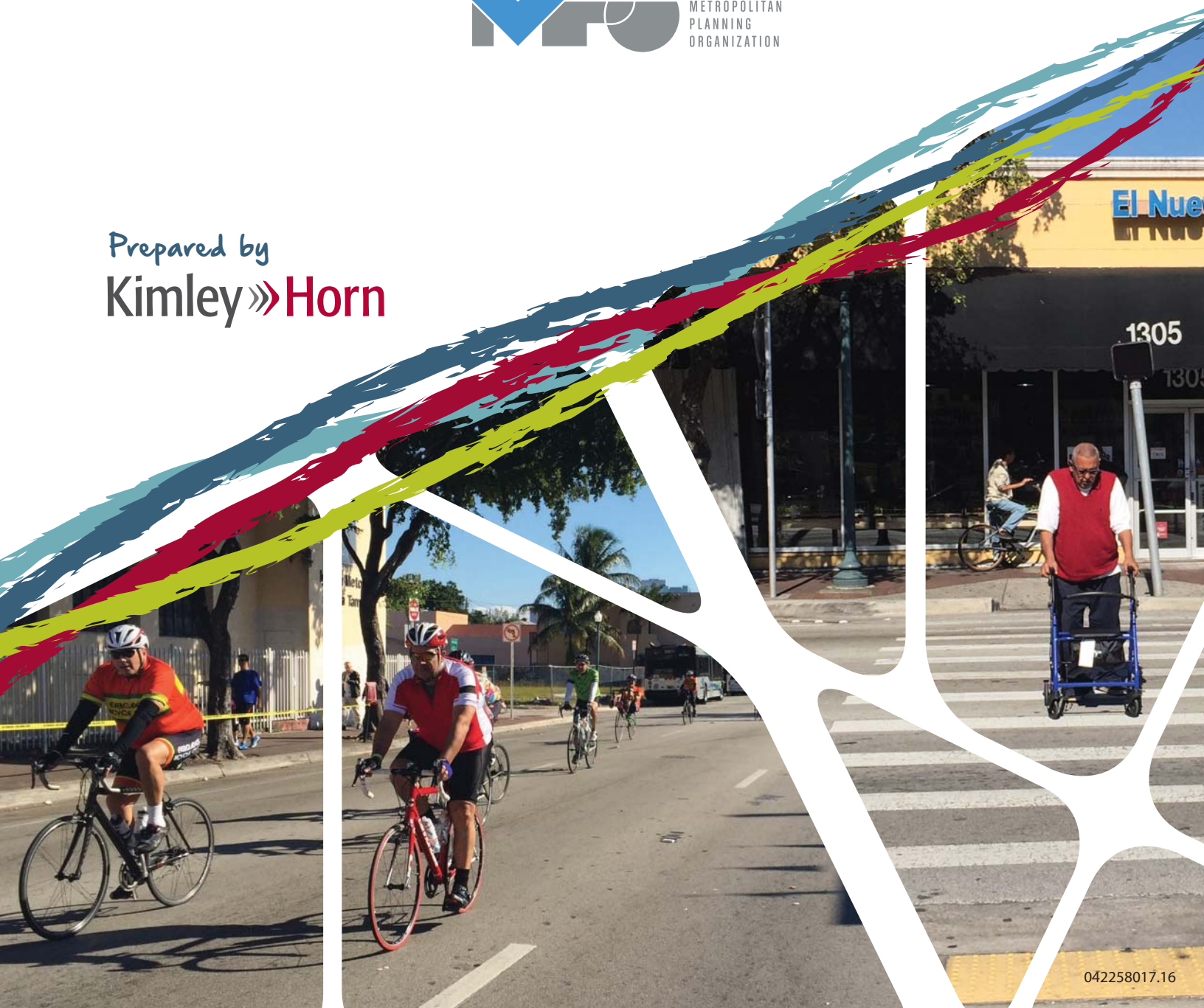
LITTLE HAVANA

Bicycle/Pedestrian Mobility Plan

MIAMI-DADE METROPOLITAN PLANNING ORGANIZATION

Prepared by

Kimley»Horn



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Little Havana
Bicycle Pedestrian Mobility Plan

Prepared for:

City of Miami

Prepared by:
Kimley-Horn and Associates, Inc.

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The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Table of Contents

List of Figures

List of Tables

Appendices

Introduction

Little Havana is one of the most vibrant and historically significant neighborhoods in Miami, and is noted as a center of social and cultural activity. Little Havana is characterized by its street life, with restaurants, window coffee shops, music and other cultural activities, local businesses, festivals, and social capital amongst its residents. Festivals including the Calle Ocho Festival, Viernes Culturales (Cultural Fridays), the Three Kings Parade and others, are a staple of the Little Havana community.

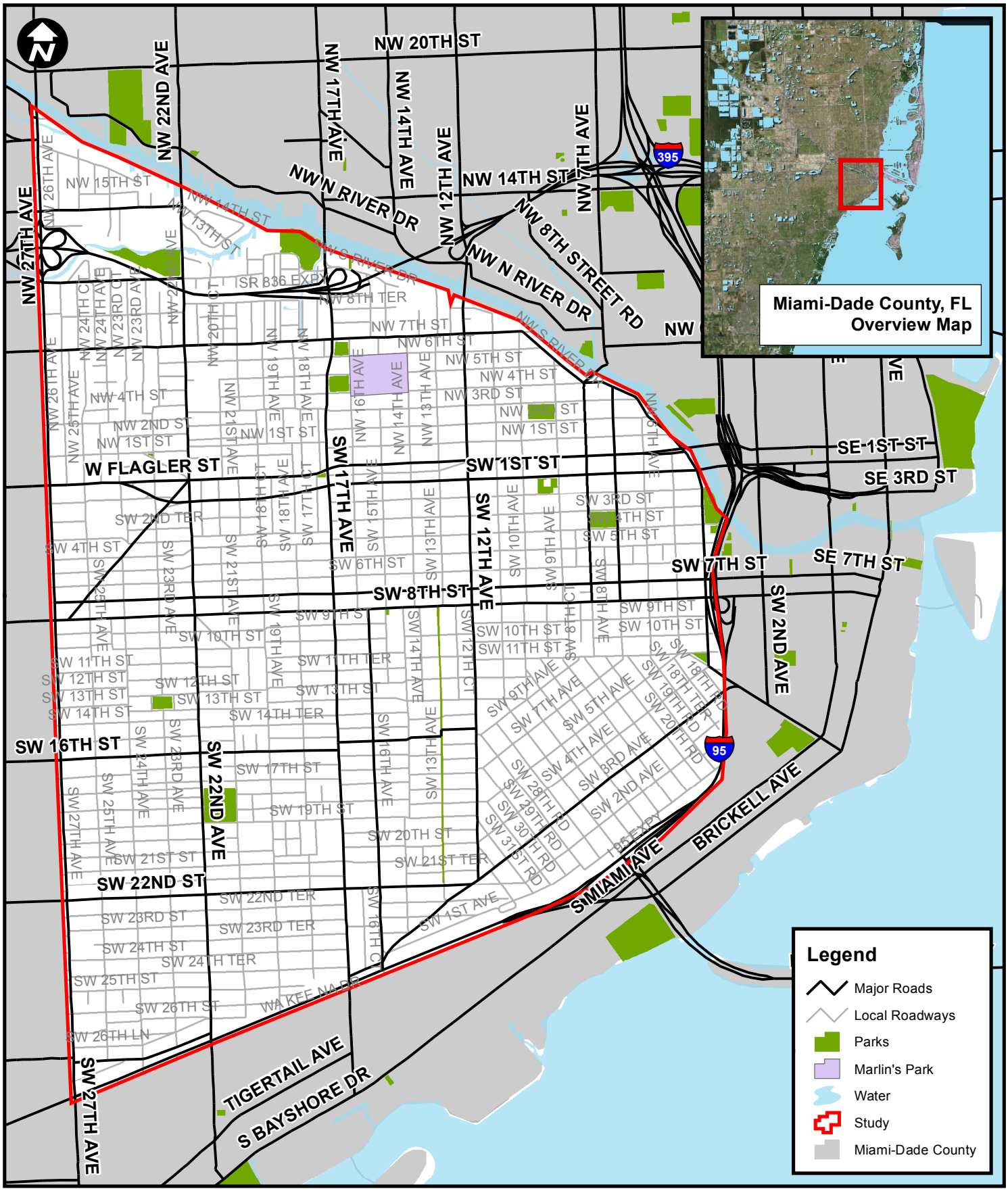
The City of Miami and the Miami-Dade Metropolitan Planning Organization (MPO) are collaborating to create a Mobility Plan to improve the walkability and bikeability of the Little Havana neighborhood, which is located just west of Downtown Miami. This plan includes the neighboring areas of Shenandoah and the Roads, just south of Little Havana. The project study area is highlighted in Figure 1.

The *Little Havana Bicycle Pedestrian Mobility Plan* will benefit the City of Miami in developing an implementation plan to achieve its complete streets goals and non-motorized mobility objectives in conjunction with the Miami Comprehensive Neighborhood Plan. Improving the conditions for bicycling and walking are expected to increase the number of non-motorized trips, improve safety, and help make the Little Havana neighborhood a more desirable place to live, work, and visit. This Mobility Plan will identify a safe, convenient, and accessible series of pedestrian and bicycle facilities and related improvements to improve mobility and safety in the area. Once implemented, this Mobility Plan will enhance the opportunity for residents and visitors alike to enjoy active transportation while gaining the health and social benefits that bicycling and walking has to offer.

Multimodal Mobility Study

Little Havana

Figure 1. Study Area



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Plan Objective

Much of Little Havana is naturally suited for walking and bicycling. Relative to the rest of Miami-Dade County, Little Havana enjoys a relatively well-connected grid street network, a number of tree-lined streets, and many interesting destinations for people to experience. In addition, Little Havana is within bikeable distance or a short bus ride away from Downtown Miami and Brickell.

The primary objective of the *Little Havana Bicycle Pedestrian Mobility Plan* is to improve the walkability and bikeability of the Little Havana area. This non-motorized mobility plan will develop and recommend projects to help implement the City of Miami's goals related to bicycle and pedestrian mobility, complete streets, placemaking, and access to public transit by connecting the area's neighborhoods, activity centers, and community facilities. The development of this plan will incorporate public input and participation. Ultimately, improving the conditions for bicycling and walking are expected to increase the number of non-motorized trips, improve safety, and help make the Little Havana area a more desirable place to live, work, and visit.

The Little Havana area is known for its spirited street life and cultural landmarks such as Domino Park.

Literature Review

An important element of a successful multimodal mobility plan is to understand prior initiatives that can provide information about the context within which this plan exists and can provide information about projects that can be used as a starting point for enhancing multimodal mobility. Recommendations and projects identified in prior studies that may affect the outcome of this plan have been identified.

The following data sources, studies, and plans were reviewed as part of this effort. A brief summary of the review of each item is included.

- Safe Routes to Age in Place
- 2016 Transportation Improvement Program
- Miami-Dade 2040 Long Range Transportation Plan
- Miami-Dade 2040 Bicycle/Pedestrian Plan
- Miami-Dade MPO Bicycle/Pedestrian Safety Plan Update
- Miami-Dade County Park and Open Space System Master Plan
- U.S. Census Journey-to-Work Data
- National Household Travel Survey Data
- Miami Downtown Development Authority Bicycle and Pedestrian Mobility Plan
- City of Miami Bicycle Master Plan
- National Association of City Transportation Officials Urban Bikeway Design Guide
- Miami Comprehensive Neighborhood Plan Future Land Use Map
- Live Healthy Little Havana

Safe Routes to Age in Place

In collaboration with five local partners in Miami-Dade County, the Health Foundation of South Florida has created the Miami-Dade Age Friendly Initiative, whose goal is to foster physical and social environments for adults of all ages to stay active and healthy. One of the major challenges that older adults face in living independently is their limited mobility options. Urban Health Partnerships (UHP) implemented a pilot Safe Routes to Age in Place (SRTAP) program, which aims at "fostering accessible, safe, comfortable, appealing, and active transportation (e.g. walking, biking, and taking mass transit) options for adults of all ages and abilities".

The SRTAP pilot program, conducted and produced by UHP with the assistance of Kimley-Horn and Associates, Inc., established criteria for selection of routes based on safety (elderly pedestrian crash density), density (elderly population density from Census data), and need (percentage of households with zero automobile availability). Four potential focus areas were selected including South Beach, North Beach, Sunny Isles, and Little Havana. Little Havana was selected as the pilot project and a number of age-friendly initiatives have been implemented since launch in 2013.

An Age-Friendly Business District was developed in Little Havana, in which over 25 businesses have provided incentives for older adults to walk into their stores every Tuesday. Additionally, the Age-Friendly Parks Initiative was developed that focuses on policy, programming and infrastructure improvements within the parks system to encourage older adults to remain active and engaged in their communities the program. 13 pilot park sites are on board to incorporate initiatives such as 55 and older fitness programs and incentive based walking programs.

Other efforts of the SRTAP and the Miami-Dade Age-Friendly Initiative include creation of the Little Havana Safe Routes to Age in Place Virtual Advisory Committee, which provides policy support to ensure the development, adoption, and implementation of key long-term plans consider age-friendly initiatives. The Open Space Master Plan (OSMP) and the Miami-Dade County 2040 Long-Range Transportation Plan (LRTP) have been revised to incorporate these guidelines.

2016 Transportation Improvement Program

The Miami-Dade MPO prepares the annual Transportation Improvement Program (TIP) consistent with federal guidelines. The TIP in effect at the time of this Plan is the FY 2015/16 to FY 2019/20 TIP approved by the Miami-Dade MPO Governing Board on May 21st, 2015. The TIP specifies proposed transportation improvements to be implemented in Miami-Dade County over the upcoming five years. The most recent TIP was reviewed to identify programmed projects within the Little Havana/ Shenandoah/The Roads study area. Several projects were identified including Resurfacing, Restoration, and Rehabilitation (RRR) projects, Project Development and Environmental (PD&E) projects, Bicycle/Pedestrian improvement projects, and Capacity, Interchange, Intersection, and Safety projects.

The RRR projects identified in the TIP allow opportunity for the re-striping of roadways and the potential to include bicycle lanes where feasible. These RRR projects as well as additional projects included within the TIP are identified and detailed below:

- **RRR**
  - along SR 968 (West Flagler Street/SW 1st Street)
  - along SR 7 (SW 7th Avenue/SW 8th Avenue)
  - along SR 933 (SW 12th Avenue)
- **PD&E Study**: SR 90/US 41 (SW 7th Street/SW 8th Street),
- **Bridge Replacement**: SW 1st Street bridge over the Miami River
- **Bridge Repair and Rehabilitation**: 12th Avenue bridge over the Miami River
- **Intersection Improvements**: SW 12th Avenue between SW 6th Street and SW 8th Street

More details regarding these improvements are provided in Appendix A.

Miami-Dade 2040 Long Range Transportation Plan

The Miami-Dade 2040 Long Range Transportation Plan (LRTP) identifies several projects located within the boundary of study area. LRTP projects are prioritized using a scale of 1 to 4, where Priority 1 projects are to be implemented between 2015-2020, Priority 2 projects are to be implemented between 2021-2025, Priority 3 projects are to be implemented between 2026 and 2030,

and Priority 4 projects between 2031 and 2040. Unlike the TIP, the LRTP identifies needs and improvements along all facilities, not only along FDOT-owned corridors.

Three corridor improvement projects were identified in the LRTP: two of which are listed as Priority 1, and one as a Priority 2. The Priority 1 projects include the Flagler Enhanced Bus service that would operate between the Miami Downtown Terminal and SW 112th Avenue to serve the Florida International University – Modesto Maidique Campus. The limited stop service along West Flagler Street may provide access to/from Little Havana, but will not serve the individual internal neighborhoods. The SW 1st Street Bridge replacement, discussed in the 2016 TIP, is also included as a Priority 1 project in the LRTP. The Priority 2 project is a roadway improvement project along NW 20th Street from NW 27th Avenue to Interstate 95.

Approximately ten bicycle/pedestrian-specific projects are included in the LRTP, including bicycle facility improvements along SW 1st Street, Safe Routes to Schools (SRTS) serving Shenandoah Elementary and Silver Bluff Elementary schools, pedestrian facility improvements on South River Drive, and a bicycle facility improvements project connecting The Roads neighborhood to the M-Path along South Dixie Highway (US 1/ SR 5). More details regarding the improvements identified in the 2040 LRTP are provided in Appendix B.

Miami-Dade 2040 Bicycle/Pedestrian Plan

The Miami-Dade 2040 Bicycle/Pedestrian Plan presents vision and improvement strategies developed through public engagement activities and technical analysis to enhance the non-motorized transportation network of Miami-Dade County, and serves as an important element of the County's 2040 LRTP. The plan establishes evaluation criteria specific to on-road and off-road bicycle and pedestrian facilities. Projects within the plan were categorized into four priority levels using a *Needs Assessment* process established by the Bicycle Pedestrian Advisory Committee (BPAC).

The evaluation criteria used in the 2040 Bicycle/Pedestrian Plan is summarized in Table 1. Based on this criteria, and weights assigned by the BPAC, the plan was able to establish a *Minimum Revenue Plan*. This plan consisted of all projects categorized as Priority 1. It was found that approximately 56 miles (roughly 44%) of the on-road network improvements were classified as Priority 1, while around 48 miles (approximately 34%) of the off-road network improvement projects fell under this category.

Table 1: Evaluation Criteria for On-road and Off-road Facilities

	On-Road Facilities	Off-Road Facilities
Existing Conditions	Pedestrian & Bicyclist Crash Data	Unpaved Path
	Pedestrian and Bicycle LOS	
Connectivity	Schools, Employment Centers, Residential, Public Transit, Parks and Recreation Areas	Schools, Employment Centers, Residential, Public Transit, Parks and Recreation Areas
	Existing Pedestrian and Bicyclist Facilities	Existing Pedestrian and Bicyclist Facilities
Local Support	Funding	Funding
Cost Feasibility	ROW (Right-of-Way) Availability	ROW (Right-of-Way) Availability
	Component of an LRTP Project	

Additionally, the 2040 Bicycle/Pedestrian Plan, through public engagement and coordination efforts, identified several showcase projects as priorities for implementation.

- Atlantic Trail
- Rickenbacker Causeway
- Biscayne Boulevard
- Snake Creek Trail
- M-Path
- Miami Avenue/NE 1st Avenue
- School Safety Enhancement Program
- Flagler Trail
- Ludlam Trail
- Neighborhood Greenways
- Bicycle Commuter Stations
- More and Safer Crosswalks

Miami-Dade MPO Bicycle/Pedestrian Safety Plan Update

The Bicycle/Pedestrian Safety Plan Update is an initiative that aims to reduce bicyclist and pedestrian fatalities in Miami-Dade County. The Safety Plan Update identifies and recommends pedestrian focused improvements, bicycle focused improvements, and general improvements that can target certain types of crashes. For example, the plan suggests using “Pork Chop” island refuges, restricting right-turns on red, and providing a leading pedestrian interval to reduce right-turn crashes. Many of the improvements geared towards preventing bicyclist crashes involve education and enforcement. Some examples of other general improvements include road diets/lane reductions to help reduce

midblock crashes, speed feedback signs to reduce high-speed crashes, and improved lighting to reduce nighttime crashes.

Miami-Dade County Park and Open Space System Master Plan

The most recent Open Space System Master Plan (OSMP) was developed in 2007 and approved in early 2008 by the Miami-Dade County Park and Recreation Department. This plan provides a 50-year vision to guide the development in the county in order to build more sustainable and livable communities. The OSMP identifies six major goals: Sustainability, Seamlessness, Beauty, Equity, Access and Multiple Benefits. Within each goal, the OSMP provides a number of strategies to guide the implementation. The key goals that impact this Mobility Plan are: Seamlessness, Beauty, Access and Multiple Benefits. Relevant actions for each of these goals are as follow:

Goal 2: Seamlessness

- Strategy #1: develop, implement greenways, trails and bicycle facilities. This strategy identifies initiated Greenway Master Plans as well as greenway and bicycle trail projects that required immediate attention. Furthermore, greenway/trail wayfinding signage should be completed.

Goal 3: Beauty

- Strategy #1: Design parks, public spaces, natural and cultural areas, greenways and streets to create a sense of place for neighborhood stabilization and/or redevelopment
- Strategy #2: Design streets to create a sense of place. This is done through a Great Streets Program that was initiated. Furthermore, Connectivity requirements for new developments are identified and include greenways and trails to connect people to parks, schools and work.
- Strategy #3: Manage and operate greenways and bicycle facilities to promote beauty and sustainability.

Goal 5: Access

- Strategy #1: Create Parks and Open Space Activity Access Criteria. This includes identifying access measures for neighborhoods and regional activities as well as connectivity gaps for recreation opportunities.
- Strategy #2: Secure safe routes to parks.

Goal 6: Multiple Benefits

- Strategy #1: Improve health, wellness, and social well-being through greenway and bicycle trails implementation and future development.

US Census Journey-to-Work Data

US Department of Transportation (USDOT) data from the 2009 *National Household Travel Survey* (NHTS) indicate that bicycling and walking account for approximately 10 percent of all trips in the Miami-Dade urbanized area, with walking representing approximately nine percent and bicycling representing approximately one percent. The USDOT NHTS data is collected on daily trips through random sample travel surveys. Data is requested from participants including trip mode, trip purpose, and trip lengths. Florida's participation in the NHTS Add-On Program allows sufficient data collection to be analyzed at the urbanized area level, therefore the reported data is presented at the Miami-Dade urbanized area level.

Additionally, the United States Census Bureau measures transportation data for work trips only using a sampling of respondents that complete the census long form as part of the annual American Community Survey (ACS). Updated socioeconomic, demographic, and housing information is now available on an annual basis. The 2010-2014 ACS 5-Year Estimates for Little Havana were used for this analysis.

Work trip characteristics in the Little Havana study area demonstrate that residents are more likely to make work trips on foot or by bicycle than compared to rest of the County, State, and Country as a whole. The percentage of work trips made by bicycle is approximately twice as high in Little Havana than in Miami-Dade County as a whole, and the percentage of work trips made on foot is one-third higher in Little Havana than the County as a whole, and twice as high as in the State of Florida as a whole. Transit and bicycles are used approximately 33 percent more in Little Havana than in the rest of the City of Miami. "*Drove alone*" is still the predominant journey-to-work mode; however, a smaller percentage of people drive alone within this area than other areas of the City and County.

Table 2: Journey to Work Data

	Little Havana Study Area		City of Miami		Miami-Dade County		State of Florida		United States	
Description	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Car, truck, or van	32,202	76.74%	144,211	78.61%	991,692	86.23%	7,343,895	89.25%	121,545,061	86.00%
Drove Alone	*26,879*	*64.05%*	*126,905*	*69.18%*	*883,910*	*76.86%*	*6,552,971*	*79.64%*	*107,990,698*	*76.41%*
Carpooled	*5,323*	*12.68%*	*17,306*	*9.43%*	*107,782*	*9.37%*	*790,924*	*9.61%*	*13,554,363*	*9.59%*
Public Transportation	6,422	15.30%	20,984	11.44%	61,754	5.37%	171,909	2.09%	7,157,671	5.06%
Taxicab	79	0.19%	232	0.13%	1,393	0.12%	6,744	0.08%	160,553	0.11%
Motorcycle	95	0.23%	722	0.39%	2,519	0.22%	27,565	0.33%	294,635	0.21%
Bicycle	553	1.32%	1,734	0.95%	7,322	0.64%	55,846	0.68%	832,750	0.59%
Walked	1,286	3.06%	8,292	4.52%	26,316	2.29%	126,128	1.53%	3,932,118	2.78%
Other means	264	0.63%	1,248	0.68%	10,367	0.90%	91,729	1.11%	1,242,769	0.88%
Worked at home	1,064	2.54%	6,029	3.29%	48,689	4.23%	404,741	4.92%	6,171,591	4.37%

National Household Travel Survey Data

According to the 2009 National Household Travel Survey, nearly 28 percent of all trips are two miles or less in length. Approximately 17 percent of trips are less than one mile, yet less than two percent of all trips are made by bicycle and less than 11 percent of all trips are made by walking.

Active transportation, such as bicycling, walking, or accessing public transportation, has the potential to serve a greater market share of trips than it currently does. Facilities such as wide sidewalks, pedestrian crossing features at key intersections, bicycle parking areas, and interconnected bike lanes are important for attracting a greater modal share for alternative travel modes. Focusing planning efforts on alternative transportation modes is vital.

Miami Downtown Development Authority Bicycle and Pedestrian Mobility Plan

Miami-Dade MPO in conjunction with Miami Downtown Development Authority (DDA) and Kimley-Horn and Associates, Inc. developed a bicycle/pedestrian mobility plan for the Miami DDA area. The mobility plan used a combination of data collection, public feedback, and engineering evaluation to determine pedestrian and bicycle facility needs throughout all of Downtown Miami. After the

assessments were completed, a list of area wide improvements, site-specific improvements, and non-engineering improvements were compiled.

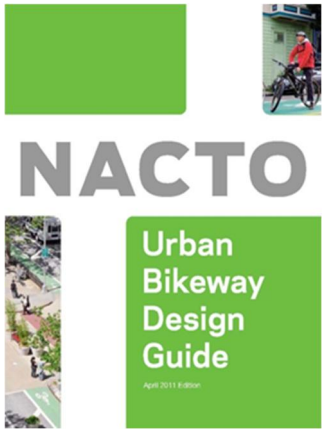
City of Miami Bicycle Master Plan


Figure 1-2: Priority Areas for Bicycle Parking Provisions

In 2009, the City of Miami in conjunction with HNTB developed a Bicycle Master Plan for the City of Miami. The vision of the Bicycle Master Plan was to provide a 20 year plan for the City of Miami's bikeway network plan, bicycle parking facilities, and bicycle safety promotion.

The Bicycle Master Plan was broken into four phases by year (2010, 2015, 2020, and 2030) based on the priorities and needs within specific districts and corridors throughout the City of Miami. Some of the priority corridors (2010-2015) that were zoned are Biscayne Boulevard, Coral Way, SW 8th Street, SW 1st Street, and NW 3rd Avenue. The districts that were considered priority areas include Brickell, Marlins Stadium, Civic Center, Center Grove, and Wynwood.

National Association of City Transportation Officials Urban Bikeway Design Guide



The National Association of City Transportation Officials (NACTO) published the "Urban Bikeway Design Guide", which illustrates state-of-the-practice bicycle transportation facility design solutions from the best cycling cities in the world. The designs are based on the concept that unique urban streets require innovative solutions that go beyond a more minimal approach found in many national and state standards and guidelines. A panel of urban bikeway planning professionals worked with traffic engineers, planners, and academics with deep experience in urban bikeway applications to develop the NACTO Guide and to ensure that it is based on sound engineering principles.

The intent of the NACTO Guide is to offer substantive guidance for cities seeking to improve bicycle transportation in places where competing demands for the use of the right-of-way present unique challenges. The NACTO Guide details state-of-the-practice design treatments that are used in the world's most bicycle friendly cities including:

- Bike Lanes
  - Conventional Bike Lanes
  - Buffered Bike Lanes
  - Contra-Flow Bike Lanes
  - Left-Side Bike Lanes
- Cycle Tracks
  - One-Way Protected Cycle Tracks
  - Raised Cycle Tracks
  - Two-Way Cycle Tracks
- Intersections
  - Bike Boxes
  - Intersection Crossing Markings
  - Two-Stage Turn Queue Boxes
  - Median Refuge Island
  - Through Bike Lanes
  - Combined Bike Lane/Turn Lane
  - Cycle Track Intersection Approach
- Bicycle Signals
  - Bicycle Signal Heads
  - Signal Detection and Actuation
  - Active Warning Beacon for Bike Route at Unsignalized Intersection
  - Hybrid Signal for Bike Route Crossing of Major Street
- Bikeway Signing and Marking
  - Bike Route Wayfinding Signage and Markings System
  - Colored Bike Facilities
  - Shared Lane Markings

Miami Comprehensive Neighborhood Plan Future Land Use Map

The study area is currently part of the Little Havana Residential Density Increase Area (RDIA). The area is currently becoming a primary location for development and redevelopment. The site is near downtown which is attracting new population because of development and redevelopment activity in the area and along the Miami River. The existence of various modes of transportation is also stimulating additional development opportunities. The presence of the developing River Walk along the Miami River, and the established Jose Marti Park provide recreational opportunities. These aspects encourage the opportunity for increased residential density.

Though development exists within the proposed RDIA east of 2nd Avenue. The site area west of 2nd Avenue currently consists of vacant properties and boarded up structures which are available for development and redevelopment. The Miami Comprehensive Neighborhood Plan (MCNP) "Interpretation of the 2020 Future Land Use Map" indicates that the project area is within the "Restricted Commercial" land use category which allows residential structures up to a density equivalent to "High Density Multifamily Residential" or 150 dwelling units per acre. The site is also currently within the Little Havana Residential Density Increase Area Overlay RDIA which allows the density to increase up to 200 dwelling units per acre and the "Little Havana" RDIA to the south and east which permits up to 200 dwelling units per acre

The MCNP Future Land Use plan also includes a conceptual plan of land uses and hypothetical build-out plan for all aspects from parks to transportation systems. The plan lists projects and programs to be facilitated by the CRA to begin transforming the area. This is for the densification of the area contained within the maps, which further demonstrates the need for pedestrian mobility and safety improvements in these areas. The Future Land Use Map (FLUM) amendment existing and future land use area map are included in Appendix C.

Live Healthy Little Havana

In 2014, Health Foundation of South Florida (HFSF) launched an initiative aimed at strengthening community capacity to collaboratively plan and collectively carryout strategies to improve health. The Foundation selected the neighborhood of Little Havana to invest up to $3.75 million over six years and has begun to establish a multi-year partnership with Little Havana stakeholders. This initiative aims to strengthen the community's capacity to collaboratively plan and collectively carryout strategies that make the historic neighborhood healthier.

Little Havana stakeholders selected ConnectFamilias, a local non-profit, to serve as the Host Agency for the neighborhood initiative. As the primary coordinator, convener, communicator and "backbone" of the initiative, ConnectFamilias was responsible for the formation of a Host Council. This council is comprised of community residents and key stakeholders tasked with providing leadership and oversight of the initiative, as well as identifying the high priority health issues in Little Havana. Using information gathered from existing data sources and community focus groups, the Host Council selected five Health Impact Areas:

- The provision and promotion of physical activity among Little Havana's children and adults
- Prevention of alcohol and substance abuse in Little Havana
- Healthy eating and improved nutrition among children and adults
- Quality mental health treatment services care services are accessible in the community
- Quality primary health care services are accessible in the community

Sub-Councils were created for each Health Impact Area to guide the development of a Community Action Plan (CAP) and monitor the progress of the initiative in each area to ensure targeted objectives are met.

Transportation Mobility Analysis

A general transportation mobility analysis is conducted to identify bicycle and pedestrian mobility issues through data analysis in the Little Havana area. The analysis was based on existing conditions, data collected for this Plan, and an online bicycle and pedestrian survey. The purpose of this task is to collect data that will allow the study team to properly assess the existing conditions of alternative travel modes in the study area and to analyze the future bicycle and pedestrian infrastructure needs.

GIS Data Map Series

Using geographic information systems (GIS), a map series was prepared to illustrate existing transportation mobility conditions and community features in Little Havana that help form the background conditions for improving the area's bicycle and pedestrian mobility.

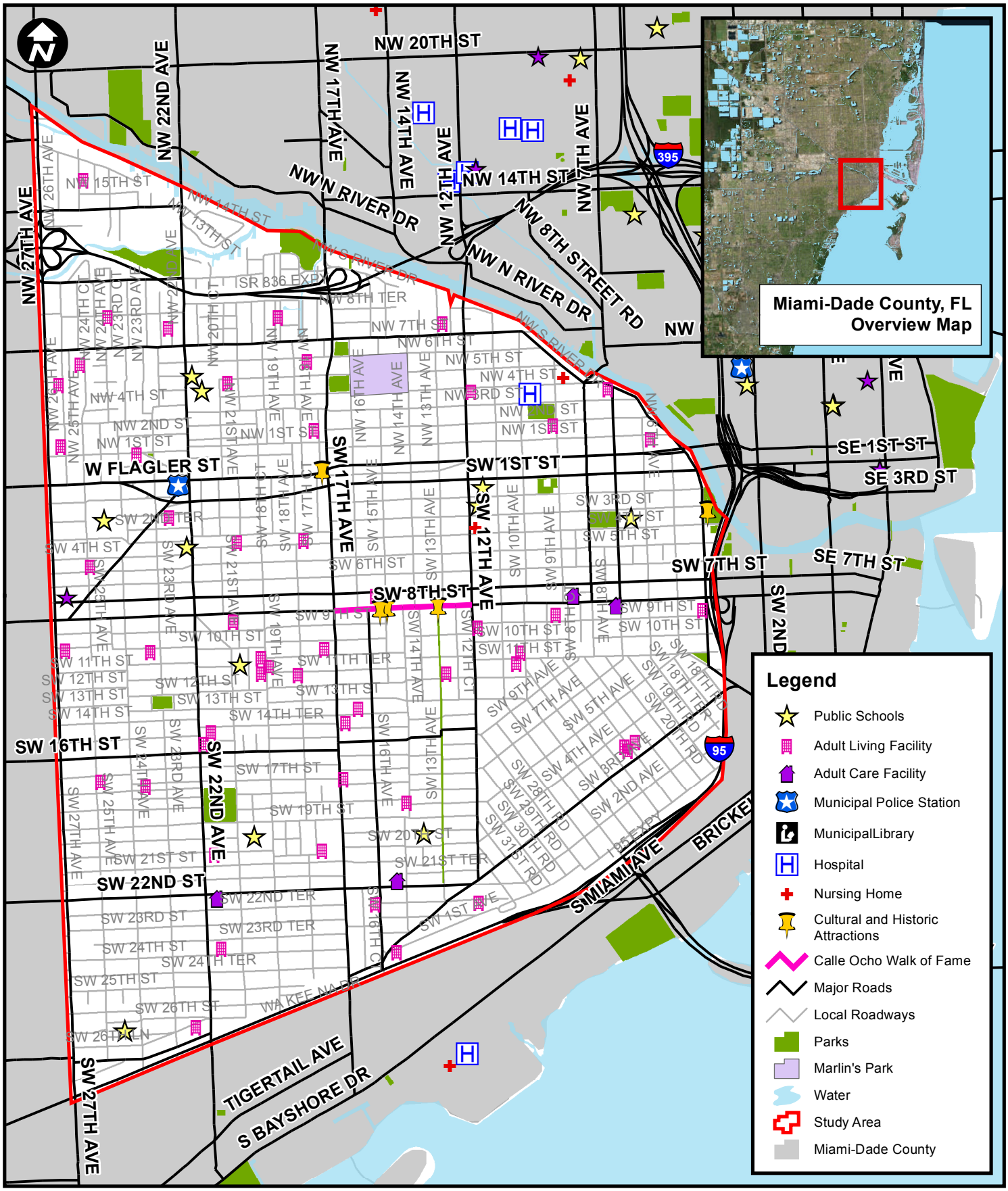
Figures 1 through 9 present the GIS Data Map Series.

