDESTRIAN AND BICYCLE NETWORK

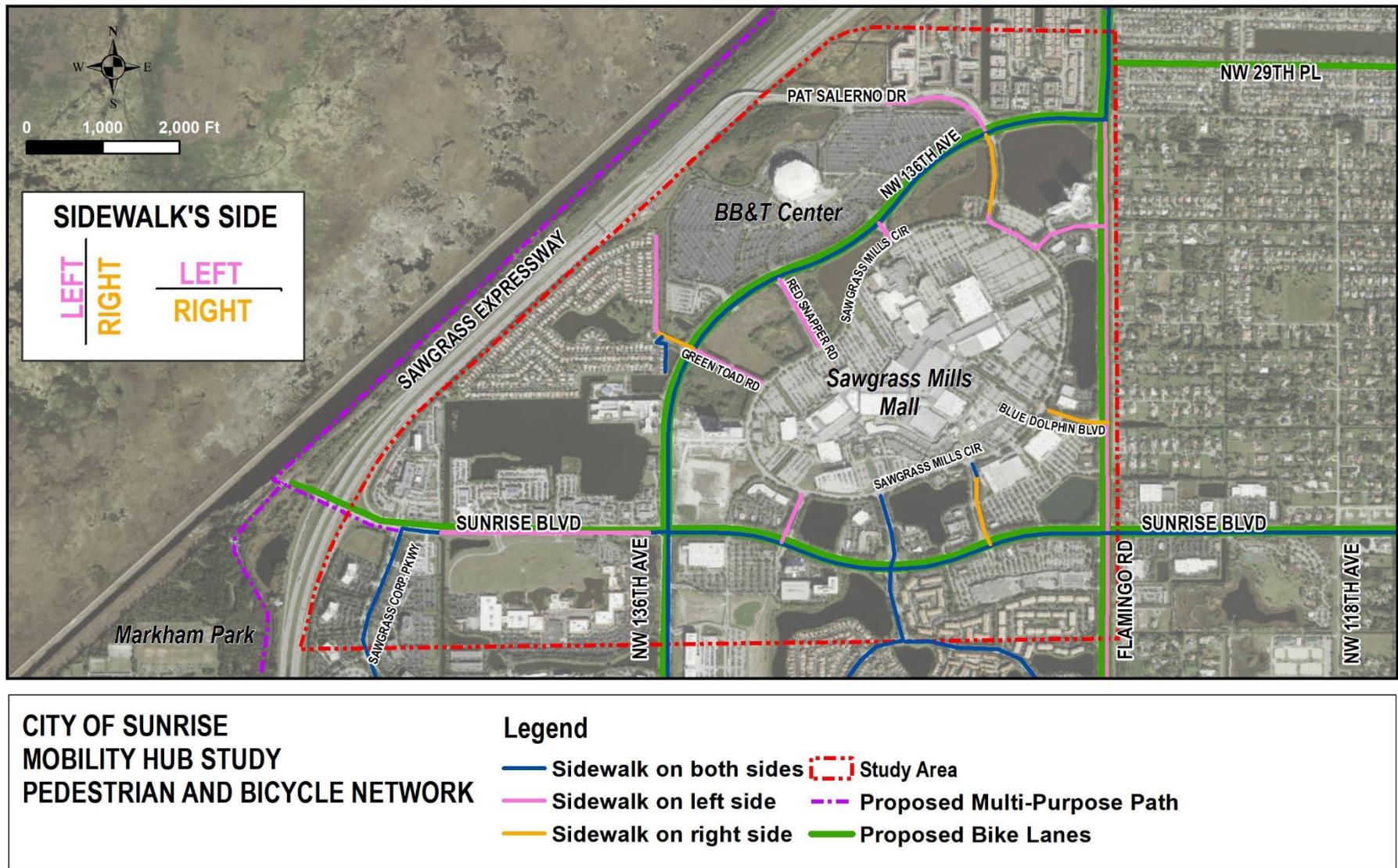
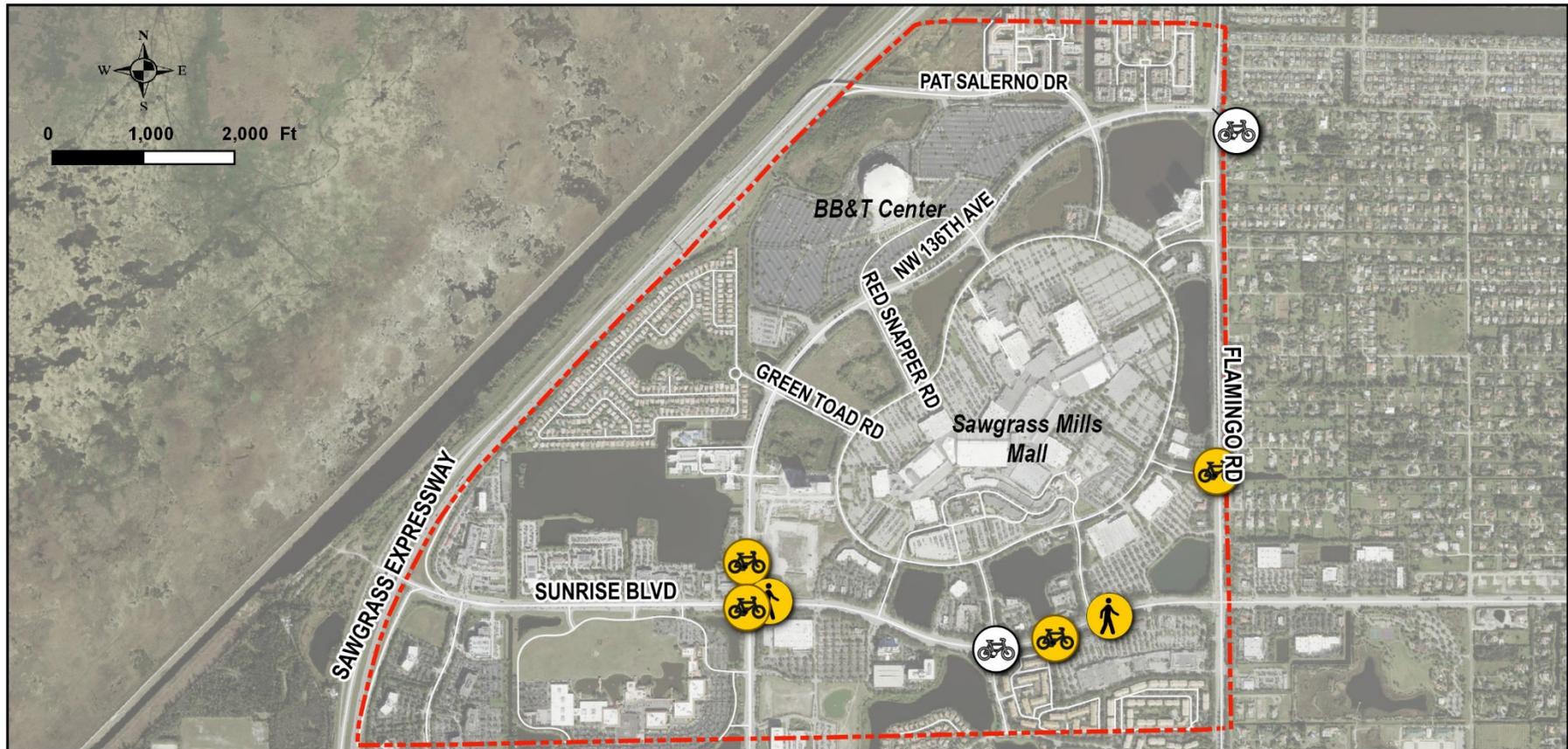


FIGURE C-11: PEDESTRIAN AND BICYCLE CRASH DATA



<p>CITY OF SUNRISE MOBILITY HUB STUDY PEDESTRIAN & BICYCLE CRASHES (2016-2019)</p>	Legend	
	Bicycle Injury	Pedestrian Injury
	Bicycle Property Damage	Study Area

ROADWAY NETWORK

Figure C-12 depicts the jurisdictions of roadways and location of signalized intersections in the Mobility Hub study area for ease of reference. Primary access is from Sunrise Boulevard, Flamingo Road, and NW 136th Avenue to local public streets at limited locations, and to neighborhoods comprised primarily of private streets.

