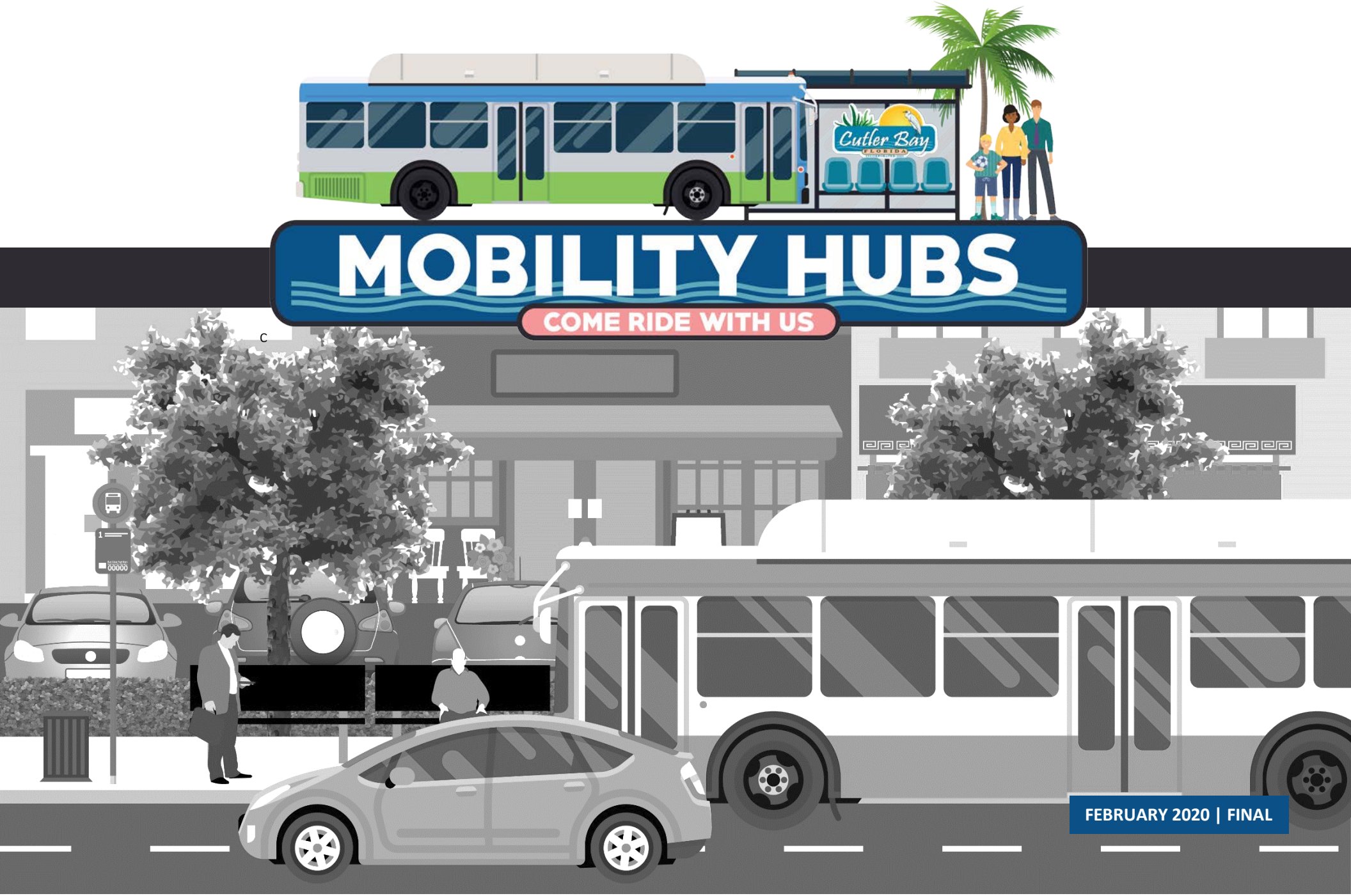
TOWN OF CUTLER BAY

MOBILITY HUBS PLAN



FEBRUARY 2020 | FINAL

MAYOR & COMMISSIONERS

Mayor Tim Meerbott
Vice Mayor Sue Ellen Loyzelle
Council Member Robert "B.J" Duncan
Council Member Michael P. Callahan
Council Member Roger Coriat

TOWN OF CUTLER BAY MANAGEMENT TEAM

Rafael G. Casals, Town Manager
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MARLIN

TPO
Miami-Dade Transportation
Planning Organization

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EXECUTIVE SUMMARY

MARLIN Engineering was contracted by the Town of Cutler Bay to provide the community with a comprehensive system of Transit Mobility Hubs connecting to the South Dade Transitway and Town of Cutler Bay. This Plan seeks to improve connectivity, mobility and safety for pedestrians, bicyclists, and transit users through the identification of Neighborhood, Community, and Regional Mobility Hubs throughout the Town's roadway network. A total of 12 Mobility Hubs were identified throughout the Town of Cutler Bay: Six Neighborhood Hubs, Five Community Hubs, and One Regional Hub. The Plan includes the location of Mobility Hubs, in addition to identified amenities, improvements, and recommendations in order to create vibrant public spaces to garner the support needed for mode shift in the Town of Cutler Bay. Through feedback from the public involvement process, Stakeholder Advisory Committee and Town staff, templates were developed for each level of Mobility Hub, and act as a visual aid to the development of the Mobility Hub network for the Town. Additionally, three conceptual designs for infrastructure improvements were developed for each type of Mobility Hub. Furthermore, the MARLIN team analyzed the existing Town Circulator (Route 200) and provided short-term and long-term recommendations to improve mobility and service throughout the Town of Cutler Bay. Finally, a cost estimate for improvements and amenities has been provided, with a list of prioritized Mobility Hub recommendations.

As part of the public involvement process, a Stakeholder Advisory Committee was formed for the purpose of reviewing information and providing technical assistance for the study. A total of three (3) Stakeholder Advisory Committee meetings were held throughout the planning process with various stakeholders including Town Staff, Miami-Dade Transportation Planning Organization (TPO), Florida Department of Transportation, Miami-Dade Bicycle and Pedestrian Advisory Committee, Southland Mall, and the Cutler Bay Business Association.

The ***Town of Cutler Bay Mobility Hubs Plan*** builds upon the recommendations provided from the Town's *Transportation Master Plan*, *Bicycle & Pedestrian Master Plan*, *Complete Streets Corridor Analysis*, *Townwide Traffic Calming Master Plan*, and adopted Land Use Regulations. The TPO's *First Mile/Last Mile Options for High-Trip Generator Employers Study* and *Protected Bike Lanes Demonstration Plan* was also reviewed. The Mobility Hubs Plan supports many of the recommendations previously provided and builds upon them to continue the momentum to create safer, more walkable streets for all types of users within the Town of Cutler Bay.

This Plan was funded through the Miami-Dade TPO SMART Moves Program which awarded the Town with a grant of $50,000, and the Town of Cutler Bay contributing $19,327. The SMART Moves Program supports the *Strategic Miami Area Rapid Transit (SMART) Plan* with ideas which enhance transit improvements, bicycle, pedestrian, on-demand connectivity, self-driving vehicles and/or other projects which improve safety, mobility and access within the community.

WHAT IS A MOBILITY HUB?

Mobility Hubs have been defined as "major transit station areas with significant levels of transit services, high development potential, and a critical function in the regional transportation system as major trip generators. They are places of connectivity where different modes of transportation – from walking to high-speed rail – come together seamlessly and where there is an intensive concentration of employment, living, shopping, and/or recreation. In addition to serving as places to arrive, depart, and wait for transit, successful mobility hubs have the potential to become vibrant places of activity and destinations in themselves." (Salsberg, 2010)

In essence, Mobility hubs are people places which integrate multi-modal travel options, technology, and support services to facilitate *efficient* transportation. Mobility hubs support and are supported by Transit Oriented Development (TOD). TOD's are areas which include a mixture of commercial, residential, office, and entertainment uses centered around or located near a transit station.[1] TOD's are dense, walkable, mixed-use areas near transit, which attract people and add to vibrant, connected communities.

Figure 1: Mobility Hub Concept Courtesy of SANDAG

Mobility hubs have the potential to create a synergy with TOD's to create places for people and positively transform the community. Successful integration of this synergy can occur best with the support of stakeholders, elected officials, residents, the business community, and governing organizations. Support for this synergy must include the implementation of TOD supportive zoning and land use regulations, government policies, and public/private investments. This in turn will spur the necessary development and support needed to create vibrant, attractive places where people want to eat, work, and play.

Mobility hubs are more than transit stops; they integrate amenities for all types and modes of transportation. This includes pedestrian, bicycle, transit, vehicle, information, support services, technology, and active uses.

[1] Federal Transit Administration

MOBILITY HUB RECOMMENDATIONS

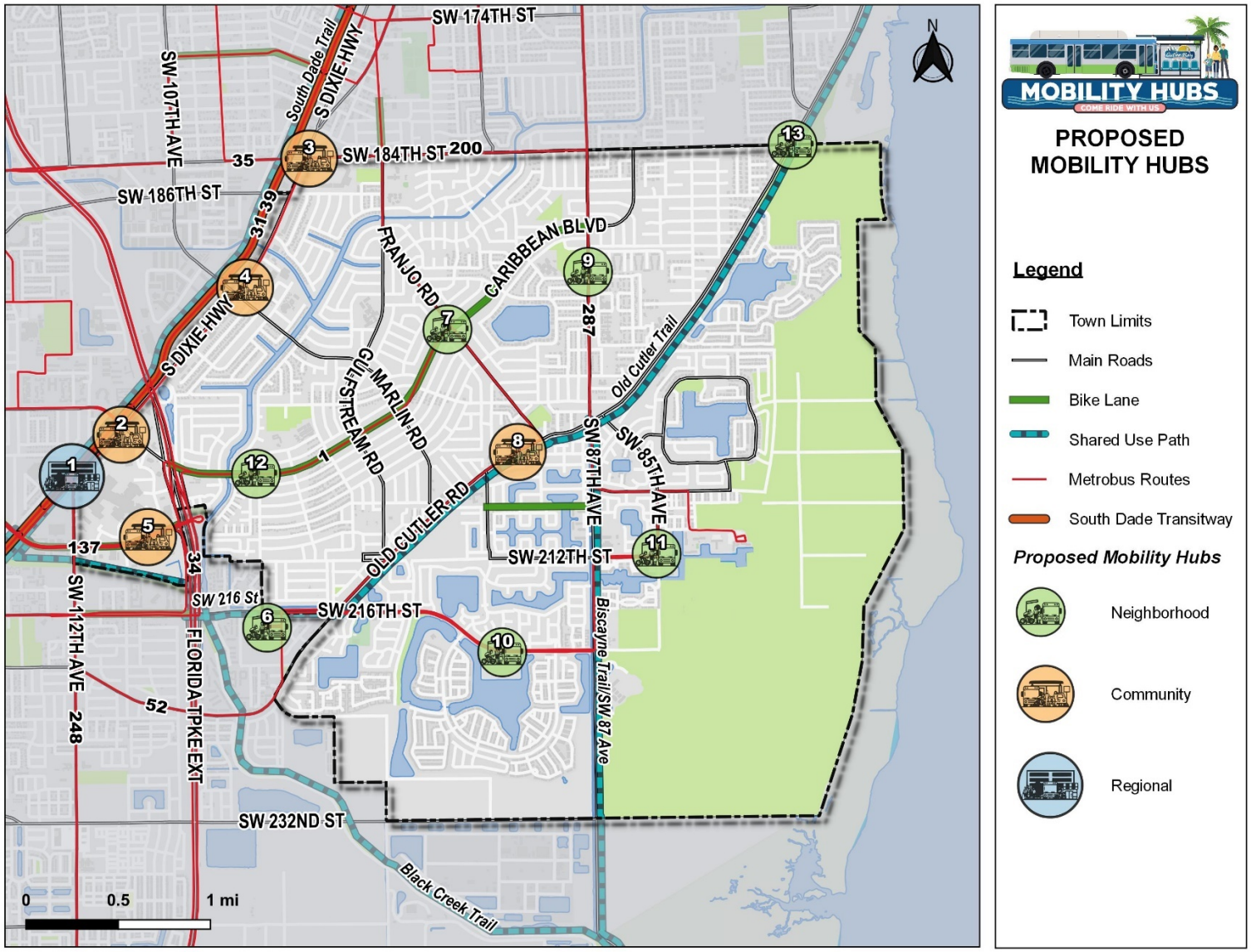


Figure 2: Proposed Mobility Hubs Map

Figure 2 on the previous page represents a map of proposed Mobility Hubs for the Town of Cutler Bay. Table 1 illustrates the prioritization of Mobility Hubs as was determined through identification of criteria in which a measurement of that criteria was used for a number assignment. Criteria used for prioritization included:

- Number of existing transit routes;
- Future transit potential, or planned transit routes;
- Existing ridership within a ¼-mile buffer, utilizing average monthly ridership data;
- Accessibility by walk, or completeness of the existing sidewalk network within a ¼-mile buffer;
- Accessibility by bicycle, or the completeness of bicycle facilities within a ¼-mile buffer;
- Accessibility by vehicle, or the number of parking spaces available for Park and Ride within a ¼-mile buffer;
- Existing population within a ½-mile buffer;
- Existing jobs within a ½-mile buffer;
- Redevelopment potential, review of vacant parcels and existing development within a ½-mile buffer;
- Transit-Oriented Development potential, oreview of existing land use and zoning within a ½-mile buffer.

Table 1: Mobility Hubs Ranked by Score

No.	Mobility Hub	Type	Score
1	Cutler Bay Regional	Regional	33
2	Caribbean Boulevard	Community	24
3	Eureka Drive West	Community	22
4	Marlin	Community	17
5	South Dade Government Center	Community	15
6	Community Health	Neighborhood	11
7	Whispering Pines	Neighborhood	10
8	Old Cutler Town Center	Community	10
9	Pine Wood	Neighborhood	9
10	The Isles of Bayshore	Neighborhood	8
11	Lakes by the Bay	Neighborhood	6
12	Cutler Ridge	Neighborhood	5
13	Eureka Drive East	Neighborhood	5

Mobility Hub Types & Locations

Regional Hub

Figure 3: Regional Hub Station Template

A Regional Hub is recommended at the existing Miami-Dade County Park & Ride facility located at SW 112th Avenue and the Transitway, near Target.

- Existing Routes 1, 31, 34, 35, 38, 39, 52 and 200.
- Existing Transitway Station Amenities: Shade, Seating, Trash Receptacle, Park & Ride and Signage.
- Existing Nearby Facilities: South Dade Trail, Retail/Restaurant, Industrial, Residential, and Southland Mall.

Recommendations

Amenities

- Carshare
- EV Charge Station
- Bikeshare Station
- Bicycle Repair Station
- Bicycle Storage Locker
- Waiting Area for Ride-Hailing Transportation Network Companies (TNCs)
- Real-Time Information
- WIFI
- Lending Library
- Monument Sign
- USB Charge Port
- Security Camera
- Emergency Callbox
- Public Art
- Information Kiosk
- Package Pickup Kiosk
- Retail

Infrastructure

- Fill Sidewalk Gaps within ¼-mile
- Linear Park along Transitway Island
- Pedestrian Lighting
- Pedestrian Promenade on the east side of US 1 & SW 112th Avenue
- Landscape Enhancements
- Parking Structure with Real-Time Parking Information

Community Hubs

Figure 4: Community Hub Bus Stop Template

Community Hubs are recommended at the following locations:

1. **Old Cutler Town Center: Old Cutler Road at Publix Shopping Plaza**
   - Existing Routes: 200 (Town Circulator)
   - Existing Amenities: Shelter, Seating, Signage, Trash Receptacle, Bicycle Rack and Lighting.
   - Existing Nearby Facilities: Old Cutler Trail, Retail/Restaurant, Residential, Hospital, Places of Worship.

2. **Marlin: Marlin Road & U.S.1 / S. Dixie Hwy**
   - Existing Routes: 31, 35, 38, 200 (Town Circulator)
   - Existing Amenities: Seating, Trash Receptacle, and Signage.
   - Existing Transitway Amenities: Seating, Shade, Trash Receptacle, Lighting and Signage.
   - Existing Nearby Facilities: Retail / Restaurants, Bank, Residential, Industrial, Schools, Career Center, Grocery and Place of Worship.

3. **Eureka Drive West: SW 184 St (Eureka Dr), East of U.S. 1 / S. Dixie Hwy.**
   - Existing Routes: 1, 31, 35, 38, 52, 200 (Town Circulator)
   - Existing Amenities: Seating, Signage, and Trash Receptacle.
   - Existing Transitway Amenities: Shelter, Seating, Trash Receptacle, Signage and Lighting.
   - Existing Nearby Facilities: South Dade Trail, Retail/Restaurants, Bank, Fitness Center, Residential, Industrial, Park, Grocery, Places of Worship, Schools.

4. **Caribbean Boulevard: Caribbean Blvd. (SW 200 Ave) & U.S. 1 (S. Dixie Hwy)**
   - Existing Routes: 1, 31, 35, 38, 39, 52, 200 (Town Circulator).
   - Existing Amenities: Seating, Trash Receptacle and Signage.
   - Existing Transitway Amenities: Seating, Shade, Trash Receptacle, Lighting and Signage.
   - Existing Nearby Facilities: South Dade Trail, Retail / Restaurant, Town Hall, Southland Mall, Residential, Hotel, and Office Park.

5. **South Dade Government Center: SW 211 St. at Southland Mall / South Dade Government Center**
   - Existing Routes: 1, 31, 35, 39, 52, 137, 200 (Town Circulator), and 248.
   - Existing Amenities: Seating, Shelter, Signage, Trash Receptacle, Bus Bay, Newspaper Rack, Lighting, and System Map.
   - Existing Nearby Facilities: Southland Mall, South Dade Government Center, Library, Retail / Restaurants, Residential, South Dade Cultural Center, Police, Fire, Town Hall, Movie Theater, Humane Society, Hotel, Offices and Bank.

Recommendations

Amenities

- Shelter
- Lighting
- Bikeshare Station
- Bicycle Rack
- Trash/Recycle Receptacle
- USB Charging Station
- EV Charge Station
- Carshare
- Security Camera
- Emergency Callbox
- Lending Library
- Public Art
- Public Space
- Real-Time Signage

Optional Amenities

- Kiss & Ride
- Package Pickup Kiosk
- Information Kiosk
- Air Misting System
- WIFI
- Park & Ride
- Waiting Area for TNCs
- Bicycle Repair Station
- Bicycle Storage Locker

Infrastructure

- Fill Sidewalk Gaps within ¼-Mile
- Pedestrian Lighting
- Landscape Enhancements
- ADA Improvements
- Midblock Crossing with Flashing Beacon & Signage (where feasible)
- High Emphasis Crosswalks
- Bicycle Lanes / Shared Use Path
- Pedestrian Crossing Signs
- Increase Sidewalks to 8 – 10’
- Street Furniture
- Bicycle Signals (where feasible)
- Bike Box (where feasible)

Neighborhood Hubs

Figure 5: Neighborhood Hub Bus Stop Template

Neighborhood Hubs are recommended at the following locations:

1. **Lakes by the Bay: SW 85 Ave. & SW 212 St.**
   - Existing Routes: 200 (Town Circulator) and 287
   - Existing Amenities: Shelter, Seating, Trash Receptacle, Lighting, Bike Rack and Signage.
   - Existing Nearby Facilities: Residential, Schools and Park.

2. **Pine Wood: SW 87 Ave. & SW 190 St.**
   - Existing Routes: 200 (Town Circulator) and 287
   - Existing Amenities: Shelter, Seating, Trash Receptacle, Lighting, Signage & System Map.
   - Existing Facilities Nearby: Residential, Schools, Place of Worship and Park.

3. **Whispering Pines: Caribbean Blvd. & Franjo Rd.**
   - Existing Routes: 1 and 200 (Town Circulator)
   - Existing Amenities: Seating, Bicycle Rack, Bus Bay and Signage.
   - Existing Nearby Facilities: Residential and Schools.

4. **Cutler Ridge: Caribbean Blvd. & Anchor Rd.**
   - Existing Routes: 1 and 200 (Town Circulator)
   - Existing Amenities: Seating, Shelter, Bicycle Rack, Trash Receptacle, Lighting and Signage.
   - Existing Nearby Facilities: Places of Worship, Schools, Residential and Park.

5. **The Isles of Bayshore: SW 216 St. & SW 89 Pl**
   - Existing Routes: 200 (Town Circulator) & 287
   - Existing Amenities: None
   - Existing Nearby Facilities: Biscayne Trail, Park and Residential.

6. **Eureka Drive East: Old Cutler Rd. & SW 184 St.**
   - Existing Routes: None
   - Existing Amenities: None
   - Existing Nearby Facilities: Old Cutler Trail, Residential, Places of Worship, Palmetto Bay Village Center, and Schools.

7. Community Health: SW 216 St. & SW 102 Ave.

- Existing Routes: 52 and 287
- Existing Amenities: Seating, Trash Receptacle, Lighting, Bus Bay & Signage.
- Existing Nearby Facilities: Hospital, Old Cutler Trail, Residential, Places of Worship, and Parks.

Recommendations

Amenities

Shelter	Public Art	Trash/Recycle Receptacle
Seating	Pedestrian Plaza / Pocket Park	Bicycle Rack
Real-Time Signage	Lending Library	Emergency Callbox
Bikeshare	USB Charge Station	

Optional Amenities

Package Pickup Kiosk	Park & Ride	Air Misting System
Carshare	Security Camera	Motion Sensing Lighting
Pop-up Retail		

Infrastructure

4-5’ Bicycle Lanes	Midblock Crossings with Flashing Beacon, Inground Lighting & Signage	Pedestrian Lighting
10’ Shared Use Path	Curb Extensions	Bike Box
Landscape Enhancements	Travel Lane Reductions	Bicycle Signal
Enhanced Pedestrian Crossings	Fill Sidewalk Gaps within ¼-mile	Pedestrian Signage at Crossings

Town Circulator Route #200 Recommendations

Recommendations were developed from analysis, feedback from the Mobility Hubs Survey, Stakeholder Advisory Committee, and public workshops:

Short-Term Recommendations

1. Addition of counter-clockwise service to existing service to reduce wait times.
2. Extending hours of operation to include peak travel times.

Long-Term Recommendations

1. Bifurcate existing route into two routes and extend service to other areas of the community.
    a. North Route would cover areas north of Old Cutler Road and west of SW 87 Ave., including the U.S. 1 / S. Dixie Hwy. commercial corridor.
    b. South Route would cover areas south of Old Cutler Road and east of SW 87 Ave., including the Town Center District.
2. Commercial Circulator Route would cover the U.S. 1 / S. Dixie Hwy. business corridor.

Other Recommendations

Recommendations were developed as a result of existing recommendations from reviewed plans, project analysis, best practices, the Mobility Hubs Survey, Stakeholder Advisory Committee, and public workshops:

- Support of previous bicycle, pedestrian and transit recommendations from the following Town adopted Master Plans:
  - Bicycle & Pedestrian Master Plan
  - Complete Streets Corridor Analysis
  - Transportation Master Plan
  - Townwide Traffic Calming Master Plan
  - Street Tree Master Plan
  - Evaluation of Multimodal Mobility Options in the South Miami-Dade Area
  - Countywide Bus and Auto/Rideshare Access to Transit Facility Assessment Study
  - Miami-Dade County Vision Zero Plan
  - Miami-Dade TPO First Mile-Last Mile: Options with High Trip Generator Employers
  - The Strategic Miami Area Rapid Transit Plan (SMART) – South Dade Transitway Corridor
  - Miami-Dade TPO Protected Bike Lanes Demonstration Plan
- Support of Transit Corridor & Town Center Zoning Districts & Increased Density along U.S. 1 / S. Dixie Hwy.
- Incorporate Mobility Hub elements and amenities in future development projects.
- Allocate space for shared services such as on demand shuttles and rideshare companies, and consider the flexible use of that space where necessary.
- Partner with shared mobility service providers to integrate shared mobility services into a platform for trip planning and payment.
- Amend the development review process to encourage developers to incorporate Mobility Hub features into their projects.
- Adopt off-street parking requirements to better align with Mobility Hub investments.
- Implement flexible curb space to meet the needs of shared mobility services and the changing demands of users.
- Encourage businesses and/or developers to partner with government agencies to test technologies and service concepts in real world environments.
- Adopt a Branding & Marketing Plan and include a Wayfinding Signage Program.
- Explore the use of Shared Mobility Options.
- Explore the adoption of a Public Art Program to fund and implement Public Art throughout the Town.
- Create Transit Partnerships with neighboring communities.
- Implement Green Infrastructure Techniques for landscape enhancements.
- Create a Pedestrian Promenade along the east side of U.S. 1 / S. Dixie Hwy.
- Adopt of Curbside Management Plan.
- Adopt Transportation Demand Management policies.

HOW MOBILITY HUBS FIT INTO OUR TRANSPORTATION LANDSCAPE

Technology has provided people with information, data, and a host of new inventions that allow the user to directly interface with data, traffic, and commerce. These technological changes connect the Internet of Things (IoT)[2] in ways that can redefine our cities, infrastructure, organizations, and behavior. Technological innovations are occurring at a pace in which governments are faced with the challenge to keep to up and provide the necessary infrastructure and investments to ensure equitable growth. The Technology Industry and companies such as Uber and Lyft, are forcing states to rethink transportation. Technology, land use, population growth, climate change, and consumer behavior are driving changes to our transportation landscape by introducing new options in mobility. These industries are leveraging technology to provide services directly to the consumer. Cities, having experience in regulating traditional businesses, have policies, rules, and regulations in place to regulate land use and how a community develops. New technologies are forcing cities to keep pace with the quickly changing landscape. Technological innovations are driving unforeseen market forces that are unpredictable, unknown, and uncertain. Regulating these new products and services should be done in a way that allows innovation, equity, and sustainability.

New mobility is a term for transportation services that are enabled, defined, or redefined by technology. This includes app-based, real-time, point-to-point, on-demand, multimodal, shared and electric services.

Land use in South Florida has been characterized by suburban auto-centric development that has encouraged sprawl and car dependency through the separation of uses. This method of zoning has forced people into their cars for trips that could be made by other modes of transportation, such as walking and/or biking. The average American spends nine days commuting in their car each year, and that number increases for those who live in metropolitan areas.[3] The separation of land uses encourages sprawl and an auto-centric design pattern that many Americans are now abandoning, preferring more compact, urban landscapes that promote mixed use development and transportation options. Last year, a survey of over 2,800 Americans across 28 major cities, including Miami, found that 23% of workers quit their job because of a bad commute – over a third of respondents were millennials.[4] Studies have indicated that millennials - the largest generation of Americans born between 1983 and 2000 – are behaving differently than previous generations. Millennials are less car dependent, more likely to use transit, and more likely to be multimodal. They are also less interested in owning or relying on cars, and prefer city living and walkable communities. Seniors are also preferring to age in place, moving to communities where they are less dependent on their vehicles. Cities across the nation have rezoned and revitalized their urban cores by introducing mixed-use, compact development that promotes and encourages livability.

In 2014, Florida overtook New York as the third most populous state in the nation with over 21 million residents. Miami-Dade County is the most populous county in Florida, with approximately 2.5 million residents in 2010 and projected to grow over 30% by 2040—that's over 3.3 million new residents! This growth will put tremendous pressure on the transportation network and drive up already high commute times. The additional vehicles from this future growth have the potential

[2] The concept of connecting any device with an on and off switch to the Internet (and/or to each other). (Forbes)
[3] U.S. Census Bureau
[4] HR Firm Robert Half

to place pressures on existing infrastructure, reduce air quality, increase pollution, and reduce livability standards. With good planning, communities can improve quality of life for current and future resident through a forward-thinking approach to transportation. This can include a shift in land use, multi-modal infrastructure investment, and alternative transportation modes.

The transportation sector contributes approximately 30% of carbon emissions to the overall carbon being emitted into the atmosphere. Carbon emissions are one of the largest contributors of greenhouse gases and climate change, which contribute to changes in precipitation, temperature, sea level rise, and reduced air quality. As local governments take action to reduce the effects of climate change, curb greenhouse gas emissions, and promote sustainability, more Americans are making eco-conscious decisions to reduce their personal environmental impact. Walking, biking, and using transit are some of the most effective ways an individual can contribute to reducing their carbon footprint and encourage a healthy lifestyle. Cities can support and encourage their resident's transportation mode choice through land use, zoning, policies, and infrastructure investments that encourage multi-modal transportation. For residents, multi-modal investments provide options, encourage healthy lifestyles, and promote economic development.

Technology and the Internet have led to a change in consumer behavior. For example, smartphones have provided people with the power of information, data, and choice in their everyday lives, all at the comfort of their fingertips. E-commerce, one of the largest growing industry sectors today, is changing people's consumption behaviors and travel patterns. Retailers are now providing customers with grocery delivery services, food delivery services, free shipping, and a number of goods and services that save you a trip to the store. These services have forced more cars and trucks onto our roads, further straining the transportation network. As e-commerce continues to grow, technology is being explored to handle the ever-increasing demand for delivery services.

In today's ever-changing transportation landscape, cities and government agencies are struggling to become mobility managers through regulating the different options in mobility. Mobility hubs are a new and innovative concept, which is the center for all types of mobility options. By connecting to the larger transportation network, Mobility Hubs aggregate services, such as package delivery, and aim to become smart centers of mobility for a seamless user experience.

Mobility hubs, integrated with technology, have the potential to provide transportation solutions to land use, population growth, climate change, and e-commerce. Through the strategic placement of these hubs, towns and cities can provide residents and visitors with amenities, services, and the information needed to create appealing choices for the mode shift required to handle the increasing demand on the transportation network.

BACKGROUND

Marlin Engineering (MARLIN) has been contracted by the Town of Cutler Bay to provide professional services to fulfill the needs of the recently awarded Miami-Dade Transportation Planning Organization (TPO) Strategic Miami Area Rapid Transit (SMART) Mobility Grant. This study provides the community with a comprehensive plan identifying a system of transit mobility hubs connecting to the South Dade Transitway and Cutler Bay Town Center. The goal of this study is to improve connectivity, mobility, and safety for pedestrians, bicyclists, and transit users by identifying mobility hub locations. This includes neighborhood, community, and regional-level mobility hubs along the Town's roadway network. Each mobility hub type is accompanied by the appropriate scale of transportation infrastructure and amenities. To facilitate usage of the hubs, recommendations, conceptual designs, and visualizations are used. The study also includes an assessment of the Town's existing circulator and transit system, including recommendations to improve the Town's overall transit performance.

The SMART Plan, adopted in 2016, is a TPO adopted blueprint with the goal of improving transportation through the advancement of rapid transit corridors and transit supportive projects for Miami-Dade County (see Figure 6). The South-Dade Transitway is one of the six major corridors identified for Bus Rapid Transit (BRT) service, and is one of the first corridors to begin implementation with an estimated ground breaking to occur December 2019. The South-Dade Transitway is a 20.1-mile exclusive busway parallel to U.S. 1 / South Dixie Highway, connecting the Dadeland South Metrorail Station in Miami to SW 344th Street / Palm Drive in Florida City, with 29 existing stations. Proposed improvements include 13 new BRT Stations (see Figures 7 & 8) with improvements to two (2) existing terminals. The proposed new BRT Stations will be located at the following:

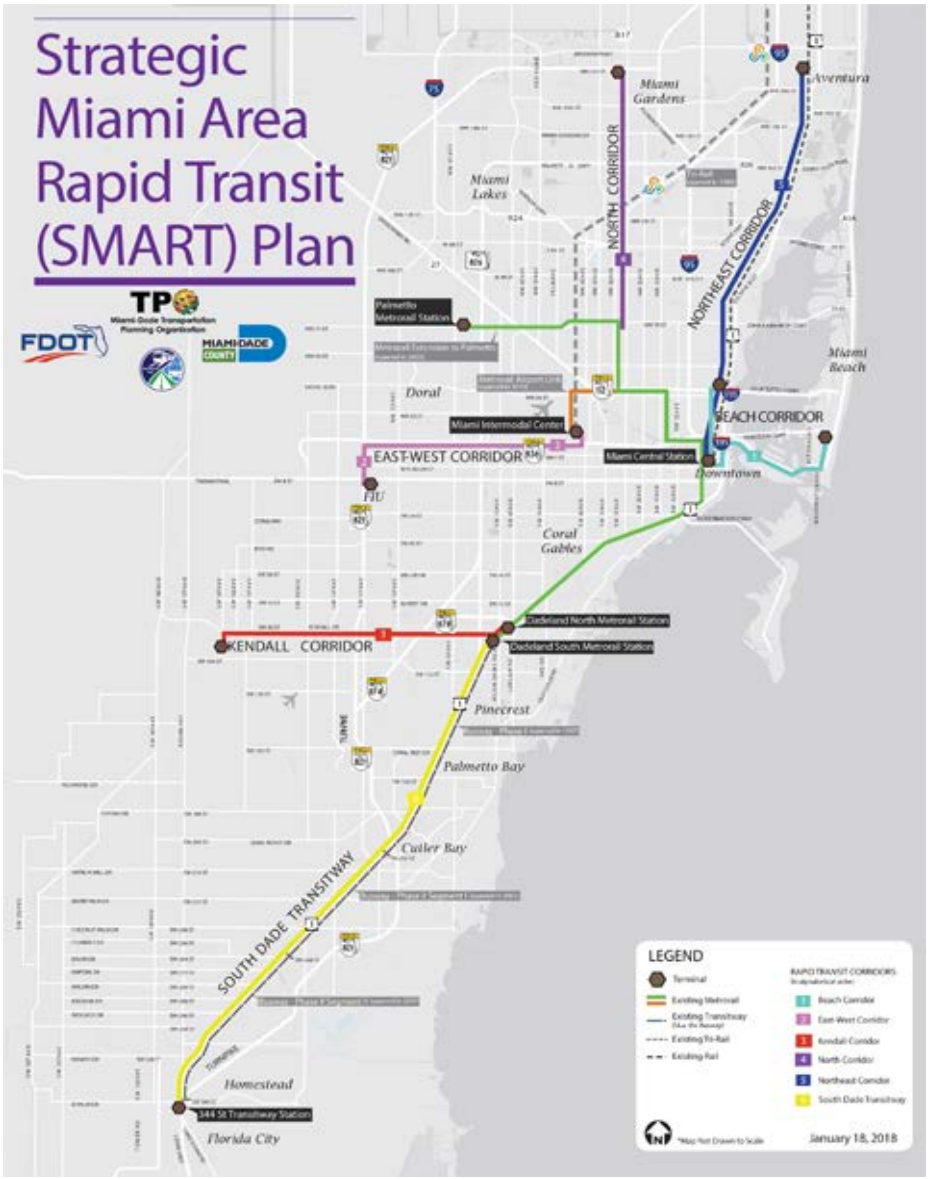


Figure 6: SMART Plan Corridor Map

1. Dadeland South Terminal Station (Metrorail)
2. SW 104th Street (Target)
3. SW 136th Street (Howard Drive / The Falls)
4. SW 152nd Street (SR-992 / Coral Reef Drive)
5. SW 168th Street (Richmond Drive)
6. SW 184th Street (Eureka Drive)
7. Marlin Road
8. SW 200th Street (Caribbean Boulevard)
9. SW 112th Avenue (SR-989 / Allapattah Road / Target)
10. SW 244th Street (Coconut Palm Drive)
11. SW 264th Street (Bauer Drive)
12. SW 296th Street
13. SW 312th Street (Campbell Drive)
14. NE 4th Drive (MDC – Homestead Campus)
15. SW 177th Avenue (SR-997 / Krome Avenue / Homestead Multimodal)
16. SW 344th Street Terminal Station (SR-9336 / Palm Drive / Florida City)

New BRT stations will feature level boarding, transit signal preemption, pedestrian improvements, ticket vending machines, safety improvements and rehabilitation of existing stations. As of August 2019, the SMART Plan has received FTA approval for funding the South Dade Transitway Corridor project.

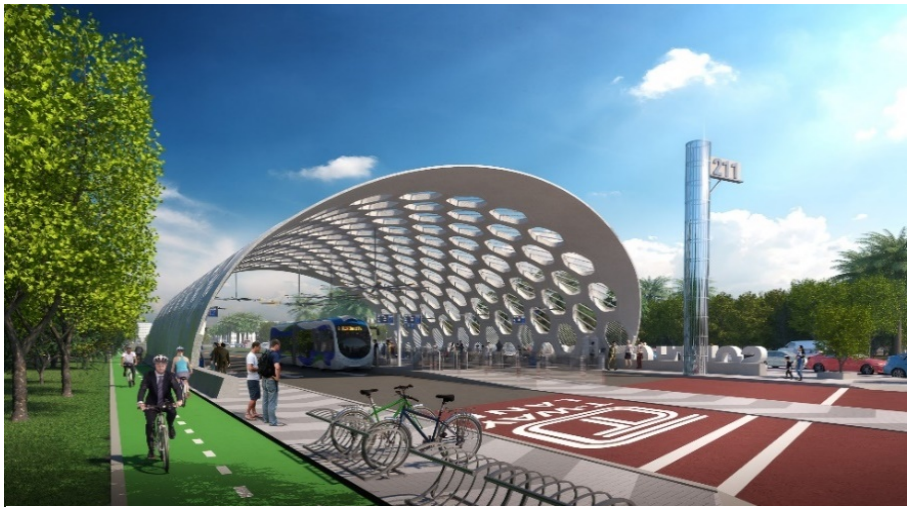


Figure 7: SMART Plan, BRT Station Concept, Miami-Dade TPO

Figure 8: SMART Plan, BRT Station Concept, Miami-Dade TPO

TOWN OF CUTLER BAY

The Town of Cutler Bay, incorporated in 2005, is located in South Miami-Dade County, bordered by Biscayne Bay to the east, the South Dade Transitway and Unincorporated Miami-Dade County to the west, SW 184th Street / Village of Palmetto Bay to the north and SW 232nd Street / Goulds Neighborhood to the south. The South Dade Metropolitan area, which includes Cutler Bay, Palmetto Bay, Florida City, Homestead, Kendall, and parts of unincorporated Miami-Dade County, is one of the fastest growing areas in the county. It includes 50% of the county land area, 25% of the county population and 12% of the county employment. The County expects a growth rate of 30% through 2040 and approximately 50% of the projected population growth is projected to occur within the South Dade Metropolitan Area, which includes Cutler Bay[5].

As of 2018, the Town's population is estimated at 44,867, with approximately 3.5 persons per household. Approximately 90% of Cutler Bay's residents travel an average of 40 minutes to work each way, due to the imbalance of jobs available in the area. This imbalance of jobs within the South Dade Metropolitan Area, in combination with the auto-centric development pattern, has contributed to traffic congestion, carbon emissions and a preference for single-occupant vehicle travel. Currently, approximately 11% of the Town's residents carpool[6]. Many of the residents who live in the Town travel north for work, oftentimes, along the Town's only major arterial roadway, U.S. 1 / South Dixie Highway.

In recent years, the Town' has been subject to a number of studies to improve mobility, reduce traffic congestion and improve quality of life for those living in the region. In 2012, the Town rezoned the Southland Mall / South Dade Government Center and the U.S. 1 / South Dixie Highway commercial corridor, to encourage mixed-use development. The new zoning categories encourage a more compact transit-oriented design, and will prepare the Town for future growth while facilitating a pedestrian, transit-oriented development pattern to reduce auto dependency.

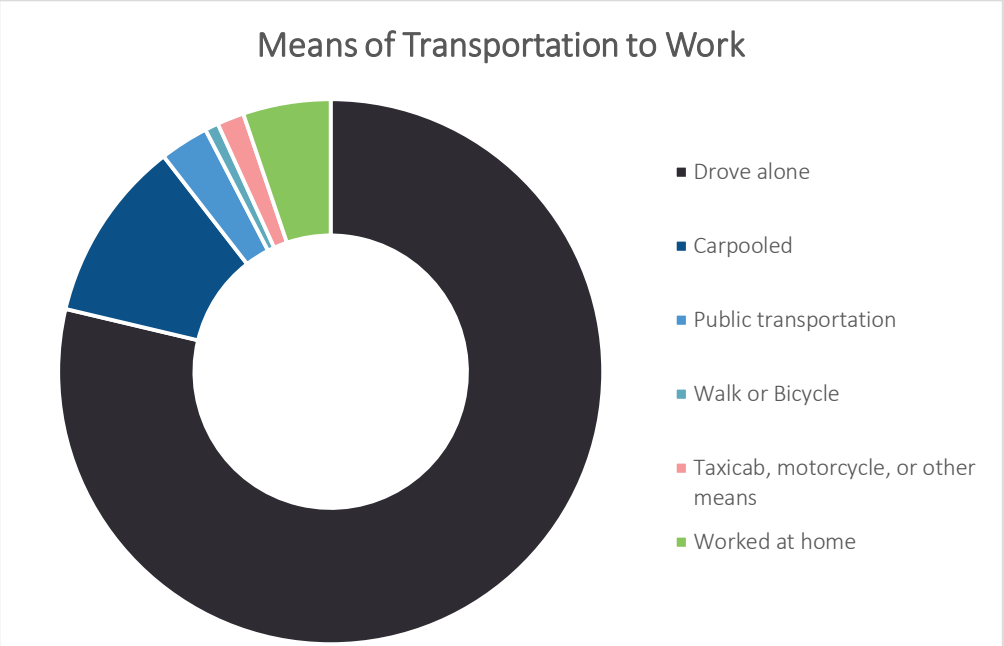


Figure 9: Town of Cutler Bay Means of Transportation to Work

Source: ACS, 2013-2017

[5] 2040 Long Range Transportation Plan

[6] American Community Survey, 2013 - 2017

Employment[7]

The Town of Cutler Bay is characterized as a bedroom community with 95.5% of the Town's population traveling outside for work and only 4.5% of residents living and employed within the Town, see Figure 10.

As of 2012, there were approximately 5,941 jobs within the Town, with a majority of these jobs located along the U.S. 1 / South Dixie Highway corridor, as illustrated by Figure 11. (Darker areas signify heavier concentrations of employment.) The top three industries located within the Town are Retail Trade (31%), Waste Management and Remediation (29%), and Accommodation and Food Services (18%).

Figure 10: Census on the Map (2015)

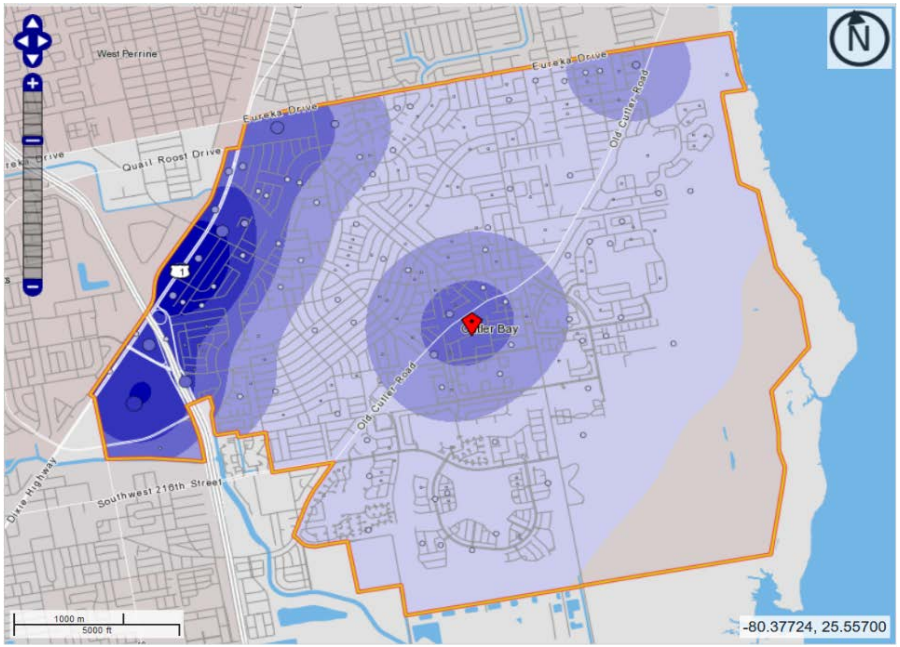
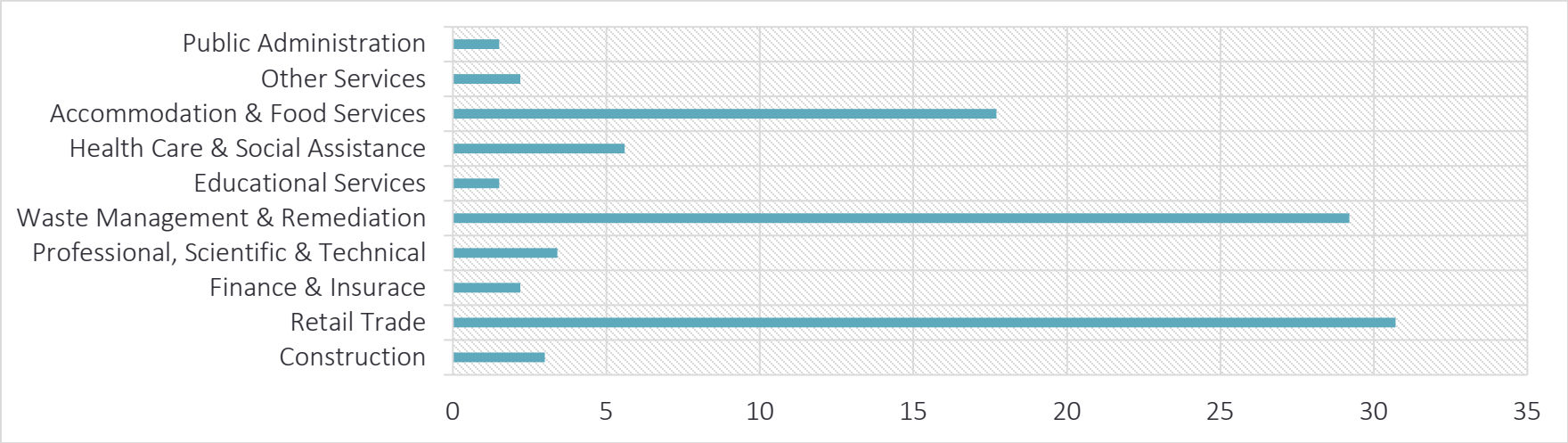


Figure 11: Census on the Map (2015)

[7] Census on the Map (2015)

Table 2 provides additional information on the percentage of industry sector jobs available within the Town. There are an estimated 22,195 workers aged 16 and over within the Town, with approximately 69% of workers in the labor force. The Town's unemployment rate is 3.9%.

Table 2: Town of Cutler Bay Industry Sectors, Census on the Map (2015)



Demographics[8]

The Town has experienced a growth rate of 11.4% since 2010, growing to approximately 44,867 residents in 2018. 58% of the population is of Hispanic or Latino descent, with roughly the same percentage speaking a language other than English at home, 21.3% speak English less than "very well." The median age for the Town is 36.2 years, with approximately 28% of Town residents between the age 25 and 44 years. Average household size within the Town is 3.5 people. 78% of the population is characterized as family households, with 10% of the population having a disability.

The median household income is $70,743, which is higher than county and national averages. The Town's average per capita income is $26,211, which is higher than the county average of $25,481, but lower than the national average of $31,177.

[8] American Community Survey, 2013-2017

Land Use and Zoning

Figures 12 and 13 on the following pages illustrate how the Town of Cutler Bay is dominated by low density residential development (in yellow), with commercial uses located primarily on the western border of the community along U.S. 1 / South Dixie Highway. A Neighborhood Commercial (NC-1) area exists in the center of the Town along Old Cutler Road, which includes the Encompass Health Rehabilitation Hospital of Miami, and would allow mixed-uses, including restaurants, services, offices and residential. The maximum residential densities for NC-1 are 15 units per acre (30 with green building certification), the minimum recommended density for TOD within a suburban Town.[9] Along SW 216th Street lies a vacant 18.6-acre parcel zoned for NC-2, which would allow pedestrian-scaled shops, restaurants, services, and small workplaces, and excludes residential development. A large portion of the Town's eastern border is designated as Conservation. These low-lying areas are environmentally sensitive and act as a buffer between the Town and Biscayne Bay. The majority of multi-family development can be found on the south side of Old Cutler Road. Institutional uses, primarily consisting of education and parks, can be found throughout the community.

In 2012, the Town rezoned the Southland Mall / South Dade Government Center as Town Center (TC). The TC District allows a broad array of uses to encourage the expansion and redevelopment of the Southland Mall and adjoining areas. The focus of this district is to provide a compact pedestrian-oriented environment. The TC District is broken into three subdistricts: Center, Core, and Edge. The center subdistrict is allowed up to 250 units per acre with a maximum building height of 216-feet; the core subdistrict is allowed up to 150 units per acre with a maximum building height of 180-feet; and the edge subdistrict is allowed up to 50 units per acre at a maximum building height of 96-feet. Furthermore, the U.S. 1 / South Dixie Highway commercial corridor was also rezoned as Transit Corridor District (TRC). The TRC District provides for the location of transit-oriented uses. The intent of the district is to facilitate convenient access, minimize traffic congestion, and reduce visual clutter in order to create a development pattern which improves the aesthetic quality and character of the U.S. 1 corridor within the Town borders. The TRC District allows up to 75 units per acre at a maximum height of 60-feet and encourages compact mixed-use development.

The rezoning of the properties along the Transitway was done in an effort to encourage multi-modal transportation and to address the population forecasts for the area. If the Town's vision comes into fruition, the Town Center and Transit Corridor Districts could become compact, vibrant communities that are pedestrian-friendly and sustainable. The livability of the area would be improved through the array of mobility options.

[9] A Framework for Florida Transit-Oriented Development in Florida Department of Transportation and Florida Department of Community Affairs, March 2011

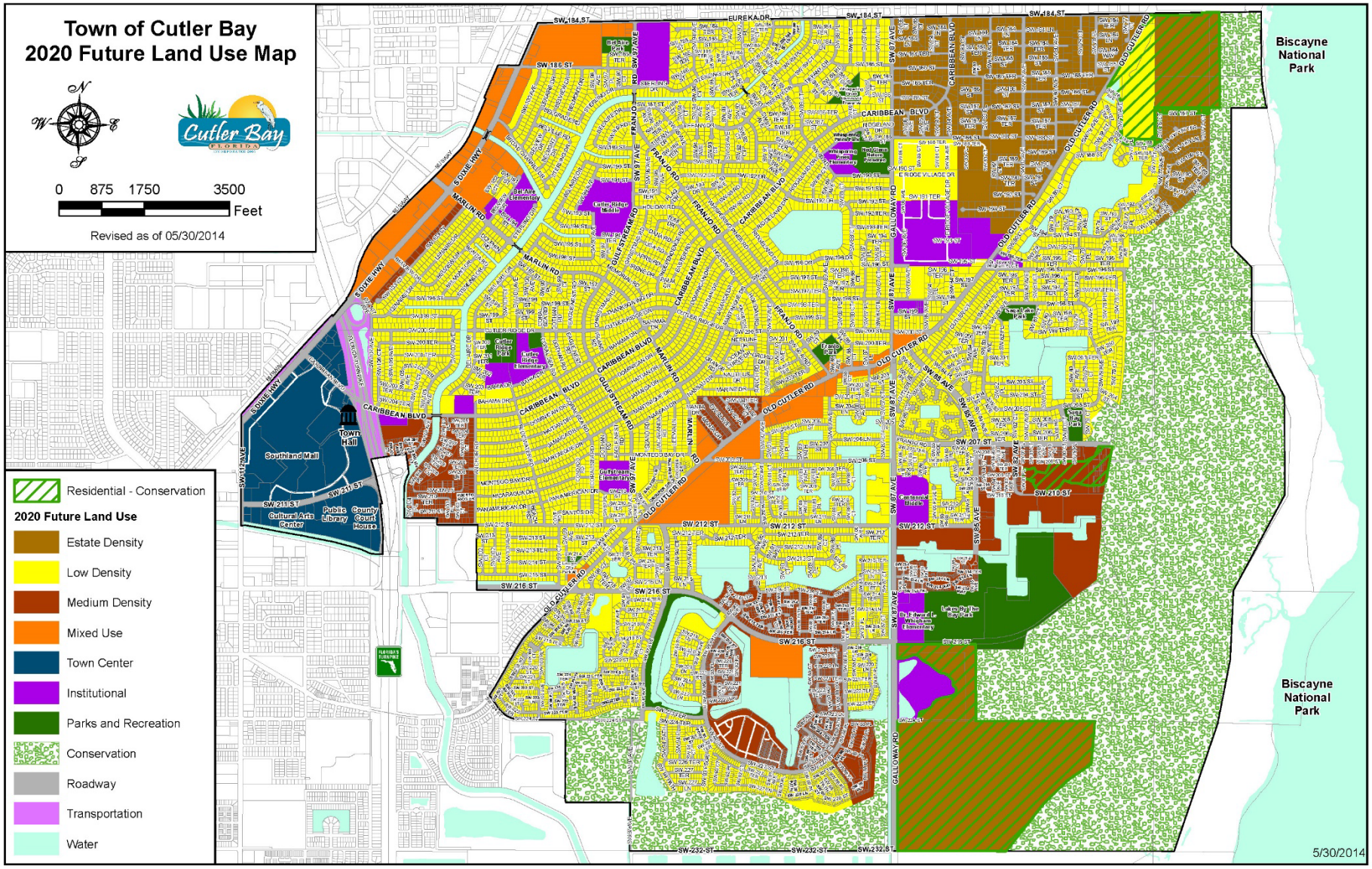


Figure 12: Town Future Land Use Map

Source: Town of Cutler Bay

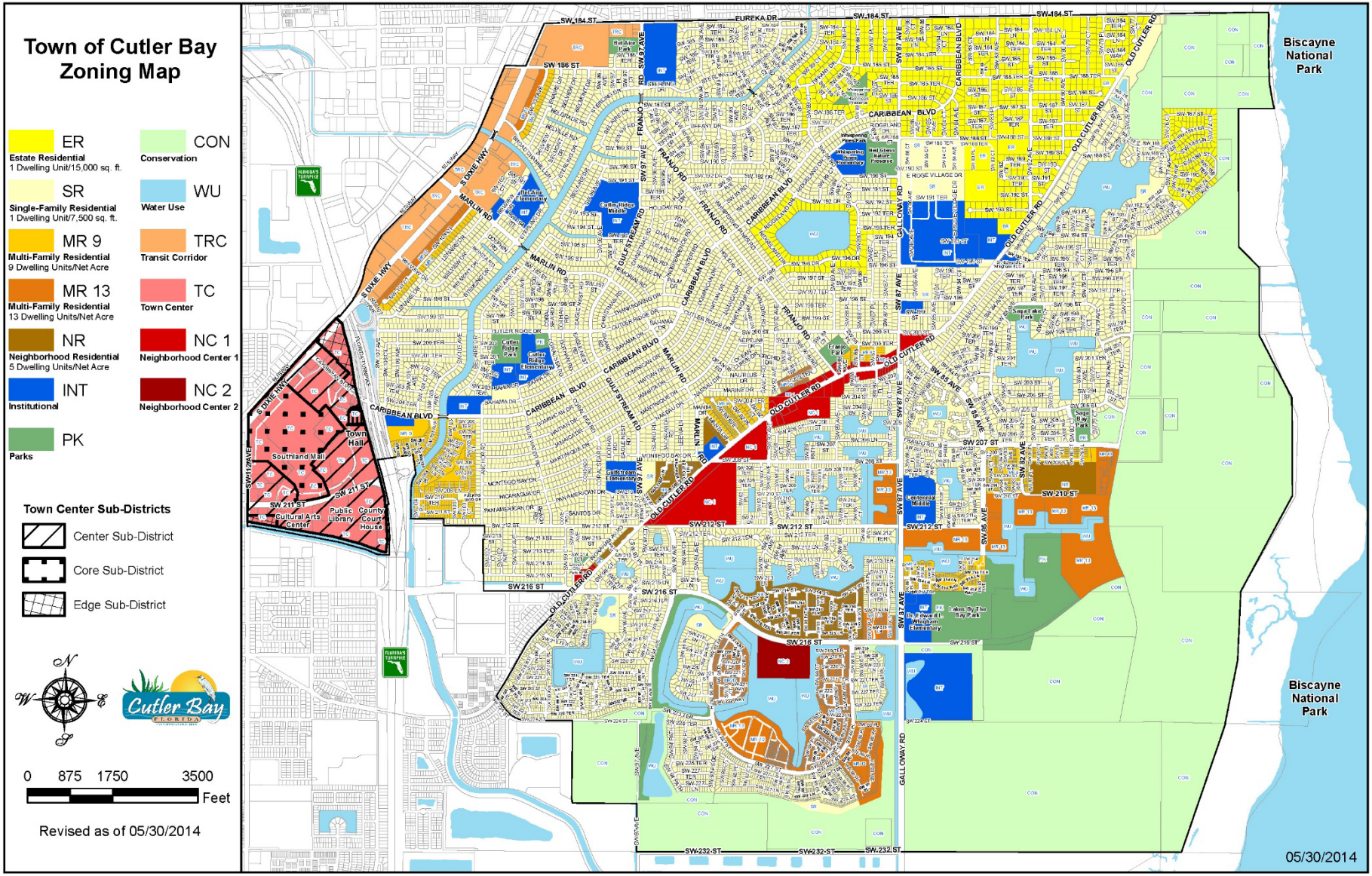


Figure 13: Town Zoning Map

Source: Town of Cutler Bay

Existing Conditions

Roadway Network

The Town is characterized by a curvilinear grid network, with the majority of traffic moving north and south, because most employment centers are located north of the Town. The area between Caribbean Boulevard and Old Cutler Road follows a grid network, while the neighborhoods of Lakes by the Bay and Saga Bay follow a more suburban plan.

Table 3 provides a summary of the roadway network in the Town.[10]

Table 3: Roadway Summary

ROAD	FROM	TO	CLASS	# OF LANES	VPD (2014)	2014 LOS	2035 VPD PROJECTIONS	2035 LOS PROJECTIONS
SR 821 (HEFT)	U.S. 1 / SR 5	Quail Roost Rd.	Principal Arterial	6	120,144	F	129,448	C
U.S. 1 / SR 5	Caribbean Blvd.	Marlin Rd.	Principal Arterial	6	54,734	F	73,823	C
Old Cutler Road	SW 184th St.	SW 77th Ave.	Minor Arterial	2	26,557	D	31,548	F
SW 184th Street	U.S. 1 / SR 5	Franjo Rd.	Minor Arterial	5	18,129	D	27,905	C
SW 216th Street	HEFT / SR 821	Old Cutler Rd.	Minor Arterial	4	28,870	D	35,878	F
Caribbean Boulevard	SW 110 Ave.	U.S. 1 / SR 5	Collector	4	31,912	F	58,563	F
Marlin Road	U.S. 1 / SR 5	SW 107th Ave.	Collector	4	38,310	F	46,196	F

Source: Transportation Master Plan

[10] Town of Cutler Bay Transportation Master Plan

Non-Motorized Facilities

The Town has a number of shared-use paths connecting to a larger, regional bicycle network (see Figure 14). This network connects residents to Metro Zoo, Parks and Recreational areas, Historic places, Commercial areas, Downtown Miami and the Biscayne Bay.

Bicycle facilities are limited within the community, as illustrated in Figure 15 on the next page.

Source: FHWA

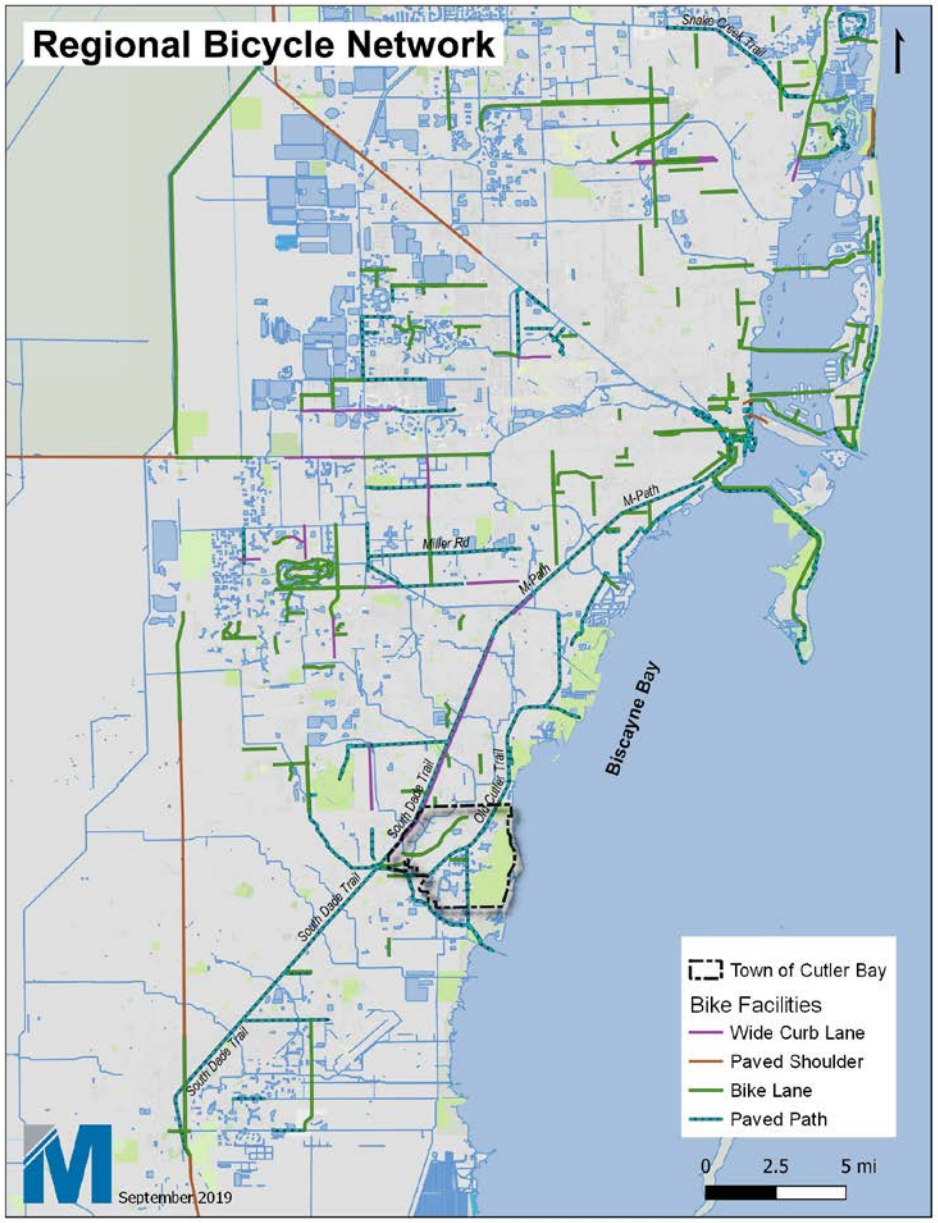


Figure 14: Regional County Bicycle Network

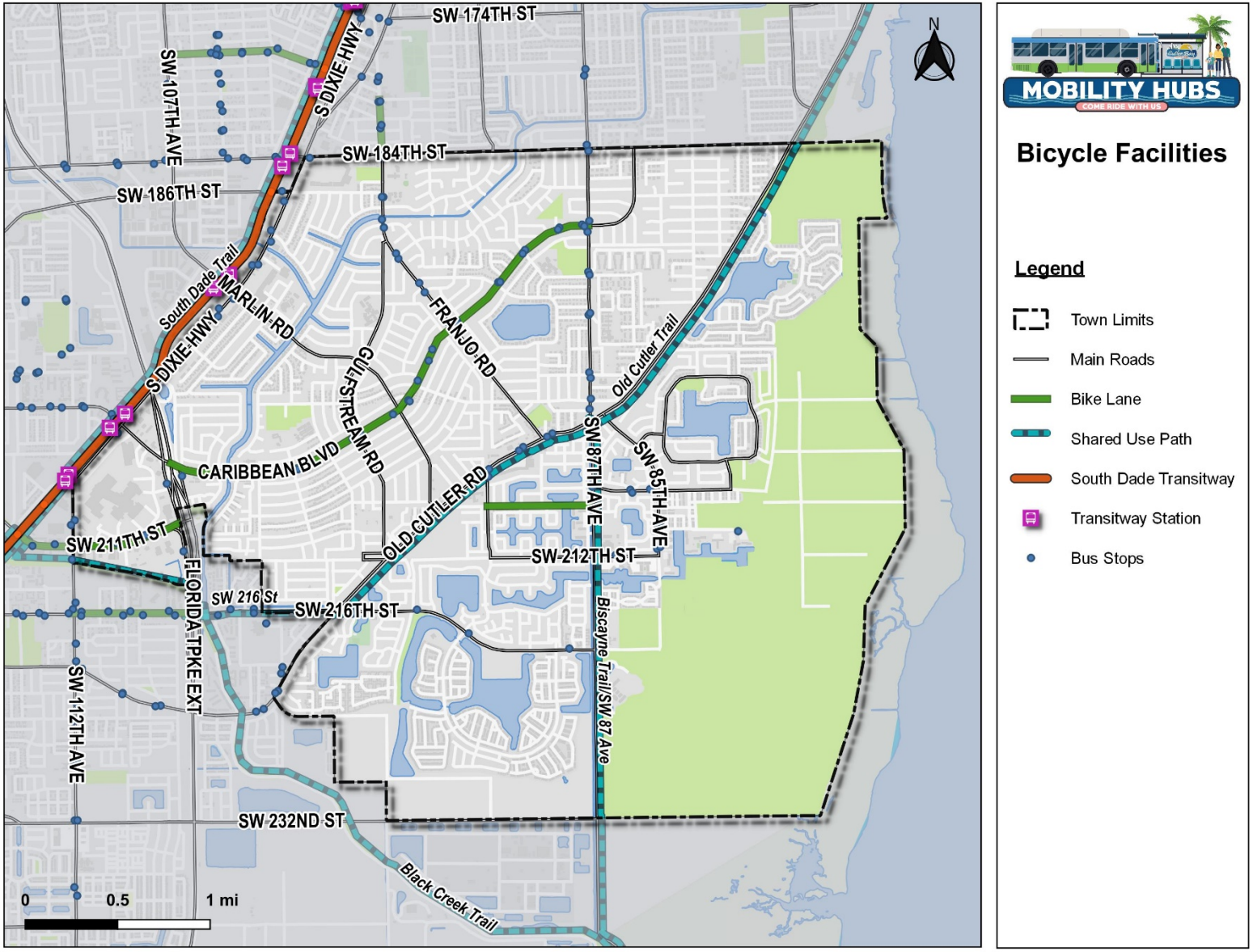


Figure 15: Town Bicycle Facilities

Sidewalks can be found throughout most of the communities within the Town, with the exception of the area located in the northeast. *The Bicycle and Pedestrian Master Plan*, adopted in 2011, identifies sidewalk gaps and provides a list of recommendations for the Town to improve the nonmotorized facilities. Furthermore, the *Complete Streets Corridor Analysis*, adopted in 2017, identifies SW 87th Avenue, Franjo Road, Marlin Road and Gulfstream Road for complete streets treatments. The completion of these projects will encourage multi-modal transportation options and create a safe and attractive environment for different mobility modes.

Figure 16 provides a map of bicycle and pedestrian crashes within the Town of Cutler Bay (the data was obtained using Signal Four Analytics from 2014 to 2018). The map illustrates a number of bicycle and pedestrian crashes along Old Cutler Road and U.S.1 / South Dixie Highway.

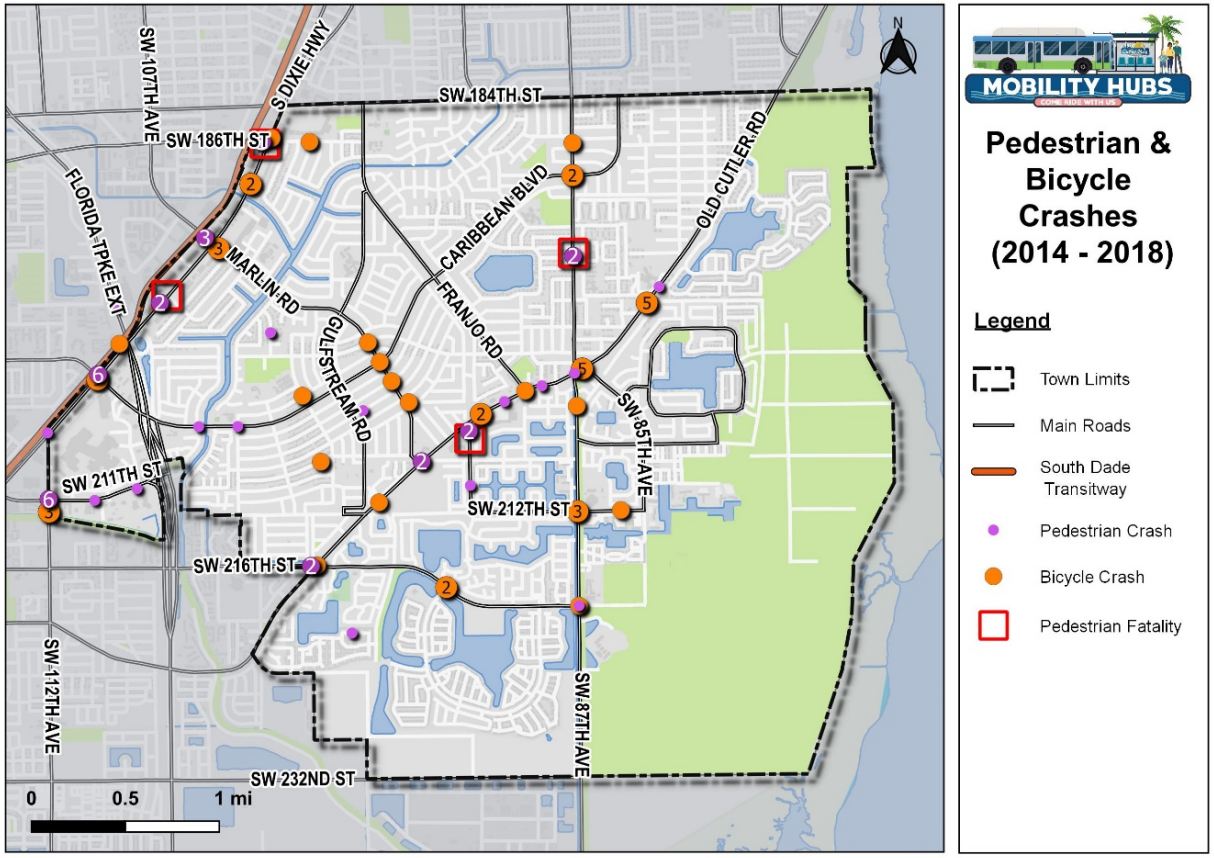


Figure 16: Bicycle & Pedestrian Crashes, 2014 - 2018

COMPLETE STREETS:
A street where the entire right-of-way is planned, designed, and operated for all modes of transportation and all users regardless of age or ability (National Complete Streets Coalition).

Source: Minneapolis Complete Streets Policy

Transit

The Miami-Dade Department of Transportation and Public Works (DTPW), also known as Miami-Dade Transit (MDT), operates the Metrobus, Metrorail and Metromover, providing transit options throughout the county.

The South Dade Busway, recently renamed the South Dade Transitway, is a 20.1-mile exclusive busway linking Pinecrest, Palmetto Bay, Cutler Bay, Gould, Naranja, Homestead and Florida City neighborhoods with both local and express service. There are 29 stations along the Transitway and 4 stations located along the Town's boundary.

The Town has 11 transit routes that provide bus service to the Town's residents, including the Town Circulator, Route 200 (see Figure 17). Currently, about 3% of the Town's population travel to work via transit, with more women than men utilizing transit[11]. Throughout the Town, bus stops can be found along the roadway network.