- Figure 1: Community Features
- Figure 2: 2010 Census Population Density
- Figure 3: 2010 Census Vehicle Ownership
- Figure 4: Little Havana Transit Services and Metrobus Ridership
- Figure 5: Existing and Planned Bicycle Facilities
- Figure 6: Bicycle Level of Service
- Figure 7: Pedestrian Level of Service
- Figure 8: Pedestrian Crashes (2008 – 2013)
- Figure 9: Bicycle Crashes (2008 – 2013)

Multimodal Mobility Study

Little Havana

Figure 2. Community Features



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Multimodal Mobility Study

Little Havana

Figure 3. 2010 Census Population Density

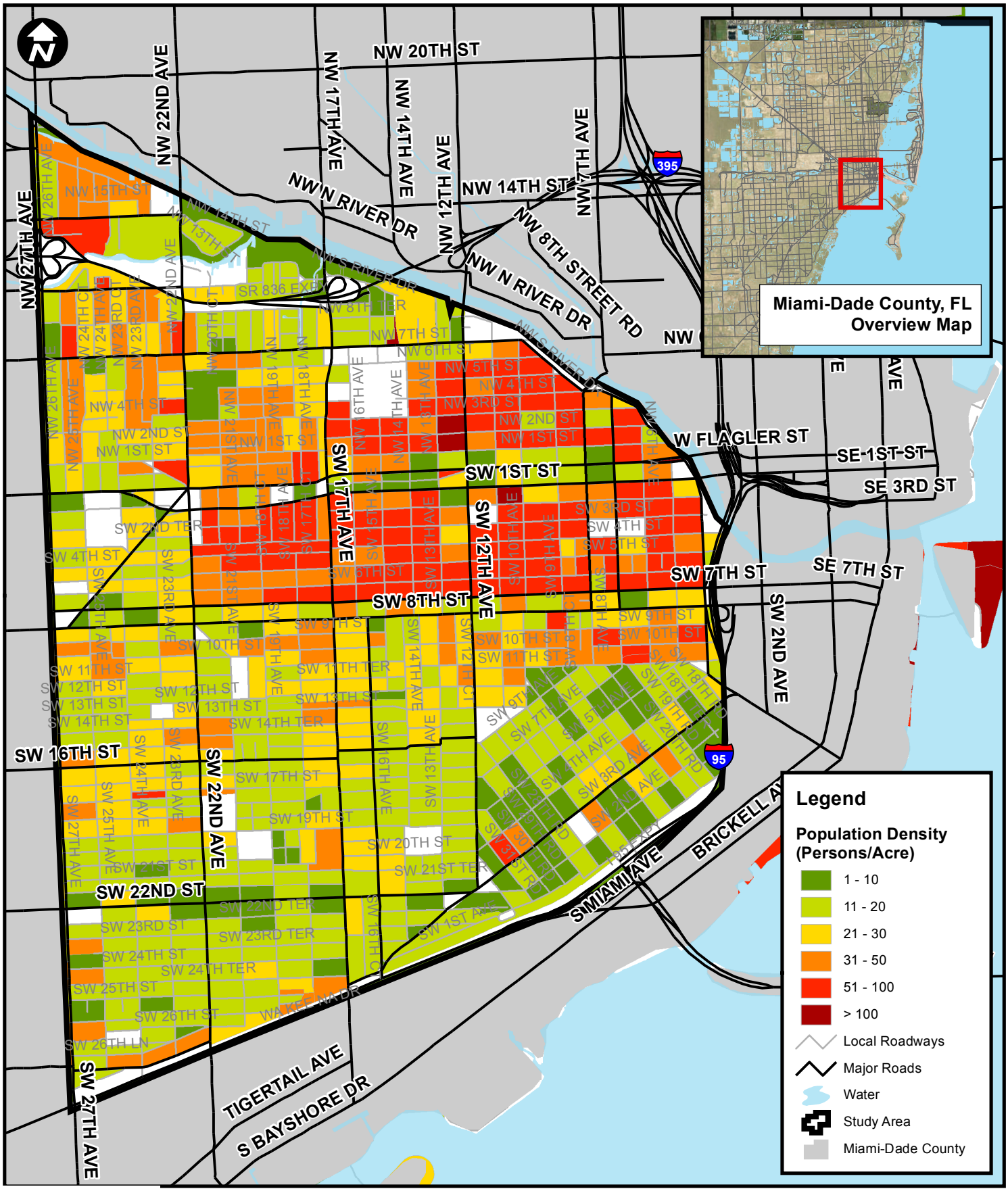

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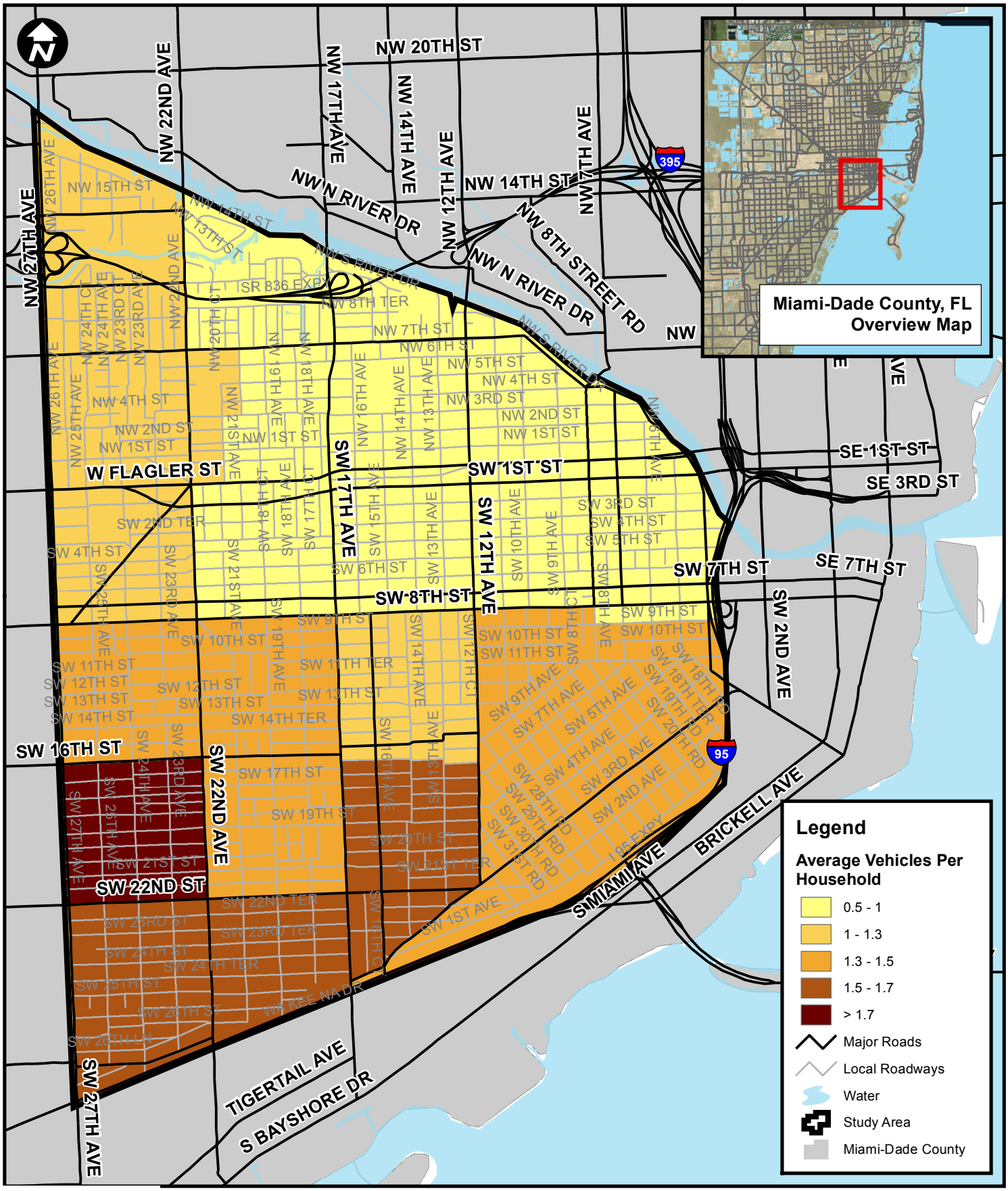
Figure 4. Vehicles Per Household



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Transit Services and Metrobus Ridership

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0 0.25 0.5 1 Miles

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Figure 6. Existing and Planned Bicycle Facilities

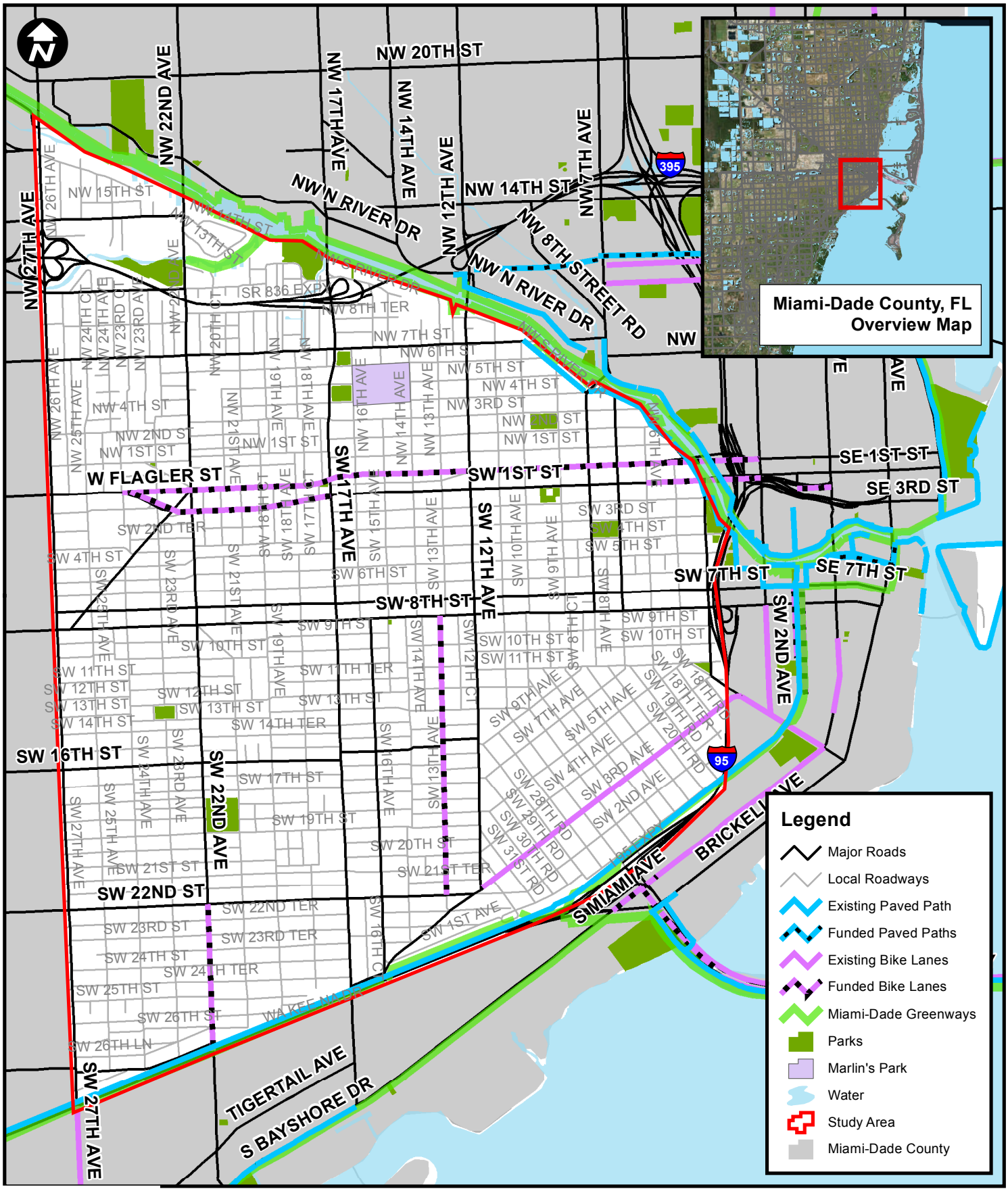

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Figure 7. Bicycle Level of Service

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Figure 8. Pedestrian Level of Service

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0 0.25 0.5 1 Miles

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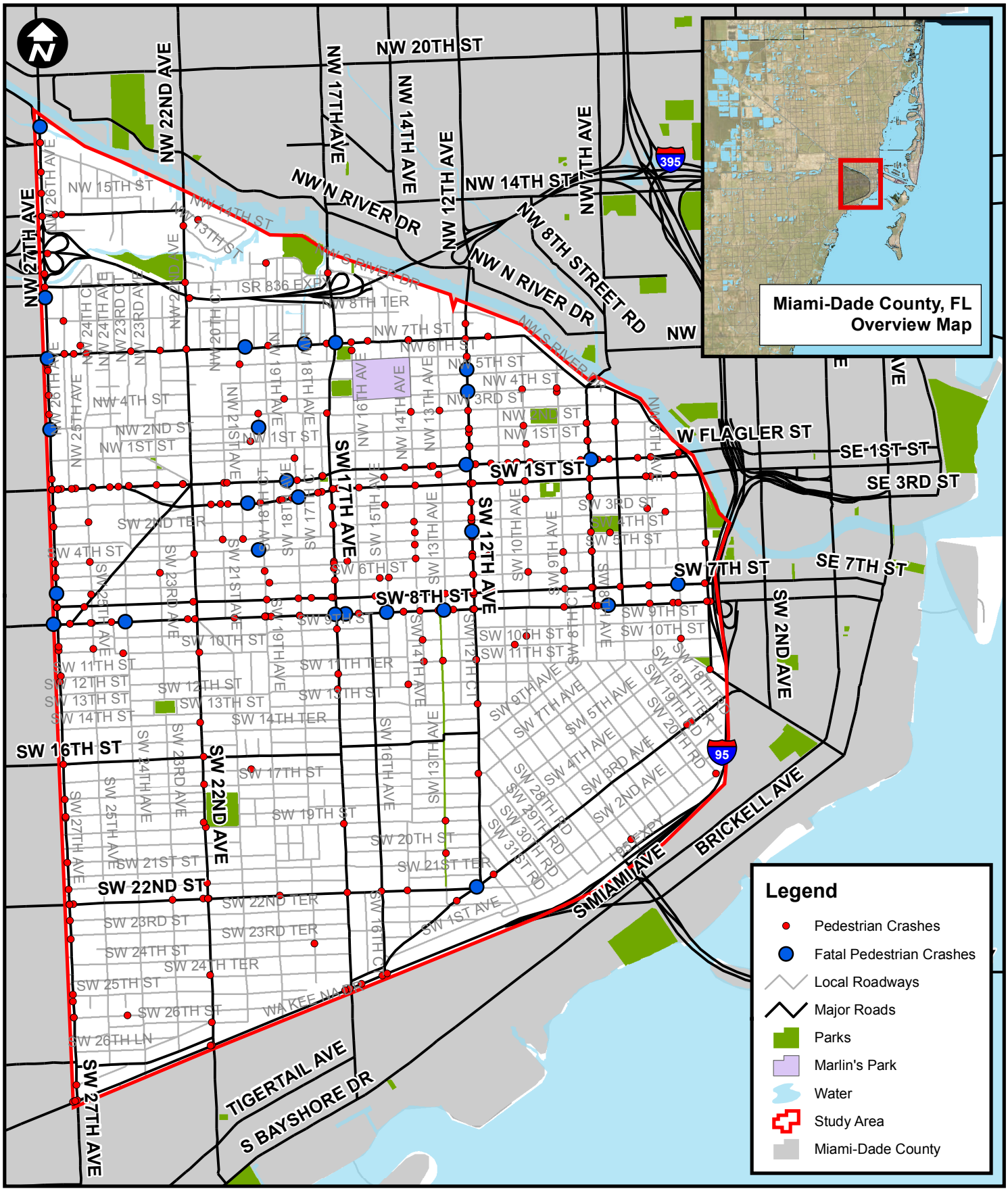
Little Havana

Figure 9. Pedestrian Crashes (2008-2013)



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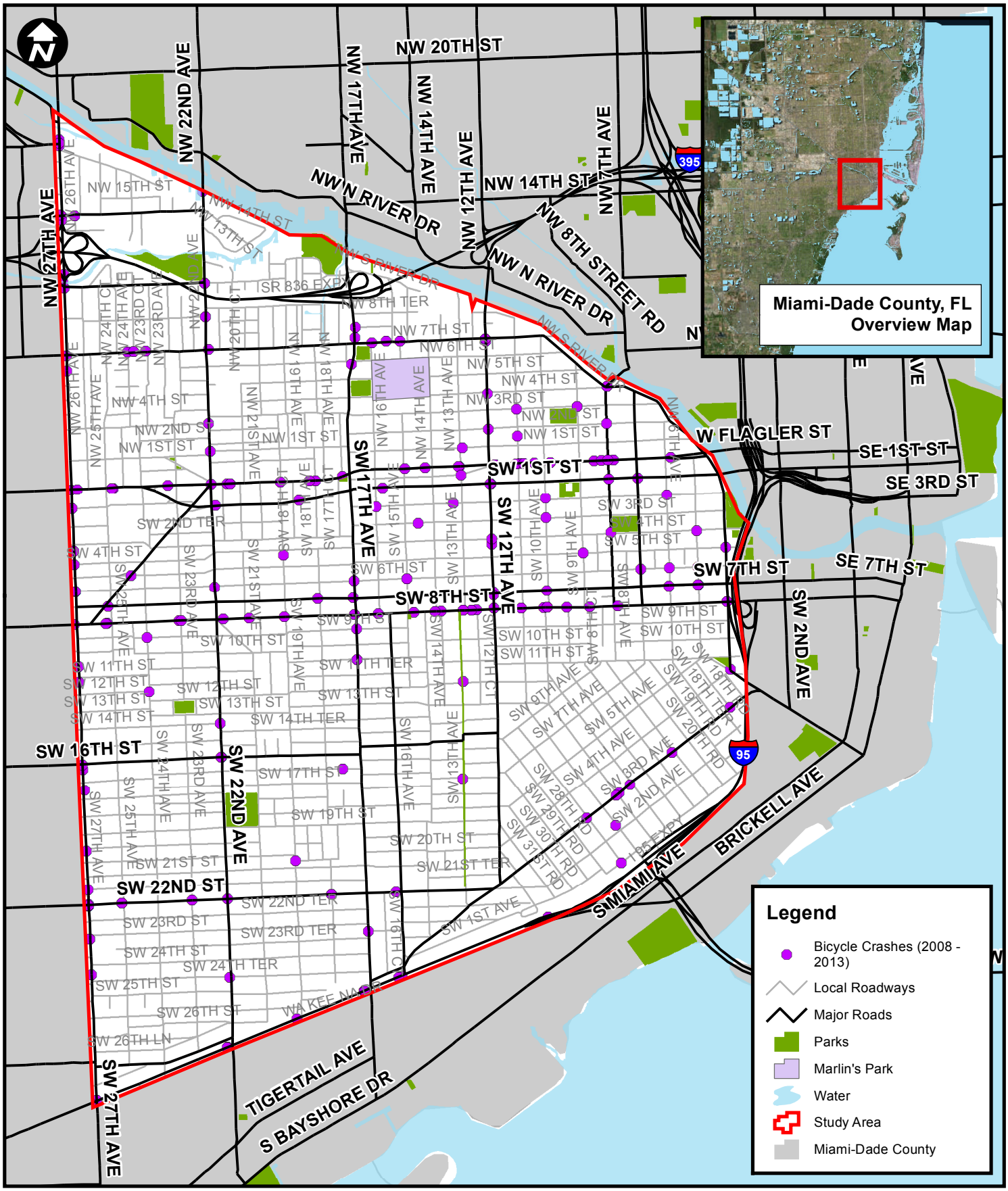
Little Havana

Figure 10. Bicycle Crashes (2008-2013)



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As shown in Figure 2, the study area of Little Havana includes a variety of community amenities such as municipal services, public schools, healthcare facilities, and recreational and tourist attractions such as the Tower Theater, the Calle Ocho Walk of Fame, Domino Park, and Marlins Park. Additionally there are over 50 adult living facilities, which are representative of Little Havana's large elderly population.

2010 US Census data showing population density and vehicle ownership is provided in Figure 2 and Figure 3 respectively. Little Havana is generally a medium-density urban area, however north of SW 8th Street has areas of relatively high population density exceeding 100 residents per acre. However, the Roads neighborhood is mostly a low-density urban area, best represented by a population density less than 10 residents per acre. Vehicle ownership per household in the higher-density area north of SW 8th Street is generally less than 1, and increases in The Roads neighborhood on the southeast end of the study area.

Figure 4 provides an overview of transit services available in Little Havana and the surrounding area. As seen in Table 2, transit ridership represents nearly 15% percent of all trips made by residents of Little Havana. Metrobus ridership data shows average daily ridership is highest along NW 27th Avenue, the West Flagler Street/SW 1st Street one-way pair, and the SW 8th Street/ SW 7th Street one-way pair. Generally, Metrobus ridership is higher north of SW 8th Street, where the average vehicle ownership per household is lower and population density is higher.

Existing and funded bicycle infrastructure is mapped in Figure 5. As can be seen, greenways and paved paths are provided along the Miami River on the northern border of the study area, and along US 1 / SR 5 on the eastern and southern border of the study area. However, bicycle facilities are scarce within the Little Havana, Shenandoah, and The Roads neighborhoods. There are some existing and funded bicycle lanes that serve West Flagler Street, as well as segments of SW 3rd Avenue, SW 13th Avenue, and SW 22nd Avenue, however there is a need for a more robust bicycle infrastructure network in order to provide connectivity to the facilities that surround the area.

A preliminary bicycle level of service (BLOS) analysis was conducted for major roadways based on the available GIS data. As can be seen in Figure 6, the lack of infrastructure translates to BLOS is E or worse for most of the major roadways in the study area. Infrastructure for pedestrian connectivity, however, is well developed along the major roadways of the study area. A preliminary pedestrian level of service (PLOS) analysis was conducted and is shown in Figure 7.

As can be seen, PLOS is C or higher for the majority of the roadways serving the Little Havana, Shenandoah, and The Roads neighborhoods. The high level of service can partially be attributed to generally wide sidewalks that are separated from traffic by either on-street parking or other types of buffers, and shade-providing trees. A more in depth BLOS and PLOS analysis is included in a later section.

Figure 9 shows pedestrian crashes in the Little Havana, Shenandoah, and The Roads neighborhoods. Between 2008 and 2013, there were approximately 500 reported crashes involving pedestrians. Of these, approximately 135 involved an elderly pedestrian. As can be seen in Figure 9, the crashes are concentrated in the norther half of the study area, between SW 8th Street and NW 7th Street. This coincides with the higher density residential areas. Crashes involving elderly pedestrians tend to occur more on major roadways, particularly those with high Metrobus ridership. This may be because elderly residents in Little Havana are regular transit users, and must cross major roadways to reach their final destination.

Approximately 210 crashes involving bicyclists were reported in the study area between 2008 and 2013. As can be seen in Figure 10, the crashes are concentrated along West Flagler Street, SW 1st Street, SW 7th Street, SW 8th Street, and SW 27th Avenue. This is likely due to these roadways being more popular among cyclists. The above mentioned roadways are also more major roads with higher speed limits and higher traffic volumes than the surrounding local streets. Furthermore, as seen in Figure 5, no facilities are currently provided for bicyclists along these roads.

A review of data available through *Strava.com* was also conducted as a tool to study bicycle trip patterns. Strava is a smartphone-based application that uses GPS location to track data about bike rides taken by its members. The data available through Strava provide an overview of popular routes for cyclists. Smartphone-based applications such as Strava are largely used by experienced on-road bicyclists who use their bike for recreational activity. Figure 11 identifies NW 7th Street, W Flagler Street, SW 8th Street, NW 3rd Avenue, and SW 22nd Street as primary east-west routes used by Strava members. NW 17th Avenue, NW 22nd Avenue, and NW 27th Avenue are the highest used north/south routes within the study area.

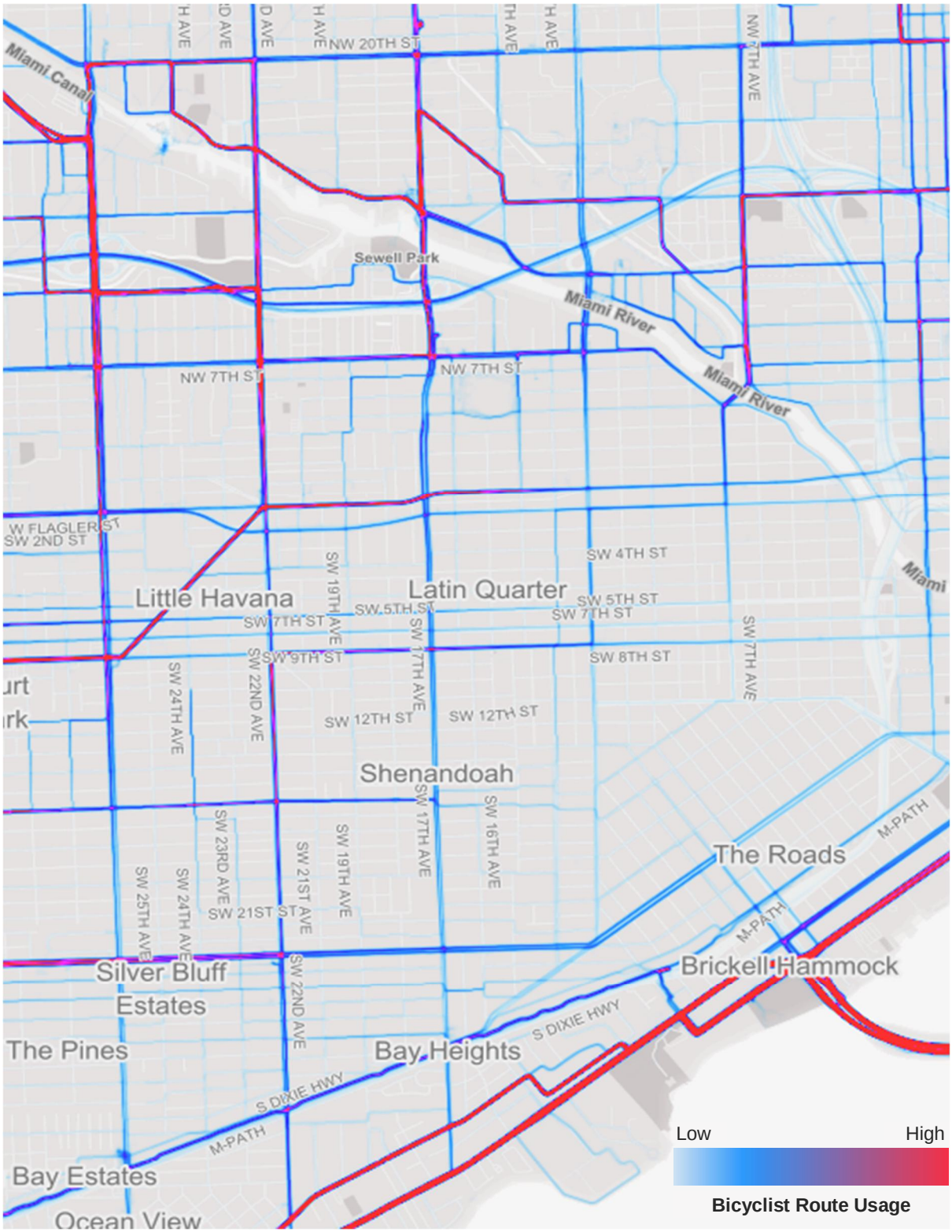


Figure 11: Strava Data

Field Observations

Several field assessments were conducted of the Little Havana study area including a field tour on bicycles on Wednesday, May 5, 2016, to assess the existing conditions from the bicyclist and pedestrian points of view. Results of the field observations discovered that within the study area, most of the roadways have sidewalks but there are few roadways with bicycle facilities, such as bike lanes or shared lane markings (sharrows). Several roadways within the study area appeared to be overbuilt based on the amount of traffic they actually carry, which encourages high vehicle speeds through neighborhoods. These roadways have potential for road diets that could lower vehicle speeds, incorporate new bicycle lanes, and enhance the pedestrian facilities. A road diet is a transportation planning technique which reduces the number of lanes and/or the width of the lanes on a roadway to improve safety or provide space for other modes of transportation such as bike lanes or wider sidewalks. Additional pedestrian/bicycle mobility issues were identified during the field reviews. These issues may be summarized as follows:

- Several sidewalks are deteriorated and in need of repair.
- Several intersections need curb extensions and other low speed design principles.
- Wayfinding signage is needed for bicycle routes and shortcuts.
- Several intersections are in need of pedestrian features such as pedestrian signalization, curb ramps, and crosswalks.

Figure 12: Examples of Field Observation Photos

Bicycle and Pedestrian Levels of Service

A preliminary bicycle level of service (BLOS) and pedestrian level of service (PLOS) analysis was conducted for major roadways based on the available GIS data. The BLOS is based on the following facility characteristics:

- Average effective width of the outside through lane
- Number of through lanes
- Motorized vehicle volumes
- Motorized speeds
- Heavy vehicle (truck) volumes
- Pavement conditions

Similar to the required BLOS roadway characteristic criteria, the PLOS Model requires additional variable information to complete its assessment and calculate LOS. The facility characteristics needed to determine the PLOS are listed below:

- Existence of a sidewalk
- Lateral separation of pedestrians from motorized vehicles
- Motorized vehicle volumes
- Motorized vehicle speeds

The PLOS and BLOS of a corridor are determined using the respective characteristics listed above in the LOS score equations from the FDOT Quality/Level of Service (QLOS) handbook. The LOS thresholds applied to the calculated scores are shown in Table 3.

Table 3: Bicycle and Pedestrian LOS Categories

Level of Service	Score
A	≤1.5
B	>1.5 and ≤2.5
C	>2.5 and ≤3.5
D	>3.5 and ≤4.5
E	>4.5 and ≤5.5
F	>5.5

In order to provide the most accurate analysis of BLOS and PLOS, a spreadsheet consisting of major road segments located in the study area was utilized. These segments were split into directions and due to varying sidewalk conditions on the different sides of the segments, the possibility exists to have a unique PLOS on both sides of each road. The maps that provide a visual reference for the levels of service ranging from A to F are provided previously in Figures 7 and 8.

The results of the BLOS analysis show that over 50 percent of the major roadways within Little Havana have a BLOS of E and no major roadway segments within the study area have a BLOS of A or B. A summary of the BLOS results are presented in Table 4.

Table 4: Little Havana Bicycle Level of Service Summary

BLOS	Percentage of Major Roads
A	0.00%
B	0.00%
C	1.51%
D	23.52%
E	67.64%
F	7.34%

As shown in Table 5, the majority of main roadways within Little Havana have a PLOS of C. Less than one percent of major roadway segments within the study area that have a PLOS of A or F.

Table 5: Little Havana Pedestrian Level of Service Summary

PLOS	Percentage of Major Roads
A	0.80%
B	36.58%
C	47.44%
D	13.07%
E	1.81%
F	0.30%

Bicyclist and Pedestrian Counts

In order to capture the magnitude of pedestrian and bicyclists at major intersections within the study area, two-hour peak period counts were collected at the ten locations shown in Figure 14.

Bicycle and pedestrian counts help to monitor locations, better define safety issues, develop improvements, and prioritize locations for implementation. Table 6 lists the locations of the bicyclist and pedestrian counts conducted for this Plan.

Table 6: Bicycle and Pedestrian Count Locations

Location Number	Intersection
1	Crosswalk 50' west of SW 8th Street and SW 15th Avenue
2	SW 7th Street and SW 14th Avenue
3	West Flagler Street and SW 12th Avenue
4	SW 1st Street and SW 17th Avenue
5	5th Street Bridge
6	SW 3rd Street and SW 8th Avenue (Riverside Park)
7	SW 7th Street and SW 27th Avenue
8	SW 22nd Street and SW 22nd Avenue
9	SW 1st Avenue and SW 16th Avenue
10	SW 3rd Street and SW 4th Avenue

The counts were collected during a typical weekday afternoon from 4:00 P.M. to 6:00 P.M. in May 2016. Peak hour pedestrian counts ranged from 7 to 282 pedestrians per hour, with an average count of 117 pedestrians per hour per intersection. The bicyclist counts ranged from 2 to 46 bicyclists per hour per intersection, with an average count of 20 bicyclists per hour per intersection. A summary of the count results is depicted in Figure 13.

Appendix D includes the count data, aerial maps of each of the ten count locations, and a summary chart.

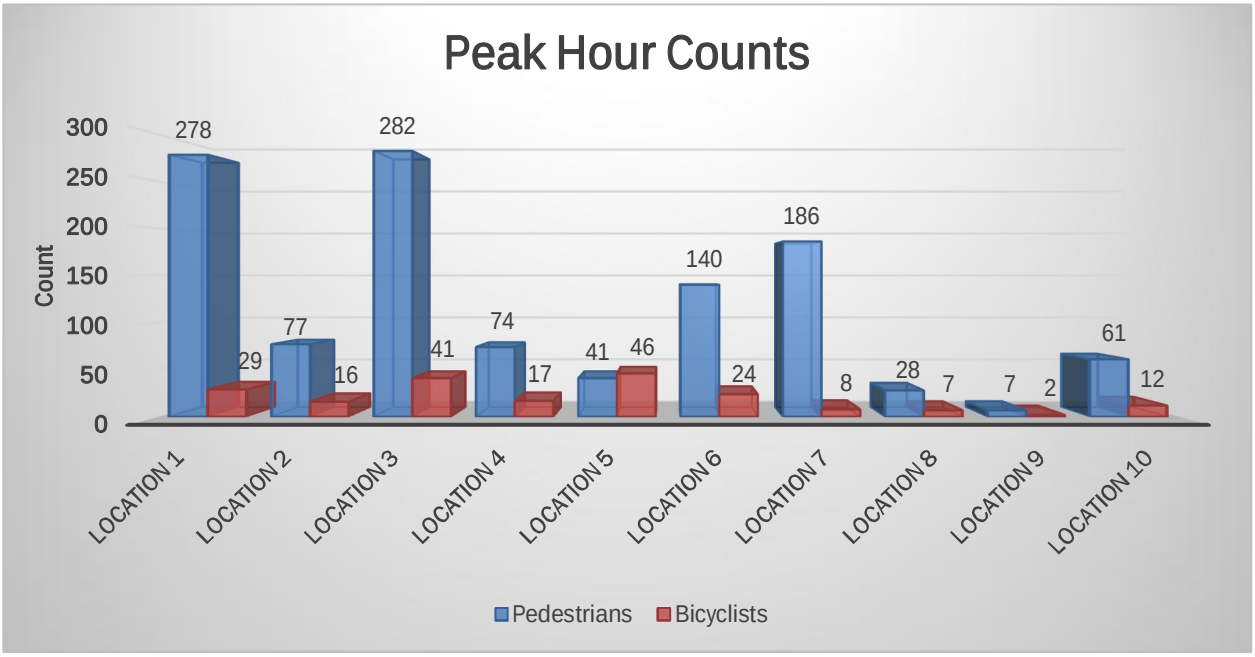
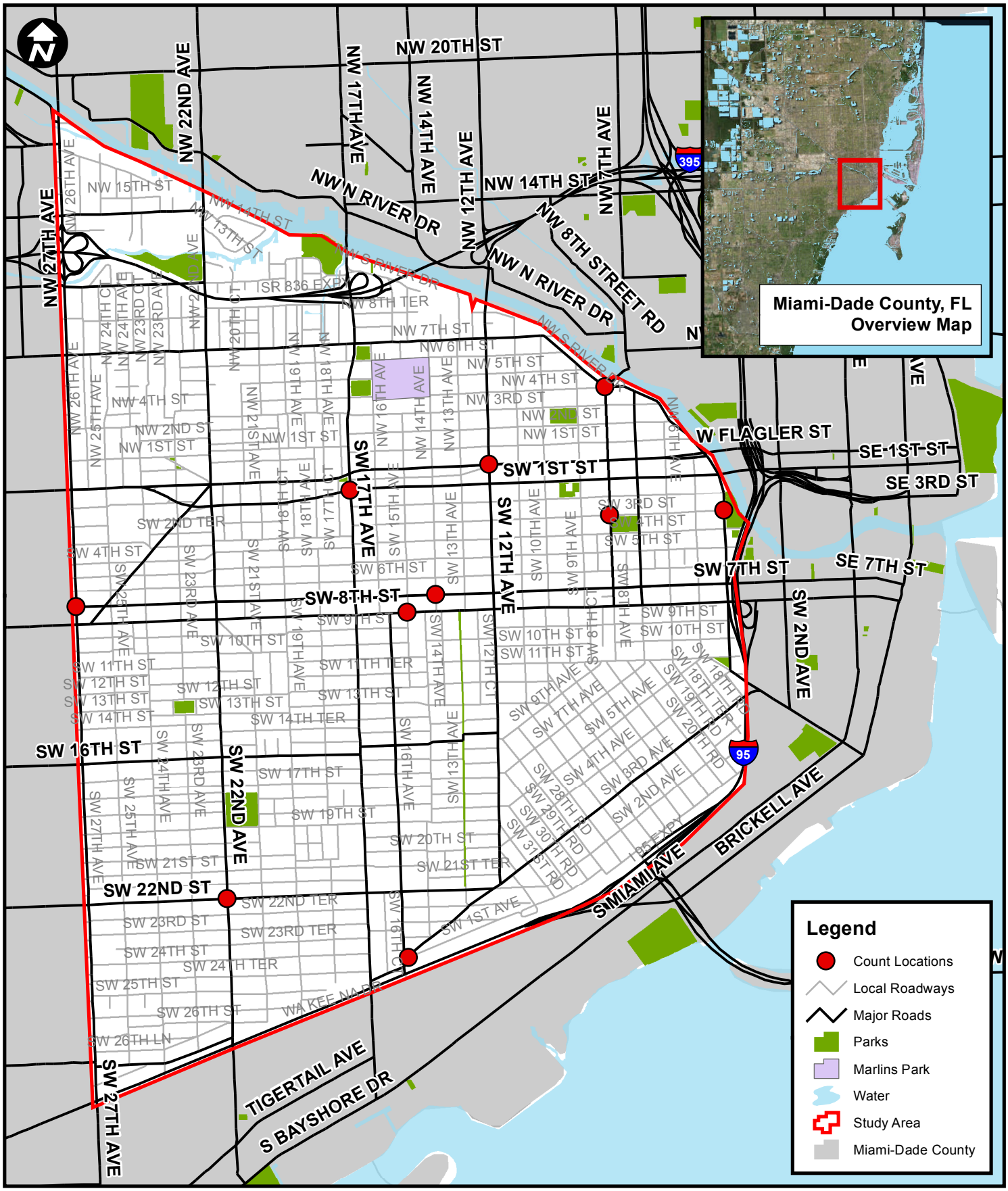


Figure 13: Peak Hour Counts

Multimodal Mobility Study

Little Havana

Figure 14. Pedestrian and Bicycle Count Locations



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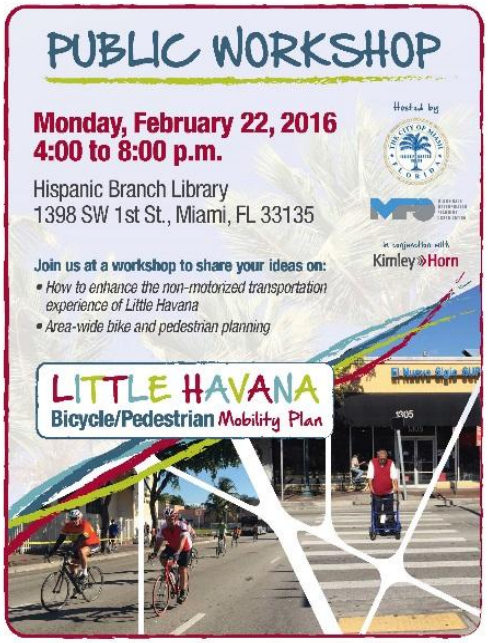
Public Engagement

Two public meetings were held to inform the citizens of Little Havana of the progress of the Bicycle and Pedestrian Mobility Plan and to solicit their input on the plan and its recommendations. The public meeting attendees provided valuable input about local travel patterns, key destinations, and the perception within the community about which streets are most comfortable and convenient to walk or bike, and which streets are typically avoided due to busy traffic.



The first public meeting was held on February 22, 2016 at the Hispanic Branch Library. The public meeting was attended by approximately 11 residents. This workshop began with a presentation summarizing the plan's objectives, context for non-motorized transportation within the area, completed study tasks, and descriptions of potential recommended improvements. The second public meeting was held on May 23, 2016. Residents provided input on the first draft of the network plan recommendations, noted key destinations and attractions to connect, highlighted streets that need improvements, and provided additional thoughts and recommendations on improving transportation in Little Havana. The attendees were then given the opportunity to describe specific locations or situations that they have encountered that are in need of bicycle and pedestrian-related improvements and point out specific locations on a map of the area with preliminary needs already highlighted. Approximately 21 residents attended the second public meeting. The second public meeting presentation is included in Appendix E.

Support was high for establishing a multimodal mobility study and providing facilities that would enhance walking and bicycling mobility within Little Havana. All recommendations were

evaluated for incorporation into the Little Havana Bicycle Pedestrian Mobility Plan. The major concerns noted during these meetings included:

- Dangers associated with crossing streets, especially crossing SW 7th Street, SW 1st Street, and Flagler Street at unsignalized intersections;
- Lighting issues at existing crosswalks being particularly dangerous for crossing;
- Vehicular speeds on the arterial and collector roadways; and
- Amount of cars parking on sidewalks due to the number of curb cuts as well as curb cut width.

Public comment cards were distributed at the public meetings and feedback received was also evaluated for inclusion into this Study.

In addition, three meetings were held with the Little Havana Technical Steering Committee to provide input to the study development throughout the course of the process including reviewing the draft network plan recommendations.

Survey Results

In addition to quantitative data from the GIS database, pedestrian counts, and traffic crash data, an online survey was created to obtain street users' perspective about the quality of existing bicycle and pedestrian conditions and usage. A total of 42 people responded to the online survey. The survey included qualitative and quantitative questions regarding the use of streets and areas within Little Havana for walking and bicycling.

One of the questions was to rank a set of bicycle-pedestrian amenities in order of importance (1 being the least important and 10 being the most important). The results indicate that bicycle sharing programs, bus shelters and benches, and wayfinding and signage are the most important elements for a pleasant trip experience. Figure 15 shows the results of this survey question. Detailed survey results are included in Appendix F.

