FEB
2016

# NE 125TH ST
## MULTIMODAL IMPROVEMENTS

NORTH MIAMI
FLORIDA

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## FIGURES

# BACKGROUND & INTRODUCTION

## BACKGROUND

North Miami is a diverse city of 61,000 residents with a rich history located approximately 10 miles north of Miami, Florida. The city has been settled since the 1800s. Like many cities along the east coast, North Miami began as a farming community that sprouted up around a Florida East Coast (FEC) Railway stop at the Arch Creek Railroad Depot. It has experienced periods of growth and decline over the years, with a period of significant disinvestment in the 1970s and 1980s. However, North Miami's central location in the region, connections to major transportation corridors, and designation as the home of several educational and cultural facilities rendered it a prime location for redevelopment and investment. With this in mind, the City created a Community Redevelopment Agency (CRA) in 2005 and has been working to revitalize its Downtown ever since.

With this history in mind, the City has developed a number of plans to guide it towards achieving its vision for the future. Based on this, it has received the National Civic League's prestigious "All American City" award in 2010, it is a Certified Silver Florida Green City, it is part of a State Enterprise Zone, and has developed several other programs to attract and maintain business. In addition, it has updated its Comprehensive Plan and Downtown Development Masterplan to call for much higher densities and intensities of development in the downtown core. All of this has been done in an effort to enhance its downtown and guide it to becoming a vibrant, mixed-use, walkable place that can act as a local and regional destination.

One key element to supporting all of this change is the main street through downtown: NE 125th Street. In addition to being the main street where businesses front and pedestrian, bicycle, transit, and vehicular is focused, NE 125th Street is the major east/west connection that links North Miami to the rest of the region. To the west, it provides access to I-95, linking the area with the region and the state. To the east, it leads to future Tri-Rail Coastal Link North Miami Station as well as to the eastern barrier islands and the beach. With this in mind, careful attention and planning is required to determine the best future for one of North Miami's most important corridors.

## REPORT ORGANIZATION

This report is broken into seven sections, as follows:

1. **Background & Introduction:** Introduces the study area and intent of the study.
2. **Planning Context:** Describes the history of the area and summarizes related plans and studies.
3. **Working Group Engagement:** Discusses the Working Group meetings and discussions leading up to the selection of a preferred alternative.
4. **Existing and Future Conditions Evaluation:** Considers the existing (2015) and future (2025) multi-modal conditions in the study area.
5. **Goals and Evaluation Criteria:** Defines the goals and objectives for the study based on the background analysis and Working Group input.
6. **Conceptual Alternatives:** Discusses and evaluates the alternatives.
7. **Preferred Alternative and Next Steps:** Defines the preferred alternative and suggests next steps for plan implementation.

# INTRODUCTION

The City of North Miami has undertaken the NE 125th Street Corridor Multi-Modal Improvements Study to objectively evaluate options for multi-modal mobility, access, and safety improvements for approximately one half of a mile of the NE 125th Street Corridor between NE 6th Avenue and NE 10th Avenue.

Recognizing that any improvements made to NE 125th Street will have impacts to the surrounding area, a study influence area was also identified. The study influence area represents the portion of the network that would most likely be impacted by changes to the NE 125th Street corridor. Therefore, this study also considers improvements within the study influence area that would support changes to the NE 125th Street corridor. The study corridor and area of influence can be seen in Figure 1.

From a regional perspective (Figure 2), the corridor represents one of the only connections to I-95 and the only connection to the beach for several miles to the north and south. Because of this, it is important to consider how changes to this corridor will impact the overall regional network in this area, especially when considering access to the beach communities.

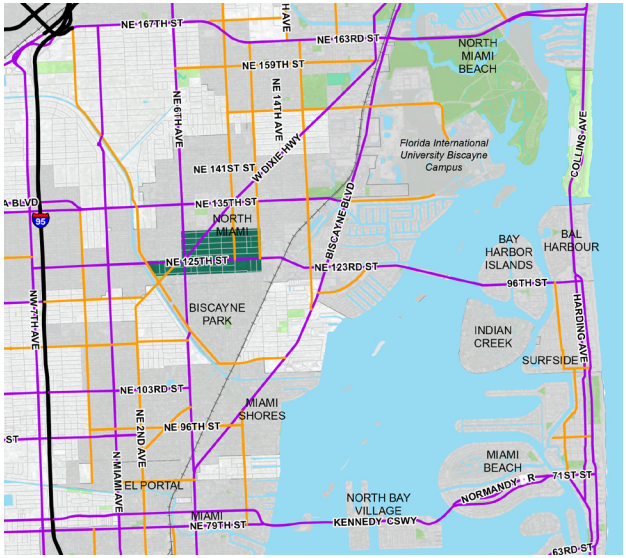
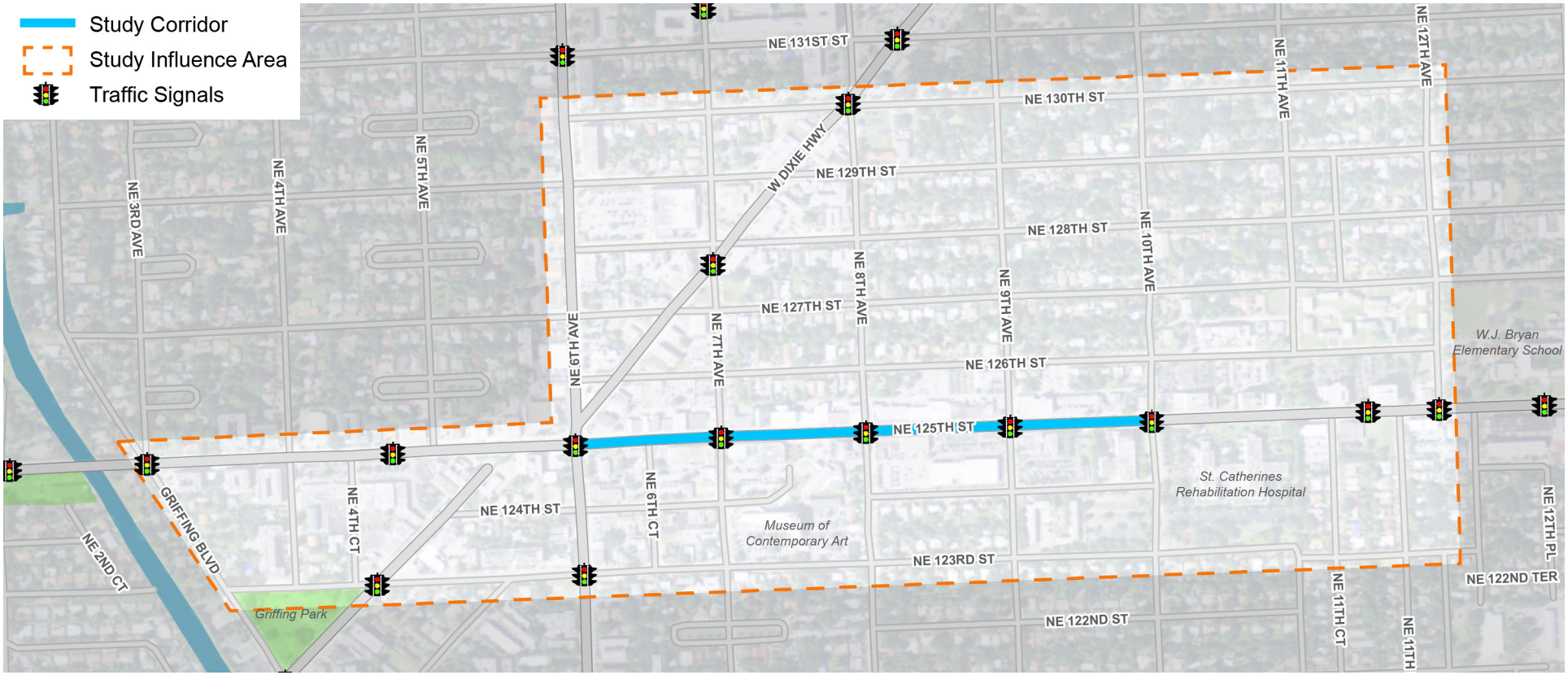



**Figure 2** | Regional Context

**Figure 1** | Study Corridor



# PLANNING CONTEXT

## PAST STUDIES, PROJECTS, AND PLANNING EFFORTS

As the heart of Downtown North Miami and a major route for regional connectivity, NE 125th Street has been the focus of a number of plans and studies. In order to better understand the history and context of the area, a review was completed of the past plans and studies. Figure 3 displays a timeline representing the plans reviewed, and the following section provides a brief description of the most relevant plans and studies to this project. A full summary of the review can be found in the **SUMMARY OF PREVIOUS WORK TECHNICAL MEMORANDUM**.

### NE 125th Street/NE 6th Avenue/W Dixie Highway Intersection Study

In 2010, the intersection of NE 125th Street/NE 6th Avenue/ W Dixie Highway, or "5-Points", was studied to identify, screen, and recommend transportation projects to address near-term and long-term operations, safety, and multimodal needs. The study was undertaken in response to a recommendation from the Treasure Coast Regional Planning Council in 2000 to construct a roundabout at the intersection to improve livability and quality of life. It was determined through the traffic analysis that a roundabout was not a feasible solution, however other short-term and long-term recommendations were developed. In the near-term, the study recommended removing the southbound W Dixie Highway connection. In the long term, it also recommended the development of a one-way couplet along NE 7th Avenue and NE 8th Avenue with the understanding that further study would need to be done to address the impacts to the surrounding properties. This plan was never implemented, and the recommendations were evaluated again in this study.

### NE 125th Street Project Development & Environmental Study

Between 2011 and 2013, a Project Development & Environmental (PD&E) Study was completed to evaluate near-term improvements to address safety and operational deficiencies at the "5-Points" intersection. The preferred alternative was developed as a refinement to the near-term concept developed in the 2010 study at the same intersection. The preferred alternative was generally consistent with the previous recommendations with the following key differences:

#### "5-Points" Intersection

- Maintain the northbound connection to Dixie Highway
- Restripe the north leg to have an exclusive right turn, through and left turn lane configuration
- Provide northbound left turn lane on the south leg

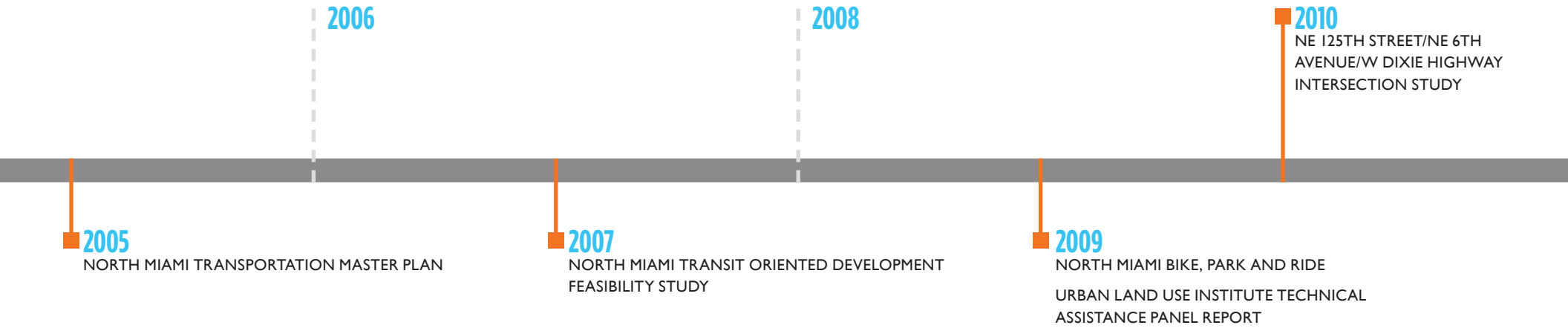
#### NE 7th Avenue from NE 125th Street to NE 127th Street

- Restripe into a one-way southbound roadway
- Prohibit westbound and eastbound left turns at NE 125th Street

#### NE 124th Street from Dixie Highway to NE 6th Avenue

- Restripe into a two-way roadway

**Figure 3** | Timeline of Past Studies and Plans



## FDOT Safety Investigation Process

The Florida Department of Transportation (FDOT) District six conducted a safety study investigation of NE 125th Street roadway segment from NE 5th Avenue to NE 7th Avenue. The segment was identified as a high crash location from 2007 up to the time of the 2013 study, and was within the top 5% segments with the highest crash frequency and severity of crashes in Miami-Dade County. The safety study recommended extending the westbound left turn lane at the NE 125th Street/NE 6th Avenue/W Dixie Highway intersection. All other recommendations from the safety study were already included in the PD&E Preferred Alternative.

## North Miami Downtown Development Master Plan

In 2013, the City of North Miami completed the Downtown Development and Major Corridor Master Plan. The planning effort included reaching out to the residents and the business community to develop a vision for the future of North Miami that Includes a vibrant downtown core and changes to a number of other corridors around the city. Prior to this, City regulations had been amended to allow for increased densities and create a more uniform and vibrant downtown. The plan recommended land assembly to allow for large parcels of land to be accumulated, which would allow for development to occur at the densities and intensities suggested in the code. It also recommends marketing activities to attract new development to downtown.

The Downtown Development Master Plan and the associated land use changes are some driving factors behind this study. Because NE 125th Street is the main street through downtown, ensuring that it is walkable and livable will be key to the success of the area.

## North Miami Downtown Concept Plan

In 2014, the Downtown Concept Plan was undertaken to generate ideas for strategic redevelopment and civic improvements within the boundaries of the Downtown District. The concept plan did not incorporate their recommendations. Instead, the concept plan focused on concepts to promote development in downtown.

The plan suggested the redevelopment of a number of properties along NE 125th Street as well as a number of streetscaping improvements intended to make the area a more walkable destination.

The plan also recommended that NE 8th Avenue from NE 125th Street to NE 132nd Street be redesigned as a priority street for pedestrians and bicyclists. This redesign includes pedestrian amenities, decorative benches, and other elements that would help to create a pedestrian and bicycle connection between the Museum of Contemporary Art/Civic Center Complex to the south and the Arts, Culture and Design District; North Miami Senior High School; and the North Miami Public Library to the north. It could also be temporarily closed as a festival street during events. This recommendation was taken into account for this plan when considering the overall pedestrian and bicycle network.

**2011**
- NE 125TH STREET STREETSCAPE DESIGN PLANS

**2012**

**2013**
- NE 125TH STREET PROJECT DEVELOPMENT & ENVIRONMENTAL STUDY
- NORTH MIAMI DOWNTOWN DEVELOPMENT AND MAJOR CORRIDOR MASTER PLAN
- NORTH MIAMI TARGET LOCATIONS FOR TRAFFIC CALMING STUDY
- FDOT SAFETY STUDY INVESTIGATION PROCESS

**2014**
- MIAMI-DADE MPO COMPLETE STREETS MANUAL
- NORTH MIAMI DOWNTOWN CONCEPT PLAN
- NORTH MIAMI COMPREHENSIVE SIGNAGE MASTER PLAN
- NORTH MIAMI TRANSIT ORIENTED DEVELOPMENT PLAN

**2015**
- NORTH MIAMI PARKING INVENTORY AND NEEDS STUDY
- DRAFT NORTH MIAMI COMPREHENSIVE PLAN
- NE 125TH STREET TIGER GRANT APPLICATION

**2016**
- NE 125TH STREET MULTIMODAL IMPROVEMENTS

## CASE STUDIES

Other cities in South Florida and nationally have conducted and carried out projects on streets through their downtowns with the goal of revitalization and the creation of a destination. The past studies and documentation of three such similar projects were reviewed to gain an understanding of relevant implementation challenges and the associated benefits of these projects. The following section summarizes the lessons learned from the review. It should be noted that because of NE 125th Street's role as a regional corridor and the large number of trips it serves, it is somewhat unique from the other corridors considered. Even so, the benefits realized from the case studies for the economy, land use, and other aspects will likely still apply.

### Hollywood Boulevard in Hollywood, FL

In 2013, the City of Hollywood was awarded a $6.8 million grant for a project incorporating Broward Metropolitan Planning Organization's Complete Streets guidelines along Hollywood Boulevard between Young Circle and Dixie Highway. Currently, Hollywood Boulevard is primarily used as a vehicular thoroughfare, and does not provide "safe pedestrian crossing or parking". On-street parking is currently under-utilized. Also, sidewalk pavements are cracked and stained due to the existing Black Olive trees. The Complete Streets project is intended to beautify, promote economic development and create a multi-modal corridor. The following is a list of proposed modifications to the roadway:

- Landscaped median
- Pedestrian crosswalks with center refuge median and center walkway spline
- 5-foot wide bike lanes with buffer zone
- Pedestrian scale lighting
- American with Disabilities Act-compliant (ADA) compliant parking spaces and accessible ways
- 28% reduction (143 spaces total) in on-street parking
- Parallel parking configuration

The project was presented to the community and area business owners in November 2013, and is currently in design. Construction is scheduled to commence in 2016 – 2017.

