



**SUNNY ISLES**  
MOVING FORWARD TOGETHER **BEACH**

## 2016 Transportation Master Plan

# SUNNY ISLES BEACH

December 15, 2016



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## ***Acknowledgements***

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<i>Vice-Mayor</i>	Jeanette Gatto
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# Executive Summary of Priorities

As a consequence of numerous Town Hall Meetings, input from the City's Fact Finding Committee and City Commission, the Commission assigned Staff with the task of prioritizing the most essential projects the City envisions in the near-, medium- and long-term planning periods.

The priorities of the projects as noted in this summary should be considered as a recommendation; as circumstances and opportunities arise in funding and construction costs, the City may wish to reprioritize based on its evolving understanding of local needs. Ongoing or recently completed projects have not been included in the summary of priorities but are listed in the List of Projects section of the Transportation Master Plan. The following lists the recommended projects resulting from this study.

## Priority Level I:

### BIKE 8

#### **Bike Route Signalization**

##### Description

Based on a needs assessment along high traffic bicycle routes, a separate signal phase would be proposed to give clear direction to drivers and to bicyclists.

### TRANSIT 3+

#### **Priority Signalization for Emergency Vehicles and Transit**

##### Description

Emergency vehicles are equipped with a transponder that emit an emergency signal received at a traffic light extending the green light required to clear any queue or congestion in front of the emergency vehicle. Specific receivers will need to be installed in all intersections; with each transceiver costing \$2,000. Intersections can be improved for about \$13,500 each. Transponders on vehicles increases costs per vehicle.

For Transit, using technology to initiate a message, a bus approaching a traffic signal within 10 or 15 seconds of a normal phase change from red to green will initiate that particular phase change earlier. This permits the bus to pass through the intersection without having to wait for the normal change in signal. Similarly, the same system previously noted could be programmed to extend the green time, opting to delay the red phase for 10 or 15 seconds so that the bus can pass through the intersection without stopping. Buses running late could receive an advanced green or delayed red while those running ahead of schedule or on time would not. Traffic signal priority systems typically result, depending on field conditions, in a four to almost ten percent reduction in travel time.

### ROAD 1+

#### **Adaptive Signalization Technology**

##### Description

It is common in Miami-Dade County to spot traffic detectors at intersections which can extend the green time for a specific movement, or perhaps skip a phase when no vehicle is waiting to move in a specific direction. There are several alternatives available. As technology advances, the City can take advantage and implement a pilot project in a designated intersection.

**POLICY 5**

**Transportation Demand Management**

Description

Work with South Florida Commuter Services and City Staff to develop techniques, incentives and programs to encourage transportation demand strategies, including telecommuting, flexible work hours, flexible Fridays, etc.

**PED 1**

**Infill Sidewalk Network**

Description

Locations of missing sidewalks are noted on the map and on page 70. Prioritization of these sidewalk improvements should be based on proximity to schools, parks and bus or trolley stops, followed by proximity to existing businesses. Primarily, the purpose is to create a cohesive connected sidewalk network. In some cases, the need for a sidewalk can be bundled with a bicycle path to develop a shared use off-road path.

**PED 10**

**ADA Improvements**

Description

Audible devices typically generate an audible sound to alert people that it is safe to cross, and should be installed at all intersections along Collins Avenue. Work with Miami-Dade County to determine which locations can have the fire hydrants and other obstacles located out of the pedestrian paths and located in such a manner as to not create a zig-zag path. These locations will be confirmed, and the owners of said infrastructure will be coordinated with, to remove the obstacles. Policies should be adopted to ensure that new obstructions are not located in this manner for future projects.

**PED 2-15-17**

**Pedestrian Bridge at 163rd St, 174th St and 180th St. and Collins Ave.**

Description

Install pedestrian park bridges at multiple locations along Collins Avenue.

A pedestrian park bridge would increase multimodal connectivity between key commercial and entertainment places, as well as residential areas. It can also attract interest and encourage repeat usage by providing a safe and comfortable user experience. The bridges should be designed as open space, with landscaping, creating an elevated park as well as safe pedestrian pathway.

**PED 19**

**Pedestrian and Bicyclist Data Collection**

Description

Similar to a traffic study, data will be collected to evaluate both pedestrian and bicycle movements, patterns and interactions throughout the City. Deficient capacity will be highlighted and recommendations will be made to provide mitigation. This will be an on-going effort to continue to evaluate and implement projects and create a level of service.

**TRANSIT 5**

**Water Taxi Stop and Service Feasibility Study**

Description

Considerations for the water taxi include the placement of docking locations, as well as environmental



considerations for manatees, which will affect the viability of a water taxi system. Past studies have reviewed the potential for water transit within Sunny Isles Beach; however, the system would require a subsidy to keep fares reasonable. Vessels cost approximately \$250,000 each, and the city may require 1-3, depending on routes and headways. Annual costs approximate \$250,000 per vessel. Due to the nature of estimated costs, which are split between variable costs based on shared and non-shared staff between the route, an operations and implementation study should be conducted to find the operational break-even points. Implementation of a pilot phase will cost approximately \$600,000 the first year, inclusive of contingency and planning costs.

**PED 20**

**Signalized Pedestrian Crossing - North Bay Road north of 170th St. at Bellagio Curve**

Description

Based on a study and needs assessment performed by several students and a teacher at Alonzo and Tracy Mourning Senior High School it was determined that a pedestrian crossing was necessary along North Bay Road at approximately theoretical 171st Street. A crossing should be designed to possibly include high visibility striping, reflectors, signage, and/or in-pavement LED lane markers. Work should be coordinated with City and County Public Works in order to approve, design, and construct the pedestrian crossing.

**Priority Level II:**

**PED 14**

**Crosswalk Improvement at Poinciana Island and Collins Ave.**

Description

Design appropriate crossings as necessary to include high visibility striping, reflectors, signage, pedestrian islands, countdown pedestrian signals, etc. Work with local owners and connect via pedestrian paths on private property. Work should be coordinated with Public Works and FDOT in order to propose crossings for approval, design, and construction.

**PED 18**

**Crosswalk, NE 181st Dr. and Atlantic Blvd.**

Description

Install crosswalk at 181st and Atlantic Blvd.

**Priority Level III:**

**PED 4**

**Pedestrian Bridge at Collins Ave. and Heritage Park**

Description

A pedestrian bridge would increase multimodal connectivity between the parking lot, while reducing J-walking seen during the study. The 110-foot bridge can be prefabricated. It could also attract interest and encourage repeat usage by providing a safe and comfortable user experience.

**PED 6**

**Pedestrian Safety Islands - Collins Avenue**

Description

Improve or install pedestrian safety islands at existing crosswalks for crossing Collins Avenue at:

1. Kings Point Drive (North Side)
2. Atlantic Avenue (South Side)
3. 170th Street (South Side)
4. 172nd Street (North Side)
5. 178th Street (South and North Sides)
6. 183rd Street (South and North Sides)

7. 185th Street (South Side)

The refuge islands would be on Collins Avenue and each intersection as noted above. Work should be coordinated with Public Works and FDOT to in order to propose crossings for approval, design, and construction. The refuge islands should be ADA compliant with detection strips installed.

**PED 13**

**Town Center Alleyway and Pedestrian Path Program**

Description

The City has a conceptual plan for the development of the Town Center area, which should be implemented. However, the area's development should begin with the creation of a Neighborhood Design Manual which will provide increased details for the specifics of the area, such as seating, lighting, and other aspects of design. This plan includes the development of paths and plazas creating a walkable environment through the provision of a bike/ped grid. To implement this, façade improvements and landscaping should be implemented both as development occurs and as made possible through planning and funding for implementation.

**BIKE 4**

**Bicycle Rental Program**

Description

Bicycle rental/sharing systems are a major component of a more sustainable and intermodal transportation system in hundreds of cities around the world including Miami Beach, Miami and Fort Lauderdale. Bikesharing provides an additional affordable means of transportation in a multi-modal system. It is recommended that the City contact several bikeshare system providers for a feasibility analysis of creating a system in Sunny Isles Beach. If the City decided to pursue a system, a vendor would be selected through a bid and selection process. the City should then identify specific locations for placing. bicycle rental racks. This will be based on proximity to destinations in the City, the need for bicycles in the area, and the ability to regularly maintain the system through manual repositioning of bicycles as necessary.

**ROAD 5**

**Collins Ave/186th St Intersection Improvements- Signal Warrant Analysis**

Description

A signal warrant analysis should be conducted to determine if a traffic signal is warranted for the intersection. If warranted, the City can bid out the construction and design.

**POLICY 4**

**Mobility Fee Feasibility Study**

Description

Research and develop alternative programs to assess development impact fees relating to person trips. Taking into account existing projects, a fee can be calculated based on project future development versus the cost of implementation of plan projects. Subsequent to the study, enact mobility fees to finance transportation master plan alternative mode projects.

**PED 12**

**Streetscape Improvements**

Description

The implementation of shading and rest areas along pedestrian paths is essential toward improving the quality of walkability, especially in warmer climates. In urban areas the sidewalk should extend from building to street and include tree planting areas. For the less urban areas of the City, sidewalks should be set back from the street and separated by a 6 foot strip with tree plantings, as part of a complete streets system. In addition, seating should be planned between 0.1 to 0.15 miles apart. The City can begin to implement the addition of shade by adopting specific sidewalk design standards which includes these streetscape elements. Additional streetscape improvements which will increase the appeal of walking within Sunny Isles Beach include the creation of pocket parks, plazas, public art, and other similar elements. The City should continue to implement and adjust the Streetscape Master Plan.



# Executive Summary

The City of Sunny Isles Beach is a fast growing coastal community in northeast Miami-Dade County. In preparing for the future, Sunny Isles Beach recognizes the need to develop solutions for congestion along Collins Avenue as development continues to be built, and to respond to the community's desire for enhanced multimodal options to accommodate transportation needs.

To preserve and enhance its high quality of life as the community continues to grow, the City set out to examine the existing and future conditions of its transportation system. This includes the roadway network, transit system, bicycling, and pedestrian facilities.

The result of this effort, the Sunny Isles Beach Transportation Master Plan 2016, will serve as the blueprint by which the City can move forward together in creating a multimodal, safe, convenient, and accessible transportation system.

## Vision

Ultimately, the City's goal is to ensure the preservation and enhancement of the high quality of life currently enjoyed by Sunny Isles Beach's residents. Through discussion with residents of the City and other stakeholders, a vision of the City's future emerged to serve as the guiding principle for the plan:

***The Sunny Isles Beach of the future is a community with high mobility and accessibility to neighborhood amenities for its residents, a place where the movement of local and regional people and goods is provided by street, water, transit, pedestrian, and bicycle systems that are complete and fully integrated.***

***Sunny Isles Beach's transportation will be designed to support and enhance the City's Urban Village and Town Center vision and strategies by providing a transportation framework to maintain and enhance local quality of life in a vibrant, complete city.***



## Findings

This study evaluated each transportation mode - roadway, transit, pedestrian, and bicycling - taking into consideration relative mobility, accessibility limitations, and intermodal aspects as main measures of multimodal transportation.

Most travel within the City is the result of geographical considerations and leads to a reliance on Collins Avenue for vehicular, transit, pedestrian, and bicycling traffic to travel between the neighborhood “zones.” Current and future traffic congestion concerns the City, as the rapid and sustained development along Collins Avenue, and in the surrounding areas of the City has strained the transportation system, with capacity growth highly outpaced by the needs generated by these new developments. Heavy investment and support from Miami-Dade County and State agencies are necessary to ensure new, alternative routes which will allow for the currently fragmented multimodal transportation grid to become a complete network. Without these improvements, available transportation capacity will continue to be increasingly constrained.

## Roadway

Roadways were evaluated on the basis of vehicular capacity and resulting Level of Service (LOS), adjusted with an annual growth rate of 0.5% between 2015 and 2025. Expected high density development along the east side of Collins Avenue was also taken into account. Evaluation of the roadways indicate that approximately 30% of the roadways in Sunny Isles Beach will have a failing LOS by 2019, with close to 40% percent of the roadways failing to meet standards by 2025. Most of the failing segments are on Collins Avenue, which bears the most traffic as the sole connecting road between the various neighborhoods and to neighboring cities. Local roads and collectors will continue to operate within acceptable LOS standards for the next decade. However, ten (10) City intersections fail to meet intersection LOS standards, thus affecting local traffic and creating congestion. Of these intersections, five (5) can be fixed with signal timing adjustments, three (3) may require signal warrant analyses and new lights, and two (2) will require a combination of changes, including intersection redesign to add new turn lanes. Dealing with future growth, however, requires encouraging local use of transit, walking, and bicycling as alternatives to driving due to the lack of additional right-of-way for new vehicular travel lanes on Collins Avenue.

## Transit

Sunny Isles Beach is well served by transit. Over three-fourths of the community has transit access within a quarter mile walking distance of their residences. Locally, the Sunny Isles Beach Shuttle is well utilized and offers ample connections to regional routes. However, shuttle stop spacing and locations should be evaluated and adjusted. Improvements to bus stop amenities, such as new shelters and signage, are also necessary. Amenities also include tools for trip planning, such as interactive displays and next bus technology at key bus stops. The City is currently working on these programs, and have been doing so for years to enact transit improvements. Pedestrian crossing improvements will also improve connectivity to transit and in some cases, reduce walking distance to and from the stops.

Future transit development is dependent on addressing congestion issues, as buses with few alternatives, relies heavily on Collins Avenue. Transit signal priority will become increasingly necessary to ensure timely and



convenient local transit operations. Other forms of transit, such as water taxis, should be explored to ensure additional options that are convenient for the transit rider.

## Bicycling

Bicycling facilities in Sunny Isles Beach tend to be concentrated at a few locations within the City, and limits bicycling as a viable form of intracity transportation. As with pedestrian travel, the lack of pathways other than Collins Avenue for North-South travel limits local options, and alternative bicycling routes should be developed alongside pedestrian facilities. As heavy traffic on Collins Avenue is a concern, the City, since its inception, developed a secondary bicycling route which has been partially implemented along North Bay Road and other local roads. Furthermore, with the completion of on-going public projects, implementation of this secondary route should improve the system. Additionally and as an alternative, a shared-use path is recommended along the eastern side of Collins Avenue. As these projects are implemented and completed, the next step will allow for exploration of bikesharing to connect to both Broward B-cycle and Miami Citibike systems, which currently have stations close to the City and provide regional alternatives to the car.

## Pedestrian

Sunny Isles Beach has a strong history of working to ensure a pedestrian friendly environment, with wider sidewalks along the western side of Collins Avenue and implementation of streetscaping and high visibility crosswalks as part of the City's master plans. Additionally, from a distance perspective, most of Sunny Isles Beach is walkable. However, both seating and shade are lacking throughout the City and limit residents' ability and desire to walk to their destinations. Additionally, for North-South travel, the lack of alternative routes limit the options for walking, but can be addressed by infilling sidewalk system gaps, such as by building a bridge at 174th Street and North Bay Road. Crossings are another concern – on Collins Avenue, these should be placed at regular intervals to allow for more direct access to community amenities. Given heavy traffic on Collins Avenue, bridges should be utilized for future pedestrian crossings at key locations. Planned properly, crossings which address both safety and the need for open space can be achieved by creating elevated parks over intersections. Initially, implementation for the intersection of Collins Avenue and 174th Street should be explored.

## Moving Forward Together: The Alternative Grid

The completion of a basic network for each mode – roadways, transit, bicycling, and pedestrian – require the development of rights-of-way aligned with the community's actual usage or potential usage of that particular roadway. In moving towards a multi- and intermodal system, Sunny Isles Beach should adopt policies which will provide a safe, convenient and active transportation system via the implementation of "Complete Streets."

This application will require the development of a mobile app, and installation of tracking software on the Shuttles. Vehicular, transit, bicycling, and pedestrian traffic grids were layered on top of each other to determine specific corridor needs while keeping in mind the actual level of needs for each mode. Utilizing this layered grid allows insight into the necessary improvements in system development, resulting in a Complete Network as an achievable long range goal of the City. Further, this indicated system gaps and provided a viewpoint as to which projects can be clustered. Complete Streets including bicycling, walking, and vehicle modes, should be first implemented on 172nd, 174th, and 178th Streets, North Bay Road, and Collins Avenue, and given the highest priority.

## Recommendations and Projects

General recommendations for the City include actions which will:

1. Focus on providing multimodal options as an alternative to short vehicular trips
2. Reduce pressure on Collins Avenue by addressing internal circulation
3. Maintain and enhance current roadway infrastructure
4. Enhance land use and mobility by providing alternative corridors to connect neighborhoods
5. Enhance safety and aesthetics by incorporating design into transportation
6. Promote multimodal options as attractive, viable alternate modes of transportation
7. Focus on regional intergovernmental efforts to create viable regional transportation options

Based on the analysis in this Plan, 53 projects totaling over \$35 million were developed to fully implement the Plan's recommendations, and were prioritized:

Priority Level I: Short Term

Priority Level II: Medium Term

Priority Level III: Long Term

Key aspects initially affecting the order of prioritization include the assessment of immediate needs, available financing options, and ease of design, permitting and implementation. However, due to the impending moratorium on right-of-way changes to Collins Avenue to begin in 2017, projects in Tier I and II were then adjusted to account for this condition. The priorities of the projects as recommended should be considered as a recommendation; as circumstances and opportunities arise in funding, the City should reprioritize based on its evolving understanding of local needs. The following lists the recommended projects resulting from this study.

## Pedestrian Projects

- PED 1 Infill Sidewalk Network
- PED 2 Pedestrian Park Bridge at Collins Ave. and 174th St.
- PED 3 Pedestrian & Bicycle Bridge at N. Bay Rd. and 174th St.
- PED 4 Pedestrian Bridge at Collins Ave. and Heritage Park
- PED 5 Pedestrian Improvements at Collins Ave. and 186th St.
- PED 6 Pedestrian Safety Islands - Collins Avenue
- PED 7 Mid-Block Crosswalk, Northbound Collins at 189th Ter.
- PED 8 Parking Lot Crosswalks at 191st Ter.
- PED 9 Pathway Between Golden Shores Community Park and Heritage Park
- PED 10 ADA Improvements
- PED 11 Sidewalk Repair
- PED 12 Streetscape Improvements
- PED 13 Town Center Alleyway and Pedestrian Path Program
- PED 14 Crosswalk Improvement at Poinciana and Collins
- PED 15 Pedestrian Bridge at 163rd Street and Collins Avenue
- PED 16 BIKE 7 - Bike/Ped Pathway on Beach
- PED 17 Pedestrian Bridge at 180th St. and Collins Ave.
- PED 18 Crosswalk, NE 181st Dr. and Atlantic Blvd.
- PED 19 Pedestrian and Bicyclist Data Collection
- PED 20 Signalized Pedestrian Crossing - North bay Road north of 170th St. at Bellagio curve

## Bicycle Projects

- BIKE 1 Shared-Use Path
- BIKE 2 Bicycling Safety and Education Programs
- BIKE 3 Bicycle Racks Installation
- BIKE 4 Bicycle Rental Program
- BIKE 5 Bike/Ped Pathway to Oleta River State Park Feasibility Study
- BIKE 6 Pathway Between 183rd St. and 185th St.
- BIKE 8 Bike Route Signalization

## Transit Projects

- TRANSIT 1 Bus Stop Amenities Improvements
- TRANSIT 2 Sunny Isles Beach Shuttle Comprehensive Operations Analysis
- TRANSIT 3 Priority Signalization for Emergency Vehicles and Transit
- TRANSIT 4 Transit Ridership Incentive Program
- TRANSIT 5 Water Taxi Stop and Service Feasibility Study
- TRANSIT 6 Transit Trip Planning App Pilot Program
- TRANSIT 7 (Ongoing) Bus Tracking App
- TRANSIT 8 Proposed Bus Pullout (School)

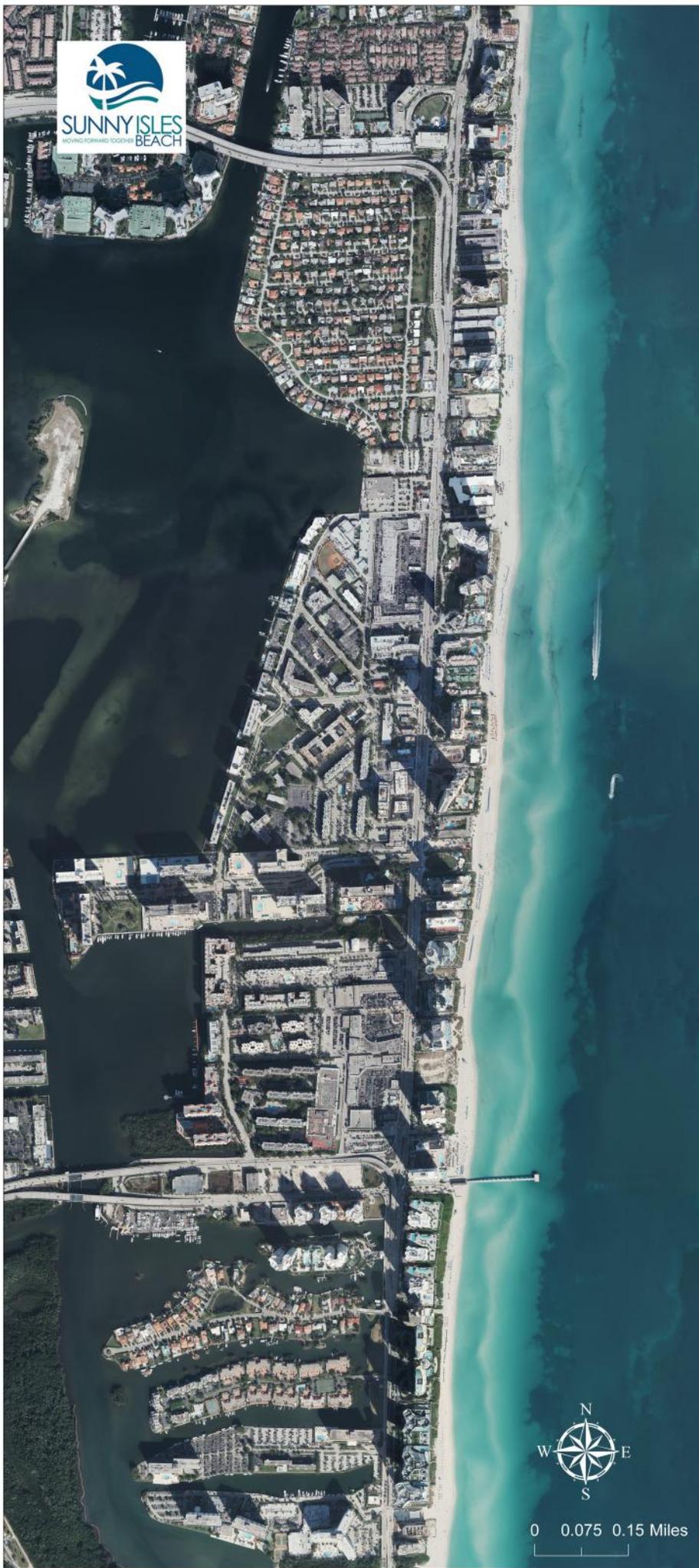
## Roadway Projects

- ROAD 1 Adaptive Signalization Technology
- ROAD 2 Parking Consolidation Study
- ROAD 3 Collins Ave/SR-826 EB Intersection Improvements
- ROAD 4 Signal Timing Intersection Improvements and Corridor Signal Progression Analysis
- ROAD 5 Collins Ave/186th St Intersection Improvements- Signal Warrant Analysis
- ROAD 6 Atlantic Blvd/178th St Intersection Improvements - Signal Warrant Analysis, SB Left Turn Addition
- ROAD 7 Atlantic Blvd/183rd St Intersection Improvements
- ROAD 8 Roadway Repavement, Collins Ave (FDOT)
- ROAD 9 174th Street Improvements

## Policy Projects

- POLICY 1 Adopt Pedestrian/Bicycling Level of Service Standards
- POLICY 2 Ensure Intergovernmental Cooperation
- POLICY 3 Complete Street Policy and Guidelines/Design Manual
- POLICY 4 Mobility Fee Feasibility Study
- POLICY 5 Transportation Demand Management
- POLICY 6 Incentive Programs for Transit, Carpooling
- POLICY 7 Maintain Local Agency Program Certification
- POLICY 8 Parks and Green Corridors (Connect the Parks)- Recreational Walking Programming Policies
- POLICY 9 Senior Services Delivery





0 0.075 0.15 Miles

# Introduction and Vision

The Sunny Isles Beach of the future is a community with high mobility and accessibility to neighborhood amenities for its residents, a place where the movement of local and regional people and goods is provided by street, water, transit, pedestrian, and bicycle systems that are complete and fully integrated.

Sunny Isles Beach's transportation will be designed to support and enhance the City's Urban Village and Town Center vision and strategies by providing a transportation framework to maintain and enhance local quality of life in a vibrant, complete city.

The City of Sunny Isles Beach, Florida's Riviera, is a community of 21,698 (Est. 2014) located on a 1.02 square mile barrier island in northeastern Miami-Dade County. Incorporated on June 16, 1997, the City boasts a beautiful community with over 1 million visitors each year. The 15th largest municipality in Miami-Dade County, Sunny Isles Beach is its most densely populated community, with a population density of 20,524 persons per square mile.

Sunny Isles Beach was initially developed in the 1920s as a tourist resort, with low-rise oceanfront motels along the east side of Collins Avenue and single-family development to the west of Collins Avenue. Since the City's incorporation, the low-rise oceanfront motels have been replaced with high-rise condominiums and hotels. This higher-density development has dramatically impacted not only the skyline, but also traffic. As Sunny Isles Beach continues to grow, it is necessary to prepare for transportation needs to accommodate the redevelopment still occurring along Collins Avenue today.

The City's Transportation Master Plan will serve as the City's blueprint for the future development of Sunny Isles Beach's transportation network, ensuring that mobility and access improvements are implemented to preserve and enhance local quality of life as the community continues to grow. The objective of the Transportation Master Plan is to study the existing and future conditions of the transportation system within the City of Sunny Isles Beach. Inclusive of the roadway network, the transit system, pedestrian and bicycle networks, and parking system (collectively known as multimodal systems) the TMP study determines how each functions, interacts with the existing and future land uses, and can be improved to enhance desired mobility in the community.

This study examined the existing transportation conditions in the City, by looking at roadway, transit and nonmotorized levels of service today, in two planning horizons, 2019 and 2025. Six tasks were developed as follows:

**Task I:** Public Involvement

**Task II:** Data Collection and Ongoing Work

**Task III:** Needs Assessment

**Task IV:** Development of Potential Projects

**Task V:** Implementation Plan

**Task VI:** Final Report

Throughout the process, the public was engaged to discuss community wants and how transportation solutions can achieve them. As a result, proposed project solutions were developed. These projects were assessed to determine their approximate costs, with costs then compared against community wants and preferences. The projects were then prioritized and associated with an implementation plan. General Recommendations were created for the City based on the analysis of each mode and constructed with public input garnered through the public engagement process. These include ensuring that the City:

1. Focus on providing multimodal options as an alternative to short vehicular trips
2. Reduce pressure on Collins Avenue by addressing internal circulation
3. Maintain and enhance current roadway infrastructure
4. Enhance land use and mobility by providing alternative corridors to connect neighborhoods
5. Enhance safety and aesthetics by incorporating design into transportation
6. Promote multimodal options as attractive, viable alternate modes of transportation
7. Focus on regional intergovernmental efforts to create viable regional transportation options including transit

Each of the transportation modes have specific recommendations, which were further developed into projects for each mode: roadway, transit, pedestrian, and bicycling. They were prioritized for implementation in the City's 5-year Capital Improvement Element.





and asked to provide input and ideas on how to improve bicycling and walking in the City. Participants were also asked to comment on the preliminary project recommendations. The comments and additional recommendations given were recorded on flip-chart pads and posted around the room. All participants were then asked to prioritize the preliminary project recommendations and the ideas generated by the small groups. The prioritized list of recommendations and input were incorporated into the final recommendations. Those in attendance ranged from City officials and staff to local business owners and residents of the City.

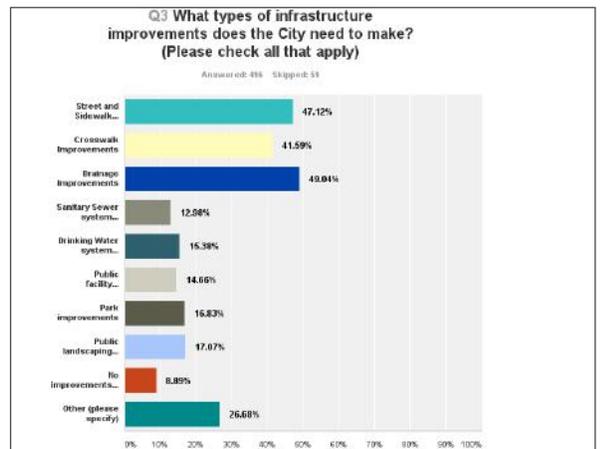
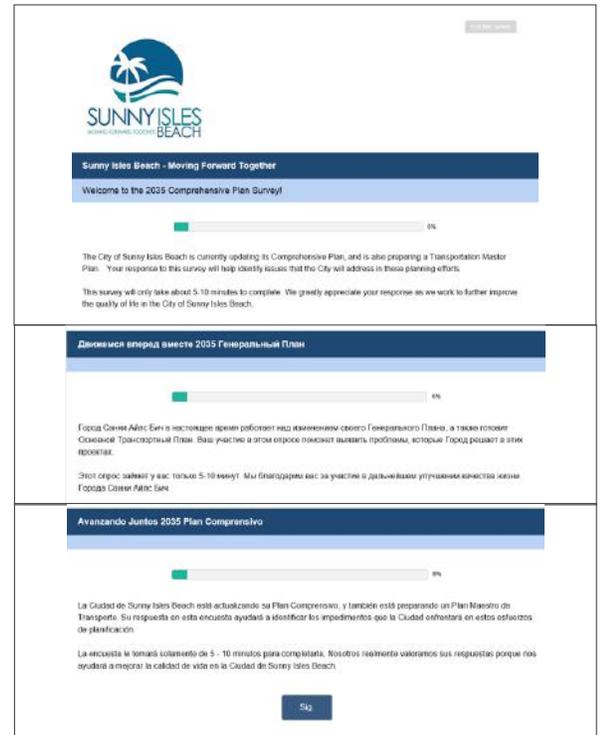
A summary of the public workshops is included in the Appendices.

The second workshop divided the public into three groups in order to conduct a transportation charrette exercise. Through this guided group conversation, each table shared their thoughts on infrastructure improvements which would improve their quality of life. Noted infrastructure improvements ranged from shading, bench placement, pedestrian tunnels and transit stop locations, to the need for bridges and bicycle lanes to safely connect families to the Norman Edelcup K-8 School. To visually share their thoughts the public indicated on maps the locations of improvements and preferred paths of travel. These maps were then combined with the Fact Finding Committee’s charrette exercise, held on August 27, 2015, to provide a composite vision concept. Comments from the charrette exercise are attached in the Appendices. The map on the following page represents a composite of ideas mainly resulting from the various charrette maps, demonstrating a vision for Sunny Isles Beach’s future.

## Survey Monkey

As part of the public outreach, a Survey Monkey poll was created and linked to the City’s website. This portion of the public outreach process was active between July 10, 2015 and October 9, 2015. The survey was posted in English, Spanish, and Russian, receiving over 480 responses. The survey response were diverse. Approximately 20% of respondents between the ages of 18-40, 50% between the ages of 41-65, and 30% aged over 65.

The feedback from the public indicated concerns for resolving issues related to drainage (49%), street and sidewalk improvements (47%), and crosswalk improvements (42%). Congestion was a major issue noted by over 70% of respondents, and over 20% indicated an issue with parking. At the same time, there was a recognition from the community, reflected in public meeting feedback, that bicycle, pedestrian, and “Complete Streets” improvements should be a City priority. These improvements were rated to be just as important as roadway improvements, indicating community support for multimodal/alternative mode transportation. There was also indication that more park and open space (30%) was needed. Better urban design (30%), and more landscaping (21%) was also indicated as needed improvements. Increased access to the beach, currently serviced by Beach Access Paths, was a priority noted by 28% of respondents.





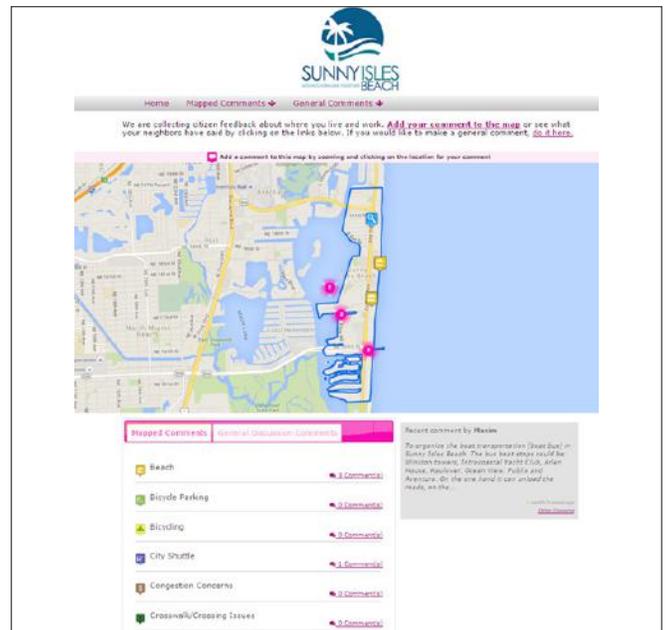
At the same time, more than 25% of the respondents indicated that it was not difficult to get around Sunny Isles Beach. Approximately 20% of all respondents frequently utilized bike paths or transit, with 75% of all respondents walking on the sidewalk frequently.

## Community Remarks

As part of the community outreach process, Community Remarks was utilized to provide stakeholders with the opportunity to provide geolocated feedback outside of the public meetings through an online platform. This enabled the public to communicate issues and ideas whenever and wherever they preferred from smart phones or computers. It allows the tracking of physical issues on a map based system. Comments ranged from water transit to intersection concerns and the development of a pathway along the beach similar to those found in other coastal communities in Miami-Dade and Broward Counties.

## Public Hearings

At the culmination of plan development process, the report was sent for comment and approval by the City Council with the public hearing (Since this is a draft report, update to include date will be forthcoming).



# Data Collection and Analysis

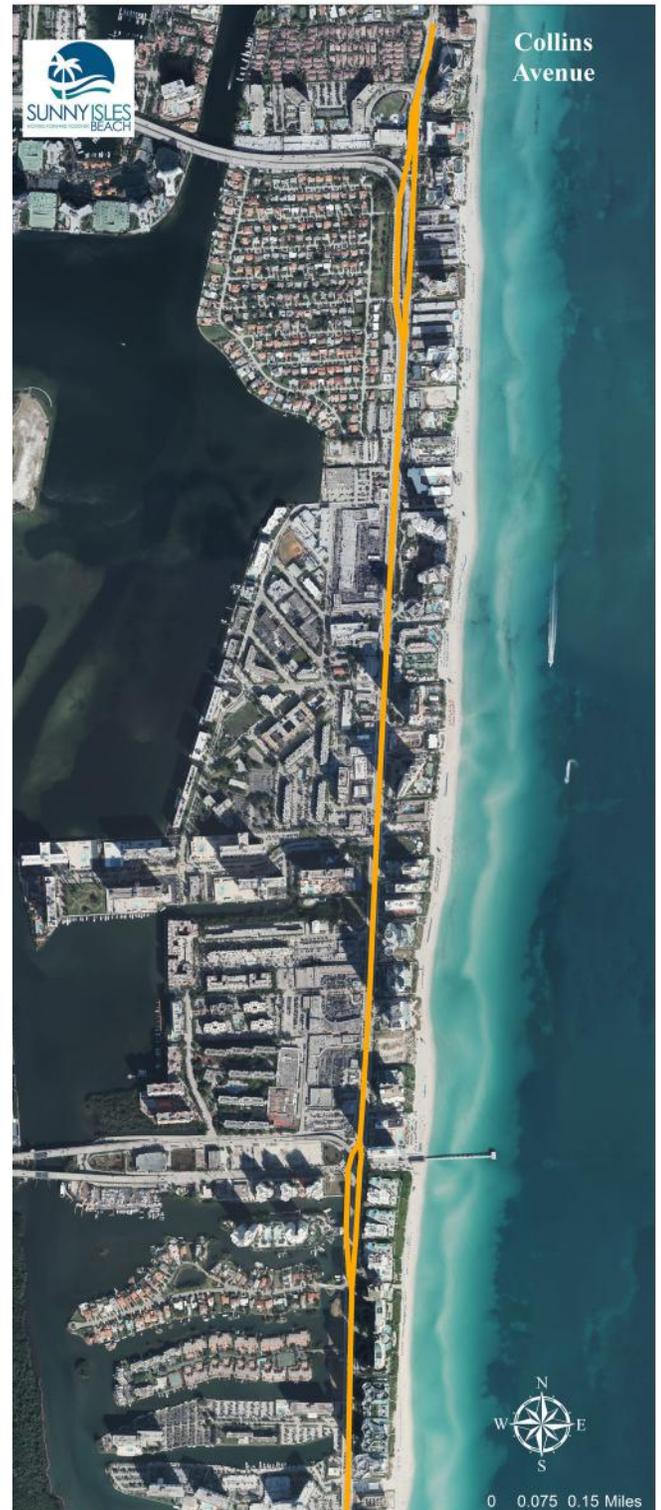
## Collins Avenue

No study planning for the future of Sunny Isles Beach can overlook the significance of Collins Avenue, a State Road which serves as the transportation spine of the community. As a State Road, improvements on Collins Avenue are subject to multiple jurisdictions, such as state, county, and local authorities. Thus, intergovernmental coordination is essential to the development of the transportation network within Sunny Isles Beach.

The right of way on Collins Avenue extends for approximately 2.6 miles within the City, and is 100 feet wide. This accommodates 6 travel lanes, with 1 lane in each direction at 10 feet and 2 lanes in each direction at 11 feet. The median varies between the arterial mandated minimum of 11 feet to upwards of 15 feet, depending on the segment of Collins Avenue, with 10 feet turn lanes occupying some of the space. The western sidewalk on Collins Avenue is generally 10 feet, and the eastern sidewalk generally 6 feet in width.

As there are no alternative routes, Collins Avenue is the primary access by which people travel between the neighborhoods, as well as to travel to other destinations outside the City. Thus, regional transit primarily serves Collins Avenue, with heavy levels of boarding along the roadway. Because there are no alternate routes a high priority should be placed on the maintenance of the road as the primary evacuation route for the community during emergencies and hurricane season.

Several challenges exist for any construction and maintenance projects along Collins Avenue. The community's near complete vehicular reliance on the roadway means that construction and maintenance has to be carefully planned. In addition, any plans to alter the roadway will have to be approved by multiple authorities, a lengthy and potentially bureaucratic process. Further, a soon to be imposed 5 year moratorium on roadway projects, beginning in 2017, will create difficulty in ensuring proposed project implementation.



## Land Use and Population Projections

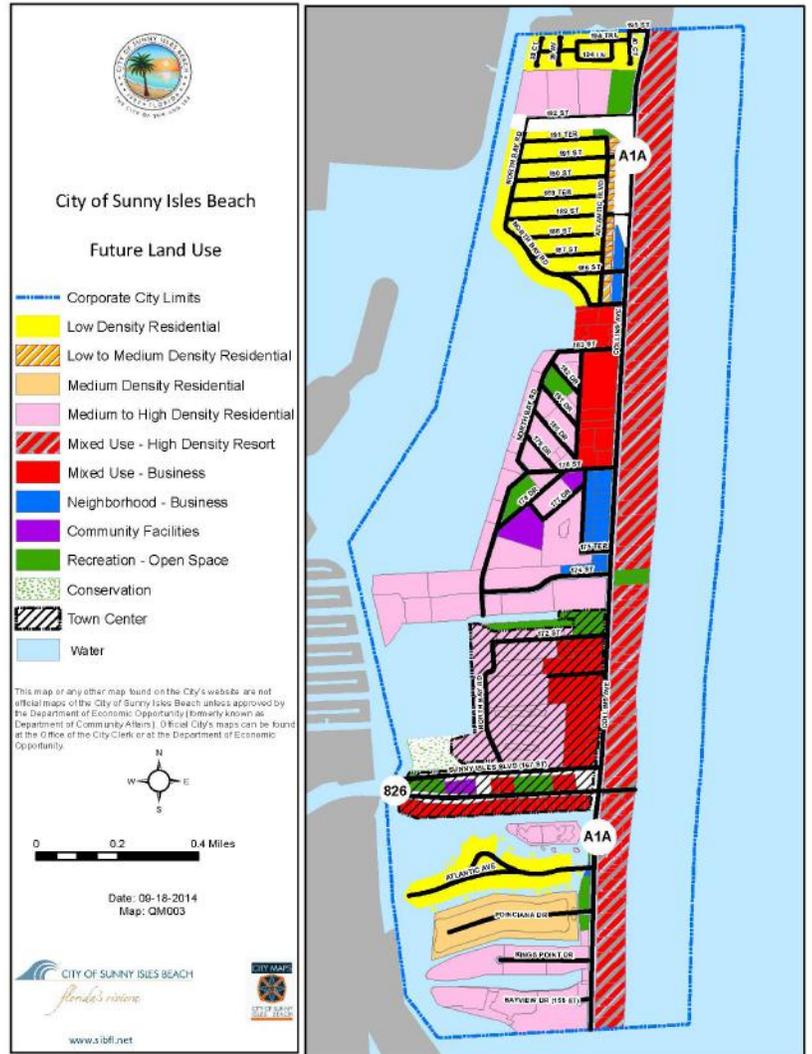
Sunny Isles Beach is substantially built-out with a very limited supply of vacant/developable land. Land usage predominantly trends towards multi-family residential, accounting for 61.8% of land usage, followed by 17.4% for single family residents, 4.5% for recreation, 13.4% for commercial development, and 2.9% for other land uses.

Commercial retail and the civic center are key destinations located in the center of the City. The City's Future Land Use Map represents the City's vision for its development and redevelopment during the short- (5 years), mid- (10 years), and long-range (15+ years) planning periods, and was utilized alongside population growth projections to determine potential traffic growth in Sunny Isles Beach.

Higher density land uses along Collins Avenue are only served by Collins Avenue.

The population of Sunny Isles Beach has a higher than average percentage of elderly, 21.5% (US Census 2010), meriting consideration in transportation planning. Children, another segment of the population where more attention must be given in transportation planning, represent 15.1% (US Census 2010).

By 2030, the City of Sunny Isles Beach is projected to increase its population by 17%, or over 3,600 people.



	2010	2014	2020	2030	2040
Sunny Isles Beach	20,832	21,698	23,141	25,362	27,059
Miami-Dade County	2,496,457	2,613,692	2,788,075	3,056,689	3,260,274

## Prior Studies and Existing Plans

### MIAMI-DADE 2040 Long Range Transportation Plan (LRTP)



Review of existing plans affecting Sunny Isles Beach included a review of Miami-Dade County's 2040 Long Range Transportation Plan. Based on this Plan, two projects were found in the Bicycle/Pedestrian components for recommended plan improvements. Improvements to Lehman Causeway to create a pedestrian facility between Aventura and Sunny Isles Beach, a Priority II project costing \$411,750 (in 2014 dollars), is to be funded and implemented between 2021 and 2025. The second project involves bicycle/pedestrian improvements to A1A between Miami Beach and Broward County, to be implemented between 2035 and 2040.

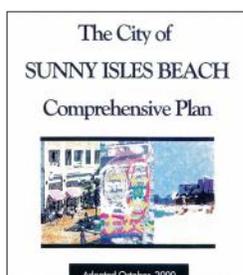
An unfunded but proposed project on the LRTP list is enhanced bus service from the Miami Beach Convention Center to Aventura Terminal. Another proposed project would improve/implement bus service between the Golden Glades Tri-Rail Station and the intersection of Collins Avenue and Sunny Isles Boulevard (NE 163rd Street).

### MPO 5-year Transportation Plan (TIP)



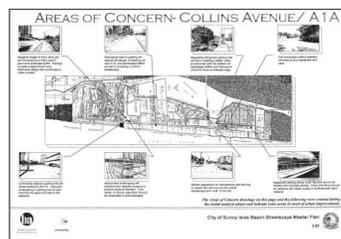
The Miami-Dade MPO's 5 year Transportation Improvement Program, which shows funding for projects within the County, was also reviewed as part of this study. Based on the review of the 5 year TIP, two projects impact the City of Sunny Isles Beach: One project is for the resurfacing of Collins Avenue, to start in April 2017. The other is for the rehabilitation of the bridge on Atlantic Avenue.

### City of Sunny Isles Beach Comprehensive Plan



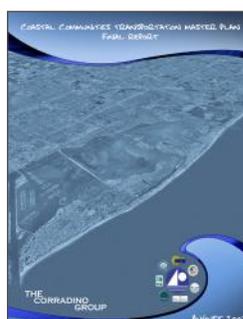
To ensure consistency with the City's Comprehensive Plans, both the existing plan and proposed changes resulting from a concurrently occurring study were considered. Where necessary, recommendations for policy additions or support of existing policies are noted within this report.

