



# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## Table of Contents

Executive Summary ..... 1

I. Introduction..... 3

II. Mobility Report Card..... 6

III. Land Use and Transportation Plans ..... 30

IV. Transportation Strategies ..... 37

V. Transportation Strategies: Evaluation & Prioritization ..... 50

VI. Conclusion..... 54

### Figures

Figure 1. Aerial of the City of North Miami..... 3

Figure 2. Existing Pedestrian Network ..... 7

Figure 3. Existing Pedestrian LOS..... 8

Figure 4. Existing Bicycle Network..... 10

Figure 5. Existing Bicycle LOS ..... 11

Figure 6. NoMi Express Routes and Stops ..... 13

Figure 7. Location of MDT Routes Map..... 14

Figure 8. NoMi and MDT Bus Routes Within North Miami ..... 18

Figure 9. Number of Lanes of Major Roadways..... 19

Figure 10. Functional Clarifications of Major Roadways..... 20

Figure 11. Existing Daily LOS ..... 23

Figure 12. Peak Hour LOS ..... 25

Figure 13. Daily 2025 LOS..... 26

Figure 14. 2025 Peak Hour LOS..... 29

Figure 15. CRA Redevelopment Plan Stage 2 ..... 32

Figure 16. Illustration of All Improvements..... 36

Figure 17. Missing Sidewalk Links ..... 38

Figure 18. CRA Redevelopment Plan Stage 2,  
Proposed Bicycle Network..... 41

Figure 19. Proposed Realignment of NoMi Express  
Routes Modifications ..... 43

Figure 20. Future NoMi System ..... 44

Figure 21. Location of Public Schools..... 49



# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN

### Table of Contents *continued*

#### Tables

<b>Table 1.</b>	<b>Pedestrian Level of Service Classifications .....</b>	<b>6</b>	<b>Table 12.</b>	<b>Five-Year Capital Improvement Plan Fiscal Years 2006-2011 .....</b>	<b>33</b>
<b>Table 2.</b>	<b>Bicycle Level of Service Classifications.....</b>	<b>9</b>	<b>Table 13.</b>	<b>Miami-Dade Metropolitan Planning Organization 2025 Long-Range Transportation Plan Improvements.....</b>	<b>34</b>
<b>Table 3.</b>	<b>NoMi Express – Operational Summary for February 2005 .....</b>	<b>12</b>	<b>Table 14.</b>	<b>Miami-Dade Metropolitan Planning Organization 2005–2009 Transportation Plan Improvements .....</b>	<b>34</b>
<b>Table 4.</b>	<b>MDT Route Service Headways (Minutes) .....</b>	<b>16</b>	<b>Table 15.</b>	<b>Florida Department of Transportation Five-Year Work Program 2005–2010.....</b>	<b>35</b>
<b>Table 5.</b>	<b>North Miami’s Proportionate Share of MDT Ridership – Annual Ridership Information from September 2003 to August 2004 .....</b>	<b>17</b>	<b>Table 16.</b>	<b>Summary of All Improvements Within City of North Miami .....</b>	<b>35</b>
<b>Table 6.</b>	<b>Generalized LOS Table .....</b>	<b>20</b>	<b>Table 17.</b>	<b>City of North Miami Transportation Master Plan Strategy/Project Evaluation Matrix.....</b>	<b>52</b>
<b>Table 7.</b>	<b>Roadway Functional Characteristics .....</b>	<b>21</b>	<b>Table 18.</b>	<b>City of North Miami Transportation Master Plan Priority Matrix Analysis – Cost, Mobility, and Applicability Factors.....</b>	<b>53</b>
<b>Table 8.</b>	<b>Existing Daily LOS .....</b>	<b>22</b>	<b>Table 19.</b>	<b>City of North Miami Transportation Master Plan Priority Matrix Analysis – Cost, Mobility, and Applicability Factors.....</b>	<b>54</b>
<b>Table 9.</b>	<b>Peak Hour LOS .....</b>	<b>24</b>			
<b>Table 10.</b>	<b>City of North Miami Traffic Volumes and Corresponding Levels of Service – 2025 Roadway Peak Hour Level of Service Analysis.....</b>	<b>27</b>			
<b>Table 11.</b>	<b>City of North Miami Traffic Volumes and Corresponding Levels of Service – 2025 Roadway Daily Level of Service Analysis .....</b>	<b>28</b>			



# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## Executive Summary

### Purpose of the Plan

The main purpose of the North Miami Transportation Master Plan (TMP) is to set the vision for the City's future transportation system and to establish the framework to guide the transportation system investments for the future. It establishes the strategies and priorities for short- and long-term transportation decisions and investments by the City. The plan recommends a **multimodal transportation system** that provides more transportation choices for all residents of North Miami. It calls for investing in more non-automobile transportation systems as a means to address travel and mobility issues in the City. Providing viable strategies which do not require expansion of the street network or expensive roadway widening will maintain the City's quality of life, preserve the existing community, and manage the existing transportation system.

### Context of the Plan

On September 22, 2003, the City of North Miami adopted a Transportation Concurrency Exception Area (TCEA) to ensure that the City's redevelopment efforts were not hindered by transportation concurrency. As part of the TCEA, the City adopted several policies in the Transportation Element of its Comprehensive Plan to address the mitigation of traffic issues associated with the concurrency exception. Specifically, Policy I.3.6 of the Transportation Element states the City's commitment to developing

a Transportation Master Plan (TMP) and to integrate the plan into the City's Comprehensive Plan.

The City has also designated the North Miami Community Redevelopment Area (CRA) and adopted a Community Redevelopment Plan to guide future redevelopment within the CRA. The transportation goals of both the Transportation Element, including the TCEA, and the CRA Redevelopment Plan include increasing the transportation choices for residents and visitors, addressing the City's traffic issues, and enhancing the streets for all users.

In addition, growth in the region continues to place a strain on the City of North Miami's transportation system, resulting in recurring periods of automobile traffic congestion compromising the quality of life for residents and adversely impacting the residents and business communities. The TMP is a response to the TCEA requirements as well as an increased need to evaluate existing conditions and better coordinate land use and transportation plans to address local mobility issues.

### Overview of the Transportation Master Plan

The main objective of this Transportation Master Plan is to set the framework for the transportation system that will address future travel and mobility challenges with an approach that strives to manage traffic congestion with a multimodal transportation system. This framework is

proposed to be achieved by providing more travel options while investing wisely in its existing transportation system. The plan aims to provide a multimodal system of transportation that will reduce the impact of automobile traffic congestion within the City. The future transportation conditions will be addressed by a set of transportation demand and multimodal strategies.

The approach presented in the TMP to manage the transportation system involves the following:

- Provision of a wider range of travel choices
- Investment in public transit
- Adoption of measures that manage traffic demand rather than a continued supply of transportation infrastructure
- Operational improvements and traffic management on the existing roadway network
- Selective improvements to the roadway network that efficiently utilize the existing infrastructure to its fullest potential

### Components of the Transportation Master Plan

The *City of North Miami Transportation Master Plan* consists of four components:

1. **Mobility Report Card**  
The mobility report card represents a snapshot of mobility for pedestrians, bicycles, public transit, and motor

vehicles in the City. The report card is based upon an evaluation of the transportation system's existing facilities or service and its current level of service. This information is used to determine the current state of mobility and to identify the system needs based on the multimodal direction.

#### 2. **Land Use and Transportation Plans**

A review of land use and transportation plans were performed to obtain information about planned and programmed transportation improvements within the City and future redevelopment. The City, County, Metropolitan Planning Organization (MPO) and the Florida Department of Transportation (FDOT) land use and transportation plans were included in the review.

#### 3. **Transportation Strategies/Projects**

The third component involved the identification of transportation strategies/projects based upon the existing transportation system conditions and the system needs provided in the mobility report card. The strategies were grouped into pedestrians, bicycles, public transit, roadways, transportation demand management (TDM), transportation system management (TSM) and neighborhood traffic management (NTM).

#### 4. **Transportation Strategies/Projects: Evaluation and Prioritization**

The fourth and the final component involved evaluating and prioritizing





# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN

strategies/projects from the previous section. Initially the strategies/projects were ranked based on a scoring method that compares each of the strategy/project against a set of evaluation criteria consistent with the vision of the TMP. Following the preliminary ranking of the strategies/projects, three additional factors (mobility, cost feasibility, and applicability) were used to re-rank the priorities. The strategies/projects were assigned a priority value of 1, 2, or 3 based on the initial evaluation score and the consideration of the three additional factors.