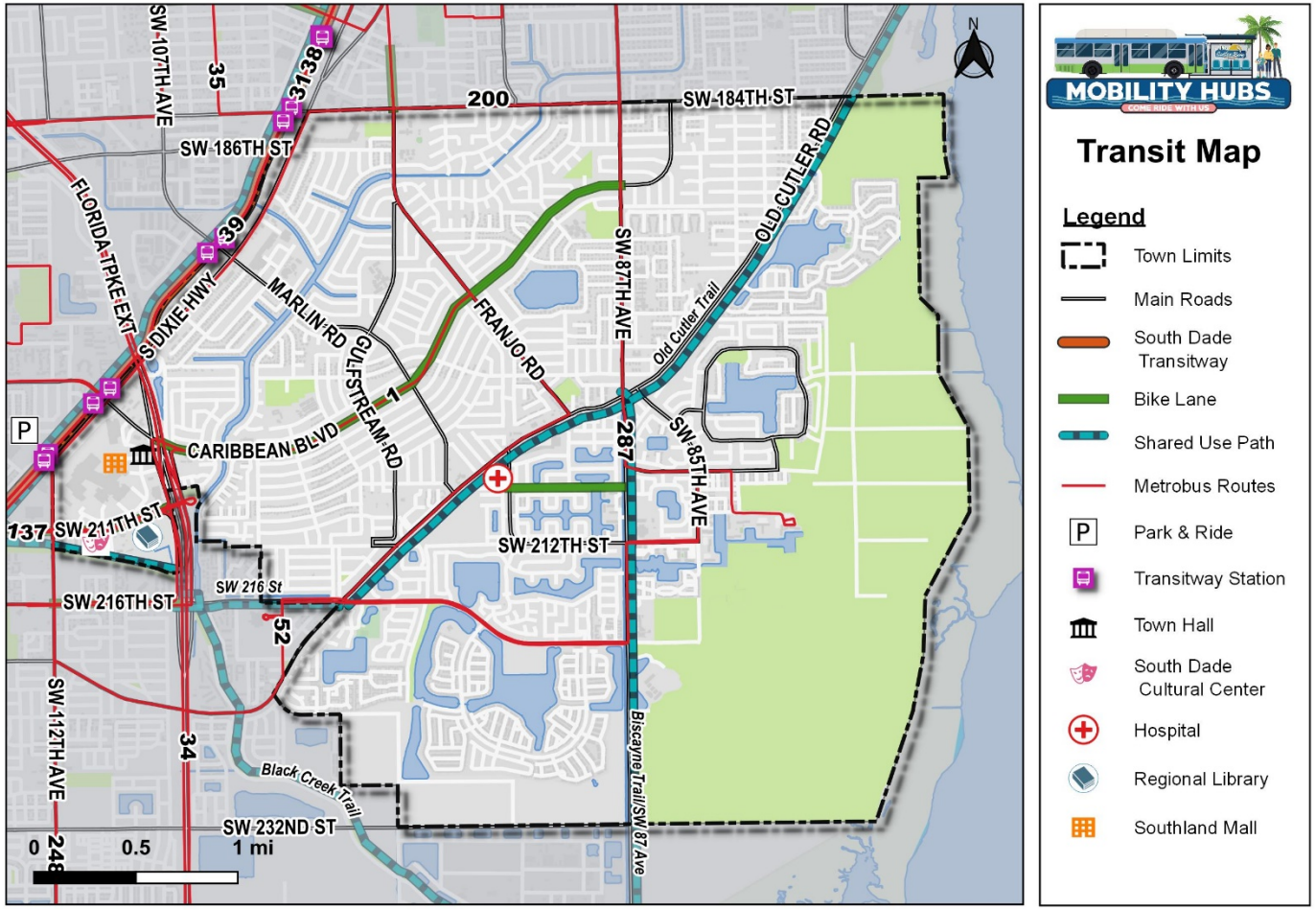


Figure 17: Transit Routes Map

Most communities within the Town are within ½-mile radius of a transit stop, with the exception of a few areas (Figure 18 illustrates ¼-mile and ½-mile buffers of the Town's transit stops).

[11] American Community Survey, 2013-2017

Route 1 travels primarily north-south from the Transitway, Perrine Shopping Center, Southland Mall, and Quail Roost Drive / SW 117th Avenue.

Route 31, also known as the Busway Local, travels north-south within the Transitway from the South Dade Government Center, Southland Mall, South Dade Transitway, SW 112th Avenue Park and Ride, SW 168th Street Park and Ride, SW 152nd Street Park and Ride, The Falls, and Dadeland South Metrorail Station.

Route 34, is a weekday only express bus, providing limited stop service along the Transitway from SW 344th Street Park and Ride to SW 112th Avenue Park and Ride, with non-stop service to the Dadeland South Metrorail Station via the Florida Turnpike.

Route 35 / 35A travels north-south beginning at the Miami-Dade College Kendall Campus, Richmond Heights, Transitway at SW 184th Street to SW 112th Street, Southland Mall, South Dade Government Center, Homestead Hospital, Florida City, and Homestead High School.

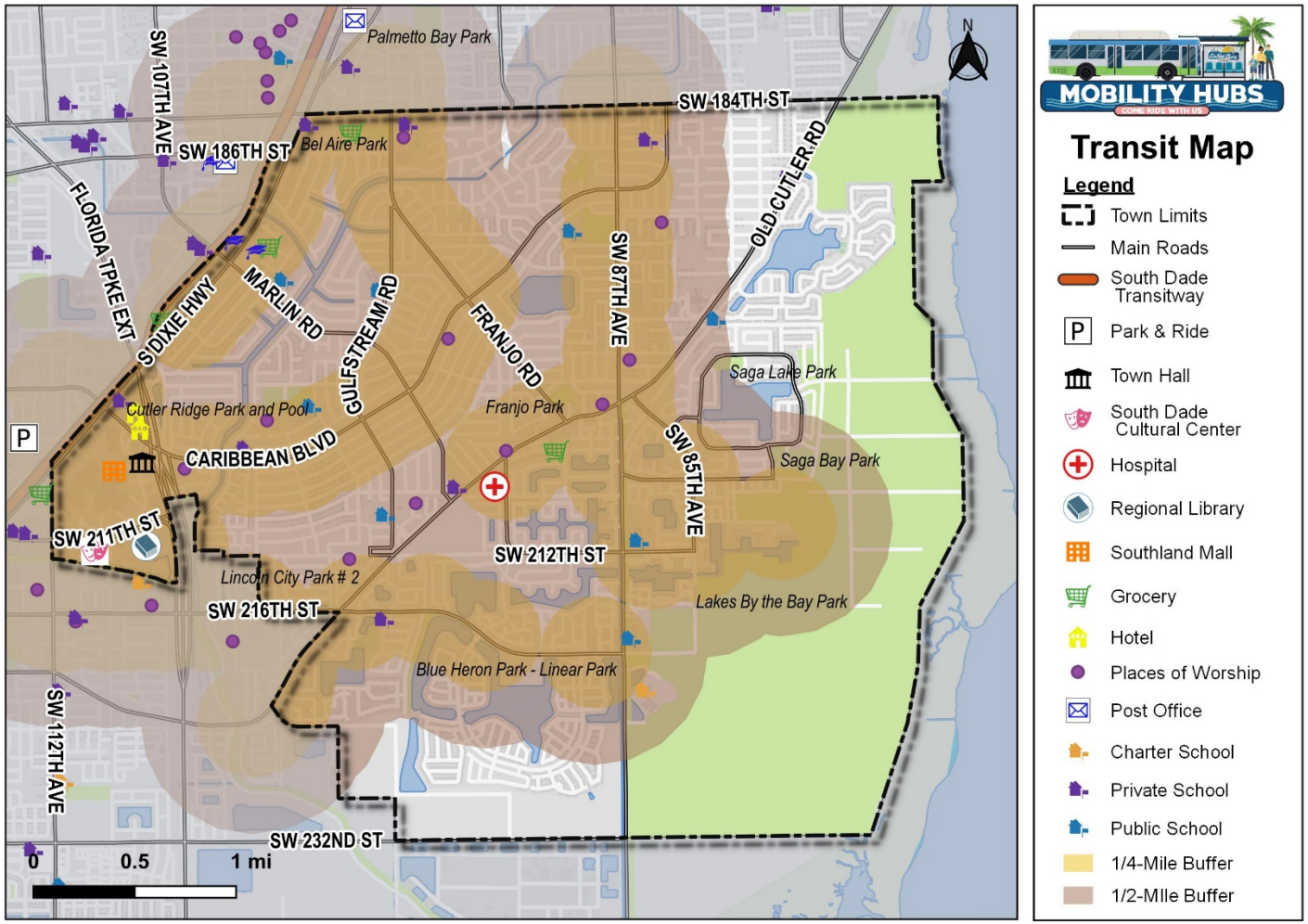


Figure 18: Transit Coverage with Points of Interest Map

Route 38, also known as the Busway Max, travels north-south for the entire length of the Transitway from the Dadeland South Metrorail Station to the SW 344th Street terminal in Florida City, stopping at all Transitway stations.

Route 39, is a weekday only express bus, providing limited stop service along the Transitway, stopping at all Park and Ride stations between the South Dade Government Center and Dadeland South Metrorail Station, with non-stop service via the Florida Turnpike.

Route 52 travels north-south from the Dadeland North Metrorail Station, Dadeland Mall, Dadeland South Metrorail Station, Transitway SW 104th Street to SW 144th Street, Richmond Heights, Perrine Shopping Center, Robert Morgan Tech., Department of Children & Families (weekdays only), Southland Mall, South Dade Government Center, Old Cutler Road, and South Dade Health Center.

Route 137, also known as the West Dade Connection, travels north-south and east-west, beginning at the Dolphin Mall, Miami International Mall, Sweetwater, Kendale Lakes, Kendall-Tamiami Executive Airport, Tamiami / Pineland Industrial Park, SW 147th Avenue / 180th Street, Serena Lakes, Larry & Penny Thompson Memorial Park, Southland Mall, and South Dade Government Center.

Route 200, also known as the Town Circulator, travels clockwise throughout the Town of Cutler Bay beginning at the Publix on Old Cutler Road and traveling to the Southland Mall, SW 112th Avenue Transitway Station, U.S. 1 / South Dixie Highway, SW 184th Street, and SW 87th Avenue. The Town Circulator is operated and maintained by DTPW through an interlocal agreement with the Town of Cutler Bay, using funds provided by the Town from the half-penny transportation surtax, passed in 2001.

Route 248, also known as the Princeton Circulator, is a weekday only local circulator bus which travels primarily north-south, beginning near the Southland Mall in Cutler Bay to Princeton and Naranja communities.

Route 287, also known as the Saga Bay Max, is a weekday only limited stop service bus which travels north-south, beginning at the Community Health Center, Lakes by the Bay, Saga Bay, SW 212 Street / 85th Avenue, Whispering Pines, Perrine, South Dade Transitway at SW 168th Street, SW 152nd Street Park and Ride, The Falls, and Dadeland South Metrorail Station.

Table 4: Summary of Town's Transit

Route	Headway (Minutes)	Weekend Service	Hours of Operation*		Average Weekday Ridership**
			Begin	End	
1	40	Yes	6:35 a.m.	7:15 p.m.	293
31	30	Yes	5:00 a.m.	8:24 p.m.	1,114
34	10	No	4:55 a.m.– 7:55 a.m.	3:45 p.m.– 7:10 p.m. (Southbound)	2,020
35 / 35A	15 / 30	Yes / No	4:57 a.m.	10:14 p.m.	2,181
38	20 (10 Peak)	Yes	24/7		6,389
39	15	No	5:30 a.m. – 8:15 a.m.	4:00 p.m.– 6:45 p.m. (Southbound)	969
52	45 (30 Peak)	Yes	4:28 a.m.	10:13 p.m.	1,296
137	30	Yes	5:35 a.m.	8:15 p.m.	1,653
200	50	Yes	8:40 a.m.	5:40 p.m.	157
248	60	No	6:25 a.m.	7:25 p.m.	128
287	35	No	5:46 a.m. – 9:18 a.m.	4:15 p.m.– 7:00 p.m. (Southbound)	373

**Hours of Operation are shown for Northbound weekdays only, except when indicated otherwise, variations on southbound and weekend hours of operation. See DTPW website for exact times.*
***Miami-Dade County Transportation & Public Works Ridership Technical Report, May 2019*

A Park and Ride facility is currently located at the SW 112th Avenue Transitway station, next to Target, with 450 parking spaces at a 90% utilization rate.[12] The SMART Plan identifies new Park and Ride facilities planned at the Caribbean Boulevard / SW 200th Transitway station, and the SW 184th Transitway station.

[12] Miami-Dade County Transportation & Public Works Ridership Technical Report, May 2019

Town Circulator

The Town Circulator, also known as Route 200, operates Monday through Saturday from 8:40 a.m. to 5:40 p.m., and Sundays from 10:40 a.m.to 3:40 p.m., excluding holidays. Route 200 is a 13.7-mile loop that begins at the bus stop located near Publix on Old Cutler Road, and takes 51-minutes to complete.

Figure 19: Picture of Town Circulator

Stops include the Southland Mall, SW 112th Avenue Transitway Station, South Dade Shopping Center, Encompass Health Rehabilitation Hospital, Cutler Bay Senior High School, and Ned Glenn Nature Preserve (see Figure 19).

The Town Circulator connects to Metrobus Routes 1, 31, 34, 35, 38, 39, 52, 137, and 287. The Town Circulator is currently operated by one bus, moving in a clockwise motion, and with two drivers. One driver operates the bus during the weekdays and the other during weekends. DTPW provides a backup bus when the Town Circulator is receiving maintenance and/or repairs. As of the end of fiscal year 2017-18, the Town Circulator had travelled a total of 192,410 miles. The average lifespan of transit buses is approximately 12 years and 250,000 miles, with replacement of the current bus expected within the next three (3) years.

TOWN CIRCULATOR QUICKFACTS

Annual Operating Cost: $324,620
Route Length: 13.7 Miles
Avg. Speed: 23 mph
Avg. Annual Mileage: 32,000
Vehicle Inventory: 1
Headway: 51-minutes
Avg. Passengers per Hour: 17
Connecting MDT Routes: 1.31.34.35.38.39.52.137.287

History, Agreement and Funding

On May 23, 2012 an Interlocal Agreement between Miami-Dade County and the Town of Cutler Bay was executed for the County to provide the Cutler Bay Circulator service within the Town at the locations and according to the routes in the agreement's exhibits. The fare was established at $0.25, with qualified passengers paying no fare and the student fare at $0.10. The agreement states service-operating schedules shall be coordinated with Metrobus to the extent possible and the Circulator will be shown on the County Transit map.

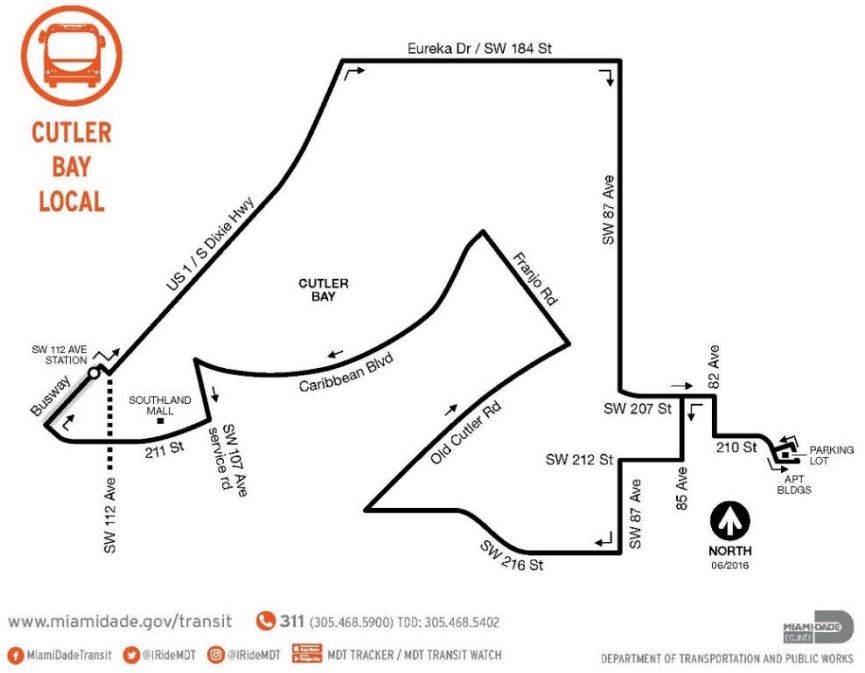


Figure 20: Map of Town Circulator
Source: Miami-Dade County

Service began on September 5, 2012 and was made possible by the half-penny transportation surtax that was approved by voters in 2002. As a result, the *People's Transportation Plan* was funded and is overseen by the Citizens' Independent Transportation Trust (CITT). The ordinance creating the half-penny transportation surtax calls for 20% of surtax proceeds to be distributed directly to municipalities on a pro rata basis for use on local transportation and transit projects. Municipalities must apply at least 20 percent of their share of surtax proceeds toward transit uses.

For FY 2018 the funds distributed to the Town of Cutler Bay were for a population of 44,901 at a per capita amount of $42.30, totaling $1,899,220. For transit uses, 20% of this, or $379,844, must be applied. In the Town's adopted budget for FY 2017-18, the Town spent $350,000 on the Circulator and $690,000 on design and construction of decorative bus shelters.

Costs, Responsibilities and Service

The Interlocal Agreement states the Town shall pay 100% of the net operating cost of the service. Per the agreement, the cost is not to exceed $146,700 for the first year. In subsequent years, the Town will continue to pay 100% of the operating costs, with the County notifying the Town of any increases in cost at least six months in advance.

The original agreement included the Circulator operating hours from 8:00 a.m. to 5:10 p.m., with service Mondays, Wednesdays and Fridays. This agreement was for five years with the option for two two-year renewals under the same terms. In May 2017, the first renewal option was approved to extend the agreement to May 23, 2019. The agreement cannot extend past May 22, 2021.

The Town requested an increase in service from three days a week to five days a week effective September 30, 2013. The annual operating cost for a five-day week service is estimated at $269,500. Transit service was not to be provided on holidays, where DTPW operated a Sunday schedule and any additional hours would be billed at the current DTPW hourly rate.

The Interlocal Agreement was again amended to include an increase in service from five days a week to six days a week on or after October 1, 2014. The additional service included Saturday with the annual operating cost for six days estimated to be $55,120 (Saturday service cost) + $269,500 (weekday cost) for a total of $324,620. Additional hours of service outside the current agreement is billed at the current DTPW hourly rate. In June 2016, the route was modified to service the Transitway station at SW 112th Ave.

On November 18, 2018 Sunday was added with service starting at 10:40 a.m. and ending at 4:33 p.m., at no additional cost to the Town. Sunday service was in response to the County removing the operation of Route 70.

The agreement states that the Town is responsible for installing and maintaining shelters and benches, as well as complying with ADA regulations, such as accessibility to and from bus passenger-stops and shelters. The County is responsible for providing, installing and maintaining bus-stop signs and sign posts along the route.

The Town has been actively replacing bus shelters as part of the Town's *Complete Streets Plan.* Phase 1 included ten (10) bus shelters, completed in early 2019. The Town most recently replaced shelters on Old Cutler Road and Caribbean Boulevard. The Town will be replacing older bus shelters in phases, and prioritizing the addition of shelters and benches at high-ridership stops. The average cost of a shelter is $43,330 and includes the installation of concrete, shelter, benches, bicycle rack, and trash receptacle at each bus stop (see Figure 21).

Through a separate interlocal agreement, the Town purchased an ADA-compatible diesel bus, having the American Recovery and Reinvestment Act (ARRA) funds to provide the circulator service with title transferred to the County. Town staff stated that the cost of the bus was $250,000 and purchased at inception of the program in 2012.

Figure 21: Town Bus Shelter

The agreement states the vehicle will be equipped with Automatic Passenger Counters, on-board surveillance equipment (voice and video), and automated vehicle-locator systems. The agreement also states projected annual operating costs and an operating expenditures report will be provided to the Town, including operating expenditures incurred by the Circulator service.

Strategic Master Plan

The Town's 2014-2019 Strategic Master Plan Goal 3.1 is to provide the infrastructure needed to meet the current and emerging needs of the community. Goal 6.2 is to optimize the smooth flow of traffic through the Town of Cutler Bay by minimizing traffic congestion and maximizing the capacity of our local roadways. Under these goals is the Objective that the Town will ensure that the Town Circulator and local roadways meet the growing needs of the community.

Ridership

The most recent Annual Report from the Miami-Dade Transit Service Planning and Scheduling Division covers the July 2017- July 2018 reporting period. The Miami Dade County 3-1-1 Answer Center received 34 calls regarding the Circulator during this time period. 23 of the calls were complaints, 5 were requesting service and 6 were commendations. This was noted as a small number of calls in comparison to annual ridership.

Since inception through July 2018 the Cutler Bay Local has provided service to over 200,000 riders. Figure 22 provides a review of annual ridership of the Town Circulator since its inception in 2012.

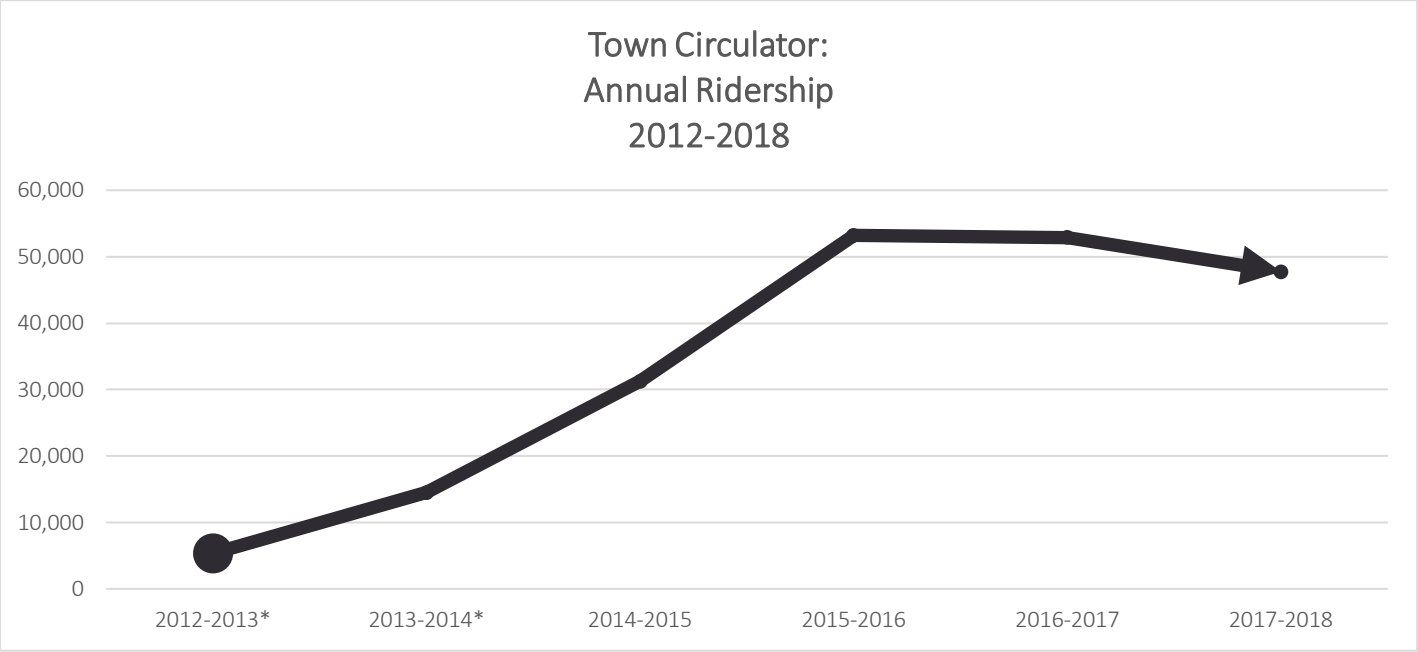


Figure 22: Annual Ridership for Town Circulator

**Indicates operations at 3x per week Source: DTPW Annual Reports*

QUESTIONS, COMMENTS, COMPLAINTS

Questions, complaints and commendations are recorded through the county's 311 program, which allows residents to report issues, file complaints, provide commendations and answer questions related to various items including Transit.

On average, the county receives approximately 60,000 – 70,000 transit related phone calls per month, with a relatively small percentage of complaints related to the Town Circulator[13]. Since its inception, there have been approximately 40 phone calls each year specific to the Town Circulator, with the most common complaint

[13] Annual Circulator Report

being “no show/no pickup”. The phone calls received through this system also include requests by citizens. Table 5 below provides a list of requests filed through the system.

Table 5: 311 Citizen Requests, 2012 – 2018

YEAR	REQUESTS		
2012-2013	Bus Bench @ 7900 SW 210 St.	Additional Stops @ SW 210 St/SW 82 Ave; Black Point Marina; and Calusa Cove (210/8000 Block)	
2013-2014	NONE		
2014-2015	Sign Replacement	Shelter Request	
2015-2016	Sign Replacement (x3)		
2016-2017	Sunday Service	Additional Stops @ SW 216 St / SW 87 Ave & SW 211 St and SW 87 Ave	
2017-2018	Keep Bus Operator	Sunday Service (x2)	Extend Hours of Operation
	Additional Bus to Run Route	Additional Stop @ SW 214 St/ SW 86 Pl	

**Cutler Bay Local Annual Reports, prepared by DTPW*

On Demand Service

On March 22, 2019, DTPW submitted a Request for Proposal (RFP) for First Mile/Last Mile On-Demand Transit Service for the areas covering the Miami Civic Center, Dadeland, Palmetto Bay and Cutler Bay. The purpose was for improving access to high demand transit facilities and serving short (under 3-mile) trips. The proposal called for dynamic routing, on-demand, and app-based transit service to be based on real-time trip demand. This service is expected to begin operations late 2019, at minimum, and weekdays from 6:00 a.m.to 7:00 p.m.

Residents will be able to schedule pickup times via an app, website or phone call for the purpose of connecting to the Transitway. The expected wait times are at 10-15 minutes and expectations of arriving to their destination within 10-15 minutes. The goal of the service is to fulfil the First/Last Mile connection and to increase travel possibilities for commuters.

The service will be paid through a SMART Demonstration Project Grant, awarded to the Town in September 2018, and with matching Town funds.

Future Flood Hazards

A sea level rise analysis was conducted to ensure future transportation investments for the Town are not at risk of future sea level rise impacts. The *Southeast Florida Regional Climate Change Compact* was created in 2010, with elected officials from Broward, Miami-Dade, Monroe and Palm Beach Counties coming together to coordinate mitigation and adaptation strategies for responding to the impacts of climate change.

In 2015, the *South Florida Regional Climate Change Compact* adopted the following Sea Level Rise (SLR) projections for short-term and long-term planning purposes:

- 6-inches to 10-inches by 2030
- 14-inches to 26-inches by 2060
- 31-inches to 61-inches by 2100

These projections were adopted utilizing data provided by the National Ocean and Atmospheric Administration (NOAA), the U.S. Army Corps of Engineers (USACE) and the Intergovernmental Panel on Climate Change (IPCC).

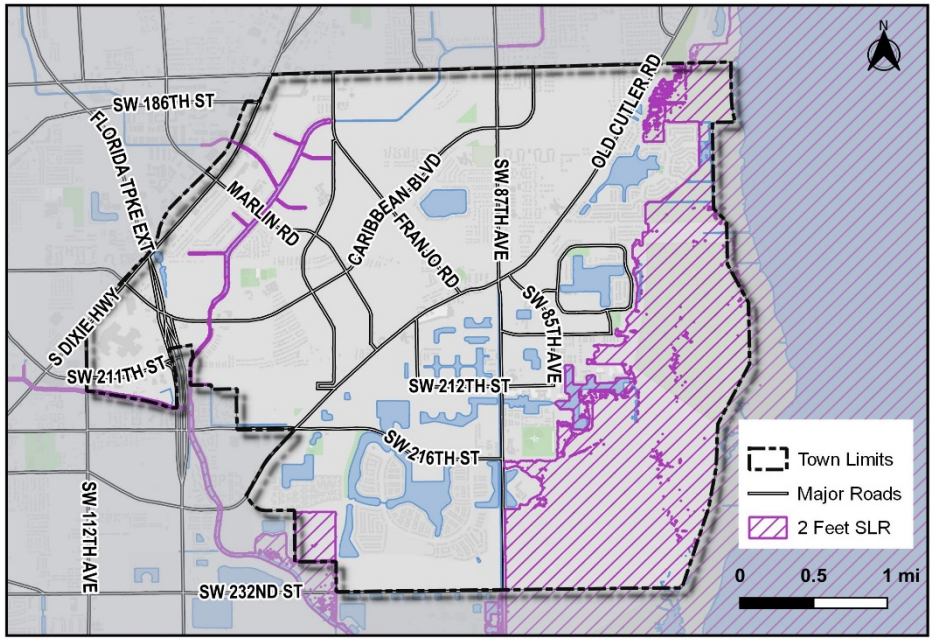


Figure 23: Map of Future Sea Level Rise Projections at 2 Feet, NOAA

Utilizing data provided by NOAA, future SLR projections for 2060 are at approximately 2-feet. Figure 23 illustrates areas of inundation (in purple), which are primarily in the conservation designated areas and with no expected threat to infrastructure and property.

The Town's *Floodplain Mitigation Plan* (2014) provides a risk assessment for the Town by identifying activities that can be undertaken by the public and private sectors in order to reduce safety hazards, health hazards, and property damage caused by floods. Table 6 is a summary of future hazardous occurrences, found in the Town's *Floodplain Mitigation Plan*.

Hazard	Likelihood of Future Occurrence	Priority Hazard
Climate Change and Sea Level Rise	Occasional	Yes
Coastal / Canal Bank Erosion	Likely	Yes
Dam / Levee Failure	Unlikely	No
Flood: 100 / 500-year	Likely	Yes
Flood: Stormwater / Localized Flooding	Highly Likely	Yes
Hurricane and Tropical Storms (including storm surges)	Likely	Yes

Table 6: Cutler Bay Summary of Future Flood Occurrences
Town of Cutler Bay Floodplain Mitigation Plan

PUBLIC INVOLVEMENT

Public involvement is vital to any project or task performed by public organizations. Our process began with a kick-off meeting with the Town of Cutler Bay, Miami-Dade TPO, and MARLIN on November 26, 2018. The purpose was to gather information and data, review the scope of services, and schedule tasks for this study.

A Public Information Plan (PIP) was drafted by MARLIN with the goal of ensuring the study reflected the values and needs of the community. Once approved by the Town, the PIP outlined specific activities to provide timely and accurate information to stakeholders throughout the process. A copy of the PIP can be found in Appendix I.

As part of the public involvement process, a Stakeholder Advisory Committee (SAC) was formed for the purpose of reviewing information and providing technical assistance for the study. A total of three (3) SAC meetings were held throughout the planning process with various stakeholders including Town Staff, Miami-Dade TPO, Florida Department of Transportation, Miami-Dade Bicycle and Pedestrian Advisory Committee, Southland Mall, and the Cutler Bay Business Association.

The project also included three (3) public workshops. The first public workshop was held on April 30, 2019 beginning at 6 p.m. to 8 p.m. within the Town's Council Chambers. Various maps were displayed illustrating the Town's existing transit network, existing pedestrian and bicycle points of interest, and a map of the existing Town Circulator (Route 200). The meeting included a 20-minute presentation with the purpose, goals, and information gathered for the study. Participants were encouraged to provide feedback and complete the online survey.

A second and third public workshops were held on Monday, September 23, 2019 which was split into two (2) sessions. The first session was held from 2:00 to 4:00 p.m. to accommodate residents who rely on transit, at the Pine Wood Villas Community Association. Due to the high number of Spanish speaking residents who attended, the presentation was conducted in both English and Spanish. The second session took place from 6:00 to 8:00 p.m. at the Town Hall Council Chambers, to accommodate residents who work.

Figure 24: Pubic Meeting - April 30, 2019

Figure 25: Public Meeting - September 23, 2019

These sessions provided residents with background information on mobility hubs, proposed locations, recommended improvements, and amenities. Residents were also given the opportunity to vote for the different amenities they would like to see at each level of mobility hub, in addition to providing feedback to the proposed locations, recommendations, and amenities.

The study will go before the public and be presented to the Town Council to be formally accepted by the Town.

Figure 26: Photos of Public Workshops

DATA COLLECTION

Data collection for this study began by gathering existing transit data, reviewing adopted Town Plans and studies, and utilizing MIOVision cameras at three (3) identified transit stops throughout the Town. Additionally, data collected from the Cutler Bay Mobility Hubs Survey was reviewed and analyzed for the purpose of understanding transit use and gauging the types of amenities transit users would like to see at their bus stops.

Figure 27:Picture of Staff Conducting Survey Along Transitway Stations

Questionnaire and Survey

In coordination with the Town, a Questionnaire for the Town Circulator Bus Operators was prepared. This questionnaire assisted the team in identifying demographic data, bus stop activity, service, and delays. Key elements of the Questionnaire included which stops had the most activity and transfers, as well as their recommendations for improving service. The Questionnaire assisted the team in identifying bus stops to collect MIOVision video data. A copy of the Questionnaire can be found in Appendix II. A total of 106 surveys were collected.

Figure 28: People Waiting for Next Bus Due to Route 34 Bus Being at Capacity

Highlights

- Average age of transit users is over 50 years
- Hispanic/Latinos were identified as the demographic group that most utilized existing service
- Average persons with disabilities was approximately 6 people per day
- The following stops were identified as having the most transfer activity:
  - SW 112th Ave and SW 211th Street
  - SW 82nd Ave and SW 210th Street
  - SW 85th Avenue and SW 212 Street
  - SW 87th Avenue and SW 198th Street
- More frequent service was recommended to improve transit
- Both DTPW operators identified the benefit of having a counter-clockwise route to improve service

Also, in coordination with the Town, MARLIN prepared an online survey in English and Spanish for the purpose of gaining feedback regarding transit use and amenities within the Town. A copy of the survey and responses can be found in Appendix II.

A site visit was performed on Tuesday, February 26, 2019 beginning at 6:00 a.m. at the SW 112th Avenue Transitway stop (see Figure 27). Here, people were encouraged to take the survey. Lines of people were seen boarding the buses along the Transitway, sometimes having to

wait for other buses due to capacity issues (see Figure 28). Many transit riders had commented about how improved frequency of service would improve their commutes, especially during the peak traffic times.

At 9:00 a.m. the MARLIN team boarded the Town Circulator (Route 200) at the first stop on Old Cutler Road, near Publix. The team spoke to patrons and asked riders to take the survey and provide feedback. Through discussion with Town Circulator riders, many commented how an additional circulator operating counter-clockwise and extended hours of operation would be beneficial to the Town.

The survey was left open for a period of approximately 10 weeks, during this time, the Town utilized their website and social media platforms to attract participants. The survey gathered 106 respondents, of those respondents 19% rode the Town Circulator. Figure 29 provides an overall review of respondent's route usage, while Figure 30, on the next page, illustrates route usage for respondents who utilize the Town Circulator, Route 200.

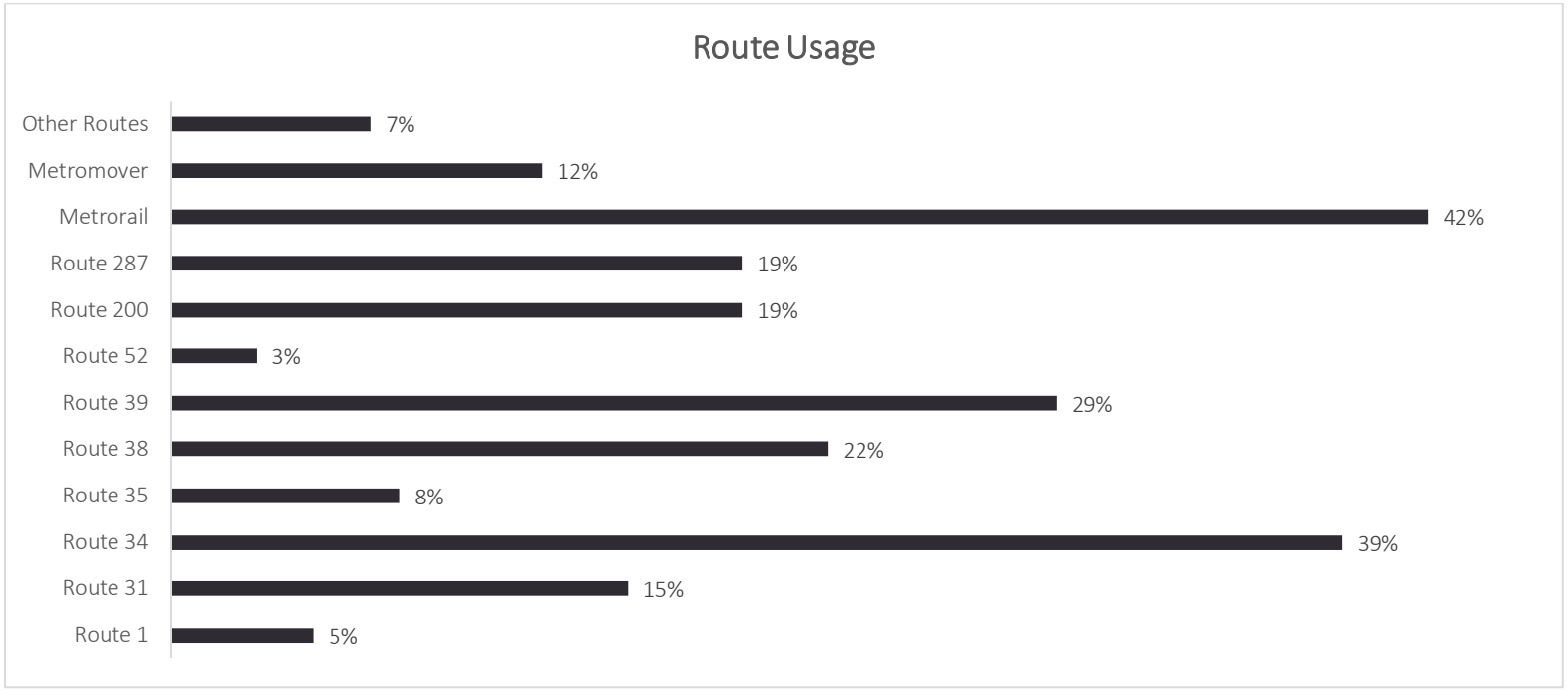


Figure 29: Overall Survey Responses to Routes Used

Route usage characteristics of the Route 200 riders indicate that over 50% of riders are not connecting into the South Dade Transitway, instead, utilizing the Town Circulator to get around the Town.

The following survey data represents the population characteristics (19%) **who ride the Town Circulator**, an overall analysis of all survey respondents can be found in Appendix II:

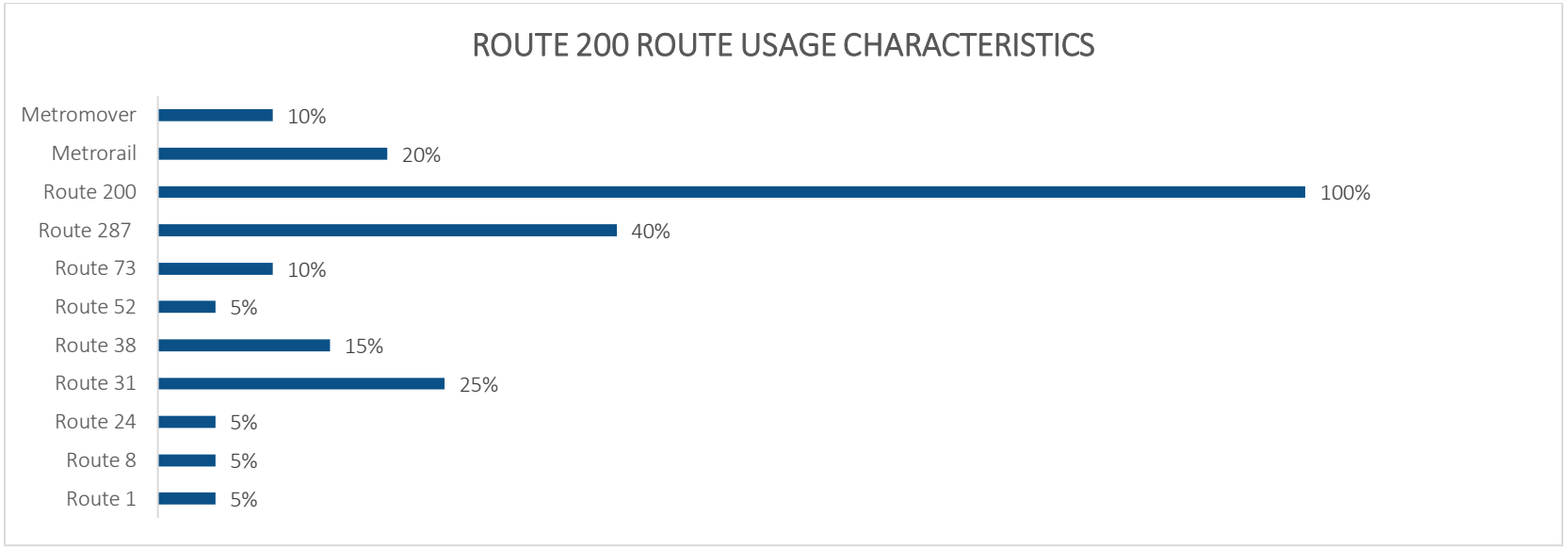
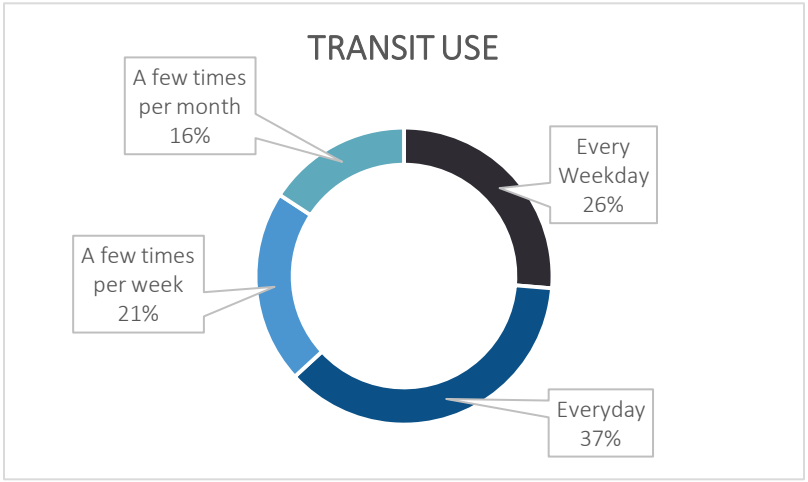


Figure 30: Route 200 Survey Respondents Route Usage



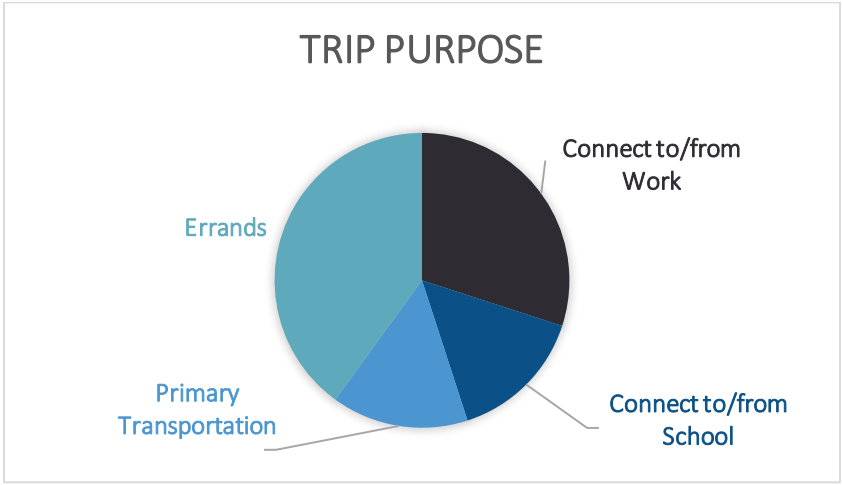
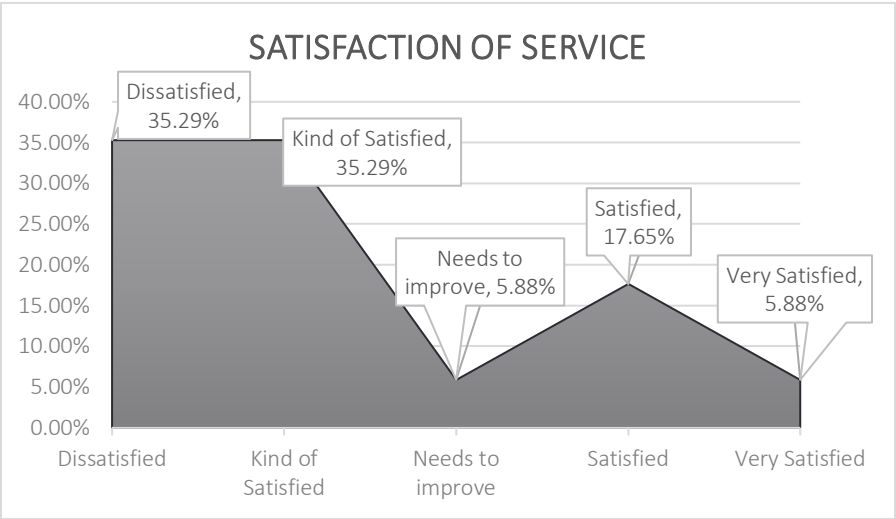


Figure 31: Route 200 Survey Respondents Route Usage & Trip Purpose



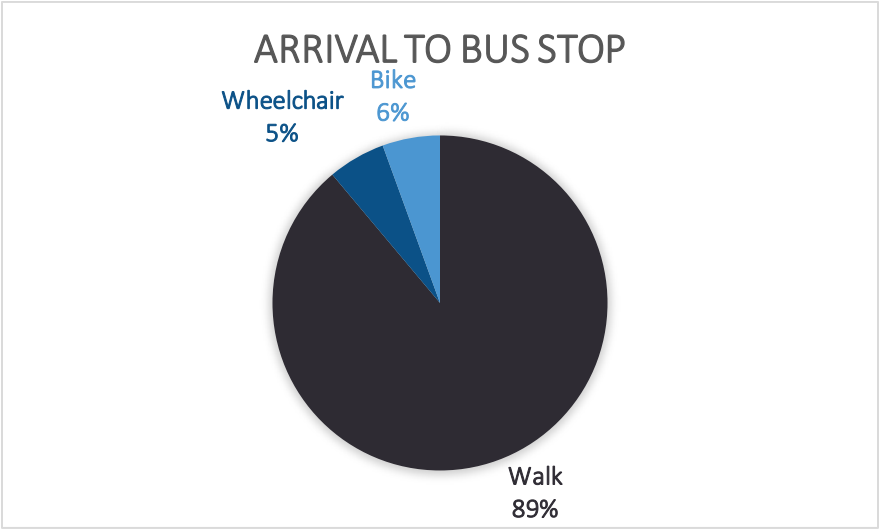


Figure 32: Route 200 Survey Respondents Satisfaction of Service & Means of Arrival to Bus Stop

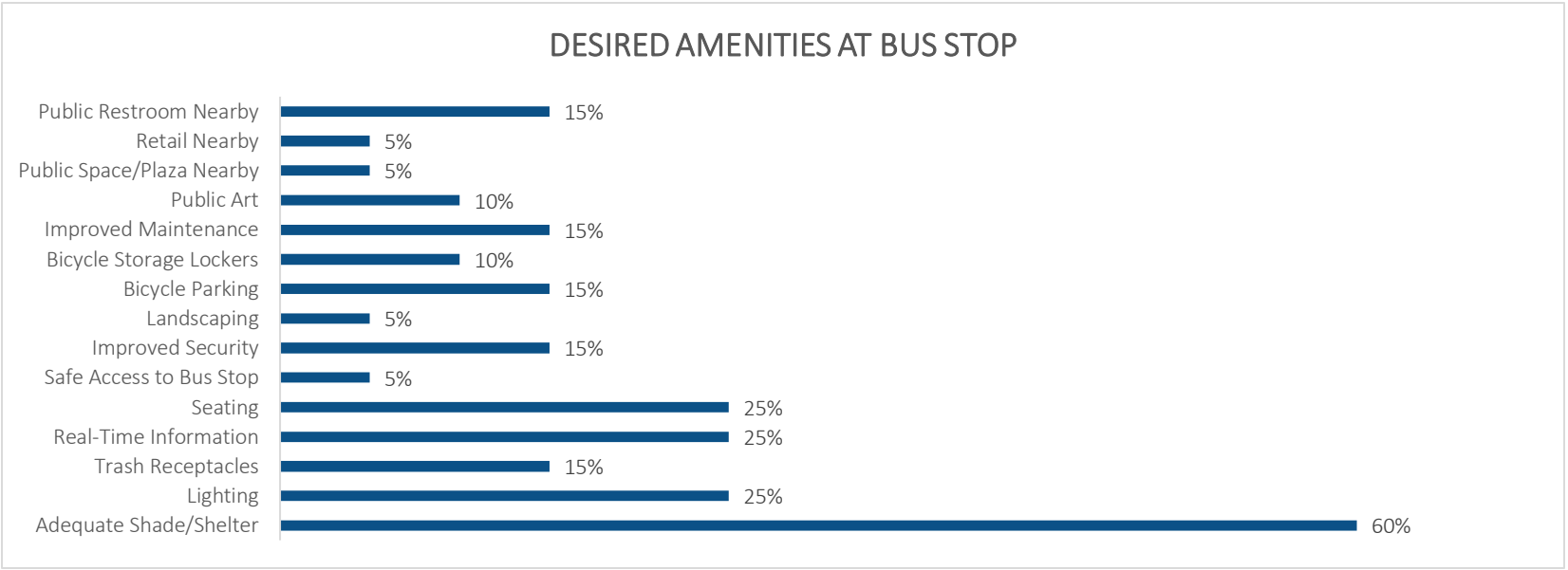


Figure 33: Route 200 Survey Respondents Desired Amenities at Bus Stop

One of the key recommendations mentioned was extending the hours of operation to make transit more accessible and convenient, especially for those who rely on transit to get to work. A number of transit passengers commented on how they would like to attend public meetings, but relied on the Town Circulator for transportation and could not attend due to the limited hours of operation.

TOWN CIRCULATOR SURVEY INSIGHTS	COMMENTS	OVERALL SURVEY FINDINGS
63% of Riders Use Route 200 Every Weekday	"Half hour frequency would be great!"	68% use Transit to Connect to/from Work
89% Walk to the Bus Stop	"Better signage for at stops for Route 200"	8% use Transit as their Primary Mode of Transportation
56% Transfer to Another Route	"More accurate time on app"	58% Begin their Transit Trip via the South Dade Transitway
22% Connect to/from Work	"Shorter headways"	32% End their Transit Trip in Downtown Miami
72% Use MDT Transit Tracker App	"311 works great"	67% Transfer to Another Route
Desired Amenities Include: Adequate Shade/Shelter; Real-Time Information Display; Seating; Improved Security	"Extended hours for 287/200 would be REALLY COOL"	47% Drive to a Park & Ride Lot
Improvements to Commute: Improved Frequency of Service; Extended Hours of Operation; Wi-Fi	"On time reliability and bus cleanliness are important"	77% Use the MDT Transit Tracker App
Satisfaction Score: 3 (1 Very Satisfied; 5 Very Dissatisfied)	"Cutler Bay has evening meetings and no evening bus. How are the retired people going to get there? We want to go to these meetings."	68% use Transit to Connect to/from Work

Transit Data

Data was gathered from Miami-Dade Department of Transportation and Public Works (DTPW) for county owned and operated bus routes. The Town of Cutler Bay provided data related to the Town Circulator (Route 200). Utilizing geographic information systems (GIS), MARLIN was able to analyze existing transit coverage for the Town of Cutler Bay, see Figure 18 on page 38.

Metrobus

Boarding and alighting data was collected from Miami-Dade County's Department of Transportation and Public Works for Routes 31, 34, 38, 39, 52, and 287. Ridership is highest along the Transitway, with 100 to over 400 boarding's and alighting's per day at the Transitway Stations along the Town's borders. Through the available data, ridership along the Transitway Station located at SW 112 Ave. was identified as having the highest numbers of boarding's and alighting's in the area. This is most likely a result of the Park and Ride facility located at this station. Ridership was also high at the transit stop located near the Southland Mall / South-Dade Government Center along SW 211th Street, see Figures 34 and 35.

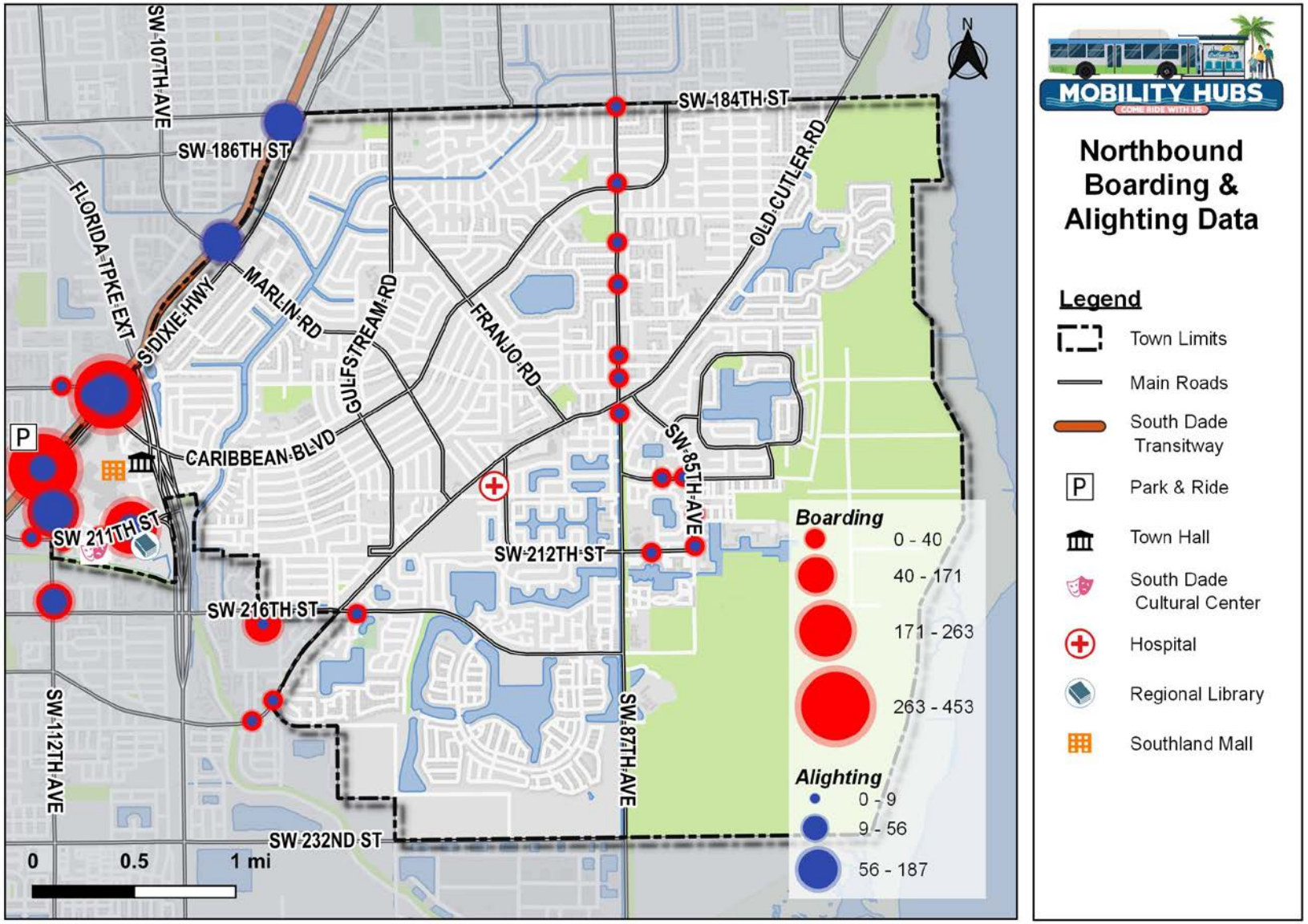


Figure 34: Northbound Boarding & Alighting Data

**Information provided by DTPW*

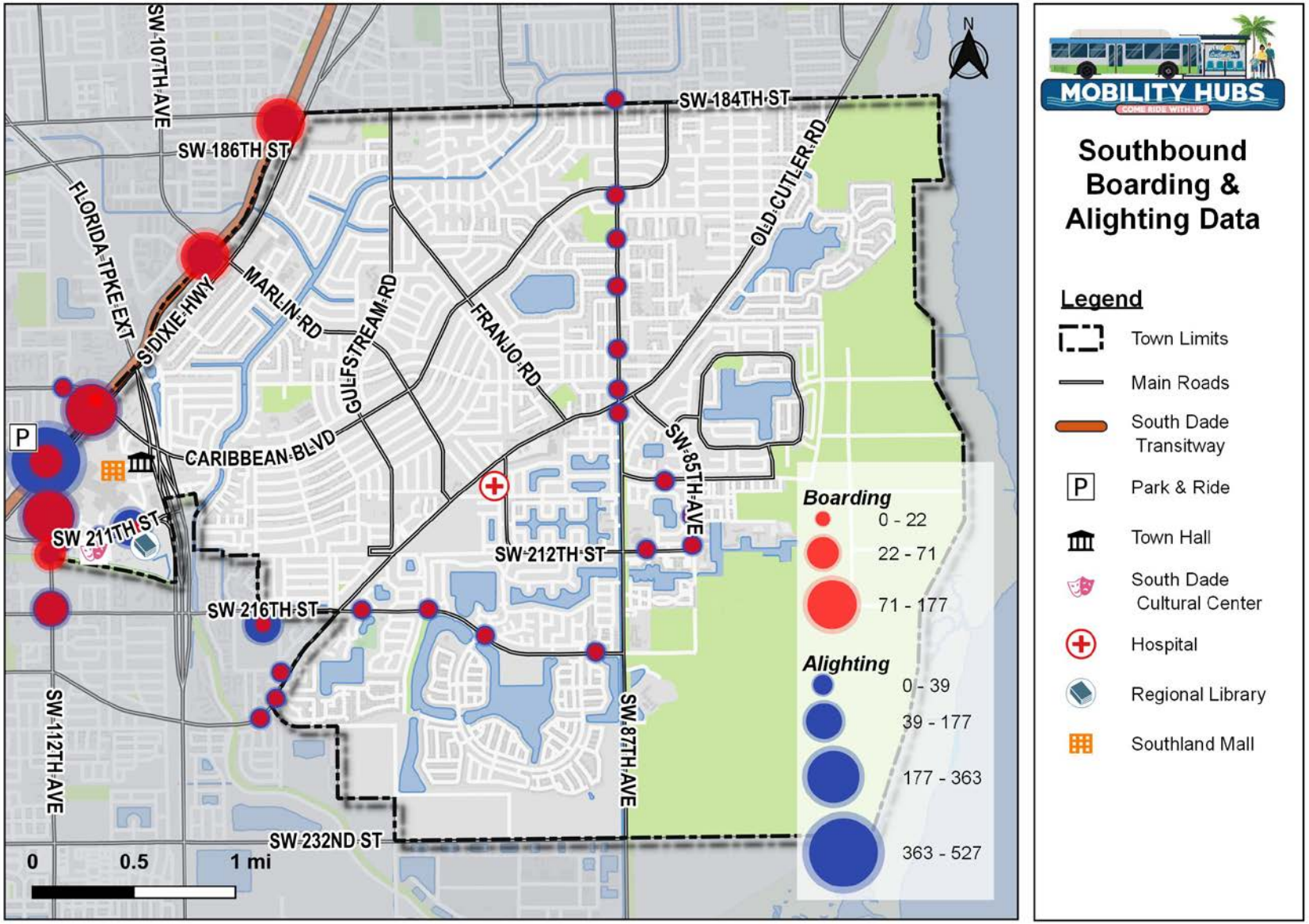


Figure 35: Southbound Boarding & Alighting Data

**Information provided by DTPW*

Town Circulator

Ridership for the Town Circulator averages 448 riders per day, with the number of annual ridership for the Town Circulator (Route 200) over 50,000 passengers per year. The top three stops for the Town Circulator are as follows:

- Old Cutler Road at Publix,
- SW 211th Street at the Southland Mall,
- SW 184th Street & U.S. 1

The top three stops for the Town Circulator receive over 30 boarding's and alighting's per day. Figure 36 illustrates the average daily boarding and alighting by stop from June through November 2018[14].

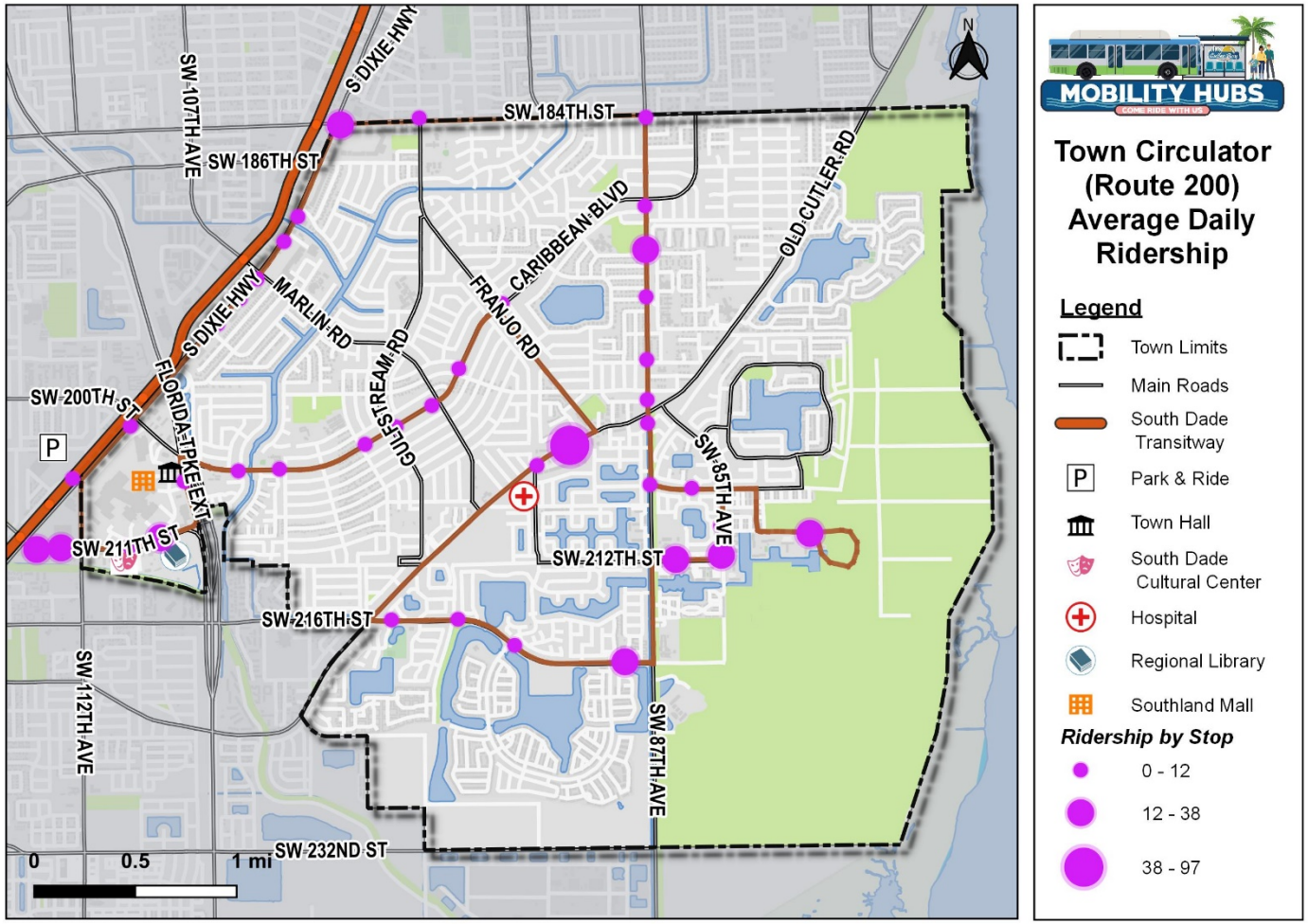


Figure 36: Town Circulator (Route 200) Average Daily Boarding & Alighting Data, 2018

[14] Data provided by Town's Public Works Department, 2018

MIOVision Analysis

On Tuesday, March 12, 2019, MARLIN Technicians setup six (6) MIOVision Cameras at three (3) transit locations, utilizing information provided by the Bus Operator Questionnaire and ridership data. MIOVision Cameras were used to capture transit, pedestrian, and bicycle activity on Wednesday, March 13, 2019, over a 12-hour period. The videos were reviewed by staff, which recorded all transit, pedestrian, and bicycle activity over a 10 – 12-hour period, depending on route hours of operation. Table 7 provides the total boarding, alighting, pedestrian, and bicycle data captured at each of the transit stops.

Table 7: Location of Video Detection Equipment

No.	Bus Stop Location	Bus Stop ID	Boarding	Alighting	Pedestrian	Bicycle
1	SW 211 Ave / Southland Mall	CTLRTERW	85	26	67	9
2	SW 184 St / U.S. 1	C184US16	24	9	59	11
3	SW 87 Ave / SW 190 St	C87V1903	10	11	26	15

Pages 56 through 58 provide the characteristics, observations, pictures, and location map of each of the bus stops recorded and analyzed using MIOVision video camera detection equipment.

Bus Stop 1: SW 211 Avenue & Southland Mall (North Side)

Figure 37: Photo of Existing Bus Stop at SW 211 Ave, Southland Mall, north side

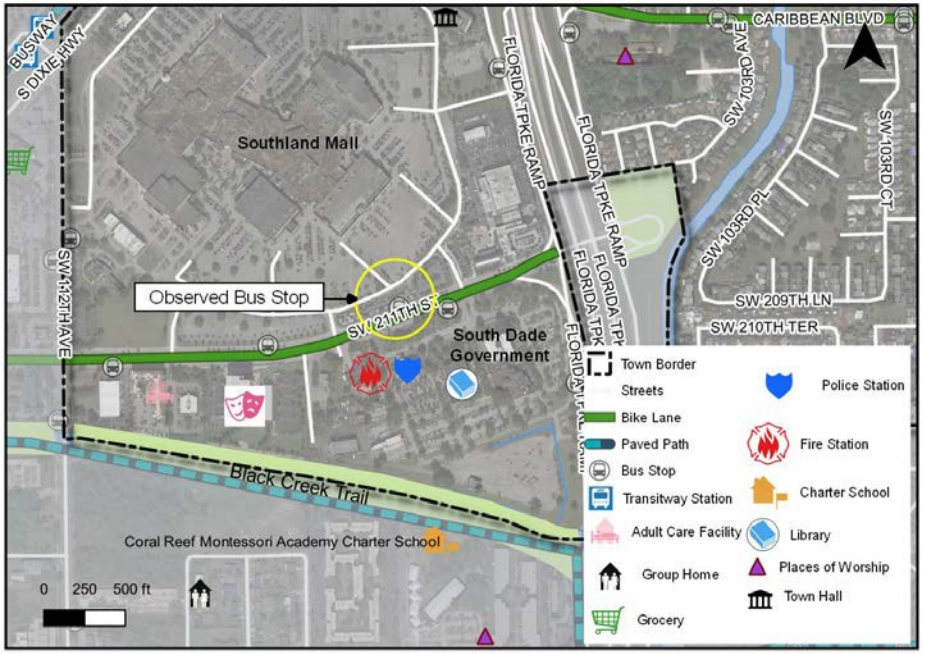


Figure 38: SW 211 Street Bus Stop Location Map

Characteristics

- Existing Amenities: Large Bus Shelter, Seating, System Map, Signage, Bus Bay, Newspaper Rack, Lighting, Trash Receptacle, Advertising.
- Nearby Facilities: Southland Mall, Movie Theater, South Dade Government Center, Dealership, Bank, Residential, Retail, Restaurants, Offices, Black Creek Trail, South Dade Cultural Arts Center, Library, Police, Fire, Town Hall, Florida Turnpike.
- Routes: 1, 31, 35, 39, 52, 137 and 200 (Town Circulator).
- Roadway: 4-lane arterial divided with buffered bicycle lanes.
- Nearest mall entrance is located approximately 560 feet from the bus stop.

Observations

- Majority of riders access the stop from the mall parking lot and west.
- About 15 passengers crossed SW 211 Street midblock.
- About 12 passengers were dropped off at the bus stop.
- A total of 67 pedestrians and 9 bicyclists were observed in a 12-hour period.

Bus Stop 2: SW 184 Street/Eureka Drive near US 1 / S. Dixie Highway

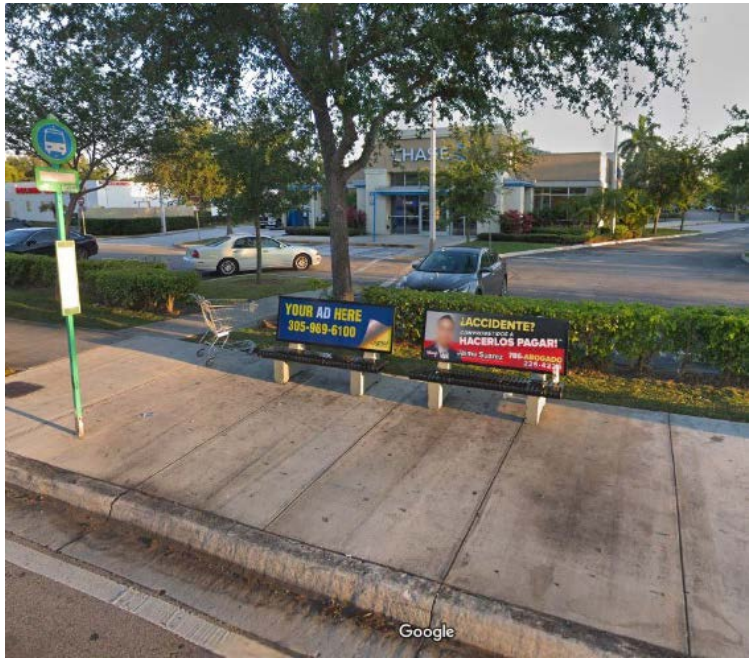


Figure 39: Photo of Existing Bus Stop on SW 184 Avenue, south side

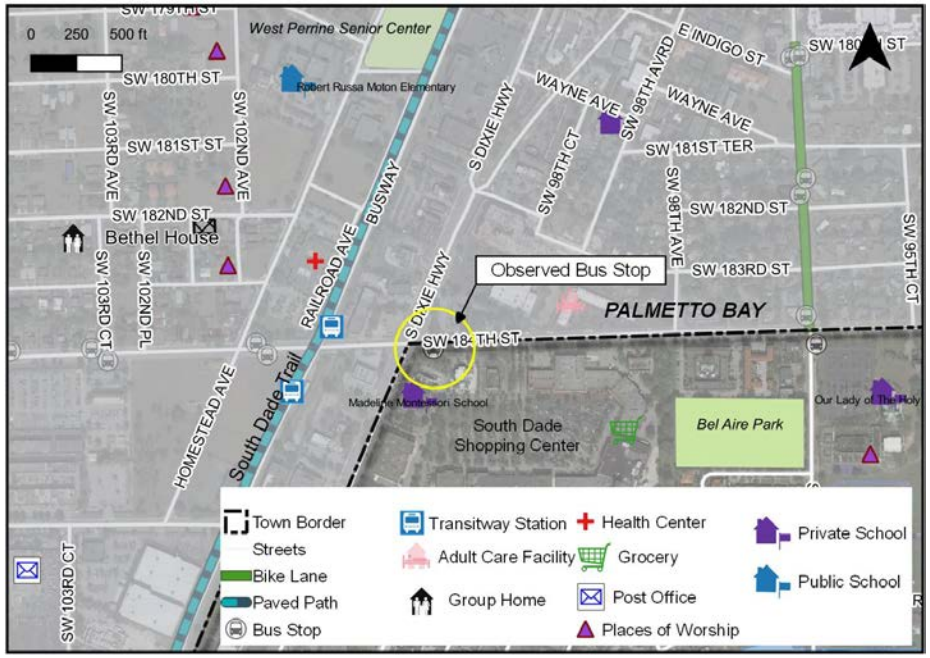


Figure 40: SW 184 Street Bus Stop Location Map

Characteristics

- Existing Amenities: Seating, Trash Receptacle and Signage
- Nearby Facilities: Bank, Grocery Store, Fitness Center, Retail, Restaurants, South Dade Trail, Transitway, Village of Palmetto Bay Downtown, Parks, Places of Worship, Residential, Industrial and Offices.
- Routes: 200
- Nearby Routes: 1, 31, 35, and 38
- Roadway: 5-lane arterial
- Transitway is located approximately 750 feet from the bus stop.