### Sunny Isles Beach Streetscape Master Plan



In addition, the Sunny Isles Beach Streetscape Master Plan was also reviewed. This plan provided recommendations for the streetscape of each neighborhood, prescribing specific rights of way widths, as well as landscaping and lighting.

### Coastal Community Transportation Master Plan



Also reviewed was the Coastal Community Transportation Master Plan, completed in 2008, which conducted a study along the coastal island communities within Miami-Dade County. Taking counts at different locations, the study tracked vehicular movement through a video inventory of license plates to determine patterns of entry and exit from the communities. It found that traffic not only occurs in zones, but also that traffic predominantly enters and leaves the communities in an east-west pattern, with little to no flowthrough traffic between the various zones. Sunny Isles Beach's Zone consisted of Sunny Isles Beach to the County line, and ended at Haulover Inlet to the south of the City.

# Multimodal Transportation

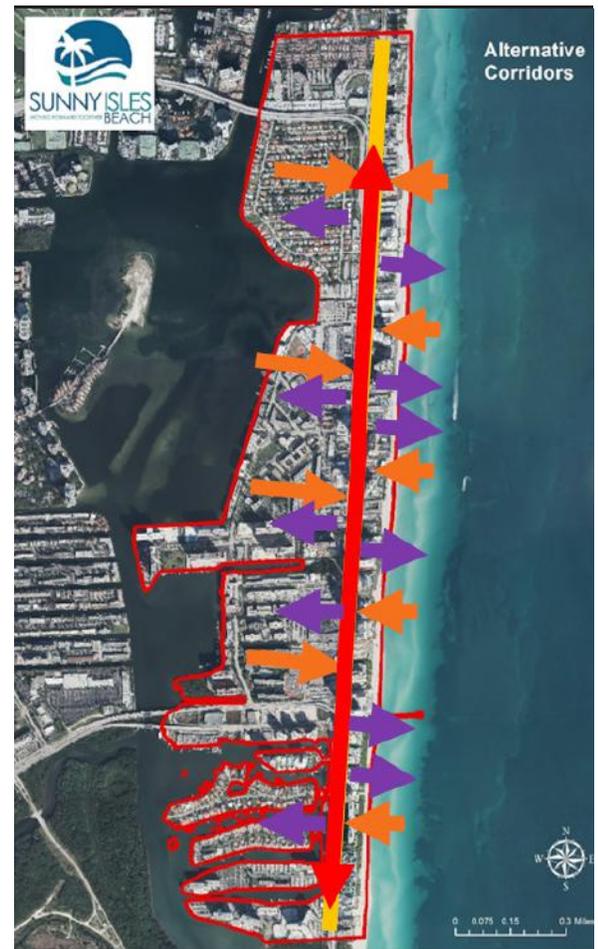
Transportation is the result of the combination of activities which make up life. As with other cities, for Sunny Isles Beach residents and its visitors, it is a story about the quality of life, of chores, of work, of school, and of play. It is in the details that this story diverges from the others.

What, then, drives Sunny Isles Beach residents? According to the 2013 data from the U.S. Census Bureau, 43% of Sunny Isles Beach residents commute to work via single occupancy vehicle, 3.6% use public transportation, 2% walk, and about 0.5% use other means, including bicycling. The combined total portion of the population that commutes using sustainable transportation modes (bike, walk and transit) comprises over 9.5% of all commuters (US Census Factfinder).

Outside these statistical facts, field observations, and more importantly, interactions with Sunny Isles Beach residents at the public meetings and the City Manager's Fact Finding Committee reveal much more – it is a community where residents walk to the park and the beach for recreation and sometimes to spend quality time with family. It is a community with parents who desire to ride their bicycles or walk with their child to school. Each day brings something the same, or, like with a transportation system with viable, multimodal choices, it can hold a myriad different possibilities as people partake in the activities that make up a full life.

Yet, for Sunny Isles Beach, patterns of movements within the community are highly predictable, dictated by the location of the civic center, the commercial areas, the location of workplaces, and the geographic considerations of the City, with neighborhoods forming three distinct zones connected only by Collins Avenue. It is generally unusual for pedestrians and bicyclists, who have a wider range of accessibility and mobility to follow the same travel patterns as transit and vehicles. Within the City, however, there are no other alternatives but to walk or bike the long way around. For Sunny Isles Beach, it is only natural then that all travel normally converges on Collins Avenue. This roadway is thus the nexus, the intersecting points of all travel within the City, and a place where special attention must be paid to the interactions between the various modes.

But, while Sunny Isles Beach is a community where walking and bicycling are modes utilized by residents, the City bears also a story of a community dependent on the personal, single occupant vehicle, one which has resulted in congestion frequently noted by residents and which has worsened as the City continued to develop. Collins Avenue is thus also the roadway where, to enhance mobility and accessibility within the City, the center of gravity in transportation must shift away from in order to provide viable choices and options of alternative travel.



Whether an individual realizes it or not, each trip that person takes affects or is affected by all of the transportation modes regardless of the mode chosen. He may walk on a sidewalk to and from his car, to drive to work. Or he may walk to work, encountering bicycles and vehicles as he waits for his turn to cross the intersection. All transportation modes are inherently connected, and it is this interconnectivity of each trip causes it to affect or be affected by all transportation modes regardless of the mode chosen.

At its core, the main measures of multimodal transportation results from two concepts: accessibility and mobility. In short, for the average person, they are measures of if I can get there, and how quickly I can reach my destination. From this, we derive the idea of options and ultimately modal choice. Each of these modes then has different conditions of cost, comfort, necessity, and infrastructure which must be met in order to create a viable choice.

In a multimodal setting, transit on roadways may follow the same pathways as the average personal vehicle; however, transit is normally subject to the same conditions as vehicles, with congestion and other traffic conditions affecting the timetable. However, new roads or bridges constructed may also be designated as restricted access, allowing for transit vehicles only on that facility. In addition, traffic signal priority systems on the roadways or dedicated bus lanes also allow for better transit timetables, providing for a more desirable busing system. Alternatively, waterborne transit systems may be considered. Evaluation of types of transit as a grid therefore should not, and for this study, was not confined to existing roadways.

To plan for the future, this study evaluated each transportation mode - roadway, transit, pedestrian, and bicycling - separately, taking into consideration relative mobility and accessibility. When applicable, how each mode interacts with each other was considered.

## Roadway Summary

Entering and leaving Sunny Isles Beach by vehicle is effected by one of four entry points: from the east via NE 163rd Street or Lehman Causeway, and to the north and south along Collins Avenue. Collins Avenue serves as the primary roadway connecting the entire community. Given its geographic shape the community is split into three major clustered areas on the west side, north of NE 163rd Street, and with three separate neighborhoods to the south of NE 163rd Street. Each of these areas has its own internal circulation, composed primarily of local, low speed streets. Collins Avenue serves as the local arterial in the network, connecting to each of these clusters of development and neighborhoods. No current alternatives exist due to the lack of bridges connecting alternative, parallel north-south roads.

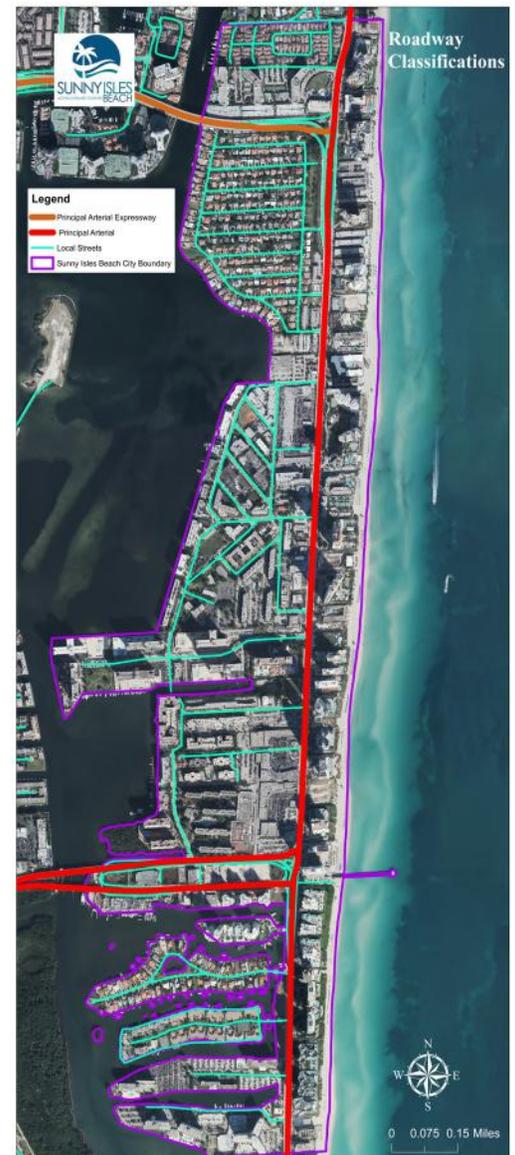
Arterials and collectors within the community were evaluated on the basis of vehicular capacity and resulting Level of Service (LOS) for both Peak-hour Peak direction and Bidirectional Peak hour. The 2015 numbers were derived from intersection turning movement counts undertaken in April 2015. Starting with a base annual growth rate of 0.5%, vehicular traffic was projected first to 2019 and 2025. This growth rate took into account expected higher density development along the east side of Collins Avenue.

Evaluation of the roadways indicate that approximately 30% of the roadways in Sunny Isles Beach will be failing by 2019, with close to 40% percent of the roadways failing by 2025. Most of the failing segments, however, are concentrated on Collins Avenue which, as the sole connecting road between the various neighborhoods in Sunny Isles Beach and with neighboring cities, bears the most traffic.

The LOS analysis indicated that local roads and collectors will continue to operate within acceptable LOS standards for the next decade. However, this is in contrast to perceptions of locally observed traffic congestion. To account for this, an intersection analysis was performed on 29 intersections. Ten intersections at key locations, primarily but not limited to Collins Avenue, were found to be failing, affecting local traffic and congestion at specific points. In addition, as several of these intersections affect traffic progression along Collins Avenue, the combined effect may be cumulative when taken as a whole.

Review of the projected traffic numbers indicate that contrary to local perceptions, flowthrough traffic, while it exists, is not the primary or only cause of traffic between NE 163rd Street and 183rd Street. Were this the case, traffic would spike on Collins Avenue between NE 163rd Street and 183rd Street; instead traffic dips in the middle of the island. This is consistent with patterns seen in prior studies, including the Coastal Community Transportation Master Plan. An observation more apt to explain the local traffic is the driving of short distances, which are otherwise normally walkable or bikeable, with origins and destinations within the City. Dealing with future roadway growth requires encouraging use alternative modes of transportation, including local transit, walking, or bicycling. The local short distance driving focus bodes well for future improvements, as internal trips are more easily resolved than regional trips – the latter of which relies on factors outside of the City’s control.

Future development of Collins Avenue to accommodate the growth of vehicular traffic will require a multimodal shift. While alternative roadways may be widened to accommodate traffic growth, this is not feasible within Sunny Isles Beach, as there is not enough actual or potential right of way for Collins Avenue, nor is there an appetite for further expansions beyond the 6 lanes. This shift may require a reconfiguration of the roadways to allow for bicycles to travel in a separate space along the corridor. However, Collins Avenue is also a State Road, and any changes will have to be approved by the State Department of Transportation. As stated previously, a 5 year moratorium starting in 2017 will prohibit any infrastructure work on or around Collins Avenue. This will likely affect the prioritization of proposed projects for Collins Avenue.







Level of Service details measured on a Peak Hour, Peak Direction Level of Service basis for 2015, 2019, and 2025 were generated to ascertain the current and expected roadway performance through 2025. Thirty-four (34) roadway links were evaluated based on local traffic counts, with a growth rate based on future development and other factors utilized to project vehicular estimates in 2019 and in 2025. For each year, the vehicular count estimate was compared against existing FDOT LOS standards to generate a LOS grade for each road. Of concern for each period are roadways which fall below the existing level of service standard, indicating worsening conditions over time and resulting congestion which must be addressed.

## Summary

### Summary of Roadway Level of Service (LOS) Measured as Peak Hour, Peak Direction

From the above roadway segment analyses, the following observations are made:

#### Comparison Between Year 2015 and 2019

Roadways falling from above to below the acceptable LOS Standard:

- ▶ Collins Avenue between 172nd Street and 174th Street

Roadways with their LOS going from D To F (Failing Roadways with continuing decline):

- ▶ Collins Avenue between 183rd Street and 186th Street
- ▶ Collins Avenue between 186th Street and 189th Street

Roadways with their LOS going from E To F (Failing Roadways with continuing decline):

- ▶ Collins Avenue between SR 856 (Lehman Causeway) and 193rd Street

#### Comparison Between Year 2019 and 2025

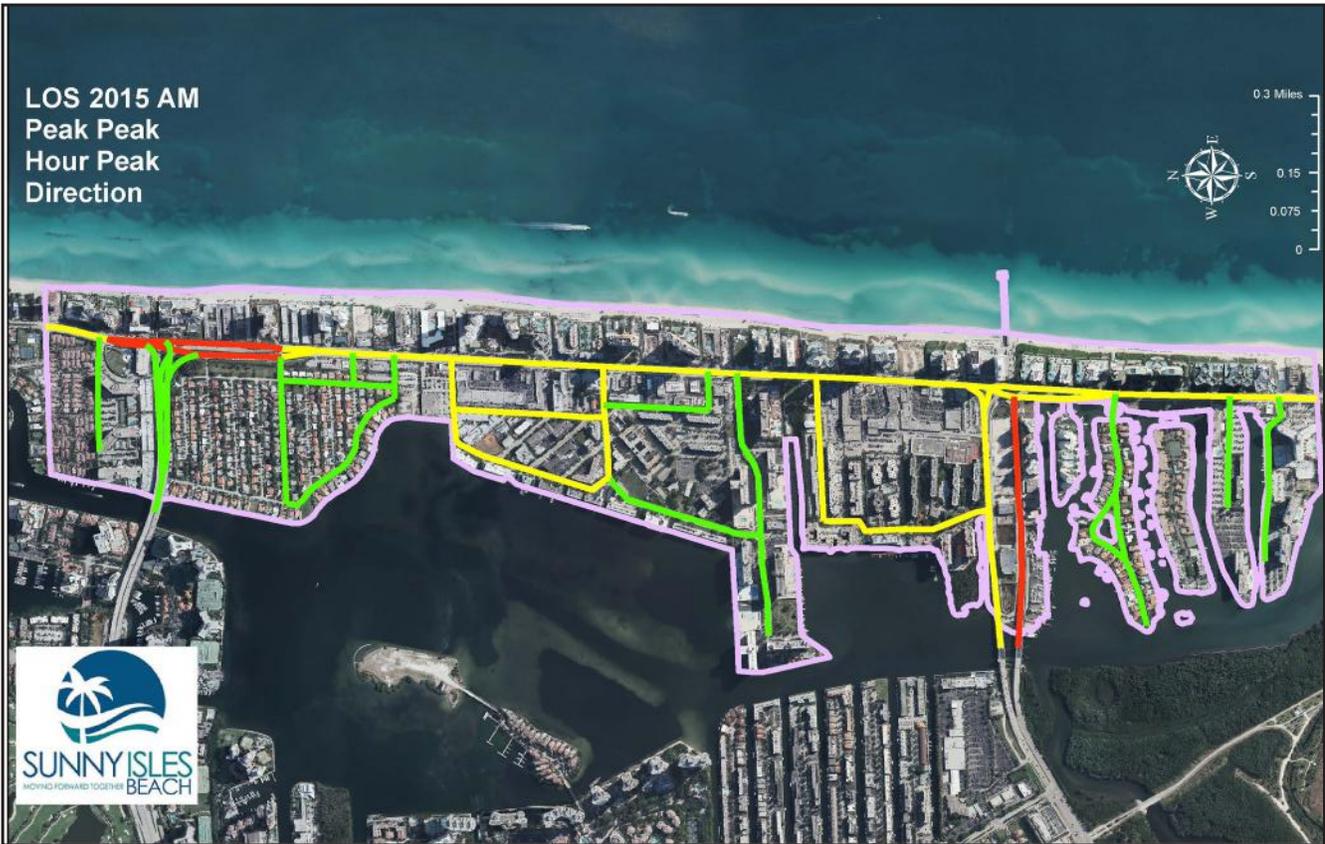
Roadways with their LOS going from D To E:

- ▶ Collins Avenue between 174th Street and 178th Street
- ▶ Collins Avenue between 178th Street and 183rd Street

Roadways with their LOS going from E To F (Failing Roadways with continuing decline):

- ▶ Collins Avenue between 172nd Street and 174th Street

The following pages provide more a more in-detail analysis for both morning and afternoon peak hours, and mapped results for each time period assessment.



# Existing Year 2015 Level of Service: Peak Hour, Peak Direction

In 2015, 30 of 34 roadway links or 88.2% operate at an acceptable level of service. Four roadway links or 11.8% are failing to meet the adopted LOS. Poinciana Drive between Collins Avenue and the end was not noted as it was a low volume private road.

**The following major roadways are operating at LOS D:**

- ▶ Collins Avenue between NE 163rd Street (Sunny Isles Blvd.) and 172nd Street
- ▶ Collins Avenue between 172nd Street and 174th Street
- ▶ Collins Avenue between 174th Street and 178th Street
- ▶ Collins Avenue between 178th Street and 183rd Street
- ▶ Collins Avenue between 183rd Street and 186th Street
- ▶ Collins Avenue between 186th Street and 189th Street
- ▶ Collins Avenue between 193rd Street and Terracina Road
- ▶ NE 163rd Street Westbound between Collins Avenue and the City Boundary West
- ▶ North Bay Road between NE 163rd Street and 172nd Street
- ▶ North Bay Road between 178th Street and 183rd Street
- ▶ 172nd Street between Collins Avenue and North Bay Road
- ▶ 178th Street between Collins Avenue and Atlantic Boulevard
- ▶ 178th Street between Atlantic Boulevard and North Bay Road
- ▶ 183rd Street between Collins Avenue and North Bay Road
- ▶ Atlantic Boulevard between 178th Street and 183rd Street

**The following major roadways are operating at LOS E:**

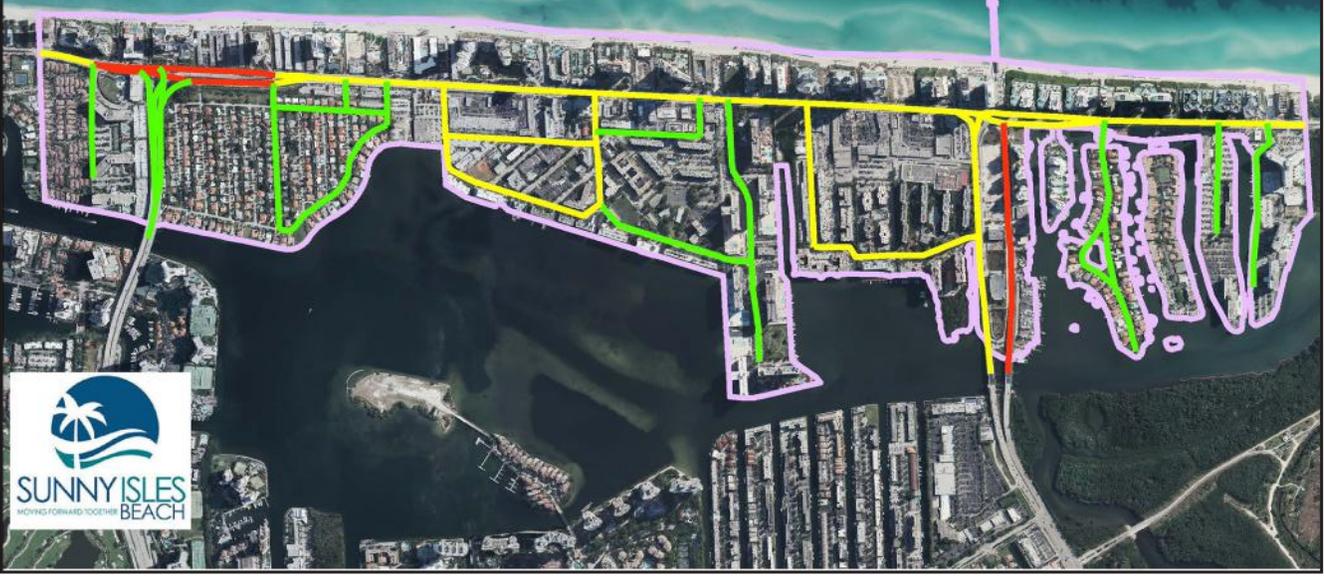
- ▶ Collins Avenue between SR 856 (Lehman Causeway) and 193rd Street

**The following major roadways are operating at LOS F:**

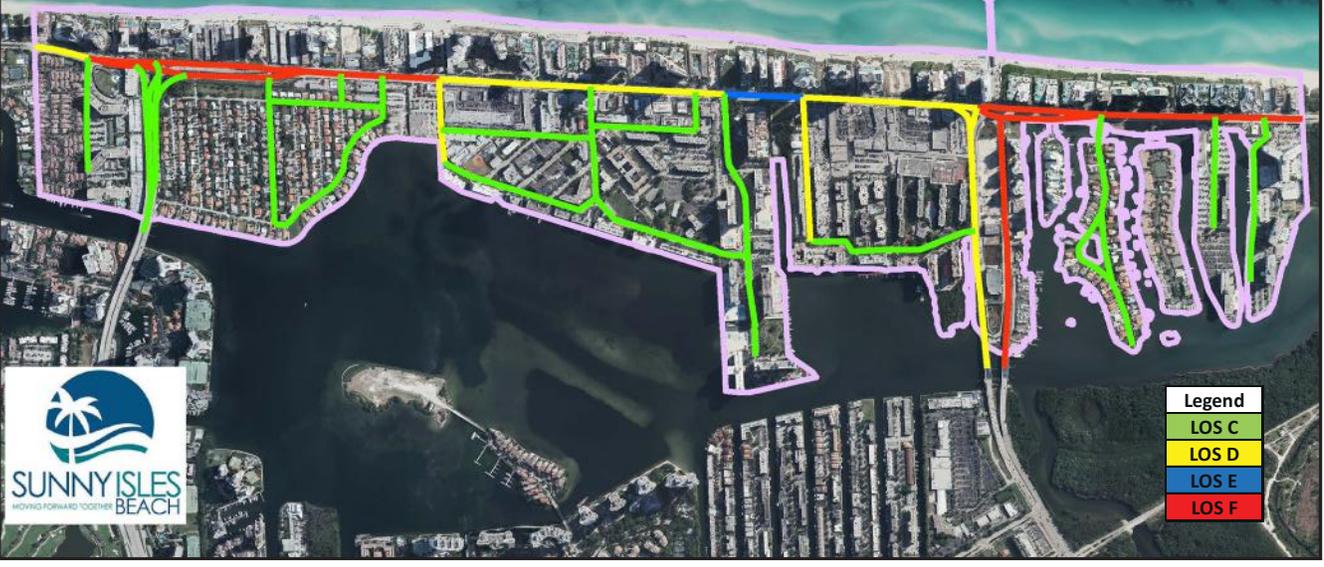
- ▶ Collins Avenue between the City South Boundary and NE 163rd Street (Sunny Isles Blvd.)
- ▶ Collins Avenue between 189th Street and SR 856 (Lehman Causeway)
- ▶ NE 163rd Street Eastbound between Collins Avenue and the City Boundary West

**The map on the preceding page graphically depicts the existing Year 2015 LOS.**

LOS 2019 AM  
Peak Peak  
Hour Peak  
Direction



LOS 2019 PM  
Peak Peak  
Hour Peak  
Direction



Legend	
Green	LOS C
Yellow	LOS D
Blue	LOS E
Red	LOS F



## Existing Year 2019 Roadway Level of Service Measured Peak-hour, Peak direction

Between 2015 and 2019, three additional roadway links along Collins Avenue will deteriorate and fall below acceptable level of service standards. In addition, one Collins Avenue roadway link (Between SR 856 (Lehman Causeway) and 193rd Street) will deteriorate from a LOS E to LOS F. By 2019, 27 of 34 roadway links or 79.4% operate at an acceptable level of service with 7 roadway links or 20.6% are failing to meet the adopted LOS.

The following major roadways are operating at LOS D:

- ▶ Collins Avenue between NE 163rd Street (Sunny Isles Blvd.) and 172nd Street
- ▶ Collins Avenue between 174th Street and 178th Street
- ▶ Collins Avenue between 178th Street and 183rd Street
- ▶ Collins Avenue between 193rd Street and Terracina Road
- ▶ NE 163rd Street Westbound between Collins Avenue and the City Boundary West
- ▶ North Bay Road between NE 163rd Street and 172nd Street
- ▶ North Bay Road between 178th Street and 183rd Street
- ▶ 172nd Street between Collins Avenue and North Bay Road
- ▶ 178th Street between Collins Avenue and Atlantic Boulevard
- ▶ 178th Street between Atlantic Boulevard and North Bay Road
- ▶ 183rd Street between Collins Avenue and North Bay Road
- ▶ Atlantic Boulevard between 178th Street and 183rd Street

The following major roadways are operating at LOS E:

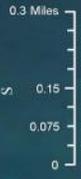
- ▶ Collins Avenue between 172nd Street and 174th Street

The following major roadways are operating at LOS F:

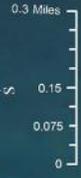
- ▶ Collins Avenue between the City South Boundary and NE 163rd Street (Sunny Isles Blvd.)
- ▶ Collins Avenue between 183rd Street and 186th Street
- ▶ Collins Avenue between 186th Street and 189th Street
- ▶ Collins Avenue between 189th Street and SR 856 (Lehman Causeway)
- ▶ Collins Avenue between SR 856 (Lehman Causeway) and 193rd Street
- ▶ NE 163rd Street Eastbound between Collins Avenue and the City Boundary West

**The map on the preceding page graphically depicts the Year 2019 LOS.**

LOS 2025 AM  
Peak Peak  
Hour Peak  
Direction



LOS 2025 PM  
Peak Peak  
Hour Peak  
Direction



Legend	
Green	LOS C
Yellow	LOS D
Blue	LOS E
Red	LOS F



## Year 2025 Roadway Level of Service: Peak Hour, Peak Direction

Between 2019 and 2025, two additional roadway links along Collins Avenue will deteriorate and fall below acceptable level of service standards. In addition, one Collins Avenue roadway link (Between 172nd Street and 174th Street) will deteriorate from a LOS E to LOS F. In 2025, 8 of the 10 Collins Avenue roadway links will fail to meet the adopted LOS as compared to 3 out of 10 Collins Avenue roadway links in 2015. By 2025, 25 of 34 roadway links or 73.5% will operate at an acceptable level of service with 9 roadway links or 26.5% failing to meet the adopted LOS.

The following major roadways are operating at LOS D:

- ▶ Collins Avenue between NE 163rd Street (Sunny Isles Blvd.) and 172nd Street
- ▶ Collins Avenue between 193rd Street and Terracina Road
- ▶ NE 163rd Street Westbound between Collins Avenue and the City Boundary West
- ▶ North Bay Road between NE 163rd Street and 172nd Street
- ▶ North Bay Road between 178th Street and 183rd Street
- ▶ 172nd Street between Collins Avenue and North Bay Road
- ▶ 178th Street between Collins Avenue and Atlantic Boulevard
- ▶ 178th Street between Atlantic Boulevard and North Bay Road
- ▶ 183rd Street between Collins Avenue and North Bay Road
- ▶ Atlantic Boulevard between 178th Street and 183rd Street

The following major roadways are operating at LOS E:

- ▶ Collins Avenue between 174th Street and 178th Street
- ▶ Collins Avenue between 178th Street and 183rd Street

The following major roadways are operating at LOS F:

- ▶ Collins Avenue between the City South Boundary and 163rd Street (Sunny Isles Blvd.)
- ▶ Collins Avenue between 172nd Street and 174th Street
- ▶ Collins Avenue between 183rd Street and 186th Street
- ▶ Collins Avenue between 186th Street and 189th Street
- ▶ Collins Avenue between 189th Street and SR 856 (Lehman Causeway)
- ▶ Collins Avenue between SR 856 (Lehman Causeway) and 193rd Street
- ▶ NE 163rd Street Eastbound between Collins Avenue and the City Boundary West

**The map on the preceding page graphically depicts the Year 2025 LOS.**





Collins Avenue and 163rd Street (West Bound)

Level of Service details measured on a Peak Hour, Bi-direction Level of Service basis for 2015, 2019, and 2025 were generated to ascertain the current and expected roadway performance through 2025. 34 roadway links were evaluated based on local traffic counts, with a growth rate based on future development and other factors utilized to project vehicular estimates in 2019 and in 2025. For each year, the vehicular count estimate was compared against existing FDOT LOS standards to generate a LOS grade for each road. Of concern for each period are roadways which fall below the existing level of service standard, indicating worsening conditions over time and resulting congestion which must be addressed.

## Summary

### Summary of Roadway Level of Service (LOS) Analyses Measured as Peak Hour, Bi-Directional

From the above roadway segment analyses, the following observations are made:

#### Comparison Between Year 2015 and 2019

Roadways falling from above to below the acceptable LOS Standard:

- ▶ Collins Avenue between 178th Street and 183rd Street

Roadways with their LOS going from D To F (Failing Roadways with continuing decline):

- ▶ Collins Avenue between NE 163rd Street (Sunny Isles Blvd.) and 172nd Street
- ▶ Collins Avenue between 174th Street and 178th Street
- ▶ Collins Avenue between 183rd Street and 186th Street

Roadways with their LOS going from E To F (Failing Roadways with continuing decline):

- ▶ Collins Avenue between 172nd Street and 174th Street

#### Comparison Between Year 2019 and 2025

Roadways falling from above to below the acceptable LOS Standard:

- ▶ Collins Avenue between 178th Street and 183rd Street

Roadways with their LOS going from E To F (Failing Roadways with continuing decline):

- ▶ Collins Avenue between 178th Street and 183rd Street

The following pages provide more a more in-detail analysis for both morning and afternoon peak hours, and mapped results for each time period assessment.

LOS 2015  
AM Peak  
Bidirectional



LOS 2015  
PM Peak  
Bidirectional



## Existing Year 2015 Roadway Level of Service (LOS) Measured as Peak-hour, Bi-directional

In 2015, 28 of 34 roadway links or 82.4% operate at an acceptable level of service. Six roadway links or 17.6% are failing to meet the adopted LOS. Poinciana Drive between Collins Avenue and the end was not noted as it was a low volume private road.

The following major roadways are operating at LOS D:

- ▶ Collins Avenue between NE 163rd Street (Sunny Isles Blvd.) and 172nd Street
- ▶ Collins Avenue between 174th Street and 178th Street
- ▶ Collins Avenue between 178th Street and 183rd Street
- ▶ Collins Avenue between 183rd Street and 186th Street
- ▶ Collins Avenue between 193rd Street and Terracina Road
- ▶ NE 163rd Street Westbound between Collins Avenue and the City Boundary West
- ▶ 172nd Street between Collins Avenue and North Bay Road
- ▶ 178th Street between Collins Avenue and Atlantic Boulevard
- ▶ 183rd Street between Collins Avenue and North Bay Road
- ▶ Atlantic Boulevard between 178th Street and 183rd Street

The following major roadways are operating at LOS E:

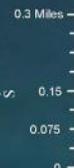
- ▶ Collins Avenue between 172nd Street and 174th Street

The following major roadways are operating at LOS F:

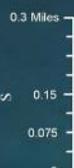
- ▶ Collins Avenue between the City South Boundary and NE 163rd Street (Sunny Isles Blvd.)
- ▶ Collins Avenue between 186th Street and 189th Street
- ▶ Collins Avenue between 189th Street and SR 856 (Lehman Causeway)
- ▶ Collins Avenue between SR 856 (Lehman Causeway) and 193rd Street
- ▶ NE 163rd Street Eastbound between Collins Avenue and the City Boundary West

**The map on the preceding page graphically depicts the existing Year 2015 LOS.**

LOS 2019  
AM Peak  
Bidirectional



LOS 2019  
PM Peak  
Bidirectional



Legend	
Green	LOS C
Yellow	LOS D
Blue	LOS E
Red	LOS F



## Year 2019 Roadway Level of Service Measured as Peak Hour, Bi-directional

Between 2015 and 2019, four additional roadway links along Collins Avenue will deteriorate and fall below acceptable level of service standards. In addition, one Collins Avenue roadway link (Between 172nd Street and 174th Street) will deteriorate from a LOS E to LOS F. By 2019, 24 of 34 roadway links or 70.6% operate at an acceptable level of service with 10 roadway links or 29.4% are failing to meet the adopted LOS.

The following major roadways are operating at LOS D:

- ▶ Collins Avenue between 193rd Street and Terracina Road
- ▶ NE 163rd Street Westbound between Collins Avenue and the City Boundary West
- ▶ 172nd Street between Collins Avenue and North Bay Road
- ▶ 178th Street between Collins Avenue and Atlantic Boulevard
- ▶ 183rd Street between Collins Avenue and North Bay Road
- ▶ Atlantic Boulevard between 178th Street and 183rd Street

The following major roadways are operating at LOS E:

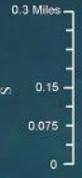
- ▶ Collins Avenue between 178th Street and 183rd Street

The following major roadways are operating at LOS F:

- ▶ Collins Avenue between the City South Boundary and NE 163rd Street (Sunny Isles Blvd.)
- ▶ Collins Avenue between NE 163rd Street (Sunny Isles Blvd.) and 172nd Street
- ▶ Collins Avenue between 172nd Street and 174th Street
- ▶ Collins Avenue between 174th Street and 178th Street
- ▶ Collins Avenue between 183rd Street and 186th Street
- ▶ Collins Avenue between 186th Street and 189th Street
- ▶ Collins Avenue between 189th Street and SR 856 (Lehman Causeway)
- ▶ Collins Avenue between SR 856 (Lehman Causeway) and 193rd Street
- ▶ NE 163rd Street Eastbound between Collins Avenue and the City Boundary West

**The map on the preceding page graphically depicts the Year 2019 LOS.**

LOS 2025  
AM Peak  
Bidirectional



LOS 2025  
PM Peak  
Bidirectional



Legend	
Green	LOS C
Yellow	LOS D
Blue	LOS E
Red	LOS F



## Year 2025 Roadway Level of Service (LOS) Measured as Peak-hour, Bi-directional

Between 2019 and 2025, one additional roadway link along Collins Avenue will deteriorate and fall below acceptable level of service standards. In addition, one other Collins Avenue roadway link (Between 178th Street and 183rd Street) will deteriorate from a LOS E to LOS F. In 2025, all 10 Collins Avenue roadway links will fail to meet the adopted LOS as compared to 5 out of 10 Collins Avenue roadway links in 2015. By 2025, 23 of 34 roadway links or 67.6% will operate at an acceptable level of service with 11 roadway links or 32.4% failing to meet the adopted LOS.

The following major roadways are operating at LOS D:

- ▶ NE 163rd Street Westbound between Collins Avenue and the City Boundary West
- ▶ North Bay Road between 178th Street and 183rd Street
- ▶ 172nd Street between Collins Avenue and North Bay Road
- ▶ 178th Street between Collins Avenue and Atlantic Boulevard
- ▶ 183rd Street between Collins Avenue and North Bay Road
- ▶ Atlantic Boulevard between 178th Street and 183rd Street

The following major roadways are operating at LOS E:

- ▶ Collins Avenue between 193rd Street and Terracina Road

The following major roadways are operating at LOS F:

- ▶ Collins Avenue between the City South Boundary and NE 163rd Street (Sunny Isles Blvd.)
- ▶ Collins Avenue between NE 163rd Street (Sunny Isles Blvd.) and 172nd Street
- ▶ Collins Avenue between 172nd Street and 174th Street
- ▶ Collins Avenue between 174th Street and 178th Street
- ▶ Collins Avenue between 178th Street and 183rd Street
- ▶ Collins Avenue between 183rd Street and 186th Street
- ▶ Collins Avenue between 186th Street and 189th Street
- ▶ Collins Avenue between 189th Street and SR 856 (Lehman Causeway)
- ▶ Collins Avenue between SR 856 (Lehman Causeway) and 193rd Street
- ▶ NE 163rd Street Eastbound between Collins Avenue and the City Boundary West

**The map on the preceding page graphically depicts the Year 2025 LOS.**

### Intersections Evaluated Under Study



### Failing Intersections



## Roadway Intersection Analysis

**Twenty-nine (29) intersections along the Collins Avenue corridor and local streets were analyzed for existing 2015 and anticipated 2019 traffic due to area-wide growth and committed developments.**

The 2015 Existing Conditions LOS analyses included a total of 29 intersections with 17 signalized and 12 unsignalized intersections. As per the results, ten (10) of the intersections contained a LOS F on at least one approach and are mentioned below:

1. Collins Avenue & SR-826 EB/NE 163rd Street (Signalized)
2. Collins Avenue & 170th Street (Signalized)
3. Collins Avenue & 172nd Street (Signalized)
4. Collins Avenue & 174th Street (Signalized)
5. Collins Avenue & 175th Terrace (Unsignalized)
6. Collins Avenue & 178th Street (Signalized)
7. Atlantic Blvd. & 178th Street (West Side) (Unsignalized)
8. Atlantic Blvd. & 183rd Street (Unsignalized)
9. Collins Avenue & 183rd Street (Signalized)
10. Collins Avenue & 186th Street (Unsignalized)

The 2019 Future Total Traffic with Existing Geometry LOS analyses included the same 29 intersections as evaluated for the existing conditions. The 2015 existing volumes were projected to the year 2019 by utilizing a 0.5% annual growth rate and committed development trips were added as well. As per the results, the same ten intersections that contained a LOS F on at least one approach in the 2015 existing conditions were also affected with the 2019 future total traffic with existing geometry and are mentioned below:

1. Collins Avenue & SR-826 EB/NE 163rd Street (Signalized)
2. Collins Avenue & 170th Street (Signalized)
3. Collins Avenue & 172nd Street (Signalized)
4. Collins Avenue & 174th Street (Signalized)
5. Collins Avenue & 175th Terrace (Unsignalized)
6. Collins Avenue & 178th Street (Signalized)
7. Atlantic Blvd. & 178th Street (West side) (Unsignalized)
8. Atlantic Blvd. & 183rd Street (Unsignalized)
9. Collins Avenue & 183rd Street (Signalized)
10. Collins Avenue & 186th Street (Unsignalized)



Collins Avenue

The above aforementioned intersections have an individual failing approach due to the anticipated future growth in the area along with the committed developments which accounts for the increase in the local pass through traffic or internal traffic.

The intersection of Collins Avenue and 175th Terrace, resulted in LOS F in both the AM and PM peak periods for the eastbound right turn traffic movement. This happens when traffic on the minor west approach (175th Terrace) is stopped in order to turn right and experiences a delay due to the lack of available gaps in southbound traffic on Collins Avenue. This intersection is unsignalized and the eastbound traffic is only allowed to turn right. As a result, mitigation is not being recommended for this intersection.

Mitigation was evaluated at the following nine intersections as identified previously:

1. Collins Avenue at SR-826 EB/NE 163rd Street
2. Collins Avenue at 170th Street
3. Collins Avenue at 172nd Street
4. Collins Avenue at 174th Street
5. Collins Avenue at 178th Street
6. Atlantic Blvd. at 178th Street (West Side)
7. Atlantic Blvd. at 183rd Street
8. Collins Avenue at 183rd Street
9. Collins Avenue at 186th Street

For the aforementioned intersections, an overall comparison was made in order to establish a baseline for mitigation purposes. Mitigation was then evaluated to alleviate the LOS F conditions. Traffic signal timing improvements are being recommended for five of the signalized intersections along Collins Avenue: 170th Street; 172nd Street; 174th Street; 178th Street; and 183rd Street. These traffic signal timing improvements include adjusting cycle splits / lengths and offsets along Collins Avenue.

For the signalized intersection of Collins Avenue at NE 163rd Street EB, the eastbound approach is LOS F for both the AM and PM peak periods. This LOS F condition occurs for both the 2015 Existing Conditions and the 2019 Future Total Traffic with Existing Geometry LOS analyses. Because of the high demand of vehicular traffic turning right at this intersection and heading south on Collins Avenue (1191 vehicles per hour (vph) during the AM peak hour and 948 vph during the PM peak hour), the mitigation recommendation is to install a triple right for the NE 163rd Street eastbound approach. This can be accomplished by having two dedicated right turn lanes along with a shared left-thru-right lane.

Three unsignalized intersections identified for mitigation included Atlantic Boulevard at 178th Street (West Side), Atlantic Boulevard at 183rd Street and Collins Avenue at 186th Street. For these intersections, the Manual on Uniform Traffic Control Devices (MUTCD) traffic signal warrants should be evaluated to determine if traffic signal control is justified. It should be noted that there is a high pedestrian volume for the intersection of Atlantic Boulevard at 183rd Street, especially during the AM peak period. For Collins Avenue at 186th Street, no eastbound and westbound laneage improvements were identified. However, for the intersection of Atlantic Boulevard at 178th Street, the high demand of southbound traffic turning left at this intersection and heading east on 178th Street (202 vph during the AM peak hour and 109 vph during the PM peak hour) could include a recommendation of installing a dedicated left turn lane on the southbound approach at this intersection. However, this recommendation will not alleviate the LOS F for the southbound approach.



