



EXHIBIT "2"



Hallandale Beach  
PROGRESS. INNOVATION. OPPORTUNITY.

# Moblity Roadmap

FINAL REPORT

November 5, 2018

Prepared by

Kimley»Horn



# Mobility Roadmap

FINAL REPORT

## TABLE OF CONTENTS

|                                                                    |    |
|--------------------------------------------------------------------|----|
| Introduction .....                                                 | 1  |
| Transportation Network Analysis .....                              | 1  |
| Existing Transportation Network .....                              | 2  |
| Existing On-Street Parking .....                                   | 2  |
| Exhibit 1 – RAC Area and Potential On-Street Parking Options ..... | 3  |
| Existing Traffic Volumes .....                                     | 4  |
| Existing and Future Traffic Conditions .....                       | 4  |
| Exhibit 2 – Hallandale Beach Developments .....                    | 4  |
| Crash Data Analysis .....                                          | 6  |
| Existing Bicycle and Sidewalk Network .....                        | 6  |
| Existing Transit System .....                                      | 8  |
| Previously Considered Transportation Improvements .....            | 9  |
| In-Planning, Funded and In-Progress Transportation Projects .....  | 12 |
| Transportation improvements .....                                  | 13 |
| Funding Strategies .....                                           | 19 |

## INTRODUCTION

The City of Hallandale Beach (City) is a dynamic community that is experiencing a surge of development and that has major activity generators, including: Gulfstream Park, Mardi Gras Casino, commercial centers, and beaches. To address ongoing traffic issues and congestion the City has engaged Kimley-Horn to provide direction towards the most beneficial investments in transportation solutions to improve safety, interconnectivity, transportation conditions, and alternative transportation options. The study is aimed at identifying short, mid and long-term improvements and potential funding strategies.

Prior transportation and mobility studies have been conducted by the City including a *Multimodal Mobility Plan* (October 2016), *Basis of Design Report* (2016), and *2030 Transportation Master Plan* (May 2009). In addition, there are City of Hallandale Beach transportation improvements identified in Broward Metropolitan Planning Organizations (MPO's) *Commitment 2040 Long Range Transportation Plan* (December 2014). The methodology for this study was to consider these previous reports and to conduct additional analysis as part of developing transportation solutions. The goal is to develop a "roadmap" of recommended transportation solutions, cost estimates, funding strategies, and an implementation plan that will help guide the City regarding capital transportation investments over the next 20 years.

The report includes an assessment of the following issues in Hallandale Beach:

- Existing transportation network classification,
- Existing on-street parking,
- Existing traffic volumes,
- Existing and future traffic conditions,
- Crash data analysis,
- Existing bicycle and sidewalk network conditions,
- Existing transit network conditions,
- Previously considered transportation and mobility improvements, and
- In-planning, funded and in-progress transportation projects.

Each of these issues were considered as part of developing short (0 to 5 years), mid (6 to 10), and long term (11 to 20 years) transportation and multi-modal improvements. Planning level cost estimates for each recommended improvement and potential funding sources are identified.

## TRANSPORTATION NETWORK ANALYSIS

A variety of data and analyses were conducted to assess the existing and future transportation conditions in the City of Hallandale Beach. The analyses include the following:

- Existing Transportation Network Classification,
- Summary of Average Annual Daily Traffic,
- Existing and Future Traffic Impact Study Level of Service (LOS) Results Summary,
- Summary of 3-Years of Crash Data,
- Existing Bicycle and Sidewalk Network, and
- Existing Transit Service and Transit Walkshed.

The figures for each of these analyses have been included in the Appendix.

## Existing Transportation Network

The Florida Department of Transportation (FDOT) has classified the transportation network in Florida, including the City of Hallandale Beach, based on AASHTO's *A Policy on Geometric Design of Highways and Streets* (2011, 6<sup>th</sup> Edition). The existing FDOT street classification for the City of Hallandale Beach is provided in **Appendix A (page I)**. According to FDOT's street classification, the City of Hallandale Beach relies on two principal east-west arterials (Hallandale Beach Boulevard and Pembroke Road) and two principal north-south arterials (State Road (SR) A1A and US-1). There are a number of major and minor collector streets, including NW/SW 8<sup>th</sup> Avenue, the two-way pair of Dixie Highway and SE 1<sup>st</sup> Avenue, NE 14<sup>th</sup> Avenue, NE 9<sup>th</sup> Street, Diplomat Parkway, and SW 11<sup>th</sup> Street. The rest of the transportation network is classified as local streets.

Due to a lack of connectivity among the local street network from barriers created by the Florida East Coast

### Existing Transportation Network Major Issues Learned (Appendix pg. I)

- Poor connectivity among collector and local streets
- Heavy dependence on arterial streets
- Landlocked on the West, East and South ends of City

(FEC) Railway, Interstate 95 (I-95), large developments (i.e. Gulfstream Park, Mardi Gras Casino, etc.), and waterways, people are heavily dependent on using the principal arterials to effectively traverse the City. There is also poor connectivity to the beaches as Hallandale Beach Boulevard is the only east-west road that crosses the water inlets providing access to the barrier island. Also, Pembroke Road and Hallandale Beach Boulevard are the only streets which cross I-95. The only streets that connect south of SW 11<sup>th</sup> Street into Miami-Dade County are Dixie Highway/SE 1<sup>st</sup> Avenue, US-1, SW 2<sup>nd</sup> Avenue/NE 26<sup>th</sup> Avenue, and SR A1A. In a lot of ways, the City is landlocked and has poor connectivity among the local roads, which places a heavy stress of traffic on the arterial and collector streets.

## Existing On-Street Parking

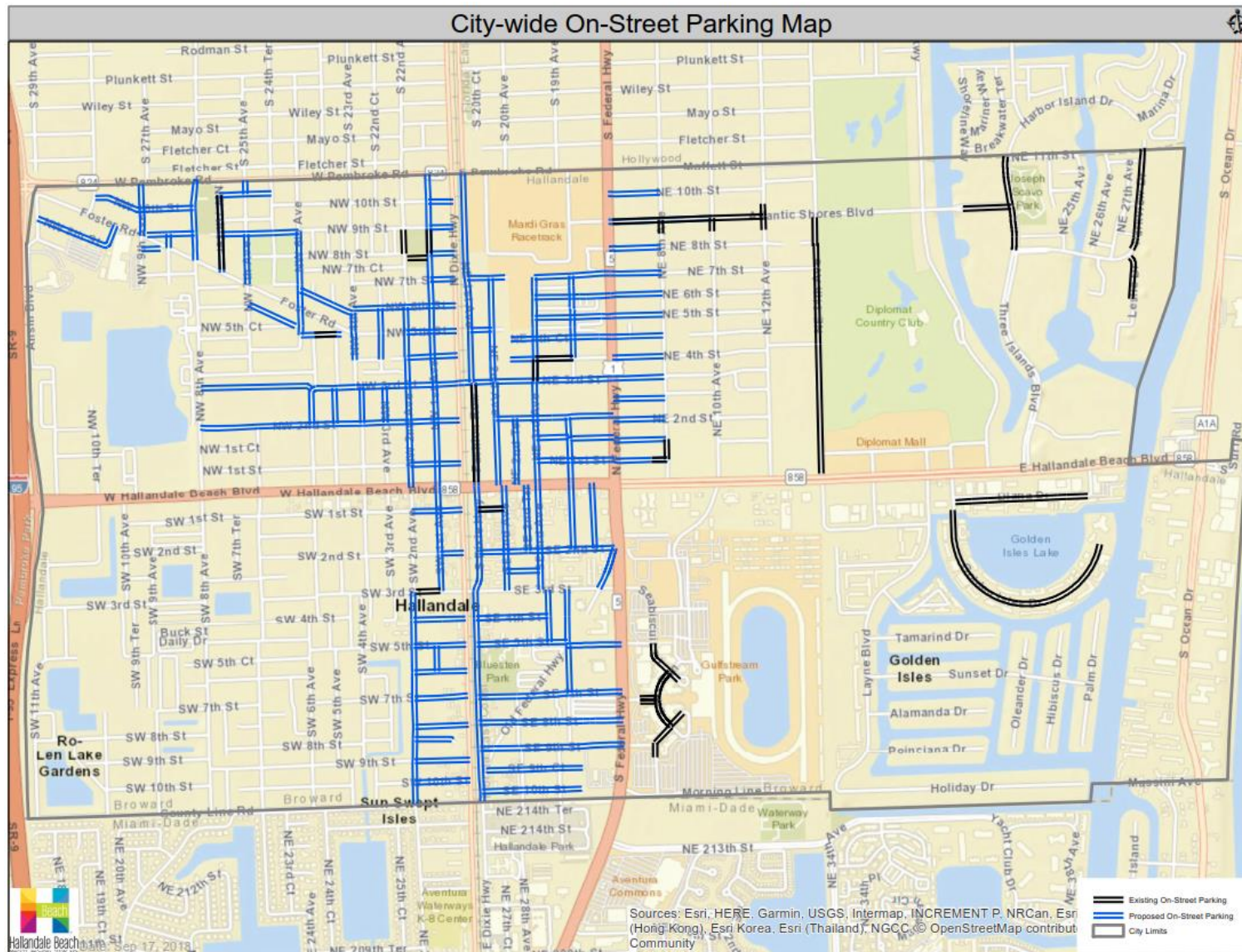
On-street parking in the City of Hallandale Beach is a limited resource that is essential in supporting residential and commercial activity. Potential parking areas adjacent to retail/commercial areas along Hallandale Beach Boulevard, Federal Highway, and Dixie Highway were assessed as part of the *BODR* study, which are the most advantageous areas. There are currently a number of striped on-street parallel

### Existing On-Street Parking Major Issues Learned

- On-street parking is essential to support residents and commercial activity
- Additional on-street parking may be needed in the RAC area to support economic development

parking areas including at the following locations: Atlantic Shores, Gulf Stream Park, Golden Isles Dr., Three Islands Blvd., Parkview Drive, Diana Drive, Egret Drive, NE 14<sup>th</sup> Avenue, NE 1<sup>st</sup> Avenue, SE 5<sup>th</sup> Street, NW 7<sup>th</sup> Terrace, NW 8<sup>th</sup> Avenue, SW 11<sup>th</sup> Avenue, and SW 10<sup>th</sup> Terrace. Many local streets have 90 degree and angled parking. Additional on-street parking in the Regional Activity Center (RAC) area may be needed to support future economic development. **Exhibit 1** shows the RAC area and where potential on-street parking could be added. On-street parking should be provided where needed whether to support residents, visitors, or businesses.





**Exhibit 1**  
**– RAC**  
**Area and**  
**Potential**  
**On-Street**  
**Parking**  
**Options**

## Existing Traffic Volumes

FDOT conducts annual traffic counts throughout Florida, including for the principal arterials and major/minor collectors in Hallandale Beach, which includes the following streets:

### Existing Traffic Volumes

#### Major Issues Learned (Appendix pg. II)

- Largest traffic volumes are along HBB
- Substantial traffic along SR A1A and Pembroke Road
- Less traffic on Dixie Highway and SE 1<sup>st</sup> Avenue then on NW 8<sup>th</sup> Avenue
- Minimal traffic along SW 11<sup>th</sup> Street and NE 1<sup>st</sup> Avenue north of HBB

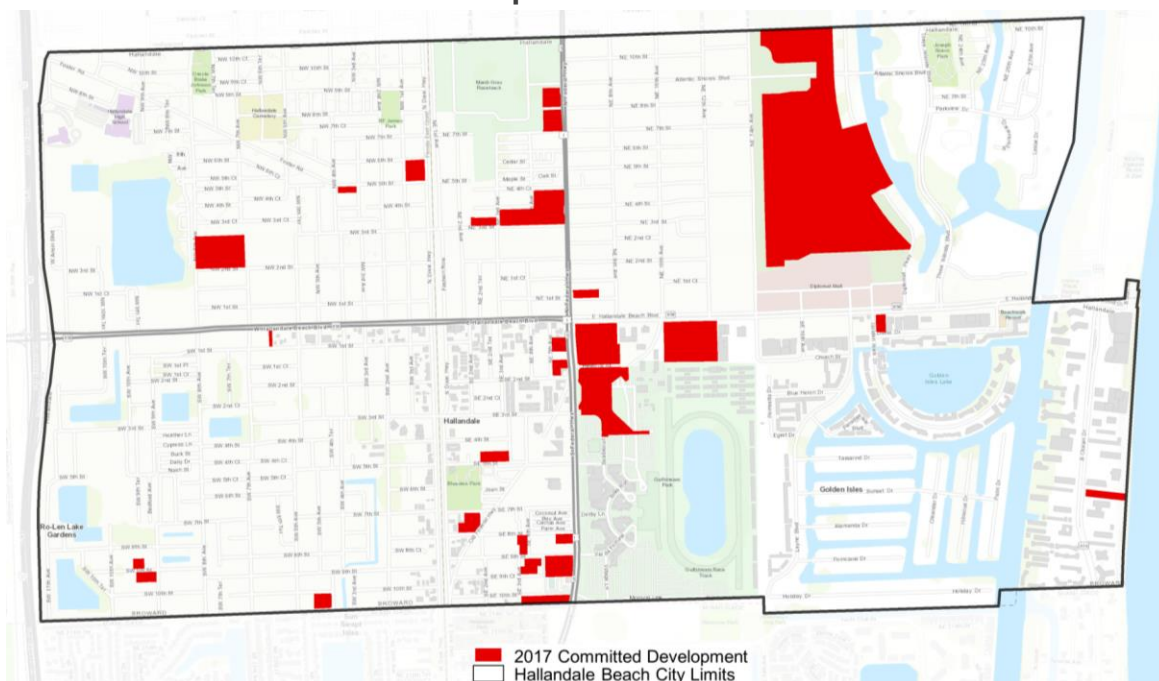
- Hallandale Beach Boulevard (HBB)
- Pembroke Road
- SW 11<sup>th</sup> Street
- NW 8<sup>th</sup> Avenue
- Dixie Highway
- SE 1<sup>st</sup> Avenue
- US-1
- SR A1A
- Atlantic Shores Boulevard
- NE 14<sup>th</sup> Avenue
- Diplomat Parkway

The 2017 average annual daily traffic (AADT) volumes are provided in the **Appendix B (page II)**.

## Existing and Future Traffic Conditions

Historically, Hallandale Beach experienced most development to the east along SR A1A, but the City's current major development activity report shows the majority of the development is concentrated in the City center adjacent to major roadway corridors (i.e. US-1 and Hallandale Beach Boulevard). **Exhibit 2** shows major committed development projects within Hallandale Beach per the City's GIS Projects Application. A large concentration of planned developments is located adjacent to the intersection of Hallandale Beach Boulevard and US-1, which could create more traffic congestion in this area.

### Exhibit 2 – Hallandale Beach Developments



Source: City of Hallandale Beach GIS Projects Application

Traffic Impact Studies were conducted for many of these developments which included capacity analyses of intersections to assess existing and future traffic conditions. It is not guaranteed that all these projects will get built, but the Traffic Impact Studies provide valuable information to understand how traffic currently operates and is projected to operate at specific intersections. Traffic studies conducted between 2012 and 2017 were considered in assessing level of service (LOS) at intersections.

To assess the LOS of the entire primary roadway system, the Broward MPO *Commitment 2040 Long Range Transportation Plan* was applied. The Broward MPO considered the AADT and street capacity to determine the LOS for existing (2013) and future (2035) roadway conditions. This helps reveal if a roadway is operating at or above capacity which can cause extensive queuing and traffic delays.

The culmination of the results from the Traffic Impact Studies for proposed developments and the Broward MPO LOS Analysis for existing (**Appendix C - page III**) and future (**Appendix C - page IV**) traffic conditions is provided in **Appendix C**. These figures show where extensive queuing and traffic delays currently exist and are forecast to happen along the Hallandale Beach street network.

Based on the existing conditions LOS analysis, both Hallandale Beach Boulevard and Pembroke Road to the west of US-1, along with all of US-1 operate at inadequate levels of service. Several intersections currently operate at poor levels of service primarily at FEC Railway crossings and along US-1. The traffic

impact analyses show that the following intersections operate at a level of service of 'F' either during the morning or evening peak hours:

## Existing and Future Traffic Conditions Major Issues Learned (Appendix pgs. III - IV)

- Substantial development projects are planned adjacent to Hallandale Beach Boulevard and US-1
- Based on average annual daily traffic, there is capacity available along Dixie Hwy, SE 1<sup>st</sup> Ave, SR A1A, SE 11<sup>th</sup> Street, and Hallandale Beach Boulevard east of US-1
- US-1, Hallandale Beach Boulevard, and Pembroke Road exceed capacity leading to extensive queuing and traffic delays
- Intersections at FEC Railway crossings and along US-1 operate at poor levels of service
- Due to traffic from Gulfstream Peak, SE 3<sup>rd</sup> Street has poor levels of service at the FEC Railway crossing
- Poor traffic conditions along US-1 at access points to Gulfstream Park
- Most local roads operate at acceptable levels of service

- SW 11<sup>th</sup> Street and S Dixie Highway,
- SE 3<sup>rd</sup> Street and S Dixie Highway/SE 1<sup>st</sup> Avenue,
- Hallandale Beach Boulevard and SE 1<sup>st</sup> Avenue, and
- SE 9<sup>th</sup> Street and US-1.

