

FINAL REPORT DECEMBER 2019





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<u>ACKNOWLEDGEMENTS</u>

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Chapter 1 EXECUTIVE SUMMARY

SMART Plan South Dade Transitway Corridor Economic Mobility and Accessibility

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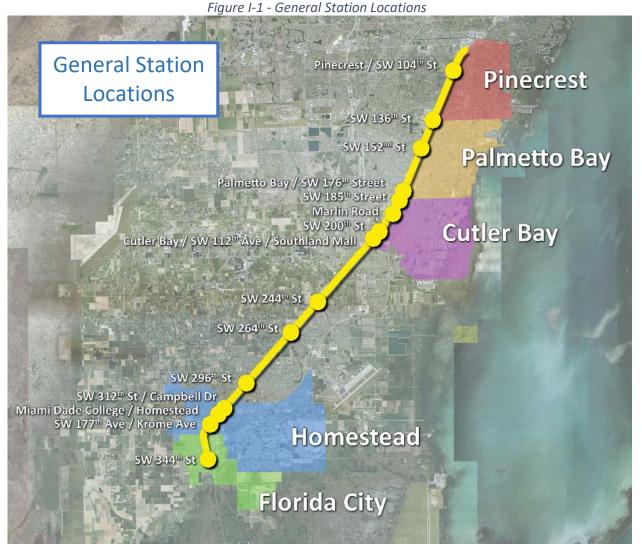


I. EXECUTIVE SUMMARY

a. Transportation Planning Organization Vision

"Provide mobility options for Miami-Dade County residents and visitors and promote economic competitiveness by investing in the County's transportation infrastructure while protecting the environment and maximizing the efficiency of the existing transportation system."

Recognizing that transit supportive land use plays a critical role in the success of major rapid transit investments, the Miami-Dade Transportation Planning Organization (TPO) was tasked with examining this interrelationship to complement the Strategic Miami Area Rapid Transit (SMART) Plan rapid transit initiative. The SMART Plan is intended to help achieve county and community goals though the integration of transportation land use planning and development of strategies. The General Station Locations, in the South Corridor, are shown in Figure I-1 below.



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In furtherance of this goal, on April 21, 2016, the Miami-Dade TPO Governing Board officially adopted and endorsed the proposed SMART Plan. The SMART Plan called for the study of six rapid transit corridors (Beach Corridor, East-West Corridor, Kendall Corridor, North Corridor, Northeast Corridor and **South Corridor (South Dade Transitway).** In addition, eight Bus Express Rapid Transit (BERT) corridors are being proposed. When completed they will significantly improve transportation mobility throughout Miami-Dade County.

On Thursday, August 30, 2018, the Miami-Dade TPO Governing Board selected Bus Rapid Transit (BRT) as the Locally Preferred Alternative (LPA) transit mode for the South Dade Transitway. It was determined that this mode was the most feasible for the corridor at the time. Once completed, BRT will provide rail-like travel time, 15 iconic stations, level boarding through all doors, and pre-paid fares for speedy access. BRT will also provide enhanced safety features and other upgrades along dedicated lanes with multi-layered service lines.

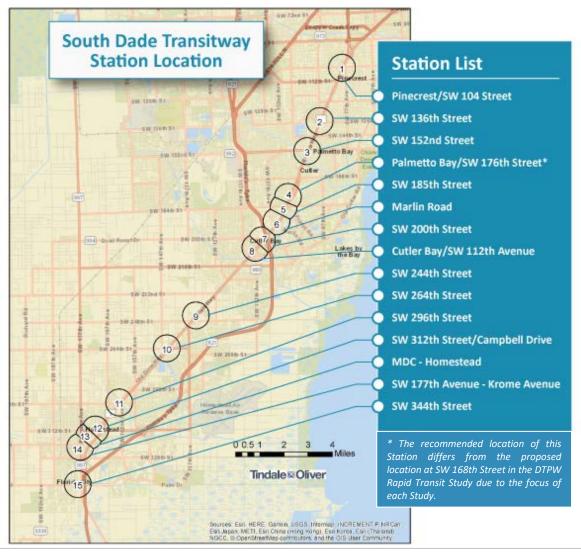


Figure I-2 - South Dade Transitway Station Location

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b. Purpose and Introduction

The purpose of this study is to recommend accessibility improvements in the South Dade TransitWay corridor and estimate the economic impact of the land use recommendations from the Land Use Scenario & Visioning Planning Study. That study was a scenario planning exercise. It demonstrated the effect on transit ridership in the corridor if increased development was attracted to the station areas along the South Dade Transitway, along with a discussion of land use regulation changes that would be necessary to enable that increased development.

The South Dade TransitWay corridor extends for approximately 20 miles from SW 344th Street on the south terminus to the Dadeland South Metrorail Station along the Transitway. Portions of Florida City, City of Homestead, Town of Cutler Bay, Village of Palmetto Bay, Village of Pinecrest and Miami-Dade County are within its limits. It should be noted that the southern portion of Miami-Dade County has the fastest population growth in the County and is projected to experience a 50 percent increase in population and 65 percent increase in employment by 2040.

All the population and employment increases, recommended accessibility improvements, and estimated economic benefits discussed in this study are within the half mile radius circles surrounding the fifteen stations recommended in the Rapid Transit Project.

c. Station Area Connectivity Diagrams

Miami-Dade County has committed to improve the ability for its residents to access destinations using a range of transportation options. An important aspect of this commitment is to investigate and identify ways that could improve connectivity near transitways. This section briefly describes the elements of improving the connectivity within the 15 stations identified along the Miami-Dade South TransitWay.

Connectivity discusses how well people can move around their community using a variety of modes (walking, biking, scooters, ride-share, private car, public transportation). This is particularly important along the South Dade Transitway. When residents feel more comfortable taking modes of transportation other than a car, transit ridership is seen as more convenient and increases. This is sometimes described using the terms "walkability" and "bikeability." In order for something to be truly considered walkable and bikeable, residents must feel safe and comfortable using these modes of transportation, and the destination must be within a 5-to-10-minute walking radius of the resident. This section examines where multi-modal elements should be considered to improve the appeal of walking, biking, and using transit to enable walkable nodes of development along the TransitWay.

d. Station Selection Analysis

The fifteen stations were examined across an array of measures to identify for further study the three stations with the greatest potential for transit success. The evaluation criteria were:

- Projected Transit Boarding
- Number of Transit Routes and Modes Served

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- Accessibility by Walking, Bicycle and Automobile
- Potential Future Population and Employment within the Walk, Bicycle and Vehicle/Circulator Travel Sheds
- Place Making Potential
- Public Acceptance of Transit Oriented Development (TOD) Principles; and
- Redevelopment Potential

The three stations recommended for further study were:

- 1. Station 8 SW 112th Ave/Southland Mall in Cutler Bay
- 2. Station 9 SW 244th Street in unincorporated Miami Dade County
- 3. Station 13 Miami-Dade College in Homestead

e. Station Area Development Potential

For the three stations identified in the Station Selection section, this section estimates the economic benefit of the increases in population and employment contained in the Preferred Vision Scenario. The population increase is translated into dwelling units by type, their projected taxable value and consequent ad valorem tax revenue, along with expected retail spending within a half-mile of the station by those new residents. The employment increase is divided into different employment types, with estimates of the amounts of different types of commercial space necessary to accommodate them, their projected taxable value and consequent ad valorem tax revenue.

Within the three station areas, by the year 2040, the additional annual ad valorem tax revenue is estimated at \$40 million, and the additional annual retail spending estimated at \$46 million.

f. Implementation Plan

The Station Connectivity Section depicted opportunities to improve access to the transit stations from the surrounding neighborhoods by constructing sidewalks, bike lanes, bike paths and pedestrian crosswalks. Cost estimates were prepared for the same three stations that were also the subject of the economic and fiscal analyses.

The dimensions and counts of proposed facilities at the stations are consistent with the exhibits contained in the Station Connectivity section.

The dimensions and counts are for a full half-mile circle, though stations 8 and 13 overlap with neighboring stations. The unit cost estimates are based on historical averages of actual costs observed by FDOT in District 6.

The total estimated cost for all proposed facilities at the three stations are:

- Station 8 Cutler Bay/SW 112th Ave./Southland Mall: \$5.3 million
- Station 9 SW 244th Street: \$5 million
- Station 13 Miami Dade College Homestead: \$1.8 million

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Station 8 - Cutler Bay/SW 112th Ave./Southland Mall

At Station 8 projects would need to be implemented by both the Town of Cutler Bay and Miami-Dade County.

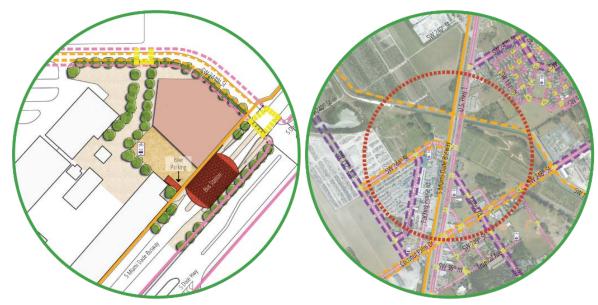
Figure I-3 - Station 8 Recommendations Illustrative Diagram and Multi-Modal Infrastructure



Station 9 – SW 244th Street

At Station 9, projects would need to be implemented by Miami-Dade County.

Figure I-4 - Station 9 Recommendations Illustrative Diagram and Multi-Modal Infrastructure



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Station 13 – Miami Dade College Homestead

At Station 13, projects would need to be implemented by the City of Homestead.

Figure I-5 - Station 13 Recommendations Illustrative Diagram and Multi-Modal Infrastructure



A separate TPO task being conducted to identify available revenue sources for all SMART Plan corridors was underway. In general, funding sources could include:

- Sales tax (PTP People's Transportation Plan)
- Ad valorem taxes (county and municipality)
- Local option gas taxes
- Impact fees
- State formula funds (e.g. DDR District Dedicated Revenue)
- State discretionary grant funds (e.g. CIGP County Incentive Grant Program)
- Federal formula funds (e.g. STBGP Surface Transportation Block Grant Program)
- Federal discretionary grant funds (e.g. TAP Transportation Alternatives Program)

Chapter 2 PURPOSE AND INTRODUCTION

SMART Plan South Dade Transitway Corridor Economic Mobility and Accessibility

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II. PURPOSE AND INTRODUCTION

a. What is the SMART Plan

Recognizing that transit supportive land use plays a critical role in the success of major rapid transit investments, the Miami-Dade TPO was tasked with examining this interrelationship to complement a rapid transit initiative entitled Strategic Miami Area Rapid Transit (SMART) Plan. The SMART Plan's intent is to help achieve county and community goals though the integration of transportation land use planning and development of strategies. The projects associated with this initiative are intended to significantly improve transportation mobility throughout Miami-Dade County, providing a world-class transit system that will support economic growth and competitiveness and link the County more effectively to the local, regional and national transportation network.

The Plan calls for the study of six rapid transit corridors (Beach Corridor, East-West Corridor, Kendall Corridor, North Corridor, Northeast Corridor and South Corridor (South Dade Transitway)). In addition, eight Bus Express Rapid Transit (BERT) corridors are also being proposed. See SMART Plan map in Figure II-1.

All the individual corridor studies will evaluate the implementation of a cost-effective rapid transit system and infrastructure improvements along the Transitway as part of an overall interconnected rapid transit network.

b. Brief Project History

In 1969, the Miami Urban Area Transportation Study (MUATS) concluded that rapid transit would be feasible and desirable (at a time when the population of then Dade County equaled 800,000).

In 1977, the U.S. Department of Transportation (DOT) committed \$575 million in funds as its share to construction Stage I of the Metrorail from Dadeland to NW 67th Street (with the County population at 1,400,000).

In 1984-85, Metrorail opened to the public (with the County population at 1,750,000).

In 1986, Metromover opened Downtown. In 1994, the system expanded to the Omni and Brickell.

In 2002, with Miami-Dade County's population at 2,530,000, voters approved a half penny sales surtax to demonstrate a local commitment to mass-transit expansion. This local commitment confirmed the desire and dedication of Miami-Dade County to seek and implement alternative transportation methods, at all levels of the community. This dedicated funding source is available to match State and Federal funds for the implementation of this Plan.

On April 21, 2016, with the County's population standing at 2,700,000, the TPO Governing Board officially adopted and endorsed the proposed Strategic Miami Area Rapid Transit (SMART) Plan. As of this writing, it is anticipated that the overall cost of the SMART Plan will be approximately \$3.6 billion. State and federal funding partnerships will be critical to deliver these projects.

On August 30, 2018, following the recommendation of the Miami-Dade Department of

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Transportation and Public Works (DTPW) Project Development and Environmental (PD&E) Study for the South Dade Transitway Rapid Transit Corridor Project, the TPO Governing Board selected Bus Rapid Transit (BRT) as the Locally Preferred Alternative. The TPO also voted to revisit Heavy Rail Transit (HRT) (e.g., Metrorail) once ridership reaches 35,000 boardings per day on the South Dade Transitway.

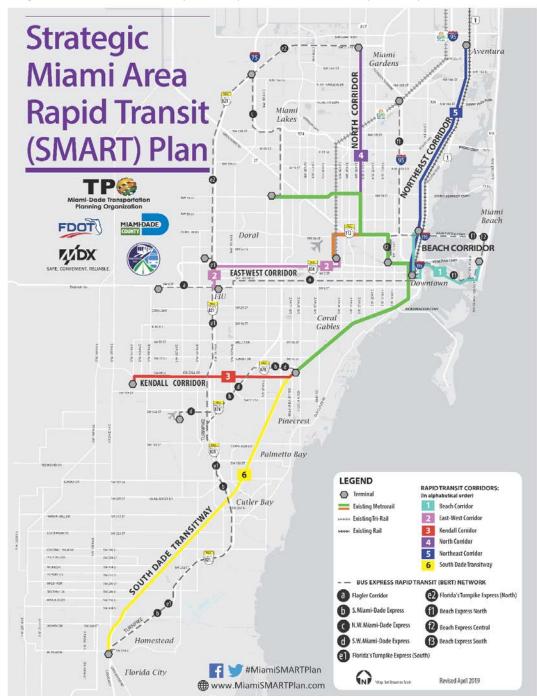


Figure II-1 - SMART Plan Proposed Rapid Transit and Bus Express Rapid Transit Corridors

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c. Context of the South Dade Transitway

The overall purpose of The Rapid Transit Project is to facilitate the movement of passengers to and from South Miami-Dade to the urban core of Downtown Miami and beyond and, as well as within the Corridor.

Unique among the SMART Plan corridors, the South Corridor follows the South Dade Transitway, with an existing dedicated right-of-way for the exclusive use of buses. The Transitway corridor is the location of what was once the old Florida East Coast (FEC) Railroad corridor right-of-way (Flagler Railroad). The first phase of the Busway was opened to transit in February 1997, while the final segment opened in December 2008. Today, there are approximately 18,000 daily transit boardings, removing many cars from South Dixie Highway (US-1). However, there is potential for many more riders to make use of transit along this corridor.

The Corridor encompasses a wide range of types of places and socioeconomic conditions. The communities surrounding the Transitway are experiencing the fastest population growth in Miami-Dade County – it is projected that the southern portion of Miami-Dade County will experience a 50 percent increase in population and 65 percent increase in employment by 2040. Along the corridor there are already numerous signs of increased investment with many new multifamily developments underway. Yet there are also scattered areas of disinvestment and neglect.

The Transitway Corridor spans a key commercial spine in southern Miami-Dade County. There are multiple malls and commercial areas along the corridor which have been designated as "Activity Centers," where redevelopment that complements the Transitway is already supported (e.g., Dadeland Mall, The Falls, and the Southland Mall). Additionally, the Jackson South Community Hospital and Miami-Dade College Homestead Campus are adjacent to the corridor. Numerous community features have been identified within the project area including local parks, schools, religions centers, community centers, public lands, civic centers, government buildings, and a cultural center.

d. The Land Use Scenario & Visioning Planning Study

The Notice to Proceed for the Land Use Scenario & Visioning Planning Study was given to the Calvin Giordano and Associates (CGA) team in August 2017. The Economic Mobility and Accessibility Study builds upon its findings.

Charrettes were held at locations spread along the corridor with the goal of introducing local residents to the study process and soliciting input about their impressions and reactions towards various notions of development intensification around the transit stations.

Based on the input received at those interactive public sessions, several land use scenarios were then developed consistent with a range of possible futures, including HRT and BRT in the corridor.

The land use scenarios were tested for their effect on transit ridership when compared with the adopted 2040 population and employment forecast for the corridor. Detailed modeling took place in order to develop all final Station Area population and employment projections.

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At this point, following the recommendations of a separate study effort, the TPO Governing Board selected BRT as the transit mode for the corridor. As a result, the development intensity added in the final recommended land use scenario, called Preferred Vision, is consistent with BRT's commensurate ability to attract investment around the stations, relative to HRT. The team also developed the corresponding forecasted ridership that this land use scenario supports.

The next step involved examining the adopted land use policies for all the affected jurisdictions along the corridor: the Villages of Pinecrest and Palmetto Bay, the Town of Cutler Bay, City of Homestead, Florida City and Unincorporated Miami-Dade County; first, to ensure the final recommendations would be consistent with each community's vision and goals; and second, to determine how well (or not) those adopted policies support the potential additional densification and intensification being considered. Finally, general policy changes and recommendations were identified, where needed to support the additional densification and intensification, as the basis for an implementation strategy.

e. Economic Mobility

Economic Mobility is described as the ability to move up the income ladder. The ladder has many rungs whose examination is outside the scope of this study (childhood nutrition levels, affordable healthcare, affordable education), but one is the ability to reach the job that maximizes the return on an individual's skill set. Transit is vital to any worker, particularly those without a personal vehicle, to expand access to a geographically wider pool of employment opportunities. Creating these connections improves labor market efficiency, in which at its maximum:

- Every worker is employed at the job that best rewards their skillset; and
- Every employer has filled their positions with employees whose skillsets best suit their position at the wage the employer is willing to pay.

Thus, improving transit service increases accessibility and the likelihood that employees can reach their best employment opportunity, and employers can hire the best employees for their business. That economic benefit to individuals and businesses is the purpose of the recommendations contained in this report.

f. Report Structure

This report is based on the Preferred Vision land use scenario presented at the conclusion of The Land Use Scenario & Visioning Planning Study. That study was a scenario planning exercise. It demonstrated the effect on transit ridership in the corridor if increased development was attracted to the station areas along the South Dade Transitway, along with a discussion of land use regulation changes that would be necessary to enable that increased development.

This introduction includes the Literature Review section which examines some of the publications - not already examined in the Land Use Scenario & Visioning Planning Study - that provide insight into the opportunities and challenges facing the corridor.

In the **Mobility Enhancements** section, the existing infrastructure that improves access to each station is depicted along with opportunities for improvement, and a smaller scale depiction of

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the area immediately surrounding the station platform.

In the **Station Selection** section, the fifteen station areas are examined across a range of measures, to identify the three that are closest to their potential to increase transit ridership. These three stations are the subject of further, more detailed examination. All fifteen station areas to be served by the new rapid transit service will benefit from a more detailed analysis to fully achieve their potential to support increased transit ridership and bring their ultimate station area vision into focus.

For the three stations identified in the Station Selection section, the **Station Area Potential** section estimates the economic benefit of the increases in population and employment contained in the Preferred Vision Scenario. The population increase is translated into dwelling units by type, their projected taxable value and consequent ad valorem tax revenue, along with expected retail spending within a half-mile of the station by those new residents. The employment increase is divided into different employment types, with estimates of the amounts of different types of commercial space necessary to accommodate them, their projected taxable value and consequent ad valorem tax revenue.

For the three stations identified in the Station Selection section, the **Implementation Plan** section develops cost estimates for the infrastructure needs identified in the Station Connectivity section, based on average unit costs used by the Florida Department of Transportation (FDOT), and identifies responsible agencies.

Progress on this study was discussed with the Study Advisory Committee (SAC) at their meetings on March 7, 2019 and July 10, 2019. Appendices A and B contain the materials from those meetings.

g. Literature Review

1. Enhancing Economic Opportunity through Transit: Lessons Learned from Denver's Southeast Light Rail Line (2013)

Reconnecting America is a national non-profit that works to better communities.

Mile High Connects (MHC) is a collaborative of local and national nonprofit organizations (including Reconnecting America) working to ensure that the Metro Denver regional transit system helps improve access, especially for those with lower incomes, to every aspect of a high-quality life: affordable housing, good paying jobs, essential services, educational opportunities, etc.

MHC's Job Access Initiative is focused on, among other things, leveraging the synergy between the current and future transit lines part of FasTracks (the regional transit plan), the job opportunities and support services for middle skill workers along those lines, and regional economic development in general.

FasTracks will include the construction of 122 new miles of commuter and light rail.

"Middle skill" is defined as residents possessing or jobs requiring more than a high school diploma

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but less than a bachelor's degree. MHC regards these as a key opportunity for lower income workers to move up the career ladder.

Improving access to economic opportunities via transit is especially important to households with lower incomes. Insufficient research has been done on how to attract, retain and grow business opportunities around transit lines.

The Southeast Line opened in 2006. It is a 19-mile, 13 station light rail line that runs along I-25 from downtown Denver to suburban neighborhoods in the southeast part of the metropolitan region. The line runs through the Denver Tech Center, which contains the second largest concentration of jobs outside of the central business district and spans six stations on the line.

This study examined the economic, workforce and real estate development changes that occurred after the opening of the Southeast Line.

Key Findings:

- Job opportunities along the Southeast Line are primarily in the office-based, professional industries
- Job growth occurred mostly in higher-income employment categories, with the healthcare sector showing the largest increase in employment
- Job growth in low- to middle-skill industries remained stagnant or decreased
- Very few work-supportive services or affordable housing units have been built along the Southeast Line
- Transit is not the driving force in the location decision of employers, but it is a top consideration
- "Last mile" connections from the Southeast Line light rail stations to workplaces are a major barrier to taking transit.

Utilization of the Southeast Line is hampered by:

- Proximity to the I-25 highway
- Distance from existing office, retail and residential buildings
- Connectivity challenges because of the low-density nature of the land uses surrounding the line
- Insufficient sidewalks, bicycle lanes, or shuttle routes to improve access to the stations
- Oversupply of free parking at existing buildings.

In 2009 there were over 87,000 jobs within a half-mile of a transit station on the Southeast Line, and 64 percent of them were in sectors that typically employ middle-skill workers.

A 2009 survey of employers within a half-mile of the line stations revealed that most had been unaware of impending transit service when they chose their location. Of the ones that had been aware, only 11 percent put proximity to transit among their top three reasons to locate where they did.

In another survey of location preferences in 2012, transit accessibility ranked third among

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employers along the Southeast Line. Two thirds of respondents said that transit accessibility was a very strong or strong factor in their location decision. However, over two thirds said that none of their employees used transit to get to work, and over two thirds said they provided no incentives to use transit (vouchers, last mile shuttles, or reimbursements). Southeast Connections, a transportation management association, is working to educate employers on ways they can improve transit utilization by their employees.

There are very few low-income communities along the Southeast Line. Only 2.7 percent of the housing units proposed or built since 1999 have been affordable units. Neighborhoods have opposed increases in affordable housing.

The number of residents living within a half-mile of a transit station rose 26.8 percent between 2000 and 2010, while the number of new workers rose 10.5 percent between 2002 and 2009, indicating the land use mix is becoming more balanced.

A 2010 study revealed that though the pace of new development increased after the transit line opened in 2006, it had been strong prior to opening too, making it difficult to attribute job growth and real estate development to the light rail line alone.

Most of the development planned or constructed in the corridor since 1999 has occurred in the Tech Center. Most of the residential developments constructed or planned are high density apartments or condominiums.

"Work supportive services" are defined as workforce training along with the types of destinations that workers regularly include in their commute trips (school, daycare, errands). Little workforce training is available close to the Southeast Line.

<u>Summary</u>

Most of the development and job growth along the line would have occurred without its implementation. Little was done to attract middle-skill job growth or housing for low- to middle-income households. There are little work-supporting businesses or workforce training providers, and severe last mile challenges to making transit accessible for most commuters. There were no station area plans prepared for any of the stations, and Transit Oriented Development (TOD) is addressed only in larger scale plans. There was little job growth outside of existing industries and almost no focus on increasing opportunities for low- and middle-skill workers.

To improve social equity and access to economic opportunity:

- Understand each corridor's strengths and weaknesses
- Incorporate economic development into station area and neighborhood plans
- Conduct outreach to employers, workforce training providers and other supportive service providers about the benefits of transit
- Improve last-mile connections
- Engage community members in the planning discussion
- Find local champions to sell the benefits of transit to other employers, developers and influential decision makers

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• Think comprehensively about services – jobs, housing and work supportive services should be planned and strategically placed in proximity to each other to fully serve workers and residents.

2. Transit Hub Evaluation Study (2009)

The aim of the study was to develop a "comprehensive transit hub system plan" for Miami Dade County.

The terms Transit Hub and Transit Center were used interchangeably. They typically involve a transfer between different types of transportation service. Larger versions involve transfers between local and regional services. All are accessible to pedestrians, bicyclists, local transit users and, with park and ride facilities, automobiles.

Several former studies were reviewed to produce a list of 79 potential future sites.

The sites were scored across a range of criteria:

- Size
- Ownership
- Adjacent MDT bus routes
- Adjacent rail routes
- Population and employment density
- Access from major roadways
- Transit ridership in area
- Proximity to existing high capacity transit corridor
- Proximity to proposed high capacity transit corridor
- Parking suitability
- Proximity to activity center
- Pedestrian access.

Scoring on these criteria and ranking produced 29 future sites.

The study developed three categories of facilities:

- Tier 1 Multimodal
- Tier 2 Bus Transfer
- Tier 3 Superstop.

The Tier 1 category had three sub-categories:

- Central Station
- Intermodal Center
- Regional Hub.

A Tier 1 facility would be characterized by a large footprint, many thousands of users, multiple modes of transportation, serving large portions of the metropolitan area. An example is the Government Center station in downtown Miami.

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A Tier 2 facility would be a regional facility, likely including park and ride capacity and transfers to other modes, and a building. An example is the 7th street Transit Village to be built on the southeast corner of 7th Avenue and NW 62nd Street.

A Tier 3 facility would be any stop or group of stops without a building but with a higher level of development than a single bus stop with a shelter. Examples are any of the stops along the South Miami-Dade Busway.

The presence, absence, or range of values for different facility attributes (seating capacity, amenities, parking, service frequency) was used to explain the differences between the categories.

Existing and proposed sites were all characterized by tier type. Using this typology, all the Metrorail stations were deemed Tier 2 facilities.

The Transit Hub Plan involved these primary components:

- Existing Metrorail and Busway Stations
- Existing and Proposed (Committed) Transit Hubs
- Potential Hub sites identified during the planning process.

The Plan included a total of 57 sites, with some overlap. In the South Dade Transitway, some locations contained multiple recommendations. A facility either Tier 1 or Tier 3 was recommended in Florida City at SW 344th Street/Palm Drive. In Cutler Bay, the recommendation was either a Tier 1 facility at the Southland Mall or a Tier 2 facility at the South Dade Government Center. Tier 3 facilities were included at:

- SW 112th Street
- SW 152nd Street
- SW 168th Street
- SW 200th Street
- SW 244th Street
- SW 296th Street.

The study provided cost estimates for typical transit center features and summary information for a selection of existing facilities throughout the U.S.

3. 10 Ahead – Miami-Dade Transit's Transit Development Plan Annual Update

A Transit Development Plan (TDP) is a state and federally mandated planning document that assesses future transit needs and available revenues and prioritizes needed projects within available revenues. Every TDP undergoes a major update every five years and an annual update in the interim years. MDT10Ahead 2018 was an annual update for Miami Dade County. A major update will be produced in 2019. The document lists funded and unfunded projects for a tenyear planning horizon and also includes long range plans beyond 2028.

Miami-Dade Transit operates the 14th largest transit system in the United States, with a service area of 306 square miles, serving a population of approximately 2.7 million. The system

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comprises four modes:

- Metrobus 79 routes, most run 5 am to midnight, 5-80 minute headways in peak periods
- Metrorail Two lines, 23 stops, 5-10 minute headways in peak periods
- Metromover Free automated people mover, 3 lines, 21 stops, 1½ to 3-minute headways in peak periods
- Demand-response service (Special Transportation Services) shared ride door to door trips reserved in advance

Metrobus provides Limited-Stop or MAX service on some routes, skipping normal stops to increase operating speeds. Express Bus Service has fewer stops than MAX service, to achieve even higher operating speed. The I-95 Express service that operates in the I-95 Express lanes is an example.