### **Recommendations of the Transportation Master Plan**

---

A preliminary three-year planning cost estimate was developed for the highest priority projects which were in the top three priority levels. In addition, projects with a five- and ten-year horizon are also recommended to continue to expand and enhance the multimodal transportation system into the future year 2015. Some of the projects from the three priority levels were extended into the five- and ten-year horizon to ease the financial burden on the City.

### **Conclusion of the Transportation Master Plan**

---

The plan may also be used as a tool for the City to seek funding from State and Federal sources to implement the strategies/projects, as the plan demonstrates that the City has a comprehensive vision toward providing multimodal transportation opportunities.

The Master Plan is a working document and should be evaluated and updated periodically to assess the status of the implementation of the strategies/projects and ensure that the City is achieving its transportation and quality of life goals. The Master Plan evaluation should include an examination of project scheduling, costs, and funding sources.



# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

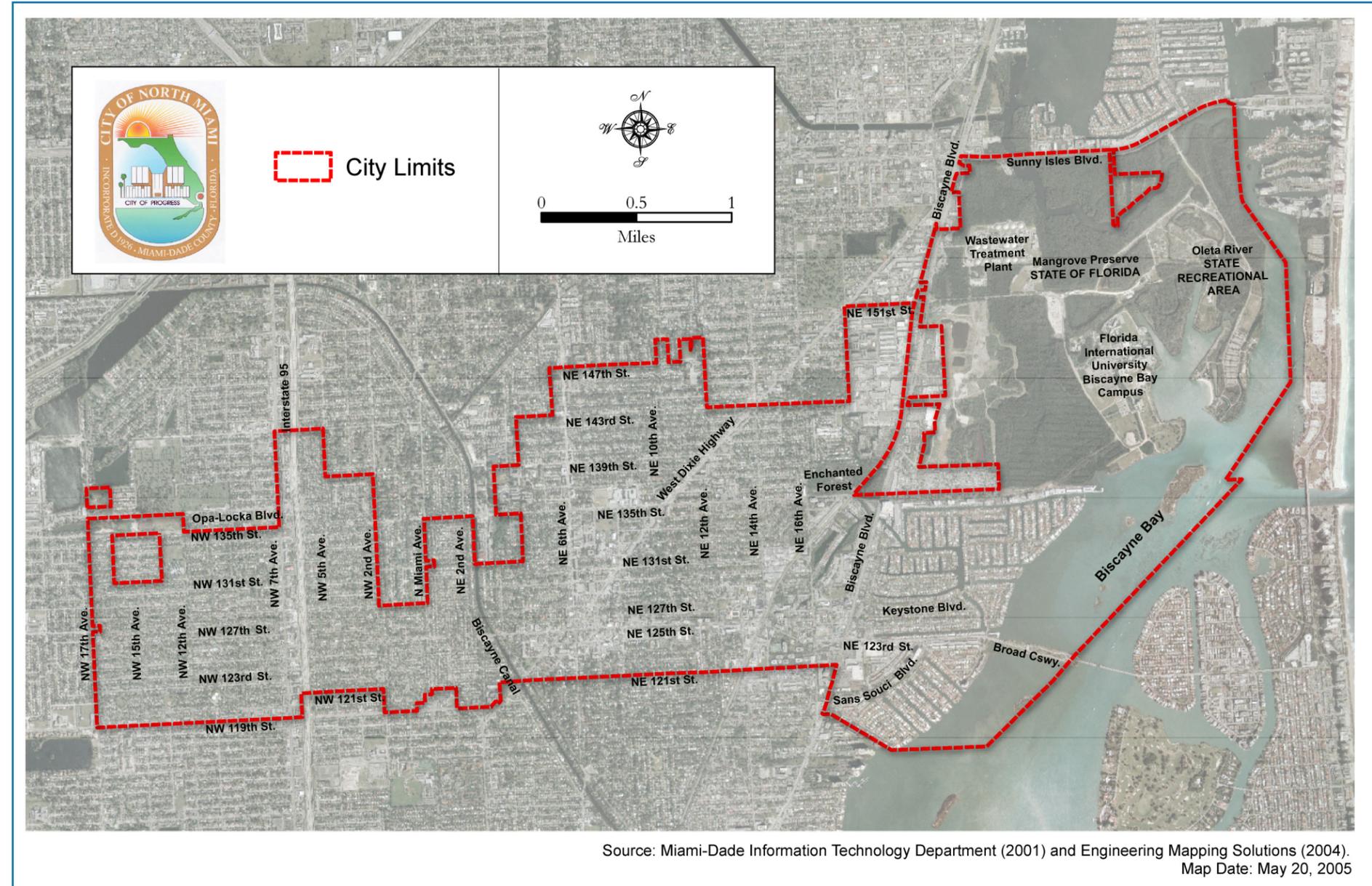
## I. Introduction

The City of North Miami is located in northeast Miami-Dade County, north of Miami Shores and Biscayne Park and west of the Intracoastal Waterway. The City has a rich diversity of residents. Approximately 60,000 residents make their homes in North Miami. The population is projected to increase to over 90,000 by 2025.

The City offers a mix of office space, manufacturing, and warehousing as well as many of Florida's film and music studios. Commercial shopping is concentrated primarily along Biscayne Boulevard, NW 7th Avenue, and NW/NE 125th Street. The City is also home to Johnson Wales University and the north campus of the Florida International University (FIU). Access from the region's freeway system is provided at three main interchanges of I-95 at NW 135th Street, NW 125th Street, and NW 119th Street/Gratigny Road. **Figure 1** (shown right) shows an aerial view of the City of North Miami.

On September 22, 2003, the City adopted a Transportation Concurrency Exception Area (TCEA) to ensure the City's redevelopment efforts were not hindered by transportation concurrency. As part of the TCEA, the City adopted several policies in the Transportation Element of the Comprehensive Plan to address the mitigation of traffic issues associated with the concurrency exception. Specifically, Policy I.3.6 of the Transportation Element states the City's commitment to develop a Transportation Master Plan (TMP) and to integrate the plan into the City's Comprehensive Plan.

Figure 1 — Aerial of the City of North Miami





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

The City has also designated the North Miami Community Redevelopment Area (CRA) and adopted a Community Redevelopment Plan to guide future redevelopment within the CRA. The transportation goals of both the Transportation Element, including the TCEA, and the CRA Redevelopment Plan include increasing transportation choices for residents and visitors, mitigating the City's traffic issues, and enhancing the streets for all users.

In addition, continued growth in the region is also placing a strain on the City's transportation system. The result is recurring periods of automobile traffic congestion that is compromising residents' quality of life and adversely impacting the community's sense of place. There is an increased need to evaluate transportation problems/issues under existing conditions and better coordinate land use and transportation plans to address local mobility issues. The City's transportation system needs to be a more positive asset of the community and its redevelopment efforts.

Public involvement for the TMP included two public workshops conducted during the plan development process. The first workshop was held on April 28, 2005, and the second workshop was held on June 9, 2005. The workshops presented existing mobility conditions, the transportation strategies/projects, and the prioritization recommendations. The public involvement culminated in the final presentation to the City Council on July 26, 2005.

## A. What is a Transportation Master Plan?

A Transportation Master Plan (TMP) is the City's long-range blueprint for travel and mobility. This TMP attempts to reconcile two conflicting goals: (1) providing safe and convenient travel, mobility, and access, and (2) preserving the character and quality of life of the City's residents and businesses. The main objective of the TMP is to establish a comprehensive set of multimodal transportation strategies and to present recommendations to the City to address local travel and mobility issues, mitigate traffic congestion, and support the TCEA. The result of the plan is a program of interrelated multimodal strategies/projects to increase transportation choices to keep pace with the City's redevelopment efforts and effectively utilize the existing roadway network.

The TMP focuses on the broader community vision contained in the City's Comprehensive Plan and the CRA Redevelopment Plan. The TMP addresses all forms of travel — walking, bicycling, public transit, and automobiles. It also addresses innovative transportation initiatives such as transportation demand management (TDM), transportation system management (TSM), and other community-based transportation initiatives such as "Safe Routes to School."