The future LOS analysis shows that no additional roadways are projected to operate at an unacceptable LOS other than what was determined from the existing conditions (i.e. Hallandale Beach Boulevard, Pembroke Road, and US-1). However, a number of new intersections are projected to operate at LOS F, which are primarily located along US-1, especially adjacent to Gulfstream Park, and also at Atlantic Shores Boulevard and NE 14<sup>th</sup> Avenue, which is located adjacent to a proposed development at the Diplomat Golf Course (i.e. 500 & 501 Diplomat Parkway).



## Crash Data Analysis

The GeoPlan Center at the University of Florida provides *Signal Four Analytics*, which is an interactive, web-based system that maps crash data for Florida. This tool was applied to assess crash data for Hallandale Beach. Provided in **Appendix D** is a map showing the number and location of vehicular crashes within the last three years in Hallandale Beach (**Appendix D - page V**) and crashes exclusively involving pedestrians and bicyclists in the last three years (**Appendix D - page VI**). The data was analyzed to determine which streets experience the greatest number of crashes.

Most crashes occur along Hallandale Beach Boulevard, US-1 and Pembroke Road, which also have the highest amount of vehicular activity. Dixie Highway and SE 1<sup>st</sup> Avenue have minimal crashes except at the FEC Railway crossings. Atlantic Shores Boulevard experiences a high number of crashes. This may be due to the layout which includes angled parking and wide streets. Wide streets have a propensity to promote speeding, and with a mixture of vehicles blindly backing out of parking spaces this can be problematic. Local streets with a high number of crashes included SE/SW 3<sup>rd</sup> Street, NE/NW 3<sup>rd</sup> Street, and Foster Road. These streets have less interruptions and are more continuous than most local City streets, making them

an attractive alternative route compared to using arterials. Also, SW/NW 8<sup>th</sup> Avenue experiences a high number of crashes at major, signalized intersections, including at Hallandale Beach Boulevard, Foster Road, and Pembroke Road. SW/NW 8<sup>th</sup> Avenue is also a favorable alternative route being that it is the only non-major roadway that traverses the City in the north-south direction.

Most of the pedestrian and bicycle crashes occur along principal arterials, which is where most of the bicycle and pedestrian activity is located. The intersection with the highest number of bicycle/pedestrian crashes in the last three years is at Pembroke Road and US-1. A substantial amount of bicycle activity uses the Dixie Highway/SE 1<sup>st</sup> Avenue corridor, but there were minimal pedestrian/bicycle crashes, which is potentially due to these being one-way streets with less vehicular activity and more than adequate street capacity allowing for vehicles to avoid bicyclists.

### Crash Data Analysis

#### Major Issues Learned (Appendix pgs. V - VI)

- Most crashes occur along primary arterials (i.e. Hallandale Beach Blvd., Pembroke Rd., and US-1)
- Substantial crashes occur at the FEC Railway crossings
- Mix of angled parking and wide streets along Atlantic Shores Blvd may increase the likelihood for crashes
- Well-connected local roads that provide a good alternative route to using a primary arterial have a high number of crashes (i.e. SE/SW 3<sup>rd</sup> St., NE/NW 3<sup>rd</sup> St., and Foster Rd.)
- Most pedestrian/bicycle crashes occur along primary arterials

## Existing Bicycle and Sidewalk Network

The *Basis of Design Review (BODR)* and *Multimodal Mobility Plan* provided a comprehensive assessment of the existing sidewalk and bicycle network in the City of Hallandale Beach. A map of the existing bicycle network and sidewalks are provided in the **Appendix E (page VII)**, which does not include the entire sidewalk network in the City, only what is inventoried on FDOT's GIS Database. However, all the dedicated bicycle lanes and sharrows in Hallandale Beach are shown. This study relied heavily on the *BODR* and *Multimodal Mobility Plan* to assess the existing bicycle and sidewalk network in Hallandale Beach, as both of these studies were recently completed and provided a comprehensive review.



## Bicycle Infrastructure

As part of the *Multimodal Mobility Plan*, a bicycle LOS analysis was conducted for the City. Bicycle lanes and sharrows are currently provided along the three primary arterials (i.e. Hallandale Beach Boulevard, Pembroke Road, and SR A1A). There are also bicycle lanes along three other north-south local roads (i.e. NE 8<sup>th</sup> Avenue, NE 10<sup>th</sup> Avenue, and Layne Boulevard). The analysis found that the City has a lack of bicycling facilities and that the existing infrastructure is a viable option for more advanced riders but not for beginner to intermediate riders. Even along streets with bike lanes like US-1 and Hallandale Beach Boulevard, the LOS ranged from D to F since only non-buffered, four (4) foot bike lanes are provided and there is heavy traffic and many conflicts from turn lanes. The average LOS grade across the system is approximately LOS D, which is “Appropriate for advanced adult bicyclists, moderate to high interactions with motor vehicles.”

The *Multimodal Mobility Plan* analyzed Strava data (obtained from FDOT), which is a fitness application that uses GPS to track the location of exercise activity including bicycling. The results of this analysis found that most bicyclists use the following streets:

- SR A1A,
- Hallandale Beach Boulevard,
- US-1,
- NE/SE 1<sup>st</sup> Avenue,
- Dixie Highway,
- NW/SW 1<sup>st</sup> Avenue, and
- Pembroke Road.

It was suggested in the *Multimodal Mobility Plan* that these roadways be prioritized for bicycle infrastructure improvements due to heavy usage. However, the *Multimodal Mobility Plan* recognizes that the Strava

analysis is somewhat limited since it relies on the use of cell phone technology and people may opt not to use such programs for privacy reasons. In addition, this type of application tends to be used more by recreational and advanced riders.

### Existing Bicycle and Sidewalk Network Major Issues Learned (Appendix pg. VII)

- Limited bicycle network
- Bicycle network serves advanced adult bicyclists but not beginner to intermediate riders
- Majority of bicycle activity is concentrated along principal arterials and Dixie Hwy/SE 1<sup>st</sup> Ave corridor
- Green markings and bike boxes would improve the safety of existing bicycle lanes
- More than half of the streets have sidewalks
- Substantial improvements needed for compliance at ADA ramps
- Extensive distance between crossings along Hallandale Beach Boulevard
- Lack of benches and shade

The *Multimodal Mobility Plan* found that there is currently no wayfinding system for bicyclists. However, in 2016 the City completed a comprehensive Citywide wayfinding project, which should help wayfinding for bicyclists. The study also discussed how existing bicycle lanes are only marked by white lines and not green lane markers which improves visibility and increase safety. Another bicycle safety improvement would be the implementation of bike boxes at signalized intersections which provides bicyclists a safe and visible way to get ahead of queuing traffic at red lights.

## Sidewalk Infrastructure

The *BODR* report concluded that there are approximately sixty-one (61) miles of concrete sidewalk in place and approximately fifty (50) miles of missing sidewalk within the City maintained Right-of-Way. The sidewalks typically vary in width from four (4) feet to five (5) feet. The City's Design Guidelines calls for a minimum sidewalk width of five (5) feet. The *BODR* identified the need for 255,091 linear feet of new sidewalk construction, 2,124 linear feet of damaged sidewalks to be replaced, 587 new Americans with Disabilities Act (ADA) ramps, and 453 new truncated domes at ADA ramps. In addition to assessing the sidewalk network, the Roadways and Sidewalks section of the *BODR* report also analyzed the following:

- Roadway pavement conditions,
- Roadway striping conditions,
- Bicycle lanes,
- Potential parallel parking,
- Missing or damaged light poles, and
- Condition of crosswalks.

The Multimodal Mobility Plan assessed the pedestrian LOS for arterial and collector roadways. The analysis determined that most of these streets have basic pedestrian amenities and operate at acceptable LOS. However, the major issues were gaps in the sidewalk network along Dixie Highway, extensive distances between street crossings (particularly along Hallandale Beach Boulevard west of US-1), and a lack of benches and shade.

## Existing Transit System

The City of Hallandale Beach is currently served by three transit service providers, which include: Broward County Transit (BCT) Routes 1, 4, 5, 6, 28 and the US-1 Breeze; Miami-Dade Transit (MDT) Route E; and the four Hallandale Beach Community Bus (Minibus) routes. BCT and MDT provide external connections to the City and generally provide service frequency that is equal to or less than one hour. A connection to the Tri-Rail Hollywood Station is available from Minibus route 3.

The Minibus has four routes providing internal circulation within Hallandale Beach and outside of Hallandale to the Hollywood Tri-Rail Station and the South Broward Community Health Services, as shown in **Exhibit 3**. The Minibus has defined stops, but will stop on demand while in route and is a free service. However, a

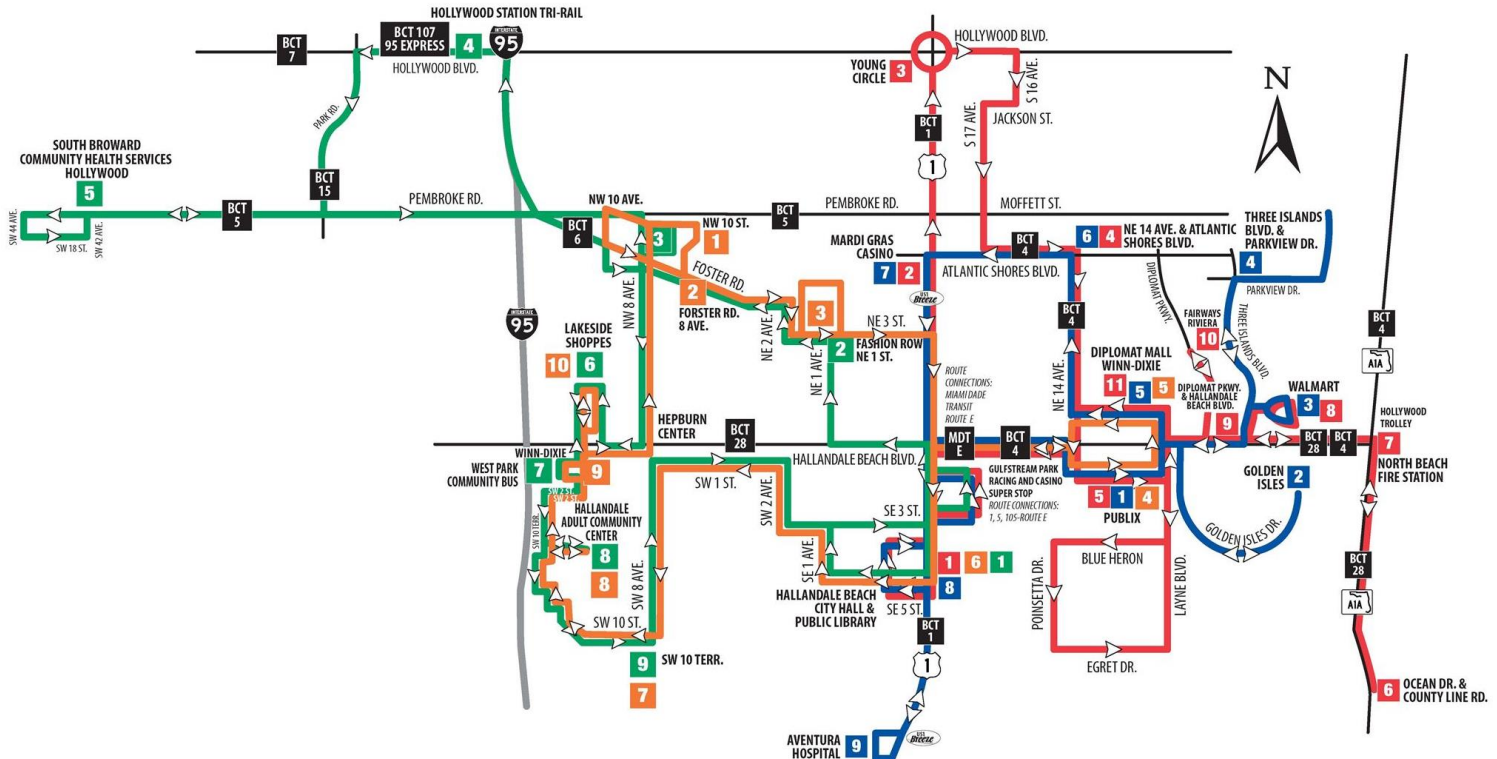
major complaint from residents are the approximately 1-hour headways. Unfortunately, ridership numbers for the Minibus have steadily declined between 2012 and 2015, with Route 1 losing upwards of 40% of its ridership. Routes 3 and 4 also experienced substantial decreases in ridership. Only Route 2 ridership numbers remained stable. However, there has been a recent increase in ridership between 2016 and 2017, especially with Route 1 since the addition of Route 1A. The City implemented a mobile app for the Minibus that allows riders to track the location of buses in real time. Also, bike racks (two bikes) are provided on each Minibus.

### Existing Transit System

#### Major Issues Learned (Appendix pg. VIII)

- Transit service generally provides good coverage for both external and internal transit options
- Poor headways are provided for Minibus
- Benches and/or shelters are needed at well utilized bus stops along with real-time arrival dynamic message signs

### Exhibit 3 – Minibus Route Map



Source: City of Hallandale Beach Website

An analysis of the watershed for bus stops and transit coverage in the City is provided in the **Appendix F (page VIII)**. A quarter-mile walking distance from bus stops was applied. It was determined that the City is generally well covered by transit service. The areas that appear to be underserved are the Golden Isles, finger islands area south of NE 11<sup>th</sup> Street and east of the intercoastal waterway, and the southwest residential portion of the City (i.e. between SW 4<sup>th</sup> Avenue, SW 7<sup>th</sup> Street, SW 7<sup>th</sup> Avenue, and SW 3<sup>rd</sup> Street).

A review of bus stops along Hallandale Beach Boulevard and US-1 from the *Multimodal Mobility Plan* indicated that many locations lack bus shelters, which is related to the concern of residents regarding shade. At some locations, there is no seating either. Also, the bus stops do not provide real time arrival information, which is an attractive amenity.

## Previously Considered Transportation Improvements

As part of previous studies many transportation improvements were considered and recommended. It is important to understand what has been analyzed and if recommendations are still viable transportation improvement options. The **Appendix G (page IX)** includes a map of the previously considered and viable vehicular improvements from the MPO's *Commitment 2040 Long Range Transportation Plan, Multimodal Mobility Plan, and 2030 Transportation Master Plan*. Some of the previously considered and recommended transportation improvements from these studies are not discussed if these improvements are no longer believed to be a viable option based on discussions with the City.



## Commitment 2040 Long Range Transportation Plan

Below is a summary of the Affordable Projects and Unfunded Improvements listed in Broward MPO's *Commitment 2040 Long Range Transportation Plan*. Affordable projects include transportation improvements of high priority that can be funded with anticipated revenue. Unfunded Improvements is a "wish list" that is not currently funded, but is of high consideration if funding becomes available.

### Affordable Projects

- *FEC Railway crossing upgrades at SE 9<sup>th</sup> Street (\$15.6 million, 2031 – 2040)*: Providing an FEC Railway crossing at SE 9<sup>th</sup> Street and realigning SE 9<sup>th</sup> Street on the east side of the FEC Railway (requires ROW acquisition) creates a continuous route between the entrance to Gulfstream Park and SW 8<sup>th</sup> Avenue. This would improve connectivity and provide an alternative east-west route along a local road helping to relieve traffic on Hallandale Beach Boulevard.
- *SE 2<sup>nd</sup> Street between US-1 and Layne Boulevard construct new 2-lane roadway (\$56.6 million, 2031 – 2040)*: The construction of a new 2-lane roadway would improve connectivity, provide an alternative east-west route for the Golden Isles neighborhood, and reduce traffic on Hallandale Beach Boulevard. Acquisition of the right-of-way is required and is a major component of the estimate costs for this project.
- *SR A1A roadway reconstruction from Hallandale Beach Boulevard to Hollywood Boulevard to include multimodal features (\$16.1 million, 2026 – 2030)*: This improvement would enhance SR A1A for pedestrian and bicycle activity creating a safer multimodal environment.