In the South Dade Transitway, most routes are limited-stop or express service.

The TDP provides overview information on:

- Fare Structure and payment options
- Farebox Recovery information
- Special Programs
- Smartphone Apps
- Park and Ride facilities
- Existing TOD Projects
- Municipal Circulator Services
- Regional Transit Connections
- Tri-Rail Connection Points
- Intercity Rail and Bus Connection Points
- Public Participation Process When asked to rank priorities, respondents chose as the top three:
 - o Improve Reliability
 - Increase frequency on existing routes
 - Expand service to new areas.

Chapter 4 – Performance Assessment

This section reports progress towards the goals, objectives, and targets set during the 2014 Major Update. Concerning the South Corridor, the list of past accomplishments included:

- Leverage land use planning that supports transit service and ridership The Land Use and Visioning and the Economic Mobility and Accessibility Studies
- TOD Projects Planned or in Development:
 - SW 200th Street/Caribbean Blvd. Multi-phase, mixed use, high-rise and mid-rise development with 170 affordable housing units, 5,000 square feet of

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retail/commercial space and a 150-space parking garage; construction to begin in summer, 2018

- SW 296th Street Adjacent to an existing park and ride lot, a 2019 RFP will invite development of a parking garage and commercial space
- SW 112th Avenue Planned RFP to develop TOD with affordable housing, commercial uses and enhancements to the bus terminal
- Multimodal Transit Hubs SW 344th Street (Florida City) Completed in 2015
- Expand Transit Services Implement South Miami Dade Bus Express Rapid Transit (BERT) service by 2019
- ADA Compliance Upgrade areas within one quarter mile of the South Miami Dade Transitway from Dadeland South to SW 200th Street to be wheelchair accessible; completed in 2016
- Park and Ride Facilities SW 112th Avenue Seeking to purchase the existing lot (currently leased) in order to construct improvements.

Chapter 5 - Current Fiscal Year (2017-18)

In the South Corridor, the adopted budget for FY 2017 – 2018 included:

- Purchase of the Park and Ride lot at SW 112th Avenue and construction of landscaping and lighting improvements
- U.S.-1 Transitway Signal Priority 47 signals along the Transitway upgraded to fully adaptive controllers, reducing delay for buses at the cross-street intersections
- Busway ADA Improvements Continuation of pedestrian accessibility improvements along the South Miami Transitway

Chapter 6 - Ten-Year Implementation Plan

SMART Plan Vision

The planned activities in the South Corridor include the Preliminary Engineering and Environmental Study (reviewed in a later section of this report), the Land Use and Visioning Study and the Economic Mobility and Accessibility Study.

#30 - The South Miami-Dade Express, Bus Express Rapid Transit (BERT) service between Dadeland North and SW 344th Street in Florida City is denoted as Route b in Figure 6-1 and is depicted using the HEFT for most of the distance. In Table 6-2 it is described using both the HEFT and the Transitway. The implementation year listed is 2019.

Fully Funded Projects (Table 6-3)

#9 - At SW 200th Street (Caribbean Station), a privately funded Park and Ride lot is proposed to provide 116 surface parking spaces and a 150-space garage, to be implemented in 2020.

#10 - At SW 184th Street (Quail Roost Drive) the Department of Transportation and Public Works (DTPW) will invite proposals to design and construct a mixed-income housing development to include a minimum of 500 housing units, 10,000 square feet of commercial space, a park and ride

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garage with 261 spaces exclusively for transit users, and parking spaces to support the housing and commercial components. Implementation is projected for 2021.

Partially Funded Projects (Table 6-4)

#5 – SMART Plan Premium Transit service from Dadeland South to Florida City.

#9 - At SW 152nd Street, upgrades to the existing Park and Ride lot are proposed: additional surface spaces with other amenities in Phase 1, and a 511-space garage in Phase 2. Implementation is projected for 2023.

#10 - At SW 344th Street, right of way has been acquired, but no design or construction funding programmed for an expansion of the existing Park and Ride facility.

Unfunded Projects (Table 6-5)

#2 - At SW 104th Street, the plan proposes leasing the space for a surface Park and Ride lot with 250 spaces by 2025.

#23 – Construction of a bus terminal at SW 112th Avenue.

#28 - The South Miami-Dade Express, Bus Express Rapid Transit (BERT) service between Dadeland North and SW 344th Street in Florida City is described in Table 6-5 using both the HEFT and the Transitway. The implementation year listed is 2019.

#30 - At SW 168th Street, the plan proposes in Phase 1 to expand the existing Park and Ride surface lot capacity by 300 spaces and add amenities, and in Phase 2 to construct a 450-space three-level garage.

Chapter 7 – 2028 and Beyond Vision Plan

The South Corridor projects included in the 2040 Long Range Transportation Plan (LRTP) Needs Plan with desired implementation years beyond the ten-year planning period of the TDP are all unfunded, are listed in Table 7-1 of the TDP Report, and include:

#2 - Direct ramps between the Transitway and Palmetto Expressway (SR 826).

#15 – Increase the number of leased parking spacing at SW 244th Street.

#16 – Improve the existing Park and Ride facility at SW 296th Street.

#17 – Improve existing Transit Center at Southland Mall/SW 205th Street.

#31 – Construct a Park and Ride facility with 90 surface parking spaces at SW 312th Street near Miami Dade College.

#32 – Lease 50-75 parking spaces at SW 136th Street.

#33 – Construct a Park and Ride facility with 200 parking spaces at SW 112th Street.

#36 – Upgrade the existing Park and Ride facility at SW 168th Street in two phases. Phase 1 would add approximately 90 spaces and add amenities. Phase 2 includes a modernized 450-space parking garage.

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#42 – Extend the Transitway from Dadeland South to Dadeland North.

#45 – Extend Metrorail from SW 104th Street to Dadeland South.

#49 – Transitway Bus Rapid Transit (BRT) bus only grade separations from SW 344th Street to Dadeland North.

#74 – Construct a bus terminal and structured parking at SW 112th Avenue.

<u>Chapter 8 – Transit Financial Plan</u>

The total of projected transit operating expenses for FY 19 is \$528 million. Total employee compensation is projected at \$324 million, with roughly 71 percent of that in wages, and 29 percent in benefits. Other major expenses are contract services (\$42 million) and Special Transportation Services (\$42 million). \$94 million of the total is "Other Operating Expenses" (Table 8-1). The total is projected to increase to \$688 million by FY 28.

The revenue sources to be used for operating expenses include farebox and advertising revenue, federal and state grants, general fund (property tax), and the Peoples' Transportation Plan (PTP) sales surtax. The projected revenue stream shows a declining PTP contribution (shifted to fund the SMART Plan capital expenses), balanced by an increasing general fund contribution (doubling from \$200 million in FY 19 to \$400 million by FY 27). Debt service is projected at \$828,000 annually.

The capital expenditure projection shows \$2.032 billion spent in the five years to FY 23, and a further \$356 million to FY 28. The projection past FY 23 includes only routine replacement of vehicles and rehabilitation of existing infrastructure.

The revenue sources to be used for capital expenditures include state and federal grants, the PTP surtax, gas taxes, impact fees, municipal contributions, bond sales, and "BBC GOP Financing" (Table 8-7).

The total Unfunded Transit Need, a combination of service improvements and capital investments, in the five years to FY 23 is estimated at \$636 million.

4. SMART Plan Corridor Inventory – South Dade Transitway Corridor (2017)

The purpose of the document is to create an inventory of existing socioeconomic, demographic, and land use conditions within the South Dade Transitway Corridor. It includes a compilation of current state, county and local plans within a half-mile of the Transitway. The objective of the report is to identify a complete picture of the existing conditions within the corridor area and identify needs and deficiencies to further support transit and TOD.

Chapter 2 -Literature Review

The Literature review includes:

- FDOT Multimodal Transportation Best Practices and Model Element
- National Governors' Association Policy Academy on Integrating Transportation and Land Use.

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Chapter 3 – Existing Conditions Assessment and Analysis

Section 3.1 – Inventory of Existing Conditions

This section includes information and maps describing:

- Municipalities, Neighborhoods, and Landmarks.
- Land Use -The corridor area is predominantly residential, with non-residential uses tending to locate closer to U.S.-1 and the Transitway. The Existing Land Use maps shows uses more concentrated in the northern half of the corridor, and more scattered in the southern half. In the Future Land Use maps uses are concentrated throughout the entire corridor.
- Zoning After Residential, the second most prevalent zoning is Urban Center District, intended to foster dense, walkable, mixed-use environments. Another, though far less prevalent zoning that is supportive of TOD is Residential/Commercial.
- Population and Employment Density the corridor as a whole has a lower population density (5,250 per square mile) than the county as a whole (7,800 per square mile). Within the corridor, the southeast side of U.S.-1 is entirely within the Urban Development Boundary, and most of the higher density parts of the corridor are on this side. Pinecrest and Palmetto Bay, both with predominantly single-family housing, have population densities slightly more than half (2,800 and 3,000 respectively) of the corridor average.
- Income While the average for the entire corridor is near the county average, large scale variations are present, with higher household incomes in the northern third of the corridor and lower household incomes in the southern two thirds of the corridor, with the lowest observed at the southern terminus of the corridor.
- Transit Dependent Populations Four indicators of potential transit dependency were used: Low Income households, Zero Car households, Aged over 65 years and Minority. Combining them into a Transit Dependency Propensity map showed greater propensity south of SW 216th Street.
- Redevelopment Potential 2016 Property Appraiser data was used to measure the ratio
 of building value to land value. Parcels where the building value was less than half of the
 land value were considered to have high redevelopment potential. When that
 "improvement ratio" was between 0.5 and 1.0, the parcel was considered to have
 moderate redevelopment potential. Parcels with an improvement ratio greater than 1.0
 were not classified or colored, nor were buildings built since 1996.
- Existing Roadways Maintenance responsibilities of roads within the corridor by number of miles are: County (197), City (105), State (38), and Private (29). U.S.-1 is a six-lane divided facility north of SW 112th Avenue, and a four-lane divided facility south of it. The Transitway is a two-lane undivided roadway that runs parallel to and west of U.S.-1. Currently, there are 55 signalized and 108 unsignalized intersections along U.S.-1. There are 49 signalized intersections and 30 bus stations along the Transitway. Milepost numbers and signal ID numbers are provided for all intersections.
- Traffic Volumes Average daily traffic volumes along U.S.-1 increase steadily from south

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to north due to north-south commuting patterns, creating extreme congestion in the northern part of the corridor. There is limited north-south roadway capacity in this portion of the county, limited to: U.S.-1, Florida's Turnpike, Krome Avenue and Old Cutler Road.

- Safety Along U.S.-1, most crashes occur at major intersections, which is typical for an arterial roadway.
- Bicycle and Pedestrian Connectivity The South Dade Rail Trail/Greenway runs adjacent to the Transitway for its entire length. Table 16 provides a list of existing bicycle facilities that connect to it. Table 17 of the SMART Plan Corridor Inventory contains planned bicycle/pedestrian projects within the study area. Pedestrian and bicycle crossings occur at most intersections both east-west for the cross streets and north-south along the Transitway (for the Greenway). Sidewalks are provided along U.S.-1 and on most of the major crossroads on their approaches to U.S.-1. Many side streets have incomplete sidewalks.
- Existing Transitway Bus Routes The Transitway is served by a collection of routes that vary in stop frequency, geographic coverage and headways. Various bus routes provide connections from Transitway stops into adjacent neighborhoods. Route 38 (Busway Max) has the highest number of boardings per day.
- Future Transportation Improvements Tables 21 and 22 of the SMART Plan Corridor Inventory contain all projects planned within the corridor in the Long-Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP) respectively.

Section 3.2 – Corridor Profile

This section includes:

- Government There are several specialized zoning types located along this corridor which are intended to encourage walkable mixed use or TOD. These include:
 - Miami-Dade County Urban Center Districts:
 - Downtown Kendall Urban Center
 - Perrine Community Urban Center
 - Cutler Ridge Metropolitan Urban Center District
 - Goulds Community Urban Center
 - Princeton Community Urban Center
 - Naranja Community Urban Center
 - Leisure City Community Urban Center
 - The North Pinecrest Business Alternative District (NPBAD)
 - The Palmetto Bay Downtown Urban Village (Franjo Activity Center)
 - o Cutler Bay Town Center, The Cutler Bay Transit Corridor District
 - Homestead's Northwest Neighborhood Overlay District (NWNOD)
 - Homestead's Southwest Planned Urban Neighborhood (SWPUN).

Regulations conducive to TOD apply to 34 percent of total corridor acreage.

Freight – U.S.-1 is not a major facility for freight movement and no major freight

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generators are near the corridor.

- Municipal Capital Improvements Capital improvement projects within the corridor by the five municipalities along it include:
 - Village of Pinecrest:
 - Kendall Drive Beautification Project improvements to the median and swales along Kendall Drive from U.S.-1 to SW 65 Court – landscape improvements.
 - U.S.-1 Beautification Project improvements to the median and eastern swale along U.S.-1 from SW 136 Street north to Snapper Creek Canal. This project will consist of development of conceptual design plans for landscape improvements to the median along the roadway including plantings and entry features as well as potential lighting improvements.
 - Village of Palmetto Bay:
 - SW 97th Avenue Roadway reconstruction from U.S.-1 to SW 184th Street. The improvements include; new traffic circle or roundabout, new bike lanes, new turn lanes, paver on street parallel parking, and pedestrian circle, ADA-compliant curb ramps, decorative paver patterns, repairs to damaged driveway aprons, new striping and paver, new LED street lights, and, landscaped medians.
 - U.S.-1 Beautification & Maintenance landscaping improvements from SW 164th Street to SW 152nd Street
 - Localized drainage improvements
 - Downtown Redevelopment. Street Improvement Project (Complete Streets)
 - Safe Routes to School Improvements Perrine Elementary & Coral Reef Elementary
 - Bike Trail through FPL Easement.
 - City of Homestead:
 - SW 328th Street (Lucy Street) -Relocation of electric utility poles along the north side street between U.S.-1 and SW 172nd Avenue to accommodate the future expansion from U.S.-1 to SW 162 Avenue
 - SW 328th Street Roadway widening to four lanes from U.S.-1 to SW 162 Ave. The expansion will include a raised median, sidewalks and bicycle facilities.
 - Florida City:
 - SW 344th Street (east of U.S.-1) Roadway widening and resurfacing.

Section 3.3 - Needs Analysis

Given the variations along the corridor in existing densities, planned densities and land use regulations, the report provides recommendations dividing the corridor into north, middle, and southern portions. The recommendations include changing the zoning to allow denser mixed-use development, working to attract development to areas with the necessary zoning already in

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place, and improving access to the stations through improved circulator service and complete bicycle and pedestrian networks.

Section 3.4 – Transit Oriented Development Guidelines

Miami Dade County

In the unincorporated parts of the corridor, Miami Dade County regulations provide mechanisms conducive to Transit Oriented Development:

- The Planned Area Development (PAD). This designation allows flexibility in planning, design and development, similar to a Planned Unit Development (PUD). Currently there are none within a half mile of the Transitway.
- The Urban Center/Urban Area District. These are intended to develop into multi-use districts characterized by high quality urban design. There are seven UCDs within the corridor:
 - 1. Cutler Ridge Metropolitan
 - 2. Downtown Kendall
 - 3. Goulds Community
 - 4. Leisure City Community
 - 5. Naranja Community
 - 6. Perrine Community; and
 - 7. Princeton Community Center

Each District's regulating plan contains seven elements:

- 1. Street Types
- 2. Sub-districts
- 3. Land Use
- 4. Building Heights
- 5. Designated Open Spaces
- 6. New Streets
- 7. Bike Routes.
- Traditional Neighborhood Development (TND) District. This designation encourages mixed-use development and replaces traditional zoning categories with simplified land use categories: Public/Semi-public, Civic, Shopfront, Rowhouse, House, Workshop. There is one TND in the corridor, Naranja Lakes, which straddles the corridor between SW 232 Street and SW 288 Street and is administered by the Naranja Lakes Community Redevelopment Agency (CRA). The CRA encourages TOD along U.S.-1.

Pinecrest

In a narrow (two properties deep) band around U.S.-1, Pinecrest offers slight reductions in the requirements concerning green space and impervious surface coverage to developers willing to comply with the requirements of the Pinecrest Parkway Alternative Development Standards. These standards are largely aesthetic, but do require bicycle and pedestrian connectivity to the neighborhoods to the east of U.S.-1.

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Palmetto Bay

The Downtown Urban Village zoning along U.S.-1 permits varying intensities and building height limits.

Cutler Bay

Along U.S.-1, the northern portion is zoned Transit Corridor (TRC), and the southern portion is zoned as Town Center (TC), dominated by the Southland Mall. Maximum residential densities vary from 75 units per acre in the TRC zone to 250 units per acre in the TC zone.

Florida City

The existing combination of low total population and low population density makes TOD unlikely.

Homestead

Planned Urban Neighborhood (PUN) districts are intended to encourage compact mixed-use development. There is currently only one PUN in Homestead, the Southwest PUN (SWPUN), which is regulated by the Southwest Neighborhood Master Plan. The SWPUN is divided into subdistricts. The Multimodal Transportation Overlay Sub-District (MMTOD) overlaps half of the Downtown Mixed-use sub-District and is exempted from most of the requirements within the Master Plan, allowing for maximum freedom of design. In the Neighborhood Mixed-use Sub-District, both multi-family buildings and mixed-use buildings are permitted by right.

Section 4 - Conclusion

The corridor already includes some features conducive to high capacity rapid transit service: high concentrations of transit-dependent populations, areas where existing land use policies are conducive to TOD, and significant amounts of vacant and re-developable parcels that could become TOD. However, there remain areas (such as the east side of U.S.-1 in Pinecrest) without land use policies conducive to TOD. There are also parcels within walking distance of the corridor that are outside the Urban Development Boundary (UDB). Extending the UDB in those area to capture those parcels would improve their potential to attract transit friendly development.

5. South Corridor Rapid Transit Project Preliminary Engineering and Environmental Report (2018)

The purpose of the study was to select the Locally Preferred Alternative (LPA) premium transit mode for the South Corridor, as well as form the basis for an application for funding to the Federal Transit Administration (FTA).

In 2006 enhanced BRT had been selected as the LPA for the corridor. In that study the goals chosen were:

- Improve corridor mobility
- Improve citizen access to employment
- Improve corridor safety and improve operating efficiency
- Reduce auto dependency
- Accommodate future population growth by providing high quality and cost-effective

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transit service

- Modify development patterns in the corridor to support transit
- Develop a plan for incremental improvements to the transit infrastructure.

In the interim, additional deficiencies identified in the corridor were:

- Transit delays from signals and long dwell times
- Stations do not meet BRT standards and are in poor condition
- Lack of Park-and-Ride spaces and Kiss-and-Ride drop off areas
- Lack of feeder Bus Service throughout the Transitway.

The four build alternatives evaluated in addition to the No-Build condition were:

- Bus Rapid Transit (BRT)
- Heavy Rail Transit (HRT)/Metrorail at-grade
- Light Rail Transit (LRT)
- Connected and Autonomous Vehicles (CAV).

BRT service would include the following elements:

- Bi-directional service
- Branded vehicles and iconic stations
- Pre-paid fares for speedy boarding
- Real-time arrival information
- Near-level boarding
- Overlaid service with BRT All Stop, BRT Limited Stop and BRT Zonal Express service
- Transit signal pre-emption and crossing gate arms
- Peak period service at 10-minutes and off-peak 15-minutes (due to overlaying some segments of the corridor would have service every two to three minutes in the peak hours)
- Maintains all stop service to all 30 existing stations along the Transitway
- Circulator and feeder bus plan
- Shared-use bicycle/pedestrian path for the entire 20 miles
- Span of service would be from 5:30 AM until 12:30 AM; BRT All Stop 24-hour operation remains
- This project aims at the gold standard of BRT quality, as defined by the Institute for Transportation and Development Policy (ITDP).

HRT service would include the following elements:

- Existing Metrorail fleet to be retrofitted to allow operation from an overhead power supply system
- Procurement of 32 new Metrorail cars
- Double track single line service similar to the existing Metrorail system
- Iconic stations with no transfer required at Dadeland South Metrorail station, seamless

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connection to existing Metrorail line

- Pre-paid fares for speedy boarding
- Real-time arrival information
- Level boarding
- Transit Signal pre-emption, crossing gate arms and railroad flashing signals
- Requires the siting and development of a Light Maintenance and train staging facility to be located south of SW 344th Street
- Circulator and Feeder bus plan
- Shared-use bicycle/pedestrian path for the entire 20 miles
- Peak period service at 9-minutes and off-peak 15-minutes
- Span of service would be from 5:30 AM until 12:30 AM
- Requires traction power substations.

LRT Service would include the following elements:

- Branded vehicles and iconic stations
- Pre-paid fares for speedy boarding
- Real-time arrival information
- Level boarding
- Transit signal pre-emption and crossing gate arms
- Single line service with a transfer required at Dadeland South Metrorail station to connect to existing Metrorail
- Procurement of a new fleet of LRT vehicles
- Requires the siting and development of a heavy maintenance and storage facility somewhere along the alignment
- Peak period service at 10-minutes and off peak 15-minutes
- Circulator and feeder bus service
- Shared-use bicycle/pedestrian path for the entire 20 miles
- Span of service would be from 5:30 AM until 12:30 AM
- Overhead power supply system and traction power substations.

The CAV Alternative would convert the Transitway into a four-lane facility with the following elements:

- Full four lane configuration for the entire 20-mile length
- Existing transit service maintained
- Limited access for CAV's as they become available
- Ability to provide both transit and CAV operation on the same facility in the future
- Shared-use bicycle/pedestrian path for the entire 20 miles.

Ridership forecasting was conducted for BRT and HRT Alternatives. BRT was projected to attract 10,000 to 11,000 new transit trips per day in 2040. HRT was projected to attract 16,000 to 18,000 new transit trips per day in 2040. Each new rider was projected to remove 16 vehicle miles of travel daily from area roadways.

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All of the stations would have the key elements of a premium transit service including:

- Weather protection
- Passenger protection, safety and security elements
- Video surveillance
- Level Boarding for HRT and Near-level boarding for BRT
- Off-Board fare collection/Ticket Vending Machines
- Fare control/turnstiles
- Next vehicle arrival displays and technology
- Emergency call stations
- Passenger seating
- Information kiosks
- Space for Art in Public Spaces
- Accommodation for a shared use path for pedestrians and bicyclists.

The report contains conceptual renderings of two potential station designs.

The key environmental issues that differentiate one alternative from another were:

- Traffic Impacts
- Noise and Vibration impacts
- Contamination
- Bridge Replacements
- Right of Way Impacts
- Capital Cost Estimates
- Operations and Maintenance Costs.

Capital Cost estimates for the four alternatives were:

- Bus Rapid Transit (BRT) \$243 million
- Metrorail Extension at-grade (HRT) \$1,332 million
- Light Rail Transit (LRT) \$1,297 million
- Connected Autonomous Vehicles (CAV) \$549 million.

Introducing grade separations along the Transitway over the cross-streets was estimated to cost between \$10 million and \$20 million each. Adding these in the northern half of the corridor where traffic volumes are greater would add between approximately \$100 million and \$150 million to each alternative.

A fully elevated Metrorail extension the entire length of the corridor would cost approximately \$2,758 million.

Yearly Operating and Maintenance costs were estimated at:

- \$15 million for BRT
- \$67 million for HRT

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Operating plans were developed for the BRT and HRT Alternatives, along with a representative collection of feeder bus routes.

LRT was eliminated due to the need to purchase and maintain a new form of transit vehicle. CAV was eliminated since there is no basis for developing funding and operational plans.

Substantial funding support is anticipated from the Florida Department of Transportation (FDOT). FDOT support requires project sponsors to apply for federal support from the FTA. Given their cost estimates, HRT would qualify as an FTA New Starts project, and BRT would qualify as a Small Starts project.

The study team recommended BRT as the LPA; the reasons included:

- Ridership results for the alternatives considered indicate that a BRT system would be most effective in meeting the projected demand in the year 2040
- BRT projects are promoted nationally by the FTA giving the BRT as a viable solution capable of meeting and addressing all the project goals
- Project evaluation results point toward a moderate level of investment as being appropriate given the County's limited resources and the need to consider major transit infrastructure improvements in other parts of Miami-Dade County
- BRT allows for a significant operational improvement benefiting the riding public in the least amount of time to develop and construct – revenue service could begin in 3 to 4 years
- BRT has the flexibility to go off-corridor for one-seat ride to Dadeland South Metrorail Station
- BRT can achieve better passenger travel times than rail from Florida City to Dadeland South Metrorail station with the installation of a crossing gate arm system
- BRT can be constructed at 20 percent of and operated at 25 percent of the cost of a rail alternative
- BRT can help the corridor develop increased ridership while preserving and encouraging the development of a rail option for the future
- Iconic stations would support economic development to further bolster ridership and justify future expansion to rail
- BRT can also encourage TOD in the future
- BRT minimizes construction impacts along the Transitway
- This project aims at the gold standard of BRT quality, as defined by the Institute for Transportation and Development Policy (ITDP)
- The design of the BRT system allows for conversion to rail in the future.

Chapter 3 STATION AREA CONNECTIVITY DIAGRAMS

SMART Plan South Dade Transitway Corridor Economic Mobility and Accessibility Final Report December 2019



III. STATION AREA CONNECTIVITY DIAGRAMS

a. Introduction

Miami-Dade County has committed to improving the ability for its residents to access destinations using a range of transportation options. An important aspect of this commitment is to investigate and identify ways that could improve connectivity near transitways. This section briefly describes the elements of improving the connectivity within the 15 stations identified along the Miami-Dade South TransitWay.

Connectivity discusses how well people can move around their community using a variety of modes (walking, biking, scooters, ride-share, private car, public transportation). This is particularly important along the South Dade Transitway. When residents feel more comfortable taking modes of transportation other than a car, transit ridership is seen as more convenient and increases. This is sometimes described using the terms "walkability" and "bikeability." In order for something to be truly considered walkable and bikeable, residents must feel safe and comfortable using these modes of transportation, and the destination must be within a 5-to-10-minute walking radius of the resident. This report examines where multi-modal elements should be considered to improve the appeal of walking, biking, and using transit to enable walkable nodes of development along the TransitWay.

This section discusses three scales of the South Dade TransitWay as part of the connectivity of the stations along the route: the route's section, the station area, and the station diagram. The route's section and station area identify bike facilities, walkable streets, crosswalks, and possible mode and ride sharing locations. Walkable streets and crosswalks may already exist in locations selected. In this case, the diagram identifies that this should be maintained, or upgraded if necessary. A map of the South Dade TransitWay, Miami-Dade County Buses, and Local Circulators are also included to identify modes of transportation that should be considered as part of the multi-modal network

b. Existing Conditions

As the South Dade TransitWay looks to increase ridership and provide options for modes of transit to and from destinations. To identify the proper types of improvements, existing conditions were examined. These were then used to illustrate where these improvements should be located on the graphics and charts contained within this report. This section provides a brief overview of the existing conditions found around the stations along the South Dade TransitWay to illustrate the good conditions and locations where improvement is needed to increase the bikeability and walkability around the stations that were studied.

1. Bike Facilities

There are three types of bike facilities around the stations of the South Dade Transitway that were studied these include:

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- <u>Sharrows</u> Painted signs on the ground to indicate that bikes and cars are to share a particular lane.
- <u>Bike Lanes</u> A separate part of the street designated for bicyclists to use.
- <u>Bike Paths</u> A separate path, usually raised and away from roads.

While these are a good step toward increasing mobility and ridership along the South Dade TransitWay, there are ways that they can be improved. Most people will avoid biking if they feel unsafe doing so. This means, that most sharrows are not used by everyday bicycle commuters. Providing more protection from car traffic following National Association of City Transportation Officials (NACTO) guidelines can help increase multi-modal transit and South Dade TransitWay ridership.

Figure III-1-Existing Conditions of Bike Facilities Along the South Dade Transitway



2. Walkability

Making roads more walkable will not only help to improve ridership, but can also help improve the health and wellbeing of residents along the South Dade Transitway. Currently, there is a mix of walkable and unwalkable streets which include ranging from interesting and shaded options, to unshaded streets without sidewalks. As with bike facilities, feeling safe while walking also will encourage people to walk in the area. Placing sidewalks directly adjacent to the road increases the feeling that walking is unsafe due to the proximity to moving vehicles and discourage people from walking. Shade trees both improve the feeling of safety and provide shade and some comfort from the sun. Ensuring that crosswalks are installed at each intersection increases safety for pedestrians as well.