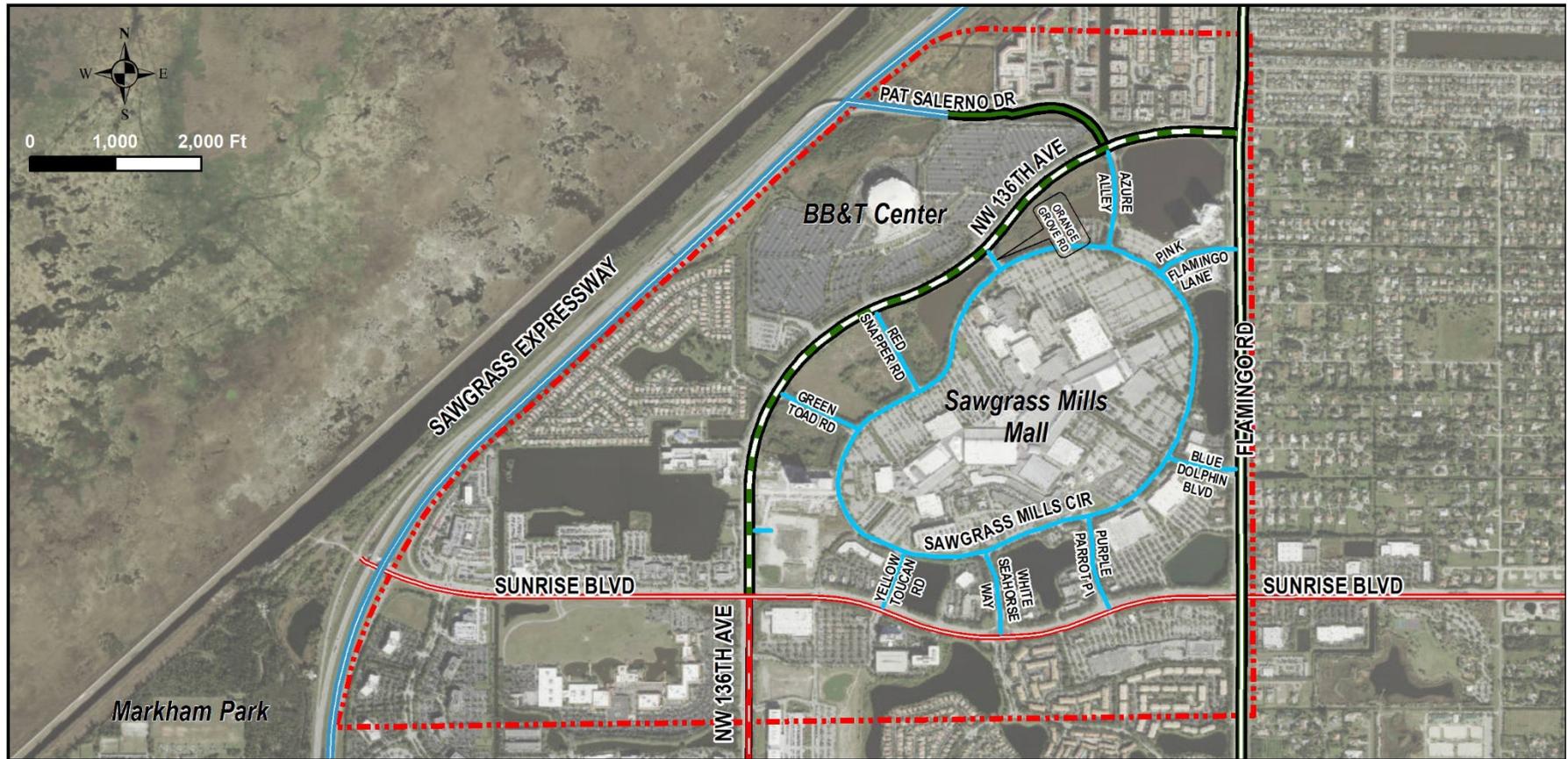
The functional roadway classification system is broadly defined in the following manner; see Table C-2 for additional details:

- Principal Arterials – Major Highway serving heavy volumes of traffic through the urban area.
- Minor Arterials – Roadways carrying moderately heavy volume of traffic, which channel traffic to community activity centers.
- Collectors – Roadways carrying moderate volumes of traffic to the arterial network.
- Local Roadways – Neighborhood Roadways carrying low volumes of traffic to collector or arterial roadways.

TABLE C- 2: FUNCTIONAL CLASSIFICATION OF ROADWAYS

Roadway	Functional Classification	Required ROW Width	# of Existing Lanes	Agency
Sawgrass Expressway	Principal Arterial - Expressway	325'	6 Lane Divided	FDOT
Sunrise Boulevard	Principal Arterial	120'	6 Lane Divided	County
Flamingo Road	Principal Arterial	200' (Varies)	6 Lane Divided	City
NW 136 th Avenue	Minor Arterial	110'	6 Lane Divided	City
NW 136 th Avenue (south of Sunrise Boulevard)	Minor Arterial	120'	6 Lane Divided	County
Pat Salerno Drive	Minor Collector	N/A	6 Lane Divided	City

FIGURE C-12: EXISTING ROADWAY NETWORK



**CITY OF SUNRISE
MOBILITY HUB STUDY
EXISTING ROADWAY NETWORK**

Legend

- | | | | |
|--------------------------|---------------------------|-------------------------|------------|
| State Principal Arterial | County Principal Arterial | City Principal Arterial | Study Area |
| County Minor Arterial | City Minor Arterial | City Minor Collector | |
| | | City Local Street | |

SELECTED PREVIOUS RECOMMENDATIONS

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

Sunrise Comprehensive Plan Transportation Element

The Transportation Element of the *Sunrise Comprehensive Plan* identifies several goals and objectives for Transportation. There are a number of Goals, Objectives and Policies that have been identified to meet the goals of the Mobility Hubs Master Plan.

Eight (8) of the ten goals support the objectives of the Mobility Hubs Master Plan:

- *Goal 1:* The City will actively promote the provision of a safe, convenient, and efficient transportation system for all modes of travel.
- *Goal 2:* The City of Sunrise will coordinate transportation and land use planning activities to ensure adequate facilities and services are available to meet existing and future needs of Sunrise’s population and economy and address existing and projected intermodal deficiencies and needs.
- *Goal 3:* The City will encourage a transportation system which minimizes environmental impact and conserves energy.
- *Goal 4:* Continue to support the development of a high level of transit service which provides safe, economical, efficient, and convenient travel for the citizens of Sunrise.
- *Goal 5:* Support Broward County Transit in developing a level of transit service which provides an alternative to the private automobile for those who wish to change modes.
- *Goal 6:* Retain and expand transit services for the elderly, handicapped and other transportation disadvantaged groups, with both regular and specialized service.
- *Goal 7:* Protect, maintain, and where feasible improve the City of Sunrise’s transportation system in a manner that provides for safety and security, convenience and energy efficiency; that coordinates and

balances the transportation system with the state, regional and countywide multi-modal plans, programs and systems; that is considerate of sensitive environmental issues and areas; and that addresses the transportation needs of present and future populations including the transportation disadvantaged.

- *Goal 10:* Coordinate with Broward County in the implementation of the countywide Transportation Element recognizing that the City includes part of the Regional (County/State) Roadway system and ALL other modes of transportation.

The City’s adopted policies that directly affect the study area include:

- Policy 1.3.4 which supports the addition of access to and from northbound Sawgrass Expressway at Pat Salerno Drive to facilitate integration of regional and local transportation networks in order to reduce trips on the local roadway network.
- Policy 4.2.3 which encourages implementing agencies to determine the feasibility of establishing a BCT transit link between Sunrise and other major transportation terminals, including Miami International Airport, Fort Lauderdale-Hollywood International Airport, and Port Everglades.
- Policy 5.1.1 states the City will work to retain and enhance the bus transfer facility at the Sawgrass Mills Mall.
- Policy 5.1.3 encourages the incorporation of exclusive or shared bus stop drop-off/pick-up areas at major public facilities and employment centers and shall include a requirement for their inclusion in design plans associated with applications for Transit Oriented Development (TOD) and Local Activity Center (LAC) future land use designations.

Objectives of the Transportation Element include reducing traffic conflicts, implementation and promotion of safe and comfortable walkways/bikeways, reduction of greenhouse gas emissions, level of service, intergovernmental and interagency coordination, coordination between land use and transportation planning, transit planning and accessibility.

The City of Sunrise has adopted several policies to support the stated goals and objectives of the Comprehensive Plan. A number of policies include transit, pedestrian and bicycle use, safety and access.

- Policy 1.1.2 encourages dedicated bicycle lanes, sidewalks and/or multiuse pathways parallel to roadways.
- Policy 1.2.9 encourages bicycle and pedestrian infrastructure linking neighborhoods to the transit system.
- Policy 1.2.6 requires private developers to provide additional bike and/or pedestrian facilities where additional bike and/or pedestrian facilities would improve public safety or convenience.
- Policy 7.1.7 seeks to improve pedestrian access to transit by ensuring that all phases of road planning, design and construction include the necessary pedestrian paths on City of Sunrise arterial and collector roads.