Hollywood Boulevard Rendering

Source: City of Hollywood

## Atlantic Avenue in Delray Beach, FL

In 1986, FDOT announced plans to widen Atlantic Avenue from four to six lanes between I-95 and the beach. Transportation planners at FDOT stated that widening the roadway would contribute to economic development in the City's downtown area by increasing capacity. However, the City of Delray Beach proposed narrowing Atlantic Avenue into a two lane roadway instead as a traffic calming measure and to create a pedestrian-friendly environment. Eventually, Atlantic Avenue was narrowed from four to two lanes with on-street parking and wider sidewalks between Swinton Avenue and US 1. The City negotiated with FDOT the following:

- Widen two parallel streets to maintain hurricane evacuation capacity
- Undergo a jurisdictional transfer of Atlantic Avenue to the City.

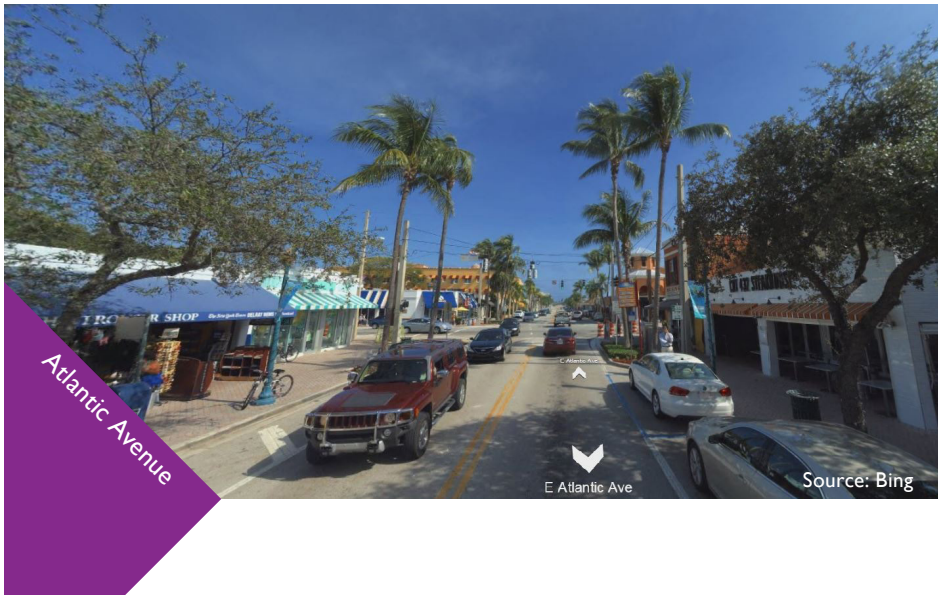
Today, the FDOT Statewide Lane Elimination Guidance published in 2014 cites the Atlantic Avenue lane elimination as a project that has "resulted in substantial positive economic development impacts".

## North Main Street in Ashland, OR

In 2011, KAI prepared an operational and safety analysis for a road diet project for the City of Ashland The proposed project was a temporary demonstration for reducing the number of lanes on North Main Street from four lanes to three, including a center two-way left-turn lane between Helman Street and the northern city limits. At the end of the 1-year demonstration period, the City and community went through a process to determine if the road diet should become permanent. The decision-making process was based on a set of evaluation measures collectively identified by the City and community. The set of evaluation included:

- Reduction in the annual average number and severity of crashes on North Main Street. In order for this measure to be valid and used, the temporary road diet must be in-place for at least two years.
- Reduction in the 85th Percentile Speed closer to the posted speed limit of 25 mph.
- Increase in bicycle and pedestrian volumes.
- Maintain an average vehicle travel time no greater than 10% of the existing corridor travel time.
- Increase in and/or majority support for keeping the road diet after the trial period.

At the end of the demonstration period, the project was considered a success and has since been permanently implemented.




# WORKING GROUP ENGAGEMENT

## WORKING GROUP ENGAGEMENT

A technical working group was developed to guide and inform the alternative development process of the NE 125th Street Study. The working group was made up of the following City departments and partner agencies:

- City of North Miami, Office of the Mayor and Council
- City of North Miami, Office of the City Manager
- City of North Miami, Public Works Department
- City of North Miami, Community Planning and Development Department
- City of North Miami, Budget Department
- City of North Miami, Community Redevelopment Agency (CRA)
- City of North Miami, Parks and Recreation
- City of North Miami, Police Department
- Miami-Dade Metropolitan Planning Organization
- Miami-Dade County, Transportation and Public Works Department
- Florida Department of Transportation, District Six, Intermodal Systems Development (ISD) Office

The working group met at North Miami's City Hall four times throughout the study:

### Scoping Workshop | March 5, 2015

This was the study kick-off workshop where the City departments and partner agencies were introduced to the study, learning of its purpose, scope and schedule. During this workshop, attendees also participated in a visioning exercise which helped inform the consultant team's development of goals and evaluation criteria.

### Preliminary Concepts Workshop | September 15, 2015

The existing and future conditions analysis results were presented at this workshop which included a preliminary set of six alternatives. Feedback was gathered on the alternatives which included identification of fatal flaws and enhancements. The consultant team also received feedback on the evaluation criteria, resulting in a set of criterion that were more targeted and direct (i.e., addressed topics of importance) and easy to understand (comprehensively reported information in way that both technical and non-technical users could understand).

### Final Concepts Workshop | February 10, 2016

Based on feedback received during the September 2015 Concept Workshop, a final set of alternatives was refined and assessed by the consultant team. These results were presented in the Final Workshop and a preferred alternative was selected by the group.

In addition to the working group meetings, a few other individual meetings were conducted throughout the study as summarized below.

### Florida Department of Transportation, District Six, Intermodal Systems Development (ISD) Office | May 18, 2015

The consultant team and City of North Miami project manager met with FDOT planning staff to walk through the study purpose and approach. FDOT planning staff concurred with the approach and stated they would remain partners throughout the study timeframe to help guide and inform the alternative development process and evaluation process. Given NE 125th Street is a State facility; FDOT staff also shared in this meeting what information was important to the decision-making process (i.e., potential regional impacts, City agreement, etc.).

### Project Manager Meeting | September 4, 2015

The consultant team met with the project manager for the City of North Miami to walk through the preliminary set of alternatives in preparation for the September 15th Preliminary Concepts Workshop with the working group.

### FDOT, Operations Office | November 4, 2015

The consultant team and City of North Miami project manager met with FDOT operations staff to walk through the study's traffic operations methodology and results. The FDOT staff concurred with the methodology and shared past studies they performed within the study area (including but not limited to a speed study and a safety study).

### Project Manager Meeting | January 14, 2016

The consultant team met with the project manager for the City of North Miami to walk through the refined set of alternatives and evaluation results in preparation for the February 10th Final Concepts Workshop with the working group.

To see the agreed upon evaluation criteria and preferred alternative, please go to the Goals and Evaluation Criteria section of this report.

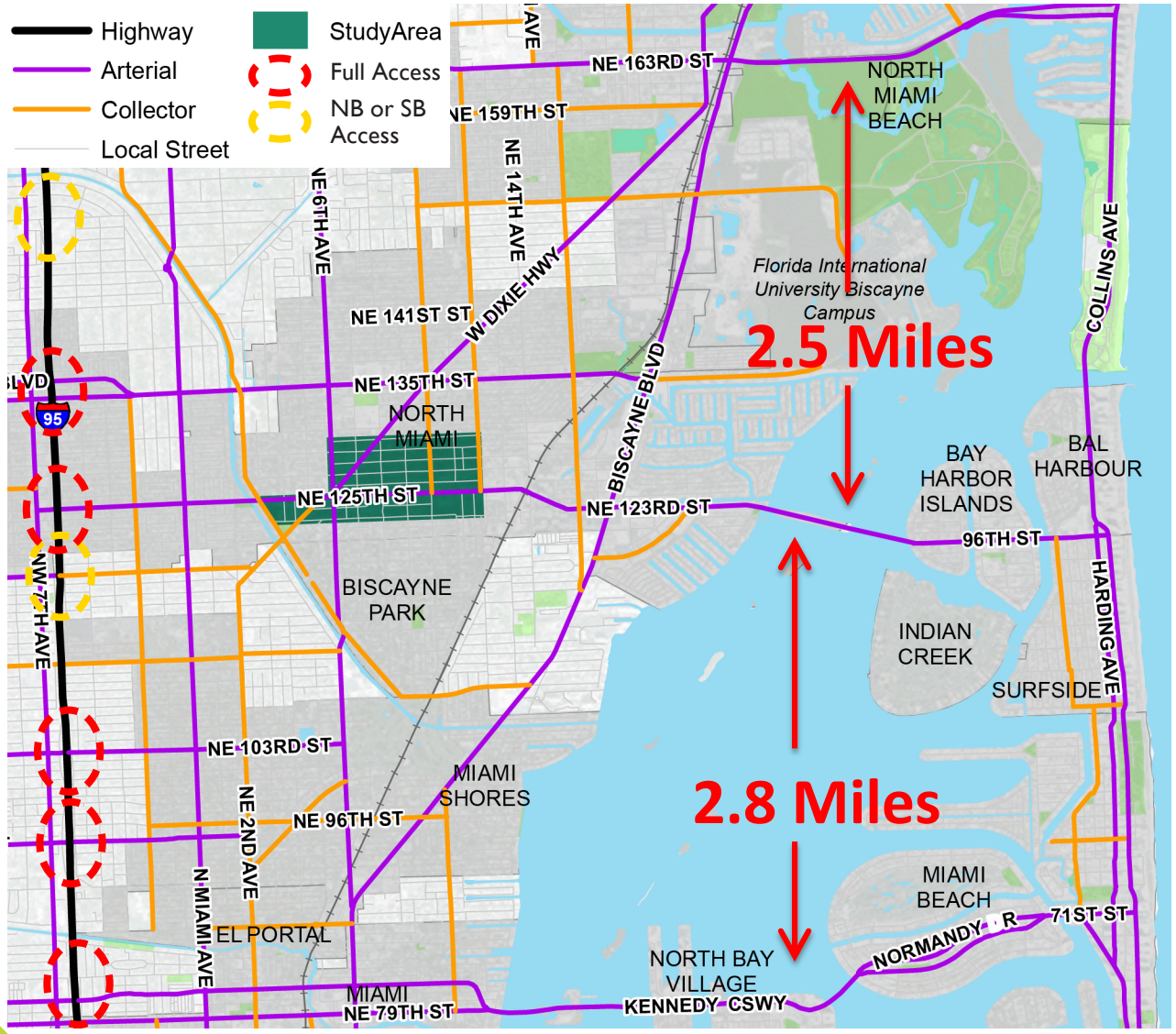
# EXISTING AND FUTURE CONDITIONS

## CORRIDOR & REGIONAL CONTEXT

As noted previously, NE 125th Street is one of the only connections to the beach in the area. Figure 4 shows that the closest alternate connections are Kennedy Causeway 2.8 miles to the south and NW 163rd Street 2.5 miles to the north. Because of this, there is regional as well as local traffic demand on the study corridor.

It is also one of only a few direct connections to I-95 in the area. Because I-95 serves as a connection to the region and beyond, NE 125th Street serves commuters and other regional trip makers in the area as well.

**Figure 4** | Regional Context

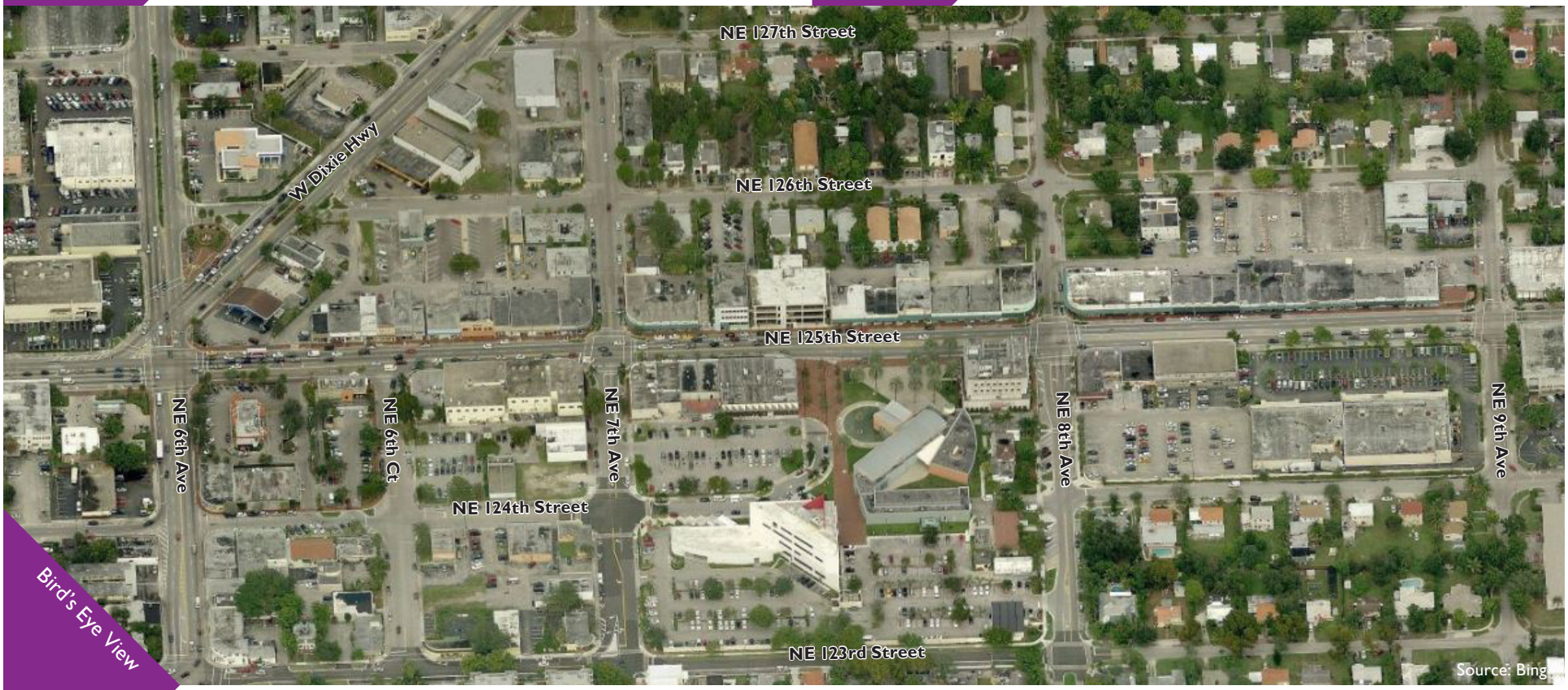



Regarding the local context, NE 125th Street represents a major draw in the area. As shown in the pictures on page 21, the land uses in the area have developed in an urban pattern and the street is lined with shops, restaurants, and cultural facilities on either side in the study area. The surrounding street network is laid out in a grid pattern, which allows for drivers, bicyclists, and pedestrians to utilize alternate routes when needed or desired.

The "5-Points" intersection, which was a major impetus for this study. It represents the convergence of W Dixie Highway, NE 125th Street, and NE 6th Avenue. It has been noted by residents and business owners alike that this intersection is challenging to cross for pedestrians and bicyclists and that it is a source of congestion in the area. In addition to being a converging point for several major streets, the land uses surrounding it have developed in an auto oriented pattern that is not characteristic of the rest of the corridor. The businesses surrounding the intersection include a fast food restaurant, two gas stations, and a Walgreens. All of these buildings are set back from the roadway with parking in front. This type of development encourages the use of the car and creates an environment that is not comfortable to walk in.