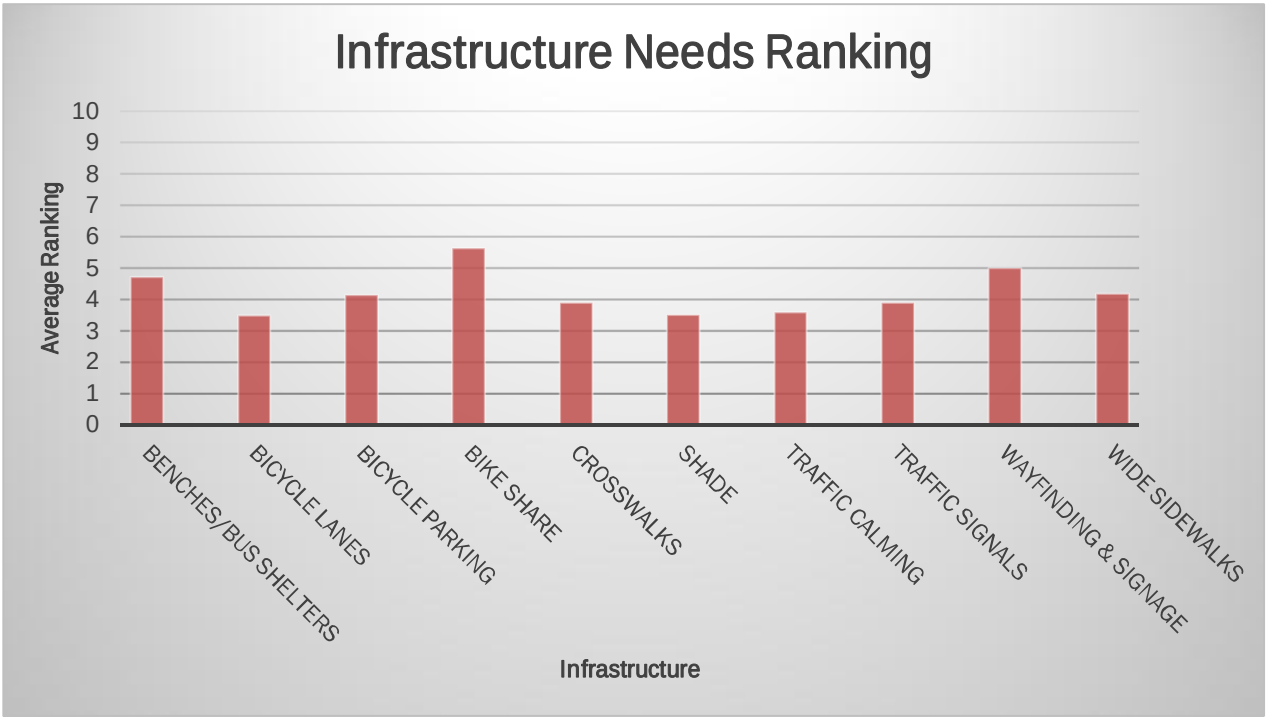


Figure 15: Bicycle/Pedestrian Infrastructure Ranking

Goals and Objectives

On February 9th, 2016, the Steering Committee for the project met to identify the main goals and objectives for this Plan in consideration of the results of the Literature Review and the Transportation Mobility Analysis.

The Little Havana area is a dynamic community where a higher percentage of people must walk or bike to reach their destinations every day. The primary goal of the Little Havana Bicycle/Pedestrian Mobility Plan is to improve walkability and bikeability within the study area. The key goals outlined in the mobility plan for healthy transportation solutions are listed below.

- Focus transportation improvements in the area on providing mobility for persons of all ages and abilities that furthers neighborhood plans, conserves energy, facilitates commercial activity, and protects the natural environment.
- Identify complete streets improvements along the two primary one-way pairs that serve east-west travel into Downtown (Flagler/SW 1st Street) and Brickell (SW 7th Street/SW 8th Street).
- Improve the frequency of safe pedestrian crossing opportunities along major arterials.
- Explore opportunities for improving the separation between bicyclists and motor vehicles on wider streets.
- Leverage the City's support of densification improvements in the Little Havana Target Area by creating a supportive environment for walking and bicycling as primary means of transportation in this area.
- Complete the Miami River Greenway sections along the northern boundary of the study area and identify connectivity improvements.
- Identify mobility improvements that connect area residents to The Underline corridor along the southern boundary of the study area.
- Rebalance roadways towards transit, pedestrians, and bicyclists.
- Identify improvements to help people reach bus stops.
- Support the initiative for integrated bus/bike lanes in major corridors.
- Identify a network of neighborhood greenways that focus on connectivity and providing a low-stress bicycle facility network
- Provide enhanced pedestrian wayfinding for visitors to the area's primary tourist attractions.

Recommended Improvements

Bicycle and pedestrian mobility recommendations were developed for Little Havana based on input from the Steering Committee and the prior work tasks of this Plan, including the literature review, transportation mobility analysis, field observations, survey results and public meeting responses. All improvements have been developed under an overarching principle to support and prioritize pedestrians and bicyclists within the area through use of context sensitive solutions (CSS) and complete streets principles as discussed in the Literature Review component of this report.

Project Listing

This Plan recommends the following improvement projects to promote safe and sustainable pedestrian and bicycle mobility within the Little Havana area. Most of the Plan projects are capital improvement projects. Project descriptions, lead agencies, tasks, timeframes, implementation strategies, and generalized implementation cost levels for these projects are included below. Generalized implementation cost ranges are identified by using dollar signs “$” ranging from lower cost “$” to higher cost “$$$$”. Photos, drawings, maps, and tables were developed or obtained from existing sources as necessary to provide further information and definition regarding the projects.

The capital projects represent the Engineering “E” of the League of American Bicyclists’ “Five E” multimodal planning process. The remaining four “Es” each have individual recommendations summarized at the end of the Plan – Education, Encouragement, Enforcement, and Evaluation. The projects are organized as shown in Table 7.

Table 7: Recommended Improvements

Engineering Improvements	
Project 1	Bicycle Lanes
Project 2	Neighborhood Greenways
Project 3	Safe Crossings
Project 4	Traffic Calming
Project 5	Roundabouts
Project 6	Little Havana Pedestrian Priority Zone
Project 7	SW 7th Street Crosswalks
Project 8	SW 8th Street Mobility and Safety Evaluation Crosswalks
Project 9	Re-Build/Re-Construct Broken Sidewalks
Project 10	Road Diets/Lane Eliminations
Project 11	Rightsizing Streets
Project 12	Pedestrian Wayfinding
Project 13	Sidewalk Furnishings and Street Trees
Project 14	Low-Speed Design Principles
Project 15	Advisory Bike Lane: NW 4th Street
Project 16	Express Bus Corridors
Project 17	Shared Bus-Bike Lane
Non-Engineering Improvements	
Project 18	Education Improvements
Project 19	Encouragement Improvements
Project 20	Enforcement Improvements
Project 21	Evaluation and Monitoring

Project 1: Bicycle Lanes	
Project Description	Bike lanes provide an exclusive space for bicyclists on the roadway surface. Identified through the use of edge lines and pavement marking symbols, bike lanes are intended for one-way travel and are usually provided on both sides of a two-way street. Install bicycle lane pavement markings and signage along key corridors including those summarized in Table 8.
Lead Agencies	City of Miami, Miami-Dade County Transportation and Public Works, Florida Department of Transportation
Notes	• Bicycle lane pavement markings designate the portion of the roadway for preferential use by bicyclists • Markings inform all users of the restricted nature of the bicycle lane
Implementation Timeframe	Short Term (3-5 years) Long Term (5+ years)
Implementation Strategy	Implement as a component of roadway improvement or reconstruction projects on the indicated corridors
Implementation Cost	$$ to $$$

Bicycle Lane Markings and Signage

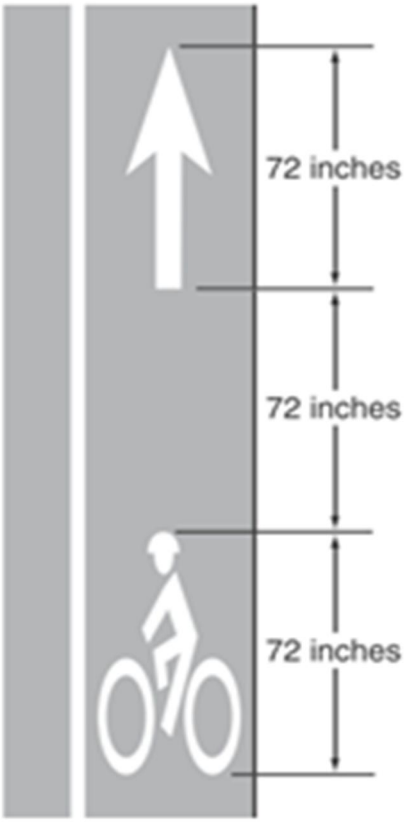


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Table 8: Recommended Bicycle Lane Corridors

Corridor	Limits
SW 1st Street	SW 6th Avenue to South River Drive
SW 6th Street	SW 27th Avenue to SW 4th Avenue
SW 3rd Avenue	South Dixie Highway to SW 12th Avenue
SW 22nd Avenue	West Flagler Street to SW 22nd Street
SW 22nd Avenue Road	SW 8th Street to West Flagler Street
SW 17th Avenue	West Flagler Street to SW 1st Avenue

Project 2: Neighborhood Greenways	
Project Description	Neighborhood greenways incorporate a variety of elements including shared lane markings, traffic calming, and bike route and wayfinding signage to provide a comfortable and low-stress environment that encourages the use of non-motorized modes of transportation.
Lead Agencies	City of Miami, Miami-Dade County Transportation and Public Works Department
Notes	• Recommended neighborhood greenway corridors listed Table 9. • Greenways are designed to minimize the number of stops that a bicyclist must make along the route through the use of neighborhood traffic circles. • Separated bicycle facilities are not necessary on neighborhood greenways because motor vehicle speeds and traffic volumes are low.
Implementation Timeframe	Now (1-2 years) Short Term (3-5 years)
Implementation Strategy	Implement as a component of any roadway improvement projects or as standalone traffic calming projects.
Implementation Cost	$ to $$$

Neighborhood Greenway Examples

Table 9: Proposed Neighborhood Greenways

Corridor	Limits
SW 24th Avenue	SW 4th Street to South Dixie Highway
SW 24th Street	SW 27th Avenue to SW 17th Avenue
SW 19th Avenue	NW 3rd Street to South Dixie Highway
SW 19th Street	SW 27th Avenue to SW 12th Avenue
SW 13th Street	SW 24th Avenue to SW 10th Avenue
SW 5th Avenue	SW 12th Avenue to West Flagler Street
SW 11th Street	SW 12th Avenue to SW 5th Avenue
SW 14th Avenue	NW 7th Street to SW 8th Street
SW 3rd Street	SW 14th Avenue to SW 4th Avenue
NW 3rd Street	NW 27th Avenue to South River Drive
NW 4th Street	NW 14th Avenue to NW 8th Avenue
NW 11th Street/NW 14th Court	NW 27th Avenue to NW 7th Street
NW/SW 10th Avenue	NW 7th Street to SW 13th Street
SW 7th Avenue	South River Drive to SW 11th Street
NW 25th Avenue	NW 7th Street to SW 6th Street
SW 15th Avenue	West Flagler Street to SW 8th Street
SW 16th Avenue	West Flagler Street to SW 8th Street
SW 16th Avenue	SW 8th Street to South Dixie Highway
SW 16th Street	SW 17th Avenue to SW 16th Avenue
SW 13th Avenue	West Flagler Street to SW 8th Street

Project 3: Safe Crossings	
Project Description	Provide crosswalks and signage at intersections where a neighborhood greenway meets with a major roadway. These neighborhood greenway intersections include crosswalks, aesthetic treatments, and safety features such as rectangular rapid flashing beacons (RRFBs) and lighting.
Lead Agencies	City of Miami, Miami-Dade County Transportation and Public Works, and Florida Department of Transportation

Tasks Involved	• At unsignalized intersections < 12,000 AADT:
	  o Marked crosswalks and warning signs
	• At unsignalized intersections > 12,000 AADT:
	  o Marked crosswalks and warning signs
	  o State law crosswalk signage
	  o Rectangular Rapid Flashing Beacons (RRFB)
	  o Median refuges where feasible
	• Recommended safe crossing locations listed in Table 10

Implementation Timeframe	Short Term (3-5 years)
Implementation Strategy	Implement as a component of any roadway improvement projects
Implementation Cost	$$

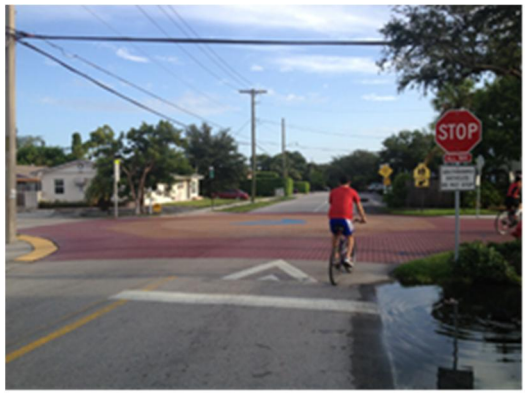
At Unsignalized Intersections < 12,000 AADT

At Unsignalized Intersections > 12,000 AADT

Table 10: Recommended Safe Crossings		
SW 27th Avenue & SW 19th Street	SW 10th Avenue & SW 6th Street	SW 14th Avenue & SW 7th Street
SW 24th Avenue & SW 6th Street	NW 10th Avenue & NW 2nd Street	SW 13th Avenue & SW 7th Street
SW 19th Avenue & SW 6th Street	NW 10th Avenue & West Flagler Street	SW 10th Avenue & SW 7th Street
SW 19th Avenue & SW 1st Street	SW 10th Avenue & SW 1st Street	SW 7th Avenue & SW 6th Street
NW 19th Avenue & West Flagler Street	SW 5th Avenue & West Flagler Street	SW 7th Avenue & SW 7th Street
SW 14th Avenue & SW 6th Street	SW 5th Avenue & SW 1st Street	SW 5th Avenue & SW 7th Street
SW 14th Avenue & SW 1st Street	SW 5th Avenue & SW 6th Street	NW 14th Court & NW 7th Street
NW 14th Avenue & West Flagler Street	SW 27th Avenue & SW 24th Street	NW 14th Avenue & NW 7th Street
NW 14th Avenue & NW 2nd Street	SW 24th Avenue & SW 7th Street	SW 24th Avenue & SW 22nd Street
NW 22nd Avenue & NW 3rd Street	SW 15th Avenue & SW 6th Street	SW 19th Avenue & SW 22nd Street
NW 27th Avenue & NW 3rd Street	SW 13th Avenue & SW 6th Street	SW 16th Avenue & SW 22nd Street
NW 27th Avenue & NW 11th Street		SW 15th Avenue & SW 7th Street

Project 4: Traffic Calming	
Project Description	Implement traffic calming techniques, such as speed cushions, neighborhood traffic circles, textured pavement intersections, and diverters to reduce motor vehicle speeds throughout the Little Havana area. The recommended traffic calming technique is the traffic circle and the proposed locations are primarily the intersection of two neighborhood greenways.
Lead Agencies	City of Miami, Miami-Dade County Transportation and Public Works Department
Notes	Recommended traffic circle locations are listed below in Table 12. Other traffic calming techniques can be utilized throughout the area.
Implementation Timeframe	Now (1-2 years) Short Term (3-5 years)
Implementation Strategy	Implement as a component of any roadway improvement projects or as standalone traffic calming projects.
Implementation Cost	$ to $$

Examples of Traffic Calming Techniques



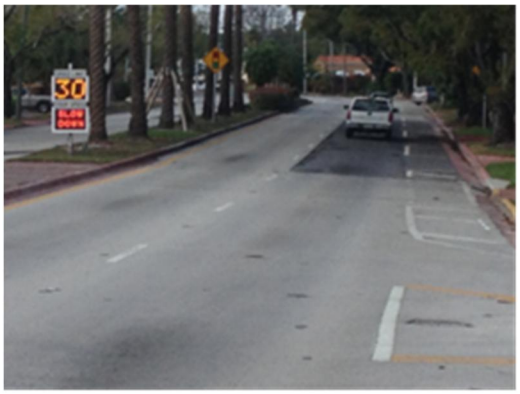


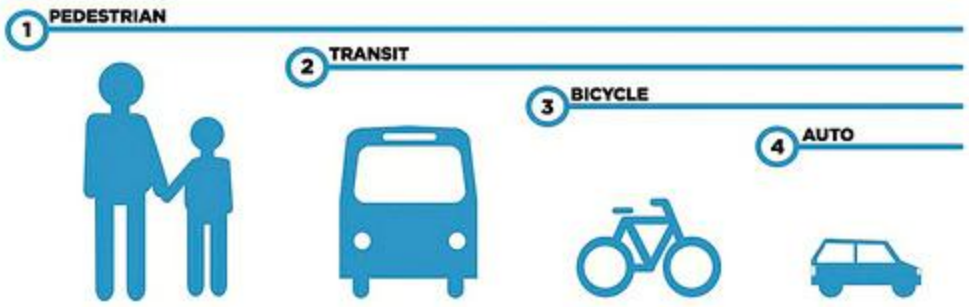
Table 11: Recommended Traffic Calming Intersections		
SW 26th Lane & SW 25th Avenue	SW 24th Terrace & SW 21st Avenue	SW 28th Road & SW 2nd Avenue
SW 24th Terrace & SW 25th Avenue	SW 16th Street & SW 16th Street	SW 26th Road & SW 2nd Avenue
SW 23rd Street & SW 25th Avenue	SW 24th Street & SW 19th Avenue	SW 25th Road & SW 2nd Avenue
SW 27th Street & SW 24th Avenue	SW 23rd Street & SW 19th Avenue	SW 31st Road & SW 4th Avenue
SW 26th Street & SW 24th Avenue	SW 21st Street & SW 19th Avenue	SW 29th Road & SW 4th Avenue
SW 25th Street & SW 24th Avenue	SW 19th Street & SW 19th Avenue	SW 27th Road & SW 4th Avenue
SW 24th Street & SW 24th Avenue	SW 17th Street & SW 19th Avenue	SW 25th Road & SW 4th Avenue
SW 22nd Terrace & SW 24th Avenue	SW 24th Terrace & SW 18th Avenue	SW 28th Road & SW 5th Avenue
SW 18th Street & SW 24th Avenue	SW 22nd Terrace & SW 18th Avenue	SW 25th Road & SW 5th Avenue
SW 16th Street & SW 24th Avenue	SW 16th Street & SW 18th Avenue	SW 22nd Road & SW 5th Avenue
SW 14th Street & SW 24th Avenue	SW 13th Street & SW 18th Avenue	SW 20th Road & SW 5th Avenue
SW 10th Street & SW 24th Avenue	SW 23rd Street & SW 16th Court	SW 28th Road & SW 7th Avenue
SW 25th Terrace & SW 23rd Avenue	SW 20th Street & SW 16th Avenue	SW 26th Road & SW 7th Avenue
SW 24th Terrace & SW 23rd Avenue	SW 19th Street & SW 16th Avenue	SW 23rd Road & SW 7th Avenue
SW 20th Street & SW 23rd Avenue	SW 24th Terrace & SW 21st Avenue	SW 20th Road & SW 7th Avenue
SW 11th Street & SW 23rd Avenue	SW 11th Street & SW 16th Avenue	SW 24th Road & SW 9th Avenue

Project 5: Roundabouts	
Project Description	Implement roundabouts on major or minor arterials. Roundabouts typically have larger diameters than traffic circles, splitter islands, and pedestrian features.
Lead Agencies	City of Miami, Miami-Dade County Transportation and Public Works, Florida Department of Transportation
Notes	Recommended roundabout locations are listed below: • SW 13th Street & SW 12th Avenue • SW 3rd Avenue & SW 15th Road
Implementation Timeframe	Short Term (3-5 years)
Implementation Strategy	Implement as a component of any roadway improvement projects or as standalone traffic calming projects.
Implementation Cost	$$$

Conceptual Example of a Roundabout

Project 6: Pedestrian Priority Zone	
Project Description	Adopt a Little Havana Pedestrian Priority Zone designation within the area bounded by SW 8th Street in the south, the Miami River in the north, SW 22nd Avenue in the west, and SW 2nd Avenue in the east.
Lead Agencies	City of Miami Miami-Dade County Transportation and Public Works
Notes	• Prioritize pedestrians and access to transit over other modes during project prioritization and decision-making to recognize that the Little Havana area is a unique setting where non-motorized transportation is vital to the economic, social, health, and mobility well-being of the community and a particularly viable transportation solution • Roadway studies and projects must consider all modes and provide improvements for all modes • Improvements to motor vehicle traffic flow must be designed in such a way that does not compromise pedestrian safety • Pedestrian priority zone principles include maintaining appropriate clear sidewalk width for pedestrian travel, aligning curb ramps with sidewalks, requiring crosswalk at all intersections, increasing pedestrian crossing times beyond the minimum, reducing travel lane widths, providing shade for sidewalks, reducing speed limits, and eliminating right-turn-on-red in dense pedestrian corridors
Implementation Timeframe	Now (1-2 years)
Implementation Strategy	Adopt the Pedestrian Priority Zone through local government ordinance. Coordinate with the City of Miami, Miami-Dade County, and FDOT to support implementation of the Pedestrian Priority Zone principles through project design.
Implementation Cost	$ to $$

Conceptual Example of a Pedestrian Priority Zone Graphic from Complete Streets Chicago



Project 7: SW 7th Street Crosswalks	
Project Description	Provide crosswalks and signage at intersections and rectangular rapid flashing beacons at crossings.
Lead Agencies	City of Miami, Miami-Dade County Transportation and Public Works, and Florida Department of Transportation

Notes	• At signalized intersections:
	  o Marked crosswalks on all four approaches
	  o Turning vehicles stop for pedestrian signage
	• At unsignalized intersections < 12,000 AADT:
	  o Marked crosswalks and warning signs
	• At unsignalized intersections > 12,000 AADT:
	  o Marked crosswalks and warning signs
	  o State law crosswalk signage
	  o Rectangular Rapid Flashing Beacons (RRFB)
	  o Median refuges where feasible
	Recommended crosswalk locations include:
	• SW 7th Street & SW 23rd Avenue
	• SW 7th Street & SW 21st Avenue
	• SW 7th Street & SW 18th Avenue
	• SW 7th Street & SW 9th Avenue

Implementation Timeframe	Short Term (3-5 years)
Implementation Strategy	Implement as a component of any roadway improvement projects
Implementation Cost	$$

Example RRFB Crosswalk

Project 8: SW 8th Street Mobility and Safety Evaluation Crosswalks	
Project Description	The Florida Department of Transportation completed a Pedestrian Mobility and Safety Evaluation which identified key locations along the SW 8th Street corridor in need of additional midblock crossings and pedestrian safety and mobility enhancements at the signalized intersections.
Lead Agencies	Florida Department of Transportation
Notes	Study Corridor: SR 90/SW 8th Street/SW 7th Street from SW 27th Avenue to Brickell Avenue. Recommended crosswalk locations are listed in Table 12.
Implementation Timeframe	Now (1-2 years)
Implementation Strategy	Include proposed study and improvements in Capital Improvements Program (CIP)
Implementation Cost	$$

Excerpt from FDOT Mobility Evaluation

Table 12: Recommended FDOT Crosswalk Locations		
No.	**Location**	**Mile Post**
1	200' E of SW 25th Ave	15.300
2	100' E of SW 23rd Ave	15.532
3	100' E of SW 20th Ave	15.820
4	100' E of SW 18th Avenue	16.044
5	100' W of SW 16th Ave South	16.258
6	West side of SW 14th Ave North	16.427
7	100' E of SW 10 Ave South	16.864
8	W side of SW 9th Ave North	16.991
9	150' W of SW 7th Avenue	17.170
10	Midblock between SW 6th Ave and SW 5th Ave(1)	17.351

NOTE: (1) Midblock pedestrian traffic signal

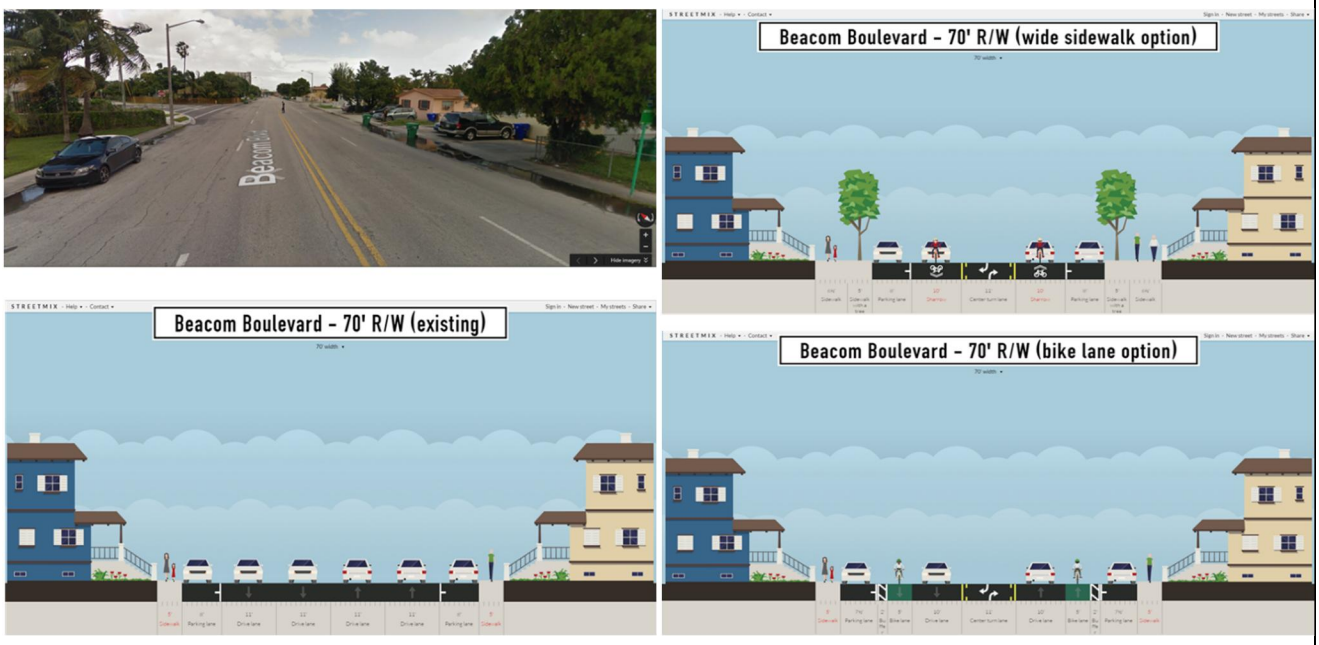
Project 9: Sidewalk Improvements	
Project Description	Construct new sidewalks where connections are missing and repair existing deteriorated/cracked sidewalks.
Lead Agencies	City of Miami, Miami-Dade County Transportation and Public Works, and Florida Department of Transportation
Notes	Repair cracked and crumbling sections of sidewalk: • NW 3rd Street between NW 8th Avenue & South River Drive • NW 2nd Street between NW 14th Avenue & NW 8th Avenue • NW 1st Street between NW 8th Avenue & NW 7th Avenue • SW 3rd Street between SW 8th Avenue and SW 7th Avenue • SW 3rd Street between SW 6th Avenue and SW 5th Avenue • NW 14th Court between NW 7th Street and South River Drive Build new sections of sidewalk to fill in missing gaps: • South River Drive between NW 15th Avenue & NW 14th Court • NW 2nd Street (south side) just west of NW 15th Avenue • NW 2nd Street (south side) just east of NW 11th Avenue • NW 25th Avenue between NW 7th Street & NW 11th Street • NW 24th Avenue between NW 7th Street & NW 11th Street • SW 23rd Avenue between SW 16th Street & SW 13th Street • NW 19th Avenue north of NW 7th Street
Implementation Timeframe	Now (1-2 years) Short Term (3-5 years)
Implementation Strategy	Implement as a component of any roadway improvement projects or as standalone repair projects
Implementation Cost	$$

Example of Broken Sidewalk on NW 3rd Street

Example of Missing Sidewalk on NW 2nd Street

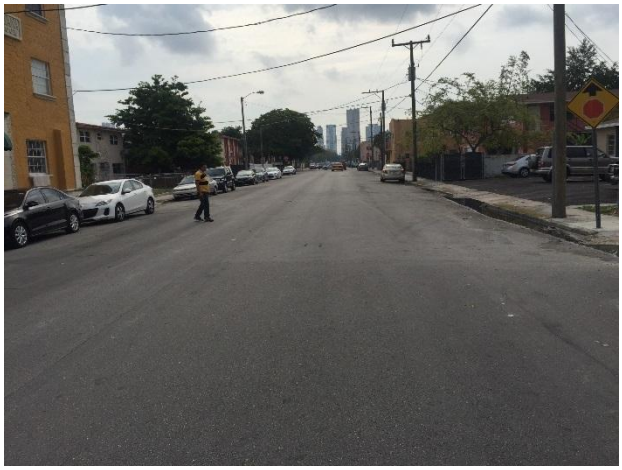
Project 10: Road Diets/Lane Eliminations	
Project Description	Repurposing of a roadway's right-of-way resulting in a reduction of through motor vehicle travel lanes. Road diets may be implemented for a variety of reasons such as the addition of bicycle lanes, widening of sidewalks, implementation of on-street parking, or for traffic calming purposes.
Lead Agencies	City of Miami Miami-Dade County Transportation and Public Works Department
Notes	The following road segments were identified as having potential for road diet implementation: • SW 6th Street from SW 27th Avenue to SW 4th Avenue • Beacom Boulevard from SW 7th Street to SW 1st Street • SW 22nd Avenue from SW 22nd Street to SW 1st Street • SW 17th Avenue from U.S. 1 to SW 1st Street
Implementation Timeframe	Long Term (5+ years)
Implementation Strategy	Include proposed study and improvements in Capital Improvements Program (CIP)
Implementation Cost	$$$

Conceptual Example of Road Diet along Beacom Boulevard



Existing ***Future***

Project 11: Rightsizing Streets	
Project Description	Reconfiguring the layout of streets primarily through lane width narrowing to better serve all users and enhance safety is considered rightsizing. Implement strategies such as changing parking configuration, vehicular lane conversions, lane direction changes, and narrowing lane widths to reduce motor vehicle speeds and enhance pedestrian and bicycle facilities throughout the Little Havana area.
Lead Agencies	City of Miami Miami-Dade County Transportation and Public Works
Notes	The following road segments were identified as having potential for rightsizing implementation: • SW 12th Court from SW 13th Street to SW 8th Street • NW 2nd Street from NW 17th Avenue to NW 9th Avenue
Implementation Timeframe	Short Term (3-5 years)
Implementation Strategy	Include proposed study and improvements in Capital Improvements Program (CIP)
Implementation Cost	$$$



Wide travel lanes on NW 2nd Street create narrow sidewalks and wide pedestrian crossings

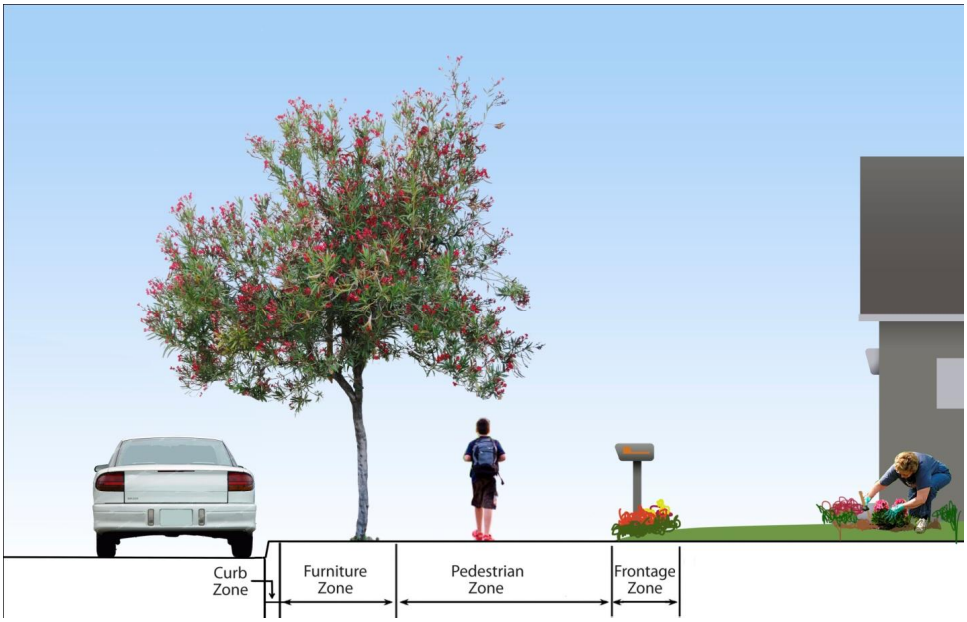
Rightsizing Project Completed in Prospect Park in Brooklyn, NY

Project 12: Pedestrian Wayfinding	
Project Description	A successful walking and bicycling environment requires a comprehensive network of wayfinding elements to create an effortless navigation system and a fluid experience. Clear navigation encourages people to walk and bicycle while also enhancing the identity of a region, community, or open space.
Lead Agencies	City of Miami Miami-Dade County Transportation and Public Works
Notes	High pedestrian volumes, visitors, and the frequency of interesting destinations make Little Havana an ideal location for pedestrian wayfinding program. Benefits of adding pedestrian wayfinding signage include: • Focus wayfinding signage improvements at transit hubs • Helps travelers understand the surrounding area • Can serve a welcoming function
Implementation Timeframe	Now (1-2 years) Short Term (3-5 years)
Implementation Strategy	Community-based temporary wayfinding signs can be implemented as a demonstration project in advance of more permanent, branded wayfinding signs following a wayfinding master plan Include proposed wayfinding study and improvements in Capital Improvements Program (CIP)
Implementation Cost	$$

Example Pedestrian Wayfinding Signs

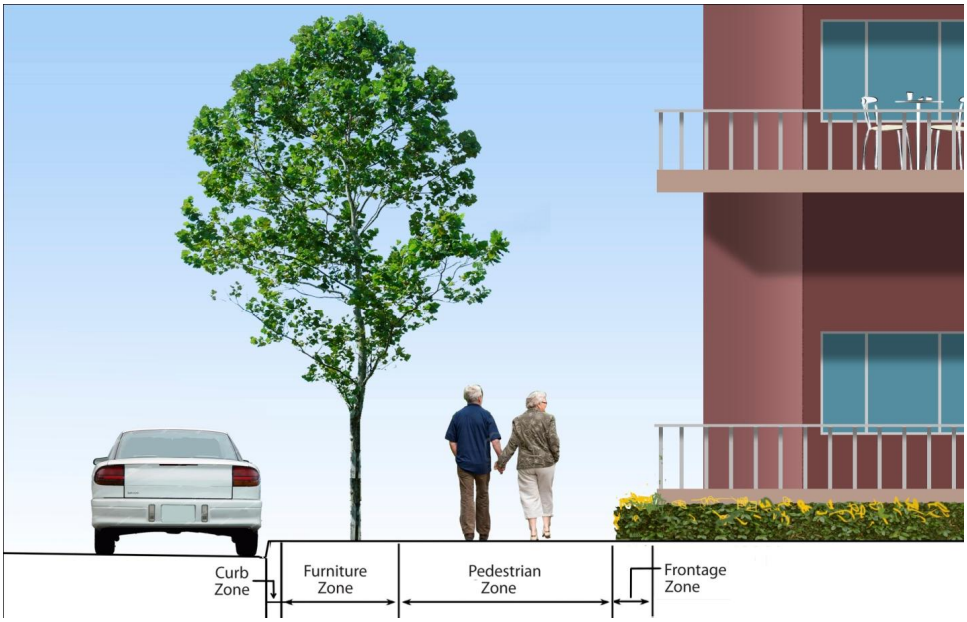
Project 13: Sidewalk Furnishings and Street Trees	
Project Description	As streets and surrounding land use are redeveloped, provide appropriate sidewalk furnishings and relocate existing elements obstructing pedestrian pathways (including but not limited to signage, lighting, trees, benches, and traffic signal devices) to establish a clear pedestrian throughway zone on streets in Little Havana.
Lead Agencies	City of Miami, Miami-Dade County Transportation and Public Works
Notes	• Examples of appropriate sidewalk furnishings include street trees, planting strips, benches, water fountains, bicycle parking racks, and pedestrian wayfinding signs • Clear pedestrian travel zones enhance the pedestrian environment and foster community life in residential and commercial districts • A desired minimum pedestrian travel zone width (clear width) of 5 feet should be provided • For higher pedestrian volume areas, such as business districts and transit stations, additional pedestrian travel width should be provided
Implementation Timeframe	Short Term (3-5 years)
Implementation Strategy	Implement as a component of any street improvement or land redevelopment project
Implementation Cost	$$

Low/Medium Density Residential



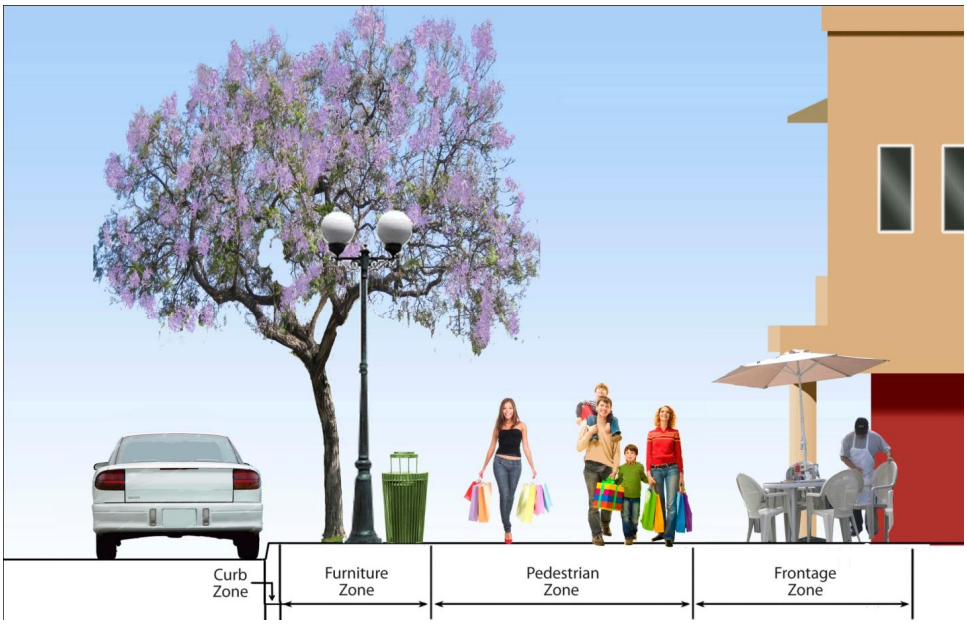
Minimum Dimensions:	6”	4’	5’	18”

Medium/High Density Residential



Minimum Dimensions:	6”	4’, 6’-8’ at bus stops, and where large trees are desired	6’	18”

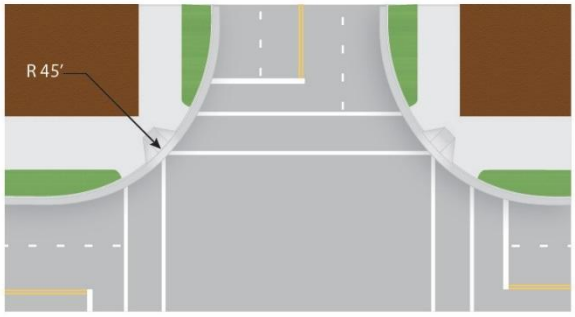
Mixed / Multi-Use

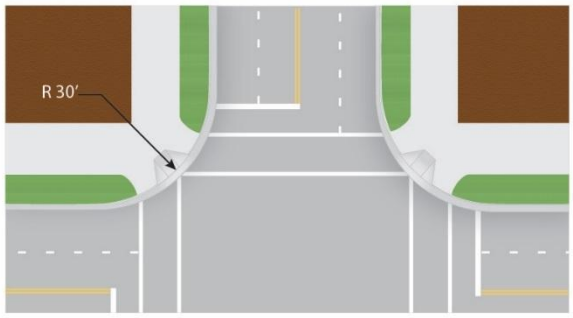


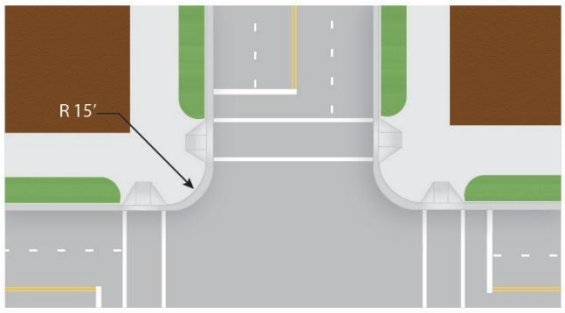
Minimum Dimensions:	6”	4’	6’	18”