Collins Avenue and 174th Street

Table 1: 2015 Existing Conditions Levels-of-Service (LOS) Summary

Intersection		Traffic Control	Overall LOS/Delay <sup>[1]</sup>	Approach LOS <sup>[2]</sup>			
No.	Name			NB	SB	EB	WB
1	Collins Avenue & Bayview Drive	Signalized	A/6.9 sec (A/8.6 sec)	A (A)	A (A)	D (E)	D (E)
2	Collins Avenue & Kings Point Drive	Signalized	A/7.1 sec (B/11.5 sec)	A (B)	A (A)	E (E)	
3	Collins Avenue & Atlantic Isles Avenue	Signalized	A/9.9 sec (B/17.0 sec)	A (C)	B (A)	A (A)	D (D)
4	SR-826 EB & 300 Block	Unsignalized	[3]	Yield	Yield	Free Flow	
5	Collins Avenue & SR-826 EB/163rd Street	Signalized	F/90.9 sec (F/96.1 sec)	B (B)	B (B)	F (F)	A (A)
6	Collins Avenue & SR-826 WB/163rd Street	Signalized	A/0.3 sec (A/1.2 sec)	A (A)	A (A)		A (A)
7	SR-826 WB & North Bay Road	Unsignalized	[3]		C (C)		Free Flow
8	Collins Avenue & 16800 Block (Crosswalk)	Signalized	A/3.4 sec (A/3.0 sec)	A (A)	A (A)		
9	Collins Avenue & 16900 Block	Signalized	A/5.8 sec (B/11.4 sec)	A (B)	A (A)	C (E)	
10	Collins Avenue & 170th Street	Signalized	A/4.7 sec (B/12.9 sec)	A (B)	A (A)	D (F)	D (E)
11	Collins Avenue & 172nd Street	Signalized	C/22.3 sec (B/11.4 sec)	A (B)	A (A)	F (D)	
12	Collins Avenue & 174th Street	Signalized	A/8.3 sec (B/13.8 sec)	A (A)	A (A)	E (F)	
13	North Bay Road & 174th Street	Unsignalized	B/10.6 sec (A/9.1 sec)	A (A)	B (B)	A (A)	A (A)
14	Collins Avenue & 175th Terrace	Unsignalized	[3]	Free Flow	Free Flow	E (E)	D (D)
15	Collins Avenue & 176th Street (Crosswalk)	Signalized	A/2.7 sec (A/3.4 sec)	A (A)	A (A)		
16	Collins Avenue & 178th Street	Signalized	C/20.4 sec (B/16.1 sec)	B (B)	B (A)	E (F)	
17	North Bay Road & 178th Street	Unsignalized	[3]	Yield	Yield		Free Flow
18	Atlantic Blvd. & 178th Street (West Side)	Unsignalized	[3]	B (A)	F (C)	Free Flow	Free Flow
19	Atlantic Blvd. & 178th Street (East Side)	Unsignalized	[3]	D (B)	C (B)	Free Flow	Free Flow
20	Atlantic Blvd. & 182nd Drive	Unsignalized	[3]	Free Flow	Free Flow		
21	North Bay Road & 182nd Drive	Unsignalized	[3]	Free Flow	Free Flow		B (B)
22	Atlantic Blvd. & 183rd Street	Unsignalized	[3]	F (A)		Free Flow	Free Flow
23	Collins Avenue & 183rd Street	Signalized	C/20.8 sec (C/23.7 sec)	A (B)	A (A)	F (F)	D (E)
24	Collins Avenue & 185th Street	Signalized	B/10.5 sec (A/9.9 sec)	A (A)	B (A)	C (D)	C (D)
25	Atlantic Blvd. & 185th Street	Unsignalized	[3]		A (A)	Free Flow	Free Flow
26	Collins Avenue & 186th Street	Unsignalized	[3]	Free Flow	Free Flow	F (F)	F (F)
27	Collins Avenue & 189th Street	Signalized	A/1.0 sec (A/0.7 sec)	A (A)	A (A)	A (A)	
28	Collins Avenue & SR-856/192nd Street/ Lehman Causeway	Signalized	B/15.1 sec (C/20.5 sec)	A (A)	A (A)	D (E)	D (D)
29	Collins Avenue & 193rd Street	Signalized	B/18.8 sec (B/18.6 sec)	B (B)	C (B)	C (C)	A (E)

[1] - AM LOS without parenthesis; PM LOS with parenthesis; Delay in seconds per vehicle

[2] - AM LOS without parenthesis; PM LOS with parenthesis

[3] - HCM software does not provide the overall LOS with a free-flow movement approach

Table 2: 2019 Future Total with Existing Geometry Levels-of-Service (LOS) Summary

Intersection		Traffic Control	Overall LOS/Delay <sup>[1]</sup>	Approach LOS <sup>[2]</sup>			
No.	Name			NB	SB	EB	WB
1	Collins Avenue & Bayview Drive	Signalized	A/7.6 sec (A/9.9 sec)	A (B)	A (A)	D (E)	D (E)
2	Collins Avenue & Kings Point Drive	Signalized	A/8.1 sec (B/10.8 sec)	A (B)	A (A)	E (E)	
3	Collins Avenue & Atlantic Isles Avenue	Signalized	B/10.4 sec (B/13.2 sec)	A (B)	B (A)	A (A)	D (D)
4	SR-826 EB & 300 Block	Unsignalized	[3]	Yield	Yield	Free Flow	
5	Collins Avenue & SR-826 EB/163rd Street	Signalized	F/102.8 sec (F/114.7 sec)	B (B)	C (B)	F (F)	A (A)
6	Collins Avenue & SR-826 WB/163rd Street	Signalized	A/0.4 sec (A/0.5 sec)	A (A)	A (A)		A (A)
7	SR-826 WB & North Bay Road	Unsignalized	[3]		E (D)		Free Flow
8	Collins Avenue & 16800 Block (Crosswalk)	Signalized	A/3.5 sec (A/3.3 sec)	A (A)	A (A)		
9	Collins Avenue & 16900 Block	Signalized	A/6.1 sec (B/11.1 sec)	A (B)	A (A)	C (E)	
10	Collins Avenue & 170th Street	Signalized	A/4.9 sec (B/11.6 sec)	A (A)	A (A)	D (F)	D (E)
11	Collins Avenue & 172nd Street	Signalized	C/24.5 sec (B/10.3 sec)	A (A)	B (A)	F (E)	
12	Collins Avenue & 174th Street	Signalized	A/9.9 sec (B/11.8 sec)	A (A)	A (A)	E (F)	
13	North Bay Road & 174th Street	Unsignalized	B/10.8 sec (A/9.1 sec)	A (A)	B (B)	A (A)	A (A)
14	Collins Avenue & 175th Terrace	Unsignalized	[3]	Free Flow	Free Flow	F (F)	D (D)
15	Collins Avenue & 176th Street (Crosswalk)	Signalized	A/3.1 sec (A/2.8 sec)	A (A)	A (A)		
16	Collins Avenue & 178th Street	Signalized	C/25.0 sec (B/18.1 sec)	B (B)	C (B)	E (F)	
17	North Bay Road & 178th Street	Unsignalized	[3]	Yield	Yield		Free Flow
18	Atlantic Blvd. & 178th Street (West Side)	Unsignalized	[3]	B (A)	F (C)	Free Flow	Free Flow
19	Atlantic Blvd. & 178th Street (East Side)	Unsignalized	[3]	D (B)	C (C)	Free Flow	Free Flow
20	Atlantic Blvd. & 182nd Drive	Unsignalized	[3]	Free Flow	Free Flow		
21	North Bay Road & 182nd Drive	Unsignalized	[3]	Free Flow	Free Flow		B (B)
22	Atlantic Blvd. & 183rd Street	Unsignalized	[3]	F (B)		Free Flow	Free Flow
23	Collins Avenue & 183rd Street	Signalized	C/25.4 sec (B/17.7 sec)	B (A)	A (A)	F (F)	D (E)
24	Collins Avenue & 185th Street	Signalized	B/11.6 sec (A/9.0 sec)	A (A)	B (B)	C (D)	C (D)
25	Atlantic Blvd. & 185th Street	Unsignalized	[3]		A (A)	Free Flow	Free Flow
26	Collins Avenue & 186th Street	Unsignalized	[3]	Free Flow	Free Flow	F (F)	F (F)
27	Collins Avenue & 189th Street	Signalized	A/1.2 sec (A/0.9 sec)	A (A)	A (A)	A (A)	
28	Collins Avenue & SR-856/192nd Street/ Lehman Causeway	Signalized	B/15.4 sec (C/20.7 sec)	A (A)	A (B)	D (E)	D (D)
29	Collins Avenue & 193rd Street	Signalized	B/20.0 sec (C/21.1 sec)	B (B)	C (C)	C (C)	A (E)

[1] - AM LOS without parenthesis; PM LOS with parenthesis; Delay in seconds per vehicle  
 [2] - AM LOS without parenthesis; PM LOS with parenthesis  
 [3] - HCM software does not provide the overall LOS with a free-flow movement approach

Table 3: 2019 Future Total Traffic With Mitigation & Overall Comparison Levels of Service (LOS) Summary

No.	Intersection	Traffic Control	Traffic Volumes	Geometry	Overall LOS/Delay <sup>[1]</sup>	Approach LOS <sup>[2]</sup>				Mitigation Recommendation
						NB	SB	EB	WB	
5	Collins Avenue & SR-926 EB/163rd Street	Signalized	Existing	Existing	F/80.8 sec (F/86.1 sec)	B (B)	B (B)	F (F)	A (A)	Add 2nd separate EB right turn lane (i.e. Triple Right Turns)
		Signalized	Future	Existing	F/102.8 sec (F/114.7 sec)	B (B)	C (B)	F (F)	A (A)	
		Signalized	Future	Proposed	D/37.9 sec (D/45.5 sec)	B (C)	C (C)	D (E)	A (B)	
10	Collins Avenue & 170th Street	Signalized	Existing	Existing	A/4.7 sec (B/12.9 sec)	A (B)	A (A)	D (F)	D (E)	Signal timing improvements
		Signalized	Future	Existing	A/4.9 sec (B/11.8 sec)	A (A)	A (A)	D (F)	D (E)	
		Signalized	Future	Proposed	A/3.8 sec (B/14.9 sec)	A (A)	A (B)	D (E)	D (D)	
11	Collins Avenue & 172nd Street	Signalized	Existing	Existing	C/22.3 sec (B/11.4 sec)	A (B)	A (A)	F (D)		Signal timing improvements
		Signalized	Future	Existing	C/24.5 sec (B/10.3 sec)	A (A)	B (A)	F (E)		
		Signalized	Future	Proposed	C/21.9 sec (A/8.8 sec)	A (A)	C (A)	E (E)		
12	Collins Avenue & 174th Street	Signalized	Existing	Existing	A/8.3 sec (B/13.8 sec)	A (A)	A (A)	E (F)		Signal timing improvements
		Signalized	Future	Existing	A/9.9 sec (B/11.8 sec)	A (A)	A (A)	E (F)		
		Signalized	Future	Proposed	A/7.5 sec (A/7.8 sec)	A (A)	A (A)	D (E)		
16	Collins Avenue & 178th Street	Signalized	Existing	Existing	C/20.4 sec (B/16.1 sec)	B (B)	B (A)	E (F)		Signal timing improvements
		Signalized	Future	Existing	C/25.0 sec (B/18.1 sec)	B (B)	C (B)	E (F)		
		Signalized	Future	Proposed	C/25.0 sec (B/18.9 sec)	B (B)	C (B)	E (E)		
18	Atlantic Blvd. & 178th Street (West Side)	Unsignalized	Existing	Existing	[B]	B (A)	F (C)	Free Flow	Free Flow	Check for signalization with current SB laneage. Add separate SB left turn lane (*Still LOS F)
		Unsignalized	Future	Existing		B (A)	F (C)			
		Unsignalized	Future	Proposed		B (A)*	F (C)*			
22	Atlantic Blvd. & 183rd Street	Unsignalized	Existing	Existing	[B]	F (A)		Free Flow	Free Flow	Check for signalization; NB laneage unchanged
		Unsignalized	Future	Existing		F (B)				
		Unsignalized	Future	Proposed		-				
23	Collins Avenue & 183rd Street	Signalized	Existing	Existing	C/20.8 sec (C/23.7 sec)	A (B)	A (A)	F (F)	D (E)	Signal timing improvements
		Signalized	Future	Existing	C/25.4 sec (B/17.7 sec)	B (A)	A (A)	F (F)	D (E)	
		Signalized	Future	Proposed	D/42.7 sec (D/39.2 sec)	D (D)	D (D)	E (E)	C (A)	
26	Collins Avenue & 188th Street	Unsignalized	Existing	Existing	[B]	Free Flow	Free Flow	F (F)	F (F)	Check for signalization; EB & WB laneage unchanged
		Unsignalized	Future	Existing				F (F)	F (F)	
		Unsignalized	Future	Proposed				-	-	
[1] - AM LOS without parenthesis; PM LOS with parenthesis; Delay in seconds per vehicle [2] - AM LOS without parenthesis; PM LOS with parenthesis [3] - HCM software does not provide the overall LOS with a free-flow movement approach						LEGEND		Approach needs mitigation improvements		
								Updated results with mitigation improvements		

## Parking

City parking facilities can be found on the **Municipal Parking Lots** map on the following page.

The City rents the location under the Lehman Causeway from the Florida Department of Transportation. Parking is currently adequate; however, connections such as crosswalks from parking areas are generally lacking, resulting in jaywalking in areas such as by the Heritage Park Garage and the metered parking areas under Lehman Causeway. Specifically, these two areas should be evaluated for pedestrian improvements. The City intends to expand parking with the development of the park at 163rd Street. Parking for some of the hotels are an issue; some need off-site parking locations to fully service demand.



Collins Avenue (Northbound) around 190th Street

## Roadway Needs

Sunny Isles Beach's local and collector roadways are expected to perform within the adopted level of service, which as written are appropriate for the City. Traffic on Collins Avenue poses long term challenges which cannot be met by current infrastructure, nor is road expansion feasible. Evaluation of different options, including a flow-through lane, does not adequately address the issue without costly impacts to the City. Internal circulation due to geographic constraints concentrate traffic onto Collins Avenue. Therefore, in the long term, encouraging modal shifts in transportation is perhaps the most cost efficient and feasible means of addressing future traffic, given local constraints and the fact that lane additions are not feasible on Collins Avenue.

In the short term, congestion issues currently experienced by the City are less caused by the amount of overall peak traffic, with roadways mainly operating at acceptable levels of service, but are more the result of an interlinked effect of failing intersections in proximity to each other. However, in cases where there are road closures, such as with construction with hotels, peak traffic counts will result in a failing roadway LOS from a practical standpoint. Intersection improvements include signal timing recalibration as well as a signal progression analysis, both of which would have to be coordinated with Miami-Dade County for implementation. With two of the intersections, a signal warrant analysis should be conducted. However, because resolving the issue of failing intersections primarily involves signal retiming, it is a relatively easy fix for the City, and should result in short term improvements. For failures due to lane closures, this is a matter of standard enforcement or good maintenance of traffic policies.

Parking in the community is a mid-term consideration for the City. The City should continue to rent properties from the Florida Department of Transportation, and provide for City edge parking. In providing parking, the City should ensure that adequate connections from the parking infrastructure to the pedestrian network exist, and approve designs which will allow for transit to service the parking area. Specifically, parking on the City's edge should be encouraged to reduce traffic within the City. This can be supported with connections via the Sunny Isles Beach community shuttle system.

## Recommendations

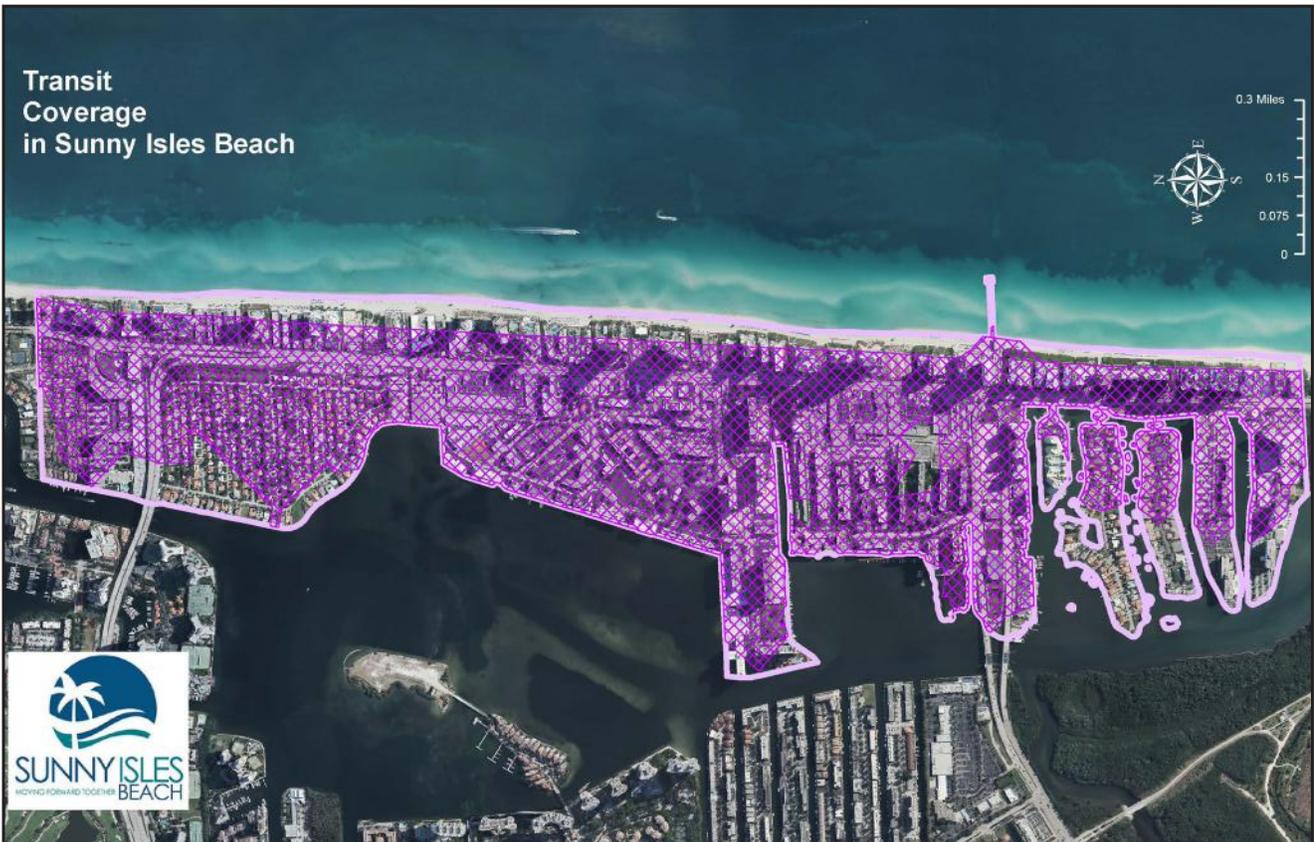
1. Address signal timing issues at failing intersections.
2. Evaluate parking needs and consolidate parking at key areas. Connect parking to Transit.
3. Encourage modal shifts and utilize transportation demand management to ease congestion on the roadways.
4. Complete North Bay Road connectivity from 163rd Street to 191st Terrace for emergency vehicles.

## MUNICIPAL PARKING LOTS

- P1: ELLEN WYNNE BEACH ACCESS LOT  
19333 Collins Ave  
Handicapped Spaces - 4  
Regular Spaces - 22  
Lifeguard Reserved - 1
- P2: LEHMAN CAUSEWAY LOT  
19162 Collins Ave (EAST END)  
Handicapped Spaces - 20  
Regular Spaces - 37 (WEST END)  
Handicapped - 0  
Regular Spaces - 300
- P3: COLLINS AVE MEDIAN LOT (UNDER RAMP)  
19152 Collins Ave  
Handicapped Spaces - 2  
Regular Spaces - 47
- P4: 175 TERRACE LOT  
210 175 Terr  
Handicapped Spaces - 2  
Regular Spaces - 39
- P5: PIER PARK  
16501 Collins Ave  
Handicapped Spaces - 4  
Regular Spaces - 23  
Lifeguard Reserved - 2
- P6: GATEWAY PARK (CLOSED - Under Construction)  
Handicapped Spaces -  
Regular Spaces -
- P7: BELLA VISTA BAY PARK  
500 Sunny Isles Blvd  
Handicapped Spaces - 2  
Regular Spaces - 24
- P8: HERITAGE PARK GARAGE  
19200 Collins Ave  
Handicapped Spaces - 16  
Regular Spaces - 97
- P9: NORTH BAY ROAD LOT  
174 St & N Bay Rd  
Handicapped Spaces - 1  
Regular Spaces - 24  
\*This location has coin-operated meters.
- F1: MARGOLIS PARK (free)  
17815 N Bay Rd  
Handicapped Spaces - 1  
Regular Spaces - 21
- F2: TOWN CENTER PARK (free)  
17200 Collins Ave  
Handicapped Spaces - 1  
Regular Spaces - 12
- F3: Pelican Community Park (free)  
18115 N Bay Rd  
Handicapped Spaces - 2  
Regular Spaces - 32  
\*\*Designated On-street Parking



Map: BC016A



## Transit

### Overall Service

Locally, a combination of three Sunny Isles Beach Shuttle and four Miami-Dade Transit routes provide service to the City. These routes allow both visitors and residents to get around the City as well as throughout the region. In addition to the Miami-Dade Transit routes, transit riders can transfer to the B Line in North Miami Beach at the Intracoastal Mall or to the Aventura Express at Aventura Mall. Transit coverage within Sunny Isles Beach is extensive, covering approximately 77% percent of the community. Transit usage potential is well served by the local population density, the highest in Miami-Dade County.

Transit is evaluated with a transit level of service. Sunny Isles Beach's existing LOS standards include the following:

The minimum peak-hour mass transit level of service shall be that all areas of the City shall be provided with public transit service having 30-minute headways, as measured by service along a transit corridor "(not by individual route) provided that:

- a) It is estimated that there is sufficient demand to warrant service
- b) The service is economically feasible
- c) The expansion of transit service into new areas is not provided at a detriment to existing or planned services in higher density areas with greater need.

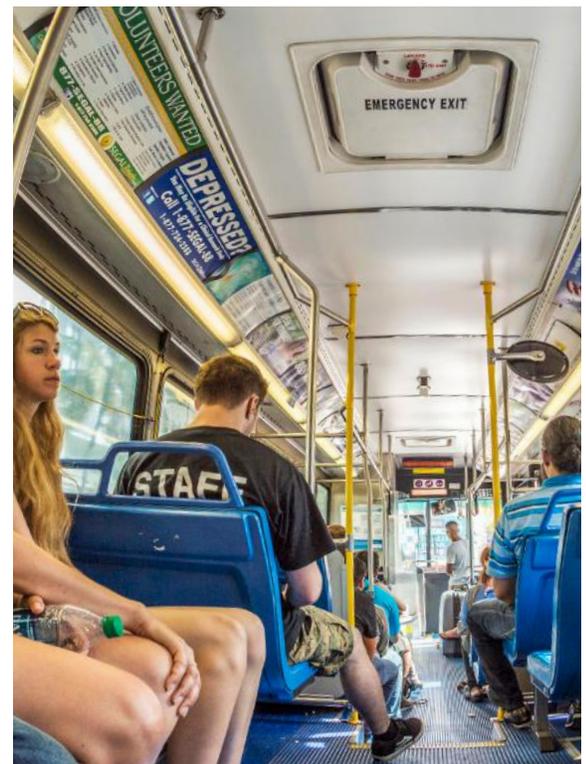
Transit level of service as evaluated under the adopted standards is sufficient or better. Transit is generally reliant on different factors for internal and external circulation. Internally, short distance travel involves easy, walkable access for residents, and should include considerations to account for shelters, sidewalks, signage, shade, and seating. The internal circulation system should then also connect to the regional system, providing riders easy access to destinations outside of the City.

A combination of transit coverage, ridership data, citizen input, and field reviews of existing amenities were utilized to determine local needs. As seen on the next page, transit boardings are consistently high along Collins Avenue.

### Real-Time Passenger Information System

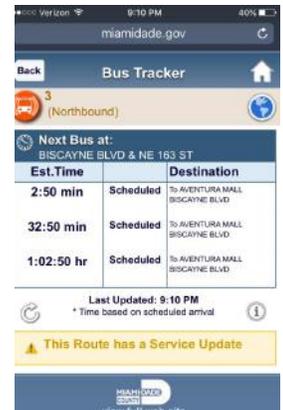
Real-time passenger information systems can inform riders of the expected time of arrival through NextBus. This system utilizes GPS technology installed on each bus, and a proprietary algorithm that incorporates historical travel data to track vehicles and predict the arrival time. By taking into account the actual position of the buses and typical traffic patterns, the system can estimate vehicle arrivals for each scheduled stop with a high degree of accuracy. This time estimate is refreshed constantly to provide riders with current information, including delays.

Real-time information system should take into account the developments of neighboring systems which connect to Sunny Isles Beach. As the City is currently exploring this form of app technology to supplement its circulator services, it should work with these communities. By encouraging intergovernmental cooperation in providing route information, both systems benefit in providing a



more cohesive information system for riders to plan their trips and arrange for appropriate transfers to different lines. Doing this provides riders with a larger range of destinations.

Under a basic bus tracking system, passengers could access a website or a free app on a smart phone to get a real-time estimate on when the closest bus will arrive. Such systems can also be incorporated in an automatic passenger counter system to give real-time, ongoing information on passenger activity. A local phone number can be called or the user can input a request to receive a text for this information as well. The system can also be used to link passengers to Wi-Fi, to report back operating information to the dispatcher, and to announce stops as a bus approaches.



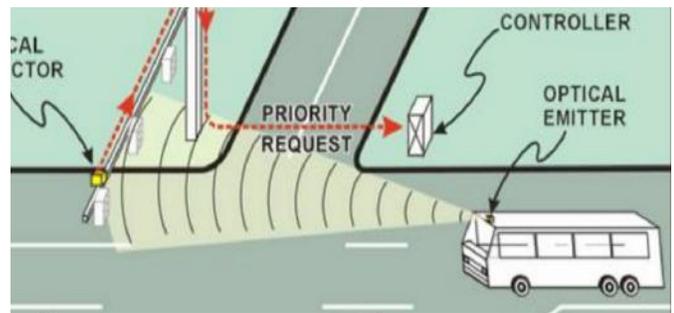
### Intergovernmental Cooperation

Intergovernmental cooperation is essential in the development of local busing systems. In order to adequately plan for transfers, coordination with neighboring community circulators, and Miami-Dade Transit is necessary to ensure stop locations are linked between multiple routes, with timetable structuring to minimize wait times during the transfers. Further, because Sunny Isles Beach's shuttle system is People's Transportation Plan funded, it must ensure that the route does not duplicate more than 30% of a Miami-Dade Transit route, and that 70% of the route is within Sunny Isles Beach.

In addition, this cooperation is essential in developing interlinked information systems that allow for easier travel planning by riders.

### Traffic Signal Priority

Traffic signals are maintained by Miami-Dade County and are utilized to manage the traffic flow. Signals at each intersection are generally set to minimize total delay for traffic approaching from all directions. However, in some cases, the signals may be timed to permit traffic moving at a pre-determined speed to travel along a corridor or route with a minimum of stops. Signal systems generally are not set to accommodate transit vehicles, because they stop along the route and pause for varying lengths of time depending upon passenger activity.



Traffic signal priority (TSP) utilizes a predetermined set of conditions to either advance a green signal or delay a red signal. Using technology to initiate a message, a bus approaching a signal within 10 or 15 seconds of a normal phase change from red to green will initiate that particular phase change earlier. This permits the bus to pass through the intersection without having to wait for the normal change in signal. Similarly, the same system previously noted could be programmed to extend the green time, opting to delay the red phase for 10 or 15 seconds so that the bus can pass through the intersection without stopping. Buses running late could receive an advanced green or delayed red while those running ahead of schedule or on time would not.

There is a tradeoff with TSP systems. Changes in normal signal timing however, can adversely impact general traffic. Prolonging green lights in one direction also prolongs the red light in the intersecting direction. Cross streets therefore may experience traffic with longer delays and queues. This effect may also be seen on dedicated turn lanes (e.g., left turn lanes with separate turn phases). To limit this effect, from which congestion may take several light cycles to recover, some transit systems will limit TSP use to buses traveling behind schedule.

Traffic signal priority systems typically result, depending on field conditions, in a 4% to almost 10% reduction in travel time. This is a consideration necessary for the Sunny Isles Beach Shuttle system due to the buses' reliance on Collins Avenue. Further, if the City decides to consider emergency vehicles priority systems in the future, it

should be noted that such systems can include bus systems. Miami-Dade County is currently undertaking a program to improve traffic signalization, with adaptive intersection signal pilot programs which could allow for traffic signal priority in a dynamic system. Such technology adjusts signal timing in real time based on algorithms and peak-time vehicle queues noted by either camera or infrared technology. This trial program will be implemented in small, localized areas during the trial period throughout Miami-Dade County.

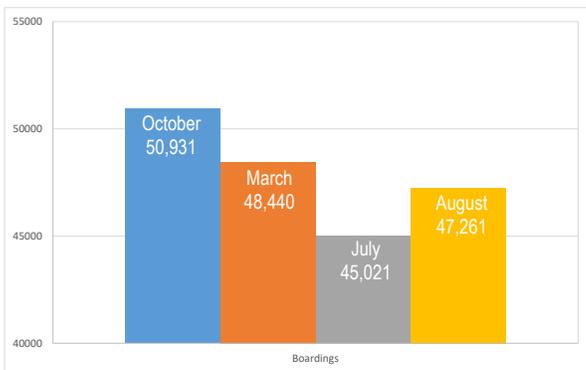
### Local Transit Options

The following details each of the Transit Routes servicing the City and the local circulator routes in Aventura and North Miami Beach, which connect to Sunny Isles Beach’s community shuttle so as to provide increased service access.

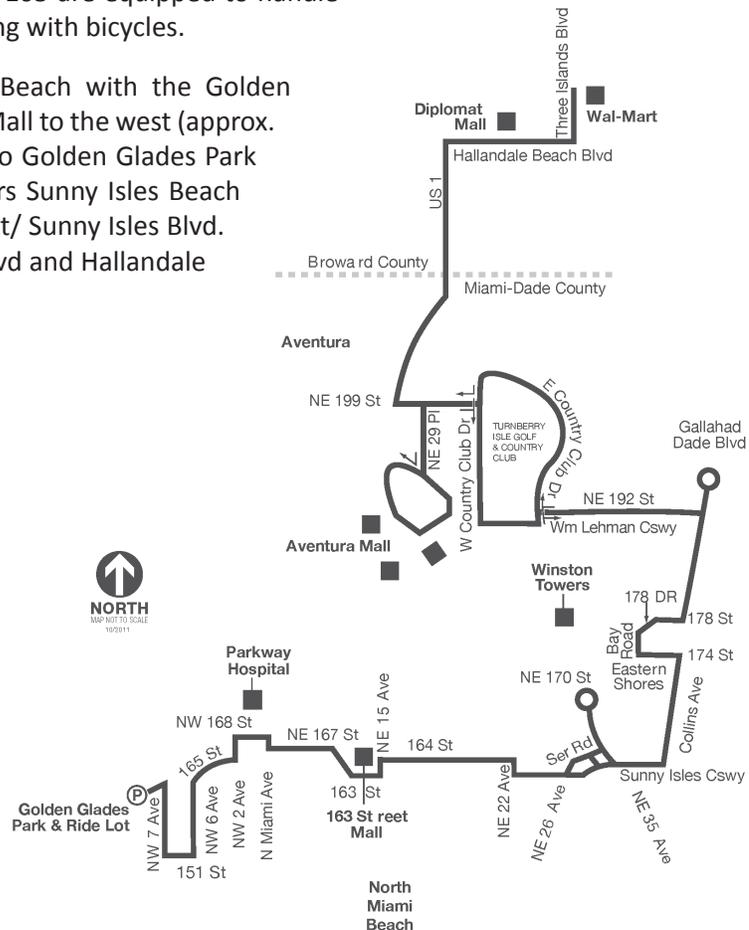
### Route E-105

Bus Route E-105 connects the Sunny Isles Beach neighborhoods with the communities in northeastern and western Miami-Dade County and southeastern Broward County. The route begins weekday eastbound service at 5:45 AM and runs until 10:40 PM. Route E-105 takes approximately 95 minutes to complete half of the full route length. Saturday and Sunday schedules are similar, with peak 30-minute headways and operating from 6:20 AM to 10:12 PM. Route E-105 services the Golden Glades Terminal, Parkway Hospital, 163rd Street Mall, Aventura Mall, and the Diplomat Mall in Hallandale Beach. For the Fiscal Year October 2013 to September 2014, the average weekday boarding on the route was 1,760 passengers. The average weekend boarding was 1,965, with 555,903 passengers for the year, or an average of 46,325 passengers per month. The peak months observed were October with 50,931 passengers, March with 48,440 passengers and August with 47,261. The month with the least amount of passengers was July with 45,021. The buses used to serve Route E-105 are equipped to handle handicap passengers and those commuting with bicycles.

Bus Route E-105 connects Sunny Isles Beach with the Golden Glades Park & Ride Lot and 163rd Street Mall to the west (approx. travel time from 163rd St & Collins Ave to Golden Glades Park & Ride Lot: 45 minutes). The route enters Sunny Isles Beach from the southwest along NE 163rd Street/ Sunny Isles Blvd. After looping around the Three Islands Blvd and Hallandale Ave stop, the route returns south.



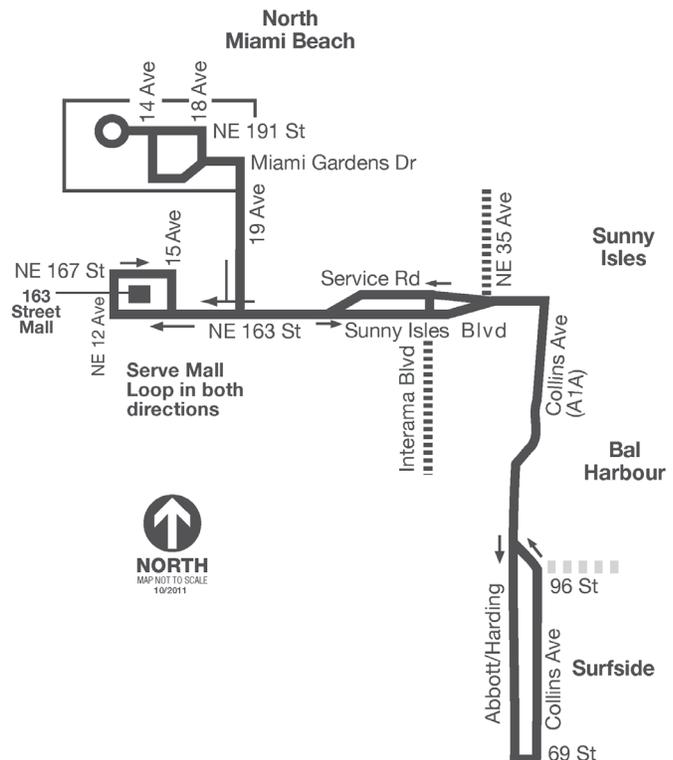
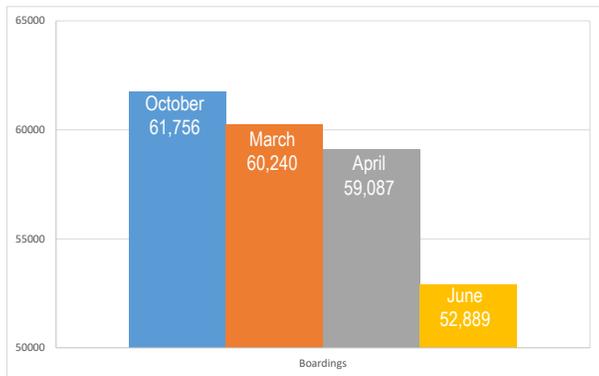
### Route E



## Route H-108

Bus Route H-108 connects the Sunny Isles Beach neighborhoods with the communities in Surfside, Bal Harbour, Miami Beach, and North Miami Beach in northeastern Miami-Dade County. The route begins weekday southbound service at 4:56 AM and runs until 11:51 PM. Route H-108 takes approximately 45 minutes to complete half of the full route length. Saturday and Sunday schedules are similar, with peak 30-minute headways and operating from 5:03 AM to 12:44 AM. Route H-108 services the City of North Miami Beach, Skylake Mall, 163rd Street Mall, Sunny Isles Boulevard, Bal Harbour Shops, Surfside Community Center, and the City of Miami Beach. For the Fiscal Year October 2013 to September 2014, the average weekday boarding on the route was 2,057 passengers. The average weekend boarding on the route was 3,025, with 689,483 passengers for the year, or an average of 57,457 passengers per month. The peak months observed were October with 61,756 passengers, March with 60,240 passengers and April with 59,087. The month with the least amount of passengers was June with 52,889. The buses used to serve Route H-108 are equipped to handle handicap passengers and those commuting with bicycles.

Bus Route H-108 connects Sunny Isles Beach with North Miami Beach to the north, and Bal Harbour and Surfside communities to the south (approx. travel time from 163rd St & Collins Ave to Surfside Community Center: 15 minutes). The route enters Sunny Isles Beach from the southwest along NE 163rd Street. After looping around the Collins Avenue and 69 Street stop, the route returns north.

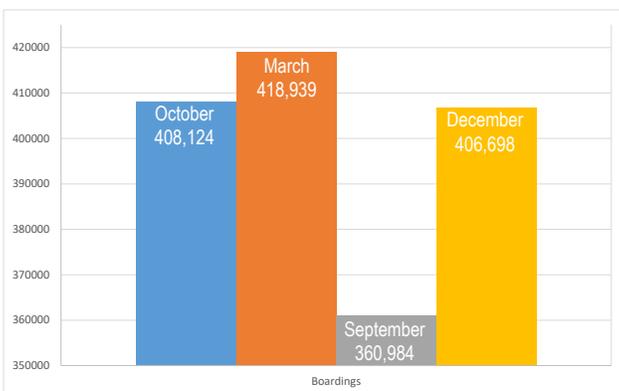


## Route H

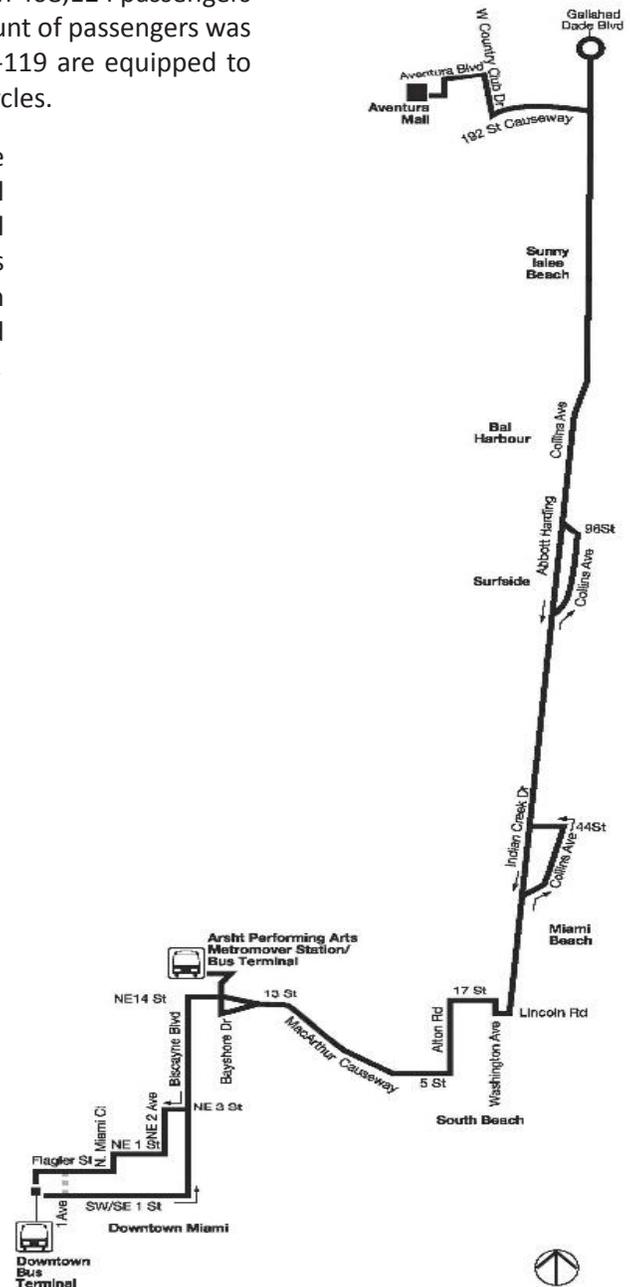
## Route S-119

Bus Route S-119 connects the Sunny Isles Beach neighborhoods with the communities in eastern Miami-Dade County. The route runs 24-hours a day, starting its weekday southbound service at 4:17 AM. Route S-119 takes approximately 90 minutes to complete half of the full route length. Saturday and Sunday schedules are similar, with peak 15-minute headways and operating from 4:21 AM to 4:55 AM. Route S-119 services the Downtown Miami Bus Terminal, Main Library, Historical Museum, Miami Art Museum, Government Center Metrorail Station, Omni Bus Terminal, Mac Arthur Causeway, South Beach, Lincoln Road, Surfside, Bal Harbour, Sunny Isles Beach and Aventura Mall. For the Fiscal Year October 2013 to September 2014, the average weekday boarding on the route was 13,711 passengers. The average weekend boarding was 21,900 passengers, with 4,698,662 passengers for the year, or, an average of 391,555 passengers per month. The peak months observed were March with 418,939 passengers, October with 408,124 passengers and December with 406,698. The month with the least amount of passengers was September with 360,984. The buses used to serve route S-119 are equipped to handle handicap passengers and those commuting with bicycles.

Bus Route S-119 connects Sunny Isles Beach with the Downtown Miami Bus Terminal, Government Center Metrorail Station, and Omni Bus Terminal to the south (approx. travel time from 163rd St & Collins Avenue to Downtown Miami Bus Terminal: 55 minutes). The route enters Sunny Isles Beach from the north along Collins Avenue. After looping around the Downtown Miami Bus Terminal, the route returns north.



Route S

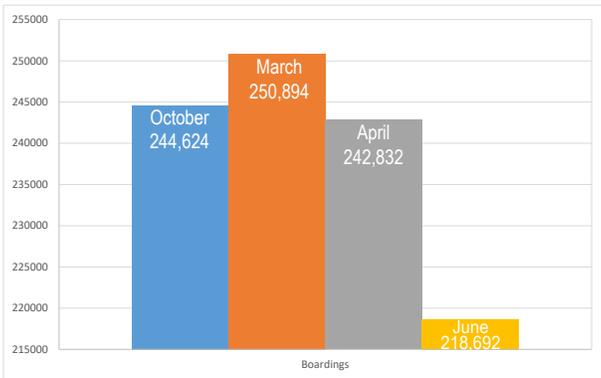


North  
Map not to scale  
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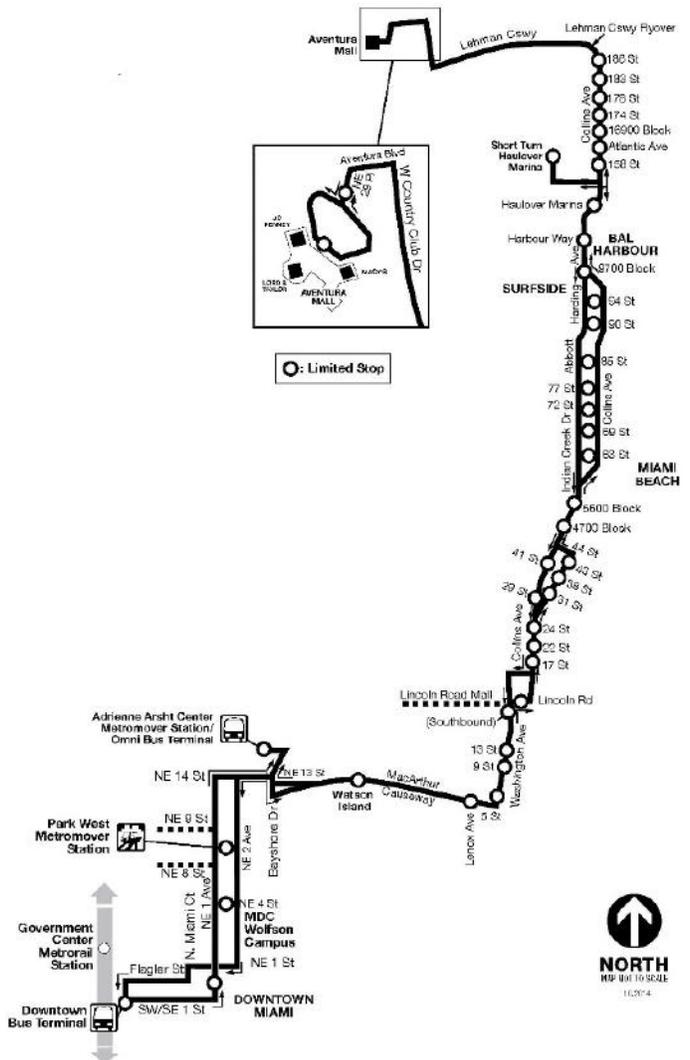
# Route 120 Beach Max

Bus Route 120 connects communities in Surfside, Bal Harbour, and North Miami Beach in northeastern Miami-Dade County. The route begins weekday southbound service at 5:00 AM and runs until 11:42 PM. Route 120 takes approximately 70 minutes to complete half of the full route length. Saturday and Sunday schedules are similar, with peak 15-minute headways and operating from 5:49 AM to 11:33 PM. Route 120 services the Downtown Miami Bus Terminal, Main Library, Historical Museum, Miami Art Museum, Government Center Metrorail Station, Miami Dade College Wolfson Campus, Omni Bus Terminal, MacArthur Causeway, Miami Beach, Surfside, Bal Harbour, Haulover Park Marina, Sunny Isles Beach and Aventura Mall. For the Fiscal Year October 2013 to September 2014, the average weekday boarding on the route was 8,522 passengers. The average weekend boarding was 11,255 with 2,784,224 passengers for the year, or an average of 232,019 passengers per month. The peak months observed were March with 250,894 passengers, October with 244,624 passengers and April with 242,832. The month with the least amount of passengers was June with 218,692. The buses used to serve route 120 are equipped to handle handicap passengers and those commuting with bicycles.

Bus Route 120 connects Sunny Isles Beach with the Downtown Miami Bus Terminal, Government Center Metrorail Station, and Miami Dade College Wolfson Campus to the south (approx. travel time from 163rd St & Collins Ave to Downtown Miami Bus Terminal: 55 minutes). The route enters Sunny Isles Beach from the south along Collins Ave. After looping around the Aventura Mall, the route returns south.



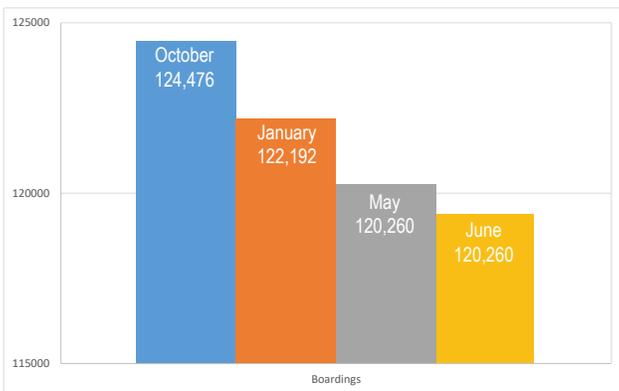
Route 120 Beach Max



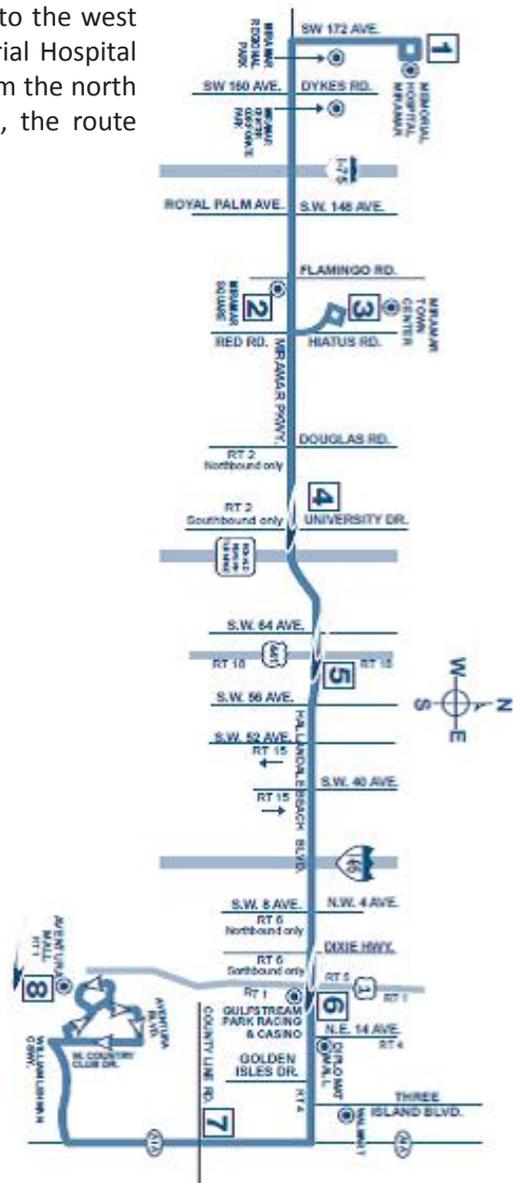
## Broward County Route 28

Bus Route 28 connects communities in Miramar, Hallandale Beach, Sunny Isles Beach and Aventura in southwest and southeast Broward County and northeastern Miami-Dade County. The route begins weekday eastbound service at 5:00 AM and runs until 12:06 AM. Route 28 takes approximately 80 minutes to complete half of the full route length. Saturday and Sunday schedules are similar, with peak 10-minute headways and operating from 5:35 AM to 12:02 AM. Route 28 services Memorial Hospital Miramar, Miramar Center Corporate Park, Miramar Square, Miramar Town Center, Gulfstream Park Racing & Casino, Diplomat Mall, Aventura Mall and Miramar Regional Park. For the Fiscal Year October 2013 to September 2014, the average weekday boarding was 4,577 passengers. The average weekend boarding was 4,390 passengers, with 1,403,170 passengers for the year, or an average of 116,931 passengers per month. The peak months observed were October with 124,476 passengers, January with 122,192 passengers and May with 120,260. The month with the least amount of passengers was June with 105,525. The buses used to serve route 28 are equipped to handle handicap passengers and those commuting with bicycles.