5-Points


NE 125th Street @ NE 7th Avenue (east)




Source: Bing

Bird's Eye View

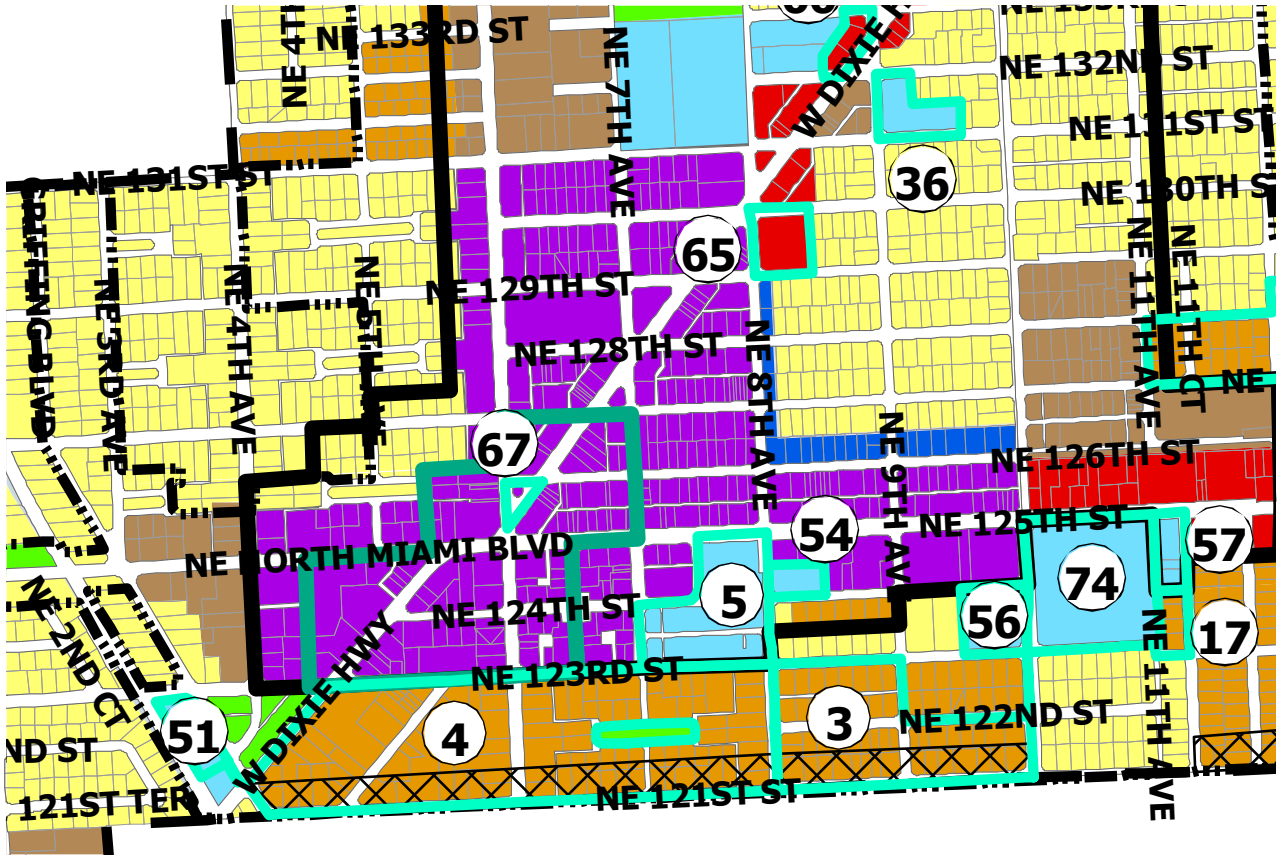
## STUDY AREA LAND USE

The existing land use in the study area consists mostly of retail, dining, and other business uses along NE 125th Street with single- and multi-family residential neighborhoods beginning one block off the street. Most of the development fronting the street is somewhat urban, with buildings fronting the street and parking accessible through alleys in the rear or on the street. The one exception to this is the area immediately surrounding the "5-Points" intersection. As described previously, the development in that area is more auto-oriented in nature.

The City of North Miami adopted a future land use map in 2007 that calls for high density development in the study area. A portion of the map is displayed in Figure 5. The study area is located in the Central City District Node and is zoned as Central Business Commercial. This allows for 110' building heights, or approximately 10 story buildings. According to the plan, some of the residential lots are eventually intended to redevelop as commercial uses, while others are planned to remain as they are now.

If the area is to develop as planned, a few changes will need to be made. Namely, the "5-Points" intersection will likely need to be redesigned. Because of the way that Dixie Highway cuts the parcels surrounding the intersection, it will be difficult to accumulate enough land to construct a building that meets the desired vision for the area. Re-routing Dixie Highway and converting the "5-Points" intersection to a 4-legged intersection would allow for the assembling of parcels needed to accomplish these goals. Additionally, some of the local streets in the study area may need to be repaved and curbed in order to support the added traffic to the network.

**Figure 5** | Future Land Use Map




**Source:** North Miami Future Land Use Map, 2007

- Land Use Plan Amendment Locations
- Neighborhood Redevelopment Overlay Boundary
- CRA Boundary
- Central City District Node Boundary
- City Boundary
- Village of Biscayne Park Height Transition Zone
- Low Density Residential (35 ft., 5.1 DU/AC)
- Low-Medium Density Residential (35 ft., 12 DU/AC)
- Medium Density Residential (75 ft., 16.3 DU/AC)
- High Density Residential (110 ft., 25 DU/AC)
- Residential Office
- Commercial /Office (55 ft.)
- Central Business Commercial (110 ft.)
- Mixed Use Low (55 ft., 25 DU/AC)
- Mixed Use Medium (75 ft., 40 DU/AC)
- Mixed Use High (110 ft., 45 DU/AC)
- Industrial
- Community Facility (55 ft.)
- Community Facility-University (110 ft.)
- Utility
- Open Space/Recreation
- Water
- Conservation
- Wetlands

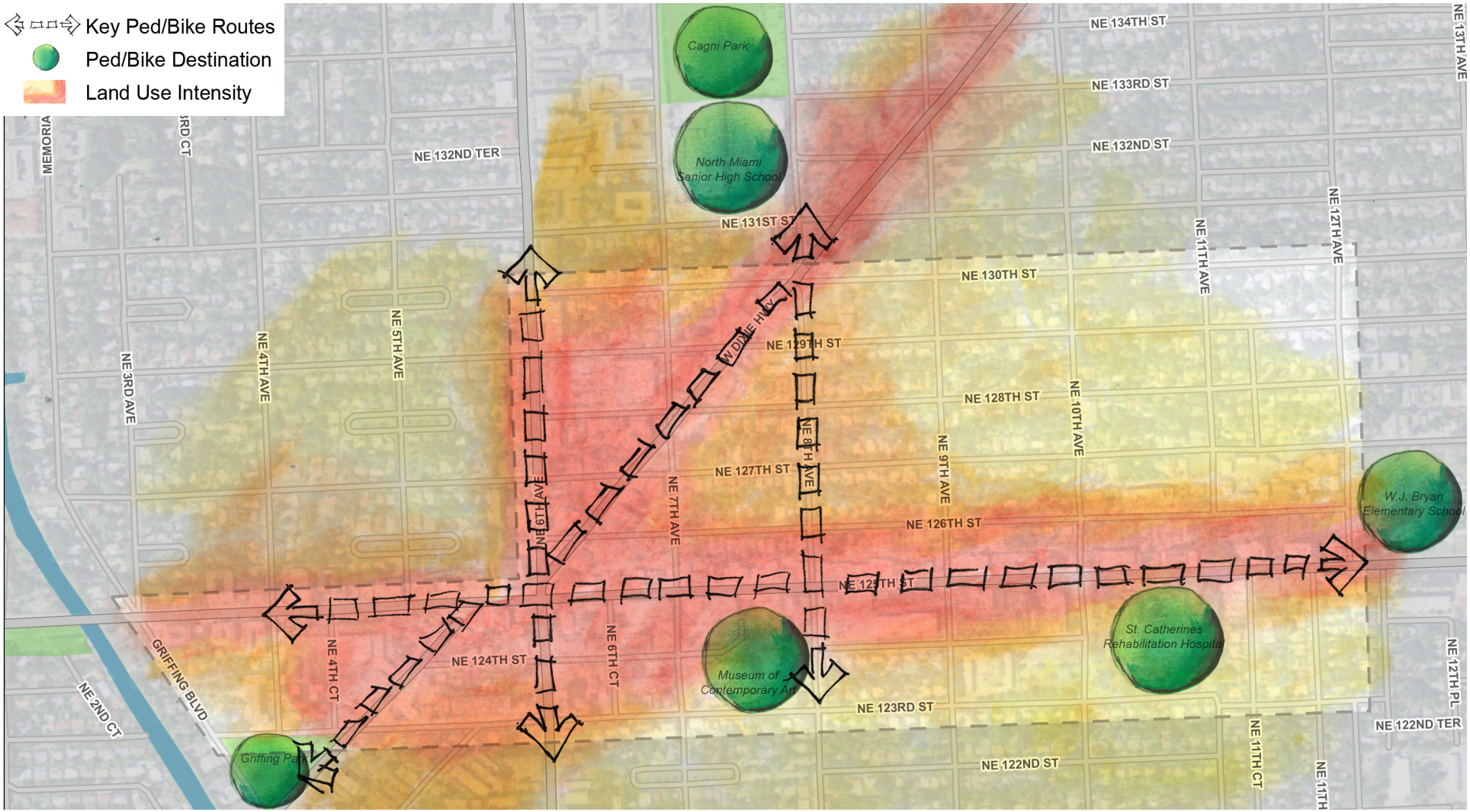
## DESTINATIONS

As shown in Figure 6, there are a number of destinations in the study area. These include two parks, two schools, a hospital, and the Museum of Contemporary Art in addition to the retail and dining destinations around NE 125th Street. When considering these destinations, several key pedestrian and bicycle desire lines become apparent that can help to connect them. These corridors may not be designed in a manner that is comfortable for walking and bicycling currently, and therefore it is important to consider comfort and safety design features in the future.

NE 125th Street is the main street, and therefore is a major walking and bicycling route. However, NE 8th Avenue also connects several destinations, as noted in the Downtown Master Plan. Dixie Highway is major street for retail, and therefore also presents a route that pedestrians and bicyclists might be likely to utilize.

Finally, NE 6th Avenue provides a north/south connection to the major roads outside of the study area. Although there are not many local destinations along it, the street could act as a longer distance connector.

**Figure 6** | Study Area Destinations



## PEDESTRIAN & BICYCLE ENVIRONMENT

The pedestrian and bicycle environment was analyzed in the area to develop a better understanding of what it is like to walk and bike. As shown in Figure 7, sidewalks line every street in the study area. While the sidewalks on the streets surround 125th Street generally meet minimum standards of 5'-6', those on NE 125th Street are wider. They measure approximately 10' which is generally wide enough to accommodate the increased pedestrian activity associated with the downtown area. The sidewalks are also buffered with on street parking, which creates a more comfortable walking environment.

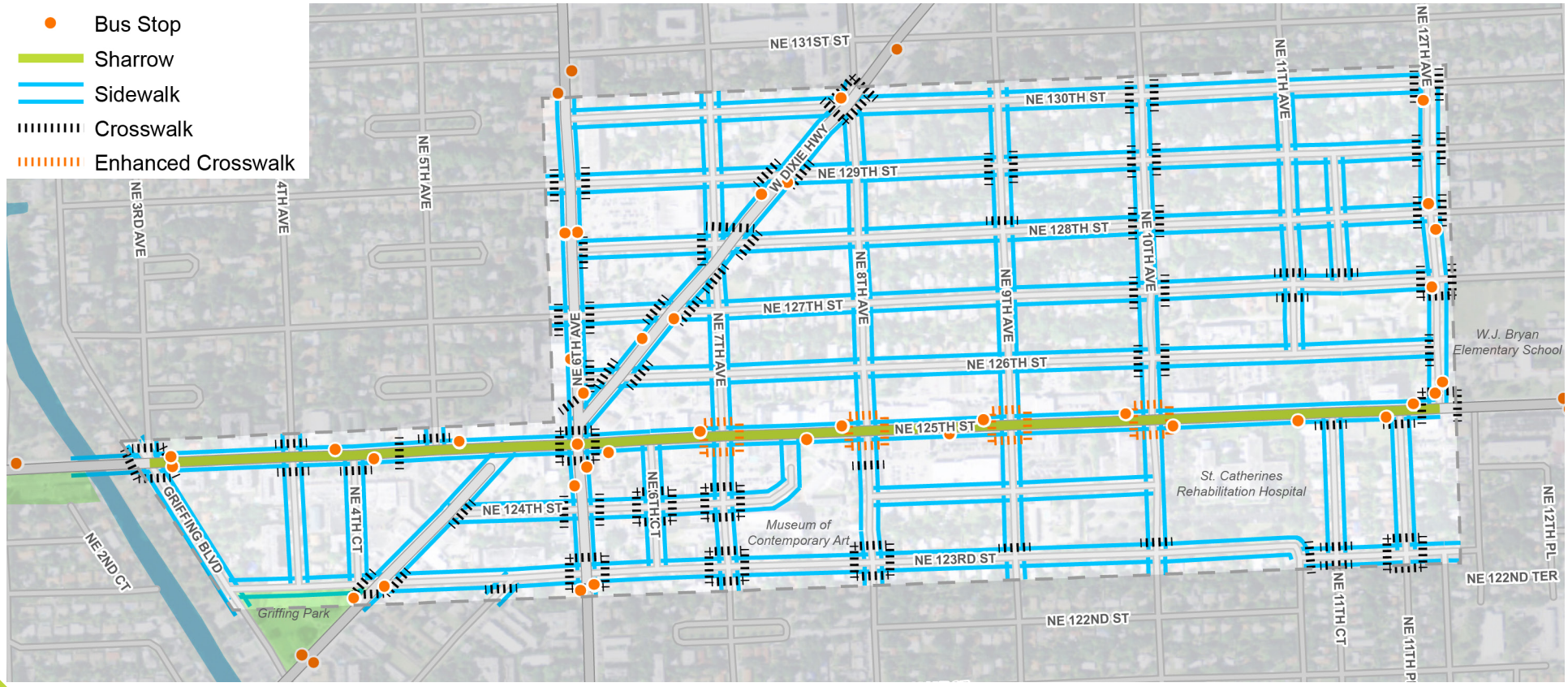
All of the signalized intersections along NE 125th Street have crosswalks. The crosswalks at the intersections of NE 6th Court through NE 10th Avenue have been upgraded based on the Downtown Masterplan and are decorative, which adds to the pedestrian experience in the area. Due to the closely spaced signals in the study area, opportunities to cross are frequent along NE 125th Street.

The crossing opportunities are more sparse on W Dixie Highway and NE 6th Avenue. For example, there is approximately 1/4 miles between crossings on W Dixie Highway between NE 125th Street and NE 128th Street and over 1/3 miles on NW 6th Avenue between NE 125th Street and NE 131st Street. More frequent crossings can help to improve the pedestrian environment. Crossings are especially important near transit stops to allow for passengers to cross the street where they get on or off.

Sharrows are painted on NE 125th Street, and those are the only bicycle facilities in the study area. The speed limit on NE 125th Street is 30 MPH, which is the maximum acceptable speed for sharrows. However, recent from the National Association of American Transportation Officials suggests that sharrows should not be placed on streets with speeds higher than 25 MPH.[1] International guidance also suggests that sharrows should not be placed on streets with AADT higher than 5,000 to 8,000, which NE 125th Street exceeds.[2] The discomfort to bicyclists was clear during a field visit when bicyclists were observed riding on the sidewalk.

1 National Association of City Transportation Officials (NACTO). Urban Bikeway Design Guide. Washington, DC. 2011.
2 CROW. CROW Design Manual for Bicycle Traffic. The Netherlands. 2007.