Making sure that every street within the 5- and 10-minute walking radius at TransitWay stations is walkable will incentivize walking in these neighborhoods as well as improve neighborhood appeal and protect land values.

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Figure III-2 - Existing Walkable Conditions Along the South-Dade Transitway



Walkability Along the South Dade TransitWay Ranges from Shaded and Interesting to Unshaded and Adjacent to Vehicular Traffic areas

c. Concepts

This section includes a series of concepts and illustrates locations for implementation within the overall network and station areas. The concepts fall into three main categories: bike facilities, walkability, and mode and ride share. The concepts are described in the section below.

1. Bike Facilities

Bike facilities refers to infrastructure that is put in place to accommodate people biking to and from destinations. It is important that this infrastructure be safe and convenient. If people feel unsafe, or if it does not connect to destinations and places of interest, it decreases the likelihood that it will be used. Bicyclists are typically able and willing to bike farther to a destination than someone walking. Because of this, the station areas show bike facilities extending beyond the 5-and 10-minute walking radii. Bike facilities should be designed referencing the Miami- Dade County Complete Streets Design Guidelines. There are two types of bike facilities identified in this report. The two types of bike facilities identified in this report are:

- <u>Bike Lanes</u>: Ideally designed as a Buffered Bike Lane, however, these may be designed as a Conventional Bike Lane as outlined by NACTO.
- <u>Bike Paths</u>: Designed as a One-Way Raised Cycle Track with a 5-foot minimum width as outlined by NACTO.

2. Walkable Streets

A walkable street is integral to connectivity and multi-modal transportation. Ideally, every street should be walkable. However, this report takes practical implementation into account and

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Figure III-3 - Station Area

prioritizes streets for walkability improvements.

Some streets already have a sidewalk while others do not. It is important to note that for a street to be truly walkable it must be at a minimum safe, convenient, and comfortable.

Elements to achieve walkability include:

- a sidewalk with a 5-foot minimum width
- trees that provide shade placed between the sidewalk and street
- parking along the side of the street (especially within the 5-minute walking radius of the transit station)
- pedestrian-scaled lighting rather than lamp posts typically found along highways and other auto-oriented streets
- crosswalks at intersections

3. Crosswalks

Crosswalks are an important aspect of walkability. They help pedestrians and bicyclists navigate their way across intersections and alert drivers to the presence of people walking and biking. Locations for crosswalks are identified within the report to improve safety and convenience factors in walkability. Crosswalks should be designed according to NACTO guidelines and should have zebra, ladder, or continental markings.

4. Mode & Ride Share Locations

As mode sharing and ride sharing is becoming increasingly available and popular, designated areas for bikes, scooters, vehicular queues will improve safety and experience for people who live and visit the stations along the South Corridor. Placing these at convenient locations will increase the chances that they are used, improving multi-modal transit and mitigating traffic congestion within the 5- and 10-minute walking radii. These locations could accommodate bike and scooter parking stations or be identified using signs and covered waiting areas. Locations have been identified at each station; however, exact locations should be verified using public outreach to determine the best location for the community



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Figure III-4 - Example of a Bikeable and Walkable Design

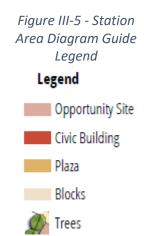


Bikeable and walkable places feel safe, convenient, comfortable, and interesting. Shade trees, bus stops, pedestrianscaled lighting, buildings fronting the street, and street parking help creating places people want to be at.

d. Station Area Diagram Guide

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location. Some of the elements that are included are public spaces, civic buildings, and opportunity sites where collaboration could be fostered with property owners for future development. These elements are:

- Plaza this is a public space intended to create a destination near the TransitWay station that could serve as a gathering area for special events, hold places for residents to shop on the way to or from the station, and add character to the area.
- Civic Buildings these elements within the diagram refer to structures that are under the oversight of the town, city, or county government and include the TransitWay stations, bike parking, and buildings containing governmental functions.
- Opportunity Site this part of the diagram shows how land might be developed into the future to improve the appeal around the transit station. Development would be closer to the street to both encourage walking and biking, but also to help shape public spaces and create destinations for residents such as restaurants, shops, and apartments or condos. While the general shape of the opportunity site may be different from what is ultimately built, the relationship to the street should be relatively consistent.
- Blocks this is done to differentiate between the street, and sidewalk and private lots.
- Trees Shade trees improve the comfort of people walking or biking, enhance safety, clean the air, and improve water filtration into natural aguifers. These are shown along streets and gathering places.



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1. Pinecrest / SW 104th Street 2. SW 136th Street 3. SW 152nd Street Legend Existing Bike Lane Proposed Bike Lane (5' min painted buffer) Existing Bike Path Proposed Bike Path Walkable Street - Existing Sidewalk Walkable Street - Proposed Sidewalk IIIIIIII Crosswalk Proposed Mode & Ride Share (Bike / Scooter / Ride Share Location) 5-Minute Walk 10- Minute Walk South Dade TransitWay Miami-Dade County Bus Route Local Circulator

e. South Section 1

Notes:

A Walkable Street includes a minimum 5' sidewalk, street trees, parallel parking (especially within the 5-minute walking radius of the transit station, and pedestrian scaled lighting.

Walkable streets and crosswalks may already exist in locations diagrammed. In this case, the diagram identifies that this should be maintained, or upgraded if necessary. Figure III-6 - South Section 1 Stations



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f. Station Area 1

1. Pinecrest / SW 104th Street

Station Area 1 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 1 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure.



Figure III-8 - Complete Streets Design Guidelines Recommended for Station Area 1

			Civic Street (CS)			
Context Zones		Frontage Zone	Pedestrian Zone	Furnishing Zone	Total Width	
UC	Urban Center	Preferred	4	10	6	20
		Minimum	1	6	4	11
U	Urban	Preferred	1	10	6	17
		Minimum	1	5	4	10
RS	Suburban Residential	Preferred	0	6	6	12
		Minimum	0	6	2	8
MU	Suburban Commercial/ Mixed Used	Preferred	4	8	4	16
		Minimum	1	5	4	10
IN	Industrial	Preferred	1	5	5	11
		Minimum	1	5	0	6

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

Figure III-7 - Station Area 1.Existing Conditions



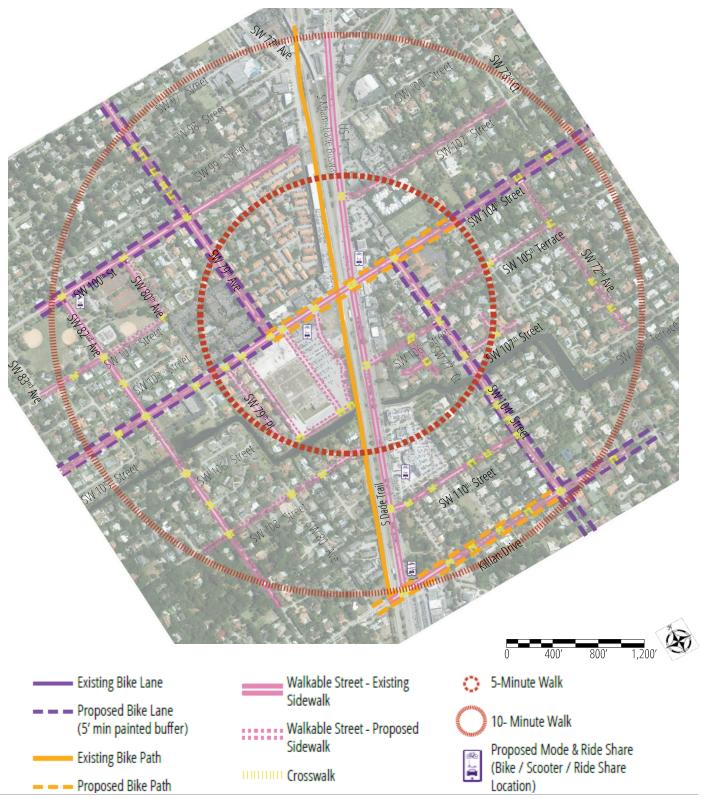




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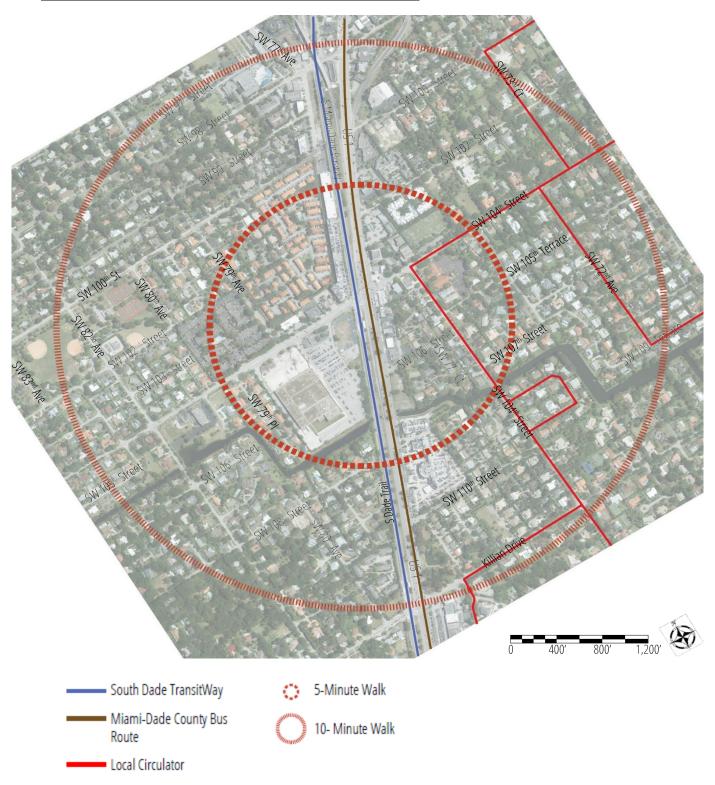
Station Area 1. Multi-Modal Infrastructure – Pinecrest/SW 104th Street



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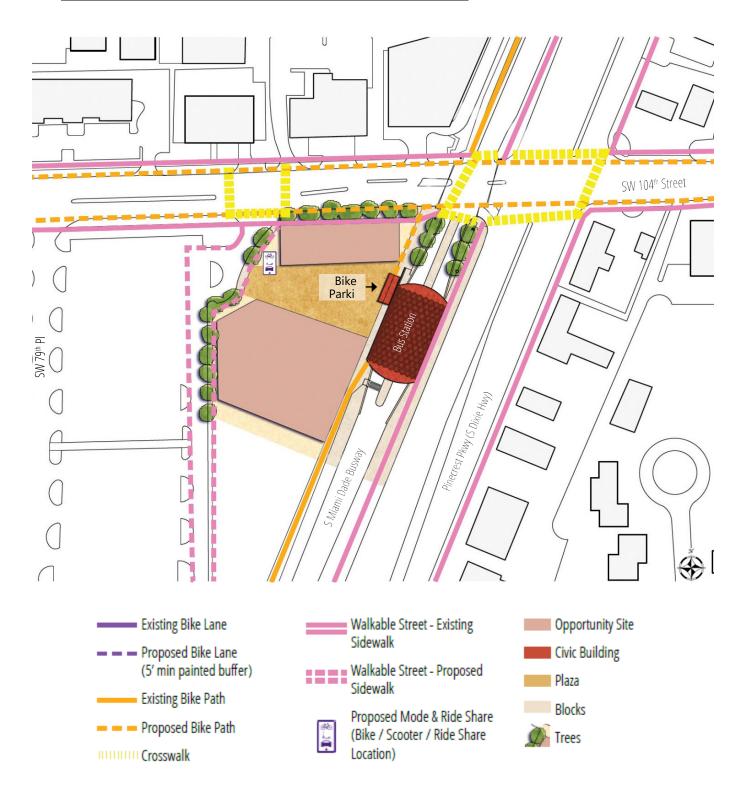
Station Area 1. Existing Transit - Pinecrest/SW 104th Street



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Station Area 1. Illustrative Diagram - Pinecrest/SW 104th Street



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g. Station Area 2

2. SW 136th Street

Station Area 2 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 2 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure. Figure III-9 Station Area 2 Existing Conditions within a 5 to 10 Mile Walking Radius







Figure III-10 Complete Streets Design Guidelines Recommended for Station Area 2

TABLE 4-3 RECOMMENDED BIKE FACILITY DIMENSIONS

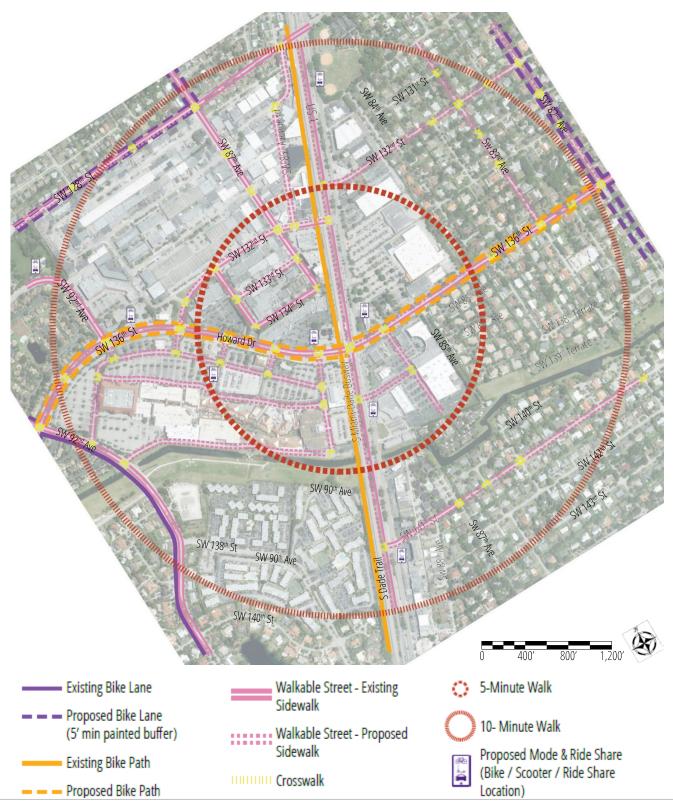
		Recommended	Minimum		
Element	Lane Buffer 7' 3' (next to parked cars) 12' 3' (next to parked cars)		Lane	Buffer 3' (next to parked cars) 3' (next to parked cars)	
Cycle Track			5'		
Two-way Cycle Track			8'		
Raised Cycle Track 6.5'		1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)	
Buffered Bike Lane 4'		3'	5'	20"	
Bike Lane	6'	n/a	5'	n/a	
Contra-Flow Bike Lane	6'	3'	5'	6"	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

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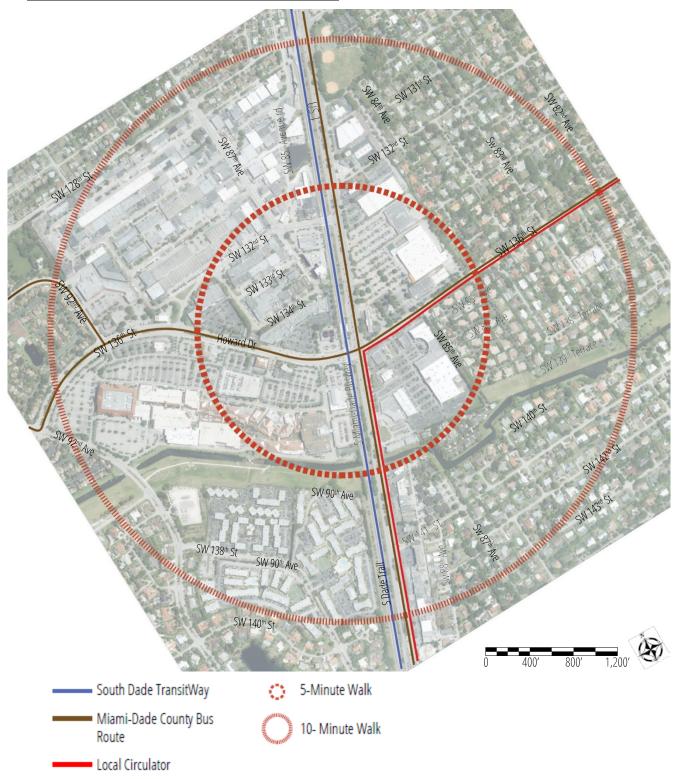
Station Area 2. Multi-Modal Infrastructure – SW 136th Street



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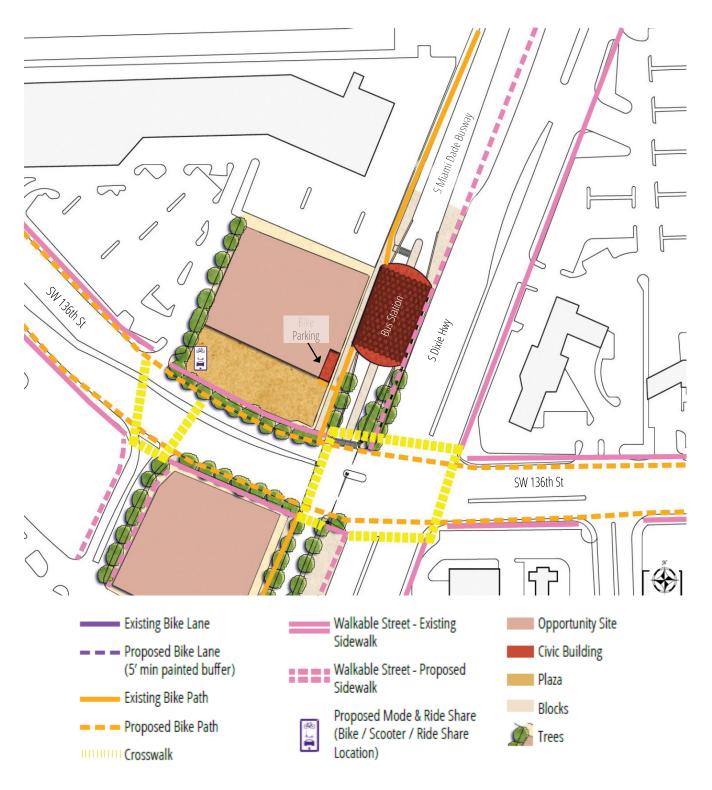
Station Area 2. Existing Transit - SW 136th Street



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Station Area 2. Illustrative Diagram - SW 136th Street



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h. Station Area 3

3. SW 152nd Street

Station Area 3 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 3 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami- Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to

the multi-modal infrastructure.



Figure III-12 Complete Streets Design Guidelines Recommended for Station Area 3

			Thoroughfare (TH)			
Context Zones			Frontage Zone	Pedestrian Zone	Furnishing Zone	Total Width
UC	Urban Center	Preferred	5	12	8	25
UC	Ulball Cellel	Minimum	1	10	5	16
U	Urban	Preferred	1	10	6	17
U		Minimum	1	8	5	14
RS	Suburban Residential	Preferred	0	6	8	14
	Suburban Residential	Minimum	0	5	5	10
MU	Suburban Commercial/	Preferred	4	6	6	16
UNU	Mixed Used	Minimum	1	6	5	12
IN	Industrial	Preferred	1	6	5	12
		Minimum	1	5	0	6

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

Figure III-11 Station Area 3 Existing Conditions within a 5 to 10 Mile Walking Radius

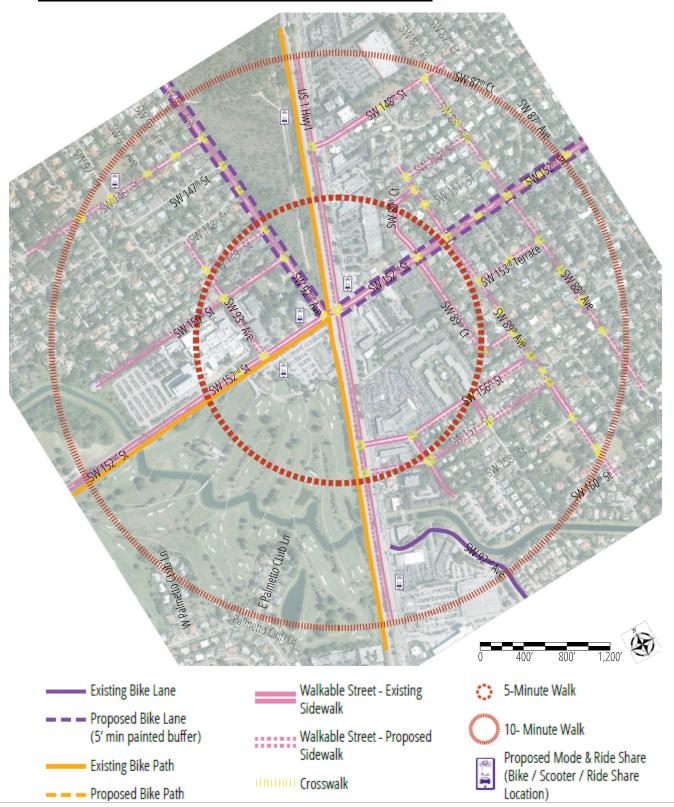




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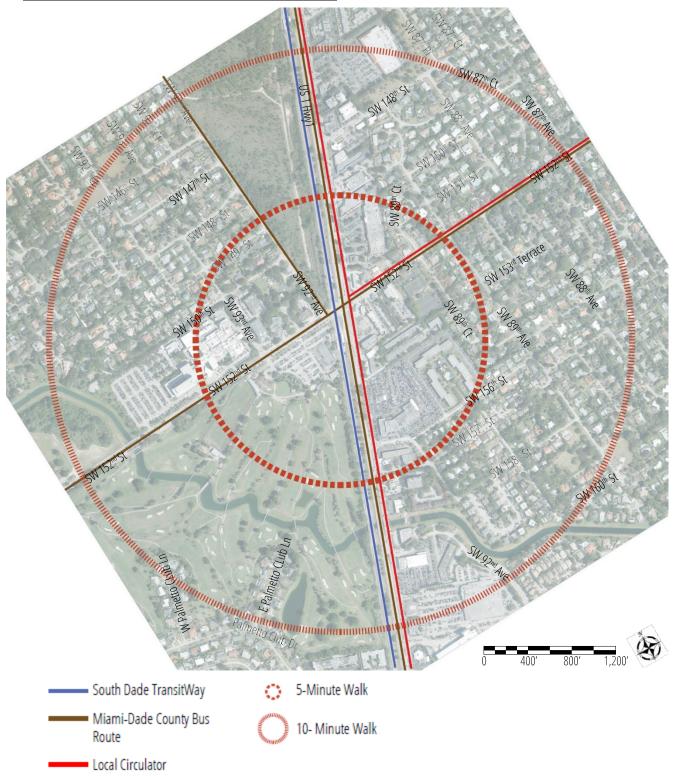
Station Area 3. Multi-Modal Infrastructure – SW 152nd Street



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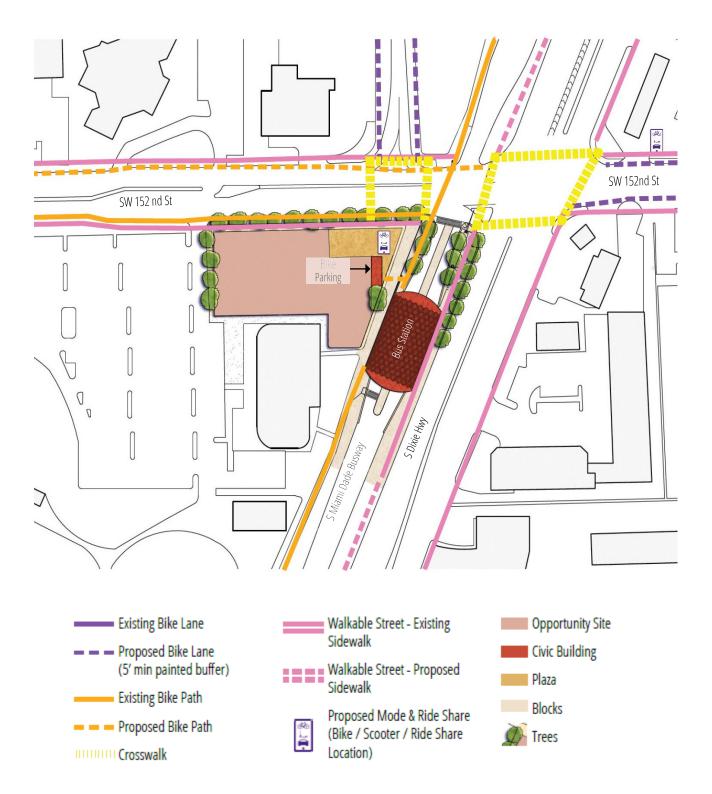
Station Area 3. Existing Transit - SW 152nd Street



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Station Area 3. Illustrative Diagram - SW 136th Street



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i. South Section 2

- 4. Palmetto Bay/SW 176th Street
- 5. SW 185th Street
- 6. Marlin Road
- 7. SW 200th Street
- 8. Cutler Bay/SW 112th Avenue / Southland Mall

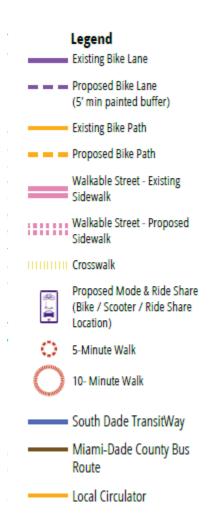
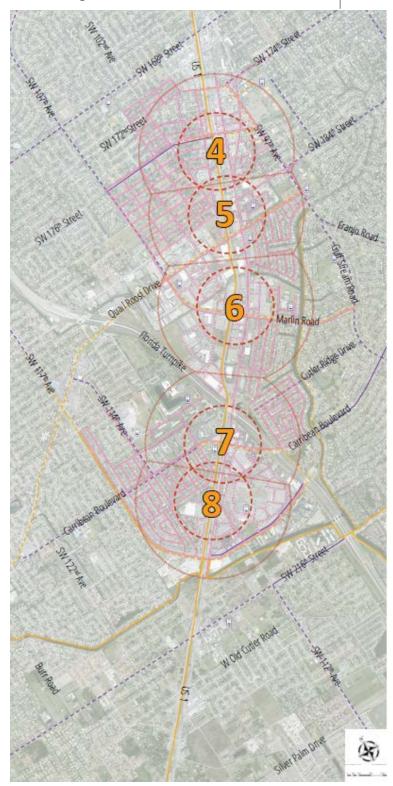


Figure III-13 - South Section 2 Stations



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j. Station Area 4

4. Palmetto Bay / SW 176th Street*

Station Area 4 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 4 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure.