The vision statement of the TMP is best stated in Goal I of the City's Transportation Element of the Comprehensive Plan.

*Goal I: Provide for a safe, convenient, effective and efficient motorized and non-motorized*

*transportation system, which is intricately related to the land use pattern and improves the level of mobility of all of the City's residents and visitors.*

The TMP presents a renewed vision for the City's transportation system and addresses all transportation facilities and modes — walking, bicycling, public transit, and automobiles.

The TMP evaluated the appropriateness and effectiveness of strategies/projects based on a set of evaluation criteria. These criteria were developed based upon the following goals and objectives:

- Invest wisely in the City's transportation system
  - Minimize construction costs
  - Optimize use of private sector funding sources
  - Prioritize project funding to meet City's transportation goals
  - Encourage/support redevelopment
- Provide greater transportation choices
  - Maximize multimodal travel options
  - Improve access to employment opportunities
  - Enhance mobility for all travel modes
- Integrate land use and transportation
  - Promote public transit oriented development
  - Create context-sensitive streets
  - Enhance community character



- Create effective regional partnerships
  - Partner with regional agencies to achieve North Miami's transportation goals
  - Involve regional agencies in planning, design, and implementation
- Engage the business community
  - Understand and manage the impacts of transportation decisions on local businesses
  - Involve businesses directly in implementation of TDM strategies

The TMP consists of four sections:

### I. Mobility Report Card

The mobility report card represents a snapshot of mobility for the City's pedestrians, bicycles, public transit, and automobiles as of April 2005. The report card is based upon an evaluation of the transportation system's existing facilities or service and its current level of service. This information is used to assess the current state of mobility within North Miami. The assessment of transportation facilities and their operating conditions in this section were used to identify the existing and future needs for the transportation system within a multimodal context. The assessment is used to identify potential strategies to address travel and mobility issues and enhance the City's multimodal transportation system.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## 2. Land Use and Transportation Plans

The following plans and transportation programs were evaluated to coordinate land use and transportation plans with the TMP, provide guidance for preparing a comprehensive vision of mobility for the City, and identify existing transportation projects programmed within the City:

- North Miami
  - Comprehensive Plan and Evaluation and Appraisal Report (EAR)
  - CRA Redevelopment Plan
  - 2007-2011 Capital Improvement Program (CIP)
- Miami-Dade County
  - Comprehensive Development Master Plan (CDMP)
  - 2005 Evaluation and Appraisal Report (EAR)
  - 2004 People's Transportation Plan (PTP)
  - Miami-Dade Transit Development Plan (TDP)
- Miami-Dade Metropolitan Planning Organization (MPO)
  - 2025 Long-Range Transportation Plan (LRTP)
  - 2008 Transportation Improvement Program (TIP)
- Florida Department of Transportation (FDOT)
  - 2004 Five-Year Work Program

The projects presented in these plans were considered during the development of the

potential strategies/projects. The TMP does not duplicate projects proposed by other transportation plans/programs. In addition, the projects currently presented in the City's CIP have not been modified.

## 3. Transportation Strategies/Projects

Based upon the assessment of the current mobility in North Miami as well as the evaluation of land use and transportation plans, a series of strategies/projects were developed to address the transportation issues/needs for the future. Strategies/projects are grouped into categories: pedestrians, bicyclists, public transit, roadways, TDM, TSM, and NTM. The strategies provide a cost effective approach to enhancing the City's multimodal transportation system.

## 4. Transportation Strategies/Projects Evaluation & Prioritization

The identified strategies/projects were ranked based on a scoring method that compared each strategy/project against a set of evaluation criteria that are intended to support a multimodal transportation system. The project comparison system was developed based upon the following ten evaluation criteria:

1. Minimizes construction costs
2. Maximizes multimodal transportation choices
3. Enhances mobility for the mode of transportation
4. Increases safety
5. Increases capacity
6. Supports context sensitive streets
7. Supports transit oriented development
8. Enhances quality of the user's experience
9. Efficiently utilizes existing transportation system
10. Satisfies multiple project categories

A project comparison matrix was developed to present the results of the evaluation and ranking based on the overall

score for each strategy/project. Preliminary planning level costs were estimated for the recommended strategies/projects based on the consultant's experience with related projects. After the preliminary ranking and grouping of the priority strategies/projects, three additional factors were taken in to consideration to determine the efficiency of the strategy/project and overall contribution toward achieving the TMP goal in order to prioritize



the recommended strategies/projects. Three factors include the impact of the project on mobility, cost feasibility, and the applicability of the strategy/project to the City. These factors added an additional dimension to the preliminary ranking method. The strategies/projects were assigned a priority level of 1, 2, or 3

depending on the initial evaluation score and an assessment of the three additional factors. Additional five- and ten-year horizon projects are also recommended to expand and enhance the multimodal transportation system.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## II. Mobility Report Card

This mobility report card is a snapshot of the existing conditions of the City's transportation system. The transportation system is made up of all modes of transportation including walking, bicycling, and public transit, along with roadways. The report card evaluates the baseline conditions of each as of April 2005. This information is collected from the best available sources including the City of North Miami, Miami-Dade County, Miami-Dade Metropolitan Planning Organization, and the Florida Department of Transportation. The report card is intended to provide a means to measure existing travel and mobility conditions.

The information provided in the mobility report card was used to identify the existing and future mobility needs of the City's Transportation system. The analysis of existing and future operating conditions of the transportation system is used to identify strategies to address travel and mobility.

The major transportation issue in the City (as identified by City residents) is the increasing traffic congestion on the City's major roadways, particularly during peak travel periods. In order to ensure that future mobility is maintained at acceptable levels and to address the residents' concerns, the City needs to focus on transportation options like walking, bicycling, and public transit to create a multimodal transportation system. Increased walking and bicycling reduces the number of shorter distance trips by private automobile, which in turn reduces the number of vehicles on the road, thus improving mobility for vehicles and reducing

congestion. The increase in use of public transit reduces the number of longer vehicular trips which has a direct impact on reducing traffic congestion by reducing the number of vehicles on the roadway. Multimodal transportation strategies are identified and discussed in Chapter III to address mobility and the future transportation system.

The following sections present an analysis of the mobility for each of the following categories: pedestrian, bicycle, public transit, and roadways. For each of these categories, a description of existing facilities, assessment of the levels of service, and identification of mobility needs are presented.

### A. Pedestrian

#### 1. Facilities

The availability of pedestrian facilities and associated infrastructure play an important role in the City's transportation system. Benefits associated with walking include the potential to reduce traffic congestion, increased personal health/recreation opportunities and reduced need for automobile parking facilities. In order to be considered a realistic option for reducing short trips and a component of long trips, conditions need to be favorable for walking, such as comfortable and continuous sidewalks, convenient access, and connectedness.



The existing sidewalk network within North Miami is excellent in terms of sidewalk coverage. A majority of streets within the residential neighborhoods have sidewalks on both sides. Sidewalks also exist in the commercial portions of the downtown area (NE 125th Street), and along West Dixie Highway, Biscayne Boulevard, and NW 7th Avenue (US 441). **Figure 2** (see page 7) shows the existing pedestrian facilities within the City.

#### 2. Level of Service

Pedestrian level of service (LOS) is a measure of the quality of the pedestrian environment within the City. The Miami-Dade MPO assigned pedestrian levels of service, (A through F), to all arterial and collector streets within the City of North Miami. Pedestrian level of service was calculated based on five factors: lateral separation between the vehicle and pedestrian, recorded traffic volumes, posted travel speed, vehicle mix, and frequency of driveways along the road. Each of these variables was weighted by coefficients derived from stepwise regression modeling importance. A numerical score, generally between 0.5 and 6.5, was determined



and stratified to a level of service grade. The range of scores corresponding to the six different levels of service (or grade) for pedestrians is described in **Table I** (see below).

**Table I**  
**Pedestrian Level of Service Classifications**

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

Source: 2002 FDOT Quality/Level of Service Handbook

**Figure 3** (see page 8) shows the pedestrian level of service along the major roadways in the City of North Miami as evaluated by the Miami-Dade MPO. The majority of roadways analyzed have an LOS greater than LOS D with a significant number equal to or exceeding LOS C. LOS C is an excellent LOS rating for the City's major sidewalk network. Corridors like NW 12th Avenue, North Miami Avenue, and NE 10th Avenue have LOS A. Portions of NW 127th Avenue, West Dixie Highway, NE 10th Avenue, and NW 7th Avenue have LOS B. The portions of the City bounded by NE 10th Avenue to the east, Biscayne Boulevard to the west, NE 135th Street to the north, and NE 125th/123rd Street





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

to the south have gaps in the sidewalk network and, thus, a lower level of service of D.