**Figure 7** | Pedestrian and Bicycle Facilities

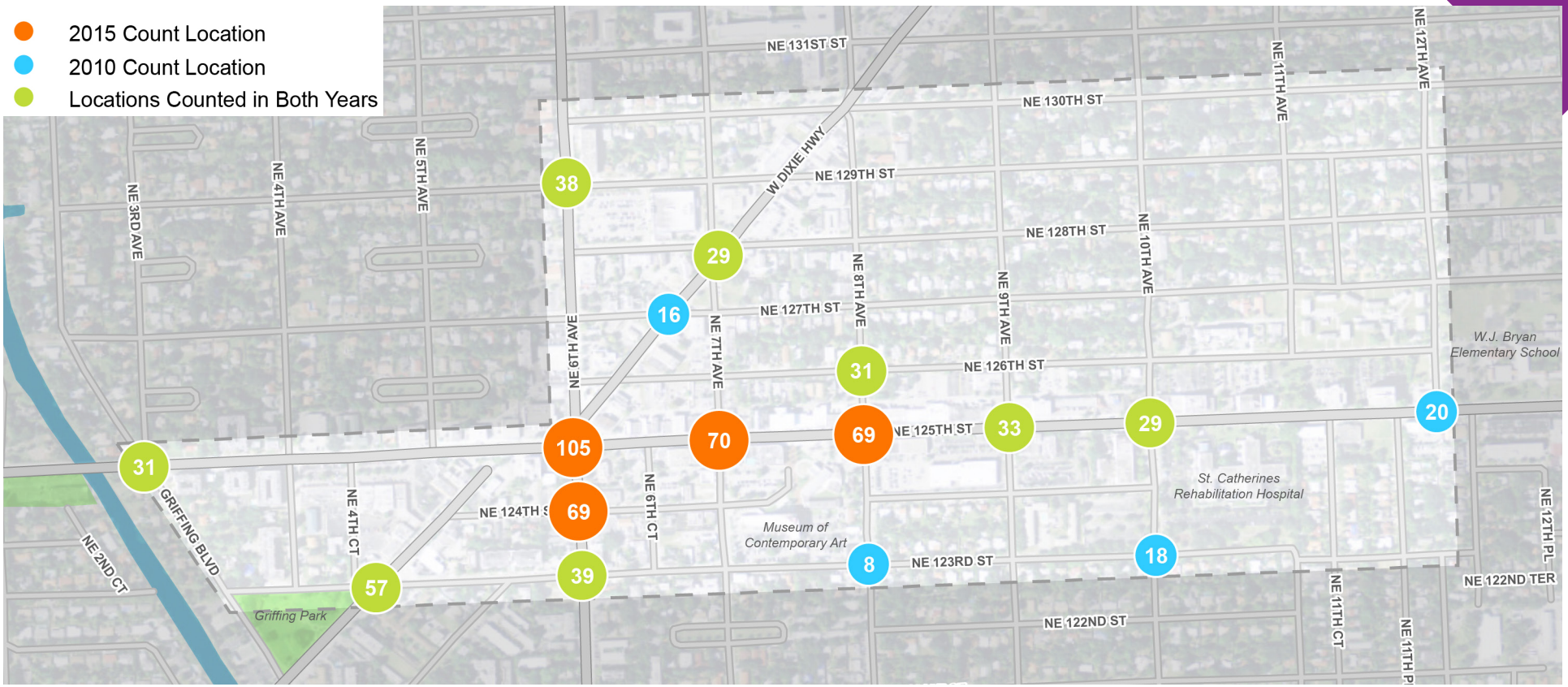


## PEDESTRIAN VOLUMES

Pedestrian volume counts were collected for this study in the AM and PM peak periods on May 6th and 7th, 2015. In addition, they were supplemented with counts taken in 2010 for the previous "5-Points" intersection planning study. Figure 8 shows the pedestrian volumes in the PM peak period (from 4:00 to 6:00 PM). As can be seen, the volumes are highest at the "5-Points" intersection, but remain high in the blocks closest to that area. It should also be noted that it was found through field visits and discussions with the Working Group that pedestrians are crossing mid block in two locations. These are NE 125th Street at NE 124th Street where MOCA is located and a new restaurant is planned; and NE 6th Avenue at NE 124th Street, where some of the highest pedestrian counts were noted.


Wide sidewalks on NE 125th Street (left and right)

**Figure 8** | PM Peak Period Pedestrian and Bicycle Volumes



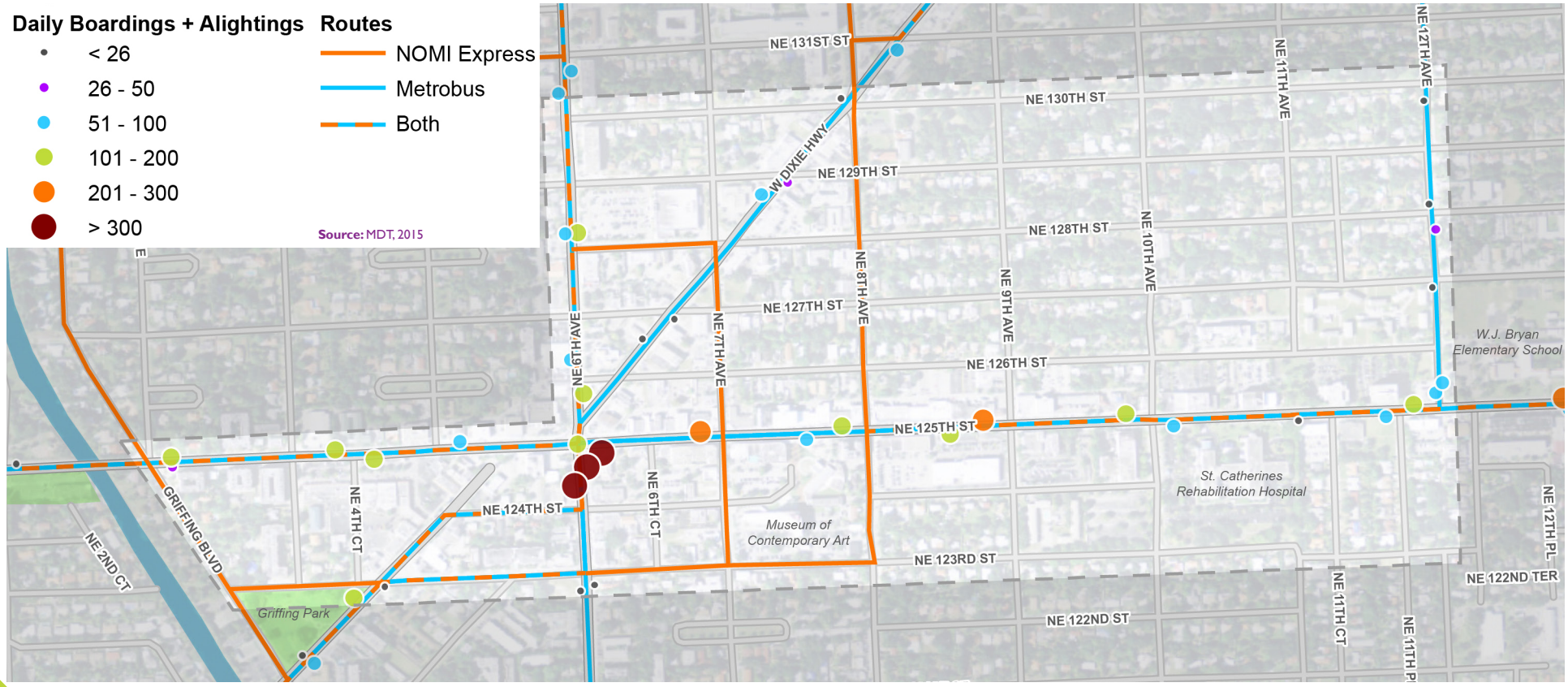
## TRANSIT

The study area is well served by transit. The routes and ridership information are shown in Figure 9. Five Miami-Dade Transit (MDT) bus routes run in the area: Routes 9, 10, 16, 19, and 107 (G) connecting the area to Destinations like Florida International University, Aventura Mall, Downtown Miami, Miami Beach, and others. In addition to MDT service, North Miami runs a local shuttle service, NOMI Express. NOMI Express has four routes. Three of those, the Red, Green, and Orange routes run in the study area.

Almost all of the transit routes converge at the "5-Points" intersection. This becomes apparent when considering the MDT ridership data. The highest ridership in the area is at the "5-Points" intersection, which is also a transfer point. Interestingly, this is the intersection that is the most auto-oriented from a land use perspective. This suggests that land use changes could make this a more pleasant location for pedestrians and transit riders.

Additionally, this area also had some of the highest pedestrian counts in the study area. It was noted that many crossings occur at the NE 124th Street intersection, which is not signalized, and at "5-Points", which has already been noted as confusing and difficult to cross. All of this leads to a need for better accommodations for pedestrian crossings at and around the area between "5-Points" and NE 124th Street.


**Figure 9** | Transit Facilities and Ridership



## PEDESTRIAN, BICYCLE, & TRANSIT ISSUES & OPPORTUNITIES

When considering the pedestrian, bicycle, and transit data and information, several issues and opportunities become apparent, as displayed in Figure 10:

**THERE IS A NEED TO BETTER ACCOMMODATE PEDESTRIAN CROSSINGS AT KEY LOCATIONS IN THE STUDY AREA.**

The area has high transit ridership and the land uses generally support a good pedestrian environment. Additionally, several intersections have enhanced pedestrian crossings. However, the "5-Points" intersection has the highest pedestrian activity in the study area and is difficult to cross for pedestrians. Two other locations with high transit and pedestrian activity were also noted where people are crossing mid block: NE 6th Avenue at NE 124th Street and NE 125th Street at NE 124th Street.

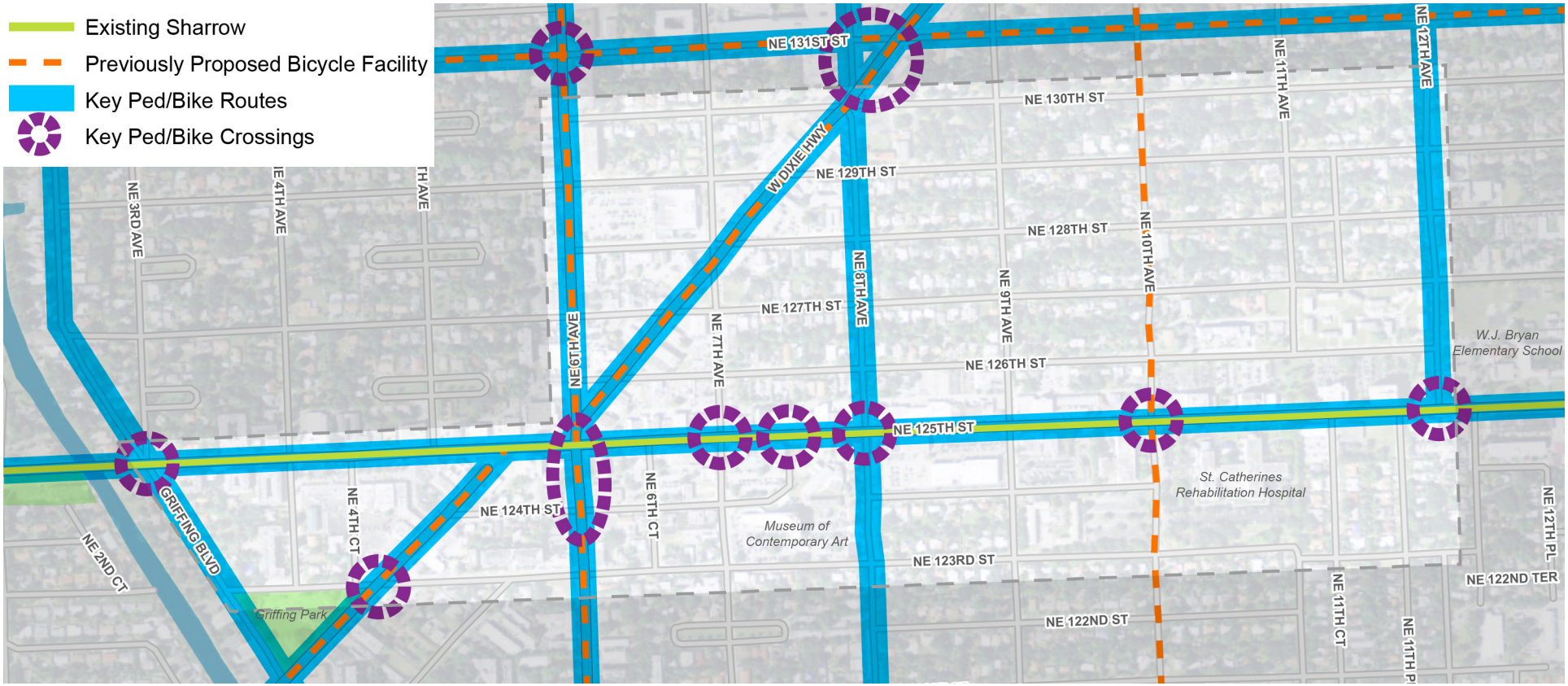
**THERE IS A NEED TO CREATE BICYCLE CONNECTIONS BETWEEN DESTINATIONS.**

This need was highlighted in the Downtown Master Plan and is still relevant. There are a number of key destinations in and around the study area that are close enough to bike or walk between. For example, redesigning NE 8th Avenue with pedestrian and bicycle facilities will connect Downtown to the educational and other destinations in the area. Another key connection is NE 125th Street, which, in addition to being the main pedestrian thoroughfare in the area, connects North Miami to the future Trial Rail Coastal Link as well as other destinations to the east. Other streets, like Griffing Boulevard, Dixie Highway, and NE 6th Avenue and NE 12th Avenue also have the potential to provide bicycle connectivity between North Miami and surrounding destinations.

**THERE IS A NEED TO SUPPORT THE DESIRED VISION THROUGH LAND USE AND INFRASTRUCTURE CHANGES.**

The future land use plan calls for higher density development to create a vibrant, memorable, and walkable place. In order to do this, some land use and infrastructure changes are necessary. For example, the auto-oriented nature of the land uses around the "5-Points" intersection will eventually redevelop in a manner that prioritizes the pedestrian with buildings that face the street. In order for the densities called for in the land use plan to occur, Dixie Highway will need to be rerouted to create blocks to the northwest of "5-Points" that have enough floor area to support the larger buildings. Care should be taken to ensure that these changes maintain the character of the existing residential neighborhoods.

**Figure 10** | Pedestrian, Bicycle, and Transit Issues and Opportunities



## ROADWAY FACILITIES

NE 125th Street is a 4 lane, undivided street with left turn lanes at most intersections. It also has on street parking on at least one side of the street through most of the study area.

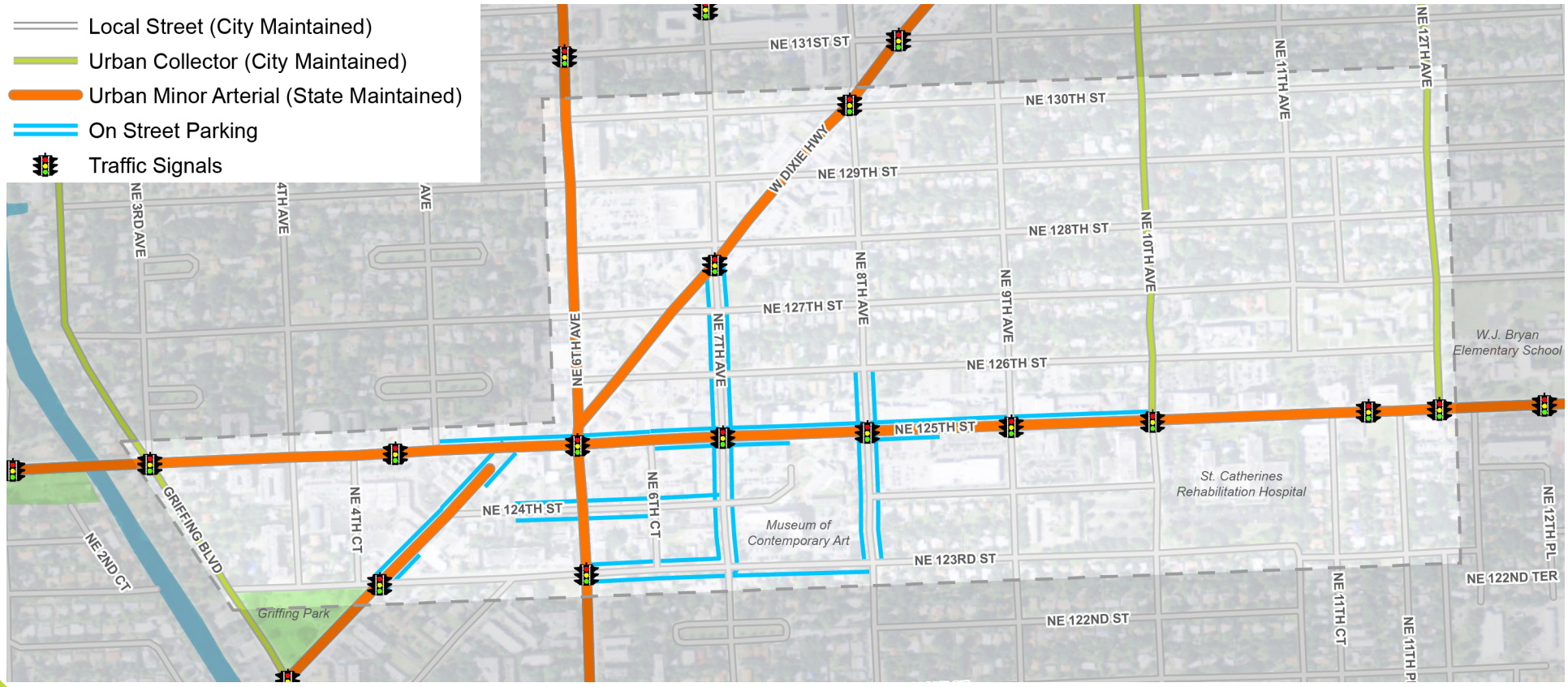
NE 125th Street is owned by the Florida Department of Transportation (FDOT) and is classified as an urban minor arterial. Based on the FDOT Functional Classification Handbook, "the arterial system serves the highest degree of through traffic movement and largest portion of total traffic." However, it recognizes that minor arterials generally serve fewer trips and lower speeds than principal arterials. It notes that they are intended to serve longer trips but also to distribute traffic to smaller geographic areas and that they provide more direct access than principal arterials without penetrating identifiable neighborhoods.