Observations

- Majority of riders access the stop from the shopping center adjacent to the stop.
- Approximately 14 pedestrians crossed SW 184 Street midblock.
- More than half of pedestrians and all bicyclists utilized the south sidewalk.
- One passenger was picked up from the bus stop.
- A few pedestrians waited around the bus stop and left.
- All but two (2) cyclists utilized the south sidewalk.

Bus Stop 3: SW 87 Avenue / SW 190 Street

Figure 41: Photo of Existing Bus Shelter at SW 87 Ave, west side

Figure 42: SW 87 Avenue Bus Stop Location Map

Characteristics

- Existing Amenities: Shelter, Seating, Trash Receptacle, Advertising, System Map and Signage
- Nearby Facilities: Ned Glenn Nature Preserve, Whispering Pines Elementary School, Place of Worship, Senior Communities, Whispering Pines Park.
- Routes: 200 and 287
- Roadway: 2-lane collector

Observations

- Most transit users accessing the stop by crossing SW 87 Avenue midblock at the Pine Wood Villa entrance.
- One wheelchair user was seen accessing the bus stop on the west sidewalk and boarding the bus.
- Most transit users were elderly.
- A good amount of pedestrian and bicycle activity was observed along the sidewalks.

Speedtracker Analysis

The MARLIN team rode the Town Circulator on Tuesday, February 26, 2019 utilizing the SpeedTracker app to track and analyze the time and distance of the Town Circulator. The team recorded two trips beginning at 10:40 a.m. and ending at 12:31 p.m., beginning and ending the trip at the Old Cutler Road Publix stop. Table 8 provides the average summary for both trips.

Table 8: Summary of SpeedTracker Analysis

Average Speed (MPH)	Maximum Speed	Distance (Miles)	Elapsed Time	Stopped Time	Travel Time
21.3	47.5	13.7	0:49:59	0:18:17	0:37:17

Each trip averaged approximately 50 minutes for the 13.7-mile clockwise loop taken by the Town Circulator. It is important to note that the bus only stops when a passenger is present at a bus stop or someone requests to get off the bus, therefore stops are not always made at each bus stop. The time schedule provided demonstrates service every hour, delays mostly occurred along U.S. 1 / S. Dixie Highway, where traffic is heavier and traffic signals are mostly present.

Alternative Routes

Through an analysis of existing service, a review of existing transit service provided by DTPW within and around the Town of Cutler Bay was conducted. Figure 43, on the following page, illustrates the existing transit coverage provided within the Town. To the south, a portion of the Isles of Bayshore (south of SW 216th Street) is out of the ½-mile service area, as is the area located in the northeastern most portion of the Town along Old Cutler Road. These two areas of the Town do not currently have access to transit. Additionally, portions of the Town fall out of the ¼-mile buffer zone. While ½-mile is the standard for transit coverage, due to the South Florida environment, ¼-mile is sometimes considered as a standard to follow. Three alternative scenarios were explored for the Town of Cutler Bay transit services, Figure 44, on page 62, illustrates proposed alternatives.

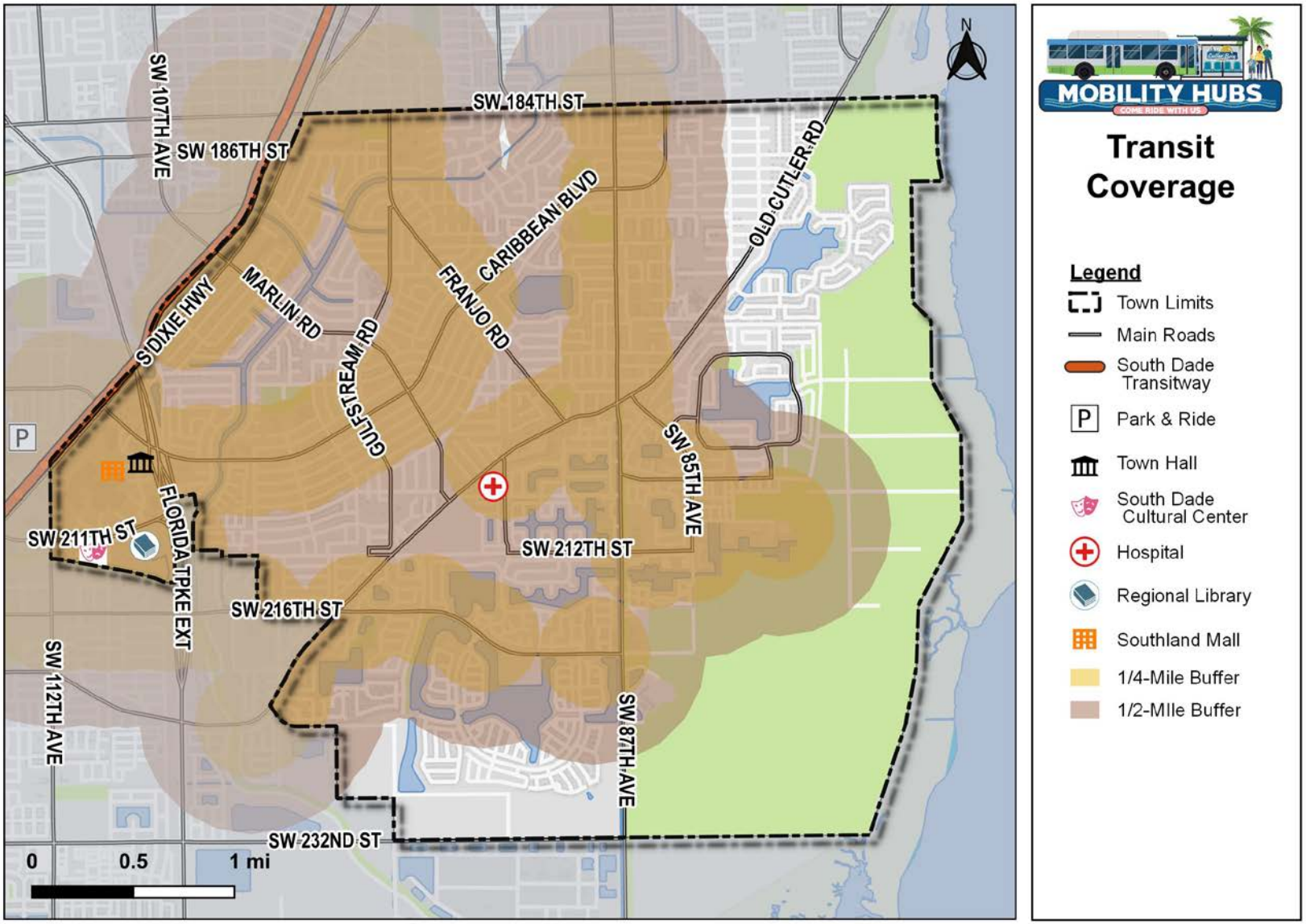


Figure 43: Transit Coverage Map of Existing Bus Stops

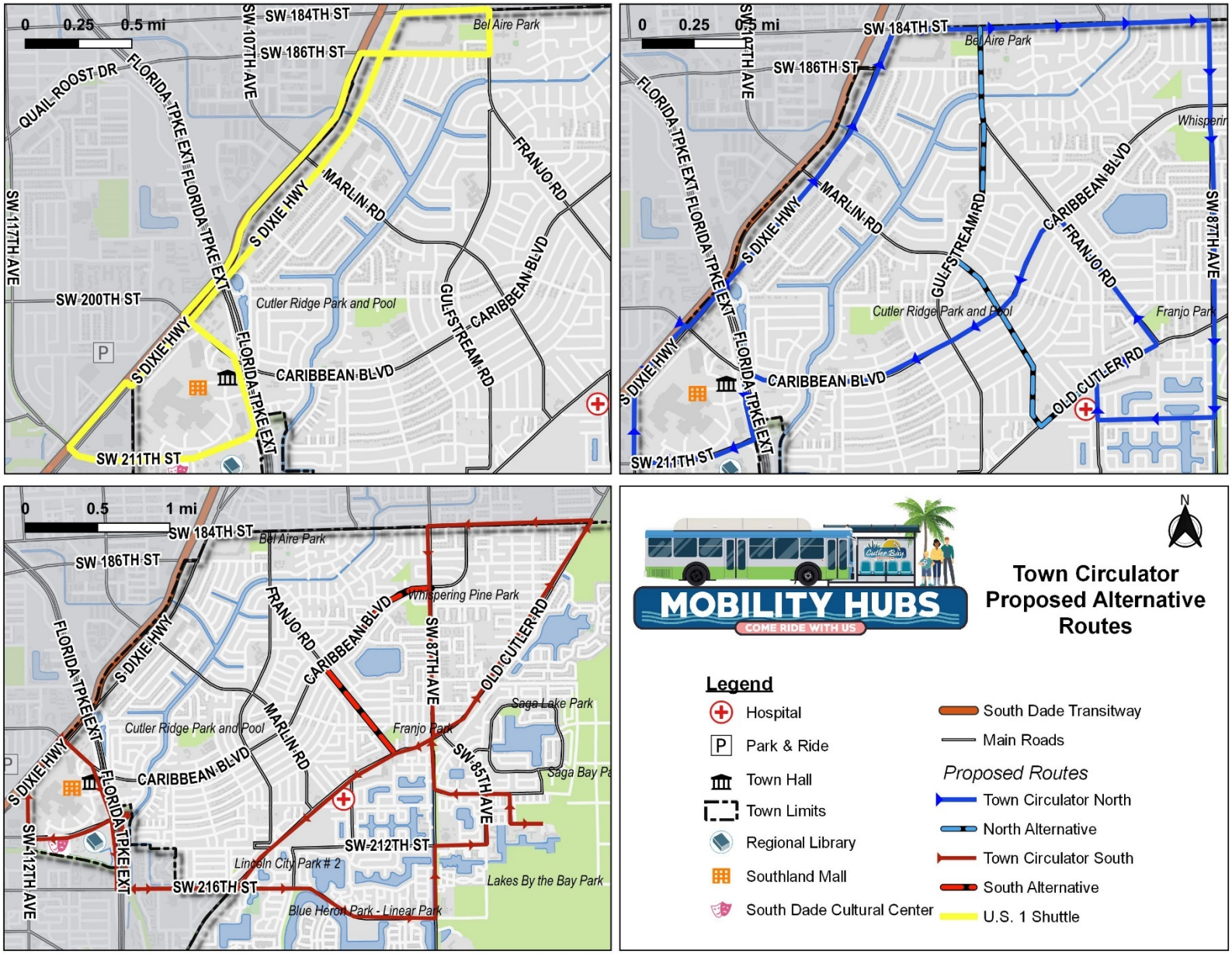


Figure 44: Proposed Alternative Routes

The following recommendations are the result of analysis, feedback from the Mobility Hubs Survey, site visits, Stakeholder Advisory Committee, and public workshops.

Short Term Alternative Recommendations

Alternative 1: Includes providing counter-clockwise service to the existing Town Circulator Route. Additional benefits to including a counter-clockwise service include shorter wait times and increased ridership through offering residents an alternate bus.

Alternative 2: Includes extending the hours of operation to include morning (6 a.m. to 8 a.m.) and evening (6 p.m. to 8 p.m.) peak periods. Additional benefits include a potential increase in ridership to offer working residents an alternative to access the Transitway. Also, residents who rely on transit could utilize the service for their first/last mile connection and attend public meetings.

Long Term Alternative Recommendations

Alternative 3: Would divide the existing Town Circulator into two routes and extend service to other areas within the Town boundaries, where there is currently no transit. The Town Circulator North and South Routes would incorporate areas not covered by transit as illustrated in Figure 43. Residents could travel anywhere throughout the Town, if needed, while also accessing the Town Center and commercial areas. Bus stops would need to be established along the new areas of service, such as Old Cutler Road, northeast of SW 87 Avenue, and Marlin Road. The extension along Caribbean could utilize existing bus stops that are not currently being utilized due to service removal of previous existing routes along this corridor.

Alternative 4: Would introduce a Commercial Circulator, transporting visitors and residents along U.S. 1 / S. Dixie Highway and the Town Center. This scenario imagines U.S. 1 / S. Dixie Highway at build out with density and mixed-use transit-oriented development along the corridor. This route could also be an on-demand type route which covers the U.S. 1 / S. Dixie Highway corridor, connecting residents, workers, and visitors to the Transitway and other routes.

The southern portion of the Isles of Bayshore could not be accessed as it is part of a private gated community. Residents who wish to utilize transit within those communities could do so by walking or biking to the entrance of the community where the existing stops are located along SW 216th Street. The community could also incorporate a low emission vehicle, such as an electric golf cart, to provide mobility throughout the community. With the exception of this area, Alternative 3 would provide complete transit coverage for the Town of Cutler Bay.

CUTLER BAY MOBILITY HUBS

Utilizing the data collected, three levels of Mobility Hubs were identified at key locations throughout the Town to provide a comprehensive network of Mobility Hubs throughout the community.

- Neighborhood Hubs: Small scaled hubs serviced by at least one transit route, near residential uses.
- Community Hubs: Medium scaled hubs serviced by one or more transit routes, near residential and retail uses.
- Regional Hubs: Large scaled hubs serviced by two or more transit routes, near mix use development, including multi-family residential, employment hubs, and regional commercial uses.

Hub Site Selection

The MARLIN team assessed existing bus stops, population, land use, transit accessibility, and the potential use of future transit to strategically place Mobility Hubs throughout the Town. Table 9 provides a list of selected locations; Figure 45, on the next page, is a map of these locations.

Table 9: Mobility Hub Locations

NAME	HUB TYPE	LOCATION	ROUTES	EXISTING STOP
Lakes by the Bay	Neighborhood	SW 85 Ave & SW 212 St	200, 287	Yes
Pine Wood	Neighborhood	SW 87 Ave & SW 190 St	200, 287	Yes
Whispering Pines	Neighborhood	Caribbean Blvd & Franjo Rd	1, 200	Yes
Eureka Drive East	Neighborhood	Old Cutler Rd & 184 St	None	No
The Isles of Bayshore	Neighborhood	SW 216 St & SW 89 Pl	200, 287	Yes
Community Health	Neighborhood	SW 216 St & SW 102 Ave	52, 287	Yes
Old Town Center	Community	Old Cutler Rd & S of Franjo Rd	200	Yes
Eureka Drive West	Community	SW 184 St & East of US 1	200	Yes
Marlin Road	Community	Marlin Rd & US 1	31, 35, 38, 200	Yes
Caribbean Boulevard	Community	SW 200 St & US 1	1, 31, 35, 38, 39, 52, 200	Yes
South Dade Government Center	Community	SW 211 St	1, 31, 35, 39, 52, 137, 200	Yes
Cutler Bay	Regional	US 1 / SW 112 Ave	1, 31, 34, 35, 38, 39, 52, 200	Yes

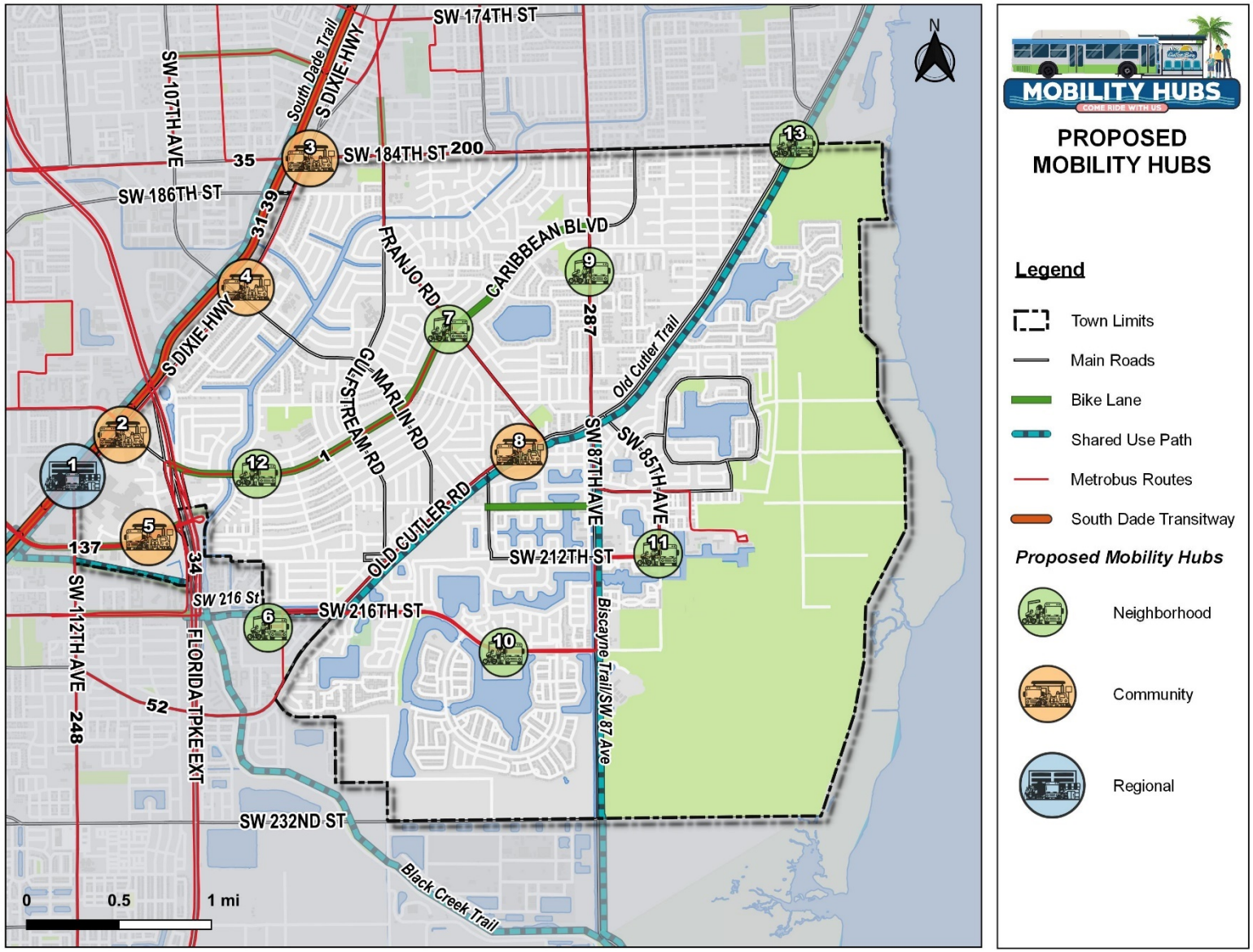


Figure 45: Proposed Mobility Hubs Location Map

Each of the sites selected was analyzed further, the following characteristics were documented within a ¼-mile and ½-mile buffer of each site:

- Edges
- Accessibility
- Existing ridership data
- Proximity to Trails
- Existing Bicycle and Pedestrian Facilities
- Population
- Employment
- Proximity to Community Facilities
- Bicycle & Pedestrian Crash Data
- Existing Infrastructure
- Redevelopment Potential
- Zoning & Land Use
- Existing Roadway Conditions & Traffic
- Right-of-Way
- Annual Average Daily Traffic (AADT)

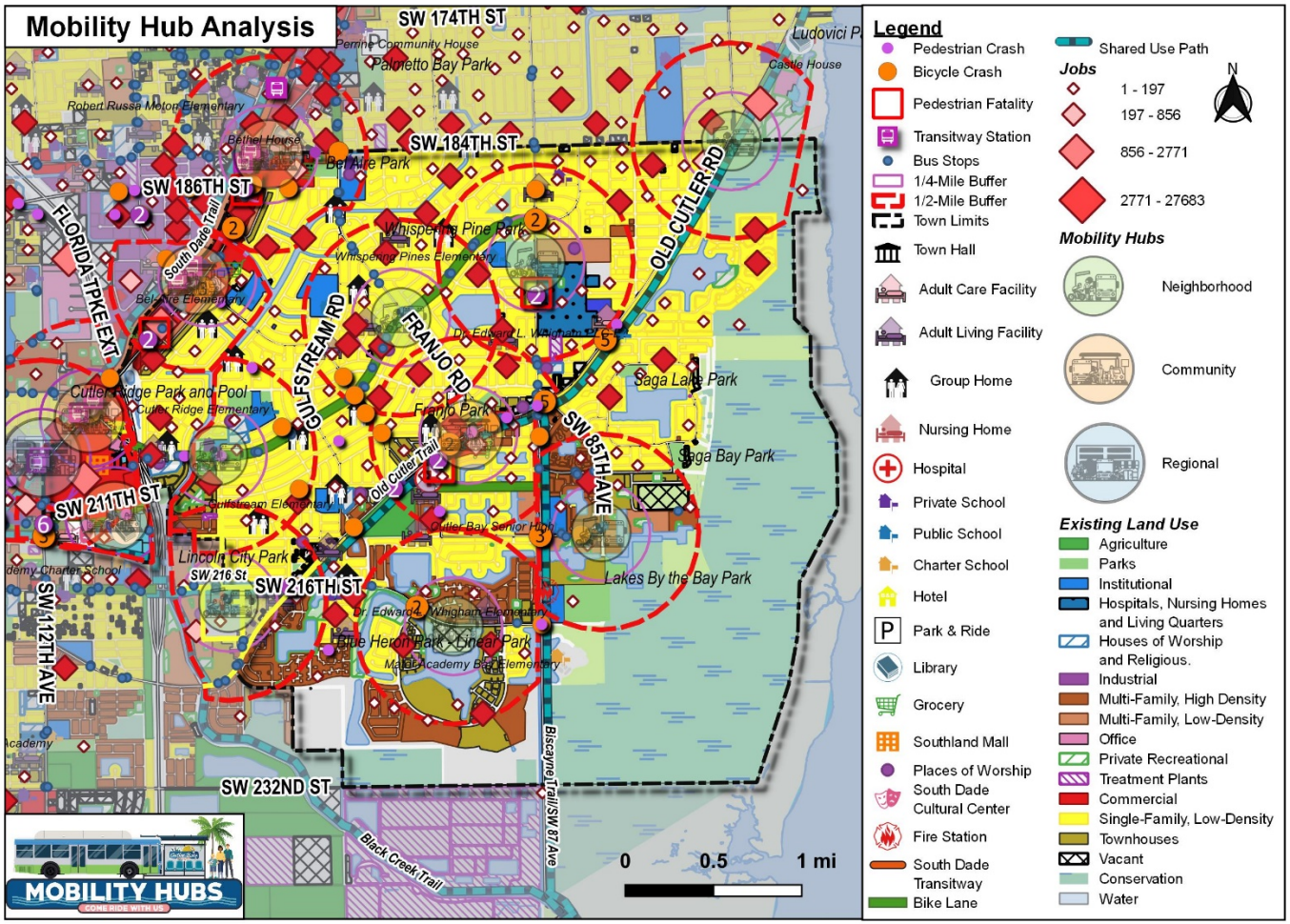


Figure 46: Hub Analysis Map

Design

The design of stations and bus stops are key components to the overall transit system. A well-designed stop or station can attract new riders, provide safety, amenities, attractive environments, create a sense of place, and ensure connectivity. Designing walkable spaces encourages mode choice, health, and community pride. Improvements to sidewalks, bus shelters, pedestrian and cycling networks, lighting, and amenities create better environments for walking, cycling, and waiting. This in turn leads to higher active transportation and transit mode shares[15]. There are seven (7) main goals that should guide decisions when designing bus stops: safety, thermal comfort, acoustic comfort, wind protection, visual comfort, accessibility, and integration.[16] Furthermore, cleanliness, shelter, seating, and mixed land-uses are also important components to any bus stop or station (see Figure 47).

Figure 47: Utretch, Netherlands Bus Stop

Paving, lighting, and vegetation are thought to have the most perceived pedestrian benefit. Therefore, one of the key recommendations to improving transit stops is landscape enhancement in the form of canopy trees, Florida-Friendly shrubs, and design. There are nine (9) key bus stop design techniques that help achieve the above-mentioned goals: lighting, seating, cover, amenities, information, vegetation, traffic management, pedestrian infrastructure, and bicycle infrastructure.[17] Roadways that are transit-supportive are ***designed*** for multiple modes of transportation. Well-integrated streets are active streets, providing safe, low-stress, bicycle and pedestrian facilities, including comfortable sidewalks, and bikeways. Well-designed streets can create nodes of activity around stations and along routes, support transit, future growth, reliability, ridership, economic, and sustainable development.

Disconnected street networks, highway barriers, high-crash or uncomfortable intersections, and difficult mid-block crossings must all be addressed to allow pedestrian and bicycle access to transit stops and stations. Mixed-use developments, commercial districts, residential areas, employment centers, and other destinations in proximity to transit make short trips more likely. To reduce conflicts, pedestrian and bicycle network facilities should be safe, accommodating, comfortable, coherent, predictable, context sensitive, and allow for innovation. Non-motorized facilities should be appropriate to the surrounding area, predictable, defined, delineated, and continuous; innovative solutions to connect networks should be encouraged, especially at locations where conflicts are more likely, and along higher-speed roadways. The success of the proposed mobility hubs will be determined by their design and coordination with government agencies to allow innovative techniques and approaches to enhancing the pedestrian environment.

[15] NRG Research Group, 2010
[16] Zhang, 2012
[17] Zhang, 2012

Conceptual Design

The MARLIN team developed templates illustrating the three levels of Mobility Hubs for the Town of Cutler Bay. Figures 48, 50 and 52 provide a graphic representation of bus stops at the different types of Mobility Hubs, additionally, conceptual infrastructure plan sheet of improvements were developed for three of the Mobility Hubs. Cost estimates for infrastructure improvements and recommended amenities can be found in Appendix III.

Figure 48 illustrates a rendering of what a bus stop at a Neighborhood Hub could look like utilizing the existing bus shelter design for the Town. The Neighborhood Hub template includes:

- Real-Time Information Sign;
- Branded Identification Sign;
- Shelter;
- Seating;
- Trash/Recycle Receptacle;
- Landscape Enhancements;
- Lending Library;
- Bikeshare Station; and
- Enhanced Bicycle and Pedestrian Connections.

Figure 48: Neighborhood Hub Bus Stop Template

Figure 49, on the following page, illustrates a plan sheet improvement for the Lakes by the Bay Neighborhood Hub featuring:

- Addition of 5-foot Bicycle Lanes on SW 85 Avenue;
- Enhanced Pedestrian Crossings;
- Pedestrian Signage;
- Curb Extension on the Northwest Corner;
- Addition of Canopy Trees;
- Modification to the Median;
- Lane reduction on SW 85 Avenue South of SW 212 Street; and
- Addition of 10 Parallel Parking Spaces.

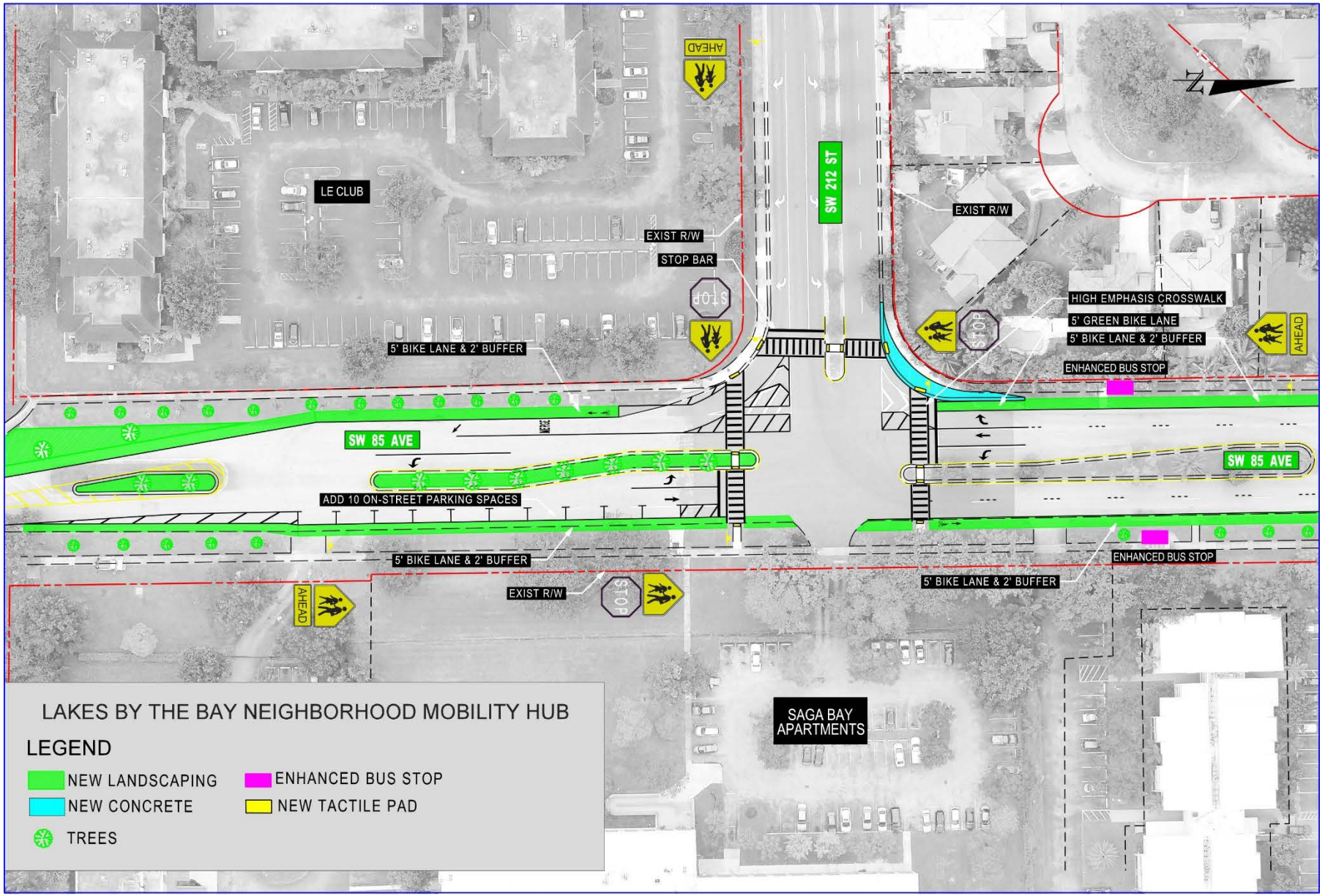


Figure 49: Neighborhood Hub Plan Sheet Improvements

Figure 50 illustrates a rendering of what a bus stop could look like at a Community Hub utilizing the Town's existing large shelter design. The Community Hub template includes:

- Real-Time Sign;
- Branded Identification Sign;
- Pedestrian Lighting;
- Trash/Recycle Receptacle;
- Public Art;
- Solar USB Charge Station;
- Carshare Station;
- Electric Vehicle Charging;
- Bikeshare Station;
- Shelter;
- Seating; and
- Enhanced Pedestrian & Bicycle Access.

Figure 51, on the following page, illustrates a plan sheet improvement for the Caribbean Boulevard Community Hub featuring:

- Kiss & Ride with Covered Walkway;
- Enhanced Pedestrian Connections;
- Enhanced Landscaping & Canopy Trees
- Removal of Billboard Signage;
- Enhanced Pedestrian Area on the East Side of U.S. 1; and
- Fencing to Funnel Pedestrians to Crosswalks near Kiss & Ride.

Figure 50: Community Hub Bus Stop Template

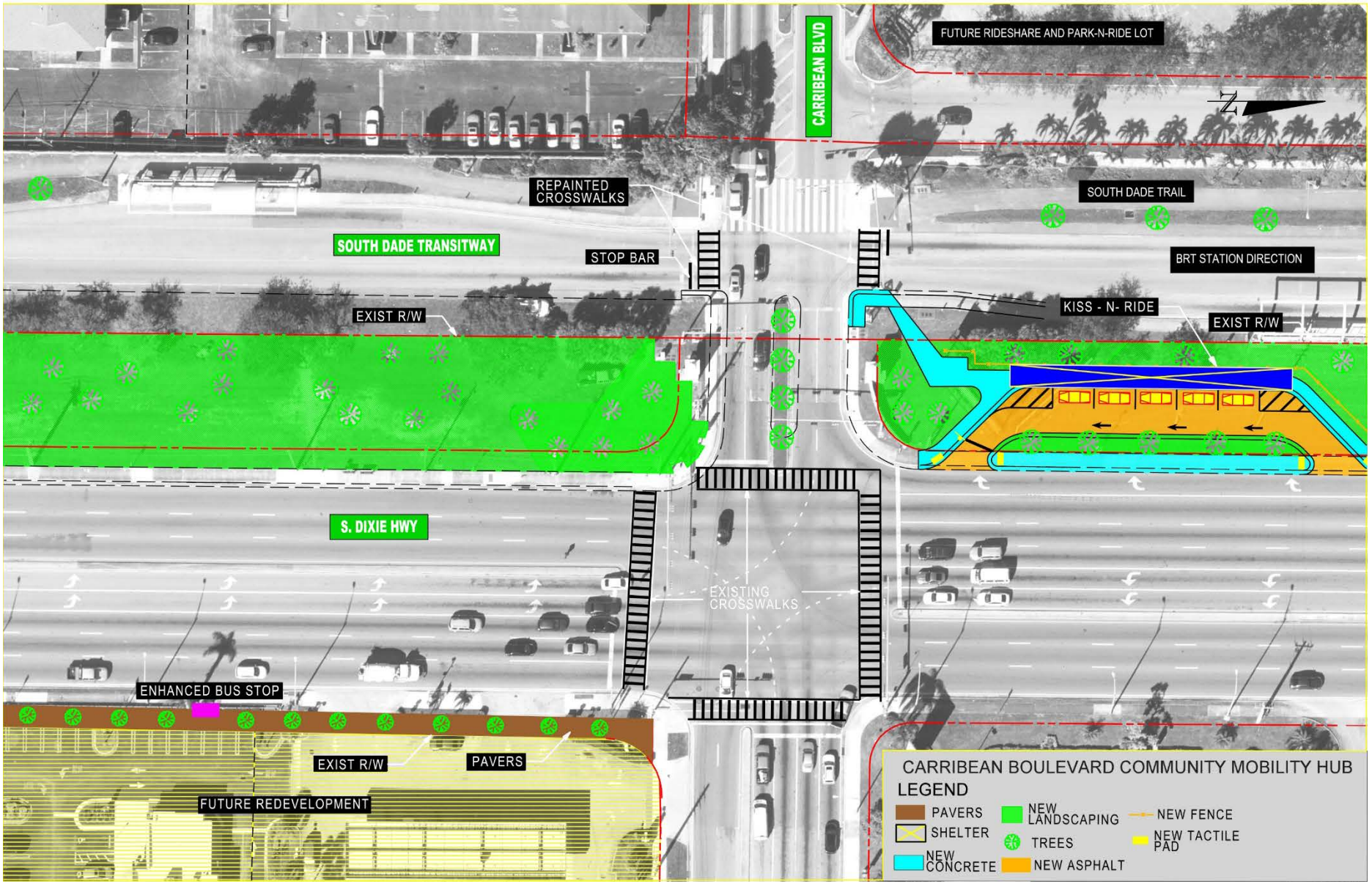


Figure 51: Community Hub Plan Sheet Improvements

Figure 52 illustrates a rendering of what the Regional Hub Station could look like with the proposed Bus Rapid Transit Station design, and the construction of a parking garage adjacent to the Transitway at SW 112 Avenue. The Regional Hub template includes:

- Park & Ride Garage;
- Kiss & Ride;
- Bicycle Storage Lockers;
- Electric Vehicle Charging;
- Package Pickup Kiosks;
- Carshare Station;
- Future Bus Rapid Station;
- Linear Park;
- Enhanced Bicycle & Pedestrian Access; and
- Enhanced Landscaping with Canopy Trees.

Figure 53, on the following page, illustrates a plan sheet improvement for the Cutler Bay Regional Hub featuring:

- Kiss & Ride
- Waiting Area;
- Electric Vehicle Charge Station;
- Carshare Area;
- Future Location of Parking Garage;
- Reworking of Park & Ride Entrance;
- Enhanced Landscaping & Canopy Trees;
- Enhanced Pedestrian Area along East Side of U.S. 1; and
- Enhanced Pedestrian Crossings.

Figure 52: Regional Hub Station Template

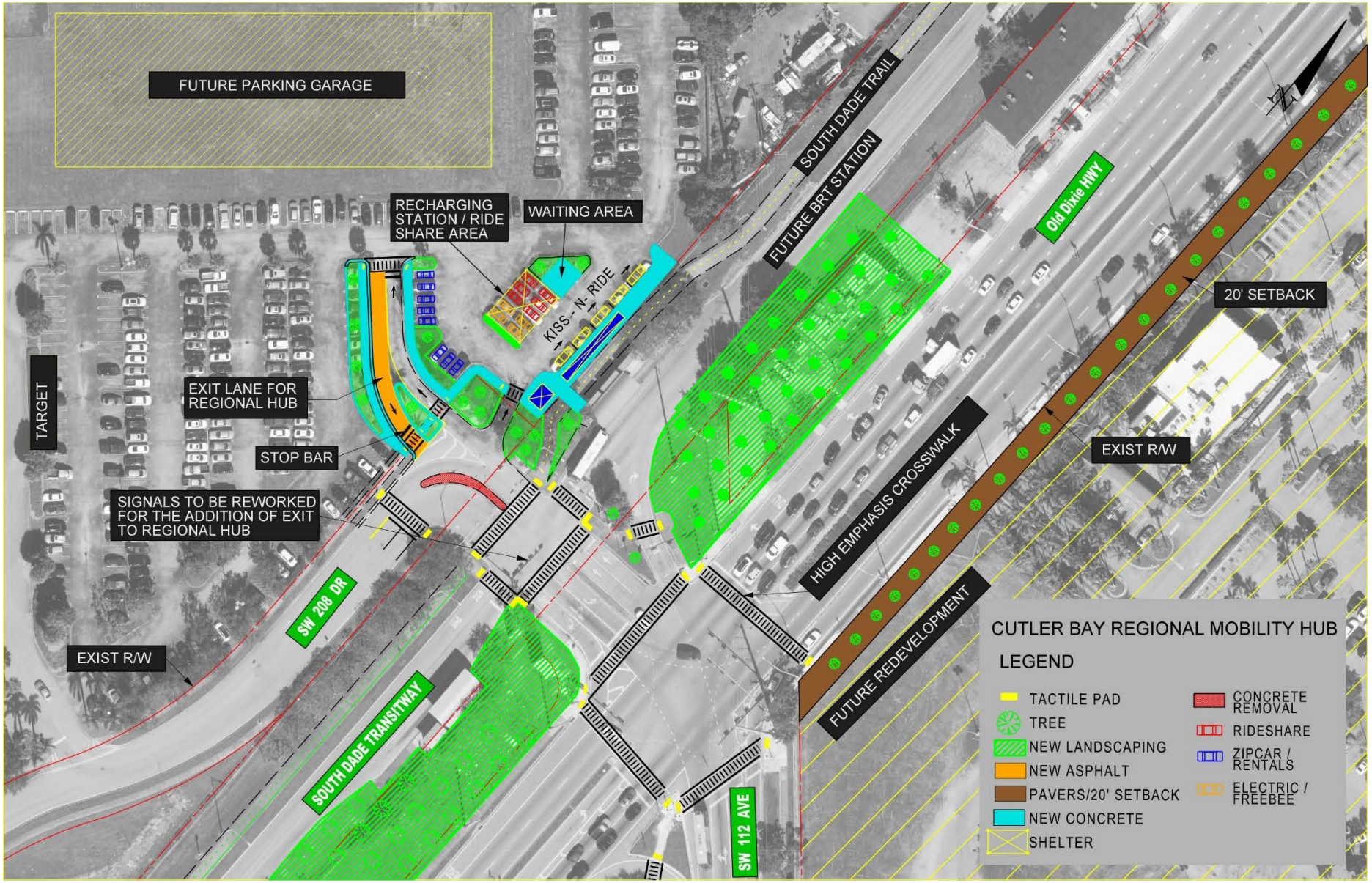


Figure 53: Regional Hub Plan Sheet Improvements

Bike & Pedestrian Facility Examples

Enhanced pedestrian and bicycle access are key components to transit. While the Town of Cutler Bay can make improvements along Town roads, most arterial and collector roadways are under the control of the Florida Department of Transportation or Miami-Dade County. Working with these two agencies to develop more pedestrian and bicycle-friendly facilities are core components to ensuring the success of future Mobility Hubs. Below are some examples of enhanced pedestrian and bicycle facilities, and treatments that could be used in identified Mobility Hub locations.

Crosswalk Examples

Figure 54: Examples of Pedestrian Crossings

(Beginning left to right) - Baltimore, MD; Lompoc, CA; Montreal, Canada

Bicycle Facility Examples

Figure 55: Examples of Bike Facilities

(From top left to right) - Queens Plaza, NY; NACTO Bikeway Design; Protected Bike Lane, Marachal Floriano, Brazil; Sevilla, Spain; Sydney, Australia, New York, NY

Linear Park Examples

Figure 56: Examples of Linear Park Designs

(Top Left to Right) - Madrid, Spain; Dandenong, Australia; San Mateo, CA; Japan

Green Infrastructure Examples

Green Infrastructure refers to an approach to water management which protects, restores, or mimics the natural water cycle. It is an effective, economical, and community enhancing alternative to traditional water treatment methods.

Figure 57: Florida Friendly Design - Starkey Ranch, FL

Figure 58: Green Infrastructure Examples in Florida: Low Impact Design, Bioswales & Raingardens

Pervious Hardscape Examples

Figure 59: Pervious Hardscape Examples

Amenities for Transit Stops

Amenities are one of the core components of a successful transit stop or station. Amenities provide residents and users an enhanced experience, attracts people, and creates a sense of place. Incorporating amenities into well designed transit stops "can expand pedestrian capacity and promote transit streets as a desirable *place* in the urban environment. Creating a simple, legible, and pleasant experience at the transit stop grows the capacity of the whole system, and can help transform transit from a basic coverage network to a sought-after mobility option".[18]

Basic Transit Amenities

The following key transit stop amenities have been identified and defined by the Capital Metropolitan Transportation Authority's *Transit Design Guidelines: Standards & Best Practices*, and are believed to be key components for improving transit access and usability. Therefore, the following amenities will be recommended for installation at all selected sites as appropriate and encouraged for installation at all existing bus stops throughout the Town of Cutler Bay.

Signage

Bus stop signage should include route name, number, direction and destination. Metrobus customer service contact, system logo, and website address. Detailed schedules and route information at major boarding locations and transfer points. Signage should also include the unique bus stop identification number and instructions for the transit agency's application or website.

Lighting

Lighting should enhance safety by improving visibility, providing a sense of security, and defining the waiting area. Areas around stops should be adequately lit at night. The installation of motion detection lighting can also reduce energy usage and costs. Pedestrian scale lighting, typically includes lamps less than 25-feet high, is important for creating safe and comfortable environments, taking Dark Sky Principles[19] into account.

Street Furniture

Street furniture enhances the experience of waiting through convenience and comfort, while also providing passerby's an opportunity to stop and rest. Examples of street furniture include shelters, seating, and bicycle racks. Opportunities to sit while waiting for a bus significantly reduces commuter stress.

[18] National Assocation of City Transportation Officials (NACTO), 2016

[19] Dark Sky Principles are principles defined by the International Dark-Sky Association that minimize the harmful effects of light pollution.

Transit Shelters

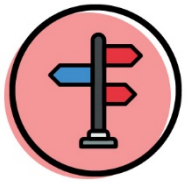
Shelters protect passengers from weather conditions while waiting, and should be oriented to protect against exposure to the elements. Shelters should be designed in an open and inviting way with open design or glass panels. When feasible, Metrobus and/or Town branding should be a component of the shelter, while also adhering to branding standards.

Seating

Bus stops should have a variety of seating options, which include benches, leaning rails, and low masonry walls. The amount of seating should match the average number of commuters occupying the stop. Seating should be integrated into the landscape, serve non-commuters, and shielded from vehicle traffic.

Bicycle Racks & Parking Shelters

Providing bicycle racks and parking is important in meeting the needs of commuters who utilize bicycles to access transit. Bicycle parking should be placed in well-lit and highly visible areas to deter theft. Due to the local South Florida environment, bicycle racks and parking should be covered to protect from the elements, and when feasible, secured with limited access such as a bicycle storage locker.



Wayfinding

Wayfinding provides assistance with navigating public spaces. Transit stops serve as gateways into neighborhoods and communities, and should be recognizable landmarks that enhance rider experience. Easy-to-follow wayfinding signage makes it easier to locate bus stops, stations, connecting routes, trails, community facilities, destinations, etc. Maps, schedule, route details, real time information, directional signage to key destinations, and relevant station names are all components to enhanced station facilities and increase ridership. Consistent brand, logos, colors, and fonts reinforce visibility and provide direction to all users. Wayfinding should provide the user with the minimum amount of information needed to find the right place and to avoid an overload of information.

Information Technology

Information plays an important role in the performance of bus stops. Schedule information will ideally be presented in real time and static form. Arrival information is best for digital display while transit maps are best presented in printed form. Updating static information, such as system maps, placards, and flags, takes time and financial resources. Digital information technology allows for wayfinding information to be presented to users in a quick, convenient, cost-effective, and up-to-date manner.

Enhanced Pedestrian & Bicycle Access

Enhanced pedestrian and bicycle access include connected sidewalks, bicycle lanes, shared use pathways, high-emphasis crosswalks, pedestrian and bicycle signage, midblock crossings, and walking environments that are safe, comfortable, and convenient for non-motorized transportation.

Landscape Enhancements

Landscape enhancements include canopy trees, green infrastructure, and native Florida-Friendly landscaping. Enhancements to the landscape provide aesthetics, community pride, a comfortable walking environment, traffic calming, and assist with reducing the heat island effect, providing patrons a refuge from the natural elements.

Mobility Hub Amenities

As mentioned in the beginning of this report, a Mobility Hub encompasses an entire intersection or area, and includes the walkshed or ½-mile distance of any transit stop or station. Mobility Hub amenities not only include transit stop amenities, but additional amenities that would improve mobility, accessibility, and the users experience of transportation through mode choice. Mobility Hub amenities include micro-mobility and shared-mobility options, which can be utilized to activate spaces, streets, and neighborhoods. This encourage socialization, community pride, and non-motorized transportation. Red icons represent recommended amenities to be placed at all Mobility Hub locations and blue icons represent optional amenities that can be placed at any Mobility Hub where feasible.

Lending Library[20]

A free little library where one takes a book and returns a book. This free book exchange comes in many shapes and sizes, with the most common version being a small wooden box of books. Each has their own unique, personal touch and anyone may take or bring a book to share.

USB Charge Station

A device where one can charge or recharge their mobile device via a USB cord (may or may not utilize solar for charging).

Emergency Callbox

Provide public safety and instant communication with one button calling of 911, Police, Fire, Security, or help.

[20] www.littlefreelibrary.org

Bicycle Share

Provides users with on-demand access to bicycles at a variety of pick-up and drop-off locations for one-way (point-to-point) or roundtrip travel. Bikesharing fleets are commonly deployed in a network within an urban area, city, neighborhood, employment center, and/or university campus[21].

Bicycle Storage Locker

Lockers are fully enclosed storage devices used to secure a bicycle, ideal for long-term parking, areas with high local theft rates, isolated areas, and/or in proximity to transit stations.

Bicycle Repair Station

A fixed station with tools necessary to perform basic bicycle repairs and maintenance.

Car Share[22]

Offers members access to vehicles by joining an organization that provides and maintains a fleet of cars and/or light trucks. These vehicles may be located within neighborhoods, public transit stations, employment centers, universities, etc. The carsharing organization typically provides insurance, gasoline, parking, and maintenance. Members who join a carsharing organization typically pay a fee each time they use a vehicle.

Electric Vehicle (EV) Charging Station

A location which provides electric energy for recharging electrically-powered vehicles, including hybrid electric vehicle, plug-in hybrid electric vehicle, extended-range electric vehicle, and battery electric vehicle.

[21] www.SAE.org/shared-mobility
[22] www.SAE.org/shared-mobility

Park & Ride [with Smart Parking Info]

Parking areas conveniently located for individuals to ride public transit to reach their destination. These facilities are typically free and located adjacent to a major transit station or hub, and can be enabled with sensors for real-time information on parking availability.

Microtransit[23]

Are privately or public operated, technology-enabled transit service that typically uses multi-passenger/pooled shuttles or vans to provide on-demand or fixed-schedule services with either dynamic or fixed routing. Vehicles can be electric and utilize phone applications for service and real-time information. Examples include Freebee and the Downtowner.

Kiss & Ride

An area, typically adjacent to a transit station, airport, or seaport, where individuals can be quickly dropped-off or picked-up for convenience. These designated areas typically have limited time frames for vehicles to wait or idle.

Package Pickup Kiosk

An electronically secured storage locker, conveniently located, and typically equipped with a kiosk computer to access packages purchased through an on-line retailer, such as Amazon or Walmart. Can be installed indoors or outdoors. The outdoor lockers are 100% weather-proof and can withstand the elements. Recipients are notified upon delivery and access their package through an access code or barcode provided upon delivery notification.

Retail

A place or kiosk where the sale of goods to the public occurs, can be permanent, temporary, or mobile.

[23] www.SAE.org/shared-mobility

Public Space
Shared spaces which include streets, parks, plazas, waterways, public transportation, public markets, open areas, etc.

Public Art
Art for everyone, a form of collective community expression. Comes in many different forms, textures, and expressions.

Wi-Fi[24]
A facility allowing computers, smartphones, or other devices to connect to the Internet or communication with one another wirelessly within a particular area.

Information Kiosk
A place, device, or person providing individuals with information or map of the area, transit system, and at times amenities including phone charging area, bathrooms, WIFI, vending machines, etc.

Air Misting System
A system in which uses pressurized water to create fine water droplets which evaporate, thus producing a cooling effect in the surrounding area.

[24] www.dictionary.com

Security

The use of security features, such as video cameras, closed circuit television, or police and/or security officer presence, in order to enhance security, deter theft, and provide the public with a sense of safety and security. Security also refers to community policing and ensuring security companies are upholding the rules at transit facilities to establish the safety and security of the public.

Motion Sensing Technology

The use of technology to detect movement in an area; this can be used to reduce and/or conserve energy, turn on lights, cameras, or other technologies.

Mobility share, public spaces and plazas, public art, WIFI, lending library, and USB charging stations are all optional recommendations at all selected sites. These should be included where feasible. Table 10 is a list of the Mobility Hub types with recommended and optional amenities.

Table 10: Mobility Hub Amenity Table

HUB TYPE	Bicycle Share	Bicycle Storage Locker	Bicycle Repair Station	Car Share	EV Charging Station	Park & Ride	Microtransit	Kiss & Ride	Air Misting System	Package Pickup Kiosk	Retail	Public Space	Public Art	WIFI	Info Kiosk	Lending Library	Enhanced Security	USB Charging Port	Real-Time Signage
Neighborhood	X	O	O	O	/	/	O	/	O	O	O	O	X	O	O	X	O	X	X
Community	X	O	O	X	X	O	O	O	O	X	X	X	X	O	O	X	X	X	X
Regional	X	X	X	X	X	X	O	X	O	X	X	X	X	X	X	X	X	X	X
X – RECOMMENDED O – OPTIONAL / - NOT APPLICABLE																			

Neighborhood Hubs

Neighborhood Hubs are small-scaled transit hubs, typically found within residential areas served by at least one (1) transit line. These Hubs are equipped with, at minimum, shelter, seating, trash and recycling receptacles, bike rack, emergency callbox, wayfinding, pedestrian lighting, and real-time information. See Figure 60 for an example of a Neighborhood Hub bus stop.

Additional items to consider are shared-mobility options for the first/last mile connection, public art to enhance community identity, a public space/plaza, such as a pocket park to provide a place for socialization and relaxation, security cameras to enhance safety and security, motion-sensing technology to conserve energy, USB charging station to provide users the opportunity to charge their devices on the go, and free lending library to encourage reading, socialization, and community pride.

Neighborhood hubs should be connected to pedestrian and bicycle facilities, have enhanced safety crossings for bicyclists and pedestrians, and be accessible.

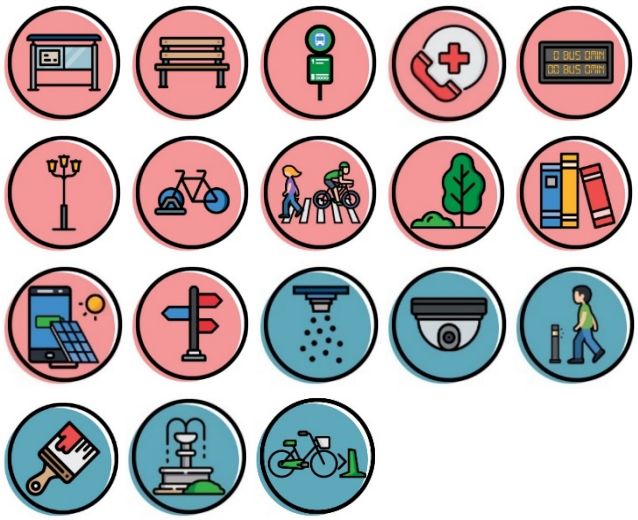


Figure 60: Neighborhood Hub Bus Stop Template

Lakes by the Bay

The proposed neighborhood hub is located at the intersection of SW 85 Avenue and SW 212 Street, near Cutler Bay Senior High School (see Figure 61). The Town recently replaced and installed two bus shelters with seating, trash receptacles, a bicycle rack, and solar-powered light bollards along SW 85 Avenue. The stop is serviced by Route 287, Saga Bay Express, and Route 200, Town Circulator, on the west side of the road. Additionally, the area is one of the denser residential communities within the Town; there are several high-rise residential buildings, many of which house seniors. The evaluation tables provided for each location establish the details of the roadway, routes servicing the proposed mobility hub, pedestrian and bicycle infrastructure, nearby facilities, and zoning within ¼-mile and ½-mile for each mobility hub proposed. Table 11 provides an overview of existing conditions and information; Table 12 provides future-planned improvements and recommendations related to amenities and infrastructure improvements.

Table 11: Lakes by the Bay Location Data

HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Name	Lakes by the Bay	200	157	Circulator
Type	Neighborhood	287	373	Limited Stop
Location	85 Ave / 212 St	*TOTAL*	*530*	
Road Class	4			
Lanes	4	Bike/Ped Facilities		Distance (Mi)
Speed Limit	30	Cutler Bay Trail		0.25
Median	Yes	Biscayne Trail		0.3
ROW	128 FT	208th St Bike Lane		0.6
Agency	County	Old Cutler Trail		1.07
Road Width	16 (x2) FT	Annual Average Daily Traffic		
Bus Stop ID	9765 (W)	SW 85 Ave.		N/A
Bus Stop ID	449 (E)	SW 212 St.		N/A

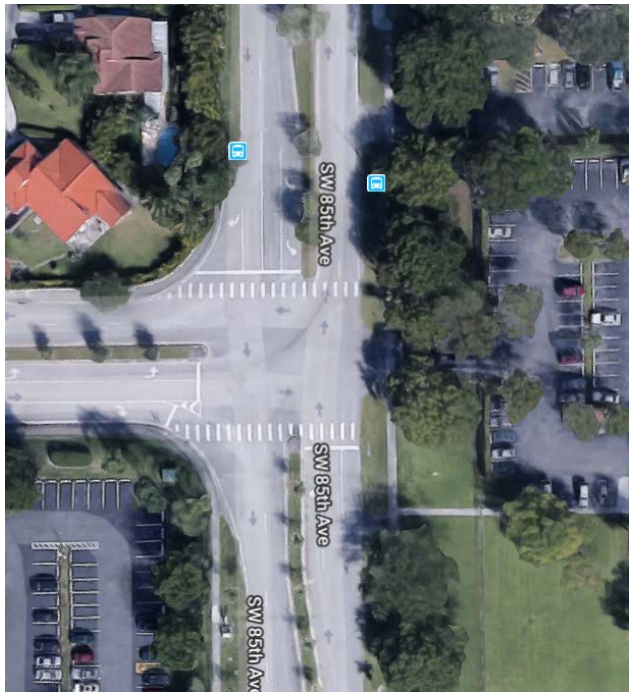
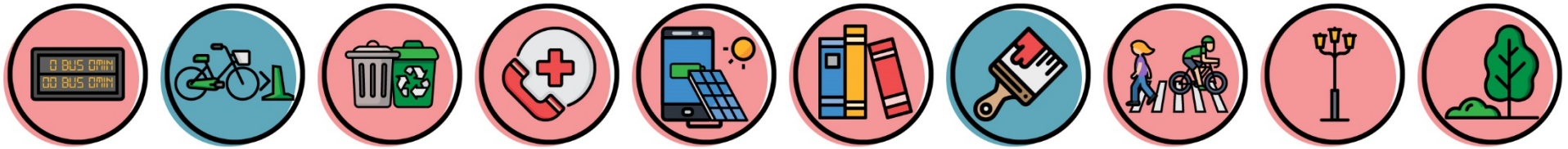


Figure 61: Lakes by the Bay Aerial
(SW 85 Avenue & SW 212 Street)

Table 12: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Sharrows on SW 212 St.	Real-Time Information Display	4'-5' Bicycle Lane on SW 85 Ave
Lakes by the Bay Park with Canoe Launch	Bikeshare Station	Enhanced Pedestrian Crossings
	Recycle Receptacle	Pedestrian Crossing Signs
	Emergency Callbox	Curb Extension on NWC
	USB Charge Port	10 Parallel Parking Spaces
	Lending Library	Lane Reduction on 85th Ave., S of 212 St.
	Box Wrap of Mechanical Equipment	Fill Sidewalk Gaps with ¼-mile
		Enhanced Landscaping
		Pedestrian Lighting

Approximate Cost Estimate for Recommended Amenities: $61,600 (details in Appendix III)
Approximate Cost Estimate for Recommended Infrastructure Improvements: $477,355 (details in Appendix III)



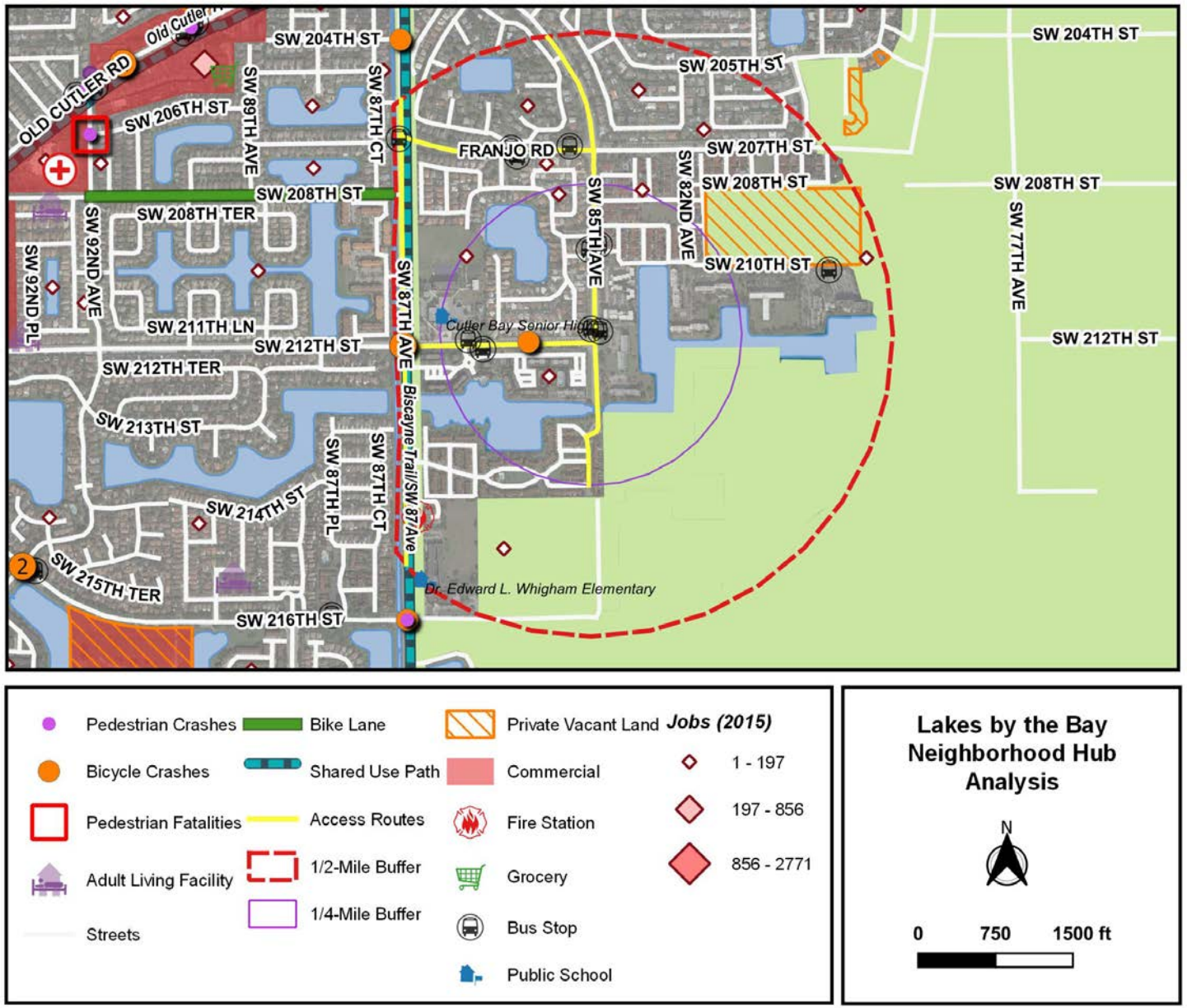


Figure 62: Lakes by the Bay Neighborhood Analysis

Pine Wood

The proposed neighborhood hub is on SW 87th Avenue at SW 190th Street, near the Ned Glenn Nature Preserve and Pine Woods Villa residential community (see Figure 63). There are two existing standard Miami-Dade County bus shelters that are serviced by Route 287, Saga Bay Express, and Route 200, Town Circulator serving only the west bus stop. The bus stops are equipped with shelter, seating, signage, trash receptacle, route system map, and advertising. The area is near several condominium communities, where seniors reside; Whispering Pines Elementary School and a place of worship. Table 13 provides an overview of existing conditions; Table 14 provides future-planned improvements and recommendations related to amenities and infrastructure improvements.

Table 13: Pine Wood Location Data

HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Type	Neighborhood	200	157	Circulator
Location	SW 87 Ave / SW 190 St	287	373	Limited Stop
Road Class	3	*TOTAL*	*530*	
Lanes	2			
Speed Limit	35	**Bike/Ped Facilities**		**Distance (Mi)**
Median	No	Caribbean Bike Lane		0.25
ROW	47 Feet	Biscayne Trail		0.8
Road Width	32 Feet	Old Cutler Trail		0.8
Agency	County	**Annual Average Daily Traffic**		
Bus Stop ID	C87V1903 (W)	SW 87 Ave		101,000
Bus Stop ID	C87V1902 (E)	SW 190 St		N/A

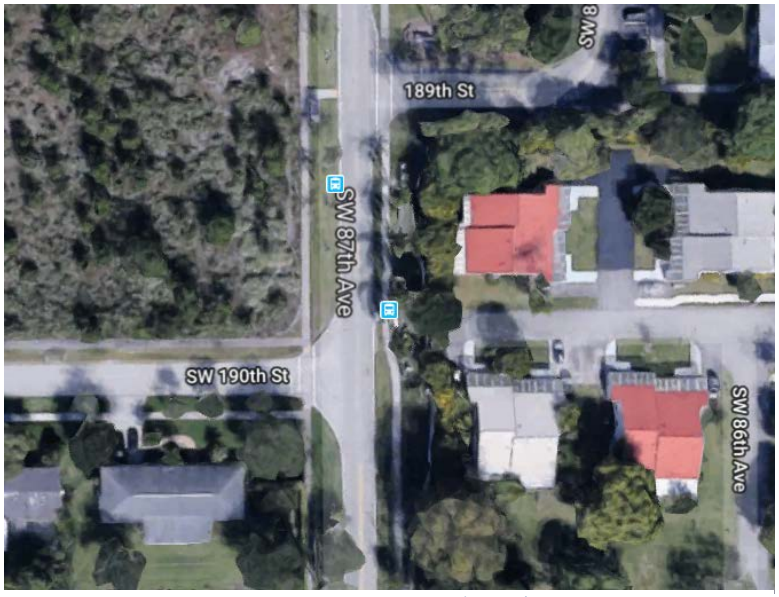
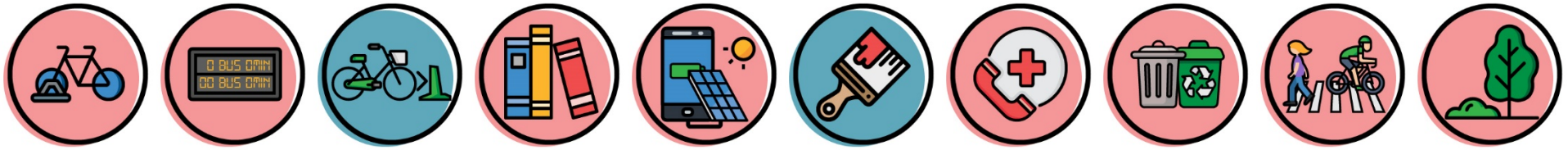


Figure 63: Pine Wood Aerial
(SW 87 Avenue & SW 190 Street)

Table 14: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Complete Streets Treatment along SW 87 Ave.	Upgrade Shelter	Support of Complete Streets Improvements
Street Lighting	Bike Rack	Midblock Crossing with Inground Lighting
Traffic Calming	Real-Time Information Display	Fill Sidewalk Gaps with ¼-mile
Shared Use Path	Bikeshare Station	Enhanced Landscaping
Midblock Crossing at SW 189 St. & SW 87 Ave.	Lending Library	
Bioswale & Landscape Improvements	USB Charge Port	
	Box Wrap of Mechanical Equipment	
	Emergency Callbox	
	Recycling Receptacle	

Approximate Cost Estimate for Recommended Amenities: $157,660 (details in Appendix III)



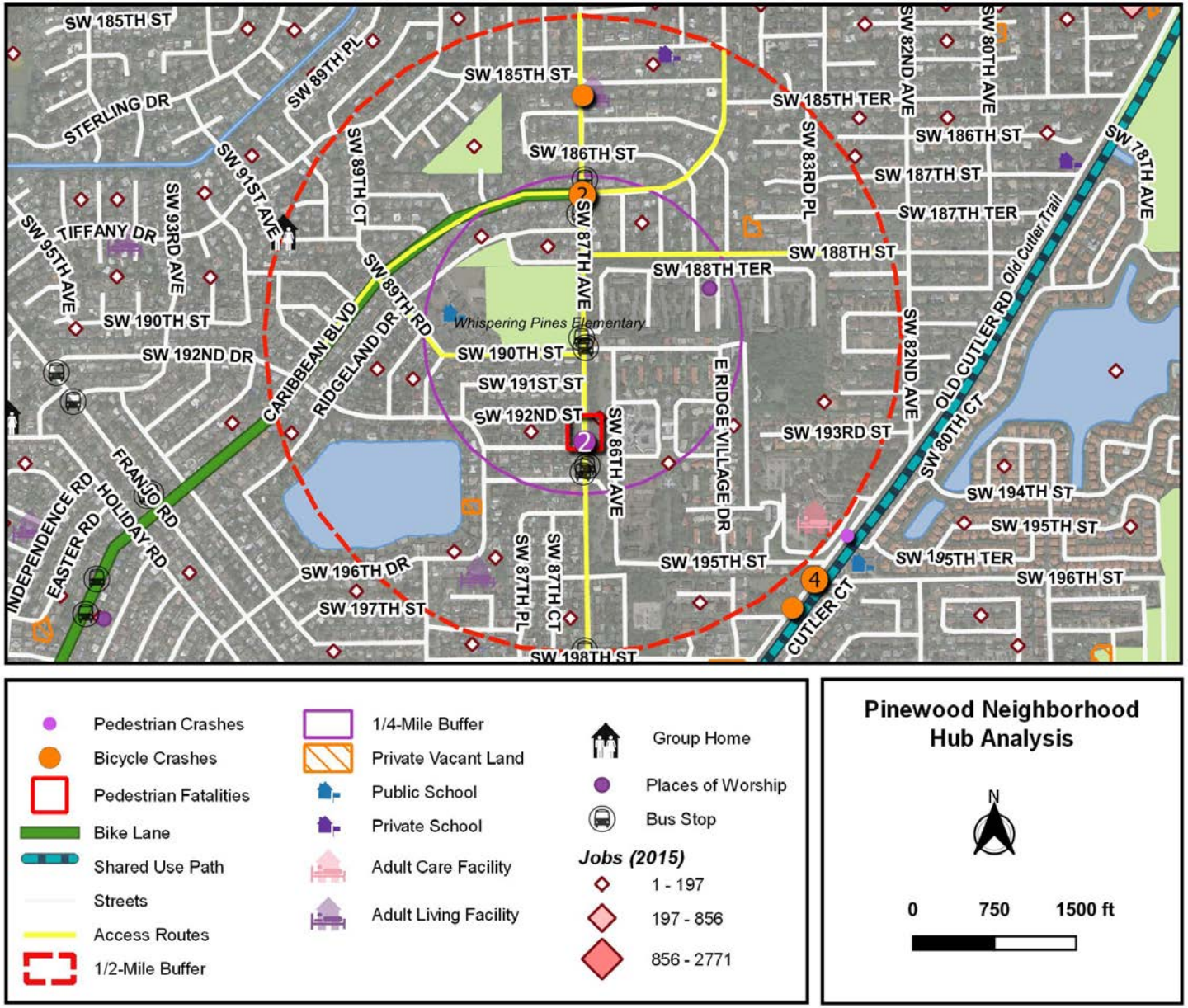


Figure 64: Pinewood Neighborhood Hub Analysis

Whispering Pines

The proposed Neighborhood Hub is recommended at Caribbean Boulevard and Franjo Road, near existing single-family residential uses (see Figure 65). The existing bus stops are serviced by Route 1 and Route 200, Town Circulator, which services only the stop on Caribbean Boulevard. The bus stop on Caribbean Boulevard is currently equipped with signage, a bench, trash receptacle, and bus bay. The bus stop located along Franjo Road is currently equipped with a standard Miami-Dade shelter with seating, trash receptacle, and signage. Caribbean Boulevard has had recent improvements which include landscape enhancements, traffic calming treatments, enhanced crosswalks, pedestrian signals, lighting, bus bay, and bicycle lanes. Table 15 provides the existing conditions and location data; Table 16 provides future-planned improvements and recommendations.