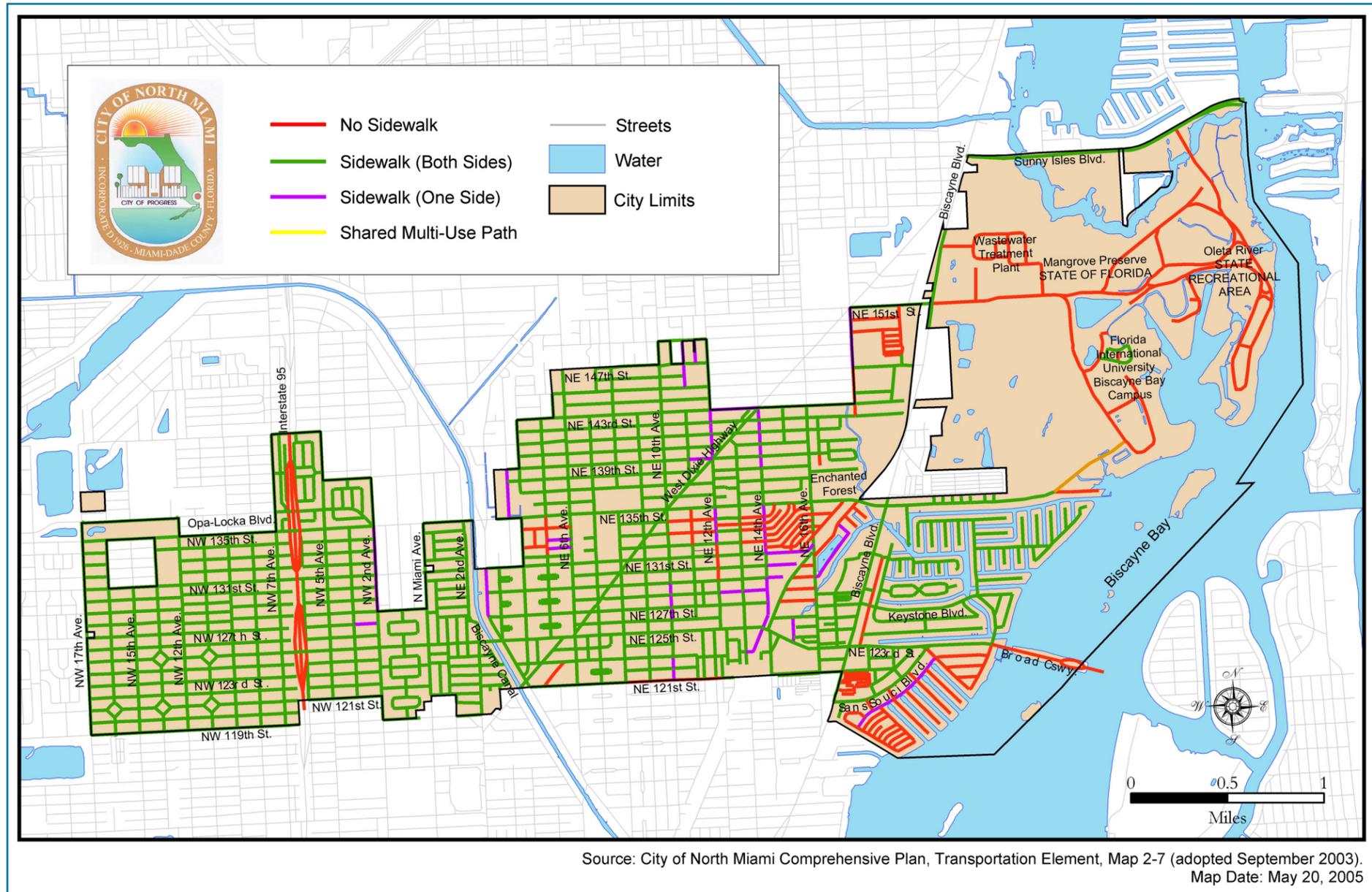
### 3. Mobility Needs

North Miami has good coverage in terms of presence of sidewalks. A majority of the roads within the City have sidewalks on both sides of the road. There are relatively few roads that do not have sidewalks. However, in a majority of areas, the sidewalks are very narrow and/or very close to the travel lane. These factors negatively impact the level of service. In order for walking to be a viable mode of transportation, pedestrian LOS needs to be LOS C or better.

On collector streets and major thoroughfares, the mere presence of sidewalks is not a direct measure of the quality of the pedestrian environment. There are several other factors that influence the quality of the walking experience — width of sidewalks, presence of benches and related infrastructure, sidewalk connections, sidewalk conditions, access to buildings and public transit, and shade.



Figure 2 — Existing Pedestrian Network





# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN



Many sidewalks within the City are less than three-foot wide and are located very close to the outside travel lane of the roadway, especially on streets like NW/NE 125th Street, NW/NE 135th Street and West Dixie Highway. Also, the driveway openings along major thoroughfares are spaced very close to each other, making the sidewalk surface uneven. The constant variation in the sidewalk slope created by the driveways is unsuitable for wheelchair use and is uncomfortable for even able-bodied pedestrians.

Major thoroughfares like NE 125th Street, NE 135th Street, West Dixie Highway, and Biscayne Boulevard are also public transit corridors. It is very important to have

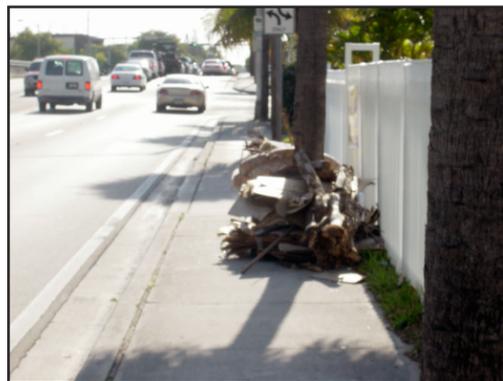
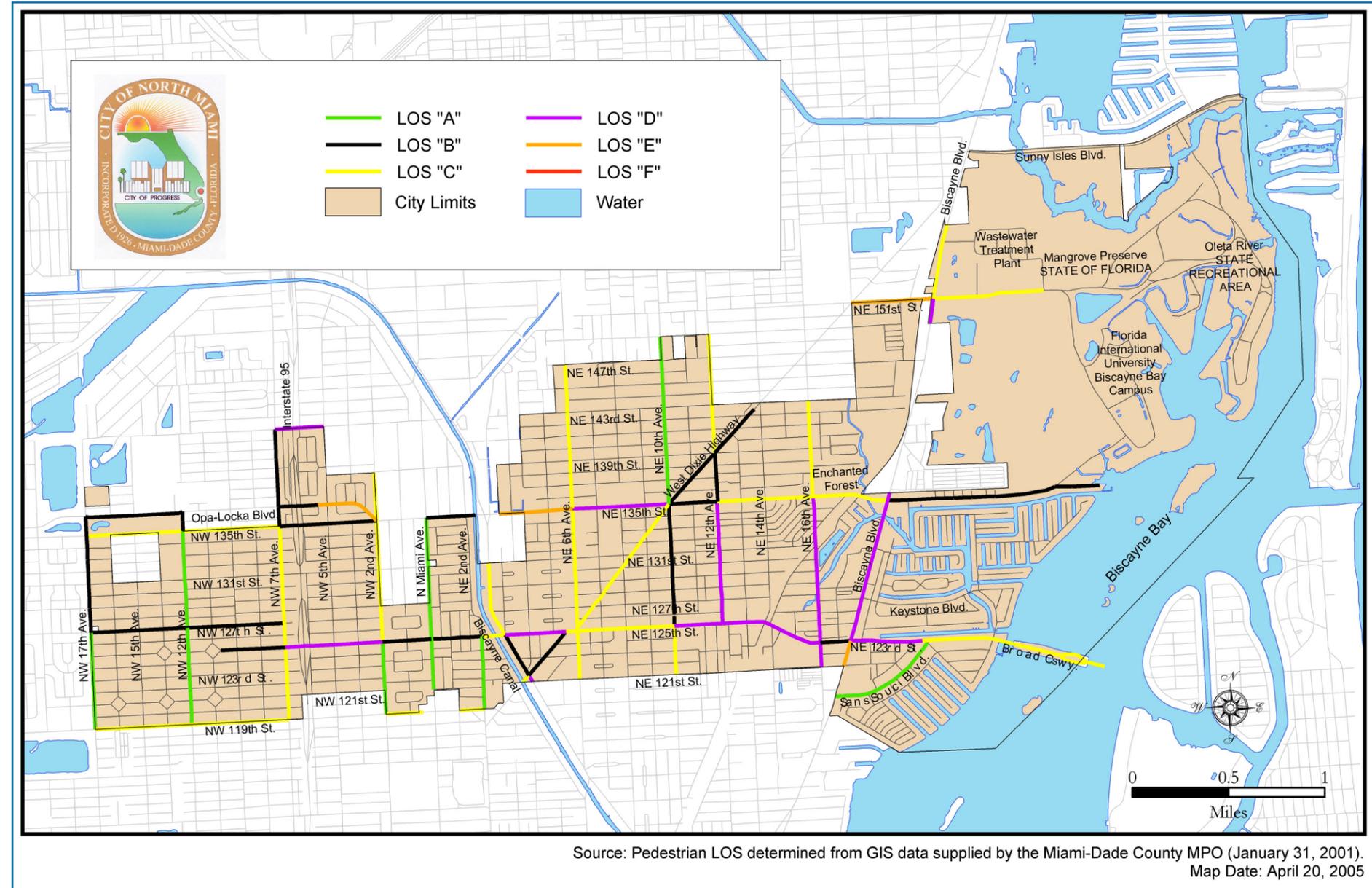