As shown in Figure 11, the street network is generally a complete grid with few road closures. That being said, NE 125th Street is provides the only direct route across the river to the west, and is therefore a lifeline to the area. It also provides the only direct connection to the beach for miles, as discussed earlier. These characteristics support the urban minor arterial classification.

However, it also serves some of the functions of an urban major collector, which are designed for travel at lower speeds and for shorter distances. They provide direct property access and traffic circulation in higher density residential neighborhoods and commercial and industrial areas. As the main street of Downtown North Miami, NE 125th Street serves the local trips of a collector as well as its more regional, through trip role. Collectors also tend to serve as main routes for pedestrians and bicyclists, while arterials serve more auto-oriented uses.

It is worth noting that North Miami has requested for a transfer of ownership of NE 125th Street through downtown. This would allow the City to design and maintain the roadway in a way that meets the desired vision for the area.

**Figure 11** | Network and Functional Classification



## POSTED SPEEDS

The posted speed limits can also help to define the role of the roadway. Higher speed roadways tend to give drivers the impression that the street is a space for vehicles, and lower speeds along with roadway design elements can give drivers a cue that they are entering a place where people might be walking, biking, shopping, dining, or other daily activities.

As noted in Figure 12, the posted speed along NE 125th Street is 35 MPH. Arterials are generally signed at 35 MPH or higher, while collectors are generally signed at 25 MPH to 35 MPH. As a main bike route and core downtown route, slower speeds are desirable. Lower speeds make walking and bicycling safer and more comfortable. When considering the impact of speed on safety, 95% of pedestrians will survive an accident with a vehicle traveling at 20 MPH, 55% will survive an accident with a vehicle traveling at 30 MPH, and 15% will survive an accident with a vehicle traveling at 40 MPH.

Additionally, when people drive slower they are more likely to notice their surroundings, as shown in Figure 13. This can make the street safer for pedestrians and bicyclists while also providing an economic development benefit as people stop to go into stores and restaurants that might catch their eye.

One of the outcomes of this study is to determine the role of the roadway. As shown in this section, it serves multiple users and needs. Once the desired role is defined, transportation strategies can be developed that support that role.

**Figure 12** | Posted Speeds (below)

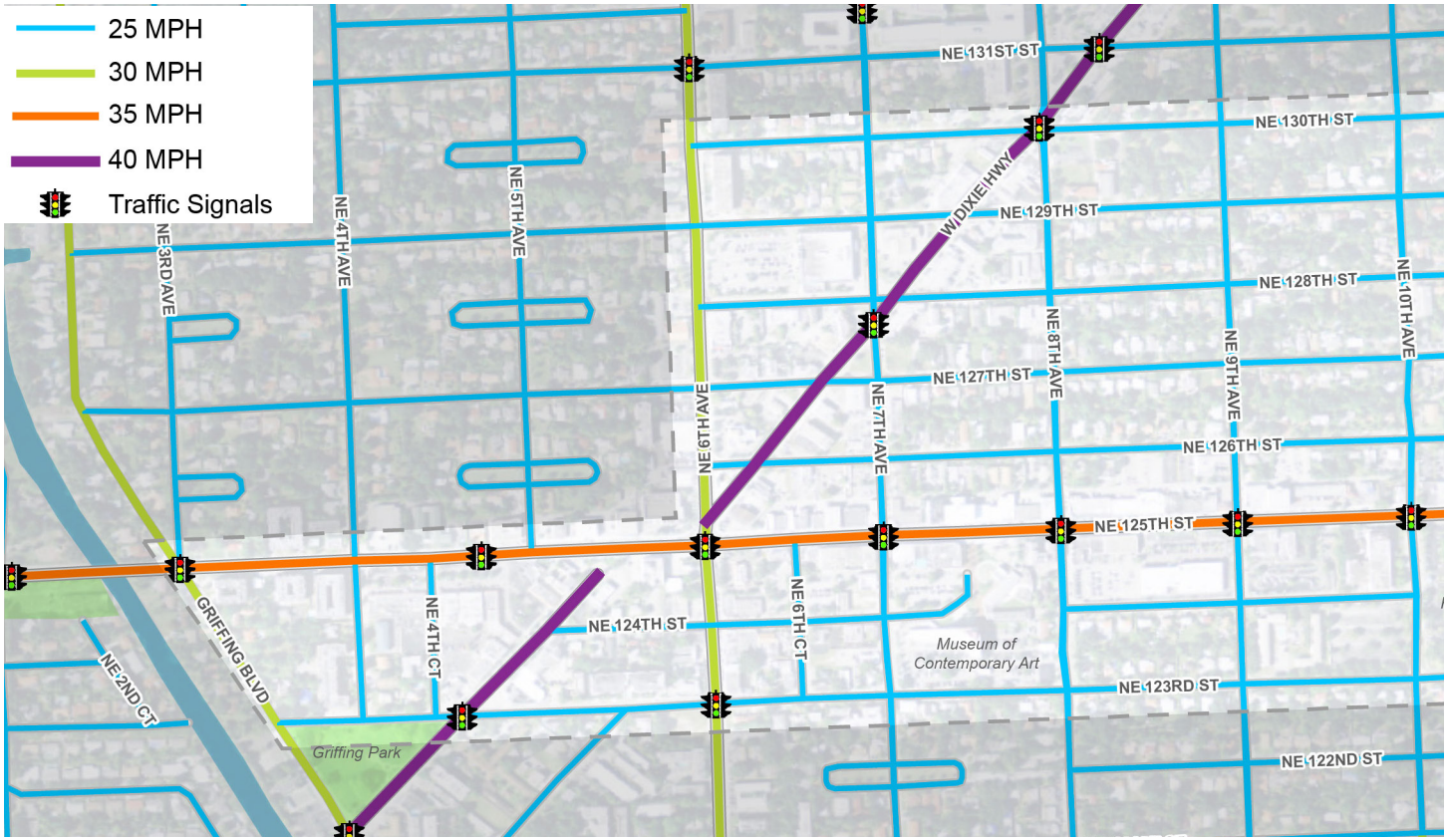



**Figure 13** | Driver's Cone of Vision (right)

## TRAFFIC CONTROLS

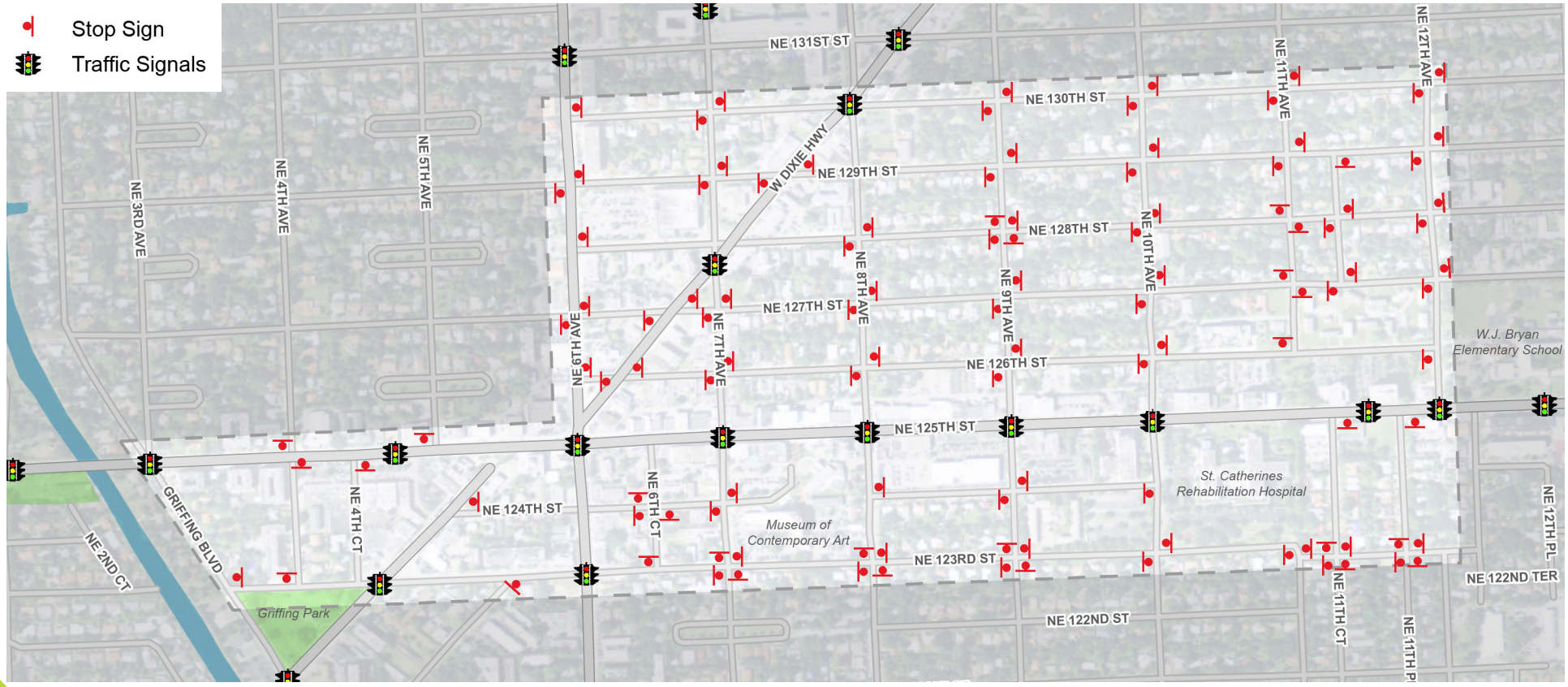
Figure 14 shows that NE 125th Street has a traffic signal at almost every block in the study area. The signals are spaced regularly with about 660' between each one.

Other than NE 125th Street, the only other signalized streets are Dixie Highway and NE 6th Avenue. Both of these streets have less frequent signal spacing, and therefore pedestrians have to walk further to get to a signalized crossing.

The side streets are almost all stop controlled. In general, the east/west routes are stop controlled on the north side and the north/south routes are not. On the south side, the traffic controls are similar although there are more all way stops.



**Figure 14** | Existing Traffic Controls



## HISTORIC TRAFFIC VOLUMES AND CHARACTERISTICS

Historical Average Annual Daily Traffic (AADT) was obtained from FDOT and is shown in Figure 15. NE 125th Street Serves over 30,000 trips per day and generally operates at capacity. However, Figure 16 shows that from 2002 to 2014, traffic volumes on NE 125th Street reduced by approximately 6 to 9 percent, or by 3,000 to 4,000 vehicles per day. During the same time, the population rose 2 percent from 60,034 to 61,420 according to US Census Bureau estimates.

**Figure 16** | Historical AADT Along NE 125th Street

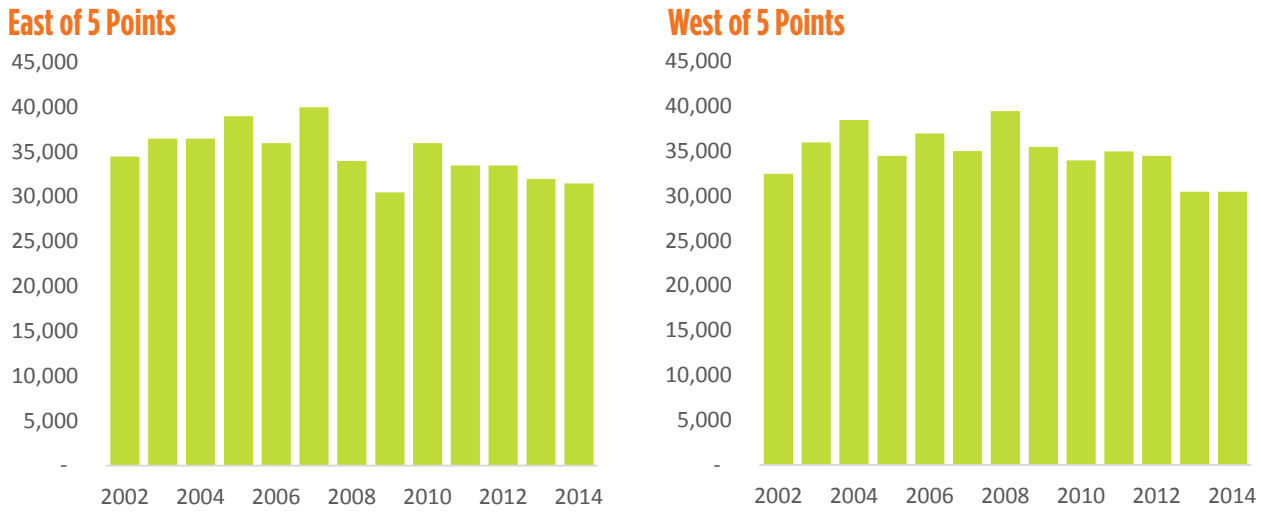
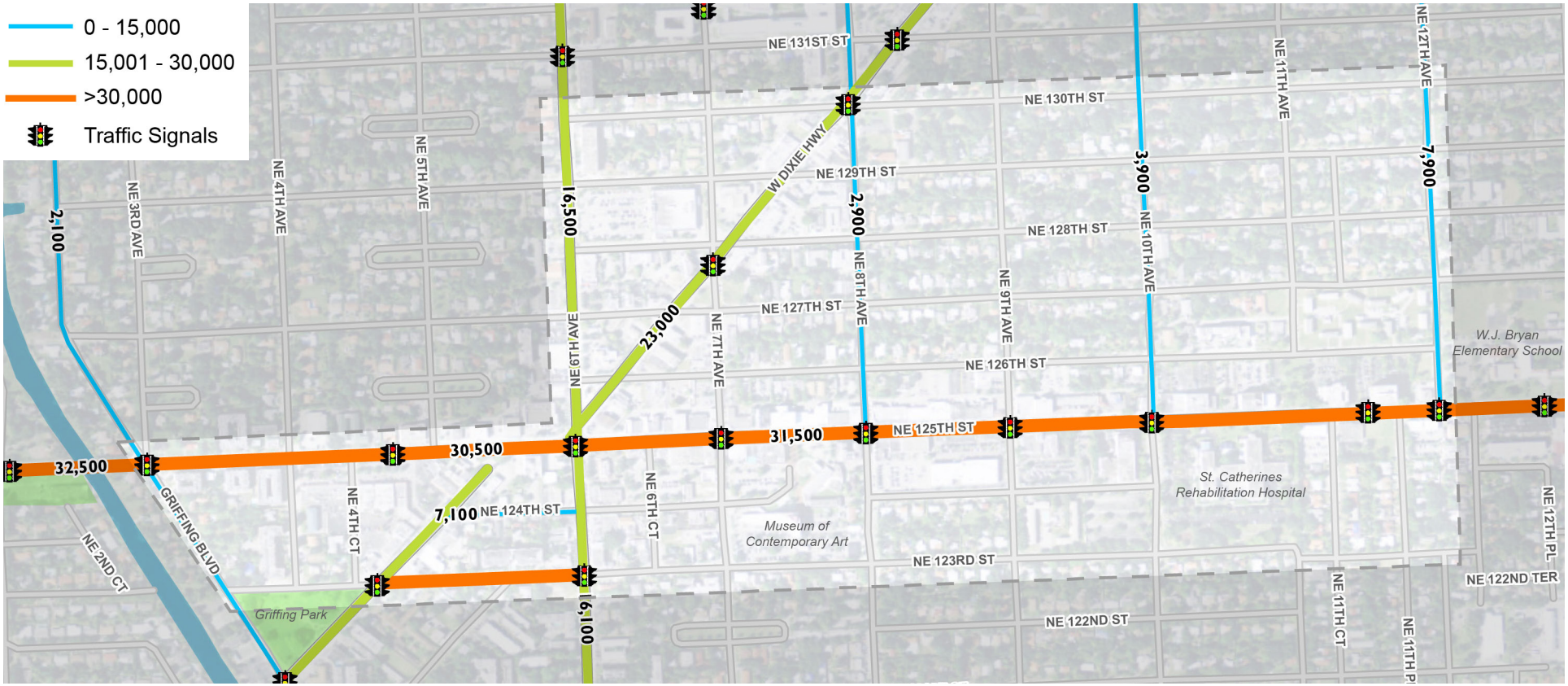