Bus Route 28 connects Sunny Isles Beach with Memorial Hospital Miramar, Miramar Town Center, and Gulfstream Park Racing & Casino to the west (approx. travel time from Collins Ave & NE 195 St to Memorial Hospital Miramar: 75 minutes). The route enters Sunny Isles Beach from the north along Collins Ave. After looping around the Aventura Mall, the route returns north.



## Broward County Route 28



## Community Shuttle

The City of Sunny Isles Beach offers free community shuttle bus service. Three lines run simultaneously: the Orange, Blue, and Green Lines. Shuttle buses are handicapped accessible and are available with a 24-hour reservation.

## Sunny Isles Beach Community Shuttle

### ORANGE LINE

The Orange Line bus route connects communities in Sunny Isles Beach, Aventura and North Miami Beach in northeastern Miami-Dade County. The route operates only on weekdays, starting service at 8:00 AM until 7:35 PM. The Orange Line takes approximately 60 minutes to complete half of the full route length. The route services Ocean View Apartments, Golden Shores, Publix, Government Center/ Pelican Park, Winston Towers, Plaza of Americas, Intracoastal Mall and the Aventura Mall, among other locations. For the Fiscal Year October 2013 to September 2014, the Orange Line route serviced a total of 62,325 passengers, or an average of 5,194 passengers per month. The peak months observed were April with 5,911 passengers, February with 5,716 passengers and October with 5,619. The month with the least amount of passengers was June with 4,349. The buses used to serve the Orange Line are equipped to handle handicap passengers upon request.

The Orange Line route connects Sunny Isles Beach with the Aventura Mall to the northwest and North Miami Beach to the west (approx. travel time from the City's Government Center to the Aventura Mall: 30 minutes). The route services all Sunny Isles Beach, mainly through Collins Avenue, with the northernmost stops at Ocean View Apartments and Aventura Mall, and the southernmost stop at the Arlen House. After looping around the Aventura Mall, the route returns south.

### BLUE LINE

The Blue Line Bus Route connects communities in Sunny Isles Beach, and Aventura in northeastern Miami-Dade County, and Hallandale Beach in southeastern Broward County. The route begins weekday northbound service at 7:45 AM and runs until 3:50 PM. The Blue Line takes approximately 45 minutes to complete half of the full route length. During the weekend, the Blue Line only operates Saturdays from 9:05 AM to 3:50 PM. The Blue Line route services Plaza of Americas, Winston Towers, Government Center/ Pelican Park, Publix, Golden Shores, Ocean View Apartments, Hallandale Fire Station and the Aventura Mall among others. For the Fiscal Year October 2013 to September 2014, the Blue Line route serviced a total of 27,370 passengers, or an average of 2,281 passengers per month. The peak months observed were October with 2,667 passengers, January with 2,621 passengers and April with 2,425. The month with the least amount of passengers was June with 1,751. The buses used to serve the Blue Line are equipped to handle handicap passengers upon request.

The Blue Line route connects Sunny Isles Beach with the Aventura Mall and Hallandale Beach to the northwest (approx. travel time from the City's Government Center to the Aventura Mall: 35 minutes). The route services all Sunny Isles Beach, mainly through Collins Avenue, with the northernmost stops at Hallandale Beach Fire Station and Aventura Mall, and the southernmost stop at the Arlen House. After looping around the Aventura Mall, the route returns south.



## GREEN LINE

The Green Line Bus Route connects communities in Sunny Isles Beach, Aventura and North Miami Beach in northeastern Miami-Dade County. The route begins weekday northbound service at 8:00 AM and runs until 7:50 PM. The Green Line takes approximately 60 minutes to complete half of the full route length. Saturday and Sunday schedules are similar, with peak 5-minute headways and operating from 8:00 AM to 7:50 PM. The Green Line route services Coastal Towers, Arlen House, Intracoastal Mall, Winston Towers, Government Center, Publix, Golden Shores, Ocean View Apartments, and the Aventura Mall among others. For the Fiscal Year October 2013 to September 2014, the Green Line route serviced a total of 78,460 passengers, or an average of 6,538 passengers per month. The peak months observed were March with 7,240 passengers, October with 6,953 passengers and February with 6,896. The month with the least amount of passengers was June with 5,759. The buses used to serve the Green Line are equipped to handle handicap passengers upon request.



The Green Line route connects Sunny Isles Beach with the Aventura Mall to the northwest and North Miami Beach to the west (approx. travel time from the City's Government Center to the Aventura Mall: 30 minutes). The route services all Sunny Isles Beach, mainly through Collins Avenue, with the northernmost stops at Ocean View Apartments and Aventura Mall, and the southernmost stop at the Arlen House. After looping around the Aventura Mall, the route returns south.

## MOUNT SINAI TRANSPORTATION SERVICES

Free transportation is provided by the City to and from Mount Sinai Medical Center at 4300 Alton Road on Mondays, Wednesdays, and Fridays. Pick up times are at 9:00 a.m. and 12 noon. Return trips are at 12:30 p.m. and 4:00 p.m. This service does not operate on holidays, and reservations are required.

## North Miami Beach

### NMB "B" LINE

The NMB-Line is a free transportation service offered to the North Miami Beach community operating five days a week. The shuttle service has 10 main stops located along NE 163rd Street (SR 826) and several other stops within the Eastern Shores Neighborhood. The B-Line also connects to Miami-Dade bus services as well as the SIB Community Shuttle service.

The B-Line route connects communities in North Miami Beach and Sunny Isles Beach in northeastern Miami-Dade County. The route operates on weekdays starting at 7:30 AM until 7:30 PM. The B-Line takes approximately 60 minutes to complete half of the full route length. The route services the Intracoastal Mall, Eastern Shores Neighborhood, Stratford Apartments, Laurenzo's Market, Inland Towers, Three Season Apartments, the NMB Public Library and the Mall at 163rd Street among others. The buses used to serve the B-Line are equipped to handle handicap passengers.



The B-Line route connects North Miami Beach with Sunny Isles Beach at the Intracoastal Mall stop to the northwest (approx. travel time from the North Miami Beach Public Library to the Intracoastal Mall: 17 minutes). The route services all North Miami Beach, mainly through 163rd Street/ N Miami Beach Blvd and Hanford Blvd, with the easternmost stops at the Eastern Shores Neighborhood and Intracoastal Mall, and the westernmost stop at the Mall at 163rd Street. After looping at the Mall at 163rd Street, the route returns east, providing local bus service to various locations within North Miami Beach, offering connections to Sunny Isles Beach located in northeastern Miami-Dade County.

The North Miami Beach Shuttle system is currently undergoing route expansion, and will potentially bring riders to Costco, Target, and the Shops at SkyLakes. These locations would be accessible on free transit accessible by Sunny Isles Beach residents. Changes to the North Miami Beach shuttles should be monitored to plan for any service change needed to Sunny Isles Beach's system to maximize ridership potential.



## Aventura AVENTURA EXPRESS

The City of Aventura currently operates a fare free shuttle system with five routes. These routes do not currently connect with the City of North Miami Beach. Service on the Aventura Lines run from 7:45 am – 6:30 pm on Mondays through Fridays for the blue, green, red, purple, and silver routes, and from 8:45 am – 6:30 pm for the yellow route. Service runs for all routes on Saturdays from 8:45 am – 9:30 pm. The routes cover the following areas: Blue serves northern Aventura, the Green, Red, and Silver Lines serve central Aventura, and the Purple and Yellow Lines serve southern Aventura.

In addition to residences, the Aventura Shuttle provides access to Aventura Mall, Aventura Hospital, the Promenade Shops on US-1, Aventura Commons and other retail, Mount Sinai Medical Center, and is a short walk from The Village at Gulfstream Park. All three of Sunny Isles Beach's shuttle lines connect to the Aventura Express shuttle lines at Aventura Mall.

## Tri-Rail and Regional Transit

In planning for the future, regional transportation links exist to West Palm Beach and Broward Counties, and other parts of Miami Dade County via the existing and proposed Tri-Rail systems.

### TRI-RAIL GOLDEN GLADES

Connectivity to the Golden Glades Station allows for residents a regional connection to Miami International Airport via transit. Golden Glades Station is currently serviced by MDT routes, from which Sunny Isles Beach residents can reach with one transfer.

### TRI-RAIL COASTAL LINK

The proposed Coastal Link Tri-Rail line will have a station in North Miami Beach, off of US-1 and NE 163rd Street. Currently, this area is serviced by the North Miami Beach B Line. At this station, the proposed commuter rail will allow for quick access to Downtown Miami, Fort Lauderdale International Airport, and other destinations in Broward and West Palm Beach Counties. Future considerations for the Sunny Isles Beach shuttle should include a feasibility and operations analysis for providing direct service to the North Miami Beach Station.



## Water Transit

Water taxis can provide an alternative route both locally and regionally for Sunny Isles Beach. Local considerations would be the primary impetus for water taxi routes, allowing for residents to not have to drive to reach places internal to the City. Traveling at regular speeds, a water taxi system could reach existing stops in Hollywood within a half hour. To the south, it would likely take upwards of an hour to reach Downtown Miami, unless there was an intermediate transfer point to more local transit. Strategically placed points would allow time savings for regional travelers utilizing transit. Considerations include the placement of docking locations, as well as environmental considerations for manatees, which will affect the viability of a water taxi system. Past studies have reviewed the potential for water transit within Sunny Isles Beach; however, the system would require a subsidy to keep fares reasonable.

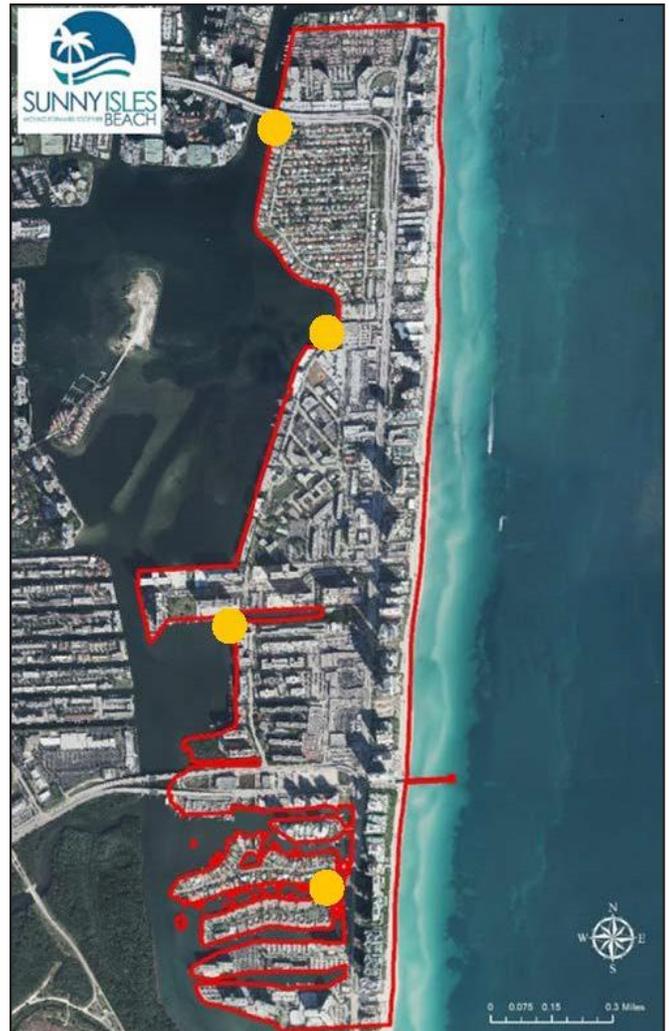
## Transit Needs Assessment

Sunny Isles Beach is generally well serviced by transit coverage, though local systems would benefit from service improvements. Specifically, public comments indicated a need to review the stop spacing and diversifying the service. In addition, during field reviews, it was noted that new signage as well as timetables and route maps to aid in trip planning and wayfinding is needed for the community shuttles and MDT stops. Some of the shelters are older, but while of sufficient quality, these will need to be replaced in the future.

As these shelters are replaced, technology can be incorporated at each bus stop. These stops can be outfitted with information systems which will allow for real time information about the next bus. Trip planning is a missing and vital component of the local bus system in Sunny Isles Beach.

Further, a shuttle comprehensive operation analysis should be conducted, at a minimum, every five years, to determine efficiency. More frequent monitoring should occur to ensure quality service. Given existing vehicular traffic projections, it is expected that congestion will increase significantly on Collins Avenue. Unfortunately, since the Sunny Isles Beach Shuttle is reliant on Collins Avenue, it too will be affected by the increased congestion. To ameliorate this effect, signal priority technology should be explored and implemented within the next several years. As part of any comprehensive operational analysis, it should be determined whether travel times can be improved through the implementation of TSP systems.

Water travel presents an alternative mode to the transit network which has been explored by Sunny Isles Beach in the past. As an alternative mode, a feasibility study must be conducted for implementation, with docking areas decided upon as part of this study. However, it is



likely, as seen in prior reports, that current ridership may not be high and it will most likely have to be administered as a subsidized system. This mode of transit, however, should not be discarded because it creates an alternative regional and local route to ease the travel pressure on Collins Avenue. As congestion becomes increasingly worse on Collins Avenue over the next four to ten years, relative costs for solutions may be more favorable in a cost effectiveness evaluation for water taxis.

Intergovernmental cooperation is of the utmost importance for developing the regional aspects of transit planning. In particular, the development of app technology which incorporates as many routes as possible routes when the platform is built when the app is developed, as opposed to adding separate route information later. Further, route planning in neighboring communities should be coordinated because of the ability to create new or better access to key destinations. All municipalities benefit from the reduction in vehicular traffic as ridership increases. These destinations can be identified in a comprehensive operation analysis, and generally include quality of life amenities, such as restaurants, and daily necessities, such as access to the grocery store, with some recreation and tourist destinations. In addition, route planning in the future may find a need for Sunny Isles Beach to extend direct shuttle service to the Tri-Rail Coastal Link – a connection which must ultimately be coordinated with the City of North Miami Beach.

## Summary of Recommendations

1. Ensure intergovernmental cooperation to continue to connect to Miami-Dade Transit, Broward Transit, Aventura Express, and North Miami Beach.
2. Conduct a Comprehensive Operational Analysis of Sunny Isles Beach Shuttle Routes, including considerations of transit connectivity to Tri-Rail and Tri-Rail Coastal Link lines.
3. Replace and upgrade facilities as necessary, keeping in mind shade, seating, shelter, safety, and sidewalk access to each bus stop.
4. Encourage transit ridership by implementing transit technology such as real-time information apps, trip planning programs, signal priority, and other improvements to incentivize transit ridership.
5. Evaluate the feasibility of enacting a water route for internal circulation, and consider for regional access to downtown Miami and Broward County.



Bus Stop Collins Avenue (Southbound) north of 163rd Street



# Sidewalk LOS

Legend	
LOS	
Orange	A
Purple	B
Green	C
Yellow	D
Blue	E
Red	F



## Pedestrian Facilities

The City of Sunny Isles Beach has approximately 14 miles of sidewalks which cover an estimated 84% of City streets. The current network of pedestrian facilities include sidewalks, park trails, and intersection treatments. However, the level of connectivity and comfort provided by the pedestrian network varies between neighborhoods, depending on the urban form, roadway characteristics, and other factors.

Areas without full sidewalk coverage tend to be residential neighborhoods, including locations in the Golden Shores and Atlantic Island areas. Additionally, several sectors in the north end of the City are missing crosswalks in relation to key retail shops, parking lots and beach access points. While sidewalk coverage is fairly comprehensive, some sidewalks need repair or feature obstructions such as bus shelters, electric boxes, light posts or other obstacles, which create impediments to pedestrians.

Historically, the City has been very good with upkeep of its existing infrastructure, with low levels of liability as a result of this consistent effort. However, in the future, as the City installs specific sidewalk pavers to replace the concrete sidewalks along Collins Avenue, it will assume liability from FDOT in those areas. Yearly upkeep for reporting therefore is needed, in order to satisfy City agreements with FDOT. As some upkeep issues existed along Collins Avenue were noted and persisted during this study, repair and maintenance bear additional scrutiny for the future.

Overall, the pedestrian network is fairly comprehensive, but it exhibits the following issues and deficiencies:

**SIDEWALKS:** Missing segments, cracked and/or poorly maintained in some locations, not ADA-compliant, too narrow and obstructed in many locations.

**INTERSECTION CROSSWALKS:** Not sufficient in many sections of Collins Avenue, lacking signalization, inadequately spaced, and unsafe.

**AMENITIES:** Lacking shade trees, benches, and trash receptacles.

Specific details of the above summation, such as locations of where pedestrian refuge islands should be emplaced, location of pedestrian bridges or midblock crossings to facilitate safety, locations where there are no sidewalks, and other aspects of the pedestrian environment can be found in the projects sheets. Specific details therein resulted in the creation of projects for the City to implement; as applicable, the details resulted in the actual cost estimates (i.e Sidewalk cost estimates are based on cost per linear foot).

To evaluate the sidewalks, a level of service standard was utilized. The City has no current LOS standard in the Comprehensive Plan, but should adopt one in order to have a method of evaluation for local pedestrian facilities. The following are the Pedestrian Level of Service standards utilized for this study and recommended for adoption. The City should strive to maintain a Level of Service A for pedestrian facilities. This is not to be confused as to be the same as Roadway LOS A in the type of quality expected, where achieving a LOS A is generally not a cost efficient policy, as LOS C presents a generally acceptable flow of traffic. For pedestrian LOS, a LOS C merely implies adequacy, but generally with few to no needed amenities, such as seating and shade, which are needed by local residents, especially the elderly, in order to create a good walking environment. Further, as the City needs to encourage a further modal shift to reduce intracity driving impacting Collins Avenue, it should strive for a higher standard in order to encourage more pedestrian trips.

Level of Service (LOS) standards are commonly used to evaluate roadway conditions for traffic flow. Similar Pedestrian



LOS standards are much less common, but for this study the following standards - based on sidewalk conditions, supporting amenities, and the overall pedestrian environment quality - were developed:

**LOS A:** Highly pedestrian oriented and attractive for pedestrian trips, with sidewalks, pedestrian friendly intersection design, low-vehicular traffic volume, and ample pedestrian amenities.

**LOS B:** Similar to A, but with fewer amenities and low to moderate level of interaction with motor vehicles.

**LOS C:** Adequate for pedestrians, some deficiencies in intersection design, moderate interactions with motor vehicles.

**LOS D:** Adequate for pedestrians but with deficiencies in intersection design and pedestrian safety and comfort features, may be some gaps in the sidewalk system, moderate to high interactions with motor vehicles.

**LOS E:** Inadequate for pedestrian use, deficient pedestrian facilities, high interactions with motor vehicles.

**LOS F:** Inadequate for pedestrian use, no pedestrian facilities, high interactions with motor vehicles.

The LOS standards above as written provide relative flexibility for the City based on land use and other local factors noted during the study. Other cities have utilized standards which require specific minimum standards that would be blanketed across their cities, and which would not necessarily be beneficial for Sunny Isles Beach. For example, in the Golden Shores neighborhood, right-of-way and drainage constraints create obstacles for the implementation of some pedestrian facilities. Holding to a more stringent standards may result in the City continuously failing its own adopted standards, whereby such a policy enactment would not be in Sunny Isles Beach's best interests in the same way that it would be different in other communities that do not have the same geographic considerations as the City.

For roadways, vehicular capacity remains the norm, and therefore is different than pedestrian LOS, where more qualitative aspects of the walking environment must be considered as part of the overall grade. Sunny Isles Beach's lack of regularly spaced seating, as well as shade - a fact often noted throughout the three public workshops - is stated deterrent to walking by locals. However, with the addition of amenities, many of the roadways can achieve a LOS B or higher, with some reaching a desirable Pedestrian LOS A.

### **Pedestrian LOS**

On the following page, the City of Sunny Isles Pedestrian LOS table provides a ranking of all segments of the Pedestrian Network for the entire City. Major and minor corridors were inventoried and evaluated for their quality and level for service. The segments were broken up at logical points, usually section or half section line roads, and then analyzed for LOS score assignment.

Many trends are noticeable, such as sidewalk obstruction and crosswalk deficiencies, and impacted scores. Another notable element within the existing conditions matrix is that only one segment is better than a LOS "C". Even in residential districts or small side roads, the LOS is only "C". This is primarily due to the fact that sidewalks are too narrow and are missing amenities such as benches. The level of vehicular traffic has a very large impact on the quality and usage of the pedestrian facilities in the same area. With increased shade and benches, many of these roadways would be LOS A.

## City of Sunny Isles Beach Pedestrian LOS Bi-Directional

#	Road	FROM	TO	Pedestrian LOS
1	Collins Avenue	City South Boundary	NE 163rd Street - Sunny Isles Boulevard	D
2	Collins Avenue	NE 163rd Street - Sunny Isles Boulevard	172nd Street	D
3	Collins Avenue	172nd Street	174th Street	D
4	Collins Avenue	174th Street	178th Street	D
5	Collins Avenue	178th Street	183rd Street	D
6	Collins Avenue	183rd Street	186th Street	D
7	Collins Avenue	186th Street	189th Street	D
8	Collins Avenue	189th Street	SR 856	D
9	Collins Avenue	SR 856	193rd Street	D
10	Collins Avenue	193rd Street	Terracina Road	D
11	SR 856 Eastbound	Collins Avenue	City Boundary West	F
12	SR 856 Westbound	City Boundary West	Collins Avenue	F
13	Bay View Drive	Collins Avenue	End	D
14	Kings Point Drive	Collins Avenue	End	C
15	Poinciana Drive	Collins Avenue	End	F
16	Atlantic Isle	Collins Avenue	End	F
17	SR 826 Eastbound	Collins Avenue	City Boundary West	D
18	SR 826 Westbound	Collins Avenue	City Boundary West	D
19	N Bay Road	SR 826	172nd Street	C
20	N Bay Road	174th Street	178th Street	C
21	N Bay Road	178th Street	183rd Street	C
22	N Bay Road	185th Street	191st Terrace	C
23	172nd Street	Collins Avenue	N Bay Road	C
24	174th Street	Collins Avenue	End	C
25	175th Terrace	Collins Avenue	Atlantic Boulevard	C
26	178th Street	Collins Avenue	Atlantic Boulevard	C
27	178th Street	Atlantic Boulevard	N Bay Road	C
28	183rd Street	Collins Avenue	N Bay Road	C
29	185th Street	Collins Avenue	N Bay Road	E
30	186th Street	Collins Avenue	Atlantic Boulevard	E
31	186th Street	Atlantic Boulevard	N Bay Road	F
32	189th Street	Collins Avenue	N Bay Road	F
33	193rd Street	Collins Avenue	Gate	B
34	Atlantic Boulevard	175th Terrace	178th Street	C
35	Atlantic Boulevard	178th Street	183rd Street	C
36	Atlantic Boulevard	185th Street	189th Street	F

## Condition and Community Usage of Pedestrian Facilities

Field observations and stakeholder interviews indicate a community which uses the pedestrian network as a form of regular travel.

### Sidewalk Conditions

Sidewalks throughout the City are generally well maintained, however some sections present poor conditions such as cracks, uneven segments and similar issues. Along Collins Avenue and other major roads, cracked and uneven sidewalks pose serious issues which hinder multimodal development and potentially expose the City or County to litigation. Some sidewalks were observed to be affected by adjacent construction. Entrances to various active construction sites on Collins Avenue were observed as creating pedestrian/vehicle conflicts.

Average sidewalk widths within the City range between 5 feet and 8 feet, an acceptable width that allows for either bi-directional traffic or for two pedestrians to walk side by side. On Collins Avenue's west side, the sidewalks are on average of 10 feet. However, this minimum width is constrained in many locations by poles, bus shelters, and other obstacles which requires pedestrians to walk in a zigzag pattern, creating an impediment for disabled persons and a potential liability for the City.

### Sidewalk Obstructions

Power poles, benches, signs, bus shelters, mast art poles, electric boxes and similar obstructions are pervasive, particularly along Collins Avenue. While these items are often placed in technical compliance with the minimum 32-36 inch clearance requirements, visual and physical interferences are major impediments to sidewalk use, and can walking difficult or even dangerous. Such issues are of particular concern for people pushing carts or strollers, older pedestrians, those with impaired vision and people with mobility difficulties.

### Sidewalk Connectivity

Although the City's current sidewalk network is fairly inclusive, there are some areas of concern. The sidewalk level of connectivity varies between neighborhoods and roadways. Areas lacking pedestrian facilities and amenities without full sidewalk coverage tend to be residential neighborhoods such as Golden Shores and Atlantic Island. Despite the fact that sidewalks exist, there are several areas throughout the City with connectivity issues such as on North Bay Road between 172nd and 174th Street. However, sidewalks are generally well maintained, with some exceptions on Collins Avenue.

In the Golden Shores neighborhood, prior work to install draining has resulted in visible drainage gates in the roadway. In addition, this drainage system, while necessary, created a situation by which, due to the lack of easement and right-of-way, is a cause of the lack of sidewalks in the neighborhood today. Understandably, to revisit and add sidewalks in the neighborhood would be highly expensive, as it will require re-engineering of the drainage system. However, there is still a need for sidewalks in the Golden Shores neighborhood; in particular, this will ensure ADA compliance with the local Shuttle stops, which have benches and signage, but no sidewalks or landing pads, despite the Shuttles being handicapped accessible.



Sidewalk Conditions



Sidewalk Obstructions



Sidewalk Connectivity



Crossing Connectivity

## Crossing Connectivity

Often cited in public comments during the outreach process, crossing safely on Collins Avenue is a major concern for residents, particularly in terms of the length of countdown available at signalized crosswalks. Existing Comprehensive Plan items indicate a standard of one second of crossing time for every four feet of crossing, and was noted as a cause of concern particularly among elderly respondents. Changes in the pedestrian timing has consequences beyond the pedestrian facility. This is particularly true for all crossings on Collins Avenue, some of which are at failing intersections. While attempting to change the standard to one second for every three feet may resolve this issue, the effect it will have on signal timing on already failing intersections will likely result in a denial for the proposed on the State regulated roadway.

The options available are to ensure refuge areas for those who cannot make the trip in one crossing, or to separate the crossing from the traffic either by using tunnels or overpasses. Tunnels, though often cited in public comments, are prohibitively expensive and may not be feasible, given the high water table (2 feet below the surface), without extreme amounts of engineering. Sea level rise also poses a concern for later tables. Overpasses, on the other hand, should be the locally preferred alternative to resolving this issue. A comparison of the two options along Collins Avenue show a likely cost difference of approximately \$1.1 million for a prefabricated bridge across Collins Avenue versus a pedestrian tunnel, which can cost upwards of \$ 2 - 2.5 million, depending on highly location specific details and need to account for ADA, pumps, bouyancy, and protection of the tunnel in shielding against water. However, by separating the pedestrian crossing from vehicular traffic, the problem of timing, as well as other safety considerations resulting from vehicular turns are eliminated. Planned properly, as seen in other cities nationwide, an overpass can be landscaped as a portion of a parks and green corridor system, addressing Sunny Isles Beach's need for park space while also allowing for a better walking experience. With overpasses, ADA considerations must be considered and given special attention during the planning phases.

Further, review of available places to cross indicate the need for better connectivity through the installation of crossing points on Collins Avenue at 191st Terrace, 186th Street, and in the vicinity of 182nd Street. These crossing points not only provide access local parking and shopping, but are specifically needed in order to reduce walking distances on long blocks. In the case of a 182nd Street crossing, for example, the walking distance could be reduced by upwards of 0.3 miles. Comparatively, as a standard, the average person is willing to walk 0.25 miles, with 0.5 miles given good conditions (rest, shade, aesthetically pleasing environment). Given this consideration, standard crossings at 0.10 miles to 0.15 miles are appropriate and desirable.

## ADA Compliance

During the field review, several cases of ADA non-compliance were observed, including missing curb cuts and missing or inadequate detection strips at crosswalks. For detection strips, the standard is to have strips which expand the width of the downramp, and sized to match the width of the crosswalk. In some cases, the maintenance of sidewalks and crosswalks created deficiencies which posed hazards. ADA compliance had been a part of the Safe Routes to School Study, and importance has been placed by the City on ensuring compliance. Future development at crossings may involve audible crosswalk countdowns for pedestrians, which take the form of either spoken instructions or signal sounds indicating when to cross.



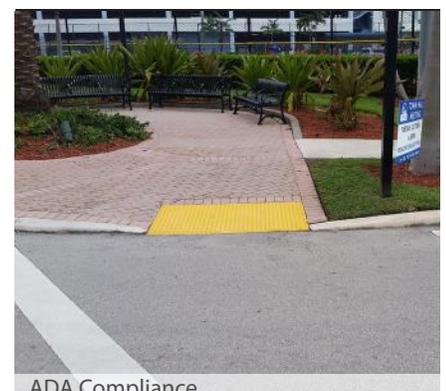
Sidewalk Conditions



Sidewalk Obstructions



Sidewalk Connectivity



ADA Compliance

## Pedestrian Needs Assessment

### Completing the Grid

Patterns of behavior indicate that pedestrians travel the same directions as vehicles. This is due to geography and the lack of connections which could be bridged with an alternative grid. The lack of connectivity means that walking distances are longer than what they potentially could be as with prior studies, this was also reflected recently with the Safe Routes to School Study, where the routes took circuitous paths.

Walking is the most versatile of all modes of transportation, as it requires the least passageway space per person. By filling in the gaps in the pedestrian network, shorter routes between origins and destinations will begin to emerge. Underlying all of this are the concepts of mobility and accessibility. Unlike cars, which require between ten and twelve feet of right-of-way, a pedestrian needs only a narrow corridor, with alleyways and other spaces serving needs adequately. In the Safe Routes example, a more direct path to school could have been effected with a new one-block pedestrian pathway. Instead, the lack of a connecting path results in having to walk a distance close to three times as much as this missing direct pathway.

Recognition of these alternative pathways implies that the pedestrian grid, while related to the overall roadway network, has more connections. Where these connections theoretically exist, projects can be constructed to create new pedestrian facilities that bridge gaps in the system.

Where there are no sidewalks, the City should first begin by filling in the sidewalk network by ensuring sidewalks along all roadways within the City. It can then further develop the grid by creating new connections to supplement the basic component of the grid.



Shuttle Stop - North Bay Road, north of 188th Street



Intersection of Lehman Causeway and Collins Avenue



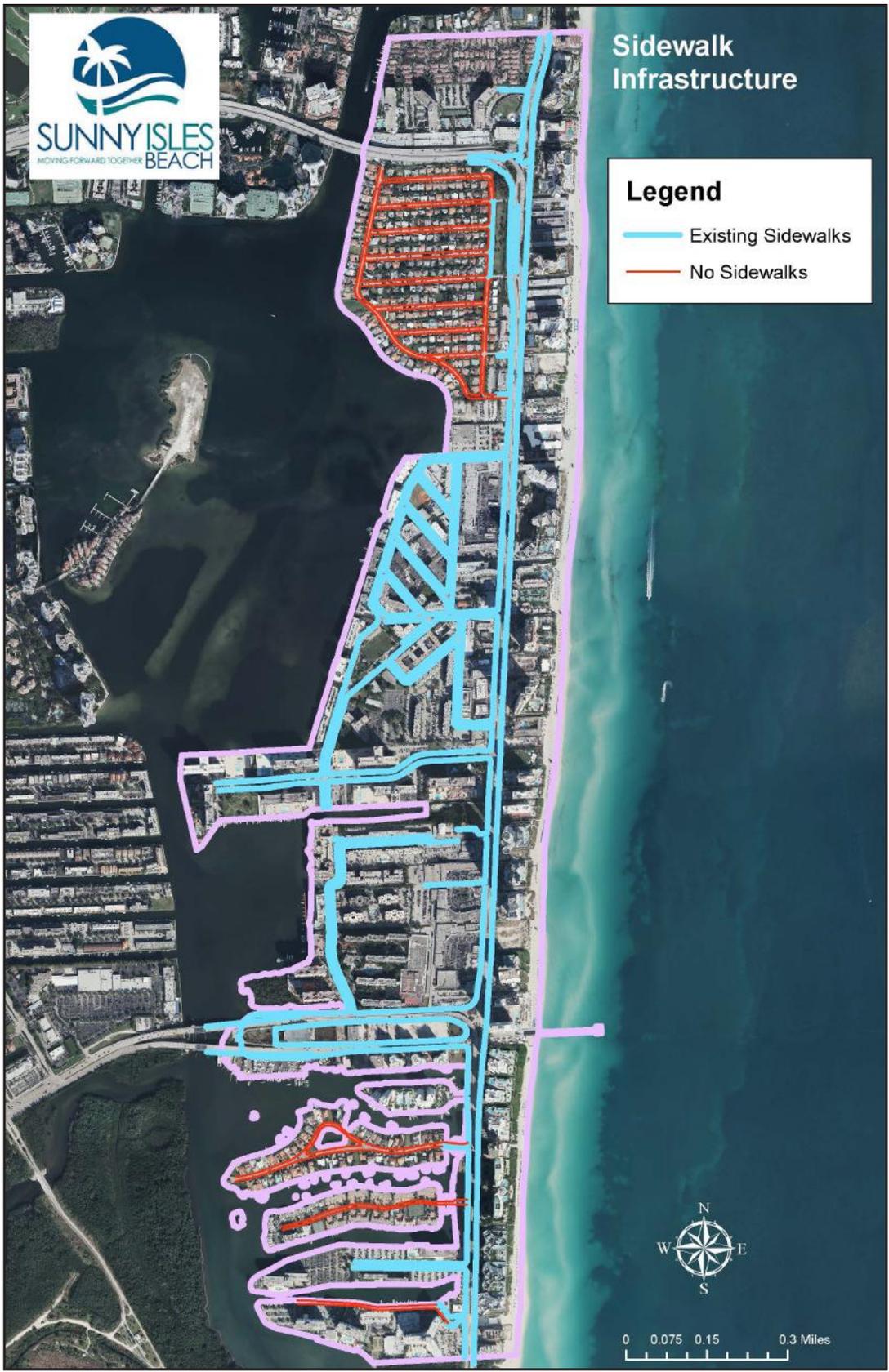
Collins Avenue north of 193rd Street



# Sidewalk Infrastructure

**Legend**

- Existing Sidewalks
- No Sidewalks



## Re-Imagining Our Space

The creation of connections to enhance a sidewalk network based on the roadway system requires a re-imagining of space and how it can be utilized. The usage of parks as alternative routes as well as alleyways to create landscaped settings allows for new pathways to be formed. Waterfront paths and beach trails extend the walkable area beyond the roadway.

### Alleyways

Alleyways or similar spaces exist in various areas of Sunny Isles Beach, particularly in the Town Center area. A re-imagining of these areas can create public space through it off to vehicles the provision of shaded areas, seating, and aesthetically pleasing amenities such as public art. The development of these spaces should be prioritized based on proximity and distance from corridors of travel, breaking up blocks allow for shorter distances between origins and destinations.

### Parks and Beach

The utilization of park space as a pedestrian space extends the pedestrian routes by allowing for recreation and additional throughways. Parks such as Gilbert Samson Oceanfront Park provides access to the beach. The beach also serves as a large pedestrian path for both recreational and travel purposes. However, beach access can be enhanced via the development of set pathways; this in particular, will improve beach access for the elderly, a large segment of Sunny Isles Beach's community.

Alternatively, enhancing the existing path between the Golden Shores Community Park and Heritage Park will allow for a different form of neighborhood connection, resulting in a more direct pedestrian route from the Golden Shores neighborhood to Broward Transit and Miami-Dade Transit stops on Collins Avenue via Heritage Park. Field reviews for this path indicate a walkthrough a parking lot. The addition of marked pavement/stripping for pedestrians, as well as landscaping and benches will enhance aesthetics and perceptions of safety which currently may not exist.

Parks, as seen with Intracoastal Park on Collins Avenue, also serve as areas of seating and shade. At parks with gates, such as the Town Center Park and Heritage Park, a redesign of the gates where they are in proximity to bus shelters, moving the bus benches and shelters out of the sidewalks, will allow for both a better transit experience and easier access to local facilities. Through proper design, this will enhance the pedestrian realm as well. During the field reviews, it was noted that these shelters take up much considerable space in the sidewalk right-of-way. This could be ameliorated by moving the park's fence and subsequent the bus stop/shelters out of the sidewalk. At park entrances, the naturally higher levels of pedestrian activity supports the need for more sidewalk room to accommodate both walkers and transit riders boarding and alighting the bus. This additional width will assist with any localized pedestrian congestion.



San Francisco, CA



Pomona, CA



Gilbert Samson Oceanfront Park



Intracoastal Park

## Above the Ground

The fact that limited right of way exists on the ground level does not preclude the idea that the space above the ground cannot be developed for pedestrian use in the same way airspace is utilized for live, work, and play. Where different modes of transportation are separated through placement on different elevated planes, intermodal conflict is reduced. Planned properly, pedestrian movement and areas can be increased through the use of elevated walkways within the City, particularly over busy intersections.

In South Florida, the standard pedestrian crossings are no more than elevated steel cages, resulting in local resistance. However, outside of the region, as seen with Chicago's The 606 and New York City's High Line projects, an elevated park capitalizes on the creation of a friendly pedestrian space where walkers can travel at their own pace. Within Sunny Isles Beach, this concept can be used and connected to existing parks, allowing pedestrian connections to blend seamlessly with the urban fabric. In addition, the City can utilize this method to supplement its park space, a necessity given the increased rate of development and adopted park level of service standards.

The City can initially utilize this concept to develop an elevated park plaza at 174th Street and Collins Avenue, allowing for potential connections with Gilbert Samson Ocean Front Park and Town Center Park. Secondary locations for consideration include the intersections on Collins Avenue at 163rd Street, 186th Street, 185th Street, 178th Street and at Heritage Park to connect to the Ellen Wyne Beach Access Path.



The High Line, NYC



Thames River Bridge, London



Transbay Transit Center, San Francisco



The 606, Chicago



## Intersections

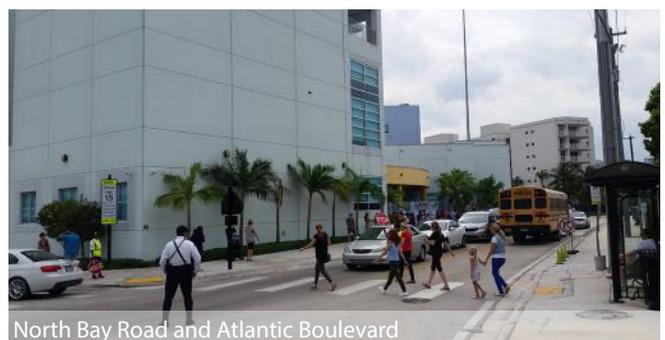
Safety and ability to cross Collins Avenue and 163rd Street were issues noted both by public comments, City staff, and by the field review. For 163rd Street, the City currently has two pedestrian bridges planned, connecting pedestrians through the park. These projects provide a direct connection in an area with documented jaywalking, and should continue to be developed.

Along Collins Avenue, crossings at most major intersections require minor to no improvements. However, improvements should be considered at 186th Street and Collins Avenue and at 189th Street and Collins Avenue. The implementation of new pedestrian paths, based on an alternative grid, special consideration should be given to each of the intersections, in particular when such crossing allows for direct access to beach paths.

A key concern raised by the elderly population is that crossing times are too short. However, it should be noted that any increase of the crossing time will affect traffic and effect the intersection timing, and vehicular flow. The more time given for pedestrian crossings, the less time there will be for vehicles to pass. There is a tradeoff when both vehicular congestion and pedestrian crossing times are major concerns.

Given the competing aspects between pedestrian and vehicular usage at intersections, careful consideration must be given to the inherent policy decisions which must be made.

Several options exist to address this issue. First, the City can choose to prioritize the pedestrian over the vehicle, accepting that vehicular congestion is a by-product of such a decision. Second, the City can evaluate, at key intersections, the use of alternative crossing patterns, such as pedestrian scrambles to maximize existing times through a combination of both cross east west- and north-south phases. This, however, will require approval by the State Department of Transportation. Third, the City can accept that some individuals will not be able to cross in one time cycle, and ensure pedestrian refuge areas in the median at each intersection. Lastly, the City may elect to remove the pedestrian from the equation, as seen in other cities, by elevating the crossing via a bridge or elevated plaza, allowing for better pedestrian and vehicular traffic flow through. Realistically, the City will have to evaluate each intersection separately given the varying costs of each potential change, and make individual determinations based on preferred policy.



## Americans with Disabilities Act (ADA) Compliance

Ensuring ADA compliance requires the implementation of minor changes at crosswalks, such as down ramps, and addressing maintenance issues. Where possible, obstacles should be removed from the sidewalk, or, at a minimum, be aligned as to not create obstacle courses, allowing for a straight path. The City can also be progressive in implementing audible signals for pedestrian crossings.

## Shade, Aesthetics, Seating

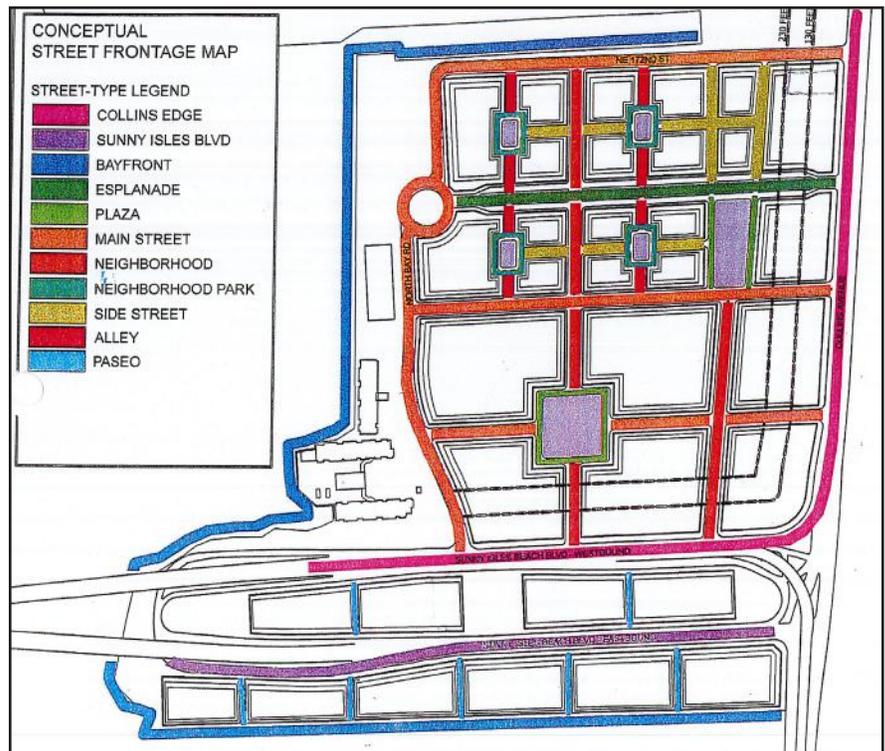
Community interviews and field reviews of existing facilities indicated a need to address shade and seating as part of the urban environment. Aesthetics are also a part of the pedestrian experience, but has been well considered by the City in its application of development rules. Along Collins Avenue, this quality manifests itself through outdoor seating for restaurants, designed sidewalks, façade and landscaping. However, the lack of shade and seating are serious issues, especially considering the percentage of the community who are elderly. This deters walking and should be a high priority for the City. Benches for walkers should be placed in shaded areas, preferably every tenth of a mile, but no further than every quarter mile. Shade can be incorporated through a variety of means, ranging from shelters to foliage.