Figure III-15 - Complete Streets Design Guidelines Recommended for Station Area 4

TABLE 4-3 RECOMMENDED BIKE FACILITY DIMENSIONS

		Recommended	Minimum		
Element	Lane Buffer		Lane	Buffer	
Cycle Track	7'	3' (next to parked cars)	5'	3' (next to parked cars)	
Two-way Cycle Track	12'	3' (next to parked cars)	8'	3' (next to parked cars)	
Raised Cycle Track	6.5'	1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)	
Buffered Bike Lane	4'	3'	5'	20"	
Bike Lane	6'	n/a	5'	n/a	
Contra-Flow Bike Lane	6'	3'	5'	6"	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines. *Alternate at SW 168th Street being considered

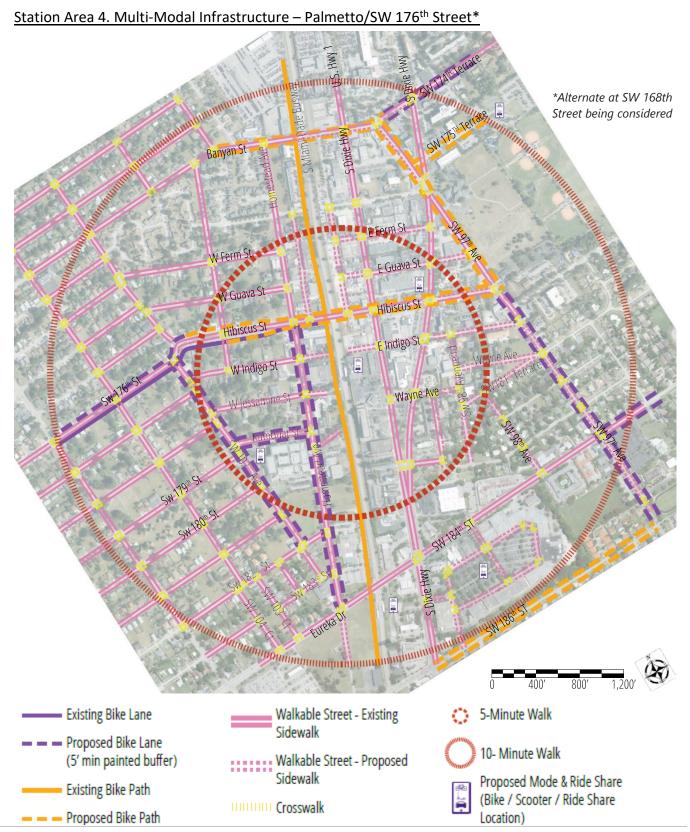
Figure III-14 - Station Area 4.Existing Conditions within a 5 to 10 Mile Walking Radius





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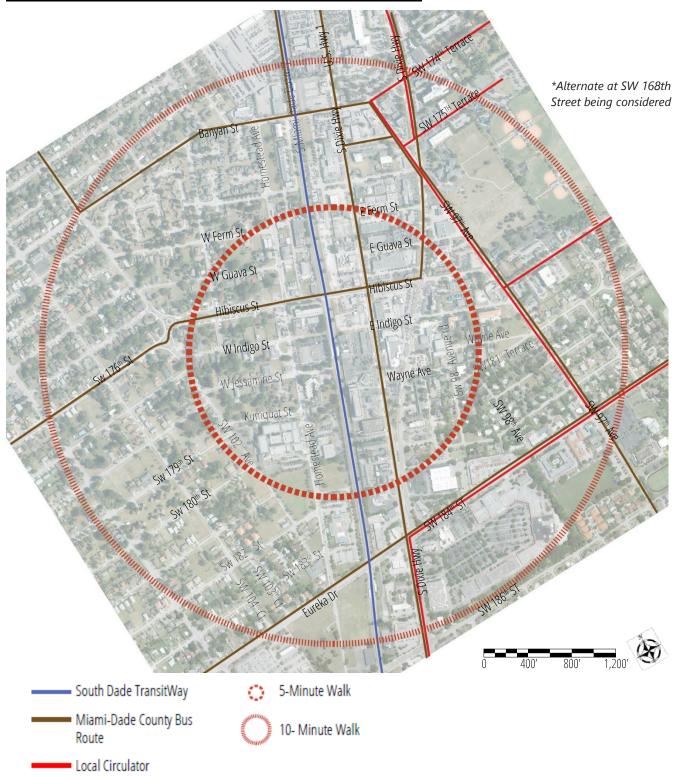




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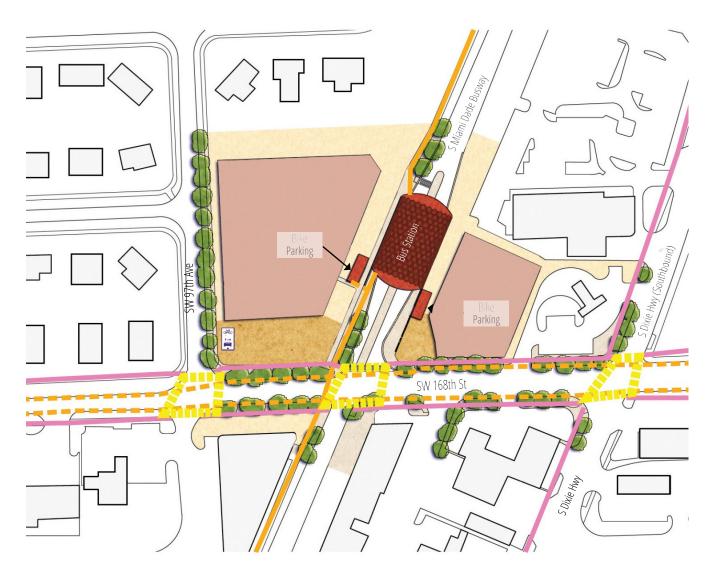
Station Area 4. Existing Transit – Palmetto Bay/SW 176th Street*

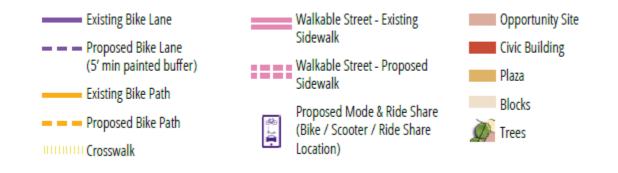


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Station Area 4. Illustrative Diagram – Palmetto Bay/SW 176th Street





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k. Station Area 5

5. SW 185th Street

Station Area 5 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 5 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure. Figure III-16 - Station Area 5.Existing Conditions within a 5 to 10 Mile Walking Radius







Figure III-17 - Complete Streets Design Guidelines Recommended for Station Area 5

TABLE 4-3 RECOMMENDED BIKE FACILITY DIMENSIONS

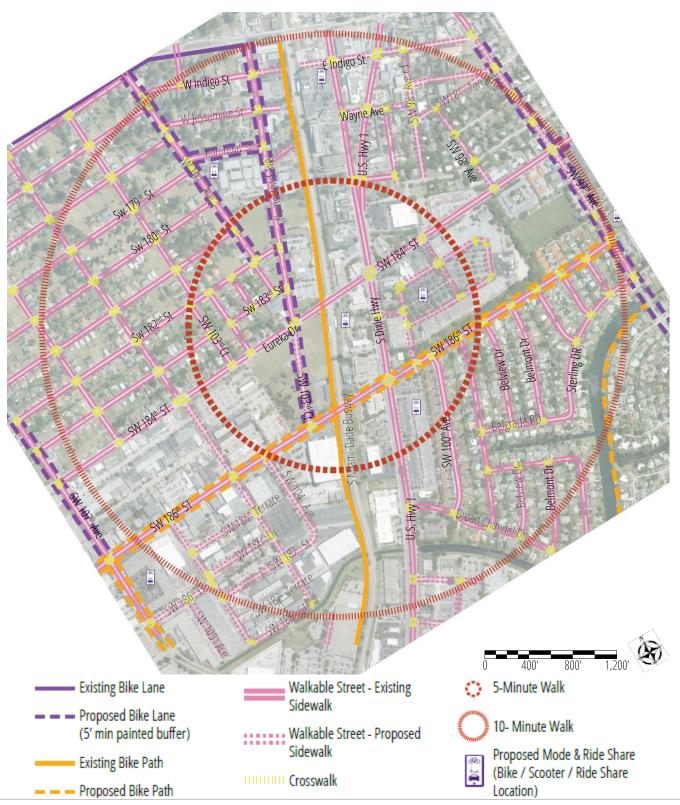
		Recommended	Minimum		
Element	Lane Buffer		Lane	Buffer	
Cycle Track	7'	3' (next to parked cars)	5'	3' (next to parked cars)	
Two-way Cycle Track	12'	3' (next to parked cars)	8'	3' (next to parked cars)	
Raised Cycle Track	6.5'	1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)	
Buffered Bike Lane	4'	3'	5'	20"	
Bike Lane	6'	n/a	5'	n/a	
Contra-Flow Bike Lane	6'	3'	5'	6"	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

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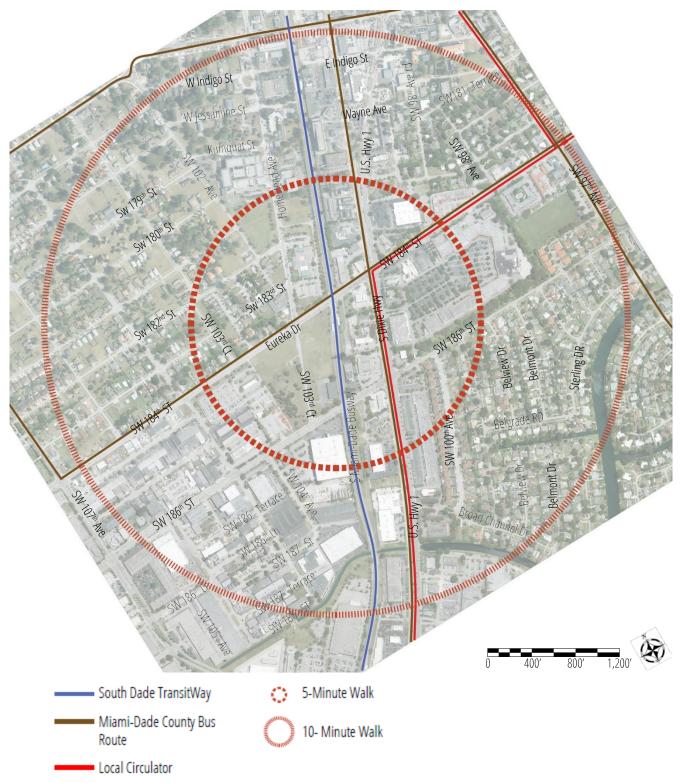
Station Area 5. Multi-Modal Infrastructure – SW 185th Street



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Station Area 5. Existing Transit – SW 185th Street



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Station Area 5. Illustrative Diagram – SW 185th Street



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I. Station Area 6

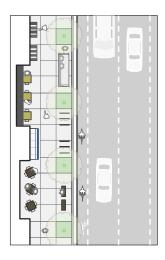
6. Marlin Road

Station Area 6 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 6 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure.



within a 5 to 10 Mile Walking Radius

Figure III-18 - Station Area 6.Existing Conditions





Figure III-19 - Complete Streets Design Guidelines Recommended						
for Station Area 6						

			Thoroughfare (TH)			
Context Zones		Frontage Zone	Pedestrian Zone	Furnishing Zone	Total Width	
UC	Urban Center	Preferred	5	12	8	25
	UIDall Cellel	Minimum	1	10	5	16
U	Urban	Preferred	1	10	6	17
U		Minimum	1	8	5	14
RS	Suburban Residential	Preferred	0	6	8	14
кэ	Suburban Residential	Minimum	0	5	5	10
MU	Suburban Commercial/ Mixed Used	Preferred	4	6	6	16
UIU		Minimum	1	6	5	12
IN	Industrial	Preferred	1	6	5	12
	muusinai	Minimum	1	5	0	6

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

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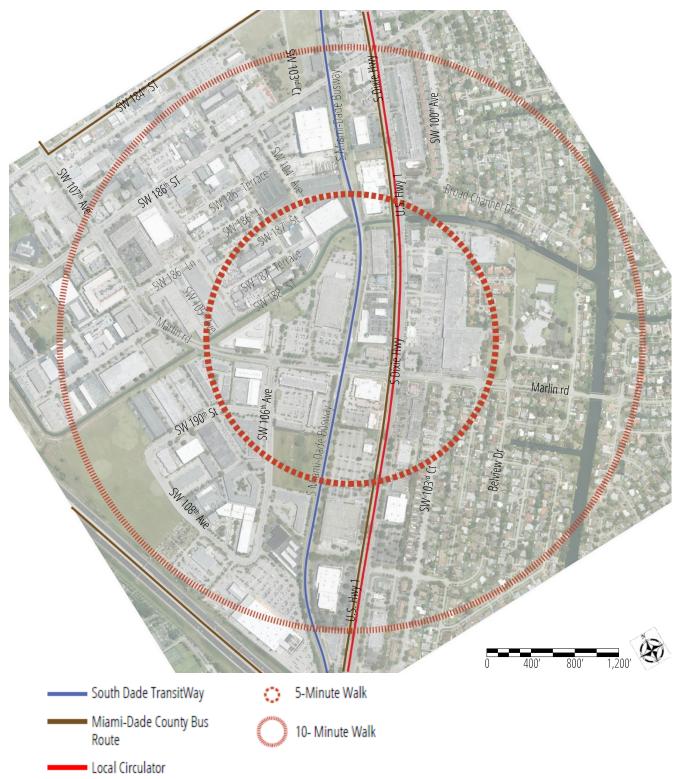
Station Area 6. Multi-Modal Infrastructure – Marlin Road



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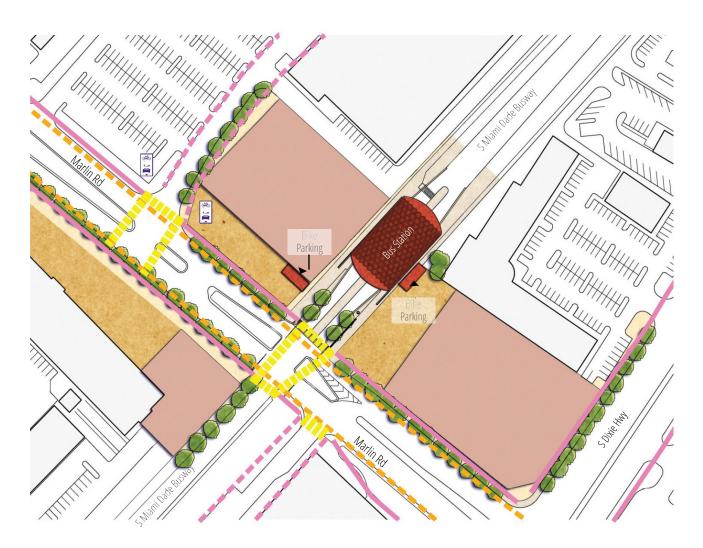
Station Area 6. Existing Transit – Marlin Road

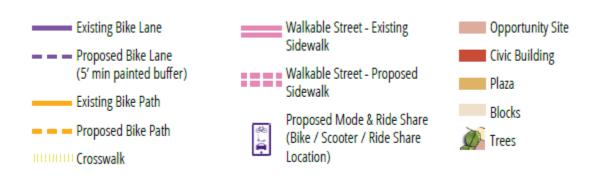


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Station Area 6. Illustrative Diagram – Marlin Road





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m. Station Area 7

7. SW 200th Street

Station Area 7 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 7 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure. Figure III-20 - Station Area 7.Existing Conditions within a 5 to 10 Mile Walking Radius







Figure III-21 - Complete Streets Design Guidelines Recommended for Station Area 7

TABLE 4-3 RECOMMENDED BIKE FACILITY DIMENSIONS

		Recommended		Minimum	
Element	Lane Buffer		Lane	Buffer	
Cycle Track	7'	3' (next to parked cars)	5'	3' (next to parked cars)	
Two-way Cycle Track	12'	3' (next to parked cars)	8'	3' (next to parked cars)	
Raised Cycle Track	6.5'	1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)	
Buffered Bike Lane	4'	3'	5'	20"	
Bike Lane	6'	n/a	5'	n/a	
Contra-Flow Bike Lane	6'	3'	5'	6"	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

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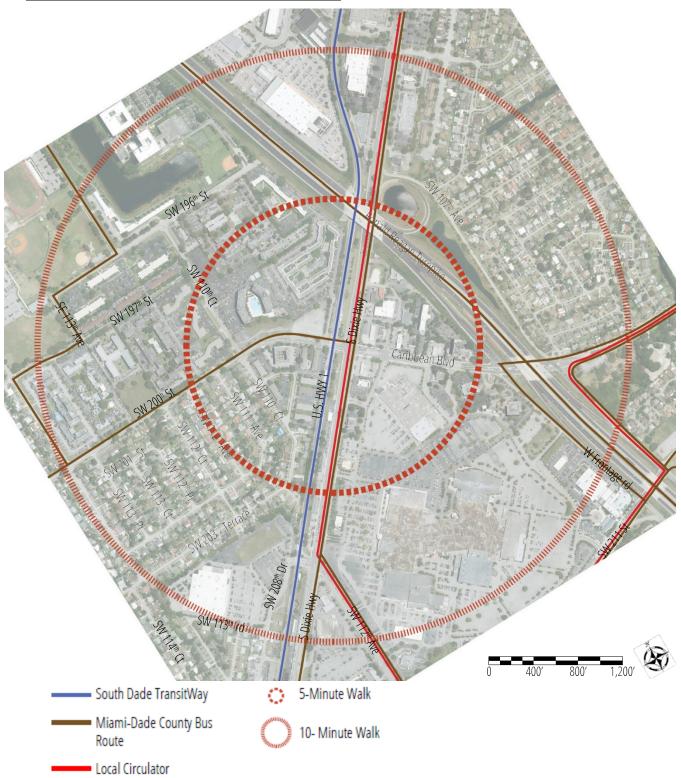
Station Area 7. Multi-Modal Infrastructure – SW 200th Street



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Station Area 7. Existing Transit – SW 200th Street



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Station Area 7. Illustrative Diagram – SW 200th Street



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n. Station Area 8

8. Cutler Bay/SW 112th Avenue/Southland Mall

Station Area 8 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 8 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure. Figure III-22 - Station Area 8.Existing Conditions within a 5 to 10 Mile Walking Radius







Figure III-23 - Complete Streets Design Guidelines Recommended for Station Area 8

TABLE 4-3 RECOMMENDED BIKE FACILITY DIMENSIONS

		Recommended	Minimum		
Element	Lane Buffer		Lane	Buffer	
Cycle Track	7'	3' (next to parked cars)	5'	3' (next to parked cars)	
Two-way Cycle Track	12'	3' (next to parked cars)	8'	3' (next to parked cars)	
Raised Cycle Track	6.5'	1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)	
Buffered Bike Lane	4'	3'	5'	20"	
Bike Lane	6'	n/a	5'	n/a	
Contra-Flow Bike Lane	6'	3'	5'	6"	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

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Station Area 8. Multi-Modal Infrastructure – Cutler Bay/SW 112th Avenue/Southland Mall



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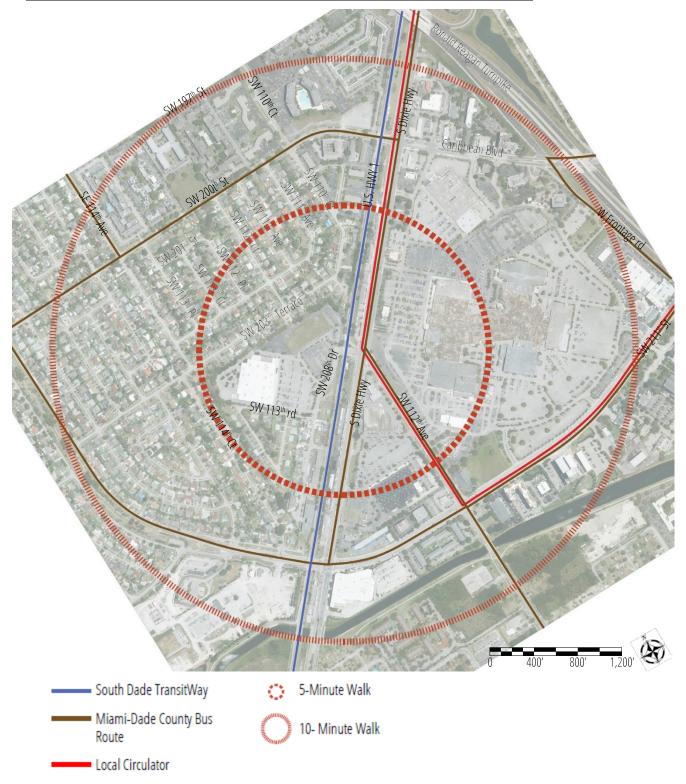
Table III-1 – STATION 8 INFRASTRUCTURE IMPROVEMENTS LIST

Thoroughfare	Bike Lane	Bike Path	Walkable Street (Existing Sidewalk)	Walkable Street (Proposed Sidewalk)	Crosswalk
SW 111th Avenue			•		•
SW 112th Avenue			•		•
SW 114th Avenue	•		•	•	•
SW 110th Court	•		•		•
SW 112th Court			•		•
SW 113th Court			•		•
SW 114th Court			•		•
SW 207th Drive				•	•
SW 208th Drive			•	•	•
SW 112th Place			•		•
SW 113th Place			•		•
SW 113th Road				•	•
SW 197th Street			•		•
SW 200th Street	•		•		•
SW 201st Street			•		•
SW 211st Street		•	•		•
SW 203rd Terrace			•		•
Caribbean Boulevard		•	•		•
Ronald Reagan Turnpike					
South Dixie Highway			•		•
U.S. Highway 1		•			
West Frontage Road					
Cutler Bay Towne Center	•			•	•
Southland Mall	•			•	•
Target				•	•

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Station Area 8. Existing Transit – Cutler Bay/SW 112th Avenue/Southland Mall



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Station Area 8. Illustrative Diagram – Cutler Bay/SW 112th Avenue/Southland Mall



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o. South Section 3

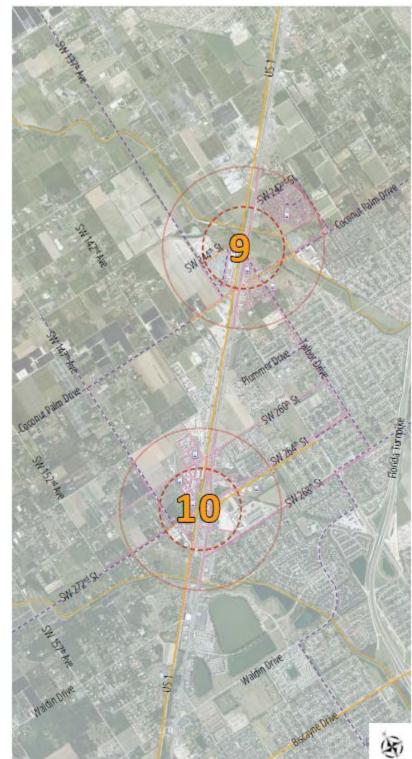
9. SW 244th Street 10. SW 264th Street



Notes:

A Walkable Street includes a minimum 5' sidewalk, street trees, parallel parking (especially within the 5-minute walking radius of the transit station, and pedestrian scaled lighting.

Walkable streets and crosswalks may already exist in locations diagrammed. In this case, the diagram identifies that this should be maintained, or upgraded if necessary. Figure III-24 - South Section 3 Stations



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p. Station Area 9

9. SW 244th Street*

Station Area 9 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 9 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure.



Figure III-26 - Complete Streets Design Guidelines Recommended for Station Area 9

			Neighborhood Street (NS)			
Conte	ext Zones		Frontage Zone	Pedestrian Zone	Furnishing Zone	Total Width
UC Urban Center		Preferred	1	6	5	12
UC	UIDAII CEIILEI	Minimum	0	5	4	9
11	Urban	Preferred	1	6	5	12
U	U UIDAII	Minimum	0	5	4	9
RS	Suburban Residential	Preferred	0	5	5	10
кэ	Suburban Residential	Minimum	0	5	2	7
MU	Suburban Commercial/	Preferred	1	6	5	12
IVIU	Mixed Used	Minimum	0	5	4	9
IN	IN Industrial	Preferred	0	5	5	10
IIN	Industrial	Minimum	0	5	2	7

Excerpt from the Miami-Dade County Complete Streets Design Guidelines. *Alternate at SW 248th Street being considered

Figure III-25 - Station Area 9.Existing Conditions within a 5 to 10 Mile Walking Radius

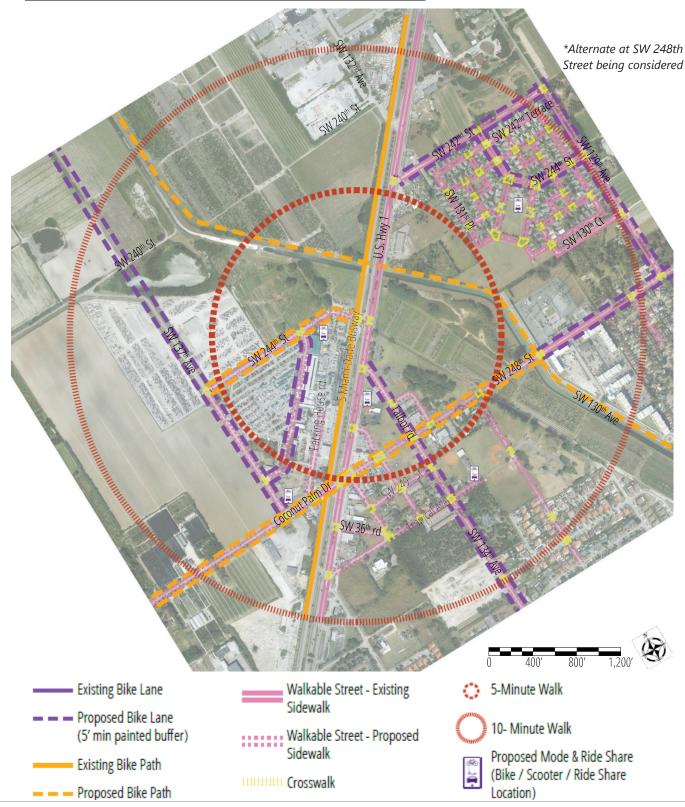




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Station Area 9. Multi-Modal Infrastructure – SW 244th Street*



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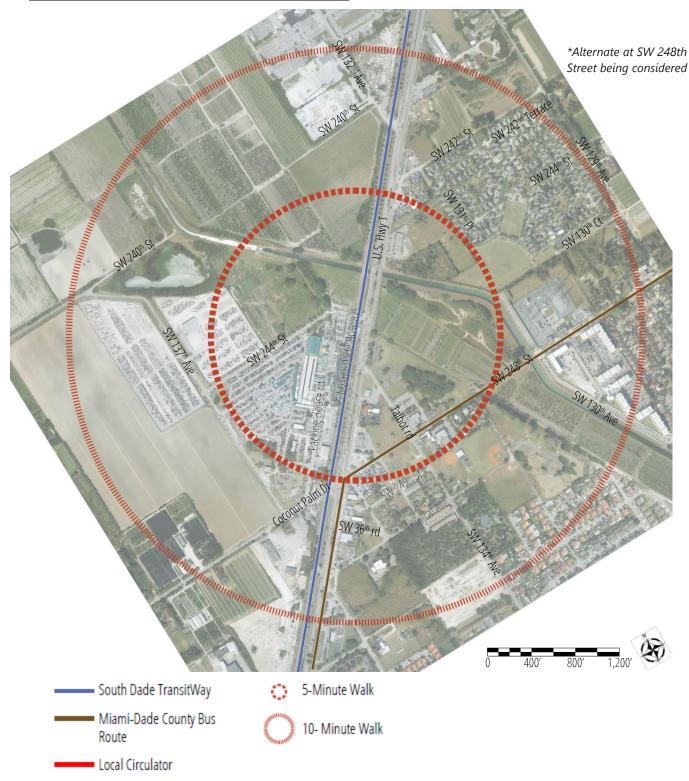
Table III-2 – STATION 9 INFRASTRUCTURE IMPROVEMENTS LIST

Thoroughfare	Bike Lane	Bike Path	Walkable Street (Existing Sidewalk)	Walkable Street (Proposed Sidewalk)	Crosswalk
SW 129th Avenue	•		•		•
SW 130th Avenue	•		•		•
SW 131st Avenue			•		•
SW 132nd Avenue			•		•
SW 133rd Avenue			•		•
SW 134th Avenue	•		•		•
SW 137th Avenue	•		•		•
SW 129th Court			•		•
SW 130th Court			•		•
SW 131st Court			•		•
SW 134th Court				•	•
SW 129th Path			•		•
SW 129th Place			•		•
SW 131st Place			•		•
SW 36th Road				•	•
SW 242nd Street	•		•		•
SW 243rd Street			•		•
SW 244th Street		•	•		•
SW 245th Street			•		•
SW 248th Street	•	•	•		•
SW 249th Street				•	•
SW 242nd Terrace			•		•
SW 244th Terrace			•		•
SW 245th Terrace			•		
North Street				•	•
Packing House Road				•	•
Redland Market Village	•		٠		
South Miami-Dade Busway		•			
Tropical Avenue				•	•
U.S. Highway 1			•		

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Station Area 9. Existing Transit - SW 244th Street*



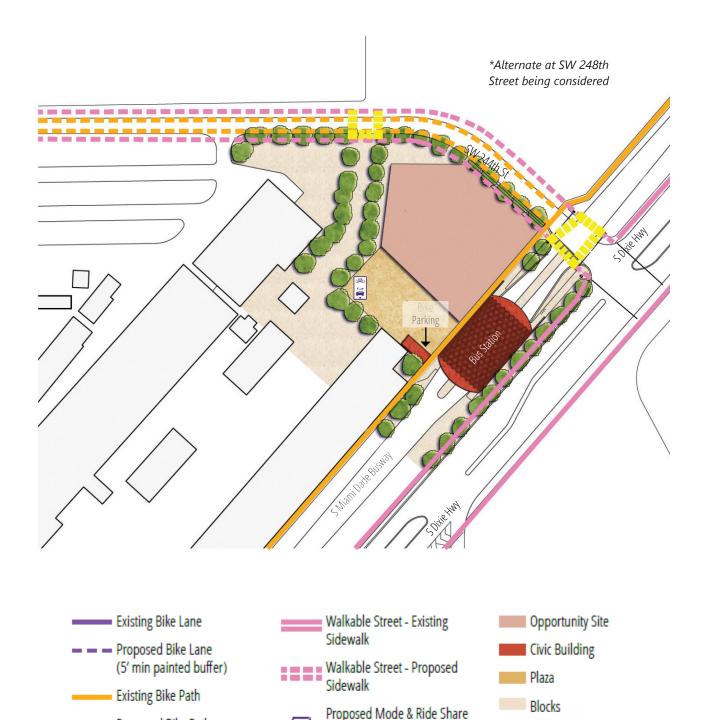
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Station Area 9. Illustrative Diagram - SW 244th Street*

Proposed Bike Path

IIIIIIII Crosswalk



(Bike / Scooter / Ride Share

Location)

Ę

D Trees

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q. Station Area 10

10. SW 264th Street

Station Area 10 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 10 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure.