Additional policies support alternative modes of transportation include:

- Policy 1.2.13 which promotes alternative modes of transportation and encourages mixed-use development.
- Policy 4.4.1 will make information available to its citizens regarding ridesharing as an alternative to the single occupant vehicle.

The City has adopted policies to improve transit amenities and address transit stop design including:

- Policy 2.1.8 encourages the construction of safe, secure, and functional mass transit stop designs.
- Policy 4.1.2 states that the City, with financial assistance from the County, will make special efforts to increase transit ridership by providing bus shelters, benches, detailed signage, and other amenities at high transit usage bus stops.
- Policy 4.1.5 addresses an architecturally attractive bus shelter, providing a safe and comfortable rider environment.
- Policy 6.2.1 urges the County to provide wheel-chair-accessible buses on any future bus service provided within the City of Sunrise.

Western Sunrise Area-Wide Transportation Needs Assessment Study (2017)

FDOT completed the study in June 2017 to evaluate and optimize the existing and future transportation network for the area. The City of Sunrise City Commission

did not review or formally endorse the findings of the study. The study evaluated the needs and opportunities and recommended multi-modal, short-, and long-term improvements that considered future traffic generators and demand. The objectives of the needs assessment included:

- Evaluating current and future transportation characteristics using qualitative data analysis.
- Establishing transportation mobility performance expectations for facilities and services.
- Defining multi-modal improvements needed to satisfy the area-wide transportation-related demands.
- Developing multi-modal project concepts.
- Identifying feasible and acceptable improvements for agencies and stakeholders.
- Recommending policies and strategies for implementation.

FDOT used performance measures to assess the system-wide existing conditions to create a baseline and evaluate candidate projects and can be used to monitor the effectiveness of the implemented projects over time. Performance Measure Targets were set for highway, transit, bicycle, and pedestrian modes for the study area. Based on the needs analysis conducted, projects were identified to meet the current and future needs within the study area, and a full range of modes and technologies was explored. Some that were identified can be implemented in the short term and are designed to meet an existing need. Others are long-term and based on project planning, programming timeframes, and/or cost. In some instances, a location may have short-, mid-, and long-term improvements identified over the next 25 years. The recommended improvements are as follows:

- Transportation Systems Management and Operations improvements to further integrate traffic control systems and optimize performance. These improvements are a series of signal system upgrades that will lead to adaptive signal control and monitoring.
 - Short-term - review and update signal timing
 - Mid-term - install fiber optic infrastructure to take advantage of enhanced features of the existing equipment, deploy a series of Arterial Dynamic Messaging Signs (DMS), and then deploy adaptive traffic control.

- Long-term - provide for periodic or permanent monitoring of traffic congestion.
- Comprehensive upgrade of the major bus stops (40 in total), including shelters, lighting, and improved accessibility for pedestrians and bicyclists.
- Implementation of a circulator system to service the local development and provide a mobility option.
- Transit mobility hub/intermodal center: This hub would serve as a terminus and transfer point for the local bus routes and transit circulators proposed for the area. Strategically locate the hub within walking distance of a major destination such as Sawgrass Mills Mall or Metropica to optimize usage.
- Autonomous vehicle (AV) technology to implement a shuttle that ultimately would serve Sawgrass Mills Mall, Metropica, and the BB&T Center. AV technology would allow riders to move easily from one location to the other and would be a draw to the area. It is envisioned that the autonomous vehicle would accommodate 6–10 passengers and operate on open roads in mixed traffic, not its own guideway.
- Pedestrian Improvements: Fill in several gaps in the existing sidewalk system and provide pedestrian access to all transit stops.
- Elevated pedestrian walkways: 1) from Metropica to Sawgrass Mills Mall and 2) from BB&T Center to Sawgrass Mills Mall
- Pedestrian Hover Ring: Concept at Sunrise Boulevard and NW 136th Avenue consisting of a hover ring that would serve as an elevated pedestrian roundabout.
- Bicycle Improvements: Four (4) corridors for on-street bicycle projects - NW 136th Avenue and Flamingo Road, Sunrise Boulevard, and Hiatus Road just to the east of the study area.
- New River Greenway Bicycle/Pedestrian Bridges (two (2) elevated multi-use greenway): 1) at Flamingo Road and 2) at NW 136th Avenue.
- Transportation demand management (TDM) services coordinator to organize ridesharing, promote alternative modes of transportation, and work with the regional commuter services program to raise awareness and build momentum and support for the programs.
- Alternative Intersection Designs: Sunrise Boulevard at NW 136th Street- two (2) alternatives 1) median U-turn, eliminating left-turn lanes at the

intersection to reduce conflict points, and the number of signal phase; 2) diverging Left-Turn Concept, remove two (2) left-turn movements from the intersection, allowing a two-phase continuous flow of vehicles in the selected alternative directions.

- Redesign of NW 136th Avenue/Panther Parkway from Red Snapper Road to Orange Grove Road; eliminate one (1) travel lane in each direction between Red Snapper Road and Orange Grove Road, resulting in a four-lane divided roadway, incorporating a midblock crossing.

Urban Land Institute, BB&T Center, Broward County, Florida, Advisory Services Panel Report (2016)

The Urban Land Institute (ULI) conducted an analysis in June of 2016. Broward County asked the ULI Advisory Services panel to develop a comprehensive vision that complements existing uses, local communities, and current construction in western Broward County. The emphasis was to recommend strategies and proposals to generate positive economic returns on a regional scale. The report evaluated three (3) different redevelopment scenarios involving the future of the BB&T Center with Florida Panthers National Hockey League franchise staying or remaining, apartments, casino/gaming component, hotel, office space, and retail. Whatever scenario ends up coming to fruition, the panel recommended the following infrastructure improvements to accommodate future traffic growth from redevelopment of the BB&T site and continued development in the region:

- Support Florida’s Turnpike expansion plans and interchange improvements for the Sawgrass Expressway.
- Continue to support the northern ramps at the Pat Salerno Drive interchange but recognize that that support will be a political and financial decision.
- Narrow the travel lanes along NW 136th Avenue/Panther Parkway between Sunrise Boulevard and Flamingo Road. Eliminate one (1) travel lane in each direction between Red Snapper Road/Gate 6 and Orange Grove Road/Gate 5 to provide a four-lane divided roadway to create a safer environment for vehicles, pedestrians, and bicycles.
- Require a comprehensive traffic evaluation of the BB&T redevelopment project as part of the approval process. The traffic study should incorporate

the findings of Sunrise's forthcoming transit-oriented development traffic study.

- Implement an adaptive signal system to maximize the efficiency of both the existing and the planned roadway geometry.
- Promote access management strategies to improve safety and maximize the efficiency of the existing/planned geometry. Support the county's bus rapid-transit implementation plan.
- Continue to evaluate light rail as a long-term solution if projected ridership for the system increases significantly.
- Develop local transit circulation system(s) to supplement the county's bus routes and provide connectivity between major destinations in western Broward County. These circulation systems could operate in a number of ways: one overall loop, or separate loops on the north (BB&T, Sawgrass Mills, and Metropica) and on the south (Sawgrass International Corporate Park), with a connector between them. The circulation system should be incorporated as the new developments are constructed and completed.
- Locate a County transit center on the BB&T site to take advantage of the existing park-and-ride lot, available land, and proposed land use interactions.
- Improve pedestrian crossings along NW 136th Avenue/Panther Parkway.
 - Narrow NW 136th Avenue/Panther Parkway to improve its safety.
 - Conduct a study to determine the feasibility of lower speed limits.
 - Use midblock pedestrian-crossing treatments that align with the proposed plaza and pedestrian bridge across the Sawgrass Mills pond. These treatments could include enhanced crosswalks, pedestrian crossings on speed tables (if speed limits are lowered), high-intensity activated crosswalk (HAWK) signals, rectangular rapid-flashing beacons (RRFBs), or pedestrian bridges.

Oakland Park Boulevard Transit Corridor Study (2014)

FDOT completed this study in April of 2014. The purpose of the study was to identify transportation and transit operational improvements that could be

implemented in a shorter time frame (within next two (2) to five (5) years) in the Oakland Park Boulevard corridor. The western terminus of the study was the intersection with the Sawgrass Expressway (SR 869) near the Sawgrass Mills Mall and BB&T Center. The Broward County Transit Route 72 is one (1) of the five (5) highest ranked routes for ridership throughout the County and the study identified the need for a limited stop station location. It also further supported the need for a Gateway Mobility Hub at Sawgrass Mills Mall.