Project 14: Low-Speed Design Principles	
Project Description	As streets are redesigned, reconstructed, and redeveloped, use low-speed design principles to achieve lower speeds through techniques such as smaller corner radii, pedestrian bulb-outs, traffic circles that accommodate bicycles and pedestrians, and utilizing traffic calming devices where appropriate. Additionally, perceptual design features such as patterns painted, stamped, or built into the roadway surface encourage motorists to reduce speeds.
Lead Agencies	City of Miami Miami-Dade County Transportation and Public Works
Notes	• A general recommendation for most neighborhood streets would be to design for no more than 30 miles per hour; however, each street would need to be evaluated on a case-by-case basis • Roadway safety statistics underscore the need to promote low speeds within high pedestrian areas • The likelihood of a pedestrian surviving a crash with a motor vehicle significantly increases as the vehicular speed at impact decreases
Implementation Timeframe	Now (1-2 years)
Implementation Strategy	All street design improvements within the study area
Implementation Cost	$$

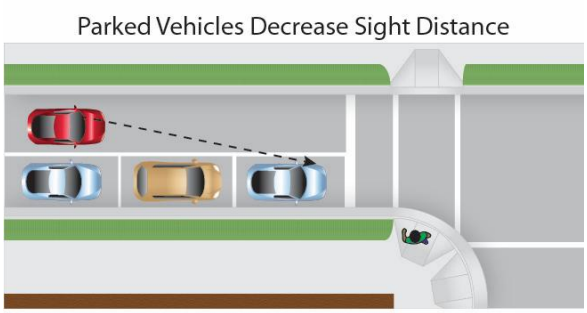
Examples of Low-Speed Design Techniques include Curb Extensions and Refuge Islands

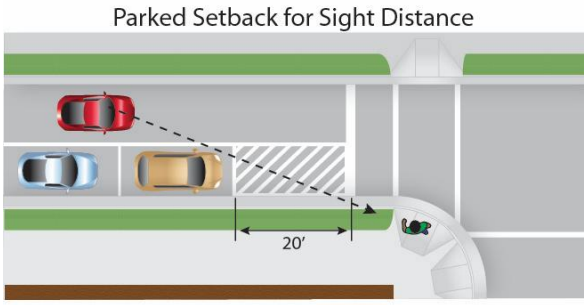


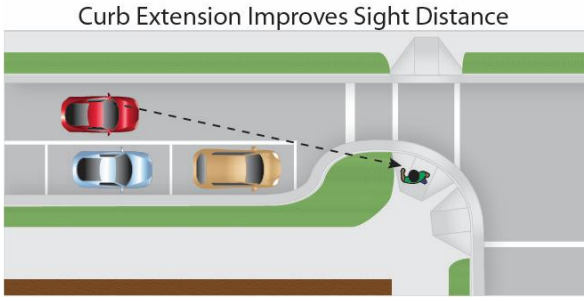




Tighter corner radii slow turning traffic and reduce pedestrian crossing distance



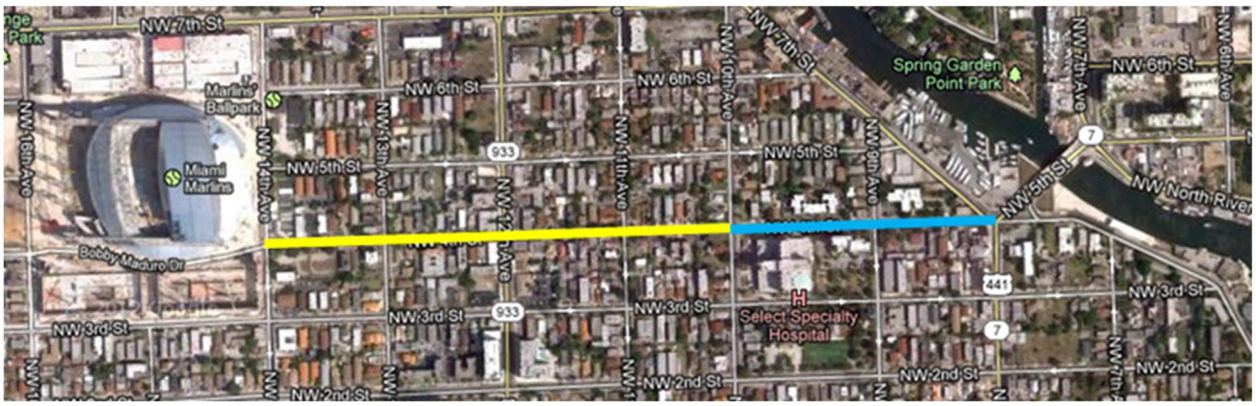




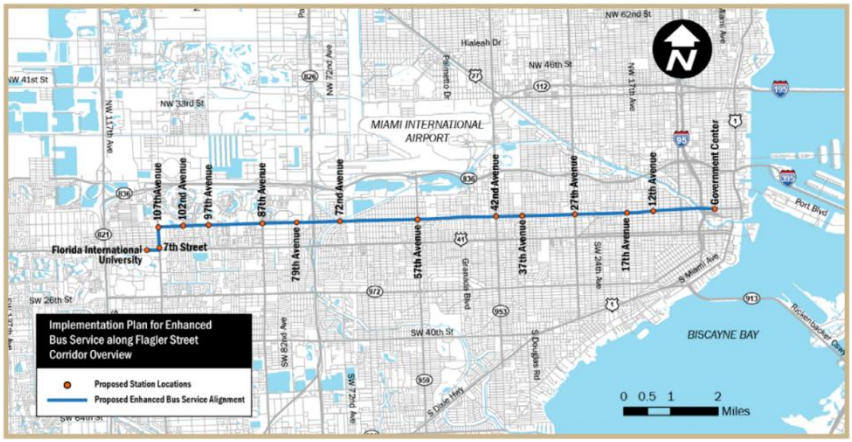
Curb extensions improve sight distance for motorists and pedestrians

Project 15: Advisory Bike Lane - NW 4th Street	
Project Description	NW 4th Street has the potential to serve as a direct bike route from Downtown Miami to Marlins Ballpark via the NW 5th Street bridge.
Lead Agencies	Miami-Dade MPO
Notes	The recommended improvement strategy includes designated parking on both sides and advisory bike lanes on the 37-foot cross section from NW 8th Avenue to NW 10th Avenue (shown in photo A and highlighted in blue in below) sharrows on the narrow sections from NW 10th Avenue to NW 14th Avenue (shown in photo B and highlighted in yellow below).
Implementation Timeframe	Short Term (3-5 years) Long Term (5+ years)
Implementation Cost	$$

NW 4th Street from NW 8th Avenue to NW 14th Avenue - Marlins Ballpark



Project 16: Express Bus Corridor	
Project Description	The Flagler Street/SW 1st Street corridor has been identified by the Miami-Dade MPO and Miami-Dade Transit as a high-frequency bus service corridor with enhanced passenger amenities, thereby improving the transit experience of existing riders and attracting new riders that would have otherwise used a private automobile to complete their trip.
Lead Agencies	Miami-Dade Transit and Miami-Dade MPO
Notes	The following segments within the study area were identified as having potential for Express Bus Corridor implementation: • SW 1st Street from West Flagler to South River Drive • West Flagler Street from SW 27th Avenue to South River Drive The major elements of the Express Bus Service include Transit Signal Priority, Queue Jumping, and Park-and-Ride Facilities.
Implementation Timeframe	Long Term (5+ years)
Implementation Strategy	Include proposed study and improvements in Capital Improvements Program (CIP)
Implementation Cost	$$$$



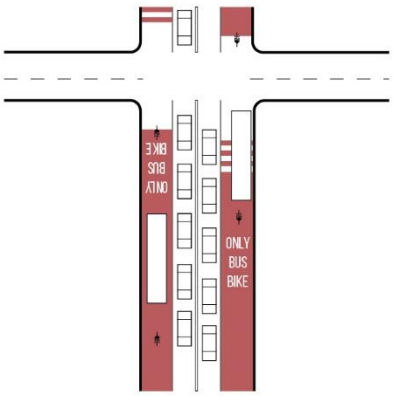
Enhanced Bus Corridor Map

Conceptual Queue Jump Lanes

Project 17: Shared Bus-Bike Lane	
Project Description	Implement a shared bus-bike lane on SW 1st Street between SW 17th Avenue and SW 5th Avenue to fill in the gap in the programmed bike lane implementation and to serve the goals of the Flagler Street/SW 1st Street Express Bus Corridor.
Lead Agencies	City of Miami, Miami-Dade Transit, Florida Department of Transportation
Notes	• Shared bus-bike lanes are most commonly applied on busy transit streets with no existing or planned bicycle facility. • Buses and bicycles often compete for the same space near the curb. On streets without dedicated bicycle infrastructure, curbside bus lanes frequently attract bicycle traffic, prompting some cities to permit bicycles in bus lanes. Shared bus-bike lanes can accommodate both modes at low speeds and moderate bus headways, where buses are discouraged from passing, and bicyclists pass buses only at stops. In appropriate conditions, bus-bike lanes are an option on streets where dedicated bus and separate high-comfort bicycle facilities cannot be provided. • Applications should generally be limited to bus lanes with operating speeds of 20 mph or less, and transit headways of 4 minutes or longer.
Implementation Timeframe	Long Term (5+ years)
Implementation Cost	$$$

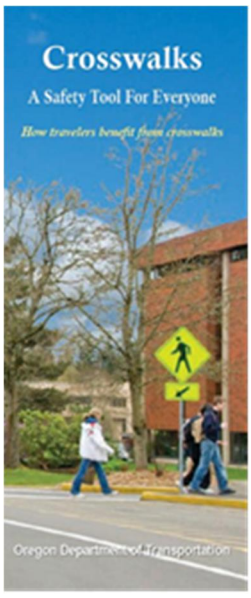
Operational Bus-Bike Lane in Walnut Street, PA

Shared Bus-Bike Lane Diagram



Project 18: Education Improvements	
Project Description	• The objective of the education improvements are to promote the concept of mobility within Little Havana to the general public in order to get more people walking and biking safely. • Provide educational pamphlets and workshops about the use of new facilities such as bicycle-activated signals, bicycle lanes, sharrows, crosswalks, and un-signalized mid-block crossings. • Work with the Miami-Dade School Board to include safe bicycling and walking classes in Elementary School curricula. • Include advertisement opportunities of bus shelter ads and billboard ads that promote bicycle and pedestrian safety. • Work with the Florida Bicycle Association to implement education initiatives in Little Havana. o Cycling Savvy includes three 3-hour components to help turn casual bicyclists into more confident riders. ▪ Alternative Transportation Education (ATE) educates offenders with revoked or suspended driver licenses on bicycling and walking safety, and has shown proven results in increasing safe use of alternative modes
Lead Agencies	City of Miami, Miami-Dade MPO, Miami-Dade County
Implementation Timeframe	Now (1-2 years)
Implementation Cost	$

Examples of Educational Pamphlets

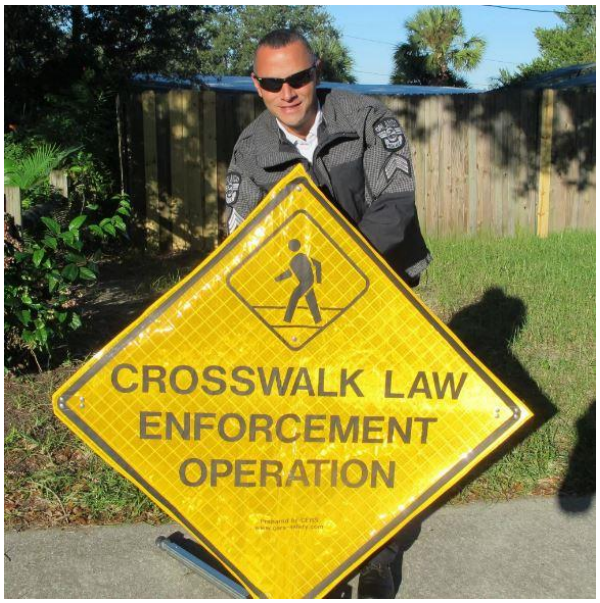


Project 19: Encouragement Improvements	
Project Description	• Work with local non-profit organizations to organize community events that would promote safely walking in Little Havana during evening hours. • Work with local bicycle clubs and advocacy groups to support and organize bicycle-related community events in Little Havana to act as an information source for bicyclists. • Promote bicycle amenities such as bicycle parking racks, bicycle transport racks, lockers, and showers at workplaces. The availability of workplace amenities encourages bicycle commuting by providing facilities that allow employees to maintain a professional appearance. • Install bike barometers/counters on shared-use paths to raise awareness of cycling and encourage more bicyclists to use the paths.
Lead Agencies	City of Miami, Miami-Dade County, Health Advocacy Groups, Non-profits, Bicycle clubs
Implementation Timeframe	Now (1-2 years)
Implementation Cost	$

Bike pedometer adjacent to cyclist in San Francisco, CA

Open Streets event on State Street in Chicago, IL

Project 20: Enforcement Improvements	
Project Description	Enforcement improvements provide a better environment for pedestrians and bicyclists in Little Havana. • Utilize targeted enforcement for both motorists and non-motorists to ensure that the rights of both groups are respected. • Expand the use of police on bicycles. • Develop a bicycle registration program to reduce theft. • Enforce citizen warnings to pedestrians not following safe walking protocol. • Promote the Ride Right, Drive Right campaign to enforce the 3-feet separation law between motorists and bicyclists. • Install bicycle activated detectors on low volume side street approaches to signalized intersections to reduce occurrences of bicyclists having to violate a red light. Gradually install them along all significant bicycle corridors and crossings. Monitor the installation of bicycle activated detectors to study the effect on bicyclist red-light running. • Develop a mandatory "bicycle traffic school" program for adult cyclists who have violated the vehicle code on their bicycle, with the purpose of teaching safe bicycling practices.
Lead Agencies	City of Miami, Miami-Dade County
Implementation Timeframe	Now (1-2 years)
Implementation Cost	$

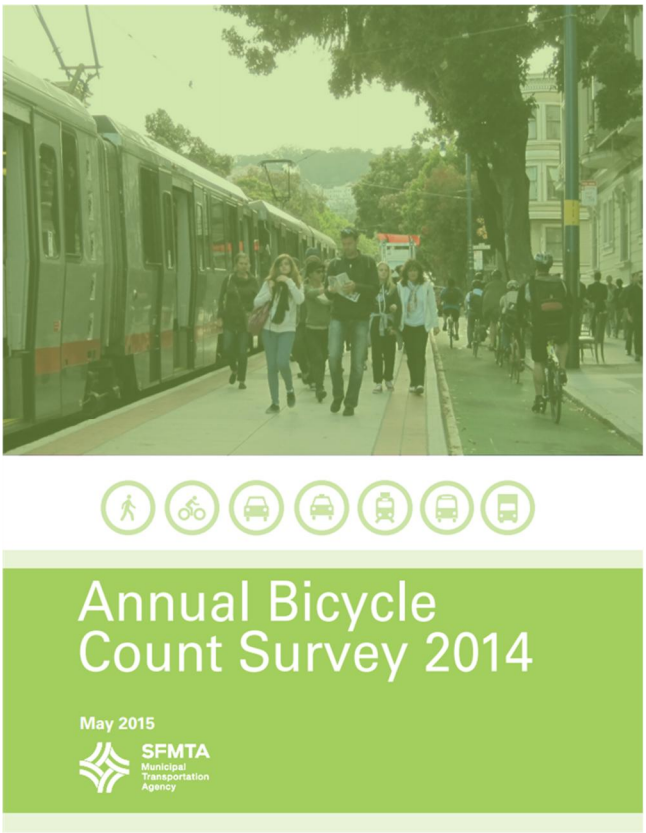


Visible Enforcement of Crosswalk Laws, Orlando, FL

Registration Decal, James City County, VA

Project 21: Evaluation and Monitoring	
Project Description	• Conduct a periodic online survey to gauge the quality of the pedestrian experience in Little Havana and measure change over time in the perceived safety and pleasantness of the pedestrian environment using the survey included in this project as an established baseline. • Evaluate the change in pedestrian and bicycle volumes annually by continuing the count program in the general vicinity of the counts conducted for this study. Document improvements implemented between counts to assess their impact.
Lead Agencies	City of Miami, Miami-Dade MPO
Implementation Timeframe	Now (1-2 years)
Implementation Cost	$

Annual Bicycle Data Collection and Monitoring Report, San Francisco

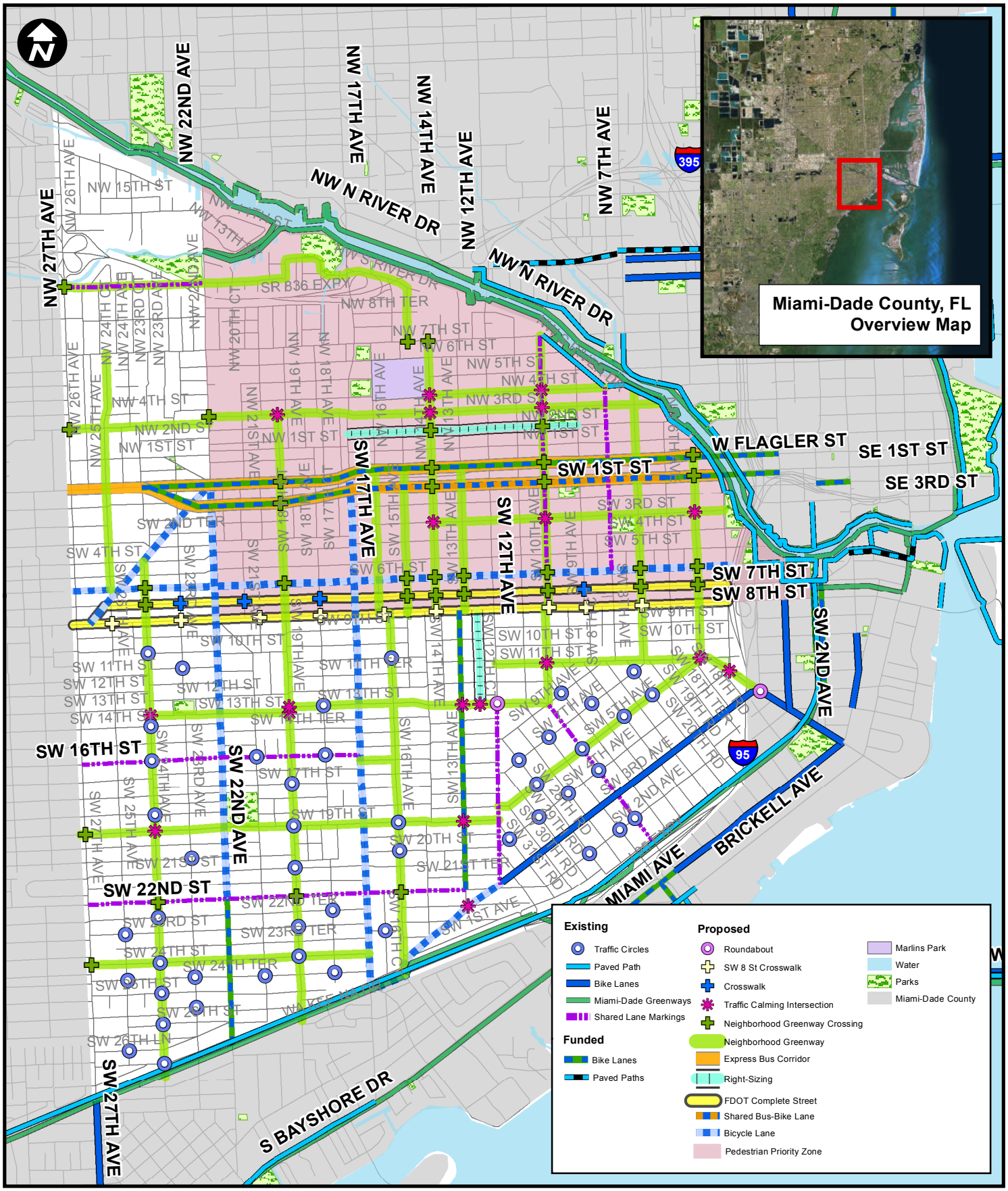


Summary

The Little Havana Bicycle Pedestrian Mobility Plan develops and recommends projects to help implement the City of Miami's goals related to bicycle and pedestrian mobility within these neighborhoods. A focus was placed on developing projects that will connect the area's activity centers, neighborhoods, and community facilities while incorporating existing plans and public input and participation. The Recommended Improvements section of this report groups the bicycling and walking initiatives into 21 projects that when taken as a comprehensive whole will increase the safety and mobility of the residents and visitors of the Little Havana area for years to come. Figure 16 depicts the existing and planned bicycle and pedestrian facilities as well as bicycle and pedestrian-related needs within Little Havana.

Multimodal Mobility Study

Little Havana Bicycle/Pedestrian Mobility Plan



Kimley»Horn

Appendix A: 2016 Transportation Improvement Program (TIP) Projects in Study Area

HIGHWAYS

MPO Project Num:	DT4180911
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	87053003
Lanes Exist:	3
Lanes Improved:	3
Lanes Added:	0
Project Length:	1.354
District:	06

Project Description: **SR 968/W. FLAGLER ST** **FROM W OF SR 9/27 AVE** **TO W 14 AVENUE**

Type of Work: **FLEXIBLE PAVEMENT RECONSTRUCT.** SIS or Non-SIS: **No**

Extra Description:

		Proposed Funding (in $000s)							
PHASE :	Funding Source	<2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
CONTRACT INCENTIVES	SA	0	0	0	400	0	0	0	400
	Total	**0**	**0**	**0**	**400**	**0**	**0**	**0**	**400**
PRELIMINARY ENGINEERING	DS	1,296	0	0	0	0	0	0	1,296
PRELIMINARY ENGINEERING	DDR	749	0	0	0	0	0	0	749
PRELIMINARY ENGINEERING	LF	120	0	0	0	0	0	0	120
PRELIMINARY ENGINEERING	DIH	121	0	0	0	0	0	0	121
	Total	**2,286**	**0**	**0**	**0**	**0**	**0**	**0**	**2,286**
RAILROAD & UTILITIES	LF	0	2,000	0	0	0	0	0	2,000
	Total	**0**	**2,000**	**0**	**0**	**0**	**0**	**0**	**2,000**
RIGHT OF WAY	DIH	111	0	0	0	0	0	0	111
RIGHT OF WAY	DDR	245	100	0	0	0	0	0	345
RIGHT OF WAY	DS	508	0	0	0	0	0	0	508
	Total	**864**	**100**	**0**	**0**	**0**	**0**	**0**	**964**
CONSTRUCTION	DS	0	77	0	0	0	0	0	77

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	DT4146331
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	87053000
Lanes Exist:	4
Lanes Improved:	4
Lanes Added:	0
Project Length:	1.285
District:	06

Project Description: **SR 968 / W FLAGLER ST** **FROM WEST 14TH AVENUE** **TO WEST 2ND AVENUE**

Type of Work: **FLEXIBLE PAVEMENT RECONSTRUCT.** SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
CONSTRUCTION	DS	0	4,434	0	0	0	0	0	4,434
CONSTRUCTION	SA	0	4,666	0	0	0	0	0	4,666
	Total	**0**	**9,305**	**0**	**0**	**0**	**0**	**0**	**9,305**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 13,596

Item Number: 414633 **Item TOTAL ALL Years ALL Phases All Segments: 24,620**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	DT4146332
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	87053001
Lanes Exist:	4
Lanes Improved:	4
Lanes Added:	0
Project Length:	0.76
District:	06

Project Description: **SR 968 / SW 1ST STREET** **FROM FLAGLER STREET** **TO EAST OF 17TH AVENUE**

Type of Work: **FLEXIBLE PAVEMENT RECONSTRUCT.** SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
CONTRACT INCENTIVES	SA	0	0	0	250	0	0	0	250
	Total	**0**	**0**	**0**	**250**	**0**	**0**	**0**	**250**
PRELIMINARY ENGINEERING	DDR	30	0	0	0	0	0	0	30
PRELIMINARY ENGINEERING	LF	132	0	0	0	0	0	0	132
PRELIMINARY ENGINEERING	SU	956	0	0	0	0	0	0	956
PRELIMINARY ENGINEERING	EB	156	0	0	0	0	0	0	156
PRELIMINARY ENGINEERING	DS	16	0	0	0	0	0	0	16
PRELIMINARY ENGINEERING	DIH	127	0	0	0	0	0	0	127
	Total	**1,416**	**0**	**0**	**0**	**0**	**0**	**0**	**1,416**
RAILROAD & UTILITIES	LF	0	2,000	0	0	0	0	0	2,000
	Total	**0**	**2,000**	**0**	**0**	**0**	**0**	**0**	**2,000**
RIGHT OF WAY	DIH	45	0	0	0	0	0	0	45
RIGHT OF WAY	DDR	210	0	0	0	0	0	0	210
	Total	**255**	**0**	**0**	**0**	**0**	**0**	**0**	**255**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	DT4327421
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	87140000
Lanes Exist:	2
Lanes Improved:	2
Lanes Added:	0
Project Length:	.733
District:	06

Project Description: **SR 7/SW/NW 8 AVENUE** **FROM SR 90/US 41/SW 8 ST** **TO NW 3RD STREET**

Type of Work: **RESURFACING**

SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
PRELIMINARY ENGINEERING	DIH	26	0	0	0	0	0	0	26
PRELIMINARY ENGINEERING	DS	30	0	0	0	0	0	0	30
PRELIMINARY ENGINEERING	DDR	189	0	0	0	0	0	0	189
	Total	**244**	**0**	**0**	**0**	**0**	**0**	**0**	**244**
RAILROAD & UTILITIES	LF	16	0	0	0	0	0	0	16
	Total	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
RIGHT OF WAY	DDR	10	0	0	0	0	0	0	10
RIGHT OF WAY	DIH	0	0	0	0	0	0	0	0
	Total	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**10**
CONSTRUCTION	DS	613	78	0	0	0	0	0	691
CONSTRUCTION	DIH	21	0	0	0	0	0	0	21
	Total	**634**	**78**	**0**	**0**	**0**	**0**	**0**	**712**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 983

Item Number: 432742 **Item TOTAL ALL Years ALL Phases All Segments: 983**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	DT4327482
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	
Lanes Exist:	
Lanes Improved:	
Lanes Added:	
Project Length:	1.993
District:	06

Project Description: **SR 933/SW-NW 12 AVENUE** **FROM NORTH OF SW 13 STREET** **TO NW 1500 BLOCK**

Type of Work: **RESURFACING - RIDE ONLY**

SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
PRELIMINARY ENGINEERING	DS	0	0	0	0	0	0	0	0
PRELIMINARY ENGINEERING	DIH	50	0	0	0	0	0	0	50
	Total	**50**	**0**	**0**	**0**	**0**	**0**	**0**	**50**
CONSTRUCTION	DDR	0	0	1,540	0	0	0	0	1,540
CONSTRUCTION	DIH	0	0	21	0	0	0	0	21
	Total	**0**	**0**	**1,561**	**0**	**0**	**0**	**0**	**1,561**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 1,611

Item Number: 432748 **Item TOTAL ALL Years ALL Phases All Segments: 2,228**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	**DT4183122**
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	87053001
Lanes Exist:	3
Lanes Improved:	3
Lanes Added:	0
Project Length:	1.163
District:	06

Project Description: **SR 968/SW 1ST STREET** **FROM SW 17TH AVENUE** **TO E. OF SW 6TH AVENUE**

Type of Work: **FLEXIBLE PAVEMENT RECONSTRUCT.** SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
	Total	**131**	**62**	**0**	**0**	**0**	**0**	**0**	**193**
CONSTRUCTION	DDR	0	0	9,308	0	0	0	0	9,308
CONSTRUCTION	DDR	0	0	79	0	0	0	0	79
CONSTRUCTION	DIH	0	0	73	0	0	0	0	73
CONSTRUCTION	DS	4	0	0	0	0	0	0	4
	Total	**4**	**0**	**9,460**	**0**	**0**	**0**	**0**	**9,464**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 13,430

Item Number: 418312 **Item TOTAL ALL Years ALL Phases All Segments: 13,430**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num: **DT4326396**
LRTP Ref.: ***
County: MIAMI-DADE
Roadway ID:
Lanes Exist:
Lanes Improved:
Lanes Added:
Project Length: 2.970
District: 06

Project Description: **SR 90/SW 7 ST/SW 8 ST** **FROM BRICKELL AVENUE** **TO SR 9/SW 27 AVENUE**

Type of Work: **PD&E/EMO STUDY**

SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
P D & E	DDR	0	2,000	0	0	0	0	0	2,000
P D & E	DIH	0	40	0	0	0	0	0	40
	Total	**0**	**2,040**	**0**	**0**	**0**	**0**	**0**	**2,040**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 2,040

Item Number: 432639 **Item TOTAL ALL Years ALL Phases All Segments: 10,212**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	**DT4244071**
LRTP Ref.:	6-12
County:	MIAMI-DADE
Roadway ID:	87053001
Lanes Exist:	4
Lanes Improved:	0
Lanes Added:	0
Project Length:	.418
District:	06

Project Description: **SR 968/SW 1ST STREET AT MIAMI RIVER (BRIDGE #870660)**

Type of Work: **BRIDGE REPLACEMENT**

SIS or Non-SIS: **No**

Extra Description:

		Proposed Funding (in $000s)							
PHASE :	Funding Source	<2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
CONSTRUCTION	BRP	0	0	0	0	3,318	0	0	3,318
	Total	**0**	**0**	**0**	**76,059**	**5,873**	**0**	**0**	**81,932**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 96,496

Item Number: 424407

Item TOTAL ALL Years ALL Phases All Segments: 96,496

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	DT4146432
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	87085000
Lanes Exist:	3
Lanes Improved:	0
Lanes Added:	0
Project Length:	2.085
District:	06

Project Description: **SR 933 / NW 12 AVENUE** **FROM SW 22 STREET** **TO NW 8 TERRACE**

Type of Work: **LANDSCAPING**

SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
PRELIMINARY ENGINEERING	DS	100	0	0	0	0	0	0	100
PRELIMINARY ENGINEERING	DIH	13	0	0	0	0	0	0	13
	Total	**113**	**0**	**0**	**0**	**0**	**0**	**0**	**113**
CONSTRUCTION	DS	0	0	1,030	0	0	0	0	1,030
CONSTRUCTION	DIH	0	0	37	0	0	0	0	37
	Total	**0**	**0**	**1,067**	**0**	**0**	**0**	**0**	**1,067**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 1,180

Item Number: 414643 **Item TOTAL ALL Years ALL Phases All Segments: 6,365**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	**DT4365361**
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	
Lanes Exist:	
Lanes Improved:	
Lanes Added:	
Project Length:	.118
District:	06

Project Description: **SR 933/NW 12 AVENUE OVER MIAMI RIVER BRIDGE # 871005**

Type of Work: **BRIDGE-REPAIR/REHABILITATION** SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
PRELIMINARY ENGINEERING	BRRP	0	50	0	0	0	0	0	50
PRELIMINARY ENGINEERING	DIH	0	20	0	0	0	0	0	20
	Total	**0**	**70**	**0**	**0**	**0**	**0**	**0**	**70**
CONSTRUCTION	BRRP	0	0	0	0	573	0	0	573
CONSTRUCTION	DIH	0	0	0	0	39	0	0	39
	Total	**0**	**0**	**0**	**0**	**612**	**0**	**0**	**612**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 682

Item Number: 436536 **Item TOTAL ALL Years ALL Phases All Segments: 682**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

HIGHWAYS

MPO Project Num:	DT4334931
LRTP Ref.:	C-9
County:	MIAMI-DADE
Roadway ID:	87085000
Lanes Exist:	0
Lanes Improved:	0
Lanes Added:	0
Project Length:	.126
District:	06

Project Description: **SR 933/SW 12 AVENUE** **FROM SW 6TH STREET** **TO SW 8TH STREET**

Type of Work: **INTERSECTION IMPROVEMENT** SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2016	2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	>2020	All Years
PRELIMINARY ENGINEERING	HSP	100	0	0	0	0	0	0	100
PRELIMINARY ENGINEERING	ACSA	110	0	0	0	0	0	0	110
PRELIMINARY ENGINEERING	DS	27	0	0	0	0	0	0	27
PRELIMINARY ENGINEERING	DIH	10	0	0	0	0	0	0	10
	Total	**247**	**0**	**0**	**0**	**0**	**0**	**0**	**247**
CONSTRUCTION	DIH	0	36	0	0	0	0	0	36
CONSTRUCTION	HSP	0	598	0	0	0	0	0	598
	Total	**0**	**634**	**0**	**0**	**0**	**0**	**0**	**634**

RESPONSIBLE AGENCY: **Florida Department of Transportation District 6**

Item Segment TOTAL ALL Years ALL Phases: 881

Item Number: 433493 **Item TOTAL ALL Years ALL Phases All Segments: 881**

***Project is not funded in LRTP and will require a LRTP amendment.

****Project was funded in a previous TIP.

Appendix B: Miami-Dade 2040 Long Range Transportation Plan (LRTP) Projects in Study Area

Figure 6-4 | Priority I Project Map

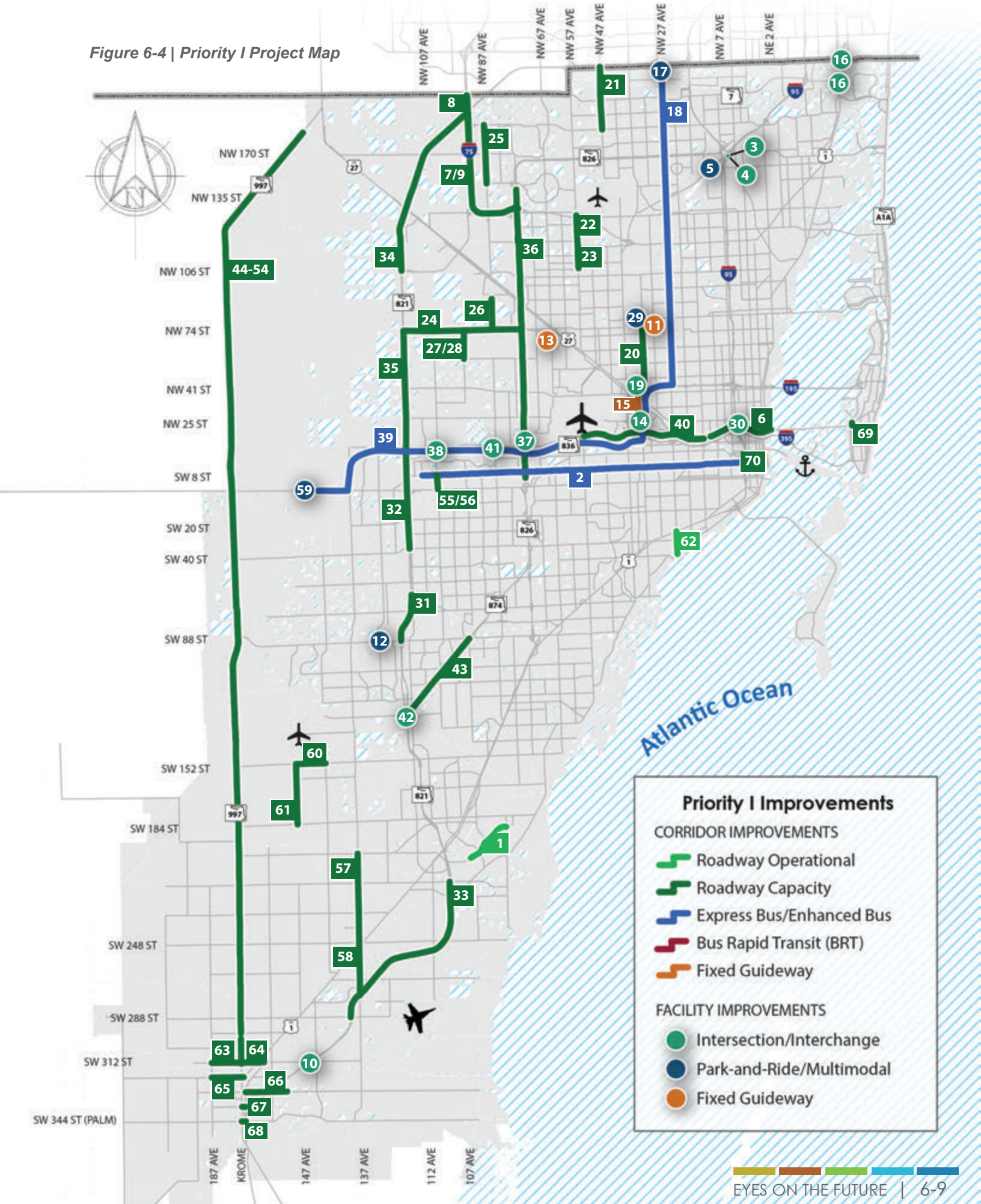


Table 6-6 | Priority I Projects (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan	
1	Caribbean Blvd	Coral Sea Rd	SW 87 Ave	Add center turn lane	$4.467			
2	East-West Corridor (Flager Enhanced Bus)**	Miami Downtown Terminal	FIU-MMC (SW 112 Ave)	Incremental improvement on PTP corridor	$2.000	$13.000	$15.730	
3	Golden Glades Interchange: SR-826 (Palmetto)	SR-826 (Palmetto) EB Ramp	I-95 NB	Modify interchange	$171.426			
4	Golden Glades Interchange Improvements	Florida's Turnpike		Interchange improvement	$74.448			
5	Golden Glades Multi-Modal Terminal (Phase 1)			Modal hub capacity improvements	$51.243			
6	I-395	I-95	MacArthur Causeway Bridge	Modify interchange	$760.584		$200.010	
7	I-75	South of NW 170 St	Miami-Dade County Line	ITS communications	$6.593			
8	I-75 Managed Lanes System	NW 170 St	South of SR-821 (HEFT) Interchange	Managed lanes	$38.853			
9	I-75 Managed Lanes System	South of SR-821 (HEFT) Interchange	Miami-Dade County Line	Managed lanes	$108.037			
n/a	Implementation of Quiet Zones for All Aboard Florida	Miami-Dade/Broward County Line	Downtown Miami	19 intersection for quiet zones in the County		$3.200	$3.872	
10	Improvements at SW 312 St (Campbell) Interchange	SR-821 (HEFT)/ SW 312 St (Campbell)		Interchange improvements	$3.984			
11	IRIS Connection	CSX Mainline	FEC Mainline	Rail capacity project	$8.304			
12	Kendall Park-and Ride Facility	SW 127 Ave/ SW 88 St (Kendall)		Park-and-Ride facility with 160 spaces	$0.741			
13	Lehman Yard Rehabilitation & Expansion (Phase 1)	Lehman Center		Rehabilitation and expansion	$1.232			
n/a	Miami Intermodal Center (MIC) Repayment***				$199.046			
14	Miami Intermodal Center (MIC) Connection To NW 37 Ave	Miami Intermodal Center (MIC)	NW 37 Ave	New 2 lane road construction	$9.827			
15	Miami River-Miami Intermodal Center (MIC) Capacity Improvement			Double track remaining single track of Tri-Rail near Miami River	$50.400	$49.000	$59.290	
16	NE 203 St and NE 215 St	US-1	West Dixie Highway	Intersection improvements, passing track/siding	$42.960			
17	NW 215 St Transit Terminal Facility**	At NW 27 Ave		Park-and-Ride facility	$2.994			
18	North Corridor (NW 27 Ave) Enhanced Bus**	Miami Intermodal Center (MIC)	NW 215 St Terminal	Enhanced bus service	$27.000			
19	NW 36 St	NW 42 Ave (LeJeune)	US-27 (Okeechobee)	Replace bridge and add lanes	$10.280			
20	NW 37 Ave	North River Dr	NW 79 St	Add 2 lanes and center turn lane and reconstruct	$17.508			
21	NW 47 Ave	NW 183 St	Miami-Dade/Broward County Line	Capacity improvements	$41.652			
22	NW 57 Ave (Red)	W 65 St	W 84 St	Add 2 lanes and reconstruct	$22.587			
23	NW 57 Ave (Red)	W 53 St	W 65 St	Add 2 lanes and reconstruct	$23.907			
24	NW 74 St	SR-821 (HEFT)	SR-826 (Palmetto)	Add 2 lanes and reconstruct	$8.476			
25	NW 87 Ave	NW 154 St	NW 186 St	Add 2 lanes and reconstruct	$6.483			
26	NW 87 Ave	NW 74 St	NW 103 St	New 2 lane road construction	$36.822			
27	NW 97 Ave	NW 70 St	NW 74 St	New 4 lane road construction	$0.977			