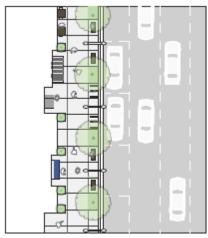


Figure III-28 - Complete Streets Design Guidelines Recommended for Station Area 10

			Civic Street (CS)				
Conte	ext Zones		Frontage Zone	Pedestrian Zone	Furnishing Zone	Total Width	
UC Urban Center		Preferred	4	10	6	20	
UC	UIDAII CEIILEI	Minimum	1	6	4	11	
11	U Urban	Preferred	1	10	6	17	
U	UIDAII	Minimum	1	5	4	10	
RS	Suburban Residential	Preferred	0	6	6	12	
кэ	Suburban Residentia	Minimum	0	6	2	8	
MU	Suburban Commercial/	Preferred	4	8	4	16	
IVIU	Mixed Used	Minimum	1	5	4	10	
IN	IN Industrial	Preferred	1	5	5	11	
IIN	Industrial	Minimum	1	5	0	6	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

Figure III-27 - Station Area 10.Existing Conditions within a 5 to 10 Mile Walking Radius

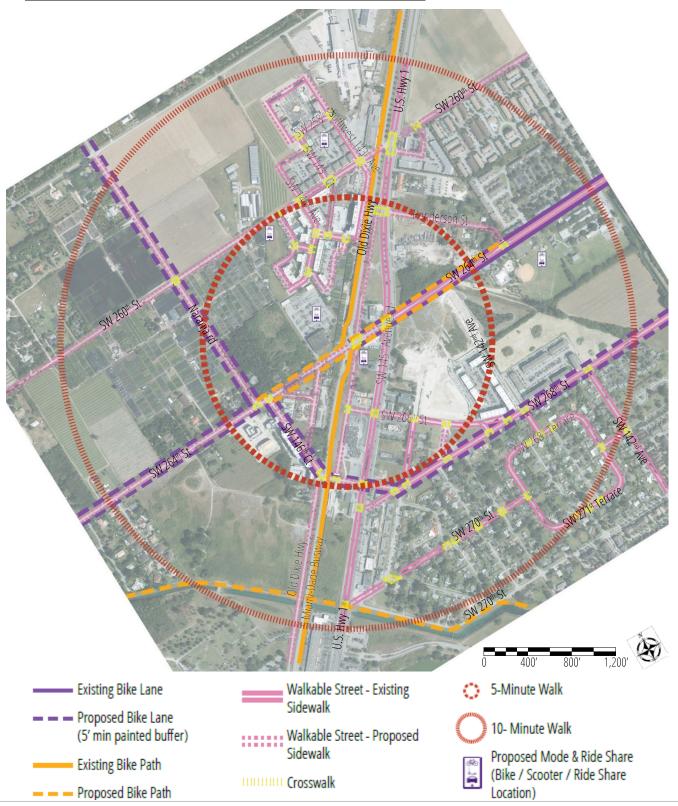




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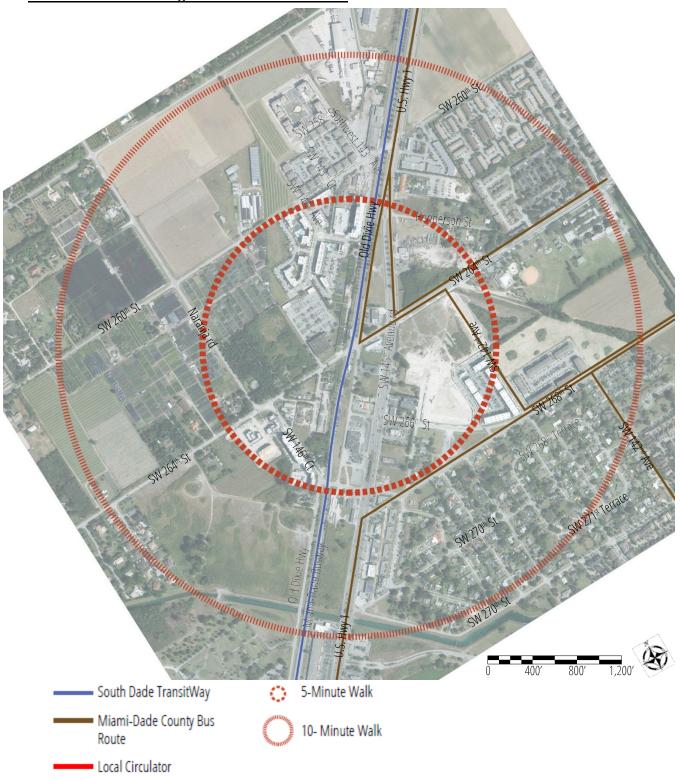
Station Area 10. Multi-Modal Infrastructure – SW 264th Street



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Station Area 10. Existing Transit - SW 264th Street



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Station Area 10. Illustrative Diagram - SW 264th Street



Proposed Mode & Ride Share

(Bike / Scooter / Ride Share

Location)

Ļ

Existing Bike Path

- - Proposed Bike Path

IIIIIIII Crosswalk

Station Area Connectivity Diagrams III-50

Blocks

Trees

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r. South Section 4

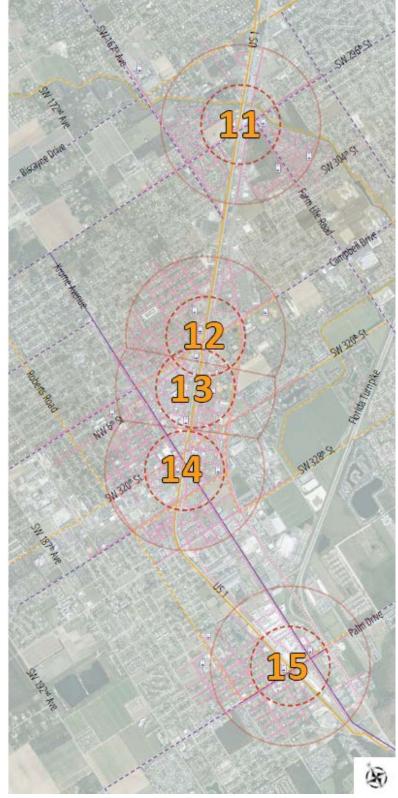
11. SW 296th Street

12. SW 312th Street/Campbell Drive 13. Miami Dade College/Homestead 14. SW 177th Avenue/Krome Avenue 15. SW 344th Street Legend Existing Bike Lane — Proposed Bike Lane (5' min painted buffer) Existing Bike Path Proposed Bike Path Walkable Street - Existing Sidewalk Walkable Street - Proposed Sidewalk IIIIIII Crosswalk Proposed Mode & Ride Share (Bike / Scooter / Ride Share Location) 5-Minute Walk 10- Minute Walk South Dade TransitWay Miami-Dade County Bus Route Local Circulator

Notes:

A Walkable Street includes a minimum 5' sidewalk, street trees, parallel parking (especially within the 5-minute walking radius of the transit station, and pedestrian scaled lighting.

Walkable streets and crosswalks may already exist in locations diagrammed. In this case, the diagram identifies that this should be maintained, or upgraded if necessary.



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s. Station Area 11

11. SW 296th Street

Station Area 11 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 11 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure. Figure III-30 - Station Area 11.Existing Conditions within a 5 to 10 Mile Walking Radius







Figure III-31 - Complete Streets Design Guidelines Recommended for Station Area 11

TABLE 4-3 RECOMMENDED BIKE FACILITY DIMENSIONS

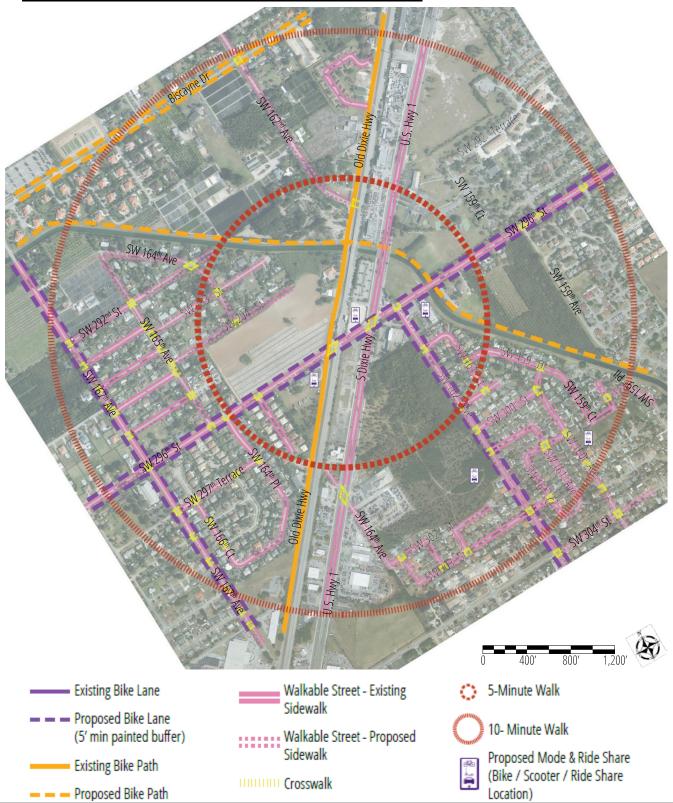
		Recommended	Minimum		
Element	Lane Buffer		Lane	Buffer	
Cycle Track	7'	3' (next to parked cars)	5'	3' (next to parked cars)	
Two-way Cycle Track	12'	3' (next to parked cars)	8'	3' (next to parked cars)	
Raised Cycle Track	6.5'	1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)	
Buffered Bike Lane	4'	3'	5'	20"	
Bike Lane	6'	n/a	5'	n/a	
Contra-Flow Bike Lane	6'	3'	5'	6"	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

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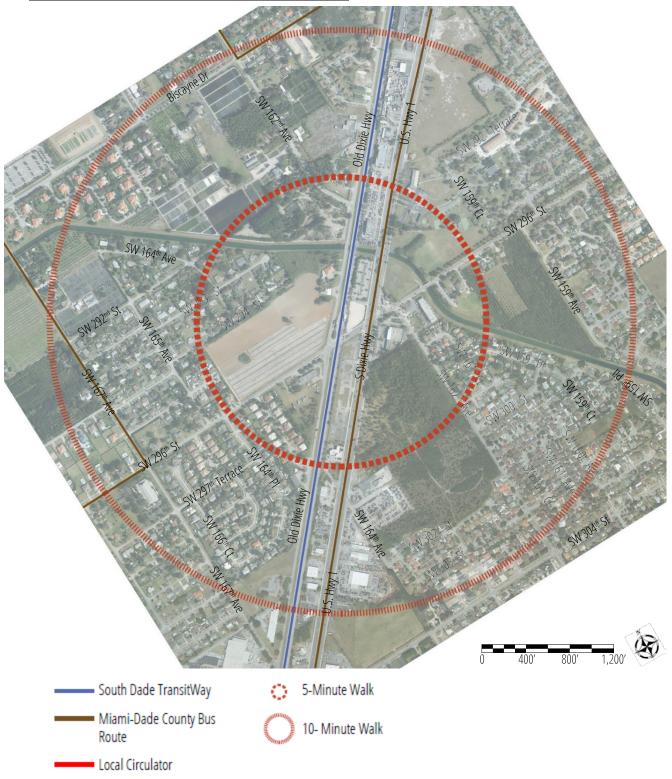
Station Area 11. Multi-Modal Infrastructure – SW 296th Street



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Station Area 11. Existing Transit - SW 296th Street



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Station Area 11. Illustrative Diagram - SW 296th Street



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t. Station Area 12

12. SW 312th Street/Campbell Drive

Station Area 12 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 12 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure.



Figure III-33 - Complete Streets Design Guidelines Recommended for Station Area 12

			Neighborhood Street (NS)				
Conte	ext Zones		Frontage Zone	Pedestrian Zone	Furnishing Zone	Total Width	
UC Urban Center		Preferred	1	6	5	12	
00		Minimum	0	5	4	9	
ш	ll linkon	Preferred	1	6	5	12	
U	Urban	Minimum	0	5	4	9	
RS	Suburban Residential	Preferred	0	5	5	10	
КЭ	Suburban Residential	Minimum	0	5	2	7	
MU	Suburban Commercial/	Preferred	1	6	5	12	
IVIU	Mixed Used	Minimum	0	5	4	9	
IN Industrial	Preferred	0	5	5	10		
IN	Industrial	Minimum	0	5	2	7	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

Figure III-32 - Station Area 12.Existing Conditions within a 5 to 10 Mile Walking Radius

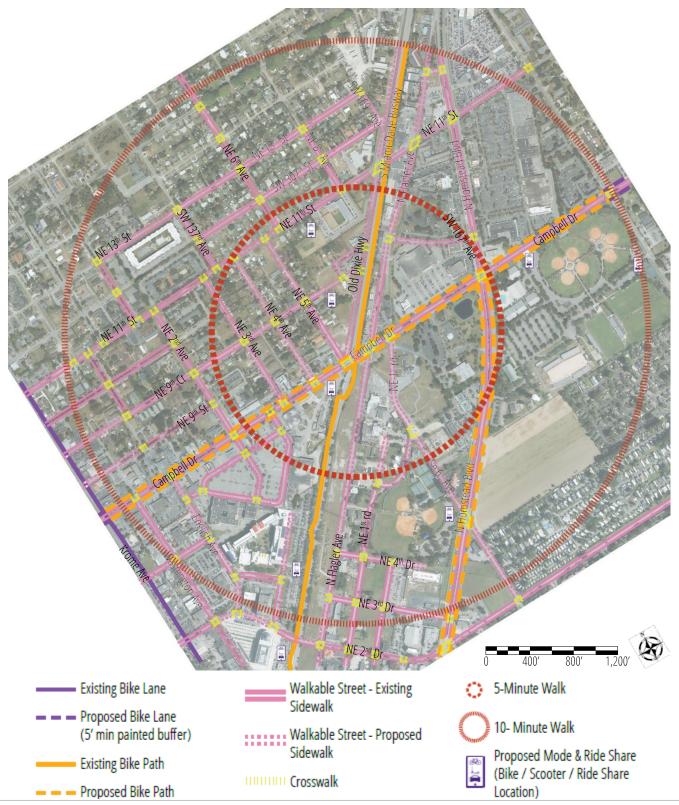




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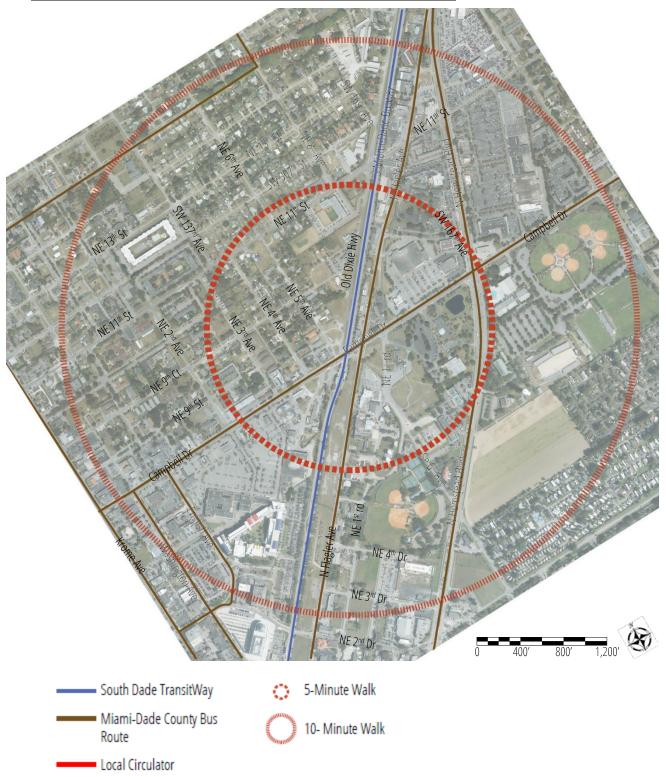
Station Area 12. Multi-Modal Infrastructure – SW 312th Street/Campbell Drive



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Station Area 12. Existing Transit - SW 312th Street/Campbell Drive



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Station Area 12. Illustrative Diagram - SW 312th Street/Campbell Drive



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u. Station Area 13

13. Miami Dade College/Homestead

Station Area 13 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 13 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure. Figure III-34 - Station Area 13.Existing Conditions within a 5 to 10 Mile Walking Radius







Figure III-35 - Complete Streets Design Guidelines Recommended for Station Area 13

TABLE 4-3 RECOMMENDED BIKE FACILITY DIMENSIONS

		Recommended		Minimum	
Element	Lane Buffer		Lane	Buffer	
Cycle Track	7'	3' (next to parked cars)	5'	3' (next to parked cars)	
Two-way Cycle Track	12'	3' (next to parked cars)	8'	3' (next to parked cars)	
Raised Cycle Track	6.5'	1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)	
Buffered Bike Lane	4'	3'	5'	20"	
Bike Lane	6'	n/a	5'	n/a	
Contra-Flow Bike Lane	6'	3'	5'	6"	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

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Station Area 13. Multi-Modal Infrastructure – Miami Dade College/Homestead



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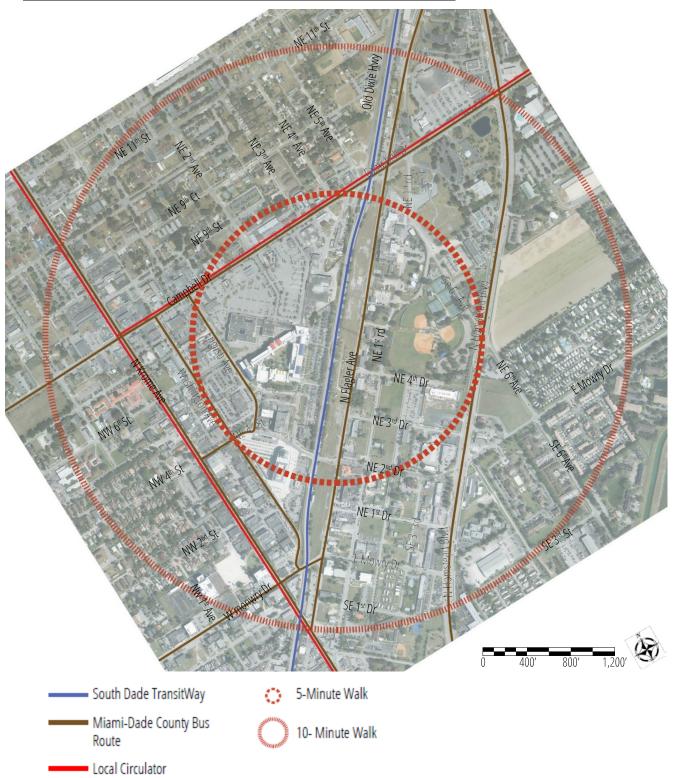


Table III-3	- STATION	I 13 INFRA	ASTRUCTURE IMPROVE	MENTS LIST	
Thoroughfare	Bike	Bike	Walkable Street	Walkable Street	Crosswalk
	Lane	Path	(Existing Sidewalk)	(Proposed Sidewalk)	
NE 1st Avenue			•	•	•
NE 2nd Avenue			•		•
NE 3rd Avenue	_		•	•	•
NE 4th Avenue			•	•	•
NE 5th Avenue			•	•	•
NE 6th Avenue				•	•
NW 1st Avenue			•		•
NE 9th Court			•	•	•
NE 1st Drive			•		•
NE 2nd Drive			•	•	•
NE 3rd Drive			•		•
NE 4th Drive			•	•	•
NE 1st Road			•	•	•
NE 2nd Road			•	•	•
NE 3rd Road			•	•	•
NE 4th Road			•		•
NE 2nd Street			•		•
NE 4th Street			•	•	•
NE 6th Street			•		•
NE 9th Street				•	•
NE 10th Street			•		•
NE 11th Street			•		•
NW 2nd Street			•		•
NW 4th Street			•		•
NW 6th Street			•		•
SE 3rd Street					
Campbell Drive	•	•	•		•
East Mowry Drive			•		•
North Krome Avenue	•		•		•
North Homestead Boulevard		•	•		
Old Dixie Highway				•	•
South Miami-Dade Busway		•			
West Mowry Drive			•		•

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Station Area 13. Existing Transit – Miami Dade College/Homestead



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Station Area 13. Illustrative Diagram – Miami Dade College/Homestead



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v. Station Area 14

14. SW 177th Avenue/Krome Avenue

Station Area 14 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 14 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure.

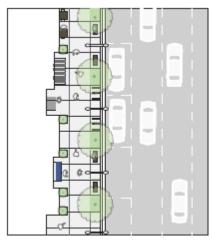


Figure III-36 - Station Area 14.Existing Conditions within a 5 to 10 Mile Walking Radius





igure III-37 - Complete Streets Design Guidelines Recommen	ded
for Station Area 14	

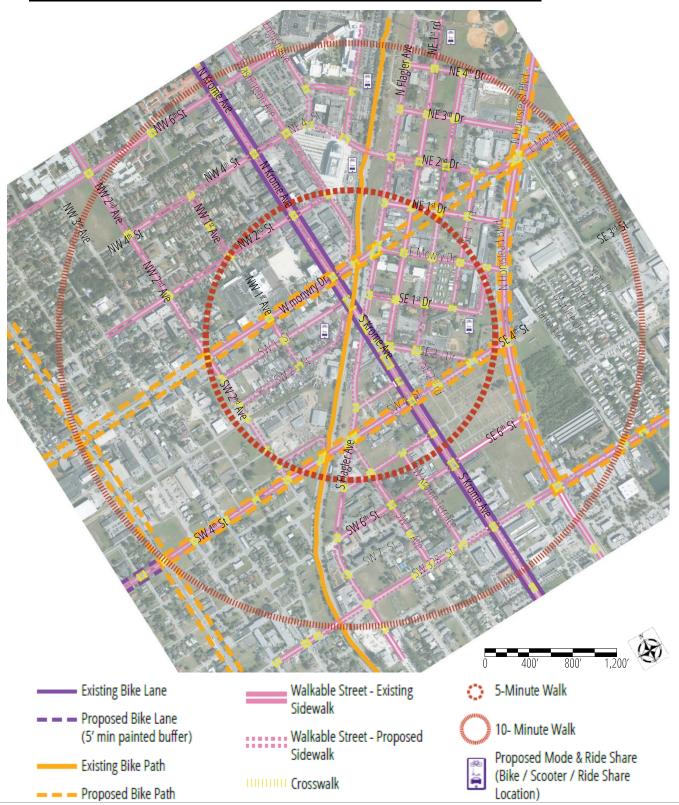
			Civic Street (CS)				
Context Zones			Frontage Zone	Pedestrian Zone	Furnishing Zone	Total Width	
UC	Urban Center	Preferred	4	10	6	20	
	UIDAII CEIILEI	Minimum	1	6	4	11	
	l litera	Preferred	1	10	6	17	
U Urban	UIDAII	Minimum	1	5	4	10	
RS	Suburban Residential	Preferred	0	6	6	12	
КЭ	Suburban Residentia	Minimum	0	6	2	8	
MU	Suburban Commercial/	Preferred	4	8	4	16	
Mixed Used	Mixed Used	Minimum	1	5	4	10	
IN Industrial	Preferred	1	5	5	11		
	muusinai	Minimum	1	5	0	6	

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

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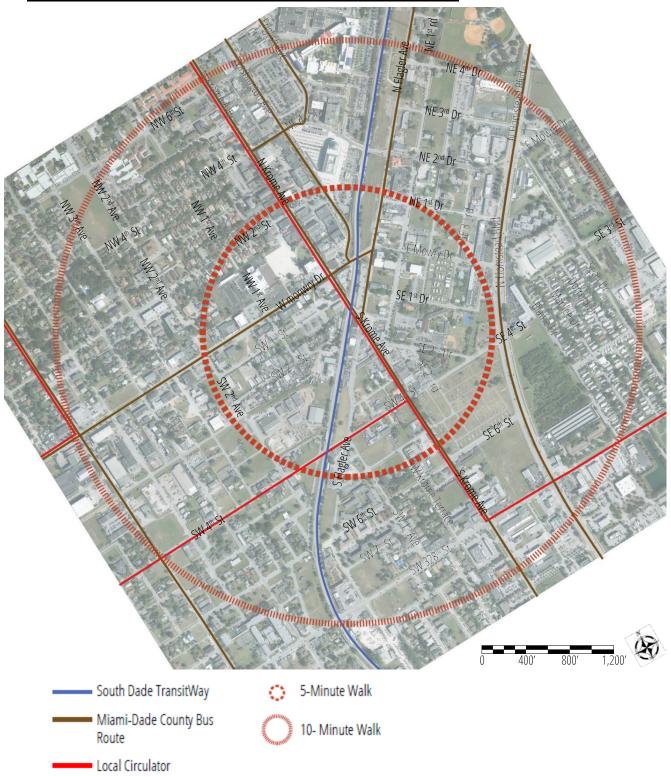
Station Area 14. Multi-Modal Infrastructure – SW 177th Avenue/Krome Avenue



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Station Area 14. Existing Transit - SW 177th Avenue/Krome Avenue



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Station Area 14. Illustrative Diagram - SW 177th Avenue/Krome Avenue



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w. Station Area 15

15. SW 344th Street

Station Area 15 has a variety of conditions within the 5- and 10-minute walking radius. The following maps identify existing transit conditions as well as existing and proposed multi-modal infrastructure. A summary of the proposed infrastructure shown in the maps includes:

- Proposed Bike Lanes
- Proposed Bike Paths
- Proposed Walkable Streets
- Crosswalks
- Proposed Bike and Ride Share Locations

The station area diagram maps show how the area within a 5- and 10-minute walking radius around the identified TransitWay station could develop to improve the walkability, bikeability, and general appeal of the location.

An example of existing conditions around Station Area 15 are included on this page representing both residential and commercial streets and intersections. A graphic and chart from the Miami-Dade County Complete Streets Design Guidelines is included to highlight and describe one of the proposed improvements to the multi-modal infrastructure.

Figure III-39 - Complete Streets Design Guidelines Recommended for Station Area 15

TABLE 4-3 RECOMMENDED BIKE FACILITY DIMENSIONS

		Recommended		Minimum
Element	Lane	Buffer	Lane	Buffer
Cycle Track	7'	3' (next to parked cars)	5'	3' (next to parked cars)
Two-way Cycle Track	12'	3' (next to parked cars)	8'	3' (next to parked cars)
Raised Cycle Track	6.5'	1' (for vertical element) 3' (next to parked cars)	5'	1' (for vertical element) 3' (next to parked cars)
Buffered Bike Lane	4'	3'	5'	20"
Bike Lane	6'	n/a	5'	n/a
Contra-Flow Bike Lane	6'	3'	5'	6"

Excerpt from the Miami-Dade County Complete Streets Design Guidelines.