Figure 3 — Existing Pedestrian LOS





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

comfortable walkable conditions on these corridors. The use of public transit is highly sensitive to the quality of the pedestrian environment because every trip using public transit begins and ends with walking.

The sidewalk conditions on these thoroughfares need to be enhanced to support public transit and increase the viability of walking as a transportation option. The sidewalks need to be continuous without gaps, obstructions, and other impediments. The sidewalks need to be separated from traffic by on-street parking, trees, or other streetscape features. The driveway openings along the sidewalks should be designed to minimize impacts to the slopes of the sidewalk and to reduce uneven sidewalk surfaces. Additionally, handicap ramps should be provided in order to make the sidewalks ADA-friendly.



Improvements to the pedestrian environment could be achieved by a focused study on the pedestrian network. In addition, increasing safe crossings—including pedestrian activated signals—would also greatly improve the quality of the pedestrian network.

## B. Bicycle

### I. Facilities

The availability of bicycle facilities also plays an important role in the City's transportation system. Benefits associated with bicycling are similar to walking and include the ability to ease traffic congestion, increased personal health/recreation opportunities, and a reduced need for automobile parking facilities. In order to be considered a realistic transportation option for short trips, conditions need to be favorable for bicycling.

Existing information maintained by Miami-Dade County and the Miami-Dade MPO show relatively few dedicated bicycle facilities within the City of North Miami and formal connections between many of these facilities do not exist. There are several corridors that have wide outside lanes or paved shoulders that are utilized by skilled cyclists, but classifying them as bicycle facilities is not appropriate. In addition, several neighborhood streets have been identified as suitable for bicycling



with low traffic volumes and low posted speed limits but have not been assigned or designated as bicycle routes. **Figure 4** (see page 10) shows the existing bicycle facilities within the City.

Even though the number of bicycle facilities is limited in North Miami, Miami-Dade Transit operates four routes within the City that participate in the Agency's Bike and Ride Program (Route 2, 93 [Biscayne Max], 107 [Route G], and 246 [Night Owl]). These buses are equipped with racks on the front to accommodate two bicycles. This extends the range of a person bicycling by providing opportunities to combine bicycle and public transit trips. Currently, the North Miami local public transit circulator (NoMi Express) is not equipped with bicycle racks.

### 2. Level of Service

Bicycle level of service is a measure of a bicyclists' perception of riding comfort on a roadway. Unlike pedestrian LOS, a roadway does not need to have exclusive bicycle lanes in order to assess the bicycle level of service. Bicycle LOS in North Miami was measured by the Miami-Dade County MPO, and levels of service (A through F) were assigned to all arterial and collector streets within the City of North Miami. Bicycle LOS was calculated based on six factors: recorded traffic volumes, percentage of heavy vehicles, posted speed limit, pavement width and number of travel lanes, pavement condition, and presence of shoulder or bicycle lane. Each of these variables was weighted by coefficients derived by stepwise regression modeling importance.

A numerical score, generally between 0.5 and 6.5, was determined using a regression equation and stratified to a level of service grade. The range of scores corresponding to the six different levels of service (or grades) for bicyclists is described in **Table 2** (see below). It is important to note that bicycle LOS is not assigned to off-street facilities.

**Table 2  
Bicycle Level of Service Classifications**

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

Source: 2002 FDOT Quality/Level of Service Handbook

Due to the City's limited bicycle facilities, the bicycle LOS is much lower than the pedestrian LOS. The majority of roadway links analyzed by Miami-Dade MPO have a bicycle LOS at or below LOS D. For bicycling to truly be a viable transportation option, bicycle LOS needs to be at LOS C or better. **Figure 5** (see page 11) shows the existing bicycle level of service along the major roadways in the City of North Miami as evaluated by the Miami-Dade MPO.

### 3. Mobility Needs

The City of North Miami does not have a well developed bicycle path system. There are a few bike paths in the northeastern portions of the City within the FIU







# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## C. Public Transit

Public transit within the City of North Miami exists in the form of bus transit. Public transit service within the City is operated by two service providers. The City provides a free local public transit circulator, called the NoMi Express, that serves areas within City limits. Miami-Dade County provides public transit service through Miami-Dade Transit (MDT) that serves areas within the County including the City of North Miami. The analysis of the existing public transit facilities and ridership information for the NoMi Express and MDT service are presented individually. However, the mobility needs for both public transit systems are combined as a single section in order to provide a comprehensive approach to public transit service within the City.

### 1. NoMi Express — City of North Miami

#### a. Service and Ridership

The City of North Miami's Transportation Element of the Comprehensive Plan, Policy 3.1.2, states that the City shall provide a local public transit circulator by January 2006.



*Policy 3.1.2: By January 2006, the City shall provide a local public transit circulator service within one quarter (1/4) mile of fifty percent (50%) of all medium and high density residential areas identified in the City's Future Land Use Map.*

The City proactively implemented the NoMi Express in July 2004 with funding assistance from FDOT. The NoMi Express service area includes areas not currently served by Miami-Dade Transit with limited destinations outside of the City limits. The service consists of four circular routes that divide the City into four districts. The NoMi Express operates during the weekdays from 7:00 a.m. to 9:00 p.m. The major destinations of this service include schools, community centers, shopping centers, and public parks.

**Figure 6** (see page 13) shows the NoMi Express routes and stops within the City of North Miami. Descriptions of the various routes are presented below.

- Route 1** serves the western portions of the City and runs along NW 131st Street, NW 135th Street, NW North Miami Boulevard, NW 119th Street, NW 13th Avenue, NW 10th Avenue, and NW 2nd Avenue. The major destinations along the route include Claude Pepper Park, NW 131st fire station, Sunkist Grove Community Center, Thomas Sasso Pool, St. James Catholic School, Benjamin Franklin Elementary School, Premiere Elgise Baptiste School, and the Gratigny Post Office. Route 1 operates with headways of 30-minutes.