Table 15: Caribbean / Franjo Location Data

HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Type	Neighborhood	1	293	Circulator
Location	Caribbean Blvd. / Franjo Rd.	200	157	Circulator
Road Class	3	*TOTAL*	*450*	
Lanes	2			
Speed Limit	30	Ped/Bike Facilities		Distance (Mi)
Median	Yes	Caribbean Bike Lane		0
ROW	95 Feet	Old Cutler Trail		0.8
Road Width	32 Feet	Biscayne Trail		1
Agency	County	Annual Average Daily Traffic		
Bus Stop ID	CARBFRA3 (W)	Caribbean Blvd.	13,700	
Bus Stop ID	FRJRCAR2 (E)	Franjo Rd.	11,900	

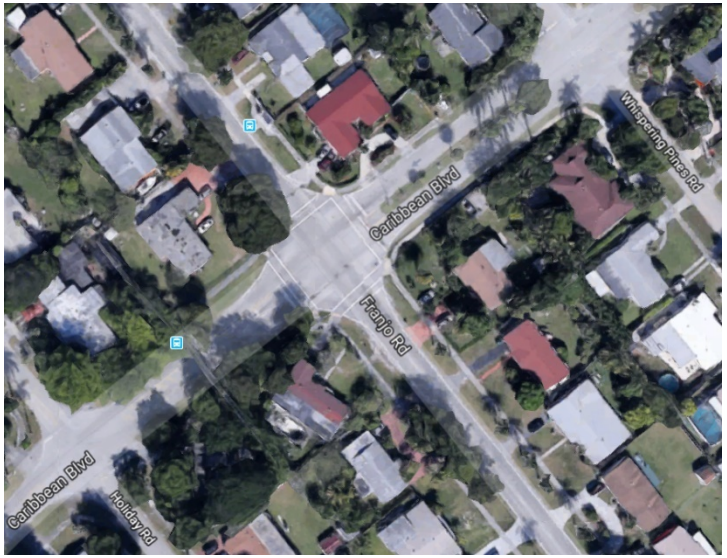
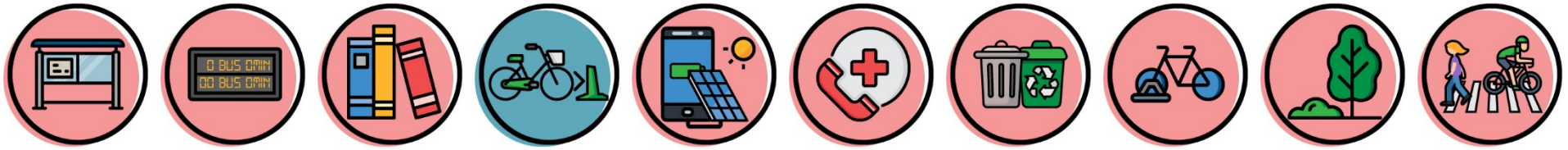


Figure 65: Whispering Pines Aerial
(Caribbean Boulevard & Franjo Road)

Table 16: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Complete Streets Treatment along Franjo Rd.	Install Shelter(s) on Caribbean Blvd.	Support of Complete Streets Improvements
Street Lighting	Upgrade Shelter on Franjo Rd.	Pedestrian Crossing Signs
Traffic Calming	Real-Time Information Display	Fill Sidewalk Gaps with ¼-mile
4' Bike Lanes	Bikeshare Station	Enhanced Landscaping
Bioswale & Landscape Improvements	Lending Library	
Furniture Zone	USB Charge Port	
Pedestrian Zone	Emergency Callbox	
Midblock Crossings at SW 193 Dr., SW 196 Dr.,	Recycling Receptacle	
and SW 89 St.	Bike Rack	

Approximate Cost Estimate for Recommended Amenities: $154,160 (details in Appendix III)



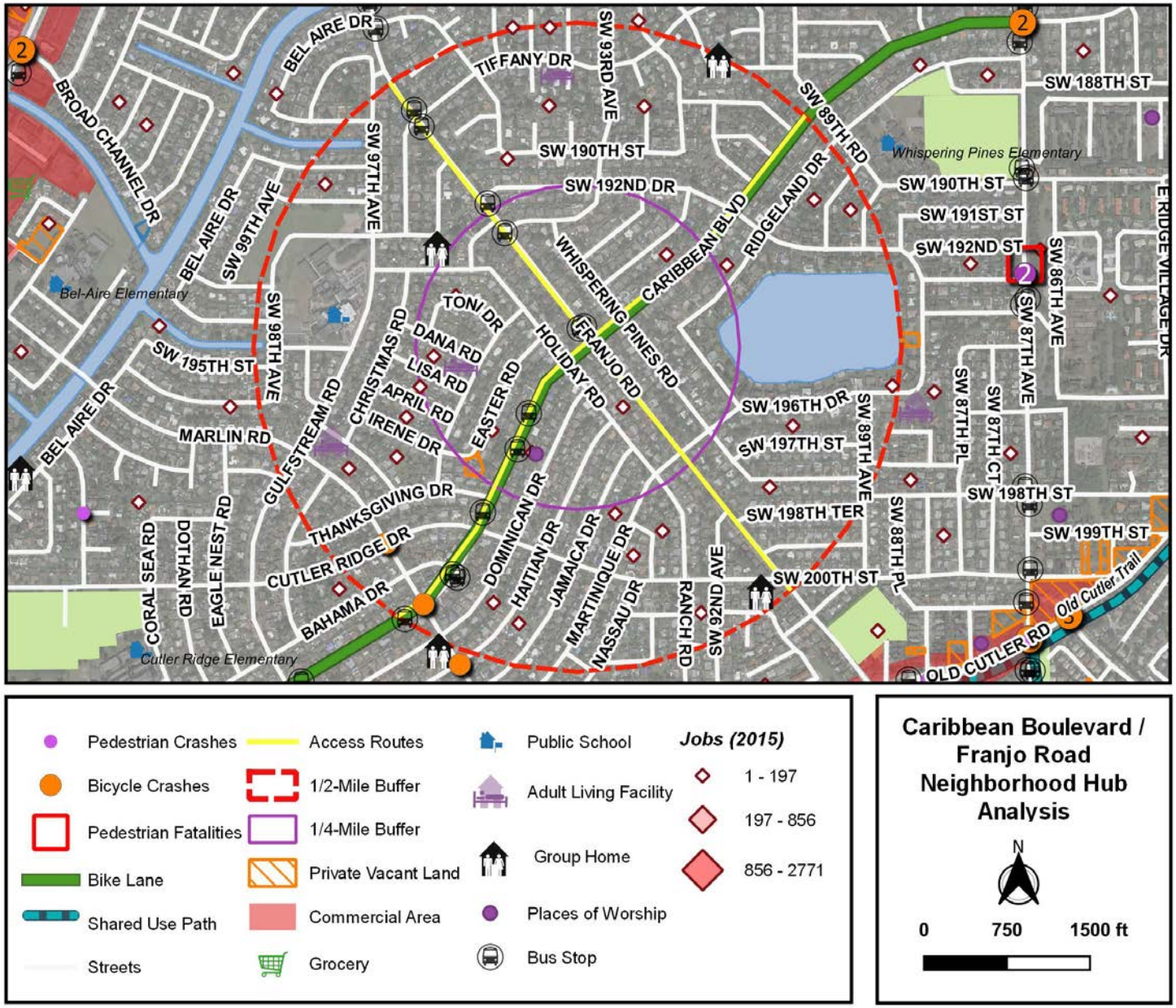


Figure 66: Caribbean Boulevard & Franjo Road Neighborhood Hub Analysis

Cutler Ridge

The proposed Neighborhood Hub is located on Caribbean Boulevard, west of Anchor Road, near existing single-family residential uses, Cutler Ridge Christian Academy, and several places of worship (see Figure 67). The existing bus stops include upgraded shelters with seating, bicycle rack, trash receptacle, bus bay, and signage. The stops are serviced by Route 1 and Route 200, Town Circulator, servicing only the northside bus stop. Caribbean Boulevard has undergone a complete streets treatment in the last several years which include lighting, enhanced pedestrian crossings with signage, pedestrian crossing signals, enhanced landscaping, and bike lanes. Table 17 provides the existing conditions and location information; Table 18 provides planned improvements and recommendations.

Table 17: Cutler Ridge Location Data

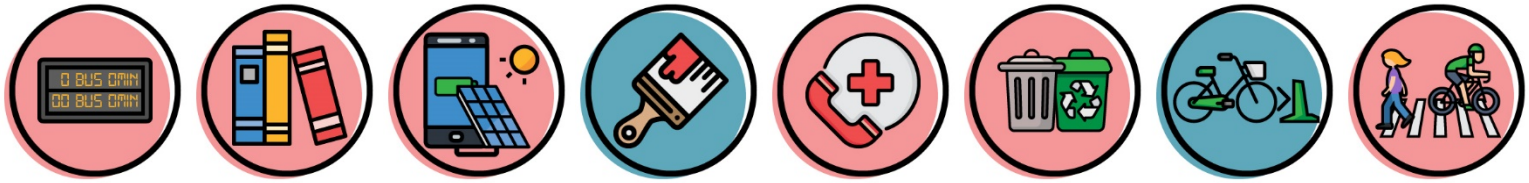
HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Type	Neighborhood	1	293	Circulator
Location	Caribbean Blvd. / Anchor Rd	200	157	Circulator
Road Class	3	*TOTAL*		*450*
Lanes	2	**Ped/Bike Facilities**		**Distance (Mi)**
Speed Limit	30	Caribbean Bike Lane		0
Median	Yes	South Dade Trail		0.8
ROW	90 Feet	Old Cutler Trail		1.1
Roadway Width	32 Feet	Black Creek Trail		1.7
Bus Stop ID	CARBANC8 (N)	**Annual Average Daily Traffic**		
Bus Stop ID	CARBANC5 (S)	Caribbean Blvd		13,700

Figure 67: Cutler Ridge Aerial Map
(Caribbean Boulevard & Anchor Road)

Table 18: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Caribbean Blvd. Bridge Widening	Real-Time Information Display	Support of Bridge Widening
	Explore a Partnership with Cutler Ridge Baptist for Carshare, Park & Ride and/or EV Charging	Fill Sidewalk Gaps with ¼-mile
	Lending Library	
	USB Charge Port	
	Box Wrap of Mechanical Equipment	
	Emergency Callbox	
	Recycling Receptacle	
	Bikeshare Station	

Approximate Cost Estimate for Recommended Amenities: $71,500 (details in Appendix III)



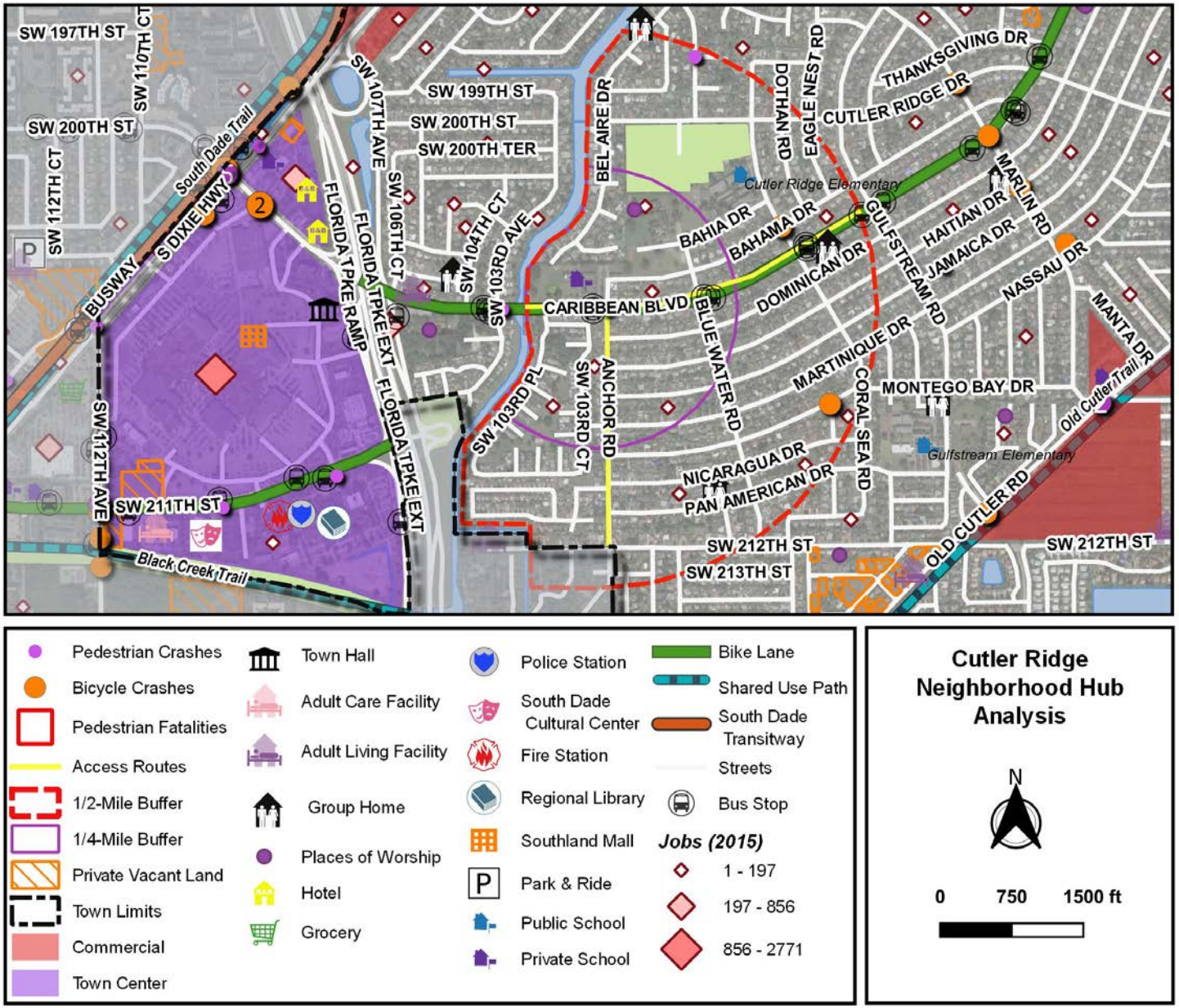


Figure 68: Cutler Ridge Neighborhood Analysis

The Isles of Bayshore

The recommended Neighborhood Hub is to be placed on SW 216th Street at SW 89th Place, southside (see Figure 69). This Hub is recommended once the vacant parcel is developed and a counter-clockwise Town Circulator is implemented. The area is currently serviced by Route 287, Saga Bay Express, and Route 200, Town Circulator, servicing only the northside bus stops. The Hub would utilize an existing concrete pad overlooking the lake and convert the existing right-turn lane into a bus bay. SW 216th Street includes canopy tree lined swales, pedestrian lighting, and sidewalks. The area is surrounded by single-family and townhouse residential development, with the future potential for neighborhood, commercial, and office uses. Table 19 provides an overview of existing conditions and location data; Table 20 provides future-planned improvements and recommendations.

Table 19: The Isles Location Data

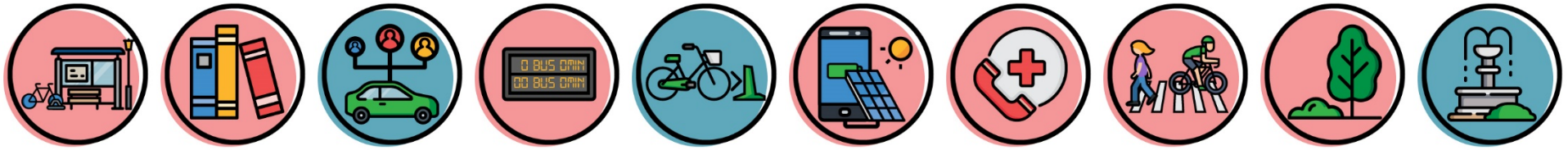
HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Type	Neighborhood	200	157	Circulator
Location	SW 216 St / SW 89 Pl	287	373	Limited Stop
Road Class	3	*TOTAL*	*530*	
Lanes	2			
Speed Limit	35	**Bike/Ped Facilities**		**Distance (Mi)**
Median	Yes	Biscayne Trail		0.5
ROW	120 Feet	Old Cutler Trail		1
Roadway Width	32 (x2) Feet	Black Creek Trail		1.7
Bus Stop ID	None	**Annual Average Daily Traffic**		
Bus Stop ID	None	SW 216 St.	18,800	

Figure 69: The Isles of Bayshore Aerial
(SW 216 Street & SW 89 Place)

Table 20: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Shared Use Path along SW 216 St.	Shelter with Basic Amenities	Support of Shared Use Path
Bike Lanes on SW 216 St.	Real-Time Information Display	Support for Traffic Circle
Traffic Circle at SW 216 St. & SW 87 Ave.	Lending Library	Fill Sidewalk Gaps with ¼-mile
	Work with Future Developer for Carshare	Midblock Crossing with Inground Lighting at SW 216 St. & SW 89 Pl.
	Bikeshare Station	
	Emergency Callbox	Enhanced Landscaping
	USB Charge Port	Pocket Park

Approximate Cost Estimate for Recommended Amenities: $104,930 (details in Appendix III)



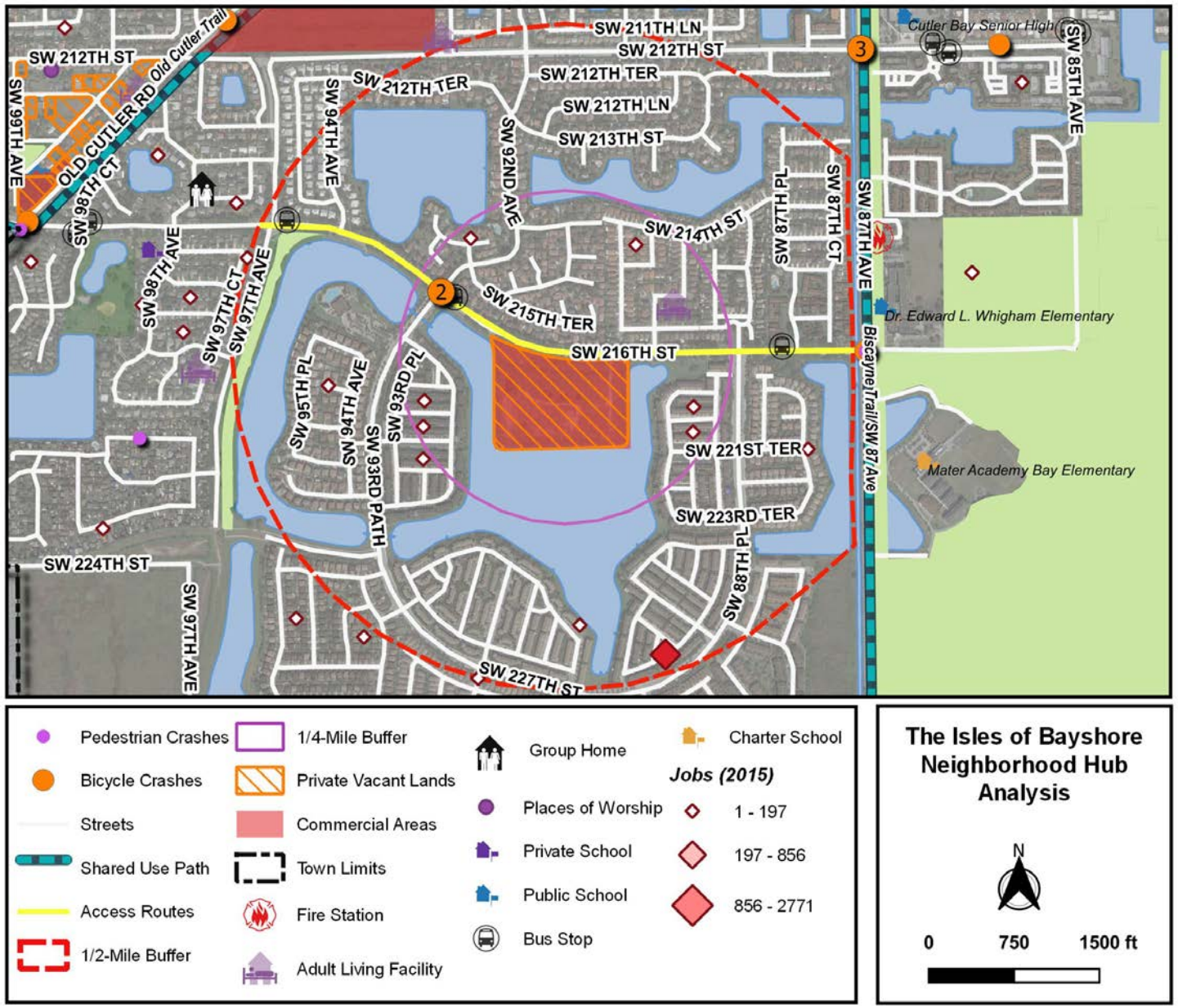


Figure 70: The Isles of Bayshore Neighborhood Hub Analysis

Eureka Drive East

The proposed Neighborhood Hub is recommended on Old Cutler Road and SW 184th Street, along the border of the Town of Cutler Bay and the Village of Palmetto Bay. The location is surrounded by single-family and estate residential uses, and the Palmetto Bay Village Center to the northeast (see Figure 71). There are no existing routes or bus stops within the area. The Hub is recommended for installation once a route is established to serve this area of the Town. Table 21 provides the existing conditions and location data; Table 22 provides the future-planned improvements and recommendations.

Table 21: Eureka Drive East Location Data

HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Type	Neighborhood	None		
Location	Old Cutler Rd / SW 184 St			
Road Class	3	Ped/Bike Facilities		Distance (Mi)
Lanes	2	Old Cutler Trail		0
Speed Limit	40	Biscayne Trail		1.9
Median	None	South Dade Trail		2.7
ROW	95 Feet	Annual Average Daily Traffic		
Roadway Width	32 Feet	Old Cutler Rd.		17,300
Bus Stop ID	None	SW 184 St.		5,300
Bus Stop ID	None			

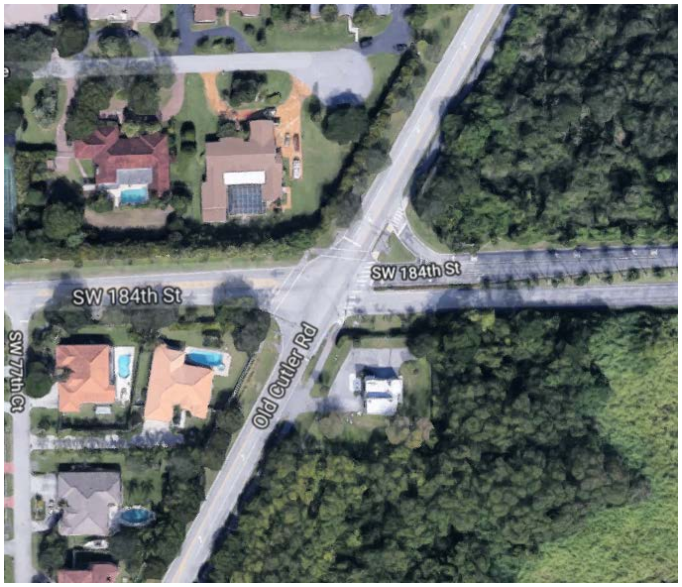


Figure 71: Eureka Drive East Aerial
(SW 184 Street & Old Cutler Road)

Table 22: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Shared Use Path or Sidewalk West of Old Cutler Rd.	Shelter with Basic Amenities	Bike Signal at SW 184 St. & OCR
Filling Sidewalk Gaps along SW 184 St.	Real-Time Information Display	Enhanced Landscaping
County's Resurfacing Project on SW 184 St. from U.S. 1 to Old Cutler Rd.	Lending Library	Fill Sidewalk Gaps with ¼-mile
Roundabout at SW 184 St. & Old Cutler Rd.	USB Charge Port	Enhanced Pedestrian Crossings
	Bikeshare Station	Pedestrian Sign
	Emergency Callbox	Pedestrian Signals
		Support of Sidewalk west of OCR
		Shared Use Path along SW 184 St.
		Pedestrian Lighting

Other recommendations include:

- Coordinate with Village of Palmetto Bay to establish Transit for the area.
- Coordinate with Village of Palmetto Bay to improve the intersection for Bicycle and Pedestrian Safety.
- Extend the Town Circulator Route to provide Transit service to the area.

Approximate Cost Estimate for Recommended Amenities: $104,930 (details in Appendix III)

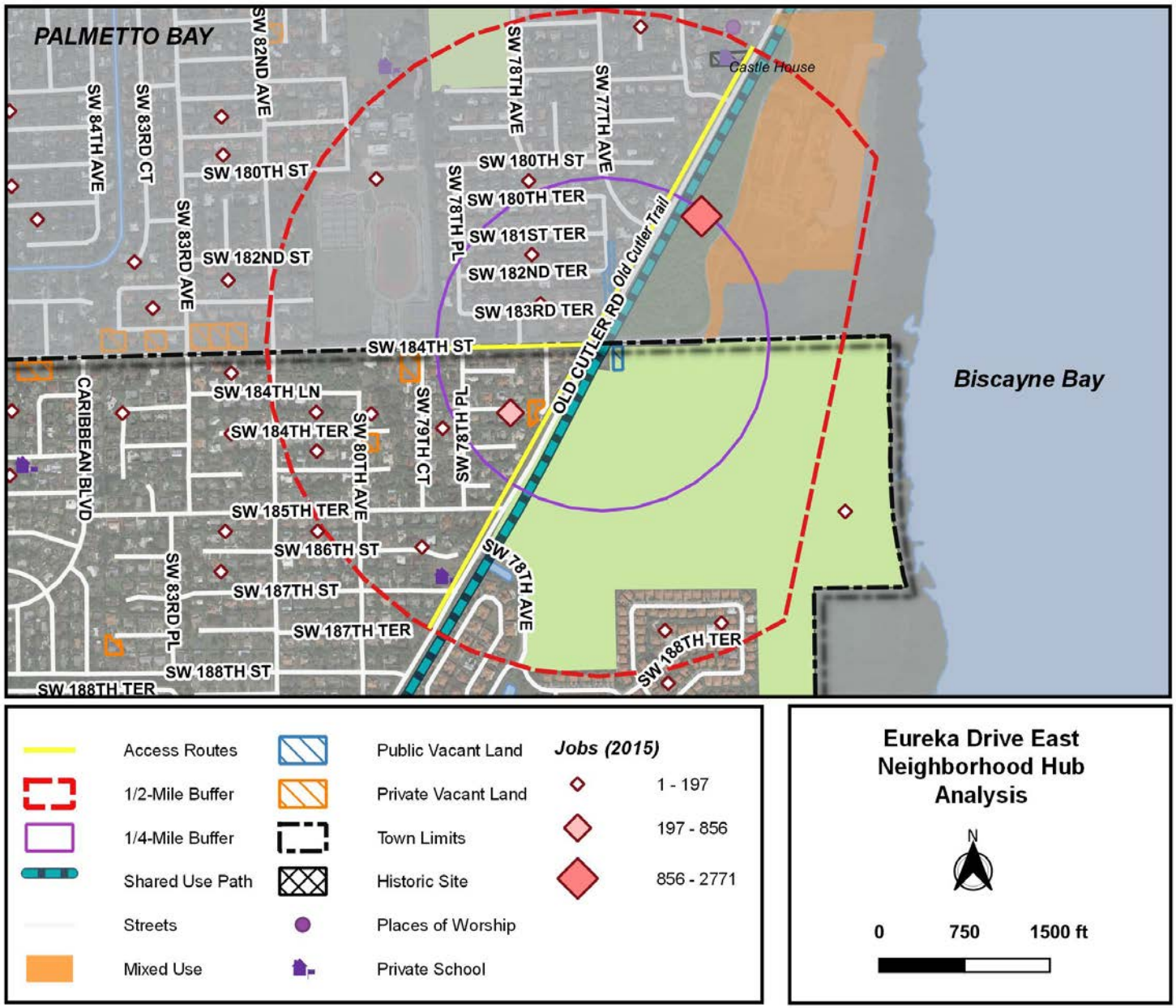


Figure 72: Eureka Drive East Analysis

Community Health

The proposed Neighborhood Hub is recommended just outside the Town's borders at the existing Community Health Medical Center on SW 216th Street and SW 102nd Avenue (see Figure 73). Recommendations include Town staff coordination and lobbying to the county for suggested infrastructure improvements and amenities for the proposed Neighborhood Hub. The existing bus stop is serviced by Route 287, Saga Bay Express, and Route 52. Surrounding the stop is multi-family and single-family residential communities, and the Florida Turnpike to the west. The existing bus stops are equipped with a bus bay, signage, a trash receptacle, pedestrian lighting, and benches. Table 23 provides the location data and existing conditions; Table 24 provides the evaluation table for the Community Health Neighborhood Hub.

Table 23: Community Health Location Data

HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Type	Neighborhood	52	1296	Local
Location	SW 216th St / SW 102 Ave	287	373	Limited Stop
Road Class	3 / 5	*TOTAL*	*1669*	
Lanes	4 / 2	Bike/Ped Facilities		Distance (Mi)
Speed Limit	35	Old Cutler		0.5
Median	Yes / None	Black Creek		0.5
ROW	275 / 85	Biscayne Trail		1.9
Roadway Width	32 (x2) / 16	South Dade Trail		2
Bus Stop ID	HLTHCNTT	Annual Average Daily Traffic		
Bus Stop ID	N/A	SW 216 St.		18,800

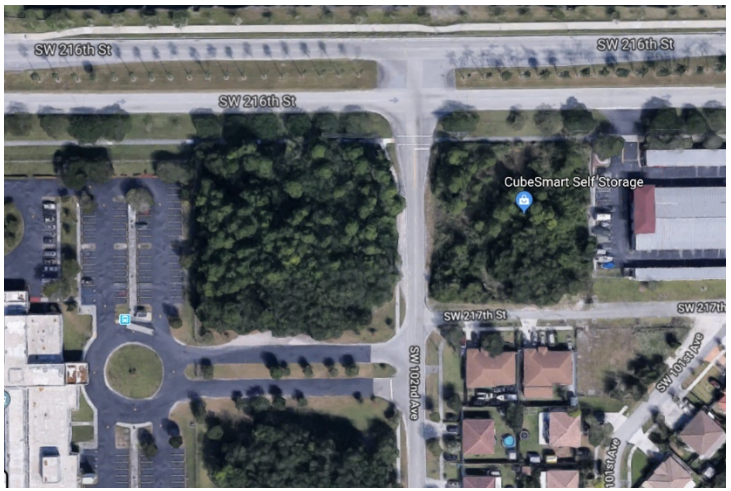


Figure 73: Community Health Aerial
(SW 216 Street & SW 102 Avenue)

Table 24: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
5’ Bicycle Lanes along SW 216 St.	Shelter w/ Basic Amenities	Enhanced Landscaping
Future Drainage Improvements by County	Real-Time Information Display	Fill Sidewalk Gaps with ¼-mile
	Lending Library	Enhanced Pedestrian Crossings
	USB Charge Port	Pedestrian Sign
	Security Camera	Midblock Crossing with Inground Lighting at SW 216 St. & SW 102 Ave.
	Emergency Callbox	
	Bicycle Storage Locker	Pedestrian Lighting
	Bikeshare Station	Park & Ride
	Package Pickup Kiosk	
	Pop Up Retail	
	Carshare	

Approximate Cost Estimate for Recommended Amenities: $131,052 (details in Appendix III)

Other recommendations include:

- Coordinate with Miami-Dade County to provide recommended improvements, and proposed amenities for the Neighborhood Hub.
- Engage the community to identify if there is a need to extend Route 200 service to the Health Center.

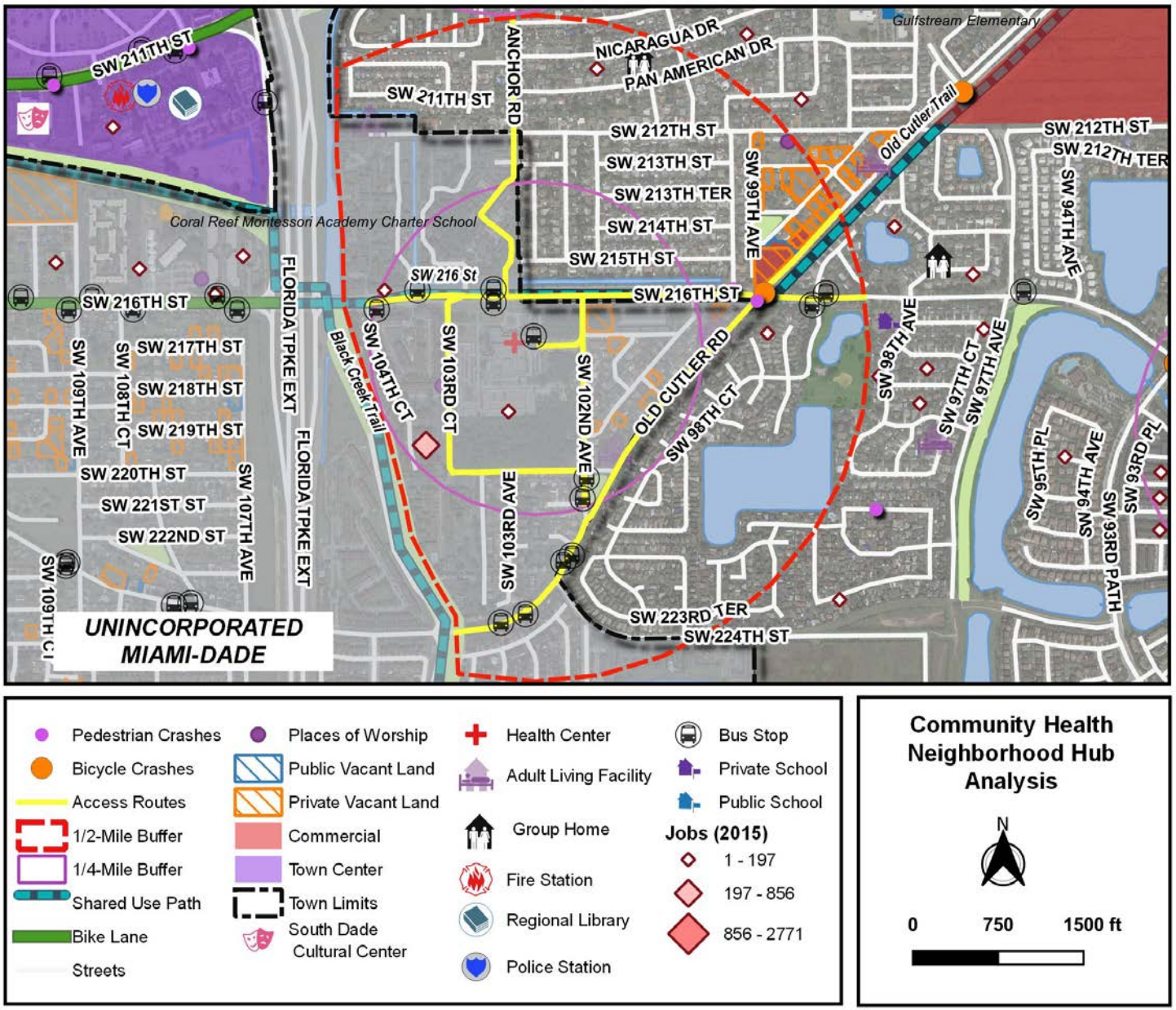


Figure 74: Community Health Neighborhood Hub Analysis

Community Hubs

Community Hubs are medium-scaled transit hubs, typically found within areas which have a mixture of uses, density, and/or employment hubs. Community Hubs are served by at least one (1) or more transit lines and average over 100 daily riders. They are equipped with the basic transit amenities, many of which are listed in the Neighborhood Hubs section. Community Hubs also provide larger shelters in order to accommodate the higher uses. An example of a bus stop at a Community Hub can be found in Figure 75.

Community Hubs may feature park and ride lots for convenience, kiss and ride lots for quick pick-up and drop-off, and an information kiosk for details on routes, connections, and the general area. Community Hubs may also feature bicycle storage lockers for long-term secured bicycle parking and theft deterrence, bicycle repair stations to perform basic repairs on the go, EV charging stations for vehicle charging, package pickup kiosk for package delivery services, microtransit to fulfill the first/last mile connection, retail to provide on the go services or errands, and WIFI to enhance the waiting experience. Community Hubs offer users the ability to visit other destinations, fulfill errands, and reduce additional trips. They are destinations for residents, visitors, and workers that are pedestrian-friendly environments. Community Hubs are key areas for placemaking and creating a sense of place that enhance neighborhoods and communities.

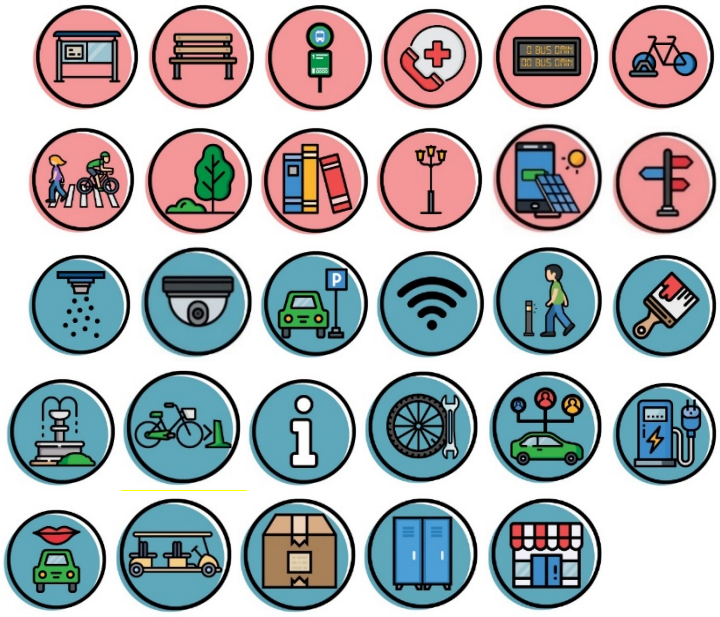


Figure 75: Community Hub Bus Stop Template

Old Cutler Town Center (Shopping Plaza)

The Community Hub is recommended at the Old Town Center off Old Cutler Road west of Franjo Road, near the existing Publix Shopping Plaza (see Figure 76). The existing bus stop is serviced by Route 200, the Town Circulator, and is currently the stop with the highest number of boarding's and alighting's for Route 200. There are existing commercial uses, multi-family and single-family residential communities, and the Old Cutler Trail. The area is zoned Neighborhood Center 1, which allows commercial and residential development. The existing bus stop is larger than the neighborhood bus stops, equipped with a large shelter, seating, bicycle rack, trash receptacle, pedestrian lighting, and signage. Recent improvements include complete streets treatment to Old Cutler Road between SW 98 Avenue and SW 87 Avenue. Table 25 provides existing conditions and location data; Table 26 provides recommendations; no future planned improvements were identified for this section of Old Cutler Road.

Table 25: Old Town Center Location Data

HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Type	Community	200	157	Circulator
Location	Old Cutler Rd. / W of Franjo Rd.	*TOTAL*	*157*	
Road Class	3			
Lanes	2	Bike/Ped Facilities		Distance (Mi)
Speed Limit	35	Old Cutler Trail		0
Median	Yes	Biscayne Trail		0.4
ROW	115 Feet / Varies	208th St. Bike Lane		0.4
Roadway Width	32 Feet	Caribbean Bike Lanes		0.9
Bus Stop ID	Old Cutler @ Old Cutler Town Center	Annual Average Daily Traffic		
Bus Stop ID	Not in use	Old Cutler Rd.		15,900

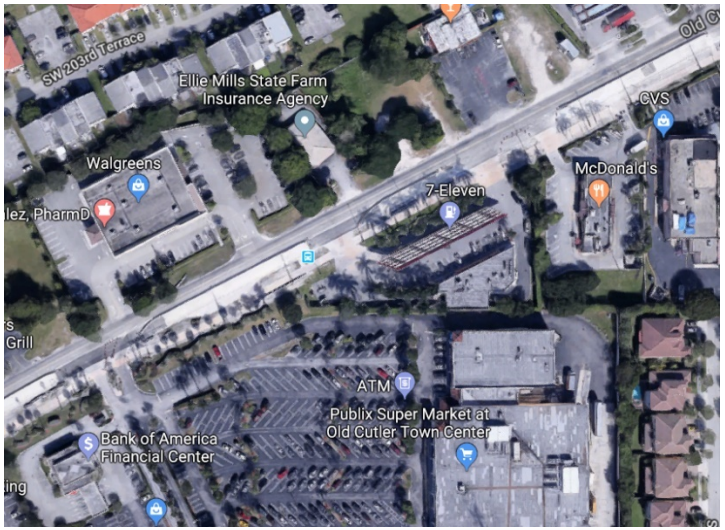


Figure 76: Old Cutler Town Center Aerial
(20425 Old Cutler Road)

Table 26: Recommendations

Recommended Amenities	Recommended Infrastructure Improvements
Information Kiosk	Enhanced Landscaping
Real-Time Information Display	Fill Sidewalk Gaps with ¼-mile
Lending Library	5’ Bicycle Lanes on SW 92 Ave.
USB Charge Port	Inground Lighting at existing Midblock Crossing
Box Wrap of Mechanical Equipment	Park & Ride
Emergency Callbox	
Bikeshare Station	
EV Charge Station	
Package Pickup Kiosk	
Security Camera	
Recycle Receptacle	
Carshare	

Approximate Cost Estimate for Recommended Amenities: $94,700 (details in Appendix III)

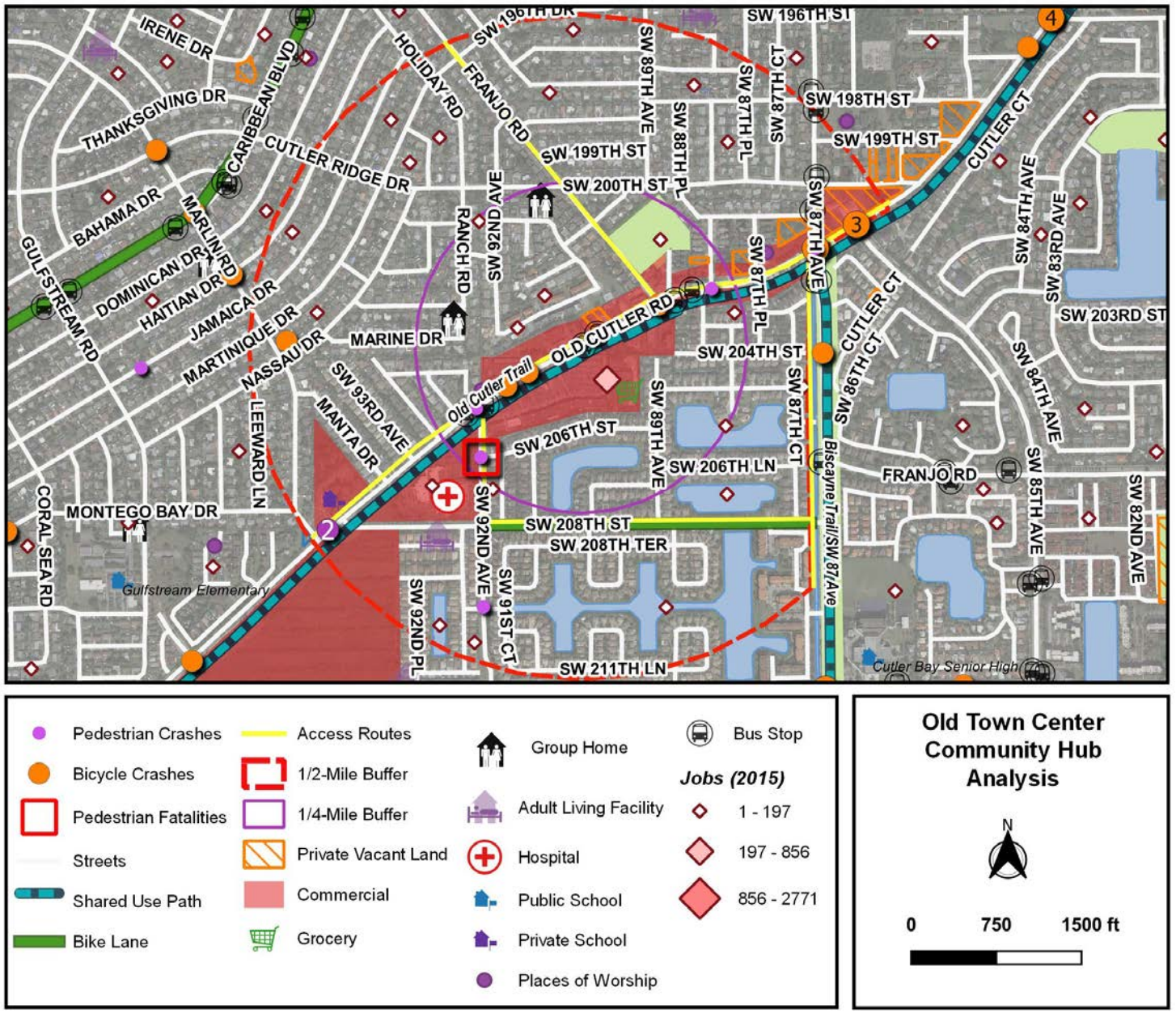


Figure 77: Old Cutler Town Center Community Hub Analysis

Eureka Drive West

The Community Hub is recommended near SW 184th Avenue, east of U.S. 1 / South Dixie Highway (see Figure 78), and would support the Bus Rapid Transit Station proposed along the Transitway near SW 184th Street. U.S. 1 / South Dixie Highway is currently serviced by Route 200, the Town Circulator. The existing nearby Transitway Station is serviced by Routes 1, 31, 35, 38, and 52, located within ¼ mile of the proposed Community Hub. There are existing shopping centers, industrial uses, nearby multi-family, and single-family residential uses. The area has also been rezoned by the Town of Cutler Bay, Village of Palmetto Bay, and Miami-Dade County for Transit-Oriented Development. The existing bus stop is currently equipped with two benches, trash receptacle, and signage. Table 27 provides existing conditions and location data; Table 28 provides future planned improvements and recommendations.

Table 27: Eureka Drive West Location Data

Hub		Route	Ridership (Avg Daily)	Bus Type
Type	Community	Route 1	293	Circulator
Location	184 St / E of US 1	Route 31	1,114	Busway Local
Road Class	3	Route 35	2,181	Local
Lanes	5	Route 38	6,389	Busway Max
Speed Limit	40	Route 52	1,296	Local
Median	No	Route 200	157	Circulator
ROW	100 Feet	*TOTAL*	*11430*	
Roadway Width	60 Feet			
Bus Stop ID	C184US16	**Bike/Ped Facilities**		**Distance (Mi)**
Bus Stop ID	None	South Dade Trail		0.1
Annual Average Daily Traffic		SW 97 Ave Bike Lane		0.4
SW 184 St.	5,300	176th St Bike Lane		0.7
U.S. 1	50,500	Old Cutler Trail		2.6

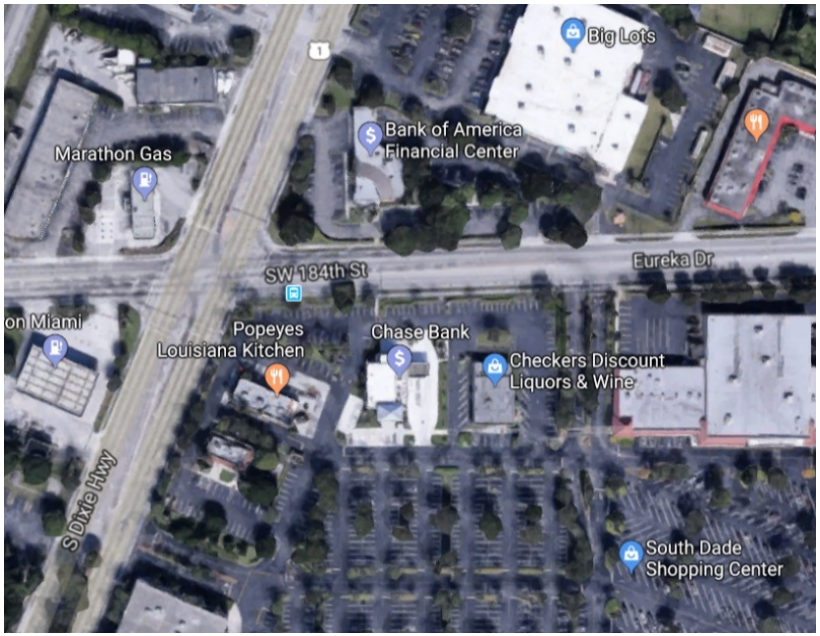


Figure 78: Eureka Drive West Aerial
(SW 184 Street & US 1)

Table 28: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Park & Ride near SW 184 St & Transitway	Shelter with Basic Amenities	Enhanced Landscaping
Bus Rapid Transit Station near SW 184 St.	Real-Time Information Display	Fill Sidewalk Gaps with ¼-mile
Rehabilitation of Existing Transitway Stations	Lending Library	Enhanced Pedestrian Crossings
Resurfacing of U.S. 1 / S. Dixie Hwy.	USB Charge Port	Pedestrian Signs
Filling in Sidewalk Gaps along SW 184 St.	Box Wrap of Mechanical Equipment	8' Shared Use Path along SW 184 St.
4' Bike Lanes on SW 184 St.	Emergency Callbox	ADA Improvements
Redevelopment of Downtown Urban Village Zoning District in the Village of Palmetto Bay	Bicycle Storage Locker	Midblock Crossing on SW 184 St.
	Bikeshare Station	Bicycle Light at U.S. 1 & SW 184 St.
	Package Pickup Kiosk	Bike Box at U.S. 1 & SW 184 St.
	EV Charge Station	Pedestrian Promenade along U.S. 1
	Carshare	Pedestrian Lighting
	Bicycle Rack	
	Security Camera	
	Recycle Receptacle	
	Designated Waiting area for TNC's (Optional)	
	Information Kiosk (Optional)	
	WIFI (Optional)	

Approximate Cost Estimate for Recommended Amenities: $147,090 (details in Appendix III)

Figure 79: Proposed Street Section for SW 184 Street (Looking east from U.S. 1)

Figure 79 provides an illustration of what SW 184 Street could look like, providing facilities for pedestrians, vehicles, shared mobility services, and street furniture. *Note: The proposed 9' bicycle lane could be fitted to accommodate low speed vehicles, such as electric golf carts and neighborhood electric vehicles.*

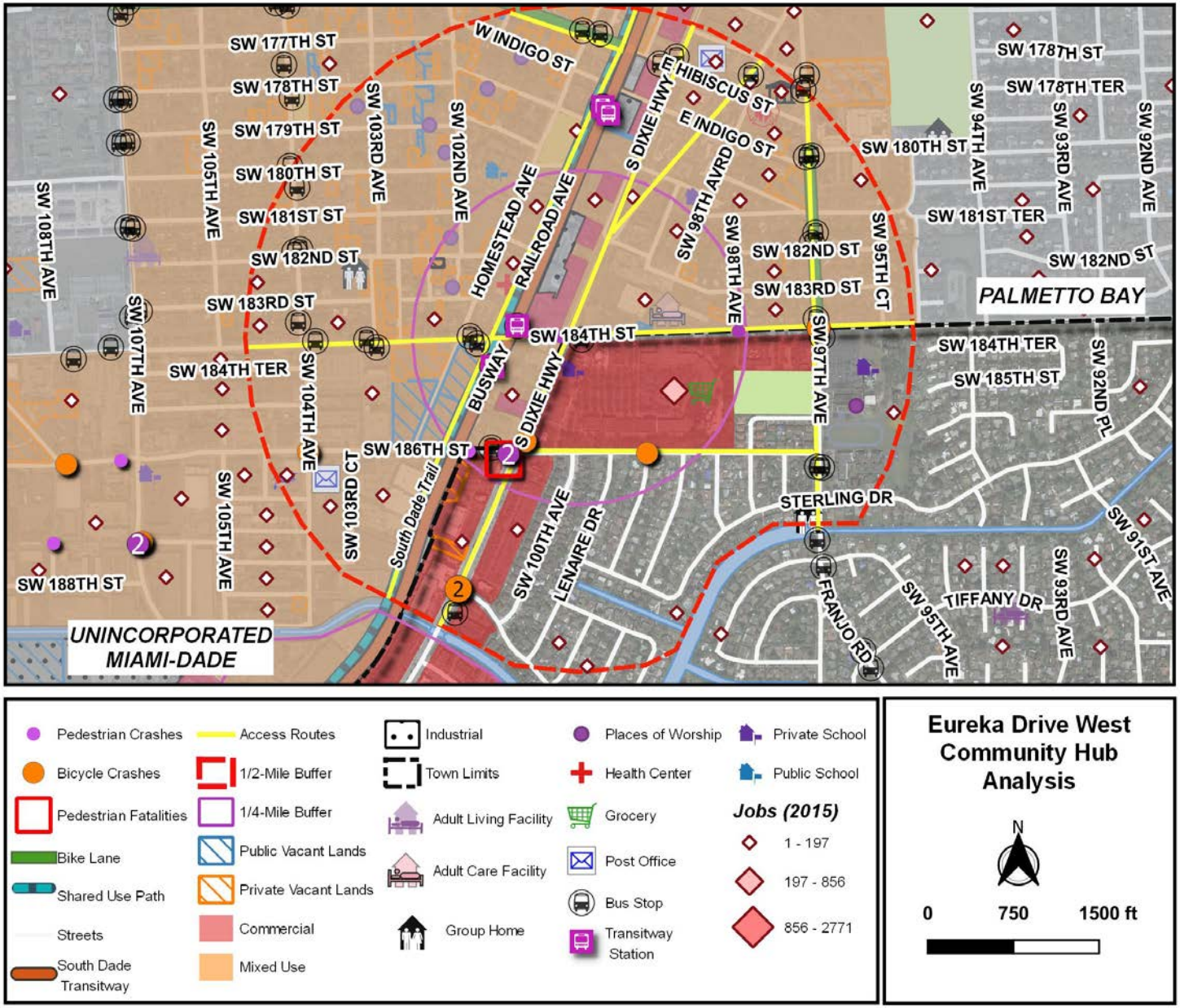


Figure 80: Eureka Drive West Community Hub Analysis

Marlin Road

The proposed Community Hub is recommended near U.S. 1/ South Dixie Highway (see Figure 82), and would support the Bus Rapid Transit Station proposed near Marlin Road and the Transitway (see Figure 81). Route 200, the Town Circulator, services U.S. 1 / South Dixie Highway. The Transitway provides service for Routes 31, 35 and 38 with existing uses of retail, industrial, single-family, and multi-family residential. Additionally, the area has been rezoned for Transit-Oriented Development by the Town of Cutler Bay and Miami-Dade County. The existing bus stop along U.S. 1 / South Dixie Highway includes two benches, a trash receptacle, and signage. Table 29 is an overview of the existing conditions and location information; Table 30 provide future planned improvements and recommendations.

Figure 81: Future Bus Rapid Transit Station

Table 29: Marlin Road Location Data

HUB INFO		Route	Ridership (Avg Daily)	Bus Type
Type	Community	Route 31	1114	Busway Local
Location	Marlin Rd / US 1	Route 35	2181	Local
Road Class	3 /4 & 2	Route 38	6,389	Busway Max
Lanes	4 / 6	Route 200	157	Circulator
Speed Limit	45 / 30	Total	9841	
Median	Yes	**Bike/Ped Facilities**		**Distance (Mi)**
ROW	110 / 135 Feet	South Dade Trail		0.1
Roadway Width	65 / 110 Feet	Caribbean Bike Lane		1.1
Bus Stop ID	11921 E	**Annual Average Daily Traffic (Approx.)**		
Bus Stop ID	Not in Use	Marlin Rd.	8,000	
		U.S. 1	50,500	

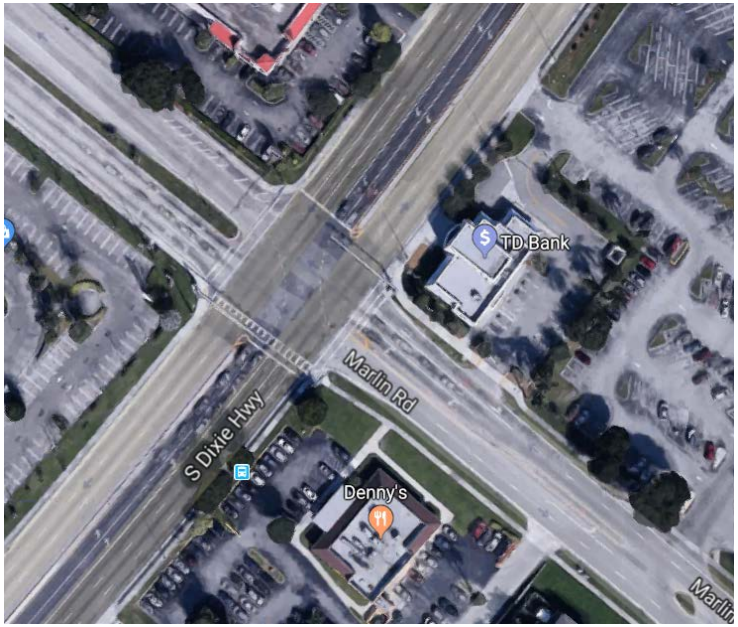


Figure 82: Marlin Aerial
(Marlin Rd. & US 1)

Table 30: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Bus Rapid Transit Station near Marlin Road	Shelter with Basic Amenities	Enhanced Landscaping
Rehabilitation of Existing Transitway Stations	Real-Time Information Display	Fill Sidewalk Gaps with ¼-mile
Resurfacing of U.S. 1 / S. Dixie Hwy.	Lending Library	Bicycle Light at U.S. 1 & Marlin Rd.
High-Emphasis Crosswalks at Marlin Rd & U.S. 1	USB Charge Port	Bike Box at U.S. 1 & Marlin Rd.
Pedestrian Signs at Marlin Rd. & U.S. 1	Box Wrap of Mechanical Equipment	Pedestrian Promenade along U.S. 1
Complete Streets Treatment to Marlin Rd. E of U.S. 1	Emergency Callbox	Extension of Bicycle Lanes W. of U.S. 1
	Bicycle Storage Locker	ADA Improvements
4' Bike Lanes	Bikeshare Station	Pedestrian Lighting
Traffic Calming	Package Pickup Kiosk	Move Existing Bus Stop West Side of U.S. 1 closer to Marlin Road with Counter-Clockwise Service
	Recycle Receptacle	
	Carshare	
	Security Camera	
	EV Charge Station	
	Designated Waiting area for TNC's (Optional)	
	WIFI (Optional)	
	Bicycle Repair Station (Optional)	
	Information Kiosk (Optional)	

Approximate Cost Estimate for Recommended Amenities: $104,430 (details in Appendix III)

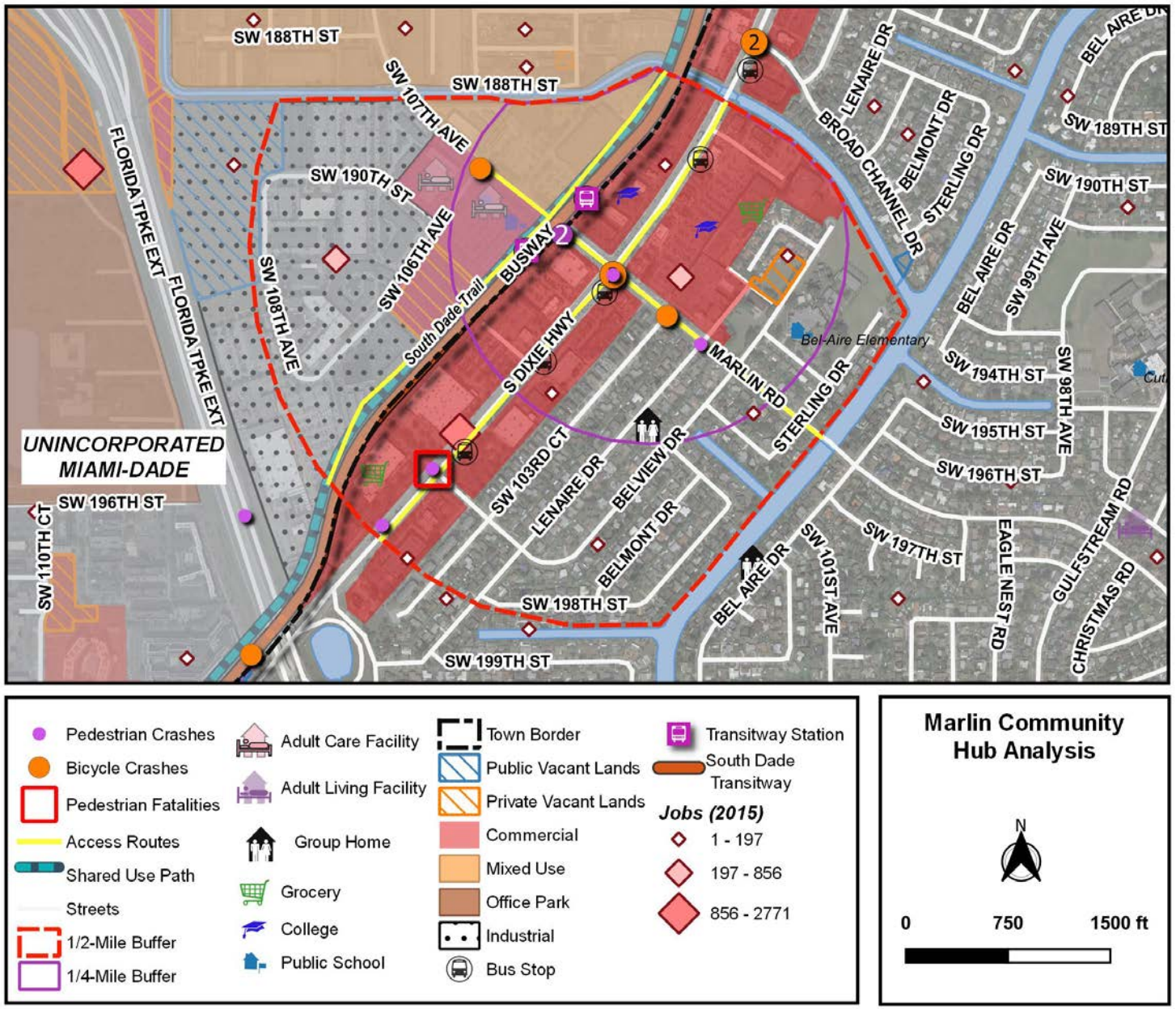


Figure 83: Marlin Community Hub Analysis

Caribbean Boulevard

The Community Hub is recommended near U.S. 1 and SW 200th Avenue / Caribbean Boulevard with the purpose of supporting the Bus Rapid Transit Station proposed near Caribbean Boulevard & U.S. 1 / South Dixie Highway (see Figure 84). U.S. 1 / South Dixie Highway is currently serviced by Route 200, the Town Circulator. The proposed Hub is located less than ¼-mile from the existing Transitway Stations serviced by Routes 1, 31, 35, 38, 39, and 52. Existing land uses include the Town Center, multi-family residential, and hotel. The area has been slated for density and Transit-Oriented Development. Recent improvements include enhanced pedestrian crossings and ADA improvements. Table 31 provides the existing conditions and location information; Table 32 provides future planned improvements and recommendations.

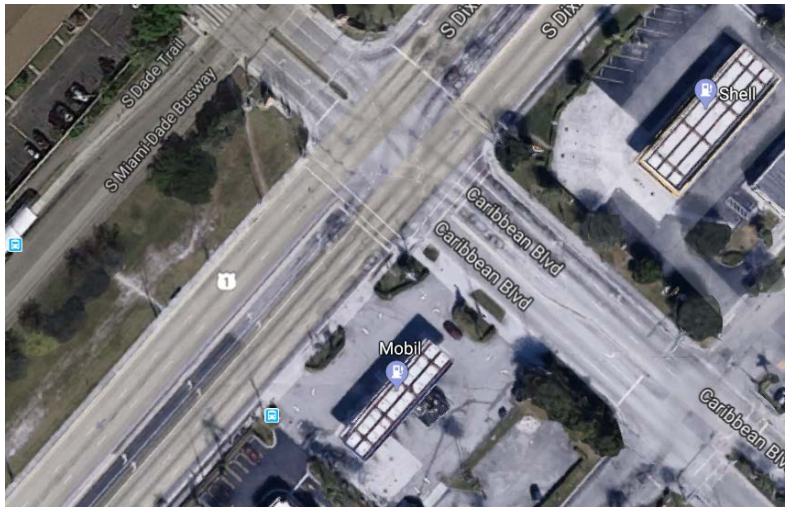


Figure 84: Caribbean Boulevard Aerial
(Caribbean Boulevard & US 1)

Table 31: Caribbean Boulevard Location Data

Hub		Route	Ridership (Avg Mo.)	Bus Type	Bike/Ped Facilities	Distance (Miles)
Type	Community	Route 1	293	Circulator	South Dade Trail	0.1
Location	200 St / US 1	Route 31	1,114	Busway Local	Caribbean Bike Lane	0.3
Road Class	3 / 2	Route 35	2,181	Local	211th St. Bike Lane	0.7
Lanes	4 / 6	Route 38	6,389	Busway Max	Black Creek Trail	0.8
Speed Limit	30 / 45	Route 39	969	Express	Roberta Hunter Trail	0.9
Median	Yes	Route 52	1,296	Local	**Annual Average Daily Traffic**	
ROW	112 / 154 Feet	Route 200	157	Circulator	U.S. 1	50,500
Roadway Width	80 / 105 Feet	Route 248	128	Circulator	SW 200 St.	11,006
Bus Stop ID	US#1CARN	*TOTAL*	*12527*		Caribbean Blvd.	17,700
Bus Stop ID	Not in Use					

Table 32: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Park & Ride Lot	Shelter with Basic Amenities	Removal of Existing Billboard Sign
Bus Rapid Transit Station near SW 200 St.	Real-Time Information Display	Enhanced Landscaping
Rehabilitation of Existing Transitway Stations	Lending Library	Fill Sidewalk Gaps with ¼-mile
Mixed-Use Development W. of Transitway	USB Charge Port	Pedestrian Promenade along U.S. 1
Addition of Lanes on SW 200 St. W. of U.S. 1	Box Wrap of Mechanical Equipment	Linear Park along Transitway Island
	Emergency Callbox	Pedestrian Lighting
	Bicycle Storage Locker	Refurbishment of South Miami Heights Monument Signs
	Pop-Up Retail	
	Bikeshare Station	Kiss & Ride Lot with Covered Walkway
	Recycle Receptacle	Bicycle Light at U.S. 1 & SW 200 St. (Optional)
	Package Pickup Kiosk	Bike Box at U.S. 1 & SW 200 St. (Optional)
	EV Charge Station	5' Bike Lanes on SW 200 St. (Optional)
	Carshare	
	Security Camera	
	Designated Waiting area for TNC's (Optional)	
	WIFI (Optional)	
	Bicycle Repair Station (Optional)	
	Information Kiosk (Optional)	

Approximate Cost Estimate for Recommended Amenities: $214,280 (details in Appendix III)
Approximate Cost Estimate for Infrastructure Improvements: $586,483 (details in Appendix III)

Figure 85 are pictures of existing conditions at Caribbean Boulevard / SW 200th Street and U.S. 1 / South Dixie Highway. Figure 86 is an illustration of what U.S. 1 near SW 200th Street could look like, providing facilities for pedestrians, vehicles, shared mobility services, and street furniture.

Note: The proposed 9' bicycle lane could be fitted to allow neighborhood electric vehicles or golf carts.

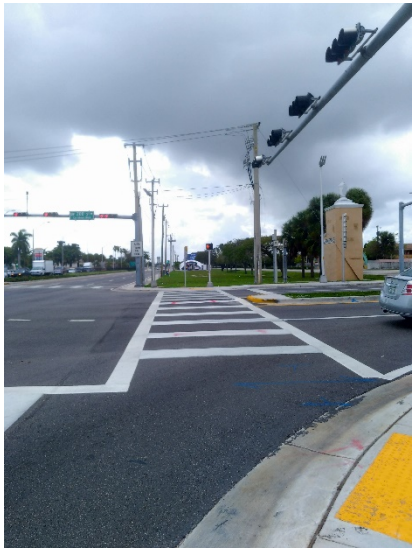


Figure 85: Existing Conditions at Caribbean Boulevard & U.S. 1

(*Right to Left: Pedestrian fence along U.S. 1, Looking South on U.S. 1 across Caribbean Blvd, northwest corner of U.S. 1 and Caribbean Blvd, Vacant parcel in front of Caribbean Blvd. Transitway Station)*

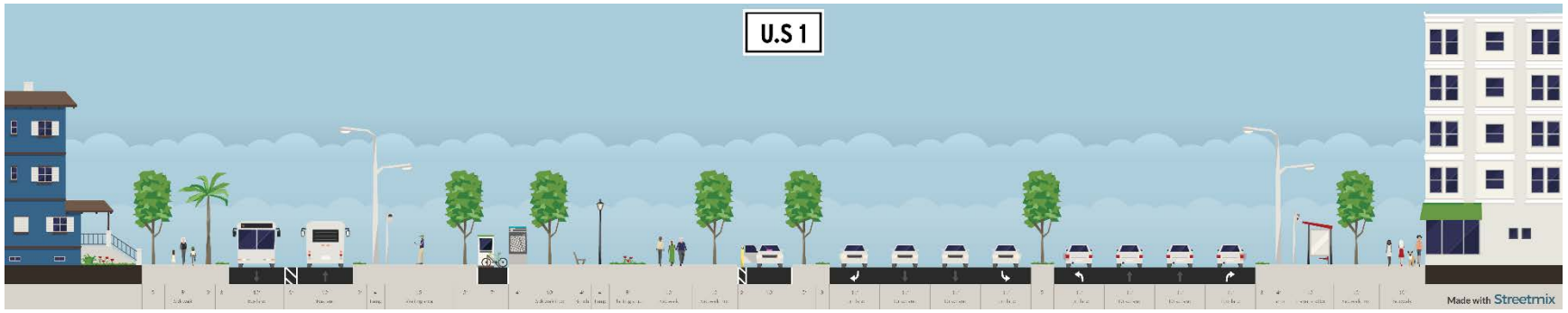


Figure 86: Proposed Street Section of Transitway & U.S. 1 / South Dixie Highway

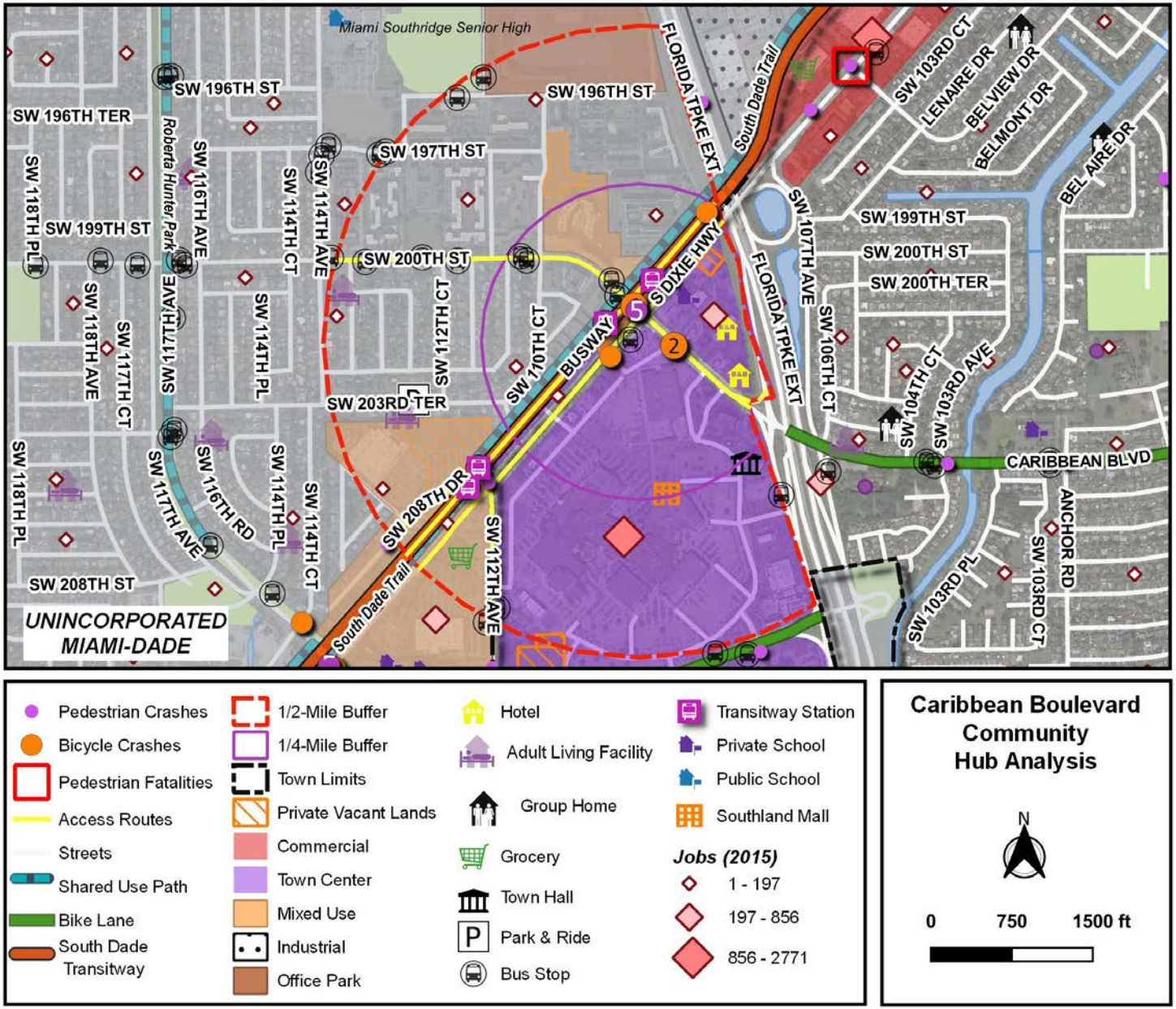


Figure 87: Caribbean Boulevard Community Hub Analysis

South Dade Government Center

The recommended Community Hub is to be located along SW 211th Street, near the South Dade Government Center and Southland Mall, currently serviced by Routes 1, 31, 35, 39, 52, 137, and 200 (see Figure 88). The existing bus stop has a large standard Miami Dade County Transit shelter with seating, trash receptacle, signage, and bus bay, in addition to bicycle lanes. The area is surrounded by multi-family residential, retail, entertainment, and institutional uses. Table 33 provides the existing conditions and location information; Table 34 includes future planned improvements and recommendations.