### Unfunded Improvements

- Bicycle Projects
  - Bike lanes on SR A1A from HBB to Miami-Dade County Line (\$247,000)
- Pedestrian Projects (sidewalk installation and improvements)
  - SE 3<sup>rd</sup> Street Corridor Bypass – from US-1 to Dixie Highway (\$825,000)
  - SE 5<sup>th</sup> Street Corridor – from US 1 to Dixie Highway (\$825,000)
  - SE 7<sup>th</sup> Street Corridor – from US 1 to Dixie Highway (\$825,000)
  - Diplomat Parkway – from Washington Street to HBB (\$474,000)
  - NE 1<sup>st</sup> Avenue – from Pembroke Road to HBB (\$377,000)
  - Hallandale Beach Blvd – from Dixie Highway to NE 8<sup>th</sup> Avenue (\$94,000)
- Transit Projects
  - HBB corridor upgrades to support enhanced bus service from I-75 to SR A1A (\$84 million)

## 2030 Transportation Master Plan

- *Traffic study of Hallandale Beach Boulevard at Dixie Highway and US-1*: A traffic study is needed along Hallandale Beach Boulevard at the intersections of Dixie Highway and US-1 to determine the best and most cost-effective strategy to improve traffic conditions. The preferred solution should consider reducing traffic delays, queuing, providing vehicular and pedestrian connections, safety, the impact of added train activity along the FEC railway (i.e. Brightline and Tri-Rail Coastal Link), and community building. Potential solutions include grade separation interchange, at-grade intersection improvements, lane modifications and signal optimization.
- *NE 2<sup>nd</sup> Street Extension (\$2.06 Million)*: This transportation improvement was suggested as part of both the MPO's *Commitment 2040 Long Range Transportation Plan* under Affordable Projects and the *Multimodal Mobility Plan*. Again, the goal is to improve connectivity and provide an alternative east-west roadway option other than Hallandale Beach Boulevard.
- *SE 3<sup>rd</sup> Street Alternative Corridor Bypass from SE 1<sup>st</sup> Avenue to US-1 (\$475,000)*: Improvements along SE 3<sup>rd</sup> Street to make it a more attractive east-west alternate route.

- *Relocating the FEC Railway Crossing from SW/SE 11<sup>th</sup> Street to SW/SE 9<sup>th</sup> Street:* This improvement is suggested as part of the MPO 's *Commitment 2040 Long Range Transportation Plan* under Affordable Projects. Due to the close proximity of SE 11<sup>th</sup> Street and SE 9<sup>th</sup> Street, the SE 11<sup>th</sup> Street crossing would need to be eliminated if the SE 9<sup>th</sup> Street crossing is constructed.
- *Dixie Highway NE/SE. 1<sup>st</sup> Avenue Corridor Improvements (\$4,325,000):* Improvements include adding curb and gutter, re-striping of travel lanes and turning lanes, and implementing wayfinding signage to help promote more traffic along these underutilized roadways.

## Multimodal Mobility Plan

### Previously Considered Transportation Improvements

#### Major Needs Assessed (Appendix pg. IX)

- FEC Railway crossing at SE 9<sup>th</sup> Street, extension of NE 2<sup>nd</sup> Street, and improvements along Dixie Highway and NE/SE 1<sup>st</sup> Avenue are recommended among all three studies
- Emphasis on the following improvements:
  - Traffic conditions along Hallandale Beach Boulevard
  - Improving connectivity among local street network
  - Promoting alternative modes of transportation (i.e. bike, pedestrian, and transit)

- *Closure of SE 11<sup>th</sup> Street FEC Railway Crossing and Addition of SE 9<sup>th</sup> Street Crossing (\$1.7 Million):* This improvement is suggested among all three studies to create an uninterrupted alternative route to Gulfstream Park from SW 8<sup>th</sup> Avenue.

- *Corridor Improvements along Dixie Highway and NE/SE 1<sup>st</sup> Avenue (\$1,678,000):* Includes conversion of Dixie Highway from one-way to two-way to improve connectivity to local streets, which is currently inhibited from limited FEC Railway crossings. Also, due to surplus lane capacity along NE/SE 1<sup>st</sup> Avenue there is an opportunity for a road diet and the implementation of bike lanes.

- *NW 3<sup>rd</sup> Street Extension between NW 5<sup>th</sup> Terrace and NW 8<sup>th</sup> Avenue (\$1.45 Million):* Improves connectivity within local traffic network.

- *Hypothetical New Roadway SE 2<sup>nd</sup> Street between SE 14<sup>th</sup> Avenue and SE 10<sup>th</sup> Avenue (\$2.07 Million):* This improvement is

suggested among all three studies. Reasoning for improvement was stated above.

- *SE 4<sup>th</sup> Street Extension between SE 3<sup>rd</sup> Avenue and SE 4<sup>th</sup> Avenue (\$260,000):* Improves connectivity within local traffic network.
- *Realignment of Old Federal Highway to SE 4<sup>th</sup> Avenue (\$950,000):* This improvement is currently in-progress. It will allow for the redevelopment of Bluesten Park, which plans to include a community recreation building and additional outdoor sports fields. *Signal Progression Analysis on US-1 (\$30,000):* Includes conducting an analysis to improve the signal progressions along US-1. A project is in-progress to implement adaptive traffic control signals along US-1.
- *Signal Progression Analysis on Hallandale Beach Boulevard (\$30,000):* Includes conducting an analysis to improve the signal progressions along Hallandale Beach Boulevard. A project is in-progress to implement adaptive traffic control signals along Hallandale Beach Boulevard.
- *NE 3<sup>rd</sup> Street Improvements between NE 12<sup>th</sup> Avenue and NE 14<sup>th</sup> Avenue (\$690,000):* Improves connectivity within local traffic network.
- *Adopt TDM Policy from South Florida Commuter Services (\$5,000):* Promote alternative modes of transportation.

## In-Planning, Funded and In-Progress Transportation Projects

Several transportation improvement projects are currently in-progress or funded. The fact that a project is funded gives it a much higher probability of getting completed. A map of the in-progress and funded transportation projects in Hallandale Beach is provided in the **Appendix H (page X)**.

### In-Planning Projects

Transportation projects currently in the planning process in the City of Hallandale Beach are discussed below.

- *Sidewalk and Street Improvements along NW 3<sup>rd</sup> Street between NE 1<sup>st</sup> Avenue and NW 6<sup>th</sup> Avenue:* Sidewalk and street improvements are being implemented that include adding on-street parking, buffered bike lanes, continuous 5-foot wide sidewalks, pedestrian plazas, and ADA upgrades to curb ramps and detectible warning devices for all crosswalks and sidewalks. These improvements will enhance the vehicular and multimodal conditions for a local east-west route.

### Funded Projects

Below is a list of transportation improvement projects where all or partial funding has been received.

- *Add Turn Lanes at the Intersections of SR-9/I-95 and SR-824/Pembroke Road:* Projected to be completed in 2019 by FDOT, this project will improve traffic conditions for vehicles entering and exiting I-95 at Pembroke Road. This improvement will have a positive impact on traffic along I-95 and westbound traffic on Pembroke Road.
- *Sidewalk Upgrades and Sharrows along NW 4<sup>th</sup> Avenue between NW 3<sup>rd</sup> Street and Foster Road:* This is a minor improvement with funding from FDOT that will improve bike and sidewalk conditions.
- *Atlantic Shores Boulevard Complete Street Project between Diplomat Parkway and US-1 (partially funded):* Construction funding has been committed through development agreements to provide bike lanes, better landscaping, drainage, and to address the angled parking situation along Atlantic Shores Boulevard. This project also includes some traffic calming features such as bulb-outs, transit pads, and ADA upgrades to curb ramps and detectible warning devices for all crosswalks and sidewalks. Atlantic Shores Boulevard was identified as having traffic and pedestrian safety issues related to the orientation of parking and street width. This project would greatly improve safety, traffic conditions, and multimodal conditions and improve accessibility to a major activity center (i.e. Mardi Gras Casino).
- *Sidewalk Upgrades and Sharrows along SW/NW 8<sup>th</sup> Avenue between SW 11<sup>th</sup> Street and Pembroke Road:* As mentioned previously, SW/NW 8<sup>th</sup> Avenue is one of only four north-south streets that traverses through Hallandale Beach. It is a local street that currently is well utilized. The planned enhancements will improve multimodal conditions and help calm traffic.

### In-Progress Projects

Transportation projects currently in-progress in the City of Hallandale Beach are discussed below.

- *Realignment of Old Federal Highway from SE 7<sup>th</sup> Street to SE 5<sup>th</sup> Street:* This project was recommended as part of the *Multimodal Mobility Plan*, which includes the extension of SE 4<sup>th</sup> Avenue between SE 5<sup>th</sup> Street and SE 7<sup>th</sup> Street and the closure of Old Federal Highway between SE 8<sup>th</sup> Street and SE 5<sup>th</sup> Street. This project will improve safety at the intersection of SE 5<sup>th</sup> Street and Old Federal Highway and improve pedestrian conditions with new sidewalks. Also, this project will create greater green space (i.e. park) and development opportunities for this area.
- *Sidewalk and Street Improvements along NE 3<sup>rd</sup> Street between US-1 and NE 1<sup>st</sup> Avenue:* Sidewalk and street improvements are being implemented that include adding on-street parking, buffered

bike lanes, continuous 5-foot wide sidewalks, pedestrian plazas, and ADA upgrades to curb ramps and detectible warning devices for all crosswalks and sidewalks. These improvements will enhance the vehicular and multimodal conditions for a local east-west route.

- *Street and Pedestrian Improvements along NE 14<sup>th</sup> Avenue from Atlantic Shores Boulevard to Hallandale Beach Boulevard:* The scope of work includes mill and overlay entire roadway, provide bikes lanes on both sides of the street, curb installation, landscaping improvements, mid-block crossings, pedestrian enhancements (i.e. trash cans, benches, etc.), and the addition of two bus shelters. These improvements will help promote multimodal transportation (i.e. bike, transit, and walking).

## In-Planning, Funded, and Under Construction/In-Progress Transportation Projects

### List of Projects (Appendix pg. X)

- **In-Planning Projects**
  - Sidewalk and street improvements along NW 3<sup>rd</sup> Street between NE 1<sup>st</sup> Avenue and NW 6<sup>th</sup> Avenue
- **Funded Projects**
  - Add turn lanes at the intersections of SR-9/I-95 and SR-824/Pembroke Road
  - Sidewalk and sharrow upgrades along NW 4<sup>th</sup> Ave. and SW/NW 8<sup>th</sup> Ave.
  - Complete streets project on Atlantic Shores Blvd. would improve multimodal and safety conditions
- **In-Progress/Under Construction Projects**
  - Create green and developable space *via* realignment of Old Federal Highway from SE 7<sup>th</sup> Street to SE 5<sup>th</sup> Street
  - Multimodal improvements along NE/NW 3<sup>rd</sup> Street and NE 14<sup>th</sup> Avenue

## TRANSPORTATION IMPROVEMENTS

A series of transportation improvements are suggested over three planning horizons: short-term (0 to 5 years), mid-term (6 to 10 years), and long-term (11 to 20 years). Improving transportation conditions, promoting safety, interconnectivity, and alternative modes of transportation were considered in developing transportation improvements. Suggested improvements are divided between vehicular and multimodal improvements. Vehicular improvements concentrate primarily on improving traffic conditions for vehicles. Multimodal improvements are geared towards promoting alternative modes of transportation. These recommendations form the framework of an implementation plan to improve transportation conditions and mobility throughout the City.

### Vehicular Improvements

In **Appendix I** is a map (**Appendix I - page XI**) and table (**Appendix I – page XII**) that shows the location and provides a summary of the suggested vehicular improvements. The summary of suggested vehicular improvements table includes the phase, location, description, goal of improvement, planning level cost estimate and jurisdiction(s) responsible. To determine the cost per section of roadway take the total cost and multiply by the ratio of the specific section and the total project length.



The *BODR* identified areas where roadway standards are not met; roadways are in need of new pavement markings, landscape and streetscape improvements; and areas with deficient street lighting. Per the *BODR*, the total cost for suggested roadway repaving, pavement markings, and curbing for the entire Hallandale Beach street network is approximately \$45 million. To improve all landscaping, hardscape and streetscape elements (i.e. lighting, street furniture, pavers, and tree grates), a total cost of approximately \$30 million is estimated. It is suggested that these roadway, landscape, hardscape and streetscape improvements are budgeted over a 20-year period, which equates to an annual budget of \$3.75 million per year.

## Short-Term Improvements

Short-term improvements are less complex projects that can be completed within the next 5 years. These projects concentrate on creating interconnectivity among the local street network and improving traffic conditions with less capital-intensive investment. Since there are many unknowns in the transportation industry today regarding the impact of new transit service (i.e. Brightline and Tri-Rail Coast Link), rideshare, and autonomous vehicles, conservative and less costly transportation and parking improvements should be implemented in the short-term, unless large infrastructure, capital intensive improvements are necessary.

As part of the Multimodal Mobility Plan, signal progression analyses were recommended to assess if the current signal timings along US-1 and Hallandale Beach Boulevard are operating at maximum capacity. The City, in conjunction with Broward County, has recently received funding for the implementation of adaptive traffic control signals along Hallandale Beach Boulevard and US-1, which allow traffic signal timings to change in response to traffic demand. In addition, it is suggested that Broward County implement adaptive traffic signals along Pembroke Road between I-95 and US-1, and along A1A south of Hallandale Beach Boulevard.

Completing the local street grid will help relieve congestion along primary arterials. To improve interconnectivity among the local roadway network the following street extensions are suggested below and shown on **page XI of Appendix I**.

- *NW 3<sup>rd</sup> Street Extension between NW 5<sup>th</sup> Terrace and NW 8<sup>th</sup> Avenue:* Sidewalk and street improvements are currently in-progress along NE 3<sup>rd</sup> Street between US-1 and NE 1<sup>st</sup> Avenue, which will make this a more attractive east-west alternative route. Extending the street to NW 8<sup>th</sup> Avenue will make it that much more functional and help reduce traffic along Pembroke Road and Hallandale Beach Boulevard.
- *SE 4<sup>th</sup> Street Extension between SE 3<sup>rd</sup> Avenue and SE 4<sup>th</sup> Avenue:* This improvement will provide a consistent connection between SE 4<sup>th</sup> Avenue and SE 1<sup>st</sup> Avenue along SE 4<sup>th</sup> Street.
- *SE 4<sup>th</sup> Avenue Extension between SE 7<sup>th</sup> Street and SE 8<sup>th</sup> Street:* With the current realignment of Old Federal Highway, which includes extending SE 4<sup>th</sup> Avenue between SE 5<sup>th</sup> Street and SE 7<sup>th</sup> Street, this additional connection will provide a consistent connection of SE 4<sup>th</sup> Avenue between SE 3<sup>rd</sup> Street and SE 9<sup>th</sup> Street.

The intersections of Hallandale Beach Boulevard with Dixie Highway and NE/SE 1<sup>st</sup> Avenue have historically been a hot spot, and the intersections were recently modified to prevent vehicles from turning left from Hallandale Beach Boulevard onto Dixie Highway or NE 1<sup>st</sup> Avenue. This intersection is projected to worsen from traffic growth associated from future development projects in Hallandale Beach and the implementation of Brightline train service. Also, due to the limited number of FEC Railway crossings there has been discussion of converting Dixie Highway into a two-way street to improve connectivity and access to local streets. A traffic study is recommended to determine the preferred intersection design at Hallandale Beach Boulevard at Dixie Highway and NE/SE 1<sup>st</sup> Avenue, and the street layout along Dixie Highway and NE/SE 1<sup>st</sup> Avenue to improve traffic conditions, connectivity, and multimodal activity.

### Mid-Term Improvements

The suggested mid-term improvements are more costly and complex projects that should be targeted for implementation between 2023 and 2027. Suggested improvements include extending SE 2<sup>nd</sup> Street, adding an FEC Railway crossing at SE/SW 9<sup>th</sup> Street, and constructing an interceptor parking structure adjacent to the proposed Tri-Rail Coastal Link station.

Both the extension of SE 2<sup>nd</sup> Street between US-1 and Layne Boulevard and the construction of an FEC Railway crossing at SE/SW 9<sup>th</sup> Street were recommended in all three previous transportation studies (i.e. *Multimodal Mobility Plan*, *2030 Transportation Master Plan*, and MPO's *Commitment 2040 Long Range Transportation Plan*). Each of these projects will improve interconnectivity and provide an alternative route to help relieve traffic on Hallandale Beach Boulevard. However, both projects have complexities. The acquisition of right-of-way from Gulfstream Park is required to extend SE 2<sup>nd</sup> Street, which may be very costly. Adding a new FEC Railway crossing at SE/SW 9<sup>th</sup> Street will likely require the closure of an existing crossing, such as SE/SW 11<sup>th</sup> Street. In addition, right-of-way acquisition may be required to realign SE 9<sup>th</sup> Street at the FEC Railway crossing resulting in a more complex and costly project.

The construction of an interceptor parking structure at SW 4<sup>th</sup> Street and Dixie Highway with shuttle service serves several purposes. It can provide off-site parking for Gulfstream Park and the beach during large events or high activity days. A parking structure in this area can also serve as an economic development tool. Much development in Hallandale Beach is moving into the central areas along primary corridors. The Dixie Highway corridor south of Hallandale Beach Boulevard currently has minimal commercial and development activity. The construction of a public parking structure could help spur development in the area. The City should consider finding a private development partner and forming a public-private partnership to help finance the parking structure. Lastly, the parking structure could serve as a park-and-ride for the potential Tri-Rail Coastal Link station proposed near SW 4<sup>th</sup> Street.