Midtown Plantation and Southwest Sunrise Livability Study (2012)

The Broward MPO led this effort to complete this study in August 2012, and the City of Sunrise City Commission endorsed its findings. The purpose of the Livability Study was to conceptually identify a variety of improvements that contribute to transit-supportive development, with a 25-year planning horizon with the implementation to occur over time as funding becomes available and as conditions change. The document serves as an Action Plan with recommendations that are both realistic and affordable and support the vision for the area.

The 2035 Broward MPO LRTP identified a Gateway Hub near Sunrise Boulevard and NW 136th Avenue with rapid bus transit, the East/West Central Broward Transit route, and a new local bus route. The 2035 LRTP shifted away from a history of investment in improvements for single occupant vehicles and established a framework for balanced investment in a system of many transportation modes. It sets forth a vision for transportation transformation based on premium transit service with Mobility Hubs as critical points where people go to make transportation connections. By definition, the Gateway hub was a place with two (2) or more planned high-capacity transit lines, either Bus Rapid Transit (BRT) or Light Rail Transit (LRT), high-density mixed-use developments including transit-oriented corridors (TOC) and transit-oriented developments (TOD), and daily boardings and alightings of more than 2,200 passengers.

The Study recommendations contain incremental methods of improving transportation and land use within the communities in a manageable and focused way. Key actions are:

- Determine the locations of Mobility Hubs.
- Improve multimodal connectivity around hubs and corridors.

- Coordinate economic development measures around Mobility Hubs with the municipalities to encourage private investment in commercial and housing opportunities that generate transit ridership.
- Amend Broward County Land Use plan to allow appropriate level of mixed-use transit-supportive development at two (2) proposed new 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 analysis revealed Transit Oriented Development (TOD) opportunities around the Sawgrass Mills Mall and BB&T Center (formerly Bank Atlantic Center). The study identified the need for pedestrian crossing improvements at 15 locations within the study area along Sunrise Boulevard, Sawgrass Mills Circle, and NW 136th Avenue. The need for bicycle facilities was also identified including new designated bicycle lanes on Flamingo Road, Sunrise Boulevard, and NW 136th Avenue. The study also provided for additional recommendations for supportive activities and programs. In particular, those with a direct impact on the study area include:

- Sawgrass Area Intermodal Station Study: Continue to coordinate with FDOT, BCT and the City of Sunrise to develop scenarios for intermodal facility.
- Shuttle feasibility: Circulator with connections to premium transit service and employment centers; Seek opportunities for local circulators, jitneys and other small forms of transportation within and between employment centers.
- Transportation Systems Management and Operations (TSM&O): Implement an integrated program to optimize the performance of existing infrastructure through implementation of multimodal, cross-jurisdictional systems, services, and projects designed to preserve capacity and improve security, safety, and reliability of transportation systems.
- Pedestrian connectivity to private properties: Improve pedestrian infrastructure in parking lots for increased connectivity and comfort.

Create pedestrian and bicycle connections to neighborhoods where feasible, at local request.

- Bicycle and pedestrian facilities at problem intersections and crossings: Improve connections and safety for bicycle and pedestrian passage through areas that are difficult to traverse, such as arterial crossings, and interchanges.
- Low-cost information/marketing approaches to improve pedestrian and bicycle safety: Develop print and website campaign to modify traffic behavior and improve multimodal safety. Provide standardized presentation materials for wider distribution.
- Transit Ambassadors: Seniors and volunteers providing information and directions to transit users and visitors at Gateway Hubs.
- Premium Transit – Alternatives Analysis - various corridors: Identify market segments and target premium transit service to likely riders along Sunrise Boulevard.
- Zoning and Design Guidelines: Create regulatory language to require/encourage transit-supportive design near Mobility Hubs. Ensure pedestrian connectivity, comfort and safety.
- Parking Management Strategies: Improve existing approaches and experiment with new systems to encourage transit-supportive development near Mobility Hubs.
- Encourage private investment near transit corridors and Mobility Hubs: Public and private sector marketing and economic development activities at the local level.
- Leverage transportation investments: Explore development incentives, including buying down development costs, with strategic public investments in transportation infrastructure.

Sawgrass Area Intermodal Planning Study (2011)

FDOT completed this study in November 2011 that set out to determine the design and planning parameters of an intermodal facility that would function as a Gateway Hub. The study also offered early (Metropica & Westerra were just underway) and strategic guidance for FDOT and its partners to collaborate with each other and with property owners and developers in the area. The study contained an assessment of the existing land uses and transportation conditions of the area;

looked at future travel needs; station planning and design parameters; conceptual station area plans; and laid out an implementation section

The major intermodal station elements considered by the study were based on an understanding of the community's needs from stakeholder discussions as well as from the 2035 LRTP's description of Gateway Hubs. According to the LRTP, a Gateway Hub is a transit node that typically contains the following features:

- Integration with high-density, mixed-use development
- Connection with two (2) or more high capacity transit lines
- Amenities such as unique architecture and signage, enclosed shelters, real time passenger information displays, restrooms, off-board fare payment, parking, and taxi bays
- Operator relief facility and a B-cycle bike sharing station (based on stakeholder discussion)

The sizes of the station types were based on the future travel needs from transit ridership and park & ride lot demand forecasts at the time. The major elements include:

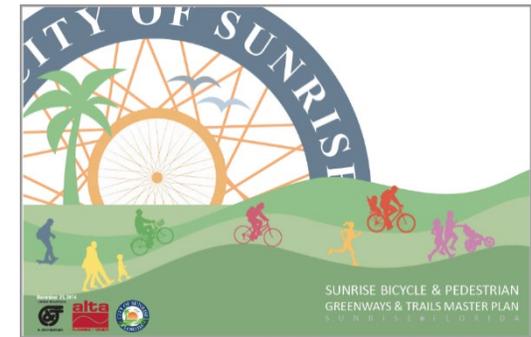
- Bus Bays: 9-10 bays for 7 routes; around islands to minimize transfer walking distances; sawtooth bay layout so buses do not have to back up.
- Park & Ride Facility: 600 spaces; 4.1 acres for surface parking
- Indoor Function Areas: ticket sales 500 sq. ft.; waiting area/lobby 3,500 sq. ft; operator relief facility 300 sq. ft. (10 operators); public restrooms 150 sq. ft. (5 restroom stalls)
- Outdoor Function Areas: Kiss & ride parking spaces 19,500 sq. ft. with 65 spaces; taxi stand 3,000 sq. ft. with 10 spaces; public plaza 10,000 sq. ft. including 500 sq. ft. B-cycle station with 20 bicycles, 500 sq. ft. for 20 weather protected bicycle parking spaces, a waiting area, public art space, park space, and vending space

Four (4) prototypes were identified, that ranged from 1-2 blocks, 10-14 bus bays along a bus specific accessway, 3.8-4.6 acres in size, contained 3-4 levels of transit serving parking garage, and had potential for joint development. It also contained design guidelines for all parcels within a 1/2 mile of the station to improve urban design and enhance existing transportation infrastructure.

Three (3) sites were identified as potential locations for future stations: north of West Sunrise Boulevard (now Metropica under construction); along Green Toad Road, and south of Red Snapper Road. The study effort helped bring more awareness to the potential for transit and a key part of the future functionality and livability of the Sawgrass Area. An Action Plan was developed with steps that could be taken toward implementing an intermodal station.

Sunrise Bicycle & Pedestrian Greenways & Trails Master Plan (2015)

The City adopted this Plan in January 2015, to provide a clear framework for the development of new facilities, renovations of existing infrastructure, programs and policies to support safe and convenient walking, biking and access to transit. The Plan vision is to create “a connected network of on and off-street bikeways, walkways and transit stops to provide safe and convenient access between neighborhoods, parks, job centers, tourist attractions, shops, schools, work and other daily destinations for a wide variety of people, trip purposes and abilities.” Seven (7) goals were established to achieve this vision:



1. Achieve Bicycle Friendly Community designation by 2016.
2. Achieve Walk Friendly Community designation by 2016.
3. Double the combined walking, biking and transit commute mode share within 5 years (2.7% for walking, bike and transit at the time of adoption).
4. Reduce the rate of annual bicycle and pedestrian crash injuries by half within 5 years (9% of all roadway injuries in Sunrise, at the time of adoption).
5. Reduce the rate of annual bicycle and pedestrian fatalities by half within 5 years (46% of all roadway fatalities in Sunrise, at the time of adoption).
6. Ensure all parks in Sunrise are connected to sidewalk and bike lane or trail within 5 years.