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
**denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*
****denotes Repayment of TIFIA Loan is funded through Local Funds Not in Escrow (LPNE) with payments scheduled to 2034.*
n/a - not applicable, project not shown on map

Table 6-6 | Priority I Projects (continued) (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan	
57	SW 137 Ave	US-1	SW 200 St	Completion as 2 continuous lanes	$13.934			
58	SW 137 Ave	SR-821 (HEFT)	US-1	Add 2 lanes and reconstruct	$6.949			
59	SW 147 Ave/SW 8 St Park-and-Ride**			Park-and- Ride facility	$9.000			
60	SW 152 St	SW 157 Ave	SW 147 Ave	Add 2 lanes and reconstruct	$2.351			
61	SW 157 Ave	SW 184 St (Eureka)	SW 152 St (Coral Reef)	New 4 lane road construction	$6.662			
62	SW 27 Ave	US-1	Bayshore Dr	Add center turn lane	$1.347			
63	SW 312 St (Campbell)	SW 187 Ave	SW 177 Ave	Add 2 lanes and center turn lane and reconstruct	$5.723			
64	SW 312 St (Campbell)	SR-997 (Krome)	US-1	Widening existing lanes and reconstruct	$13.181			
65	SW 320 St (Mowry)	SW 187 Ave	Flagler Ave	Add 2 lanes and reconstruct	$1.805			
66	SW 328 St	US-1	SW 162 Ave	Add 2 lanes and reconstruct	$2.146			
67	SW 336 St	SR-997 (Krome)	US-1	Widen and resurface existing roadway	$1.390			
68	SW 344 St (Palm)	SR-997 (Krome)	US-1	Widen and resurface existing roadway	$0.890			
69	West Ave Connector Bridge	North of Lincoln Rd	South of 18 St	New bridge construction	$ 5.473			
70	SR-968/SW 1 St	At Miami		Bridge replacement	$ 84.981			

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*

Figure 6-16 | Partially Funded Project Map

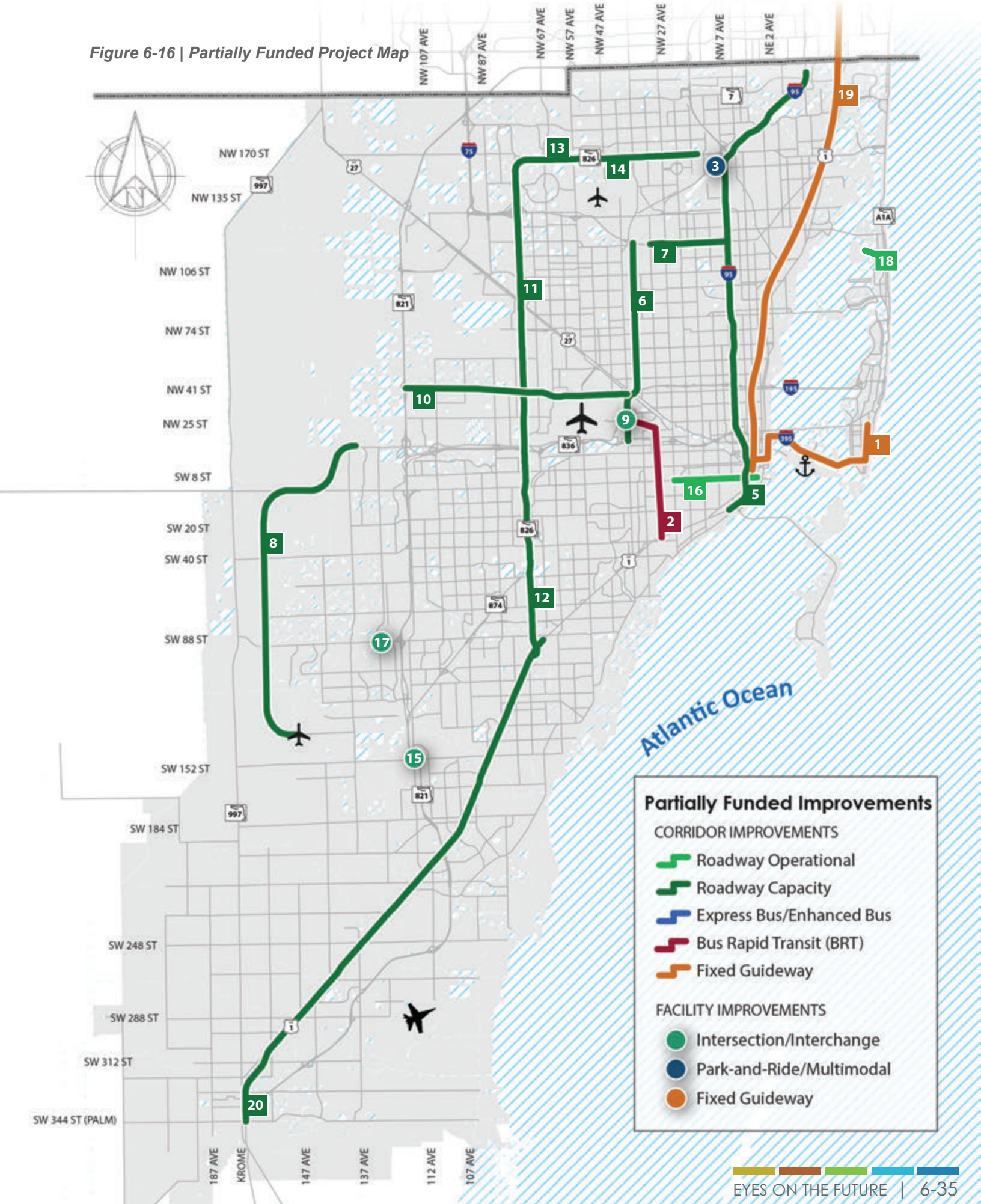


Table 6-10 | Partially Funded Projects (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan	
1	Beach Connection (Baylink)	Miami Downtown Terminal	Miami Beach Convention Center	Premium transit service		$532.132	$161.273	
2	Douglas Rd Corridor BRT(SW 27/37 Ave) Dedicated Lanes	US-1	Miami Intermodal Center (MIC)	Full bus rapid transit		$166.400	$36.378	
3	Golden Glades Multimodal Terminal (Phase 2)			Park-and-Ride facility with 1,800 space garage		$45.000	$6.075	
4	I-95	South of SR 836/I-395	Broward County Line	Operational and capacity improvements	$13.035		$13.035	
5	I-95	US-1	South of SR 836/I-395	Operational and capacity improvements	$10.200		$10.200	
6	MDX Connect 4 Express	Central Miami-Dade County	North Miami-Dade County	New expressway connecting SR-836 (Dolphin), SR- 112 , SR-924, and SR-826 (Palmetto)	$7.300	$150.000	$323.800	
7	MDX SR-924/Gratigny Parkway East Extension	NW 32 Ave	I-95	New expressway extension of SR-924 East to I-95	$0.240	$477.000	$296.500	
8	MDX SR-836 (Dolphin) SouthWest Extension***	Western Terminus of SR-836 (Dolphin)	SW 136 St	Extend SR-836 from NW 137 Ave to the Southwest Kendall area	$7.490	$808.000	$681.900	
9	Miami Intermodal Center (MIC)			NW 42 Ave (LeJeune) Strip	$0.012			
10	NW 36th /NW 41 St	SR-821 (HEFT)	NW 42 Ave (LeJeune)	Redesign NW 36 St/41 St as a superarterial express street		$397.051	$509.504	
11	SR-826 (Palmetto)	West Flagler St	NW 154 St	Operational and capacity improvements			$2.080	
12	SR-826 (Palmetto)	US-1/S Dixie Highway	SR-836 (Dolphin)	Managed lanes	$7.150			
13	SR-826 (Palmetto)	East of NW 67 Ave	East of NW 57 Ave	Capacity and operational improvements	$5.500			
14	SR-826 (Palmetto)	West of NW 32 Ave	East of NW 27 Ave	Capacity and operational improvements	$6.900			
15	SW 117 Ave/SW 152 St (Coral Reef) Grade Separation			Grade separate SW 117 Ave over SW 152 St (Coral Reef)		$39.705	$7.060	
16	SW 7 St/ SW 8 St	Brickell Ave	SW 27 Ave	Operational and capacity improvements		$0.278	$0.093	
17	SW 88 St (Kendall)/SW 127 Ave Grade Separation			Grade separate SW 88 St (Kendall) over SW 127 Ave.		$39.705	$7.060	
18	Town of Indian Creek Bridge			Reconstruct bridge	$1.515	$13.860		
19	Tria-Rail Coastal Link	Miami	Pompano	Tri-Rail service	$5.566			
20	US-1 Managed Lanes***	SW 344 St (Palm)	Dadeland South Metrorail Station	Add 2 /1 reversible new managed lanes within the ROW of the Busway	$1.809	$367.000	$139.700	

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*
****Project would require amendment of the Miami-Dade County Comprehensive Plan Development Master Plan*

Figure 6-21 | Bicycle/Pedestrian Project Map

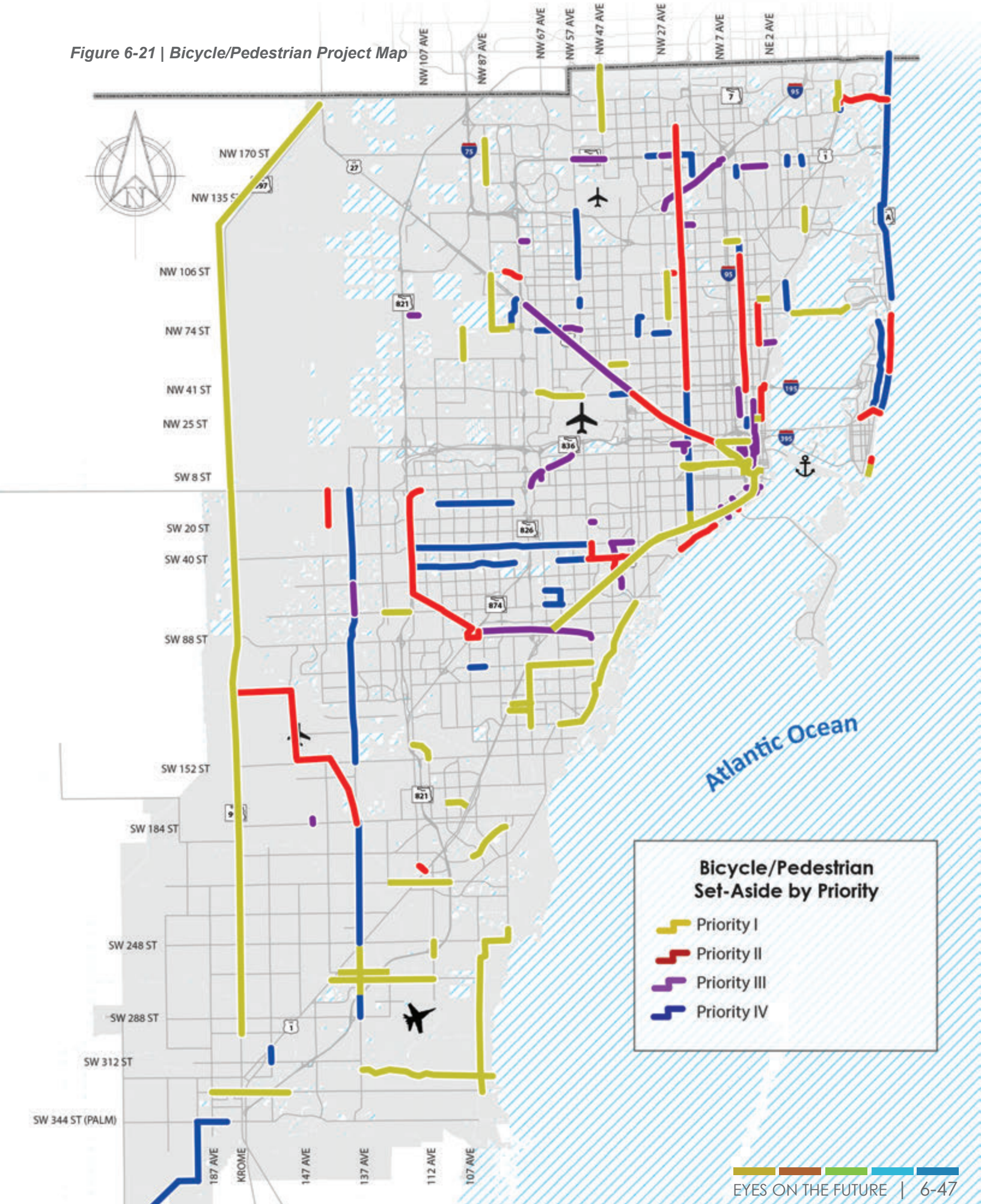


Table 6-14 | Bicycle/Pedestrian Priority I Projects (Values in Thousands YOE $)

Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2014 $)	Project Costs Funded via 2040 Plan	
SW 328 St	SW 187 Ave	SW 162 Ave	Bicycle Facility Improvements	*			
SW 268 St	S Dixie Highway	SW 112 Ave	Bicycle Facility Improvements	*			
SW 112 Ave	SW 256 St	SW 248 St	Bicycle Facility Improvements	*			
Caribbean Boulevard	Marlin Road	SW 87 Ave	Bicycle Facility Improvements	*			
SW 112 Ave	SW 117 Ave	SW 152 St	Bicycle Facility Improvements	*			
SW 72 St	SW 127 Ave	SW 118 Ave	Bicycle Facility Improvements	*			
SW 77 Ave	SW 104 St	SW 136 St	Bicycle Facility Improvements	*			
SW 124 St	SW 77 Ave	S Dixie Highway	Bicycle Facility Improvements	*			
SW 128 St	SW 77 Ave	S Dixie Highway	Bicycle Facility Improvements	*			
SW 104 St	SW 77 Ave	SW 57 Ave	Bicycle Facility Improvements	*			
Flagler St	NW 2 Ave	NW 24 Ave	Bicycle Facility Improvements	*			
SW 1 St	SW 24 Ave	SW 17 Ave	Bicycle Facility Improvements	*			
SW 1 St	SW 5 Ave	SW 2 Ave	Bicycle Facility Improvements	*			
NW 87 Ave	NW 74 St	NW 103 St	Bicycle Facility Improvements	*			
NW 97 Ave	NW 74 St	NW 58 St	Bicycle Facility Improvements	*			
NW 36 St	NW 72 Ave	Curtiss Prkway	Bicycle Facility Improvements	*			
Hialeah Drive	E 4 St	E 8 St	Bicycle Facility Improvements	*			
NW 27 Ave	NW 103 St	NW 79 St	Bicycle Facility Improvements	*			
NE 79 St	NE Bayshore Ct	Bay Drive	Bicycle Facility Improvements	*			
NW 87 Ave	NW 154 St	NW 178 St	Bicycle Facility Improvements	*			
NW 47 Ave	NW 183 St	NW 21 St	Bicycle Facility Improvements	*			
NW 119 St	NW 7 Ave	NE 2 Ave	Bicycle Facility Improvements	*			
SW 216 St	S Dixie Highway	SR-821 (HEFT)	Bicycle Facility Improvements	*			
NW 16 Ave	NE 135 St	NE 123 St	Bicycle Facility Improvements	*			
NW 11 St	NW 12 Ave	SW 2 Ave	Bicycle Facility Improvements	*			
SR-997 (Krome)	SW 8 St (Tamiami)	US-27 (Okeechobee)	Bicycle Facility Improvements	*			
Krome Trail	Homestead	SW 8 St (Tamiami)	Trail Improvements	*			
Coral Way K-8 Center			Safe Routes to Schools	**			
Maya Angelou Elementary			Safe Routes to Schools	**			

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
**Funded in 2015/2019 Miami-Dade County Transportation Imrpovement Program (TIP) in conjunction with road reconstruction/rehabilitation*
*** Safe Routes to School - funded as a program 2015/2019 Miami-Dade County TIP ($6.2M)*

Table 6-14 | Bicycle/Pedestrian Priority I Projects (continued) (Values in Thousands YOE $)

Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2014 $)	Project Costs Funded via 2040 Plan	
Winston Park K-8 Center			Safe Routes to Schools	**			
Ernest R Graham Elementary			Safe Routes to Schools	**			
Meadowlane Elementary			Safe Routes to Schools	**			
Ben Sheppard Elementary			Safe Routes to Schools	**			
Brentwood Elementary			Safe Routes to Schools	**			
Gertrude Edelman/Sabal Palm Elementary			Safe Routes to Schools	**			
Spanish Lake Elementary			Safe Routes to Schools	**			
Melrose Elementary			Safe Routes to Schools	**			
Dr. Robert B. Ingram Elementary			Safe Routes to Schools	**			
Biscayne Elementary			Safe Routes to Schools	**			
North Beach Elementary			Safe Routes to Schools	**			
Fienberg/Fisher K-8 Center			Safe Routes to Schools	**			
Miami Lakes K-8 Center			Safe Routes to Schools	**			
Redondo Elementary			Safe Routes to Schools	**			
Shenandoah Elementary			Safe Routes to Schools	**			
Silver Bluff Elementary			Safe Routes to Schools	**			
Kinloch Park Elementary			Safe Routes to Schools	**			
Fairlawn Elementary			Safe Routes to Schools	**			
Nathan Young Elementary			Safe Routes to Schools	**			
James H. Bright Elementary			Safe Routes to Schools	**			
Morningside Elementary			Safe Routes to Schools	**			
Hialeah Gardens Elementary			Safe Routes to Schools	**			
Perrine Elementary			Safe Routes to Schools	**			
Palmetto Elementary			Safe Routes to Schools	**			
Howard Drive Elementary			Safe Routes to Schools	**			
Coral Reef Elementary			Safe Routes to Schools	**			
Pinecrest Elementary			Safe Routes to Schools	**			
Saunders Elementary			Safe Routes to Schools	**			
Avocado Elementary			Safe Routes to Schools	**			

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
**Funded in 2015/2019 Miami-Dade County Transportation Imrpovement Program (TIP) in conjunction with road reconstruction/rehabilitation*
*** Safe Routes to School - funded as a program 2015/2019 Miami-Dade County TIP ($6.2M)*

Table 6-14 | Bicycle/Pedestrian Priority I Projects (continued) (Values in Thousands YOE $)

Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2014 $)	Project Costs Funded via 2040 Plan	
Devon Aire K-8 Center			Safe Routes to Schools	**			
NW 74 St	NW 87 Ave	NW 79 Ave	Bicycle Facility Improvements		$48.480	$65.230	
NW 79 Place	NW 74 St	Palmetto Metrorail Station	Bicycle Facility Improvements		$17.200	$23.143	
SW 216 St	SW 127 Ave	HEFT	Bicycle Facility Improvements		$19.260	$25.914	
SW 264 St	US-1	SW 137 Ave	Bicycle Facility Improvements		$35.260	$47.442	
SW 176 St/Hibiscus St	SW 107 Ave	US-1	Bicycle Facility Improvements		$63.200	$85.036	
SW 22 Ave	US-1	Coral Way	Bicycle Facility Improvements		$30.480	$41.011	
SW 137 Ave	HEFT	US-1	Bicycle Facility Improvements		$33.240	$44.724	
West Dixie Highway	NE 186 St/Miami Gardens Drive	Ives Dairy Road	Bicycle Facility Improvements		$23.000	$30.947	
Overtown Greenway	NW 7 Ave	NW 3 Ave	Trail Improvements	$2,142.000	$2.142		
Biscayne Trail "C"	Biscayne National Park	Black Point Park	Trail Improvements	$1,085.000	$1.085		
Old Cutler Road Path Phase 2	SW 136 St	SW 72 St	Trail Improvements	$1,324.000	$1.324		
South Dade Greenway Bridges	Biscayne and Black Creek	Trail Bridges	Trail Improvements	$960.000	$0.960		
Biscayne Trail "D"	US-1 / South Dixie Highway	Biscayne National Park	Trail Improvements	$1,850.000	$1.850		
Miami River Greenway (complete missing segments)	NW 12 Ave	SE 2 Ave	Trail Improvements		$406.000	$546.273	
M-Path GreenLink (short-term improvements)	SW 67 Ave	Miami River Greenway	Trail Improvements		$452.400	$608.704	
Atlantic Trail	South Pointe Park / South Pointe Drive	5 St	Trail Improvements		$220.000	$296.010	
El Portal / 87 St	NW 5 Ave	NE 2 Ave	Pedestrian Facility Improvements		$222.500	$299.374	
East of Little Havana	Greenways/South River Drive	SW 12 Ave to J. Marti Park	Pedestrian Facility Improvements		$766.500	$1,031.326	
NE 20 St	N Miami Ave/FEC Railroad	NE 2 Ave	Pedestrian Facility Improvements		$114.000	$153.387	
Kensington Park Elementary			Safe Routes to Schools		$136.000	$182.988	
Santa Clara Elementary			Safe Routes to Schools		$117.000	$157.424	
Linda Lentin K-8 Center			Safe Routes to Schools		$169.000	$227.390	
Natural Bridge Elementary			Safe Routes to Schools		$130.000	$174.915	
Little River Elementary			Safe Routes to Schools		$125.000	$168.188	
Phyllis Ruth Miller Elementary			Safe Routes to Schools		$75.000	$100.913	
Phillis Wheatley Elementary			Safe Routes to Schools		$124.000	$166.842	
Toussaint L'ouverture Elementary			Safe Routes to Schools		$156.000	$209.898	
Oak Grove Elementary			Safe Routes to Schools		$200.000	$269.100	

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
**Funded in 2015/2019 Miami-Dade County Transportation Imrpovement Program (TIP) in conjunction with road reconstruction/rehabilitation*
*** Safe Routes to School - funded as a program 2015/2019 Miami-Dade County TIP ($6.2M)*

Table 6-15 | Bicycle/Pedestrian Priority II Projects (Values in Thousands YOE $)

Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2014 $)	Project Costs Funded via 2040 Plan	
NE 2 Ave	NE 20 St	NE 36 St	Bicycle Facility Improvements		$82.400	$124.136	
NE 2 Ave	NE 62 St	West Little River Canal/NE 84 St	Bicycle Facility Improvements		$108.800	$163.907	
Federal Highway	NE 36 St	NE 38/39 St	Bicycle Facility Improvements		$47.600	$71.709	
NW 22 Ave	NW 111 St	NW 183 St	Bicycle Facility Improvements (Restriping)		$44.810	$67.506	
NW 22 Ave	NW 36 St	NW 111 St	Bicycle Facility Improvements / Road Diet		$355.360	$535.350	
NW 2 Ave	NW 20 St	NW 79 St	Bicycle Facility Improvements		$366.800	$552.584	
Commodore Trail improvements	Darwin St	Mercy Hospital	Trail Improvements		$377.000	$567.951	
Atlantic Trail	4600 Block / Indian Beach Park	6400 Block / Allison Park	Trail Improvements		$927.500	$1,397.279	
SW side of SW 117 Ave	Roberta Hunter Park	South Dade Trail & Black Creek Trail junction	Trail Improvements		$151.200	$227.783	
Snapper Creek Trail "A"	K-Land Park / SW 88 St	SW 72 St	Trail Improvements		$1,040.000	$1,566.760	
Snapper Creek Trail "A"	SW 72 St	SW 8 St / FIU	Trail Improvements		$2,451.000	$3,692.432	
Dade Blvd Bike Path	Meridian Ave	Atlantic Trail / Beachwalk	Trail Improvements		$307.200	$462.797	
Beachwalk Greenway/5th St	Ocean Drive	Atlantic Trail / Beachwalk	Trail Improvements		$19.600	$29.527	
Black Creek Trail "B"	Larry and Penny Thompson Park	Krome Trail	Trail Improvements		$3,140.000	$4,730.410	
Miami River Greenway (complete missing segments)	NW 36 St	NW 12 Ave	Trail Improvements		$840.250	$1,265.837	
NW 103 St	W 28 Ave	W 24 Ave	Pedestrian Facility Improvements		$79.000	$119.014	
NW 103 St	W 24 Ave	W 49 St	Pedestrian Facility Improvements		$130.500	$196.598	
Biscayne Boulevard	NE 191 St	Aventura Boulevard	Pedestrian Facility Improvements		$134.250	$202.248	
SW 142 Ave	SW 26 St	SW 8 St	Pedestrian Facility Improvements		$563.250	$848.536	
Granada Boulevard	Ponce De Leon Boulevard	Blue Road	Pedestrian Facility Improvements		$265.500	$399.976	
Blue Road	SW 57 Ave	Ponce De Leon	Pedestrian Facility Improvements		$763.000	$1,149.460	
S Miami Ave	S Dixie Highway	SW 26 Road	Pedestrian Facility Improvements		$19.000	$28.624	
Alhambra Circle	Blue Road	SW 40 St	Pedestrian Facility Improvements		$269.000	$405.249	
Urban Center Pedestrian Safety/Mobility Improvements	Various Locations		Pedestrian Facility Improvements		$1,000.000	$1,506.500	
Lehman Causeway Pedestrian Facility	Aventura	Sunny Isles Beach	Pedestrian Facility Improvements		$411.750	$620.301	
Non-motorized Facility Improvements	Various Locations		Safe Routes to Schools		$1,000.000	$1,506.500	
Improve safety by public outreach initiatives	Various Locations		Improve safety through public outreach initiatives		$1,000.000	$1,506.500	

Table 6-16 | Bicycle/Pedestrian Priority III Projects (Values in Thousands YOE $)

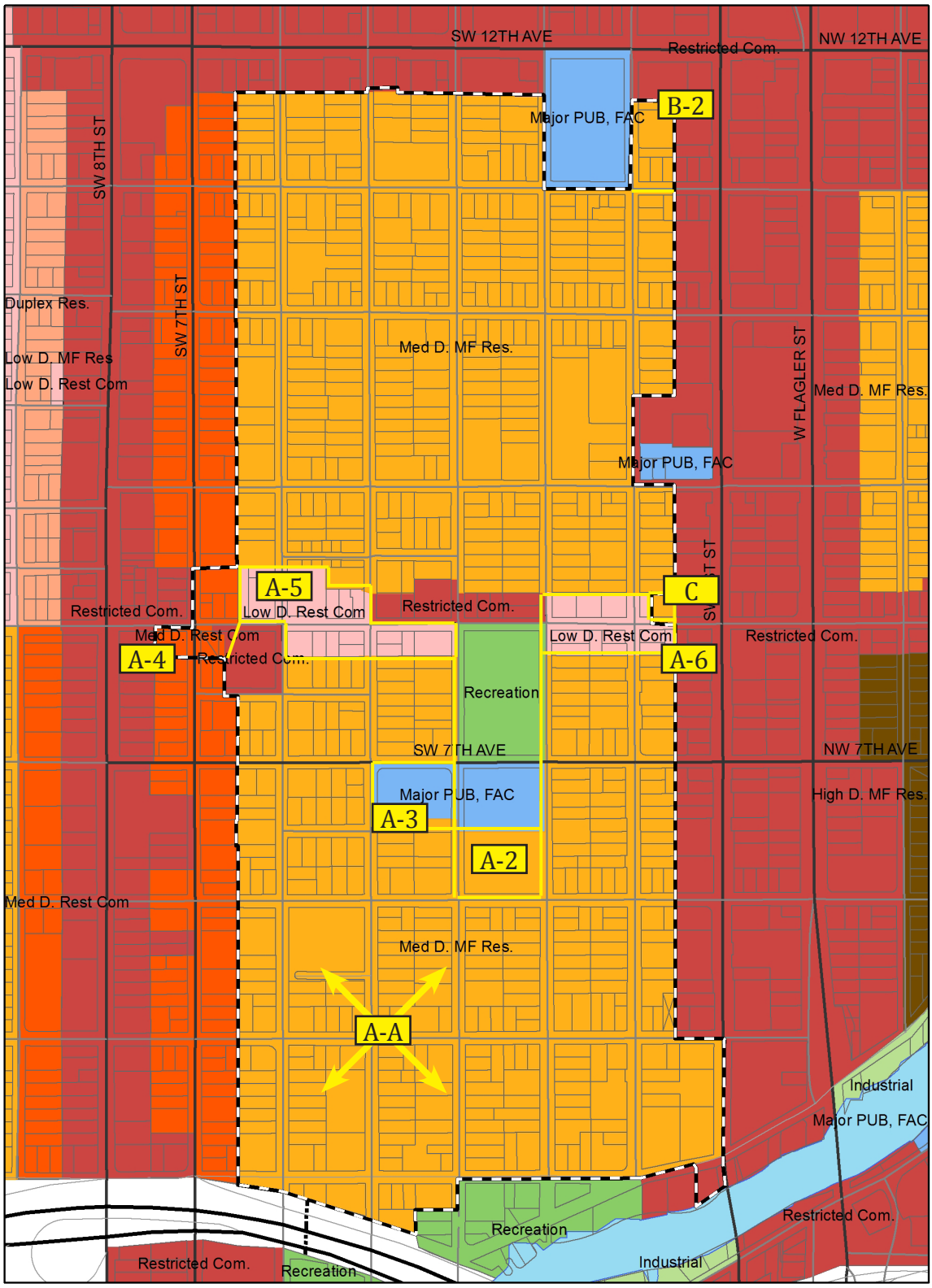
Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2014 $)	Project Costs Funded via 2040 Plan	
S 13 St / Coral Way	SW 3 Ave	Brickell Ave	Bicycle Facility Improvements		$94.800	$167.891	
Tamiami Canal Road	West Flagler St	NW 7 St	Bicycle Facility Improvements		$18.100	$32.055	
South Miami Ave	SW 15 Road	SW 14 Terrace	Bicycle Facility Improvements		$22.800	$40.379	
South Miami Ave	SW 7 St	SW 3 St	Bicycle Facility Improvements		$29.800	$52.776	
North Miami Ave	NW 17 St	NW 29 St	Bicycle Facility Improvements		$87.000	$154.077	
North Miami Ave / NE 1st Ave	NW 5 St	NW 17 St	Bicycle Facility Improvements		$85.500	$151.421	
NE 62 St	Biscayne Boulevard	NE 2nd Ave	Bicycle Facility Improvements		$52.100	$92.269	
SW 32 Road	Vizcaya Metrorail Station	Coral Way	Bicycle Facility Improvements		$18.500	$32.764	
SW 32 Road	Brickell Ave	Vizcaya Pedestrian Bridge	Bicycle Facility Improvements		$28.000	$49.588	
SW 25 Road	Brickell Ave	Coral Way	Bicycle Facility Improvements		$43.900	$77.747	
NW 5 Ave	NW 22 St	NW 36 St	Bicycle Facility Improvements		$87.900	$155.671	
Tamiami Canal Road	SW 8 St	West Flagler St	Bicycle Facility Improvements		$66.600	$117.949	
SW 137 Ave	SW 72 St	SW 56 St	Bicycle Facility Improvements		$80.000	$141.680	
SW/NW 1 Ave	SW 2 St	NW 11 St	Bicycle Facility Improvements		$17.300	$30.638	
SW 72 Ave	SW 4 St	West Flagler St	Bicycle Facility Improvements		$25.300	$44.806	
NW 11 St	NW 27 Ave	NW 22 Ave	Bicycle Facility Improvements		$52.000	$92.092	
NW 23 Ave	NW 7 St	NW 11 St	Bicycle Facility Improvements		$23.300	$41.264	
NW 5 Ave	NW 4 St	NW 11 St	Bicycle Facility Improvements		$45.900	$81.289	
Snapper Creek Trail "B"	SW 94 Ave / K-Land Park	SW 57 Ave	Trail Improvements		$1,521.200	$2,694.045	
M-Path GreenLink (long-term improvements)	SW 67 Ave	Miami River Greenway	Trail Improvements		$4,524.000	$8,012.004	
NW/NE 131 St	NW 22 Ave	NE 16 Ave	Trail Improvements		$43.000	$76.153	
Overtown Greenway (except between NW 3rd and 7th Ave)	Miami River Greenway	Musuem Park	Trail Improvements		$32.082	$56.817	
W Okeechobee Road	NW 103 St	W 18 Ave	Pedestrian Facility Improvements		$1,447.500	$2,563.523	
Hialeah Expressway	W 8 Ave	W 4 Ave	Pedestrian Facility Improvements		$256.000	$453.376	
SR-9 Extension Frontage Road	NW 27th Ave	SR 9 Extension	Pedestrian Facility Improvements		$684.750	$1,212.692	
SW 117 Ave	SW 17th St	SW 8 St	Pedestrian Facility Improvements		$185.000	$327.635	
NW 82 St	NW 114 Path	NW 109 Ave	Pedestrian Facility Improvements		$75.000	$132.825	
SW 152 Ave	SW 184 St	SW 181 Terrace	Pedestrian Facility Improvements		$41.750	$73.939	
Granada Boulevard	Hardee Road	S Dixie Highway	Pedestrian Facility Improvements		$273.000	$483.483	

Table 6-17 | Bicycle/Pedestrian Priority IV Projects (Values in Thousands YOE $)

Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2014 $)	Project Costs Funded via 2040 Plan	
SW 137 Ave	US-1	SW 184 St	Bicycle Facility Improvements		$83.060	$188.172	
NW 79 Place/NW 79 Ave	Palmetto Metrorail Station	US-27 (Okeechobee)	Bicycle Facility Improvements		$69.760	$158.041	
Bike Boulevard Demonstration Project	NW 32 Ave/NW 41 St	NW 11 Ave/Little River Drive	Bike Boulevard Improvements		$3,000.000	$6,796.500	
SW 137 Ave	SW 152 St	SW 72 St	Bike Boulevard Improvements		$404.160	$915.624	
SW 137 Ave	SW 56 St	SW 8 St	Bicycle Facility Improvements		$255.520	$578.881	
SW 16 St	SW 107 Ave	SW 82 Ave	Bicycle Facility Improvements		$200.080	$453.281	
SW 48 St	SW 117 Ave	SW 82 Ave	Bicycle Facility Improvements		$1,767.000	$4,003.139	
NW 344 St	SW 192 Ave	NW 6 Ave	Bicycle Facility Improvements		$20.480	$46.397	
SW 376 St	Ingraham Highway	SW 192 Ave	Bicycle Facility Improvements		$13.680	$30.992	
Ingraham Highway	SW 376 St	SW 392 St	Bicycle Facility Improvements		$45.480	$103.035	
SW 392 St	Ingraham Highway	Everglades National Park	Bicycle Facility Improvements		$59.680	$135.205	
SW 192 Ave	SW 344 St	SW 376 St	Bicycle Facility Improvements		$40.580	$91.934	
SW 137 Ave	SW 288 St	SR-821 (HEFT)	Bicycle Facility Improvements		$56.080	$127.049	
Blue Road	SW 67 Ave	SW 42 Ave	Bicycle Facility Improvements		$51.460	$116.583	
SW 40 St	SW 117 Ave	SW 57 Ave	Bicycle Facility Improvements		$485.280	$1,099.402	
NW 22 Ave	SW 22 St	Airport Expyway/ SR -12	Bicycle Facility Improvements		$338.320	$766.464	
Pine Tree Drive/La Gorce	23 St	63 St	Bicycle Facility Improvements		$250.800	$568.187	
Atlantic Trail (Boardwalk Replacement Project)	23 St	4600 Block / Indian Beach Park	Trail Improvements		$658.800	$1,492.511	
M-Path / Overtown Greenway	North of Miami River		Trail Improvements		$3,666.400	$8,306.229	
Atlantic Trail (north of Miami Beach)	North Shore Park	Haulover Park	Trail Improvements		$2,128.400	$4,821.890	
Atlantic Trail (north of Haulover Park)	Haulover Park	Broward County Line	Trail Improvements		$1,272.400	$2,882.622	
W 4 Ave	W 53 St	NW 114 St	Pedestrian Facility Improvements		$487.500	$1,104.431	
W 4 Ave	NW 114 St	NW 119 St	Pedestrian Facility Improvements		$61.250	$138.762	
NE 16 Ave	NE 159 St	NE 163 St	Pedestrian Facility Improvements		$68.250	$154.620	
NW 17 Ave	NW 157 St	NW 167 St	Pedestrian Facility Improvements		$164.000	$371.542	
NW 167 St	NW 32 Ave	NW 27 Ave	Pedestrian Facility Improvements		$126.250	$286.019	
SW 104 St	SW 97 Ave	SW 92 Ave	Pedestrian Facility Improvements		$127.750	$289.418	
NW 2 Ave	N Biscayne River Drive	NW 159 St	Pedestrian Facility Improvements		$78.250	$177.275	
Hialeah Expressway	W Okeechobee Road	W 10 Ave	Pedestrian Facility Improvements		$30.250	$68.531	

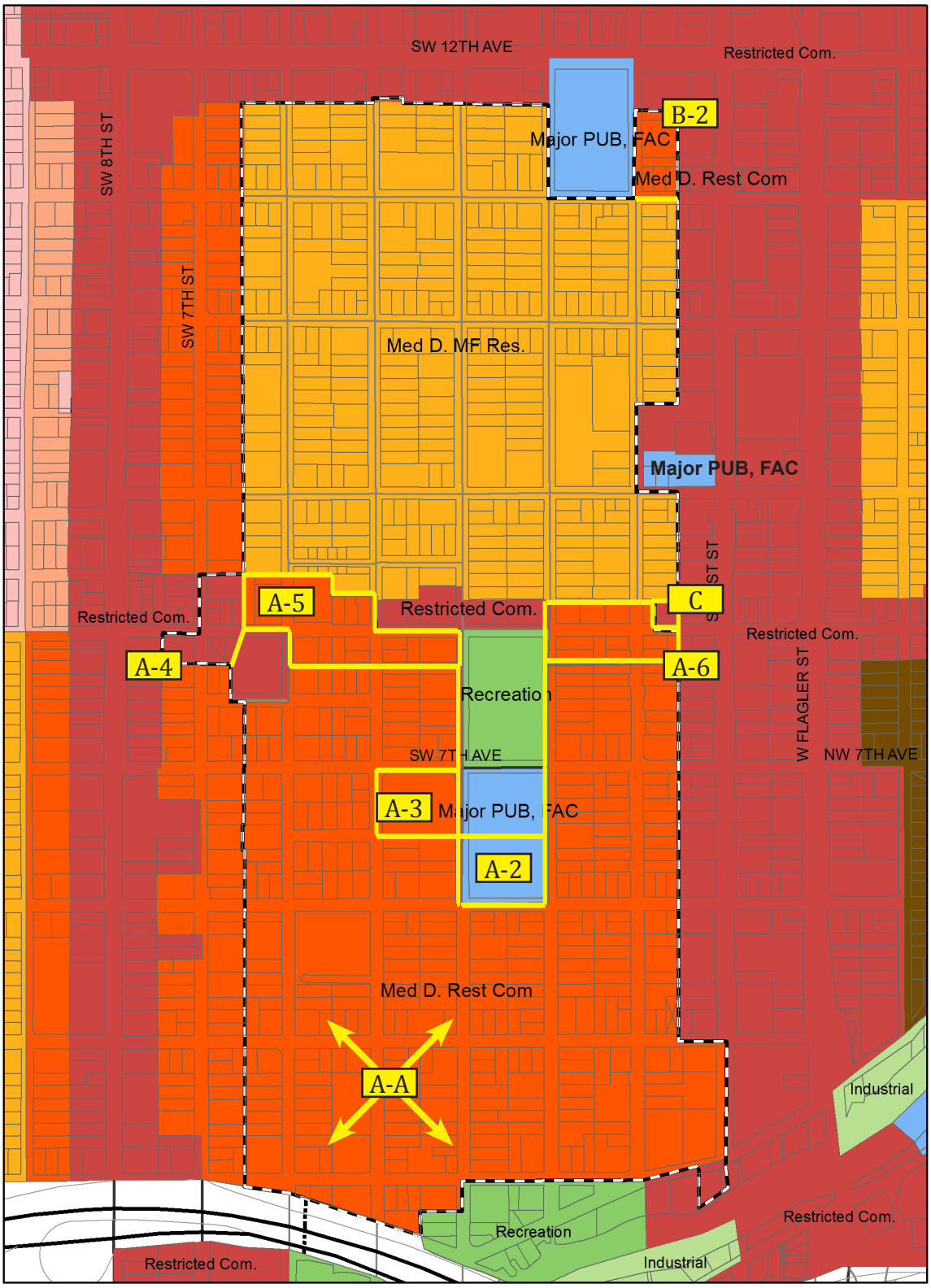
Appendix C: Future Land Use Amendment

Existing Land Use Area Key Map



Address: Approximately bounded by Southwest 2nd Street to the north, Southwest 6th Street to the south, Southwest 11th Avenue to the west and South River Drive, Interstate-95, and Southwest 4th Avenue to the East, Miami, Florida