**Figure 15** | Annual Average Daily Traffic



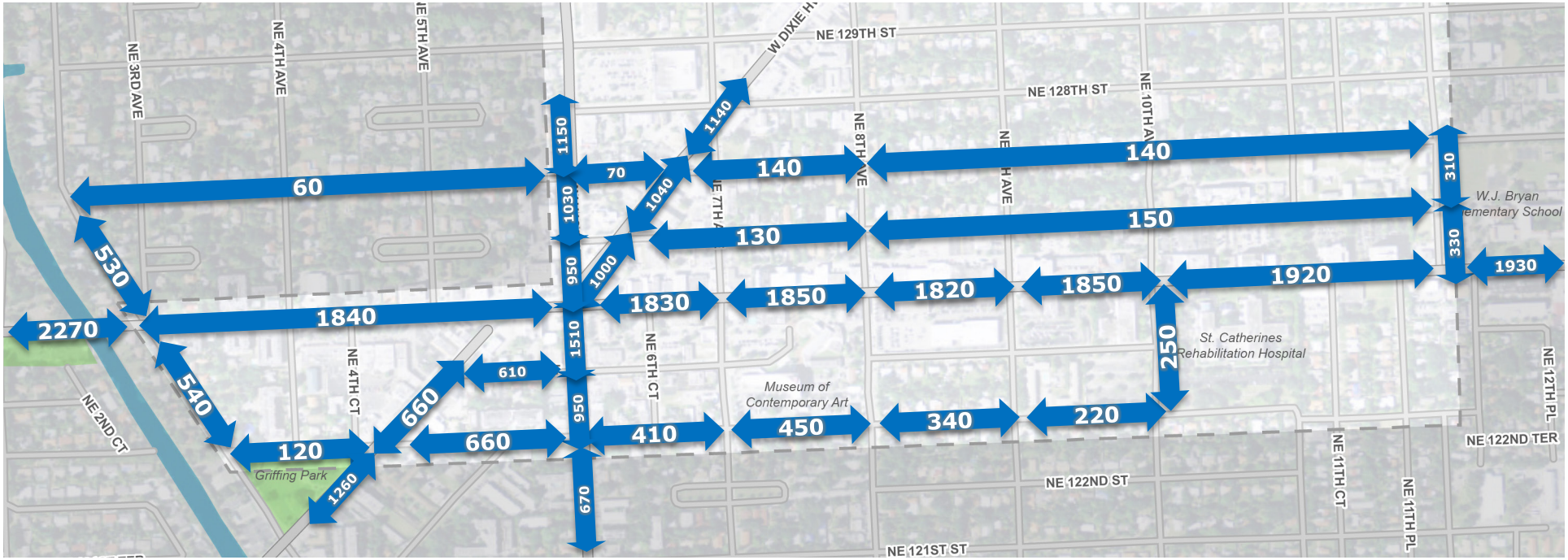



**Figure 17** | 2015 Existing AM Peak Hour Segment Volumes (top)

**Figure 18** | 2015 Existing PM Peak Hour Segment Volumes (bottom)

## EXISTING (2015) TRAFFIC CONDITIONS

The traffic volumes and level of service (LOS) were analyzed to gain a better understanding of how congestion affects mobility in the study area. The FDOT level of service (LOS) standard on urban state roadways is LOS D, for analysis of segments and intersection approaches along the State Highway System. However, the entire City of North Miami has been designated as a Transportation Concurrency Exception Area (TCEA) since 2003. Because of this, it exempt from concurrency requirements specified in Florida Statute 163.3180(5)(f) and does not have to maintain a minimum LOS.

In general, the segment analysis shows that almost all of the segments operate at LOS D or above, with the exception of westbound NE 125th Street between NE 7th Avenue and "5-Points"; northbound NE 6th Avenue between NW 124th Street and "5-Points"; and Dixie Highway northbound and southbound immediately adjacent to "5-Points" which operate at LOS F.

The intersection analysis results show that all of the intersections currently operate at LOS D or better, with the exception of "5-Points" which operates at LOS E in the PM peak hour. The analysis shows that "5-Points" is currently the bottleneck along the NE 125th Street corridor. This is also likely what is causing the delay on the segments around "5-Points" as well. Many of the remaining intersections operate at LOS B or higher. Detailed intersection operations analysis results, as well as intersection geometry diagrams and other pertinent information can be found in the **TRAFFIC TECHNICAL MEMORANDUM**.

**Figure 19** | 2015 Existing Worst Movement

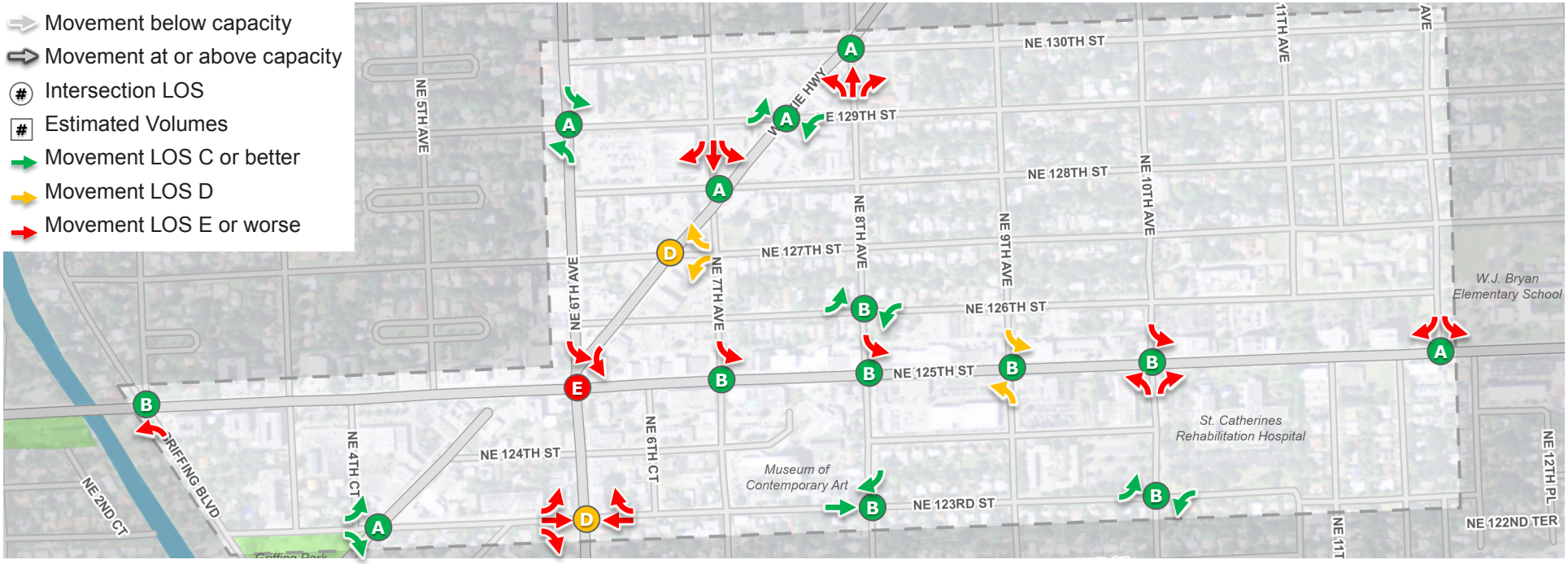



**Figure 20** | 2025 Future AM Peak Hour Segment Volumes (top)


**Figure 21** | 2025 Future PM Peak Hour Segment Volumes (bottom)

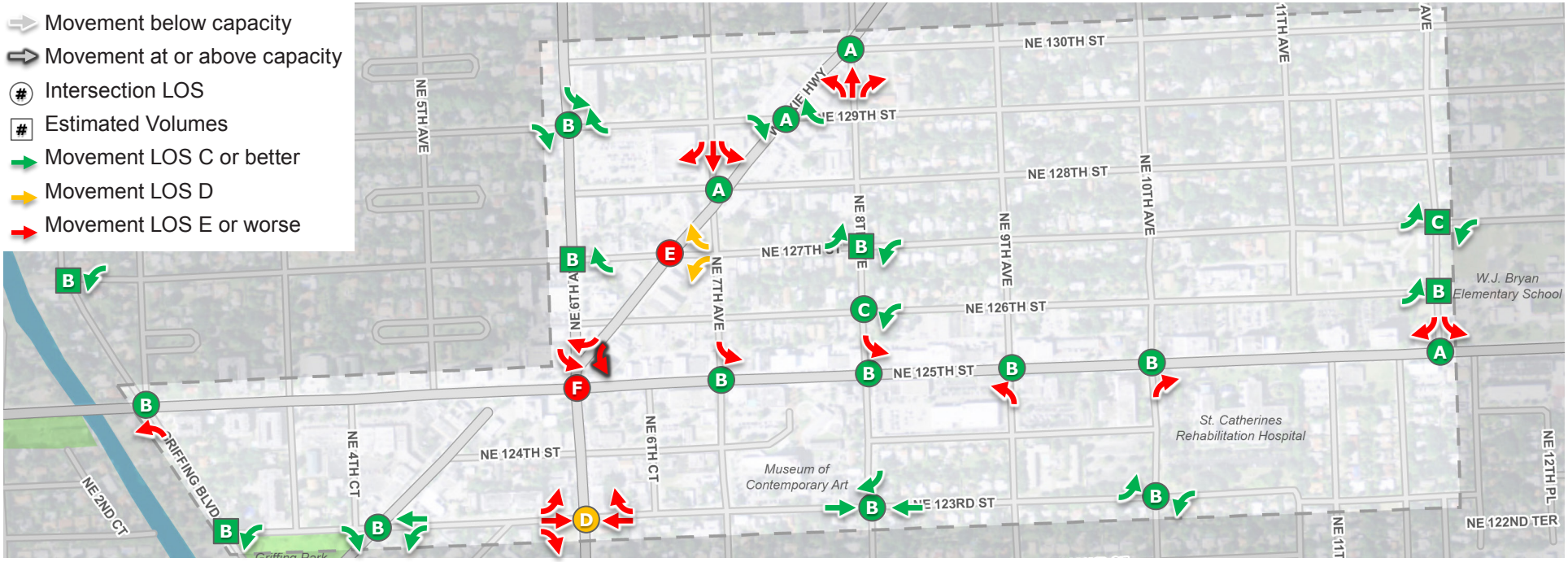
## FUTURE (2025) NO-BUILD TRAFFIC CONDITIONS

The Future Year No-Build analysis shows that the system is expected to operate reasonably well in terms of average vehicle delay. Similar to the existing condition, the "5-Points" intersection remains the bottleneck along the NE 125th Street corridor.

With the exception of the "5-Points" intersection, all roadway segments operate within the FDOT adopted LOS standard. The analysis results conclude that if no major improvements are provided on North Miami's downtown transportation network, and no major development occurs, the system is expected to operate similar to the existing conditions in the horizon year 2025.

Detailed intersection operations analysis results, as well as intersection geometry diagrams and other pertinent information can be found in the **TRAFFIC TECHNICAL MEMORANDUM**.

**Figure 22** | 2025 Future Worst Movement



# GOALS AND EVALUATION CRITERIA

## GOALS AND EVALUATION CRITERIA

The goal of this study is to make improvements to NE 125th Street that will support the future land use plan and Downtown Master Plan vision. This includes making multimodal improvements to the street to create a walkable, vibrant destination.

Based on the existing and future conditions analysis and discussion with the Working Group, a series of performance measures were developed to further the vision for downtown North Miami. These performance measures are intended to act as evaluation criteria for assessing the transportation improvement alternatives. The performance measures fall in to five categories: Land Use & Economic Development; Pedestrian & Bicycle; Transit; Vehicular; and Cost and are described further in the following:

### Land Use & Economic Development

One of the main drivers behind this study is the future land use plan and the Downtown Master Plan. As such, it is important that any solutions further the goals of those plans. The following performance measures support this goal:

#### Supports Existing & Future Land Use

Maintaining two-way traffic increases business visibility, slows speeds, makes navigation easier, and better supports bicycle and pedestrian traffic. Streetscaping and protected bike lanes have also been shown to increase property values and promote business.

#### Maintains Parking Supply

On-street parking and easy access to garages is important to local business vitality.

#### Improves Development Potential

The future land use calls for increased densities and intensities. Creating somewhat larger blocks supports this. Creating a one-way pair might cause directional traffic issues throughout the day, since there is directional peaking.

#### Encourages Economic Development

The future land use plan calls for the commercial land uses to expand several blocks off of 125th Street. Encouraging utilization of the grid helps to disperse traffic and creates more visibility for businesses that locate off of 125th Street.

### Pedestrian & Bicycle

Key to creating a successful downtown is the provision of a comfortable environment for walking and bicycling. The following performance measures address the impacts of changes to the walking and bicycling environment:

#### Connectivity to Destinations

Marked bicycle and pedestrian facilities should connect destinations to encourage non-motorized travel.

#### Bicycle Comfort

Most bicyclists are not comfortable sharing the road when high auto volumes or speeds exist, and separated facilities have been proven to increase bicycling activity.

#### Pedestrian Comfort

People are more comfortable and more likely to walk when they have buffers from vehicular traffic, shade, and wide sidewalks.

#### Safety

Street trees, narrow lanes, marked pedestrian crossings, reduced speeds, shorter crossing distance, and separated or protected facilities can all help to improve pedestrian and bicycle safety.

#### "5-Points" Intersection

The "5-Points" intersection is difficult to cross. Removing a leg creates a 4-legged intersection with is easier to navigate and less confusing for pedestrians.

## Transit

Although this study is not focused on changes to the transit system, connectivity between downtown and the Tri-Rail Coastal Link station will help to support the vision of the city. The follow performance measure supports this goal:

### Compatible with Future Tri Rail Coastal Link & TOD

Connectivity to the future TOD is important for the economic vitality of the area. Transit and bicycle connections can encourage better connectivity to the Tri-Rail Coastal Link.

## Vehicular

While downtown North Miami is envisioned as a destination, NE 125th Street also serves both local and regional travel. Because of this, it is important to consider any impacts to the vehicular environment. The following performance measures address the impact of changes to the vehicular environment:

### Travel Time on NE 125th Street

Length of travel time can impact people's decision to travel at certain times of the day and in selecting their routes, but it has been found that small increases are generally tolerable to most people.

### "5-Points" Intersection Operations

The "5-Points" intersection is the choke point for the corridor. If the intersection performs better, vehicular operations improve overall.

### Preserves Neighborhood Streets

Reductions to capacity of NE 125th Street may cause people to seek alternative routes through the neighborhood. These can be mitigated through traffic calming measures.

## Cost

Cities and other government agencies operate on fixed budgets and many have experienced a decrease in revenue due to the recession. Therefore, considering the costs of improvements is an important element of any planning study. The following performance measures address cost:

### Alternative Cost Effectiveness

Cost was considered during the development of alternatives. From a planning-level perspective, the final set of alternatives are considered cost feasible but the lower cost options and strategies can be implemented in the near-term should full funding not immediately be available.

# CONCEPTUAL ALTERNATIVES

## CONCEPT DEVELOPMENT

Based on the review of the previous plans and studies; case studies; the existing and future conditions analysis; and discussions with the Working Group, four initial sets of strategies were developed. Each strategy aims to improve the multimodal environment and support the future land use plan. The strategies are described below:

### Strategy 1: Traffic Re-Routing/Roadway Closure

The closure of Dixie Highway was proposed between NE 125th Street and NE 127th Street. The closure of Dixie Highway has multiple benefits including: (1) improving the congestion at the "5-Points" intersection by simplifying traffic operations and creating safer, less confusing operations for motorists, (2) lessening travel distance for pedestrians and cyclists while also creating a safer, less confusing design for them to navigate, and (3) creating more desirable block sizes for redevelopment that is consistent with the adopted future land use plan. If desired, the street closure could be implemented in two phases, where the first phase would include closing the southbound travel lanes only.

### Strategy 2: Lane Repurposing

Lane repurposing along NE 125th Street between the "5-Points" intersection and NE 10th Avenue was considered. Two cross-sections were proposed. The first reduced the number of through lanes from four to two while maintaining turn lanes at the intersections. The second option also reduced the number of through lanes from four to two but eliminated the turn lanes at intersections. The lane repurposing strategy would allow for a more inviting pedestrian and bicycle environment through converting the travel lane space into wider sidewalks and/or buffered bike lanes.

### Strategy 3: North/South One-Way Couplet

NE 7th Avenue and NE 8th Avenue were considered as a north/south one-way couplet option with the intent of providing alternative routes to motorists for north and south travel through the City. By dispersing motorists across a network and providing more options, the convergence of traffic at the "5-Points" intersection is reduced. Traffic would be rerouted as follows: traffic traveling southbound on Dixie Highway would head south on NE 7th Avenue before connecting back to Dixie Highway via NE 124th Street. Traffic traveling northbound on Dixie Highway would head west at NE 123rd Street before turning north onto NE 8th Avenue, finally connecting back into Dixie Highway at NE 130th Street.