7. Ensure all schools in Sunrise are connected to a sidewalk and bike lane or trail within 5 years.

Within the Mobility Hub study area, NW 136th Avenue/Sunrise Boulevard intersection was identified as a “Priority Connection.” As identified within the Plan, a “Priority Connection” are areas identified with recommendations to overcome barriers to bicycle and pedestrian connectivity. Proposed improvements include: bicycle lanes along NW 136th Avenue and Sunrise Boulevard, two-staged turn queue boxes to assist cyclists making left turns at the intersection, bicycle lane intersection markings, high visibility crosswalks, reduced turning radius, median refuge island and 12-foot multi-use pathway along the west side of NW 136th Avenue. Furthermore, bicycle lanes and 12-foot multiuse pathways were proposed along the west side of Flamingo Road and south side of Sunrise Boulevard. Other recommendations pertaining to the Mobility Hub study area included:

- Filling in sidewalk gaps
- ADA improvements
- Providing sidewalks on both sides of the roadway
- Bus stop accessibility via sidewalk connection
- Frequent and safe crossings
- Mid-block crossings
- Placement of bus stops within proximity to street crossings

Sunrise Boulevard, Flamingo Road and NW 136th Avenue have been identified as “Priority Pedestrian Corridors,” along with the Sawgrass Mills Mall identified as a “Priority Pedestrian Zone.” “Priority Pedestrian Corridors” have been defined in the Plan as a corridor that should focus on providing safe and frequent crossings, appropriate bus stop spaces and locations and access to adjacent neighborhoods and businesses. A “Priority Pedestrian Zone” is an area that should be given top priority to pedestrian infrastructure improvements, safe access and frequent crossings.

Developments of Regional Impact (DRI)

Within the boundaries of the Mobility Hub study are two (2) DRIs that are not built out and require the developers to provide improvements to enhance mobility.

Westerra – located south of Sunrise Boulevard, west of NW 136th Avenue

The following actions, contributions and improvements are required, before first Certificate of Occupancy (CO):

- Coordination with Broward County, FDOT, and the City of Sunrise to encourage transit use, carpooling and van pooling, and provide for improved transit routes serving the development, according to a Commute Trip Reduction Program.
- Provide rideshare and transit information to residents, tenants, and employees.
- Two (2) bus stops southbound on NW 136th Avenue, adjacent to the project with the following features and amenities:
- Bus shelters designed in accordance with BCT standards and City design standards including the dedication of land or easements necessary.
- Kiosks with bus system maps (numbers not specified)
- Leaning Rails (numbers not specified)
- Trash receptacles (numbers not specified)
- Landscaping (no specifics)
- Lighting (including signal lighting)
- Bicycle racks (numbers not specified)
- Other onsite amenities to enhance pedestrian connectivity and increase transit ridership (nothing specified)
- Prior to a CO for a new permanent structure six (6) intersection improvements on Sunrise Boulevard.
- Monetary contributions totaling \$845,000 (based on CPI as of 1/8/2016) to Broward County for partially funding traffic signal upgrades package and transit-oriented improvements or equipment based on the number of net new external PM peak hour trips based on a formula prior to the issuance of building permits. Phased payments based on trip generation rates of what is being built.
- Prior to the issuance of a CO for land uses generating 1,572 trips, six (6) additional intersection improvements on Sunrise Boulevard, plus \$354,346 to the City for transportation and transit improvements and services in the impact area.

- According to the City the transit improvements include hub and localized shuttle service within 2 years of the first CO.

Metropica, west of the Sawgrass Mills Mall ring road

- Prior to any vertical construction in Area 2, prepare and execute a Commute Trip Reduction Plan in coordination with the FDOT Commuter Assistance Program. Area 2 is the remaining 77 acres of the project.
- Construct a transit station Green Toad Road within two (2) years of the first CO of Phases 1 (within Area 2).
- Within six (6) months from first CO for the first new Area 2 structure enter into an agreement with the City to develop an ADA-compliant alternative fuel shuttle service that provides regular service to Metropica, Westerra, and other nearby points of interest.

Broward MPO’s 2045 Metropolitan Transportation Plan (MTP) (2019)

The Broward MPO is the agency responsible for creating local transportation policy and prioritizing federal and state funding for transportation projects. The 2045 MTP, adopted in December of 2019, is a multi-modal transportation plan that extends over 20 years and looks at the region’s transportation future needs. The MTP emphasizes moving people and goods, creating jobs and strengthening communities.

The MTP builds on existing transportation assets, identifies deficiencies in these facilities, and recommends actions that maintain or improve quality of life. *The MTP* seeks to utilize Mobility Hubs to emphasize compact and economic development with premium transit, which are also bicycle and pedestrian friendly. Additionally, it provides a list of regionally significant projects to construct, operate and maintain by and through 2045.

PROGRAMMED AND PLANNED PROJECTS

Planning and programming documents were reviewed including the MPO 2045 MTP, Broward County 2018 Penny Surtax Initiative Projects, Broward MPO 2020 to 2024 Transportation Improvement Program (TIP), and the BCT Transit Development Plan (TDP) 2020 to 2029. Tables C-3 through C-6 provide a list of

the planned and programmed improvements within the Mobility Hub study area. There are no FDOT projects planned for the Mobility Hub study area.

TABLE C-3: BROWARD COUNTY MPO 2045 MTP PROJECTS

MTP ID	Project	Description	Location	Cost	Time Period
ROADWAY PROJECTS					
4	South Turnpike	Provide one (1) auxiliary lane in each direction	Sawgrass Expwy/SR-869 to Broward/Palm Beach County Line	\$23,963,559	2025
14	Turnpike	Widen to 10 lanes with express lane	Sawgrass Expwy/SR-869 to Broward/Palm Beach County Line	\$65,331,538	2026-2030
92	Pat Salerno Northbound Ramps on Sawgrass (SR-869)	Construct interchange improvements at Pat Salerno Drive to and from Northbound Sawgrass Expwy (SR-869)	Pat Salerno Drive	\$56,000,000	Unfunded
98	Southbound NW 136 th Avenue to Eastbound I-595	Construct flyover from Southbound NW 136 th Avenue to Eastbound I-595	NW 136 th Avenue	\$31,257,600	Unfunded

TABLE C-4: MUNICIPAL SURTAX CAPITAL PROJECTS PRIORITIES (FISCAL YEAR 2020)

Project Ranking	Name & Description	Phase	Capital Cost
2	Various Drainage Improvements: Improvements to City drainage systems including storm drainage and canals to address drainage related issues	Construction	\$10,000,000
50	Pine Island Road Bicycle Lanes: New bicycle lanes along Pine Island Road from Commercial Boulevard to the C-13 Canal as part of the City’s Complete Street Initiative	Design	\$4,500,000
69	Oakland Park Blvd Multi-Use Path: Construct a multi-use path along the south side of Oakland Park Boulevard from the Sawgrass Expressway to the City limits.	Design	\$3,250,000

Project Ranking	Name & Description	Phase	Capital Cost
	Reconstruct the existing sidewalk or construct a new multi-use trail where a sidewalk does not exist.		
91	Oakland Park Blvd Bicycle Lanes: New bicycle lanes along Oakland Park Boulevard from Flamingo Road to the eastern city limits as part of the City's Complete Street Initiative	Design	\$6,000,000
152	Nob Hill Road Bicycle Lanes	Design	\$4,650,000
153	Nob Hill Road Multi-Use Path	NA	\$2,500,000
157	NW 136 Avenue Multi-Use Path	Design	\$2,550,000
158	NW 136 Avenue Bicycle Lanes	Design	\$3,750,000
167	University Drive Bicycle Lanes	Design	\$2,000,000
176	Flamingo Road Multi-Use Path	Design	\$2,000,000
177	Flamingo Road Bicycle Lanes	Design	\$3,750,000
182	Sunrise Blvd/136 Ave-Improvements	Design	\$3,000,000
189	Sunrise Blvd Multi-Use Path	Design	\$1,500,000
190	Sunrise Blvd Bicycle Lanes	Design	\$3,000,000
192	Hiatus Road Bicycle Lanes	Design	\$4,800,000
196	SW 14th Street Bicycle Lanes	Planning	\$1,500,000
213	Commercial Blvd Multi-Use Path	Design	\$1,500,000
214	Commercial Blvd Bicycle Lanes	Design	\$2,000,000
219	Oakland Park/Nob Hill Road-Intersection	Design	\$5,000,000
221	Sunrise Lakes Blvd Bicycle Lanes	Design	\$3,300,000
222	Oakland Park/University-Intersection	Design	\$5,000,000
233	NW 8th Street Multi-Use Path	Design	\$1,500,000
238	Panther Parkway Improvements	Design	\$3,000,000
240	Commercial Blvd Median Improvements	Design	\$500,000
245	136 Ave/New River Greenway Intersection	Planning	\$5,000,000
257	Bus Stop & Bus Shelter Improvements	Design	\$2,500,000
260	C13 Greenway from Hiatus to City Limits	Design	\$3,150,000
262	Springtree Drive Bicycle Lanes	Design	\$1,400,000
263	Oakland Park/Hiatus Road-Improvements	Planning	\$5,000,000
264	136 Ave/Sunrise Boulevard-Intersection	Design	\$5,000,000