- Route 2** runs to the east of Route 1 along NW 2nd Avenue, NE 119th Street, West Dixie Highway, NE 135th Street, Griffing Boulevard, NE 131st Street, NE 6th Avenue, and NE 8th Avenue. The major destinations along the route include North Miami Elementary School, North Miami Senior High School, Thomas Jefferson Middle School, North Miami Community Center, Breeze Swept Tot-Lot, Griffing Adult Center, North Miami Library, and Gratigny Elementary School. Route 2 operates with 45-minute headways and overlaps Route 1 along NW 2nd Avenue.
- Route 3** runs to the east of Route 2 along NE 7th Avenue, NE 8th Avenue, NE 9th Avenue, NE 139th Street, NE 14th Avenue, NE 16th Avenue, and NE 125th Street. The major destinations along the route include North Miami Senior High School, Publix Supermarket on Biscayne Boulevard, Johnson & Wales University, William J. Bryan Elementary, Villa Maria Nursing & Rehab, City Hall Plaza/MoCA, and North Miami Library. Route 3 operates with 45-minute headways and overlaps Route 2 along NE 7th, NE 8th, and NE 9th Avenues.
- Route 4** runs on the eastern portions of the City along NE 16th Avenue, Biscayne Boulevard/US 1, Natural Bridge Road, Sans Souci Boulevard, NE 146th Street, and

NE 12th Avenue. The major destinations along the route include Target on Biscayne Boulevard, Publix Supermarket on Biscayne Boulevard, Johnson & Wales University, Walgreens/Office Max on NE 125th Street, Home Depot on Biscayne Boulevard, Penny Sugaman Tennis Center, and the Sans Souci Neighborhood. Route 4 operates with 60-minute headways and overlaps Route 3 along NE 16th Avenue.

The City currently contracts with a private company to provide the service. The contract covers all aspects of the service including vehicles, personnel, and operations.

#### b. Level of Service

There is no established level of service standard for the NoMi Express. The service has been in operation since July 2004 and within this short period is experiencing respectable monthly boardings. The service headways, monthly boardings, and monthly passenger miles for February 2005, the latest available data, are presented in **Table 3** (see below).

**Table 3  
NoMi Express — Operational Summary for February 2005**

Routes	Headways	Monthly Boardings	Monthly Passenger Miles	Monthly Revenue Miles
Route 1	30 min	7,536	11,356	2,400
Route 2	45 min	4,197	6,897	2,580
Route 3	45 min	4,174	6,955	2,100
Route 4	60 min	2,329	4,655	2,100
<b>Total</b>		<b>18,236</b>	<b>29,863</b>	<b>9,180</b>





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

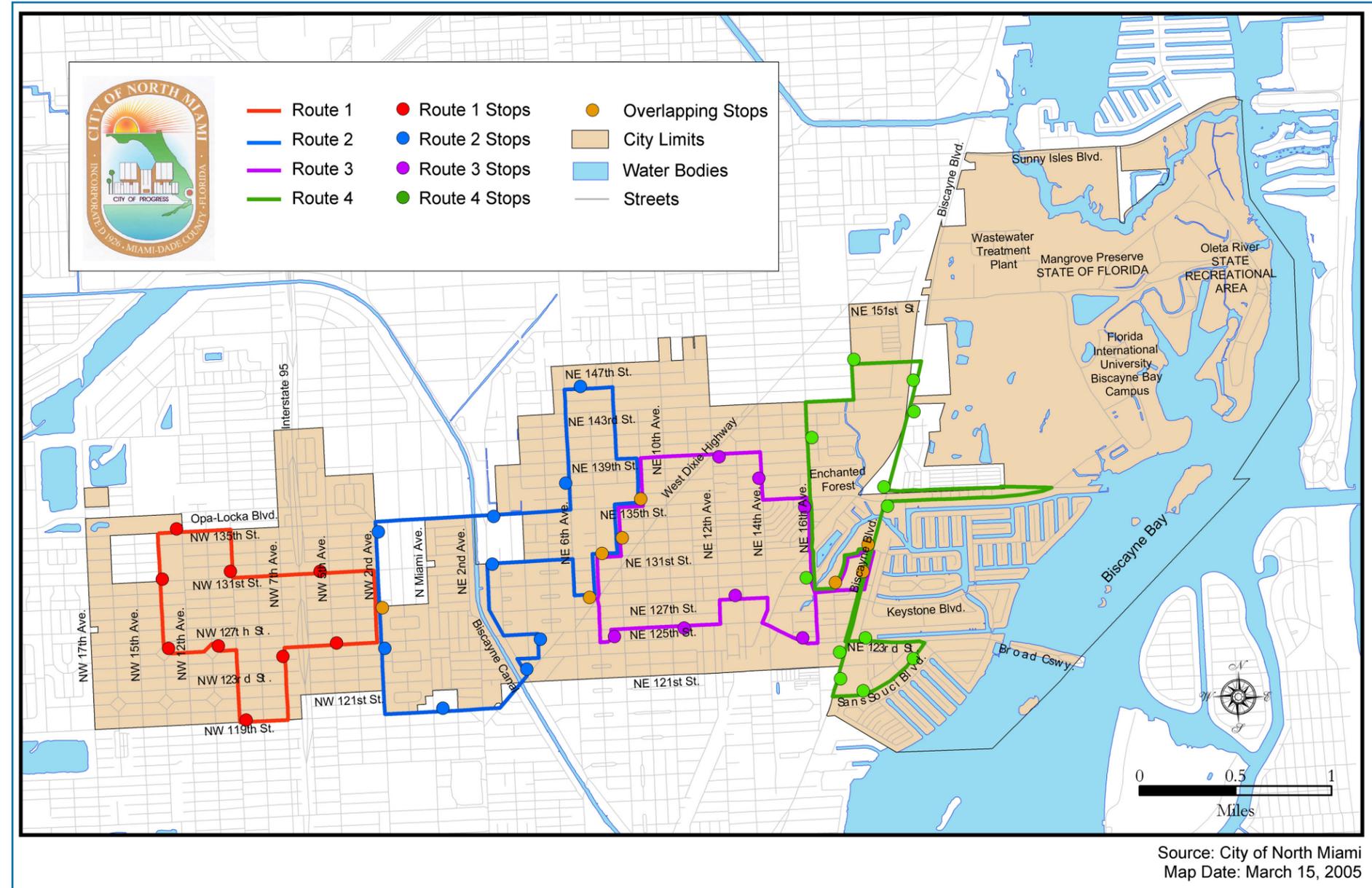
## 2. Miami-Dade Transit Metrobus — Miami-Dade County

### a. Service and Ridership

The City of North Miami is served by Miami-Dade Transit (MDT) that enables regional travel by public transit. The City is served by 16 Metrobus routes, including routes 2, 3, 9, 10, 16, 17, 28, 75, 77, 83, 93 (Biscayne Max), 105 (E), 107 (G), 108 (H), 122 (V), and 246 (Night Owl). Six other routes run along Interstate 95, but do not provide boarding or alighting opportunities within the City. **Figure 7** (see page 14) shows the location of MDT routes and stops within the City. The MDT routes are described below:

- Route 2** runs along Miami Avenue within the City Limits. This is a north-south route and runs from the 163rd Street Mall to the Downtown Government Center Metrorail Station. Other important destinations served by this route include the Downtown Bus Terminal, Overtown Metrorail station, and Parkway Regional Hospital. The route operates seven days a week. Service is provided from 4:00 a.m. to 12:00 p.m. on weekdays, 5:30 a.m. to 12:00 p.m. on Saturdays, and 5:30 a.m. to 9:30 p.m. on Sundays. The route has headways of 15 minutes on weekdays, 30 minutes during weekday nights and 20 minutes on the weekends. Ridership data from Miami-Dade Transit shows that approximately 58,900 passengers used this route between September 2003 and August 2004.