### Long-Term Improvements

Long-term improvements are the most capital intensive and complex and would have the largest impact on improving traffic conditions along primary arterials, especially Hallandale Beach Boulevard. Those improvements should be targeted for implementation between 2028 and 2038. It is important to note that these large infrastructure improvements may not be necessary due to the potential reduction in traffic from the implementation of new transit service, impact of rideshare services, and introduction of autonomous vehicles. However, there is no definitive way of knowing if any of these factors will ever take shape, so it is suggested that the City begins considering these long-term improvements. However, prior to planning for these capital intensive and logistically difficult improvements, other intersection improvements should be considered.

Long-term vehicular improvements include:

- Hallandale Beach Boulevard FEC Railway,
- Hallandale Beach Boulevard to US-1 southbound, and
- Extending Layne Boulevard from Holiday Drive to the intersection of NE 213<sup>th</sup> Street and NE 34<sup>th</sup> Avenue.

The two most deficient intersections along Hallandale Beach Boulevard are at Dixie Highway and NE/SE 1<sup>st</sup> Avenue and at US-1. As discussed previously, Hallandale Beach Boulevard is the only form of access to the beach, and one of only two connections west of I-95, so most of the traffic filters onto Hallandale Beach Boulevard. Intersection improvements are needed at these two locations and should be based on a

formal traffic study. Improvements should reduce congestion, support future traffic growth, and help mitigate the impact of additional train service along the FEC Railway. Grade separated, flyover improvements are exceptionally costly, logistically complex, would require right-of-way acquisition, and would need to be advanced by FDOT. Thus, other intersection improvements should be considered and studied in the interim to help eliminate the need for grade-separated capital-intensive projects.

There is currently no roadway connection for traffic from the Golden Isles neighborhood to travel south of Holiday Drive from Hallandale Beach into Miami-Dade County. Traffic from Golden Isles is forced to travel north and filter onto Hallandale Beach Boulevard in order to eventually travel south. To help relieve traffic on both Hallandale Beach Boulevard and US-1 it is suggested that Layne Boulevard is extended from Holiday Drive to the intersection of NE 213<sup>th</sup> Street and NE 34<sup>th</sup> Avenue. This improvement will require a partnership with the City of Aventura and potential land acquisition from Gulfstream Park.

## Multimodal Improvements

In the **Appendix J** is a map (**Appendix J - page XIII**) and a table (**Appendix J – pages XIV - XVI**) that provides a summary of the suggested multimodal improvements. This includes the phase, location, description, goal of improvement, planning level cost estimate and jurisdiction(s) responsible. To determine the cost per section of roadway take the total cost and divide by the linear square feet of the section. To determine the cost per section of roadway take the total cost and multiply by the ratio of the specific section and the total project length.

As discussed previously, the *BODR* identified approximately 255,091 linear feet of missing sidewalk and 2,153 linear feet of sidewalk in need of repair. Also, there are extensive improvements needed to meet ADA accessibility standards, including 587 ramps in need of repair and 453 ramps that require truncated domes. In terms of addressing these improvements, priority should be placed on established roadway projects that would trigger Title II, followed by locations within 1,000 feet of bus stops and then by road hierarchy. A total budget of \$7.9 million was estimated in the *BODR* to install new and repair broken sidewalk, ADA ramps, and truncated domes in Hallandale Beach, including the Golden Isles neighborhood. It is suggested that these repairs are budgeted over a 20-year period, which would equate to a budget of approximately \$395,000 per year.

## Short-Term Improvements

Short-term complete streets improvements are less complex and capital-intensive projects that concentrate on enhancing existing bicycle lanes, incorporating multimodal improvements with suggested street extensions, and safety. The target implementation is within the next 5 years.

Pembroke Road, Hallandale Beach Boulevard, and US-1 all currently have basic 4-foot, white-striped bike lanes. These bike lanes are not very attractive to a beginner or intermediate level bicyclist, especially on primary arterials with heavy traffic. Simple improvements that can be implemented to increase the safety, visibility, and attractiveness of these bike lanes is by painting them green, installing bike boxes, and adding markings.

There are current street improvements planned along NE/NW 3<sup>rd</sup> Street between US-1 and NW 6<sup>th</sup> Avenue that include adding on-street parking, buffered bike lanes, and providing continuous 5-foot wide sidewalks. As part of the suggested transportation improvements it was suggested that NW 3<sup>rd</sup> Street is extended between NW 5<sup>th</sup> Terrace and NW 8<sup>th</sup> Avenue. Along with this road extension, buffered bike lanes and sidewalks should be provided in both directions along NW 3<sup>rd</sup> Street.

As discussed previously, construction funding has been committed through development agreements to provide bike lanes, better landscaping, drainage, and to address the angled parking situation along Atlantic

Shores Boulevard between Diplomat Parkway and US-1. Due to traffic and safety issues in this area, and that since this corridor provides access to a major activity center (i.e. Maris Gras Casino), it is suggested that this project be implemented.

There is currently parallel, angled, and 90-degree on-street public parking established throughout Hallandale Beach. As discussed previously, on-street parking is a vital asset to support residents and commercial activity. It is suggested that all on-street parking is retained and that new on-street parking opportunities are explored and added in the RAC area to support economic development and residents. The orientation of 90-degree and angled head-in parking should be reviewed for safety, as these parking orientations can cause drivers to blindly back out into a roadway. Safer on-street parking design options include parallel and back-in angled parking, which improve visibility of oncoming vehicles, pedestrians and bicyclists. On-street parking should be added along NE/SE 1<sup>st</sup> Avenue along with multimodal improvements, which will be discussed later in the report. Prior to constructing a centralized interceptor garage, as suggested as part of the mid-term improvements, park-and-ride lots with shuttle service should be implemented. As discussed with City of Hallandale Beach staff, potential park-and-ride locations include: Winn Dixie, Mardi Gras, Gulfstream Park, and Arcade Plaza. The Minibus currently stops at some of these locations. Park-and-ride lots could serve the Tri-Rail, beach, residential overflow, City Hall, and large events. It is suggested that a comprehensive analysis of on-street parking and park-and-ride opportunities is conducted to identify where parking should be eliminated or added and how parking should be managed.

As identified in the BODR study, there is approximately fifty (50) miles of missing sidewalk within the City maintained Right-of-Way, the sidewalks typically vary in width from four (4) feet to five (5) feet, there is a need for 255,091 linear feet of new sidewalk construction, 2,124 linear feet of damaged sidewalks to be replaced, 587 new Americans with Disabilities Act (ADA) ramps, and 453 new truncated domes at ADA ramps. The *BODR* report includes a figure that shows the existing sidewalk network and where it is damaged. The prioritization of sidewalk repairs and installation of new sidewalk should consider its location and the extent of damage. In terms of location, sidewalk repairs should be prioritized by the street network classification (i.e. 1. arterial, 2. collector, 3. local, etc.), proximity to a bus stop(s), and proximity to major activity centers (i.e. school, Gulfstream Park, Mardi Gras Casino, etc.). Next criteria to determine sidewalk repairs/installation should be based on whether there is no sidewalk provided or an easily accessible alternative route. There are a number of areas where no sidewalk is provided or there is a gap in coverage. The design of existing sidewalks should be considered to determine where replacement installations are performed. All sidewalks should meet the Public Right-of-Way Accessibility Guidelines (PROWAG) which requires a maximum cross slope of 2% and minimum width of 48 inches. After it has been established that the sidewalk meets the PROWAG guidelines the condition of the sidewalks should be assessed. The greater the cracks, drop-offs, and ponding area the higher the priority for repair. It is suggested that a comprehensive assessment of the sidewalks should be conducted to determine a prioritization list of installation, replacement and repair sidewalk projects.

## Mid-Term Improvements

Mid-term improvements are somewhat more complex and capital intensive and should be targeted to be completed between 2023 and 2027. The suggested projects include road diets, new bike lanes, new sidewalks, and a new shared-use path.

Currently, the bike lanes along SR A1A end south of the South City Beach Park and transition to sharrows. There is additional lane capacity along SR A1A that would allow a road diet by repurposing a lane to support buffered bike lanes. There are no bike lanes along either NE/SE 1<sup>st</sup> Avenue or Dixie Highway. If Dixie Highway is converted to a 2-way street there would also be additional capacity along SE 1st Avenue, which could be repurposed as buffered bike lanes or a cycle track. Repurposing traffic lanes for bike lanes may



be difficult to get public approval, especially along SR A1A. However, it should be explored as an option. Another option is to construct a multi-use trail adjacent to the FEC Railway line along the Dixie Highway/1<sup>st</sup> Avenue corridor. Conceptual plans for a Dixie Highway multi-use trail were recently developed for the City of Hollywood between Pembroke Road and Sheridan Street.

SE/SW 3<sup>rd</sup> Street is a well-connected east-west local roadway that provides direct access to Gulfstream Park. It is suggested that sidewalk and bike improvements are implemented along SE/SW 3<sup>rd</sup> Street between US-1 and SW 7<sup>th</sup> Avenue.

Diana Drive is an east-west local street that provides access to a number of multi-family residential buildings. The roadway primarily serves traffic, parking, and vehicular access. There are minimal pedestrian amenities. It is suggested that the following improvements are implemented along Diana Drive between Golden Isles Drive and SE 26<sup>th</sup> Avenue: sidewalks provided on each side of the road, traffic calming, and drainage and flood mitigation features. These improvements will enhance the walkability and safety for the many people living in the area.

SW 11<sup>th</sup> Street is a low traffic east-west local street that is well connected. SW 11<sup>th</sup> Street could serve as a great route for local bicyclists. There is currently a pedestrian path on the south side of SW 11<sup>th</sup> Street between SW 11<sup>th</sup> Avenue and SW 7<sup>th</sup> Terrace. This pedestrian path should be widened and striped as a shared-use path so that it can safely be used by both pedestrians and bicyclists. East of SW 7<sup>th</sup> Terrace, sharrows should be implemented on SW 11<sup>th</sup> Avenue extending to Dixie Highway.

## Long-Term Improvements

Long-term improvements include a variety of improvements that will help enhance bike and pedestrian connectivity along the local street network. The target to complete these projects are between 2028 and 2037. The following improvements are suggested:

- *Three Islands Boulevard between Hallandale Beach Boulevard and NE 11<sup>th</sup> Street:* Potential road diet by repurposing traffic lanes with buffered bike lanes, which will need to be studied to ensure that the roadway can effectively support traffic with less capacity. This type of project will receive heavy push back from the local neighborhood.
- *Layne Boulevard between Holiday Drive and NE 213<sup>th</sup> Street:* As part of the suggested road extension of Layne Boulevard, sidewalk and bike lanes improvements are recommended in both directions, which would continue the existing bike and pedestrian paths along Layne Boulevard.
- *SW/NW 8<sup>th</sup> Avenue between Countyline Road and Pembroke Road:* Add bike lanes and widen sidewalks in each direction along SW/NW 8<sup>th</sup> Avenue, which will require widening the street thus making this a costly project.,
- *Diplomat Parkway between Hallandale Beach Boulevard and NE 11<sup>th</sup> Street:* A shared-use path for bicycles and pedestrians is recommended on the west side of the street.
- *Parkview Drive between Three Islands Boulevard and NE 11<sup>th</sup> Street:* Implement sharrows in both directions along Parkview Drive.
- Upgrade the Minibus trolleys to improve fuel efficiency and increase capacity.
- Increase Minibus frequency/headways to 30 minutes or less for each bus stop.

## FUNDING STRATEGIES

Funding is an essential component to implementation. There are a wide variety of resources available to finance the suggested transportation improvements between federal, state, county, and private agencies. The best funding options are described below for the vehicular and complete streets improvements.

### USDOT

- *Better Utilizing Investments to Leverage Development (BUILD)* Transportation Discretionary Grants program has \$1.5 billion available in discretionary grant funding. This grant is for investments in roads, bridges, transit, rail, ports or intermodal transportation infrastructure and are awarded on a competitive basis for projects that will have a significant local or regional impact. The primary projects that BUILD can help fund include the larger long-term improvement projects and the interceptor parking structure. <https://www.transportation.gov/BUILDgrants>
- *Transportation Alternatives (TA)* provides funds for smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, and safe routes to schools projects. The national total of funds is \$850 million for 2018-2020. TA funding can be applied for complete streets projects. <https://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm>
- *Surface Transportation Block Grant (STBG) Program* has the most flexible eligibilities among all Federal-aid highway programs to best address state and local transportation needs. The Federal Highway Administration (FHWA) appropriates lump sum funding to each state to distribute based on a percentage per law. The State of Florida was provided approximately \$590 million from STBG approved projects. Most STBG projects cannot be on local roads or rural minor collectors, however, there are exceptions. Funding may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Other eligible projects under STBG include transit safety improvements, establishing public-private partnerships, and most transportation control measures. <https://www.fhwa.dot.gov/fastact/factsheets/stbgfs.cfm>
- *Highway Safety Improvement Program (HSIP)* provides funding to improve safety and achieve a reduction in traffic fatalities and serious injuries on all public roads. The FHWA appropriates lump sum funding to each state to distribute based on a percentage per law. The State of Florida was provided approximately \$120 million for HSIP approved projects. Funding could be applied to improve safety in high accident areas of Hallandale Beach (i.e. Hallandale Beach Boulevard). <https://safety.fhwa.dot.gov/hsip/>
- *Congestion Mitigation and Air Quality (CMAQ) Improvement Program* provides funding to help meet the requirements of the Clean Air Act by reducing congestion and improving air quality for areas that do not meet the National Ambient Air Quality Standards and for former nonattainment areas that are now in compliance. The FHWA appropriates lump sum funding to each State to appropriate based on a percentage per law. The State of Florida was provided approximately \$14 million for CMAQ approved projects. Since Broward County is a former nonattainment area, funds can be applied for ongoing maintenance. CMAQ funding could be applied for adaptive control signals along Hallandale Beach Boulevard, US-1, and Pembroke Road; and infrastructure improvements to the transit system. <https://www.fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm>
- *Recreational Trails Program* provides funds to the state to develop and maintain both motorized and nonmotorized recreational facilities and trail-related facilities. Approximately, \$2.6 million has been set-aside from the STBG Program. This program could potentially be useful in funding recreational trails along SW 11<sup>th</sup> Street and the Dixie Highway/1<sup>st</sup> Avenue corridor. [https://www.fhwa.dot.gov/environment/recreational\\_trails/](https://www.fhwa.dot.gov/environment/recreational_trails/)

## MPO

- *Complete Streets and other Localized Initiatives Program (CSLIP)* is administered by the Broward MPO and provides funding for small multimodal transportation projects in Broward County. This program can fund complete streets projects, traffic calming, intersection improvements, ADA upgrades, mobility hubs, bus shelters, bike racks, and technology advancements. Funds awarded are provided to FDOT to construct the project. Projects are evaluated based on objective criteria and consistency with Commitment 2040. A variety of projects in Hallandale Beach could apply CSLIP funding, especially projects recommended in MPO's *Commitment 2040 Long Range Transportation Plan*. <http://www.browardmpo.org/index.php/major-functions/complete-streets-localized-initiatives-program>
- *Unified Planning Work Program (UPWP)* is the MPO's operational budget which is created every two (2) years, which incorporates and describes all transportation planning activities and associated funding (budget) for the MPO and its planning partners in Broward. The UPWP is developed by Broward MPO staff in consultation with partner agencies, municipal staff and input from local citizens and stakeholders. The information collected is incorporated into the UPWP and budgeted accordingly. This document is then submitted to FDOT, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) for review, comment and final acceptance. <http://www.browardmpo.org/index.php/about-the-mpo/budgets-upwp>
- *Mobility Hubs* are areas designated by the MPO that provide connections to transit and have high development potential. As part of the Long Range Transportation Plan the MPO has designated mobility hubs in downtown Fort Lauderdale, at Hollywood Boulevard and State Road 7, in Pembroke Pines, Plantation, and Cypress Creek. Planned improvements include enhancing pedestrian connections, streetscape upgrades, supporting multi-modal transportation, and safety. <http://www.browardmpo.org/index.php/mobility-hubs-overview>
- *Complete Streets Master Plan* is a prioritized list of projects based on technical, data-driven analysis and community input. The Master Plan provided opportunities for transportation partners' input throughout the duration of its development such as the Project Advisory Committee (PAC). <http://www.browardmpo.org/index.php/csmp-overview>
- *Transportation Improvement Program (TIP)* 2018/19 includes 532 projects and a total investment of \$5.2 billion dollars of transportation projects in Broward. The TIP is a comprehensive list of federal, state and locally funded transportation projects. All modes of transportation are included in the TIP. The Florida Department of Transportation's Work Program is used to produce the Broward MPO's five-year TIP. The TIP is approved by the MPO's Board every year in July. It is essential for City of Hallandale Beach representatives to meet with the MPO and present prioritized transportation projects to make it on the TIP. <http://www.browardmpo.org/index.php/carousel-articles/296-transportation-improvement-program-tip>

## FDOT

- *Shared-Use Nonmotorized (SUN) Trail Network* provides funding for the development of a statewide system of paved multi-use trails for bicyclists and pedestrians. Funding from this program could be applied to potential multi-use trails along Dixie Highway, NE/SE 1<sup>st</sup> Avenue, and SW 11<sup>th</sup> Street. <http://www.floridasuntrail.com/>
- *Resurfacing Program (3R)* deals with resurfacing, restoration, and rehabilitation (RRR) of existing State roadways. Projects are funded under FDOT's Pavement Resurfacing program and funds are

allocated to each FDOT District based on a fixed amount per lane mile to be resurfaced. The resurfacing of State Roads in Hallandale Beach could be funded through this program.