Figure III-38 - Station Area 15.Existing Conditions within a 5 to 10 Mile Walking Radius





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Station Area 15. Multi-Modal Infrastructure – SW 344th Street

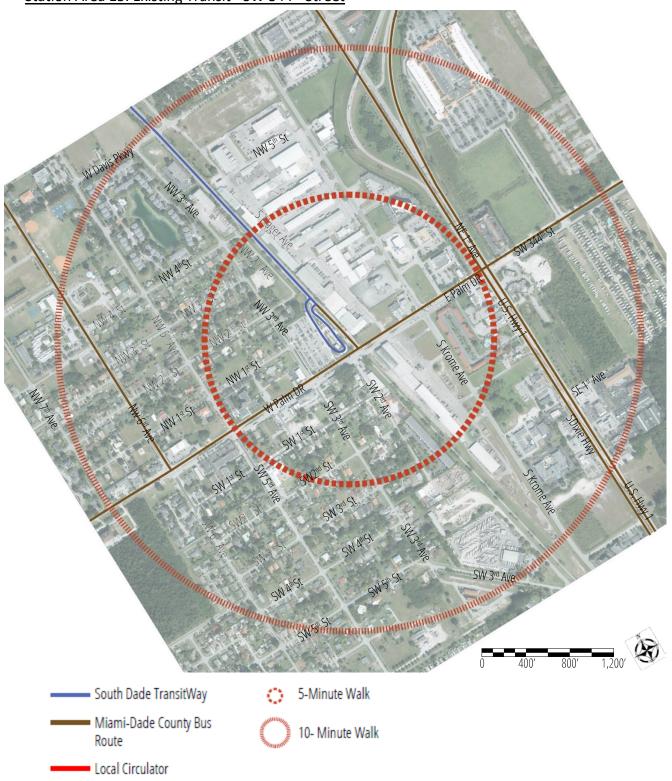


Station Area Connectivity Diagrams III-70

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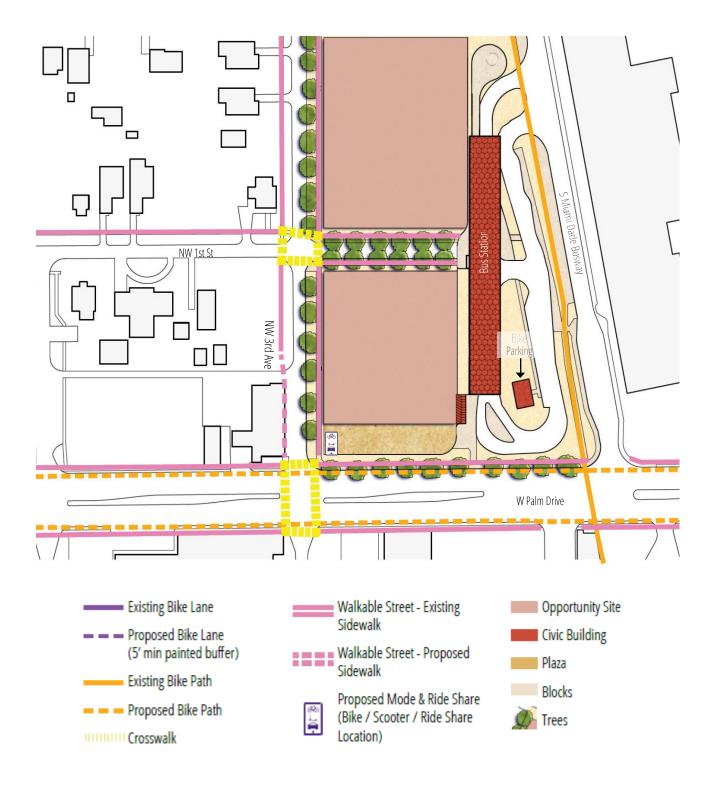
Station Area 15. Existing Transit - SW 344th Street



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Station Area 15. Illustrative Diagram - SW 344th Street



Chapter 4 STATION SELECTION ANALYSIS

SMART Plan South Dade Transitway Corridor Economic Mobility and Accessibility

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IV. STATION SELECTION ANALYSIS

The fifteen stations were examined across an array of 12 measures to identify three stations for further study. Raw scores were normalized before summing across all criteria. The components of the analysis are explained below.

a. Station Selection Process

The evaluation criteria were:

1. Projected Transit Boarding

The Land Use Scenarios and Visioning Planning Study Preferred Scenario was modeled in the Southeast Regional Planning Model (SERPM) for the forecast year 2040. The congested roadway travel times produced by SERPM became an input into the transit ridership forecast model.

Simplified Trips on Project Software (STOPS) was used to produce the transit ridership forecasts for this study, as well as for the South Corridor Rapid Transit Study that recommended Bus Rapid Transit (BRT) as the transit mode for the corridor. STOPS was developed by the Federal Transit Administration (FTA) to provide a reliable estimator of transit ridership due to routine travel by permanent residents on "fixed guideway" (Commuter Rail, Light Rail, Streetcar, BRT) transit projects. The boardings at each station in the matrix are part of the output of the STOPS model.

2. Number of Transit Routes and Modes Served, existing and future - Busway Operations

Figure IV-1 - BRT Operations PlanFigure IV-1 depicts a revised version of the operating plan shown as Table 8.1 in the Rapid Transit Study. It indicates that at all of the stations considered, each would be served by three different BRT services.

3. Number of Transit Routes and Modes Served, existing and future – Number of Feeder Bus Routes

Figure IV-2 is shown as Figure 9.1 in the Preliminary Engineering & Environmental Report and depicts the feeder bus routes projected to serve the stations in the corridor. Most stations will be served by one feeder bus route.

4. Accessibility by Walk – Sidewalk network completeness

These scores are based on a visual review of the station area plans depicting sidewalk facilities and gaps. It is a measure of the attractiveness of the station to transit riders who walk to it.

5. Accessibility by Bicycle – Bicycle lane network completeness

These scores are based on a visual review of the station area plans depicting bicycle facilities and gaps. It is a measure of the attractiveness of the station to transit riders who bicycle to it.

6. Accessibility by Vehicle – Park and Ride Supply at Station

These Park and Ride lot capacities are from Table 4.7 in the Rapid Transit Study. This is a measure of the attractiveness of the station to transit riders who drive to it

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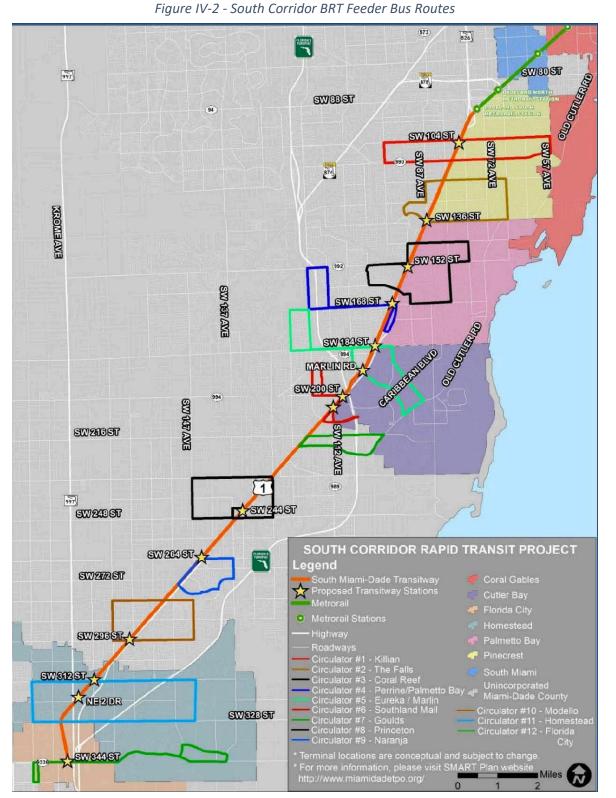


Figure IV-1 - BRT Operations Plan

N	lunicipality					Pin	ecre	st				Pal	lmett	o Ba	у			С	utler	Bay			Uni	ncorpo	rated	i Mia	mi-D	ade			Но	mes	tead		F	lorida	City
Operation Types	Headway Peak / Off-Peak (Min.) Service Span	Station Locations	Dadeland North (Metrorail)	Dadeland South (Metrorail)	SW 104 St (Target)	SW 112 St (SR-990 / Kilian Dr)	SW 120 St (Montgomery Dr)	SW 124 St (Chapman Field Dr)	SW 128 St	SW 136 St (Howard Dr / The Falls)	SW 144 St (Mitchell Dr)	SW 152 St (SR-992 / Coral Reef Dr)	SW 160 St (Colonial Dr)	SW 168 St (Richmond Dr)	SW 173 St (Banyan St)	W Indigo St	SW 184 St (Eureka Dr)	Martin Rd	SW 200 St (Caribbean Blvd)	SW 112 Ave (SR-989 / Allapattah Rd / Target)	"Southland Mail	SW 216 St (Hainfin Mill Dr)	SW 220 St (W Old Cutler Rd)	SW 232 St (Silver Palm Dr) / SW 127 Ave	SW 244 St (Coconut Palm Dr)	SW 264 St (Bauer Dr)	SW 272 St (Epmore Dr)	SW 280 St (Waldin Dr)	SW 296 St	SW 312 St (Campbell Dr)	Civic Ct	NE 2 Dr (Homestead City Hall)	SW 177 Ave (SR-997 / Krome Ave / Homestead Multimodal)	SW 324 St / SW 4 St	SW 328 St / SW 8 St (Lucy St)	SW 344 St (SR-9336 / Palm Dr / Florida City)	S-1 & SM is Pkny)
BRT - S	cenario 1B		T	T	Ð					FP		P		P			FP		6	P					P				\bigcirc	FP			UC)			T	
Ridership	Aug-17			3,788	100	75	89	75	91	298	154	492	220	371	197	206	347	277	543	464	269	116	96	39	316	308	127	144	224	501	-	293	-	158	149	329	128
Ridership Ranking	Aug-17			1	-	-	-	-	-	-	-	4	-	6	-	-	7	-	2	5	-	-	-	-	9	10	-	-	-	3	-	-	-	-	-	8	-
Local Service (All-Stops)	10 / 15 24-Hour		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0	0	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
Bus Rapid Transit (BRT - Limited Stops)	7.5 / 15 5 AM - 12:30 AM			•	•					•		•		•			•	•	•	•					•	•			•	•	•		•			•	
Park and R	an: 6 AM to 9 AM / 4 <u>lide Legend</u> Existing Park and Ri Existing Terminal w Park and Ride curre Future Park and Rid	ide rith Pa ently u	rk and nder (d Ride constru			40 LR	TP)				<u>Transit</u> BRT S All Sto	tation		n Cou 14 16		Term	own inal St / Statie		s ; <u>3</u> 2	2			Additio * Oper ** Off	ating	off Ti	ransit	way						Upda	ated:	7-Jun-:	19

Source: Miami-Dade Department of Transportation and Public Works, June 2019





Source: South Corridor Rapid Transit Project Preliminary Engineering & Environmental Report

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7. Potential Future Population and Employment within Walk Travel-Shed

The measure used was the combined population and employment in the 2040 Preferred Vision Scenario within a half-mile radius of the station, roughly equivalent to a ten-minute walk trip. The raw counts are expressed in hundreds. Unlike the Land Use Scenarios and Visioning Planning Study, this measure included the overlap areas between closely spaced stations. To exclude those overlap areas yielded a measure that favored isolated stations solely because they shared less of their half mile circle with an adjacent station. This distortion was particularly noticeable examining the five-mile circles used below.

8. Potential Future Population and Employment within Bicycle Travel-Shed

The measure used was the combined population and employment in the 2040 Preferred Vision Scenario within a two-mile radius of the station, roughly equivalent to a ten-minute bicycle trip. The raw counts are expressed in hundreds.

9. Potential Future Population and Employment within Circulator\Vehicle Travel-Shed

The measure used was the combined population and employment in the 2040 Preferred Vision Scenario within a five-mile radius of the station, roughly equivalent to a ten-minute auto trip. The raw counts are expressed in hundreds.

10. Place Making Potential

The raw scores are based on a review of the land use regulations in the various jurisdictions, judging their ability to facilitate the densities tested in the Land Use and Visioning Study without amendment. The product of that review is discussed in more detail in another section of the final report.

11. Public Acceptance of Transit Oriented Development (TOD) Principles

During the charrettes conducted for the Land Use and Visioning Study, attendees were invited to vote on differing development intensities around the various stations in the corridor. The raw scores are proportional to the intensities chosen most frequently during the charrette process.

12. Redevelopment Potential

During the Land Use Scenario and Visioning Study, station area incremental growth totals were distributed into the Micro-Analysis Zones (MAZs) used to define land use in the travel demand model. One of the guidelines used in that process was redevelopment suitability. The South Corridor contains almost 19,000 property parcels. Of those parcels, approximately 2,100 were identified as vacant. Vacant parcels are considered more suitable for new development, though not universally.

The data available for developed parcels included several attributes appealing as measures of redevelopment suitability. These included building age, improvement ratio (building value/land value) and Residual Floor Area Ration (RFAR), a measure of un-utilized intensity under the existing zoning.

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Data gaps meant that parcels nearly identical in redevelopment suitability could be classified differently due solely to the absence of data on some parcels. To overcome these limitations, an alternate system was used to identify parcels with an increased likelihood of redevelopment.

All vacant parcels were deemed suitable for redevelopment. The developed parcels with either missing improvement ratio data or missing building age data were ignored. The RFAR attribute was ignored. Few developed parcel records contained any data for this attribute. The remaining developed parcels, approximately 14,900 in number, were grouped according to Figure 3-3 below. The threshold values for building age (1970 and 1987) and improvement ratio (1.0 and 2.0) proposed in the original suitability scoring script were kept. The number of developed parcels within each of the classes is displayed inside each cell in Figure 3-3.

Parcels whose attributes fell in the shaded data ranges in Figure 3-3 were flagged as "suitable." In the selection matrix, at each station, the raw score for this criterion is the percentage of station area acreage occupied by "suitable" parcels.

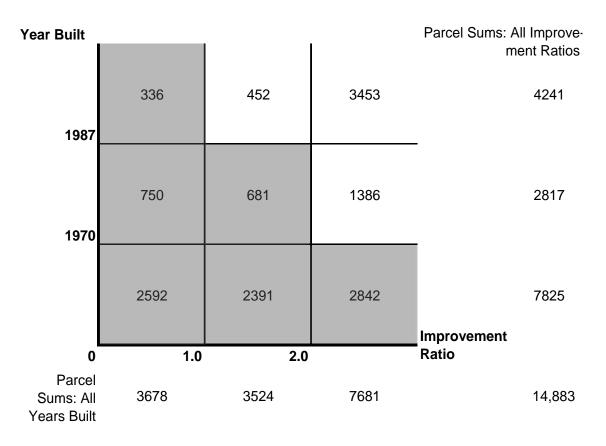


Figure IV-3 - Developed Parcel Redevelopment Suitability

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b. Percentile Scores

In order to sum scores measured in different units, all raw scores were expressed, in percentile terms, where their value fell within the range of values for that particular score. The lowest score in any range became zero, the highest 100. For example, a score taking values 1, 2, or 3 would convert to percentile scores of 0, 50 and 100.

c. Selected Stations

In order to avoid clustering of the selected stations, either within a community or just too close geographically (within 2 miles), stations were skipped if they violated either of these conditions. The following describes the choice of the three recommended stations. In descending order of percentile scores, the stations are:

- 1. Station 8 SW 112th Ave SELECTED and in Cutler Bay.
- 2. Station 5 SW 185th Street NOT SELECTED because partially within Cutler Bay.
- 3. Station 4 SW 176th Street NOT SELECTED due to uncertainty about station location.
- 4. Station 7 SW 200th Street NOT SELECTED because within Cutler Bay.
- 5. Station 9 SW 244th Street SELECTED and in unincorporated Miami Dade County.
- 6. Station 13 Miami-Dade College SELECTED and in Homestead.

In summary, the three stations recommended for further study are:

- 1. Station 8 SW 112th Ave/Southland Mall in Cutler Bay;
- 2. Station 9 SW 244th Street in unincorporated Miami Dade County.
- 3. Station 13 Miami-Dade College in Homestead

Table IV-1 contains the raw scores and Table IV-2 contains the percentile scores. Table IV-3 sorts the station by their scores and summarizes the selection of the top three stations.

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	Table IV-1 - SMART Plan South Corridor Station Areas (Raw Scores)																
										Station	s						
	Criteria	Measure	1 Pinecrest/SW 104th St.	2 SW 136th St.	3 SW 152nd St.	4 Palmetto Bay/SW 176th St.	5 SW 185th St.	6 Marlin Rd.	7 SW 200th St.	Cutler Bay/SW 112th 8 Ave/Southland Mall	9 SW 244th St.	10 SW 264th St.	11 SW 296th St.	12 SW 312th St./Campbell Dr.	13 MDC - Homestead	14 SW 177th Ave./ Krome 14 Ave.	15 SW 344th St.
1	Projected Transit Boarding	STOPS ridership forecast.	597	1219	1260	1257	2583	531	3749	1696	1700	1087	823	1530	782	1143	923
2	Number of Transit Routes and Modes Served, existing and future.	Number of Future Busway Operations	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3	Number of Transit Routes and Modes Served, existing and future.	Number of Future Feeder Bus Routes	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1
4	Accessibility by Walk	Sidewalk network completeness.	1	1	1	2	2	2	2	2	2	1	2	2	2	2	2
5	Accessibility by Bicycle	Bicycle lane network completeness.	1	2	2	2	2	1	1	3	1	2	1	2	2	2	3
6	Accessibility by Vehicle	Park and Ride Supply at Station.	250	75	500	449	261	0	0	656	217	0	200	90	800	0	448
7	Potential Future Population and Employment within Walk Travel-Shed Ring (1/2 mile).	Preferred Vision Scenario 2040 Pop. + Emp. (100s) within a 1/2 mile radius.	85	148	83	154	139	121	217	219	108	115	92	179	195	176	102
8	Potential Future Population and Employment within Bicycle Travel-Shed Ring (2-mile).	Preferred Vision Scenario Pop. + Emp. (100s) within a 2-mile radius.	969	740	965	1184	1326	1438	1443	1423	942	1024	1179	1432	1429	1488	1173
9	Potential Future Population and Employment within Circulator\Vehicle Travel-Shed Ring (5-mile).	Preferred Vision Scenario Pop. + Emp. (100s) within a 5-mile radius.	4961	4843	5023	4577	4563	4525	4499	4475	3914	3797	3833	3481	3371	3174	2837
10	Place Making Potential	Ability of Existing Land Use Policies to facilitate station area potential.	2	3	1	4	3	3	3	4	3	2	1	1	1	1	2
11	Public Acceptance of TOD Principles	Original station area intensity preferences from 1st Charrette round.	1.5	5	1.5	4	4	1.5	4	5	5	4	1.5	1.5	4	4	4
12	Redevelopment Potential	Percent of Station Area Parcel Acreage "Suitable" for Redevelopment.	90	87	88	74	84	85	59	85	93	87	66	80	83	81	73

Station Selection Analysis IV-7

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 Table IV-2 - SMART Plan South Corridor Station Areas (Percentile Scores)

										Stations							
	Criteria	Measure	1 Pinecrest/SW 104th St.	2 SW 136th St.	3 SW 152nd St.	 Palmetto Bay/SW 176th St. 	5 SW 185th St.	6 Marlin Rd.	7 SW 200th St.	Cutter Bay/SW 112th 8 Ave/Southland Mall	9 SW 244th St.	10 SW 264th St.	11 SW 296th St.	12 SW 312th St./Campbell Dr.	13 MDC - Homestead	14 SW 177th Ave./ Krome Ave.	15 SW 344th St.
1	Projected Transit Boarding	STOPS ridership forecast.	2	21	23	23	64	0	100	36	36	17	9	31	8	19	12
2	Number of Transit Routes and Modes Served, existing and future.	Number of Busway Operations	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	Number of Transit Routes and Modes Served, existing and future.	Number of Feeder Bus Routes	100	100	100	100	100	100	100	100	100	100	100	100	0	0	100
4	Accessibility by Walk	Sidewalk network completeness.	0	0	0	100	100	100	100	100	100	0	100	100	100	100	100
5	Accessibility by Bicycle	Bicycle lane network completeness.	0	50	50	50	50	0	0	100	0	50	0	50	50	50	100
6	Accessibility by Vehicle	Park and Ride Supply at Station.	31	9	63	56	33	0	0	82	27	0	25	11	100	0	56
7	Potential Future Population and Employment within Walk Travel-Shed Ring (1/2 mile).	Preferred Vision Scenario 2040 Pop. + Emp. (100s) within a 1/2 mile radius.	1	48	0	52	41	28	99	100	18	24	7	71	82	68	14
8	Potential Future Population and Employment within Bicycle Travel-Shed Ring (2-mile).	Preferred Vision Scenario Pop. + Emp. (100s) within a 2-mile radius.	31	0	30	59	78	93	94	91	27	38	59	93	92	100	58
9	Potential Future Population and Employment within Circulator\Vehicle Travel-Shed Ring (5-mile).	Preferred Vision Scenario Pop. + Emp. (100s) within a 5-mile radius.	97	92	100	80	79	77	76	75	49	44	46	29	24	15	0
10	Place Making Potential	Ability of Existing Land Use Policies to facilitate station area potential.	33	67	0	100	67	67	67	100	67	33	0	0	0	0	33
11	Public Acceptance of TOD Principles	Original station area intensity preferences from 1st Charrette round.	0	100	0	71	71	0	71	100	100	71	0	0	71	71	71
12	Redevelopment Potential	Percent of Station Area Parcel Acreage "Suitable" (see TM#3) for Redevelopment.	93	85	87	45	74	77	0	77	100	84	22	61	73	67	43

Station Selection Analysis IV-8

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Table IV-3 - SMART Plan South Corridor Station Areas (Ranking)

Sta#	Location	Rank	Score	Comment
8	Cutler Bay/SW 112th Ave/Southland Mall	1	1061	Selected
5	SW 185th St.	2	857	Not selected because partially within Cutler Bay.
4	Palmetto Bay/SW 176th St.	3	836	Not selected due to uncertainty about the station location.
7	SW 200th St.	4	807	Not selected because within Cutler Bay.
9	SW 244th St.	5	725	Selected
13	MDC - Homestead	6	701	Selected
15	SW 344th St.	7	688	
2	SW 136th St.	8	672	
12	SW 312th St./Campbell Dr.	9	646	
6	Marlin Rd.	10	642	
14	SW 177th Ave./ Krome Ave.	11	591	
10	SW 264th St.	12	561	
3	SW 152nd St.	13	552	
1	Pinecrest/SW 104th St.	14	489	
11	SW 296th St.	15	467	

Chapter 5 STATION AREA DEVELOPMENT POTENTIAL

SMART Plan South Dade Transitway Corridor Economic Mobility and Accessibility

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V. STATION AREA DEVELOPMENT POTENTIAL

a. Introduction

The following examines the development potential for three proposed (selected as explained in the previous chapter) stations along the South Dade Transitway Corridor (South Dade), including: Station 8- located at Southland Mall (112th Avenue); Station 9 – located at S.W. 244th Street; and, Station 13 – located at the Miami Dade College (MDC) campus in Homestead. All data sources (US Census OnTheMap, Consumer Expenditure Survey) cited used the most recent year of data available at the time the report was prepared.

The primary objective of this assessment is to provide a general overview of the geographic and general site conditions surrounding each station within a designated ½ mile radius and consider the opportunity for long-term redevelopment that may occur within and/or surrounding the transit station sites. This will include estimates of demand for housing and commercial (office, retail, hotel, industrial and healthcare) development, as well as estimate retail expenditures and ad valorem tax revenue that will be created upon build out of the station areas in 2040. The estimates of demand (by use), incremental expenditure, and incremental ad valorem tax represent the *value capture* that is created within each respective transit station area. In particular, this relates to the incremental ad valorem tax revenue upon which a given municipality can leverage to fund designated capital improvement programs and/or other economic development initiatives.

Notably, the incremental ad valorem tax revenue generated within each station area does not necessarily have to be dedicated solely to redevelopment within in the transit station area itself. These funds can potentially be used to support programming and investment in other areas of the municipality as well. Tax Increment Financing (TIF) could be used to confine this incremental revenue to the station areas. The utilization of TIF will depend upon how each municipality chooses to structure a TIF-related program.

The analysis herein is preliminary and high-level in nature. This is in large part due to the fact that: a.) there has been no in-depth evaluation of a single and/or group of properties to determine the property condition, physical/regulatory constraints, and/or propensity for near-term or long-term redevelopment of the mostly privately-owned properties; and, b.) there has not been any economic feasibility conducted to determine the viability of redevelopment in light of current and prospective market conditions. Furthermore, the estimates of demand by use are based upon the forecast of population and employment growth within each defined station area in the Preferred Vision Scenario. Therefore, there needs to be consideration for variability in demand among each land use contained in the estimates herein; the overall analysis at this point be should be regarded as *order-of-magnitude*.

The following sections provide the narrative around the three station evaluations, with reference to the detailed demand models provided in Appendix C. Table V-1 contains a summary of key findings related to estimated demand (by use) and projected incremental annual ad valorem tax

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revenue at each of the three stations in 2040. All estimates of value related to incremental ad valorem revenue and retail expenditures are expressed in 2019 dollars. As used in this analysis, "Build Out" does not mean development of all parcels but the merely that the forecast population and employment in the Preferred Vision Scenario is fully realized in the year 2040.

	Station 8	Station 9	Station 13
Residential (units)	2,203	2,274	1,128
Office (sq. ft.)	422,932	148,553	363,927
Retail (sq. ft.)	480,605	248,611	413,553
Hotel (rooms)	1,068	460	919
Industrial (sq. ft.)	96,121	368,313	110,281
Health Care (sq. ft.)	243,507	93,306	209,533
Est. Annual Incremental Ad Valorem Tax Revenue	\$14,912,999	\$11,224,497	\$14,136,436
Est. Net New Annual Retail Expenditure	\$23,792,400	\$12,893,580	\$9,745,920

 Table V-1 - Summary of Key Demand (by Use) and Ad Valorem Tax Revenue Upon Build Out (2040)

In sum, the Incremental Annual Ad Valorem Tax Revenue upon build out of residential and commercial development for the 3 stations identified herein total **\$40.3 million**.

b. Station 8 – Cutler Bay/S.W. 112th Ave/Southland Mall

The proposed Station 8 is defined by its location at the doorstep of Southland Mall, and the business activity in proximity to the Mall.

While the core activity surrounding the station is retail and business, there are pockets of lower density residential comprising a mix of modest and higher-end single family and townhomes. The

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Mall represents by far the largest single retail destination, though there is a broad mix of other retail including big-box stores (Target) along with small commercial/neighborhood centers.

Considering the economic environment surrounding the retail sector and, particularly, as it relates to the repurposing/redevelopment of many malls (and supermalls), we expect the characteristic of the retail environment in this area to change over the next several years and be repurposed/redeveloped as this asset class declines. To that, Southland Mall is currently undertaking a redevelopment plan that contemplates a mixed-use development comprising residential, office, hotel and retail. Regardless, Southland Mall property will remain the epicenter of economic activity within the station area.

Within the ½ mile station area, office development is somewhat limited at roughly 200,000 square feet, with only one notable development (Cutler Bay Office Center, 36,000 square feet) built in the last 30<u>+</u> years. However, in tandem with the Mall's repositioning, and improved transit, the South Dade office market (and collectively the station area) should strengthen and grow over the foreseeable future. The projections of employment through 2040 in the Preferred Vision Scenario are indicative of the expected continued growth in the market.

Perhaps most notable, the Southland Mall station is surrounded by an Opportunity Zone, the federal tax incentive program which was included within the 2017 tax reform bill and which is organized to encourage investment in areas historically constrained by substantial disinvestment. Indeed, while only a portion of the eastern section of the ½ mile radius surrounding the station is in an Opportunity Zone, it presents a significant opportunity for the Mall redevelopment over the long-term. While not a panacea for all designated communities, the Opportunity Zone tax incentives are of tremendous value to those zones where there is a market incentive for investment already in place. As a result, we expect the Opportunity Zone designation will serve to enhance and hasten the market trends in the area which already exists.

In summary, the addition of improved transit along the US-1 corridor can principally strengthen South Dade in its ability to attract higher density business and hospitality activity. The demand for residential, retail, office and hotels will be enhanced by the presence of a transit station. The Southland Mall station will act as a business center. And, given the presence of the Mall (even as repositioned), it will also experience peak inbound and outbound travel during and immediately following principal shopping hours on weekends, holiday periods, and weeknights.

Estimates of Demand, Household Expenditures and Fiscal Benefit

Based upon the ½ mile station pattern population projections (Preferred Vision Scenario), Station 8 is forecast to increase from 3,335 persons in 2015 to 8,774 in 2040, a net increase of 5,438 persons. Given existing and prospective land development patterns, it is estimated that 80 percent of future housing will be multi-family (defined by mid to higher density product), with 20 percent represented by townhome and/or single-family development. For the multi-family dwelling units, the average household size is estimated to be 2.3, while the townhome/single family average size will be closer to 3.5.

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As a result, this would create demand for a total 2,203 new dwelling units, including 1,892 multifamily units and 311 single family/townhome units. For the multi-family units, which primarily represents rental product, it is assumed that the average taxable value will be in the range of \$190,000, while single-family/townhome product will be in the range of \$350,000. Upon build out (2040) this will generate \$468 million in total taxable value from residential units and \$8.3 million in incremental annual ad valorem tax revenue¹, summarized in Table V-2.