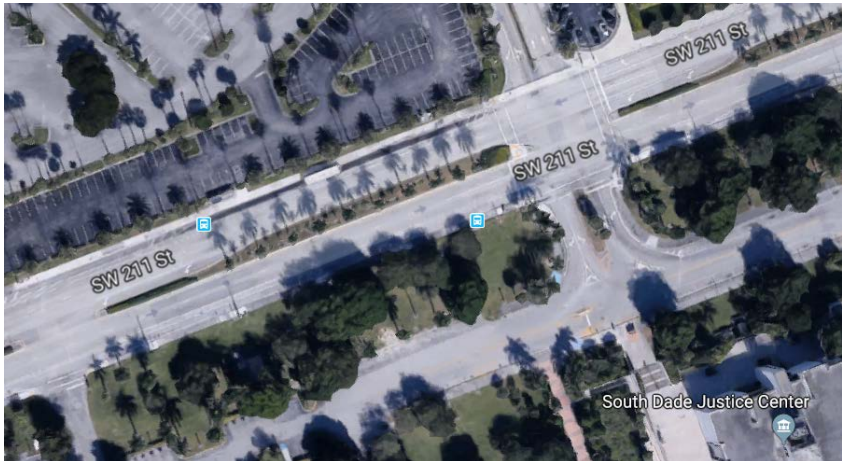


Figure 88: South Dade Government Center Aerial
(SW 211 Street & 107 Avenue)

Table 33: South Dade Government Center Location Data

HUB INFO		Route	Ridership (Avg Daily)	Bus Type	Bike/Ped Facilities	Distance (Mi)
Type	Community	Route 1	293	Circulator	211th Street Bike Lane	0
Location	SW 211 St / 107 Ave.	Route 31	1,114	Busway Local	Caribbean Bike Lane	0.6
Road Class	3	Route 35	2,181	Local	216th St Bike Lane	0.7
Lanes	4	Route 39	969	Express	Black Creek Trail	0.8
Speed Limit	35	Route 52	1,296	Local	Old Cutler Trail	1.3
Median	Yes	Route 137	1,653	Local	**Annual Average Daily Traffic**	
ROW	130 FT	Route 200	157	Circulator	SW 211 St.	16,700
Roadway Width	105 FT	Route 248	128	Circulator		
Bus Stop ID	CTLRTERW (N)	*TOTAL*	*7791*			
Bus Stop ID	CLTRTERE (S)					

Table 34: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Protected Bike Lanes on SW 211 St.	Upgrade Shelter with Basic Amenities	Pedestrian Lighting
Sidewalk Addition from Turnpike Access Rd. to Government Center Parking	Real-Time Information Display	Enhanced Landscaping
	Lending Library	Fill Sidewalk Gaps with ¼-mile
Greenway along C-100 Canal	USB Charge Port	ADA Improvements
	Box Wrap of Mechanical Equipment	Midblock Crossing with Inground Lighting along SW 211 St.
	Emergency Callbox	
	Bicycle Storage Locker	Enhanced Pedestrian Crossings at Intersections
	Bikeshare Station	Support for Protected Bike Lanes
	Recycle Receptacle	Pedestrian Signs
	Package Pickup Kiosk	Increased Sidewalk Widths to 10' with Street Furniture
	EV Charge Station	
	Carshare	Pedestrian Promenade Along Canal
	Security Camera	Public Plaza at Government Center
	WIFI (Optional)	Park & Ride (Optional)
	Information Kiosk (Optional)	Enhanced Pedestrian Crossings at Intersections
	Designated Waiting area for TNC's (Optional)	Pedestrian Promenade Along Canal

Approximate Cost Estimate for Recommended Amenities: $186,920 (details in Appendix III)

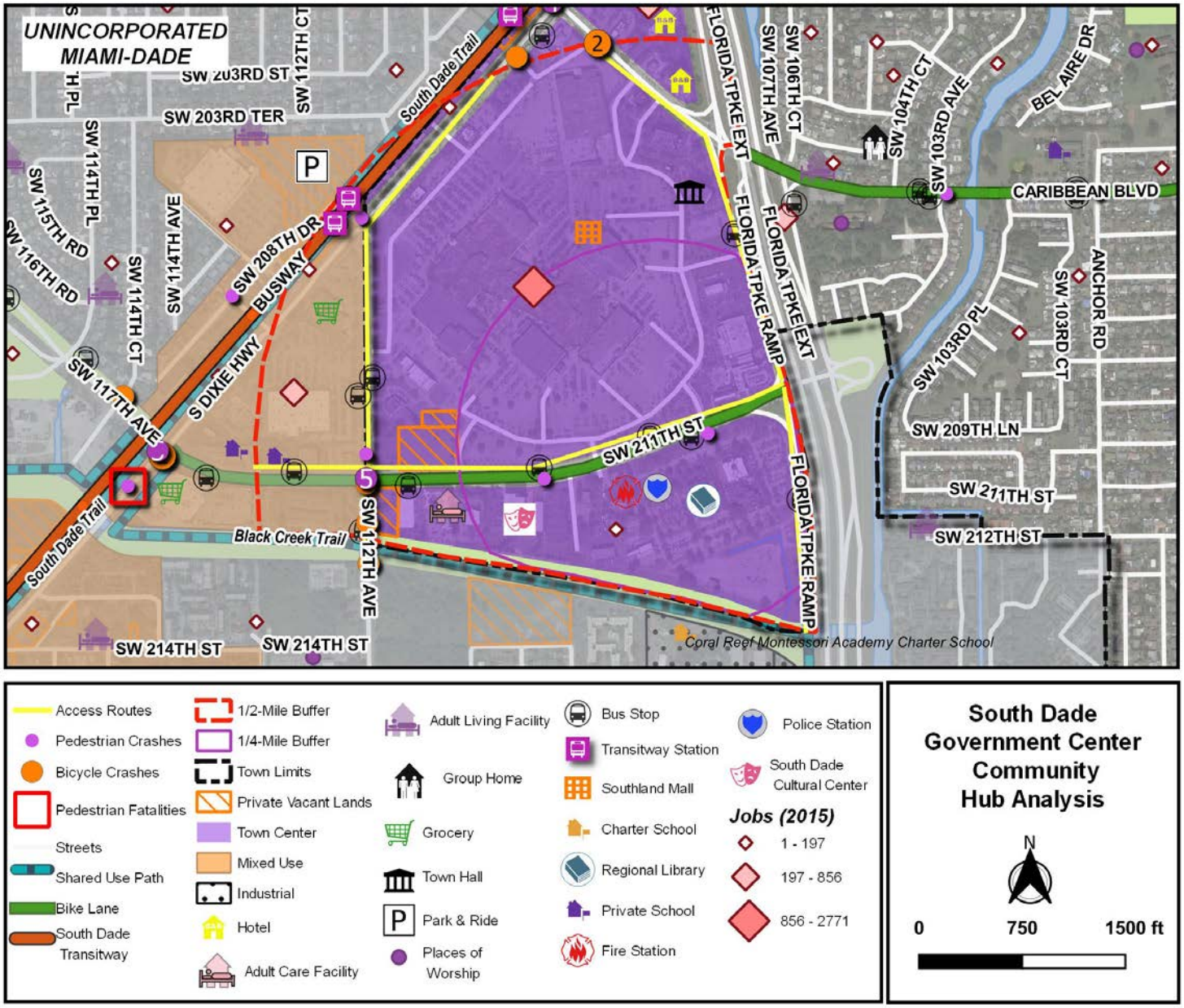


Figure 89: South Dade Government Center Community Hub Analysis

Regional Hubs

Regional Hubs are large scaled transit hubs, typically found in areas that have a mixture of uses, employment density, and high rates of transit usage. Regional Hubs are typically served by multiple transit lines and are areas that are active with pedestrian life. They are equipped with an array of amenities including parking garages, retail centers, public spaces, micro-mobility options, and provide amenities for all types of transportation modes. The Regional Hub Station template is illustrated in Figure 90.

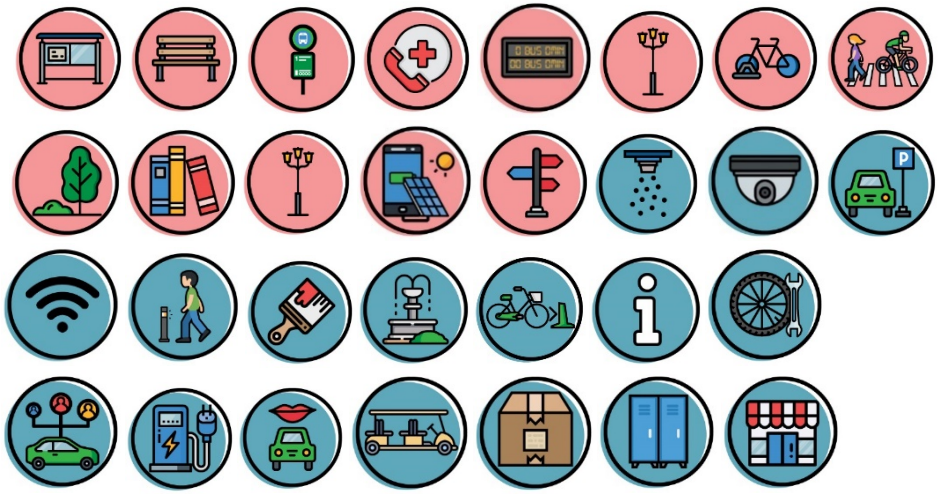


Figure 90: Regional Hub Station Template

Cutler Bay (Target) Regional Hub

The Regional Hub is recommended at the existing County Park & Ride facility at SW 112th Avenue and the Transitway (near Target). The existing Transitway Stations are being serviced by Routes 1, 31, 34, 35, 38, 39, 52 and 200 (see Figure 91). The existing facility is located near single-family and multi-family residential, industrial, retail, entertainment, and Town Center developments. Existing transit stations are equipped with shade, seating, trash receptacle, signage, exclusive bus lanes, and are adjacent to the South Dade Trail. Table 35 provides the existing conditions and location data; Table 36 is the evaluation data for the Cutler Bay Regional Hub.

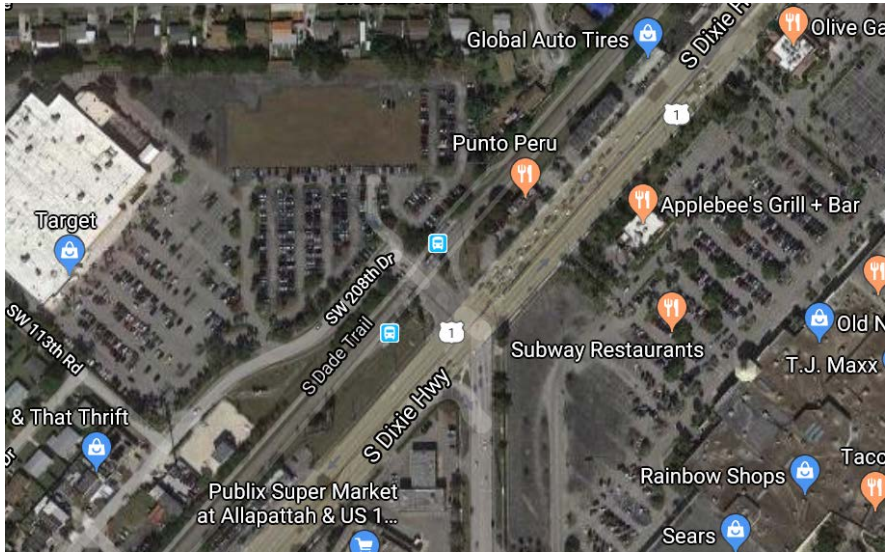


Figure 91: Cutler Bay (Target) Aerial
(SW 112 Avenue & US 1)

Table 35: Cutler Bay (Target) Regional Hub Location Data

HUB INFO		Route	Ridership (Avg Mo.)	Bus Type	Bike/Ped Facilities	Distance (Mi)
Type	Regional	Route 1	293	Circulator	South Dade Trail	0
Location	US 1 / 112 Ave	Route 31	1,114	Busway Local	Black Creek Trail	0.4
Road Class	2 / 5 & 3	Route 34	2,020	Limited Stop	211th Street Bike Lane	0.4
Lanes	6 / 5	Route 35	2,181	Local	Roberta Hunter Trail	0.7
Speed Limit	45 /	Route 38	6,389	Busway Max	Caribbean Bike Lane	0.8
Median	Yes / No	Route 39	969	Express	216th St. Bike Lane	0.8
ROW	137 / 118 Feet	Route 52	1,296	Local	**Annual Average Daily Traffic**	
Roadway Width	109 / 62 Feet	Route 200	157	Circulator	U.S. 1	50,500
Bus Stop ID	BSWY12V3 (W)	Route 248	128	Circulator	SW 112 Ave.	41,000
Bus Stop ID	BSWY12V2 (E)	*TOTAL*	*14547*		Transitway	550

Table 36: Planned Improvements & Recommendations

Planned Improvements	Recommended Amenities	Recommended Infrastructure Improvements
Bus Rapid Station	Retail / Pop-up Retail	Pedestrian Lighting
Rehabilitation of Existing Transitway Stations	Real-Time Information Display	Enhanced Landscaping
Resurfacing of U.S. 1 / S. Dixie Hwy.	Lending Library	Fill Sidewalk Gaps with ¼-mile
Pedestrian Improvements at U.S. 1 & SW 112 Ave.	USB Charge Port	ADA Improvements
	Box Wrap of Mechanical Equipment	Linear Park along Transitway Island
Accessibility Improvements	Emergency Callbox	Pedestrian Promenade along U.S. 1
Reconstruction of Raised Island	Bicycle Storage Locker	Reconfiguration of Park & Ride Lot Entrance
Widening of SB Lanes on U.S. 1	Bicycle Repair Station	Kiss & Ride with covered walkway
Addition of Dedicated Left Turn Lane from U.S. 1 to SW 112 Ave.	Bikeshare Station	5' Bicycle Lanes on SW 112 Ave. (Optional)
	Information Kiosk	Bicycle Light at U.S. 1 & SW 112 Ave. (Optional)
Bus Layover Area	Package Pickup Kiosk	Bike Box at U.S. 1 & SW 112 Ave. (Optional)
Kiss & Ride	EV Charge Station	
Bicycle Storage	Carshare	
	Bicycle Rack	
	Security Cameras	
	Recycle Receptacle	
	Designated Waiting area for TNC's	
	WIFI	

Approximate Cost Estimate for Recommended Amenities: $153,540 (details in Appendix III)
Approximate Cost Estimate for Recommended Infrastructure Improvements (does not include parking garage): $459,193 (details in Appendix III)
Approximate Cost Estimate for Parking Garage: $19,700 per space

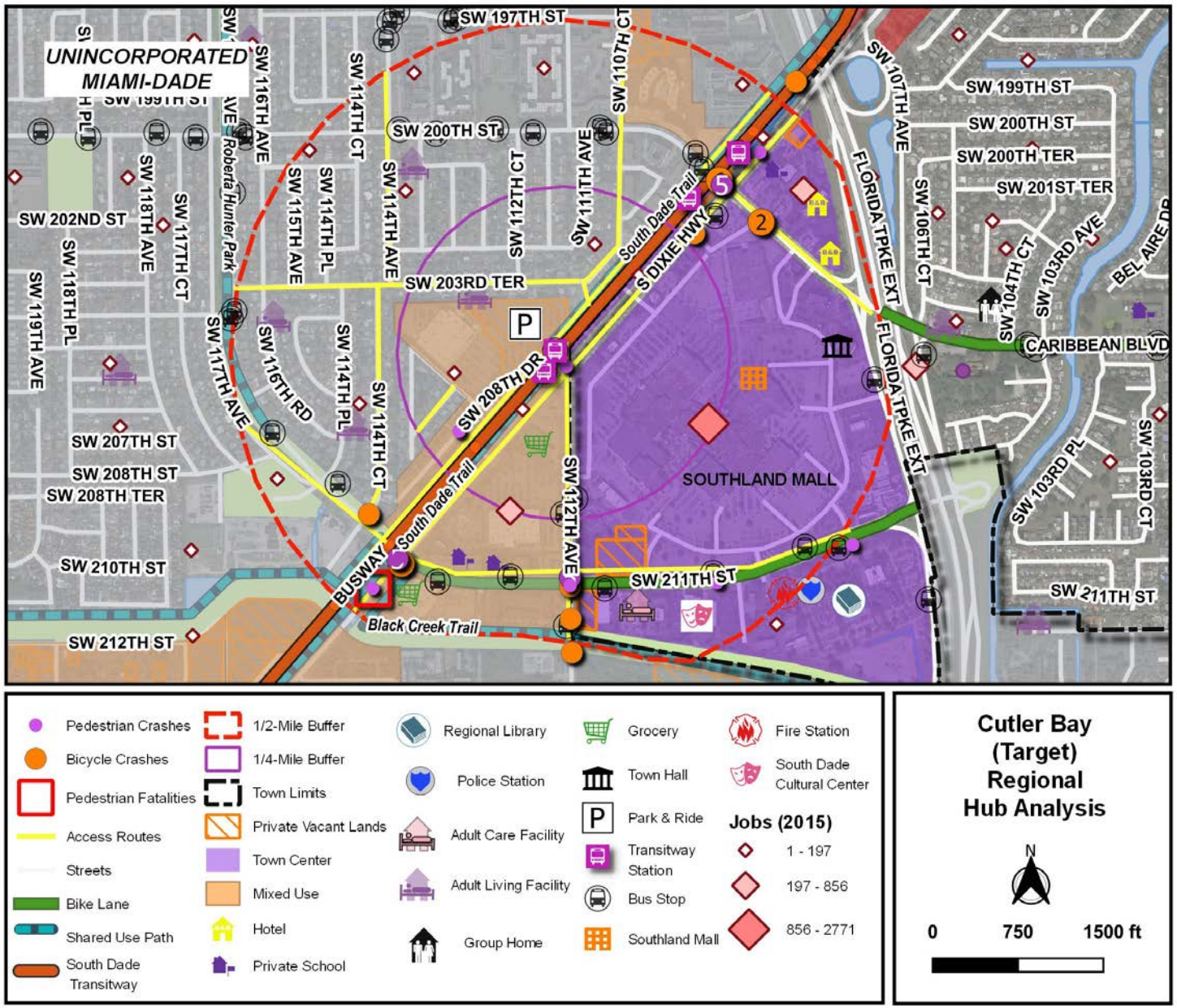


Figure 92: Cutler Bay (Target) Regional Hub Analysis

Prioritization

Prioritization of Mobility Hubs was determined through identification of criteria in which a measurement of that criteria could be performed for a number assignment. Table 37 provides the list of identified criteria and measurement used to rank each Mobility Hub.

Table 37: Criteria Used for Prioritization Ranking

CRITERIA	MEASURE
Number of Transit Routes	Number of Existing Routes
Future Transit Potential	Low (1), Medium (5), High (10)
Existing Ridership	Average Monthly Ridership
Accessibility by Walk	Sidewalk Network Completeness (1, 5, 10)
Accessibility by Bicycle	Bicycle Facility Completeness (0, 1, 5, 10)
Accessibility by Vehicle	Number of Park & Ride Spaces
Population	Existing Population within ½-Mile
Employment	Existing Jobs within ½-Mile
Redevelopment Potential	Vacant Parcels & Existing Development within ½- Mile – Low (1), Medium (5), High (10)
Transit Oriented Development Potential	Existing Land Use & Zoning with ½-Mile – Low (1), Medium (5), High (10)

Future transit potential was identified from previous recommended improvements or transit routes, in addition to potential routes identified within this plan, such as providing transit along Old Cutler Road, east of SW 85 Avenue. Existing ridership was identified through DTPW's May 2019 Ridership Technical Report. Accessibility by walking and cycling was review through existing facilities and connections for pedestrians and cyclists within a ½-mile radius. All identified Mobility Hubs have existing sidewalk connections, with the completeness measurement being determined by sidewalk connections within the ½-mile radius. A zero (0) was assigned to Mobility Hub locations that had no bicycle facilities connecting to the Mobility Hub, such as with the case of The Isles Neighborhood Hub, with all bicycle facilities located outside the ½-mile radius. Accessibility by vehicle was determined through existing park and ride lots and the number of spaces available, utilizing DTPW's May 2019 Ridership Technical Report.

2010 Census Data was used to determine tract level population data, it is important to note that some tracts overlapped within some areas and other areas the tract was outside the ½-mile boundary and therefore the whole number was used as there was no way to determine the exact number of people living within the ½-mile radius. Employment data was retrieved utilizing Census on the Map, which utilizes Longitudinal Employment Household Data (LEHD) from 2015 to determine the number of jobs within the ½-mile radius.

Redevelopment potential was reviewed through existing vacant parcels and parcels with high redevelopment potential, as is the case along U.S. 1 / South Dixie Highway that recently underwent a rezoning to attract mixed use dense redevelopment. Finally, TOD Potential was reviewed through existing TOD zoning and land use within ½-Mile of identified Mobility Hubs. The final score card is shown in Table 38.

Table 38: Prioritization Scoring

Criteria	Measure	Lakes by the Bay	Pine Wood	Whispering Pines	Eureka Drive East	Cutler Ridge	The Isles of Bayshore	Community Health	Old Cutler Town Center	Eureka Drive West	Marlin	Caribbean Boulevard	South Dade Government Center	Cutler Bay Regional
Number of Transit Routes	Number of Existing Routes	2	2	1	0	2	2	2	2	6	4	8	8	9
Future Transit Potential	Low, Medium, High	1	1	1	1	1	1	1	1	10	10	10	10	10
Existing Ridership	Avg. Mo. Ridership	530	530	450	0	450	530	1669	157	11430	9841	12527	7791	14547
Accessibility by Walk	Sidewalk Network Completeness	5	5	10	1	5	10	5	10	5	1	1	1	1
Accessibility by Bicycle	Bicycle Facility Completeness	1	1	5	5	10	0	1	10	1	1	1	5	1
Accessibility by Vehicle	Park & Ride Supply	0	0	0	0	0	0	0	0	0	0	0	0	450
Population	Existing 1/2 Mile	5865	7946	9305	3936	4822	7074	8722	8583	8473	3605	9697	4546	15526
Employment	Existing 1/2 Mile	69	55	77	1266	68	88	665	812	2225	3522	1959	2121	2693
Redevelopment Potential	Low, Medium, High	5	1	1	5	5	10	5	10	10	10	10	10	10
Transit Oriented Development Potential	Low, Medium, High	5	1	1	1	1	10	5	10	10	10	10	10	10
TOTAL		6483	8542	9851	5215	5364	7725	11075	9595	22170	17004	24223	14502	33257

Low: 1 Point, Medium: 5 Points, High: 10 Points

Once the raw scores were determined, they were assigned a simplified score as shown in Table 39 (the ranking for funding and planning purposes could be utilized by the Town).

Table 39: Final Prioritization Ranking

No.	Mobility Hub	Type	Raw Score	Score
1	Cutler Bay Regional	Regional	33257	33
2	Caribbean Boulevard	Community	24223	24
3	Eureka Drive West	Community	22170	22
4	Marlin	Community	17004	17
5	South Dade Government Center	Community	14502	15
6	Community Health	Neighborhood	11075	11
7	Whispering Pines	Neighborhood	9851	10
8	Old Cutler Town Center	Community	9595	10
9	Pine Wood	Neighborhood	8542	9
10	The Isles of Bayshore	Neighborhood	7725	8
11	Lakes by the Bay	Neighborhood	6483	6
12	Cutler Ridge	Neighborhood	5364	5
13	Eureka Drive East	Neighborhood	5215	5

IMPLEMENTATION

One of the most crucial components of any plan is the implementation process. With a limited amount of investment, agency approval, and oversight, Mobility Hub improvements and recommendations can be provided in the near-term. Others will take longer to implement, requiring investment, planning, policy changes, and private public partnerships. Additionally, as new technology becomes available, understanding this technology and how to incorporate it within the Mobility Hub will be an ongoing process.

However, the Town of Cutler Bay in partnership with Miami-Dade County and the Florida Department of Transportation can take steps to phase improvements and amenities over time. Innovative planning and developing policies are ways to start now. The Federal Highway Administration provides a guide for such policies, such as the *Public Policies for Pedestrian and Bicyclist Safety and Mobility: An Implementation Project of the Pedestrian and Bicyclists Safety and Mobility International Scan*. Adopted in September 2010, this plan outlines policies that cities can adopt to improve bicycle and pedestrian safety throughout their communities. Additionally, as people increasingly utilize on-demand mobility services, the need to create and plan for flexible curb spaces and drop-off / pick-up zones will be critical.

Public private partnership will be an important component of not only establishing Mobility Hubs, but also in providing the improvements and amenities needed for the success of the Mobility Hubs. The Town can work with developers to provide easements for mobility-shared services, enhance pedestrian and transit areas, or be required to provide funding for transit. Additionally, new development can be required to complete connections to transit or sidewalks, integrate Hub services and amenities, designate parking for carshare vehicles, install EV charging stations, incorporate Transportation Demand Management (TDM) techniques, and take additional measures to mitigate traffic impacts. Density bonuses, reduced parking requirements, and project fast-tracking are a few incentives the Town can provide for installing and maintaining Mobility Hub features and amenities.

The following list, provided by the SANDAG *Regional Mobility Hubs Implementation Strategy* can apply to the Town of Cutler Bay and partner agencies:

- Collaborate with DTPW to amend transit station design guidelines to support Mobility Hub implementation and provide flexibility for change as technology, travel behavior and patterns evolve over time.
- Allocate space for shared services such as on-demand shuttles and rideshare companies, and consider the flexible use of that space where necessary.
- Incorporate Mobility Hub elements in future joint development projects.
- Partner with shared mobility service providers to integrate shared mobility services into a platform for trip planning and payment.
- Amend the development review process to encourage developers to incorporate Mobility Hub features into their projects, see Appendix V.
- Adapt off-street parking requirements to better align with Mobility Hub investments.
- Implement flexible curb space to meet the needs of shared mobility services and the changing demands of users.
- Educate developers, employers, and other transportation stakeholders on the Mobility Hub concept and garner support.
- Account for a connected and autonomous future in local planning documents and policies.
- Communicate the value of prioritizing drop-off space over parking to private property owners and developers.
- Seek pilot projects that enhance transit and bring mobility options to commuters.
- Encourage businesses and/or developers to partner with government to test technologies and service concepts in real-world environments.

Additionally, the Town of Cutler Bay could look at adopting a Mobility Fee, an impact fee imposed on new development or redevelopment that generates personal travel demand above the current use of land. Therefore, the Mobility Fee would fund improvements related to all types of mobility, such as bicycle, pedestrian, and transit. In August 2019, the City of Palm Beach Gardens was the first in the State of Florida to adopt such a program. A Mobility Fee would allow the Town to collect money from new development and/or redevelopment to fund multimodal transportation improvements identified through a Master Plan, such as this one. The Mobility Fee would need to be adopted via Council action through the amendment of the Town's Comprehensive Plan.

Funding

Table 40 provides a list of various funding programs identified for the Town of Cutler Bay to assist with the funding of the ***Mobility Hubs Plan*** and proposed amenities and improvements. These funding sources include Federal, House and Urban Development (HUD), Environmental Protection Agency (EPA), State and Private programs for funding capital, and non-capital programs. The table identifies the sponsor, program name, funding type, potential funding strategy, description of the funding program, and a link for additional information.

Table 40: Funding Sources

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
FEDERAL CAPITAL FUNDING SOURCES				
U.S. Department of Transportation	BUILD	Capital / Operations & Maintenance	Competitive	Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants. BUILD Transportation grants (previously known as Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants Program), can support roads, bridges, transit, rail, ports or intermodal transportation. BUILD Transportation grants are for investments in surface transportation infrastructure and will be awarded on a competitive basis to projects that will have a significant local or regional impact that address public health and safety, promote regional connectivity, facilitate economic growth or competitiveness, deploy broadband as part of an eligible transportation project, or promote energy independence. Additional information can be found at https://www.transportation.gov/BUILDgrants/outreach
U.S. Department of Transportation	National Highway System FAST Act (NHS)	Capital / Operations & Maintenance / Planning & Research	Flexible	The FAST Act continues the National Highway Performance Program, which was established under MAP-21. The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS. The FAST Act continues all prior NHPP eligibilities, and adds four new eligible categories: Installation of vehicle-to-infrastructure communication equipment; Reconstruction, resurfacing, restoration, rehabilitation, or preservation of a bridge on a non-NHS Federal-aid highway (if Interstate System and NHS Bridge Condition provision requirements are satisfied); A project to reduce the risk of failure of critical NHS infrastructure (defined to mean a facility, the incapacity or failure of which would have a debilitating impact in certain specified areas); and, at a State's request, the U.S. DOT may use the State's Surface Transportation Block Grant (STBG) funding to pay the subsidy and administrative costs for Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance for an eligible NHPP project or group of projects. Additional information can be found at https://www.fhwa.dot.gov/fastact/factsheets/nhppfs.cfm
Federal Highway Administration	Surface Transportation Block Grant Program (STBG)	Capital / Operations & Maintenance / Planning & Research	Flexible	The Surface Transportation Program (STBG) provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Fundable components include construction, reconstruction, rehabilitation, resurfacing, restoration, and operational improvements for highways and bridges

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
				including construction or reconstruction necessary to accommodate other transportation modes. As funding for planning, these funds can be used for surface transportation planning activities, wetland mitigation, transit research and development, and environmental analysis. Other eligible projects under STBG include transit safety improvements and most transportation control measures. Additional information can be found at https://www.fhwa.dot.gov/fastact/factsheets/stbgfs.cfm
Federal Highway Administration	Recreational Trails Program (23 USC 206)	Capital / Operations & Maintenance / Programming	Trail projects or access to Trails	Develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. States are encouraged to enter into contracts and cooperative agreements with qualified youth conservation or service corps. Eligible projects include: Maintenance and restoration of existing trails; Development and rehabilitation of trailside and trailhead facilities and trail linkages; Purchase and lease of trail construction and maintenance equipment; Construction of new trails (with restrictions for new trails on Federal lands); Acquisition of easements or property for trails; Assessment of trail conditions for accessibility and maintenance; Development and dissemination of publications and operation of educational programs to promote safety and environmental protection related to trails (including supporting non-law enforcement trail safety and trail use monitoring patrol programs, and providing trail-related training) (limited to 5 percent of a State's funds); State administrative costs related to this program (limited to 7 percent of a State's funds). Additional information can be found at http://www.fhwa.dot.gov/environment/rectrails/
Federal Highway Administration	National Scenic Byways Program	Capital / Programming	Public Roads	Grants and technical assistance are provided to states and Indian tribes to implement projects on highways designated as National Scenic Byways, All-American Roads, America's Byways, and state scenic or Indian tribe scenic byways and to plan, design, and develop a state or Indian tribe scenic byway program. Additional information can be found at https://www.fhwa.dot.gov/hep/scenic_byways/index.cfm
Federal Highway Administration	Safe Routes to School (SRTS)	Capital / Planning & Research / Programming	Projects within a half mile radius of public school	The purpose of SRTS is to enable and encourage children, including those with disabilities, to walk and bicycle to school; To make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. Additional information can be found at http://www.srtsfl.org
Federal Highway Administration	Highway Bridge Replacement and Rehabilitation (HBRRP)	Capital	Projects including bridges	Replace and rehabilitate deficient highway bridges and to seismically retrofit bridges located on any public road. Additional information can be found at http://www.fhwa.dot.gov/bridge/hbrrp.htm

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
Federal Highway Administration	Highway Safety Improvement Program (HSIP)	Capital	Public Roads	The overall purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements. Additional information can be found at http://safety.fhwa.dot.gov/hsip/
Federal Transit Administration	Transportation Alternatives	Capital	Flexible	Eligible activities include construction, planning and design of on-road and off-road trail facilities for pedestrians, bicyclists and other non-motorized forms of transportation. For example, new sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting, and other safety-related infrastructure, ADA compliance projects. Additional information can be found at https://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm
Federal Transit Administration	Paul S. Sarbanes Transit in the Parks Discretionary Grant Program	Capital / Planning & Research	Access to Everglades trails	The purpose of the program is to enhance the protection of national parks and public lands and increase the enjoyment of those visiting the parks and public lands. Eligible project areas include any federally owned or managed park, refuge or recreational area open to the general public, including: National Parks, National Wildlife Refuges; Bureau of Land Management recreational areas; Bureau of Reclamation recreational areas; and National Forests. Eligible projects may also include the communities and land surrounding these federal lands. Additional information can be found at https://www.transit.dot.gov/funding/grants/grant-programs/paul-s-sarbanes-transit-parks-program-5320
Federal Transit Administration	Major Capital Investments (New Starts & Small Starts)	Capital	Long Range Transportation Plan	The transit capital investment program provides capital assistance for three primary activities: New fixed guideway systems (New Starts program and Small Starts) New and replacement buses and facilities (Bus and Bus Related Facilities program), and Modernization of existing rail systems (Fixed Guideway Modernization program). The New Starts program provides funds for construction of new fixed guideway systems or extensions to existing fixed guideway systems. The Small Starts program provides funds to capital projects that either (a) meet the definition of a fixed guideway for at least 50 percent of the project length in the peak period, or (b) are corridor-based bus projects with 10-minute peak/15-minute off-peak headways or better while operating at least 14 hours per weekday. The Federal assistance provided or to be provided under Section 5309(e) must be less than $75 million and the project must have a total capital cost of less than $250 million, both in year of expenditure dollars. Additional information can be found at https://www.transit.dot.gov/funding/grant-programs/capital-investments/capital-investment-grants-program
Federal Transit Administration	Bus and Bus Facilities Infrastructure	Capital	BCT Priority Areas	The transit infrastructure investment program provides capital assistance for three primary activities: New and replacement buses and facilities (Bus and Bus Related Equipment and Facilities program). Modernization of existing rail systems (Fixed

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
	Investment Program			Guideway Modernization program). New fixed guideway systems (New Starts program and Small Starts). Additional information can be found at https://www.transit.dot.gov/funding/grants/bus-bus-facilities-infrastructure-investment-program
Federal Transit Administration	New Freedom Program	Capital / Disability Programming	ADA Facilities	The New Freedom formula grant program aims to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the work force and full participation in society. Lack of adequate transportation is a primary barrier to work for individuals with disabilities. The 2000 Census showed that only 60 percent of people between the ages of 16 and 64 with disabilities are employed. The New Freedom formula grant program seeks to reduce barriers to transportation services and expand the transportation mobility options available to people with disabilities beyond the requirements of the Americans with Disabilities Act (ADA) of 1990. Additional information ca be found at https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/new-freedom-program-guidance-and-application-instructions
Federal Transit Administration	Integrated Mobility Innovation (IMI) Program	Capital	Public Transportation	FTA's Integrated Mobility Innovation (IMI) Program funds projects that demonstrate innovative and effective practices, partnerships and technologies to enhance public transportation effectiveness, increase efficiency, expand quality, promote safety and improve the traveler experience. Additional information can be found at https://www.transit.dot.gov/IMI
Federal Transit Administration	Mobility on Demand (MOD) Sandbox Program	Technology /Partnerships	Public Transportation	Improve transportation efficiency by promoting agile, responsive, accessible and seamless multimodal service inclusive of transit through enabling technologies and innovative partnerships. Utilizing technological advances such as smart phones, information processing, and widespread data connectivity. New mobility concepts and solutions, from bike- and car-sharing systems to demand-responsive bus services. Additional information can be found at https://www.transit.dot.gov/research-innovation/mobility-demand-mod-sandbox-program
Miami-Dade Transportation Planning Organization	SMART Moves Projects		Demonstration Projects	The Miami-Dade TPO has indicated that a new funding cycle will open for mobility demonstration projects during the 2019-2020 fiscal year. Stay tuned! Information available at http://www.miamidadetpo.org/
HUD CAPITAL FUNDING SOURCES				

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
United States Department of Housing and Urban Development	CBDG Section 108	Capital / Programming	Project Bundles	Section 108 is the loan guarantee provision of the Community Development Block Grant (CDBG) program. Section 108 provides communities with a source of financing for economic development, housing rehabilitation, public facilities, and large-scale physical development projects. This makes it one of the most potent and important public investment tools that HUD offers to local governments. It allows them to transform a small portion of their CDBG funds into federally guaranteed loans large enough to pursue physical and economic revitalization projects that can renew entire neighborhoods. Additional information can be found at https://www.hudexchange.info/programs/section-108/
HUD NON-CAPITAL FUNDING SOURCES				
United States Department of Housing and Urban Development/ United States Environmental Protection Agency	Sustainable Communities Regional Planning Grant	Planning & Research / Programming	Projects touching Palm Beach or Miami-Dade County	This year's Regional Planning Grant program encourages grantees to support regional planning efforts that integrate housing, land-use, economic and workforce development, transportation, and Capital developments in a manner that empowers regions to consider how all of these factors work together to bring economic competitiveness and revitalization to a community. The program places a priority on partnerships, including the collaboration of arts and culture, philanthropy, and innovative ideas to the regional planning process. Additional information can be found at https://www.hud.gov/program_offices/economic_development/sustainable_communities_regional_planning_grants
United States Department of Housing and Urban Development/ United States Environmental Protection Agency	Community Challenge Planning Grants	Planning & Research / Programming	Flexible	The program provides grants to enable communities in fostering reform and reducing barriers to achieving affordable, economically vital, and sustainable communities. Such efforts may include amending or replacing local master plans, zoning codes, and building codes, either on a jurisdiction-wide basis or in a specific neighborhood, district, corridor, or sector to promote mixed-use development, affordable housing, the reuse of older buildings and structures for new purposes, and similar activities with the goal of promoting sustainability at the local or neighborhood level. This Program also supports the development of affordable housing through the development and adoption of inclusionary zoning ordinances and other activities such as acquisition of land for affordable housing projects. Additional information can be found at https://www.hud.gov/program_offices/economic_development/HUD-DOT_Community_Challenge_Grants
United States Department of Housing and	Community Development Block Grant	Programming	Flexible	The program provides annual grants on a formula basis to entitled cities and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for low- and

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
Urban Development	(CDBG) - Entitlement Communities Grant & State Administered			moderate-income persons. Additional information can be found at https://www.hud.gov/program_offices/comm_planning/communitydevelopment/programs
United States Department of Housing and Urban Development	Brownfields Economic Development Initiative (BEDI)	Planning & Research / Programming	Projects within or adjacent to Brownfield sites	The Brownfields Economic Development Initiative (BEDI) is a key competitive grant program that HUD administers to stimulate and promote economic and community development. BEDI is designed to assist cities with the redevelopment of abandoned, idled and underused industrial and commercial facilities where expansion and redevelopment is burdened by real or potential environmental contamination. BEDI grant funds are primarily targeted for use with a particular emphasis upon the redevelopment of brownfields sites in economic development projects and the increase of economic opportunities for low-and moderate-income persons, as part of the creation or retention of businesses and jobs, and increases in the local tax base. Additional information available at https://www.hudexchange.info/programs/bedi/
EPA NON-CAPITAL FUNDING SOURCES				
United States Environmental Protection Agency	Brownfields Assessment Grant	Planning & Research / Operations & Maintenance	Projects within or adjacent to Brownfield sites	Assessment grants provide funding for a grant recipient to inventory, characterize, assess, and conduct planning and community involvement related to brownfields sites. An eligible entity may apply for up to $200,000 to assess a site contaminated by hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum) and up to $200,000 to address a site contaminated by petroleum. Additional information can be found at https://www.epa.gov/brownfields/types-brownfields-grant-funding
United States Environmental Protection Agency	Brownfields Cleanup Grant	Operations & Maintenance/ Programming	Projects within or adjacent to Brownfield sites	Cleanup grants provide funding for a grant recipient to carry out cleanup activities at brownfield sites. An eligible entity may apply for up to $200,000 per site. Additional information can be found at https://www.epa.gov/cleanups/cleanup-grants-and-funding
United States Environmental Protection Agency	Brownfields Revolving Loan Fund Grants	Operations & Maintenance / Programming	Projects within or adjacent to Brownfield sites	Revolving Loan Fund (RLF) grants provide funding for a grant recipient to capitalize a revolving loan fund and to provide sub grants to carry out cleanup activities at brownfield sites. Additional information can be found at https://www.epa.gov/sites/production/files/2015-09/documents/rlf_factsheet.pdf

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
United States Environmental Protection Agency	Brownfields Area-Wide Planning Pilot Program	Planning & Research	Projects within or adjacent to Brownfield sites	EPA is piloting this area-wide planning approach to community brownfield challenges, which recognizes that revitalization of the area surrounding the brownfield site(s) is critical to the successful reuse of the property as assessment, cleanup, and redevelopment of an individual site. The area-wide planning approach will enhance EPA's core brownfields assistance programs by encouraging continued meaningful involvement in a locally-driven planning process that will result in a strategy for making brownfields site assessment, cleanup, and/or redevelopment decisions for the future. Additional information can be found at https://www.epa.gov/sites/production/files/2015-09/documents/awp_sanford_me.pdf
OTHER FED GOVERNMENT INSTITUTIONAL CAPITAL FUNDING SOURCES				
Department of the Interior/ National Park Service	Land and Water Conservation Fund	Capital	Projects bordering Everglades	The State Side of the LWCF provides matching grants to States and local governments for the acquisition and development of public outdoor recreation areas and facilities. Grant funds can be dedicated toward planning, acquisition and development of facilities that provide recreational opportunities. Additional information can be found at http://www.nps.gov/lwcf/
OTHER FED GOVERNMENT INSTITUTIONIONAL NON-CAPITAL FUNDING SOURCES				
National Endowment for the Arts	Access to Artistic Excellence, "Our Town" Program	Programming	Encouragement / Education Programming	Based on the availability of funding, the National Endowment for the Arts will provide a limited number of grants, ranging from $25,000 to $250,000, for creative placemaking projects that contribute toward the livability of communities and help transform them into lively, beautiful, and sustainable places with the arts at their core. Creative placemaking is when artists, arts organizations, and community development practitioners deliberately integrate arts and culture into community revitalization work - placing arts at the table with land-use, transportation, economic development, education, housing, infrastructure, and public safety strategies. The Arts Endowment plans to support a variety of diverse projects, across the country in urban and rural communities of all sizes. Projects may include planning, design, and arts engagement activities. Additional information can be found at https://www.arts.gov/grants-organizations/our-town/introduction
National Endowment for the Humanities	America's Historic Places Grants	Programming	Encouragement / Education Programming in close proximity to Historic sites	As part of the We the People initiative, NEFH seeks proposals for public programs that use one or more historic sites to address themes and issues central to American history. Projects may interpret a single historic site, a series of sites, whole neighborhoods, communities or towns, or larger geographical regions. The place taken as a whole must be significant to American history and the project must convey its importance to visitors.

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
				Additional information can be found at http://www.neh.gov/grants/guidelines/historicplaces.html
STATE / FLORIDA CAPITAL FUNDING SOURCES				
Florida Department of Transportation	Resurfacing Program (3R)	Capital	Programmed District resurfacing project	The resurfacing program deals with improvements to the structural condition of existing pavements on the State Highway System (SHS), including the interstate and turnpike enterprise. This program provides for pavement resurfacing, rehabilitation, minor reconstruction, and pavement milling and recycling. Such projects are intended to preserve the structural integrity of highway pavements. Opportunities may exist for early project identification and coordination to leverage other funds for Complete Streets improvements. Additional information can be found at http://www.fdot.gov/roadway/ppmmanual/2012/volume1/chap25.pdf
Florida Department of Transportation	Public Transit Service Development program	Capital / Programming	Transit /Municipal priority projects	This grant program is designed to provide start-up funding for new public transit projects that provide new or innovative techniques to improve system efficiencies, ridership, or revenues. Additional information can be found at https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/content/transit/documents/transitresourceguide.pdf?sfvrsn=a4a21cda_0
Florida Department of Transportation	Intermodal Development program	Capital	Mobility Hub projects	This program provides funding for projects that promote the intermodal or multimodal movement of people and goods. These projects may include major capital investments in fixed guideway transportation systems; access to seaports or airports; and construction of intermodal, multimodal, or other transportation terminals. Additional information can be found at https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/content/transit/documents/transitresourceguide.pdf?sfvrsn=a4a21cda_0
Florida Department of Transportation	Park & Ride Lot Program	Capital	Existing and Planned Park & Ride projects	This program supports the purchase or lease of land for the construction of park and ride facilities or the promotion of these facilities to increase their use for transit, carpools, and vanpools. Additional information can be found at https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/content/transit/documents/transitresourceguide.pdf?sfvrsn=a4a21cda_0
Florida Department of Transportation	Transit Corridor Program	Capital	Transit /Municipal priority projects	This program is designed to support projects that relieve congestion and improve capacity in identified transportation corridors by improving the people-carrying capacity of the system through the use of high-occupancy conveyances. Additional information can be found at https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/content/transit/documents/transitresourceguide.pdf?sfvrsn=a4a21cda_0

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
STATE / FLORIDA NON-CAPITAL FUNDING SOURCES				
Florida Department of Transportation	High Visibility Enforcement Grant	Programming	Enforcement Programming	High visibility enforcement funds are intended as a crash mitigation tool. These enforcement activities are designed to target unsafe behaviors of all road users, including motorists, pedestrians, and bicyclists. The funds may only be used for officer overtime hours spent conducting on-street enforcement operations. Additional information can be found at http://www.alerttodayflorida.com/hve.html
PRIVATE FOUNDATION/ORGANIZATION CAPITAL FUNDING SOURCES				
Rails to Trails	Doppelt Family Trail Development Fund	Capital / Programming	Trail projects or access to Trails	The Doppelt Family Trail Development Fund supports organizations and local governments that are implementing projects to build and improve multi-use trails. Under the Doppelt Family Trail Development Fund, RTC will award approximately $85,000 per year, distributed among several qualifying projects through a competitive process. Additional information can be found at https://www.railstotrails.org/our-work/doppelt-family-trail-development-fund/
Bike Florida	Share the Road Challenge Grant	Capital / Programming	Encouragement /Education programming	Applicants must match at least 75 percent of the grant in cash. Up to 25 percent of the match may be in the form of in-kind services and supplies. The purpose of the 'Share The Road Challenge Grant' is to fund local level demonstration projects designed to facilitate cycling as a safe and convenient form of transportation that will produce measurable impacts and that can be duplicated in other communities. Projects may encompass education, infrastructure, public awareness, design, or other innovative approaches. Additional information can be found at https://sharetheroad.org/challenge-grant/
Transit Center	Major Grants	Capital / Programming	Mobility Hubs	Transit Center awards grants to qualified organizations engaged in transit advocacy and applied research. Those awards are made through periodic competition among entities which Transit Center invites to submit applications. Additional information can be found at http://transitcenter.org/grants/
PRIVATE FOUNDATION/ORGANIZATION NON-CAPITAL FUNDING SOURCES				

Sponsor	Program Name	Funding Type	Potential Funding Strategy	Description of Funding Program
Conservation Fund	Kodak American Greenways Program	Programming	Encouragement /Education programming	The organization is interested in funding activities such as mapping, eco-logical assessments, surveying, conferences, and design activities; developing brochures, interpretative displays, audio-visual productions, or public opinion surveys; hiring consultants; incorporating land trusts; and/or building footbridges, planning bike paths, or other creative projects. Additional information can be found at http://www.rlch.org/funding/kodak-american-greenways-grants
League of American Bicyclists	Woman Bike Grants	Programming	Women Encouragement /Education programming	One of the goals of the Women Bike program is to seed, support, and spread the best campaigns and ideas that are getting more women on bikes. Additional information can be found at http://www.bikeleague.org/content/women-bike-funding

Appendix I

Public Information Plan

CUTLER BAY MOBILITY HUBS PLAN

PREFACE

Cutler Bay Mobility Hubs Plan

The purpose of this Public Involvement Plan (PIP) is to assist in providing information to and obtaining input from concerned citizens, agencies, private groups (residential/business), and governmental entities.

The overall goal of this plan is to help ensure that the study reflects the values and needs of the communities it is designed to benefit.

A schedule of events and a list of documentation exhibiting compliance with these procedures are included.

The Cutler Bay Mobility Hubs Public Information Plan outlines the specific activities that the Town of Cutler Bay will undertake to provide timely and accurate information to stakeholders throughout the project.

POINTS OF CONTACT

Cutler Bay Mobility Hubs Plan

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MARLIN

PROJECT OVERVIEW

Cutler Bay Mobility Hubs Plan

The Town of Cutler Bay was recently awarded a Miami-Dade Transportation Planning Organization (TPO) SMART Mobility grant. The Town's consultant, MARLIN Engineering, Inc. will provide the community with a comprehensive system of transit mobility hubs connecting to the South Dade Transitway and Cutler Bay Town Center.

The Plan will focus on populations and jobs within the entire Town with an overall goal of improving connectivity, mobility and safety for pedestrians, bicyclists, and transit users by identifying locations for neighborhood, community and commercial level mobility hubs along the Town's roadway network. Once locations have been identified, the appropriate scope of transportation infrastructure and amenities to facilitate usage of the hubs will be recommended through conceptual design and visualizations. The Plan will include a sketch planning assessment of the Town's existing circulator and bus system and proposed recommendations to improve the Town's overall transit performance and connectivity.

The Plan also seeks innovative ways to enhance the Town's recently constructed complete streets projects along Caribbean Boulevard and Old Cutler Road. The Plan will also build upon recommendations provided in the Town's Transportation, Bicycle/Pedestrian and Complete Streets Master Plans, Townwide Traffic Calming Plan and Adopted Land Use Regulations.

Finally, the Plan will also take into account best practices provided in the TPO's recently completed First Mile/Last Mile Options for High-Trip Generator Employers Study and the Protected Bike Lanes Demonstration Plan.

PUBLIC INFORMATION PRINCIPLES

Cutler Bay Mobility Hubs Plan

Statement and Core Values

Public Information plays a critical role in supporting the decision-making core value. Informing the public about upcoming decisions allows stakeholders to be involved in decision making in a meaningful way. Additionally, effective public information initiatives are critical for informing impacted stakeholders in advance regarding construction and maintenance activities.

Integration in the 6-Step Process

The Cutler Bay Mobility Hubs Plan will integrate a 6-Step Process, which includes the following steps:

- Define Desired Outcomes and Actions
- Endorse the Process
- Establish Criteria
- Develop Alternatives or Options
- Evaluate, Select, and Refine Alternatives or Options
- Finalize Documentation and Evaluation Process

This Public Information Plan supports the 6-Step Process by ensuring that project stakeholders and the public are adequately informed in advance to be engaged at each step in an open and meaningful way.

Implementation

Effective public information supports effective implementation of decisions based off integration of the 6-step process because it provides easy-to-understand information to stakeholders in advance so they can make informed decisions. The Town of Cutler Bay firmly believes that it is imperative to understand what the community wants and what is needed.

PUBLIC INFORMATION APPROACH

Cutler Bay Mobility Hubs Plan

MARLIN will work with the community to determine the vision, goals, objectives and needs for the Cutler Bay Mobility Hubs Plan.

Clarifying Project Goals

The goal of this project is to improve connectivity, mobility and safety for pedestrians, bicyclists and transit users through the identification of mobility hubs along the Town's roadway network. The Study team will achieve this goal via 5 key tasks which include:

1. Background Information of Existing Conditions
2. Public Involvement Plan/Meetings
3. Data Collection
4. Conceptual Design
5. Recommendations/Final Report

Key Milestones and Activities

A kickoff meeting which included a general overview of the project, scope and tasks took place on November 26, 2018.

Project Management Teleconferences will include a total of six (6), 30-minutes teleconferences which will be used to update and collaborate with the project manager and consultant.

Two (2) Town Commission meetings will take place to provide findings and recommendations to the Town Council.

Two (2) public involvement meetings will take place to include outreach and communication efforts to seek input from the community.

Three (3) Study Advisory Committee (SAC) meetings will take place. The Town of Cutler Bay shall identify stakeholders and participants which will include representatives from the Florida Department of Transportation (FDOT) District Six (6), the Miami Dade Department of Transportation Public Works (DTPW), the Miami Dade Transportation Planning Organization (TPO), Southland Mall and the Bicycle Pedestrian Advisory Committee (BPAC).

The SAC will provide valuable feedback through review of materials on all project deliverables and approval/endorsement of the final results and recommendations for this study.

The Cutler Bay Mobility Hubs Plan is scheduled for completion by October 16, 2019.

Public Information Tools

Tools may include:

- News releases
- Calendar items
- Web site
- Newsletters
- Online media – Facebook, Twitter, Instagram, YouTube

PUBLIC INFORMATION SCHEDULE

Cutler Bay Mobility Hubs Plan

The schedule is as follows:

- Project Management Teleconferences
  - December 20, 2018
  - February 28, 2019
  - April 25, 2019
  - June 27, 2019
  - August 20, 2019
  - October 7, 2019
- Kickoff Meeting and Ongoing Coordination with the Miami-Dade TPO, DTPW and FDOT
  - Kickoff Meeting November 26, 2018
- Town Commission Meetings
  - February, 2020
- Public Involvement Meetings
  - April 30, 2019
  - September 3, 2019 (Rescheduled due to Hurricane Dorian)
  - September 23, 2019
- Study Advisory Committee (SAC)
  - February 6, 2019
  - May 22, 2019
  - August 28, 2019

PUBLIC INFORMATION SCHEDULE

Town of Cutler Bay Mobility Hub Plan

TASKS AND SUBTASKS	November '18	December '18	January '19	February '19	March '19	April '19	May '19	June '19	July '19	August '19	September '19	October '19
Task 1. Background Information/Existing Conditions												
a. Review relevant Multi-modal transportation planning studies												
b. Obtain and assess Existing / Future Land Use and Zoning and ROW												
c. Obtain MDDTPW, Town Circulator Stop and Ridership Data and Files												
Task 2. Public Involvment and Coordinatio												
a. Project Management Teleconferences (6, 30 Minutes)												
b. Coordination with Public, TPO, MD DTPW												
c. Town Commission Meetings (2)												
d. Community Meetings (2)												
e. Study Advisory Group (3 meetings)												
Task 3. Data Collection and Transit Hub Assessment												
a. Interview Town Circulator Drivers/Operator												
b. Ride Town Circulator Routes and Use Speedtracker for Speed/Delay and Rider Survey												
c. Interview Metrobus Riders at transfer points and at Cutler Bay Transitway Stations												
d. Analysis of MIOVision results												
e. GIS Analysis of ridership and route demographics												
f. Development of alternative system routes and schedules												
g. Sketch Planning Stop/Hub Utilization Assessment												
h. Capital, O&M Cost Analysis (3 Schedules)												
Task 4. Mobility Hub siting and Conceptual Design												
a. Hub Siting Analysis up to 12 locations												
b. Development of Neighborhood, Community and Central Hub												
c. Review of Right of Way, Adjacent Land Use and Ped/Bike Access												
d. Assessment of permitting requirements												
e. Cost Estimates 12 locations												
Task 5. Documentation												
a. Recommendations: Prioritization												
b. Potential Funding												
c. Powerpoint presentations for Commission Meetings												
d. Final Report												

Appendix II

Bus Operator Questionnaire

1. **How long have you been a bus operator for this City? Overall?**

2. **User/Riders**
    a. What is the average age group of your rider?
    b. Are riders more male/female/even mixture of both?
    c. What is the average demographic of your rider? (Black/White/Asian/Hispanic/Even Mix)
    d. Do many persons with disabilities ride the bus?
    e. What is the primary purpose of your average rider? (Work/School/Errands/Joyride)
    f. How do you track ridership?
    g. Do they carry a bicycle, walk or park and ride?

3. **Bus Stops/Route**
    a. Which stop(s) has the most transfer activity?
    b. Where do most riders begin and end their trip?
    c. What stops do you believe should be eliminated? Why?
    d. What stops do you believe should be added? Why?
    e. What changes would you like to see on your route?

4. **Service**
    a. What changed could be made to get more riders?
    b. How can we improve the riders experience during the transit ride?
    c. How can we improve the riders experience during the wait for a bus?
    d. Do the hours of operation meet the need of the riders?
    e. Is ridership higher during the weekend, weekday or special events?

5. **Delays**
    a. Where do your delays occur?
    b. What time(s) are they occurring at?
    c. How can your travel delay be reduced?

6. **Additional Feedback:**

BUS OPERATOR RESPONSES

1. How long have you been a bus operator for this City? Overall? (31 YEARS)
2. User/Riders
    a. What is the average age group of your rider? (60 Years Old)
    b. Are riders more male/female/even mixture of both? (FEMALES)
    c. What is the average demographic of your rider? (Black/White/Asian/Hispanic/Even Mix) (HISPANIC)
    d. Do many persons with disabilities ride the bus? (AVERAGE 6 WHELLCHAIR PASSENGER PER DAY)
    e. What is the primary purpose of your average rider? (Work/School/Errands/Joyride) (ERRANDS)
    f. How do you track ridership? (FAREBOX)
    g. Do they carry a bicycle, walk or park and ride? (ABOUT 3 PER DAY WITH BICYCLE, THE REST WALK)
3. Bus Stops/Route
    a. Which stop(s) has the most transfer activity? (82 AVE AND 210 STREET, 85 AVENUE AND 212 STREET AND 87 AVE AND 198 STREET.
    b. Where do most riders begin and end their trip? BUS STOPS LISTED ABOVE ANF ENDING AT 184 STREET AND US1 AND MARLIN ROAD AND US1.
    c. What stops do you believe should be eliminated? Why? NONE
    d. What stops do you believe should be added? Why? NONE
    e. What changes would you like to see on your route? ADDITIONAL BUS IS NEEDED IN ORDER TO BE ABLE TO BE ON TIME AND ACCOMMODATE THE PASSENGER LOADS. IDEALLY A COUNTER CLCOK CIRCULATOR TO MINIMIZE TRAVEL TIME FOR PASSENGERS. OFTERN TIMES I HAVE TO LEAVE A PASSNEGER ON A WHEEL CHAIR BECAUSE I ALREADY HAVE TWO WHEELCHAIR PATRONS ONBOARD.
4. Service
    a. What changed could be made to get more riders? SUGGESTION PROVIDED ABOVE. A COUNTER CLOCKWISE TO COMPLETMENT THE EXISTING CLOCKWISE SERVICE.
    b. How can we improve the riders experience during the transit ride? MORE FREQUENT SERVICE, INCREASE HEADWAY FROM EXISTING 1 HOUR TO 30 MINUTES.
    c. How can we improve the riders experience during the wait for a bus? MORE BUS SHELTERS AND BENCHES.
    d. Do the hours of operation meet the need of the riders? WEEKDAYS YES. WEEKEND NO.
    e. Is ridership higher during the weekend, weekday or special events? WEEKDAYS
5. Delays
    a. Where do your delays occur? THE LACK OF RECOVERY TIME CAUSES ANY UNFORSEEING TRAFFIC SITUATION OR WHEELCHAIR PASSENGER LOAD A CHALLENGE TO KEEP THE BUS ON TIME. I ONLY GET 7 MINUTES OF RECOVERY TIME PER TRIP.
    b. What time(s) are they occurring at? ANY TIME OF THE DAY.
    c. How can your travel delay be reduced? BY INCREASING THE RECOVERY TIME FROM 7 MINUTES TO 15 MINUTES TO ACCOMMODATE ANY UNFORSEEING TRAFFIC SITUATIONS OR PASSENGER LOADS.
6. Additional Feedback:

PASSENGERS ARE CONSTANLTY REQUESTING A COUNTERCLOCK SERVICE SO THAT THEY DO NOT HAVE TO SPEND UP TO 45 MINUTES ON THE BUS WHEN THEY ONLY NEED TO RIDE FOR 8 MINUTES IF A COUINTERCLOCK SERVICE WAS PROVIDED.

1. How long have you been a bus operator for this City? Overall? 13 YRS.

2. User/Riders
   a. What is the average age group of your rider? 50 – 80
   b. Are riders more male/female/even mixture of both? EVEN MIXTURE
   c. What is the average demographic of your rider? HISPANIC
      (Black/White/Asian/Hispanic/Even Mix)
   d. Do many persons with disabilities ride the bus? ABOUT 6-7 PEOPLE
   e. What is the primary purpose of your average rider? WORK, ERRANDS
      (Work/School/Errands/Joyride)
   f. How do you track ridership? BY COUNTING
   g. Do they carry a bicycle, walk or park and ride? BICYCLE, WALK

3. Bus Stops/Route
   a. Which stop(s) has the most transfer activity? 112 AVE & 211 ST.
   b. Where do most riders begin and end their trip? 210 ST & 82 AVE
   c. What stops do you believe should be eliminated? Why? NONE
   d. What stops do you believe should be added? Why? NONE
   e. What changes would you like to see on your route? MORE RECOVERY TIME.

4. Service
   a. What changed could be made to get more riders? MORE FREQUENT BUSES
   b. How can we improve the riders experience during the transit ride? MORE FREQUENT BUSES
   c. How can we improve the riders experience during the wait for a bus? HAVE HIGHER SIDEWALK WITH CURB FOR ELDERLY ON BUS STOPS.
   d. Do the hours of operation meet the need of the riders? YES
   e. Is ridership higher during the weekend, weekday or special events?
      I ONLY DO THIS ROUTE ON WEEKENDS, SATURDAY VERY BUSY.

5. Delays
   a. Where do your delays occur? BETWEEN 112 AVE & 211 ST AND 184 ST & US1
   b. What time(s) are they occurring at? FROM 11:00 AM TO 3:00 PM
   c. How can your travel delay be reduced? HAVE MORE TIME ON SCHEDULE

6. Additional Feedback:

Survey Questions

1. **What is your residence zip code?**

2. **How many times per week do you typically ride the bus?**
   a. Everyday
   b. A few times per week
   c. A few times per month
   d. Weekends
   e. Sometimes
   f. Other_____

3. **What time do you begin and end your trip?**

4. **What route(s) do you typically ride?**
   a. Route 1
   b. Route 31
   c. Route 34
   d. Route 35
   e. Route 38
   f. Route 39
   g. Route 52
   h. Route 137
   i. Route 200
   j. Route 287
   k. Other_____

5. **Which bus stop do you begin your trip?**
   a. Southland Mall
   b. SW 112 Ave Transitway
   c. SW 200 Ave Transitway
   d. Marlin Road Transitway
   e. SW 184 Transitway
   f. SW 184 / US 1
   g. Publix @ Old Cutler Road
   h. SW 190 St / SW 87 Ave
   i. SW 210 St / SW 82 Ave
   j. SW 212 St / SW 85 Ave
   k. Other_____

6. **Where do you end your trip?**
   a. Southland Mall
   b. SW 112 Ave Transitway
   c. SW 200 Ave Transitway
   d. Marlin Road Transitway
   e. SW 184 Transitway
   f. SW 184 / US 1
   g. Publix @ Old Cutler Road
   h. SW 190 St / SW 87 Ave
   i. SW 210 St / SW 82 Ave
   j. SW 212 St / SW 85 Ave
   k. Other_____

7. **How do you get to the bus stop?**
   a. Walk
   b. Bike
   c. Park and Ride
   d. Uber/Lyft or Similar
   e. Drop Off
   f. Other_____

8. **Do you transfer?**
   a. Yes
   b. No

9. **If yes, how many times and where?**

10. **What is the primary purpose of your ride?**

a. Connect to/from Work
b. Connect to/from School
c. Connect to/from Commercial Centers
d. Connect to/from Appointment
e. Errands
f. Joyride
g. Other_____

11. Do you use the Miami Dade Transit Tracker App for Realtime tracking or planning your route?

a. Yes
b. No
c. No – I did not know about it
d. Sometimes

12. How satisfied are you with the service and reliability of the Metrobus?

a. 1 Very Satisfied
b. 2 Satisfied
c. 3 Neither Satisfied nor Dissatisfied
d. 4 Dissatisfied
e. 5 Very Dissatisfied

13. What upgrades could improve your bus stop experience? (choose as many as you like)

a. Lighting
b. Pedestrian Access to Bus Stop
c. Wider Sidewalks
d. Bicycle Access/Bicycle Lane
e. Security Cameras
f. Police Call Box
g. Shade
h. Landscaping
i. Seating
j. Trash Receptacles
k. Bicycle Parking
l. Bicycle Storage
m. Maintenance of Bus Stops
n. Bus Information Display
o. Traffic Calming Near Bus Stop
p. Other: _____

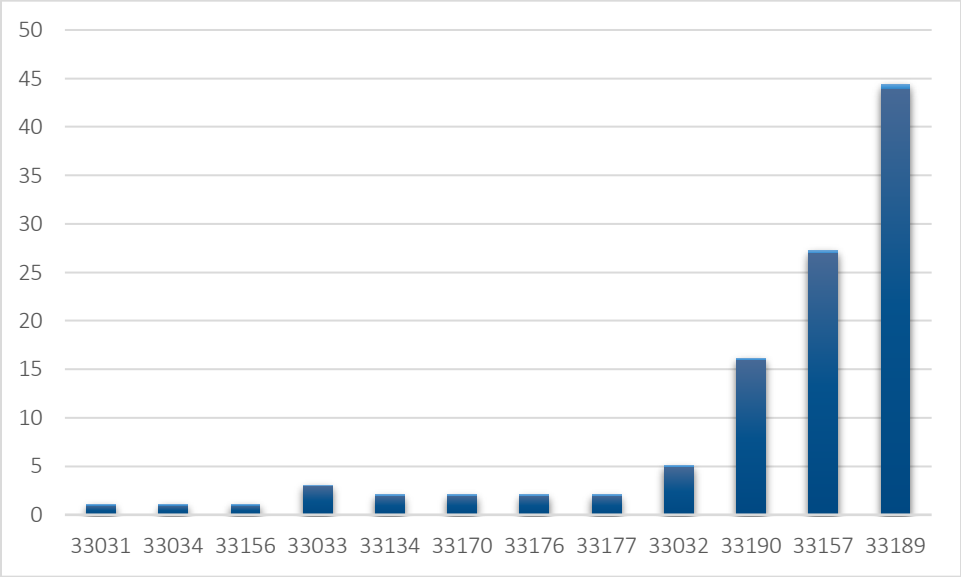
14. What would improve your commute?

a. Bicycle Repair Facilities
b. Bicycle Share Stations
c. Electric Bike/Scooter Share
d. Car Share
e. Passenger Loading Zone
f. Electric Vehicle Charging Stations
g. Micro Transit (Golf Carts, Freebie, etc.)
h. Wayfinding/Signage
i. WI-FI Service on Bus
j. Retail
k. Food Truck
l. Public Space/Plaza
m. Public Art
n. Public Restroom
o. Mobile Ticketing
p. Other: _____

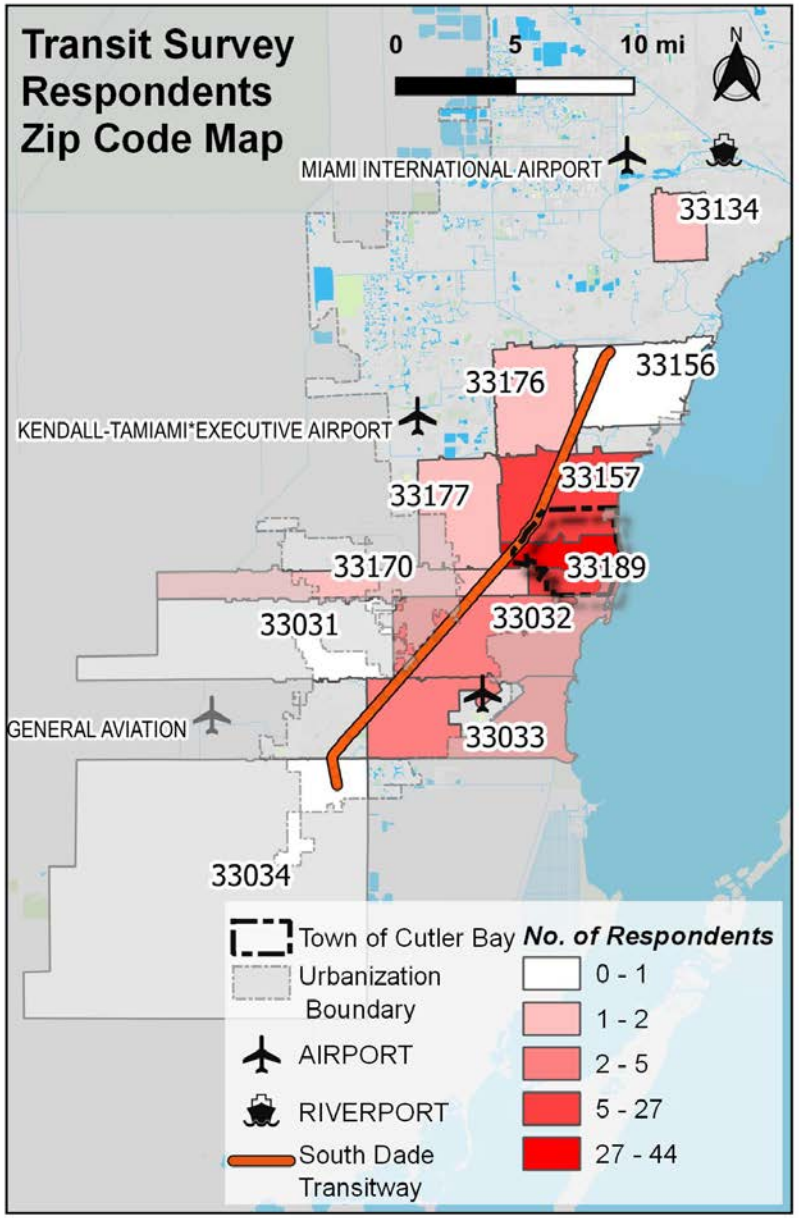
15. Additional Feedback:

SURVEY RESPONSES

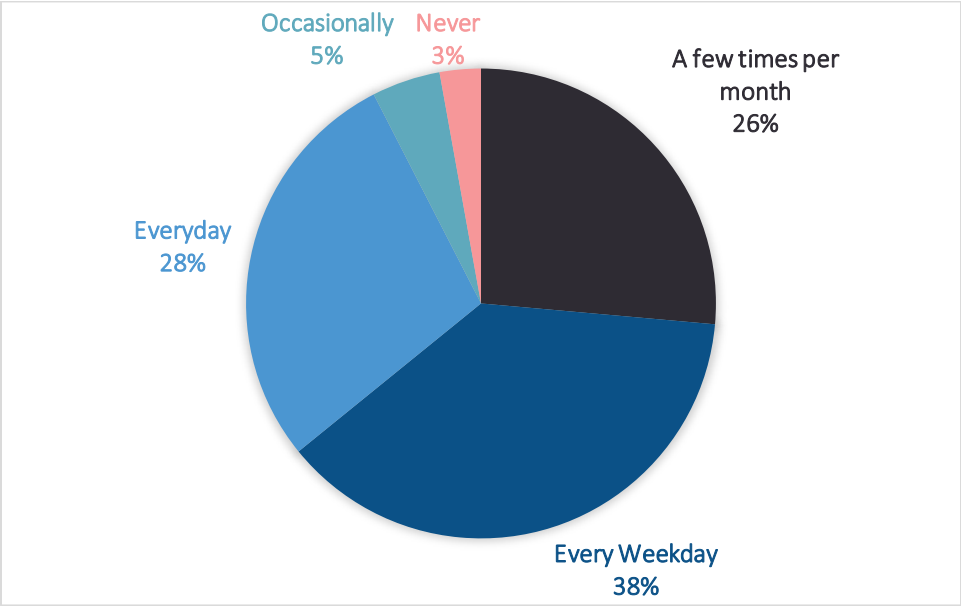
Q1. What is your residence zip code?