<http://www.fdot.gov/roadway/ppmmanual/2012/volume1/chap25.pdf>

- *Safe Routes to School (SRTS)* is a program dedicated to improving the ability of students (K-12) to walk and bicycle to school safely through the improvement of pedestrian and bicycle facilities and traffic control devices. A K-12 school needs to be within a half mile of the project. There are a number of schools in Hallandale Beach that could take advantage of this program to help fund complete street projects. <http://www.srtsfl.org>
- *Park and Ride Lot Program* supports the purchase or lease of land for park and ride facilities. This could be applied for funding the interceptor parking structure. <http://www.fdot.gov/multimodal/Grants/D4/Grants%20Guide.pdf>
- *Transit Corridor Program* is aimed at reducing congestion and improving the capacity by supporting transit services. Eligible projects include, but are not limited to transit corridor plans, creation of new or expanded transit services, bus pull out lanes, high-occupancy vehicle (HOV) lanes, capital acquisition of high-occupancy vehicles, and marketing of transit. This program could help fund transit improvements and a park-and-ride facility. <http://www.fdot.gov/multimodal/Grants/D4/Grants%20Guide.pdf>
- *Intermodal Development Program* provides funding for projects that promote the intermodal or multimodal movement of people and goods. These projects may include major capital investments in dedicated bus lanes, public rail, and access to multimodal terminals. Funding from this program could be applied to transit improvements, a multimodal hub, and potentially a dedicated transit route to the Tri-Rail station. <http://www.fdot.gov/multimodal/Grants/D4/Grants%20Guide.pdf>

## Private

- *Rails to Trails* is a program sponsored by the Doppelt Family Trail Development Fund that supports organizations and local governments that are implementing projects to build and improve multi-use trails. Under the Doppelt Family Trail Development Fund, RTC will award approximately \$85,000 per year, distributed among several qualifying projects, through a competitive process. This could potentially be used to develop a trail along the Dixie Highway/1<sup>st</sup> Avenue corridor. <https://www.railstotrails.org/our-work/doppelt-family-trail-development-fund/>
- *Bike Florida* is challenging local governments, school districts and non-profit bicycle advocacy groups and other non-profit community organizations to come forward with innovative proposals to improve cycling in their communities. It offers an inaugural \$25,000 grant and that applicants much match at least 75% of grant in cash. <https://sharetheroad.org/challenge-grant/>

## Broward County

- *Penny Surtax* was recently enacted on November 6, 2018, which would levy a 1% local option sales tax funding countywide transportation system improvement. Revenue generated from this tax would be applied to improve connectivity, relieve traffic congestion, improve transit service, and expand the availability of multimodal transportation. This program could potentially fund a wide variety of transportation projects in the City. <http://www.broward.org/pennyfortransportation/Pages/default.aspx>
- *County Incentive Grant Program (CIGP)* is a State-funded program that provides funding to counties for transportation improvements to the State highway system or for local transportation facilities that relieve congestion on the State highway system. More than \$2 million and almost \$6 million have been budgeted for transportation projects for years 20/21 and 21/22, respectively. It is



up to Broward County to prioritize projects and submit applications to FDOT.  
<http://www.fdot.gov/programmanagement/LP/CIGP/Default.shtm>

- *Broward County Transit (BCT) Grant* provides \$15 per service hour as supplemental funding for all community bus services. This helps fund the Minibus. Financial assistance is provided through an interlocal agreement (ILA) and has a 5-year term which is up for renewal in 2019.  
<http://www.broward.org/GoGreen/GreenGovernment/Pages/Transportation.aspx>
- *Broward County Inter-Local Traffic Engineering Agreement* is in place between Broward County and the City of Hallandale Beach. This agreement transfers the maintenance and financial responsibility to maintain and install stop and yield signs, traffic signals, and various other street designations. This agreement negates the City from the labor and financial responsibility to repair, maintain, and install these traffic design and control features.

## City of Hallandale Beach

- *Capital Improvement Projects (CIP) Budget* is managed by the Department of Public Works as well as the Office of Capital Improvements. This draws from the General Budget and other sources. One major source is the Transportation Fund which generates revenue from a road & bridge tax, motor fuel tax, Minibus, and administrative charges. One potential source of additional revenue that should be considered by the City is charging for on- and off-street parking. This will require the installation of revenue control equipment and establishing a management/operation plan. A CIP 5-year plan needs to be developed that considers annual budgeting for planned mobility projects.



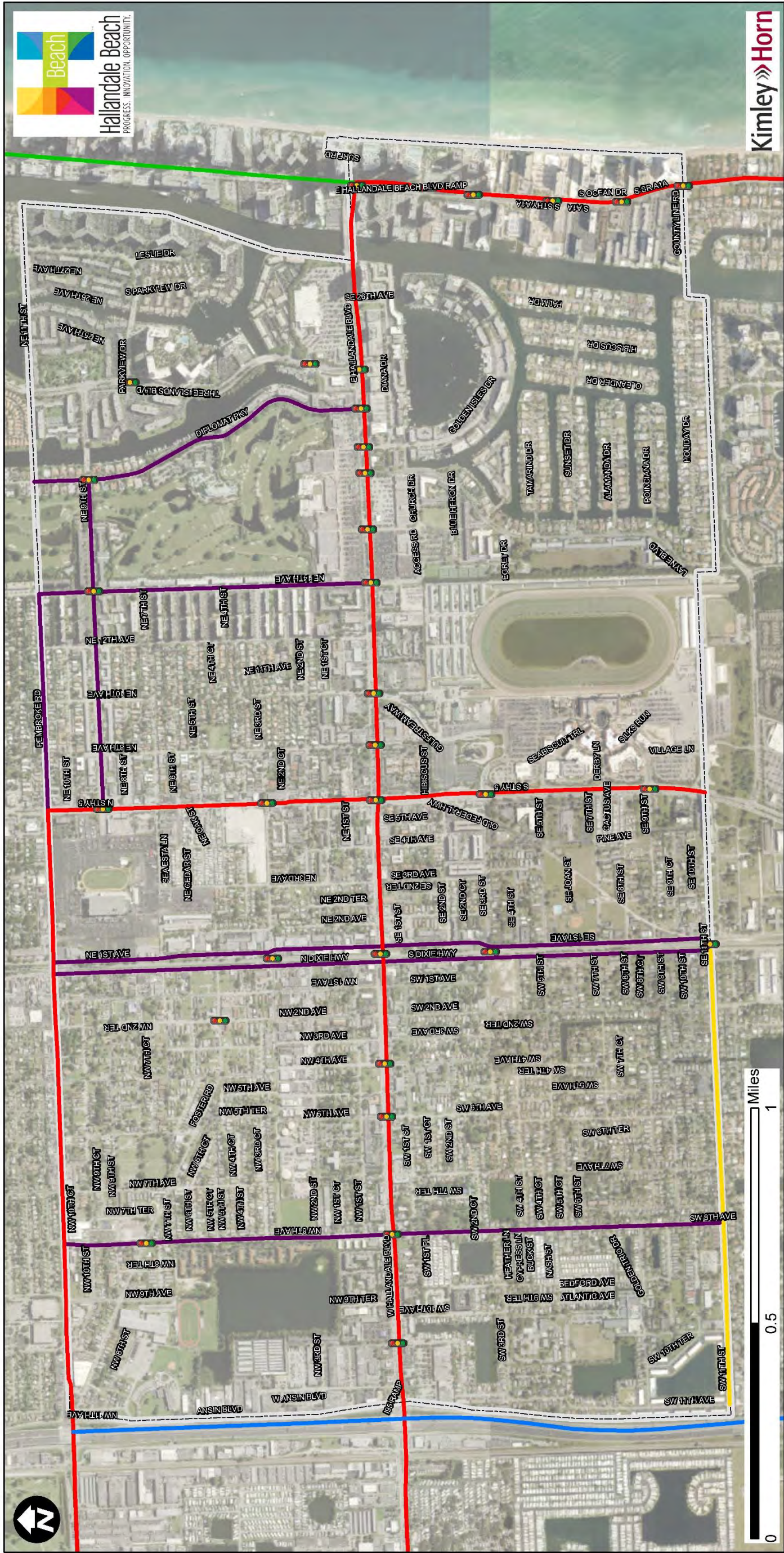
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX A



## City of Hallandale Beach Mobility Plan Roadmap - FDOT Functional Classifications



Source: AASHTO A Policy on Geometric Design of Highways and Streets (2011, 6th Edition)





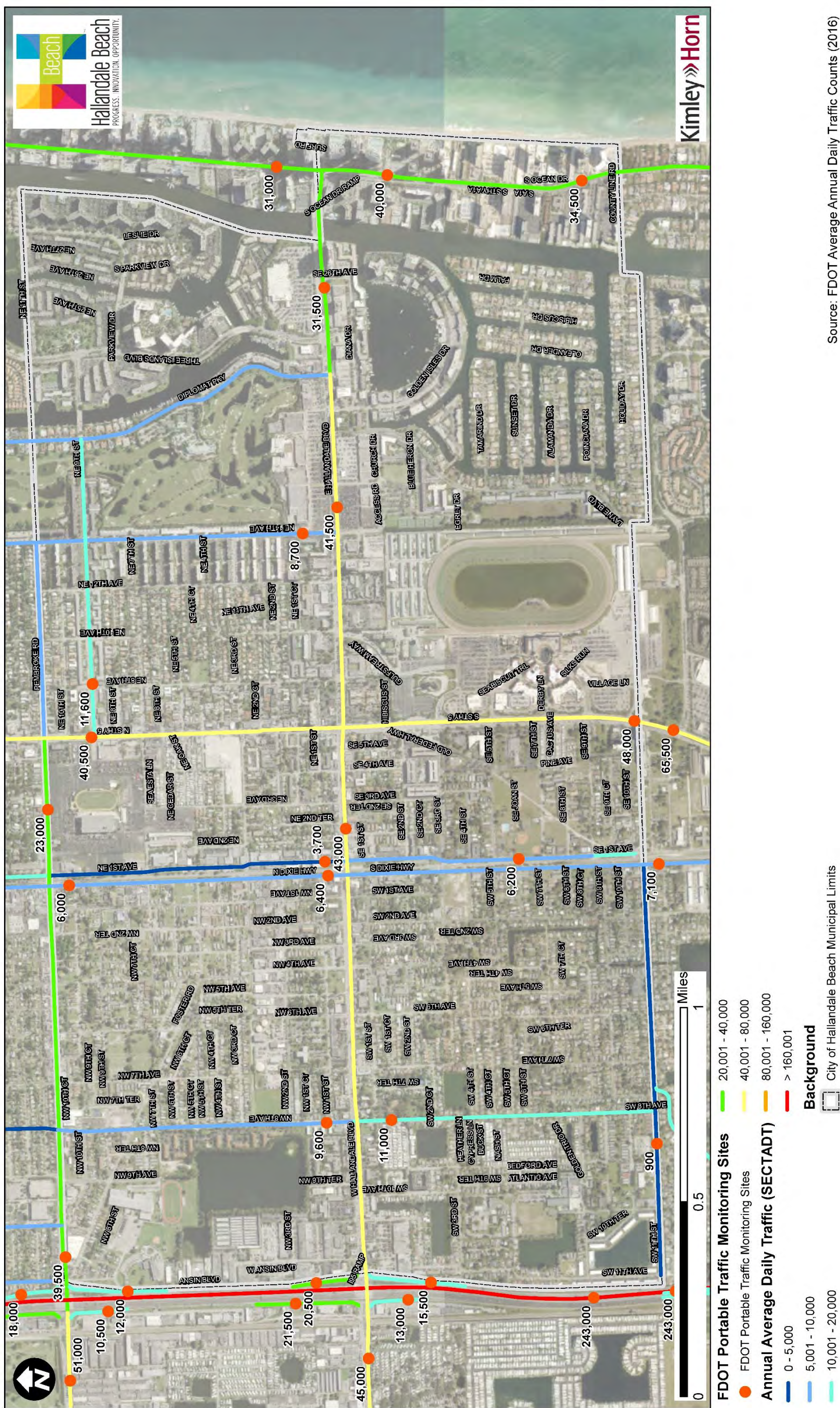
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX B



# City of Hallandale Beach Mobility Plan Roadmap - Annual Average Daily Traffic (2017)







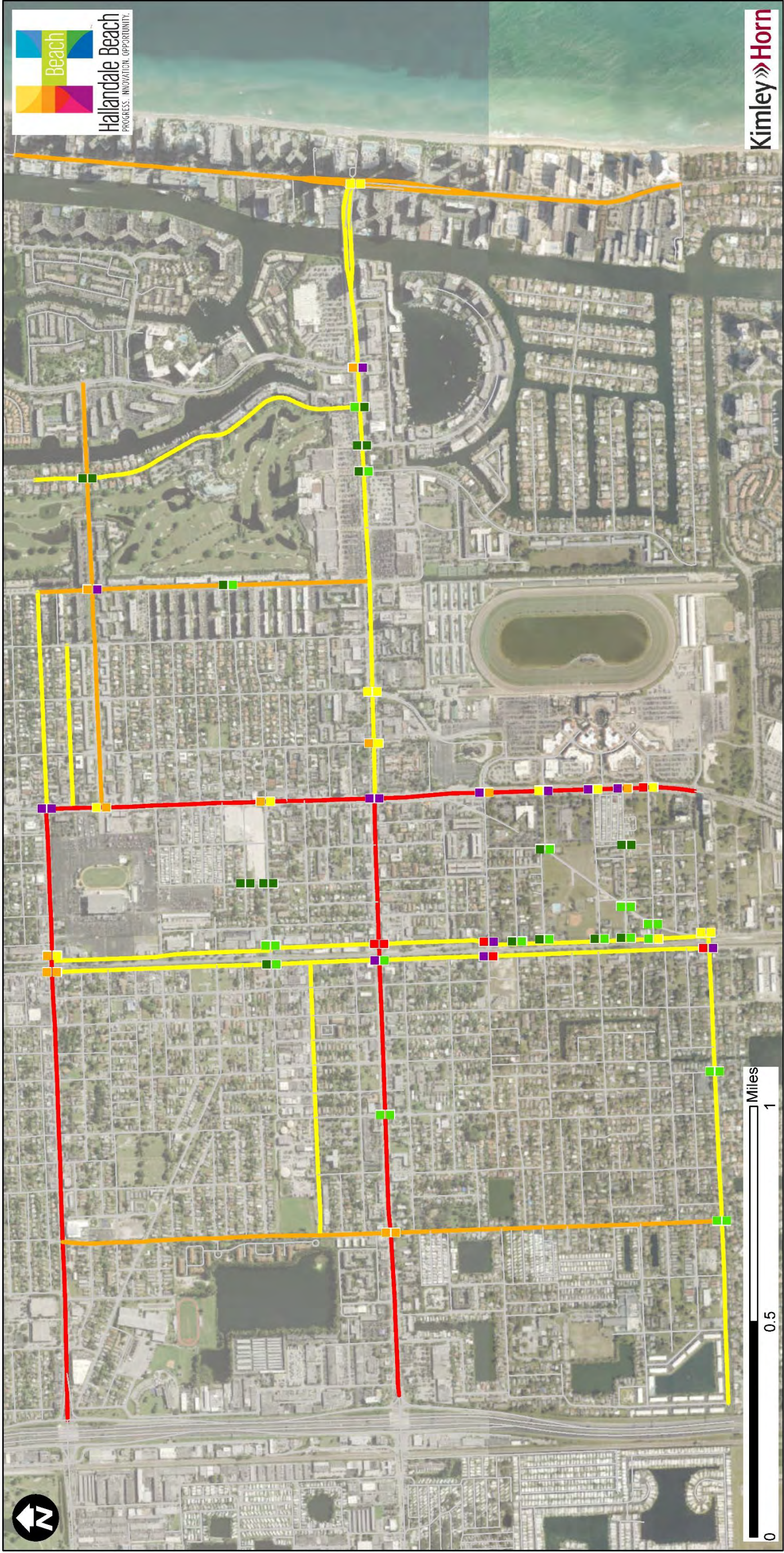
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX C