## Town Center Area

Sunny Isles Beach is a small community approaching build-out; but large parking lots at commercial areas take up much large amounts of land. In the case of the Town Center area, a large city block results from current configuration of land use and the placement of large parking lots.

The current Town Center is a large area with little impetus for walking due to how the pedestrian facilities were developed. Conversion of existing rights of way such as narrow alleyways will allow for a more aesthetically pleasing walking environment with shorter blocks and easier means of access to the area.

The City has a conceptual plan for the development of the Town Center area, which is being implemented. However, the area's development should begin with the creation of a neighborhood design manual for implementation, which will provide increased details for the specifics of the area, such as seating, lighting, and other design elements. This plan includes the development of paths and plazas which will create a walkable environment through the provision of a bike/ped grid. To realize this, façade improvements and landscaping should be implemented as development occurs and when possible through planning and funding.



## Summary of Recommendations

1. Adopt Pedestrian Level of Service Standards.
2. Complete pedestrian grid by filling in gaps through installation of sidewalks along all roadways, including completing pedestrian connectivity on North Bay Road from 163rd Street to Heritage Park, and other areas through the implementation of new pedestrian paths.
3. Ensure seating for pedestrians are located approximately every 0.1 mile.
4. Ensure appropriate shade for pedestrians on all walking paths.
5. Shorten walking distances through the implementation of appropriate crossings along Collins Avenue and the development of alleyways as public space to break up larger blocks, including in the Town Center area.
6. Enhance pedestrian safety on roadways through repair and maintenance of existing facilities and intersections through the implementation of pedestrian islands, pedestrian bridges, and elevated park plazas.
7. Enhance ADA accessibility through the installation of curb cuts, detection strips, audible crosswalk signals, ADA accessible beach paths, and removal of any sidewalk obstructions.
8. Link planning for the pedestrian network with development of the parks system by incorporating parks as pedestrian links.

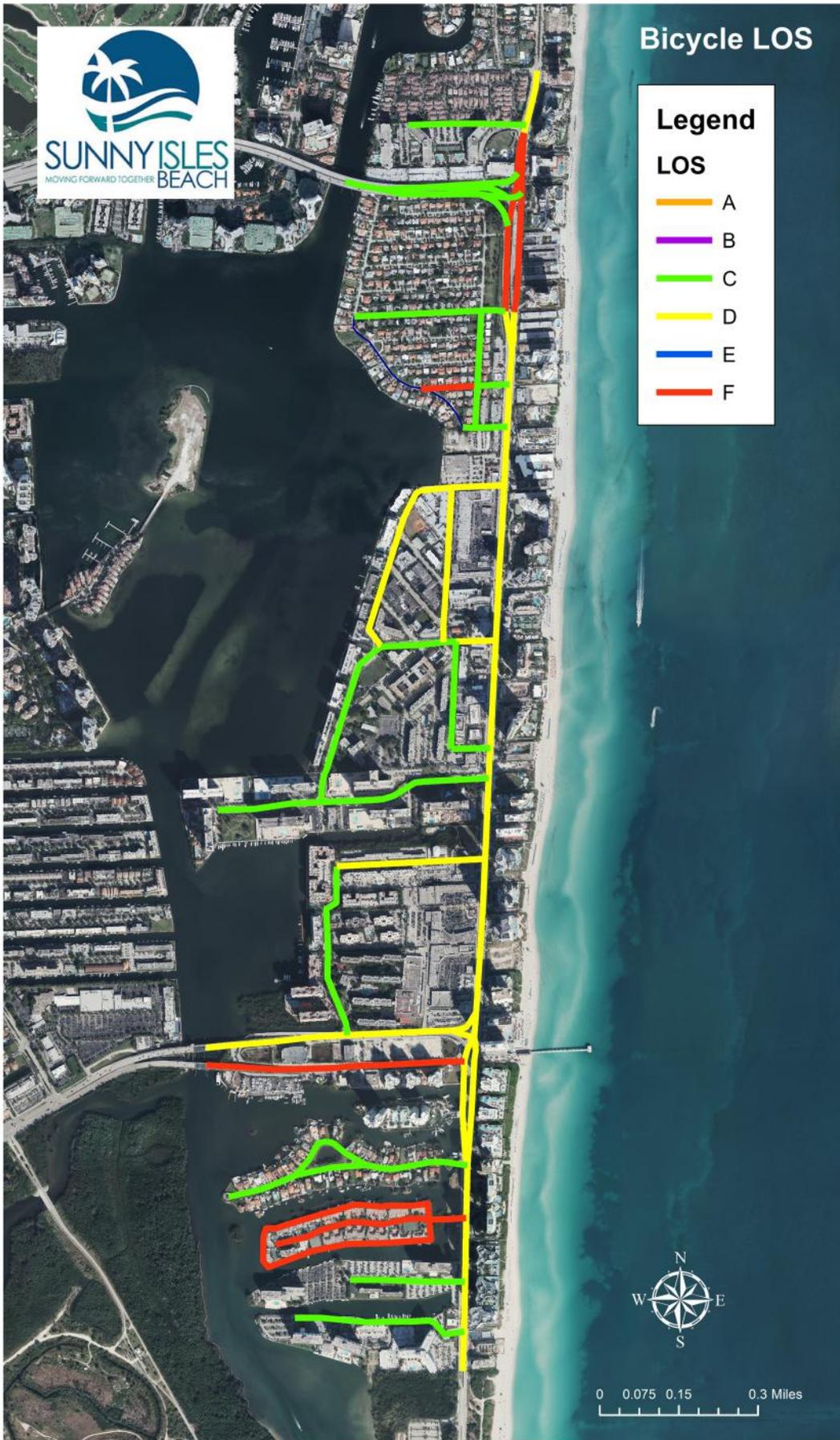




# Bicycle LOS

## Legend LOS

- A
- B
- C
- D
- E
- F



## Bicycle Facilities

The existing bicycle network in the City of Sunny Isles Beach consists of on-street facilities such as shared lanes and park trails; however no bicycle lanes or ground markers are present. There is a lack of bicycle facilities such as assigned bicycle lanes and bike racks. As of 2015, the bicycle network consisted of a network of approximately 9 miles on-street and 0.7 miles of off-street parks and trails.

Overall the network is incomplete, with most segments not connected to each other in a manner similar to the clusters of infrastructure seen in pedestrian facilities. As a summary, the City exhibits the following issues and deficiencies:

**BICYCLE NETWORK:** Incomplete and fragmented, sharrows utilized on major corridor with heavy traffic results in placing limitations on who can safely ride.

**SAFETY:** Perception of safety low on Collins Avenue, with additional considerations at intersections.

**INTERSECTION CROSSWALKS:** Not sufficient on many sections of Collins Avenue, lacking signalization, inadequately spaced, and unsafe.

**AMENITIES:** Lacking shading trees, benches at rest areas, and bicycle parking.

Further details are described in this chapter, via the LOS grades, the project sheets, and in the Appendix.

### Bicycle Level of Service (LOS)

To evaluate the bicycle facilities, a level of service standard was utilized. The City has no current LOS standard in the Comprehensive Plan, but should consider adopting one in order to have a method of evaluation for such facilities. The following is the Bicycling Level of Service standards utilized for this study and recommended for adoption. For local roads, the City should seek to maintain a bicycle Level of Service Standard of B or better on all roadways with designated bicycle paths. This Level of Service is also achievable for Collins Avenue.

### Bicycle Level of Service Standards

Level of Service (LOS) standards are commonly used to evaluate roadway conditions for traffic flow. Similar Bicycle LOS standards are much less common, but for this study the following standards—based on sidewalk/roadway conditions, supporting amenities, and the overall bicycling environment quality—were developed:

**LOS A** - On and off street facilities, low level of interaction with motor vehicles, appropriate for all riders;

**LOS B** - Low level of interaction with motor vehicles, appropriate for all riders;

**LOS C** - Appropriate for most riders, some supervision may be required, moderate interaction with motor vehicles;

**LOS D** - Appropriate for advanced adult bicyclists, moderate to high interactions with motor vehicles;

**LOS E** - Cautious use by advanced adult riders, high interaction with motor vehicles;

**LOS F** - Generally not safe for bicycle use, high level of interaction with motor vehicles.

The following City of Sunny Isles Bicycle LOS table provides a ranking of all segments of the Bicycling Network for the City. Major and minor corridors were inventoried and evaluated for their quality and level for service. The segments were broken up at logical points, usually section or half section line roads, and then analyzed for LOS score assignment.

## City of Sunny Isles Beach Bicycle LOS Bi-Directional

#	Road	FROM	TO	Pedestrian LOS
1	Collins Avenue	City South Boundary	NE 163rd Street - Sunny Isles Boulevard	E
2	Collins Avenue	NE 163rd Street - Sunny Isles Boulevard	172nd Street	E
3	Collins Avenue	172nd Street	174th Street	E
4	Collins Avenue	174th Street	178th Street	E
5	Collins Avenue	178th Street	183rd Street	E
6	Collins Avenue	183rd Street	186th Street	E
7	Collins Avenue	186th Street	189th Street	E
8	Collins Avenue	189th Street	SR 856	D
9	Collins Avenue	SR 856	193rd Street	D
10	Collins Avenue	193rd Street	Terracina Road	D
11	SR 856 Eastbound	Collins Avenue	City Boundary West	C
12	SR 856 Westbound	City Boundary West	Collins Avenue	C
13	Bay View Drive	Collins Avenue	End	C
14	Kings Point Drive	Collins Avenue	End	D
15	Poinciana Drive	Collins Avenue	End	C
16	Atlantic Isle	Collins Avenue	End	C
17	SR 826 Eastbound	Collins Avenue	City Boundary West	F
18	SR 826 Westbound	Collins Avenue	City Boundary West	F
19	N Bay Road	SR 826	172nd Street	D
20	N Bay Road	174th Street	178th Street	E
21	N Bay Road	178th Street	183rd Street	D
22	N Bay Road	185th Street	191st Terrace	C
23	172nd Street	Collins Avenue	N Bay Road	D
24	174th Street	Collins Avenue	End	D
25	175th Terrace	Collins Avenue	Atlantic Boulevard	D
26	178th Street	Collins Avenue	Atlantic Boulevard	D
27	178th Street	Atlantic Boulevard	N Bay Road	D
28	183rd Street	Collins Avenue	N Bay Road	D
29	185th Street	Collins Avenue	N Bay Road	D
30	186th Street	Collins Avenue	Atlantic Boulevard	C
31	186th Street	Atlantic Boulevard	N Bay Road	C
32	189th Street	Collins Avenue	N Bay Road	C
33	193rd Street	Collins Avenue	Gate	C
34	Atlantic Boulevard	175th Terrace	178th Street	D
35	Atlantic Boulevard	178th Street	183rd Street	D
36	Atlantic Boulevard	185th Street	189th Street	C



Collins Avenue, in front of City Hall

### Existing Facilities

The only facility within the City of Sunny Isles Beach that currently has designated bicycle shared lanes is the northern portion of Collins Avenue. On 183rd Street, the area north of the K-8 school is currently proposed as an off road path for bicyclists, continuing along North Bay Road south to 174th Street. Other roads have been designated for future on-road bicycling facilities. These include: 172nd Street between North Bay Road and Collins Avenue; and, North Bay Road between 172nd Street and 163rd Street. A bicycle lane connects Sunny Isles Beach with Aventura Mall via the Lehman Causeway. Safety in crossing traffic, as with pedestrian facilities, is also a major concern for bicyclists, and was noted in public comments.

### Bicycle Parking

There is limited bicycle parking within the City, with the exception of bike racks located primarily at schools. Few locations were identified as having bicycle parking: City Hall, the K-8 school, the Community Center, and the shopping centers. The City has recently adopted a policy that requires bicycle parking as a condition for new development and redevelopment projects that include substantial improvements.



By Starbucks, Collins Avenue

### Community Usage of Bicycling Facilities

Field observations show that Sunny Isles Beach residents and visitors do bicycle around the community; however, most bicyclists wish to avoid being in the travel lanes of Collins Avenue and therefore ride on the sidewalks. Where bicyclists ride on the sidewalk, obstructions that narrow the available sidewalk result in chokepoints where the potential for collision with pedestrians is higher. Parents were observed walking alongside younger bicyclists as a family activity. Stakeholder and community workshop feedback indicated that parents would like to be able to ride with their children to school, particularly on local roads, which have less traffic than Collins Avenue.

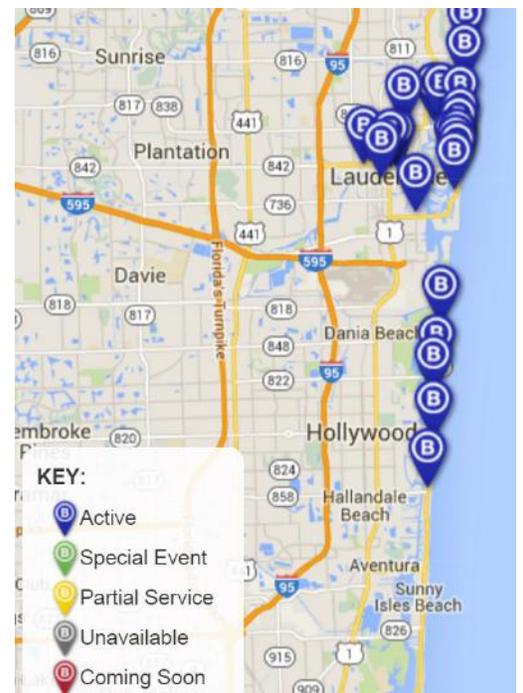
A general moratorium for riding bicycles on sidewalks within Sunny Isles Beach was discussed during the City Manager's Fact Finding Committee meeting. As a policy, it can serve to deter pedestrian and bicyclist conflict, which can result in injuries to both rider and walker. However, this policy also has the effect of restricting the potential for younger riders to utilize bicycling to school as a form of transit. Parents, citing safety, will generally not allow their children on sharrows on busy streets with high levels of traffic, nor should such practices be encouraged

for safety reasons, even with adult supervision. As there are no alternative paths to Collins Avenue to traverse the community, bicycling in the City is generally reserved for the advanced bicycle rider, and is not an activity which can be reasonably enjoyed by residents of all ages. Further, as bicycles have brakes, unlike skateboards, for example, the law indicates that these cannot be prohibited on the sidewalks. Any proposed moratorium, would be illegal and would, from a policy standpoint, be incompatible with the Safe Routes designations developed for the Norman S. Edelcup K-8 School.

**Bikeshare**

Bikesharing is a system by which riders can rent a bicycle and ride to their destination and park their bicycle at the next station. Riders have the option of utilizing an annual subscription or pay by hour. Riders utilizing the subscription service can generally ride the bicycles free for the first half-hour. Strategic placement of facilities is also important. In proximity to Sunny Isles Beach there are two existing systems: Citibike to the south, and Broward B-cycle to the north, both of which have stations within approximately two and half miles of the City. At this distance, the bicycle ride is more than manageable within this half-hour. No bikesharing system exists in Sunny Isles Beach; however, an expansion of either system will allow for increased bicycle access for residents and visitors.

Bikeshare usability, however, is dependent on the existing bicycle facilities, and perception of safety. Within Sunny Isles Beach, for Bikeshare to be viable, not only do stations have to be strategically placed, but bicycle facility improvements need to occur on Collins Avenue, at least until to 163rd Street, in order to encourage ridership by allowing access to and from the interior areas of the City. Extension of the system will allow for a natural stop at



Haulover Beach, and provide Sunny Isles Beach residents an additional option for travel to Bal Harbour shops. Depending on the programming for a bikeshare system, City residents, and visitors from other cities, may have increased access to local businesses and other quality of life amenities.

### Alternatives for Filling In Bicycling Network Gaps

Bicycling facilities vary in the level of access and separation from traffic. The following represent the four alternatives from which the City can choose from for all its roadways. These considerations were incorporated into the thought process and review of the right of way, leading to the recommendations seen later in the report.

**Shared Use Path:** Off-road facilities shared with pedestrians. Generally, pathways are a minimum of 5 feet in width for each direction.

**Cycle Tracks:** Bicycle facilities separated from vehicular traffic, with potential grade separation with roadway and/or sidewalks for pedestrians. Each cycle track should be approximately 5 feet in width.

**Bike Lanes:** On-Road facilities designated for bicycles with a minimum of 4 feet in width, which may or may not have at grade separation from vehicles through buffer striping or barriers.

**Sharrows:** On-road bicycle facility where bicycles share designated lanes with vehicular traffic.

As a general rule, all options are technically implementable, based on how you design the road. Viability, however, is another matter which was considered and is based on cost and local conditions and preference. Based on discussions with City staff and feedback from the Fact Finding Committee and existing conditions, an examination of continued shared usage on roadways was conducted, with recommendations resulting from a clear indication of the lack of community desire to continue to having sharrows. Locally, separation between pedestrians, bicycles, and vehicles should be considered. Generally, in high vehicular traffic areas, increased separation between bicycles and vehicles should be effected, removing sharrows, and in some cases, bicycle lanes from consideration. This is particularly salient for Sunny Isles Beach, given existing conditions on Collins Avenue. In planning for pathways with high pedestrian activity, there should be a higher degree of separation between bicyclists and pedestrians, deemphasizing shared use paths as a viable option. The available right of way also serves as a constraint for facility development as well, given different minimum requirements for implementation.



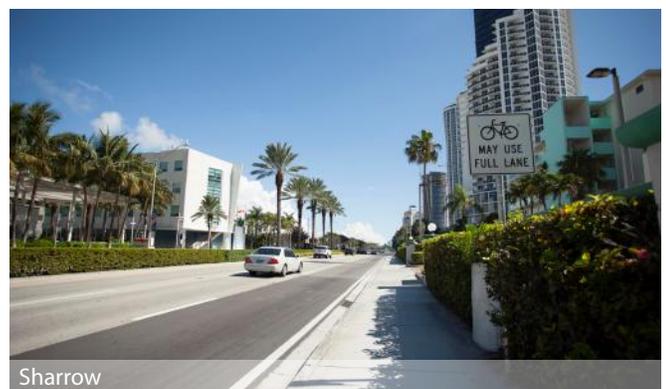
Shared Use Path



Cycle Tracks



Bike Lanes



Sharrow

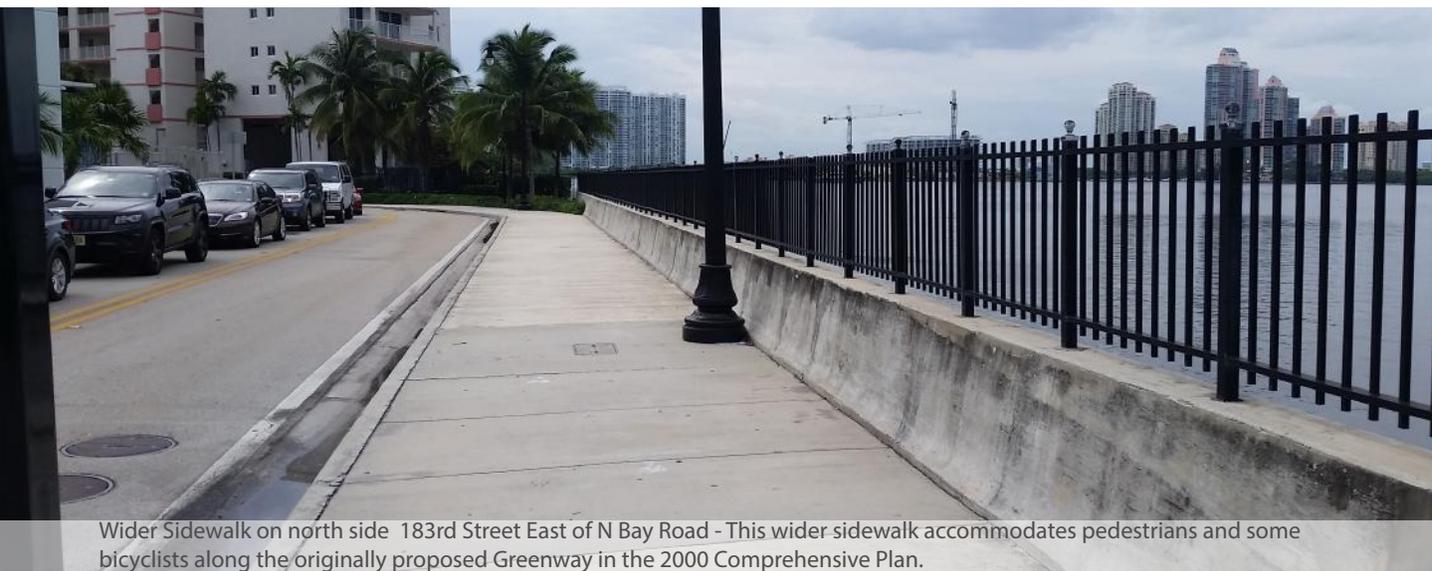
## Bicycle & Pedestrian Greenways: An Existing Plan

In planning for 2015, as part of the 2000 Comprehensive Plan, the City took a visionary approach towards multimodality by adopting as part of its policies the development of a North-South Bicycle and Pedestrian Greenway, which would provide an alternative route to Collins Avenue. As part of the City's overall plans, there would be additions to the roadway network as well, which have since been implemented in the form of North Bay Road, 172nd Street, and 170th Street. To implement this plan, the City would have to create bicycle and pedestrian infrastructure, with landscaping and other green aesthetics (hence, "Green"-way) to create a comfortable, enjoyable experience for the walkers and cyclists.

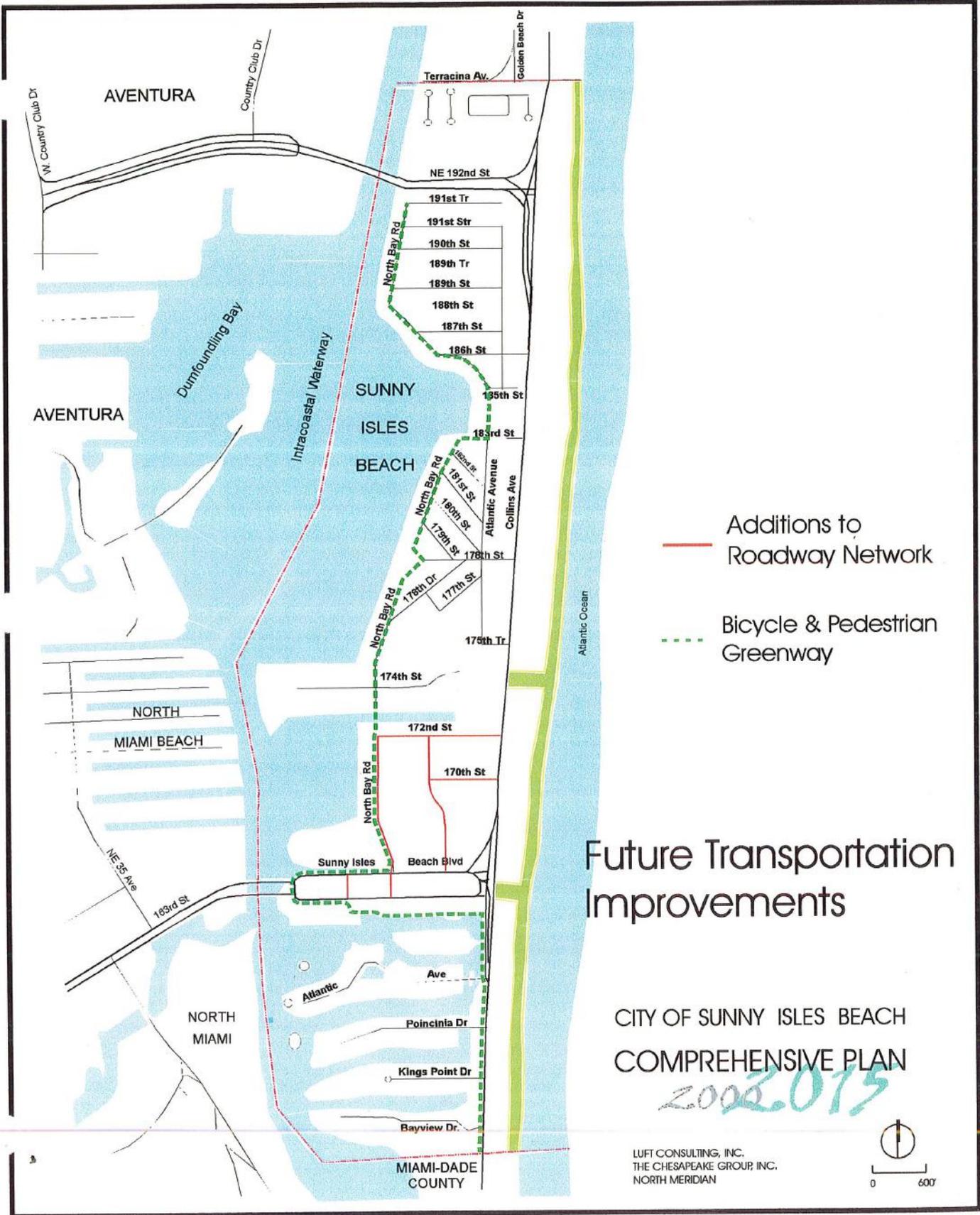
Since the adoption of the Greenway as part of the City's Comprehensive Plan, the City has implemented some segments of the route through the development of wider sidewalks along North Bay Road between 183rd Street and 174th Street, which, though geared towards pedestrians based on engineering design standards, can also accommodate bicyclists. Other portions of the route which has been implemented in this fashion include. In essence, these routes act as de facto "shared-use paths," and can operate normally as such under lower amounts of pedestrian and bicyclist activity. At higher levels, conflicts between the two will occur, but observed behavior in the City does not indicate that this critical level of pedestrian/bicyclist conflict has been reached on North Bay Road as of the creation of this plan.

Presumably, as the Greenway and North Bay Road overlap, the two concepts would be developed together. This has partially come to pass, with well landscaped walkways of approximately feet feet accommodating pedestrians along the path. No bicycle aspects of the proposed route exist on the current right-of-way. As can be seen in subsequent analysis and mapping, a gap exists in this Greenway plan for the bicycle component. Other to be implemented sections of the plan exist in the Golden Shores neighborhood, and along Sunny Isles Boulevard/163rd Street on the southern, westbound side.

This prior adopted plan for the City included a green outline indicating the beach, as well as two beach access paths, as can be seen in the map from the Comprehensive Plan on the following page. The City has made strides to follow this plan, and the recommendations for this Transportation Master Plan intends to build upon the City's original vision through recommendations to complete the Greenway network, and to enhance connectivity through the creation of a more appropriate grid system, of which the original Bicycle and Pedestrian Greenway and a vital component.



Wider Sidewalk on north side 183rd Street East of N Bay Road - This wider sidewalk accommodates pedestrians and some bicyclists along the originally proposed Greenway in the 2000 Comprehensive Plan.

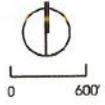


# Future Transportation Improvements

CITY OF SUNNY ISLES BEACH  
 COMPREHENSIVE PLAN

2002-2015

LUFT CONSULTING, INC.  
 THE CHESAPEAKE GROUP, INC.  
 NORTH MERIDIAN



# Historical and 2015 Transportation Master Plan Proposed Pathways

**Legend**

- 2000 Comprehensive Plan Bicycle and Pedestrian Greenway
- 2000 Comprehensive Plan Beach Path
- Bicycle Corridors (Proposed - 2015 TMP)



# Bicycle Existing Infrastructure and Gaps

**Legend**

- Beach Paths
- Bike Lane
- Sharrow
- Wider Sidewalks
- Bike/Ped Greenway (Current Gaps)
- Bicycle Corridors (Supplement - Gaps)
- Sunny Isles Beach



## Bicycle Needs Assessment

### The Alternative Grid

Development of a bicycle grid is necessary to make bicycling a viable mode of transportation within Sunny Isles Beach. This development requires the filling in of infrastructure gaps, and must allow for travel to and from a location. Thus, facilities must be bidirectional, meaning having parallel paths to allow for two-way transit. To create a grid, two major and one minor north-south bicycling arterials, and approximately a half dozen east-west routes will provide sufficient coverage for the network.

The maps on the following page indicate the North-South and East-West pathways discussed below, with pathways based on the overall alternative corridors grid seen on the map on this page. By overlapping the existing and proposed grids, a geospatial analysis can provide insight into the gaps in the system which currently exist. Ultimately, to fill in the gaps, the City will have to redesign the rights-of-way to allow for the additional infrastructure or alter existing infrastructure, such as on Collins Avenue, to allow for better bicycling options. Additional details can be found in the actual project sheets. As can be seen, a combination of narrow beach paths, wider sidewalks shared with pedestrians (and which sometimes have bus shelters or utilities constraining access), sharrows on Class I roadways (35 mph and above), and bike lanes on a causeway represent the grid. The prior Bicycle and Pedestrian Greenway plan also ran parallel to the beach, noted on the map as a light green line (see page 77), but with no East-West cross sections to bridge the gaps and complete the grid.

### North-South Travel

The major north-south routes should be along North Bay Road, and along Collins Avenue. A beach pathway would also provide for a recreational pathway as a minor bicycling arterial. Each route requires development of new infrastructure to deal with specific gaps and constraints.

### Collins Avenue

Providing a pathway along Collins Avenue requires the dedication of right of way which may not be readily available. Given existing conditions, sharrows, bike lanes, or shared-use paths may be utilized. Currently, sharrows exist for part of this route; however, it is not preferred by residents due to their proximity to vehicles. Rather, local preference is for a separated facility, and therefore, shared-use paths are preferred. On Collins Avenue, a two-way shared use path can be developed on the east side, which has less pedestrian traffic, by utilizing the existing sidewalk and easement and narrowing traffic lanes.



Bicyclists on Collins Avenue, south of 170th Street

### ***North Bay Road***

A route along North Bay Road can connect the neighborhoods from 163rd Street to 191st Terrace. Four gaps, however, currently exist in the system and require bridges or pathways to complete the route: between 185th Street and 183rd Street (path), between 174th Street and 172nd Street (bridge), and across eastbound and westbound 163rd Street (both bridges). North Bay Road has a low speed limit, and exhibits qualities of a local road which permits bicycling as a sharrow. In addition, the current sidewalks are wide enough to serve as an off-road facility.

### ***Beach Pathway***

A beach route will provide Sunny Isles Beach with a scenic recreation bicycle route similar to those found in neighboring communities. However, there is difficulty in constructing this route, as there are restrictions due to its proximity to the water. There will be costs to obtain the necessary easements or the purchase of property. However, this is a plan which has been explored by the City several times, and bears merit for future development. While Collins Avenue's proposed shared use path will provide primary access, a secondary pathway will provide a good alternative route over time, allowing for overflow from Collins Avenue, as well as provide a viable path for active transportation. A beach pathway should be gradually planned for and implemented in segments.

### ***East-West Travel***

East-west arterials should take advantage of beach access paths and pathways out of the City, and should be located on Lehman Causeway and along eastbound and westbound 163rd Street (major corridors) and on 174th Street, 178th Street, and 172nd Street (minor corridors).

### ***Lehman Causeway***

Lehman Causeway currently has a marked bicycle lane which allows for access to Aventura Mall. While this bicycle lane is easily accessed from the east side of Collins Avenue, the same cannot be said of the west. A similar issue exists for eastbound bicycles travel travel on the Lehman Causeway, where there is difficulty in crossing from the west to the east side of Collins Avenue. Determination of a crossing point close to the intersection of 189th Street and Collins Avenue to the east side of Collins is necessary to ensure access to the bicycle lane as well as provide access to bicyclists traveling eastbound over the Lehman Causeway.

### ***Eastbound 163rd Street and Westbound 163rd Street***

Eastbound and westbound 163rd Street currently has sidewalks which, though narrow, may be and are currently utilized for bicycle transit. However, this space is very narrow and not likely to easily accommodate both pedestrian and bicycle traffic. At the same time, high speeds on the roadway create safety issues for bicyclists which cannot be easily resolved. Should the roadway and bridge be redeveloped in the future, this walkable path should be widened into a shared use path separated from traffic. Connections to Oleta River State Park, less than a half mile from the City, should be considered. This would require a crossing just beyond the City's limit and would need coordination with the city of North Miami Beach. An additional alternative would be to build a new bicycle only bridge over the Oleta River, extending from the currently proposed path to Bella Vista Bay Park, and routing the path past the bridge into the space between eastbound and westbound NE 163rd Street.

### ***178th Street***

178th Street should be designated an east-west path, serving the local area as a connection to the beach. This path should be an off-path route. To accommodate bicycles, riding on sidewalks should be allowed, with consideration of sidewalk widening from North Bay Road to Collins Avenue. At Collins Avenue, a redesigned intersection to improve bicycle crossing can effectively allow better bicycle network access to the beach via the Walter Bresslour Beach Access Route.



## COMPLETE STREETS

### The Alternative Grid

In moving towards a multi and intermodal system, Sunny Isles Beach should adopt policies which will provide a safe, convenient and active transportation system via the implementation of "Complete Streets."

To achieve a Complete Streets system does not imply that every street will be identical; rather, each street's development is tied to the community's actual usage or potential usage on that particular roadway, and thus related to the land uses in proximity to the street in question. Complete Street features to be implemented should be appropriate to the context of the transportation corridor.

For each mode, particularly bicycling, transportation can be narrowed down to corridors of varying importance in local travel. To ensure that bicycle and pedestrian means of transportation will safely and conveniently connect residential areas with major activity centers within the City, bicycle, pedestrian, transit, and vehicular traffic grids should be layered on top of each other to determine specific corridor needs while keeping in mind the actual level of needs for each mode.

As can be seen when the various grids are layered, Complete Streets requires accommodations for bicycling, walking, and vehicle modes. A high level of priority should be given to 174th Street, 178th Street, North Bay Road, 172nd Street, and Collins Avenue.

Implementation of Complete Streets utilizing this layered grid allows for policy decisions regarding necessary improvements in development, resulting in a Complete Network as a long range goal of the City. Further, it will indicate any system gaps and provide a viewpoint as to which projects can be clustered, so that when projects such as roadway resurfacing or drainage improvements are made, implementation of Complete Streets can also be planned. In some cases, the effort to combine projects geographically will allow for a reduction of overall project costs.





# Project Development

This chapter introduces the actual projects, each of which is listed in the accompanying Project Bank with a stated purpose, need, description of the project, and an estimated cost. The Transportation Master Plan has identified multimodal transportation and mobility issues across the community by talking with the citizens and analyzing transit and roadway data and existing pedestrian and bicycling facilities. A set of multimodal projects was developed based on this analysis, focusing on identifying the major facilities or the movement of people.

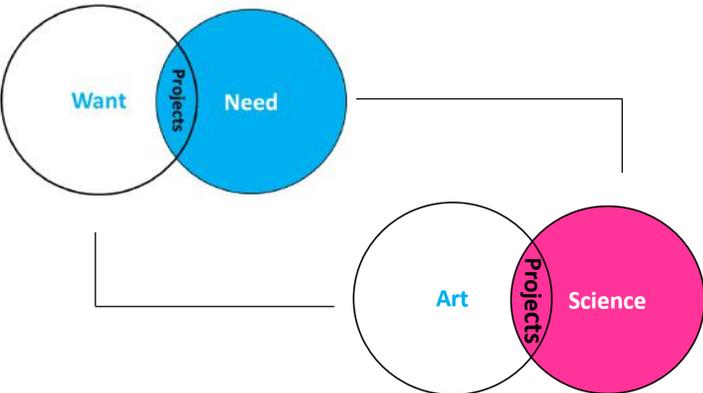
The development of projects for implementation is both an art and a science. Planners, decisions makers, and citizens all dream of what can be, but all of these stakeholders may hold differing viewpoints of how to progress into the future. To gain consensus and implement projects, a community must agree to, and want, what is being planned. This project placed great effort on both the art (finding out what is wanted), and the science (finding out what is needed). Through the analysis of existing conditions and needs, the needs of the community from a technical standpoint are developed. What is wanted then stems from discussions and feedback resulting from significant engagement of the public in building consensus.

Projects were listed by the following categories:

## Pedestrian | Bicycling | Transit | Roadway | Policy

As part of this process the issues that were initially discussed and presented in the previous chapter were organized, streamlined and defined as projects. First, the projects were evaluated based on cost, benefits, needs, and community desire in the creation of the overall project bank. After detailed consideration of this criteria, ideas from the initial lists were either utilized, consolidated or dropped.

In creating a formal project listing, projects from the initial lists that had no significant impact because they were not addressing a formal need were generally dropped from consideration. Some projects fell into the same overall category but were consolidated in order to create a more easily read report. Individual components which may be implemented separately, such as the filling in of specific gaps in the sidewalk system, addressing crosswalk issues at intersections, and implementing various aspects of the bicycle network system. Projects or ideas that approached a similar problem in different ways were also consolidated after evaluation.



## Pedestrian Projects

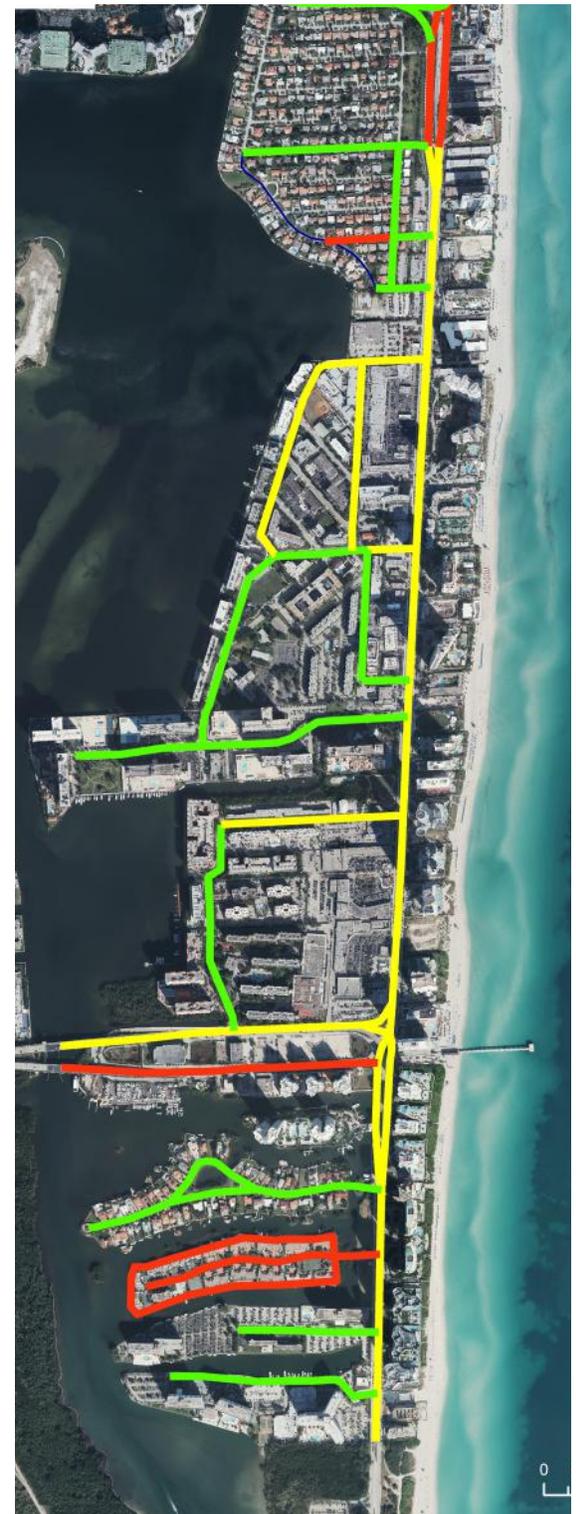
- PED 1 Infill Sidewalk Network
- PED 2 Pedestrian Park Bridge at Collins Avenue and 174th St.
- PED 3 Pedestrian & Bicycle Bridge at N. Bay Road and 174th St.
- PED 4 Pedestrian Bridge at Collins Avenue and Heritage Park
- PED 5 Pedestrian Improvements at Collins Avenue and 186th St.
- PED 6 Pedestrian Safety Islands - Collins Avenue
- PED 7 Mid-Block Crosswalk, Northbound Collins at 189th Ter.
- PED 8 Parking Lot Crosswalks at 191st Ter.
- PED 9 Pathway Between Golden Shores Community Park and Heritage Park
- PED 10 ADA Improvements
- PED 11 Sidewalk Repair
- PED 12 Streetscape Improvements
- PED 13 Town Center Alleyway and Pedestrian Path Program
- PED 14 Crosswalk Improvement at Poinciana and Collins
- PED 15 Pedestrian Bridges at 163rd Street and Collins Avenue
- PED 16 BIKE 7 - Bike/Ped Pathway on Beach
- PED 17 Pedestrian Bridge at 180th St. and Collins Avenue
- PED 18 Crosswalk, NE 181st Dr. and Atlantic Blvd.
- PED 19 Pedestrian and Bicyclist Data Collection
- PED 20 Signalization Pedestrian Crossing - North Bay Road N of 170th Street at Bellagio Curve

## Bicycle Projects

- BIKE 1 Shared-Use Path
- BIKE 2 Bicycling Safety and Education Programs
- BIKE 3 Bicycle Racks Installation
- BIKE 4 Bicycle Rental Program
- BIKE 5 Bike/Ped Pathway to Oleta River State Park Feasibility Study
- BIKE 6 Pathway Between 183rd St. and 185th St.
- BIKE 8 Bicycle Route Signalization

## Transit Projects

- TRANSIT 1 Bus Stop Amenities Improvements
- TRANSIT 2 Sunny Isles Beach Shuttle Comprehensive Operations Analysis
- TRANSIT 3 Priority Signalization for Emergency Vehicles and Transit
- TRANSIT 4 Transit Ridership Incentive Program

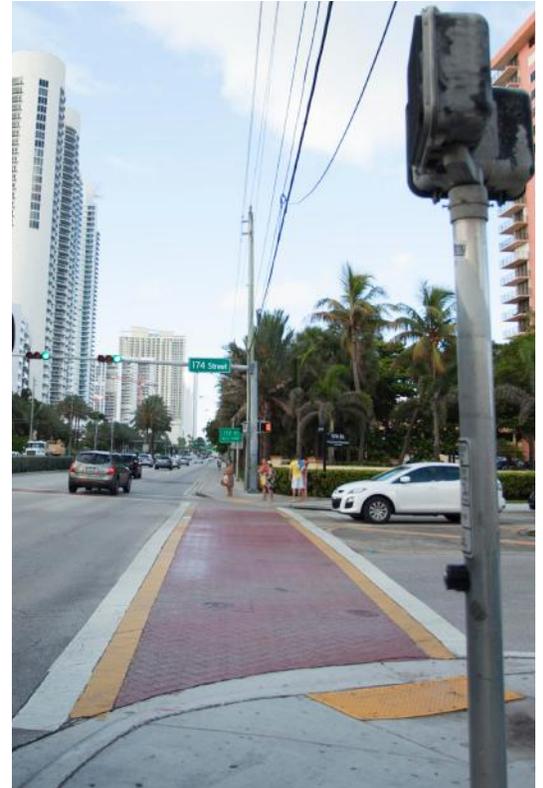


- TRANSIT 5 Water Taxi Stop and Service Feasibility Study
- TRANSIT 6 Transit Trip Planning App Pilot Program
- TRANSIT 7 (Ongoing) Bus Tracking App
- TRANSIT 8 Proposed Bus Pullout (School)



## Roadway Projects

- ROAD 1 Adaptive Signalization Technology
- ROAD 2 Parking Consolidation Study
- ROAD 3 Collins Avenue/SR-826 EB Intersection Improvements
- ROAD 4 Signal Timing Intersection Improvements and Corridor Signal Progression Analysis
- ROAD 5 Collins Ave/186th St Intersection Improvements-Signal Warrant Analysis
- ROAD 6 Atlantic Blvd/178th St Intersection Improvements-Signal Warrant Analysis, SB Left Turn Addition
- ROAD 7 Atlantic Blvd/183rd St Intersection Improvements
- ROAD 8 Roadway Repavement, Collins Avenue (FDOT)
- ROAD 9 174th Street Improvements



## Policy Projects

- POLICY 1 Adopt Pedestrian/Bicycling Level of Service Standards
- POLICY 2 Ensure Intergovernmental Cooperation
- POLICY 3 Complete Street Policy and Guidelines/Design Manual
- POLICY 4 Mobility Fee Feasibility Study
- POLICY 5 Transportation Demand Management
- POLICY 6 Incentive Programs for Transit, Carpooling
- POLICY 7 Maintain Local Agency Program Certification
- POLICY 8 Parks and Green Corridors (Connect the Parks)-Recreational Walking Programming Policies
- POLICY 9 Senior Services Delivery







## Project Bank

This chapter details the actual projects with a stated purpose, need, description of the project, and an estimated cost.

Projects were listed by the following categories:

[Pedestrian](#) | [Bicycling](#) | [Transit](#) | [Roadway](#) | [Policy](#)

## FILL-IN SIDEWALK NETWORK

### PEDESTRIAN: PED 1

#### Purpose

Fill in gaps in the sidewalk infrastructure. The sidewalk is the most obvious element of the pedestrian network; therefore a primary objective of this plan is to provide mobility by ensuring a complete and inclusive sidewalk system. Including short, direct pedestrian connections between adjoining land uses can make walking (and bicycling) more attractive.