Proposed Land Use Area Key Map
[Exhibit A]



Address: Approximately bounded by Southwest 2nd Street to the north, Southwest 6th Street to the south, Southwest 11th Avenue to the west and South River Drive, Interstate-95, and Southwest 4th Avenue to the East, Miami, Florida

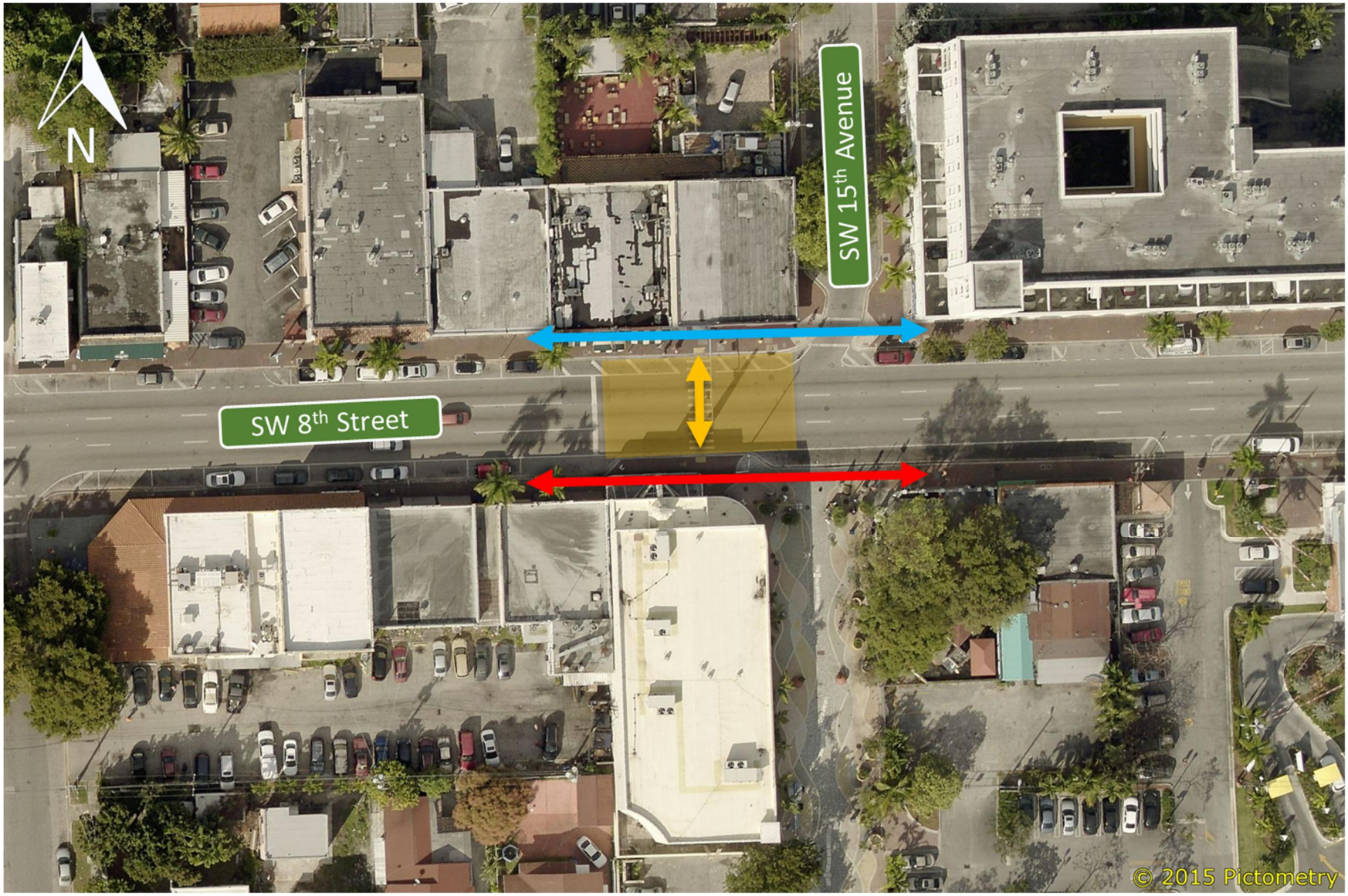
Appendix D: Pedestrian and Bicyclist Count Data

Pedestrian and Bicyclist Count Locations

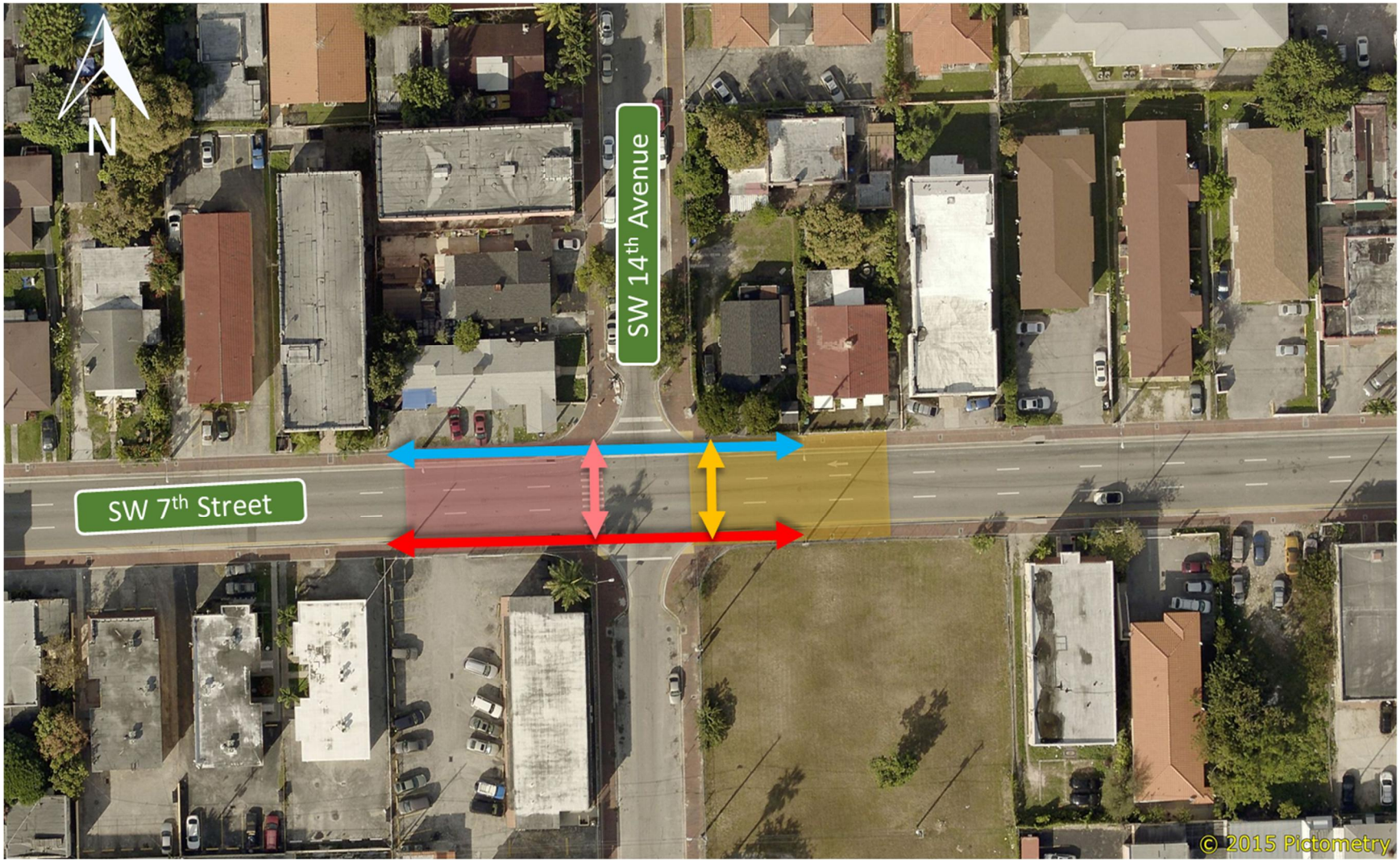
Int No.	Location
1	Crosswalk 50' west of SW 8th Street and SW 15th Avenue
2	SW 7th Street and SW 14th Avenue
3	West Flagler Street and SW 12th Avenue
4	SW 1st Street and SW 17th Avenue
5	5th Street Bridge (cordon line count on the bridge)
6	SW 3rd Street and SW 8th Avenue (Riverside Park)
7	SW 7th Street and SW 27th Avenue
8	SW 22nd Street and SW 22nd Avenue
9	SW 1st Avenue and SW 16th Avenue
10	SW 3rd Street and SW 4th Avenue

- Each colored arrow on the attached aerials represents a different side of the intersection, which was counted separately and color-coded in the results spreadsheets to allow comparisons of count volumes on different legs/approaches of the intersections.

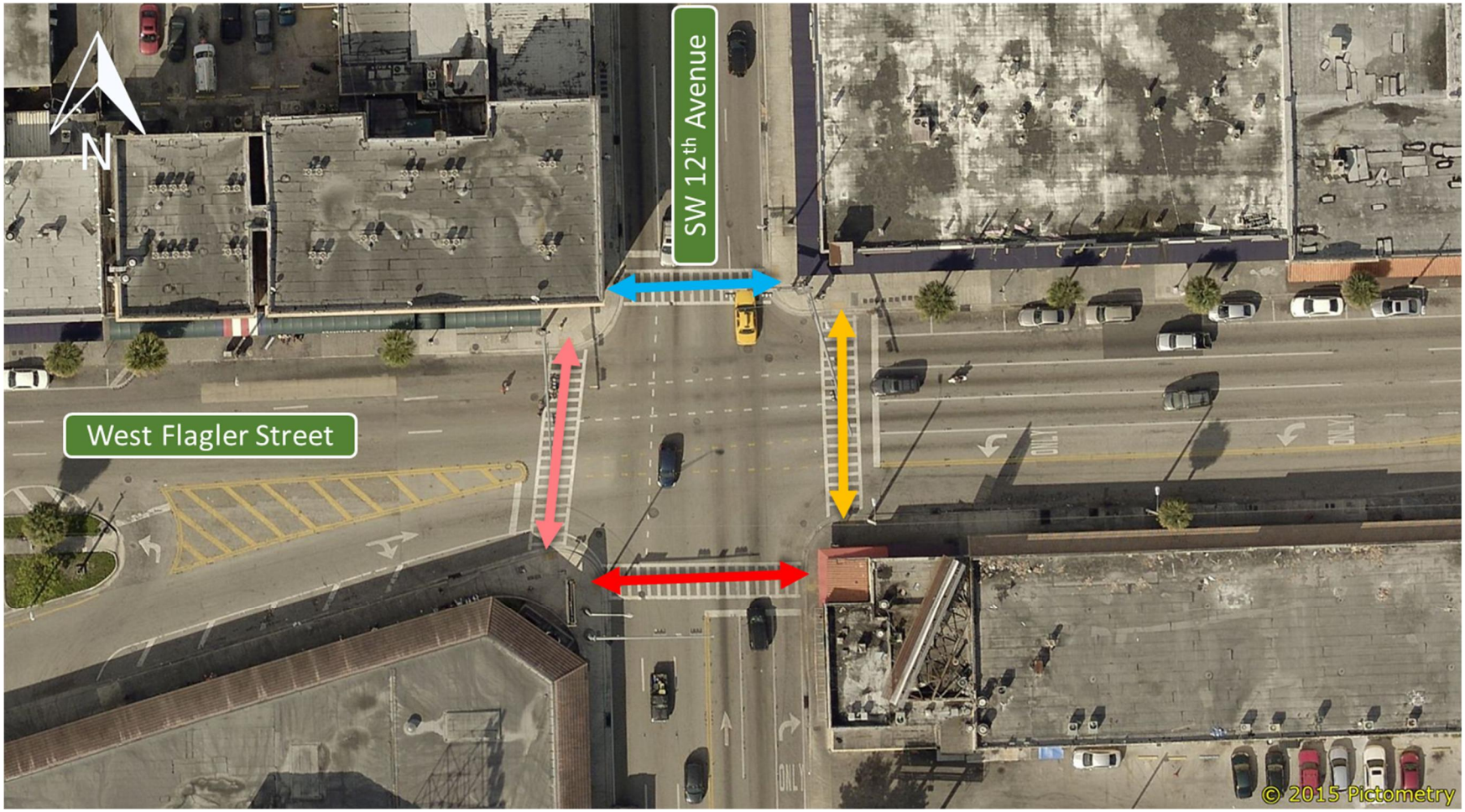
Location #1: *SW 8th Street and SW 15th Avenue*



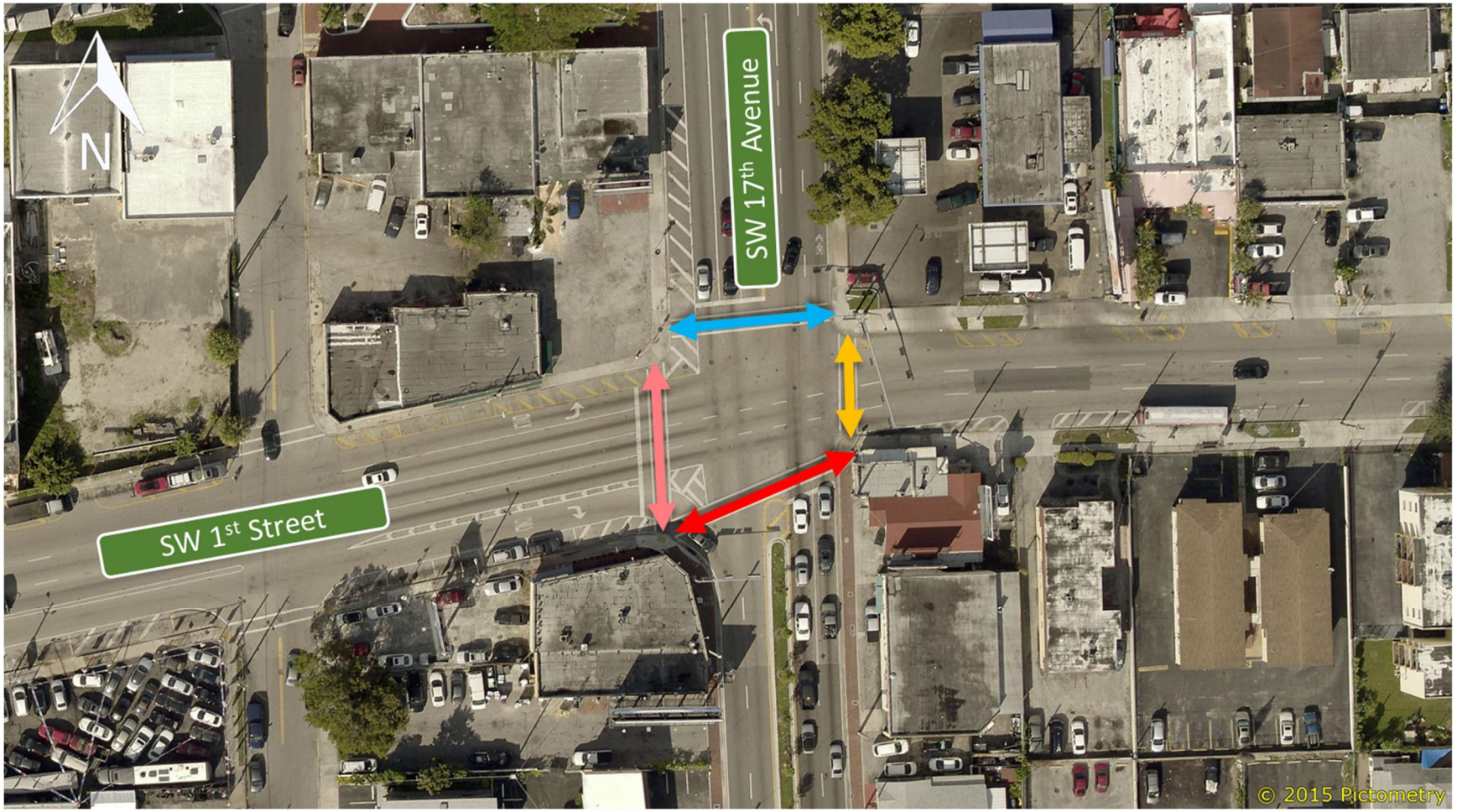
Location #2: *SW 7th Street and SW 14th Avenue*



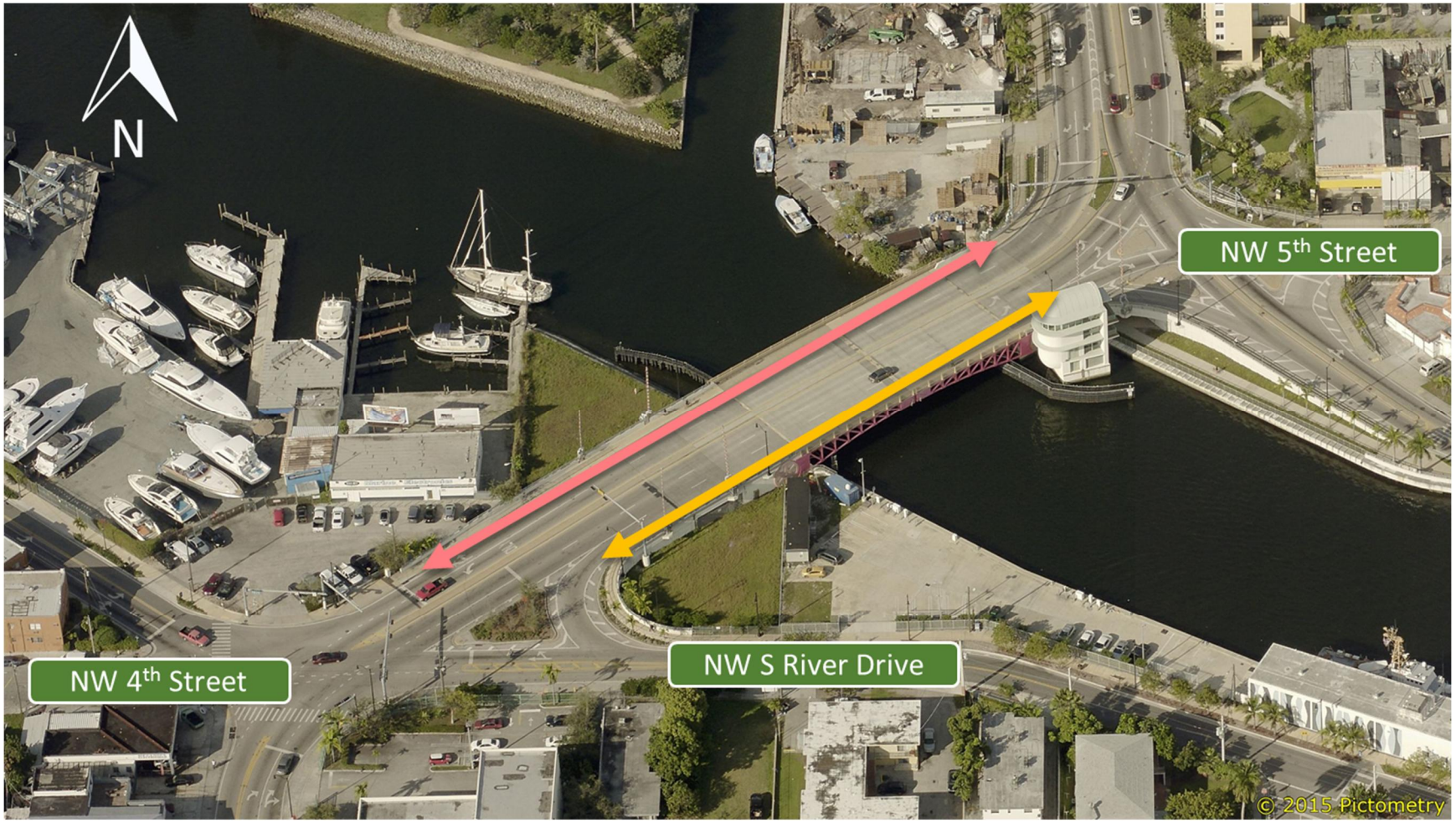
Location #3: *West Flagler Street and SW 12th Avenue*



Location #4: *SW 1st Street and SW 17th Avenue*

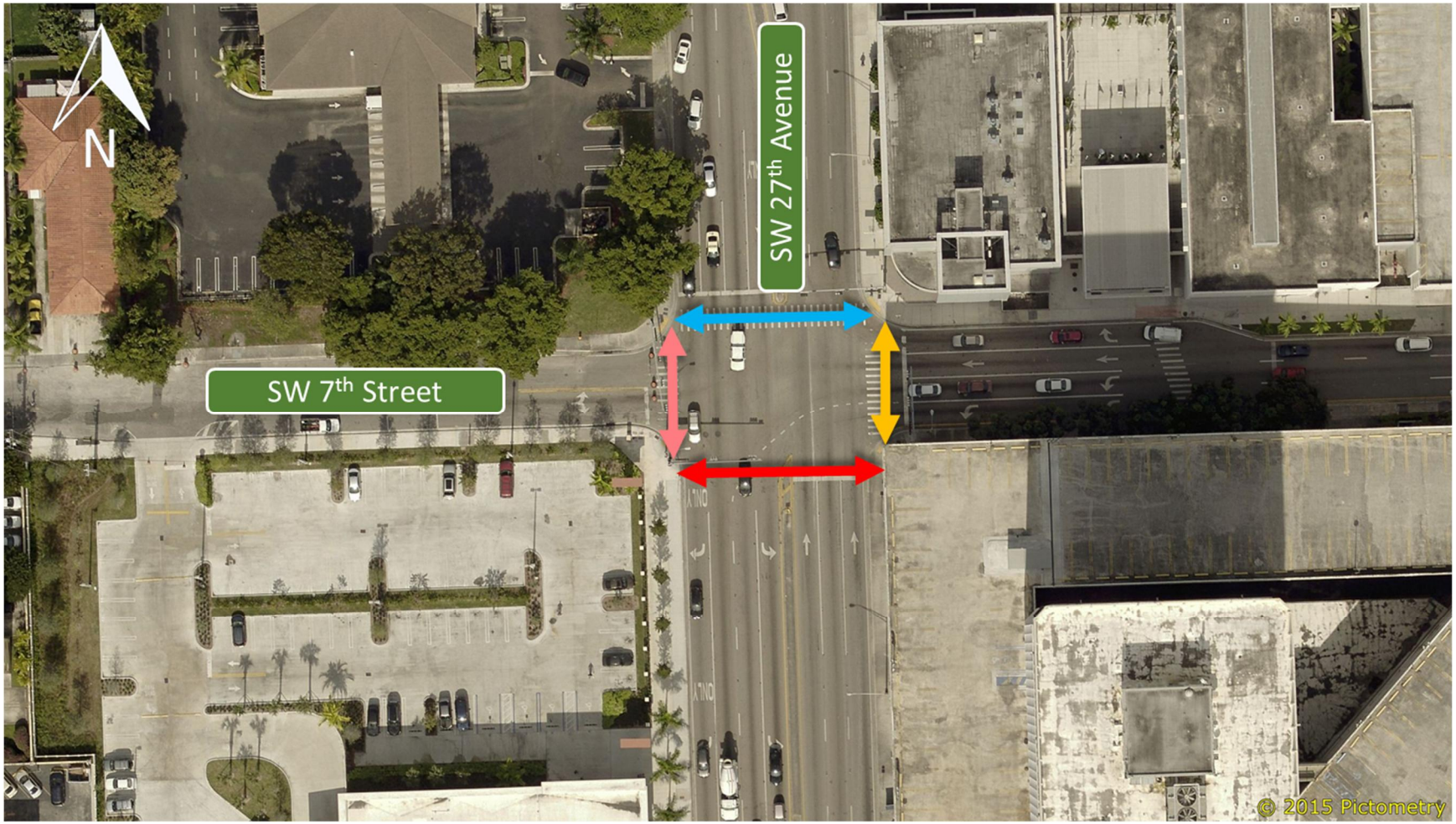


Location #5: *5th Street Bridge*

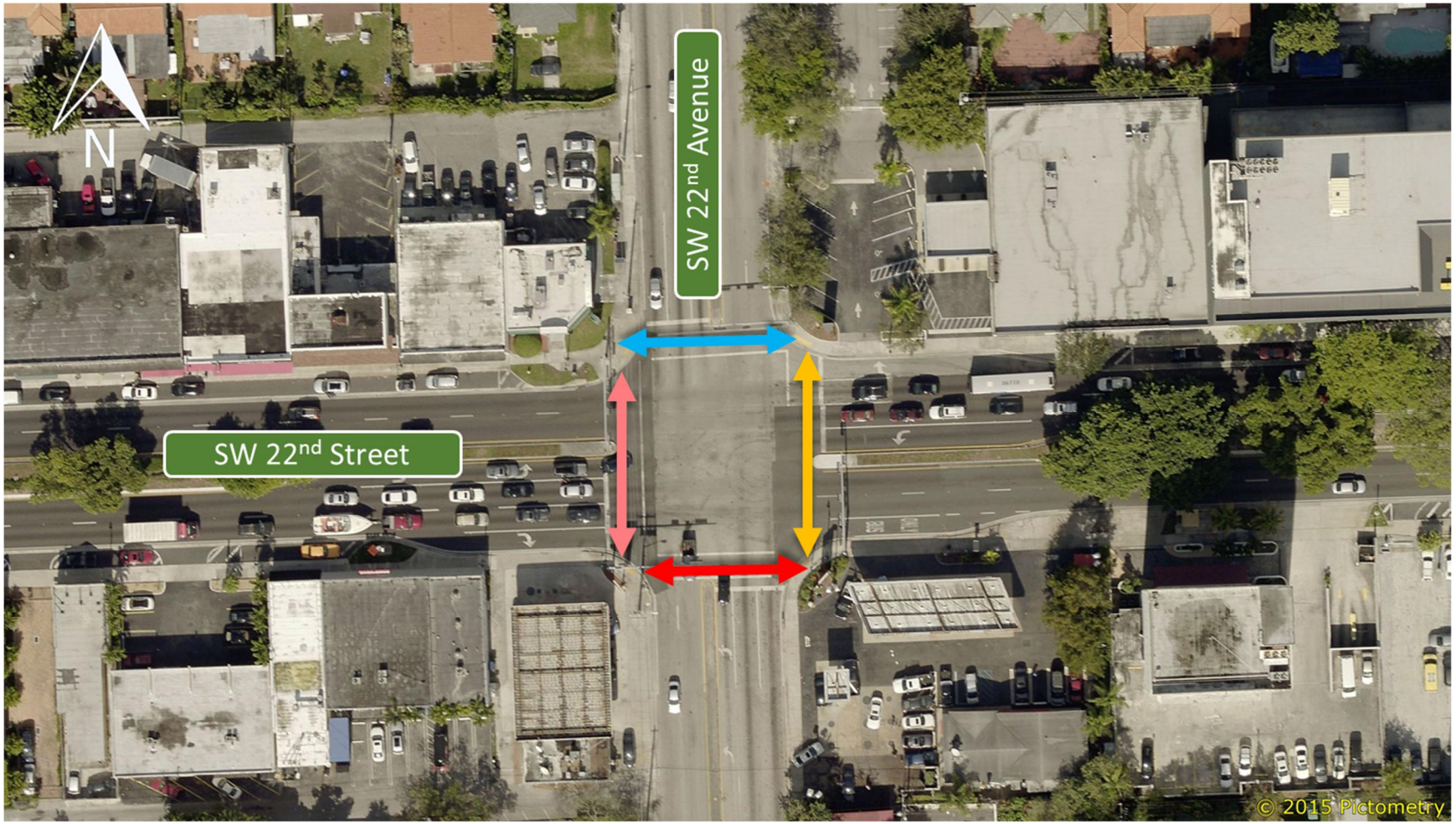


Location #6: *SW 3rd Street and SW 8th Avenue (Riverside Park)*

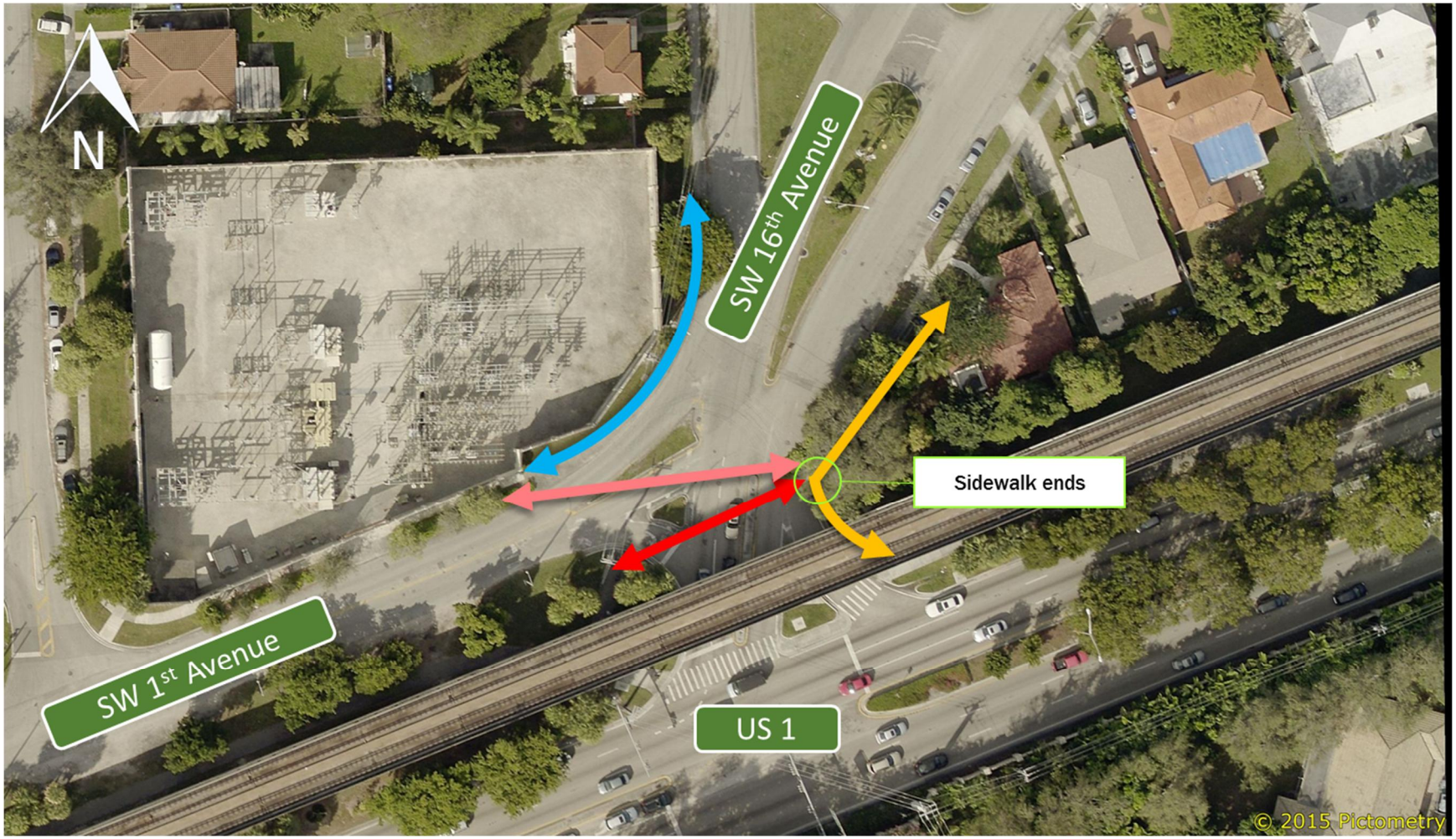
Location #7: *SW 7th Street and SW 27th Avenue*



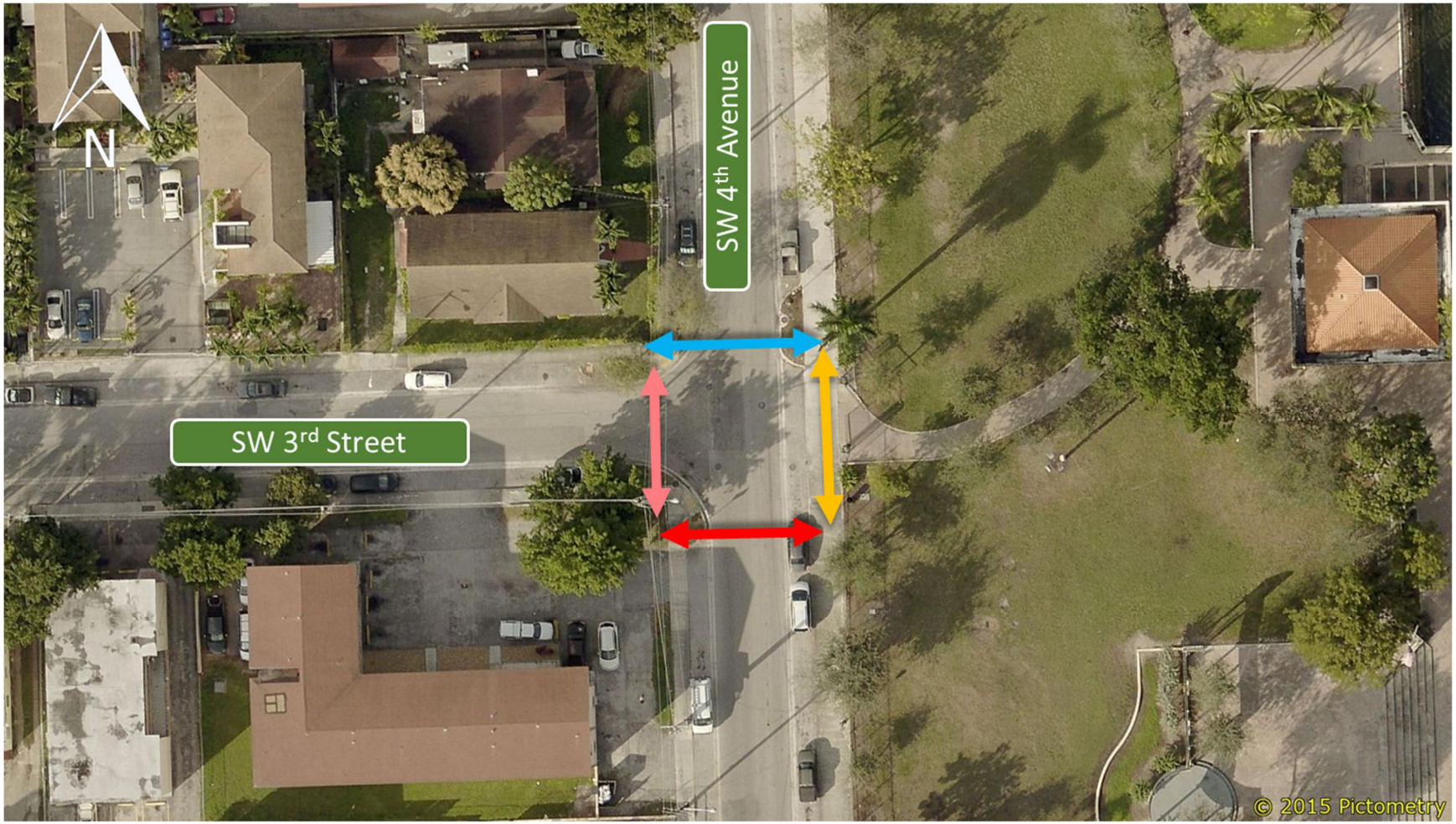
Location #8: *SW 22nd Street and SW 22nd Avenue*



Location #9: *SW 1st Avenue and SW 16th Avenue*

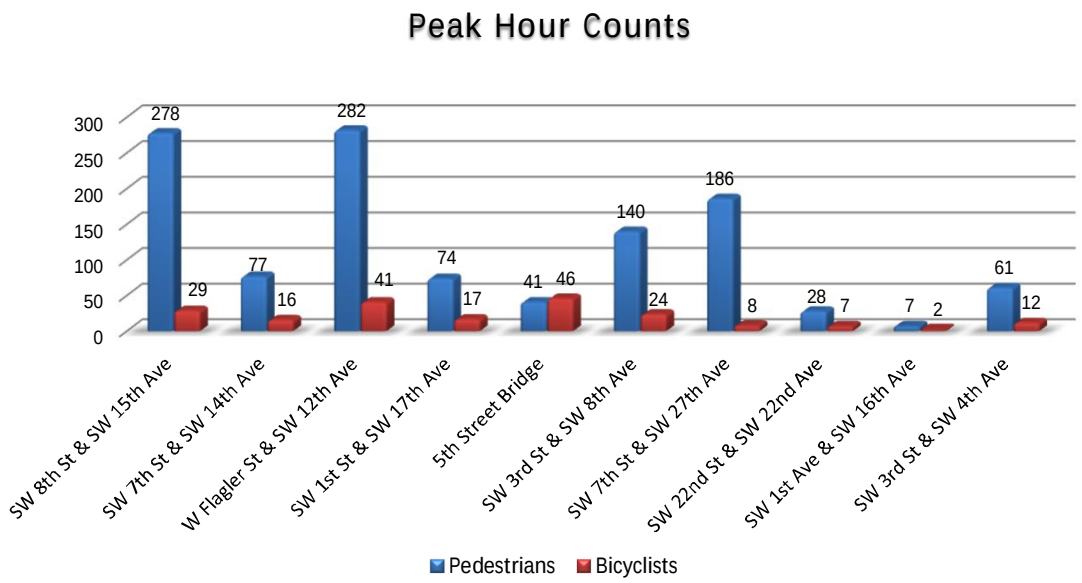


Location #10: *SW 3rd Street and SW 4th Avenue*



Little Havana Bicycle and Pedestrian Mobility Plan - Pedestrian and Bicyclist Counts