Zip code	No. of Respondents	%
33031	1	1%
33034	1	1%
33156	1	1%
33033	3	3%
33134	2	2%
33170	2	2%
33176	2	2%
33177	2	2%
33032	5	5%
33190	16	15%
33157	27	25%
33189	44	42%
TOTAL	**106**	**100%**

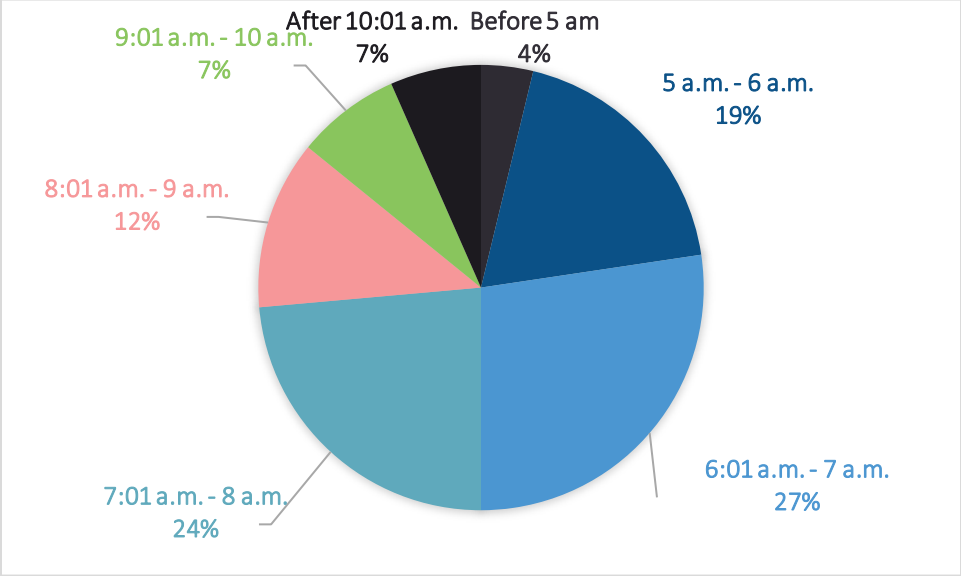


Q2. How many times per week do you typically ride the bus?



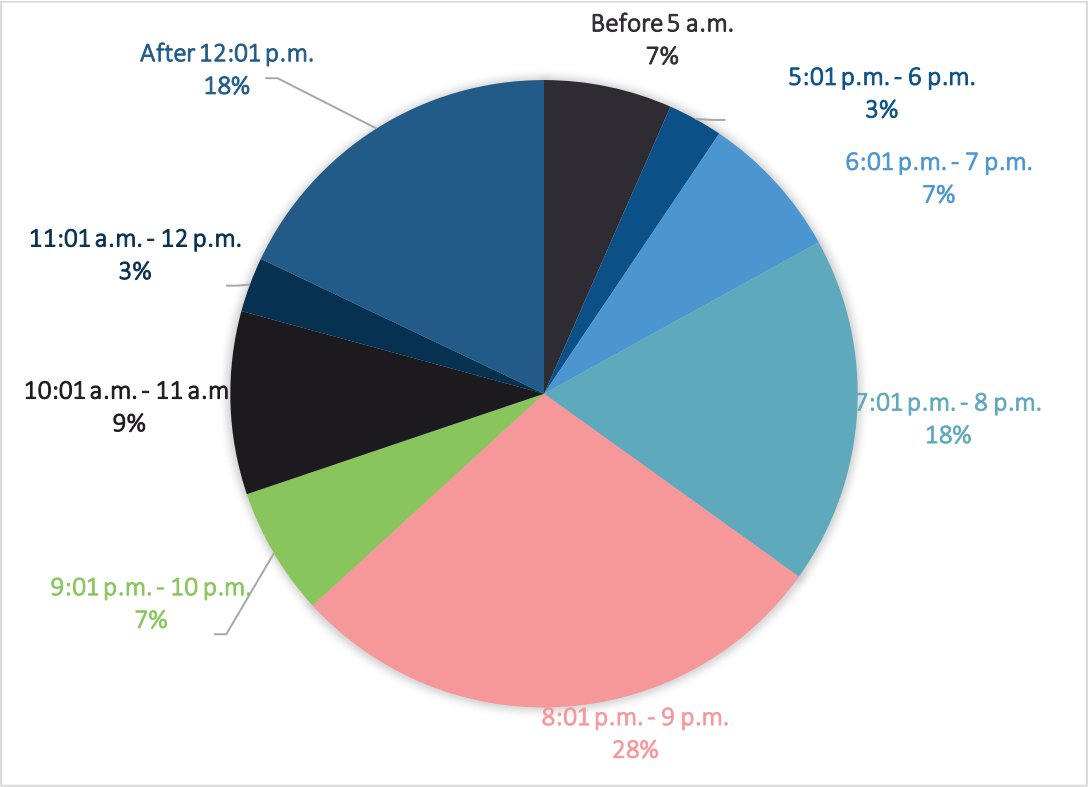
Responses	No. of Respondents	%
A few times per month	28	26%
Every Weekday	40	38%
Everyday	30	28%
Occasionally	5	5%
Never	3	3%
Total	**106**	**100%**

Q3. What time do you begin and end your trip? Begin Time



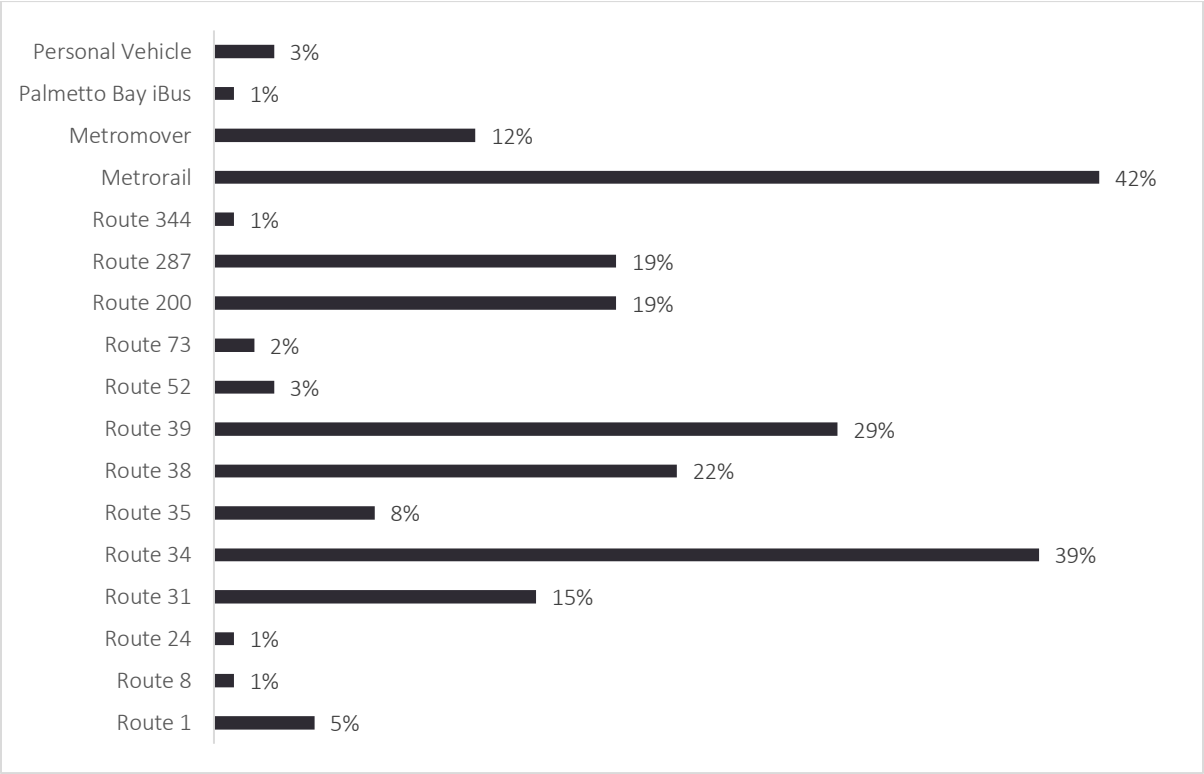
Departure Time	No. of Respondents	%
Before 5 am	4	4%
5 a.m. - 6 a.m.	20	19%
6:01 a.m. - 7 a.m.	29	27%
7:01 a.m. - 8 a.m.	25	24%
8:01 a.m. - 9 a.m.	13	12%
9:01 a.m. - 10 a.m.	8	8%
After 10:01 a.m.	7	7%
Total	**106**	**100%**

Q3. What time do you begin and end your trip? Arrival Time



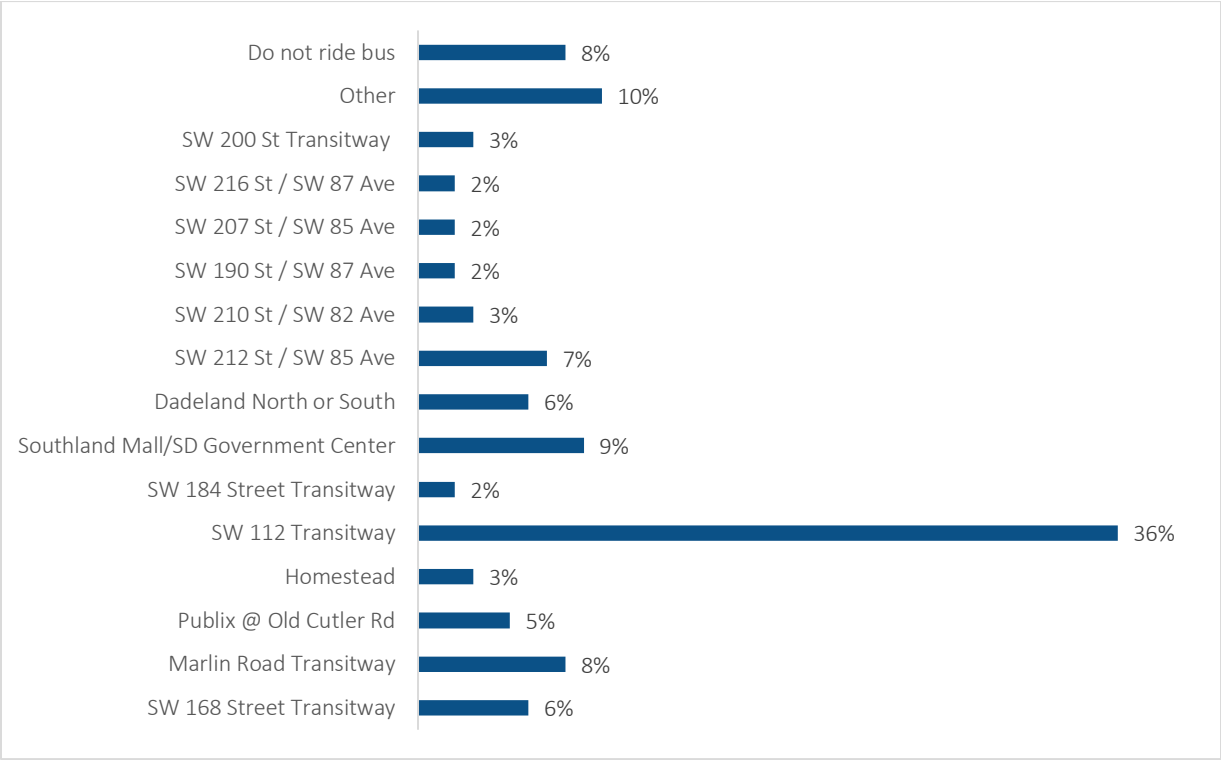
Arrival Time	No. of Respondents	%
Before 5 a.m.	7	7%
5:01 p.m. - 6 p.m.	3	3%
6:01 p.m. - 7 p.m.	8	8%
7:01 p.m. - 8 p.m.	19	18%
8:01 p.m. - 9 p.m.	30	28%
9:01 p.m. - 10 p.m.	7	7%
10:01 a.m. - 11 a.m.	10	9%
11:01 a.m. - 12 p.m.	3	3%
After 12:01 p.m.	19	18%
Total	**106**	**100%**

Q4. What routes do you typically ride?



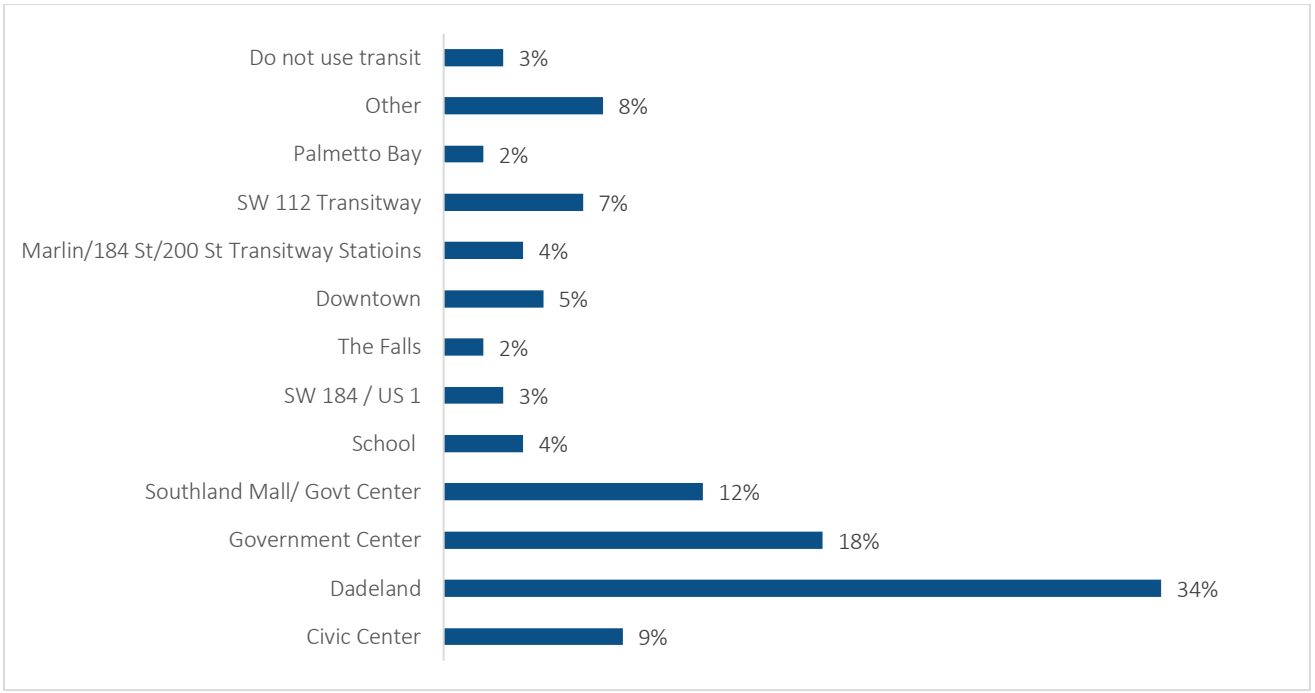
Routes Used	No. of Respondents	%
Route 1	5	5%
Route 8	1	1%
Route 24	1	1%
Route 31	16	15%
Route 34	41	39%
Route 35	8	8%
Route 38	23	22%
Route 39	31	29%
Route 52	3	3%
Route 73	2	2%
Route 200	20	19%
Route 287	20	19%
Route 344	1	1%
Metrorail	44	42%
Metromover	13	12%
Palmetto Bay iBus	1	1%
Personal Vehicle	3	3%
TOTAL	**106**	**100%**

Q5. Which bus stop do you begin your trip?



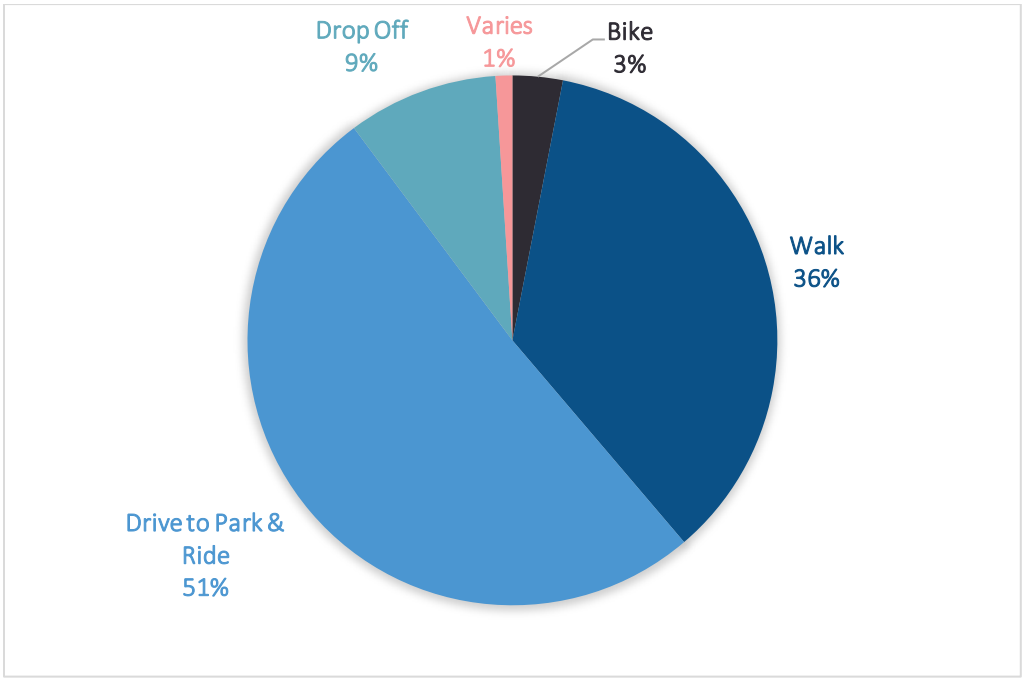
Bus Stop	No. of Respondents	%
SW 168 Street Transitway	6	6%
Marlin Road Transitway	8	8%
Publix @ Old Cutler Rd	5	5%
Homestead	3	3%
SW 112 Transitway	38	36%
SW 184 Street Transitway	2	2%
Southland Mall/SD Government Center	9	9%
Dadeland North or South	6	6%
SW 212 St / SW 85 Ave	7	7%
SW 210 St / SW 82 Ave	3	3%
SW 190 St / SW 87 Ave	2	2%
SW 207 St / SW 85 Ave	2	2%
SW 216 St / SW 87 Ave	2	2%
SW 200 St Transitway	3	3%
Other	10	10%
Do not ride bus	8	8%
Total	**105**	**100%**

Q6. Where do you end your trip?



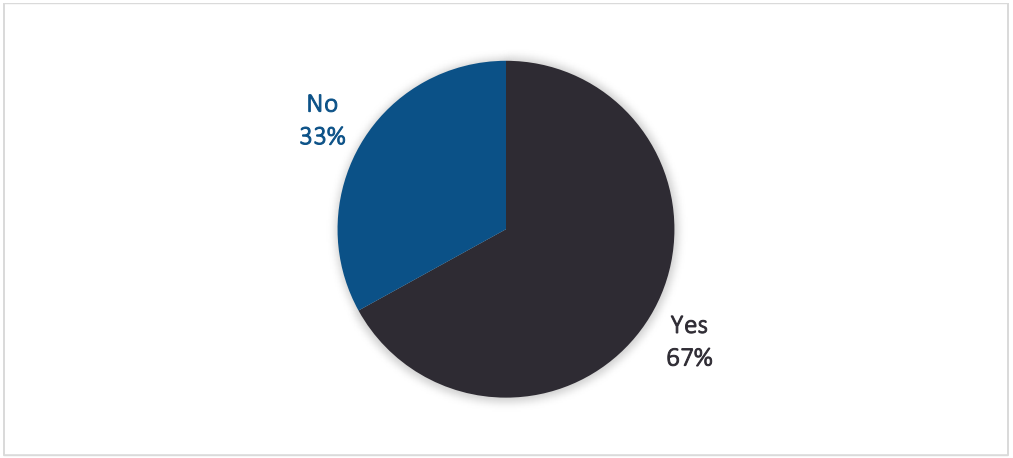
End Stop	No. of Respondents	%
Civic Center	9	9%
Dadeland	36	34%
Government Center	19	18%
Southland Mall/ Govt Center	13	12%
School	4	4%
SW 184 / US 1	3	3%
The Falls	2	2%
Downtown	5	5%
Marlin/184 St/200 St Transitway Stations	4	4%
SW 112 Transitway	7	7%
Palmetto Bay	2	2%
Other	8	8%
Do not use transit	3	3%
Total	**105**	**100%**

Q7. How do you get to the bus stop?



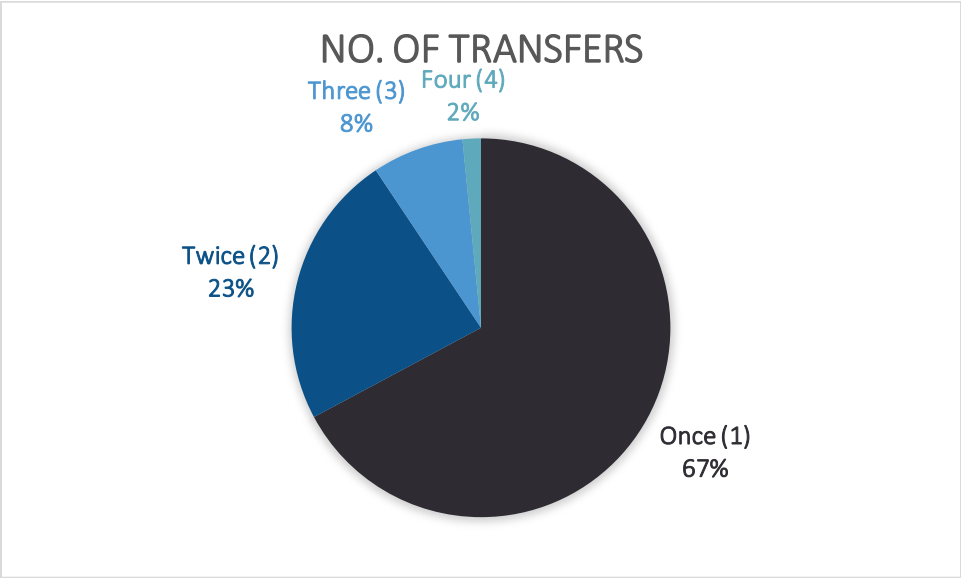
Mode	No. of Respondents	%
Bike	3	3%
Walk	35	33%
Drive to Park & Ride	50	47%
Drop Off	9	8%
Varies	1	1%
Wheelchair	2	2%
N/A - Do Not Take Bus	4	4%
Bus	2	2%
TOTAL	**106**	**100%**

Q8. Do you transfer?

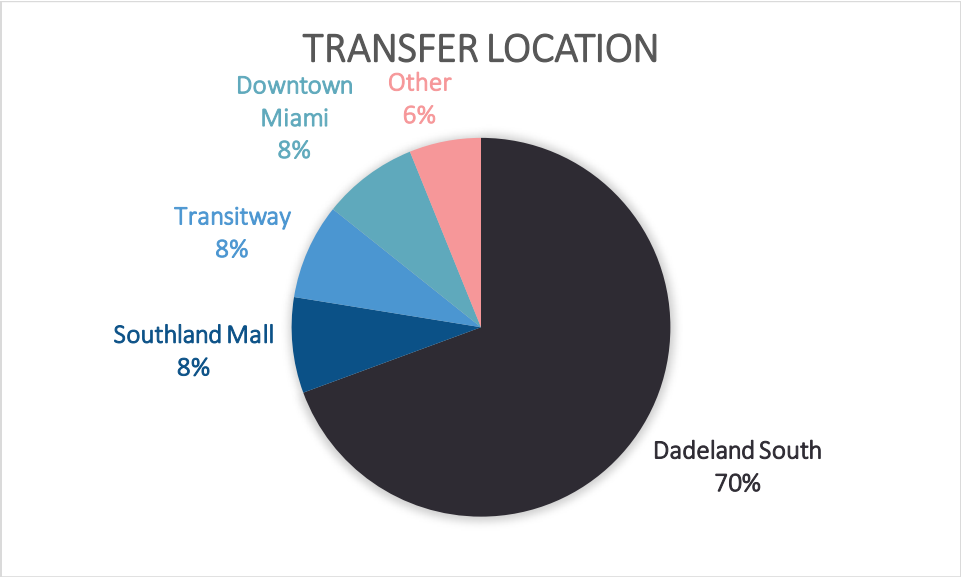


Transfer	No. of Respondents	%
Yes	71	67%
No	35	33%
Total	**106**	**100%**

Q9. If yes, how many times and where?

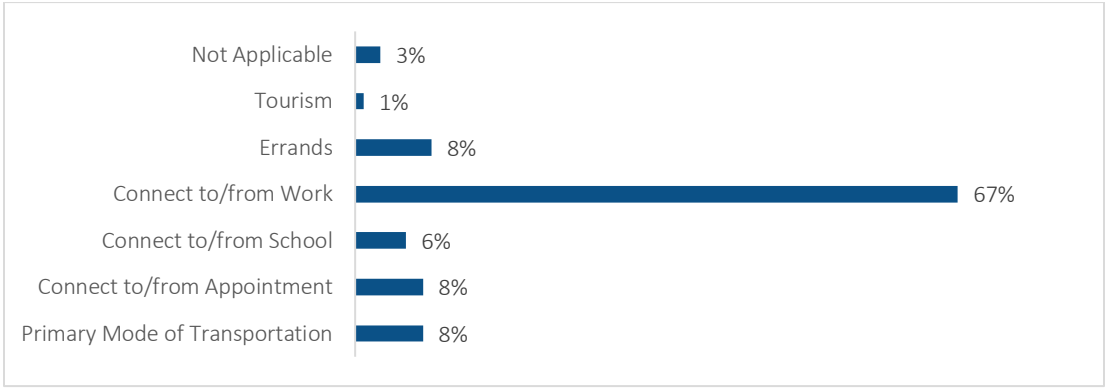


No. of Transfers	No. of Respondents	%
Once (1)	43	67%
Twice (2)	15	23%
Three (3)	5	8%
Four (4)	1	2%
Total	**64**	**100%**



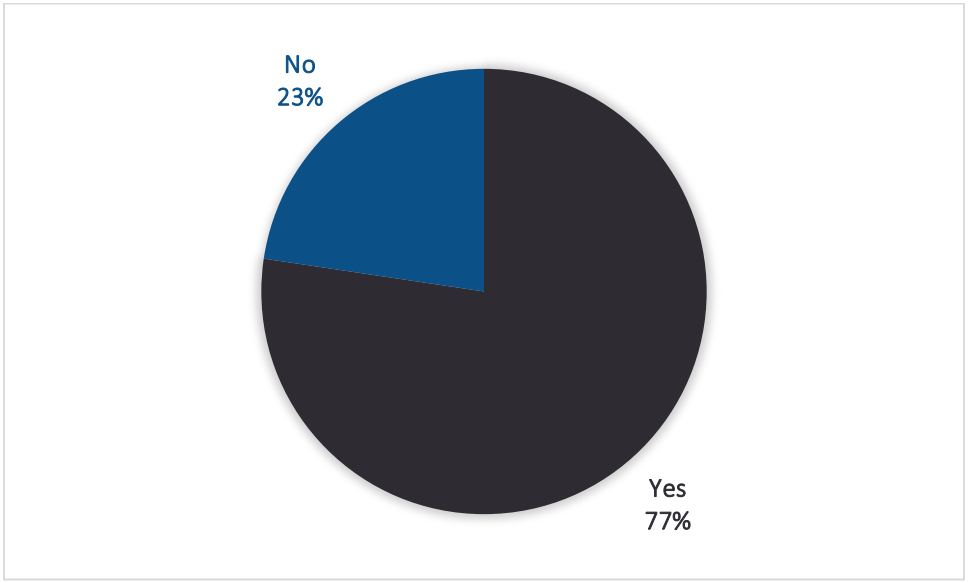
Location	No. of Respondents	%
Dadeland South	34	69%
Southland Mall	4	8%
Transitway	4	8%
Downtown Miami	4	8%
Other	3	6%
Total	**49**	**100%**

Q10. What is the primary purpose of your ride?



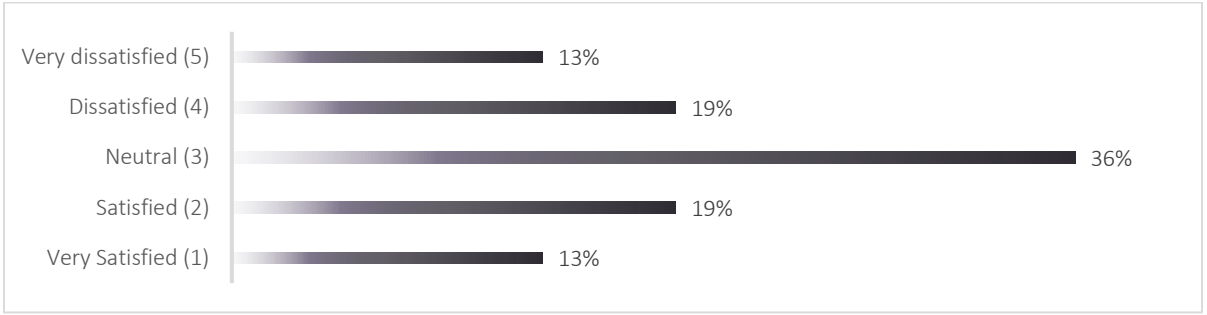
Trip Purpose	No. of Respondents	%
Primary Mode of Transportation	8	8%
Connect to/from Appointment	8	8%
Connect to/from School	6	6%
Connect to/from Work	71	67%
Errands	9	8%
Tourism	1	1%
Not Applicable	3	3%
Total	**106**	**100%**

Q11. Do you use the Miami-Dade Transit Tracker APP for Real-time Tracking & Planning your route?



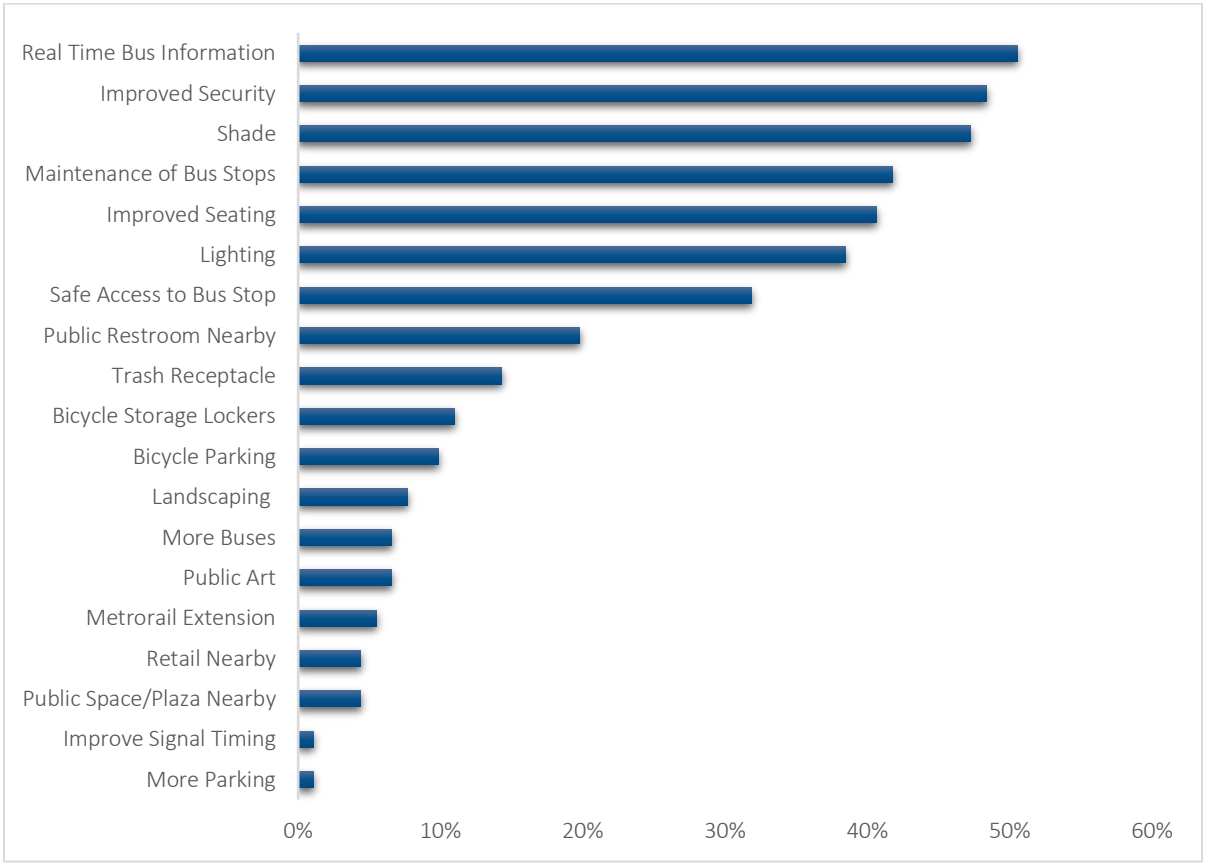
App Use	No. of Respondents	%
Yes	82	77%
No	24	23%
Total	**106**	**100%**

Q12. How satisfied are you with the service and reliability of the Metrobus?



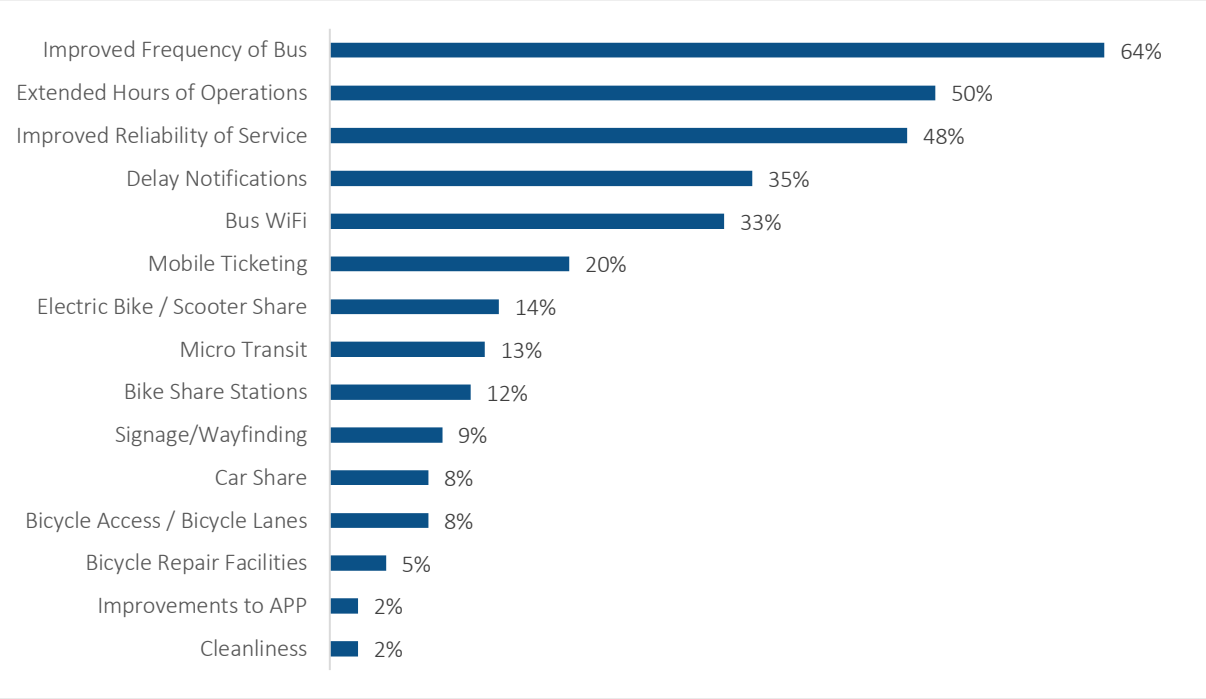
Satisfaction	No. of Respondents	%
Very Satisfied (1)	14	13%
Satisfied (2)	20	19%
Neutral (3)	38	36%
Dissatisfied (4)	20	19%
Very dissatisfied (5)	14	13%
Total	**106**	**100%**

Q13. What upgrades could improve your bus stop experience? (choose as many as you like)



Amenity	No. of Respondents	%
More Parking	1	1%
Improve Signal Timing	1	1%
Public Space/Plaza Nearby	4	4%
Retail Nearby	4	4%
Metrorail Extension	5	5%
Public Art	6	7%
More Buses	6	7%
Landscaping	7	8%
Bicycle Parking	9	10%
Bicycle Storage Lockers	10	11%
Trash Receptacle	13	14%
Public Restroom Nearby	18	20%
Safe Access to Bus Stop	29	32%
Lighting	35	38%
Improved Seating	37	41%
Maintenance of Bus Stops	38	42%
Shade	43	47%
Improved Security	44	48%
Real Time Bus Information	46	51%
Total	**91**	**100%**

Q14. What would improve your commute? (Choose as many as you like)



Improvements	No. of Respondents	%
Cleanliness	2	2%
Improvements to APP	2	2%
Bicycle Repair Facilities	4	5%
Bicycle Access / Bicycle Lanes	7	8%
Car Share	7	8%
Signage/Wayfinding	8	9%
Bike Share Stations	10	12%
Micro Transit	11	13%
Electric Bike / Scooter Share	12	14%
Mobile Ticketing	17	20%
Bus WIFI	28	33%
Delay Notifications	30	35%
Improved Reliability of Service	41	48%
Extended Hours of Operations	43	50%
Improved Frequency of Bus	55	64%
Total	**86**	**100%**

Q15. Additional Feedback:

Additional Feedback
Signal change causes delays to get to park and ride, let passenger on bus at light,311 terrible and gives excuses when you call, bus service needs improvement
Train
Get rid of small buses
Improve bus schedule, can be unreliable
Bus isnt on time, 34 south never on time is on train. Called to complain but hasnt improved.
More buses, park and ride lot very dark friends car stolen, people sleep at station stops better maintenance of stops
On time reliability and bus cleanliness are impkrtant
Trip takes too long
Consistent bus driver, less stops
Need Longer hours, weekend hours , more stops between carribean and old cutler, cutler bay has evening meetings and there is no evening bus. How are the retired people going to get there. We want to go to these meetings.

Additional Feedback Continued
More accurate times on app, shorter headways, more hours for 287
Comment: also Route 35 buses are too small need bigger buses to accomodate all the people
Schedule is not always accurate. App says one time and then bus comes early or late or not at all.
Better signage at stops for 200, 311 works great.
Half hour frequency would be great
Also route 1 bus ada ramp is frequently broken
Route 35 changed to small buses and cannot accomodate everyone
Route 35 changed to small buses and cannot accomodate everyone
Problems with 301, increase bus frequency, notification when delay.
Drivers are helpful, need more frequency in buses
Called and was given wrong time ,and reliability, no buses on us 1 less accessibility to shopping there; 35 no longer goes on us 1, need more stops, inform public when changes are made to bussize etc
Trains are filthy and unreliable. Waste of time and money. You need to invest more in transit. Not expanding but FIXING what is broken.
More Service Needed for Route 287, and Route 200 Cutler Bay Local
The biggest issue is reliability and lack of communication when there is an issue.
I would be able to use the bus more often (5 days/week) if the 287 ran during the day or if another Transit option was reliable to my area mid-day.
The people that ride the bus late at night makes me nervous. The buses are dirty and some of the metrorail buses air conditioners didn't work too good. One passenger was fondling himself. I just didn't feel comfortable.
I deeply appreciate the ride as it cuts my work commute to an hour from Cutler bay to Downtown. I would welcome more frequency of the express buses and a way to tell how many seats are left.
Communication about delays sould be improved.
DO NOT ALLOW PEOPLE TO SMOKE IN THE BUS LINE. DO NOT ALLOW PEOPLE TO SMOKE ON THE BENCHES BESIDE THE BUS LINES.
Bus drivers that show up at the same time and if you miss those you're waiting 40 minutes!!!! They purposely do that!!
If Cutler Bay adds a dedicated route please do not have it stop on busway. Make it exclusive to Cutler Bay residents by having one or 2 stops within the town. The stop would need easy access to busway for efficiency purposes.
The Cutler Bay local we need more time so we could attend these meetings
Transit is lacking proper operating hours in Cutler Bay
Access to the unsafe stations from the east is the MAJOR challenge
Freebee/trolley service need to go inside gated communities
Extend the train to Florida City. Have buses dedicated to go frequently traveled locations just by taking 1 bus and NOT keep transferring. That is not very helpful for commuters with little children, carrying strollers , bags etc.
34 Express is overflowing of riders around 7am

Additional Feedback Continued
We need a Metro Rail express line during heavy commuting times. A train that runs straight from Dadeland south to Government Center. This would cut down the number of stops and overall commuting time.
Time to extend the ELEVATED RAIL south to Homestead
I am mostly a stay-at-home mom now, so I only rarely take transit when I'm going downtown for something. But when I worked in Miami Gardens, I would have LOVED to take metro. But I couldn't, because Metro doesn't come far enough south or north. I could have driven to the Dadeland south station, but then it still didn't go far enough north and I am not waiting in the rain at multiple bus stops, for multiple bus transfers. Not when I have a car.
Called and was given wrong time ,and reliability, no buses on us 1 less accessibility to shopping there; 35 no longer goes on us 1, need more stops, inform public when changes are made to bussize etc
Extended hours for 287/200 would be REALLY COOL Improve tracker services (sometimes it says the bus has no more stops when it actually does have more stops left) Improve tracker app to provide tracking for smaller buses and trolleys
Mas seguridad 38
improved bus maint
Completion of Roadway Grid in Palmetto Bay with Bridges on 87ave and 77 ave
shuttle from an area in east culter bay directly to dadeland south
Buses and trains running close to on time
Extended hours during the daytime for the express buses on the busway
I got out late from jury duty and the bus I would have taken stopped running so had to take one that let me off at Marlin and husband had to ouck me up.
A system that says how many seats are left on the bus, either in the app or on a display on the bus outsude.
Conditions & cleanliness of the busses
A clean facility at SW 112 Ave (there is broken glass constantly all over and the benches are too dirty to sit on) and benches at the mover stations (there aren't any at government center and sometimes the wait is 10 minutes)
Lazy bus drivers!
Fixing the traffic issue leave the park and ride on 112 and the busway. It takes 15-20 minutes sometimes to get out of that parking lot. That's ridiculous
Having a version of the Palmetto Bay ibus But for Cutler Bay that picks up in the morning and drops off at Dadeland South. Starting in the morning and running frequently in the evening. Stop location inside the town.
Express buses do not run frequent enough- first trip for #34 bus from dadeland south is 3:45pm- and its always packed with people, many who have waited for some time for his to arrive. Majority of time, buses are delayed and there are long lines to get on. The buses are express yet stop at pretty much every traffic light if the metrorail were extended south, this wouldn't be an issue.
It is unsafe to cross IS-1 from the east and it takes too many light cycles to get to the parknride
Freebee services to and from the station to my house in Island of Bayshore

Additional Feedback Continued
34 EXPRESS bus arrives at my stop already full. With bags to carry etc, it's hard to keep standing in the middle of the bus when it's in motion. The frequency should be improved and train reliability as well. Being fired from work because trains keep breaking is unacceptable.
More busses - the 34 express is always so full that I have to stand or fight for a seat.
Completing the traffic grid by building the missing bridges. Not just in Palmetto Bay, mind you. Make it easier for people to drive to the large, parking garage and security patrolled metro stations, then people would get out of their cars. But of course, you need to complete the traffic grid and build the bridges to help people drive to the nearest metro station, which is Dadeland South.
Improve signal to arrive
Park and ride needs more parking
Benches too far from stop at marlin and at 184
shelter needed at 212 and 87
Need shelter for rain
Scary to ride at night
Improvements to trip planning components of the MDT App or recommendations of a better trip planning app that focuses on public transportation usage.
more frequent buses in the afternoon (4-6pm)
Security and lighting at the park and ride is awful. Most of the time the lights are off when it's dark and security is sitting around talking versus patrolling and protecting.
More security, a lot of homeless and illegal activities are seen at the stops.
More routes to dolphin mall and other similar areas, too long of a trip at the moment
Additional buses added to route
What would help tremendously is having the metrorail continue south from dadeland south. Most commuters want this to happen.
bus breaks down too often
Stations are unsafe with panhandlers, muggers, druggies, etc.
Pedestrian Crossing both to Southland Mall and to the Parking lot
Safety from homeless people taking shelter from bus stops.
Our safety too much harrasment by young people.
Metrorail extension to Homestead
More frequent afternoon buses
More pickup time
parking garage, so I can park my car and get on the metro rail without being exposed to elements. And security. Better AC on metro rails. I will not ride the bus or wait at bus stops. Build the metro rail AND FINISH THE TRAFFIC GRID BY BUILDING THE BRIDGES!!!
I'm dropping kids at school and running errands. My girls will never ride the bus to school; didn't you just see in the news the latest school girl who was raped at the bus stop?
Unsafe and not easily accessible from east of US-1
I would never wait in the Miami rain at a bus stop. I would drive to the nearest parking garage with security where I feel safe to get on the metro rail. I will never use the bus.

Appendix III

Cost Estimates

Table 41 includes an approximate cost for items related to roadway infrastructure, signing and pavement markings; signal and lighting; bus stop shelters and basic amenities; landscaping, and proposed Mobility Hub amenities. The proposed costs are meant as a guide to assist the Town of Cutler Bay as the Town plans for future transportation improvements throughout the community. Table 42 through 44 are the detailed infrastructure cost estimates for the proposed Neighborhood, Community, and Regional Hub improvements proposed in the Conceptual Design section of this report. Tables 45 through 57 are cost estimates for recommended amenities at all proposed Neighborhood, Community, and Regional Mobility Hubs.

Cost Estimates: Infrastructure Improvements

Table 41: General Costs for Improvements & Amenities

OPINION OF PROBABLE COST CUTLER BAY MOBILITY HUBS PLAN Miami-Dade County				
Pay Item	**Description**	**Unit**	**Unit Cost**	**Source**
ROADWAY INFRASTRUCTURE				
0101 1	MOBILIZATION (10%)	**LS**	10%	**FDOT**
0102 1	MOT (8%)	**LS/DA**	8%	**FDOT**
0104 10 3	SEDIMENT BARRIER	**LF**	$1.92	**FDOT**
0104 18	INLET PROTECTION SYSTEM	**EA**	$63.21	**FDOT**
0107 1	LITTER REMOVAL	**AC**	$1.92	**FDOT**
0107 2	MOWING	**AC**	$1.70	**FDOT**
0110 1 1	CLEARING & GRUBBING	**AC**	$25,942.11	**FDOT**
0110 4 10	REMOVAL OF EXISTING CONCRETE PAVEMENT	**SY**	$18.17	**FDOT**
120-6	EMBANKMENT	**CY**	$8.51	**FDOT**
160-4	STABILIZATION TYPE B	**SY**	$0.23	**FDOT**
285-7AA	OPTIONAL BASE, BASE GROUP 10	**SY**	$13.03	**FDOT**
0327 70 5	MILLING EXISTING ASPHALT PAVEMENT 1"	**SY**	$5.27	**FDOT**
0334 1 13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	**TN**	$114.40	**FDOT**
0337 7 82	ASPH CONC FC,TRAFFIC C,FC-9.5,PG 76-22	**TN**	$130.36	**FDOT**
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	**LF**	$22.50	**FDOT**
0522 1	CONCRETE, 4" THICK - SIDEWALK	**SY**	$37.64	**FDOT**
0522 2	CONCRETE, 6" THICK - CURB RAMPS	**SY**	$47.03	**FDOT**
0522 4	BUS SHELTER PAD - CONCRETE	**SY**	$205.40	**FDOT**
0523 1	PATTERNED PAVEMENT, VEHICLE AREAS (Crosswalk)	**SY**	$90.17	**FDOT**
0523 1 3	PATTERNED PAVEMENT, VEHIC AREAS (Bike Lane)	**SY**	$88.73	**FDOT**

0526 1 2	PAVERS, ARCHITECTURAL, SIDEWALK	SY	$103.17	FDOT
0527 2	PED DETECTABLE WARNINGS	SF	$25.12	FDOT
0570 1 2	PERFORMANCE TURF, SOD	SY	$2.60	FDOT
0646 1 12	ALUMINUM SIGNALS POLE, PED DETECT POST	EA	$1,235.66	FDOT
0665 1 11	PEDESTRIAN DETECTOR, F&I, STANDARD	EA	$247.73	FDOT
POROUS PAVEMENT				
	POROUS CONCRETE	SF	$6.00	https://greenvalues.cnt.org/national/cost_detail.php
	POROUS ASHPALT	SF	$6.34	https://greenvalues.cnt.org/national/cost_detail.php
	PERMEABLE PAVERS	SF	$7.10	https://greenvalues.cnt.org/national/cost_detail.php
	FLEXI-PAVE INSTALLATION	SF	$2.75	
	FLEXI-PAVE MATERIAL	SF	$6.00	
SIGNING & PAVEMENT MARKING				
0700 1 11	SINGLE POST SIGN, F&I GM, <12 SF	EA	$358.22	FDOT
0711 15201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	GM	$3,655.54	FDOT
0711 16202	THERMOPLASTIC, STD-OT, YELLOW, SOLID, 8"	GM	$8,901.36	FDOT
0711 15101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	GM	$3,659.78	FDOT
0710 15102	THERMOPLASTIC, STD-OP, WHITE, SOLID, 8"	GM	$4,185.06	FDOT
0711 11123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12" (crosswalk)	LF	$1.66	FDOT
0711 11125	PAINTED PAVT MARK,STD,WHITE,SOLID,24" (stop bar)	LF	$3.11	FDOT
0711 11421	THERMOPLASTIC, STD, BLUE, SOLID,6"	LF	$7.50	FDOT
0711 14160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE (bike symbol)	EA	$273.87	FDOT
0711 14170	THERMOPLASTIC, PREFORMED, WHITE, ARROW (bike arrow)	EA	$91.45	FDOT
SIGNAL & LIGHTING				
	PEDESTRIAN LIGHTING - METAL	EA	$1,332.14	
0653 1 12	PEDESTRIAN SIGNAL, F&I LED COUNT, 2 WAYS	EA	$1,333.14	FDOT
0653 1 11	PEDESTRIAN SIGNAL, F&I LED COUNT, ONE WAYS	EA	$775.68	FDOT
	STREETLIGHT	EA	$3,600.00	Cost for Bicycle and Pedestrian Infrastructure Improvements, 2013
	IN-PAVEMENT LIGHTING	TOTAL	$18,250.00	
BUS STOP				

0751 38 11	BENCH, F&I, ALUMINUM	EA	$730.70	FDOT
0751 35 11	BUS SHELTER, F&I, UPTO 50	EA	$29,894.23	FDOT
	TOWN BUS SHELTER: CONCRETE, SHELTER, LIGHTING, WASTE, SEATING, BIKE RACK	EA	$43,330.00	Town of Cutler Bay
0751 36 12	BICYCLE RACK, FURNISH & INSTALL, 2-6 BI	EA	$660.89	FDOT
0751 37	TRASH/RECYCLE RECEPTACLE	EA	$1,533.71	FDOT
0522 4	BUS SHELTER PAD - CONCRETE	SY	$205.40	FDOT
	USB CHARGING STATION	EA	$5,000.00	https://kwikboost.com/
LANDSCAPING				
	NATIVE PLANTS	SF	$0.10	https://greenvalues.cnt.org/national/cost_detail.php
0580 1 1	LANDSCAPE COMPLETE- 10 TREES - 12' to 15'	EA	$2,000.00	FDOT
0580 1 2	LANDSCAPE COMPLETE- PALM TREES	EA	$15,000.00	FDOT
	RAINGARDEN	SF	$7.00	https://greenvalues.cnt.org/national/cost_detail.php
	BIOSWALES	SF	$15.00	https://greenvalues.cnt.org/national/cost_detail.php
	PLANTER BOXES	SF	$8.00	https://greenvalues.cnt.org/national/cost_detail.php
AMENITIES				
	BIKESHARE STATION (10 BIKES)	Station	$54,000.00	Bikeshare Business & Implementation Plan, 2016
	DOCKLESS BICYCLES	EA	$1,000.00	www.alibaba.com
	ELECTRIC BIKE SHARE (10 BIKES)	Station	$65,000.00	Bikeshare Business & Implementation Plan, 2016
	BICYCLE REPAIR STATION	EA	$1,500.00	www.dero.com
	BICYCLE STORAGE LOCKER	EA	$2,140.00	Cost for Bicycle and Pedestrian Infrastructure Improvements, 2013
	BICYCLE TRAFFIC LIGHT	EA	$1,000.00	pedbikesafe.org
	SCOOTER SHARE	EA	$0.00	National League of Cities (2018). Micromobility in Cities A History & Policy Overview.
	CAR SHARE STATION	Station	$0.00	City of Miami Car Sharing Feasibility Study, 2011
	EV CHARGING STATION	EA	$8,000.00	Costs Associated with Non-Residential Electric Vehicle Supply Equipment, 2015
	WIFI	EA	$1,400.00	Vermont Council on Rural Development (Dec. 2014). Planning & Implementing a WIFI Zone in Your Town. *Vermont Digital Economy Project*.
	PARK & RIDE GARAGE	Space	$19,700.00	Parking Structure Cost Outlook, 2017
	SHELTER WITH METAL CANOPY AT KISS-N-RIDE	EA	$3,300.00	Alan's Factory Outlet
	SHELTER INSTALLATION	EA	$6,000.00	www.improvenet.com
	DIGITAL DISPLAY SIGN: REAL-TIME SIGN INFO	EA	$400.00	www.alibaba.com
	INFORMATION KIOSK	EA	$6,000.00	www.alibaba.com

	PACKAGE KIOSK	EA	$0.00	Guta, Michael (29, Dec. 2017). "What is Amazon Locker and How Can It Benefit Your Business." Small Business Trends
	PUBLIC ART - VARIOUS	EA	Varies	
	PUBLIC ART - BOX WRAPS	EA	$1,000.00	The Southeast Como Improvement Association
	Air Misting System	EA	$5,000.00	www.costowl.com
	Security Camera	EA	$600.00	www.homeadvisor.com
	Emergency Call Box	EA	$5,500.00	U.S. DOT
	Library Share	EA	$200.00	https://littlefreelibrary.org/faqs/
	USB Charge Station	EA	$1,500.00	https://kwikboost.com/
	Wayfinding	Plan	$40,000.00	https://guidestudio.com/
	Solar Panel	kW	$2,990.00	www.energysage.com
Notes: MEI has no control over competitive bidding or market conditions or the cost of labor, materials, equipment, or over the contractor's methods of determining prices. The quantities and pricing used in the Opinion of Probable Cost were composed based on FDOT historical cost and our engineering opinion and judgement. Opinions of Probable Cost represent only the Engineers judgement as a design professional familiar with the construction industry. MEI nor the signing Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from the values stated in this document.		**CONTI-NGENCY**	**10%**	
		DESIGN	**20%**	
		SURVEY	**5%**	
		CEI	**5%**	

Table 42: Lakes by the Bay Neighborhood Hub Cost Estimate

OPINION OF PROBABLE COST

CUTLER BAY MOBILITY HUBS PLAN
Lakes by the Bay Neighborhood Hub (SW 85 Ave & SW 212 St)
Miami-Dade County

Pay Item	Description	Unit	Qty	Unit Cost	Cost
ROADWAY INFRASTRUCTURE					
0101 1	MOBILIZATION (10%)	**LS**		**10%**	**$29,318.47**
0102 1	MOT (8%)	**LS/DA**		**8%**	**$23,454.78**
0104 10 3	SEDIMENT BARRIER	**LF**	1,731.00	$1.92	**$3,323.52**
0104 18	INLET PROTECTION SYSTEM	**EA**	4.00	$63.21	**$252.84**
0110 1 1	CLEARING & GRUBBING	**AC**	0.59	$25,942.11	**$15,378.56**
0110 4 10	REMOVAL OF EXISTING CONCRETE PAVEMENT	**SY**	350.00	$18.17	**$6,359.50**
0120 1	REGULAR EXCAVATION	**CY**	16.11	$7.29	**$117.45**
120-6	EMBANKMENT	**CY**	16.11	$8.51	**$137.10**
160-4	STABILIZATION TYPE B	**SY**	96.67	$0.23	**$22.23**
285-7AA-	OPTIONAL BASE, BASE GROUP 10	**SY**	96.67	$13.03	**$1,259.57**

0327 70 5	MILLING EXISTING ASPHALT PAVEMENT 1"	SY	96.67	$5.27	$509.43
0334 1 13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	TN	4.71	$114.40	$538.63
0337 7 83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	TN	4.71	$146.57	$690.34
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	140.00	$22.50	$3,150.00
0522 1	CONCRETE, 4" THICK - SIDEWALK	SY	46.67	$37.64	$1,756.53
0522 2	CONCRETE, 6" THICK - CURB RAMPS	SY	50.00	$47.03	$2,351.50
0522 4	BUS SHELTER PAD - CONCRETE	SY	30.00	$205.40	$6,162.00
	BIKELANE CONSTRUCTION				
0523 1 3	NORTHSIDE - PATTERNED PAVEMENT, VEHIC AREAS (Bike Lane) - 4 feet bike lane on SW 85 Ave from SW 207th St. to South of SW 212 St	SY	977.78	$88.73	$86,758.22
	SOUTHSIDE				
0110 1 1	*CLEARING & GRUBBING*	AC	0.10	$25,942.11	$2,594.21
0120 1	*REGULAR EXCAVATION*	CY	40.74	$7.29	$297.00
120-6	*EMBANKMENT*	CY	40.74	$8.51	$346.70
160-4	*STABILIZATION TYPE B*	SY	244.44	$0.23	$56.22
285-7AA-	*OPTIONAL BASE, BASE GROUP 10*	SY	244.44	$13.03	$3,185.05
0334 1 13	*SUPERPAVE ASPHALTIC CONC, TRAFFIC C*	TN	18.33	$114.40	$2,097.33
0337 7 83	*ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22*	TN	9.17	$146.57	$1,344.05
0523 1 3	*PATTERNED PAVEMENT, VEHIC AREAS (Bike Lane) - 4 feet bike lane on SW 85 Ave from SW 207th St. to South of SW 212 St*	SY	977.78	$88.73	$86,758.22
0527 2	PED DETECTABLE WARNINGS	SF	108.00	$25.12	$2,712.96
0570 1 2	PERFORMANCE TURF, SOD	SY	394.44	$2.60	$1,025.56
0580 1 1	LANDSCAPE COMPLETE- SMALL PLANTS - 10 tress - 12' to 15'	EA	32.00	$2,000.00	$64,000.00
		TOTAL ROADWAY			**$345,957.99**
SIGNING & PAVEMENT MARKING					
0711 15201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	GM	0.316	$3,655.54	$1,156.20
0711 15101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	GM	0.625	$3,659.78	$2,287.36
0711 16131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	GM	0.021	$1,375.45	$28.66
0710 11160	PAINTED PAVT MARK,STD,WHITE, MESSAGE	EA	1.000	$34.46	$34.46
0710 11170	PAINTED PAVT MARK,STD,WHITE, ARROWS	EA	7.000	$20.01	$140.07
0710 11290	PAINTED PAVT MARK,STD,YELLOW,ISLAND NOSE	SF	200.000	$3.49	$698.00
0711 11123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12" (crosswalk)	LF	420.000	$1.66	$697.20
0711 11125	PAINTED PAVT MARK,STD,WHITE,SOLID,24" (stop bar)	LF	600.000	$3.11	$1,866.00
0711 14160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE (bike symbol)	EA	2.000	$273.87	$547.74
0711 14170	THERMOPLASTIC, PREFORMED, WHITE, ARROW (bike arrow)	EA	2.000	$91.45	$182.90
0700 1 11	SINGLE POST SIGN, F&I GM, <12 SF	EA	6.00	$358.22	$2,149.32
		TOTAL SIGNING & MARKING			**$7,638.59**
Notes: MEI has no control over competitive bidding or market conditions or the cost of labor, materials, equipment, or over the contractor's methods of determining prices. The quantities and pricing used in the Opinion of Probable Cost were composed based on FDOT historical cost and our engineering opinion and judgement. Opinions of Probable Cost represent only the Engineers judgement as a design professional familiar with the construction industry. MEI		**SUB TOTAL**			**$353,596.58**
		CONTINGENCY		**10%**	**$35,359.66**
		DESIGN		**20%**	**$70,719.32**
		SURVEY		**5%**	**$0.00**

nor the signing Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from the values stated in this document.	**CEI**	**5%**	**$17,679.83**
	GRAND TOTAL		**$477,355.38**

Table 43: Caribbean Boulevard Community Hub Cost Estimate

OPINION OF PROBABLE COST

CUTLER BAY MOBILITY HUBS PLAN
Caribbean Boulevard Community Hub (SW 200 St. & US 1)
Miami-Dade County

Pay Item	Description	Unit	Qty	Unit Cost	Cost
ROADWAY INFRASTRUCTURE					
0101 1	MOBILIZATION (10%)	**LS**		**10%**	**$36,326.26**
0102 1	MOT (8%)	**LS/DA**		**8%**	**$29,061.01**
0104 10 3	SEDIMENT BARRIER	**LF**	700.00	$1.92	**$1,344.00**
0104 18	INLET PROTECTION SYSTEM	**EA**	4.00	$63.21	**$252.84**
0110 1 1	CLEARING & GRUBBING	**AC**	0.65	$25,942.11	**$16,862.37**
0110 4 10	REMOVAL OF EXISTING CONCRETE PAVEMENT	**SY**	364.00	$18.17	**$6,613.88**
0120 1	REGULAR EXCAVATION	**CY**	2,350.00	$7.29	**$17,131.50**
120-6	EMBANKMENT	**CY**	2,350.00	$8.51	**$19,998.50**
160-4	STABILIZATION TYPE B	**SY**	3,080.00	$0.23	**$708.40**
285-7AA-	OPTIONAL BASE, BASE GROUP 10	**SY**	3,080.00	$13.03	**$40,132.40**
0334 1 13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	**TN**	231.00	$114.40	**$26,426.40**
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	**LF**	420.00	$22.50	**$9,450.00**
0522 1	CONCRETE, 4" THICK - SIDEWALK	**SY**	1,477.22	$37.64	**$55,602.64**
0522 2	CONCRETE, 6" THICK - CURB RAMPS	**SY**	90.00	$47.03	**$4,232.70**
0522 4	BUS SHELTER PAD - CONCRETE	**SY**	9.00	$205.40	**$1,848.60**
0526 1 2	PAVERS, ARCHITECTURAL, SIDEWALK	**SY**	364.00	$103.17	**$37,553.88**
0527 2	PED DETECTABLE WARNINGS	**SF**	270.00	$25.12	**$6,782.40**
0570 1 2	PERFORMANCE TURF, SOD	**SY**	988.89	$2.60	**$2,571.11**
0580 1 1	LANDSCAPE COMPLETE- 10 TREES - 12' to 15'	**EA**	40.00	$2,000.00	**$80,000.00**
0550 10210	FENCING, TYPE B, 0.0-5.0', STANDARD FEAT	**LF**	75.00	$22.53	**$1,689.75**
	SHELTER WITH METAL CANOPY AT KISS-N-RIDE	**EA**	1.00	$12,086.25	**$12,086.25**
	SHELTER INSTALLATION	**EA**	1.00	$21,975.00	**$21,975.00**
		TOTAL ROADWAY			**$428,649.90**
SIGNING & PAVEMENT MARKING					
0711 15101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	**GM**	0.221	$3,659.78	**$807.51**
0710 11170	PAINTED PAVT MARK,STD,WHITE, ARROWS	**EA**	3.000	$20.01	**$60.03**
0711 11123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12" (crosswalk)	**LF**	860.000	$1.66	**$1,427.60**
0711 11125	PAINTED PAVT MARK,STD,WHITE,SOLID,24" (stop bar)	**LF**	1006.000	$3.11	**$3,128.66**

0700 1 11	SINGLE POST SIGN, F&I GM, <12 SF	EA	1.00	$358.22	$358.22
		TOTAL SIGNING & MARKING			$5,782.02
Notes: MEI has no control over competitive bidding or market conditions or the cost of labor, materials, equipment, or over the contractor's methods of determining prices. The quantities and pricing used in the Opinion of Probable Cost were composed based on FDOT historical cost and our engineering opinion and judgement. Opinions of Probable Cost represent only the Engineers judgement as a design professional familiar with the construction industry. MEI nor the signing Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from the values stated in this document.		SUB TOTAL			$434,431.92
		CONTINGENCY		10%	$43,443.19
		DESIGN		20%	$86,886.38
		SURVEY		5%	$0.00
		CEI		5%	$21,721.60
		GRAND TOTAL			$586,483.09

Table 44: Cutler Bay Regional Hub Cost Estimate

OPINION OF PROBABLE COST

CUTLER BAY MOBILITY HUBS PLAN
Cutler Bay Regional Hub (SW 112 Ave & US 1)
Miami-Dade County

Pay Item	Description	Unit	Qty	Unit Cost	Cost
ROADWAY INFRASTRUCTURE					
0101 1	MOBILIZATION (10%)	LS		10%	$27,687.14
0102 1	MOT (8%)	LS/DA		8%	$22,149.71
0104 10 3	SEDIMENT BARRIER	LF	1,000.00	$1.92	$1,920.00
0104 18	INLET PROTECTION SYSTEM	EA	4.00	$63.21	$252.84
0110 1 1	CLEARING & GRUBBING	AC	0.12	$25,942.11	$3,113.05
0110 4 10	REMOVAL OF EXISTING CONCRETE PAVEMENT	SY	490.00	$18.17	$8,903.30
0120 1	REGULAR EXCAVATION	CY	147.04	$7.29	$1,071.90
120-6	EMBANKMENT	CY	147.04	$8.51	$1,251.29
160-4	STABILIZATION TYPE B	SY	570.00	$0.23	$131.10
285-7AA-	OPTIONAL BASE, BASE GROUP 10	SY	570.00	$13.03	$7,427.10
0327 70 5	MILLING EXISTING ASPHALT PAVEMENT 1"	SY	46.00	$5.27	$242.42
0337 7 83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	TN	14.63	$146.57	$2,144.81
0334 1 13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	TN	7.32	$114.40	$837.03
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	173.00	$22.50	$3,892.50
0522 1	CONCRETE, 4" THICK - SIDEWALK	SY	445.11	$37.64	$16,753.98
0522 2	CONCRETE, 6" THICK - CURB RAMPS	SY	124.44	$47.03	$5,852.62
0522 4	BUS SHELTER PAD - CONCRETE	SY	65.11	$205.40	$13,373.82
0526 1 2	PAVERS, ARCHITECTURAL, SIDEWALK	SY	1,272.22	$103.17	$131,255.17
0527 2	PED DETECTABLE WARNINGS	SF	497.00	$25.12	$12,484.64
0570 1 2	PERFORMANCE TURF, SOD	SY	524.56	$2.60	$1,363.84
0580 1 1	LANDSCAPE COMPLETE- SMALL PLANTS - 10 tress - 12' to 15'	EA	23.00	$2,000.00	$46,000.00

	SHELTER WITH METAL CANOPY AT KISS-N-RIDE	EA	2.00	$3,300.00	$6,600.00
	SHELTER INSTALLATION	EA	2.00	$6,000.00	$12,000.00
		TOTAL ROADWAY			$326,708.26
SIGNING & PAVEMENT MARKING					
0711 15201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	GM	0.030	$3,655.54	$110.77
0711 15101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	GM	0.070	$3,659.78	$256.46
0710 11170	PAINTED PAVT MARK,STD,WHITE, ARROWS	EA	3.000	$20.01	$60.03
0711 11123	PAINTED PAVT MARK,STD,WHITE,SOLID, 12" (crosswalk)	LF	1350.000	$1.66	$2,241.00
0711 11125	PAINTED PAVT MARK,STD,WHITE,SOLID,24" (stop bar)	LF	2310.000	$3.11	$7,184.10
0700 1 11	SINGLE POST SIGN, F&I GM, <12 SF	EA	10.00	$358.22	$3,582.20
-		TOTAL SIGNING & MARKING			$13,434.57

Notes: MEI has no control over competitive bidding or market conditions or the cost of labor, materials, equipment, or over the contractor's methods of determining prices. The quantities and pricing used in the Opinion of Probable Cost were composed based on FDOT historical cost and our engineering opinion and judgement. Opinions of Probable Cost represent only the Engineers judgement as a design professional familiar with the construction industry. MEI nor the signing Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from the values stated in this document.	SUB TOTAL	$340,142.83
	CONTINGENCY 10%	$34,014.28
	DESIGN 20%	$68,028.57
	SURVEY 5%	$0.00
	CEI 5%	$17,007.14
	GRAND TOTAL	$459,192.82

COST ESTIMATES: MOBILITY HUB AMENITIES

The proposed cost estimates for the amenities include a total estimated investment which include recommended and optional amenities, and a minimum investment amount which include only the recommended amenities. Cost estimates were based on research related to the item, for a reference of the cost see Table 41. Cost estimates are provided as a guide for the Town of Cutler Bay to use for planning and investment purposes. Some items, such as carsharing and package kiosks do not include a cost as these services are often provided by a private party with an agreement in place with the municipality. Additionally, items such as package kiosks and carsharing may incur administrative costs for the municipality to pass resolutions and/or ordinances related to that item to ensure zoning regulations are in place. Tables 45 through 57 include approximate cost estimates for the proposed recommended amenities for each Mobility Hub referenced in this plan.