#### Need

The data collection and analysis of this Transportation Master Plan has shown gaps in the sidewalk system totaling approximately 38,577 linear feet (as of November 2015). These gaps are mostly located in residential neighborhoods such as Golden Shores, Atlantic Isle, Poinciana Island and Bayview Drive, which make walking difficult and prevent pedestrians from easily accessing the City's major corridor, Collins Avenue.

#### Description

Locations of missing sidewalks are noted in the map and attached table. Prioritization of these sidewalk improvements should be based on proximity to schools, parks and bus or trolley stops, following by proximity to existing businesses. Primarily, the purpose is to create a cohesive connected walking network. In some cases, the need for a sidewalk can be bundled with a bicycle path to develop a shared use off-road path.



North Bay Road, north of 188th Street

## Pedestrian Park Bridge at Collins Ave and 174th St

### PEDESTRIAN: PED 2

#### Purpose

Provide safe pedestrian and bicycle access over Collins Avenue at 174th Street.

#### Need

Pedestrians and bicyclists need to safely and conveniently cross Collins Avenue to access the Gilbert Samson Park, the beach and numerous retail shops on the west side of Collins Avenue. The pedestrian bridge need has been identified on many occasions such as through data analysis, as well as community meetings and public input.

#### Description

A pedestrian bridge would increase multimodal connectivity between key commercial and entertainment places, as well as residential areas. It can also attract interest and encourage repeat usage by providing a safe and comfortable user experience. The bridge should be designed as a plaza, with landscaping, creating an elevated park as well as safe pedestrian pathway.



## Pedestrian & Bicycle Bridge at N Bay Rd and 174th St

### PEDESTRIAN: PED 3

#### Purpose

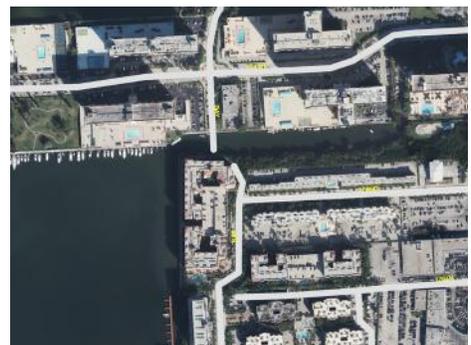
Fill in gaps in the gap in the pedestrian infrastructure. Build a bridge to complete route along North Bay Road between 163rd Street and 183rd Street.

#### Need

Completing the bridge will provide for a more complete North-South travel network for pedestrians and bicyclists, and will serve as an alternative to Collins Avenue. This path will also be a more direct route, and will shorten walking distances between neighborhoods, and provide a safe alternative for residents walking or bicycling to Pelican Community Park and the K-8 School. This issue was also brought up by the residents of Sunny Isles Beach during Fact Finding Committee meetings, public workshops, and in feedback comments.

#### Description

A pedestrian/bicycling access bridge south of the intersection of 174th Street and North Bay Road has been planned in the past and is in the process of implementation. The completion of this bridge will allow for a continuous path from 163rd Street to 183rd Street, allowing bicycling and pedestrians a viable alternative to Collins Avenue. Designed properly, the bridge or area in the vicinity of the bridge may also eventually serve as a water taxi location.



## Pedestrian Bridge at Collins Ave and Heritage Park

### PEDESTRIAN: PED 4

#### Purpose

Provide a safe pedestrian and bicycle path over Collins Avenue at Heritage Park.

#### Need

Pedestrians and bicyclists need to safely and conveniently cross Collins Avenue to access Heritage Park, the William “Bill” Lone beach access, and high-rise residential buildings on the east side of Collins Avenue. The addition of this bridge will create a more complete pedestrian and bicycle network while also increasing connectivity between neighborhoods.

#### Description

A pedestrian bridge would increase multimodal connectivity between the parking lot, while reducing J-walking seen during the study. The 110 foot bridge can be prefabricated. It could also attract interest and encourage repeat usage by providing a safe and comfortable user experience.



## Pedestrian Bridge at Collins Ave and 186th St

### PEDESTRIAN: PED 5

#### Purpose

Provide a safe pedestrian and bicycle path over Collins Avenue at 186th Street.

#### Need

Pedestrians and bicyclists need to safely and conveniently cross Collins Avenue through 186th Street to access commercial, retail/shops and restaurants on the west side of Collins Avenue and high-rise residential buildings and beach on the east side of Collins Avenue. The addition of this bridge will create a more complete pedestrian and bicycle network as well as increase connectivity between neighborhoods.

#### Description

A pedestrian bridge would increase multimodal connectivity between key commercial and entertainment places, as well as residential areas. It can also attract interest and encourage repeat usage by providing a safe and comfortable user experience. This bridge can also serve to fill in the gap in the bicycling system as it relates to access for the Lehman Causeway bicycle lanes.



## Pedestrian Safety Islands - Collins Avenue

### PEDESTRIAN: PED 6

#### Purpose

Improve or install pedestrian safety islands at existing crosswalks for crossing Collins Avenue at:

1. Kings Point Drive (North Side)
2. Atlantic Avenue (South Side)
3. 170th Street (South Side)
4. 172nd Street (North Side)
5. 178th Street (South and North Sides)
6. 183rd Street (South and North Sides)
7. 185th Street (South Side)

#### Need

Through the analysis and public involvement of this study, it became evident that the public would like safer pedestrian access to and from various locations. From site reconnaissance it was determined that pedestrian street crossings are difficult, with pedestrians not having adequate time to cross intersections, intersections are poorly marked therefore pedestrians J-Walk at mid-block. Further, crossing times are not sufficient for many residents and visitors. A solution is to provide pedestrian islands in the middle of the typically wide right-of-way in the City.

#### Description

The refuge islands would be on Collins Avenue and each intersection as noted above, on the North or South sides of the intersection. Work should be coordinated with Public Works and FDOT to in order to propose crossings for approval, design, and construction. The refuge islands should be ADA compliant with detection strips installed.



## Mid-Block Crosswalk, Northbound Collins at 189th Ter

### PEDESTRIAN: PED 7

#### Purpose

Determine the need and construct a new pedestrian crossing at 189th Terrace on eastern/northbound side of Collins Avenue.

#### Need

Through the analysis and public involvement of this study, it became evident that the public would like safer pedestrian access to and from various locations. From site reconnaissance it was determined that pedestrian street crossings are difficult, with pedestrians not having appropriate time to cross at intersections, poorly marked intersections or pedestrians J-Walking at mid-block. This occurs on Collins Avenue and 189th Terrace due to inadequate marked crossing areas.

#### Description

Determine crosswalk location, and if parking spaces under Lehman Causeway needs an additional entrance near final crosswalk location. Parking users currently have no easy places to cross after parking, therefore they J-walk to reach the beach. Evaluate crossing volumes and accessibility. Design appropriate crossings as necessary mid-block to include high visibility striping, reflectors, signage, pedestrian islands, countdown pedestrian signals, etc. Work with local owners and connect via pedestrian paths on private property. Work should be coordinated with Public Works and FDOT in order to propose crossings for approval, design, and construct crossings.



## Parking Lot Crosswalks at 191st Ter

### PEDESTRIAN: PED 8

#### Purpose

Determine the need and create new pedestrian crossings at 191st Terrace on Collins Avenue adjacent to the parking lot. A crosswalk should be considered for the southbound side of Collins as well as connecting to the sidewalk infrastructure immediately to the north of the parking lot.

#### Need

A gap exists at the north end of the parking lot on Collins Avenue by 191st Terrace, under the Lehman Causeway. This gap exists both in connecting to the west side of Collins Avenue as well as to the crosswalk to the north. There is a road with no crossing between the north end of the parking lot and the crosswalk to access the east side of Collins Avenue.

#### Description

Determine crosswalk location, and if parking spaces under Lehman Causeway needs an additional entrance near final crosswalk location. Parking users currently have no easy places to cross after parking, therefore J-walk to reach the beach. Evaluate crossing volumes and accessibility. Design appropriate crossings as necessary mid-block to include high visibility striping, reflectors, signage, pedestrian islands, countdown pedestrian signals, etc. Work should be coordinated with Public Works and FDOT to in order to propose crossings for approval, design, and construction. Pole signage/flashers warning incoming traffic from Lehman Causeway may be necessary.



Collins Avenue, by 191st Terrace

## Pathway Between Golden Shores Community Park and Heritage Park

### PEDESTRIAN: PED 9

#### Purpose

Create new pedestrian route under the Lehman Causeway to connect Golden Shores Community Park and Heritage Park.

#### Need

The Lehman Causeway serves as a barrier between the two portions of the community. Creating a pathway between the two areas will connect the parks, and provide Golden Shores residents with an improved, direct path to Heritage Park, and with both MDT and Broward Transit stops.

#### Description

Work should be coordinated with FDOT in order to propose route for approval, design, and construction. To maximize the path's potential, landscaping, signage, and safety improvements, including striping for pedestrians crossing the parking lot under Lehman Causeway would have to be constructed. New sidewalks would connect to the existing network south of Heritage Park. Further, new entrances to Golden Shores Community Park and the Heritage Park/Heritage Park garage will have to be constructed.



Under Lehman Causeway Parking Area

## ADA Improvements

### PEDESTRIAN: PED 10

#### Purpose

Ensure that pedestrian ways are unobstructed by other necessary public infrastructure. In addition, at crosswalks install audible signals and detection strips where necessary.

#### Need

There are multiple locations in the City where fire hydrants and other public infrastructure (e.g., benches, shelters, traffic cameras, signage, and utility poles) are on pedestrian paths presenting obstacles. In some cases, these obstacles present issues for disabled persons in wheelchairs, as well as families with children in strollers and bicyclists. Residents and visitors will also benefit from audible signals.

#### Description

Audible devices typically generate an audible sound to alert people that it is safe to cross, and should be installed at all intersections along Collins Avenue. Work with Miami-Dade County to determine which locations can have the fire hydrants and other obstacles located out of the pedestrian paths and located in such a manner as to not create a zig-zag path. These locations will be confirmed, and the owners of said infrastructure will be coordinated with, to remove the obstacles. Policies should be adopted to ensure that new obstructions are not located in this manner for future projects.



## Sidewalk Repair

### PEDESTRIAN: PED 11

#### Purpose

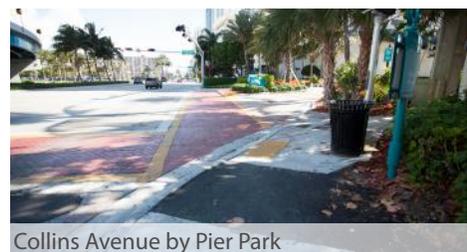
Repair or replace damaged, uneven, or cracked sidewalks.

#### Need

Through the data and analysis section of this study the following locations were identified as needing remediation: 172nd Street, 170th Street, Collins Avenue and Oceania Island, Atlantic Isle, Atlantic Avenue, 178th Street, 183rd Street, among others. These create impediments to pedestrian mobility and present trip hazards where the paths are uneven.

#### Description

Sidewalk locations will be prioritized then repaired. During the repair and replacement process, planning and design should place emphasis on the materials being used, contraction joints and whether there are existing tree roots which may eventually impact the sidewalk.



## Streetscape Improvements

### PEDESTRIAN: PED 12

#### Purpose

Enhance the pedestrian environment within Sunny Isles Beach through the addition of shade, seating, and fully implementing the Streetscape Master Plan.

#### Need

Shading for pedestrians is not consistent throughout the City, but can be remedied by adding trees along walkways and shared-use paths. The pedestrian environment can also be improved through the addition of visually appealing infrastructure.

#### Description

The implementation of shading and rest areas along pedestrian paths is essential toward improving the quality of walkability, especially in warmer climates. In urban areas the sidewalk should extend from building to street and include tree planting areas. For the less urban areas of the City, sidewalks should be set back from the street and separated by a 6 foot strip with tree plantings, as part of a complete streets system. In addition, seating should be planned between 0.1 to 0.15 miles apart. The City can begin to implement the addition of shade by adopting specific sidewalk design standards which includes these streetscape elements. Additional streetscape improvements which will increase the appeal of walking within Sunny Isles Beach include the creation of pocket parks, plazas, public art, and other similar elements. The City should continue to implement and adjust the Streetscape Master Plan.



## Town Center Alleyway and Pedestrian Path Program

### PEDESTRIAN: PED 13

#### Purpose

Enhance the pedestrian environment within Sunny Isles Beach through implementation of pathways within the Town Center.

#### Need

The current Town Center is a large area west of Collins Avenue with little impetus for walking due to how the pedestrian facilities were developed. Conversion of existing right-of-way such as narrow alleyways will allow for a more aesthetically pleasing walking environment with shorter blocks and easier means of access.

#### Description

The City has a conceptual plan for the development of the Town Center area, which should be implemented. However, the area's development should begin with the creation of a Neighborhood Design Manual which will provide increased details for the specifics of the area, such as seating, lighting, and other aspects of design. This plan includes the development of paths and plazas creating a walkable environment through the provision of a bike/ped grid. To implement this, façade improvements and landscaping should be implemented both as development occurs and as made possible through planning and funding for implementation.



## Crosswalk Improvement at Poinciana and Collins

### PEDESTRIAN: PED 14

#### Purpose

Determine the need and create new pedestrian crossings at Poinciana Drive (160th Street) and Collins Avenue.

#### Need

A gap exists connecting to the west side of Collins Avenue at Poinciana Drive. A crosswalk is needed especially since there are two parks and two MDT bus stops on the west side of Collins (approximately 350 feet north and south of Poinciana Drive) and one MDT bus stop on the east side of Collins Avenue, directly across the referenced location.

#### Description

Design appropriate crossings as necessary to include high visibility striping, reflectors, signage, pedestrian islands, countdown pedestrian signals, etc. Work with local owners and connect via pedestrian paths on private property. Work should be coordinated with Public Works and FDOT to in order to propose crossings for approval, design, and construction.



Collins Avenue and Poinciana Drive, west side

## Pedestrian Bridge at 163rd St and Collins Ave (Vicinity)

### PEDESTRIAN: PED 15

#### Purpose

Provide a safe pedestrian and bicycle path over Collins Avenue at 163rd Street or around vicinity.

#### Need

Pedestrians and bicyclists need to safely and conveniently cross Collins Avenue and the 163<sup>rd</sup> St vicinity, this area is heavily used by pedestrian, bicycles as well as by automobiles, it connects the beach and hotels on the east side of Collins Ave to commercial and residential areas in the west side of Collins Ave. The addition of pedestrian bridges will create a more complete pedestrian and bicycle network while increasing connectivity between neighborhoods, since Collins Ave, a six lane thoroughfare, acts an impediment to pedestrian safety and connectivity.

#### Description

A pedestrian bridge would increase multimodal connectivity within Sunny Isles Beach, and reduce the local J-walking seen during the study. Each 110' bridge can be prefabricated. It could also attract interest and encourage repeat usage by providing a safe and comfortable user experience. Connecting this gap in the network allows for better access to Collins Avenue for residents west of it, which, when combined with the 174th Street Bridge project, will provide an alternative to crossing at the busy 163rd Street/Collins Avenue intersection, and allow for continuous, safer access for children and adults en route to City's parks from the neighborhoods south of 163rd Street.

## Bike/Ped Pathway on Beach

**PEDESTRIAN: PED 16 BICYCLE: BIKE7**

### Purpose

Study and provide a plan of implementation of a beach boardwalk.

### Need

Plan for an alternative transit and recreational corridor for bicycle traffic. The beach provides an alternative corridor for north-south travel paralleling Collins Avenue, which currently has little right-of-way left for facility expansion.

### Description

Evaluate what steps need to be taken for the development of a beach boardwalk, including: types of lighting to protect the sea turtle population; need for acquisition for right-of-way and associated costs and phases of implementation as determined by the various beach access points and based on costs estimates for each section. This path should encompass the entirety of the north-south length of the City.



## Pedestrian Bridge at 180th St. and Collins Ave

**PEDESTRIAN: PED 17**

### Purpose

Provide a safe pedestrian and bicycle path over Collins Avenue at 180th Street. Currently, the distance between 183rd Street and 178th Street, the two closest crossings for that section of Collins Avenue, is 0.3 miles. Observed human behavior indicates a general unwillingness to walk more than 0.25 miles. A bridge will cut the distance in half, and also provide a closer crossing for existing transit stops.

### Need

Pedestrians and bicyclists need to safely and conveniently cross Collins Avenue at regular intervals. This will also remove students from at-grade crossings as they approach the new middle school.

### Description

Install a pedestrian bridge at 180th Street and Collins Avenue.

## Crosswalk, 181st Dr and Atlantic Blvd

PEDESTRIAN: PED 18

### Purpose

The City is currently in the process of constructing a new middle school north of City Hall. As part of this project, a crosswalk should be installed, as there is no east-west crosswalk at this intersection.

### Need

This crosswalk will connect the school to the main building as well as Pelican Community Park. Design appropriate crossing as necessary to include high visibility striping, reflectors, and signage. Attention must be paid to the distance between the bus pullout and the crosswalk in the design.

### Description

Install crosswalk at 181st and Atlantic Blvd.



## Pedestrian and Bicyclist Data Collection

PEDESTRIAN: PED 19

### Purpose

Data collection to support local planning effort and project prioritization/re-prioritization.

### Need

Regular collection of Data is needed to ensure the City addresses the evolving needs of its residents and businesses.

### Description

Similar to a traffic study, data will be collected to evaluate both pedestrian and bicycle movements, patterns and interactions throughout the City. Deficient capacity will be highlighted and recommendations will be made to provide mitigation. This will be an on-going effort to continue to evaluate and implement projects and create a level of service.



## Signalized Pedestrian Crossing - North Bay Road N of 170th St. at Bellagio Curve

### PEDESTRIAN: PED 20

#### Purpose

Implement a new pedestrian crossing at North Bay Road north of 170th St., at Bellagio Curve.

#### Need

Based on a study and needs assessment performed by several students and a teacher at Alonzo and Tracy Mourning Senior High School it was determined that a pedestrian crossing was necessary along North Bay Road at approximately theoretical 171st Street.

#### Description

A crossing should be designed to possibly include high visibility striping, reflectors, signage, and/or in-pavement LED lane markers. Work should be coordinated with City and County Public Works in order to approve, design, and construct the pedestrian crossing.

## Shared-Use Path

### BICYCLE: BIKE 1

#### Purpose

Enhance and improve the pedestrian environment by widening the sidewalks an additional 4 feet to create a shared-use path on the east side of Collins Avenue.

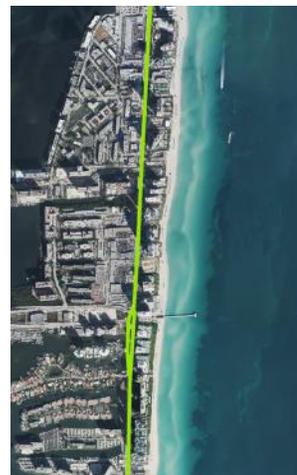
#### Need

Additional right-of-way width for bicycles on the northeast side of Collins Avenue to create a shared-use path to encourage more walking and bicycling and to provide transportation links for a variety of users. Ensure safe roadway and driveway crossings and safe interaction among different path users.

#### Description

The eastern side of Collins Avenue was selected for an off-road bicycle facility to be shared with pedestrians, due to right-of-way (ROW) constraints and the need for bicycle corridor development. This would require a roadway realignment, including a lane diet to free up space for the pathway, and paving and repaving of the entirety of the roadway within the City.

Additional ROW may need to be acquired on a case-by-case basis wherever bus stops are located. Additionally, potential cost savings may ensue if the project is combined with the already planned resurfacing project for Collins Avenue. This cost savings may be upwards of \$6.5 million dollars based on the current estimated cost of the resurfacing project.



## Bicycling Safety and Education Programs

### BICYCLE: BIKE 2

#### Purpose

Ensure that cyclists and motorists alike are practicing safe and courteous behavior to minimize accidents, therefore encouraging more people to bicycle.

#### Need

South Florida is one of the most dangerous places in the nation to ride a bicycle, in large part because of the lack of bicycle facilities and the spatial and operational characteristics of our cities. Educating cyclists how to properly ride on our streets, as well as educating motorists to be aware of, and fairly treat cyclists, will assist in making the roads safer.

#### Description

Develop a bicycle/driver education pamphlet, work to educate the public on bicycle and driver safety.



## Bicycle Racks Installation

### BICYCLE: BIKE 3

#### Purpose

Increase bicycling mobility by installing bicycle racks throughout the City.

#### Need

Bicycle parking is scarce in the City, and does not exist in many key places. Bicycles have been observed attached to handicap ramp guard railings. The lack of available parking places at many major commercial areas discourage bicycling as a form of transit.

#### Description

Bicycle rack locations need to be determined based on proximity of bicycling facilities and potential usage. Priority in installation should be given to destinations adjacent to currently existing pathways which do not have bicycle racks and commercial areas. Initial installation of bicycle racks should be at schools, transit-hub transfer areas, and at all shopping centers and the various beach access throughout the City. Further implementation in other areas would occur as funding becomes available. In some instances, the installation of bicycle racks must undergo coordination with a private property owner. Bicycle racks can be installed in phases as funding becomes available, at an approximate cost of \$8,100 per installation for 10 spaces.



## Bicycle Rental Program

### BICYCLE: BIKE 4

#### Purpose

Provide bicycle rentals in Sunny Isles Beach.

#### Need

Increased bicycle access may lead to increased bicycling and increased mobility.

#### Description

Bicycle rental/sharing systems are a major component of a more sustainable and intermodal transportation system in hundreds of cities around the world including Miami Beach, Miami and Fort Lauderdale. Bikesharing provides an additional affordable means of transportation in a multi-modal system. It is recommended that the City contact several bikeshare system providers for a feasibility analysis of creating a system in Sunny Isles Beach. If the City decided to pursue a system, a vendor would be selected through a bid and selection process. the City should then identify specific locations for placing. bicycle rental racks. This will be based on proximity to destinations in the City, the need for bicycles in the area, and the ability to regularly maintain the system through manual repositioning of bicycles as necessary.



## Bike/Ped Pathway to Oleta River State Park Feasibility Study

### BICYCLE: BIKE 5

#### Purpose

Provide safe transportation links for bicyclists, pedestrian and all users and encourage more walking and bicycling throughout the City, especially to Oleta State Park.

#### Need

Multi-use paths separated from the roadway will provide pedestrians and cyclists a safe and appropriate pathway connection to Oleta River State Park.

#### Description

Eastbound and Westbound 163rd Street currently have sidewalks which, though narrow, may be and are currently utilized for bicycle transit. However because the space is very narrow it cannot easily accommodate both pedestrian and bicycle traffic. At the same time, high speeds on the roadway create safety issues for bicyclists which cannot be easily resolved. Should the roadway and bridge be redeveloped in the future, this walkable path should be widened into a shared use path separated from traffic. Connections to Oleta River State Park, (less than a half mile from the City) should be considered, but would require a crossing just beyond the City's limit. This project would require coordination with North Miami Beach. An additional alternative would be to build a new bicycle only bridge over the Oleta River, extending from the currently proposed path to Bella Vista Bay Park, and routing the path past the bridge into the space between eastbound and westbound 163rd Street.



## Pathway Between 183rd St. and 185th St.

**BICYCLE: : BIKE 6**

### **Purpose**

Create new pedestrian/bicycling route between 183rd Street and 185th Street

### **Need**

The Publix site serves as a barrier between the two portions of the community. Creating a pathway between the two areas will connect North Bay Road north of 185th Street with North Bay Road south of 183rd Street, and provide residents living in Golden Shores a more direct route to Pelican Community Park and the K-8 School.

### **Description**

Acquire right-of-way and construct shared use path either on the water or as a pedestrian/bicycle path continuation to/from Atlantic Boulevard. To maximize the path's potential, landscaping, signage, and safety improvements need to be constructed. New crosswalks at north and south ends of the route would need to be striped.



## Bike Route Signalization

**BICYCLE: : BIKE 8**

### **Purpose**

Install bicycle signalization at signalized intersection to enhance bicyclist safety within Sunny Isles Beach.

### **Need**

Based on a needs assessment along high traffic bicycle routes, a separate signal phase would be proposed to give clear direction to drivers and to bicyclists.

### **Description**

Install separate signal phases for bicycles along Collins Avenue and as appropriate at signalized intersections within the City of Sunny Isles Beach.

## Bus Stop Amenities Improvements

### TRANSIT: TRANSIT 1

#### Purpose

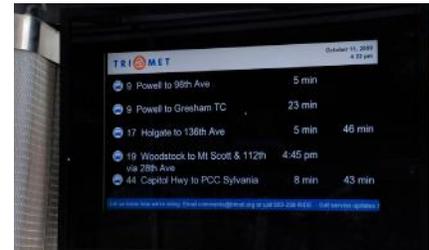
Make transit more attractive to potential riders by providing amenities. Where necessary, install sidewalks to bus stops and land pads to ensure ADA compliance.

#### Need

Transit ridership has been increasing, and automobile use has been decreasing for nearly a decade particularly among the young. Transit must increase its attractiveness to take advantage of this momentum and not allow transit ridership to be recaptured by the automobile. Transit is no longer able to compete by serving captive riders or the purely transit dependent. The future of transit will be for the traveler who has a choice. Bus-stop amenities are a critical component. Shelter, shade from the sun, protection from the rain, safety, seating, trash receptacles, and real-time travel information are all critical components of the system. Some shuttle stops have shelters in poor condition which need to be repaired. Stops which average less than 1 person boarding per day should be eliminated. In addition, some Shuttle stops do not have sidewalks to and from the shelter.

#### Description

Determine the location, cost and feasibility of implementing these options at various transit stops in the City. These amenities will vary based on the existing amenities at the stop, with changes in the future occurring based on stop activity, with higher frequencies of usage. In addition, bicycle racks and bicycle rental station should be installed at major hubs. Prioritization of improvements within this list should be based on existing and future ridership. The City can also explore installing real-time information signs at all bus stops similar to a bus transit information system like NextBus. This could be linked to the current real-time system utilized by the City's website and app. Initial locations for the implementation of real-time bus information display systems should be at transfer hub locations.



## Sunny Isles Beach Shuttle Comprehensive Operations Analysis

### TRANSIT: TRANSIT 2

#### Purpose

Ensure the efficiency and effectiveness of the Sunny Isles Beach Shuttle, and provide increased mobility by increasing the frequency of buses on the routes.

#### Need

It is customary for transit systems to re-evaluate their routes on a periodic basis. This helps provide responsiveness to shifts in ridership and rider characteristics, and provides a picture of whether current capital investments are necessary. Through the public involvement portion of this study it was identified that people desire more frequent shuttle service. Typically the increase of frequency would increase ridership, further shifting the mode split towards transit, and taking automobile trips off the roads.

#### Description

Using the data available and possibly collecting new data on headways, ridership, boardings and alightings by route and stop, as well as public involvement through ridership surveys or workshops, performance of the current routes and stops can be evaluated. Recommendations can then be made for changes, with costs provided for the needed capital, capital needs, operations, and maintenance changes. Proposed recommendations should note the transit access areas, based on a quarter mile walking distance from a stop with shuttle service with at least 30 minutes or less headways, and should streamline the operations of the trolley in coordination with the MDT bus lines. Connectivity to Aventura, North Miami Beach, and Tri-Rail Stations (Golden Glades, Coastal Link) should be evaluated as part of the analysis.



## Priority Signalization for Emergency Vehicles and Transit

### TRANSIT: TRANSIT 3

#### Purpose

Provide priority signalization to emergency vehicles and transit.

#### Need

Improve response time for emergency services and increase transit service reliability during congestion on Collins Avenue.

#### Description

Emergency vehicles are equipped with a transponder that emit an emergency signal received at a traffic light extending the green light required to clear any queue or congestion in front of the emergency vehicle. Specific receivers will need to be installed in all intersections; with each transceiver costing \$2,000. Intersections can be improved for about \$13,500 each. Transponders on vehicles increases costs per vehicle.

For Transit, using technology to initiate a message, a bus approaching a traffic signal within 10 or 15 seconds of a normal phase change from red to green will initiate that particular phase change earlier. This permits the bus to pass through the intersection without having to wait for the normal change in signal. Similarly, the same system previously noted could be programmed to extend the green time, opting to delay the red phase for 10 or 15 seconds so that the bus can pass through the intersection without stopping. Buses running late could receive an advanced green or delayed red while those running ahead of schedule or on time would not. Traffic signal priority systems typically result, depending on field conditions, in a four to almost ten percent reduction in travel time.



## Transit Ridership Incentive Programs

### TRANSIT: TRANSIT 4

#### Purpose

Incentivizing fare reductions either in parking costs or through lower boarding fares will allow for better cost advantages versus private automobile usage. Increase outreach regarding MDT's available fare discount programs for corporations, students, and the elderly.

#### Need

Transit must be comparable to or better than the automobile in travel time and cost to become a viable alternative for choice riders. This would manage travel costs.

#### Description

Various means exist to present transit as a more financially viable method of transportation. People typically tend to treat parking prices in a disproportionate manner, as an extra surcharge to the transit fare. Providing free parking provides an incentive, especially if the driver would have had to pay for parking at their destination.

Additionally, many transit fare programs exist through MDT, but are not necessarily known by people who qualify or by businesses. Additional outreach may aid enrollment in these programs. As a tourist destination, the City may also elect to create its own incentive program through partnerships with local businesses, either through the creation of promotional rewards programs for riding public transit or through recognition of businesses within Sunny Isles Beach which makes conscious, green efforts to reduce vehicular use.

As part of the program, educating the public on available trip planning tools is essential, and intergovernmental cooperation is necessary to ensure increased knowledge of trip planning between the multiple transit services around Sunny Isles Beach (Aventura, North Miami Beach, North Miami, Tri-Rail, MDT, Broward County).

## Water Taxi Stop and Service Feasibility Study

### TRANSIT: TRANSIT 5

#### Purpose

Determine cost of developing Water Taxi locations, specific routes, and servicing options (private vendor, city operated, etc.).

#### Need

Local considerations would be the primary impetus for water taxi routes, allowing for residents and visitors to not have to drive to reach places internal to the City. Water taxis can provide an alternative route and mode of transportation both locally and regionally.

#### Description

Considerations for the water taxi include the placement of docking locations, as well as environmental considerations for manatees, which will affect the viability of a water taxi system. Past studies have reviewed the potential for water transit within Sunny Isles Beach; however, the system would require a subsidy to keep fares reasonable. Vessels cost approximately \$250,000 each, and the city may require 1-3, depending on routes and headways. Annual costs approximate \$250,000 per vessel. Due to the nature of estimated costs, which are split between variable costs based on shared and non-shared staff between the route, an operations and implementation study should be conducted to find the operational break-even points. Implementation of a pilot phase will cost approximately \$600,000 the first year, inclusive of contingency and planning costs.



## Transit Trip Planning Application Pilot Program

### TRANSIT: TRANSIT 6

#### Purpose

Make transit more attractive to potential riders by providing a transit trip planning and time application at key locations in the City. While most apps require a mobile device once could be designed with other technologies so as to increase public access.

#### Need

Improvements to transit amenities regarding trip planning will increase system accessibility and could potentially raise ridership.

#### Description

The City will install interactive signs at specific stations, which would include an updatable electronic sign linked to the current real-time system utilized by the City's website and app. In addition, the app will be developed in such a way that riders can select their destination on the screen. The screen will list for them the buses they should take, where to transfer, the bus times, and other pertinent information. This app can be developed with various system routes, provided that GTFS data, such as those provided publically by Miami-Dade and Broward counties are utilized. The same information system can be accessed online. Initial locations for the implementation of real-time bus information display systems should be at transfer and other key locations. The program should start with a pilot program with touch screen displays at City Hall, Gilbert Samson Oceanfront Park, and Pier Park, with potential expansions at the shopping areas.

Real-time systems cost approximately \$50,000 to \$60,000 for hardware, with \$14,000 in annual costs. LED displays at stops cost approximately \$4,000 per stop, with an additional cost for touch screen items.



## (Ongoing) Bus Tracking App

### TRANSIT: TRANSIT 7

#### Purpose

Currently being developed by the City, this project intends to make transit more attractive to potential riders by providing a transit application at key locations in the City.

#### Need

Enhancements to transit ridership experience will allow for better service and viability of transit as a form of transportation.

#### Description

Develop bus tracking application. This application will require the development of a mobile app, and installation of tracking software on the Shuttles.

## Proposed Bus Pullout (School)

### TRANSIT: TRANSIT 8

#### Purpose

The City is currently in the process of constructing a new middle school north of City Hall. As part of this project, a bus pullout (labeled Proposed Bus Lane), will be constructed.

#### Need

A bus pullout will provide a safe location for boarding and alighting from the school buses without blocking traffic. At this section of the road, heavier than normal congestion is expected in the morning, and the road is a 2-lane road. Blockage resulting from school buses is non-desirable.

#### Description

Design and implement bus pullout by new school extension.



## Adaptive Signalization Technology

### ROADWAY: ROAD 1

#### Purpose

Provide adequate infrastructure, such as traffic signal detectors, to optimize timing and phasing based on current traffic flow.

#### Need

Over time, congestion will continue to increase in Sunny Isles Beach. As traffic increases, with no right-of-way available for expansion, signals must be continuously updated to ensure optimal traffic flow.

#### Description

It is common in Miami-Dade County to spot traffic detectors at intersections which can extend the green time for a specific movement, or perhaps skip a phase when no vehicle is waiting to move in a specific direction. There are several alternatives available.



## Parking Consolidation Study

### ROADWAY: ROAD 2

#### Purpose

Evaluate existing parking needs within Sunny Isles Beach's Town Center and adjacent areas and provide for concentrated parking, thereby freeing up ground parking and vehicular right-of-way for other land uses, including pedestrian and bicycle pathways within the City.

#### Need

Sunny Isles Beach is a small community approaching build-out; but large parking lots at commercial areas take up necessary land. In addition, as in the case of the Town Center, contribute to a large block structure which should be divided to allow for bicycle and pedestrian pathways and other uses.

#### Description

Conduct a parking study and plan to potentially consolidate parking into structures at locations such as 163rd St. and Collins Avenue. These structures should be close to either transit locations, on the City's edge, or both. Concentrated parking can also serve as a local park and ride location. Where parking is removed, the land is freed-up and should be used for open space and for alternative transit routes.



## Collins Ave/SR-826 EB Intersection Improvements ROADWAY: ROAD 3

### Purpose

Reduce congestion at the intersection that is due to failing intersection LOS.

### Need

Intersection failing LOS on Eastbound approach.

### Description

Add second separate Eastbound right turn lane to create a triple right turn lane. This will require an intersection analysis and redesign to determine if right-of-way acquisition is necessary or if a single conversion of the third lane from a left turn lane to a left and right turn lane will suffice. Also, consideration must be given to the left turn which currently operates at an LOS E.



163rd Street, eastbound

## Signal Timing Intersection Improvements and Corridor Signal Progression Analysis ROADWAY: ROAD 4

### Purpose

Reduce congestion at each intersection that is due to failing intersection LOS.

### Need

The following intersections have failing intersection LOS:

- ▶ Collins Ave/170th Street (Eastbound approach)
- ▶ Collins Ave/172nd Street (Eastbound approach)
- ▶ Collins Ave/174th Street (Eastbound approach)
- ▶ Collins Ave/178th Street (Eastbound approach)
- ▶ Collins Ave/183rd Street (Eastbound approach)

### Description

Each of these intersections requires a reconfiguration of signal timing, which will result in the intersection raising above its current failing level of service on their respective eastbound approaches. In addition, the re-signalization of these intersections, due to their proximity to each other, should be part of a greater corridor signal progression analysis to ensure that the changes at each intersection will appropriately sync to ensure improved traffic flow.



Collins Avenue and 183rd Street, east side



## Collins Ave / 186th Street Intersection Improvements - Signal Warrant Analysis

**ROADWAY: ROAD 5**

### Purpose

Conduct a signal warrant analysis at the intersection of Collins Avenue and 186th Street and implement results as necessary. Reduce congestion at intersection due to failing intersection LOS.

### Need

Intersection failing LOS on both Eastbound and Westbound approaches.

### Description

A signal warrant analysis should be conducted to determine if a traffic signal is warranted for the intersection. If warranted, the City can bid out the construction and design.



## Atlantic Blvd/178th St Intersection Improvements-Signal Warrant Analysis, SB Left Turn Addition

**ROADWAY: ROAD 6**

### Purpose

Conduct a signal warrant analysis at Atlantic Boulevard and 178th Street and implement results as necessary. Reduce congestion at intersection due to failing intersection LOS by adding a SB Left turn lane.

### Need

Intersection failing LOS on Southbound approach.

### Description

A signal warrant analysis should be conducted to determine if a traffic signal is warranted for the intersection. If warranted, the City can bid out the construction and design. In addition, a SB left turn lane should be added if warranted, and should be considered as part of the intersection re-design.



## Atlantic Blvd / 183rd Street Intersection Improvements

### ROADWAY: ROAD 7

#### Purpose

Conduct a signal warrant analysis at the intersection of Atlantic Boulevard and 183rd Street and implement results as necessary. Reduce congestion at intersection due to failing intersection LOS.

#### Need

Intersection failing LOS on both Northbound approach.

#### Description

A signal warrant analysis should be conducted to determine if a traffic signal is warranted for the intersection. If warranted, the City can bid out the construction and design.



Atlantic Boulevard and 183rd Street

## Roadway Repavement, Collins Avenue (FDOT)

### ROADWAY: ROAD 8

#### Purpose

Repaving Collins Avenue

#### Need

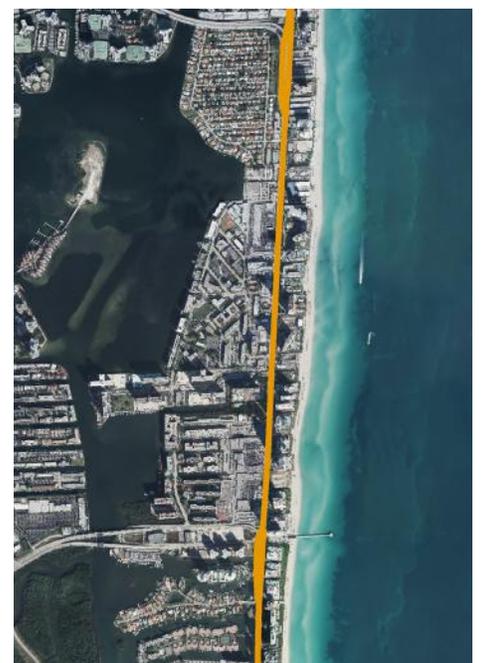
Collins Avenue is in need of repair and other improvements.

#### Description

Already funded by FDOT, this is a \$6.5 million project which when implemented will repave Collins Avenue for its full length within Sunny Isles Beach. Subsequent to this repaving, a 5 year moratorium will be imposed on improvements to Collins Avenue.



Collins Avenue and Atlantic



## 174th Street Improvements

### ROADWAY: ROAD 9

#### Purpose

Reconstruction of road due to drainage problem – The project currently being implemented by the City will have a new median with improved landscaping and sidewalks.

#### Need

Drainage issues need to be addressed.

#### Description

Already in progress by City, this project will address drainage problems and concurrently address sidewalk width expansion, median and landscaping improvements, and other necessary improvements.



## Adopt Pedestrian/Bicycling Level of Service Standards

### POLICY: POLICY 1

#### Purpose

Commit to increasing mobility by increasing pedestrianism, bicycling, and transit by amending the Comprehensive Plan.

#### Need

The Comprehensive Plan is one of the primary policy documents of the City. Goals, Objectives and Policies within the document ensures that projects will be prioritized, and adopting a bicycle/pedestrian level of service will enable better tracking of objectives and measure of success in implementing multimodal options.

#### Description

Make a text amendment to the Comprehensive Plan's Transportation Element by developing additional objectives with multiple policies. These would have to be approved by the City Commission. Specific amendments would include:

- ▶ Pedestrian Level of Service
- ▶ Bicycle Level of Service

The adopted standard for each should be at a minimum LOS B.



## Ensure Intergovernmental Cooperation

### POLICY: POLICY 2

#### Purpose

Commit to increasing mobility by increasing pedestrianism, bicycling, and transit through active cooperation with other governing entities in the region.

#### Need

Intergovernmental coordination is a vital aspect of Sunny Isle Beach’s transportation mobility development due to jurisdictional issues on Collins Avenue.

#### Description

Ensure intergovernmental coordination with Aventura, North Miami Beach, Bal Harbour, Surfside, Miami Beach, Golden Beach, Miami-Dade Transit, Broward Transit, and FDOT. In particular, effective coverage of busing in Sunny Isles Beach is contingent on the service areas of both the local circulator and connections to Broward Transit, Miami-Dade Transit, Aventura and North Miami Beach Shuttles. Intergovernmental coordination is necessary to ensure efficient use of funding which is contingent upon minimizing overlap while maximizing transit service. Further, coordination with FDOT is needed to preserve the parking facilities rented from FDOT. Cooperation with the coastal communities along A1A/Collins Avenue are all necessary to further regional bicycle route development. This could be specifically included in the Comprehensive Plan as an objective toward more general policy statements. Furthermore, continued coordination with the County is necessary to address signalization issues, as intersection signalization is controlled by Miami-Dade County.

Lastly, pending projects on Collins Avenue will benefit from cost savings if these improvements are bundled into a corridor re-design project and incorporated into FDOT’s repaving of Collins Avenue.

## Complete Street Policy and Guidelines/Design Manual

### POLICY: POLICY 3

#### Purpose

Create and adopt specific and consistent guidelines for streets to accommodate all modes of travel.

#### Need

Design Guidelines will allow for guiding future development.

#### Description

Complete Streets represent an incremental approach to enhancing the safety of the street network. Over time, it will have a great impact on Sunny Isles Beach. Review the existing Streetscape Master Plan and convert the document via updates to develop a handbook of Design Guidelines for Complete Streets. The manual would provide ways measurements for sidewalks, bike lanes, street furniture, and landscaping and transit infrastructure to be applied to Sunny Isles Beach’s streets. As part of this update, attention should be given to ensure policies are adopted to encourage Complete Streets in the Comprehensive Plan and in the Land Development Regulations. Future projects can utilize these concepts as a method of integrating this critical infrastructure.



## Mobility Fee Feasibility Study

### POLICY: POLICY 4

#### Purpose

Since the State removed Concurrency as a requirement, the City can utilize alternative means to assess development impact fees as a way to finance alternative mode transportation.

#### Need

Alternative mode projects are necessary and must be funded to be implemented.

#### Description

Research and develop alternative programs to assess development impact fees relating to person trips. Taking into account existing projects, a fee can be calculated based on project future development versus the cost of implementation of plan projects. Subsequent to the study, enact mobility fees to finance transportation master plan alternative mode projects.



## Transportation Demand Management

### POLICY: POLICY 5

#### Purpose

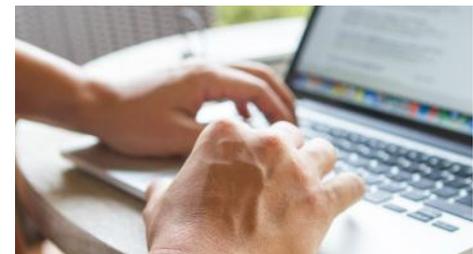
Encourage travelers to use the transportation network differently by modifying the times they need to travel to and from work.

#### Need

The roadway network is highly congested, primarily at peak hours. What is shown is that congestion levels are not as severe outside of peak hours. In more mature communities, congestion is seen well outside of the peaks. In the case of Sunny Isles Beach, if some people have the flexibility to travel outside of the peak periods it will relieve congestion during those times, reducing travel time and minimizing delays. This is particularly important as Collins Avenue will begin to reach a failing LOS by 2019.

#### Description

Work with South Florida Commuter Services and City Staff to develop techniques, incentives and programs to encourage transportation demand strategies, including telecommuting, flexible work hours, flexible Fridays, etc.



## Incentive Programs for Transit, Carpooling

### POLICY: POLICY 6

#### Purpose

Accelerate a mode shift by incentivizing the use of carpooling or alternative modes of transportation.

#### Need

Roadway capacity is almost completely consumed by automobiles. It is recognized that the right-of-way will need to be used in a different way if any meaningful impacts to congestion or travel time will be made. The most logical step is to first encourage people to ride together in higher capacity vehicles, primarily carpools. At the same time, as alternative mode and transit linkages are made, encourage people to use those instead of the automobile.

#### Description

Work with South Florida Commuter Services (SFCS) to determine appropriate programs to be put in place by the City and explore working with the private sector to encourage these alternatives.



## Maintain Local Agency Program Certification

### POLICY: POLICY 7

#### Purpose

Maintain FDOT Local Agency certification to assist in funding processes for transportation projects.

#### Need

Local Agency Program (LAP) certification is necessary for many funding grants from FDOT, and must be renewed every 3 years. Recently, FDOT is requiring all municipalities participating in the program to update its Title IV programs and re-certify.