Project Ranking	Name & Description	Phase	Capital Cost
273	Sunset Strip/Greenway Connector	Design	\$5,000,000
279	Josh Lee Blvd Complete Street Project	NA	\$1,250,000
288	Weston Road Bicycle Lanes	Design	\$2,200,000
291	Springtree Lakes Drive Bicycle Lanes	Design	\$2,000,000
293	Oakland Park/Pine Island-Intersection	Design	\$5,000,000
317	NE 50th Street Bicycle Lanes	Design	\$1,000,000
318	NW 94th Avenue Bicycle Lanes	Design	\$2,550,000
324	Sunset Strip Entrance Improvements	Planning	\$3,000,000
325	Sawgrass Expressway Greenway	NA	\$5,000,000
340	East Sunrise Master Plan Improvements	Design	\$10,000,000
345	New River Circle Bicycle Lanes	Design	\$2,000,000
350	NW 29th Manor Traffic Calming	Design	\$500,000
352	Pump Station No. 8 Improvements	NA	\$10,000,000
414	Transit and Shuttle Bus Infrastructure	Design	\$3,000,000
437	Median Improvements (Citywide)	Design	\$5,000,000
451	Various Traffic Calming - Zone B	Planning	\$500,000
452	Various Traffic Calming - Zone A	Planning	\$500,000
453	Various Traffic Calming - Zone C	Planning	\$500,000
454	Various Traffic Calming - Zone D	Planning	\$500,000
473	Street & Pedestrian Lighting - Zone C	Planning	\$500,000
474	Street & Pedestrian Lighting - Zone D	Planning	\$500,000
475	Street & Pedestrian Lighting - Zone A	Planning	\$500,000
476	Street & Pedestrian Lighting - Zone B	Planning	\$500,000

NOTE: Project ranking #1 - 110 represent MPO Surtax Services recommendations for Fiscal Year 2020 and consider construction readiness and utilized "rounds" to ensure equity among municipalities. Project #111 - 510 have not been evaluated for funding readiness and require additional evaluation and analysis

TABLE C-5: TIP PROJECTS 2020-2030

Priority	Project	Limits	Description	Cost
3	Oakland Park Blvd Transit Corridor	Sawgrass Mall to A1A/BCT Downtown Terminal	Capital improvements for transit service performance, Mobility Hubs, Bicycle Facilities, Pedestrian Facilities and Greenways	\$138,700,000
13	Arterial Connectivity/Capacity with Respect to I-595	Turnpike to Sawgrass Expressway	Planning Study	\$2,000,000
15	Broward Signal Network	Countywide	Install fiber-optic signal components	\$24,000,000
16	FDOT Signal Network	Countywide	Install TSM&O components	\$109,600,000

TABLE C-6: BCT TRANSIT DEVELOPMENT PLAN 2020-2029

Fiscal Year	Weekday Headway Increase	Weekend Headway Increase	Running Time Enhancement	Span of Service Increase	Restored Route Service	Route Realignment & Extension	New Local Routes	New Rapid Bus or Express Route
2020	Route 72		Route 72	Route 72				I-75
2021	Route 23	Route 23		Route 36		Route 23		
2022	Route 22			Route 22				
2023							Route 25 (Flamingo Road)	
2024								Oakland Park Boulevard
2025								
2026	Route 36						NW 136 th Avenue	
2027		Route 23						
2028								
2029								

DEVELOPMENT CONTEXT

The Sunrise Mobility Hub Master Plan planning area encompasses the area between the Sawgrass Expressway and North Flamingo Road, extending from roughly Pat Salerno Drive on the north to the land uses just south of and accessed from Sunrise Boulevard. Investment in development and redevelopment is active and ongoing in this area, with significant entitlements in place for additional density that has not yet been realized. For purposes of mobility planning, this evolving development context results in unique challenges.

The sections that follow document the “baseline” existing 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 the Sawgrass Mills area 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 the Sawgrass Mills area continues to evolve.

DEVELOPMENT PATTERN

The study area comprises a mix of commercial, office, entertainment, and multi-family land uses. Properties in the area were developed as large, phased planned developments (i.e., Developments of Regional Impact, or DRIs), and several of the DRIs have not yet reached full build-out. Figure C-13 depicts the current and largely compartmentalized arrangement of land uses in the Sunrise Mobility Hub planning area, depicting the overall pattern rather than parcel-level detail. A generalized pattern of land uses, and an understanding of the orientation of and access to these uses, are relevant to the development of multimodal strategies.

COMMERCIAL uses predominate in the planning area, with the inwardly oriented focus of commercial activity being Sawgrass Mills Mall, a regional shopping center encompassing approximately 400 acres west of Flamingo Road and north of Sunrise Boulevard. The frontage on these two arterials consists of commercial out parcels interspersed with stormwater retention and water features. Access points are limited and controlled, with a ring road serving large expanses of parking surrounding the mall, and significant

setbacks and landscaping separating commercial uses from adjacent roadways. Large-scale auto-oriented commercial uses also front on Sunrise Boulevard, including Sawgrass Square at Sunrise Boulevard and Flamingo Road, and extending west from the intersection of Sunrise Boulevard and NW 136th Street. Additional commercial uses are included in the second phase mixed-use Metropica development, on the northeast corner of Sunrise Boulevard and NW 136th Avenue, also accessed from the Sawgrass Mills Circle ring road.

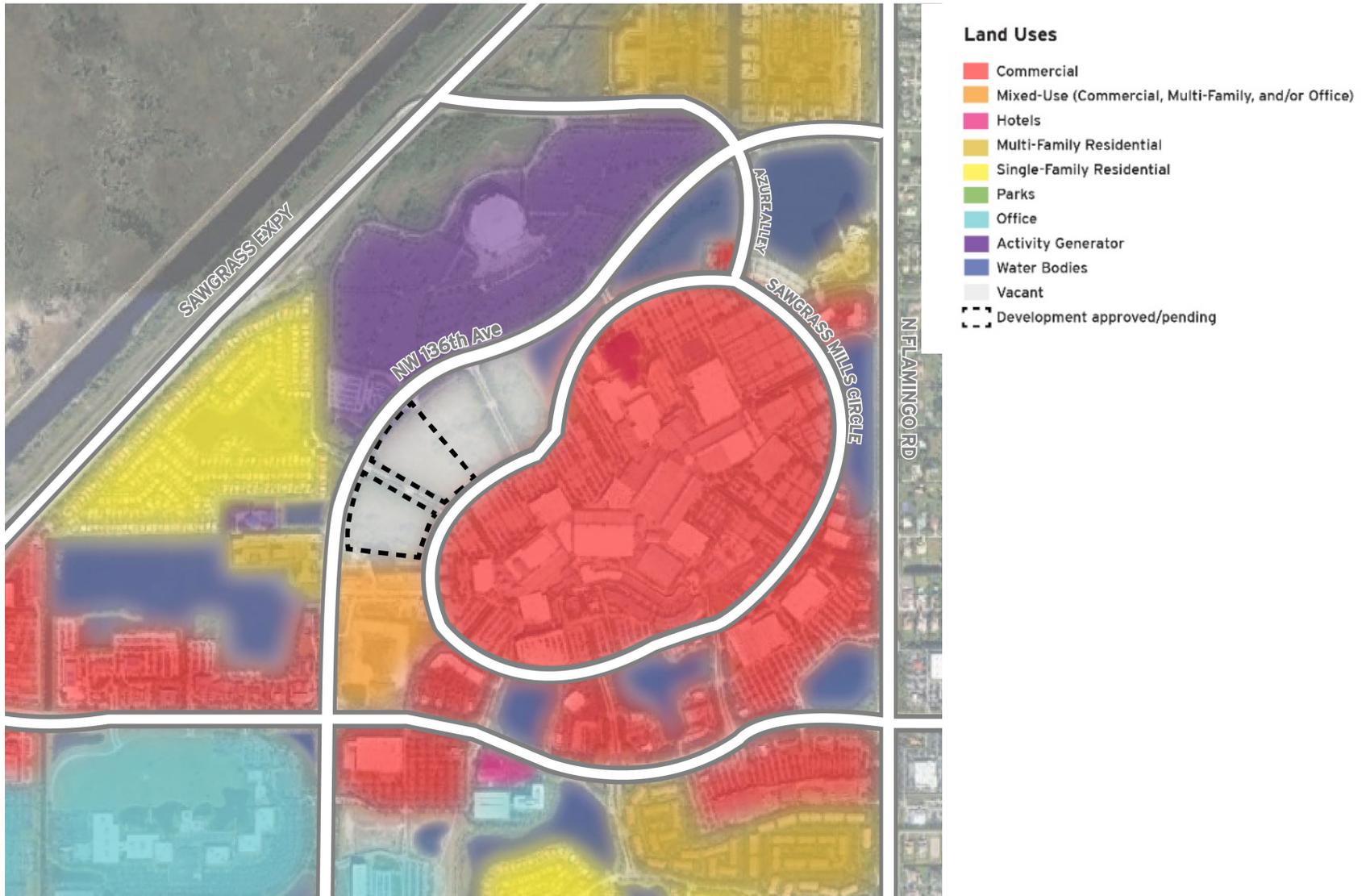
OFFICE uses include corporate office complexes extending south along NW 136th Avenue, south of Sunrise Boulevard, including the Westerra and Sawgrass Corporate Park developments. Access to these large-scale office uses occurs at limited points along NW 136th Avenue, with significant setbacks and on-site parking for employees.