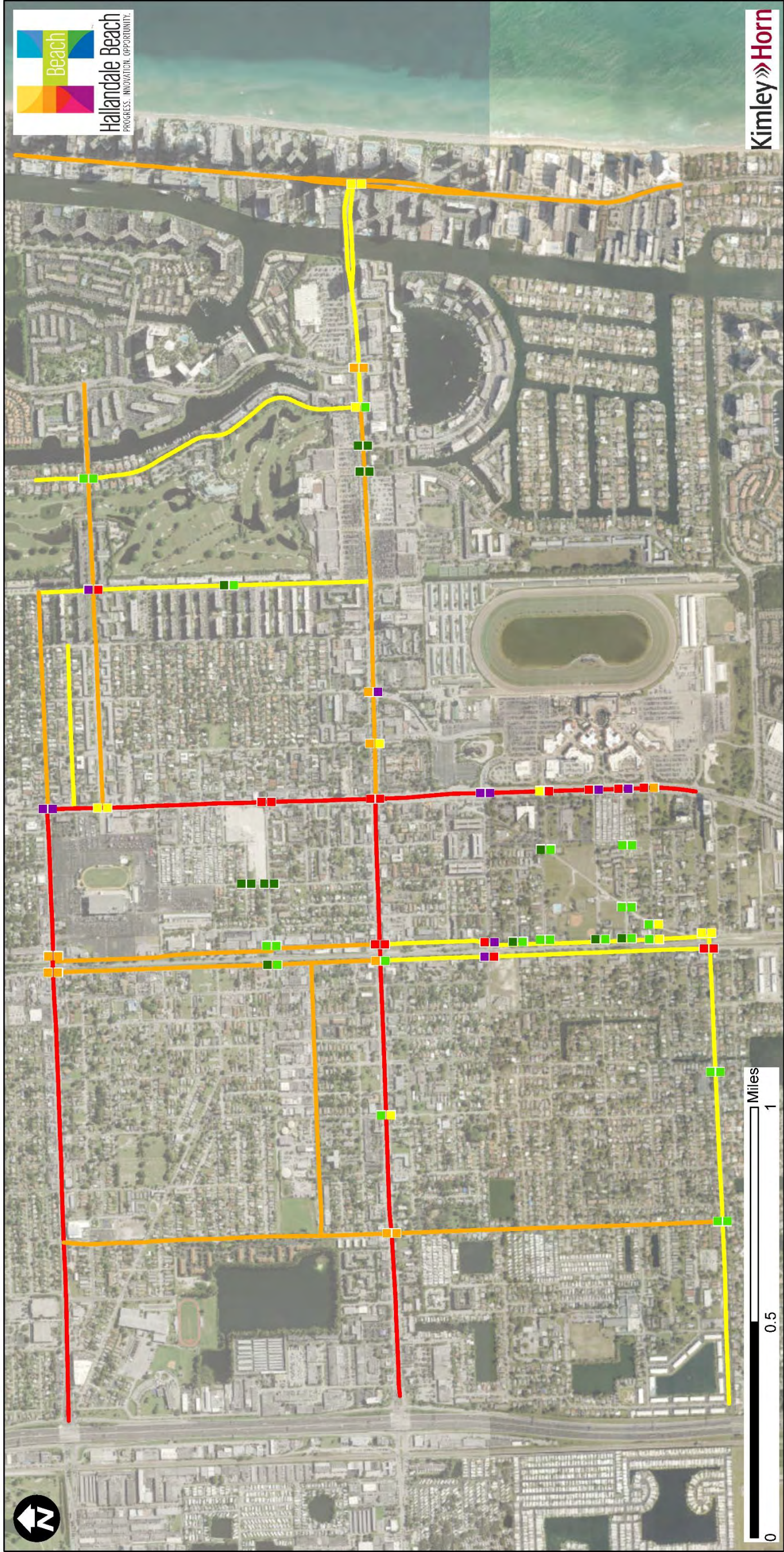


City of Hallandale Beach Mobility Plan Roadmap - Traffic Impact Study Survey Existing LOS





City of Hallandale Beach Mobility Plan Roadmap - Traffic Impact Study Survey Future LOS







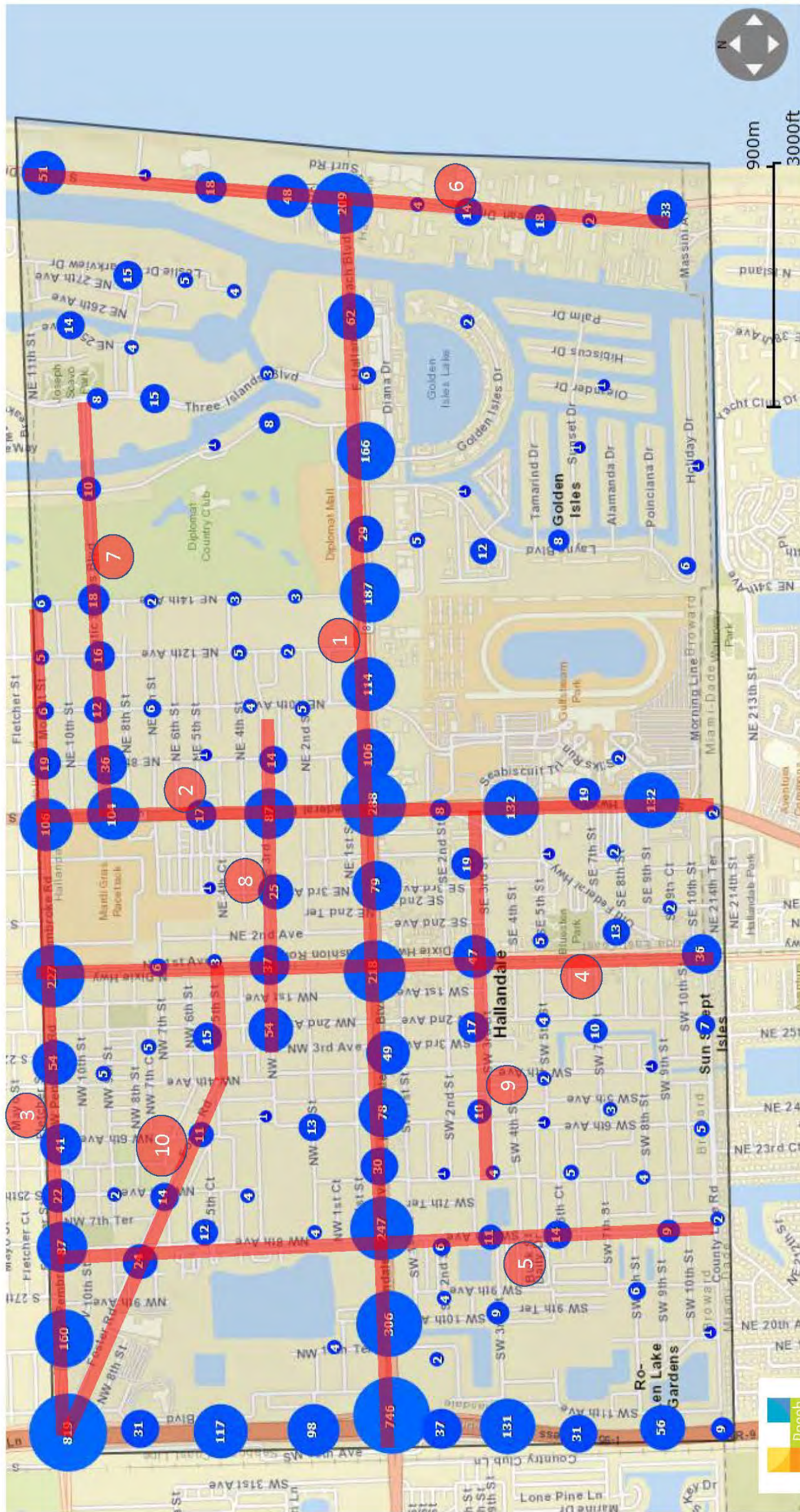
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX D



# Vehicle Accident Data Analysis (3 Years)

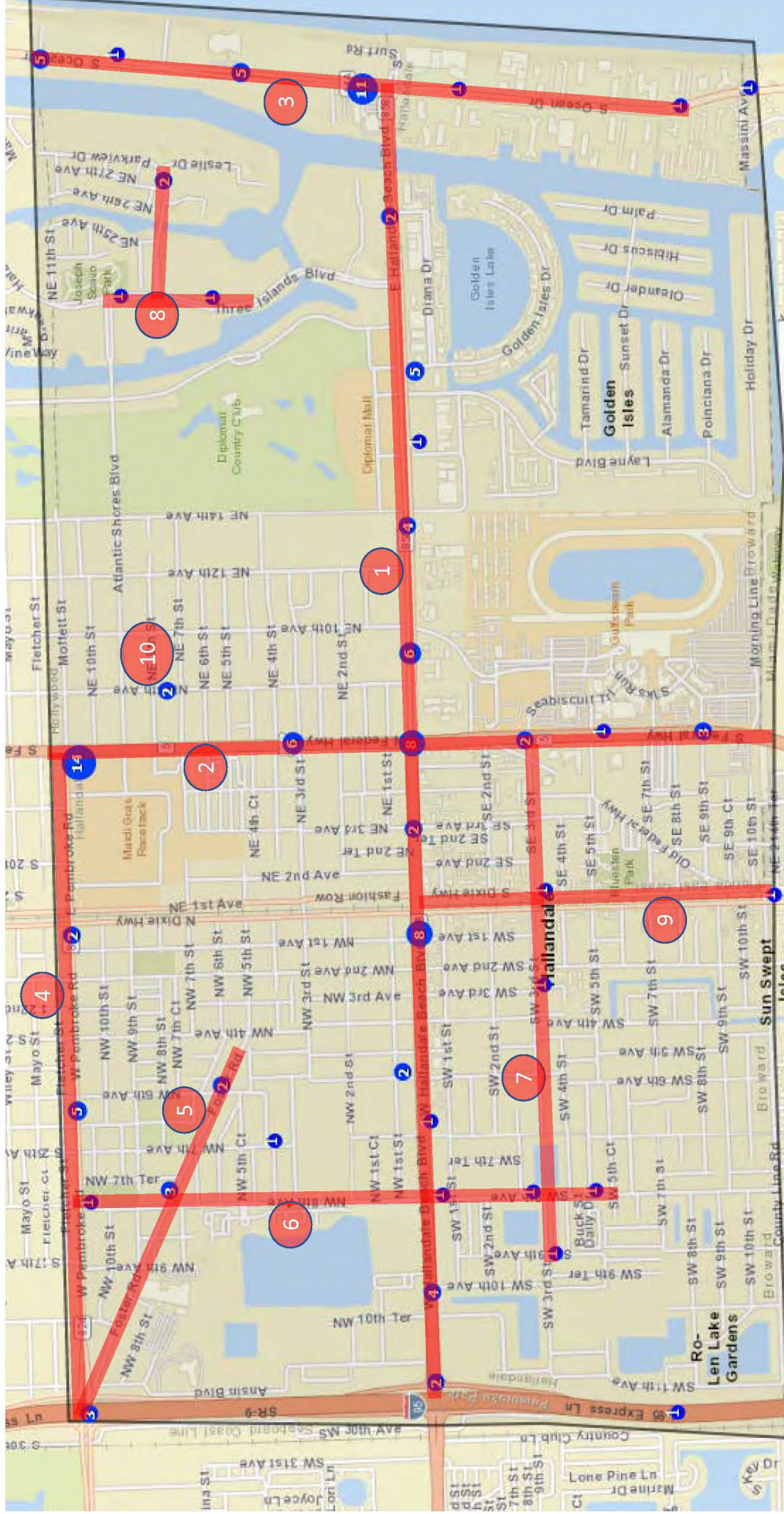


**Kimley»Horn**  
Expect More. Experience Better.

# Corridor Rank of Accidents

Source: University of Florida Signal 4 Analytics





# Corridor Rank of Accidents

**Kimley»»Horn**  
Expect More. Experience Better.





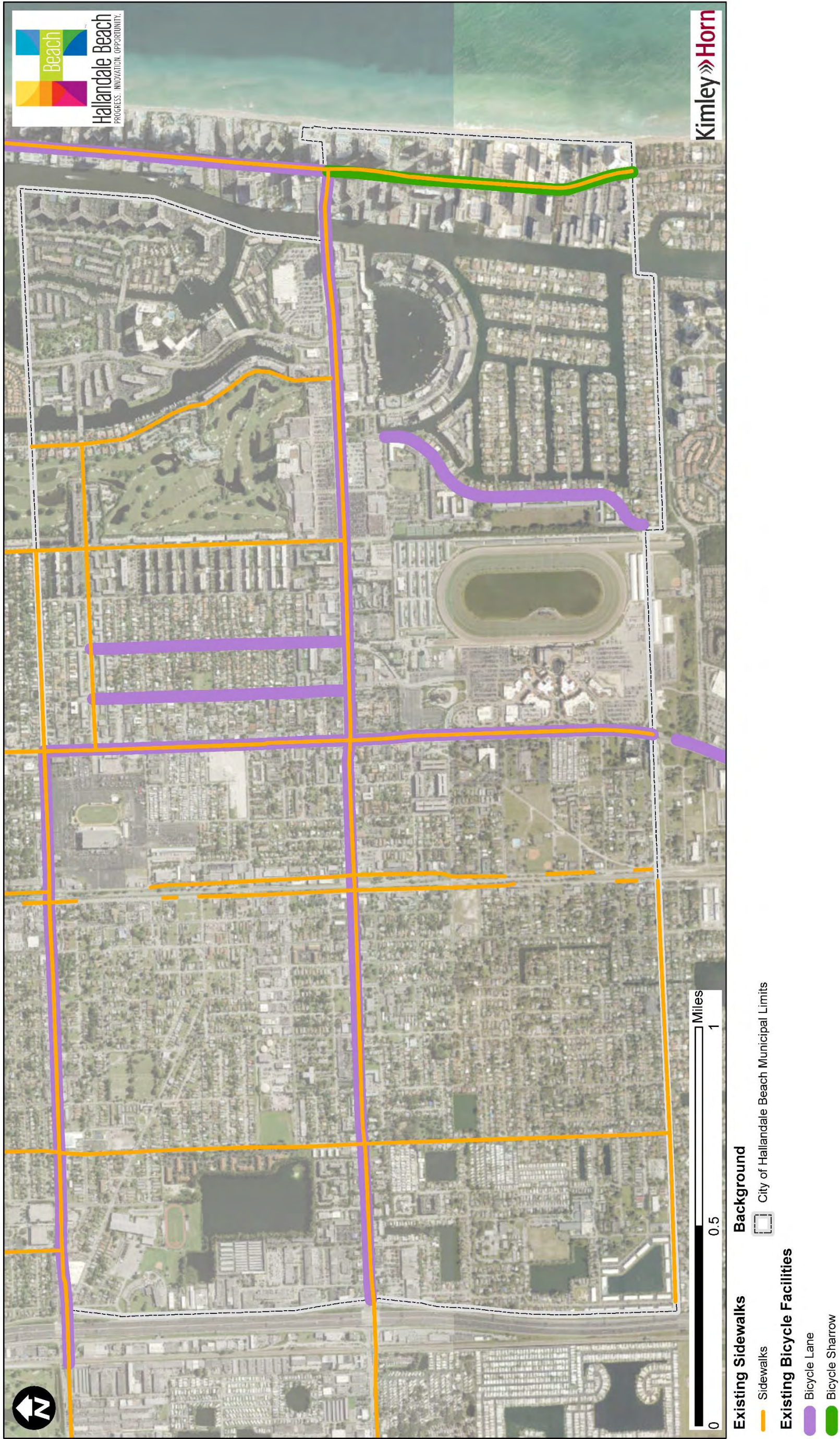
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX E