Table 45: Cutler Bay Regional Mobility Hub Amenities Cost Estimate

CUTLER BAY REGIONAL MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Bikeshare Station	EA	10 Bikes	$ 54,000.00	1	$ 54,000.00
Mechanical Box Wraps	EA	$15/SF (Avg Cost for Material & Install)	$ 1,000.00	1	$ 1,000.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	6	$ 12,840.00
Carshare		Public Private Partnership	$ 0.00	Varies	$ 0.00
Package Kiosk	EA	Amazon Locker	$ 0.00	1	$ 0.00
Security Camera	EA	Equipment & Installation	$ 600.00	4	$ 2,400.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
Bicycle Signal	EA	Equipment	$ 1,000.00	2	$ 2,000.00
Emergency Callbox	EA	Unit & Construction	$ 5,500.00	3	$ 16,500.00
Real Time Information Signage	EA	Unit	$ 400.00	3	$ 1,200.00
Recycle Receptacle	EA	Unit	$ 500.00	2	$ 1,000.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
Info Kiosk	EA	75" Digital Display Board	$ 6,000.00	1	$ 6,000.00
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
EV Charging Stations	EA	Equipment & Installation	$ 8,000.00	6	$ 48,000.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	1	$ 5,000.00
TOTAL ESTIMATED INVESTMENT					**$ 153,540.00**

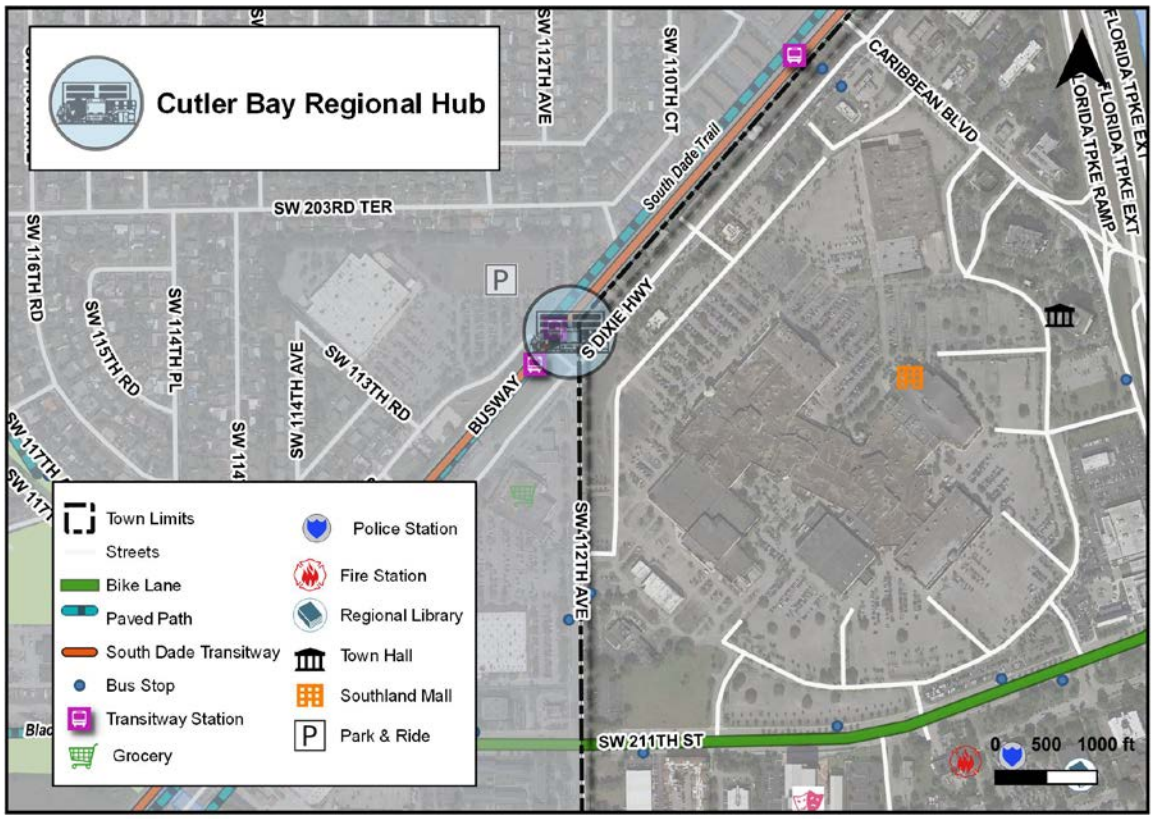


Figure 93: Cutler Bay Regional Hub Location

Table 46: Caribbean Boulevard Community Hub Amenities Cost Estimate

CARIBBEAN BOULEVARD COMMUNITY MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Standard Town Shelter	EA	Shelter, Seating, Garbage, Bike Rack, Lighting, Concrete	$ 43,330.00	2	$ 86,660.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	5	$ 2,000.00
EV Charging Stations	EA	Equipment & Installation	$ 8,000.00	4	$ 32,000.00
Bikeshare Station	EA	10 Bikes	$ 54,000.00	1	$ 54,000.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	3	$ 6,420.00
Carshare		Public Private Partnership	$ 00.0	Varies	$ 00.0
USB Charging Station	EA	Free Standing Station for 10 phones	$ 1,500.00	1	$ 1,500.00
Package Kiosk	EA	Public Private Partnership	$ 00.0	1	$ 0.00
Security Camera	EA	Equipment & Installation	$ 600.00	5	$ 3,000.00
Emergency Callbox	EA	Unit & Construction	$ 5,500.00	5	$ 27,500.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
Mechanical Box Wraps	EA	$15/SF - Avg. Cost of Installation & Material	$ 1,000.00	1	$ 1,000.00
OPTIONAL:					
Bicycle Signal	EA	Equipment	$ 1,000.00	2	$ 2,000.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
Info Kiosk	EA	75" Digital Display Board	$ 6,000.00	1	$ 6,000.00
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	2	$ 10,000.00
TOTAL ESTIMATED INVESTMENT					**$ 234,180.00**
MINIMUM ESTIMATED INVESTMENT					**$ 214,280.00**

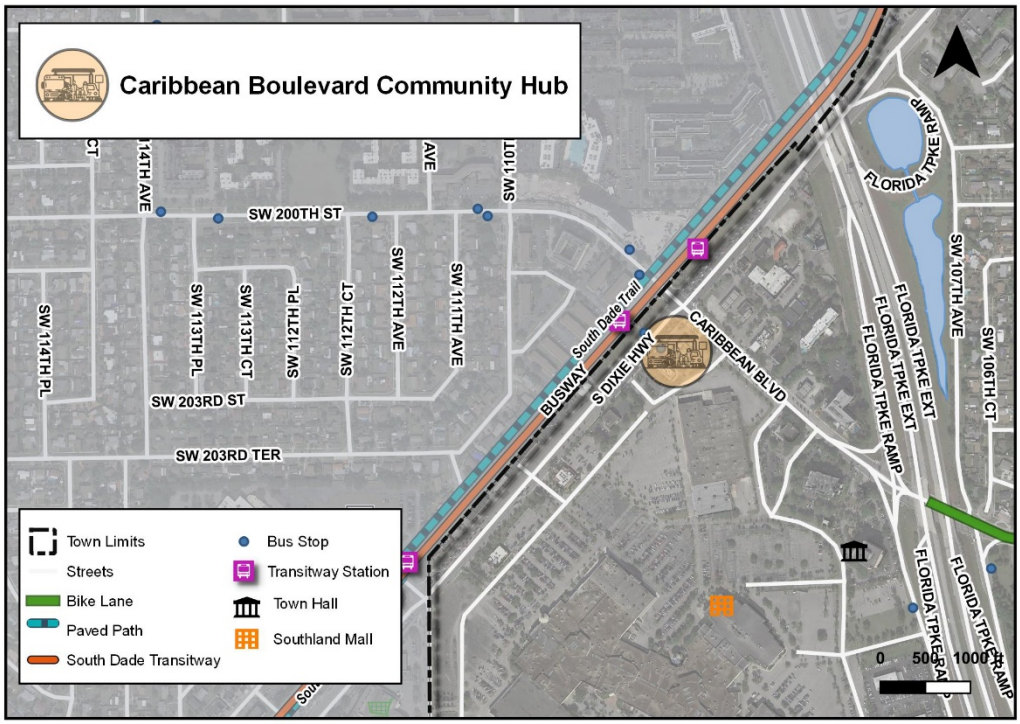


Figure 94: Caribbean Boulevard Community Hub Location Map

Table 47: Eureka Drive West Community Hub Amenities Cost Estimate

EUREKA DRIVE WEST COMMUNITY MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Standard Town Bus Shelter	EA	Shelter, Seating, Garbage, Bike Rack, Lighting, Concrete	$ 43,330.00	1	$ 43,330.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
Bikeshare Station	EA	10 Bikes	$ 54,000.00	1	$ 54,000.00
Mechanical Box Wraps	EA	$15/SF / Approx. Cost Material & Install	$ 1,000.00	1	$ 1,000.00
Emergency Callbox	EA	Unit & Construction	$ 5,500.00	1	$ 5,500.00
USB Charging Station	EA	Free Standing Station for 10 phones	$ 1,500.00	1	$ 1,500.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	4	$ 8,560.00
EV Charging Stations	EA	Equipment & Installation	$ 8,000.00	4	$ 32,000.00
Security Camera	EA	Equipment & Installation	$ 600.00	1	$ 600.00
Real Time Information Signage	EA	Unit	$ 400.00	1	$ 400.00
OPTIONAL:					
Carshare		Public Private Partnership	$ 00.0	Varies	$0.00
Package Kiosk	EA	Public Private Partnership	$ 00.0	1	$0.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
Bicycle Signal	EA	Equipment	$ 1,000.00	4	$ 4,000.00
Info Kiosk	EA	75" Digital Display Board	$ 6,000.00	1	$ 6,000.00
Air Misting System	EA	Equipment & Installation	$5,000.00	1	$ 5,000.00
TOTAL ESTIMATED INVESTMENT					**$ 163,590.00**
MINIMUM ESTIMATED INVESTMENT					**$ 147,090.00**

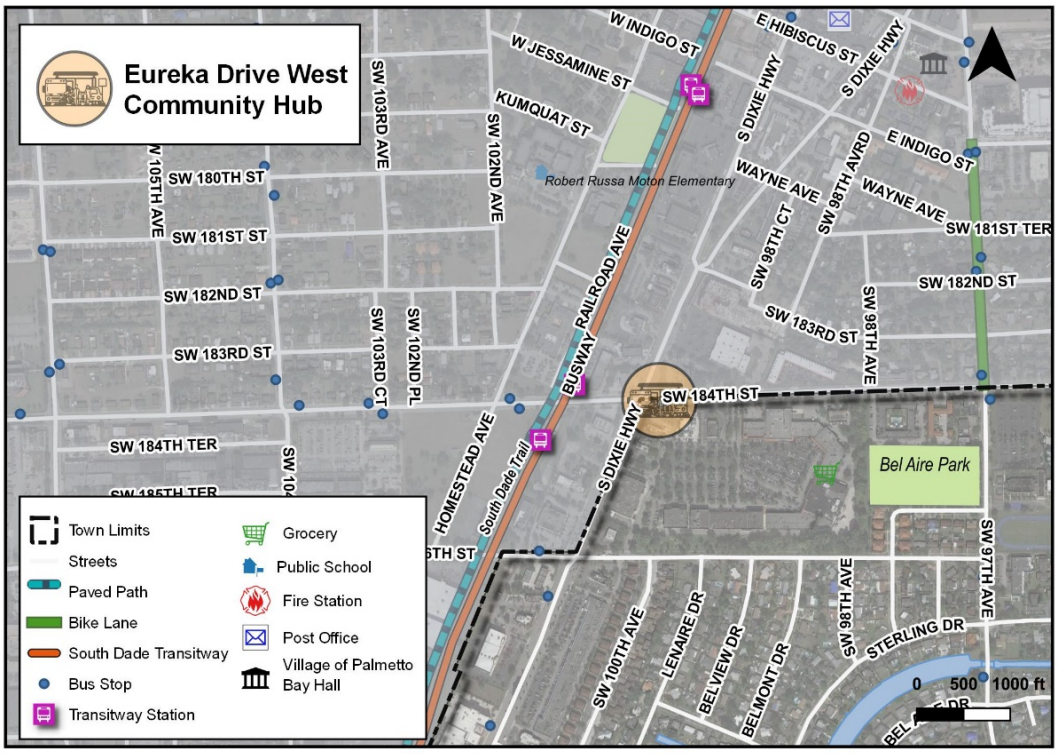


Figure 95: Eureka Drive West Community Hub Location Map

Table 48: Old Town Center Community Hub Amenities Cost Estimate

OLD TOWN CENTER COMMUNITY MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Mechanical Box Wraps	EA	$15/SF - Avg Cost Material & Install	$ 1,000.00	3	$ 3,000.00
Bike Rental Station	EA	10 Bikes	$54,000.00	1	$ 54,000.00
Recycle Receptacle	EA	Equipment & Installation	$ 500.00	2	$ 1,000.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	2	$ 800.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
Info Kiosk	EA	75" Digital Display Board	$ 6,000.00	1	$ 6,000.00
USB Charging Station	EA	Free Standing Station for 10 phones	$ 1,500.00	1	$ 1,500.00
EV Charging Stations	EA	Equipment & Installation	$ 8,000.00	2	$ 16,000.00
Security Camera	EA	Equipment & Installation	$ 600.00	2	$ 1,200.00
Emergency Call Box	EA	Unit & Construction	$5,500.00	2	$ 11,000.00
OPTIONAL:					
Bicycle Storage Locker	EA	Equipment & Installation	$2,140.00	2	$ 4,280.00
Carshare		Public Private Partnership	$ 0.00	Varies	$ 00.0
Package Kiosk	EA	Public Private Partnership	$ 0.00	1	$ 0.00
Bicycle Repair Station	EA	Equipment & Installation	$1,500.00	1	$ 1,500.00
Air Misting System	EA	Equipment & Installation	$5,000.00	2	$ 10,000.00
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
TOTAL INVESTMENT					**$ 110,880.00**
MINIMUM INVESTMENT					**$ 94,700.00**

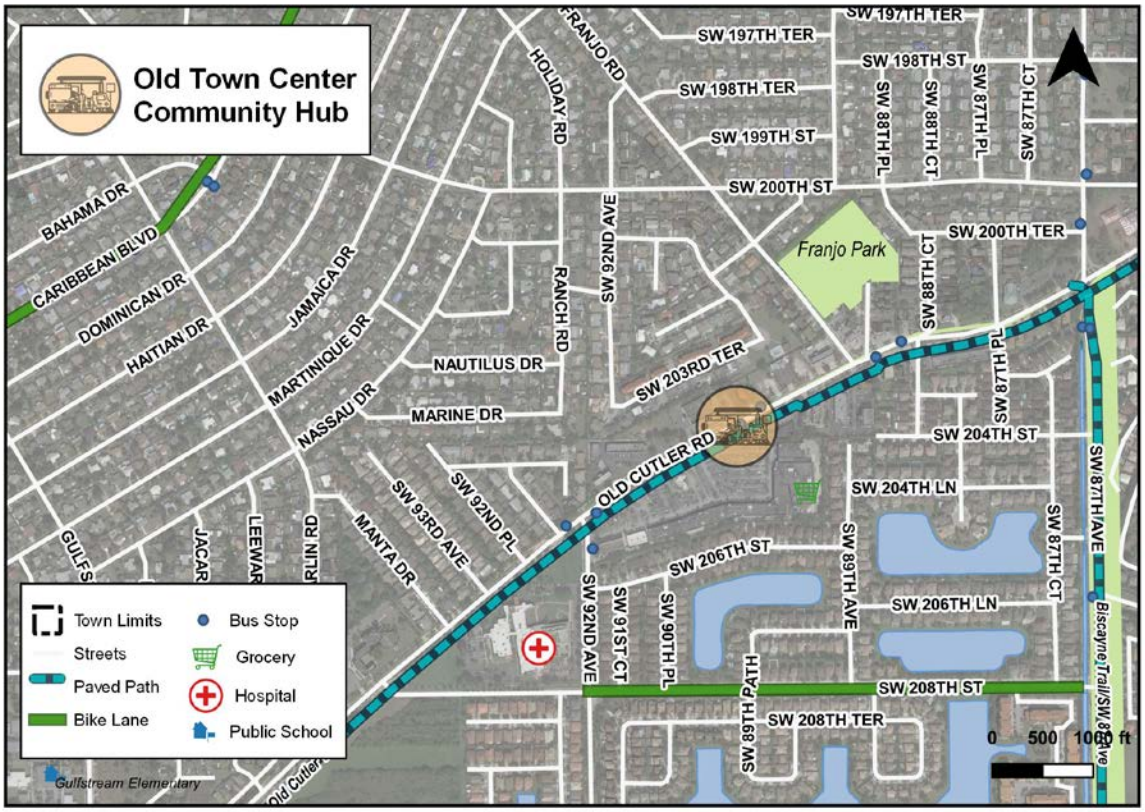


Figure 96: Old Town Center Community Hub Location Map

Table 49: Community Health Neighborhood Hub Amenities Cost Estimate

COMMUNITY HEALTH NEIGHBORHOOD HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Shelter	EA	Standard Shelter	$ 29,894.23	2	$59,788.46
Bench	EA	Aluminum	$ 730.70	2	$ 1,461.40
Bike Rack	EA	2-6 Bikes	$ 660.89	2	$ 1,321.78
Bike Rental Station	EA	Station (10 Bikes)	$ 54,000.00	1	$54,000.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	2	$ 4,280.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
Security Camera	EA	Equipment & Installation	$ 600.00	2	$ 1,200.00
Trash/Recycle Receptacle	EA	Equipment & Installation	$ 500.00	2	$ 1,000.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	2	$ 800.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
Emergency Call Box	EA	Unit & Construction	$ 5,500.00	1	$ 5,500.00
OPTIONAL:					
EV Charging Stations	EA	Equipment & Installation	$ 8,000.00	2	$ 16,000.00
Package Kiosk	EA	Public Private Partnership	$ 0.00	1	$ 0.00
Info Kiosk	EA	75" Digital Display Board	$ 6,000.00	1	$ 6,000.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	2	$ 10,000.00
Carshare		Public Private Partnership	$ 0.00	Varies	$ 0.00
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
TOTAL INVESTMENT					**$163,451.64**
MINIMUM INVESTMENT					**$131,051.64**

Figure 97: Community Health Neighborhood Hub Location Map

Table 50: Whispering Pine Neighborhood Hub Amenities Cost Estimate

WHISPERING PINE ROAD NEIGHBORHOOD HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Standard Town Shelter	EA	Shelter, Seating, Garbage, Bike Rack, Lighting, Concrete	$43,330.00	2	$ 86,660.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	2	$ 800.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
Bike Share	EA	Station (10 Bikes)	$54,000.00	1	$ 54,000.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
Emergency Callbox	EA	Equipment & Installation	$ 5,500.00	2	$ 11,000.00
OPTIONAL:					
Bicycle Signal	EA	Equipment	$ 1,000.00	4	$ 4,000.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	2	$ 10,000.00
Security Camera	EA	Equipment & Installation	$ 600.00	2	$ 1,200.00
TOTAL INVESTMENT					**$ 169,360.00**
MINIMUM INVESTMENT					**$ 154,160.00**

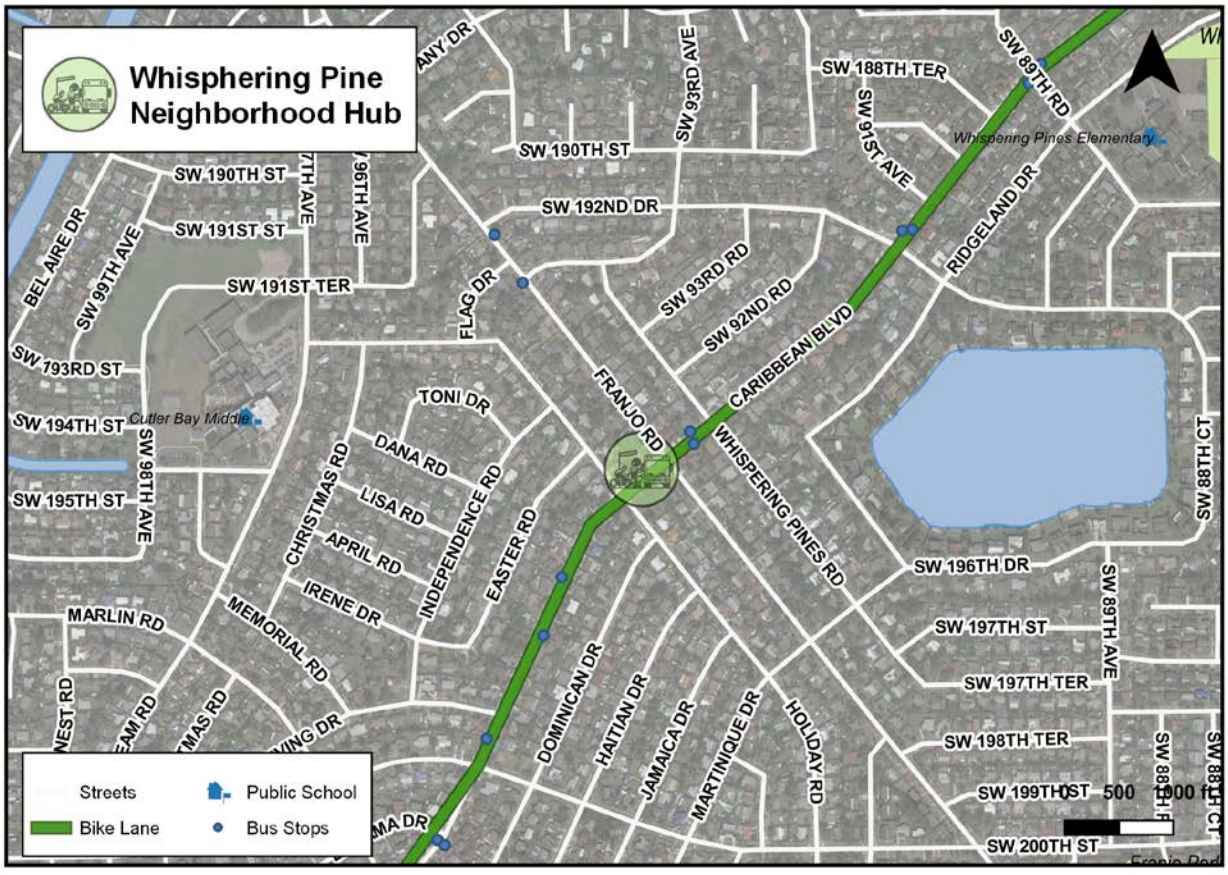


Figure 98: Whispering Pine Neighborhood Hub Location Map

Table 51: Pine Wood Neighborhood Hub Amenities Cost Estimate

PINE WOOD NEIGHBORHOOD MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Standard Town Shelter	EA	Shelter, Seating, Garbage, Bike Rack, Lighting, Concrete	$ 43,330.00	2	$ 86,660.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	2	$ 800.00
Bike Share	EA	Station (10 Bikes)	$ 54,000.00	1	$ 54,000.00
Emergency Callbox	EA	Equipment & Installation	$ 5,500.00	2	$ 11,000.00
Mechanical Box Wrap	EA	$15/SF (Avg. Cost of Material & Install)	$ 1,000.00	5	$ 5,000.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
OPTIONAL:					
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Security Camera	EA	Equipment & Installation	$ 600.00	2	$ 1,200.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	2	$ 10,000.00
Package Kiosk	EA	Public Private Partnership	$ 0.00	1	$ 0.00
TOTAL INVESTMENT					**$ 170,760.00**
MINIMUM INVESTMENT					**$ 157,660.00**

Figure 99: Pine Wood Neighborhood Hub Location Map

Table 52: Isles of Bayshore Neighborhood Hub Amenities Cost Estimate

THE ISLES OF BAYSHORE NEIGHBORHOOD MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Standard Town Shelter	EA	Shelter, Seating, Garbage, Bike Rack, Lighting, Concrete	$43,330.00	1	$ 43,330.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	1	$ 400.00
USB Charging Station	EA	Free Standing Station for 10 phones	$ 1,500.00	1	$ 1,500.00
Bike Share	EA	Station - 10 Bikes	$54,000.00	1	$ 54,000.00
Emergency Callbox	EA	Equipment & Installation	$ 5,500.00	1	$ 5,500.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
OPTIONAL:					
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Package Kiosk	EA	Public Private Partnership	$ 0.00	1	$ 0.00
Security Camera	EA	Equipment & Installation	$ 600.00	1	$ 600.00
Carshare		Public Private Partnership	$ 0.00	Varies	$ 0.00
EV Charging	EA	Equipment & Installation	$ 8,000.00	2	$ 16,000.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	1	$ 5,000.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
TOTAL INVESTMENT					**$ 128,430.00**
MINIMUM INVESTMENT					**$ 104,930.00**

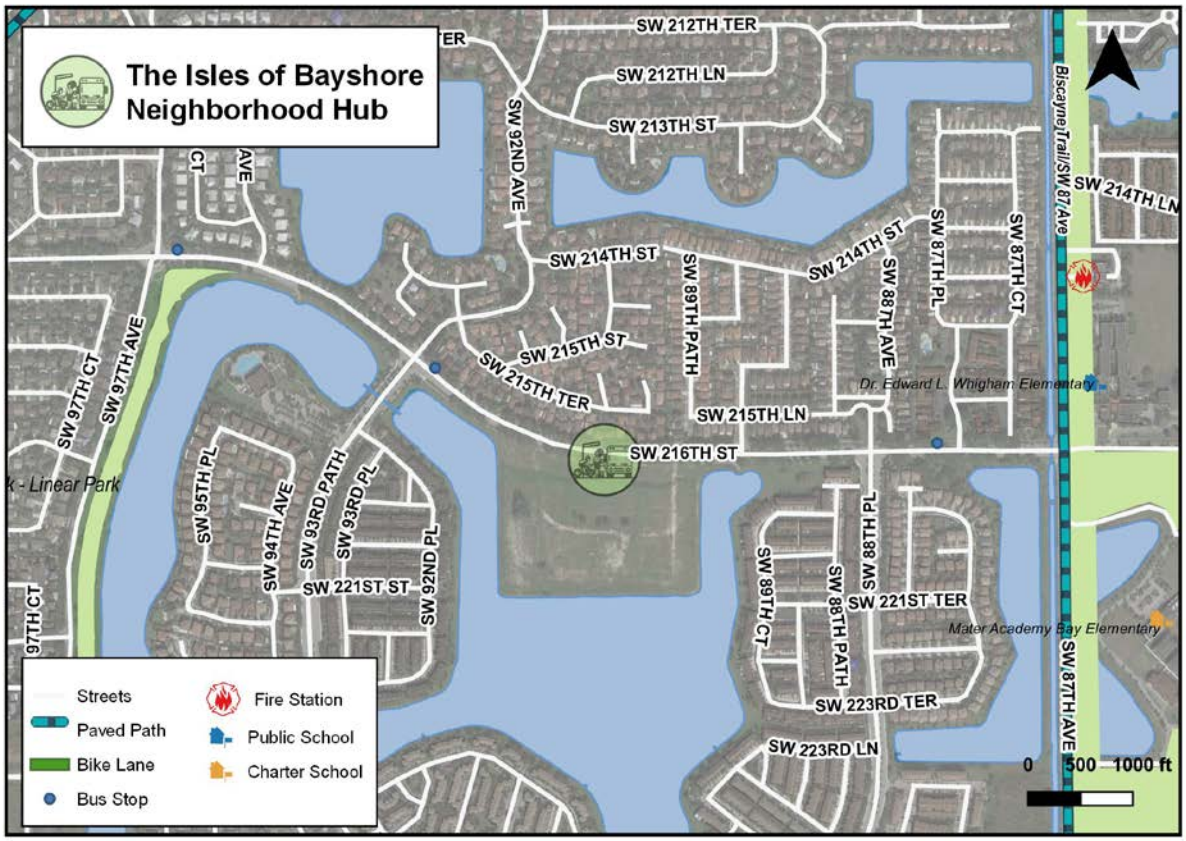


Figure 100: The Isles of Bayshore Neighborhood Hub Location Map

Table 53: Marlin Road Community Hub Amentias Cost Estimate

MARLIN ROAD COMMUNITY MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Standard Town Shelter	EA	Shelter, Seating, Garbage, Bike Rack, Lighting, Concrete	$ 43,330.00	2	$ 86,660.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	2	$ 800.00
Bike Share	EA	Station (10 Bikes)	$ 54,000.00	1	$ 54,000.00
Emergency Callbox	EA	Equipment & Installation	$ 5,500.00	2	$ 11,000.00
Mechanical Box Wrap	EA	$15/SF (Avg. Cost for Installation & Material)	$ 1,000.00	1	$ 1,000.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
Security Camera	EA	Equipment & Installation	$ 600.00	2	$ 1,200.00
EV Charging	EA	Equipment & Installation	$ 8,000.00	3	$ 24,000.00
Carshare		Public Private Partnership	$ 0.00	Varies	$ 0.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	2	$ 4,280.00
OPTIONAL:					
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Package Kiosk	EA	Public Private Partnership	$ 0.00	1	$ 0.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
Bicycle Signal	EA	Equipment	$ 1,000.00	2	$ 2,000.00
Info Kiosk	EA	75" Digital Display Board	$ 6,000.00	1	$ 6,000.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	2	$ 10,000.00
TOTAL INVESTMENT					**$ 204,540.00**
MINIMUM INVESTMENT					**$ 104,430.00**

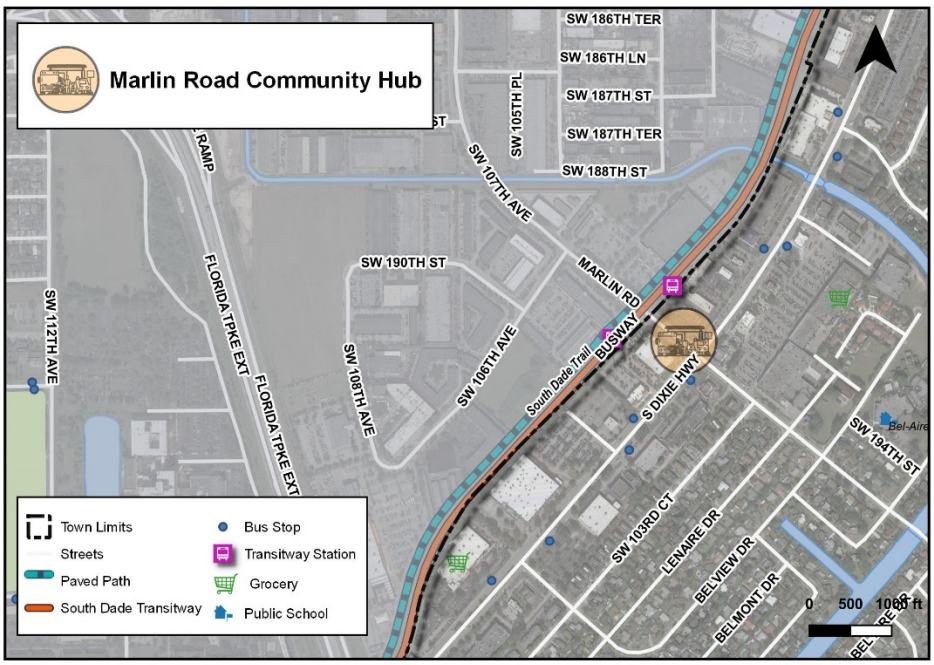


Figure 101: Marlin Road Community Hub Location Map

Table 54: South Dade Government Center Community Hub Amenities Cost Estimate

SOUTH DADE GOVERNMENT CENTER COMMUNITY MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Standard Town Shelter	EA	Shelter, Seating, Garbage, Bike Rack, Lighting, Concrete	$43,330.00	2	$ 86,660.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	2	$ 800.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
Bike Share	EA	Station (10 Bikes)	$54,000.00	1	$ 54,000.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	4	$ 8,560.00
Emergency Callbox	EA	Unit & Construction	$ 5,500.00	2	$ 11,000.00
Mechanical Box Wrap	EA	$15/SF (Avg. Cost for installation & material)	$ 1,000.00	7	$ 7,000.00
Package Kiosk	EA	Public Private Partnership	$ 0.00	1	$ 0.00
Carshare		Public Private Partnership	$ 0.00		$ 0.00
EV Charging	EA	Equipment & Installation	$ 8,000.00	2	$16,000.00
Security Camera	EA	Equipment & Installation	$ 600.00	2	$ 1,200.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
OPTIONAL:					
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Bicycle Repair Station	EA	Equipment & Installation	$1,500.00	1	$ 1,500.00
Bicycle Signal	EA	Equipment	$1,000.00	8	$ 8,000.00
Air Misting System	EA	Equipment & Installation	$5,000.00	2	$10,000.00
Info Kiosk	EA	75" Digital Display Board	$6,000.00	1	$ 6,000.00
TOTAL INVESTMENT					**$212,820.00**
MINIMUM INVESTMENT					**$186,920.00**

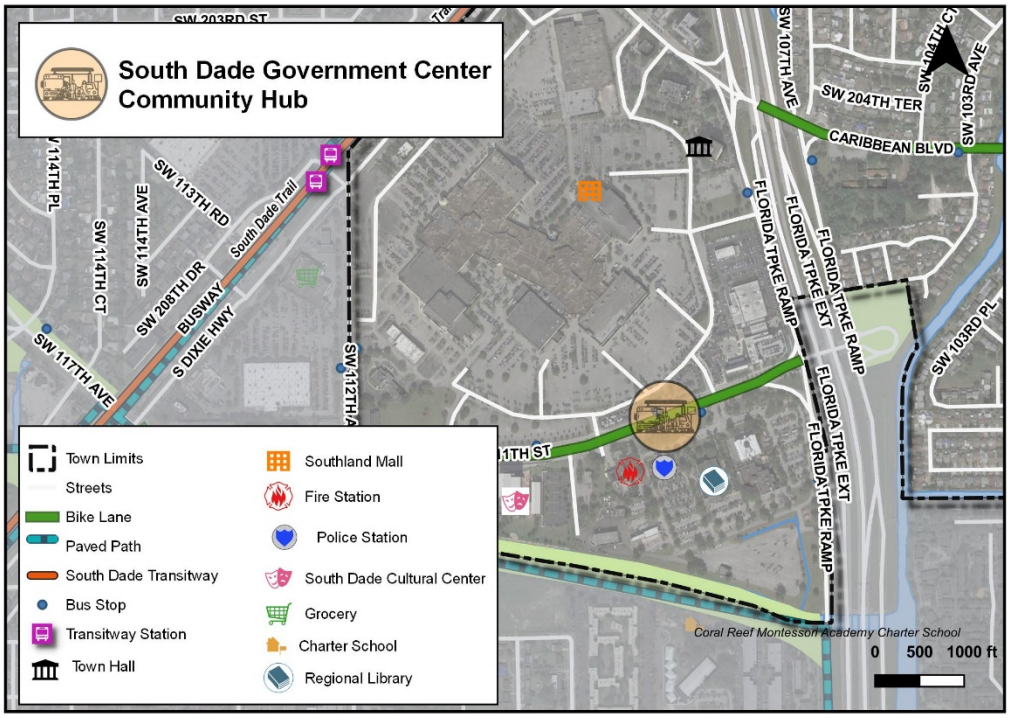


Figure 102: South Dade Government Center Location Map

Table 55: Lakes by the Bay Neighborhood Hub Amenities Cost Estimate

LAKES BY THE BAY NEIGHBORHOOD MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Recycle Receptacle	EA	Equipment & Installation	$ 500.00	2	$ 1,000.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	2	$ 800.00
Bike Share	EA	Station (10 Bikes)	$54,000.00	1	$54,000.00
Emergency Callbox	EA	Equipment & Installation	$ 5,500.00	2	$11,000.00
Mechanical Box Wrap	EA	$15/SF (Avg. Cost for installation & material)	$ 1,000.00	2	$ 2,000.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
OPTIONAL:					
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Security Camera	EA	Equipment & Installation	$ 600.00	2	$ 1,200.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	2	$10,000.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	2	$ 4,280.00
TOTAL INVESTMENT					**$87,880.00**
MINIMUM INVESTMENT					**$61,600.00**

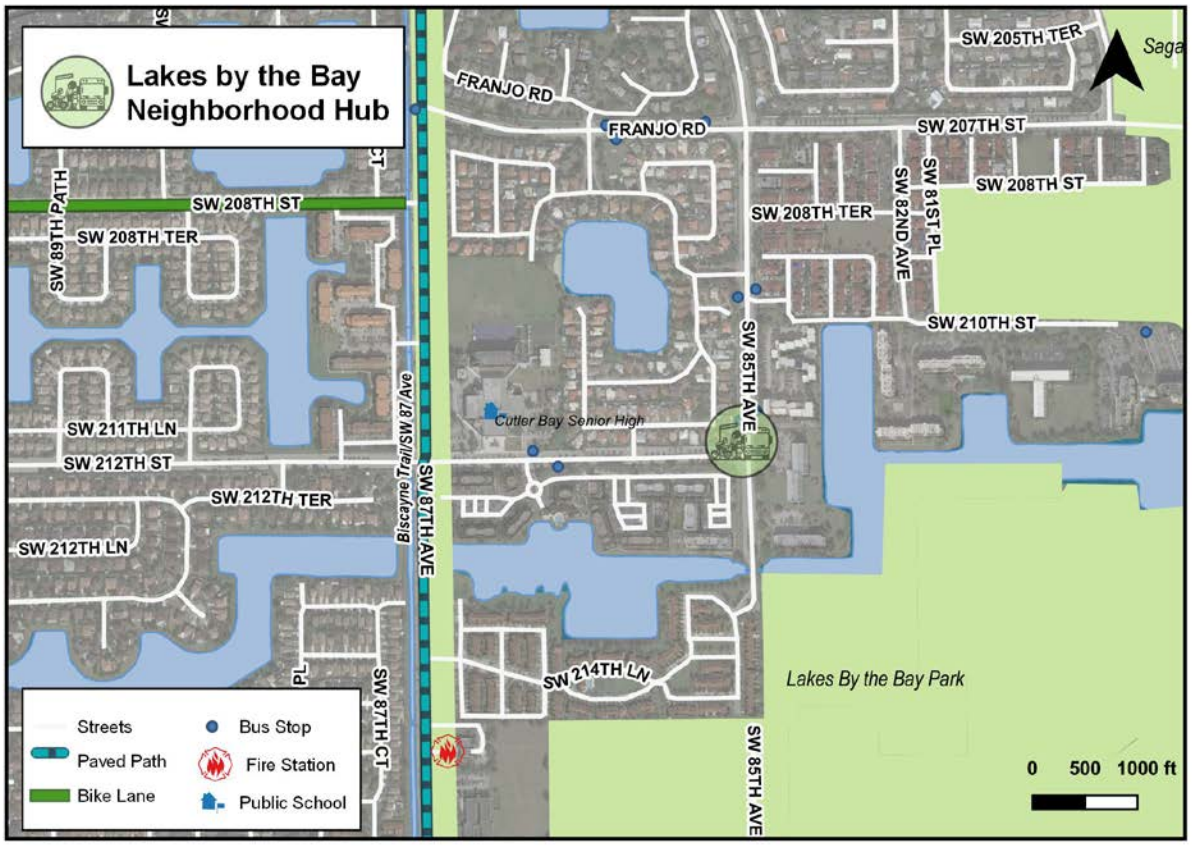


Figure 103: Lakes by the Bay Neighborhood Hub Location Map

Table 56: Eureka Drive East Neighborhood Hub Amenities Cost Estimate

EUREKA DRIVE EAST NEIGHBORHOOD HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Standard Town Shelter	EA	Shelter, Seating, Garbage, Bike Rack, Lighting, Concrete	$ 43,330.00	1	$ 43,330.00
Real Time Information Signage	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Bike Share	EA	Station (10 Bikes)	$ 54,000.00	1	$ 54,000.00
Emergency Callbox	EA	Equipment & Installation	$ 5,500.00	1	$ 5,500.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
OPTIONAL:					
Security Camera	EA	Equipment & Installation	$ 600.00	1	$ 600.00
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Package Kiosk	EA	Public Private Partnership	$ 0.00	1	$ 0.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
Bicycle Signal	EA	Equipment	$ 1,000.00	2	$ 2,000.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	1	$ 5,000.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	2	$ 4,280.00
TOTAL INVESTMENT					**$118,710.00**
MINIMUM INVESTMENT					**$104,930.00**

Figure 104: Eureka Drive East Neighborhood Hub Location Map

Table 57: Cutler Ride Neighborhood Hub Amenities Cost Estimate

CUTLER RIDGE NEIGHBORHOOD MOBILITY HUB					
Recommended Amenities	**Unit**	**Measurement**	**Price**	**Quantity**	**Cost**
Recycle Receptacle	EA	Equipment & Installation	$ 500.00	2	$ 1,000.00
Real Time Information Signage	EA	Equipment	$ 400.00	2	$ 800.00
Bike Share	EA	Station (10 Bikes)	$ 54,000.00	1	$54,000.00
Emergency Callbox	EA	Unit & Construction	$ 5,500.00	2	$11,000.00
Mechanical Box Wrap	EA	$15/SF (Avg. Cost for installation & material)	$ 1,000.00	3	$ 3,000.00
USB Charging Station	EA	Free Standing Station (10 phones)	$ 1,500.00	1	$ 1,500.00
Library Share	EA	Equipment, Install & Registration	$ 200.00	1	$ 200.00
OPTIONAL:					
Security Camera	EA	Equipment & Installation	$ 600.00	2	$ 1,200.00
WIFI	EA	Equipment & Installation	$ 400.00	1	$ 400.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
Bicycle Storage Locker	EA	Equipment & Installation	$ 2,140.00	2	$ 4,280.00
EV Charging	EA	Equipment & Installation	$ 0.00	2	$ 0.00
Carshare		Public Private Partnership	$ 0.00	Varies	$ 0.00
Bicycle Repair Station	EA	Equipment & Installation	$ 1,500.00	1	$ 1,500.00
Air Misting System	EA	Equipment & Installation	$ 5,000.00	2	$ 10,000.00
Bicycle Signal	EA	Equipment	$ 1,000.00	2	$2,000.00
TOTAL INVESTMENT					**$92,380.00**
MINIMUM INVESTMENT					**$71,500.00**

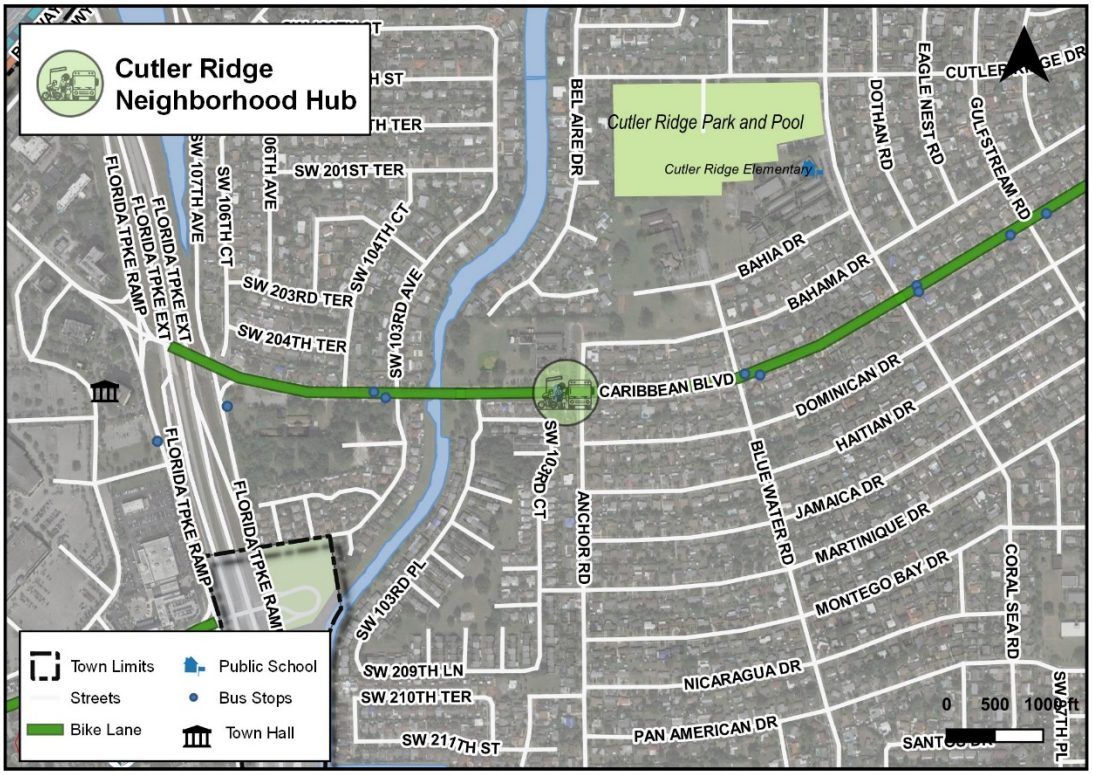


Figure 105: Cutler Ridge Neighborhood Hub Location Map

Appendix IV

Development Review Checklist for Mobility Hub Elements

The following checklist was developed to assist the Town of Cutler Bay with incorporating Mobility Hub elements into the development approval process. The checklist is meant as a guide the Town can use to work with developers to ensure Mobility Hub elements are incorporated into the Transit Corridor, Town Center and Neighborhood Commercial Zoning Districts.

MOBILITY HUB CHECKLIST					
Elements	**Standard**	**Example**	**Coordinating Agency**	**To Be Considered (Yes, No, N/A)**	**Comments**
Pedestrian					
Connected Sidewalks	Section 3-72, 3-80 & 3-134	5' Minimum unobstructed, 8' preferred	Town Planning Dept.		
Universal Design	ADA Requirements	Clear Zone, sloping, clearance	Town Public Works Dept.		
Street Trees	Florida Native Canopy Trees for shade, Right Tree/Right Place: Sections 3-102, 3-133 (15) & Town Street Tree Master Plan	Live Oak, Mahogany, Gumbo Limbo, Verawood, Black Ironwood, Simpson Stopper, etc...	Town Public Works Dept.		
Pedestrian Lighting	25' - Full Cutoff, Warm White: Section 3-151	Town Approval	Town Public Works Dept.		
Crosswalks	Pavers, Stamped Asphalt, High Emphasis or similar: Section 3-133	Complete Streets Corridor Analysis (p. 51), Town Mobility Hubs Plan (p. 74)	Miami-Dade DTPW		
Mid-Block Crossings	Flashing Beacon, Signage, Crosswalk, Traffic Light	Complete Streets Corridor Analysis (p.51)	Miami-Dade DTPW		
Pedestrian Signals	County Standard	Push Buttons/ Countdown / Lead Pedestrian Interval (LPI)	Miami-Dade DTPW		
On Street Parking	22' x 8' (+ optional door zone): Section 3-140 & 3-142	SW 208th Street	Town Planning Dept.		
Seating	None	Benches, Seats, Standing Bars	Town Planning Dept.		
Internal Circulation	Section 3-133	Pedestrian Connectivity, Completing the Network	Town Planning Dept.		

Bollards	Device to stop vehicles from crossing into pedestrian zone	Bollards, Planters or similar	Town Planning Dept.		
Complete Streets Treatment	Section 3-133	Refer to Town of Cutler Bay Complete Streets Corridor Analysis	Town Public Works Dept.		
Bicycle					
Bicycle Parking	6 per 50,000 SF: Section 3-72	Bicycle Rack, Storage Lockers, Bicycle Parking Areas	Town Planning Dept.		
Showering Facilities	Section 3-72	Optional, facilities for biking to work	Town Planning Dept.		
Bicycle Facility	5' Bike Lane, 8' Shared Use Path, or Protected/Buffer Bike Lanes: Section 3-133	Town Mobility Hubs Plan (p. 75)	Town Public Works Dept.		
Bicycle Repair Station	County Standard	See Old Cutler Road Bike Repair Stations, Bike Repair Shop	Miami-Dade DTPW		
Transit					
Shelter	Town Adopted Standard	See Old Cutler Road	Town Public Works Dept.		
Seating	Town Adopted Standard	See Old Cutler Road	Town Public Works Dept.		
Trash/Recycle Receptacle	Town Adopted Standard	See Old Cutler Road	Town Public Works Dept.		
Lighting	Section 3-151	Adequate shelter lighting	Town Public Works Dept.		
Right-of-Way	Article II	ROW for Transit Shelter & Amenities	Town Public Works Dept.		
Amenities	***to be considered for placement near Transit***				
Bikeshare	Town Mobility Hubs Plan	Docking Station such as Citibike or similar	Town Public Works Dept.		
Carshare	Town Mobility Hubs Plan	Zipcar or similar	Town Public Works Dept.		
Park & Ride	Town Mobility Hubs Plan	Marked Spaces, Signage	Town Public Works Dept.		
Kiss & Ride	Town Mobility Hubs Plan	Managed Curbside Area	Town Public Works Dept.		

EV Charging Station	Town Mobility Hubs Plan	Tier 1, 2 or 3	Town Public Works Dept.		
Microtransit	Town Mobility Hubs Plan	Shuttle service, Golf Carts, or similar	Town Public Works Dept.		
Package Pickup Kiosk	Town Mobility Hubs Plan	Amazon locker or similar	Town Planning Dept.		
Public Space	Town Mobility Hubs Plan	Pocket Park, Linear Park, Plaza, Space	Town Planning Dept.		
Public Art	Town Mobility Hubs Plan	Local Artist Partnership/Box Wrapping of Mechanical Equip.	Town Planning Dept.		
WIFI	Town Mobility Hubs Plan	Hotspot	Town Public Works Dept.		
Enhanced Security	Town Mobility Hubs Plan	Emergency Callbox, Security Cameras, Lighting	Town Public Works Dept.		
USB Charging Station	Town Mobility Hubs Plan	Near Transit or Public Space	Town Public Works Dept.		
Wayfinding	Town Mobility Hubs Plan	Town Adopted Standard	Town Public Works Dept.		
Information Kiosk	Town Mobility Hubs Plan	Transit & Community Information Display Kiosk	Town Public Works Dept.		
Retail	Town Mobility Hubs Plan	Near Transit	Town Planning Dept.		
Other:	Town Mobility Hubs Plan	Amenity supporting Mobility Hub	Town Planning Dept.		
Maintenance Plan	***Maintenance of Pedestrian, Bicycle and Transit Facilities***		***Town Public Works Dept.***		
Y - Yes, N - No, N/A - Not Applicable					

Appendix V

Public Meeting Notes, Presentation & Attendance

Appendix V includes public meeting notes, presentations, and attendance sheets for the Public Workshops held on April 30, 2019 and September 23, 2019.

Figure 106: Photos of Public Workshops

TOWN OF CUTLER BAY
PUBLIC INVOLVEMENT WORKSHOP

We want to hear from you!

PROJECT OVERVIEW

The Town of Cutler Bay was awarded a grant from the Miami-Dade Transportation Planning Organization to conduct a local area Strategic Miami Area Rapid Transit (SMART) Moves study for the purpose of enhancing connectivity between the Town and the South Dade Transitway. The Plan will analyze existing MetroBus service, the Cutler Bay Town Circulator operations, and identify enhancements to the transit services as well as identifying improvements for stops and transfer points. The focus on stops and transfer points is to improve accessibility, connectivity, mobility and safety for pedestrians, bicyclists and transit users by identifying locations for neighborhood, community and commercial level mobility hubs along the Town's roadway network. A mobility hub is the convergence of frequent transit, development with mixed land uses, density and people to cater to the mass movement of people.

WHAT TO EXPECT

Two public meeting will be held at the Town Hall to obtain input from residents and stakeholders and to share conceptual designs. Graphics will be displayed and the project team will be available to answer any questions.

The public involvement workshop is being conducted in a universally accessible location. Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in the hearing is asked to advise the Town at least four (4) business days before the hearing by contacting the Town Clerk at (305) 234-4262. If you are hearing or speech impaired, please contact the Town using the Florida Relay Service, 1(800) 955-8771 (TTY) or 1(800) 955-8770 (Voice) or dial 7-1-1.

Any non-English speaking person wishing to attend the public hearing should contact the Town Clerk at (305) 234-4262 at least four (4) business days prior to the hearing and an interpreter will be provided.

DATE:
Tuesday, April 30, 2019

TIME:
6:00 p.m.-8:00 p.m.

LOCATION:
Cutler Bay Town Center
10720 Caribbean Boulevard
Cutler Bay, FL 33189

TRANSIT RIDERS:
WE NEED YOUR FEEDBACK!

Transit riders—we are requesting your feedback! Please take a few minutes to complete the survey by following the links below:

English version:
http://ow.ly/hdr450mA7HM

Spanish version:
http://ow.ly/UcB250mA7le

WWW.CUTLERBAY-FL.GOV

Cutler Bay
MIAMI

LA CIUDAD DE CUTLER BAY
TALLER DE PARTICIPACIÓN PÚBLICA

¡Queremos su opinión!

DESCRIPSIÓN DEL PROJECTO

La ciudad de Cutler Bay recibió una subvención del estudio Miami-Dade Area Rapid Transit (SMART) Movimientos para perfeccionar la conectividad entre la ciudad y las vias de tránsito en el sur de el condado. El Plan analizará el servicio de MetroBus que ya existe, las operaciones de circulacion de la ciudad de Cutler Bay, y modenizará los servicios de tránsito, así como también reestablecerá paradas y puntos de traslados. El enfoque en las paradas y los puntos de traslado es mejorar la accesibilidad, conectividad, movilidad y la seguridad para peatones, ciclistas y usuarios de tránsito mediante la identificación de lugares para los centros de movilidad en el vecindario, en la comunidad y a nivel comercial a lo largo de la interconexión de carreteras de la Ciudad. Un centro de movilidad es la union del tránsito fluvial, el desarrollo de lugares con usos mixtos para residenciales, comerciales, lugares de entretenimiento, y el movimiento masivo de personas.

QUE ESPERAR

La reunión pública se llevará a cabo en el salon de la ciudad para obtener información de los residentes y las partes interesadas y para compartir diseños conceptuales. Los gráficos se mostrarán y el equipo del proyecto estará disponible para responder cualquier pregunta.

El taller de participación pública se está llevando a cabo en un lugar de acceso universal. Bajo las disposiciones de la Ley de Estadounidenses con Discapacidades, se le pide a cualquier persona que requiera adaptaciones especiales para participar en la audiencia que avise a la ciudad al menos cuatro (4) días hábiles antes de la audiencia comunicándose con el Secretario Municipal al (305) 234-4262. Si tiene problemas de audición o del habla, comuníquese con la ciudad a través del Servicio de retransmisión de Florida al 1 (800) 955-8771 (TTY) o al 1 (800) 955-8770 o marque el 7-1-1.

Cualquier persona que no hable inglés y desee asistir a la audiencia pública debe comunicarse con el Secretario Municipal al (305) 234-4262 al menos cuatro (4) días hábiles antes de la audiencia, y se le proporcionará un intérprete.

FECHA:
Martes 30 de abril del 2019

HORA:
6:00 p.m. - 8:00 p.m.

UBICACIÓN:
Cutler Bay Town Center
10720 Caribbean Boulevard
Cutler Bay, FL 33189

PILOTOS DE TRÁNSITO: ¡ESTAMOS SOLICITANDO SU OPINIÓN!

Por favor, tómese unos minutos para completar la encuesta. siguiendo los enlaces de abajo:

Version en Ingles:
http://ow.ly/hdr450mA7HM

Version en Español:
http://ow.ly/UcB250mA7Ie

WWW.CUTLERBAY-FL.GOV

Town of Cutler Bay Mobility Hubs
Public Involvement Workshop #1: SMART Moves Study

Tuesday, April 30, 2019 (6:00 PM)

NAME	TELEPHONE	E-MAIL
Christina Fermin	954-850-8050	CFermin@Marlinengineering.com
A. Peter Paunovic	305-924-5950	goldenstrand78@msn.com
Tom CONDON	—	—
Barbara Condon	—	—
Jeannine Stoller	954-537-2700	jeannies@gumberg.com
Daniel Kruel		dkruel@ctseinc.com
Jonathan Knight	305-599-8964	Jonathan.Knight@ctseinc.com
Cheryl MOTSCO	786-469-5162	motscc@miamidade.gov
Alfredo Quintero		
Yenier Vega		
Rafael Casals	JOSE Santiago	
Jeannine Gorlorde		

Cutler Bay Mobility Hubs Plan Public Involvement Meeting #1
April 30, 2019 6 PM – 8 PM

Presentation Comments:

- Where are most residents traveling to for work? Do you have that data?
  - Town Manager: That data is provided in the Town's Transportation Master Plan and most residents are traveling North for work.
- Many residents work in Hialeah, Doral and Aventura – the bus service in those areas runs late, but when we arrive home the bus service ends at 5 PM and we have no way to get home via transit. At times I wait long periods of time to use Uber, Lyft or Taxi service.
  - Town Manager: The Town began service in 2012 at 3 days per week and we are now at 7 days per week, but only paying for 6 days per week. The Town is exploring options to extend the hours of operation and accommodate residents who rely on transit.
- We have meeting and after meeting and there is no action. Meanwhile Smart cars have been running in Pinecrest and Palmetto Bay and we are having studies done. Residents here need action and need transit to operate later.
  - Town Manager: The Town is in the processing of implementing a Freebie service that will operate 5:30 AM to 9 PM providing door-to-door service, meaning they will pick you up at home and transport you to the transitway for free. This service will not be golf carts, they will be vans and wrapped for marketing purposes so residents become aware of the service.
- Have you looked at having a bus run counterclockwise for Route 200?
  - Yes, we have looked at that option and will be including it in the report as a recommendation. We are also looking at other routes to provide better service and coverage for the Town.
- How many respondents have taken the survey to date?
  - About 100
- Does the survey show what time residents are coming home?
  - We asked what time people were leaving their homes to begin their trip and what time they arrived to their destination.
- How long does the Town Circulator take to make the loop?
  - According to our analysis 51 minutes, which is what the schedule shows
- Did you take into account the time the driver takes their 10-minute break?
  - Yes

Transit Route Map Comments:

- Route 200 ends at 5:30 PM and it is challenging to get home after work. Ideally the route should begin earlier and end later to allow residents to get home via the bus.
- Route 287 has limited hours; this bus should operate until 9 PM.
- Provide transit service to/from church in Palmetto Bay to connect to iBus to Dadeland South.

- Route 200 – extend hours; Route 287 – extend hours.
- New Route: Old Cutler Road to Ludlum Road to Dadeland South.
- Route 200, add additional bus moving counterclockwise.
- No transit available during peak periods within the Town.
- Route should travel along Old Cutler Road North to Ludlum Road to get to Dadeland South.

Attendance:

Christina Fermin, Marlin Engineering

Jose Santiago, Marlin Engineering

Robert Duncan, Town Council

Rafael Casals, Town Manager

Alfredo Quintero, Public Works Director

Yenier Vega, Assistant Public Works Director

Jeannine Gaslonde, Miami-Dade TPO

A. Peter Paunovic

Tom Condon

Barbara Condon

Jeannine Stuller

Daniel Kruel

Jonathan Knight

Cheryl Motsco

TOWN OF CUTLER BAY

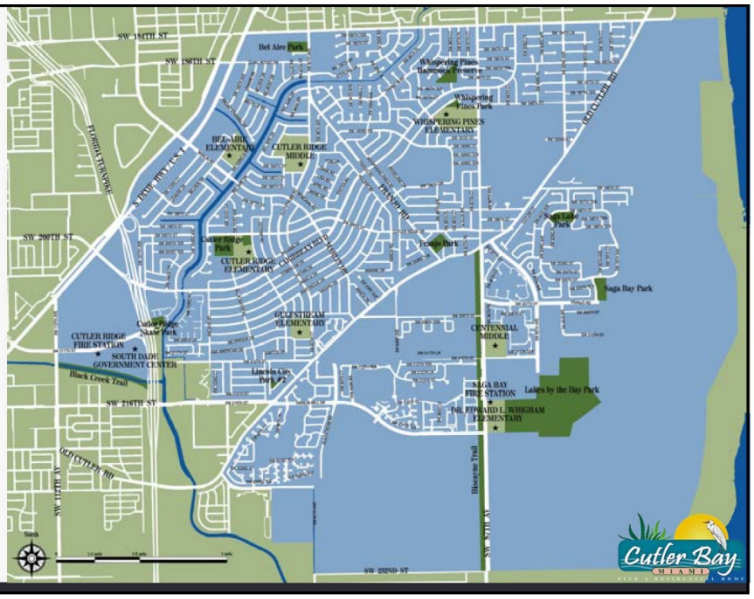
MOBILITY HUBS PLAN

Miami-Dade Transportation Planning Organization

1

Overview

- » Mobility Hub
- » Purpose
- » Background
- » Development
- » Data
- » Next Steps
- » Discussion



2

Mobility Hub

3

What is a Mobility Hub?

"a location where more than one transit route converge, an area where bicycle and pedestrians have access to local land uses, major generators and have land uses that cater the mass movement of commuters."

– Town of Cutler Bay Complete Streets Corridor Analysis

Source: LA Department of Planning *Mobility Hubs A Reader's Guide*

4

5

"Transit hubs are also social centers and expressions of civic identity that can boost or damage local pride." - CityLab

Transit Transfer Point

Mobility Hubs make transferring between different transportation modes and services easy, safe and efficient.

Comfortable Walking Destination For All

A great pedestrian environment makes Mobility Hubs accessible to everyone — not just the very dedicated.

Context-Sensitive Designs Are Well Adapted to Site

Mobility Hubs are more than just functional. They are also welcoming, enjoyable, safe, intuitive and enticing.

Popular Place for Private Mobility Services

Successful Mobility Hubs need to be in places that make sense for transportation users and providers alike.

Source: Mobility Hubs – Project Connect

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Mobility Hub Amenities

Mobility Hub Amenities	Bicycle Connections			Vehicle Connections			Bus Infrastructure		Information–Signange			Support Services				Active Uses		Pedestrian Connections	
	2.1. Bike Share	2.2. Bike Parking	2.3. Bicycling Facilities	3.1. Ride Share/Pick up-Drop off	3.2. Car Share	3.3. EV Charging Stations	4.1. Bus Layover Zone	4.2. Bus Shelters	5.1. Wayfinding	5.2. Real-time Information	5.3. Wi-Fi / Smartphone Connectivity	6.1. Ambassadors	6.2. Waiting Area	6.3. Safety and Security	6.4. Sustainable Approach	7.1. Retail	7.2. Public Space	8.1. To the Mobility Hub	8.2. At the Mobility Hub
(N) Neighborhood	●	●	■	■	○	○	■	○	●	○	○	■	○	○	○	■	■	○	○
(C) Central	●	●	○	●	●	●	○	●	●	●	●	○	○	●	●	○	●	●	●
(R) Regional	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●
Legend:	Vital: ●	Recommended: ○	Optional: ■																

Source: Mobility Hubs: A Reader's Guide – City of Los Angeles

7

Examples

Photos courtesy of Aurel Design Urbai

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Purpose

9

UPWP 5.2 SMART Moves Program

Used by TPO to prioritize and program planning studies to support projects, including:

- **Complete Streets**
- **First Mile/Last Mile Connections**
- **Connected & Autonomous Vehicles**
- **Projects to Enhance Connectivity**

Municipal Program: Encourages municipal participation in implementing transportation planning studies and plans.

Public Input: Solicit transportation planning ideas from the general public and other agencies.

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Scope of Services

- » **Identify** a comprehensive network of mobility hubs.
- » **Improve** mobility and safety for pedestrians, bicyclists and transit users.
- » **Assess** the Town Circulator and provide recommendations.
- » **Final recommendations** will be evaluated and prioritized.