	Multi-family	SF/Townhome	Total
Number of Units	1,892	311	2,203
Average Taxable Value/Unit	\$190,000	\$350,000	\$212,600
Total Taxable Value	\$359,480,000	\$108,850,000	\$468,330,000
Current Millage	17.8100	17.8100	17.8100
Annual Ad Valorem Tax (2040)	\$6,402,339	\$1,938,619	\$8,340,957

Table V-2 - Station 8 - Est. Annual Incremental Ad Valorem Tax Revenue Upon Build Out Residential(2019 \$'s)

Based upon prospective housing values, median household income in the Station 8 area is estimated to be \$80,000. Based upon the 2017-18 Consumer Expenditure Survey (Bureau of Labor Statistics), households will expend an estimated 27 percent of income on non-auto retail goods and services, and 50 percent of this expenditure will occur within the ½ mile station area. As shown in Table V-3, upon build out, this will generate nearly \$24 million in new resident retail expenditure annually within the station area.

Table V-3 - Station 8 - Estimated Annual Resident Retail Expenditure Upon Build Out (2019 \$'s)

	Multi-family
Net New Households	2,203
Average HH Income	\$80,000
Total HH Income	\$176,240,000
% Expended on Non-auto Retail	27%
% Retained in Station Area	50%
Net New Retail Expenditure	\$23,792,400

In terms of employment, the station area is forecast to increase from 2,347 workers in 2015 to 6,619 in 2040, a net increase of 4,272 workers. Using an assessment of current employment

¹ Based upon City of Cutler Bay current millage of 17.8100

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within the station area based upon US Census On-the-Map (2016 data), what follows is a general overview of estimated current employment within the primary commercial development categories, with estimates of the employment breakdown by use upon build out (2040). This is summarized in the following:

<u>Office:</u> Considering employment types including but not limited to Information, Real Estate, Finance, and Professional Business Services, approximately 12 percent of the station area's current employment is considered office employment. Looking ahead, the characteristic of the area's new development will likely become considerably more balanced than what exists today (given the heavy influence of Southland Mall), with office projected to approximately 45 percent of future employment demand.

<u>Retail</u>: As noted, the Mall is currently the primary employer in the station area, with 56 percent of station area employment now in the retail sector. However, due to the influence of rapid transit access, retail's share of future demand is estimated to be 25 percent.

<u>Industrial:</u> Industrial employment is relatively modest at less than 5 percent currently within the station area and, given diminishing land availability, is estimated to decline to the 2.5 percent range. This would mostly be defined by flex/showroom type space.

<u>Hotel</u>: There are currently two small hotels in the station area (La Quinta Inn, Motel 6), but as the area becomes increasingly balanced with office and residential, hotel development will increase notably and is estimated to represent 10 percent of total employment in 2040.

<u>Healthcare</u>: Healthcare related employment represents approximately 12 percent of the current total, which is estimated to increase to 15 percent given growing trends within this sector.

Based upon estimates of square feet per employee for the primary commercial uses noted above using information from the Urban Land Institute (ULI), International Council of Shopping Centers (ISCS) and/or Institute of Transportation Engineers (ITE), Table V-4 provides a summary of demand by use based upon the station's forecast employment increase of 4,272 by 2040.

Use	Office (SF)	Retail (SF)	Industrial (SF)	Hotel (Rms)	Health Care (SF)
Employment (%)	45%	25%	2.5%	10%	15%
Estimated Employment	1,922	1,068	107	427	641
Avg. Sq. Ft./Empl. or Empl./Room	220	450	900	.40	380
Estimated Demand by Use	422,928	480,600	96,120	1,068	243,504

Table V-4 - Station 8 - Estimated Commercial Space Demand by Use Upon Build Out

Note: Employment percent above does not add to 100% as there is some other/miscellaneous employment not related to these primary uses such as: education, public administration, agriculture, among others.

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Based upon the estimates of demand by use, and applying an estimated taxable value for each of these uses, Table V-5 provides a summary of incremental taxable value for the station area from new commercial development by 2040.

Table V-5 - Station 8 - Estimated Annual Incremental Ad Valorem Tax Revenue Upon Build Out – Commercial (2019 \$'s)

Use	Office (SF)	Retail (SF)	Industrial (SF)	Hotel (Rms)	Health Care (SF)
Est. Demand (2040)	422,928	480,600	96,120	1,068	243,504
Est. Taxable Value/unit	\$250	\$225	\$150	\$100,000	\$140
Est. Total Taxable Value	\$105,732,000	\$108,135,000	\$14,418,000	\$106,800,000	\$34,090,560
Current Millage	17.8100	17.8100	17.8100	17.8100	17.8100
Est. Annual Tax Revenue	\$1,883,087	\$1,925,884	\$256,785	\$1,902,108	\$607,153

As set forth above, the total incremental ad valorem tax among all commercial uses is estimated to be \$6.6 million upon station area build out in 2040.

c. Station 9 – S.W. 244th Street

Station Area 9 is generally surrounded by a limited amount of development, and a considerable amount of vacant land. Within immediate proximity is Redlands Market, a 27-acre indoor/outdoor market that is well-established in the community. To the west of US-1, there is scattered industrial and storage facilities. Though east of US-1 is also sparsely developed, there have been two new rental apartments developed totaling 360+ units and both representing affordable/workforce housing. South of the proposed station along US-1 is defined by older, small commercial centers in fair condition.

Though this station area has seen moderate growth during the past several years, the prospect of notably improved transit should modify and greatly enhance the area's existing development pattern with a more balanced mix of residential and commercial uses.

Estimates of Demand, Household Expenditures and Fiscal Benefit

Based upon the ½ mile station pattern population projections (Preferred Vision Scenario), Station 9 is forecast to increase from 2,779 persons in 2015 to 8,608 in 2040, a net increase of 5,829 persons. Given existing and prospective land development patterns, it is estimated that 70 percent of future housing will be multi-family (defined by mid to higher density product), with 30 percent represented by townhome and/or single-family development. For the multi-family dwelling units, the average household size is estimated to be 2.3, while the townhome/single

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family average size will be closer to 3.5.

As a result, this would create demand for a total 2,274 new dwelling units including 1,774 multifamily units and 500 townhome/single family units. For the multi-family units, which primarily represents rental product, it is assumed that the average taxable value will be in the range of \$170,000, while townhome/single-family and townhome product will be in the range of \$290,000. Upon build out (2040) this will generate \$446 million in total taxable value from residential units and \$7.8 million in incremental annual ad valorem tax revenue², summarized in Table V-6.

Table V-6 - Station 9 - Estimated Annual Incremental Ad Valorem Tax Revenue Upon Build Out -Residential (2019 \$'s)

	Multi-family	Single Family	Total
Number of Units	1,774	500	2,274
Average Taxable Value/Unit	\$170,000	\$290,000	\$196,400
Total Taxable Value	\$301,580,000	\$145,000,000	\$446,580,000
Current Millage	17.51040	17.51040	17.51040
Annual Ad Valorem Tax (2040)	\$5,280,786	\$2,539,008	\$7,819,794

Based upon prospective housing values, median household income in the Station 9 area is estimated to be \$70,000. Based upon the 2017-18 Consumer Expenditure Survey (Bureau of Labor Statistics, households will expend an estimated 27 percent of income on non-auto retail goods and services; and, 30 percent of this expenditure will occur within the ½ mile station area. As shown in Table V-7, upon build out, this will generate nearly \$13 million in new resident retail expenditure annually within the station area.

Table V-7 - Station 9 - Estimated Annual Resident Retail Expenditure Upon Build Out (2019 \$'s)

	Multi-family
Net New Households	2,274
Average HH Income	\$70,000
Total HH Income	\$159,180,000
% Expended on Non-auto Retail	27%
% Retained in Station Area	30%
Net New Retail Expenditure	\$12,893,580

In terms of employment, the station area is forecast to increase from 252 workers in 2015 to 2,708 in 2040, a net increase of 2,455 workers. Using an assessment of current employment within the station area based upon US Census OnTheMap (2016 data), what follows is a general overview of estimated current employment within the primary commercial development categories, with estimates of the employment breakdown by use upon build out (2040). This is

2 Based Upon Unincorporated Miami Dade County current millage of 17.5104

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summarized in the following:

<u>Office:</u> Considering employment types including but not limited to Information, Real Estate, Finance, and Professional Business Services, approximately 8 percent of the station area's employment is considered office employment. Looking ahead, the characteristic of the area's new development will likely become more balanced than what exists today, with office projected to represent up to 25 percent of future employment demand.

<u>Retail:</u> Currently 17 percent of station area employment is in the retail sector, which is presumed to increase somewhat during the long term to an estimated 22.5 percent.

<u>Industrial:</u> Industrial employment represents a relatively modest 7 percent currently within the station area, though it is a predominate use in the area. Given land availability within the station area and, particularly on the periphery, industrial will continue to represent a notable use in the area and represent approximately 10 to 15 percent of future employment demand.

<u>Hotel</u>: There are currently no hotels in the station area, but as the area becomes increasingly balanced with office, residential, and retail, then development should occur and is estimated to represent 7.5 percent of total employment in 2040.

<u>Healthcare</u>: Healthcare related employment represents approximately 0 percent of the current total, which is estimated to increase to 10 percent given growing trends within this sector.

Based upon estimates of square feet per employee for the primary commercial uses noted above using information from ULI, ISCS and/or ITE, Table V-8 provides a summary of demand by use based upon the station's forecast employment increase of 2,455 by 2040.

Use	Office (SF)	Retail (SF)	Industrial (SF)	Hotel (Rms)	Health Care (SF)
Employment (%)	27.5%	22.5%	12.5%	7.5%	10%
Estimated Employment	675	552	307	184	246
Avg. Sq.ft./Empl. or Empl./Room	220	450	1,200	.40	380
Estimated Demand by Use	148,528	248,569	368,250	460	93,290

Table V-8 - Station 9 - Estimated Comme	rcial Space Demand by Use Upon Build Out
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Note: Employment percent does not add to 100 as there is some other/miscellaneous employment not related to these primary uses, and most notably education- and agriculture-based employment.

Note that in Table V-8 approximately 20 percent of the employment demand within this station is not included as a primary commercial use for the station area's future demand. This is based upon the premise that, according to OnTheMap, approximately 62 percent of the station area's current employment is categorized within the education and agriculture sector. Looking forward, these sectors will still likely represent some component of employment demand, but at a more modest level that is estimated to be 20 percent of the forecast growth. However, since these

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particular uses are generally non-profit, they provide a marginal contribution to the ad valorem tax base; therefore, they have been excluded from the analysis herein.

Based upon the estimates of demand by use and applying an estimated taxable value for each of these uses, Table V-9 provides a summary of incremental taxable value for the station area from new commercial development by 2040.

Table V-9 - Station 9 - Estimated Annual Incremental Ad Valorem Tax Revenue Upon Build Out -Commercial (2019 \$'s)

Use	Office (SF)	Retail (SF)	Industrial (SF)	Hotel (Rms)	HealthCare (SF)
Est. Demand (2040)	148,528	248,569	368,250	460	93,290
Est. Taxable Value/unit	\$270	\$215	\$130	\$90,000	\$125
Est. Total Taxable Value	\$40,102,425	\$53,442,281	\$47,872,500	\$41,428,125	\$11,661,250
Current Millage	17.51040	17.51040	17.51040	17.51040	17.51040
Est. Annual Tax Revenue	\$702,210	\$935,796	\$838,267	\$725,423	\$204,193

As set forth above, the total incremental ad valorem tax among all commercial uses is estimated to be \$3.4 million upon station area build out in 2040.

d. Station 13 – MDC Homestead

The MDC Homestead station (Station 13) site and associated development opportunities are defined by its positioning within Homestead's downtown area, and its proximity to City Hall and the Miami Dade College (MDC's) Homestead Campus. The surrounding station area is generally defined by small commercial development, moderate value housing and vacant properties. However, there is a considerable amount of development activity occurring as discussed below.

The MDC Homestead campus today has approximately 6,000 students, the vast majority of which arrive to campus by automobile. The opportunity which the station represents is the expansion of the educational facilities, transitioning students/faculty/staff from an auto trip to a transit trip, and growing the number of students on campus as MDC continues to expand.

During the past 15<u>+</u> years, the City of Homestead experienced notable growth, including the relocation of City Hall to the core of its downtown (station area). In addition to its relatively strong single-family residential market, the City added more than 2,000 multi-family units (including those currently under construction) since 2005 – though nothing of note within the station area. In terms of retail, there has been roughly 1.4 million square feet city-wide built since 2005, with a significant amount of retail attributed to larger shopping/power centers; however, of note, the

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150,000 square foot Homestead Station (a retail and entertainment complex) located at Krome Avenue and Mowry Drive is now under construction. Accordingly, there has been roughly 220,000 square feet of office development city-wide during the past $15\pm$ years, though, nothing of scale within the station area. Homestead Hospital Baptist South is approximately $2\pm$ miles from the proposed transit station.

In addition to the City's focus on its downtown area, the area (including MDC Homestead station) is nearly entirely enveloped by an Opportunity Zone, the federal tax incentive program which was included within the 2017 tax reform bill and which is organized to encourage investment in areas historically constrained by substantial disinvestment. As noted above, this designation provides no guarantee for significant redevelopment. However, the Opportunity Zone tax incentives should provide tremendous value to those zones where there is a market incentive for investment already in place, especially areas like this that have a broad mix of residential, commercial, education and healthcare sectors.

Estimates of Demand, Household Expenditures and Fiscal Benefit

Based upon the ½ mile station pattern population projections (Preferred Vision Scenario), Station 13 is forecast to increase from 1,589 persons in 2015 to 4,325 in 2040, a net increase of 2,735 persons. Given existing and prospective land development patterns, it is estimated that 85 percent of future housing will be multi-family (defined by mid to higher density product), with 15 percent represented by townhome and/or single-family development. For the multi-family dwelling units, the average household size is estimated to be 2.3, while the townhome/single family average size will be closer to 3.5.

As a result, this would create demand for a total 1,128 new dwelling units including 1,011 multifamily units and 117 townhome/single family units. For the multi-family units, which primarily represents rental product, it is assumed that the average taxable value will be in the range of \$275,000, while single-family and townhome product will be in the range of \$350,000. Upon build out (2040) this will generate \$319 million in total taxable value from residential units and \$6.9 million in incremental annual ad valorem tax revenue³, summarized in Table V-10.

	Multi-family	Single Family	Total
Number of Units	1,011	117	1,128
Average Taxable Value/Unit	\$275,000	\$350,000	\$282,800
Total Taxable Value	\$278,025,000	\$40,950,000	\$318,975,000
Current Millage	21.6894	21.6894	21.6894
Annual Ad Valorem Tax (2040)	\$6,030,195	\$888,181	\$6,918,376

Table V-10 - Station 13 - Estimated Annual Incremental Ad Valorem Tax Revenue Upon Build Out -Residential (2019 \$'s)

³ Based upon City of Homestead current millage of 21.6894

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Based upon prospective housing values, median household income in the Station 8 area is estimated to be \$80,000. Based upon the 2017-18 Consumer Expenditure Survey (Bureau of Labor Statistics), households will expend an estimated 27 percent of income on non-auto retail goods and services, and 40 percent of this expenditure will occur within the ½ mile station area. As shown in Table V-11, upon build out, this will generate nearly \$10 million in new resident retail expenditure annually within the station area.

	Multi-family
Net New Households	1,128
Average HH Income	\$80,000
Total HH Income	\$90,240,000
% Expended on Non-auto Retail	27%
% Retained in Station Area	40%
Net New Retail Expenditure	\$9,745,920

Table V-11 - Station 13 - Estimated Annual Resident Retail Expenditure Upon Build Out (2019 \$'s)

In terms of employment, the station area is forecast to increase from 2,818 workers in 2015 to 6,494 in 2040, a net increase of 3,676 workers. Using an assessment of current employment within the station area based upon US Census On-the-Map (2016 data), what follows is a general overview of estimated current employment within the primary commercial development categories, with estimates of the employment breakdown by use upon build out (2040). This is summarized in the following:

<u>Office:</u> Considering employment types including but not limited to Information, Real Estate, Finance, and Professional Business Services, approximately 37 percent of the station area's employment is considered office-using. Looking ahead, the characteristic of the area's new development may become a little more balance, office use should continue to proliferate in the downtown area and is projected to represent 45 percent of future employment demand.

<u>Retail:</u> Currently 16 percent of station area employment is now in the retail sector. However, with the addition of Homestead Station, coupled with improved transit, retail should reach an estimated 25 percent of future employment demand.

<u>Industrial:</u> Industrial employment represents less than 5 percent currently within the station area and will lower to 2.5 percent, its modest capture of potential development likely confined to the periphery of the station area.

<u>Hotel</u>: There are currently no hotels located within the station area. The mix of future development activity should significantly increase the potential for hotel development to 10 percent.

<u>Healthcare</u>: Healthcare related employment represent approximately 18 percent of the current total and should remain in this general range going forward to approximately 15 percent.

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Based upon estimates of square feet per employee for the primary commercial uses noted above using information from ULI, ISCS and/or ITE, Table V-12 provides a summary of demand by use based upon the station's forecast employment increase of 3,676 by 2040.

Use	Office (SF)	Retail (SF)	Industrial (SF)	Hotel (Rms)	HealthCare (SF)
Employment (%)	45	25	2.5	10	15
Estimated Employment	1,654	919	92	368	551
Avg. Sq. Ft./Empl. or Empl./Room	220	450	1,200	.40	380
Estimated Demand by Use	363,924	413,550	110,280	919	209,532

Table V-12 - Station 13 - Estimated Commercial Demand by Use Upon Build Out

Note: Employment percent does not add to 100 as there is some other/miscellaneous employment not related to these primary uses.

Based upon the estimates of demand by use, and applying an estimated taxable value for each of these uses, Table V-13 provides a summary of incremental taxable value for the station area from new commercial development by 2040.

Table V-13 - Station 13 - Estimated Annual Incremental Ad Valorem Tax Revenue Upon Build Out -Commercial (2019 \$'s)

Use	Office (SF)	Retail (SF)	Industrial (SF)	Hotel (Rms)	HealthCare (SF)
Est. Demand (2040)	363,924	413,550	110,280	919	209,532
Est. Taxable Value/unit	\$280	\$225	\$150	\$100,000	\$140
Est. Total Taxable Value	\$101,898,720	\$93,048,750	\$16,542,000	\$91,900,000	\$29,334,480
Current Millage	21.6894	21.6894	21.6894	21.6894	21.6894
Est. Annual Tax Revenue	\$2,210,122	\$2,018,172	\$358,786	\$1,993,256	\$636,247

As set forth above, the total incremental ad valorem tax among all commercial uses is estimated to be \$7.2 million upon station area build out in 2040.

e. Transit Oriented Development (TOD) Opportunities

The land use regulations that affect the implementation of Transit Oriented Development in the three station areas are:

1. The Cutler Bay Growth Management Plan (for the portion of the Station area 8 within the Town -west of US-1);

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- 2. The Miami-Dade Comprehensive Development Master Plan (affecting part of Station 8 and all of Station 9); and
- 3. The City of Homestead Comprehensive Plan (Station 13).

These three documents are examined below for opportunities to encourage TOD in the different jurisdictions.

Town of Cutler Bay Growth Management Plan (adopted April 28, 2008)

I	Element Key		Asses	sment Key
	FLU	Future Land Use Element	×	Inconsistent or lacking
	HOU	Housing Element		Consistent, no changes needed
	IGC	Intergovernmental Coordination Element	✓	Consistent but needs work (e.g., update)
	TRA	Transportation Element		

<u>General Comments</u>: The Land Development Regulations (LDRs) in Table 4-14 are clearly and explicitly tied to the Comprehensive Plan policies related to transit-friendly development. The densities and intensities in the zoning categories that allow transit-friendly development are sufficiently high to support BRT. The site design and architectural design standards are clear and detailed enough to provide guidance regarding the expected quality of development. One area of the LDRs that the Town could clarify and improve is in regard to the provision of affordable housing, which is not really well addressed.

<u>Note:</u> The text of policies marked with an * have been abbreviated. See Growth Management Plan for complete Objectives and Policies.

Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
FLU	Policy FLU-1C	The Town's Land Development Regulations shall conform to, and implement, the use, intensity and density standards prescribed for the land use districts provided on the Future Land Use Map and detailed in Table FLU-1. Mixed Use Density and Intensity – US-1 Corridor Mix of uses, with residential uses comprising no less than 20 percent and no greater than 80 percent of the total floor	D		

Table V-14 – Town of Cutler Bay Growth Management Plan



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
		area of a vertical mixed-use building, and no less than 20 percent and no more than 80 percent of the buildings on a development site or block face. Floor Area Ratio (FAR) of 2.5 multi- family residential at up to 75 units per gross acre. Maximum building height of 72 feet, with no more than three stories, 35 feet adjacent to residentially zoned areas. Architectural features can exceed maximum height limitations.			
		Town Center			
		Densities and Intensities			
		Core			
		A maximum building height, of 18 stories, floor area ratio of 3.8 and density of 250 units per gross acre. Architectural features can exceed maximum height limitations.			
		Center			
		Floor Area Ratio of 2.5, 150 units per gross acre. Maximum building height of 15 stories. Architectural features can exceed maximum height limitations.			
		Edge			
		Floor Area Ratio of 1.0, 50 units per gross acre. Maximum building height of eight stories. Architectural features can exceed maximum height limitations. *			
FLU	Policy FLU-2A	Development and redevelopment in the Town Center shall provide for the development of a well- designed and compatible area that provides attractive places to live, work and shop and that is	D		



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
		accessible via the full range of transportation options, including transit, automobiles, bicycles, and pedestrians.			
FLU	Policy FLU-2B	The Town shall implementimprovedmulti-modaltransportation access to, from andwithin the Town Center.	D	ARTICLE IX provides standards for linkages/connectivity through multimodal infrastructure improvements.	~
FLU	Policy FLU-3A	Areas designated mixed-use shall contain commercial, office, residential, community, institutional and recreation and open space uses integrated vertically or horizontally, in accordance with Policy FLU-1C.	D		
FLU	Policy FLU-5B	Development and redevelopment in the Town shall provide for pedestrian friendly street design, an interconnected street network and hierarchy to reduce congestion and improve traffic flow, design that promotes the use of non- motorized transportation modes, connectivity to transit, and a range of uses in a compact area to reduce the need for external trips.			
FLU	Policy FLU-13C	The Town shall support the location of employment centers, offices, and retail uses proximate to residential areas through the implementation of the Town Center and Mixed-Use land use districts, in accordance with this Plan.	1	The town center district is coded to accommodate the higher overall intensity of development required to support the town. It is expected that the district may be expanded over time to meet the growth in demand for downtown facilities and services. The transit corridor district provides for the location of transit-oriented uses.	
HOU	Policy H1-1B	In order to discourage sprawl and encourage housing in areas with the necessary infrastructure and services, including proximity to	D		



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
		services, and employment centers, the Town shall allow residential development in appropriate locations in the Town Center and Mixed-Use Districts.			
HOU	Policy H1-1C	The Town shall encourage housing proximate to transit and employment centers by allowing residential development at appropriate densities along transit corridors.	D		
HOU	Policy H2-1F	The Town shall encourage housing, including affordable, workforce, elderly and special needs housing, proximate to transit and employment centers by providing adequate locations for mixed-use development and allowing residential development at appropriate densities along transit corridors.	D		✓
HOU	Policy H2-2D	In consideration of a developer's provision of affordable, workforce, elderly or special needs housing, the Town shall consider granting up to a 20 percent density increase. *	1	There is no explicit encouragement for the provision of affordable, workforce, elderly or special needs housing in proximity to transit and employment centers, but the TRC and TC zoning districts do allow densities that make such housing more feasible.	X
IGU	Policy IC-2F	The municipalities will seek to coordinate with Miami-Dade County to create an overlay district in order to promote development through the use of air rights over the South Dade Busway.	D		
IGU	Policy IC-3I	The Town shall coordinate with and support the TPO and Miami-Dade DTPW in its efforts toward multi- modal transportation planning. *	D		 ✓

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Element	GOP ID # Goal 1	Supportive Comprehensive Plan Policies Provide for the citizens of Cutler	Direct (D) or Indirect (I) Support	Comments The Town has developed bicycle	Status
		Bay, a safe, convenient, accessible and efficient transportation system.		routes and improved its sidewalk system; it has established a trolley system and will soon undertake a pilot project to provide Freebee on demand rides.	
TRA	Policy T1-1I	To provide an incentive for development in designated charrette areas, where higher, Transit Oriented Densities are encouraged, the Town shall work with the County and the State to seek alternative means of capacity; including advocacy of a transit impact fee.	1		
TRA	Policy T1-1T	The Town shall work with Miami- Dade County Transit to implement transit service improvements where warranted throughout the town and along the US-1 Busway, including but not limited to Signal Prioritization, Minimal Headways, Special Use Lanes, and other Transportation Demand Management, Transportation Systems Management, Tolling and High Occupancy Vehicle approaches that may be practical.	D		✓
TRA	Policy T1-2B	The Town shall work with The Florida Department of Transportation, Miami-Dade County Public Works Department and Miami-Dade Transit to implement parking strategies in the charrette areas and along the Busway to provide incentive for the further development of transit friendly urban design.	1		
TRA	Policy T1-2J	The Town supports the implementation of an extension of the Metrorail System between Dadeland and Florida City on the	D	Language regarding Metrorail could be updated; or it could remain to reflect aspirational future. Nomenclature for the	

Station Area Development Potential V-17



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
		US-1 Busway, and therefore supports a funding shift from primarily roadway projects to a more alternative mode/transit mobility programming.		busway should be updated.	
TRA	Policy T1-2M	The Town will work with Miami- Dade Transit to decrease bus headways mid-day to 30 minutes or less.	1		
TRA	T1-2N	Cutler Bay shall support County plans for the higher level of transit service along on the Busway, including the examination of High Occupancy Toll lanes, or development of the Metrorail. The Town will advocate for a transit impact fee.	D	Policy should be amended to reflect current plans.	
TRA	Policy T1-3F	The Town shall coordinate with Miami-Dade Transit for improved pedestrian facilities within ¼ mile of all transit stations, and areas of transit-oriented densities. The Town strongly supports a pedestrian overpass on US-1 to the busway and will work with the appropriate agencies to implement this project.	D		
TRA	Policy T1-4A	The Town shall develop regulations that promote Transit Oriented Development (TOD) in the charrette areas, and around existing and future transit and express bus stations, where appropriate. The regulations shall promote infill development with the appropriate transit sufficient densities around Busway transit stations.	D	Sec. 3-59 TRC and Sec. 3-60 TC Districts incorporate regulations to promote Transit Oriented Development	

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Miami-Dade County Comprehensive Development Master Plan (CDMP) (adopted October 2, 2013 as amended through September 27, 2018)

Assessment Key

Element Key

-			-
FLU	Future Land Use Element	×	Inconsistent or lacking
TRA	Transportation Element		Consistent, no changes needed
CHD	Community Health and Design	\checkmark	Consistent but needs work (e.g., update)

<u>General Comments</u>: Consistency between the Future Land Use Map and the Zoning map is high, particularly in the context of adopted goals and policies that encourage a more urban and intense mix of uses in transit corridors and urban centers.

<u>Note:</u> In Table V-15 the text of policies marked with an * have been abbreviated. See Comprehensive Development Master Plan for complete Objectives and Policies.

The wording of Policies LU-7F, LU-7G, LU-9F and LU-9V provided below comes from Ordinance 19-07, adopted by the Miami-Dade County Board of County Commissioners on January 24, 2019. (refer to section c. of this Chapter for more details).

Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments (No comments are incorporated into this section)	Status
FLU	Policy LU-1A	High intensity, well-designed urban centers shall be facilitated by Miami-Dade County at locations having high countywide multimodal accessibility.	1		
FLU	Obj. LU-7	Miami-Dade County shall require all new development and redevelopment in existing and planned transit corridors and urban centers to be planned and designed to promote transit-oriented development (TOD), and transit use, which mixes residential, retail, office, open space and public uses in a safe, pedestrian and bicycle friendly environment that promotes mobility for people of all ages and abilities through the use of rapid transit services.	D		
FLU	Policy LU-7A	Through its various planning, regulatory and development activities, Miami-Dade County shall encourage development of a wide variety of residential and nonresidential land uses and activities in nodes around rapid transit stations Rapid transit station sites and their vicinity shall be developed as	D		

Table V-15 – Miami-Dade County Comprehensive Development Master Plan



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments (No comments are incorporated into this section)	Status
		"urban centers" as provided in this plan element under the heading Urban Centers.*			
FLU	Policy LU-7B	It is the policy of Miami-Dade County that both the County and its municipalities shall accommodate new development and redevelopment around rapid transit stations that is well designed, conducive to pedestrian, bicycle and transit use, and architecturally attractive. *	D		V
FLU	Policy LU-7E	Land uses that are not conducive to public transit ridershipshould not be permitted to locate or expand within 1/4 mile of rail rapid transit stations.	D		
FLU	Policy LU-7F	Residential development around existing and proposed rapid transit stations should have a minimum density of 15 dwelling units per acre (15 du/ac) within 1/4 mile walking distance from the stations and 20 du/ac or higher within 700 feet of the station, and a minimum of 10 du/ac between 1/4 and 1/2 mile walking distance from the station. Business and office development intensities around rail stations should have a minimum intensity of 1.5 FAR within 1/4-mile walking distance from within 700 feet, and 1.0 FAR between 1/4- and 1/2-mile walking distance from the station*	D		
FLU	Policy LU-7G	Miami-Dade County should partner with the Transportation Planning Organization (TPO) and affected municipalities to establish a systematic program that will produce transit-oriented development (TOD) plans for the areas within ¼ to ½ mile around all Metrorail, the Miami Intermodal Center (MIC) and Strategic Miami Area Rapid Transit (SMART) Plan rapid transit corridor stations. Transit-oriented development is a mix of land uses that promotes transit use and decreases the dependence on automobiles Priority for station development or improvement shall be for those municipalities that have established zoning standards that ensure minimum	D		



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments (No comments are incorporated into this section)	Status
		average residential density and non- residential intensity in accordance with Policy LU-7F.*			
FLU	Policy LU-7H	The Department of Regulatory and Economic Resources shall review land development regulations to identify reforms that would invite, and not impede, transit- oriented development in the station areas, by the year 2020.	D		
FLU	Policy LU-7I	Miami-Dade County will continue to review development incentives to encourage higher density, mixed use and transit- oriented development at or near existing and future transit stations and corridors and continue to update its land development regulations to remove impediments and promote transit-oriented development.	D		
FLU	Policy LU-9F	Miami-Dade County shall formulate and adopt zoning or other regulations to implement the policies for development and design of Metropolitan and Community Centers established in the CDMP through individual ordinances for each urban center. By 2025, Miami-Dade County shall complete area plans for station locations along the six rapid transit corridors identified in the Strategic Miami Area Rapid Transit (SMART) Plan.	D		
FLU	Policy LU-9R	Miami-Dade County shall conduct a study to address minimum requirements for off- street parking and shared parking in transit corridors and areas with mixed use developments.	1		M
FLU	Policy LU-9V	By 2020, Miami-Dade County shall adopt form-based zoning regulations to implement the mixed-use development provisions for the areas within the Rapid Transit Activity Corridors. Such regulations, shall at a minimum, address compatibility with adjacent land uses, use of alternate modes of transportation, and connectivity between land uses and transit.	D		



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments (No comments are incorporated into this section)	Status
FLU	Policy LU-12E	Miami-Dade County shall continue to investigate and seek opportunities to incentivize infill developmentSuch incentives may include, but not be limited to, joint development agreements at transit stations and transit centers,	D		
		Mixed Use Development Mixed-Use Developments Located Within: Major Corridors: FAR from 1.0 to 1.5; Max Residential Density 36 du/ac Neighborhood Activity Nodes: FAR from 0.75 to 1.0; Max Residential Density 18 du/ac			
		Urban Centers Regional Activity Centers: FAR greater than 4.0 in the core, no less than 2.0 in the edge; Max Density in du/gross ac 500 Metropolitan Urban Centers: FAR greater than 3.0 in the core, no less than 0.75 in the edge; Max Density in du/gross ac 25 Community Urban Centers: FAR greater than 1.5 in the core, no less than 0.5 in the edge; Max Density in du/gross ac 125*			
	<u> </u>	edge, wax Density in du/gross at 125			
TRA	Policy TE-1A	As provided in this section and the Mass Transit Sub-element, the County shall promote mass transit alternatives to the personal automobile, such as rapid transit (i.e. heavy rail, light rail, and bus rapid transit, premium transit (enhanced and/or express bus)), local route bus and paratransit services.	D		
TRA	TE-1F	Transit-supportive Land Use Element policies including, but not limited to, Urban Center guidelines shall be vigorously implemented in association with planned rapid transit facilities identified in the Mass Transit Sub-element.	D		
TRA	TE-3B	Miami-Dade County shall analyze planned land use patterns and intensities in planned rapid and premium transit station areas and shall identify transportation and land use	I		

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Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments (No comments are incorporated into this section)	Status
		plan changes needed to improve interrelationships. This analysis shall address, at a minimum, the existing Metrorail corridor, the planned initial segment of the East-West corridor, the planned North corridor, and the South Miami-Dade Busway corridor as well as rapid and premium transit corridors listed in the Mass Transit Sub-element. *			
TRA	MT-5D	The County shall promote increased affordable housing development opportunities within proximity to areas served by mass transit.	D		
TRA	MT-8C	In the siting of transit stations in future rapid transit corridors, major consideration will be given to the opportunities for joint development and/or redevelopment of prospective stations sites, and adjacent neighborhoods, offered by property owners and prospective developers.	D		
CHD	CHD-1G	Promote coordination between jurisdictions in the planning and implementation of bicycle, trail, transit, pedestrian and other alternative transportation modes to establish continuous networks that support healthy communities	1		

EAR-Based Amendments to the City of Homestead Comprehensive Plan Update (adopted June 7, 2011)

Element Key		Assessment Key		
	FLU	Future Land Use Element	×	Inconsistent or lacking
	TRA	Transportation Element		Consistent, no changes needed
	HOU	Housing Element	✓	Consistent but needs work (e.g., update)

<u>General Comments</u>: The City of Homestead has a variety of future land use designations and zoning categories that may be considered transit-friendly, although (significantly) none of them are explicitly transit-oriented development categories. Other than one Planned Urban Neighborhood (SWPUN), none of the four mixed-use zoning districts is currently designated on the Zoning Map. Therefore, there could be more consistency between the FLUM and the Zoning

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Map relative to the goals and policies that encourage mixed-use land use patterns.

The City could also benefit from reviewing the density and intensity caps for the mixed-use land use designations and zoning categories to ensure that –particularly where land may fall within the potential transit station area(s)— the regulations are flexible enough to ensure potential development can follow current best practices in transit-oriented development districts.

Other topics that are not sufficiently addressed or that could be refined for improved consistency with the Comprehensive Plan policies include: vehicular, bicycle and pedestrian circulation; linkages and safety; affordable housing (particularly definitions, identification of areas where it is encouraged or required, standards for its development, etc.).

<u>Note:</u> The text of policies in Table V-16 marked with an * has been abbreviated. See Comprehensive Plan for complete Objectives and Policies.

Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
FLU	Policy 1.1	Encourage development and redevelopment by providing flexibility in site development standards, such as minimum lot size and other parameters.	1	Minimum lot size is not the most efficient tool in providing flexibility. Height, density and intensity bonuses could be considered.	X
FLU	Policy 2.1	Downtown Mixed Use (DMU): Permitted uses include light commercial, institutional and residential uses (up to 15 units per gross acre). This land use designation is appropriate in the higher intensity traditional center of Homestead, including the Historic Downtown Business District along Krome Avenue and the area around the Miami-Dade Community College Homestead campus Lot coverage in the Downtown Mixed-Use designation shall not exceed 90% of the parcel to be developed. Maximum building height shall not exceed 70' or 6 stories. However, PUDs shall be regulated by Policy 1.11. Technology Mixed Use (TMU): Permitted uses include clean, light	1	The densities, intensities and building heights of the zoning categories that apply to land located within the potential station area(s) are generally modest; none of the category descriptions includes wording related to transit-oriented or transit-supportive development.	

Table V-16 – City of Homestead EAR-Based Amendments to the Comprehensive Plan

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Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
		industry such as computer research, development, manufacturing and service, software development, telecommunications, testing and calibration. Lot coverage in the Technology Mixed Use designation shall not exceed eighty-five (85) percent of the parcel of land to be developed. Maximum building height shall not exceed 70' or six (6) stories. However, PUDs shall be regulated by Policy 1.11. Planned Urban Neighborhood (PUN)encourages compact, mixed-use development comprised of residential and non-residential land uses. Development within a PUN should emphasize			
		integration of pedestrian and bicycle facilities, convenient access to public transit, and an urban form characterized by close-knit neighborhoods and sense of community. A PUN be oriented to support a mix of uses generally within a 1/4 -mile walk of each other, thereby promoting a compact urban form the maximum gross residential density for a PUN shall not exceed 20 du/ac for a single residential parcel and 15 du/ac as the average residential density.*			
FLU	Policy 2.3	Discourage the proliferation of urban sprawl in the City's future land development pattern.	1	These categories are intended to provide for compact, mixed-use development that discourages sprawl, but none except PUN is currently represented on the Zoning Map or are implementable.	X
FLU	Policy	Actively promote higher densities,	D	With the exception of the	\checkmark

Station Area Development Potential V-25



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
	2.11	mixed-use development and transit-oriented design in the downtown, the CRA, the Southwest Neighborhood, along the South Dade Express Busway and in other appropriate areas.		SWPUN, the zoning districts that make up the zoning of downtown and CRA are not mixed-use districts. By contrast, the zoning categories that could achieve Policy 2.11 are not reflected on the current Zoning Map.	
FLU	Policy 3.2	Foster the redevelopment and infill of the downtown, CRA, Southwest Neighborhood and along the South Dade Express Busway.	D	The current designations are generally traditional single-use low intensity zoning categories, which may offer little flexibility and opportunity for creative redevelopment and infill.	✓
FLU	Obj. 7	Continue to encourage the redevelopment of blighted areas, particularly in the Downtown Historic District and adjacent neighborhoods, through the efforts of the Community Redevelopment Area. *	1	CRA boundaries include the designated SWPUN, as well as portions of the potential station area(s).	
FLU	Policy 12.6	Encourage smart growth strategies that naturally combat global warming such [as] transit-oriented mixed-use development, pedestrian-oriented design, increased street connectivity and higher densities in appropriate locations.	1	All of these zoning categories are intended to provide for compact, mixed-use development consistent with smart growth principles, but none except PUN is currently represented on the Zoning Map.	✓
HOU	Policy 1.14	Increase the supply of affordable housing by permitting density bonuses in designated areas, allowing accessory units and mixed land uses*	1	The Code does not appear to include regulations or incentives (such as bonuses in the mixed- use zoning districts), other than Sec. 30-696.61, directly linked to, or supportive of, affordable housing development.	✓
HOU	Policy 2.2	Continue to provide residential land use categories on the City's FLUM that allow up to ten (10) dwelling units per gross acre, allow residential development within the Downtown Mixed Use (up to	1	The densities, intensities and building heights of the mixed-use zoning categories are generally modest.	✓

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Element	GOP ID #	Supportive Comprehensive Plan Policies fifteen (15) dwelling units per gross	Direct (D) or Indirect (I) Support	Comments	Status
		acre) and Planned Urban Neighborhood (up to twenty (20) dwelling units per gross acre).*			
TRA	Policy 1.1	Improve pedestrian and vehicular linkages from U.S. 1 to the Historic Business District.	D		✓
TRA	Obj. 3	Promote traffic and transit improvements which enhance regional access to and from other parts of Miami-Dade County.	D		✓
TRA	Policy 3.2	Coordinate with Miami-Dade County Transit and the MPO in order to facilitate ongoing operations of South Miami-Dade Busway stops within the City.	D	The City has been successful in its coordination efforts	
TRA	Policy 3.3	Coordinate with Miami-Dade Transit and the MPO to promote east-west connections to the busway system.	1		~
TRA	Policy 4.3	Provide a pedestrian network for all major destinations within the City including schools, public institutions, the Downtown District and areas containing or generating pedestrian traffic.	1		✓
TRA	Policy 4.6	Provide an integrated bicycle system consistent with the Parks Master Plan and Exhibit 3 in the Future Land Use Element that includes east-west corridors within the City that intersect with the South Miami-Dade Busway.	D	DIVISION 9 COMMERCIAL DEVELOPMENT STANDARDS generally set out the requirements for pedestrian and bicycle features for the City's various commercial district overlays. However, the standards are not consistent from one district to the next. There is no reference in the standards of any of these districts, direct or indirect, to the policy of building the referenced alternate bicycle system.	
TRA	Policy	Use all financial resources available	I		\checkmark

Station Area Development Potential V-27



Element	GOP ID #	Supportive Comprehensive Plan Policies	Direct (D) or Indirect (I) Support	Comments	Status
	4.8	and work with FDOT, TPO, Miami- Dade County Transit and Public Works Department to implement the improvements indicated on the Future Transportation Map (Exhibit 3) and improve and expand transit service, including the South Miami- Dade Busway.			
TRA	Policy 4.13	Create programs that will promote the use of public transportation.	D	The City has implemented a trolley system which connects to the South Dade Transitway.	
TRA	Policy 5.3	Coordinate with [the] Future Land Use Element to encourage land uses which promote public transportation in designated public transportation corridors.	D		 Image: A second s
TRA	Policy 5.4	Examine the feasibility of implementing a Transportation Concurrency Area by the year 2012 along US-1 to promote mixed-use development along the busway.	D	It is unclear if the City has done this.	X

Chapter 6 IMPLEMENTATION PLAN

SMART Plan South Dade Transitway Corridor Economic Mobility and Accessibility

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VI. IMPLEMENTATION PLAN

a. Preliminary Cost Estimates

The Station Connectivity Section depicted opportunities to improve access to the transit stations from the surrounding neighborhoods by constructing sidewalks, bike lanes, bike paths and pedestrian crosswalks. The cost estimates that follow are for the same three stations selected in an earlier section, that were also the subject of the economic and fiscal analyses. The three stations are:

- Station 8 Cutler Bay/SW 112th Ave./Southland Mall;
- Station 9 SW 244th Street; and
- Station 13 Miami Dade College Homestead.

The dimensions and counts of proposed facilities at the stations are consistent with the exhibits contained in the Station Connectivity section.

The dimensions and counts are for a full half-mile circle, though stations 8 and 13 overlap with neighboring stations.

For bike lanes and bike paths to be useful for a bike trip to the station they need to extend at least two miles from the station, the approximate equivalent of a ten-minute journey by bicycle. The bike lane and bike path dimensions used here end at the half-mile circle centered on the station.

The sidewalk, bike lane, and bike path dimensions are for individual facilities. If the proposal was to add sidewalks to both sides of a one-mile section of road, that would be reported here as two miles of sidewalks. The assumed widths are:

- Bike Path: 6 Feet
- Sidewalk: 5 Feet
- Bike Lane: 5 Feet

The cost estimate for a single crosswalk is based on one leg of an intersection. Estimating the cost of crosswalks for intersections with three or four legs requires multiplying the single leg cost estimate accordingly. The crosswalk counts include existing crosswalks assuming they would be improved as part of a more comprehensive program of pedestrian improvements.

The unit cost estimates are based on historical averages of actual costs observed by FDOT in District 6. These cost estimates contain a contingency component. The per-mile unit cost estimates are for a facility on one side of the road, consistent with the way the dimensions of proposed facilities are reported.

For preliminary cost estimates, Design and Construction Engineering Inspection (CEI) are usually estimated as a percentage of the construction cost, but the construction cost basis is assumed without contingency added yet. The assumption here is that Design would cost 30% of the construction cost and CEI would cost 20% of the construction cost, a total of 50% of the construction cost *without* contingency. Because the unit cost estimates already contain

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contingency, the assumption here is that the Design/CEI component will be approximately 40% of the construction cost based on the unit costs which already have contingency added. The unit cost estimates used here are as follow:

- One mile of Bike Path: \$97,729
- One mile of Sidewalk: \$168,235
- One mile of Bike Lane: \$333,975
- One Crosswalk: \$597

Bike lane costs can vary considerably when crossing signalized intersections. The unit cost used here assumes no utility relocation or drainage improvements.

The total estimated cost for all proposed facilities at the three stations are:

- Station 8 Cutler Bay/SW 112th Ave./Southland Mall: \$5.3 million
- Station 9 SW 244th street: \$5 million
- Station 13 Miami Dade College Homestead: \$1.8 million

Tables 5-1 through 5-4 contain the development of the unit cost estimates for bike paths, sidewalks, bike lanes and crosswalks respectively. Tables 5-5 through 5-7 contain the facility dimensions and total cost estimates at the three stations.

Engineer's Cost Estimate Description: 6 Foot Bike Path One Side										
Item No.	Item No. Pay Item Quantity Unit Unit									
				Cost*	Total					
110-1-1	Clearing and Grubbing	1.25	AC	\$15,869.05	\$19,836.31					
160-4	Type B Stabilization	3,520	SY	\$0.23	\$809.60					
285-701	Optional Base, Base Group 01	3,520	SY	\$6.21	\$21,859.20					
334-1-11	334-1-11 Superpave Asphaltic Conc. Traffic A 194 TN \$180.00									
570-1-2 Performance Turf, Sod 1,584 SY \$4.08										
					\$83 <i>,</i> 887.83					
101-1	Mobilization (5%)	1.00	LS	\$4,194.39	\$4,194.39					
102-1	Maintenance of Traffic (10%)	1.00	LS	\$8,388.78	\$8,388.78					
					\$12,583.17					
Contingency (10%)										
Source										
*FDOT Item Average Unit Cost Area 13 (https://fdotwww.blob.core.windowns.net/sitefinity/docs/default-										
Source/programmanagement/estimates/historicalcostinformation/files/area13-20180501-										
20190430.pdf?sfvrsr	n=645f359a_2-Retrieved July 22, 2019)									

	Table	VI-1 – 6	Foot Bike	Path One	Side Cost	Estimate Per Mile	2
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Table VI-2 – 5 Foot Sidewalk One Side Cost Estimate Per Mile

Engineer's Cost Estimate Description: 5 Foot Sidewalk One Side										
Item No.	Item No. Pay Item Quantity Unit Unit									
	Cost*									
110-1-1	Clearing and Grubbing	1.25	AC	\$15,869.05	\$19,836.31					
120-1	Regular Excavation	323	AC	\$4.46	\$1,439.06					
522-1 Concrete Sidewalk and driveways, 2,933 SY \$37.64 4"										
570-1-2	\$4.08	\$12,733.97								
		\$144,407.46								
101-1	Mobilization (5%)	1.00	LS	\$7,220.37	\$7,220.37					
102-1	Maintenance of Traffic (10%)	1.00	LS	\$14,440.75	\$14,440.75					
					\$21,661.12					
		\$2,166.11								
Source										
*FDOT Item Average Source/programman 20190430.pdf?sfvrst	y/docs/default-	\$168,234.69								

Table VI-3 – 6 Foot Bike Path One Side Cost Estimate Per Mile

Engineer's Cost Estimate Description: 5 Foot Bike Lane One Side								
Item No.	Pay Item	Quantity	Unit	Unit Cost*	Grand Total			
101-1	Mobilization (5%)	1.00	LS	\$23,192.72	\$23,192.72			
102-1	Maintenance of Traffic (10%)	1.00	LS	\$23,192.72	\$23,192.72			
104-10-3	Sediment Barrier (Silt Fence)	5280	LF	\$1.98	\$10,454.40			
104-18	Inlet Protection System	20	EA	\$83.23	\$1664.60			
110-1-1	Clearing and Grubbing	0.9	AC	\$13,374.23	\$11,368.10			
120-2-2	Borrow Excavation, Truck Measure	1955	CY	\$16.14	\$31,553.70			
160-4	Type B Stabilization (Subgrade) 12"	2,933	SY	\$0.49	\$1,437.17			
285-709	Optional Base, Base Group 09	2,933	SY	\$11.43	\$35,524.19			
334-1-13	Superpave Asphaltic Conc. Traffic C (2")	377.6	ΤN	\$103.24	\$38,983.42			
337-7-83	Asphaltic Concrete Friction Course, Traffic C, FC-12.5.5, PG 76-22 (1 1/2 ^{'''})	242	ΤN	\$129.16	\$31,256.72			
520-1-10	Concrete Gutter, type F	130	LF	\$19.15	\$2,489.50			
522-1	Concrete Sidewalk and Driveways, 4"	1,173	SY	\$34.73	\$40,738.29			
570-1-2	Performance Turf, Sod	1,1173	SY	\$3.85	\$4,516.05			

Implementation Plan VI-3



Engineer's Cost Estimate Description: 5 Foot Bike Lane One Side							
Item No.	Pay Item	Quantity	Unit	Unit Cost*	Grand Total		
	Signing & Pavement M	arking Comp	onent				
700-1-11	Single Post Sign, F&I Ground Mount, Up to 12 SF	8	AS	\$366.26	\$2,930.08		
706-3	Raised Pavement Markers (White/Red)	132	EA	\$3.38	\$446.16		
706-3	Raised Pavement Markers (Yellow/Yellow)	16	EA	\$3.38	\$54.08		
711-14-160	Thermoplastic, Preformed, White, Message	8	EA	\$170.12	\$1,360.96		
711-14-170	Thermoplastic, Preformed, White, Arrow	8	EA	\$104.85	\$838.80		
711-15-101	Thermoplastic, Standard-Open Graded Asphalt Surfaces White, Solid, 6"	2	GM	\$3,850.00	\$7,700.00		
711-11-125	Thermoplastic, Standard, White Solid 24" For Stop Line	48	LF	\$3.12	\$149.76		
711-11-141	Thermoplastic, Standard, White, Skip, 6" (2-4)	0.416	GM	\$1,431.18	\$595.37		
711-11-241	Thermoplastic, Standard, yellow, Skip, 6" (2-4)	0.416	GM	\$1,292.89	\$537.84		
711-15-131	Thermoplastic, Standard, White, Skip, 6" (10-30)	1.76	GM	\$1,450.00	\$2,552.00		
711-15-201	Thermoplastic,Standard-OpenGraded Asphalt Surfaces Yellow, Solid,6"	1.76	GM	\$8,388.78	\$6,776.00		
* NOTE: UNIT COST PRICES WERE OBTAINED FROM FDOT HISTORICAL COST - AREA 13 Sub Total (RETIEVED ON JULY 25, 2019)					\$231,927.19		
					\$278,312.63		
Contingency 20% Grand Total					\$55,662.53		
	\$333,975.16						

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Table VI-4 – Standard Crosswalk Cost Estimate

Engineer's Cost Estimate Description: Standard Crosswalk						
ltem No.	Pay Item	Quantity	Unit	Unit Cost*	Grand Total	
700-1-11	Single Post Sign, F&I Ground Mount, Up to 12 SF	1.00	AS	\$386.41	\$386.41	
700-1-60	Single Post, Remove	1.00	AC	\$23.38	\$23.38	
710-11-123	Painted Pavt. Mark, Std, White, Solid 12"	50.00	LF	\$0.50	\$25.00	
711-11-123	Thermoplastic, Std., White, Solid, 12"	50.00	LF	\$1.69	\$84.50	
Subtotal						
101-1 Mobilization (5%) 1.00 LS					\$25.96	
102-1	Maintenance of Traffic (10%)	1.00	LS		\$51.93	
Source Subtotal						
*FDOT Item Average Unit Cost Area 13 (https://fdotwww.blob.core.windowns.net/sitefinity/docs/default- Source/programmanagement/estimates/historicalcostinformation/files/area13- 20180501-20190430.pdf?sfvrsn=645f359a_2-Retrieved June 14, 2019)					\$597.18	

Table VI-5 – Station 8 Mobility Enhancements Preliminary Cost Estimate

Pay Item No.	Description	Unit	Unit Cost*	Quantity	Subtotal Cost	
1	Proposed Bike Lane	Mile	\$333,975.16	4.00	\$1,335,901	
2	Proposed Bike Path	Mile	\$97,729.32	3.04	\$297,097	
3	Proposed Sidewalk	Mile	\$168,234.69	11.90	\$2,001,993	
4	Proposed Standard Pedestrian	EA	\$597.18	294.00	\$175,572	
	Crosswalk (Marking & Signage)					
Source Estimated Subtotal					\$3,810,563	
*FDOT Item Average Unit Cost Area 13 Design/CEI (40%)					\$1,524,225	
(https://fdotwww.blob.core.windowns.net/sitefinity/docs/default-						
Source/programmanagement/estimates/historicalcostinformation/files/are a13-20180501-20190430.pdf?sfvrsn=645f359a_2-Retrieved June 14, 2019)			Estimated C	Grand Total	\$ 5,334,788	

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Table VI-6 – Station 9 Mobility Enhancements Preliminary Cost Estimate

Pay Item	Description	Unit	Unit Cost*	Quantity	Subtotal	
No.					Cost	
1	Proposed Bike Lane	Mile	\$333,975.16	5.16	\$1,723,312	
2	Proposed Bike Path	Mile	\$97,729.32	3.92	\$383,099	
3	Proposed Sidewalk	Mile	\$168,234.69	7.97	\$1,340,831	
4	Proposed Standard Pedestrian	EA	\$597.18	211.00	\$126,006	
	Crosswalk (Marking & Signage)					
Source Estimated Subtotal					\$3,573,247	
*FDOT Item Average Unit Cost Area 13			Design/CEI (40%)		\$1,429,299	
(https://fdotwww.blob.core.windowns.net/sitefinity/docs/default-						
Source/programmanagement/estimates/historicalcostinformation/files/are a13-20180501-20190430.pdf?sfvrsn=645f359a_2-Retrieved June 14, 2019)			Estimated C	Grand Total	\$5,002,546	

Table VI-7 – Station 13 Mobility Enhancements Preliminary Cost Estimate

Pay Item No.	Description	Unit	Unit Cost*	Quantity	Subtotal Cost	
1	Proposed Bike Lane	Mile	\$333,975.16	0.45	\$150,289	
2	Proposed Bike Path	Mile	\$97,729.32	3.92	\$383,099	
3	Proposed Sidewalk	Mile	\$168,234.69	3.38	\$568 <i>,</i> 633	
4	Proposed Standard Pedestrian	EA	\$597.18	336.00	\$200,654	
	Crosswalk (Marking & Signage)					
Source Estimated Subtotal					\$1,302,675	
*FDOT Item Average Unit Cost Area 13 Design/CEI (40%)					\$521,070	
(https://fdotwww.blob.core.windowns.net/sitefinity/docs/default-						
Source/programmanagement/estimates/historicalcostinformation/files/are a13-20180501-20190430.pdf?sfvrsn=645f359a_2-Retrieved June 14, 2019) Estimated Grand Total				Grand Total	\$1,823,745	

b. Responsible Agencies

At Station 8 projects would need to be implemented by both the Town of Cutler Bay and Miami-Dade County.

At Station 9, projects would need to be implemented by Miami-Dade County.

At Station 13, projects would need to be implemented by the City of Homestead.

c. Funding Sources

A separate TPO task being conducted to identify available revenue sources for all SMART Plan corridors is underway. In general, funding sources could include:

- Sales tax (PTP People's Transportation Plan)
- Ad valorem taxes (county and municipality)
- Local option gas taxes

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- Impact fees
- State formula funds (e.g. DDR District Dedicated Revenue)
- State discretionary grant funds (e.g. CIGP County Incentive Grant Program)
- Federal formula funds (e.g. STBGP Surface Transportation Block Grant Program)
- Federal discretionary grant funds (e.g. TAP Transportation Alternatives Program)

d. SMART Demonstration Projects

Station 8

Cutler Bay Express – New first/last mile connections to the South-Dade Transitway and the Dadeland South Metrorail Station. Anticipated start of service by early 2019.

e. Transit Development Plan Projects

The Performance Assessment section of the TDP reports progress towards the goals, objectives, and targets set during the 2014 Major Update. Concerning the South Corridor, the list of past accomplishments includes:

- SW 112th Avenue Planned RFP to develop TOD with affordable housing, commercial uses and enhancements to the bus terminal
- Expand Transit Services Implement South Miami Dade Bus Express Rapid Transit (BERT) service by 2019
- Park and Ride Facilities SW 112th Avenue Seeking to purchase the existing lot (currently leased) in order to construct improvements.

In the South Corridor, the adopted budget for FY 2017 – 2018 included:

- Purchase of the Park and Ride lot at SW 112th Avenue and construction of landscaping and lighting improvements
- U.S.-1 Transitway Signal Priority 47 signals along the Transitway upgraded to fully adaptive controllers, reducing delay for buses at the cross-street intersections
- Busway ADA Improvements Continuation of pedestrian accessibility improvements along the South Miami Transitway

The Ten-Year Implementation Plan includes:

#30 - The South Miami-Dade Express, Bus Express Rapid Transit (BERT) service between Dadeland North and SW 344th Street in Florida City is denoted as Route b in Figure 6-1 and is depicted using the HEFT for most of the distance. In Table 6-2 it is described using both the HEFT and the Transitway.

The implementation year listed is 2019.