## City of Hallandale Beach Mobility Plan Roadmap - Existing Sidewalks and Bicycle Facilities







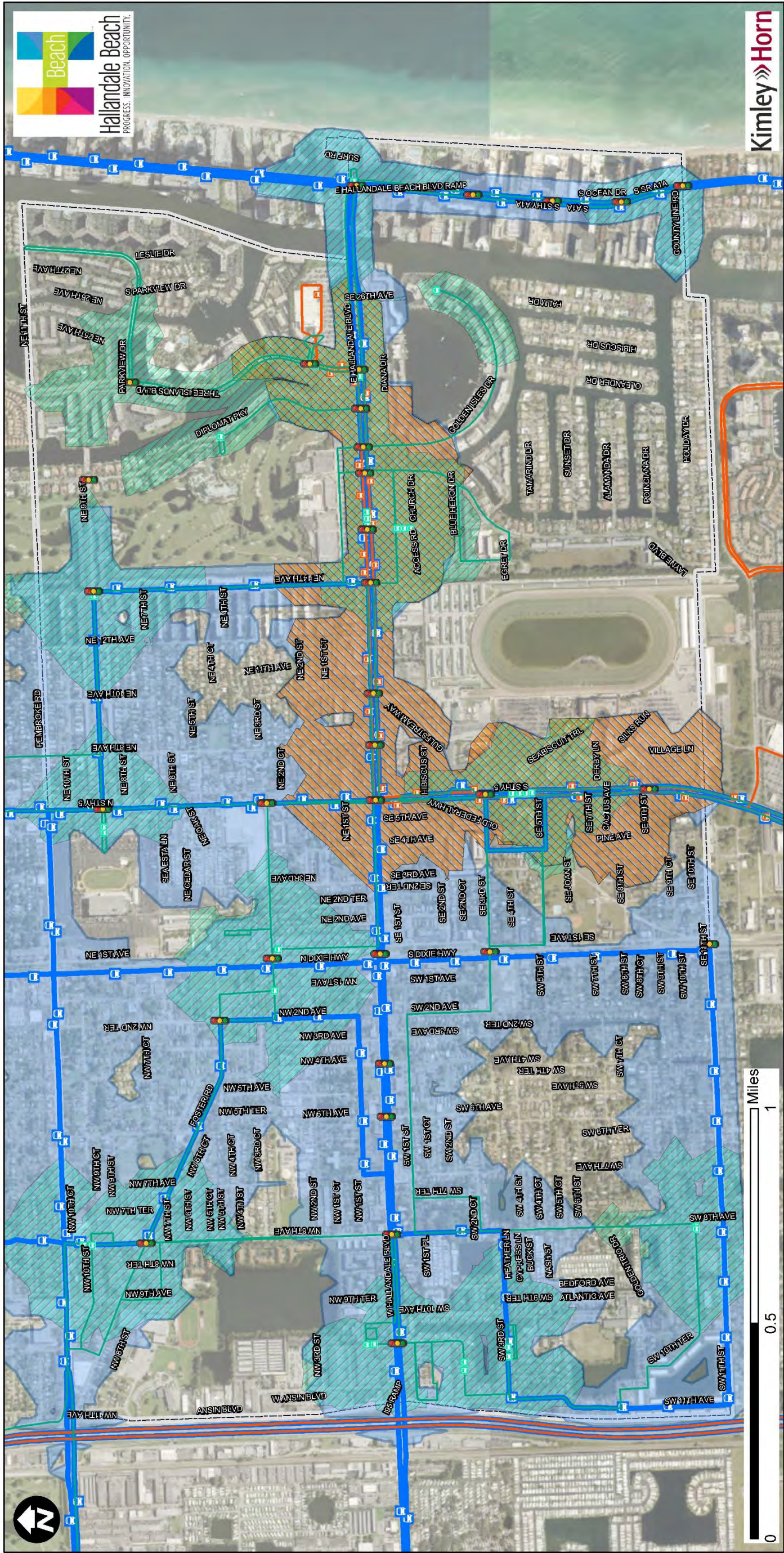
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX F



## City of Hallandale Beach Mobility Plan Roadmap - Current Public Transportation Network







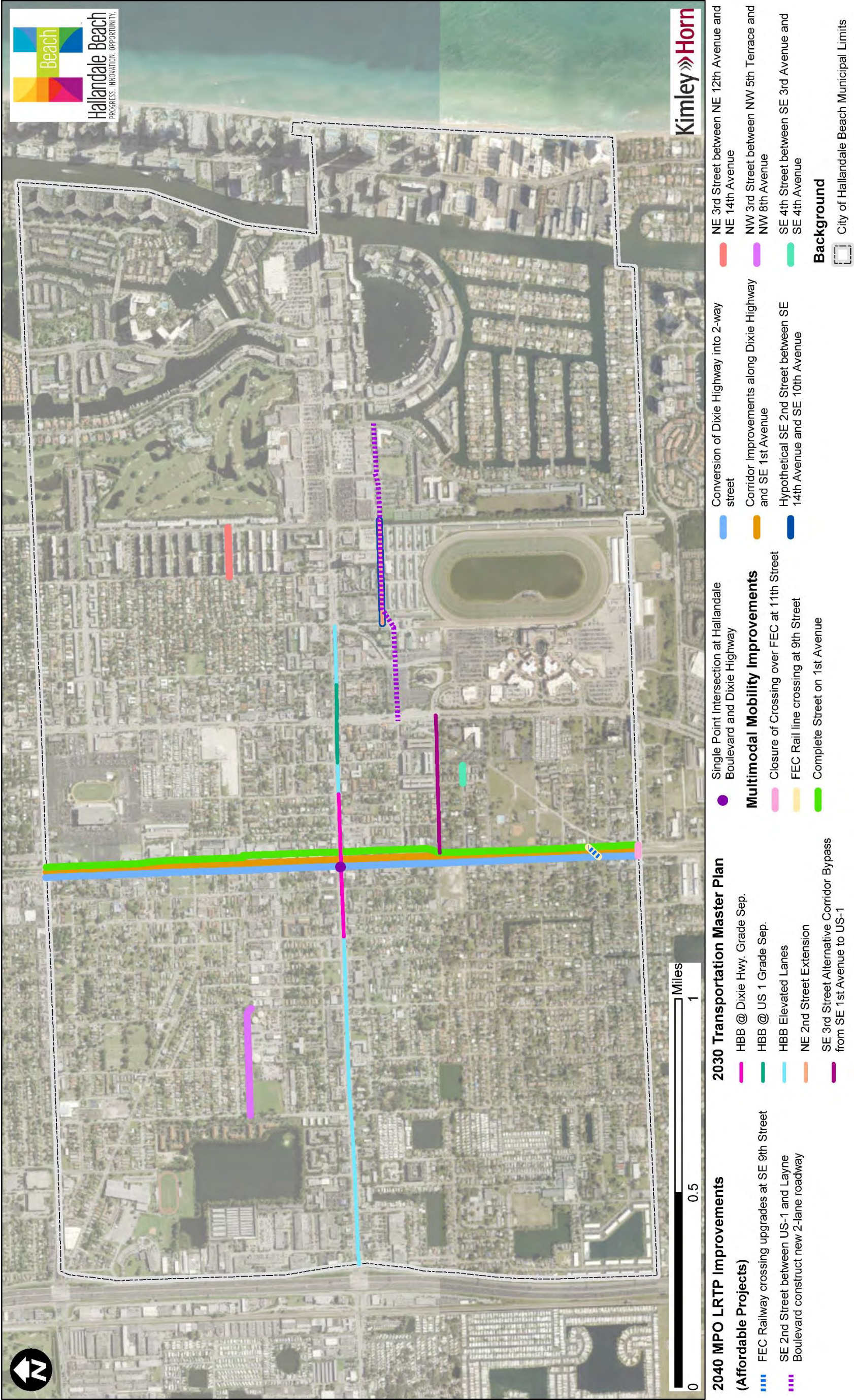
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX G



City of Hallandale Beach Mobility Plan Roadmap - Previously Considered Vehicular Improvements







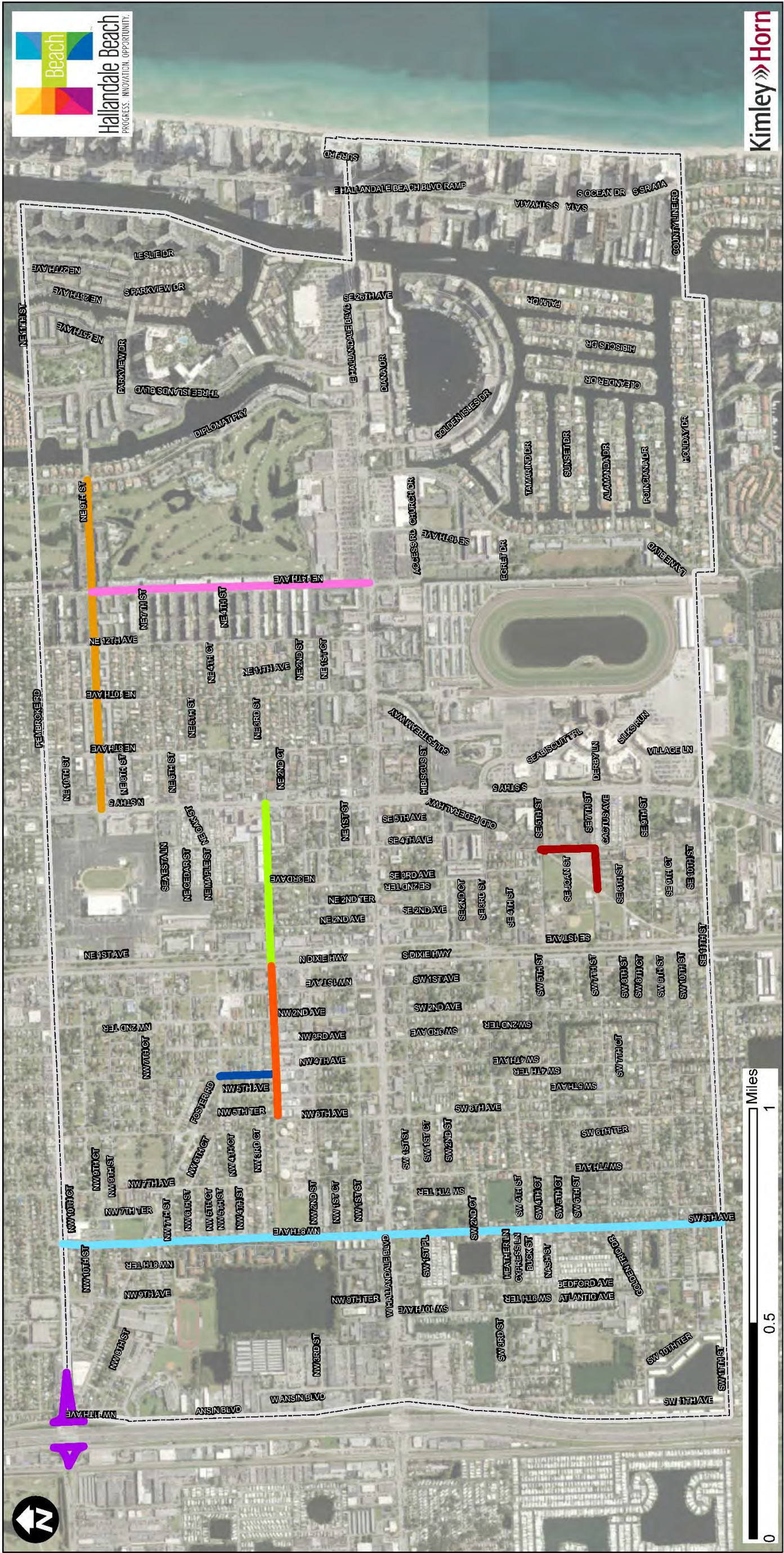
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX H



City of Hallandale Beach Mobility Plan Roadmap: In-Planning, Funded, and In-Progress Projects







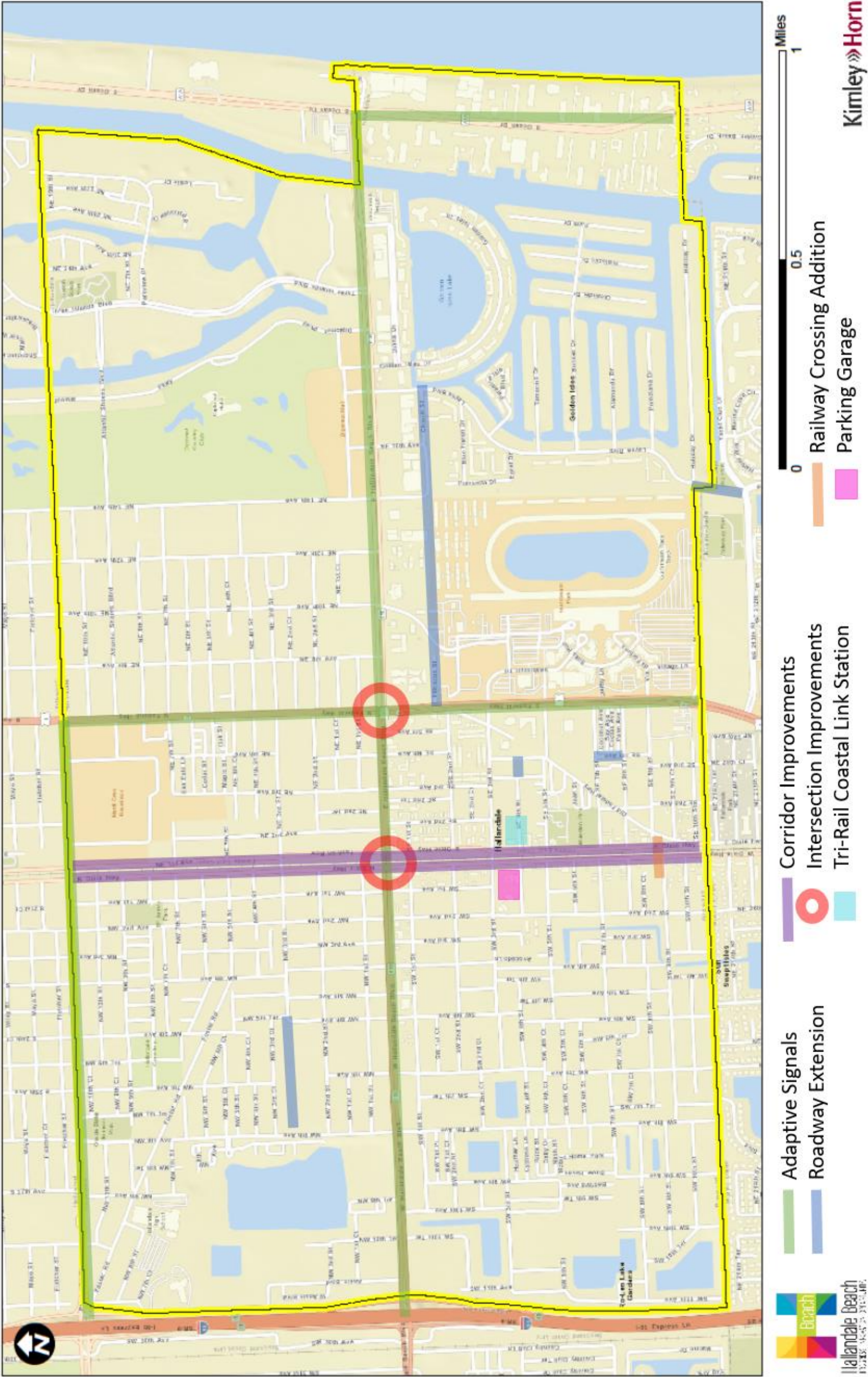
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX I