Figure 6 — NoMi Express Routes and Stops

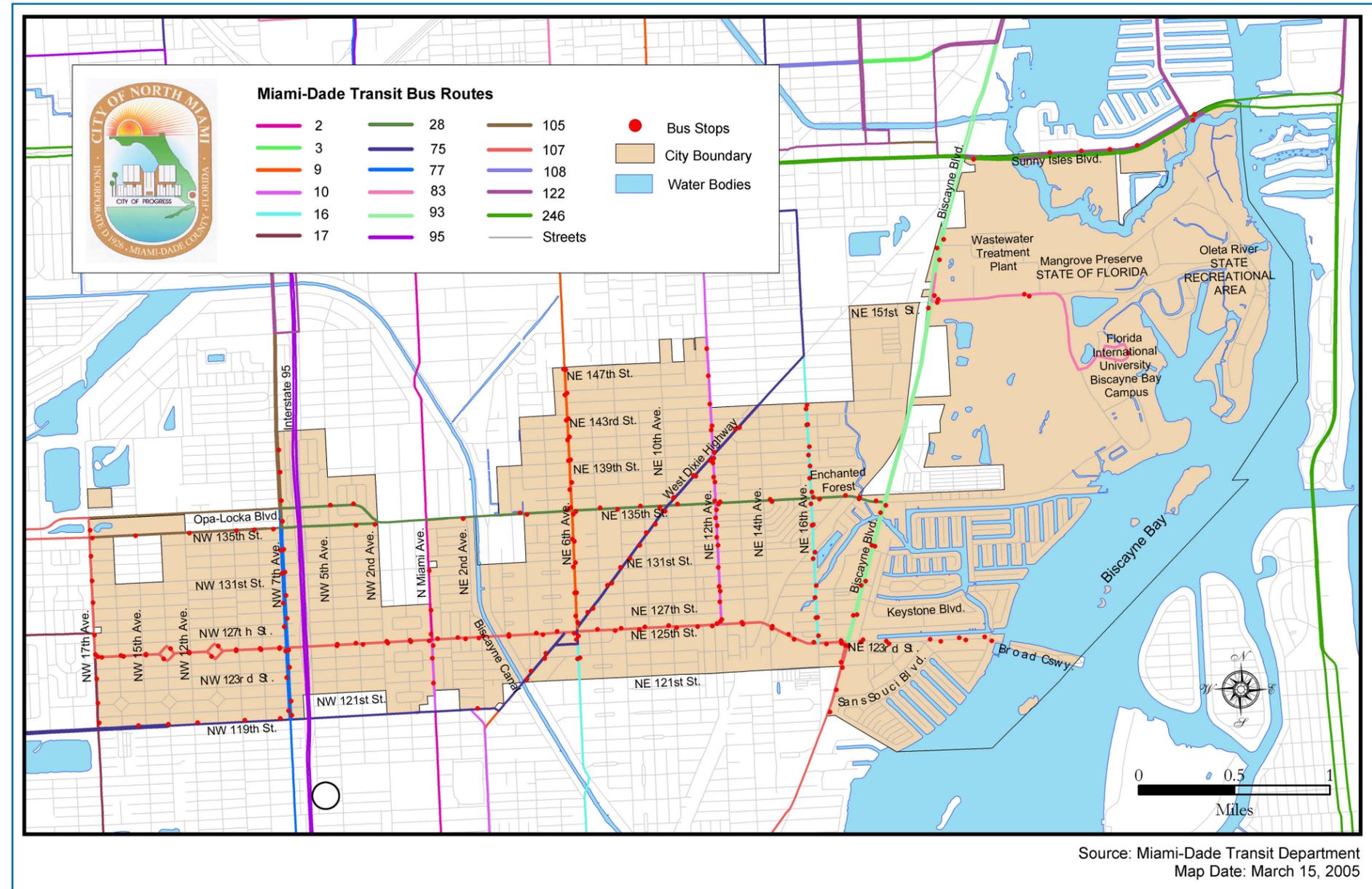




# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

- Route 3** offers service between North Miami Beach and the Omni Bus Terminal. This is a north-south route and accesses North Miami via Biscayne Boulevard. The route operates seven days a week and service is provided for 24 hours. Headways are kept at 15 minutes on weekdays, 30 minutes on weekday nights, 15-minutes on Saturdays and 20 minutes on Sundays. Ridership data from Miami-Dade Transit shows that approximately 150,100 passengers used this route between September 2003 and August 2004.
- Route 9** offers north-south service through North Miami via West Dixie Highway and NE 6th Avenue. This route passes through the Central Business District of North Miami. It also serves the 163rd Street Mall, Aventura Mall, and Downtown Bus Terminal. Route 9 operates seven days a week. Service is provided from 4:30 a.m. to 12:00 p.m. on weekdays, 5:00 a.m. to 1:00 p.m. on Saturdays, and 6:00 a.m. to 12:00 p.m. on Sundays. The route has headways of 12 minutes during the weekday peak period and 30 minutes during the weekday off-peak period. Weekend and weekday evening service is provided every 30 minutes. Ridership data from Miami-Dade Transit shows that approximately 131,800 passengers used this route between September 2003 and August 2004.
- Route 10** offers north-south service from the 163rd Street Mall to the Downtown Bus Terminal in the City of Miami. Within North Miami the route

Figure 7 — Location of MDT Routes Map





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

runs along NE 12th Avenue, NE 125th Street and North Miami Avenue. The route operates seven days a week. Service is provided from 5:00 a.m. to 12:00 p.m. on weekdays and 5:30 a.m. to 12:00 p.m. on Saturdays and Sundays. Headways are 40 minutes during the weekday peak period and 30 minutes during the weekday off-peak periods, weekday evenings, Saturdays, and Sundays. Ridership data from Miami-Dade Transit shows that approximately 143,000 passengers used this route between September 2003 and August 2004.

- **Route 16** offers north-south service from the 163rd Street Mall to the Downtown Bus Terminal in the City of Miami. It also serves the Government Center Metrorail Station, Omni Bus Terminal, and the Downtown Bus Terminal in the City of Miami. Within North Miami the route runs along NE 16th Avenue, NE 125th Street, and NE 6th Avenue. The route operates seven days a week. Service is provided from 4:30 a.m. to 11:00 p.m. on weekdays, 5:30 a.m. to 11:30 p.m. on Saturdays, and 5:30 a.m. to 8:00 p.m. on Sundays. Headways are established at 15 minutes during the weekday peak periods, 20 minutes during the off-peak periods, and 30 minutes during the weekday nights and weekends. Ridership data from Miami-Dade Transit shows that approximately 146,500 passengers used this route between September 2003 and August 2004.

- **Route 17** offers service from NW 183rd Street in Norwood to the Vizcaya Metrorail Station in Little Havana. This route has limited service within North Miami and runs a distance of approximately ½ mile along NW 17th Avenue. The route operates seven days a week. Service is provided from 4:45 a.m. to 1:15 p.m. on weekdays, and 5:00 a.m. to 12:30 p.m. on Saturdays and Sundays. Headways are established at 30 minutes on weekdays, 60 minutes weekday evenings. Weekend service is provided at 30-minute headways. Ridership data from Miami-Dade Transit shows that approximately 87,100 passengers used this route between September 2003 and August 2004.



- **Route 28** offers predominantly east-west service from the Hialeah Metrorail Station to the Florida International University north campus. Within North Miami the route runs along NW 135th Street, Biscayne Boulevard and NE 151st Street. The route operates seven days a week. Service is provided from 5:00 a.m. to 10:00 p.m. on weekdays and 6:00 a.m. to 7:30 p.m. on Saturdays and Sundays. Headways are established at 30 minutes during weekdays and 60 minutes during weekday evenings and weekends. Ridership data from Miami-Dade Transit shows that approximately 17,000

passengers used this route between September 2003 and August 2004.

- **Route 75** provides east-west service from Miami Lakes to the Miami-Dade Community College North Campus via the 163rd Street Mall. Within North Miami the route runs along NW/NE 119th Street and West Dixie Highway. The route operates seven days a week. Service is provided from 5:15 a.m. to 11:45 p.m. on weekdays and 6:00 a.m. to 10:00 p.m. on Saturdays and Sundays. Headways are established at 30 minutes on weekdays and 60 minutes during weekday evenings. Weekend service is provided at 30-minute headways. Ridership data from Miami-Dade Transit shows that approximately 166,500 passengers used this route between September 2003 and August 2004.
- **Route 77** offers north-south service from NW 183rd Street and NW 7th Avenue to the Downtown Bus Terminal in the City of Miami. The route also serves the Golden Glades Park & Ride facility, Culmer Metrorail Station, and Government Center Metrorail Station. Within North Miami the route runs along NW 7th Avenue. The route operates seven days a week and service is provided for 24 hours. Peak-hour headways are established at 7.5

minutes with 15-minute headways on weekday off-peak periods and Saturdays. Headways are 30 minutes during weekday evenings and Sundays. Ridership data from Miami-Dade Transit shows that approximately 394,000 passengers used this route between September 2003 and August 2004.