RESIDENTIAL uses include multi-family developments along Flamingo Road both north of NW 136th Avenue and south of Sunrise Boulevard, with limited access points from Flamingo Road. Multi-family and single-family development clusters are located south of the Sawgrass Square commercial development, and a single-family neighborhood and multi-family development, each with one (1) primary entrance point from NW 136th Street, are located just west of the mall and BB&T Center. To date, one (1) high-rise condominium tower has been constructed as part of the mixed use Metropica development northeast of Sunrise Boulevard and NW 136th Avenue. Additional multi-family residential towers are slated for the later phases of the Metropica development, between NW 136th Avenue and Sawgrass Mills Circle just west of the mall.

The **ACTIVITY GENERATOR** is the County-owned BB&T Center, a professional sports arena and concert/event venue with significant dedicated parking both surrounding and underneath the facility. The future of this parcel is uncertain, as the County is considering various redevelopment concepts that would add new uses on the current parking lots in conjunction with structured parking.

FIGURE C-13 GENERALIZED EXISTING LAND USE PATTERN

Not to scale



DEVELOPMENT CHARACTER

Large-scale single use developments dominate the Sunrise Mobility Hub planning area, separated from each other by multi-lane roadways, expanses of parking, water retention facilities and/or landscaped setbacks. All but one (1) residential development in the vicinity are gated communities. Monument signage identifying retail uses, restaurants and corporate offices are the predominant streetscape feature in the area.



Photo group at lower left: Existing uses south of Sunrise Blvd –existing shopping center, older and newer corporate office complexes.

Photo group at lower center: BB&T Arena and Nexus Sawgrass residential uses north of Sawgrass Mills.

Photo group at lower right: Pedestrian environment and streetscape features at Sawgrass Mills food court entrance serviced by BCT buses, a valet stand serving the Oasis wing extending from Sawgrass Mills to the north, and a “walkable street” environment in the Colonnade wing extending from Sawgrass Mills to the south.

Photo group at top right: Colonnade wing main entrance and Colonnade storefronts with adjacent parking structure.



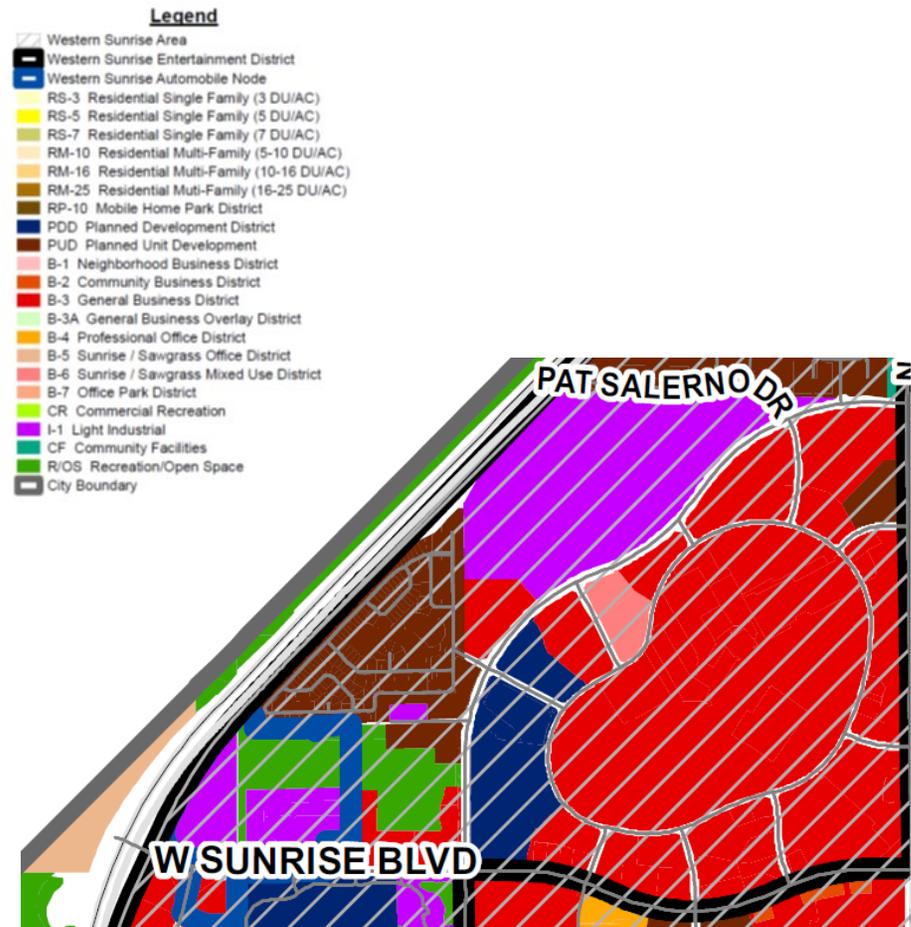
ZONING AND DEVELOPMENT STANDARDS

The current Future Land Use Plan for the City, which serves as the legal basis for land use rights, designates the Sawgrass Mills Mall as Commercial with a dwelling unit density of 2.94 per acre, the BB&T Center as Industrial, Metropica as Transit Oriented Development (TOD), Westerra as Local Activity Center (LAC), with the residential developments varying from three (3) to ten dwelling units to the acre. Both the LAC and TOD designations allow for mixed-use and higher density residential development.

Current zoning in the Mobility Hub study area is depicted in Figure C-14 and permits a wide array of uses within each zoning district. The City has created special districts that are overlaid over the traditional zoning districts which further restrict the uses that are allowed. These special districts are designed to promote and regulate the types of uses and development that the City desires to occur in these areas. Over the Mobility Hub study area is first the Western Sunrise Area overlay district which does not permit heavier commercial uses. Then the Western Sunrise Entertainment District covers the Mobility Hub study area, and this allows Nightclubs when the rest of the Western Sunrise Area overlay district does not. Additionally, the City has a Planned Development District and Planned Unit Development District which are zoning tools that are applied to larger tracts of land that allow for the clustering of development usually with designs that have public and common open spaces which are in common ownership.

FIGURE C-14: EXISTING MOBILITY HUB STUDY AREA ZONING

Source: City of Sunrise, Community Development Department (August 2019)



STAKEHOLDER OUTREACH

The Broward MPO and consulting team met with the key City of Sunrise personnel on March 20th, 2019 and again on September 16th, 2019, to discuss the project and solicit input regarding local needs, concerns, and priorities towards multimodal mobility. Meetings were also held with Broward County Transit representatives on March 30th, 2019, Broward County Planning and Engineering representatives on May 7th, 2019, FDOT District 4 Planning and Operations representatives on May 21st, 2019, the director of Broward County Real Estate on June 5th, 2019, and Sawgrass Mills Mall management on November 12th, 2019.

In addition, the Broward MPO and consulting team deployed personnel in the Sawgrass Mills Mall area to conduct in-person surveys with current public transit users.

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

CITY AND AGENCY MEETINGS

PUBLIC TRANSPORTATION

- City operates community shuttles, separate from Broward County Transit (BCT), that do not currently receive BCT funding. The local funding allows more flexibility on how the City uses the shuttles.
- The City has a vision to use an alternative fuel or autonomous vehicle as a local shuttle around the Sawgrass Mills Mall area to satisfy the requirements of the Metropica DRI.
- The Sawgrass route (BCT 72) has one (1) of the highest ridership levels in the County.
- The City is exploring the use of Freebee (or similar microtransit) to provide on-demand service in the area. If the City decides to take this approach looking at potentially leveraging FDOT funds, it would like to have the service in place by the fall of 2020. The City is considering one (1) electric golf cart and three (3) 8-10 passenger electric vans.