#### Description

LAP allows FDOT to forge contractual relationships with local governmental agencies that have the authority to plan, develop, design, acquire right-of-way, and construct transportation facilities. Local agencies must be LAP-certified before entering into a LAP Agreement. This allows for reimbursement from Federal funds administered by the Federal Highway Administration. The LAP is administered in each District by a District LAP Administrator designated by the District Secretary. The level of assistance provided is based on the nature of each project and the demonstrated capabilities of the Local Agency. In addition, the District Administrator annually selects certain projects for a Process Review.



## Parks and Green Corridors (Connect the Parks)–Recreational Walking Programming Policies

### POLICY: POLICY 8

#### Purpose

Develop a Green Corridor Master Plan connecting each park along walkable corridors prioritizing the development of green space and shade along these pedestrian corridors. Ultimately, Sunny Isles Beach should support connecting all County greenways and connect to parks outside the City, such as Haulover Park and Oleta River State Park, both of which border the City.

#### Need

Recreational walking paths were noted by public to be inadequate. Additionally, shade along pedestrian corridors are lacking within Sunny Isles Beach. A connected, system which enhances bicycling/pedestrian mobility locally and allows for the City to tap into future regional networks is needed.

#### Description

The County’s current greenway system, allows access for bicyclists and pedestrians. Connection to county greenways allows for alternative transit as well as recreation activities for residents.



Golden Shores Park



Gwen Margolis Park

## Senior Services Delivery

### POLICY: POLICY 9

#### Purpose

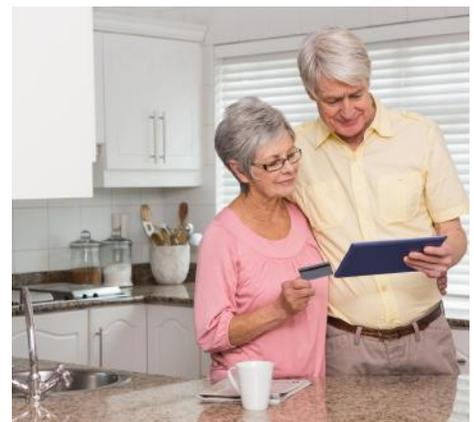
Encourage service to deliver groceries to residents, thus reducing number of trips with destination to supermarkets and shopping plazas. Alternatively, this can be used to enhance transit usage for those who still wish to have the shopping experience.

#### Need

To reduce internal congestion within the city, vehicular trips need to be reduced. One identified reason through interviews with stakeholders was the inconvenience of using transit or walking/bicycling with groceries. This was a particular concern for the elderly.

#### Description

Help local buildings organize services or adjust as part of a senior citizens service program. This could be a sign-up and delivery co-op or other program which will allow some of the citizens to not drive short distances within the City.



# Implementation

As a consequence of numerous Town Hall Meetings, input from the City's Fact Finding Committee and City Commission, the Commission assigned Staff with the task of prioritizing the most essential projects the City envisions in the near-, medium- and long-term planning periods. Implementation of the various projects is a multiyear effort which is dependent upon available funds.

Priority I, II and III projects represent short, mid, and long term projects, respectively.

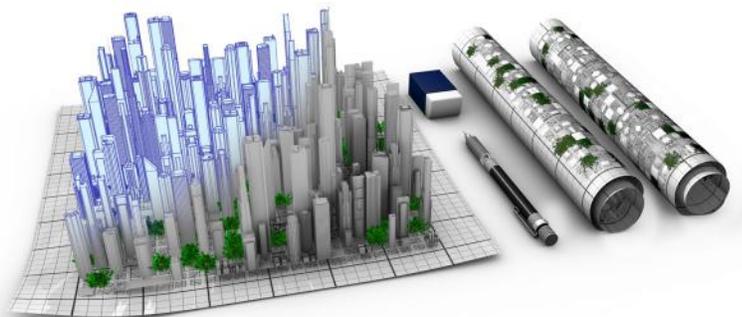
In determining the order in which the projects should be developed, consideration of need, as well as local preference were considered along with various constraints, including project cost and funding availability. The regional Long Range Transportation Plan and the 5 year Transportation Improvement Plan were reviewed to determine any overlaps in projects, and to determine if cost savings could be effected through the combination of projects.

Of note in consideration of local constraints in transportation development is the impending five year moratorium by the Florida Department of Transportation, on any changes to Collins Avenue after 2017. This will result in a need to address any necessary changes to Collins Avenue immediately.

This need to implement improvements first on Collins Avenue naturally constrains available funding for other projects. As a result, projects which would normally be a higher priority than currently assigned were instead recommended for later implementation. However, the City should determine changes to the priority schedule as needs and opportunities in funding arise.

For purposes of this prioritization, potential grant funding for which the City does not have an application or an offer of financing was not weighed, as it is not a guaranteed source of funding. However, should the City receive monies in the future, the timetable for project implementation seen in this section should be adjusted accordingly. Potential funding sources may come from federal, state, county, and local sources and are detailed in the Funding section.

The priorities of the projects as recommended should be considered as a recommendation; as circumstances and opportunities arise in funding and construction costs, the City may wish to reprioritize based on its evolving understanding of local needs. Ongoing or recently completed projects have not been included in the summary of priorities but are listed in the List of Projects section of the Transportation Master Plan. The following lists the recommended projects resulting from this study.



## List of Projects

Project Number	Name
<b>PED 1</b>	Infill Pedestrian Network
<b>PED 2</b>	Ped. Park Bridge at Collins and 174th
<b>PED 3</b>	Pedestrian and Bicycle Bridge at N. Bay Road and 174th St.
<b>PED 4</b>	Pedestrian Bridge at Collins Ave. and Heritage Park
<b>PED 5</b>	Pedestrian Improvements at Collins Ave. and 186th St.
<b>PED 6</b>	Pedestrian Safety Islands - Collins Avenue
<b>PED 7</b>	Mid-Block Crosswalks, Northbound Collins at 189th Ter.
<b>PED 8</b>	Parking Lot Crosswalks at 191st Ter.
<b>PED 9</b>	Pathway between Golden Shores Community Park and Heritage Park
<b>PED 10</b>	ADA Improvements
<b>PED 11</b>	Sidewalk Repair
<b>PED 12</b>	Streetscape Improvements
<b>PED 13</b>	Town Center Alleyway and Pedestrian Path Program
<b>PED 14</b>	Crosswalk Improvement at Poinciana and Collins
<b>PED 15</b>	Pedestrian Park Bridges at NE 163rd Street and Collins Ave (vicinity)
<b>PED 16/BIKE 7</b>	Bike/Ped Pathway on Beach
<b>PED 17</b>	Pedestrian Bridge at 180th St. and Collins Ave.
<b>PED 18</b>	Crosswalk, NE 181st Dr. and Atlantic Blvd.
<b>PED 19</b>	Pedestrian and Bicyclist Data Collection
<b>PED 20</b>	Signalized Pedestrian Crossing - North Bay road north of 170th St. at Bellagio Curve
<b>BIKE 1</b>	Shared-Use Path
<b>BIKE 2</b>	Bicycling Safety and Education Program
<b>BIKE 3</b>	Bicycle Racks Installation
<b>BIKE 4</b>	Bicycle Rental Program
<b>BIKE 5</b>	Bike/Ped Pathway to Oleta River State Park Feasibility Study
<b>BIKE 6</b>	Pathway bBetween 183rd St. and 185th St.
<b>BIKE 8</b>	Bike Route Signalization
<b>TRANSIT 1</b>	Bus Stop Amenities Improvements
<b>TRANSIT 2</b>	Sunny Isles Beach Shuttle Comprehensive Operations Analysis
<b>TRANSIT 3</b>	Priority Signalization for Emergency Vehicles and Transit
<b>TRANSIT 4</b>	Transit Ridership Incentive Programs
<b>TRANSIT 5</b>	Water Taxi Stop and Service Feasibility Study
<b>TRANSIT 6</b>	Transit Trip Planning App Pilot Program
<b>TRANSIT 7</b>	(Ongoing) Bus Tracking App
<b>TRANSIT 8</b>	Proposed Bus Pullout (School)
<b>ROAD 1</b>	Adapative Signal Technology
<b>ROAD 2</b>	Parking Consolidation Study
<b>ROAD 3</b>	Collins Ave./ SR-826 EB Intersection Improvements
<b>ROAD 4</b>	Signal Timeing Intersection Improvements and Corridor Signal Progression Analysis
<b>ROAD 5</b>	Collins Ave/186th Street Intersection Improvements - Signal Warrant Analysis
<b>ROAD 6</b>	Atlantic Blvd/178th St. Intersection improvements - Signal Warrant Analysis, SB Left Turn Addition
<b>ROAD 7</b>	Atlantic Blvd/183rd Street Intersection Improvements
<b>ROAD 8</b>	Roadway Repavement, Collins Avenue (FDOT)
<b>ROAD 9</b>	174th Street Improvements
<b>POLICY 1</b>	Adopt Pedestrian/Bicycling Level of Service Standards
<b>POLICY 2</b>	Ensure Intergovernmental Cooperation
<b>POLICY 3</b>	Complete Streets Policy and Guidelines/Design manual
<b>POLICY 4</b>	Mobility Fee Feasibility Study
<b>POLICY 5</b>	Transportation Demand Management
<b>POLICY 6</b>	Incentive Programs for Transit, Carpooling
<b>POLICY 7</b>	Maintain Local Agency Program Certification
<b>POLICY 8</b>	Parks and Green Corridors (Connect the Parks) - Recreational Walking Programming Policies
<b>POLICY 9</b>	Senior Services Delivery

## Funding

Funding for transportation projects comes from three primary sources: Local, State and Federal.

Each year funding is more difficult to come by. Cities and counties, face the dilemma of rising costs of transportation projects, increasing traffic volumes and limitations on their ability to generate revenue. The cost of construction and materials increased by 44 percent between 2000 and 2013, more than the 35 percent rise in the overall rate of inflation. Fast changing economic environments put pressure on local governments to keep up with growth and congestion. At the same time, most states limit counties' ability to raise revenue. In Florida in recent years, the State Legislature has capped property tax, lowered property taxes and has attempted to take away the ability for local governments to tax.

Faced with rapidly increasing construction costs and traffic volumes local governments are finding new funding and financing solutions for transportation. Often, these solutions involve partnerships with other jurisdictions, the private sector and most of all county residents. Unfortunately Florida is a donor state, giving more into the federal system than it gets back. Most monies for large projects are collected locally, provided to the Federal Government, and then reallocated to the states to be administered to agencies like FDOT. The next several pages contain a description of relevant funding opportunities at all levels.

### Local Funding

Local funding is money that is generated from within a city or county. These sources generally rely on property taxes or other funds. Many communities have concurrency fees or impact fees, which can be applied to local infrastructure projects. In high growth communities it is advised that they consider these, in the form of mobility fees, which require that developments fund their fair share of the infrastructure needed to support their development.

#### Miami-Dade Municipal Grant Program

The Municipal Grant Program (MGP) was developed to allow municipalities within Miami-Dade County submit transportation planning proposals to the Metropolitan Planning Organization (MPO) to receive funding on a competitive basis. Participation in the program requires a minimum 20% funding commitment from the municipality.

Selection criteria include:

- ▶ Level of Service (LOS) benefits of the proposed project
- ▶ Impact of mobility/traffic circulation gains
- ▶ Intermodal nature of proposal
- ▶ Support of the approved countywide activities of the Unified Planning Work Program
- ▶ Consistency with the applicant's local comprehensive plans

#### Miami-Dade County's People's Transportation Plan, 1/2 Penny Sales Tax

Miami Dade County's People Transportation Plan (PTP), half-penny transportation surtax was approved by Miami-Dade County voters in November 2002 and included \$476 million for public works projects. The PTP funds to be provided were for major highway and road improvements totaling \$309 million, and for neighborhood improvements totaling \$167 million. Twenty percent of the total funding is provided to municipalities, based on their population. Each city must spend at least 20% of their funds on transit projects. Importantly, this source of funds can be used for a local match to federal funding. An advantage many local areas do not have.

## Local Option Gas Taxes

County governments are authorized to levy up to 12 cents of local option fuel taxes in three separate levies on fuel sold within the county. The funds are used for transportation expenditures.

- ▶ The ninth-cent fuel tax is a tax of 1 cent on every net gallon of motor and diesel fuel sold within a county.
- ▶ A tax of 1 to 6 cents on every net gallon of motor and diesel fuel sold within a county.
- ▶ A tax of 1 to 5 cents on every net gallon of motor fuel sold within a county. Diesel fuel is not subject to this tax. The funds may also be used to meet the requirements of the capital improvements element of an adopted local government comprehensive plan.

## State Funding

The State of Florida has several funding sources that primarily come from FDOT.

The Governor's newly proposed FY 2016/2017 transportation budget makes the following investments:

- ▶ \$3.3 billion for construction of highway projects to keep Florida's transportation infrastructure among the best in the country.
- ▶ \$153.9 million in seaport infrastructure improvements to keep Florida first in the world for ocean cruise passengers and a major U.S. cargo gateway.
- ▶ \$237.6 million for aviation improvements to keep Florida first in airport infrastructure investments.
- ▶ \$731.9 million for scheduled repair of 48 bridges and replacement of 21 bridges to keep Florida's bridges among the best structures in the country.
- ▶ \$963.4 million for maintenance and operation to keep Florida's infrastructure among the best maintained in the country.
- ▶ \$574 million for public transit development grants to keep Florida's growth in transit ridership over the last five years among the best in the country.
- ▶ \$159 million for safety initiatives to continue to improve the safety of families and visitors on our roads.
- ▶ \$46.6 million for bike and pedestrian trails to keep Florida's trail development among the best in the country.

## Economic Development Transportation Fund

The Economic Development Transportation Fund, commonly referred to as the "Road Fund," is an incentive tool designed to alleviate transportation problems that adversely impact a specific company's location or expansion decision. The award amount is based on the number of new and retained jobs and the eligible transportation project costs, up to \$3 million. The award is made to the local government on behalf of a specific business for public transportation improvements.

## The Transportation Regional Incentive Program (TRIP)

The TRIP fund was created as part of major Growth Management legislation enacted during the 2005 Legislative Session (SB 360). The purpose of the program is to encourage regional planning by providing state matching funds for improvements to regionally significant transportation facilities identified and prioritized by regional partners. Eligible partners include single MPOs or groups on contiguous MPOs. Cities, by extension, can benefit these funds if they work with the MPO to have their regionally significant facilities included. These partners must form a regional transportation area, pursuant to an interlocal agreement, and develop a regional transportation plan that identifies and prioritizes regionally significant facilities. To qualify for TRIP funding, partners must sign an interlocal agreement that:

- ▶ Includes development of the regional transportation plan.
- ▶ Delineates the boundaries of the regional transportation area.
- ▶ Provides the duration of the agreement and how it may be changed.
- ▶ Describes the planning process, and defines a dispute resolution process.

TRIP funds are to be used to match local or regional funds up to 50% of the total project costs for public transportation projects. In-kind matches such as right of way donations and private funds made available to the regional partners are also allowed. Federal funds attributable to urbanized areas over 200,000 in population may also be used for the local/regional match.

## FDOT Programs

The Florida Department of Transportation Safety Office (FDOT) funds subgrants that address traffic safety priority areas including:

- ▶ Aging Road Users
- ▶ Community Traffic Safety
- ▶ Impaired Driving
- ▶ Motorcycle Safety
- ▶ Occupant Protection and Child Passenger Safety
- ▶ Pedestrian and Bicycle Safety
- ▶ Police Traffic Services
- ▶ Speed and Aggressive Driving
- ▶ Teen Driver Safety
- ▶ Traffic Records
- ▶ Traffic Record Coordinating Committee (TRCC)

Subgrants may be awarded for assisting in addressing traffic safety deficiencies, expansion of an ongoing activity, or development of a new program.

Grants are awarded to state and local safety-related agencies as "seed" money to assist in the development and implementation of programs that address traffic safety deficiencies or expand ongoing safety programs activities in safety priority program areas. Funding for these grants are apportioned to states annually from the National Highway Traffic Safety Administration (NHTSA) according to a formula based on population and road mileage. Funding may be available for projects in other program areas if there is documented evidence of an identified problem.

Through public rule making processes conducted in 1982, 1988, 1995 and 1998, it has been determined that certain highway safety program areas have proven to be more effective than others in reducing traffic crashes, injuries, and fatalities. These programs, designated as National Priority Program Areas are: Impaired Driving, Police Traffic Services, Speed Control, Occupant Protection/Child Passenger Safety, Pedestrian and Bicycle Safety, Motorcycle Safety, Traffic Records, and Community Traffic Safety.

It is expected that programs funded through these grants will become self-sufficient and continue when grant funding terminates. To promote self-sufficiency, agencies are expected to provide a local funding match when personnel costs are included in second and third year projects. The local match is normally 25% of eligible costs for second year projects and 50% for third year projects.

Government agencies, political "subdivisions" of the state, local city and county government agencies, state colleges and state universities, school districts, fire departments, public emergency services providers, and certain qualified non-profit organizations are eligible to receive traffic safety grant funding.

These grants are awarded on a Federal fiscal year basis, and can be funded for a maximum of three consecutive years in a given priority area.

### **Federal Programs**

Federal programs make up the bulk of the funding for large projects. This is so because state governments contribute to the federal government, which in turn provides those funds back to the state. Florida is a donor state, which means it receives less than it contributes each year. There are competitive grant programs which often require local matches.

The US Department of Transportation helps communities fund transportation projects by issuing grants to eligible recipients for planning, vehicle purchases, facility construction, operations, and other purposes. The USDOT administers this financial assistance according to federal transportation authorization, MAP-21. There are a large number of programs and grants within the Department of Transportation that support projects that enhance or relate to livability.

### **Grants and Programs:**

- ▶ Surface Transportation Improvement
- ▶ Accessibility to Disadvantaged Populations
- ▶ Fixed Guideway Systems
- ▶ Rail
- ▶ Surface Transportation Planning
- ▶ Bike/Pedestrian
- ▶ Marine Transport
- ▶ Air Transport
- ▶ Research & Miscellaneous

## Surface Transportation Program (STP)

The Surface Transportation Program (STP) is one of the main sources of flexible funding available for transit or highway purposes. STP provides the greatest flexibility in the use of funds. These funds may be used as capital funding for public transportation capital improvements, car and vanpool projects, fringe and corridor parking facilities, bicycle and pedestrian facilities, and intercity or intracity bus terminals and bus facilities. As funding for planning, these funds can be used for surface transportation planning activities, wetland mitigation, transit research and development, and environmental analysis. Other eligible projects under STP include transit safety improvements and most transportation control measures. STP funds are distributed among various population and programmatic categories within a State. Some program funds are made available to metropolitan planning areas containing urbanized areas over 200,000 population; STP funds are for areas between 5,000 and 200,000 in population. The largest portion of STP funds may be used anywhere within the State to which they are apportioned. State and local governments are eligible for these funds.

## Bus and Bus Facilities Program

The Buses and Bus Related Equipment and Facilities program provides capital assistance for new and replacement buses, related equipment, and facilities. Eligible capital projects include the purchasing of buses for fleet and service expansion, bus maintenance and administrative facilities, transfer facilities, bus malls, transportation centers, intermodal terminals, park-and-ride stations, acquisition of replacement vehicles, bus rebuilds, bus preventive maintenance, passenger amenities such as passenger shelters and bus stop signs, accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers and shop and garage equipment. Funds are allocated on a discretionary basis. Eligible recipients include public bodies and agencies (transit authorities and other state and local public bodies and agencies thereof) including states, municipalities, other political subdivisions of states; public agencies and instrumentalities of one or more states; and certain public corporations, boards and commissions established under state law. Private companies engaged in public transportation and private non-profit organizations are eligible sub recipients of FTA grants.

## Transportation, Community, and System Preservation Program

The Transportation, Community, and System Preservation (TCSP) Program is a comprehensive initiative of research and grants to integrate transportation, community, and system preservation plans and practices that improve the efficiency of the transportation system of the United States; reduce environmental impacts of transportation; reduce the need for costly future public infrastructure investments; ensure efficient access to jobs, services, and centers of trade; and examine community development patterns and identify strategies to encourage private sector development patterns and investments that support these goals. States, metropolitan planning organizations, local governments, and tribal governments are eligible.

## Bicycle and Pedestrian Program

The Federal Highway Administration's Bicycle and Pedestrian Program promotes bicycle and pedestrian transportation use, safety, and accessibility. The Program is responsible for implementing Federal transportation legislation and policy related to bicycling and walking. This is not a funding program. Pedestrian and bicycle projects and programs are eligible for almost all Federal-aid highway funding categories. Each State has a Bicycle and Pedestrian Coordinator in its State Department of Transportation to promote and facilitate non-motorized transportation, including developing pedestrian and bicycle facilities and public educational, promotional, and safety programs. Pedestrian and bicycle projects and programs are eligible for almost



all Federal-aid highway funding categories. Applicants should consult program eligibility criteria available in their State. The State Bicycle and Pedestrian Coordinators can help with questions specific to each State.

### Transportation Enhancement Activities

Transportation Enhancement (TE) activities offer funding opportunities to expand transportation choices and enhance the transportation experience through 12 eligible TE activities related to surface transportation, including pedestrian and bicycle infrastructure and safety programs, scenic and historic highway programs, landscaping and scenic beautification, historic preservation, and environmental mitigation. TE projects must relate to surface transportation and must qualify under one or more of the 12 eligible categories. Each State develops its own procedures to solicit and select projects for funding. States may make funds available to Federal, Tribal, State, or local government agencies. A few States allow private nonprofit organizations to apply in partnership with a government agency.



### Transportation Alternative Program

The Transportation Alternative Program was developed as a result of the Moving Ahead for Progress in the 21st Century (MAP- 21). Eligible activities for funding include: 1. Construction, planning and design of on and off road facilities for bicyclists, pedestrians, and other forms of non-motorized transportation; 2. Construction, planning and design of infrastructure related projects/systems to provide safe routes for non-drivers; 3. Conversion and use of abandoned railroad corridors for non-motorized use; 4. Construction of turnouts, overlooks, and viewing areas under community improvement activities; 5. Inventory, control or removal of outdoor advertising; 6. Historic preservation and rehabilitation of historic transportation facilities; 7. Vegetation management practices in transportation rights of way; 8. Archeological activities related to impacts from transportation projects eligible under Title 23; and 9. Environmental mitigation activities.

As a cost reimbursement program, projects must go through multiple levels of review and approval to become eligible for reimbursement. Once the Federal Highway Administration (FHWA) has authorized a project, project costs may be incurred and ultimately reimbursed. Costs incurred prior to FHWA authorization are not eligible for reimbursement.

In addition, the Safe Routes to School (SRTS) Program and Recreational Trails Program (RTP) were both consolidated within the nine (9) activities under the TAP. The planning, designing, and constructing of boulevards and other roadways largely in the right of way of former Interstate System routes or other divided highways are also eligible as well. The City has applied for funding from the TAP program before, and several projects, such as a beach pathway and elevated pedestrian plazas, may be eligible under this grant.

## The Safe Routes to School Program

The purpose of the Safe Routes to School (SRTS) Program is to enable and encourage children, including those with disabilities, to walk and bicycle to school; to make walking and bicycling to school safe and more appealing; and to facilitate the planning, development and implementation of projects that will improve safety, and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. The SRTS Program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school. The Federal-aid Safe Routes to School program was created by Section 1404 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act. The SRTS Program was funded at \$612 million and provided Federal-aid highway funds to State highway agencies over five fiscal years (FY 2005 - 2009), in accordance with a formula specified in the legislation. Although states received these funds for FY 2005-2009, some states, such as Florida, did not utilize all of the money, which are now available. The national SRTS program is federally funded, but managed and administered by each State Department of Transportation (DOT). Funds are made available for infrastructure and non-infrastructure projects, and to administer Safe Routes to School programs that benefit elementary and middle school children in grades K-8. Each State is responsible for hiring a full-time Safe Routes to School Coordinator to implement a SRTS statewide program.

## Recreational Trails Program

The Recreational Trails Program, (RTP) provides funds to the States to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. Each State develops its own procedures to solicit and select projects for funding. States may make funds available to Federal, Tribal, State, or local government agencies. Some States allow private nonprofit organizations to apply directly.



# Summary of Recommendations

## Vision

The Sunny Isles Beach of the future is a community with high mobility and accessibility to neighborhood amenities for its residents, a place where movement of people, goods, both locally and regionally is provided by street, water, transit, pedestrian, and bicycle systems that are complete and fully integrated.

Sunny Isles Beach's transportation will be designed to support and enhance the City's Urban Village and Town Center vision and strategies by providing a transportation framework to maintain and enhance local quality of life in a vibrant, complete city.

### General Recommendations

1. Focus on providing multimodal options as an alternative to short vehicular trips
2. Reduce pressure on Collins Avenue by addressing internal circulation
3. Maintain and enhance current roadway infrastructure
4. Enhance land use and mobility by providing alternative corridors to connect neighborhoods
5. Enhance safety and aesthetics by incorporating design into transportation
6. Promote multimodal options as attractive, viable alternate modes of transportation
7. Focus on regional intergovernmental efforts to create viable regional transportation options including transit

### Roadway Recommendations

1. Address signal timing issues at failing intersections.
2. Evaluate parking needs and consolidate parking at key areas. Connect parking to Transit.
3. Encourage modal shifts and utilize transportation demand management to ease congestion on the roadways.
4. Complete North Bay Road connectivity from 163rd Street to 191st Terrace for emergency vehicles.

## Transit Recommendations

1. Ensure intergovernmental cooperation to continue to connect to Miami-Dade Transit, Broward Transit, Aventura Express, and North Miami Beach.
2. Conduct a Comprehensive Operational Analysis of Sunny Isles Beach Shuttle Routes, including considerations of transit connectivity to Tri-Rail and Tri-Rail Coastal Link lines.
3. Replace and upgrade facilities as necessary, keeping in mind Shade, Seating, Shelter, Safety, and Sidewalk access to each bus stop.
4. Encourage transit ridership by implementing transit technology such as real-time information apps, trip planning programs, signal priority, and other improvements to incentivize transit ridership.
5. Evaluate the feasibility of enacting a water route for internal circulation, and consider for regional access to downtown Miami and Broward County.

## Pedestrian Recommendations

1. Adopt Pedestrian Level of Service Standards
2. Complete pedestrian grid by filling in gaps through installation of sidewalks along all roadways, including completing pedestrian connectivity on North Bay Road from 163rd Street to Heritage Park, and other areas through the implementation of new pedestrian paths.
3. Ensure seating for pedestrians are located approximately every 0.1 mile.
4. Ensure appropriate shade for pedestrians on all walking paths.
5. Shorten walking distances through the implementation of appropriate crossings along Collins Avenue and the development of alleyways as public space to break up larger blocks, including in the Town Center area.
6. Enhance pedestrian safety on roadways through repair and maintenance of existing facilities and intersections through the implementation of pedestrian islands, pedestrian bridges, and elevated park plazas.
7. Enhance ADA accessibility through the installation of curb cuts, detection strips, audible crosswalk signals, ADA accessible beach paths, and removal of any sidewalk obstructions.
8. Link planning for the pedestrian network with development of the parks system by incorporating parks as pedestrian links.

## Bicycle Recommendations

1. Adopt Bicycling Level of Service Standards.
2. Implement Bicycle Network by beginning with development of bicycling facilities to ensure continuous connectivity, and access to major bicycle corridors:
  - a. North-South Routes – Collins Avenue, North Bay Road
  - b. East-West Routes – Lehman Causeway, 178th Street, 174th Street, 172nd Street, NE 163rd Street
3. Build Shared-use path along eastern side of Collins Avenue.
4. Ensure appropriate shade and parking for bicyclists.
5. Implement Bikeshare through negotiated extensions of Broward B-Cycle and Citibike systems.
6. Enhance bicyclist safety on roadways through repair and maintenance of existing facilities and at intersections through the implementation of pedestrian islands, pedestrian bridges, and elevated park plazas.
7. Link planning for the bicycling network with development of the parks system by incorporating bicycling route design through parks designated as pedestrian thoroughfare in the transportation network.

# Projects

As a consequence of numerous Town Hall Meetings, input from the City's Fact Finding Committee and City Commission, the Commission assigned Staff with the task of prioritizing the most essential projects the City envisions in the near-, medium- and long-term planning periods.

The priorities of the projects as noted below should be considered as a recommendation; as circumstances and opportunities arise in funding and construction costs, the City may wish to reprioritize based on its evolving understanding of local needs. Ongoing or recently completed projects have not been included in the summary of priorities but are listed in the List of Projects section of the Transportation Master Plan. The following lists the recommended projects resulting from this study.

## Priority I

Project Number	Name	Priority
<b>BIKE 8</b>	Bike Route Signalization	I
<b>TRANSIT 3+</b>	Priority Signalization for Emergency Vehicle and Transit	I
<b>ROAD 1+</b>	Adaptive Signalization Technology	I
<b>POLICY</b>	Transportation Demand Management	I
<b>PED 1</b>	Infill Sidewalk Network	I
<b>PED 10</b>	ADA Improvements	I
<b>PED 17</b>	Pedestrian Bridge at 180th St. and Collins Ave.	I
<b>PED 2</b>	Pedestrian Park Bridge at Collins Ave. and 174th St.	I
<b>PED 15</b>	Pedestrian Bridge at 163rd St. and Collins Ave.	I
<b>PED 19</b>	Pedestrian and Bicyclist Data Collection	I
<b>TRANSIT 5</b>	Water Taxi Stop and Service Feasibility Study	I
<b>PED 20</b>	Signalized Pedestrian Crossing - North Bay Road north of 170th St. at Bellagio Curve	I

## Priority II

Project Number	Name	Priority
<b>PED 14</b>	Crosswalk Improvement at Poinciana Island and Collins Ave.	II
<b>PED 18</b>	Crosswalk, NE 181st Dr. and Atlantic Blvd.	II

## Priority III

Project Number	Name	Priority
<b>PED 4</b>	Pedestrian Bridge at Collins Ave. and Heritage Park	III
<b>PED 6</b>	Pedestrian Safety Islands - Collins Avenue	III
<b>PED 13</b>	Town Center Alleyway and Pedestrian Path Program	III
<b>BIKE 4</b>	Bicycle Rental Program	III
<b>ROAD 5</b>	Collins Ave/186th St. Intersection improvements - Signal Warrant Analysis	III
<b>POLICY 4</b>	Mobility Fee Feasibility Study	III
<b>PED 12</b>	Streetscape Improvements	III



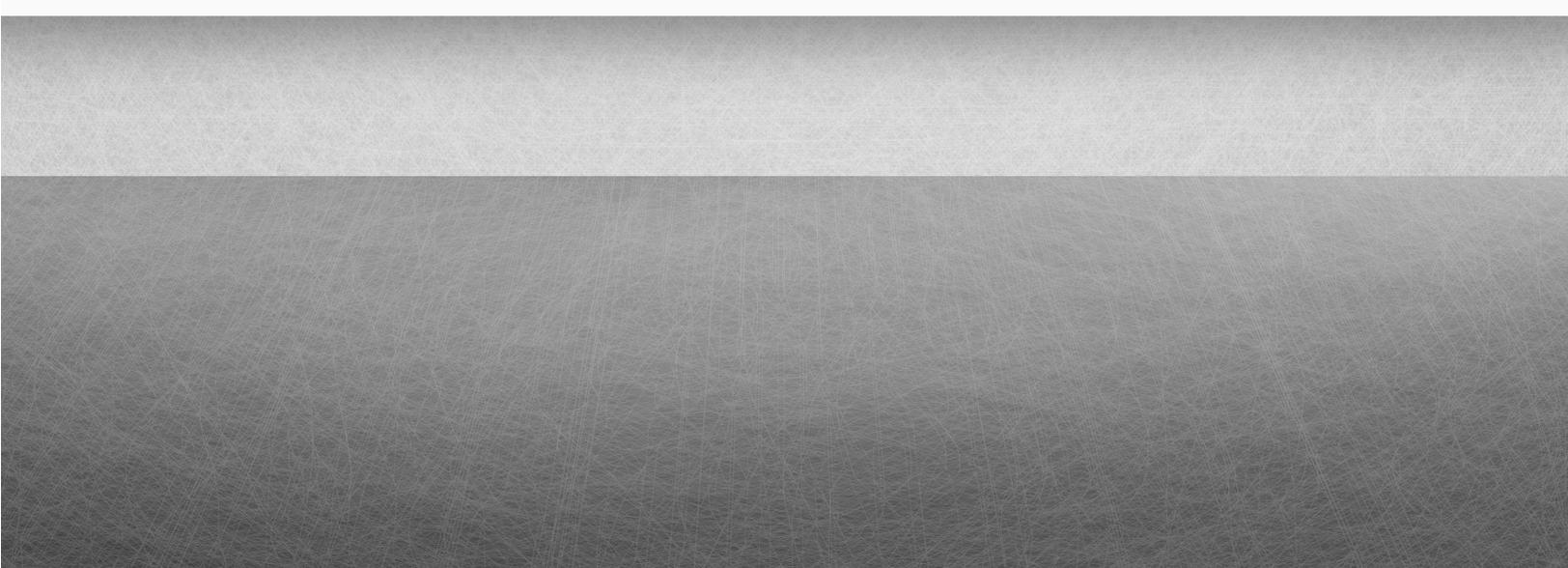
# Appendices

[A: Roadway LOS](#)

[B: Summary of Workshop Notes](#)

[C: Charrette Results](#)

[D: Bike/Ped LOS Analysis Details](#)



# Appendix A:

## Roadway LOS

City of Sunny Isles Beach Adjustments Table  
Transportation LOS

#	Road	FROM	TO	JURISDICTION	Speed Limit
1	Collins Avenue	City South Boundary	NE 163rd Street	State	35
2	Collins Avenue	NE 163rd Street	172nd Street	State	35
3	Collins Avenue	172nd Street	174th Street	State	35
4	Collins Avenue	174th Street	178th Street	State	35
5	Collins Avenue	178th Street	183rd Street	State	35
6	Collins Avenue	183rd Street	186th Street	State	35
7	Collins Avenue	186th Street	189th Street	State	35
8	Collins Avenue	189th Street	SR 856	State	35
9	Collins Avenue	SR 856	193rd Street	State	35
10	Collins Avenue	193rd Street	Terracina Road	State	35
11	SR 856 Eastbound	Collins Avenue	City Boundary West	State	45
12	SR 856 Westbound	City Boundary West	Collins Avenue	State	45
13	Bay View Drive	Collins Avenue	End	City	20
14	Kings Point Drive	Collins Avenue	End	City	20
15	Atlantic Isle	Collins Avenue	End	City	20
16	SR 826 Eastbound	Collins Avenue	City Boundary West	State	35
17	SR 826 Westbound	Collins Avenue	City Boundary West	State	35
18	N Bay Road	SR 826	172nd Street	City	20
19	N Bay Road	174th Street	178th Street	City	20
20	N Bay Road	178th Street	183rd Street	City	20
21	N Bay Road	185th Street	191st Terrace	City	20
22	172nd Street	Collins Avenue	N Bay Road	City	20
23	174th Street	Collins Avenue	End	City	20
24	175th Terrace	Collins Avenue	Atlantic Boulevard	City	20
25	178th Street	Collins Avenue	Atlantic Boulevard	City	20
26	178th Street	Atlantic Boulevard	N Bay Road	City	20
27	183rd Street	Collins Avenue	N Bay Road	County/City	20
28	185th Street	Collins Avenue	N Bay Road	City	20
29	186th Street	Collins Avenue	Atlantic Boulevard	City	20
30	189th Street	Collins Avenue	N Bay Road	County/City	20
31	193rd Street	Collins Avenue	End	County/City	20
32	Atlantic Boulevard	175th Terrace	178th Street	City	20
33	Atlantic Boulevard	178th Street	183rd Street	City	20
34	Atlantic Boulevard	185th Street	189th Street	City	20

Speed  
Limit

Speed Limit	Adjustments	Adjustment Factor	State Signalized Roadway	Class	# OF LANES
			If no, Additional - 10% Adjustment from State Values		
35	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0%	Yes	II	6
35	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	6
35	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	6
35	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	6
35	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	6
35	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	6
35	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	6
35	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	6
35	4 Lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	4
35	4 Lanes, Divided Median, Exclusive Left Lanes,	0	Yes	II	4
35	4 Lanes, Divided Median, Exclusive Left Lanes,	0%	Yes	II	4
45	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0%	Yes	I	6
45	Multi (6) lanes, Divided Median, Exclusive Left Lanes,	0%	Yes	I	6
20	4 Lane, Divided, RTL	0%	No	II	4
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
35	4 Lanes, One-Way, Divided Median, No LTL, No RTL	0%	Yes	II	4
35	4 Lanes, One-Way, Divided Median, No LTL, No RTL	0%	Yes	II	4
20	2 Lane, Undivided, LTL	0%	No	II	2
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
20	3 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
20	4 Lanes, Divided Median, No LTL, No RTL	0%	No	II	4
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
20	2 Lane, Undivided, RTL	0%	No	II	2
20	2 Lanes, Undivided, No LTL, No RTL	-20%	No	II	2
20	2 Lanes, Undivided, RTL, LTL	0%	No	II	2
20	2 Lane, Undivided, RTL	0%	No	II	2
20	2 Lane, Undivided, RTL	0%	No	II	2
20	2 Lane, Undivided, No RTL, No LTL	-20%	No	II	2
20	2 Lane, Divided Median, RTL	0%	No	II	2
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2
20	2 Lane, Undivided, No LTL, No RTL	-20%	No	II	2

# Appendix A:

## 2015 Bidirectional LOS

#	Road	FROM	TO	Class	# OF LANES	C VOLUME	D VOLUME
1	Collins Avenue	City South Boundary	NE 163rd Street - Sunn	II	6	2090	4
2	Collins Avenue	NE 163rd Street - Sunn	172nd Street	II	6	2090	4
3	Collins Avenue	172nd Street	174th Street	II	6	2090	4
4	Collins Avenue	174th Street	178th Street	II	6	2090	4
5	Collins Avenue	178th Street	183rd Street	II	6	2090	4
6	Collins Avenue	183rd Street	186th Street	II	6	2090	4
7	Collins Avenue	186th Street	189th Street	II	6	2090	4
8	Collins Avenue	189th Street	SR 856	II	4	1310	2
9	Collins Avenue	SR 856	193rd Street	II	4	1310	2
10	Collins Avenue	193rd Street	Terracina Road	II	4	1310	2
11	SR 856 Eastbound	Collins Avenue	City Boundary West	I	6	5250	5
12	SR 856 Westbound	City Boundary West	Collins Avenue	I	6	5250	5
13	Bay View Drive	Collins Avenue	End	II	4	1179	2
14	Kings Point Drive	Collins Avenue	End	II	2	462	9
15	Atlantic Isle	Collins Avenue	End	II	2	462	9
16	SR 826 Eastbound	Collins Avenue	City Boundary West	II	4	786	1
17	SR 826 Westbound	Collins Avenue	City Boundary West	II	4	786	1
18	N Bay Road	SR 826	172nd Street	II	2	594	1
19	N Bay Road	174th Street	178th Street	II	2	462	9
20	N Bay Road	178th Street	183rd Street	II	2	462	9
21	N Bay Road	185th Street	191st Terrace	II	2	462	9
22	172nd Street	Collins Avenue	N Bay Road	II	2	462	9
23	174th Street	Collins Avenue	End	II	4	1179	2
24	175th Terrace	Collins Avenue	Atlantic Boulevard	II	2	462	9
25	178th Street	Collins Avenue	Atlantic Boulevard	II	2	594	1
26	178th Street	Atlantic Boulevard	N Bay Road	II	2	462	9
27	183rd Street	Collins Avenue	N Bay Road	II	2	594	1
28	185th Street	Collins Avenue	N Bay Road	II	2	594	1
29	186th Street	Collins Avenue	Atlantic Boulevard	II	2	594	1
30	189th Street	Collins Avenue	N Bay Road	II	2	462	9
31	193rd Street	Collins Avenue	End	II	2	594	1
32	Atlantic Boulevard	175th Terrace	178th Street	II	2	462	9
33	Atlantic Boulevard	178th Street	185th Street	II	2	462	9
34	Atlantic Boulevard	185th Street	189th Street	II	2	462	9

FDOT LOS MANUAL VOLUME PK HR 2way THRESHOLDS		AM PK HR 2WAY Count	Vehicular Capacity, LOS		PM PK HR 2WAY Count	Vehicular Capacity, LOS	
D VOLUME	E VOLUME		LOS	AVAILABLE CAPACITY		LOS	AVAILABLE CAPACITY
4500	4590	3716	D	-1626	4620	F	-2530
4500	4590	3518	D	-1428	4206	D	-2116
4500	4590	3904	D	-1814	4506	E	-2416
4500	4590	3530	D	-1440	4106	D	-2016
4500	4590	3371	D	-1281	3859	D	-1769
4500	4590	3467	D	-1377	4298	D	-2208
4500	4590	3731	D	-1641	4664	F	-2574
2920	3040	3727	F	-2417	4580	F	-3270
2920	3040	2585	D	-1275	3065	F	-1755
2920	3040	2496	D	-1186	2668	D	-1358
5390	5390	510	C	4740	1706	C	3544
5390	5390	1388	C	3862	1798	C	3452
2628	2736	295	C	884	302	C	877
931	987	224	C	238	233	C	229
931	987	62	C	400	50	C	412
1752	1824	2046	F	-1260	2009	F	-1223
1752	1824	1051	D	-265	1191	D	-405
1197	1269	465	C	129	525	C	69
931	987	414	C	48	324	C	138
931	987	446	C	16	243	C	219
931	987	47	C	415	31	C	431
931	987	589	D	-127	592	D	-130
2628	2736	632	C	547	621	C	558
931	987	99	C	363	124	C	338
1197	1269	706	D	-112	493	C	101
931	987	399	C	63	295	C	167
1197	1269	740	D	-146	536	C	58
1197	1269	113	C	481	186	C	408
1197	1269	39	C	555	46	C	548
931	987	146	C	316	138	C	324
1197	1269	418	C	176	494	C	100
931	987	247	C	215	230	C	232
931	987	618	D	-156	291	C	171
931	987	46	C	416	70	C	392

# Appendix A:

## 2015 Peak Hour Peak Direction LOS

#	Road	FROM	TO	Class	# OF LANES	C VOLUME	D VOI
1	Collins Avenue	City South Boundary	NE 163rd Street	II	3	1170	25
2	Collins Avenue	NE 163rd Street	172nd Street	II	3	1170	25
3	Collins Avenue	172nd Street	174th Street	II	3	1170	25
4	Collins Avenue	174th Street	178th Street	II	3	1170	25
5	Collins Avenue	178th Street	183rd Street	II	3	1170	25
6	Collins Avenue	183rd Street	186th Street	II	3	1170	25
7	Collins Avenue	186th Street	189th Street	II	3	1170	25
8	Collins Avenue	189th Street	SR 856	II	2	730	16
9	Collins Avenue	SR 856	193rd Street	II	2	730	16
10	Collins Avenue	193rd Street	Terracina Road	II	2	730	16
11	SR 856 Eastbound	Collins Avenue	City Boundary West	I	3	2940	30
12	SR 856 Westbound	City Boundary West	Collins Avenue	I	3	2940	30
13	Bay View Drive	Collins Avenue	End	II	2	657	14
14	Kings Point Drive	Collins Avenue	End	II	1	259	5
15	Atlantic Isle	Collins Avenue	End	II	1	259	5
16	SR 826 Eastbound	Collins Avenue	City Boundary West	II	2	876	19
17	SR 826 Westbound	Collins Avenue	City Boundary West	II	2	876	19
18	N Bay Road	SR 826	172nd Street	II	1	333	6
19	N Bay Road	174th Street	178th Street	II	1	259	5
20	N Bay Road	178th Street	183rd Street	II	1	259	5
21	N Bay Road	185th Street	191st Terrace	II	1	259	5
22	172nd Street	Collins Avenue	N Bay Road	II	1	259	5
23	174th Street	Collins Avenue	End	II	2	657	14
24	175th Terrace	Collins Avenue	Atlantic Boulevard	II	1	259	5
25	178th Street	Collins Avenue	Atlantic Boulevard	II	1	333	6
26	178th Street	Atlantic Boulevard	N Bay Road	II	1	259	5
27	183rd Street	Collins Avenue	N Bay Road	II	1	333	6
28	185th Street	Collins Avenue	N Bay Road	II	1	333	6
29	186th Street	Collins Avenue	Atlantic Boulevard	II	1	333	6
30	189th Street	Collins Avenue	N Bay Road	II	1	259	5
31	193rd Street	Collins Avenue	End	II	1	333	6
32	Atlantic Boulevard	175th Terrace	178th Street	II	1	259	5
33	Atlantic Boulevard	178th Street	183rd Street	II	1	259	5
34	Atlantic Boulevard	185th Street	189th Street	II	1	259	5