Location	Pedestrians	Bicyclists
SW 8th St & SW 15th Ave	278	29
SW 7th St & SW 14th Ave	77	16
W Flagler St & SW 12th Ave	282	41
SW 1st St & SW 17th Ave	74	17
5th Street Bridge	41	46
SW 3rd St & SW 8th Ave	140	24
SW 7th St & SW 27th Ave	186	8
SW 22nd St & SW 22nd Ave	28	7
SW 1st Ave & SW 16th Ave	7	2
SW 3rd St & SW 4th Ave	61	12



Location Name: Location 1 (SW 8th St & SW 15th Avenue)
Start Date: Tuesday
Start Time: 4:00pm

	North Side											Crosswalk											South Side										
	From East					From West					Total	From North					From South					Total	From East					From West					Total
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs		Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs		Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	
4:00 PM	3					4					7	17	1				7					25	5					25	1				31
4:15 PM	4					7					11	16					10	1				27	18					14					32
4:30 PM	6	1				12					19	10		1			2	1				14	16	1				19	1				37
4:45 PM	17					7	1				25	16					5	3		1		25	9	1				12	3				25
5:00 PM	7	1				9					17	12	1				6	1				20	9	1				10					20
5:15 PM	8	1				4	2				15	11	2				12	1				26	15	1				17					33
5:30 PM	6					4	2				12	21	2		1		16	1				41	14	5				18					37
5:45 PM	12	3				15	1				31	14					11					25	11	2				15					28
Total	63	6	0	0	0	62	6	0	0	0	137	117	6	1	1	0	69	8	0	1	0	203	97	11	0	0	0	130	5	0	0	0	243

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	61	2	263	15
4:15 PM	69	1	255	17
4:30 PM	66	4	253	23
4:45 PM	67	8	267	29
5:00 PM	53	4	278	27
5:15 PM	67	7		
5:30 PM	80	10		
5:45 PM	78	6		
Total	541	42	278	29

Location Name: Location 2 (SW 7th St & SW 14th Avenue)
Start Date: Tuesday
Start Time: 4:00pm

	North Side											West Leg											East Leg											South Side										
	From East					From West						From North					From South						From North					From South						From East					From West					
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total
4:00 PM	1										1	5	1				6	1				13	3	1				3	2				9		2									2
4:15 PM	4	1									5	5					4					9						1					1	1										1
4:30 PM						2	1				3	5					5					10	4	2				4					10	1										1
4:45 PM		1									1	3		1			3	1	1			9						2	2				4	2	1				1					4
5:00 PM	2										2	4					3	1				8	6					2					8						1	1				2
5:15 PM						1	1				2	5					4					9						2	1				3						1	2				3
5:30 PM		1									1	5					5					10	3					3	2				8	1	1				4					6
5:45 PM	2	1				1					4	6	1				7					14	2	1				3					6	2	2				2	1				7
Total	9	4	0	0	0	4	2	0	0	0	19	38	2	1	0	0	37	3	1	0	0	82	18	4	0	0	0	20	7	0	0	0	49	7	6	0	0	0	9	4	0	0	0	26

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	18	7	67	16
4:15 PM	15	1	67	11
4:30 PM	21	3	65	14
4:45 PM	13	5	65	15
5:00 PM	18	2	77	16
5:15 PM	13	4		
5:30 PM	21	4		
5:45 PM	25	6		
Total	144	32	77	16

Location Name: Location 3 (West Flagler St & SW 12th Avenue)
Start Date: Tuesday
Start Time: 4:00pm

	North Leg											West Leg											East Leg											South Leg										
	From East					From West						From North						From South							From North						From South							From East						From West					
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total
4:00 PM	11	3				11					25	9	2				7	1				19	3	1				3	1				8	6					1	1				8
4:15 PM	9					16	1				26	12	1				11					24	8					6	2	1			17	4	1				2					7
4:30 PM	19					16					35	8	1				3					12	8					13					21	2					6					8
4:45 PM	8	2				4					14	14					8					22	5	7	1			12	3				28	6	2				9	1				18
5:00 PM	11					8	1	1			21	6	2				7					15	3	2	1			7		2			15	4	1				5	2				12
5:15 PM	17	1				10	1				29	11	1				7	1				20	6	2	1			10	1				20	4	1				10					15
5:30 PM	18	1				8	1				28	14					3	3				20	4	1				6					11	2	3				9	1				15
5:45 PM	16					22	2				40	4	2				14	1				21	9	1				8					18	11	2				3					16
Total	109	7	0	0	0	95	6	1	0	0	218	78	9	0	0	0	60	6	0	0	0	153	46	14	3	0	0	65	7	3	0	0	138	39	10	0	0	0	45	5	0	0	0	99

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	51	9	262	30
4:15 PM	69	5	266	29
4:30 PM	75	1	273	32
4:45 PM	67	15	262	41
5:00 PM	55	8	282	34
5:15 PM	76	8		
5:30 PM	64	10		
5:45 PM	87	8		
Total	544	64	282	41

Location Name: Location 4 (SW 1st Street & SW 17th Avenue)
Start Date: Tuesday
Start Time: 4:00pm

	North Leg											West Leg											East Leg											South Leg										
	From East					From West						From North						From South							From North						From South							From East						From West					
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total
4:00 PM	2										2	3	1					1				5	2	1									3		1					3					4
4:15 PM	1										1	1						1				2						3					3	2					1			1		4
4:30 PM											0		1					1				1	3					1					4	4										4
4:45 PM											0						3					3						2					2											0
5:00 PM	1					1	1				3	5					1	1				7	5					4					9	1	1				1					3
5:15 PM						3	1				4	2	2				5					9	2										2	3	2				1					6
5:30 PM						1					1	7	2				1					10	5					5					10	2	2				4					8
5:45 PM						1					1	1	1				5	1				8	2					2	1				5	2	1				1	1				5
Total	4	0	0	0	0	6	2	0	0	0	12	19	7	0	0	0	15	4	0	0	0	45	19	1	0	0	0	17	1	0	0	0	38	14	7	0	0	0	8	4	0	1	0	34

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	7	7	29	9
4:15 PM	9	1	41	5
4:30 PM	8	1	48	9
4:45 PM	5	0	65	12
5:00 PM	19	3	74	17
5:15 PM	16	5		
5:30 PM	25	4		
5:45 PM	14	5		
Total	103	26	74	17

Location Name: Location 5 (5th Street Bridge)
Start Date: Tuesday
Start Time: 4:00pm

	West Side											East Side										
	From North					From South					Total	From North					From South					Total
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs		Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	
4:00 PM		5					1				6		1				3	3				7
4:15 PM	3	2				4	1				10	2	1				2	1				6
4:30 PM	1	2				5					8	1	2				3	1				7
4:45 PM	8	3					1				12	1	2				1	2				6
5:00 PM	2	1				4				1	8		3					1				4
5:15 PM	4	7				6	2				19	1	6				2	2				11
5:30 PM	2	5				2					9	1	5				2	1				9
5:45 PM	3	6				5	1				15	4	3				2	3				12
Total	23	31	0	0	0	26	6	0	0	1	87	10	23	0	0	0	15	14	0	0	0	62

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	3	10	34	28
4:15 PM	11	5	38	23
4:30 PM	10	5	40	35
4:45 PM	10	8	37	41
5:00 PM	7	5	41	46
5:15 PM	13	17		
5:30 PM	7	11		
5:45 PM	14	13		
Total	75	74	41	46

Location Name: Location 6 (SW 3rd Street & SW 8th Avenue [Riverside Park])
Start Date: Tuesday
Start Time: 4:00pm

	North Leg											West Leg											East Leg											South Leg										
	From East					From West						From North						From South							From North						From South							From East						From West					
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total
4:00 PM		2				2	1				5	11					10	1				22		1				2	1				4	7					7					14
4:15 PM	3	4				2					9	9					6					15	3					4	3				10	2					7					9
4:30 PM	1					2					3	13					11					24	3	1									4	3	2				3	1				9
4:45 PM	1	2				1					4	12					9					21		1				1					2	4					1					5
5:00 PM							2				2	12	3				7					22	4					2					6	6	1				3					10
5:15 PM	1	1									2	3					7	3				13	1										1	1					6	2				9
5:30 PM	1						1				2	10		1			10	1				22											0	1										1
5:45 PM	2					2	1				5	8	1				8					17	3	2				4	2				11	5	1				3	3				12
Total	9	9	0	0	0	9	5	0	0	0	32	78	4	1	0	0	68	5	0	0	0	156	14	5	0	0	0	13	6	0	0	0	38	29	4	0	0	0	30	6	0	0	0	69

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	39	6	140	20
4:15 PM	36	7	135	20
4:30 PM	36	4	118	19
4:45 PM	29	3	105	17
5:00 PM	34	6	111	24
5:15 PM	19	6		
5:30 PM	23	2		
5:45 PM	35	10		
Total	251	44	140	24

Location Name: Location 7 (SW 7th Street & SW 27th Avenue)
Start Date: Tuesday
Start Time: 4:00pm

	North Leg											West Leg											East Leg											South Leg										
	From East					From West						From North						From South							From North						From South							From East							From West						
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total
4:00 PM	2										2	1					2					3	3					1					4										0
4:15 PM						3	2				5	5					5					10	2	3				2					7	2										2
4:30 PM	2					6					8	3	1				6					10	3					4					7										0
4:45 PM	3					4					7	2	1				7					10	1					2	1				4										0
5:00 PM	3					2					5	5					5					10	1					2					3										0
5:15 PM	2					2					4	7					6					13	3					15	1				19										0
5:30 PM	2					6					8	4					10					14	3					40					43	2					1					3
5:45 PM	1					4					5						3	2				5	2					52	1				55	1					2					3
Total	15	0	0	0	0	27	2	0	0	0	44	27	2	0	0	0	44	2	0	0	0	75	18	3	0	0	0	118	3	0	0	0	142	5	0	0	0	0	3	0	0	0	0	8

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	9	0	71	8
4:15 PM	19	5	80	8
4:30 PM	24	1	96	4
4:45 PM	19	2	140	3
5:00 PM	18	0	186	4
5:15 PM	35	1		
5:30 PM	68	0		
5:45 PM	65	3		
Total	257	12	186	8

Location Name: Location 8 (SW 22nd Street & SW 22nd Avenue)
Start Date: Tuesday
Start Time: 4:00pm

	North Leg											West Leg											East Leg											South Leg										
	From East					From West						From North						From South							From North						From South							From East						From West					
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total
4:00 PM	1	1				3	1				6											0	2					1					3										0
4:15 PM	2					1	2				5											0	1					3	1				5							1				1
4:30 PM	1					2					3	1					1					2	3										3	1									1
4:45 PM	1										1	1										1						3					3							1				1
5:00 PM											0						1					1											0							1				1
5:15 PM											0	2	1					2				5											0						2					2
5:30 PM						2					2						2					0	2					3					5										0
5:45 PM											0											0											0	1						1				2
Total	5	1	0	0	0	8	3	0	0	0	17	4	1	0	0	0	2	2	0	0	0	9	8	0	0	0	0	10	1	0	0	0	19	2	0	0	0	0	2	4	0	0	0	8

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	7	2	28	7
4:15 PM	7	4	22	6
4:30 PM	9	0	19	5
4:45 PM	5	1	17	5
5:00 PM	1	1	13	5
5:15 PM	4	3		
5:30 PM	7	0		
5:45 PM	1	1		
Total	41	12	28	7

Location Name: Location 9 (SW 1st Avenue & SW 16th Avenue [intersection north of U.S. 1/South Dixie Highway])
Start Date: Tuesday
Start Time: 4:00pm

	North Side											South Leg Crossing SW 1st avenue											East Side											South Leg Crossing SW 16th Avenue										
	From North to West					From West to North						From East						From West							From North to US 1						From US 1 to North							From East						From West					
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total
4:00 PM							1				1											0										0										0
4:15 PM											0		1									1										0										0
4:30 PM											0											0										0										0
4:45 PM						1					1											0										0										0
5:00 PM	1					1					2											0										0										0
5:15 PM	1										1											0										0										0
5:30 PM											0											0										0										0
5:45 PM	2					1	1				4											0										0						1					1
Total	4	0	0	0	0	3	2	0	0	0	9	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	0	1	1	2
4:15 PM	0	1	3	1
4:30 PM	0	0	4	0
4:45 PM	1	0	4	0
5:00 PM	2	0	7	1
5:15 PM	1	0		
5:30 PM	0	0		
5:45 PM	4	1		
Total	8	3	7	2

Location Name: Location 10 (SW 3rd Street & SW 4th Avenue)
Start Date: Tuesday
Start Time: 4:00pm

	North Leg											West Leg											East Leg											South Leg										
	From East					From West						From North						From South																												
Start Time	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Peds	Bikes	Strollers	Skateboards	Wheelchairs	Total
4:00 PM						1					1	1					3		2			6	1					1					2	1					1					1
4:15 PM						1					1	2	1				2					5							4					4	2					1					3
4:30 PM						1					1	2					3					5						2	2					4		1									1
4:45 PM											0											0	1					3					4											0
5:00 PM											0	2	1				1					4						5					5						1	1				2
5:15 PM		1									1	2	1				3					6	1					1	2				4						2	1	1			4
5:30 PM		1				5					6	3	1				4					8	6					1	2				9	4					1					5
5:45 PM											0	1		1			6					8	6					3	1				10	1										1
Total	0	2	0	0	0	8	0	0	0	0	10	13	4	1	0	0	22	0	2	0	0	42	15	0	0	0	0	16	11	0	0	0	42	8	1	0	0	0	5	2	1	0	0	17

Intersection Total				
Start Time	Peds	Bikes	Peds	Bikes
4:00 PM	10	0	30	8
4:15 PM	8	5	29	10
4:30 PM	8	3	31	10
4:45 PM	4	0	47	11
5:00 PM	9	2	61	12
5:15 PM	10	5		
5:30 PM	24	4		
5:45 PM	18	1		
Total	91	20	61	12

Appendix E: Presentation Material

LITTLE HAVANA

Bicycle/Pedestrian Mobility Plan

Prepared for

THE CITY OF MIAMI FLORIDA INCORPORATED 1896

MPO MIAMI-DADE METROPOLITAN PLANNING ORGANIZATION

Prepared by

Kimley»Horn

PUBLIC WORKSHOP

Hosted by

Monday, May 23, 2016
4:00 to 7:00 p.m.

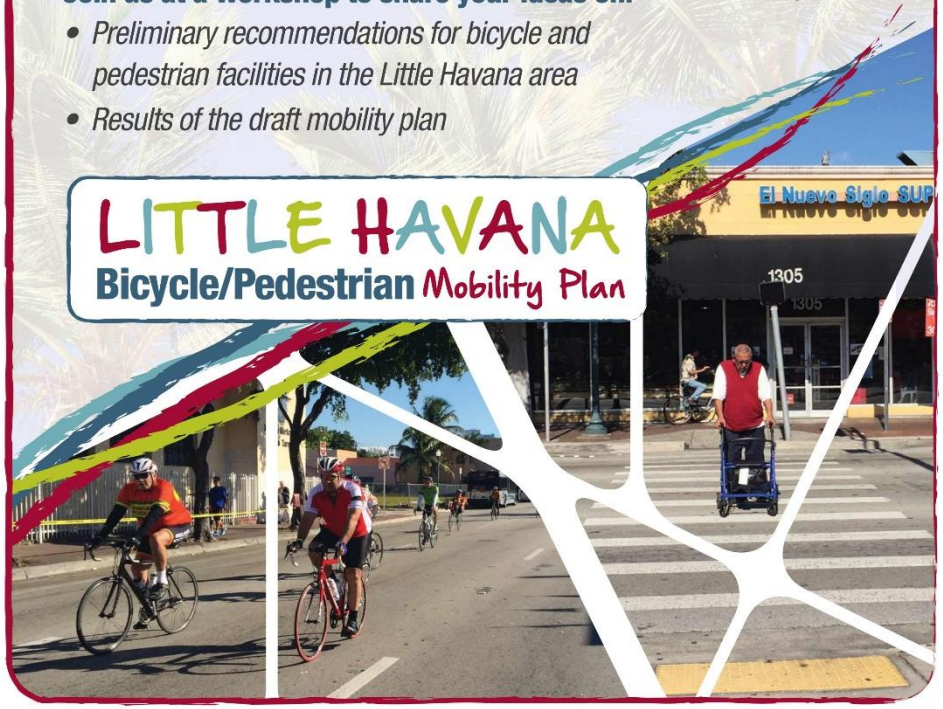
Hispanic Branch Library
1398 SW 1st St., Miami, FL 33135

in conjunction with Kimley»Horn

Join us at a workshop to share your ideas on:

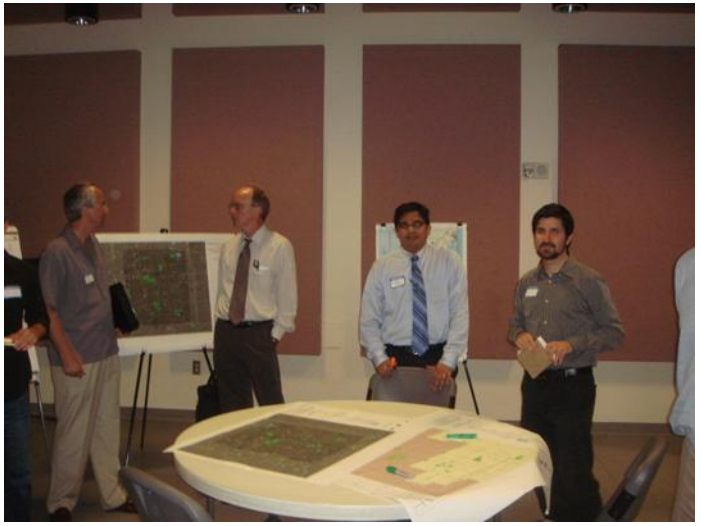
- *Preliminary recommendations for bicycle and pedestrian facilities in the Little Havana area*
- *Results of the draft mobility plan*

LITTLE HAVANA
Bicycle/Pedestrian Mobility Plan



Public Workshop

We want to hear from YOU!!!

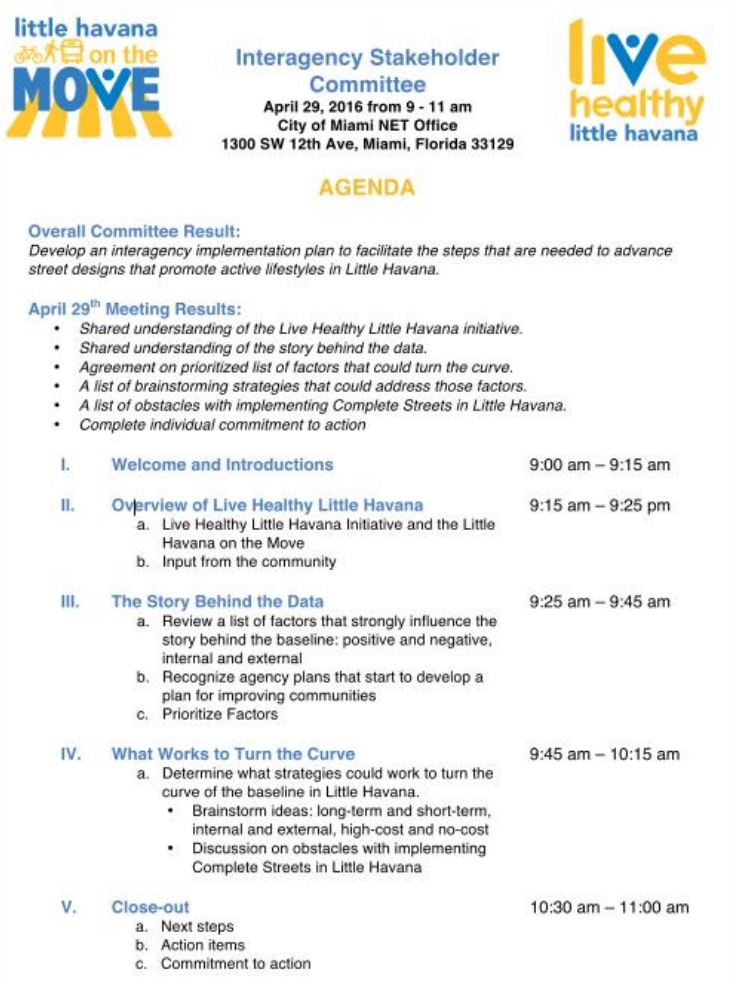


Plan Objective

- Improve walkability and bikeability in the Little Havana neighborhood
  - Identify, develop, and recommend projects to help implement the City of Miami's goals
    - Bicyclist and pedestrian mobility
    - Complete streets
    - Placemaking
    - Access to public transit

Live Healthy Little Havana

- Interagency Stakeholder Committee



little havana on the MOVE

Interagency Stakeholder Committee
April 29, 2016 from 9 - 11 am
City of Miami NET Office
1300 SW 12th Ave, Miami, Florida 33129

live healthy little havana

AGENDA

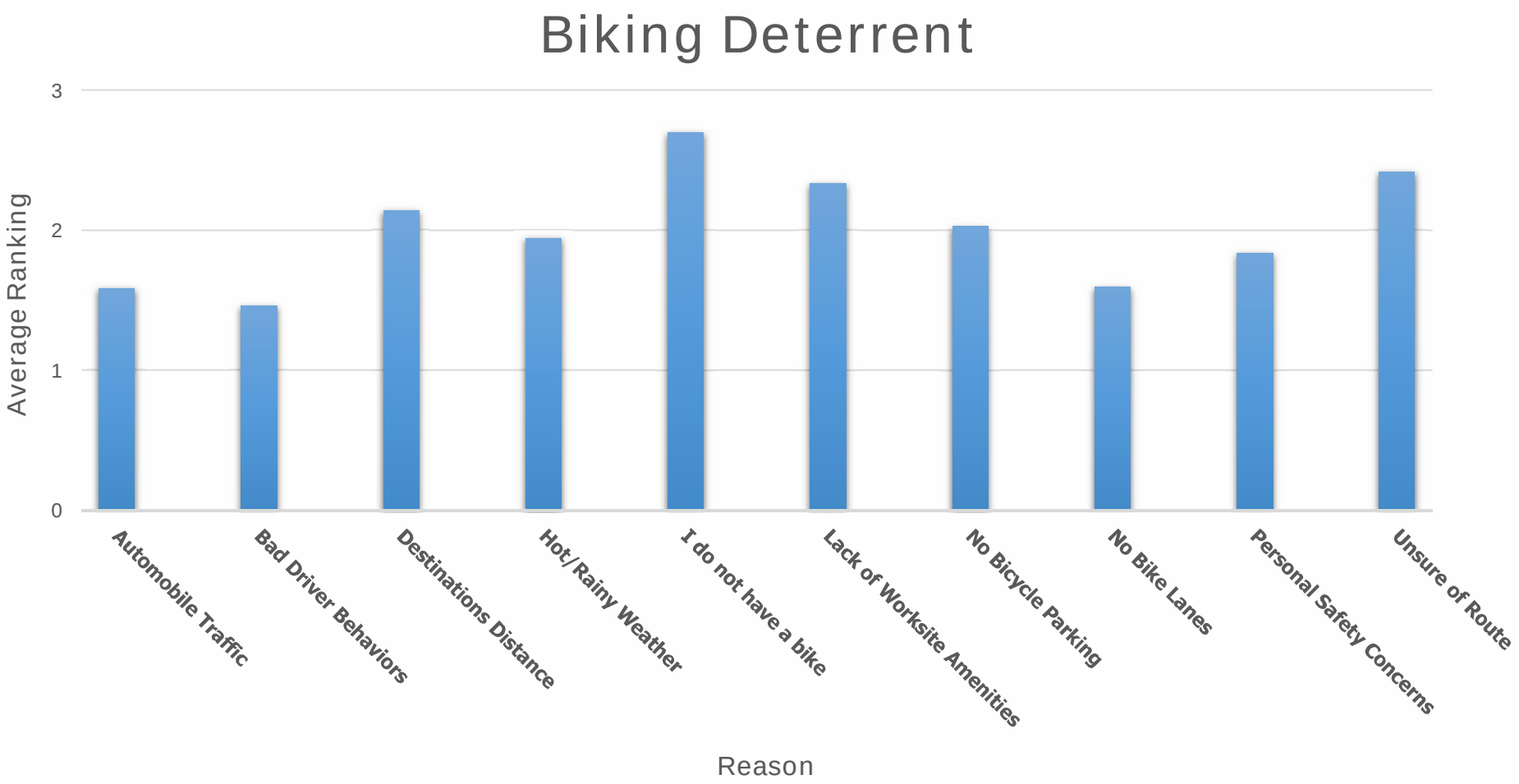
Overall Committee Result:
Develop an interagency implementation plan to facilitate the steps that are needed to advance street designs that promote active lifestyles in Little Havana.

April 29th Meeting Results:
- *Shared understanding of the Live Healthy Little Havana initiative.*
- *Shared understanding of the story behind the data.*
- *Agreement on prioritized list of factors that could turn the curve.*
- *A list of brainstorming strategies that could address those factors.*
- *A list of obstacles with implementing Complete Streets in Little Havana.*
- *Complete individual commitment to action*

I.	**Welcome and Introductions**	9:00 am – 9:15 am
II.	**Overview of Live Healthy Little Havana** a. Live Healthy Little Havana Initiative and the Little Havana on the Move b. Input from the community	9:15 am – 9:25 pm
III.	**The Story Behind the Data** a. Review a list of factors that strongly influence the story behind the baseline: positive and negative, internal and external b. Recognize agency plans that start to develop a plan for improving communities c. Prioritize Factors	9:25 am – 9:45 am
IV.	**What Works to Turn the Curve** a. Determine what strategies could work to turn the curve of the baseline in Little Havana. • Brainstorm ideas: long-term and short-term, internal and external, high-cost and no-cost • Discussion on obstacles with implementing Complete Streets in Little Havana	9:45 am – 10:15 am
V.	**Close-out** a. Next steps b. Action items c. Commitment to action	10:30 am – 11:00 am

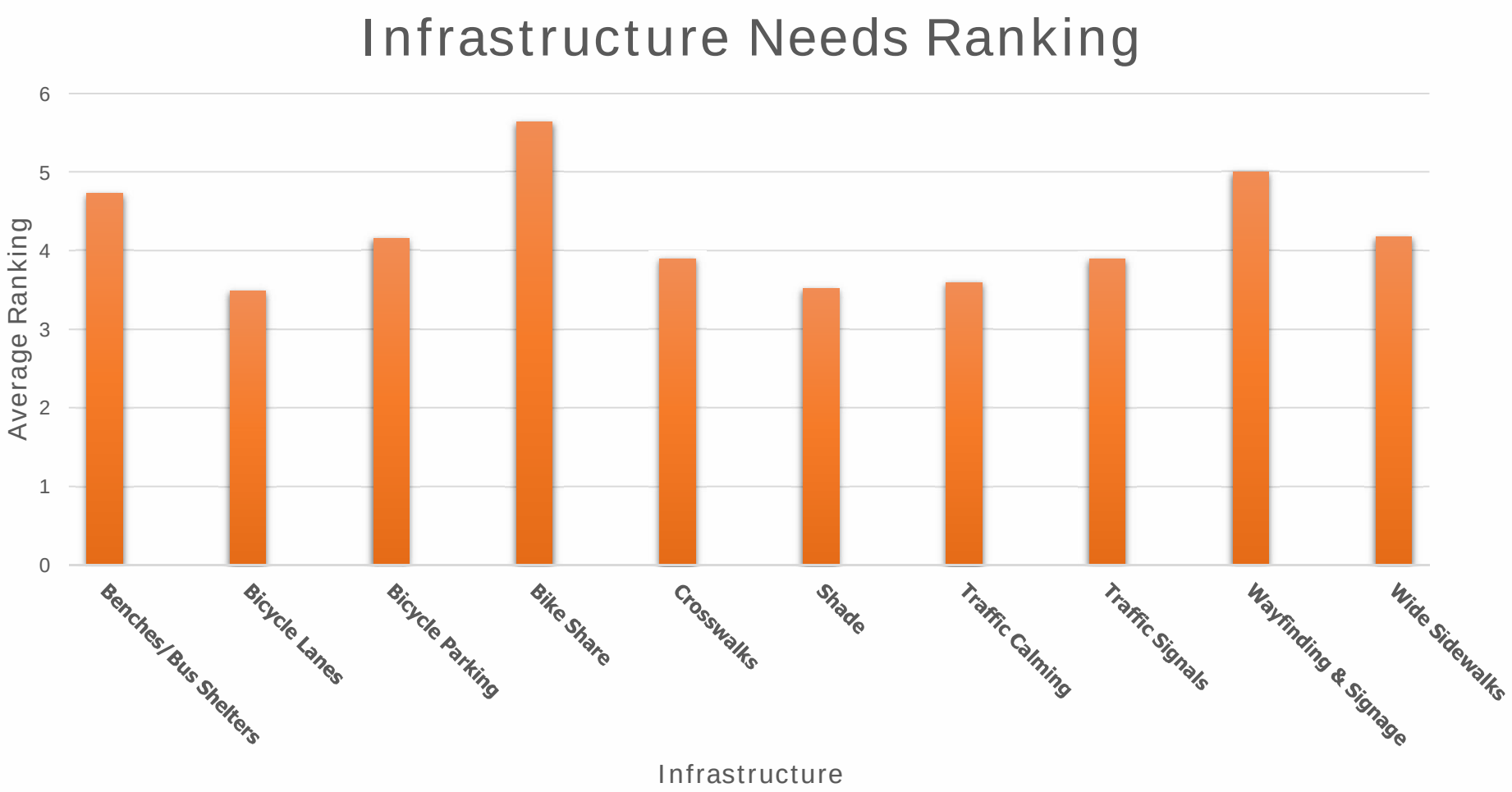
Public Survey

"If a bike share program and/or bike lanes were introduced into the neighborhood, I would feel safer and would be more likely to ride a bike."



Public Survey

"We need more shade and more crosswalks to cross major roads."



Transportation Mobility Analysis

- GIS Data Map Series
- Field Observations
- Bicycle and Pedestrian Levels of Service
- Online Survey Results
- Traffic Crash Data
- Transit Boarding Data
- Public Meeting Results

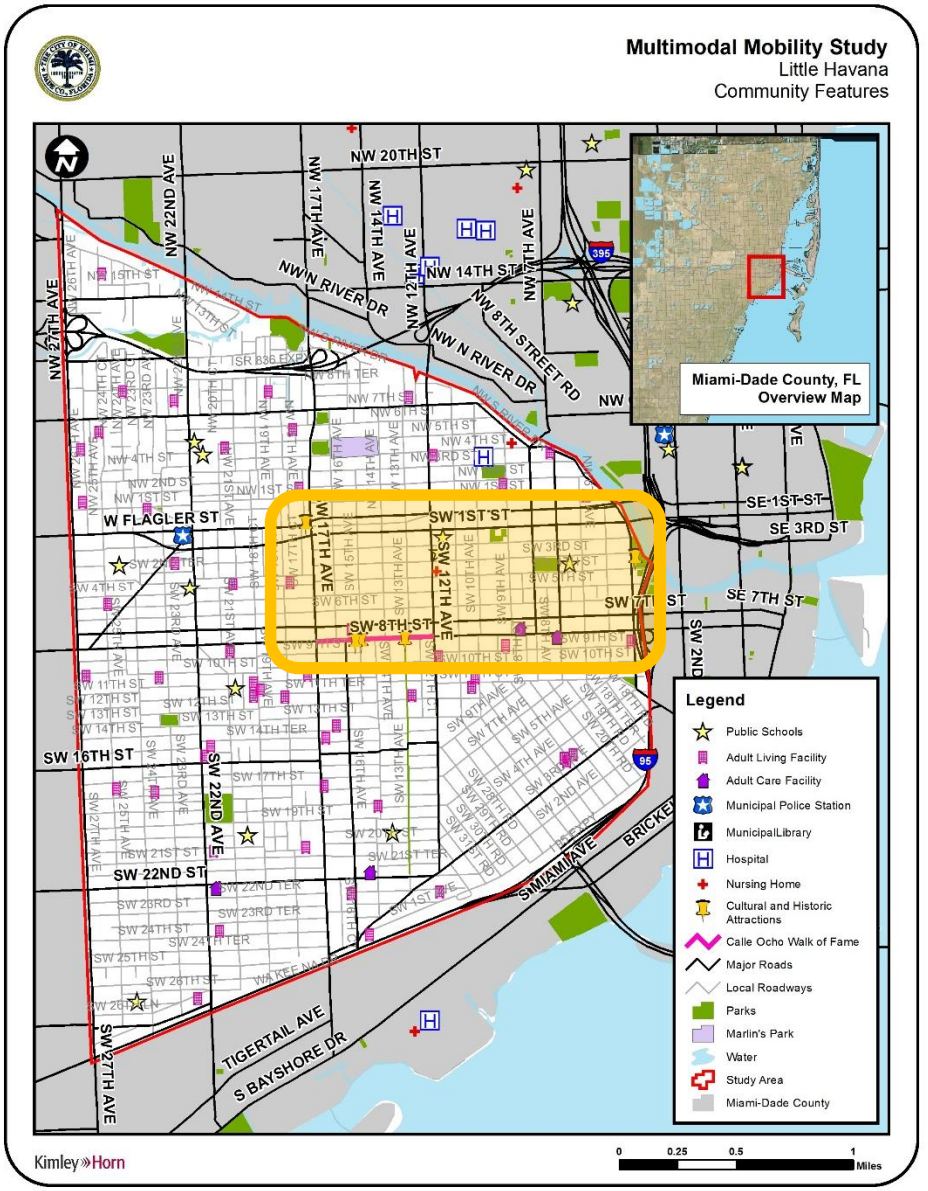
Community Features

Key Attractions

- Cultural and Historic Attractions
- Marlins Park

Neighborhood Characteristics

- Public Schools
- Elderly living facilities
- Adult care and nursing facilities
- City Parks
- Mixed land use



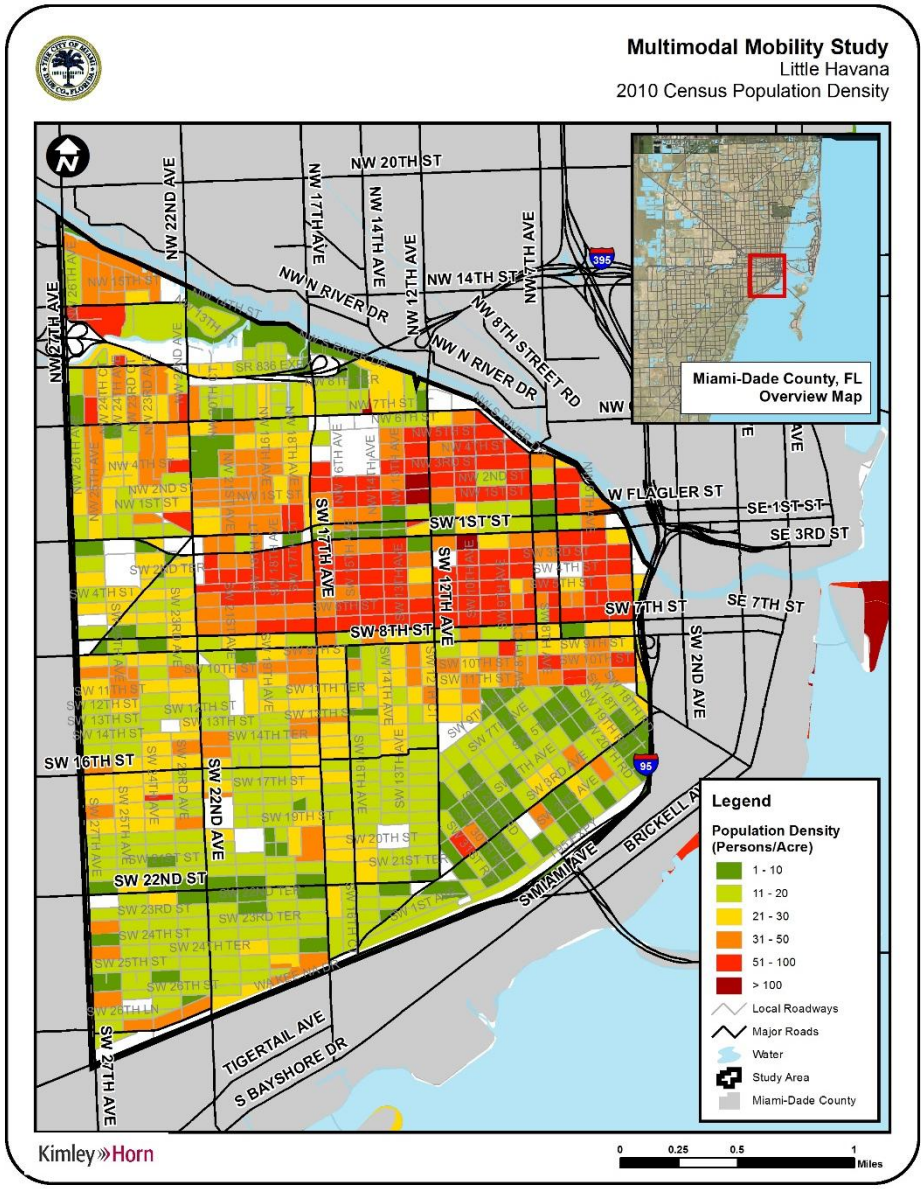
Demographics

Little Havana

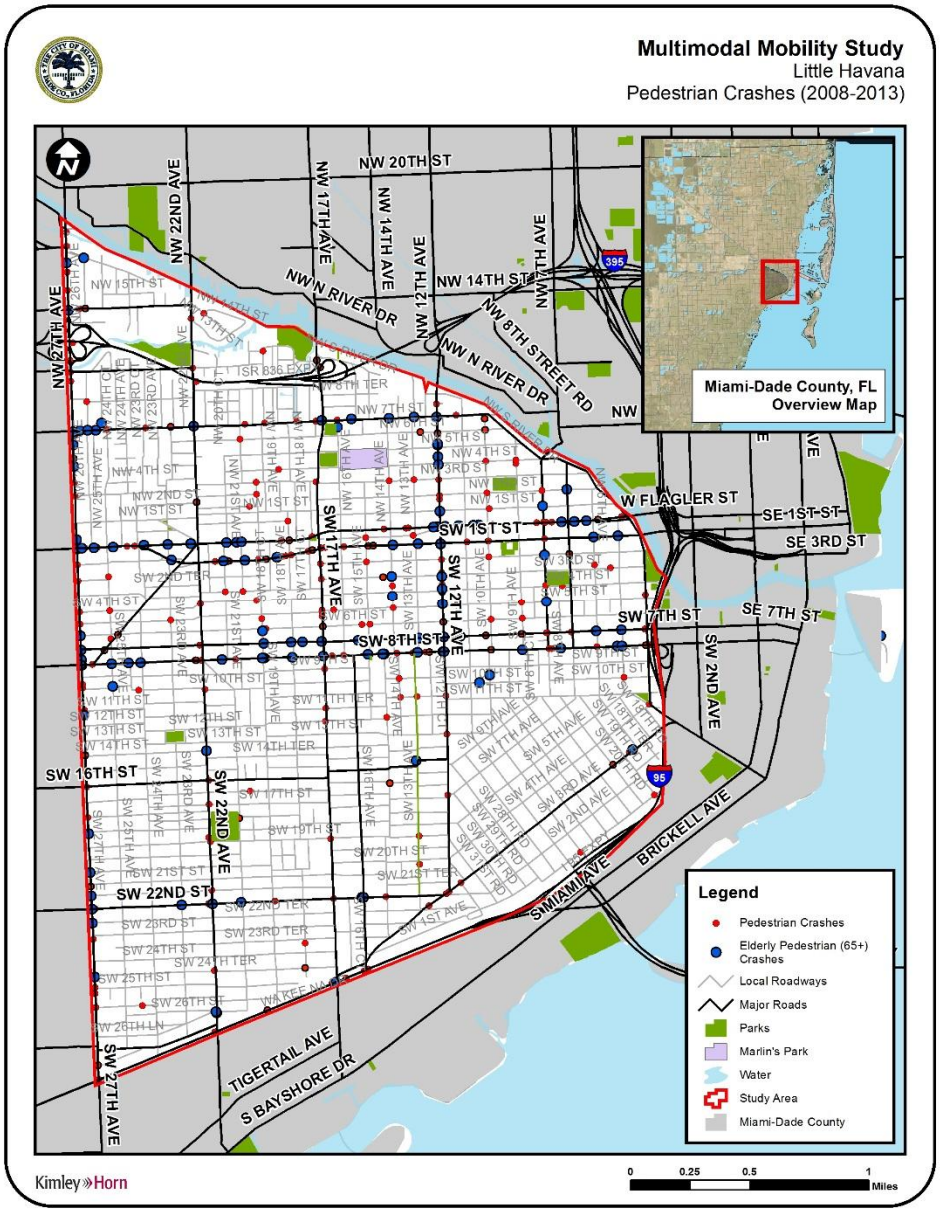
- High population density (>30 persons per acre)