### Strategy 4: East/West One-Way Couplet

NE 125th Street and NE 126th Street was considered as an east/west one-way couplet option with the intent of accommodating existing traffic on NE 125th Street while also providing for a better pedestrian and bicyclist environment. Under this strategy, NE 125th Street would be two-lanes eastbound and NE 126th Street would be two-lanes westbound between NE 6th Avenue and NE 12th Avenue. Traffic would be rerouted as follows: eastbound traffic would remain on NE 125th Street through the study area and traffic traveling west on NE 125th Street would head north at NE 12th Avenue, head west onto NE 126th Street, head south on Dixie Highway and then finally connect back into NE 125th Street to continue west.

Although NE 125th Street and NE 126th Street was chosen for analysis due to existing and future land uses in the area, this does not rule out the possibility of alternative corridors for an east/west one-way couplet such as NE 127th Street.

## DIVERTED TRAFFIC ASSUMPTIONS

In many of the strategies traffic will be rerouted due to changes in the network design and/or capacity. The following three levels of diversion were assumed during the concept development process.

### Regional Diversion Due to Capacity Changes with Lane Repurposing

Regional trips are defined in this study as vehicles traveling between I-95 and the beach. With reduced capacity on NE 125th Street within the City of North Miami, regional trips may divert away from the study area and use another parallel arterial, such as NE 135th Street. A wayfinding program could be developed to help direct regional traffic in the desired manner. Under each alternative, the amount of traffic being diverted at the regional level was estimated based on the regional travel demand model and existing traffic counts.

### Local Diversion Due to Capacity Changes with Lane Repurposing

Vehicles on NE 125th Street are also expected to naturally divert onto local streets to by-pass congested intersections. Any vehicle demand above the eastbound or westbound intersection approach capacity is assumed to seek alternate routes via the surrounding local road network. To manage and accommodate the change to local trip routing, a neighborhood multi-modal traffic management plan should be developed within the study area. Under each alternative, the amount of traffic being diverted at the local level was based on existing traffic counts and travel pattern assumptions.

### Dixie Highway Diversion Due to Street Closure

The Dixie Highway closure was included in all build scenarios. Traffic re-routing was estimated based on existing traffic count data and travel pattern assumptions.

### East/West or North/South Diversion Due to Couplets

For the couplet scenarios, it was assumed through-trips would reroute accordingly. The specific rerouting applied is described under Strategy 3 and Strategy 4 above.

The traffic diversion volumes and patterns can be found in the **TRAFFIC TECHNICAL MEMORANDUM**.

## STRATEGY SCREENING PROCESS AND RESULTS

The consultant team met with the working group to walk-through the initial set of strategies and to discuss their performance in relation to the study goals and evaluation criteria. Through the screening process, the Working Group determined that the north/south one-way couplet strategy was fatally flawed as it conflicted with the North Miami Downtown Concept Plan. The Concept Plan, published in 2014, proposes to install decorative paving on NE 8th Avenue from NE 123rd Street to NE 132nd Street to calm traffic and provide a pedestrian friendly environment. Given the north/south couplet would encourage additional vehicular and freight traffic to the NE 8th Avenue corridor, the Working Group determined this strategy should be removed from the list of potential improvements.

# CONCEPTUAL ALTERNATIVES

From the strategies remaining after the screening process, five alternatives were developed. In this chapter, each of the alternatives is described and renderings of potential concepts are provided. At the end of the chapter, results of each alternative's performance in relation to the goals is summarized. All traffic analysis related to the alternatives, including segment volumes and operational conditions, can be found in the **TRAFFIC TECHNICAL MEMORANDUM**. Below is a brief introduction of the five alternatives.

## No-Build Alternative

The No-Build alternative considers the impact of retaining the four-lane cross section and not making any other changes to the surrounding network. More information on this alternative can be found in the **FUTURE 2025 OPERATIONS** section of the **EXISTING AND FUTURE CONDITIONS** chapter.

## 4-Lane + Dixie Re-Routing Alternative

This concept alternative only consists of the Dixie Re-Routing strategy.

## 3-Lane + Dixie Re-Routing Alternative

This concept alternative consists of the Lane Repurposing strategy and the Dixie Highway Re-Routing strategy. The NE 125th Street cross-section under this alternative has one through lane in each direction with left-turn lanes at intersections.

## 2-Lane + Dixie Re-Routing Alternative

This concept alternative consists of the Lane Repurposing strategy and Dixie Highway Re-Routing strategy. The NE 125th Street cross-section under this alternative has one through lane in each direction, with a shared left-through-right lane at intersections (i.e., no turn lanes).

## 2-Lane + Dixie Re-Routing + Couplet Alternative

This concept alternative consists of the East/West One-Way Couplet strategy and Dixie Highway Re-routing strategy. From NE 6th Avenue to NE 12th Avenue, the NE 125th Street cross-section under this alternative has two eastbound only through lanes and the NE 126th Street cross-section has two westbound only through lanes.

## 4-Lane + Dixie Re-Routing Alternative

The following are recommended improvements to be implemented with this concept alternative:

### Close Dixie Highway

This concept alternative includes the closure of Dixie Highway between the "5-Points" intersection and NE 127th Street from traffic. This would convert "5-Points" into a 4-legged intersection, and NE 127th Street & Dixie Highway into a 3-legged intersection. The closed segment of Dixie Highway will only be accessible from NE 126th Street.

### Signalize NE 127th Street & Dixie Highway

This intersection is currently a two-way stop controlled intersection, with only right-in and right-out movements permitted for the NE 127th Street approaches. The surrounding land use is expected to generate significant pedestrian traffic in the future based on the City's future land use plan. Therefore, this alternative assumes signalizing the intersection to accommodate future pedestrian traffic with a traffic signal.

### Signalize NE 127th Street & NE 6th Avenue

This intersection is currently a two-way stop controlled intersection with a concrete median preventing through and left-turn movements from NE 127th Street. Since diverted traffic from Dixie Highway closure would introduce turning movements at this intersection, this alternative assumes signalizing and full access at this intersection to permit all movements.

### "5-Points" Phasing Modifications

The closure of Dixie Highway from "5-Points" would provide opportunities to simplify the traffic signal phasing by removing the need for a dedicated phase for the Dixie Highway approach. This alternative assumes operating the northbound and southbound approaches with protected-permitted left-turn phasing under this concept alternative.

### Add NB Left-Turn Lane at "5-Points"

The existing northbound approach does not permit a left-turn. Currently, northbound left-turning vehicles proceed north onto NE 6th Avenue, turn right into southbound Dixie Highway, and make a right-turn onto westbound NE 125th Street. The closure of Dixie Highway would require accommodating for the northbound left-turning vehicles.

### NE 125th Street & NE 10th Avenue Phasing Modifications

The analysis assumes protected-permitted westbound left-turn phasing, and northbound right-turn overlap to improve traffic operations at this location.

### Coordinate NE 123rd Street & Dixie Highway

Signal timing plans show this signalized intersection is currently operating uncoordinated. The analysis assumes coordinating this intersection with NE 123rd Street & NE 6th Avenue using half-cycle lengths.

### Diverted Trips and Travel Time

Due to the closure of Dixie Highway, up to 680 southbound and 500 northbound vehicles in the AM and PM peak hours are expected to be diverted along NE 127th Street and NE 6th Avenue. No regional diversion was assumed. The travel time in the 2025 No-Build Alternative is approximately 4 minutes, 38 seconds from Griffing Boulevard to NE 12th Avenue and is expected to improve by 6 seconds under this alternative.

For detailed information on the traffic analysis, including segment volumes, operations, and other information, please see the **TRAFFIC TECHNICAL MEMORANDUM**.

**Figure 23** | No Build & 4 Lane + Dixie Re-Routing Alternative Cross Section (Looking East)

## 3-Lane + Dixie Re-Routing

The following are recommended improvements to be implemented with this concept alternative:

### Close Dixie Highway

This concept alternative includes the closure of Dixie Highway between the "5-Points" intersection and NE 127th Street from traffic. This would convert "5-Points" into a 4-legged intersection, and NE 127th Street & Dixie Highway into a 3-legged intersection. The closed segment of Dixie Highway will only be accessible from NE 126th Street.

### Convert NE 125th Street to 3-Lanes

This concept alternative includes a lane repurposing on NE 125th Street from 4 through lanes to 2 through lanes from the "5-Points" intersection to NE 10th Avenue. Left-turns along the corridor would be accommodated with exclusive left-turn lanes at signalized intersections. The analysis assumes a westbound right-turn trap-lane at NE 10th, and an eastbound left-turn trap-lane at "5-Points". Changes to the typical section were assumed to occur at locations that take advantage of the existing number of lanes where only re-striping would be required. Changing of typical sections can occur in a variety of ways and should be explored in greater detail prior to implementation.

### Signalize NE 127th Street & Dixie Highway

This intersection is currently a two-way stop controlled intersection, with only right-in and right-out movements permitted for the NE 127th Street approaches. The surrounding land use is expected to generate significant pedestrian traffic in the future based on the City's future land use plan. Therefore, this alternative assumes signalizing the intersection to accommodate future pedestrian traffic with a traffic signal.

### Signalize NE 127th Street & NE 6th Avenue

This intersection is currently a two-way stop controlled intersection with a concrete median preventing through and left-turn movements from NE 127th Street. Since diverted traffic from Dixie Highway closure would introduce turning movements at this intersection, this alternative assumes signalizing and full access at this intersection to permit all movements.

### "5-Points" Phasing Modifications

The closure of Dixie Highway from "5-Points" would provide opportunities to simplify the traffic signal phasing by removing the need for a dedicated phase for the Dixie Highway approach. This alternative assumes operating the northbound and southbound approaches with protected-permitted left-turn phasing under this concept alternative.

### Add NB Left-Turn Lane at "5-Points"

The existing northbound approach does not permit a left-turn. Currently, northbound left-turning vehicles proceed north onto NE 6th Avenue, turn right into southbound Dixie Highway, and make a right-turn onto westbound NE 125th Street. The closure of Dixie Highway would require accommodating for the northbound left-turning vehicles.

### NE 125th Street & NE 10th Avenue Phasing Modifications

The analysis assumes protected-permitted westbound left-turn phasing, and northbound right-turn overlap to improve traffic operations at this location.

### Coordinate NE 123rd Street & Dixie Highway

Signal timing plans show this signalized intersection is currently operating uncoordinated. The analysis assumes coordinating this intersection with NE 123rd Street & NE 6th Avenue using half-cycle lengths.

### Diverted Trips and Travel Time

Due to the closure of Dixie Highway, up to 680 southbound and 500 vehicles in the AM and PM peak hours are expected to be diverted along NE 127th Street and NE 6th Avenue. Additionally, up to 250 vehicles are expected to regionally divert away from NE 125th Street and between 80 and 490 vehicles are expected to divert locally during the peak hours. This alternative is expected to extend future year travel time along NE 125th Street between Griffing Boulevard and NE 12th Avenue by between 16 and 58 seconds (from 4 minutes, 38 seconds under the No-Build Alternative to between 4 minutes, 54 seconds and 5 minutes, 30 seconds under this alternative).

For detailed information on the traffic analysis, including segment volumes, operations, and other information, please see the **TRAFFIC TECHNICAL MEMORANDUM**.

### Complete Street Features

In general, a desire was noted to create a complete street on NE 125th Street to help match the desired character of the area. Complete streets are comprised of a number of elements that help them to become safe, comfortable, and accessible for all users and modes. It has been found that complete streets boost private investment; increase property values; and improve safety.[3; 4] All of these support the Downtown Master Plan. The suggested lane repurposing opens up new space for complete street treatments. There are a number of options for streetscape elements that can be included with the extra space. As the City develops the final streetscape design, the following points should be considered:

*Wide sidewalks:*
Sidewalks provide basic accommodations for pedestrians. If wide enough, the sidewalks can accommodate other features, such as sidewalk cafes, street furniture, landscaping, lighting, and other elements. The sidewalks along NE 125th Street are currently wide by most standards at 10'. This option, which would make the sidewalk even wider, eliminates the potential for bike lanes. If sidewalk cafes are introduced it will be important to ensure that enough space is provided to comfortably fit all of the desired elements. This would require at least 10 to 12' of clear space in addition to space for any other desired elements for bicycles and pedestrians to comfortably share the sidewalk.

*Buffered/Protected Bike Lanes:*
Bicycles are an important form of transportation to consider, as they provide an alternative to driving and have a further reach than walking. Over time and across the country, studies have shown that buffered or protected bike lanes, which have a physical or painted buffer between the bike lane and traffic, can have a number of positive benefits. These include reduction in crashes and crash severity; increase in mobility options; better traffic flow as bicyclists are relocated outside of travel lanes; increase in retail sales; shortened crossing distances for pedestrians; and increase in bicycling as a transportation mode choice.[5; 6]

3 NYCDOT. (2013). The Economic Benefits of Sustainable Streets.
4 National Complete Streets Coalition. (2016). Complete Streets Stimulate the Local Economy. Retrieved from Smart Growth America.
5 People for Bikes; Alliance for Biking & Walking. (2014).
6 Protected Bike Lanes mean Business. NYCDOT. (2014). Protected Bicycle Lanes in NYC.

Two alternatives are shown below, although there are a number of other options available. The preferred option should be determined in the design phase based on public input. On the left, 10' sidewalks are maintained and buffered bike lanes are added between the sidewalk and on-street parking. On the right, the buffered bike lanes are omitted in favor of a wider sidewalk, which bicyclists could share with pedestrians. This option would allow for sidewalk dining as well, although this could narrow the width enough to create potential conflicts between bicyclists and pedestrians.


**Figure 24** | 3-Lane + Dixie Re-Routing Alternative Cross Section (Looking East) Before & After


## 2-Lane + Dixie Re-Routing

The following are recommended improvements to be implemented with this concept alternative:

### Close Dixie Highway

This concept alternative includes the closure of Dixie Highway between the "5-Points" intersection and NE 127th Street from traffic. This would convert "5-Points" into a 4-legged intersection, and NE 127th Street & Dixie Highway into a 3-legged intersection. The closed segment of Dixie Highway will only be accessible from NE 126th Street.

### Convert NE 125th Street to 2-Lanes

This concept alternative includes a lane repurposing on NE 125th Street from 4 through lanes to 2 through lanes from the "5-Points" intersection to NE 10th Avenue. Left-turns along the lane repurposing would be accommodated with shared through-left turn lanes. The analysis assumes a westbound right-turn trap-lane at NE 10th, and an eastbound left-turn trap-lane at "5-Points". Changes to typical section were assumed to occur at locations that take advantage of the existing number of lanes where only re-striping would be required. Changing of typical sections can occur in a variety of ways and should be explored in greater detail prior to implementation.

### Signalize NE 127th Street & Dixie Highway

This intersection is currently a two-way stop controlled intersection, with only right-in and right-out movements permitted for the NE 127th Street approaches. The surrounding land use is expected to generate significant pedestrian traffic in the future based on the City's future land use plan. Therefore, this alternative assumes signalizing the intersection to accommodate future pedestrian traffic with a traffic signal.

### Signalize NE 127th Street & NE 6th Avenue

This intersection is currently a two-way stop controlled intersection with a concrete median preventing through and left-turn movements from NE 127th Street. Since diverted traffic from Dixie Highway closure would introduce turning movements at this intersection, this alternative assumes signalizing and full access at this intersection to permit all movements.

### "5-Points" Phasing Modifications

The closure of Dixie Highway from "5-Points" would provide opportunities to simplify the traffic signal phasing by removing the need for a dedicated phase for the Dixie Highway approach. This alternative assumes operating the northbound and southbound approaches with protected-permitted left-turn phasing under this concept alternative.

### Add NB Left-Turn Lane at "5-Points"

The existing northbound approach does not permit a left-turn. Currently, northbound left-turning vehicles proceed north onto NE 6th Avenue, turn right into southbound Dixie Highway, and make a right-turn onto westbound NE 125th Street. The closure of Dixie Highway would require accommodating for the northbound left-turning vehicles.

### NE 125th Street & NE 10th Avenue Phasing Modifications

The analysis assumes protected-permitted westbound left-turn phasing, and northbound right-turn overlap to improve traffic operations at this location.

### Coordinate NE 123rd Street & Dixie Highway

Signal timing plans show this signalized intersection is currently operating uncoordinated. The analysis assumes coordinating this intersection with NE 123rd Street & NE 6th Avenue using half-cycle lengths.

### Diverted Trips and Travel Time

Due to the closure of Dixie Highway, up to 680 southbound and 500 vehicles in the AM and PM peak hours are expected to be diverted along NE 127th Street and NE 6th Avenue. Additionally, up to 250 vehicles are expected to regionally divert away from NE 125th Street and between 80 and 490 vehicles are expected to divert locally during the peak hours. This alternative is expected to extend future travel time along NE 125th Street from Griffing Boulevard to NE 12th Avenue by between 39 seconds and 1 minute, 35 seconds (from 4 minutes, 38 seconds under the No-Build Alternative to between 5 minutes, 17 seconds and 6 minutes, 13 seconds under this alternative).