Boston Crosswalk

11

Schedule

Town of Cutler Bay Mobility Hub Plan

TASKS AND SUBTASKS	November '18	December '18	January '19	February '19	March '19	April '19	May '19	June '19	July '19	August '19	September '19	October '19
Task 1. Background Information/Existing Conditions												
a. Review relevant Multi-modal transportation planning studies												
b. Obtain and assess Existing / Future Land Use and Zoning and ROW												
c. Obtain MDD/DTPW, Town Circulator Stop and Ridership Data and Files												
Task 2. Public Involvement and Coordinatio												
a. Project Management Teleconferences (6, 30 Minutes)												
b. Coordination with Public, TPO, MD/DTPW												
c. Town Commission Meetings (2)												
d. Community Meetings (2)												
e. Study Advisory Group (3 meetings)												
Task 3. Data Collection and Transit Hub Assessment												
a. Interview Town Circulator Drivers/Operator												
b. Ride Town Circulator Routes and Use Speedtracker for Speed/Delay and Rider Survey												
c. Interview Metrobus Riders at transfer points and at Cutler Bay Transitway Stations												
d. Analysis of MDOVision results												
e. GIS Analysis of ridership and route demographics												
f. Development of alternative system routes and schedules												
g. Sketch Planning Stop/Hub Utilization Assessment												
h. Capital, O&M Cost Analysis (3 Schedules)												
Task 4. Mobility Hub siting and Conceptual Design												
a. Hub Siting Analysis up to 12 locations												
b. Development of Neighborhood, Community and Central Hub Templates												
c. Review of Right of Way, Adjacent Land Use and Ped/Bike Access												
d. Assessment of permitting requirements												
e. Cost Estimates 12 locations												
Task 5. Documentation												
a. Recommendation Prioritization												
b. Potential Funding												
c. Powerpoint presentations for Commission Meetings												
d. Final Report												

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Background

The Strategic Miami Area Rapid Transit (SMART) Plan

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South Dade Transitway

- **20-miles from Dadeland South Metrorail Station** to SW 344th Street Park and Ride/Transit Terminal
- **Connects Miami CBD** to Village of Pinecrest, Village of Palmetto Bay, Town of Cutler Bay, City of Homestead, and Florida City.
- **BRT to begin by 2022**

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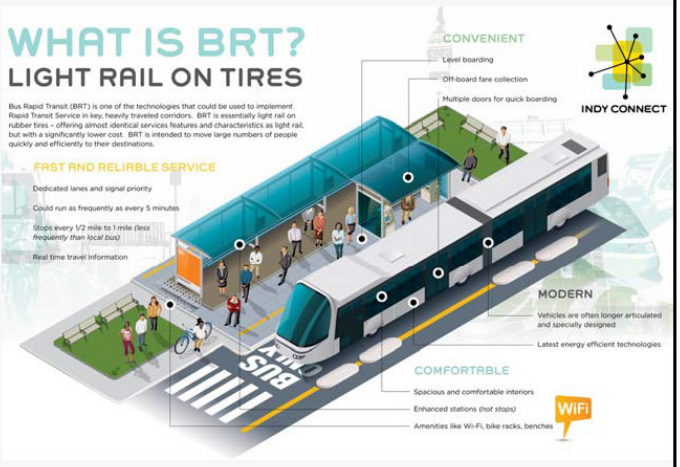
Bus Rapid Transit (BRT)

- High-Quality Bus-Based Transit System
- Dedicated Lanes
- Transit Signal Preemption
- Fast
- Comfortable
- Frequent



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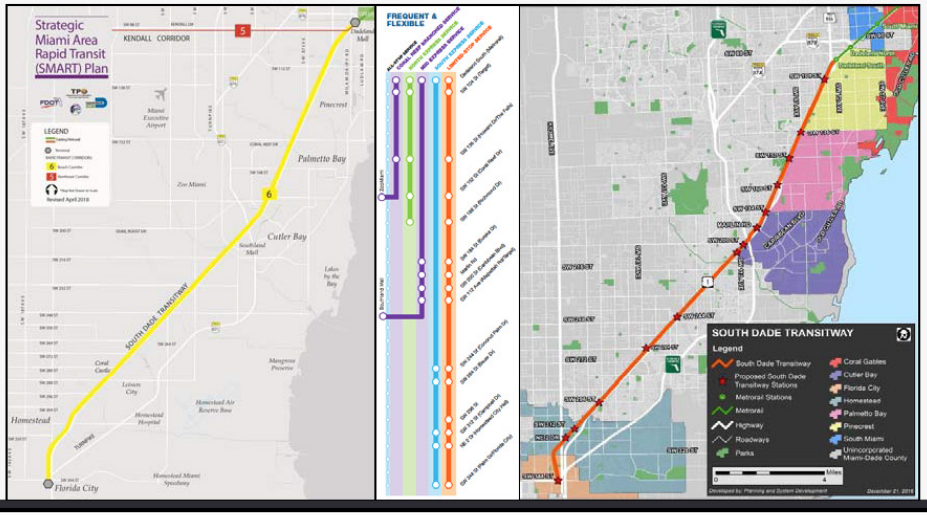
South Corridor Rapid Transit Project



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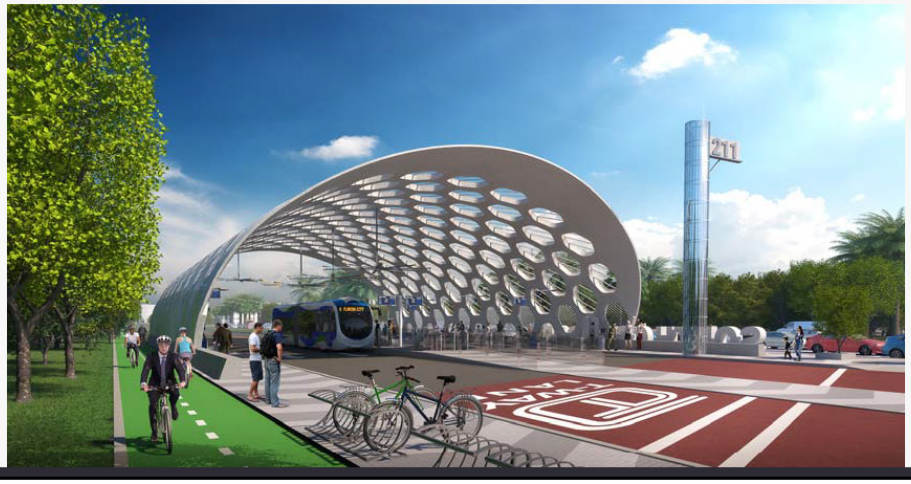
Station Rendering

DRAFT – South Dade Rapid Transit Corridor PD&E August 2018



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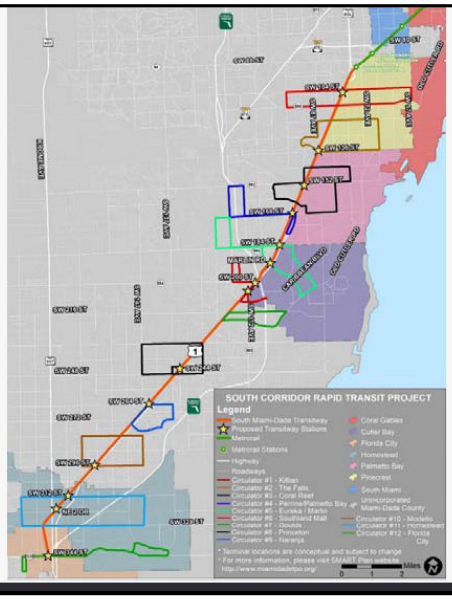
South Dade Rapid Transit Corridor Project

Feeder Bus Program

DRAFT PD&E August 2018

- First and Last Mile Connection
- Based on Input Received along the Corridor
- Municipalities along Transitway May Restructure their Existing Local Bus Service
- Explore Partnership Options with Transportation Network Companies (TNC's)
- **Future:** Autonomous/Connected Vehicles Could Replace Current Technology



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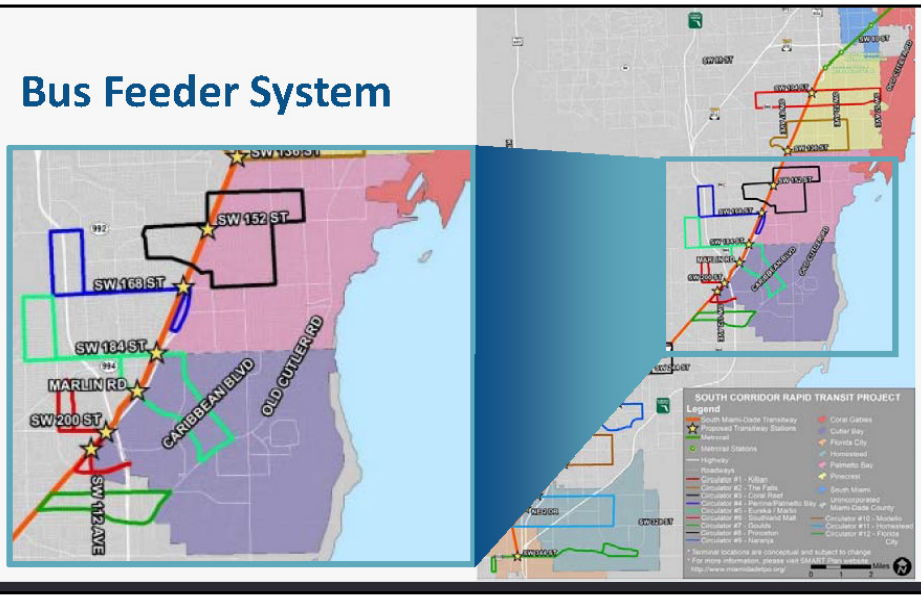
Bus Feeder System



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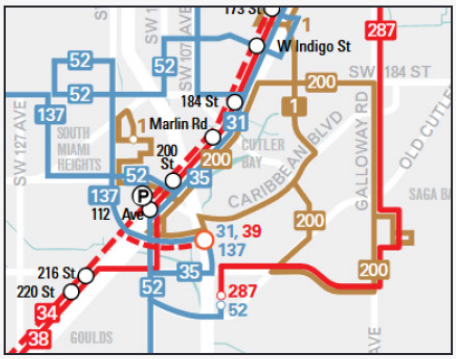
Existing Bus Service

MetroBus



Town Circulator (Route 200)

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Planning & Development

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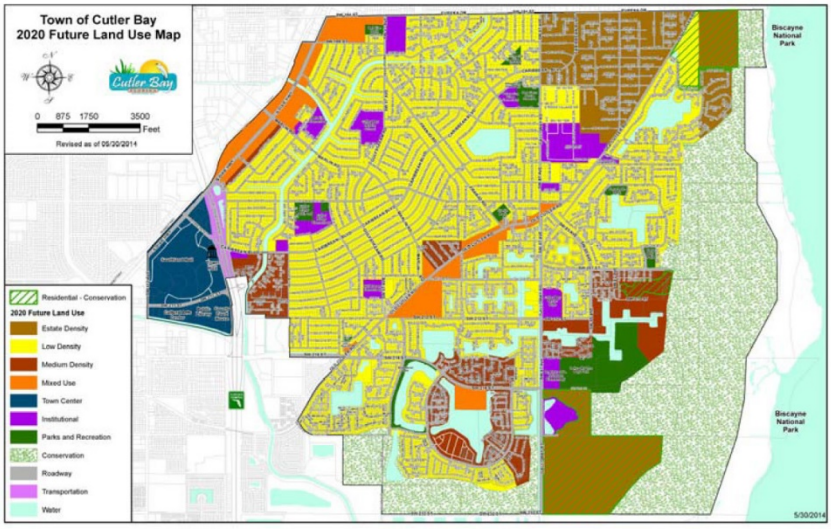
Land Use Map



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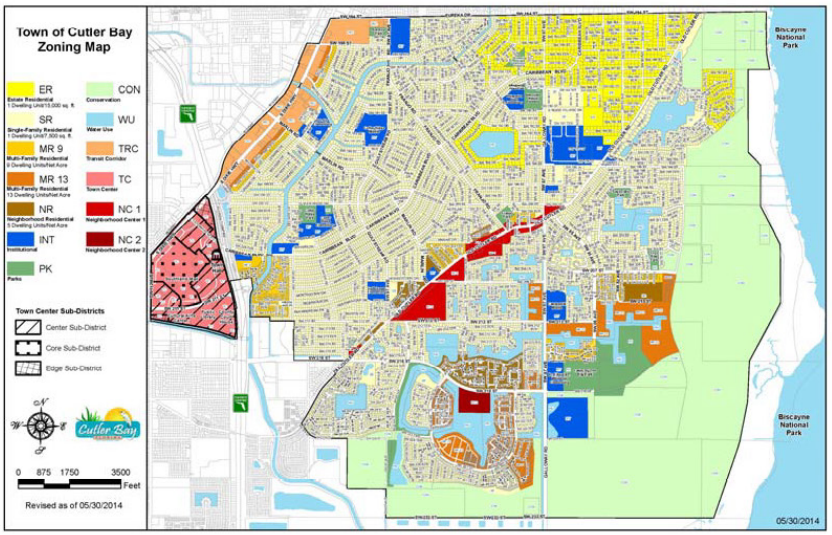
Zoning Map



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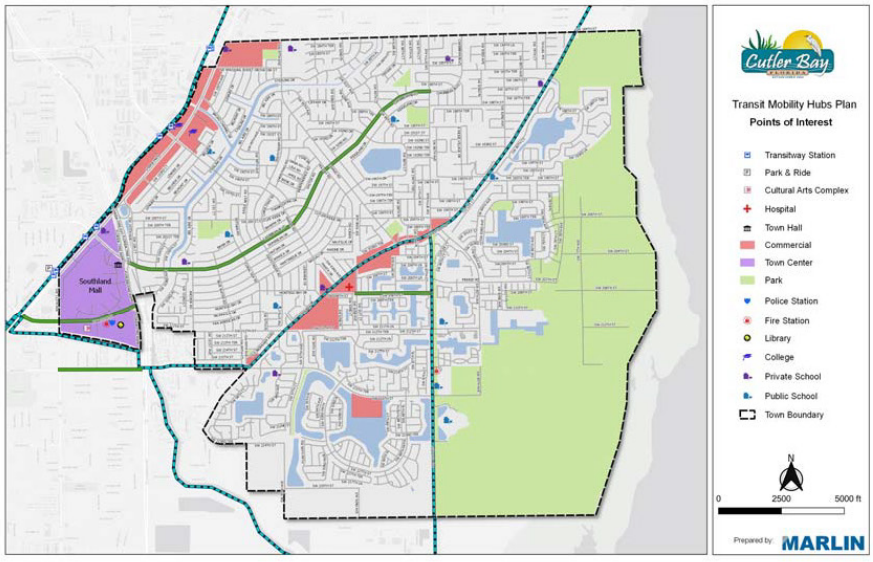
Points of Interest Map



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Community Statistics

DATA

25

Stats

Population (Est. 2017): 45,101

Median Age: 36.2

Households: 12,682

Housing: 71% Owner Occupied

Median Value/Rent: $235,000/$1,442

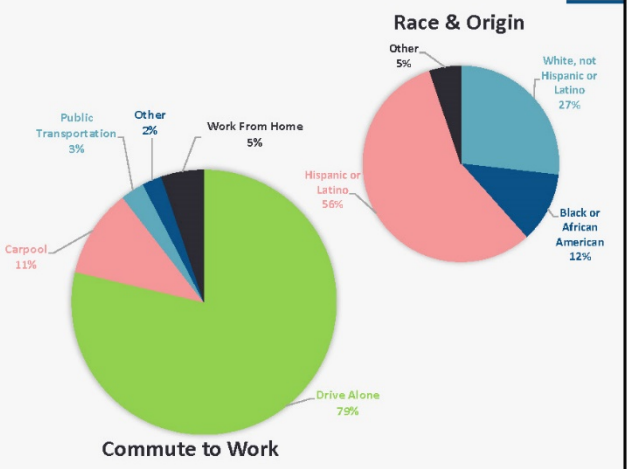
Mean Travel Time to Work: 41.6 Minutes

Median HH Income: $70,473

Language Other than English: 54.8%

High School Graduate or Higher: 89.1%

-Census QuickFacts



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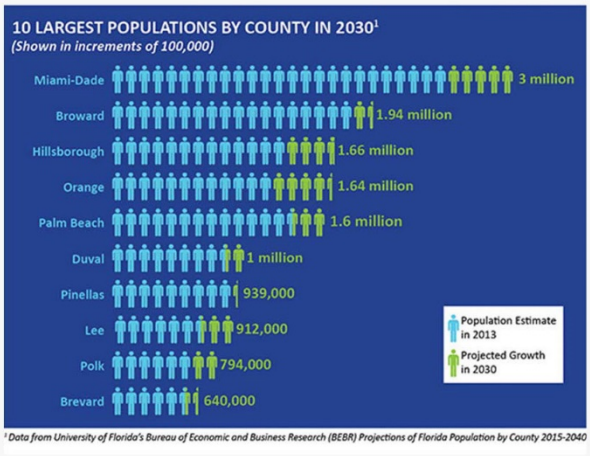
Future Growth

- 2030 County Growth Projected:10.5%
- 2040 County Projection: 3.3 Million
- 2020 Town Projected Growth: 55,000



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Transit Survey

DATA

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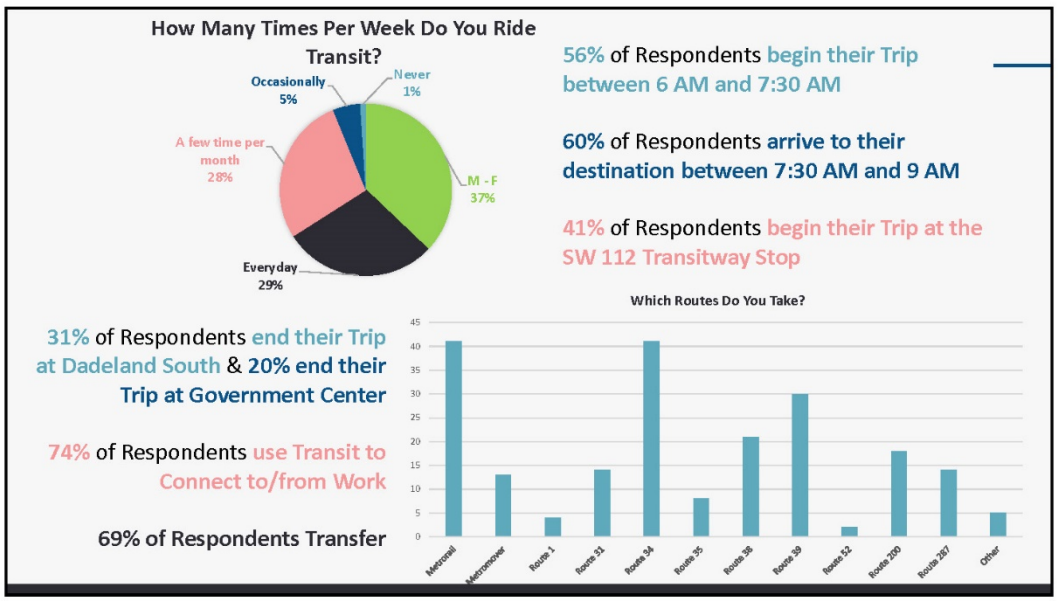
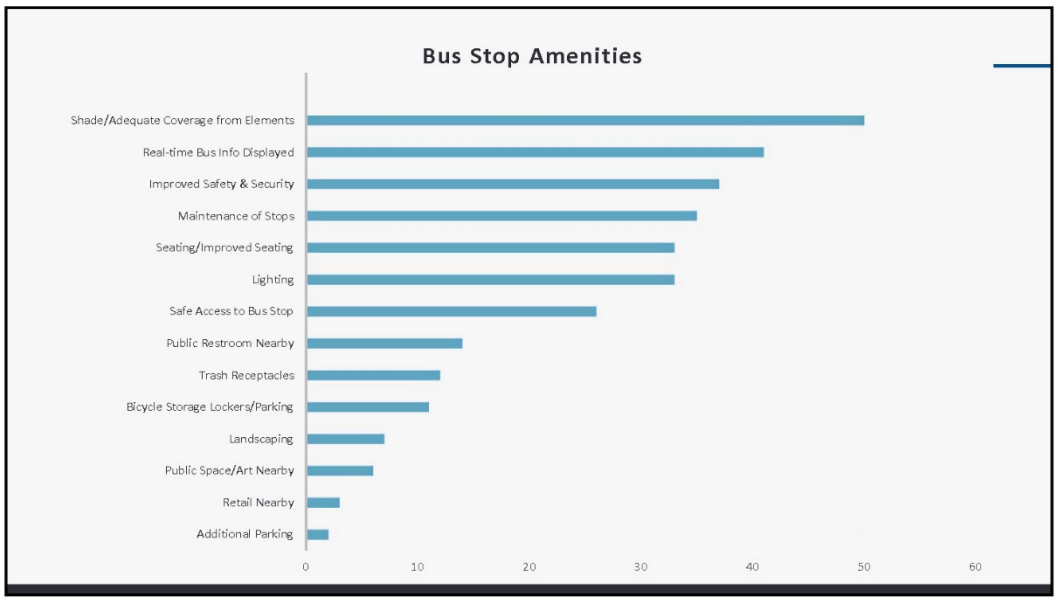
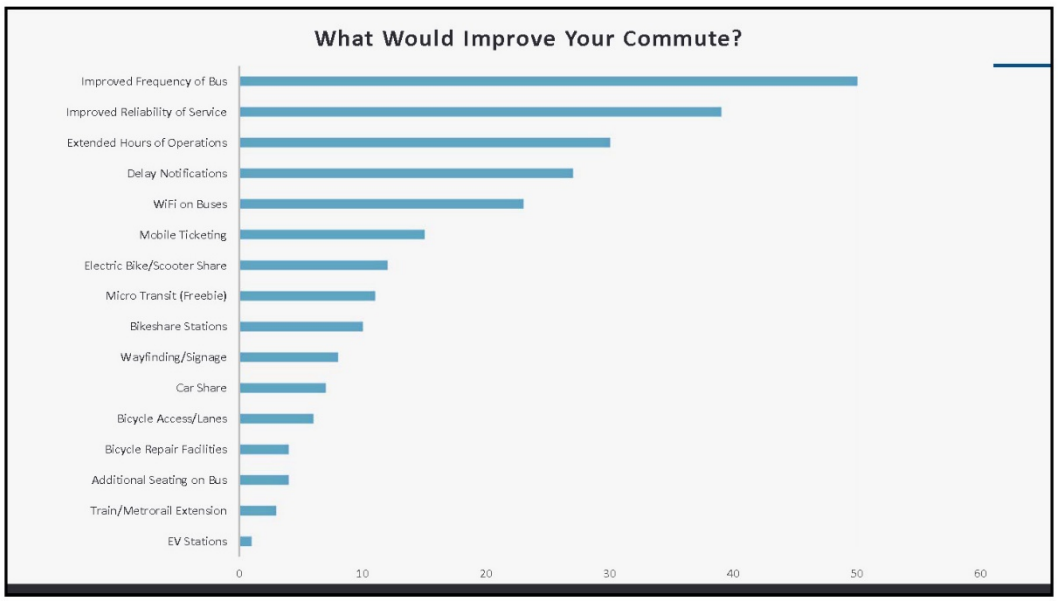

How Many Times Per Week Do You Ride Transit?
Occasionally 5%
Never 1%
A few time per month 28%
M - F 37%
Everyday 29%
56% of Respondents begin their Trip between 6 AM and 7:30 AM
60% of Respondents arrive to their destination between 7:30 AM and 9 AM
41% of Respondents begin their Trip at the SW 112 Transitway Stop
31% of Respondents end their Trip at Dadeland South & 20% end their Trip at Government Center
74% of Respondents use Transit to Connect to/from Work
69% of Respondents Transfer
Which Routes Do You Take?
45
40
35
30
25
20
15
10
5
0
Metrorail
Metromover
Route 1
Route 31
Route 34
Route 35
Route 38
Route 39
Route 52
Route 200
Route 287
Other

29


Bus Stop Amenities
Shade/Adequate Coverage from Elements
Real-time Bus Info Displayed
Improved Safety & Security
Maintenance of Stops
Seating/Improved Seating
Lighting
Safe Access to Bus Stop
Public Restroom Nearby
Trash Receptacles
Bicycle Storage Lockers/Parking
Landscaping
Public Space/Art Nearby
Retail Nearby
Additional Parking
0
10
20
30
40
50
60

30



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Transit

DATA

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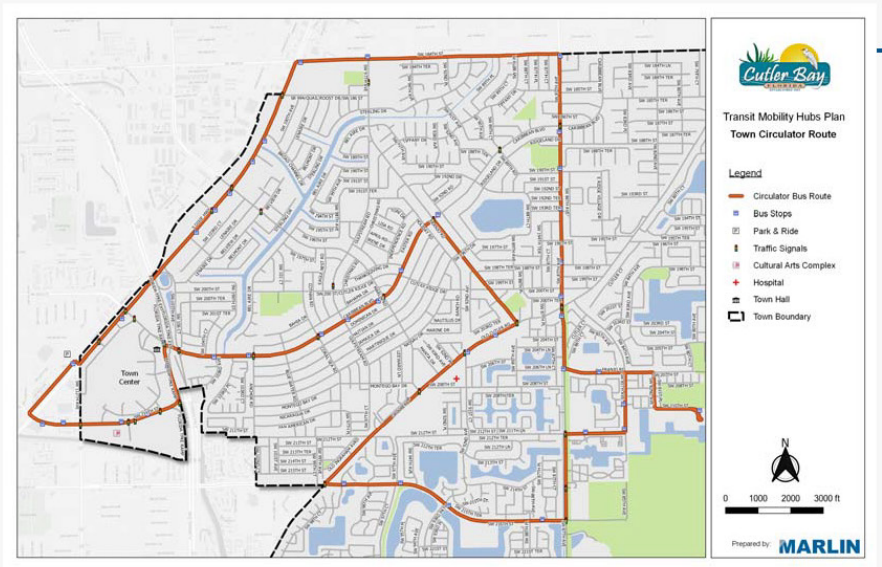
Town Circulator (Route 200)



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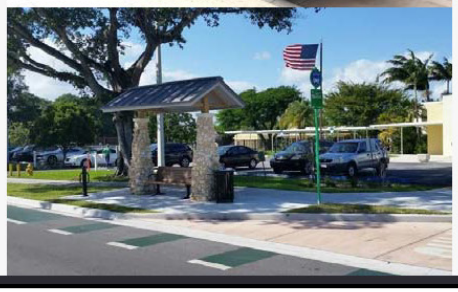
Cutler Bay Circulator

- **Start/End:** Old Cutler Road @ Publix
- **Time:** Approximately 51 minutes
  - Stopped: 22 minutes
  - Travel: 34 minutes
- **Travel Distance:** 13.7 miles
- **Average Speed:** 23 mph
- **Operating Hours:**
  - Monday – Saturday: 8:40 AM to 5:40 PM
  - Sunday: 10:40 AM to 3:40 PM



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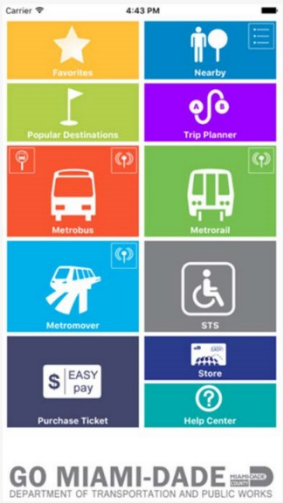
MDT Tracker APP

- Download via the Google Play or Apple Store
- Real-time tracking of all Miami-Dade Transit
- Trip Planning



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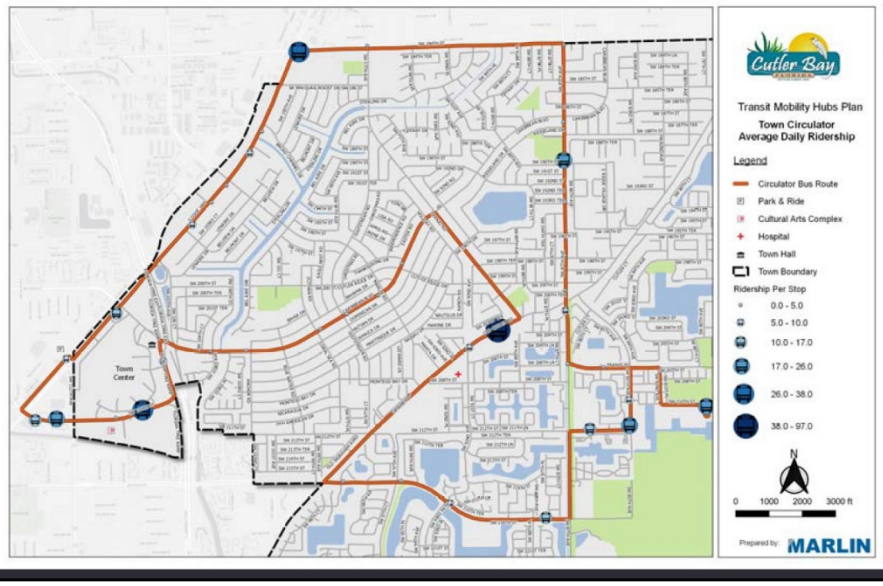
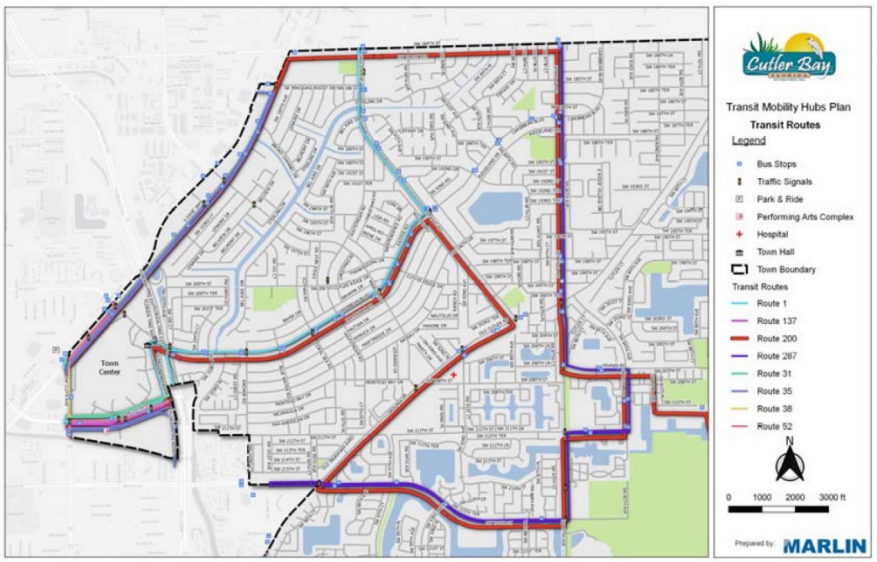
Average Daily Ridership



36

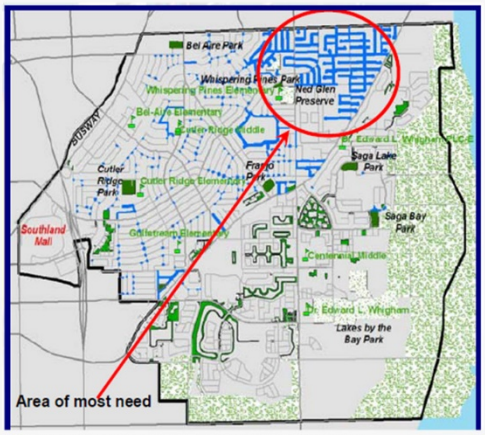
Metrobus Routes



37

Pedestrian Network

- Overall well developed network
- Missing sidewalks primarily in the northeast
- Town Center/Southland Mall has poor connectivity and little pedestrian connectivity
- 16 Bicycle & Pedestrian Destinations



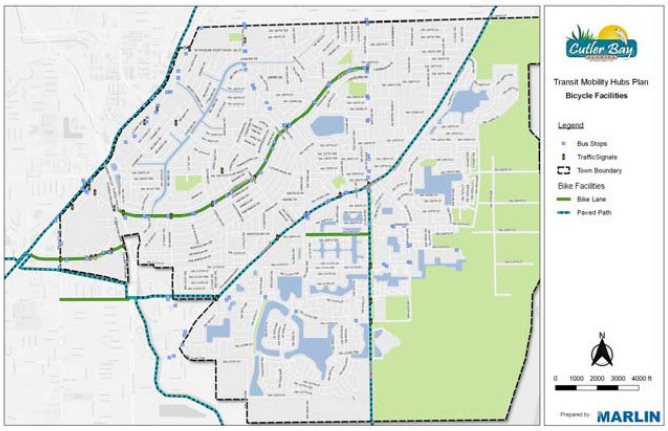
Source: Town of Cutler Bay Bicycle & Pedestrian Master Plan, 2011

38

Bicycle Network

Existing Bicycle Network

- Old Cutler Road
- Caribbean Boulevard
- SW 87th Avenue
- SW 211th Street
- SW 208th Street

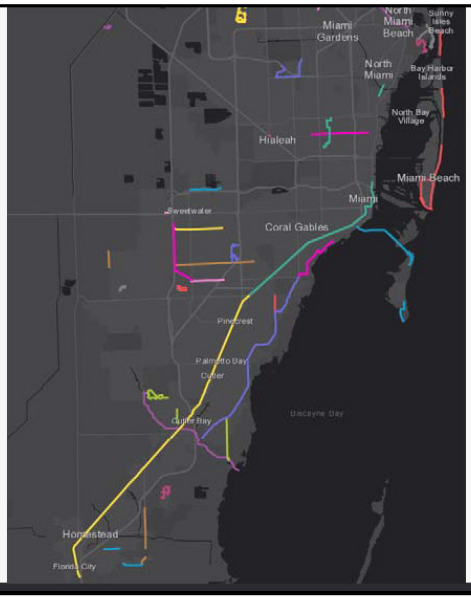


39

Regional Bicycle Network

Regionally Connected

- Old Cutler Trail
- Black Creek Trail
- South Dade Trail
- Biscayne Trail



40

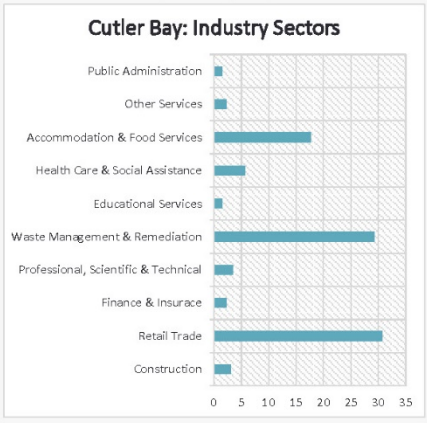
Employment

DATA

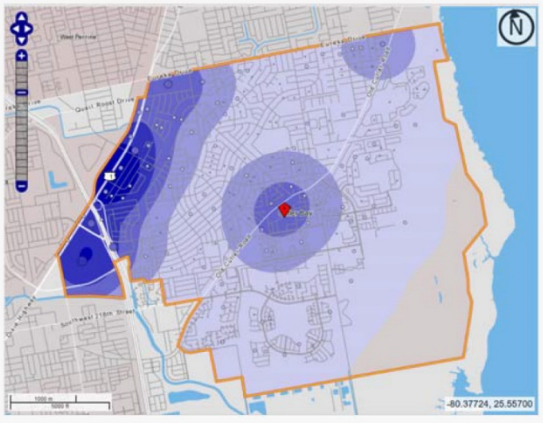
41

Stats

Businesses (2012): 5,941



Source: On The Map



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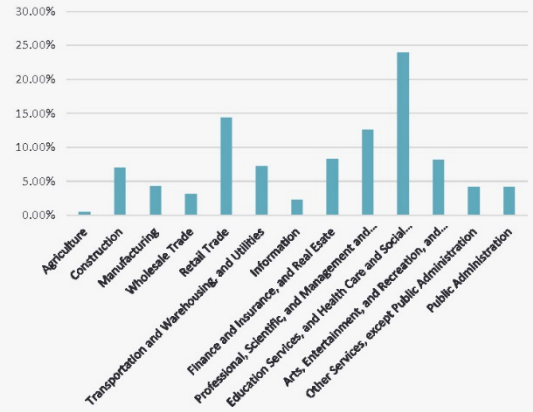
Cutler Bay Residents & Employed Industries

1. Education Services, Health Care and Social Services
2. Retail Trade
3. Professional, Scientific, Management, Administration and Waste Management



Source: ACS 2017 - 2013

43

Next Steps

44

Task 4: Conceptual Design

- » Hub Siting Analysis
- » Mobility Hubs Development
  - » Neighborhood
  - » Community
  - » Commercial
- » Review of ROW, Land Use & Bicycle Pedestrian Access
- » Assessment of Permit Requirements
- » Cost Estimates

SITE ENHANCEMENT COST ESTIMATES

Enhancement:	Minimum Investment:	Full Investment:
Bike and Pedestrian Enhancements:	$20,000	$370,000
High-Visibility Pick-Up and Drop-Off Areas:	$10,000	$10,000
Real-Time Digital Bus Time Display:	$80,000	$80,000
TOTAL ENHANCEMENTS COST:	**$110,000**	**$460,000**

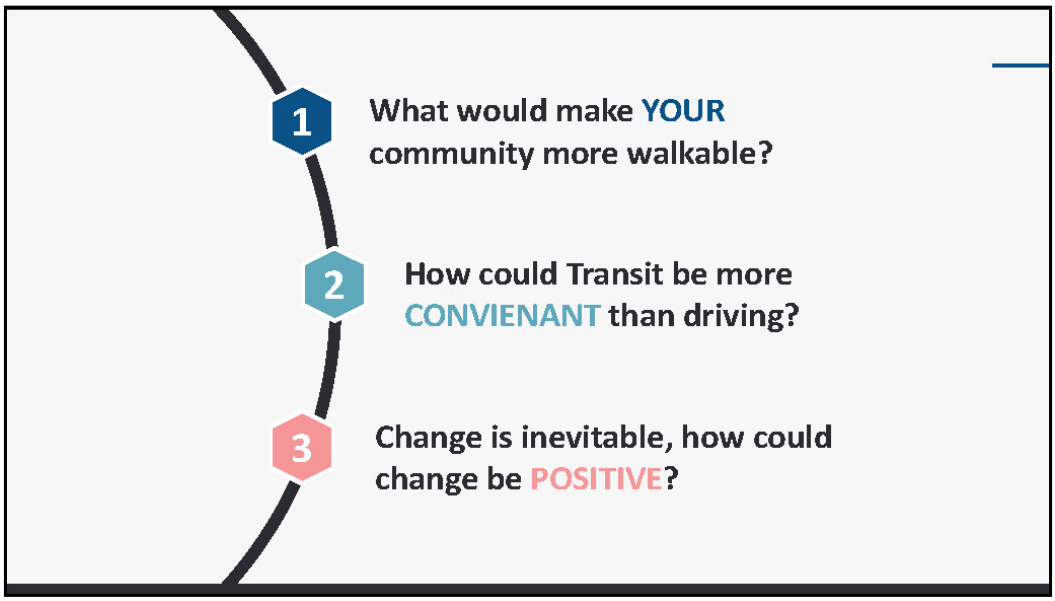
Source: Mobility Hubs – Project Connect

45

Public Workshop #2
Save the Date - September 3, 2019

Conceptual Designs → Hub Siting Analysis → Recommendations → Additional Public Input

46



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Take Our Survey!

English

https://forms.gle/7Yq3MKD78uPFaWBs8

Español

https://forms.gle/by3RRHDJPdkFZqh27

48

Discussion

49

Christina Fermin, AICP, *LEED Green Association*
CFermin@marlinengineering.com
954-870-5064

Cutler Bay
TPO Miami-Dade Transportation Planning Organization

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TOWN OF CUTLER BAY
PUBLIC INVOLVEMENT WORKSHOP

We want to hear from you!

PROJECT OVERVIEW

The Town of Cutler Bay was awarded a grant from the Miami-Dade Transportation Planning Organization to conduct a local area Strategic Miami Area Rapid Transit (SMART) Moves study for the purpose of enhancing connectivity between the Town and the South Dade Transitway. The Plan will analyze existing MetroBus service, the Cutler Bay Town Circulator operations, and identify enhancements to the transit services as well as identifying improvements for stops and transfer points. The focus on stops and transfer points is to improve accessibility, connectivity, mobility and safety for pedestrians, bicyclists and transit users by identifying locations for neighborhood, community and commercial level mobility hubs along the Town's roadway network. A mobility hub is the convergence of frequent transit, development with mixed land uses, density and people to cater to the mass movement of people.

WHAT TO EXPECT

The 2nd Public Involvement Workshop is a follow up to the first workshop held on April 30, 2019 and will be held in English and Spanish to obtain input from residents and stake holders and to share conceptual designs. Graphics will be displayed and the project team will be available to answer any questions.

The public involvement workshop is being conducted in a universally accessible location. Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in the hearing is asked to advise the Town at least four (4) business days before the hearing by contacting the Town Clerk at (305) 234-4262. If you are hearing or speech impaired, please contact the Town using the Florida Relay Service, 1(800) 955-8771 (TTY) or 1(800) 955-8770 (Voice) or dial 7-1-1.

Any non-English speaking person wishing to attend the public hearing should contact the Town Clerk at (305) 234-4262 at least four (4) business days prior to the hearing and an interpreter will be provided.

Save the Date for the 2nd Public Involvement Workshop!

WORKSHOP *(ENGLISH*)*

Date: **Monday, September 23, 2019**

Time: **6:00 p.m.-8:00 p.m.**

Place: **Cutler Bay Town Center**
Council Chambers, Ste 115
10720 Caribbean Boulevard
Cutler Bay, FL 33189

WORKSHOP *(SPANISH**)*

Date: **Monday, September 23, 2019**

Time: **2:00 p.m.-4:00 p.m.**

Place: **Pine Woods Villa**
Club House Dining Room
8420 SW 188 Terrace
Cutler Bay, FL 33157

**Interpretes bilingües estarán disponibles durante el taller*

***Bilingual interpreters will be available at the workshop*

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Cutler Bay
FLORIDA
INCORPORATED 2005

EL PUEBLO DE CUTLER BAY
TALLER DE PARTICIPACIÓN PÚBLICA

¡Queremos su opinión!

DESCRIPCIÓN DEL PROYECTO

El Pueblo de Cutler Bay recibió una subvención del estudio Miami-Dade Area Rapid Transit (SMART) Movimientos para perfeccionar la conectividad entre el pueblo y las vias de tránsito en el sur del condado. El plan analizará el servicio de MetroBus que ya existe, las operaciones de circulación del pueblo de Cutler Bay, y modernizará los servicios de tránsito, así como también reestablecerá paradas y puntos de traslados. El enfoque en las paradas y los puntos de traslado es mejorar la accesibilidad, conectividad, movilidad y la seguridad para peatones, ciclistas y usuarios de tránsito mediante la identificación de lugares para los centros de movilidad en el vecindario, en la comunidad y a nivel comercial a lo largo de la interconexión de carreteras del pueblo. Un centro de mobilidad es la union del tránsito fluvial, el desarollo de lugares con usos mixtos para residencias, comercios y lugares de entretenimiento, y el movimiento masivo de personas.

QUE ESPERAR

El segundo taller de participación pública es a continuación del primer taller que ocurrió el 30 de abril del 2019. Habra un taller en inglés y en español para recibir comentarios de los residentes y para compartir diseños conceptuales. Gráficos sobre el proyecto se mostrarán y el equipo de este proyecto estará disponible para responder cualquier pregunta.

El taller de participación pública se lleva a cabo en un lugar de acceso universal. Bajo las disposiciones de la Ley de Estadounidenses con Discapacidades, se le pide a cualquier persona que requiera adaptaciones especiales para participar en la audiencia que avise a la ciudad a menos cuatro (4) dias hábiles antes de la audiencia comunicándose con el Secretario Municipal al (305) 234-4262. Si tiene problemas de audición o del habla, comuniquese con el pueblo a través del servicio de retransmisión de Florida al 1 (800) 955-8771 (TTY) o al 1 (800) 955-8770 o marque el 7-1-1.

Cualquier persona que no hable inglés y desee asistir a la audiencia pública debe comunicarse con el Secretario Municipal al (305) 234-4262 al menos cuatro (4) dias habiles antes de la audiencia, y se le proporcionara un interprete.

Apunte la fecha para el segundo taller de participación pública!

TALLER *(ESPAÑOL*)*

Fecha: **Lunes, 23 de septiembre del 2019**

Hora: **2:00 p.m.-4:00 p.m.**

Lugar: **Pine Woods Villa**
Club House Dining Room
8420 SW 188 Terrace
Cutler Bay, FL 33157

TALLER *(INGLÉS**)*

Fecha: **Lunes, 23 de septiembre del 2019**

Hora: **6:00 p.m.-8:00 p.m.**

Lugar: **Cutler Bay Town Center**
Council Chambers, Ste 115
10720 Caribbean Boulevard
Cutler Bay, FL 33189

**Bilingual interpreters will be available at the workshop*

***Interpretes bilingües estarán disponibles durante el taller*

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CUTLER BAY MOBILITY HUBS PLAN

GUEST SIGN-IN SHEET

Public Meeting – Monday, September 23, 2019 | 2 P.M. to 4 P.M.
Pine Wood Villas – Club House Dining Room (8420 SW 188 Ter)

NAME	BUSINESS OR GROUP REPRESENTING	ADDRESS	TELEPHONE NUMBER	EMAIL ADDRESS
ALFREDO QUINTERO	TOWN OF CUTLER BAY	10720 CARIBBEAN BLVD	3/234-4262	AQUINTERO@CUTLERBAY-FL.GOV
Cheryl Motsco	Miami-Dade Transit	701 NW 1 Ct, Miami FL 33136	786-469-5162	motsco@miamidade.gov
YENIER VEGA	TOWN OF CUTLER BAY	10720 CARIBBEAN BLVD suite 105	3/234-4262	YVEGA@CUTLERBAY-FL.GOV
Sally Burns	~~Town~~	18867 SW 85 Ct Apt 22	7866414339	SALLYBURNS500@GMAIL
[illegible]		18867 SW 85 Ct Apt 11	305 776 2396	Govle7@Gmail
Maria Borros		18868 SW 85 Ct Ap 21	786 7408004	marielabosch1967@g.mail.com
Ulariele B[illegible]		" " "	" "	" " "
[illegible]		8498 SW 188 Apt-17	[illegible] 5619327342	
Ignacio [illegible]	Cutler Bay	" " Apto 10	7862129656	[illegible]@gmail.com
Stella [illegible]	CUTLER BAY	18868 SW 85 Ct Ap 18	—	—
Martha Crespo	CUTLER BAY	18867 SW ~~Ct~~ 84/9/9	305 924 4181	—
Martha Guerra	Cutler Bay	8630 SW 188 Ter apto 1	—	—
Raul Ayala	Cutler Bay		786 412 0169	—
[illegible]			786-614-4461	
Arlen Scott	Cutler Bay	18868 S.W. 85 Ct (15)	786-406-0166	
[illegible]	"	18868 SW 85 Ct (17)	786-[illegible]	

CUTLER BAY MOBILITY HUBS PLAN

MOBILITY HUBS
COME RIDE WITH US

GUEST SIGN-IN SHEET

Public Meeting – Monday, September 23, 2019 | 2 P.M. to 4 P.M.
Pine Wood Villas – Club House Dining Room (8420 SW 188 Ter)

NAME	BUSINESS OR GROUP REPRESENTING	ADDRESS	TELEPHONE NUMBER	EMAIL ADDRESS
Felipe Vaquero		18867 sw 83 PL apt.22 Cutler Bay	786 278 4922	N/A
Guillermina Marrero		1868 SW 83 court Apt 14 Cutler Bay	786-444-4779	[illegible]
Jesus Martinez		18867 SW 83 PL 16		[illegible]
Jose Rodriguez		7920 SW 204 ST	7-519-2069	Jose@Jrbuilders.us
[illegible]		18954 SW 86 Ct.	786 285 3250	
[illegible]		18868 SW 38 PL. 14 Miami FL	786 343-0872	—
[illegible]		18 867	78 638 544	—
Julio Delgado		18867 SW 83 PL	305 288 2837	—
Olga Eckert	Pine Woods Villa		305 542 8714	
Ignacio Garcia			305 788 1458	[illegible]
Lisa Maack	Marlin Eng.	1700 NW 66 ave	954-870 5069	LMaack@Marlinengineering
Berardo Gomez	" "	"	"	BGomez@marlinengineering
Christina Fermin	" "	"	"	CFermin@marlinengineering

CUTLER BAY MOBILITY HUBS PLAN

GUEST SIGN-IN SHEET

Public Meeting – Monday, September 23, 2019 | 6 P.M. to 8 P.M.
Cutler Bay Town Center - Commission Chambers (10720 Caribbean Boulevard)

NAME	BUSINESS OR GROUP REPRESENTING	ADDRESS	TELEPHONE NUMBER	EMAIL ADDRESS
HANSEN, TOM MARTIN		9490 MARTINIQUE DR	305-251-4299	LOBO1136@MSN.COM
ALFREDO QUINTERO	TOWN OF CUTLER BAY	10720 CARIBBEAN BLVD	305-234-4262	AQUINTERO@CUTLERBAY-FL.GOV
YENIER VEGA	TOWN OF CUTLER BAY	10720 CARIBBEAN BLVD.	305-234-4262	YVEGA@CUTLERBAY-FL.GOV
CHERYL MOTSCO	MIAMI-DADE TRANSIT	701 NW 1 COURT, MIAMI, FL	786-469-5162	MOTSCO@MIAMIDADE.GOV
ROGER CORIAT	TOWN OF CUTLER BAY	22851 SW 88 PLACE	305-234-4262	RCORIAT@CUTLERBAY-FL.GOV
JEANNINE GASTONDE	~~TOWN OF CUTLER BAY~~ TPO	DOWNTOWN MIAMI	305-375-1739	JEANNINE.GASTONDE@METROPA.ORG
CHRISTINA FERMIN	MARLIN ENG.		954-870-5070	CFERMIN@MARLINENGINEERING.COM
BERARDO GOMEZ	" "		" "	BGOMEZ@MARLINENGINEERING.COM
LISA MAACK	" "		" "	LMAACK@MARLINENGINEERING.COM
KATHRYN JORDAN		20659 SW 91 CT	305-877-2594	OVAF10@COMCAST.NET

Cutler Bay Public Meeting Notes

Monday, September 23, 2019

2 PM – 4 PM

Questions:

- This presentation and project is wonderful, I really want to see the implementation, what year will this plan and improvements begin?
    - Answer: BRT set to begin 2022, amenities would be done in phases. Franjo Road is the next complete streets project set to begin by the Town from the Complete Streets Master Plan and will be completed in 2 years. The Town is also filling in sidewalk gaps identified in the Bicycle and Pedestrian Master Plan along SW 184th Street. This project will begin soon. This is another Master Plan for the Town that the City will be implementing and incorporating into the budget planning process.
- It is my understanding that Cutler Bay will be implementing what Palmetto Bay has done, Freebee?
    - Answer: Yes, the Town is in partnership with the County who has released a Request for Proposal. The Miami-Dade Commission must decide on a vendor and finalize the contract, we will most likely see this service in approximately 6 months.
- Sunday Route used to come at 9 am at the stop on Old Cutler Road by the Publix. Now the bus comes after 10 am. Church service begins at 10 am and I can no longer attend.
    - Answer: Route 70 used to operate on Sundays and was cancelled, the County now provides the Town Circulator service on Sundays beginning at 10:40 am. We will note your comment and include within the report.
- I have a golden passport, why do I have to pay for parking at the parking garage at Dadeland South?
    - Answer: The Fee covers the maintenance of the facility. There is a park and ride facility located near Target at SW 112 Ave along the Transitway nearby which is free to park.
- Resident (who could not attend, but submitted this question) uses the bus every day, wants to know if the Town can provide service every 30 minutes rather than every hour. Has medical issues and has difficult time waiting long periods of time.
    - One of the recommendations includes adding a counter-clockwise bus to assist in cutting down the time.
- Do buses have cameras?
    - Yes, all buses have camera equipment though some of the older bus's cameras may be malfunctioning, County has purchased new buses with newer equipment.
- Homeless man who uses the Town Circulator is often at the bus stop on Old Cutler Road near Publix and gets upset, sometimes aggressive, if someone sits in his seat. How do bus operators handle riders who are aggresive?
    - Bus operators may call dispatch to provide police services, bus operators can also place "Call Police" on their outside sign display.

Comments/Requests:

- A lot of people in Pine Wood Villas and East Ridge rely on bus service to provide transportation.
- Biggest issue for local residents is crossing SW 87 Ave., requesting a sidewalk with flashing beacon.
- Resident was told that Town would not install a crosswalk across 87 Ave because Traffic Engineers are in disagreement for installing a crosswalk where a traffic light does not exist.
- Resident request for Town to look at installing security cameras at bus stops.
- Can the bus operator advertise when they take their break? We never know when the bus driver is taking a break and it can be inconvenient at times.
- Town Staff requested report to show each transit route separately with arrows.
- Homeless who use bus often emits an offending odor.

6 PM – 8 PM

Questions:

- Will there be a fee at the parking garage proposed at SW 112 Ave? Current park and ride is free.
    - The fees charged for parking garages typically cover maintenance, though the County may be able to work out an agreement to keep the parking free.
    - Recommendation will include a public private partnership to activate the space and keep costs down.
- Can we park near the SW 211th Street bus stop (near the Southland Mall)? Will I get towed if I park there?
    - Mercedes is using that lot right now and County no longer advertises a park and ride here. Therefore, this area is no longer a park and ride lot.

Comments:

- TPO requests photos of public workshops and final powerpoint.
- Security a concern for traveling at night along the transitway, female regular transit rider had many concerns, is afraid of traveling on transit after dark.

TOWN OF CUTLER BAY

MOBILITY HUBS PLAN

MOBILITY HUBS

COME RIDE WITH US

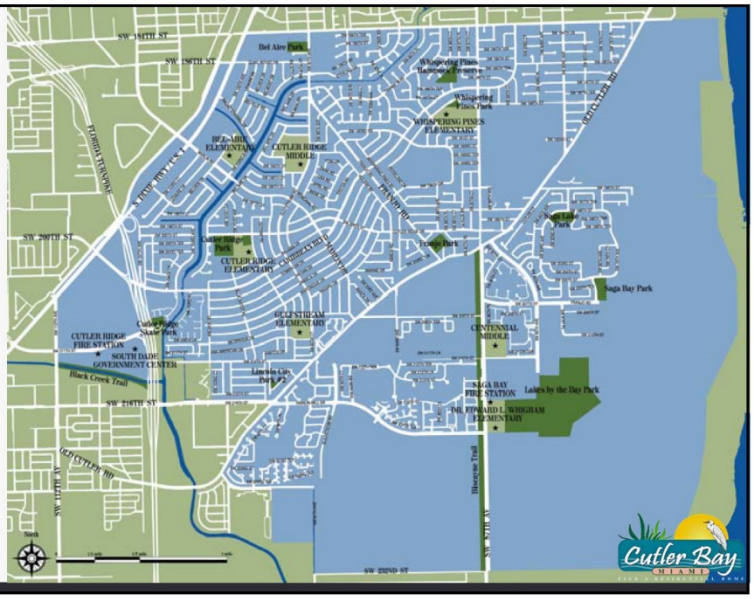
Cutler Bay MIAMI

TPO Miami-Dade Transportation Planning Organization

1

Overview

- Purpose
- Background
- Recommendations
- Mobility Hubs
- Open House



2

Purpose

3

Scope of **Services**

- **Identify** a comprehensive network of mobility hubs.
- **Improve** mobility and safety for pedestrians, bicyclists and transit users.
- **Assess** the Town Circulator and provide recommendations.
- **Final recommendations** will be evaluated and prioritized.

Boston Crosswalk

4

Schedule

Town of Cutler Bay Mobility Hub Plan

TASKS AND SUBTASKS	November '18	December '18	January '19	February '19	March '19	April '19	May '19	June '19	July '19	August '19	September '19	October '19
Task 1. Background Information/Existing Conditions												
a. Review relevant Multi-modal transportation planning studies												
b. Obtain and assess Existing / Future Land Use and Zoning and ROW												
c. Obtain MDD/TPW, Town Circulator Stop and Ridership Data and Files												
Task 2. Public Involvement and Coordinatio												
a. Project Management Teleconferences (6, 30 Minutes)												
b. Coordination with Public, TPO, MD DTPW												
c. Town Commission Meetings (2)												
d. Community Meetings (2)												
e. Study Advisory Group (3 meetings)												
Task 3. Data Collection and Transit Hub Assessment												
a. Interview Town Circulator Drivers/Operator												
b. Ride Town Circulator Routes and Use Speedtracker for Speed/Delay and Rider Survey												
c. Interview Metrobus Riders at transfer points and at Cutler Bay Transitway Stations												
d. Analysis of MDOVision results												
e. GIS Analysis of ridership and route demographics												
f. Development of alternative system routes and schedules												
g. Sketch Planning Stop/Hub Utilization Assessment												
h. Capital, O&M Cost Analysis (3 Schedules)												
Task 4. Mobility Hub siting and Conceptual Design												
a. Hub Siting Analysis up to 12 locations												
b. Development of Neighborhood, Community and Central Hub Templates												
c. Review of Right of Way, Adjacent Land Use and Ped/Bike Access												
d. Assessment of permitting requirements												
e. Cost Estimates 12 locations												
Task 5. Documentation												
a. Recommendations Prioritization												
b. Potential Funding												
c. Powerpoint presentations for Commission Meetings												
d. Final Report												

5

Background

The Strategic Miami Area Rapid Transit (SMART) Plan

6

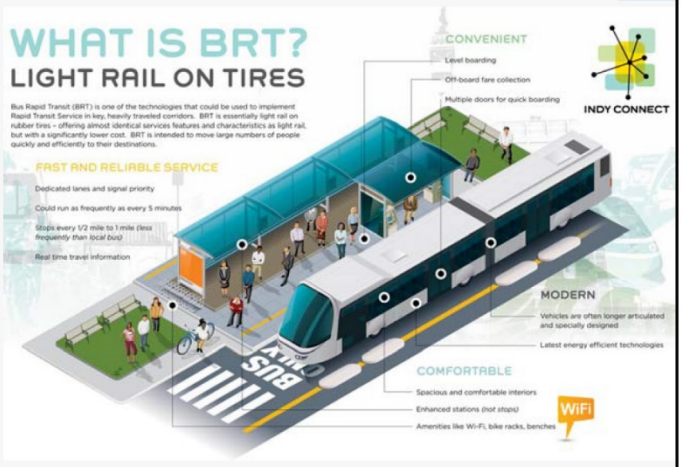
South Dade **Transitway**

- **20-miles from Dadeland South Metrorail Station** to SW 344th Street Park and Ride/Transit Terminal
- **Connects Miami CBD** to Village of Pinecrest, Village of Palmetto Bay, Town of Cutler Bay, City of Homestead, and Florida City.
- **BRT to begin by 2022**

7

Bus Rapid **Transit (BRT)**

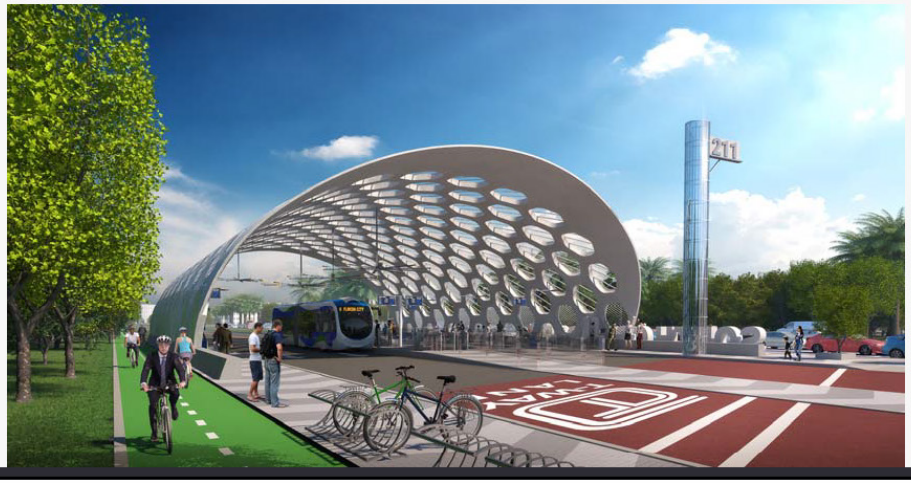
- High-Quality Bus-Based Transit System
- Dedicated Lanes
- Transit Signal Preemption
- Fast
- Comfortable
- Frequent



8

Station **Rendering**

DRAFT – South Dade Rapid Transit Corridor PD&E August 2018



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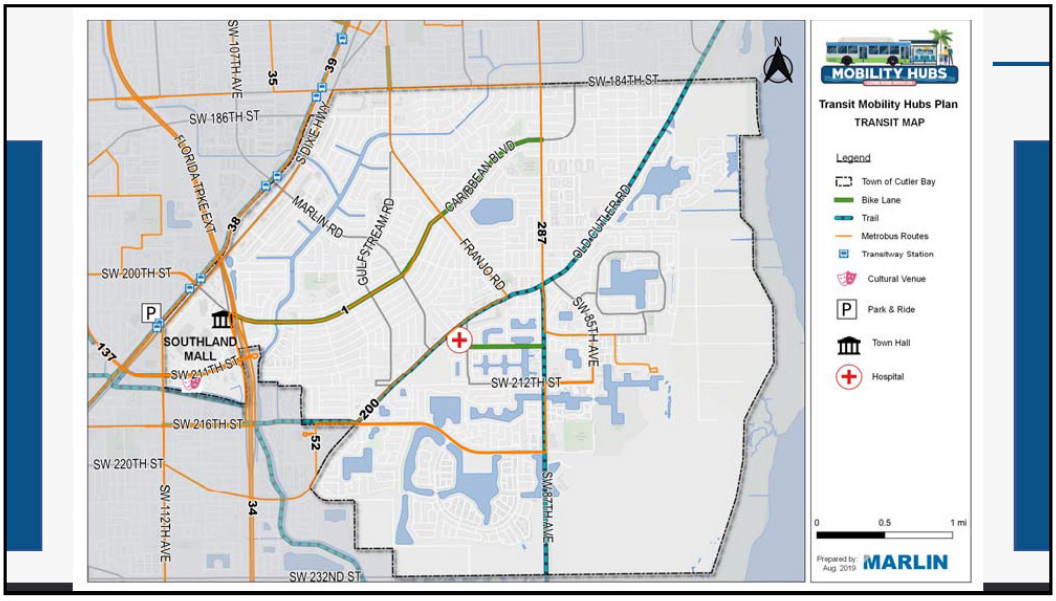


10

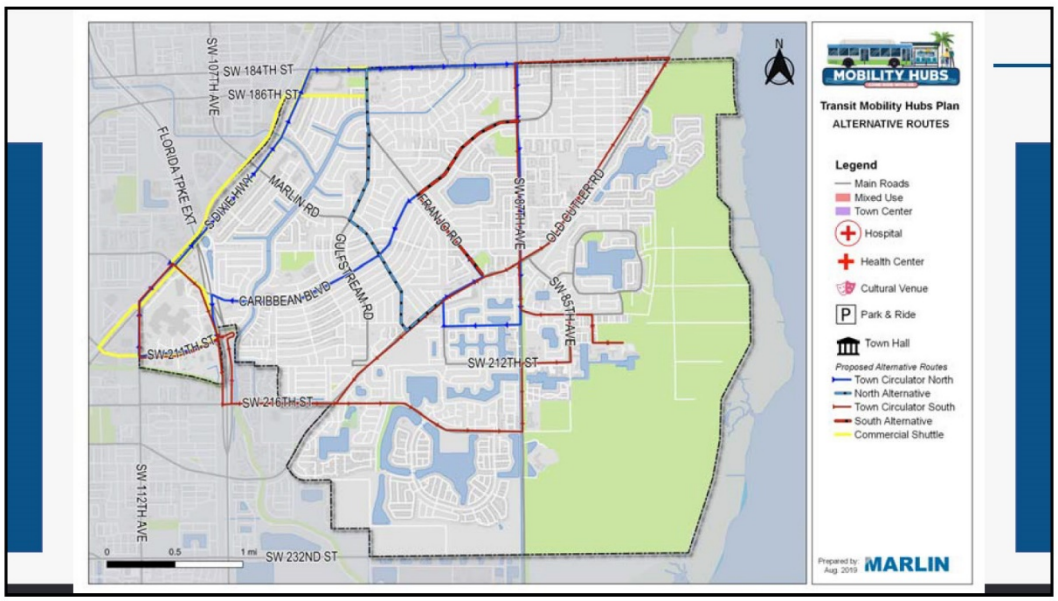
Recommendations

11

Town Circulator **(Route 200)**

- **IMMEDIATE:**
  - Extend hours of operation to include peak travel periods
  - Add additional bus counter-clockwise
- **FUTURE (Optional):**
  - Bifurcate Route with modifications to serve additional residents

12



13

Mobility **Hubs**

14

What is a **Mobility Hub?**

"a location where more than one transit route converge, an area where bicycle and pedestrians have access to local land uses, major generators and have land uses that cater the mass movement of commuters."

– Town of Cutler Bay Complete Streets Corridor Analysis

Source: LA Department of Planning *Mobility Hubs A Reader's Guide*

15

Basic Transit **Amenities**

- Shelter
- Seating
- Bike Rack
- Trash/Recycling Receptacle
- Signage
- Lighting

16

Mobility Hub **Amenities**

MOBILITY HUB TYPE	Bicycle Share	Bicycle Storage Locker	Bicycle Repair Station	Car Share	EV Charging Station	Park & Ride w/ Smart Parking	Microtransit	Kiss & Ride	TNC Waiting Area	Package Pickup Kiosk	Retail	Public Space	Public Art	WiFi	Info Kiosk	Lending Library	Enhanced Security	USB Charging Port	Real-Time Signage
NEIGHBORHOOD	X	O	O	O	/	/	O	/	/	O	O	O	X	O	O	X	O	X	X
COMMUNITY	X	O	O	X	X	O	O	O	O	X	X	X	X	O	O	X	X	X	X
REGIONAL	X	X	X	X	X	X	O	X	X	X	X	X	X	X	X	X	X	X	X

X – RECOMMENDED O – OPTIONAL / - NOT APPLICABLE

17

Mobility **Hubs**

Neighborhood Hubs

Lakes by the Bay
» 216 St / 85 Ave

Cutler Ridge
» Caribbean Blvd / Anchor Rd

Caribbean / Franjo
» Caribbean Blvd / Franjo Rd

Pine Wood
» 87 St / 190 St

Eureka Drive East
» 184 St / Old Cutler Rd

Lincoln City Park
» 102 Ave / 217 St

The Isles
» 216 St / Vacant Parcel

Community Hubs

Marlin
» Marlin Rd / US 1

Eureka Drive West
» 184 St / US 1

Town Center
» Old Cutler Rd / Franjo Rd

Miami Heights
» 200 St / US 1

Regional Hub

Cutler Bay
» 112 Ave & US 1

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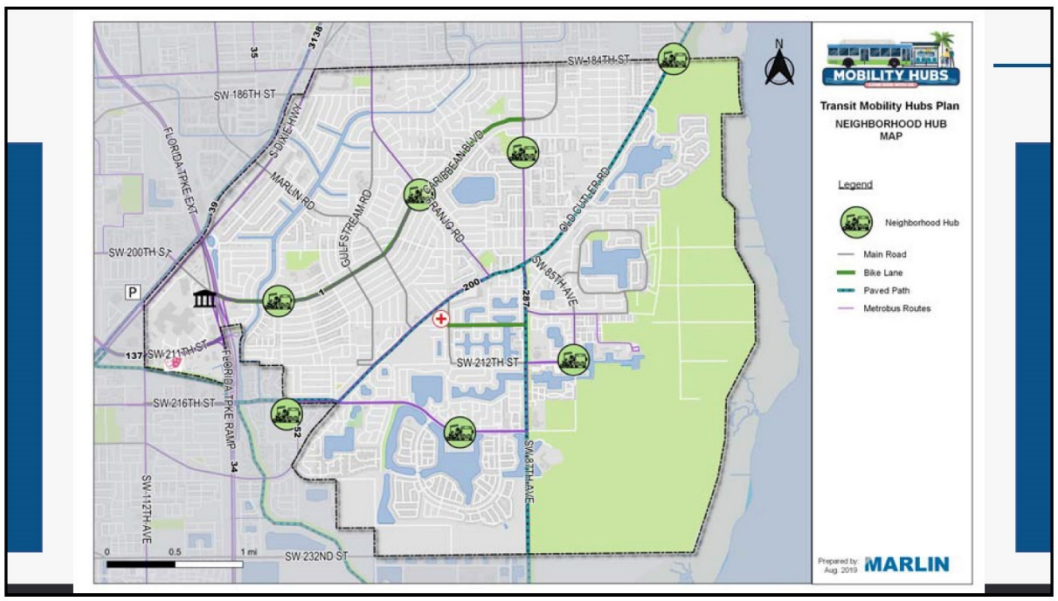
MOBILITY HUBS
Transit Mobility Hubs Plan
NEIGHBORHOOD HUB MAP
Legend
Neighborhood Hub
Main Road
Bike Lane
Paved Path
Metrobus Routes
SW 184TH ST
SW 186TH ST
SW 200TH ST
SW 211TH ST
SW 212TH ST
SW 216TH ST
SW 232ND ST
SW 112TH AVE
SW 87TH AVE
SW 85TH AVE
FLORIDA TPKE EXT
FLORIDA TPKE RAMP
GULFSTREAM RD
MARLIN RD
CARIBBEAN BLVD
RANCH O RD
OLD CUTLER RD
Prepared by:
Aug. 2019
MARLIN

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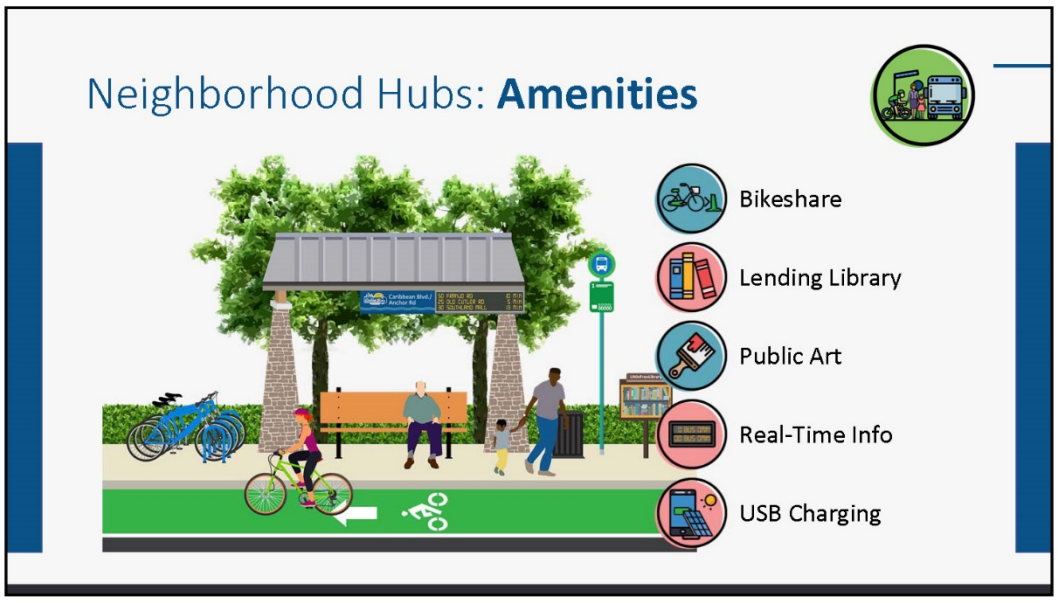
Neighborhood Hubs: Amenities
Bikeshare
Lending Library
Public Art
Real-Time Info
USB Charging

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Neighborhood Hubs: **Infrastructure**

All Neighborhood Hubs	Where Feasible
» Missing sidewalk links	» Pedestrian Lighting
» Enhanced Pedestrian Crossings	» Bike Lanes
» Pedestrian Signage	» Curb Extension
» Enhanced Landscaping	» Midblock Crossing
» Artistic Box Wraps	» On-Street Parallel Parking
	» Multiuse Path

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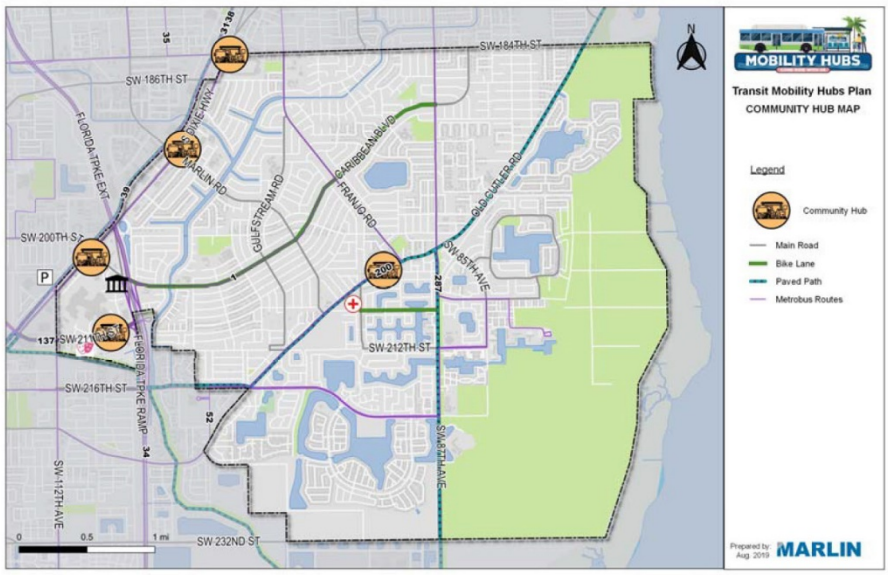

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Community Hubs: **Amenities**

- Carshare
- EV Charging
- Cameras
- Package Pickup Kiosk
- Public Space
- WiFi
- Bicycle Storage Locker
- Park & Ride
- Kiss & Ride

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Community Hubs: **Infrastructure**

All Community Hubs	Where Feasible
» Missing sidewalk links	» Public Plaza
» Enhanced Pedestrian Crossings	» Park & Ride
» Pedestrian Signage	» Kiss & Ride
» Enhanced Landscaping	» Midblock Crossing
» Artistic Box Wraps	» Public Art
» Bike Signal	
» Bike Lanes or Multiuse Path	
» Pedestrian Lighting	

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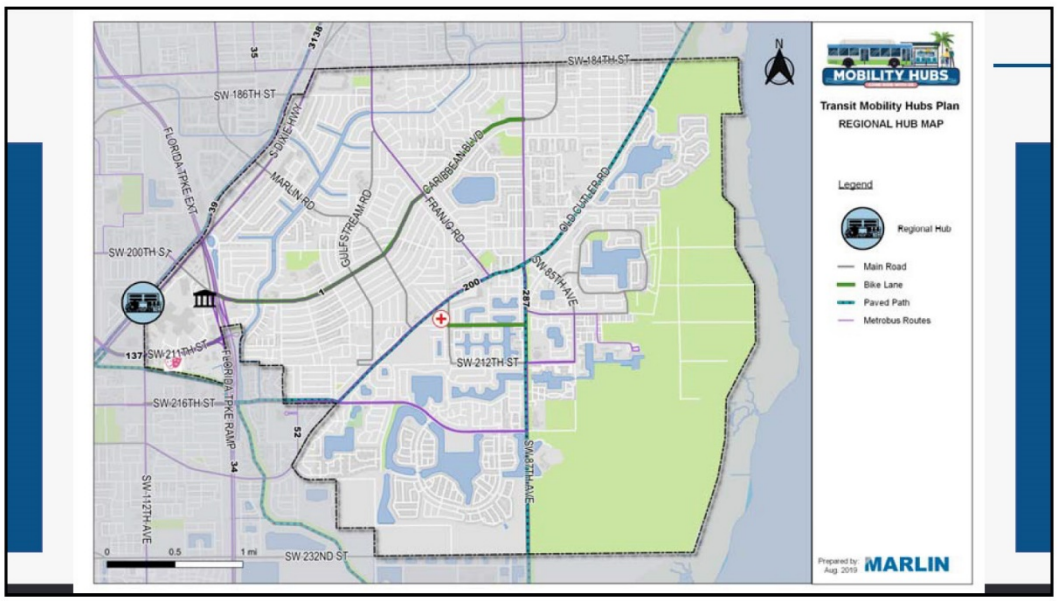
MOBILITY HUBS
Transit Mobility Hubs Plan
REGIONAL HUB MAP
Legend
Regional Hub
Main Road
Bike Lane
Paved Path
Metrobus Routes
SW 184TH ST
SW 186TH ST
SW 200TH ST
SW 211TH ST
SW 212TH ST
SW 216TH ST
SW 232ND ST
SW 112TH AVE
SW 87TH AVE
SW 85TH AVE
FLORIDA TPKE EXT
FLORIDA TPKE RAMP
SUNSET STRIP
MARLIN RD
GULFSTREAM RD
CARIBBEAN BLVD
FRANJO RD
OLD CUTLER RD
Prepared by:
Aug. 2019
MARLIN

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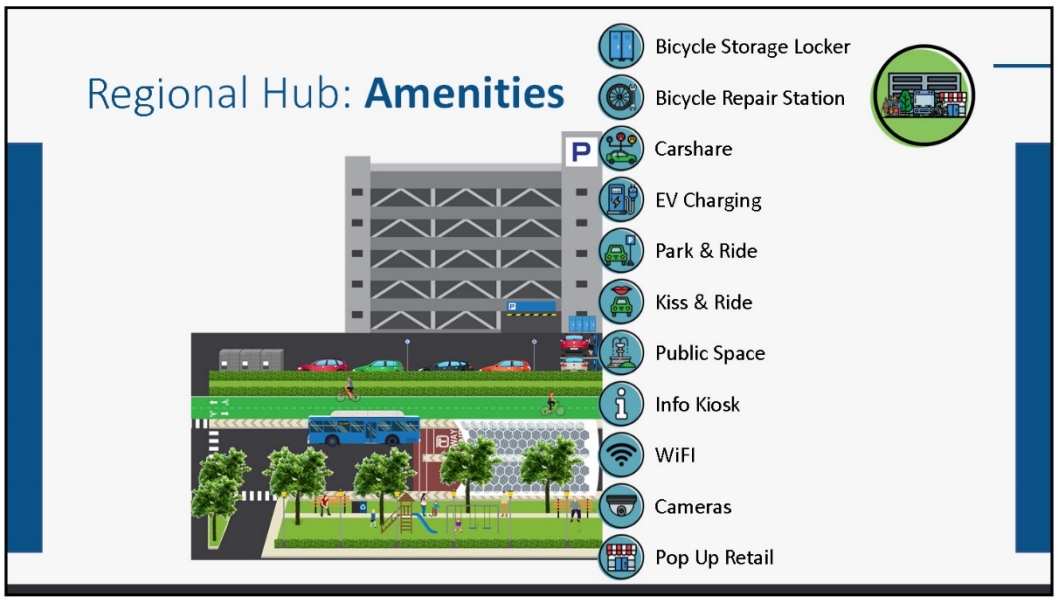
Regional Hub: Amenities
Bicycle Storage Locker
Bicycle Repair Station
Carshare
EV Charging
Park & Ride
Kiss & Ride
Public Space
Info Kiosk
WiFI
Cameras
Pop Up Retail

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Regional Hub: **Infrastructure**

Recommendations	Town of Cutler Bay
» Parking Garage	» Enhanced Landscaping
» Kiss & Ride	» Mixed Use Development
» TNC Waiting Area	» Linear Park
» Rework of Entrance	» Information Kiosk
» Enhanced Crossings	» Artistic Box Wraps
» Pedestrian Signage	» Public Art
» Bicycle Storage Locker	

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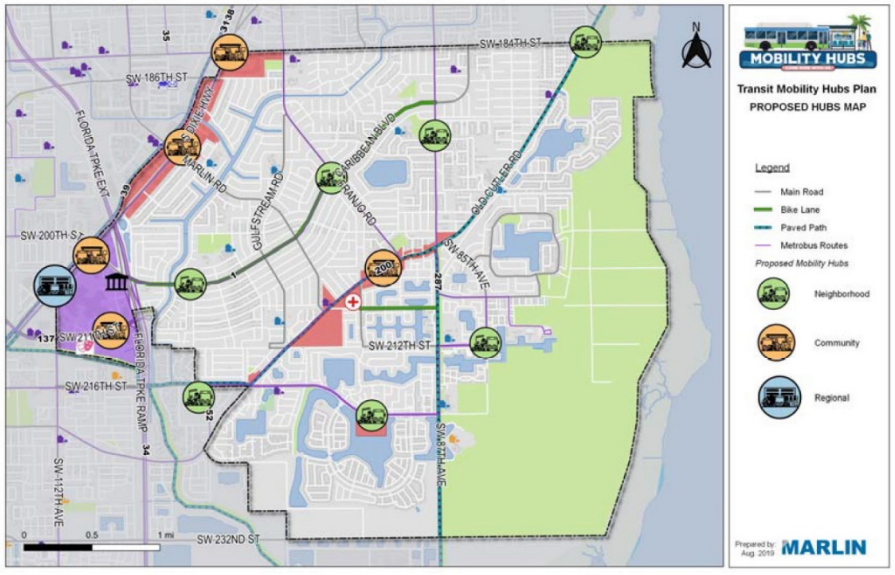

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Recommendations

- Support Previous Recommended Bike/Ped Improvements
- **Support of Town Street Tree Master Plan**
- Supports Increased Density & Mixed Use along US 1
- **Branding/Marketing Plan**
- Curbside Management Plan
- **TDM Program**
- **Explore the use of Shared Mobility**
- Create Transit Partnerships with Neighboring Communities
- **Implement Green Infrastructure Techniques**
- Pedestrian Promenade along US 1 / Transitway Island

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Reimagining US1/**W Dixie Highway**

Location: **US1 & SW 200 Street**

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1. What would make **YOUR** community more walkable?
2. How could Transit be more **CONVIENANT** than driving?
3. Change is inevitable, how could change be **POSITIVE**?

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TOWN OF CUTLER BAY

MOBILITY HUBS PLAN

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