- The City Commission would make the decision whether or not this on-demand service meets the requirements of the Metropica DRI; if so, the City might require Metropica to pay for this service.
- The City would explore this option for two (2) to three (3) years or until funds run out, then the decision might be to have developers fund the service or seek alternative solutions.
- Microtransit providers collect data which could provide valuable insight to identify transit needs in the area.
- The City staff sees the need for another transit solution besides microtransit with all of the development that may occur. It is unclear of what that solution needs to be at this time.
- The City would focus on branding and marketing the microtransit service in the first two (2) years.
- The City Commission recently approved redesigned bus shelters, has approved funding for three (3) new bus shelters and applied for surtax funding for additional shelters. There are 11 stops, nine (9) of which do not have pullouts.

ROADWAY, BICYCLE AND PEDESTRIAN NETWORK

- The City is performing a study of potential improvements, mostly along the Sawgrass Ring Road (City Road). The study will identify improvements related to bicycle and pedestrian facilities such as bike lanes, sidewalks, landscaping, turning lanes, traffic calming and narrowing roadway. The study should be complete before the end of 2020.
- The City would like to construct safe mid-block crossings on NW 136th Avenue, especially from the Portico Community which is part of the Metropica development. Many residents are using their cars to access the Sawgrass Mills Mall even though it is a ten-minute walk away due to the lack of a signalized pedestrian crossing. While the roadway is under the City's jurisdiction, Broward County Traffic Engineering Division (BCTED) is responsible for all of the City's traffic engineering responsibilities through an inter-local agreement. BCTED has indicated to the City that they oppose such a crossing at this time.
- The City will need to perform a warrant analysis to justify the installation of a light on NW 136th Avenue, just north of Sunrise Boulevard, however

development and associated traffic volume is not enough to justify it yet. Metropica is willing to pay for the installation of a light at this time. City staff feels that signal retiming would help move traffic more efficiently.

- Crossings and covered walkway to a Transit Hub are City “Wishlist” items.
- A full interchange at Pat Salerno Drive has been identified by the City, County, and Sawgrass Mills Mall as a critical link. At this time, County and City are in negotiations with Turnpike Authority, to gain support for this link.
- City would like to advance the construction of improvements from the Bike/Ped Master Plan for the area including, intersection improvements and shared use pathways on NW 136th Avenue, Sunrise Boulevard and Flamingo Road. The City submitted these projects for Surtax funding. The City is also looking at other funding sources to construct these improvements.

DEVELOPMENT PATTERN

- Development buildouts will proceed in an organic manner and are hard to predict.
- Sawgrass Mills Mall has remaining entitlements for a hotel, office uses and additional commercial development.
- Westerra is in the process of being sold. Development rights are approved, but it needs a site plan, which the new developer is working on.
- Metropica is close to the first CO. Developer will have 2 years to build “Transit Hub” once the CO has been issued; the facility must provide room for five (5) articulated buses to park at once off-street.
- The parking lots of the BB&T property are a potential location for mixed-use redevelopment supported by the ULI Study that was completed in 2016. The County’s contract with the National Hockey League Florida Panthers expires in 2027/2028 with the team having an early out option in 2023. There is a two-year advance notification requirement if the County will consider an early out. Redevelopment can occur with or without the BB&T Center remaining.
- Signature pedestrian recreational bridge over the Sawgrass Expressway connecting to levee greenway in discussions. A decision may be made by the fall of 2020.

TRANSIT SURVEYS

The Broward MPO and consulting team conducted surveys to gather data regarding the community’s mobility experience in the Mobility Hub study area. The purpose of the survey was to:

- Assess mobility needs as part of the planning phase;
- Identify BCT service usage and user perception in the Mobility Hub study area; and
- Provide context for the creation of a planning framework for the Mobility Hub Study.

Methodology

The consulting team conducted in-person surveys targeting respondents using Broward County Transit bus services (BCT Routes 22, 122, 23, 36 and 72) in the study area (Sunrise / Sawgrass Mall bus stops) during peak ridership periods. Survey questions and methodology were approved by the Broward Metropolitan Planning Organization.

In order to provide a broad collection of opinions to ensure a confidence level of 95% and a margin of error of 5%, the goal was to collect data from 200 riders in the study area. The in-person surveys were conducted in English, Spanish and Creole. A “typical” day was selected to conduct the survey in order to obtain results that are representative of ridership that occurs most often. Therefore, the survey was conducted on a regular weekday when all bus schedules were in service, schools were in session and there were no special events in the area including the BB&T Center.

Sawgrass Mall hours of operation are from 10:00 a.m. to 9:30 p.m. Monday through Saturday and 11:00 a.m. to 8:00 p.m. on Sundays. Studies show that peak BCT ridership countywide is on weekdays from 7 a.m. to 9 a.m. and 4 p.m. to 6 p.m. (Note: Weekend routes are limited to BCT Routes 36 and 72). Informal observations and interviews with drivers at the location indicated weekday peak ridership periods to be between 6 a.m. to 9 a.m. and 3 p.m. to 6 p.m. Events at the BB&T and/or mall may influence ridership during other periods; however, there is no data from BCT available.

Survey questions focused on the following:

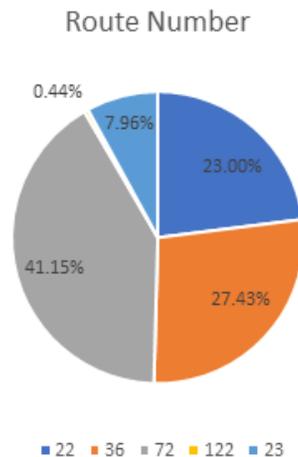
- Bus route used
- Purpose of visitation
- Frequency of use
- Mode of secondary transportation in the area Transportation Network Companies (TNCs), walking, cycling, or other mode used to reach final destination, when applicable
- Pros and cons of the current transit service

Overall Summary

In-person surveys (227) were completed on Monday, October 14th, 2019, from 6:00 a.m. to 6:00 p.m. Peak ridership periods were from 6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m. and 93.81% of those surveyed arrived at the Sawgrass Mall bus location. Team members sought respondents at other locations with minimal results.

Of the total respondents:

- 41.15% used Bus Route 72
- 27.43% used Bus Route 36
- 23.00% used Bus Route 22
- 7.96% used Bus Route 23
- 0.44% used Bus Route 122



Of respondents who use the BCT bus service to work, 90.26% use it very frequently (more than five (5) times a month), 3.90% use it four (4) to five (5) times a month and 1.95% use it once in a month. The majority of the bus riders arrive via bus to the mall locations to work (49.16%) and shop (19.91%), and 26.12% use the mall location to transfer to another bus (Routes 36, 22 or 23) to arrive at their final destination of work/home. Final work locations varied from the

Sunrise/Sawgrass area (Route 36) to Plantation/Davie (Route 22) and Weston/Pembroke Pines (Route 23). (Note: Bus Route 22, used by 23% of total respondents, stops at the West Regional Terminal where it connects to Routes 2, 30, 81 and 88).

Of the respondents, 19.91% use the BCT service to shop at the mall. However, of the 26.99% that responded that the initial bus stop was not their destination, only 3.28% of those said they were shopping outside the mall and of those, half were walking there.

The majority of bus riders preferred not to comment about their likes (47.35%) and dislikes (53.54%); however, of those that did respond, 33.19% expressed general satisfaction (great/good/OK) when asked what they liked and 22.12% expressed no dislikes (nothing) with service at the location when asked what they disliked. With more specificity, some respondents noted convenience and ease of use as likes of the service. Dislikes of the service location varied with some citing bus punctuality and schedules as problems. (Note: Some routes only run during limited periods of the day and some do not run on the weekend.)

Those alighting at SB 136 Ave/Orange Grove (Route 72) crossed the street at the pedestrian crossing to the mall for work. Those alighting at Sunrise Blvd/Purple Parrot westbound (Route 36), climbed a landscape wall to walk through hedge and across a parking lot to work at mall or to shop at Walmart. The bus location at NB 136th Avenue/Sunrise Boulevard. is partially obstructed by the Metropica construction fence. Those alighting at that construction location walk southbound or westbound from the bus stop to transfer to a southbound bus (Routes 22 or 23).

Sawgrass Mills Mall is an important BCT stop with five (5) routes being the beginning and endpoint; increased headways and span of service are being planned. Overall, results indicate that traveling to and from work and home is the primary reason riders use the bus transit service at the Sawgrass Mills Mall and they use it frequently. There are more than a quarter of the riders transferring and nearly as many shopping. Route 72, which travels from east (A1A) to west (Sawgrass Mall) via Oakland Park Boulevard, was used by most at this location. Generally, riders are satisfied with the service.