For detailed information on the traffic analysis, including segment volumes, operations, and other information, please see the **TRAFFIC TECHNICAL MEMORANDUM**.

### Complete Street Features

In general, a desire was noted to create a complete street on NE 125th Street to help match the desired character of the area. Complete streets are comprised of a number of elements that help them to become safe, comfortable, and accessible for all users and modes. It has been found that complete streets boost private investment; increase property values; and improve safety.[7; 8] All of these support the Downtown Master Plan. The suggested lane repurposing opens up new space for complete street treatments. There are a number of options for streetscape elements that can be included with the extra space. As the City develops the final streetscape design, the following points should be considered:

*Wide sidewalks:*
Sidewalks provide basic accommodations for pedestrians. If wide enough, the sidewalks can accommodate other features, such as sidewalk cafes, street furniture, landscaping, lighting, and other elements. The sidewalks along NE 125th Street are currently wide by most standards at 10'. This option, which would make the sidewalk even wider, eliminates the potential for bike lanes. If sidewalk cafes are introduced it will be important to ensure that enough space is provided to comfortably fit all of the desired elements. This would require at least 10 to 12' of clear space in addition to space for any other desired elements for bicycles and pedestrians to comfortably share the sidewalk.

*Buffered/Protected Bike Lanes:*
Bicycles are an important form of transportation to consider, as they provide an alternative to driving and have a further reach than walking. Over time and across the country, studies have shown that buffered or protected bike lanes, which have a physical or painted buffer between the bike lane and traffic, can have a number of positive benefits. These include reduction in crashes and crash severity; increase in mobility options; better traffic flow as bicyclists are relocated outside of travel lanes; increase in retail sales; shortened crossing distances for pedestrians; and increase in bicycling as a transportation mode choice.[9; 10]

7 NYCDOT. (2013). The Economic Benefits of Sustainable Streets.
8 National Complete Streets Coalition. (2016). Complete Streets Stimulate the Local Economy. Retrieved from Smart Growth America.
9 People for Bikes; Alliance for Biking & Walking. (2014).
10 Protected Bike Lanes mean Business. NYCDOT. (2014). Protected Bicycle Lanes in NYC.

Two alternatives are shown below, although there are a number of other options available. The preferred option should be determined in the design phase based on public input. On the left, 10' sidewalks are maintained and buffered bike lanes are added between the sidewalk and on-street parking. On the right, the buffered bike lanes are omitted in favor of a wider sidewalk, which bicyclists could share with pedestrians. This option would allow for sidewalk dining as well, although this could narrow the width enough to create potential conflicts between bicyclists and pedestrians.

**Figure 25** | 2-Lane + Dixie Re-Routing Alternative Cross Section (Looking East) Before & After

## 2-Lane + Dixie Re-routing + Couplet

The following are recommended improvements to be implemented with this concept alternative:

### Close Dixie Highway

This concept alternative includes the closure of Dixie Highway between the "5-Points" intersection and NE 127th Street from traffic. This would convert "5-Points" into a 4-legged intersection, and NE 127th Street & Dixie Highway into a 3-legged intersection. The closed segment of Dixie Highway will only be accessible from NE 126th Street.

### Close WB Lanes on NE 125th Street

This concept alternative includes the closure of NE 125th Street westbound lanes between "5-Points" and NE 12th Avenue. The eastbound lanes will remain as a 2-lane roadway.

### Close EB Lanes on NE 126th Street

This concept alternative includes the conversion of NE 126th Street eastbound lanes between NE 6th Avenue and NE 12th Avenue into westbound lanes. Stop controlled intersections along this section would be converted to provide free movement to NE 126th Street.

### Add NB Left-Turn Lane NE 126th Street & NE 12th Avenue

Diverting westbound movements onto NE 126th Street would require the addition of a left-turn lane at this intersection.

### Install Stop Sign on NB and SB approaches at NE 126th Street & NE 12th Avenue

The eastbound approach is currently stop controlled, with the northbound and southbound approaches operating free. With this concept alternative, the eastbound approach (west leg) will only function as a receiving lane. Some level of sign control may be required for the northbound and southbound approaches. Stop signs are assumed on the northbound and southbound approaches to provide a conservative analysis.

### Signalize NE 126th Street & NE 6th Avenue

This intersection is currently stop controlled on NE 126th Street with only right-in and right-out movements permitted. Since the concept alternative will divert all westbound movements on the NE 126th Street, this alternative assumes signalizing this intersection to better accommodate increased left-turning movements.

### Signalize NE 127th Street & Dixie Highway

This intersection is currently a two-way stop controlled intersection, with only right-in and right-out movements permitted for the NE 127th Street approaches. The surrounding land use is expected to generate significant pedestrian traffic in the future based on the City's future land use plan. Therefore, this alternative assumes signalizing the intersection to accommodate future pedestrian traffic with a traffic signal.

### Signalize NE 127th Street & NE 6th Avenue

This intersection is currently a two-way stop controlled intersection with a concrete median preventing through and left-turn movements from NE 127th Street. Since diverted traffic from Dixie Highway closure would introduce turning movements at this intersection, this alternative assumes signalizing and full access at this intersection to permit all movements.

### "5-Points" Phasing Modifications

The closure of Dixie Highway from "5-Points" would provide opportunities to simplify the traffic signal phasing by removing the need for a dedicated phase for the Dixie Highway approach. This alternative assumes operating the northbound and southbound approaches with protected-permitted left-turn phasing under this concept alternative.

### Add NB Left-Turn Lane at "5-Points"

The existing northbound approach does not permit a left-turn. Currently, northbound left-turning vehicles proceed north onto NE 6th Avenue, turn right into southbound Dixie Highway, and make a right-turn onto westbound NE 125th Street. The closure of Dixie Highway would require accommodating for the northbound left-turning vehicles.

### NE 125th Street & NE 10th Avenue Phasing Modifications

The analysis assumes protected-permitted westbound left-turn phasing, and northbound right-turn overlap to improve traffic operations at this location.

### Coordinate NE 123rd Street & Dixie Highway

Signal timing plans show this signalized intersection is currently operating uncoordinated. The analysis assumes coordinating this intersection with NE 123rd Street & NE 6th Avenue using half-cycle lengths.

### Diverted Trips and Travel Time

Due to the closure of Dixie Highway, up to 680 southbound and 500 vehicles in the AM and PM peak hours are expected to be diverted along NE 127th Street and NE 6th Avenue. Additionally, approximately 700 vehicles in the AM peak hour and 1320 vehicles in the PM peak hour are expected to be diverted onto NE 126th Street. This alternative is expected to extend future travel time along NE 125th Street from Griffing Boulevard by approximately 13 seconds (from 4 minutes, 38 seconds under the No-Build alternative to 4 minutes, 51 seconds under this alternative).

For detailed information on the traffic analysis, including segment volumes, operations, and other information, please see the **TRAFFIC TECHNICAL MEMORANDUM**.

### Considerations for One-Way Streets

In general, one-way streets can help to shorten travel times and can free up space for more pedestrian and bicycle infrastructure by reducing the number of lanes needed. However, these benefits are not necessarily good for downtown areas. Throughout the country, cities that once celebrated one-way streets are now converting them back to two-way streets. There are a number of reasons for this shift, but some that are particularly relevant to Downtown North Miami include the following:

*Speed*

"Average travel speed can be higher on one-way streets due to less delay at traffic signals and fewer turns being accommodated. Some studies also suggest that drivers pay less attention on one-way streets because there is no conflicting traffic flow."[11]

*Livability*

"Vehicles stop less on one-way streets, which is hard for bikers and pedestrians."[11]

*Navigation*

"One-way street networks are confusing for drivers, which leads to more vehicle-miles traveled; they also make it tough for bus riders to locate stops for a return trip."[11]

11 Jaffe, E. (2013, January 31). The Case Against One-Way Streets. Retrieved from The Atlantic Citylab.

**Figure 26** | 2-Lane + Dixie Re-Routing + Couplet Alternative Cross Section (Looking East) Before & After




*Safety*
"Speeds tend to be higher on one-way streets, and some studies suggest drivers pay less attention on them because there's no conflicting traffic flow."[7] Converting one-way streets to two-way streets can help to slow down traffic. At slower speeds, accidents are less likely to occur and are less severe (especially when pedestrians are involved).[12]

*Economics*
Two-way streets encourage slower speeds, which better allows people to see businesses. Additionally, businesses on one-way streets are only within sight of people traveling in the direction of the street, which can cause business to suffer. Finally, a survey of 25 towns and cities showed that in cities that converted streets from one-way to two-way, private investment was stimulated and vacant floor space was reduced. [12]

12 Edwards, John D. (2002, June). Converting One-Way Streets to Two-Way. Retrieved from Main Street America.

## Alternatives Evaluation Matrix

HIGH MEDIUM LOW

| | OBJECTIVE | DESCRIPTION | DEFINITION OF PERFORMANCE MEASURES |
|---|---|---|---|
| **LAND USE & ECONOMIC DEVELOPMENT** | SUPPORTS EXISTING AND FUTURE LAND USE | Maintaining two-way traffic increases business visibility, slows speeds, makes navigation easier, and better supports bicycle and pedestrian traffic. Streetscaping and protected bike lanes have also been shown to increase property values and promote business. | **Low:** No Change or couplet without streetscaping<br>**Medium:** Couplet with streetscaping or two-way traffic with Dixie removal<br>**High:** Two way traffic maintained with streetscaping and/or protected bike lanes |
| | PARKING SUPPLY | On-street parking and easy access to garages is important to local business vitality. | **Low:** Removes on street parking<br>**Medium:** Does not change on street parking<br>**High:** Adds on street parking |
| | IMPROVES DEVELOPMENT POTENTIAL | The future land use calls for increased densities and intensities. Creating somewhat larger blocks supports this. Creating a one-way pair might cause directional traffic issues throughout the day, since there is directional peaking. | **Low:** No Change/One-Way Pair<br>**High:** Removes Dixie |
| | ENCOURAGES ECONOMIC DEVELOPMENT | The future land use plan calls for the commercial land uses to expand several blocks off of NE 125th Street. Encouraging utilization of the grid helps to disperse traffic and creates more visibility for businesses that locate off of NE 125th Street. | **Low:** Does not encourage utilization of downtown grid<br>**Medium:** Encourages utilization of downtown grid<br>**High:** Requires utilization of downtown grid |
| **PEDESTRIAN & BICYCLE** | CONNECTIVITY TO DESTINATIONS | Marked bicycle and pedestrian facilities should connect destinations to encourage non-motorized travel. | **Low:** No separated facilities<br>**High:** Marked Bicycle & Pedestrian Facilities |
| | BICYCLE COMFORT | Most bicyclists are not comfortable sharing the road when high auto volumes or speeds exist, and separated facilities have been proven to increase bicycling activity. | **Low:** No separated facilities<br>**High:** Buffered or protected bike Lanes |
| | PEDESTRIAN COMFORT | People are more comfortable and more likely to walk when they have buffers from vehicular traffic, shade, and wide sidewalks. | **Low:** 1 Element<br>**Medium:** 2 elements<br>**High:** 3 or more elements |
| | SAFETY | Street trees, narrow lanes, marked pedestrian crossings, reduced speeds, shorter crossing distance, and separated or protected facilities can all help to improve pedestrian and bicycle safety. | **Low:** 1 Element<br>**Medium:** 2-4 elements<br>**High:** More than 4 elements |
| | "5-POINTS" INTERSECTION | The "5-Points" intersection is difficult to cross. Removing a leg creates a 4-legged intersection with is easier to navigate and less confusing for pedestrians. | **Low:** No Change<br>**High:** Leg removed |
| **TRANSIT** | COMPATIBLE WITH FUTURE TRI RAIL COASTAL LINK & TOD | Connectivity to the future TOD is important for the economic vitality of the area. Transit and bicycle connections can encourage better connectivity to the Tri Rail Coastal Link. | **Low:** Vehicular connectivity only<br>**Medium:** Transit connectivity<br>**High:** Transit connectivity and protected bike lanes |
| **VEHICULAR** | TRAVEL TIME ON NE 125TH Street | Length of travel time can impact people's decision to travel at certain times of the day and in selecting their routes, but it has been found that small increases are generally tolerable to most people. | **Low:** Increases travel time > 20% or 30 sec/vehicle<br>**Medium:** Does not change travel time > 20% or 30 sec/vehicle<br>**High:** Decreases travel time |
| | "5-POINTS" INTERSECTION OPERATIONS | The "5-Points" intersection is the choke point for the corridor. If the intersection performs better, vehicular operations improve overall. | **Low:** V/C > 1.0<br>**Medium:** V/C .9 – 1.0<br>**High:** V/C < .9 |
| | PRESERVES NEIGHBORHOOD STREETS | Reductions to capacity of NE 125th Street may cause people to seek alternative routes through the neighborhood. These can be mitigated through traffic calming measures. | **Low:** Forces vehicles into neighborhood<br>**Medium:** Displaces some vehicles<br>**High:** Does not utilize neighborhood streets |
| **COST** | ALTERNATIVE COST EFFECTIVENESS | Cost was considered during the development of alternatives. From a planning-level perspective, the final set of alternatives are considered cost feasible but the lower cost options and strategies can be implemented in the near-term should full funding not immediately be available. | **Low:** No change<br>**Medium:** Dixie Removal<br>**High:** Requires reconstruction |

| NO BUILD (2025) | 4-LANE + DIXIE RE-ROUTING | 3-LANE + DIXIE RE-ROUTING | 2-LANE + DIXIE RE-ROUTING | 2-LANE + DIXIE RE-ROUTING + COUPLET |
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# PREFERRED ALTERNATIVE + NEXT STEPS

# PREFERRED ALTERNATIVE + NEXT STEPS

Based on the alternatives analysis, the Working Group selected the **3 LANE + DIXIE RE-ROUTING** alternative. This alternative was chosen based on its ability to support the future land use plan; improve the pedestrian and bicycle environment; and relatively small impact on travel times.

The NE 125th Street Multimodal Improvements study is one step of many in the transformation of Downtown North Miami into a multimodal, vibrant, livable, and memorable place. This study presents a plan that lays the groundwork for improvements that represent a first step in the ultimate realization of the vision presented in the Downtown Master Plan. As the City begins to pursue concept and final design for the improvements to NE 125th Street, a series of next steps have been developed and categorized into two categories:

- Engineering and Design Needs
- Public and Stakeholder Engagement

## Engineering and Design Needs

During the period of this study, the City submitted an application to transfer the ownership of the study area corridor from the State to the City. This ownership transfer will need to be completed prior to any major changes to the corridor can take place.

Once the transfer of ownership occurs, further study will need to be undertaken to develop a final design concept for the preferred alternative. This study will determine what the cross section will include, such as bike lanes, wider sidewalks, on street parking, types of trees, street lighting, and other elements. The final design concept will need to consider the location and type of drainage and other utilities as well.

This study should also determine whether the improvements will be completed all at once or over time. The the improvements are to be completed over time, a phasing plan should be developed that delineates when each portion of the plan is to be completed.

The final design of the corridor should be developed with based on input from the public regarding what they would like to see included.

## Public and Stakeholder Engagement

Public and stakeholder engagement will be a critical factor in moving the NE 125th Street Multimodal Corridor Study from plan to reality. Successful implementation of this project depends not just on the substance, but also on the support of champions and critical stakeholders. Given North Miami's diverse residential and business climate, a multi-pronged approach is recommended as follows:

### Frame the Message

Key messaging should be central to a public engagement campaign. In order to be effective, messaging should be consistent, intentional, and used by all relevant leaders and champions. Framing the "why" should be emphasized as much as discussing the planned changes. This is key to translating the multi-modal improvements into terms that make sense to residents and other stakeholders. Given North Miami's local context and diverse stakeholders, targeting sub-messages to specific audiences could be considered to address criticisms and concerns.

### Identify and Educate Champions

In order to build support and momentum for the recommended improvements to the NE 125th Street corridor, garnering the support of champions is critical. Identifying, engaging, and educating these individuals can catalyze public support for this project. Consider targeting diverse representation among residents, business leaders, and decision makers.

### Build a Guiding Coalition

Garnering the support of a small, powerful core group of visible and credible leaders can help remove barriers and exert influence to support adoption and implementation.

### Develop an Outreach Strategy

While it's important to identify champions and a guiding coalition, another important step is broad public engagement. Residents, local business, and various cultural groups should have opportunities to learn about the recommended improvements to NE 125th Street and provide feedback. This can be achieved in many different ways. Charrettes and workshops are common, effective strategies. Tactical urbanism interventions could also be an effective tool to give a preview of the changes to stakeholders and build widespread community support.

Prepared for the City of North Miami by:

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