ME	FDOT LOS MANUAL VOLUME PK HR PK DIR THRESHOLDS		AM PK HR	Vehicular Capacity, LOS		PK HR PK	Vehicular Capacity, LOS	
	D VOLUME	E VOLUME	PK Dir Count	LOS	AVAILABLE CAPACITY	Dir Count	LOS	AVAILABLE CAPACITY
	2520	2560	2352	D	-1182	2616	F	-1446
	2520	2560	2352	D	-1182	2139	D	-969
	2520	2560	2203	D	-1033	2237	D	-1067
	2520	2560	1954	D	-784	2150	D	-980
	2520	2560	1839	D	-669	2115	D	-945
	2520	2560	1990	D	-820	2281	D	-1111
	2520	2560	2056	D	-886	2494	D	-1324
	1630	1700	2052	F	-1322	2409	F	-1679
	1630	1700	1619	D	-889	1631	E	-901
	1630	1700	1619	D	-889	1411	D	-681
	3040	3040	1537	C	1403	1706	C	1234
	3040	3040	1388	C	1552	1798	C	1142
	1467	1530	195	C	462	156	C	501
	525	560	169	C	90	137	C	122
	525	560	36	C	223	28	C	231
	1956	2040	2046	F	-1170	2009	E	-1133
	1956	2040	1051	D	-175	1191	D	-315
	675	720	334	D	-1	305	C	28
	525	560	238	C	21	184	C	75
	525	560	333	D	-74	179	C	80
	525	560	32	C	227	16	C	243
	525	560	350	D	-91	316	D	-57
	1467	1530	398	C	259	327	C	330
	525	560	70	C	189	70	C	189
	675	720	341	D	-8	283	C	50
	525	560	372	D	-113	152	C	107
	675	720	436	D	-103	325	C	8
	675	720	76	C	257	110	C	223
	675	720	26	C	307	34	C	299
	525	560	94	C	165	93	C	166
	675	720	237	C	96	274	C	59
	525	560	134	C	125	149	C	110
	525	560	284	D	-25	149	C	110
	525	560	35	C	224	38	C	221

# Appendix A:

## 2019 Bidirectional LOS

#	Road	FROM	TO	Class	# OF LANES	C VOLUME	D VO
1	Collins Avenue	City South Boundary	NE 163rd Street - Sunn	II	6	2090	4
2	Collins Avenue	NE 163rd Street - Sunn	172nd Street	II	6	2090	4
3	Collins Avenue	172nd Street	174th Street	II	6	2090	4
4	Collins Avenue	174th Street	178th Street	II	6	2090	4
5	Collins Avenue	178th Street	183rd Street	II	6	2090	4
6	Collins Avenue	183rd Street	186th Street	II	6	2090	4
7	Collins Avenue	186th Street	189th Street	II	6	2090	4
8	Collins Avenue	189th Street	SR 856	II	4	1310	2
9	Collins Avenue	SR 856	193rd Street	II	4	1310	2
10	Collins Avenue	193rd Street	Terracina Road	II	4	1310	2
11	SR 856 Eastbound	Collins Avenue	City Boundary West	I	6	5250	5
12	SR 856 Westbound	City Boundary West	Collins Avenue	I	6	5250	5
13	Bay View Drive	Collins Avenue	End	II	4	1179	2
14	Kings Point Drive	Collins Avenue	End	II	2	462	9
15	Atlantic Isle	Collins Avenue	End	II	2	462	9
16	SR 826 Eastbound	Collins Avenue	City Boundary West	II	4	786	1
17	SR 826 Westbound	Collins Avenue	City Boundary West	II	4	786	1
18	N Bay Road	SR 826	172nd Street	II	2	594	1
19	N Bay Road	174th Street	178th Street	II	2	462	9
20	N Bay Road	178th Street	183rd Street	II	2	462	9
21	N Bay Road	185th Street	191st Terrace	II	2	462	9
22	172nd Street	Collins Avenue	N Bay Road	II	2	462	9
23	174th Street	Collins Avenue	End	II	4	1179	2
24	175th Terrace	Collins Avenue	Atlantic Boulevard	II	2	462	9
25	178th Street	Collins Avenue	Atlantic Boulevard	II	2	594	1
26	178th Street	Atlantic Boulevard	N Bay Road	II	2	462	9
27	183rd Street	Collins Avenue	N Bay Road	II	2	594	1
28	185th Street	Collins Avenue	N Bay Road	II	2	594	1
29	186th Street	Collins Avenue	Atlantic Boulevard	II	2	594	1
30	189th Street	Collins Avenue	N Bay Road	II	2	462	9
31	193rd Street	Collins Avenue	End	II	2	594	1
32	Atlantic Boulevard	175th Terrace	178th Street	II	2	462	9
33	Atlantic Boulevard	178th Street	185th Street	II	2	462	9
34	Atlantic Boulevard	185th Street	189th Street	II	2	462	9

TIME	FDOT LOS MANUAL VOLUME PK HR 2way THRESHOLDS		AM PK HR 2WAY Count	Vehicular Capacity, LOS		PM PK HR 2WAY Count	Vehicular Capacity, LOS	
	D VOLUME	E VOLUME		LOS	AVAILABLE CAPACITY		LOS	AVAILABLE CAPACITY
		4500	4590	3803	D	-1713	4888	F
	4500	4590	4007	D	-1917	4757	F	-2667
	4500	4590	4440	D	-2350	4979	F	-2889
	4500	4590	4204	D	-2114	4654	F	-2564
	4500	4590	3944	D	-1854	4571	E	-2481
	4500	4590	4085	D	-1995	4944	F	-2854
	4500	4590	4297	D	-2207	5322	F	-3232
	2920	3040	4148	F	-2838	5170	F	-3860
	2920	3040	2830	D	-1520	3314	F	-2004
	2920	3040	2458	D	-1148	2904	D	-1594
	5390	5390	1595	C	3655	1846	C	3404
	5390	5390	1589	C	3661	2062	C	3188
	2628	2736	316	C	863	348	C	831
	931	987	240	C	222	249	C	213
	931	987	64	C	398	51	C	411
	1752	1824	2202	F	-1416	2194	F	-1408
	1752	1824	1257	D	-471	1311	D	-525
	1197	1269	479	C	115	541	C	53
	931	987	426	C	36	334	C	128
	931	987	459	C	3	250	C	212
	931	987	50	C	412	33	C	429
	931	987	606	D	-144	611	D	-149
	2628	2736	664	C	515	650	C	529
	931	987	102	C	360	128	C	334
	1197	1269	662	D	-68	518	C	76
	931	987	411	C	51	303	C	159
	1197	1269	777	D	-183	563	C	31
	1197	1269	118	C	476	193	C	401
	1197	1269	39	C	555	47	C	547
	931	987	151	C	311	142	C	320
	1197	1269	431	C	163	509	C	85
	931	987	256	C	206	239	C	223
	931	987	637	D	-175	299	C	163
	931	987	49	C	413	74	C	388

# Appendix A:

## 2019 Peak Hour Peak Direction LOS

#	Road	FROM	TO	Class	# OF LANES	C VOLUME	D VOLUME
1	Collins Avenue	City South Boundary	NE 163rd Street	II	3	1170	2520
2	Collins Avenue	NE 163rd Street	172nd Street	II	3	1170	2520
3	Collins Avenue	172nd Street	174th Street	II	3	1170	2520
4	Collins Avenue	174th Street	178th Street	II	3	1170	2520
5	Collins Avenue	178th Street	183rd Street	II	3	1170	2520
6	Collins Avenue	183rd Street	186th Street	II	3	1170	2520
7	Collins Avenue	186th Street	189th Street	II	3	1170	2520
8	Collins Avenue	189th Street	SR 856	II	2	730	1630
9	Collins Avenue	SR 856	193rd Street	II	2	730	1630
10	Collins Avenue	193rd Street	Terracina Road	II	2	730	1630
11	SR 856 Eastbound	Collins Avenue	City Boundary West	I	3	2940	3040
12	SR 856 Westbound	City Boundary West	Collins Avenue	I	3	2940	3040
13	Bay View Drive	Collins Avenue	End	II	2	657	1467
14	Kings Point Drive	Collins Avenue	End	II	1	259	525
15	Atlantic Isle	Collins Avenue	End	II	1	259	525
16	SR 826 Eastbound	Collins Avenue	City Boundary West	II	2	876	1956
17	SR 826 Westbound	Collins Avenue	City Boundary West	II	2	876	1956
18	N Bay Road	SR 826	172nd Street	II	1	333	675
19	N Bay Road	174th Street	178th Street	II	1	259	525
20	N Bay Road	178th Street	183rd Street	II	1	259	525
21	N Bay Road	185th Street	191st Terrace	II	1	259	525
22	172nd Street	Collins Avenue	N Bay Road	II	1	259	525
23	174th Street	Collins Avenue	End	II	2	657	1467
24	175th Terrace	Collins Avenue	Atlantic Boulevard	II	1	259	525
25	178th Street	Collins Avenue	Atlantic Boulevard	II	1	333	675
26	178th Street	Atlantic Boulevard	N Bay Road	II	1	259	525
27	183rd Street	Collins Avenue	N Bay Road	II	1	333	675
28	185th Street	Collins Avenue	N Bay Road	II	1	333	675
29	186th Street	Collins Avenue	Atlantic Boulevard	II	1	333	675
30	189th Street	Collins Avenue	N Bay Road	II	1	259	525
31	193rd Street	Collins Avenue	End	II	1	333	675
32	Atlantic Boulevard	175th Terrace	178th Street	II	1	259	525
33	Atlantic Boulevard	178th Street	183rd Street	II	1	259	525
34	Atlantic Boulevard	185th Street	189th Street	II	1	259	525

TIME	FDOT LOS MANUAL VOLUME PK HR DIR THRESHOLDS		AM PK HR PK Dir Count	Vehicular Capacity, LOS		PK HR PK Dir Count	Vehicular Capacity, LOS	
	D VOLUME	E VOLUME		LOS	AVAILABLE CAPACITY		LOS	AVAILABLE CAPACITY
	2520	2560	2498	D	-1328	2616	F	-1446
	2520	2560	2358	D	-1188	2139	D	-969
	2520	2560	2519	D	-1349	2237	D	-1067
	2520	2560	2302	D	-1132	2150	D	-980
	2520	2560	2159	D	-989	2115	D	-945
	2520	2560	2298	D	-1128	2281	D	-1111
	2520	2560	2347	D	-1177	2494	D	-1324
	1630	1700	2342	F	-1612	2409	F	-1679
	1630	1700	1736	F	-1006	1631	E	-901
	1630	1700	1518	D	-788	1411	D	-681
	3040	3040	1595	C	1345	1706	C	1234
	3040	3040	1589	C	1351	1798	C	1142
	1467	1530	209	C	448	156	C	501
	525	560	181	C	78	137	C	122
	525	560	37	C	222	28	C	231
	1956	2040	2202	F	-1326	2009	E	-1133
	1956	2040	1257	D	-381	1191	D	-315
	675	720	344	D	-11	305	C	28
	525	560	245	C	14	184	C	75
	525	560	343	D	-84	179	C	80
	525	560	34	C	225	16	C	243
	525	560	288	D	-29	316	D	-57
	1467	1530	418	C	239	327	C	330
	525	560	72	C	187	70	C	189
	675	720	383	D	-50	283	C	50
	525	560	303	D	-44	152	C	107
	675	720	458	D	-125	325	C	8
	675	720	79	C	254	110	C	223
	675	720	26	C	307	34	C	299
	525	560	97	C	162	93	C	166
	675	720	244	C	89	274	C	59
	525	560	139	C	120	149	C	110
	525	560	396	D	-137	149	C	110
	525	560	37	C	222	38	C	221

# Appendix A:

## 2025 Bidirectional LOS

#	Road	FROM	TO	Class	# OF LANES	C VOLUME	D VOLUME
1	Collins Avenue	City South Boundary	NE 163rd Street - Sunn	II	6	2090	4
2	Collins Avenue	NE 163rd Street - Sunn	172nd Street	II	6	2090	4
3	Collins Avenue	172nd Street	174th Street	II	6	2090	4
4	Collins Avenue	174th Street	178th Street	II	6	2090	4
5	Collins Avenue	178th Street	183rd Street	II	6	2090	4
6	Collins Avenue	183rd Street	186th Street	II	6	2090	4
7	Collins Avenue	186th Street	189th Street	II	6	2090	4
8	Collins Avenue	189th Street	SR 856	II	4	1310	2
9	Collins Avenue	SR 856	193rd Street	II	4	1310	2
10	Collins Avenue	193rd Street	Terracina Road	II	4	1310	2
11	SR 856 Eastbound	Collins Avenue	City Boundary West	I	6	5250	5
12	SR 856 Westbound	City Boundary West	Collins Avenue	I	6	5250	5
13	Bay View Drive	Collins Avenue	End	II	4	1179	2
14	Kings Point Drive	Collins Avenue	End	II	2	462	9
15	Atlantic Isle	Collins Avenue	End	II	2	462	9
16	SR 826 Eastbound	Collins Avenue	City Boundary West	II	4	786	1
17	SR 826 Westbound	Collins Avenue	City Boundary West	II	4	786	1
18	N Bay Road	SR 826	172nd Street	II	2	594	1
19	N Bay Road	174th Street	178th Street	II	2	462	9
20	N Bay Road	178th Street	183rd Street	II	2	462	9
21	N Bay Road	185th Street	191st Terrace	II	2	462	9
22	172nd Street	Collins Avenue	N Bay Road	II	2	462	5
23	174th Street	Collins Avenue	End	II	4	1179	2
24	175th Terrace	Collins Avenue	Atlantic Boulevard	II	2	462	9
25	178th Street	Collins Avenue	Atlantic Boulevard	II	2	594	1
26	178th Street	Atlantic Boulevard	N Bay Road	II	2	462	9
27	183rd Street	Collins Avenue	N Bay Road	II	2	594	1
28	185th Street	Collins Avenue	N Bay Road	II	2	594	1
29	186th Street	Collins Avenue	Atlantic Boulevard	II	2	594	1
30	189th Street	Collins Avenue	N Bay Road	II	2	462	9
31	193rd Street	Collins Avenue	End	II	2	594	1
32	Atlantic Boulevard	175th Terrace	178th Street	II	2	462	9
33	Atlantic Boulevard	178th Street	185th Street	II	2	462	9
34	Atlantic Boulevard	185th Street	189th Street	II	2	462	9

VOLUME	FDOT LOS MANUAL VOLUME PK HR 2way THRESHOLDS		AM PK HR 2WAY Count	Vehicular Capacity, LOS		PM PK HR 2WAY Count	Vehicular Capacity, LOS	
	D VOLUME	E VOLUME		LOS	AVAILABLE CAPACITY		LOS	AVAILABLE CAPACITY
90	4500	4590	3978	D	-1888	5113	F	-3023
90	4500	4590	4191	D	-2101	4976	F	-2886
90	4500	4590	4644	F	-2554	5208	F	-3118
90	4500	4590	4397	D	-2307	4868	F	-2778
90	4500	4590	4125	D	-2035	4781	F	-2691
90	4500	4590	4273	D	-2183	5171	F	-3081
90	4500	4590	4494	D	-2404	5566	F	-3476
10	2920	3040	4339	F	-3029	5407	F	-4097
10	2920	3040	2960	E	-1650	3466	F	-2156
10	2920	3040	2571	D	-1261	3038	E	-1728
50	5390	5390	1669	C	3581	1931	C	3319
50	5390	5390	1662	C	3588	2157	C	3093
79	2628	2736	331	C	848	364	C	815
2	931	987	251	C	211	261	C	201
2	931	987	67	C	395	54	C	408
6	1752	1824	2303	F	-1517	2295	F	-1509
6	1752	1824	1315	D	-529	1372	D	-586
4	1197	1269	501	C	93	566	C	28
2	931	987	446	C	16	350	C	112
2	931	987	481	D	-19	262	C	200
2	931	987	53	C	409	35	C	427
2	931	987	634	D	-172	640	D	-178
79	2628	2736	695	C	484	680	C	499
2	931	987	107	C	355	134	C	328
4	1197	1269	693	D	-99	542	C	52
2	931	987	430	C	32	317	C	145
4	1197	1269	813	D	-219	589	C	5
4	1197	1269	124	C	470	202	C	392
4	1197	1269	41	C	553	50	C	544
2	931	987	158	C	304	149	C	313
4	1197	1269	451	C	143	533	C	61
2	931	987	268	C	194	250	C	212
2	931	987	667	D	-205	313	C	149
2	931	987	52	C	410	78	C	384

# Appendix A:

## 2025 Peak Hour Peak Direction LOS

#	Road	FROM	TO	Class	# OF LANES	C VOLUME	D VOLUME
1	Collins Avenue	City South Boundary	NE 163rd Street	II	3	1170	2520
2	Collins Avenue	NE 163rd Street	172nd Street	II	3	1170	2520
3	Collins Avenue	172nd Street	174th Street	II	3	1170	2520
4	Collins Avenue	174th Street	178th Street	II	3	1170	2520
5	Collins Avenue	178th Street	183rd Street	II	3	1170	2520
6	Collins Avenue	183rd Street	186th Street	II	3	1170	2520
7	Collins Avenue	186th Street	189th Street	II	3	1170	2520
8	Collins Avenue	189th Street	SR 856	II	2	730	1630
9	Collins Avenue	SR 856	193rd Street	II	2	730	1630
10	Collins Avenue	193rd Street	Terracina Road	II	2	730	1630
11	SR 856 Eastbound	Collins Avenue	City Boundary West	I	3	2940	3040
12	SR 856 Westbound	City Boundary West	Collins Avenue	I	3	2940	3040
13	Bay View Drive	Collins Avenue	End	II	2	657	1467
14	Kings Point Drive	Collins Avenue	End	II	1	259	525
15	Atlantic Isle	Collins Avenue	End	II	1	259	525
16	SR 826 Eastbound	Collins Avenue	City Boundary West	II	2	876	1956
17	SR 826 Westbound	Collins Avenue	City Boundary West	II	2	876	1956
18	N Bay Road	SR 826	172nd Street	II	1	333	675
19	N Bay Road	174th Street	178th Street	II	1	259	525
20	N Bay Road	178th Street	183rd Street	II	1	259	525
21	N Bay Road	185th Street	191st Terrace	II	1	259	525
22	172nd Street	Collins Avenue	N Bay Road	II	1	259	525
23	174th Street	Collins Avenue	End	II	2	657	1467
24	175th Terrace	Collins Avenue	Atlantic Boulevard	II	1	259	525
25	178th Street	Collins Avenue	Atlantic Boulevard	II	1	333	675
26	178th Street	Atlantic Boulevard	N Bay Road	II	1	259	525
27	183rd Street	Collins Avenue	N Bay Road	II	1	333	675
28	185th Street	Collins Avenue	N Bay Road	II	1	333	675
29	186th Street	Collins Avenue	Atlantic Boulevard	II	1	333	675
30	189th Street	Collins Avenue	N Bay Road	II	1	259	525
31	193rd Street	Collins Avenue	End	II	1	333	675
32	Atlantic Boulevard	175th Terrace	178th Street	II	1	259	525
33	Atlantic Boulevard	178th Street	183rd Street	II	1	259	525
34	Atlantic Boulevard	185th Street	189th Street	II	1	259	525

VOLUME	FDOT LOS MANUAL VOLUME PK HR DIR THRESHOLDS		AM PK HR PK Dir Count	Vehicular Capacity, LOS		PK HR PK Dir Count	Vehicular Capacity, LOS	
	D VOLUME	E VOLUME		LOS	AVAILABLE CAPACITY		LOS	AVAILABLE CAPACITY
	70	2520	2560	2613	F	-1443	2875	F
70	2520	2560	2467	D	-1297	2492	D	-1322
70	2520	2560	2635	F	-1465	2644	F	-1474
70	2520	2560	2408	D	-1238	2549	E	-1379
70	2520	2560	2258	D	-1088	2551	E	-1381
70	2520	2560	2404	D	-1234	2718	F	-1548
70	2520	2560	2455	D	-1285	2915	F	-1745
30	1630	1700	2450	F	-1720	2755	F	-2025
30	1630	1700	1816	F	-1086	1827	F	-1097
30	1630	1700	1588	D	-858	1589	D	-859
40	3040	3040	1669	C	1271	1931	C	1009
40	3040	3040	1662	C	1278	2157	C	783
57	1467	1530	219	C	438	201	C	456
59	525	560	190	C	69	153	C	106
59	525	560	39	C	220	30	C	229
76	1956	2040	2303	F	-1427	2295	F	-1419
76	1956	2040	1315	D	-439	1463	D	-587
33	675	720	360	D	-27	329	C	4
59	525	560	257	C	2	199	C	60
59	525	560	359	D	-100	193	C	66
59	525	560	36	C	223	18	C	241
59	525	560	302	D	-43	341	D	-82
57	1467	1530	438	C	219	359	C	298
59	525	560	76	C	183	76	C	183
33	675	720	401	D	-68	311	C	22
59	525	560	317	D	-58	164	C	95
33	675	720	479	D	-146	357	D	-24
33	675	720	83	C	250	120	C	213
33	675	720	28	C	305	37	C	296
59	525	560	102	C	157	101	C	158
33	675	720	256	C	77	295	C	38
59	525	560	146	C	113	163	C	96
59	525	560	415	D	-156	161	C	98
59	525	560	39	C	220	43	C	216

# Appendix B:

## Summary of Workshop Notes



**JULY 9, 2015 TOWN HALL MEETING**

**Winston Towers**

### BREAKOUT SESSION COMMENTS

#### **GROUP ONE**

##### Vision Statement

Coastal Resources → Conservation  
In-Land Waterway

Security/Public Safety → Add Boardwalk at Beach for Bicycle Use/Pedestrians  
Add more shade trees along streets  
Add Bicycle lanes along Collins Ave.  
Synchronize Traffic Lights

City model at City Hall needs to be updated to show proposed/approved/existing projects

→ Color code it: Purple - proposed projects  
Green - Approved  
White - Existing

##### City's Major Challenges

Traffic Congestion → Majority of traffic pass through the City  
→ Elevated train/rail

Infrastructure → Flooding, sewers

Development → Encourage vertical mixed-use  
(Retail/offices/residential)

City catering only for tourists

Need more services for residents (better restaurants, movie theaters, super markets, dry cleaners, etc.)

##### City Key Assets

# Appendix B:

## Summary of Workshop Notes

Location - located between Downtown FLL and MIA

Walkability (need more cross walks, wider sidewalks)

Clean Environment

Beaches

### Infrastructure & Svcs

Needs Improvement → Flooding  
Sea Level Rise  
N Bay Rd & 177 south side of park

Sewer System → Capacity w/ all new development

School System

K-8<sup>th</sup> Grade → Good  
Needs High Schools, Pre-K  
\* Problem: Students coming from Broward County or other school districts

Allow residents to use school facilities after hours

Automated license plate detectors to see who is coming from different school district

### Transportation System

Community Shuttle → run more frequently to allow residents go to work & catch county buses  
Add extra step to buses for elderly  
Add better signs for stops & street

Elevated pedestrian crosswalks

Consider reconfiguring traffic (one-way streets)

Adding bus bays for buses to stop & not stop traffic

Add connections to express buses  
Make it easy to go to downtown FLL/MIA

### Built Environment

Add more trees (shade)  
Beach renourishment (make beach wider/add more sand)  
Better businesses (more restaurants)  
Add exercising stations to parks or boardwalk/beach

# Appendix B:

## Summary of Workshop Notes

### Parks & Beach

Add more water features/water parks/fountains  
Provide community activities (exercise/yoga, etc.)

### **GROUP TWO**

#### Vision Statement

Better Meeting Place

Vision Statement  
9 buildings along Collins Avenue  
Not affordable (eastside)

Poor Planning  
Chaos  
Professional  
Meeting in a room that doesn't fit

Traffic, no solution

Over population, no solution

School, not needed

Waste of what we did over time with growth

City, old people city, **now** is a young city

The young people is good a lot of improvement

Not organized → the growth → all the buildings on the beaches shadow in the afternoon

Goods and services for

The school is bringing kids from other cities

Parking - cannot be solved - only solution is to decrease the rate

West side - only businesses that provides goods and services for the residents

23,000 - 30,000 population

9 billion  
70% of the traffic thru

Curb cuts  
Traffic, lights synchronize



# Appendix B:

## Summary of Workshop Notes

Police dept. -

- Lax in enforcing, buses don't go off to the road
- Police don't

Collins Avenue arches should be built underneath not over  
Create taxis → help traffic

Newport Beach, when they have an event traffic chokes up and blocks Collins Avenue

Traffic Overpass  
From Bal Harbour to Golden Beach  
163<sup>rd</sup> Street Bridge

Different ownerships and no one is on the same page

TDR's - moratorium  
And building moratorium until everything is done

Best Assets  
Cultural Programs, dances  
Parks  
New Pier  
Services  
Concerts  
Kids Programs  
Television

Code enforcement is very strict

Building boardwalk for bikes, segways, etc.

Packed/hard sand so people can

Bldgs., grass, everything looks good

174<sup>th</sup> Street

School is really good  
Almost like a private school  
Crowded, come down  
Traffic, population to get there and back  
Don't see the need of it  
Why are we building things that will bring in more and more traffic to the area  
No pick up for parents

North Bay Road - wider sidewalk a good thing

County buses - repetitive stop time, disturbing traffic

# Appendix B:

## Summary of Workshop Notes

Buses - good on time

Building environment

Only give permits for businesses that offer services

Parks - great too many, enough, stop

Beach → erosion  
Lifeguards always there  
Cleanliness, good but could be better  
weekends

### GROUP THREE

High rises - no more permits for tall buildings

Code regulating building height

Control speed limit on Collins

What is going to happen with Monaco Hotel?

Police/fire, etc. sirens going on too often

24 floor building near Marshalls (too high) approved

Too many bicycles on sidewalks along Collins

Don't want 174<sup>th</sup> St/NB Rd. Bridge

Positives of SIB: location, beach

Would like better beach access

Homeless occupying public benches

Sun blocked on beach due to bldg. height

Would like community shuttle to access more places in Aventura (Whole Foods, Target, etc.)

All shuttles go in same direction so travel time from Arlen House to Aventura Mall is 1 hour plus

Flooding on private property at WT - far right & far left sides of Winston Towers

Improve sidewalk cleanliness

# Appendix B:

## Summary of Workshop Notes

No bikes, rollerblading, scooters in parks so children don't have a place to do so

Lack of bike lanes on Collins

Easy to travel city via walking

Parks are good/meet needs of patrons

Satisfied with SIB school

Parks need exercise equipment for all age ranges (similar to Miami Beach)

Can results & comments of meeting be posted on City website so residents can see that their needs are being addressed?

Concerned that emergency bridge will eventually be opened to regular traffic

Crosswalks don't allow pedestrians enough time to cross Collins

Crosswalk 172<sup>nd</sup> - not ADA compliant

With all development - roads too small to handle emergency - i.e. hurricane - would like less development

### GROUP FOUR

Streets - address traffic

Police - cameras/more police presence

No more bldgs.  
Too many bldgs.

City is doing good w/ parks

Drainage - flooding

Views - access to the beach

Access to beach

Marina @ 200 bldg.

Littering o beach

Non-smoking area on beach

Non-alcohol area on beach

# Appendix B:

## Summary of Workshop Notes

Elevated train to downtown

Over congestion in City

Good social life  
City events!  
More!

Senior center

Bicycle sidewalks - walking paths

Sport areas  
Volleyball  
Beach games - sports

Walking paths on beach for seniors

Accessibility

Police on streets

Traffic safety

Hard to get in/out of ocean - access/safety

Parking for beach

More parking areas

Garages

Not enough time on crosswalks to cross. More time

More signs for pedestrian crossing

More stops

Not enough accessible sand on beach

Boardwalk

Issue w/ homeless - Samson Park

Security - report suspicious behavior

Process of being Imp.

# Appendix B:

## Summary of Workshop Notes

Drainage

Traffic -

163<sup>rd</sup> Street

174 - no left sign after 10 p.m.

163<sup>rd</sup> - higher so don't have to stop for drawbridge

Lehman Causeway

Bike Lanes

Too many bldgs.

Block view

Block sun - shadow

Make sure parks are open/operational at 7

Enough parks

Senior Center

City parks are good

Drawbridge very important

Condo boards change rules - more coordination w/ City

Skateboards on streets

Boards need to be more open w/ unit owners

### GROUP FIVE

Traffic/Parking

Development on west side

Challenges

Traffic not local

Park & Ride for visitors

Shuttle

Traffic → Bus pull outs

Jaywalking

174<sup>th</sup> St Ped crossing

# Appendix B:

## Summary of Workshop Notes

High bldgs. on west

### Assets

Clean beautiful  
Police no crime safety  
People care  
Good elected officials

### Infrastructure

Bad flooding  
Beautification of west side like the east side  
RK shopping centers flood  
Confused on the allowable height  
4 story limit - west side of Collins  
Could over develop  
No TDR on west side

### Trucking

Enforce  
Require off street deliveries

### Schools

Great - too many kids  
Out of district transfers

1 way streets

Down zone on west side

### Sidewalks

Most walkers on west side  
Bicycling  
On east side only  
Clean sidewalks

### Overpass

Good idea

### COMMENTS ON VISION STATEMENT

#### Infrastructure

Better sewer system

#### Transportation

Enhance public transp  
Bike paths on the main streets

# Appendix B:

## Summary of Workshop Notes

Rating 5 (1-10)

Built environment

Better businesses (services restaurants)

Parks beach

No dogs on the beach

# Appendix B:

## Summary of Workshop Notes

### SEPTEMBER 1, 2015 CHARRETTE MEETING

Arlen House

#### TABLE BREAKOUT COMMENTS

##### **TABLE ONE**

No pedestrian bridges, build tunnels

West Side- Future bridge should be for crosswalk, goods and services only (no hotels)

Extend water taxi (service from Ft Lauderdale/Hollywood to Sunny Isles Beach, ending in South Beach)

Add more benches throughout the city

Old type scooters

Eliminate curb cuts to plazas on Collins Ave. Use north, south and west streets for access/egress

Golden Shores  
Bury electric lines  
Fix storm drainage

Add benches with shading trees throughout entire City, especially on Collins Ave.

Add Boardwalk with bike path along beach

Add bike path along N Bay Road extending through future pedestrian bridge

Relocate pedestrian crosswalk

Add left turn/ U-turn at Kings Point Drive and Collins Ave.

Build pedestrian tunnel at Sunny Isles Ocean Bch Blvd (SR 826) and Collins Ave.

Add water taxi stop at Sunny Isles Ocean Bch Blvd (SR 826) and Intracoastal.

Relocate new crosswalk at Collins Ave & 172 Street

##### **TABLE TWO**

Ensure sidewalks are clean

# Appendix B:

## Summary of Workshop Notes

Too much traffic

Charging stations

More opportunities for U-turns

Traffic lights synchronization Citywide (north to south)

Add more benches throughout city, especially on Collins Ave.

Handicap challenge (sidewalks end in curb) on northern side of Collins Ave.

Add marine lights along Intracoastal

Need pedestrian path on Atlantic Blvd between 183 Street and 185 Street

Provide water taxi along Intracoastal

Add boardwalk similar to Halover

Lights are off on northern part of N Bay Road

Add bus stop on Collins Ave south of Bayview Drive

Opening to Walgreens at 174 Street

Connect streets- Kings Point Drive, Atlantic Ave.

Look at Stop and Go enforcement along westbound SR 826

SR 826: At peak hours constrain flow-thru traffic for pedestrians to cross

Drainage issues at 172 Street

Add street trees along 174 Street

City shuttle service good, but too slow.

Consider adding crosswalk south of 172 St at Collins Ave

Difficult to get out of Collins Ave between SR 826 and Atlantic Ave; people doing U-turns, problem traffic

Add bus stop on Collins Ave between 172 Street and 174 Street

### TABLE THREE

# Appendix B:

## Summary of Workshop Notes

Traffic caused by thru-traffic

Bottle necks

163 Street push hour is bad

We are part of the traffic problem because we don't have an option to bike or walk

Want quieter peaceful streets

Add shading trees and benches along entire Collins Avenue

Add boardwalk, bike path and shading trees along beach throughout entire city

Connect Atlantic Ave between 183 Street and 185 Street

Add sidewalks all along N Bay Road

Create pathway to school along N Bay Road

Continue bike path on N Bay Road between SR 826 and 174 Street

Build higher bridge on SR 826 and Intracoastal

Add community shuttle stop on Collins Ave, north of Poinciana Drive

Delivery trucks on eastbound SR 826

Add left turn on Collins Ave and 172 Street

Add crosswalk at Collins Ave and 172 Street (to the south)



# Appendix B:

## Summary of Workshop Notes

### OCTOBER 6, 2015 TOWN HALL MEETING

#### Pelican Community Center

#### SESSION COMMENTS

Bay - look at beach

Emphasize Bike Paths

Drivers scared of bicycles, motorcycles

Where would bike paths go?

Aventura - resurfaced park - Margolis Park - resurface area to walk/look at (improving) walking around Margolis Park

N. Bay Road - bridge - how will that affect traffic on N. Bay Road?

Water Taxis - other cities did good on bay area

Concern about boardwalk. Beach is eroded - how will (it be) accommodated

Traffic blockages - concern about emergency access

Traffic notification (notify residents about traffic conditions)

SIB Police Dept. - good response to explosion - good response

Comp Plan - What do we do about traffic on Collins?

Suggest to police too how to address traffic backup - police to alleviate traffic

Walkway along Ocean - already looked at. Sea turtles, other concerns prohibited

Water taxi good idea but prohibitively expensive

Look into it again

Property values skyrocketing - affordable housing especially challenging in SIB

Crisis -What can do about getting in and out during emergency

How will we address traffic in SIB?

Traffic - what other options?

Cannot move in City - Collins can't move

Police coordination during emergencies - i.e. explosion

Consider the emergency bridge - excluded from presentation

Walkways on beach - fed. govt. turned down - not wide enough

# Appendix B:

## Summary of Workshop Notes

Taxi-boat needed a large subsidy  
Pedestrians do not have not enough time to cross - need at least 30 seconds  
Adjust/increase timing on crosswalk  
Bicycles - careless  
Educate bicyclists who take risks  
Demographics - younger community  
    Consider Projections  
Enormous change in demographics  
Samson Ocean Park - when will it be done?  
174 Street - construction going too slow - 3 years' time  
Traffic jams in morning due to construction vehicles  
Construction suppliers blocking lanes  
Construction vehicles blocking  
Technology - encourage people to use (i.e. Uber, waze)  
Technology i.e. public Uber system  
City look at enforcing how commercial vehicles are blocking lanes  
No space on the beach, overcrowding  
No more building permits  
Share powerpoints ahead of time/on website



# Appendix D:

## Pedestrian LOS Assessment Details

#	ROAD	FROM	TO	VEHICULAR SPEED LIMIT	COMMENTS
1	Collins Avenue	City South Boundary	163rd Street - Sunny Isles Boulevard	35	Wider sidewalks on the West side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), sidewalk obstructions such as electric/utility poles, bicyclists utilizing sidewalks on west side, missing midblock crosswalks, benches street trees and ADA curb ramps and detectable strips on sidewalks, high interactions with vehicles, sidewalks and crosswalks on east and west side needing repairs.
2	Collins Avenue	163rd Street - Sunny Isles Boulevard	172nd Street	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), sidewalk obstructions such as electric/utility boxes and poles, bicyclists utilizing sidewalks on west side, missing benches and street trees, high interaction with vehicles, sidewalks on east and west side needing repairs.
3	Collins Avenue	172nd Street	174th Street	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), missing benches and street trees, high interaction with vehicles, sidewalks on east side needing repairs.
4	Collins Avenue	174th Street	178th Street	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), bicyclists utilizing sidewalks on west side, missing midblock crosswalks, benches and street trees, high interaction with vehicles, sidewalks and crosswalks on east side needing repairs.
5	Collins Avenue	178th Street	183rd Street	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), missing crosswalks, midblock crosswalks, benches and street trees, high interaction with vehicles, sidewalks needing repairs.
6	Collins Avenue	183rd Street	186th Street	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), sidewalk obstructions such as bus stops and benches, missing crosswalks, benches and street trees, high interaction with vehicles, sidewalks on east and west side needing repairs.
7	Collins Avenue	186th Street	189th Street	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), missing midblock crosswalks, benches and street trees, high interaction with vehicles.
8	Collins Avenue	189th Street	SR 856	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), missing midblock crosswalks, benches and street trees, high interaction with vehicles.
9	Collins Avenue	SR 856	193rd Street	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), missing midblock crosswalks, benches and street trees, high interaction with vehicles.
10	Collins Avenue	193rd Street	Terracina Road	35	Wider sidewalks on the west side (10'), narrower sidewalks on the east side (6', acceptable for pedestrians without bicycle conflicts), missing crosswalks, benches and street trees, high interaction with vehicles.
11	SR 856 Eastbound	Collins Avenue	City Boundary West	45	No sidewalks, pedestrian facilities. Inadequate for pedestrian use, high interactions with vehicles.
12	SR 856 Westbound	City Boundary West	Collins Avenue	45	No sidewalks, pedestrian facilities. Inadequate for pedestrian use, high interactions with vehicles.
13	Bay View Drive	Collins Avenue	End	20	Missing sidewalks, crosswalks and benches (only segment with sidewalks is on northeast side of Bay View Drive and Collins Avenue), moderate to low interactions with vehicles.
14	Kings Point Drive	Collins Avenue	End	20	Missing crosswalks and benches, low interactions with vehicles.
15	Poinciana Drive	Collins Avenue	End		No sidewalks or pedestrian facilities, low interactions with vehicles. Inadequate for pedestrian use.
16	Atlantic Isle	Collins Avenue	End	20	No sidewalks or pedestrian facilities, low interactions with vehicles. Inadequate for pedestrian use.
17	SR 826 Eastbound	Collins Avenue	City Boundary West	35	Missing midblock crosswalks and benches, high interactions with vehicles
18	SR 826 Westbound	Collins Avenue	City Boundary West	35	Missing midblock crosswalks and benches, high interactions with vehicles

# Appendix D:

## Pedestrian LOS Assessment Details

#	ROAD	FROM	TO	VEHICULAR SPEED LIMIT	COMMENTS
19	N Bay Road	SR 826	172nd Street	20	Missing crosswalks, midblock crosswalks and benches, narrow sidewalks, moderate interactions with vehicles except during school drop-off hours, which causes high interactions with vehicles.
20	N Bay Road	174th Street	178th Street	20	Missing crosswalks, midblock crosswalks and benches, narrow sidewalks, moderate interactions with vehicles except during school drop-off hours, which causes high interactions with vehicles.
21	N Bay Road	178th Street	183rd Street		Missing crosswalks, midblock crosswalks and benches, narrow sidewalks, moderate interactions with vehicles except during school drop-off hours, which causes high interactions with vehicles.
22	N Bay Road	185th Street	191st Terrace	20	Missing crosswalks, midblock crosswalks and benches, narrow sidewalks, moderate interactions with vehicles except during school drop-off hours, which causes high interactions with vehicles.
23	172nd Street	Collins Avenue	N Bay Road	20	Missing crosswalks, midblock crosswalks and benches, narrow sidewalks, moderate interactions with vehicles.
24	174th Street	Collins Avenue	End	20	Missing crosswalks, midblock crosswalks and benches, narrow sidewalks, high interactions with vehicles.
25	175th Terrace	Collins Avenue	Atlantic Boulevard	20	Missing midblock crosswalks and benches, narrow sidewalks, low interactions with vehicles.
26	178th Street	Collins Avenue	Atlantic Boulevard	20	Missing benches and street trees, narrow sidewalks, low interactions with vehicles.
27	178th Street	Atlantic Boulevard	N Bay Road	20	Missing benches and street trees, narrow sidewalks, moderate interactions with vehicles.
28	183rd Street	Collins Avenue	N Bay Road	20	Missing benches and street trees, narrow sidewalks, moderate interactions with vehicles except during school drop-off hours, which causes high interactions with vehicles.
29	185th Street	Collins Avenue	N Bay Road	20	Deficient pedestrian facilities (sidewalks not complete), low interactions with vehicles.
30	186th Street	Collins Avenue	Atlantic Boulevard	20	Deficient pedestrian facilities (sidewalks not complete), low interactions with vehicles.
31	186th Street	Atlantic Boulevard	N Bay Road	20	No sidewalks or pedestrian facilities, low interactions with vehicles. Inadequate for pedestrian use.
32	189th Street	Collins Avenue	N Bay Road	20	No sidewalks or pedestrian facilities, low interactions with vehicles. Inadequate for pedestrian use.
33	193rd Street	Collins Avenue	Gate	20	No benches, moderate-low interactions with vehicles.
34	Atlantic Boulevard	175th Terrace	178th Street	20	Missing midblock crosswalks and benches, narrow sidewalks, high interactions with vehicles.
35	Atlantic Boulevard	178th Street	183rd Street	20	Missing benches, narrow sidewalks, moderate interactions with vehicles except during school drop-off hours, which causes high interactions with vehicles.
36	Atlantic Boulevard	185th Street	189th Street	20	No sidewalks or pedestrian facilities on west side. East side adequate for pedestrian use, high interactions with vehicles.

# Appendix D:

## Bicycle LOS Assessment Details

#	ROAD	FROM	TO	VEHICULAR SPEED LIMIT	COMMENTS
1	Collins Avenue	City South Boundary	163rd Street - Sunny Isles Boulevard	35	No bike lane, cautious use by advanced adult riders due to high level of interaction with vehicles.
2	Collins Avenue	163rd Street - Sunny Isles Boulevard	172nd Street	35	No bike lane, cautious use by advanced adult riders due to high level of interaction with vehicles, field visit indicated riding on sidewalk on west side.
3	Collins Avenue	172nd Street	174th Street	35	No bike lane, cautious use by advanced adult riders due to high level of interaction with vehicles, field visit indicated riding on sidewalk on west side.
4	Collins Avenue	174th Street	178th Street	35	No bike lane, cautious use by advanced adult riders due to high level of interaction with vehicles.
5	Collins Avenue	178th Street	183rd Street	35	No bike lane, cautious use by advanced adult riders due to high level of interaction with vehicles, field visit indicated riding on sidewalk on east side.
6	Collins Avenue	183rd Street	186th Street	35	No bike lane, cautious use by advanced adult riders due to high level of interaction with vehicles, field visit indicated riding on sidewalk on east side.
7	Collins Avenue	186th Street	189th Street	35	No bike lane, cautious use by advanced adult riders due to high level of interaction with vehicles, field visit indicated riding on sidewalk on both east and west sides.
8	Collins Avenue	189th Street	SR 856	35	Shared lane marked, appropriate for advanced adult bicyclists, high interaction with vehicles.
9	Collins Avenue	SR 856	193rd Street	35	Shared lane marked, appropriate for advanced adult bicyclists, high interaction with vehicles.
10	Collins Avenue	193rd Street	Terracina Road	35	Shared lane marked, appropriate for advanced adult bicyclists, high interaction with vehicles.
11	SR 856 Eastbound	Collins Avenue	City Boundary West	45	Properly marked bike lane, appropriate for advanced adult bicyclists, high interaction with vehicles and high speed limit.
12	SR 856 Westbound	City Boundary West	Collins Avenue	45	Properly marked bike lane, appropriate for advanced adult bicyclists, high interaction with vehicles and high speed limit.
13	Bay View Drive	Collins Avenue	End	20	No bike lane, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.
14	Kings Point Drive	Collins Avenue	End	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
15	Poinciana Drive	Collins Avenue	End		No bike lane or sidewalks, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.
16	Atlantic Isle	Collins Avenue	End	20	No bike lane or sidewalks, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.
17	SR 826 Eastbound	Collins Avenue	City Boundary West	35	No bike lane, generally not safe for bicycle use due to high level of interaction with vehicles.
18	SR 826 Westbound	Collins Avenue	City Boundary West	35	No bike lane, generally not safe for bicycle use due to high level of interaction with vehicles.

# Appendix D:

## Bicycle LOS Assessment Details

#	ROAD	FROM	TO	VEHICULAR SPEED LIMIT	COMMENTS
19	N Bay Road	SR 826	172nd Street	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
20	N Bay Road	174th Street	178th Street	20	No bike lane, only one narrow vehicle lane each way, cautious use by advanced adult riders, moderate interactions with vehicles.
21	N Bay Road	178th Street	183rd Street		No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
22	N Bay Road	185th Street	191st Terrace	20	No bike lane, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.
23	172nd Street	Collins Avenue	N Bay Road	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
24	174th Street	Collins Avenue	End	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
25	175th Terrace	Collins Avenue	Atlantic Boulevard	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
26	178th Street	Collins Avenue	Atlantic Boulevard	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
27	178th Street	Atlantic Boulevard	N Bay Road	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
28	183rd Street	Collins Avenue	N Bay Road	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
29	185th Street	Collins Avenue	N Bay Road	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
30	186th Street	Collins Avenue	Atlantic Boulevard	20	No bike lane, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.
31	186th Street	Atlantic Boulevard	N Bay Road	20	No bike lane, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.
32	189th Street	Collins Avenue	N Bay Road	20	No bike lane, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.
33	193rd Street	Collins Avenue	Gate	20	No bike lane, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.
34	Atlantic Boulevard	175th Terrace	178th Street	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
35	Atlantic Boulevard	178th Street	183rd Street	20	No bike lane, appropriate for advanced adult bicyclists, moderate interactions with vehicles.
36	Atlantic Boulevard	185th Street	189th Street	20	No bike lane, appropriate for most bicyclists (some supervision may be required), moderate to low interactions with vehicles.

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**SUNNY ISLES  
MOVING FORWARD TOGETHER BEACH**



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