Suggested Vehicular Improvements





# Suggested Vehicular Improvements

| Phase                     | Suggested Improvements                                                                                                                                | Description                                                                                                                                                                                                     | Goal of Improvement                                                                                          | Estimated Cost                            | Jurisdiction                                                |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------|
| Short Term (0 - 5 Years)  | NW 3rd Street Extension between NW 5th Terrace and NW 8th Avenue                                                                                      | New 2-lane roadway extending NW 3rd Street between NW 5th Terrace and NW 8th Ave. with on-street parking on one side                                                                                            | Improve connectivity and provide alternate east-west route                                                   | \$1.45 Million                            | City of Hallandale Beach                                    |
|                           | SE 4th Street Extension between SE 3rd Avenue and SE 4th Avenue                                                                                       | New 2-lane roadway extending SE 4th Street between SE 3rd Avenue and SE 4th Avenue                                                                                                                              | Improve connectivity within local traffic network                                                            | \$260,000                                 | City of Hallandale Beach                                    |
|                           | SE 4th Avenue Extension between SE 7th Street and SE 8th Street                                                                                       | New 2-lane roadway extending SE 4th Avenue between SE 7th Street and SE 8th Street                                                                                                                              | Improve connectivity within local traffic network                                                            | \$260,000                                 | City of Hallandale Beach                                    |
|                           | Adaptive Signal Installation along Hallandale Beach Boulevard                                                                                         | Install 13 adaptive traffic control signals along Hallandale Beach Boulevard between I-95 and A1A,                                                                                                              | Improve traffic flow along major east-west arterial                                                          | \$780,000                                 | FDOT                                                        |
|                           | Adaptive Signal Installation along A1A                                                                                                                | Install 5 adaptive traffic control signals south of Hallandale Beach Boulevard along A1A                                                                                                                        | Improve traffic flow along major north-south arterial                                                        | \$300,000                                 | FDOT                                                        |
|                           | Adaptive Signal Installation along US-1                                                                                                               | Install adaptive traffic control signals along US-1 between Pembroke Road and SE 11th Street                                                                                                                    | Improve traffic flow along major north-south arterial                                                        | \$360,000                                 | FDOT                                                        |
|                           | Adaptive Signal Installation along Pembroke Road between I-95 and US-1                                                                                | Install 4 adaptive traffic control signals along Pembroke Road between I-95 and US-1                                                                                                                            | Improve traffic flow along major east-west arterial                                                          | \$240,000                                 | FDOT                                                        |
|                           | Traffic Study of Hallandale Beach Boulevard and Dixie Highway/1st Avenue Intersection and Converting Dixie Highway and SE 1st Avenue to 2-Way Streets | Conduct traffic study to assess the preferred intersection design at Hallandale Beach Boulevard and Dixie Highway/1st Avenue while also considering converting Dixie Highway and 1st Avenue to 2-way streets    | Improve traffic conditions at critical intersection, improved access to neighborhoods and across FEC Railway | \$200,000                                 | FDOT, Broward County and City of Hallandale Beach           |
|                           | SE 2nd Street Extension between US-1 and Layne Boulevard                                                                                              | New 4-lane bi-directional roadway between US-1 and Layne Boulevard to include ADA upgrades to curb ramps and detectible warning devices for all crosswalks and sidewalks                                        | Improve connectivity and alleviate congestion along Hallandale Beach Boulevard                               | \$2.1 Million                             | City of Hallandale Beach and Gulfstream Park                |
|                           | Hallandale Beach Boulevard and NE 14th Avenue Eastbound Double Left-Turn Lanes                                                                        | Implement eastbound dual left-turn lanes from NE 14th Avenue onto Hallandale Beach Boulevard                                                                                                                    | Improve traffic conditions at intersection                                                                   | \$500,000                                 | City of Hallandale Beach and FDOT                           |
| Mid Term (6 - 10 Years)   | Old Federal Highway and SE 3rd Street intersection improvements                                                                                       | Restripe an eastbound left-turn lane and through lane and right-turn only lane. Adjust traffic signals to reflect this change.                                                                                  | Improve traffic conditions at intersection                                                                   | \$25,000                                  | City of Hallandale Beach                                    |
|                           | FEC Railway Crossing at SE/SW 9th Street and closure of 11th Street Railway Crossing                                                                  | Construction of new crossing at SE/SW 9th Street over the FEC Railway. Includes new roadway, ROW acquisition for road alignment, and installation of traffic control. Requires closure of 11th Street crossing. | Improves interconnectivity and access to/from Gulfstream Park                                                | \$1.7 Million                             | City of Hallandale Beach and FEC Railway                    |
|                           | Interceptor Parking Garage at SE 4th Street and Dixie Highway with Shuttle Service                                                                    | Off-site public parking garge to support Gulfstream Park, Beach, economic development in area, and potential Coastal Link Train Station                                                                         | Reduce traffic and help spur development around potential transit station                                    | \$5 Million                               | City of Hallandale Beach                                    |
| Long Term (11 - 20 Years) | Intersection improvements at Hallandale Beach Boulevard and Dixie Highway/1st Avenue                                                                  | Intersection improvements should be based on a traffic study and consider improving traffic, safety, financially feasible, and community building                                                               | Improve traffic conditions at critical intersection                                                          | Up To \$33.7 Million for Flyover          | FDOT                                                        |
|                           | Intersection improvements at Hallandale Beach Boulevard and US-1                                                                                      | Intersection improvements should be based on a traffic study and consider improving traffic, safety, financially feasible, and community building                                                               | Improve traffic conditions at critical intersection                                                          | Up to \$45 Million for Southbound Flyover | FDOT                                                        |
|                           | Extend Layne Blvd. from Holiday Drive to connect to NE 213th Street and NE 34th Avenue Intersection                                                   | New 2-lane roadway extending Layne Boulevard south of Holiday Drive to connect with the intersection of NE 213th and NE 34th Avenue, add traffic signal mast arm                                                | Provide alternative route to reduce traffic along Hallandale Beach Blvd.                                     | \$600,000                                 | City of Hallandale Beach, Gulfstream Park, City of Aventura |

Notes: Cost estimates do not include land acquisition costs, only construction costs. To calculate section cost multiply total cost by the ratio of the length of the specific section and the total project length. To determine cost estimates per section of roadway, simply determine the ratio of that section to the entire roadway length in linear feet and multiply that ratio by the cost estimate.





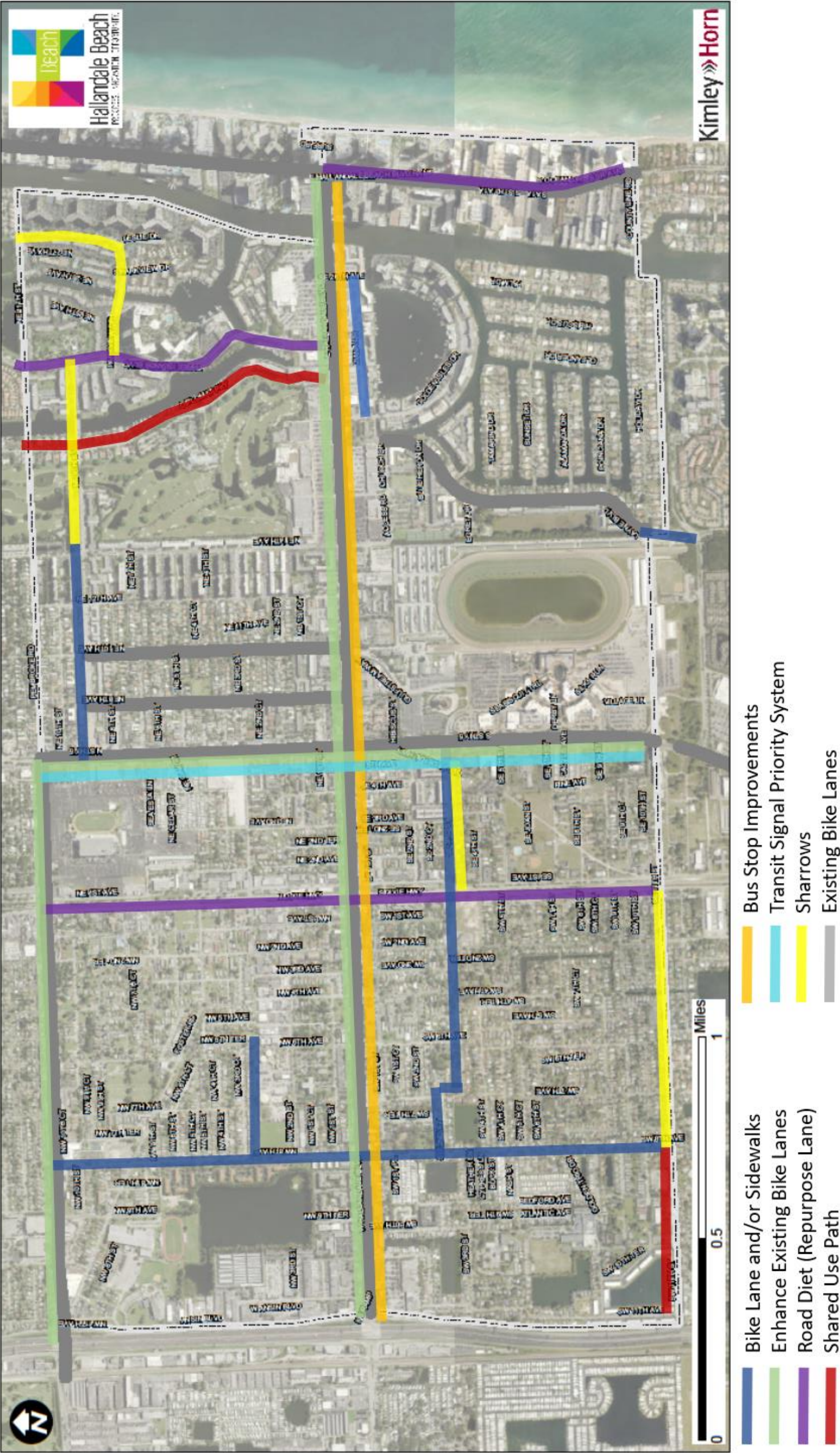
# Mobility **Roadmap**

## FINAL REPORT

### APPENDIX J



# Suggested Multi-Modal Improvements





# Suggested Short-Term Multi-Modal Improvements

| Phase                       | Location                                                                    | Description                                                                                                                                                                                                                                                                           | Goal of Improvement                                                                            | Cost      | Jurisdiction                           |
|-----------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------|----------------------------------------|
| Short Term<br>(0 - 5 Years) | Pembroke Rd. between I-95 and NE 14th Ave.                                  | Enhance existing bike lanes with green paint, bike boxes, and markings in both directions                                                                                                                                                                                             | Enhance existing east-west bike path along major arterial                                      | \$205,000 | FDOT                                   |
|                             | US-1 between Countyline Rd. and Pembroke Rd.                                | Enhance existing bike lanes with green paint, bike boxes, and markings in both directions                                                                                                                                                                                             | Enhance existing north-south bike path along major arterial                                    | \$160,000 | FDOT                                   |
|                             | Hallandale Beach Boulevard between I-95 and A1A                             | Enhance existing bike lanes with green paint, bike boxes, and markings in both directions                                                                                                                                                                                             | Improve bicycle conditions along major east-west arterial                                      | \$590,000 | FDOT                                   |
|                             | NW 3rd Street Extension between NW 5th Terrace and NW 8th Avenue            | Along with construction of road extension, provide 4 foot bike lanes in each direction and sidewalks on both sides of the street                                                                                                                                                      | Improve connectivity and continue complete street Improvements along NE/NW 3rd Street          | \$325,000 | City of Hallandale Beach               |
|                             | Bus Stop Improvements at well utilized stops                                | Installation of bus shelters and next bus technology at 13 stops and next bus info at 2 additional locations                                                                                                                                                                          | Increase the ridership of the BCT and MDT                                                      | \$520,000 | City of Hallandale Beach, BCT, and MDT |
|                             | Community Bus Comprehensive Operational Analysis                            | Perform an analysis to reduce the headways and alter the routes to provide service to underserved areas                                                                                                                                                                               | Increase the ridership of the Community Bus and keep operational costs down                    | \$70,000  | City of Hallandale Beach               |
|                             | Sidewalk Condition Assessment Comprehensive Analysis                        | Develop a prioritization list of repair/replacement/installation of the sidewalk network                                                                                                                                                                                              | Improve walkability and safety for pedestrians                                                 | \$75,000  | City of Hallandale Beach               |
|                             | Parking Conditions Assessment Comprehensive Analysis and Park-and-Ride Lots | Assess the on-street parking system needs, opportunities, and management; Adding parking in the RAC, and implementing park-and-ride lots with shuttle service from privately owned lots                                                                                               | Improve parking conditions to support residential and commercial activity                      | \$100,000 | City of Hallandale Beach               |
|                             | Atlantic Shores Boulevard between Three Islands Boulevard and US-1          | Stripe in green color bicycle lanes and realign angled parking between US-1 and NE 12th Ave. in each direction. Widen ROW for bike lanes in each direction between NE 12th Ave. and Diplomat Pkwy. Implement sharrows in each direction between Diplomat Pkwy and Three Islands Blvd. | Provide east-west bike path along major collector and improves safety conditions for all users | \$335,000 | City of Hallandale Beach               |
|                             |                                                                             |                                                                                                                                                                                                                                                                                       |                                                                                                |           |                                        |

Notes: Cost estimates do not include land acquisition costs, only construction costs. To calculate section cost multiply total cost by the ratio of the length of the specific section and the total project length.

# Suggested Mid-Term Multi-Modal Improvements

0.16

| Phase                    | Location                                                          | Description                                                                                                                                                                                      | Goal of Improvement                                                                                  | Cost      | Jurisdiction                           |
|--------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------|----------------------------------------|
| Mid Term<br>(6-10 Years) | A1A south of Hallandale Beach Blvd. to County Line Rd.            | Implement a road diet by repurposing a through lane with 7 foot wide green buffered bike lanes in each direction                                                                                 | Provide north-south bike path along principal arterial                                               | \$79,000  | FDOT                                   |
|                          | SE 1st Ave. between SE 11th Street and Hallandale Beach Boulevard | Implement a road diet by repurposing a through lane and adding continuous 7 foot sidewalks, 7 foot wide green buffered bike lanes, and ADA upgrades to curb ramps and detectible warning devices | Improve safety and provide prominent north-south bike and pedestrian path along major collector road | \$395,000 | City of Hallandale Beach               |
|                          | SE/SW 3rd Street between US-1 and SW 7th Ave.                     | Sharrows from US-1 to Dixie Hwy. and 4 foot wide bike lanes west of Dixie Hwy. and sidewalk on north side of street between SE 1st Ave. and SE 3rd Ave.                                          | Provide east-west bike and pedestrian paths along local road                                         | \$405,000 | City of Hallandale Beach               |
|                          | Diana Drive from Golden Isles Drive to SE 26th Avenue             | Provide 6 foot sidewalks in each direction, parallel parking, bulb-outs, and drainage and flood mitigation features                                                                              | Improve pedestrian conditions                                                                        | \$150,000 | City of Hallandale Beach               |
|                          | Bus Stop Improvements along Hallandale Beach Boulevard            | Installation of bus shelters and next bus technology on Hallandale Beach Boulevard                                                                                                               | Increase the ridership of the BCT and MDT                                                            | \$605,000 | City of Hallandale Beach, BCT, and MDT |
|                          | Transit Signal Priority on US-1                                   | Install transit signal priority systems along US-1 between Pembroke Road and SE 11th Street                                                                                                      | Increase the ridership of the transit routes along US-1                                              | \$64,000  | City of Hallandale Beach, BCT, and MDT |
|                          | Countyline Rd. between SW 11th Ave and Dixie Hwy.                 | Shared-use path from SW 11th Avenue to SW 7th Terrace and sharrows between SW 7th Terrace and Dixie Hwy                                                                                          | Provide east-west bike and pedestrian paths along local road                                         | \$200,000 | City of Hallandale Beach               |
|                          |                                                                   |                                                                                                                                                                                                  |                                                                                                      |           |                                        |

Notes: Cost estimates do not include land acquisition costs. To calculate section cost multiply total cost by the ratio of the length of the specific section and the total project length.



# Suggested Long-Term Multi-Modal Improvements

| Phase                        | Location                                                              | Description                                                                                                                                                              | Goal of Improvement                                                                    | Cost                   | Jurisdiction             |
|------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------|--------------------------|
| Long Term<br>(11 - 20 Years) | Three Islands Blvd. between Hallandale Beach Blvd. and NE 11th Street | Analyze potential for a road diet to add 7 foot wide buffered bike lanes in each direction                                                                               | Provide a north-south bike path along a local road                                     | \$215,000              | City of Hallandale Beach |
|                              | Foster Road between NW 11th Avenue and Dixie Highway                  | Add 4 foot wide bike lanes and 6 foot wide sidewalks in each direction. ADA upgrades to all curb ramps and detectible warning devices for all crosswalks and sidewalks   | Improve pedestrain and bicycle conditions along local road                             | \$5 Million            | City of Hallandale Beach |
|                              | Old Federal Highway between US-1 and SE 1st Avenue                    | Complete sidewalk network, on-street parking on both sides of the street, bike lanes or sharrows, traffic calming features, and ADA upgrades                             | Improve ped/bike conditions along local road connecting arterial and collector streets | \$1.5 Million          | City of Hallandale Beach |
|                              | Layne Boulevard between Holiday Drive and NE 213th Street             | Along with road extension provide 5 foot sidewalk on east side of street and 4 foot bike lanes in each direction                                                         | Improve connectivity and continue north-south bicycle and pedestrian paths             | \$130,000              | City of Hallandale Beach |
|                              | SW/NW 8th Avenue between Countyline Rd. and Pembroke Road             | Add 4 foot wide bike lanes in each direction and 7 foot wide sidewalks in each direction. ADA curb ramps and detectible warning devices for all crosswalks and sidewalks | Provide a north-south bike path and pedestrian path along a local road                 | \$1.5 Million          | City of Hallandale Beach |
|                              | Diplomat Pkwy. between Hallandale Beach Blvd. and NE 11th Street      | Implement shared use path for bikes and pedestrians on one side of the street                                                                                            | Provide a north-south bike path and pedestrian path along a local road                 | \$395,000              | City of Hallandale Beach |
|                              | Increase Community Bus Frequency                                      | Add additional buses to improve operating headways to 30 minutes or less, which would require an increase in annual O/M costs                                            | Increase ridership of Community Bus                                                    | \$2.2 Million annually | City of Hallandale Beach |
|                              | Upgrade Community Bus trolleys                                        | Replace six (6) Community Bus trolleys with more fuel efficient and higher capacity vehicles                                                                             | Improve service and reduce ongoing costs                                               | \$600,000              | City of Hallandale Beach |
|                              | Parkview Drive between Three Islands Blvd. and NE 11th Street         | Implement sharrows in both directions                                                                                                                                    | Provide a north-south/east-west bike path along a local road                           | \$75,000               | City of Hallandale Beach |
|                              |                                                                       |                                                                                                                                                                          |                                                                                        |                        |                          |

Notes: Cost estimates do not include land acquisition costs, only construction costs. To calculate section cost multiply total cost by the ratio of the length of the specific section and the total project length.