Shenandoah & The Roads

- Medium-low population density (<30 persons per acre)



Pedestrian Crashes Along Bus Stops

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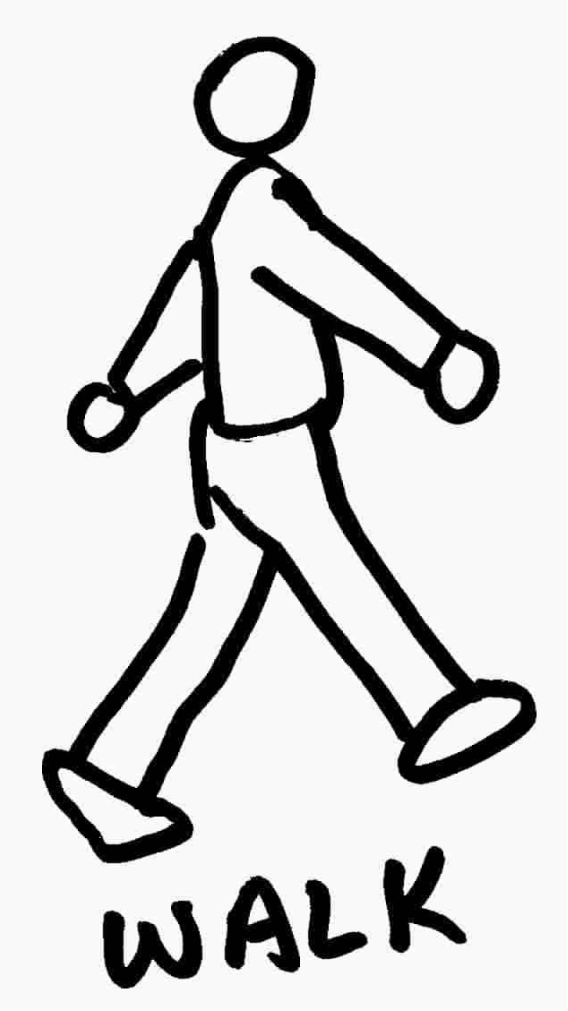
TRAFFIC
CIRCLE

Draft Recommendations

- Organizing Principles
  - Walking
  - Bicycling
  - Slow Speed Design
  - Non-Infrastructure

Walking

- Re-build/re-construct broken sidewalks
- Add missing crosswalks at signalized intersections
- Construct crosswalks at unsignalized intersections
- Median refuge crossing islands
- Curb extensions
- Street furnishings
- Shade
- Wayfinding



Bicycling

- Bicycle lanes
- Neighborhood greenways
- Shared lane markings
- Advisory bike lanes
- Bicycle left-turn treatments

Slow Speed Design

- Right sizing streets
- Traffic calming
- Road diets / lane eliminations
- Aesthetic treatments
- Electronic speed feedback signs

Non-Infrastructure

- Courtesy counts campaign
- Sidewalk stenciling
- Temporary signage
- Pamphlets and workshops
- Community festivals that promote safe walking
- Promote bicycle-supportive infrastructure

Neighborhood Greenways

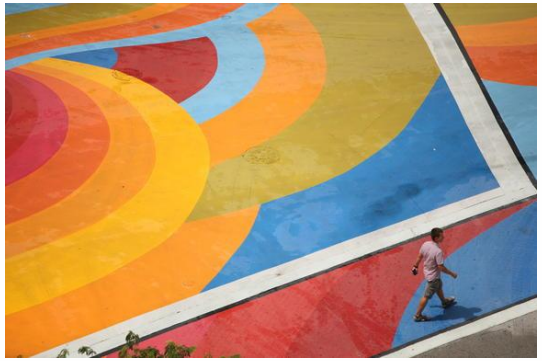
- Low-volume low-speed streets great for bicycling and walking with signage and marking improvements

Neighborhood Greenways

- Also can include traffic calming elements as needed

Neighborhood Greenway Intersections

- Across arterial roadways
  - Include crosswalks, aesthetic treatments, and RRFBs as needed



Crosswalks

- More frequent safe crossings at intersections

Traffic Calming Intersections

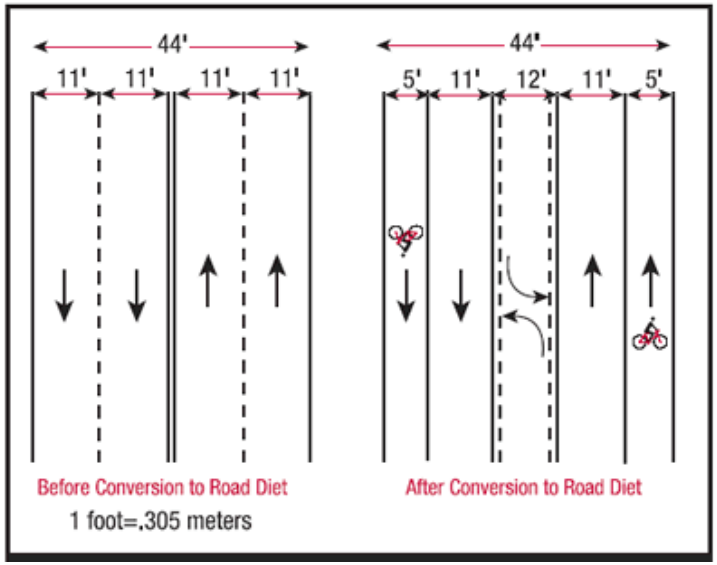
- Intersections of two neighborhood greenways

Right-Sizing Streets

- Add more space for bicycling and walking by reducing lane widths

Road Diets / Lane Eliminations

- Add more space for bicycling and walking by reducing the number of lanes
  - SW 22nd Avenue
  - SW 6th Street



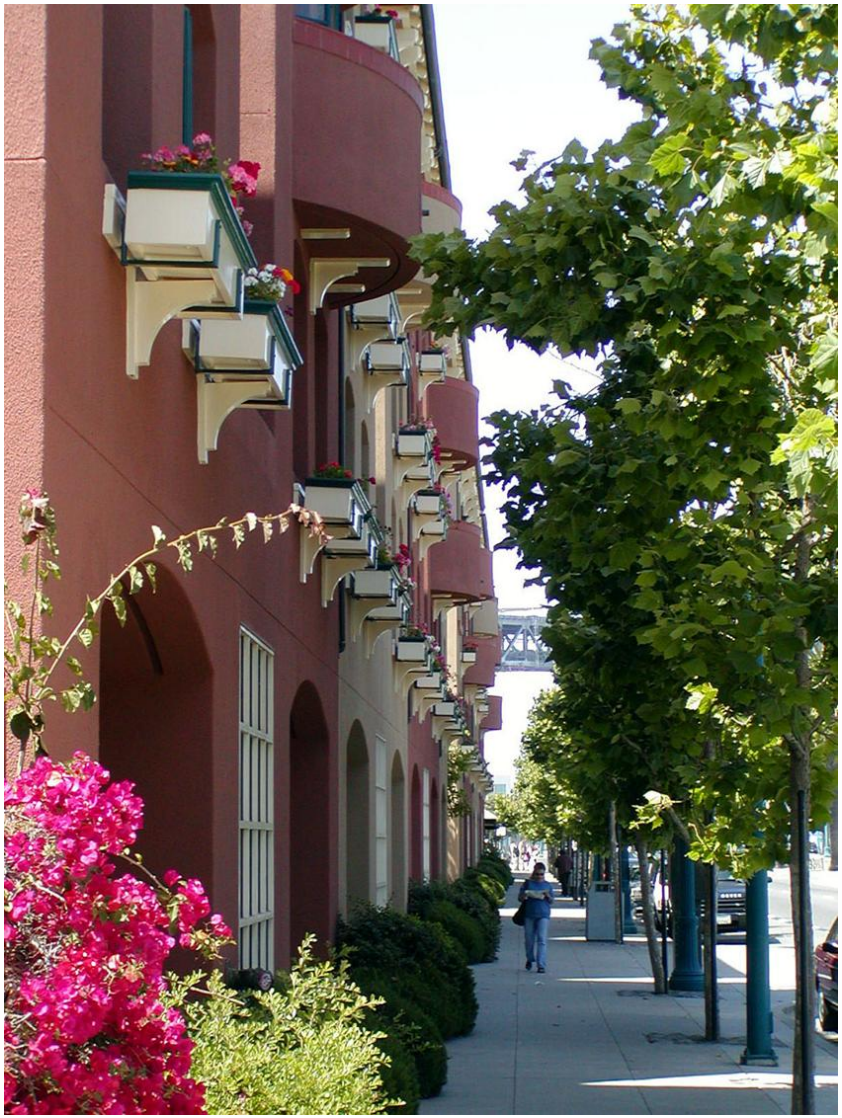
Bike Lanes

Parklets

- In place of 1-3 on street parking spaces

Shade Corridors

- Street trees
- Sidewalk design
- Synthetic shade structures



Pedestrian Wayfinding

- Initial focus us SW 7th / SW 8th Street corridor

Pedestrian Wayfinding

- Initial focus us SW 7th / SW 8th Street corridor

Sidewalk / Street Stencils

Courtesy Counts Campaign

- Street banners
- Flyers
- Bus shelters
- Spreading the word

LITTLE HAVANA

Bicycle/Pedestrian Mobility Plan

Prepared for

THE CITY OF MIAMI FLORIDA INCORPORATED 1896

MPO MIAMI-DADE METROPOLITAN PLANNING ORGANIZATION

Prepared by

Kimley»Horn

Appendix F: Survey Results

Constant Contact Survey Results

Survey Name: Little Havana Bicycle/Pedestrian Mobility Plan

Response Status: Partial & Completed

Filter: None

5/10/2016 6:30 PM EDT

The

Little Havana area is where I ... (check all that apply)

Answer	0% 100%	Number of Response(s)	Response Ratio
Live		19	48.7 %
Work		21	53.8 %
Shop		15	38.4 %
Play		20	51.2 %
	Totals	**39**	**100%**

When

you are working, shopping, or playing in Little Havana, how do you get around?

1 = Often, 2 = Occasionally, 3 = Seldom, 4 = Never

Answer	1 2 3 4	Number of Response(s)	Rating Score*
Car		37	1.3
Public Transit		30	3.1
Walk		35	1.8
Bicycle		34	2.5

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

On average, how frequently do you WALK outside for the following reasons?

1 = Daily, 2 = At least once a week, 3 = At least once a month, 4 = At least once a year, 5 = Never

Answer	1	2	3	4	5	Number of Response(s)	Rating Score*
Go to work						37	3.8
Go to school						33	4.8
Get to and from a bus stop						35	4.0
Run errands (post office, dry cleaners, etc.)						33	3.4
Go shopping or out to eat						35	2.8
Exercise or go to the park						34	2.7
Through trip (just passing through)						34	3.9

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

How would you rate the following as reasons that you DO NOT WALK more frequently?

1 = Major Reason, 2 = Minor Reason, 3 = Not a Reason

Answer	1	2	3	Number of Response(s)	Rating Score*
Automobile traffic (speed and number of cars)				37	1.6
Bad driver behaviors				36	1.6
Destinations are too far away				36	1.6
Hot/rainy weather				36	1.8
Lack of worksite amenities (lockers/showers/dressing rooms)				35	2.2
Other modes are more convenient				36	1.4
Personal safety concerns (crime, no lighting)				37	1.9
Sidewalks in poor condition				36	1.8
Too much to carry				35	2.0
Unsafe intersections (no crosswalks or signals)				37	1.7

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

On average, how frequently do you BIKE for the following reasons?

1 = Daily, 2 = At least once a week, 3 = At least once a month, 4 = At least once a year, 5 = Never

Answer	1	2	3	4	5	Number of Response(s)	Rating Score*
Go to work						35	4.2
Go to school						35	4.8
Get to and from a bus stop						34	4.6
Run errands (post office, dry cleaners, etc.)						35	3.9
Go shopping or out to eat						35	3.9
Exercise or go to the park						37	3.2
Through trip (just passing through)						36	3.8

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

How would you rate the following as reasons that you DO NOT BIKE more frequently?

1 = Major Reason, 2 = Minor Reason, 3 = Not a Reason

Answer	1	2	3	Number of Response(s)	Rating Score*
Automobile traffic (speed and number of cars)				36	1.6
Bad driver behaviors				37	1.5
Destinations are too far away				36	2.1
Hot/rainy weather				35	1.9
I do not have a bike				33	2.7
Lack of worksite amenities (lockers/showers/dressing rooms)				36	2.3
No bicycle parking				36	2.0
No bike lanes				37	1.6
Personal safety concerns (crime, no lighting)				37	1.8
Unsure of route				36	2.4

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Please RANK the
following bicycle-pedestrian infrastructure in order of importance to you
(1=MOST Important, 10=LEAST Important; use the "Comment" section for additional infrastructure):

1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 = 5, 6 = 6, 7 = 7, 8 = 8, 9 = 9, 10 = 10

Answer	1	2	3	4	5	6	7	8	9	10	Number of Response(s)	Rating Score*
Benches/Bus Shelters											36	4.7
Bicycle Lanes											39	3.5
Bicycle Parking											39	4.2
Bike Share											36	5.6
Crosswalks											38	3.9
Shade											39	3.5
Traffic Calming											37	3.6
Traffic Signals											39	3.9
Wayfinding & Signage											37	5.0
Wide Sidewalks											39	4.2

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Do you support greater
public investment in bicycle and pedestrian improvements throughout Little Havana area?

Answer	0%	100%	Number of Response(s)	Response Ratio
Yes			35	83.3 %
No			2	4.7 %
No Response(s)			5	11.9 %
		Totals	42	100%

What are the BEST things
about WALKING AND BIKING in the Little Havana area?

28 Response(s)

What things COULD BE
IMPROVED about WALKING AND BIKING in the Little Havana area?

30 Response(s)

Please list needs that you are aware of around the Little Havana area. (Examples: Need a sidewalk on Supergirl Street from Batcave Lane to Spiderman Avenue. Need more frequent crosswalks on Walkers Boulevard.)

17 Response(s)

What is your gender?

Answer	0% 100%	Number of Response(s)	Response Ratio
Male		16	38.0 %
Female		22	52.3 %
Prefer not to answer		0	0.0 %
No Response(s)		4	9.5 %
	Totals	**42**	**100%**

Which category describes your age?

Answer	0% 100%	Number of Response(s)	Response Ratio
Younger than 20		1	2.3 %
20-29		5	11.9 %
30-39		11	26.1 %
40-49		7	16.6 %
50-59		12	28.5 %
60-69		2	4.7 %
70 or older		2	4.7 %
Prefer not to answer		0	0.0 %
No Response(s)		2	4.7 %
	Totals	**42**	**100%**

What is your home zip code?

37 Response(s)

Constant Contact Survey Results

Survey Name: Little Havana Bicycle/Pedestrian Mobility Plan
Response Status: Partial & Completed
Filter: None
Jun 25, 2016 4:09:37 PM

2. When you are working, shopping, or playing in Little Havana, how do you get around? - Comments	
Answer	**Respondent**
[No Responses]	

3. On average, how frequently do you WALK outside for the following reasons? - Comments	
Answer	**Respondent**
This may skew with folks not attending school saying they never walk to school. Wasn't clear on the pass through.	Anonymous
I walk for exercise only.	Anonymous
There are not enough parks within walking distance and there isn't enough shade.	Anonymous
Im active but get around in car becuz this isnt a safe and friendly pedestrian or bike town. If this town catered to activity I would bike more possibly even to work everyday. For this reason I drive to the gym and the park. How sad with such beautiful weather. Lets change this its good for our health and the environment. Tks	Anonymous
I don't feel safe and also our neighborhood needs beautification	Anonymous

4. How would you rate the following as reasons that you DO NOT WALK more frequently? - Comments	
Answer	**Respondent**
Sidewalks need to be wider and obstacles such as poles, signs, etc. need to be moved outside the sidewalk. Also, more shade trees need to be planted.	Anonymous
I don't walk to work or shop because I am not poor.	Anonymous
It is not a concern for me because I work there and have no choice. With that said, drivers are horrendous - zipping through turns right into crosswalks, regardless if people are walking through- or they do not seem to look to even notice.	Anonymous
Narrow sidewalks; high speed of automobiles; incredibly wide intersections!	Anonymous
i would walk more often if the traffic and drivers weren't so bad. Not enough crosswalks on Coral Way.	Anonymous
If we r serious about changing we need to study countries that have traded in their cars for more bikes and follow their lead. It might happen in neighborhoods or small areas where only bikes and pedestrians can access but its a start	Anonymous
need better transportation and better merchants	Anonymous

5. On average, how frequently do you BIKE for the following reasons? - Comments	
Answer	**Respondent**
Give a regular cyclist some love; slow the cars; give me some space. Make it safe enough for my wife and Miami would be awash in recreational and commuter cyclists.	Anonymous
About 7 years ago I was almost hit by a FedEx truck and since then, I longer bike in my neighborhood. The rent enough bike paths and little to no enforcement of traffic laws.	Anonymous
Cannot afford bicycle and all that it takes to keep it secure, plus, no place to store it. Biggest reason, though, is I'm taking care of a blind man, and we would need a tandem trike. If we had one of those, it would change everything, including most of my answers in this survey.	Anonymous

I like to bike but the traffic is just to much for Biking. It is irresponsible to think bikes should have the right of way when there is no space even for the cars to drive by. Many people that bike do not follow traffic rules making streets very dangerous for them. When I do bike anywhere I often use secondary road so I don't get in any unnecessary accidents. Because 2 wrongs don't make a right.	Anonymous
would love to bike more often unfortunately our streets are not safe nor are attractive. And the car drivers don't care about bike riders on the roads. We need safer roads for bike riders	Anonymous

6. How would you rate the following as reasons that you DO NOT BIKE more frequently? - Comments

Answer	Respondent
I use Citi Bike frequently, and it is a great resource. Unfortunately, there are not always bike stations to park the bike when I reach my destination.	Anonymous
Bicycle lanes are not available and it is dangerous sharing the street lane with moving cars. Furthermore, parked cars are also dangerous for bicyclist because there is no buffer when doors are opened on the traffic lane side.	Anonymous
I only Bike for exercise. For any other reason is unproductive for me or society.	Anonymous
I do not own a bike because the drivers are so bad. It is not worth risking my life. Walking is much safer as I can be on the sidewalk.	Anonymous
I often see many cyclists in the area, and I can see that cycling is their main form of transportation. Meanwhile, there is VERY LITTLE that protect cyclists in my area. Almost all cyclists I see are forced on the sidewalk, where dangerous crosswalks constantly place cyclists at risk because cars have to drive into the crosswalk to be able to see and merge into traffic.	Anonymous

7. Please RANK the following bicycle-pedestrian infrastructure in order of importance to you (1=MOST Important, 10=LEAST Important; use the "Comment" section for additional

Answer	Respondent
Bicycles except off road, are a detriment to productivity and the economy.	Anonymous
No bicecles on Calle 8. Bicecles are already prohibited on sidewalks, but no police enforcement. Public at risk of being run over by high speeding bicecles on sidewalks and skateboards.	Anonymous
The issue I have with bike lines is that in order to have them existing lines must be reduce creating more traffic during peak hours aggravating the traffic problem.	Anonymous

9. What are the BEST things about WALKING AND BIKING in the Little Havana area? - Responses

Answer	Respondent
There are some great places to bike and explore, some beautiful neighborhoods, and the river. There are great places to dine and drink and walk about as well.	Anonymous
You are able to better soak in the culture and the energy of the community by walking and biking because you are not just zipping through the neighborhood the way cars tend to.	Anonymous
Would like dedicated bicycle lanes but not at the expense of sacrificing traffic lanes or parking.	Anonymous
Great urbanism already in place.	Anonymous
I'm close to home and I'm doing physical activity for my health.	Anonymous
Things are close enough that walking is possible in many incidents. Personally, I love seeing and saying hi to neighbors.	Anonymous
It's flat. Beautiful scenery in parts of area. There's other people on the streets. Not being stuck in traffic is always great. Easy access to ventanitas with colada :)	Anonymous

There are a lot of places to go within a short distance. When you bike or walk, you also experience more of your surroundings than you do in a car. I feel like I have gotten to know my neighborhood better by biking.	Anonymous
Lots of interesting places within short distance. Back streets are connected so it is easier to bike places.	Anonymous
TEST DATA - PLEASE DELETE THIS ENTRY	Anonymous
Get to enjoy the sights and sounds of the area, exercise, not needing to find a parking spot	Anonymous
The best thing is that so little do it. Lets not make it worse by wasting more of the taxpayers money on people who pay little or any taxes on the use.	Anonymous
People watching.	Anonymous
Walking is a great way to enjoy the art, restaurants, shops, etc. I do not and would not bike in Little Havana, or frankly anywhere in the city. There are too many unlicensed, uninsured people who do not know how to control their cars. I do, however, support a separate bike lane for those who chose to bicycle. Today they are riding on the sidewalks, which is dangerous to pedestrians, or riding in the streets while not obeying the same laws as cars (bicyclists are often run stoplights, lane-splitting, etc.)	Anonymous
Building community with the residents. Little Havana has a rich culture of coffee, checkers and such.	Anonymous
It is a community. The people out and about are the best part of Little Havana - incidental community for visitors.	Anonymous
Walking only: great to see people and what's going on in the area. Lots of places to eat and area is convenient to public transport. I wouldn't bike in the neighborhood unless streets are closed off. Too dangerous.	Anonymous
small stores to visit	Anonymous
I love the my neighborhood. I grew up here. It's home. I love to give back to my community by going to the local bakery, super market,laundromat and local restaurants.	Anonymous
The neighborhood is beautiful, colorful and intimate, one of the few remaining real neighborhoods. It is best experienced in the close-up manner provided when walking or biking.	Anonymous
You get to see the area better by walking and cycling. Avoid looking for parking by not driving.	Anonymous
Biking is a wonderful way to get around. You get to exercise plus reduce your carbon footprint. Lastly, you see things you would normally miss when driving.	Anonymous
The sense of community that arises when you get the chance to walk and bike around your neighborhood. Feeling connected to your neighbors and having a chance to appreciate were you live.	Anonymous
Very easy to move around. Less stress on the environment. Less ware and tear on my car.	Anonymous
Scenic and old world Latin flavor and charm. (I would like to say safe and friendly, but have had opposite experiences.)	Anonymous
Its a nice area. Its a cute area and there r many so spots to enjoy.	Anonymous
You get to see how day by day Little Havana keeps changing, eather its structures or the people. You get to breat fresh air and see how beautiful some areas are when their trees are protected.	Anonymous
I would've to see the art and restaurants	Anonymous

10. What things COULD BE IMPROVED about WALKING AND BIKING in the Little Havana area? - Responses

Answer	**Respondent**
Safe facilities, particularly on the major roads. I want to be able to bike on SW 1st St or SW 8th St.	Anonymous
There needs to be a safe path for bicycles that goes east-west through the neighborhood. This can be done on a number of different east-west streets, and the treatment selected very much depends on which east-west street is selected as the 'bike route' through Little Havana.	Anonymous
More Enforcement from Police. Bicycles on the sidewalks are a problem for pedestrians	Anonymous
SLOWING CARS DOWN. PUTTING THE PEDESTRIAN FIRST. COMPLETE STREETS.	Anonymous
Everything.	Anonymous

Safety	
Bike Paths and Sidewalks	Anonymous
Improve feeling of safety (lighting, police/community watch presence).	Anonymous
I use the underline to get to work on my bike and when its not daylight savings time, it gets too dark to ride home comfortably. Lighting along the underline would be a huge improvement. Also, its often very difficult to find bike parking. It would be great if the City had some sort of map of bike parking locations (and installed more adequate bike parking stations for that matter).	
Also I think replacing four-way stops with round-abouts would make it much easier to bike in the area.	Anonymous
More frequent crosswalks, drivers do not wait for people to cross before turning.	Anonymous
TEST DATA - PLEASE DELETE THIS ENTRY	Anonymous
More car lanes, Ban bicycles, prosecute jaywalkers.	Anonymous
No biking on Calle8. 35 miles posted maximum speed. Lighted-signed crosswalks on every corner between 12 ans 17 Ave. No bicycle lanes on Calle8 The will interrupt traffic, hurt business, creat greater accident risks,take away parking for tourists buses, cars and emergency behicles, And will not provide additional cutomers for business. We need horseback police and additinal police on the beat for Calle8 and Little Havana. Allow small tables and seating outside businesses.	
Need street lighting and serious landscapping improvements.	Anonymous
By having bike lanes both walking and biking improve.	Anonymous
See above	Anonymous
Newer sidewalks.	Anonymous
Finding ways for people to connect. More public spaces for people to gather, with seating.	Anonymous
Shade, bike lanes and sidewalks.	Anonymous
Walking: improve crosswalk lighting; police enforcement of traffic violations; speed reduction redesign; increase bus routes. Biking: would have to change streets completely to allow for SAFE bike lanes. Drivers don't observe bike lanes at all.	Anonymous
bike lanes.	Anonymous
More crosswalks. More emphasis on the speeding cars on South West seventh Street and Calle Ocho. A lot of my neighbors walk these streets. I want it to be safer for them and my family	Anonymous
Come on. Anything really. Wider sidewalks. Shade trees. Cross walks. Two lanes instead of three. A bike lane. Light-rail. Little Havana could really be super awesome.	Anonymous
There are many dangerous intersections where visibility is basically non-existent. One of the most dangerous intersections is at sw 6th street and 12th ave. Possibly this is due to the fact that 6th street is wider than surrounding streets (it used to be a route for the cable car) and people fly down the street. There is at least an accident a week it seems, whether car or person. Also the visibility is terrible from all sides. Additionally, many people ride bicycles on the sidewalk because they are not comfortable in the street which causes pedestrians to step into the street, etc.	Anonymous
No bike lanes on 8th Street. 3 lanes of car traffic.. don't need that many.. it encourages cars to speed	Anonymous
More bike lanes. More enforcement of traffic laws. More crosswalks for predestrians.	Anonymous

The community's health would be greatly improved. Also, improvements to bicycle infrastructure would help those the commute by bike to feel safe out on the roads.	Anonymous
Sidewalks ...designate bike lanes .stronger enforcement on horrible drivers. Mire lighting mire traffic calming device's	Anonymous
Increased mounted and bicycle police patrol are most definitely needed. I would also like to see increased education on traffic rules governing not only automobiles, but traffic laws that are supposed to be followed by bicyclists whom I see constantly breaking laws, blowing through busy intersections against traffic lights and stop signs. And speaking of stop signs, why does this section of Miami completely ignore the law that says your vehicle cannot be parked within so many feet of a stop sign? Neither drivers nor cyclists can see the cross-traffic when a car is parked right under a stop sign.	Anonymous
We need to keep green space. Parks r needed in that area with benches. There's way too many buildings going up	Anonymous
I love walking to places any time it is possible, better cross walks, lights signals that actually work, better illumination would help me increase my walks and bike rides to places.	Anonymous
streets, sidewalks, bike lanes and have better surveillance on car drivers who don't care about the people who walking or biking riding	Anonymous

11. Please list needs that you are aware of around the Little Havana area. (Examples: Need a sidewalk on Supergirl Street from Batcave Lane to Spiderman Avenue. Need more

Answer	Respondent
Cycle tracks on major roadways to create a safe opportunity for biking. Full signalized crosswalks for pedestrians, and greater enforcement of traffic laws. Red light cameras would be helpful.	Anonymous
Need speeding calming signals	Anonymous
Should connect Jose Marti Park from 5 street to 7street with a park or underpath for recreational purposes.	Anonymous
It is difficult to think about specific streets when filling out a survey at my desk. I know there are areas where sidewalks and cross walks are needed but I can't place them specifically at the moment.	Anonymous
Need signal crosswalk at InterAmericsn campus.	Anonymous
I think the speed limit on SW 22nd Avenue between 8th street and Coral Way needs to be addressed. When you go south of Coral Way, the speed limit drops to 35 MPH but north of Coral Way it is 40 MPH even though the area is residential, there is a major park on the corridor (Shenandoah Park) and a middle school nearby (Shenandoah Middle). I live near Shenandoah Middle School and in the mornings there are a lot of kids that cross 22nd Avenue to visit a corner store before school. In my opinion if the speed limit was lower (and enforced) the kids in the neighborhood would be much safer.	Anonymous
TEST DATA - PLEASE DELETE THIS ENTRY	Anonymous
Illegally parked tour buses blocking sight views of oncoming traffic at 16th Ave and 8th street. Speeding cars on residential streets. Need speed bumps and roundabouts.	Anonymous
Need more intense policing For drug sales and use. Open liquor. Theft and brakeins rampant.	Anonymous
Bike lanes in general would be nice.	Anonymous

12th Ave and Flagler has to be one of the most dangerous I have seen in the county. The street is so big, difficult for me to cross in the 20-seconds given by lights. I often see people using canes, walkers and wheelchairs trying to navigate. When I do, I go out and cross the road with them, even if I don't need to cross the road. I figure if people will hit one person, perhaps they'll reconsider if it is two of us out there. That is a sad state of affairs and does not say much for us as a community, not electeds, or those running departments that ignore people's pleas for safety. I can't believe there have not been any lawsuits. Truly.	Anonymous
Need a crosswalk with lights on 10th avenue and SW 7th street. May a couple of more between 8ave and 22nd avenue along SW 7th Street. Thus would really help with the speeding cars	Anonymous
27th Avenue needs a bike lane! I recommend from bridge all the way to the Coconut Grove station. (maybe that's too much, but I don't want to get hit again by a car)	Anonymous
Need crosswalk in the residential neighborhoods due to traffic coming off Sw 27 ave and 8 st. Older residents can't enjoy a walk in the neighborhood because of high traffic...it is impossible to cross SW 11 st between 27 AVE and 32 ave. Also Hugh traffic rude drivers in the area of SW 8 st to 16 st 27 ave to 32 ave	Anonymous
SE 4th AV from Calle Ocho to 15th RD is extremely dangerous for travel by foot, bicycle and vehicle. Cars speed too fast, no bicycle lanes, no sidewalks (to speak of), and people shove their trash cans so far out in the road that there is not room for two-way traffic as fast as it goes through there. Passage on 4th Avenue, from the west side of 15th Road to the east side is very dangerous because the majority of the westbound traffic is turning left and not allowing the right of way to eastbound traffic.	Anonymous
Need bike lanes all over little havana. I saw the new bike lanes in key Biscayne they r bright green very visible. Those r great	Anonymous
need better sidewalk by sw37th & 8th st cemetery, need safer bike lane. need beatification to enjoy the view while riding it. Need better merchants i.e restaurant, cafe's etc..	Anonymous

14. What is your home zip code? - Responses

Answer	Respondent
33150	Anonymous
33136	Anonymous
33146	Anonymous
33132	Anonymous
33145	Anonymous
33130	Anonymous
33135	Anonymous
33125	Anonymous
33145	Anonymous
33138	Anonymous
33143	Anonymous
33135	Anonymous
33145	Anonymous
33125	Anonymous
33135	Anonymous
33175	Anonymous
33130	Anonymous
33145	Anonymous
33145	Anonymous
33157	Anonymous
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33145	Anonymous
33139	Anonymous
33157	Anonymous
33135	Anonymous
33130	Anonymous
33145	Anonymous
33125	Anonymous
33130	Anonymous
33145	Anonymous
33125	Anonymous
33135	Anonymous
33130	Anonymous
33135	Anonymous
33125	Anonymous
33135	Anonymous
33135	Anonymous

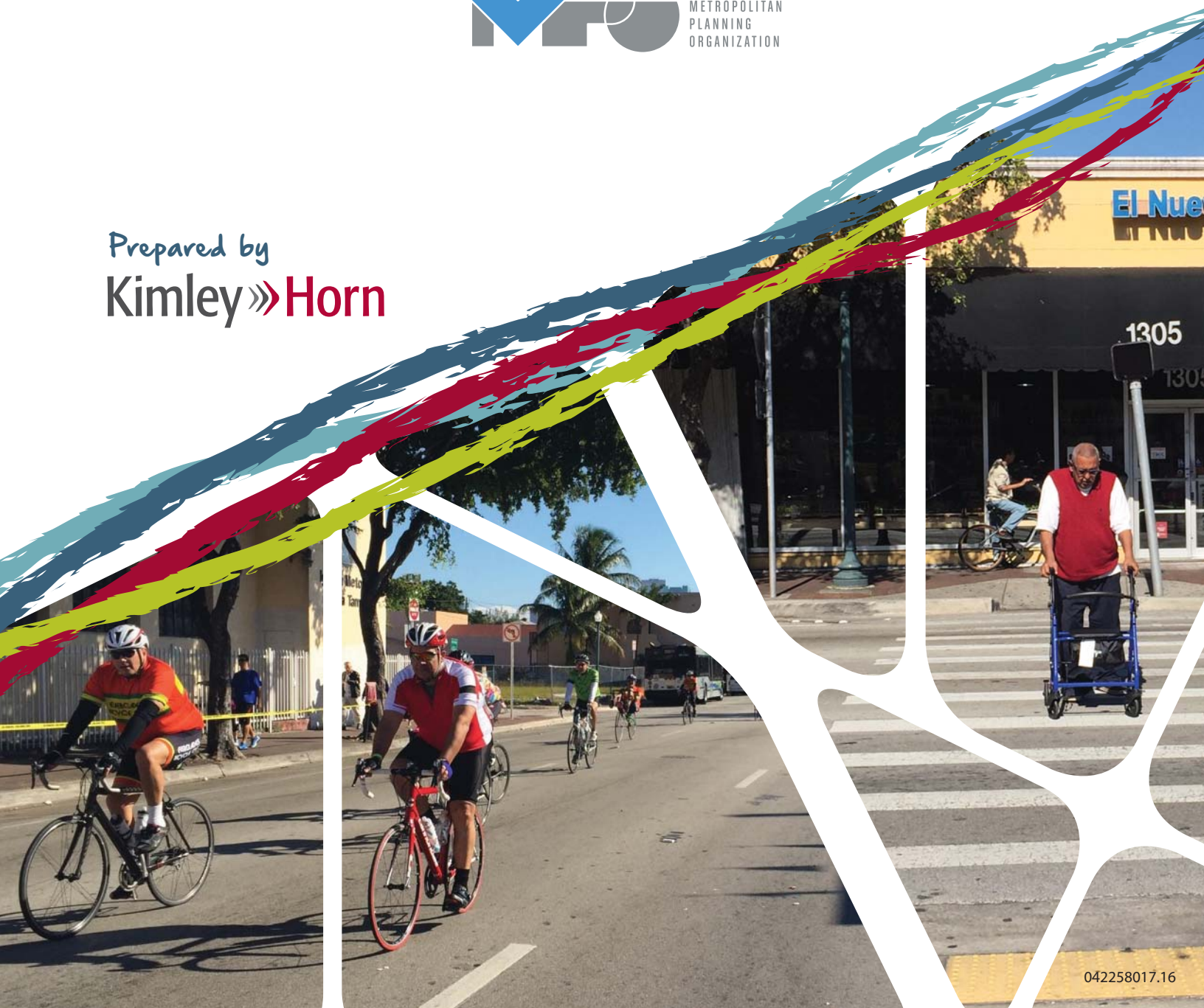
LITTLE HAVANA

Bicycle/Pedestrian Mobility Plan

MIAMI-DADE METROPOLITAN PLANNING ORGANIZATION

Prepared by

Kimley»Horn



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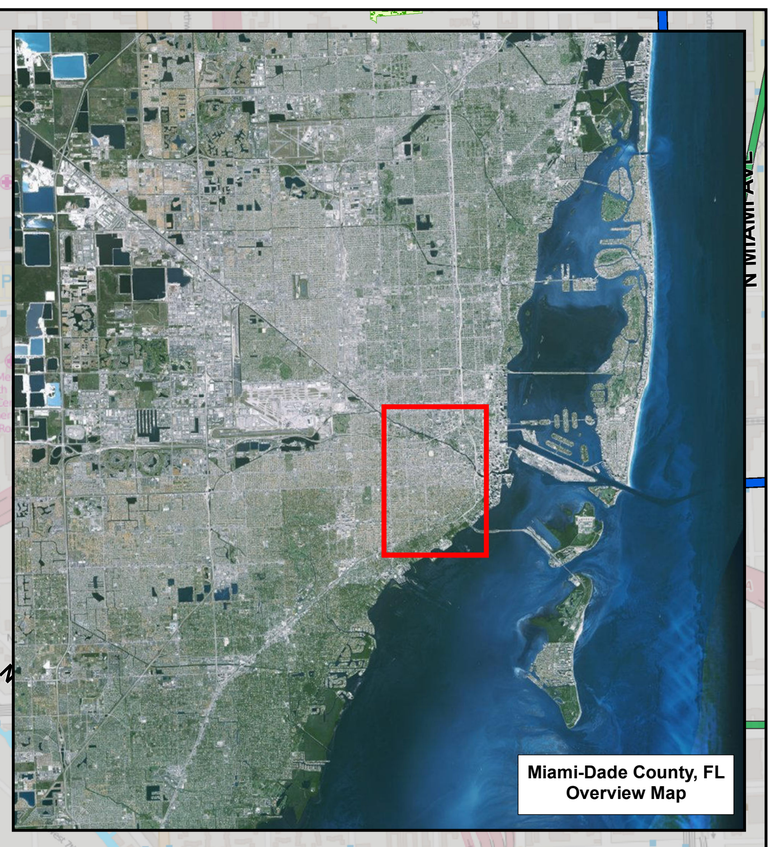
Multimodal Mobility Study

Little Havana Bicycle/Pedestrian Mobility Plan



Existing

- Traffic Circles
- Paved Path
- Bike Lanes
- Shared Lane Markings
- Miami-Dade Greenways

Funded

- Bike Lanes
- Paved Paths

Proposed

- Roundabout
- SW 8 St Crosswalk
- Crosswalk
- Traffic Calming Intersection
- Neighborhood Greenway Crossing
- Neighborhood Greenway
- Express Bus Corridor
- Right-Sizing
- FDOT Complete Street
- Shared Bus-Bike Lanes
- Bike Lanes
- Pedestrian Priority Zone

- Parks
- Water
- Miami-Dade County

0 0.225 0.45 0.9 Miles

Kimley»Horn