- **Route 83** provides east-west service from Miami Lakes to the Florida International University (FIU) North Campus. This route also serves the 163rd Street Mall and the Carol City Shopping Center. Within North Miami the route runs along NE 163rd Street, Biscayne Boulevard, and NE 151st Street. The route operates seven days a week. Service is provided from 5:15 a.m. to 12:15 p.m. on weekdays and 6:00 a.m. to 12:00 p.m. on Saturdays and Sundays. Headways are 15 minutes during the weekday peak period and 30 minutes during the off-peak period. Weekday evening service is provided with 50-minute headways, and weekend service is provided with 30-minute headways. Ridership data from Miami-Dade Transit states that approximately 70,700 passengers used this route between September 2003 and August 2004.
- **Route 93/Biscayne Max** provides north-south service from Aventura Mall to Downtown Miami. Within North Miami the route runs along Biscayne Boulevard with connections to Sans Souci Boulevard, NE 123rd Street, NE 135th Street, NE 146th Street, NE 151st Street, and NE 163rd Street. The route operates only on weekdays from





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

6:00 a.m. to 7:30 p.m. Service is provided with 15-minute headways. Ridership data from Miami-Dade Transit reports that approximately 90,700 passengers used this route between September 2003 and August 2004.



from 5:30 a.m. to 1:30 p.m. on weekdays, 7:15 a.m. to 12:15 p.m. on Saturdays, and 6:00 a.m. to 12:30 p.m. on Sundays. Headways are established at 30 minutes during weekdays, 60 minutes during weekday evenings. Weekend service is provided with 30-minute headways. Ridership data from Miami-Dade Transit

represents that approximately 316,500 passengers used this route between September 2003 and August 2004.

- Route 105/E** provides east-west service from Miami Lakes to Aventura Mall via North Miami and North Miami Beach. The route also serves the Opa-Locka City Hall, Parkway Hospital, and Golden Glades Park & Ride Facility. Within North Miami the route runs along NW 135th Street and NW 7th Avenue. The route operates seven days a week. Service is provided from 5:45 a.m. to 9:30 p.m. on weekdays and 9:00 a.m. to 7:30 p.m. on Saturdays and Sundays. Headways are established at 30 minutes during the weekday peak period and 60 minutes the rest of the times. Ridership data from Miami-Dade Transit shows that approximately 22,100 passengers used this route between September 2003 and August 2004.
- Route 107/G** provides north-south service from 163rd Street Mall to downtown Miami Beach. Within North Miami the route runs on NW 17th Avenue, NW/NE 125th Street and Biscayne Boulevard. This route runs through the Central Business District of North Miami. The route operates seven days a week. Service is provided

- Route 108/H** provides north-south service from Miami Gardens to South Beach within North Miami along NE 163rd Street/Sunny Isles Boulevard. The route operates seven days a week. Service is provided from 5 a.m. to 1 p.m. on weekdays and 5:00 a.m. to 12:30 p.m. on Saturdays and Sundays. Headways are kept at 20 minutes on weekdays and Saturdays. Weekday evening service is provided with 24-minute headways and Sunday service with 30-minute headways. Ridership data from Miami-Dade Transit shows that approximately 31,300 passengers used this route between September 2003 and August 2004.
- Route 122/V** provides east-west service from the Golden Glades Park & Ride Facility to Hallandale Beach via North Miami, North Miami Beach, and Miami Beach. Within the City of North Miami the route runs along NE 163rd Street/Sunny Isles Boulevard. This route

operates only on the weekdays from 8:00 a.m. to 6:00 p.m. Service is provided with 30-minute headways during the weekday peak period and 60-minute headways during the off-peak period. Ridership data from Miami-Dade Transit indicates that approximately 2,600 passengers used this route between September 2003 and August 2004.

- Route 246/Night Owl** provides a circular route service through the cities of Opa-Locka, North Miami, Miami Beach, and North Miami. This route serves the Glades Park & Ride Facility, Parkway Hospital, Omni Bus Terminal, Allapattah Metrorail Station, and the Civic Center Station/Jackson Memorial Hospital. Within North Miami the route runs along NE 163rd Street/Sunny Isles Boulevard. This route operates seven days a week and provides service only during the evening from 10:30 p.m. to 7:00 a.m. Service is provided with 60-minute headways. Ridership data from Miami-Dade Transit reports that approximately 4,500 passengers used this route between September 2003 and August 2004.

Peak hour headways for these routes range between 7.5 to 60 minutes. During the peak hours, there are approximately

49 buses serving the 16 routes. These vehicles have a combined peak hour capacity of approximately 2,205 passengers, assuming 45 passengers per vehicle. The public transit service headways are shown in **Table 4** (shown below) and the annual ridership information is shown in **Table 5** (see page 17).

**Table 4  
MDT Route Service Headways (Minutes)**

Route Name	Peak	Off-Peak	Night	Saturday	Sunday
Route 2	15	15	30	20	30
Route 3	15	15	30	15	20
Route 9	12	30	30	30	30
Route 10	40	30	30	30	30
Route 16	15	20	30	30	30
Route 17	30	30	60	30	30
Route 28	30	30	60	60	60
Route 75	30	30	60	30	30
Route 77	7.5	15	30	15	30
Route 83	15	30	50	30	30
Route 93	15	15	n/a	n/a	n/a
Route 105/E	30	60	60	60	60
Route 107/G	30	30	60	30	30
Route 108/H	20	20	24	20	30
Route 122/V	30	60	n/a	n/a	n/a
Route 246/Night Owl	n/a	n/a	60	n/a	n/a

Approximately seven of the 16 routes have peak hour headways less than 15 minutes, and all others but one have peak hour headways less than 30 minutes. Nine of 16 routes have off-peak, evening, and weekend headways less than 30 minutes.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

**Table 5  
North Miami's Proportionate Share of MDT Ridership  
Annual Ridership Information from September 2003 to August 2004**

Route Name	% of Route within North Miami	Sep-03	Oct-03	Nov-03	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Annual Ridership
Route 2	5%	4,562	4,694	4,142	4,551	4,959	5,046	5,680	5,098	5,041	4,976	4,887	5,267	58,905
Route 3	5%	13,216	14,822	13,353	13,594	11,986	11,669	12,686	11,313	11,677	10,863	12,322	12,617	150,117
Route 9	10%	11,610	12,480	10,302	11,573	13,746	13,805	20,235	14,447	14,547	2,570	3,628	2,843	131,787
Route 10	18%	9,701	10,282	8,983	10,426	12,170	12,843	14,474	12,952	12,875	12,565	12,787	12,926	142,984
Route 16	15%	2,595	2,897	3,507	17,122	17,122	8,613	9,204	16,332	18,337	19,239	16,299	15,244	146,512
Route 17	3%	4,120	4,295	39,626	4,325	4,325	5,079	4,837	4,364	4,457	3,718	3,950	4,051	87,145
Route 28	5%	1,326	1,402	1,224	1,382	1,382	1,478	1,575	1,462	1,489	1,355	1,468	1,511	17,054
Route 75	15%	14,608	14,802	12,537	14,367	14,367	14,620	15,467	14,408	14,270	12,846	11,552	12,660	166,503
Route 77	12%	31,185	33,491	29,775	32,235	32,235	33,002	36,667	34,006	33,830	32,644	31,990	32,863	393,927
Route 83	5%	5,347	5,528	4,994	6,108	6,108	6,489	6,792	6,182	6,039	5,677	5,632	5,760	70,655
Route 93	15%	7,069	7,574	6,253	7,624	7,624	7,967	9,383	8,291	7,781	7,563	6,829	6,770	90,728
Route 105/E	5%	1,432	1,551	1,393	1,628	1,866	1,899	2,035	1,799	2,600	2,255	1,857	1,753	22,068
Route 107/G	30%	25,153	27,250	25,231	26,250	26,926	25,972	29,755	26,809	25,479	24,879	26,335	26,453	316,492
Route 108/H	2%	2,430	2,613	2,523	2,616	2,586	2,710	2,928	2,751	2,446	2,382	2,620	2,664	31,269
Route 122/V	2%	185	190	176	200	234	211	283	255	221	223	211	201	2,591
Route 246/Night Owl	3%	339	349	377	440	440	396	279	178	366	336	401	600	4,500
<b>Total Annual Ridership from September 2003 to August 2004</b>														<b>1,833,236</b>

### b. Level of Service

The MDT routes provide countywide service offering North Miami residents with access to areas outside of the City throughout Miami-Dade County and connections to routes within Broward County. The routes serve most of the major roadways within the City including NW/NE 125th Street, NW/NE 135th Street, West Dixie Highway, US 1/Biscayne Boulevard, NW 7th Avenue, NE 6th Avenue, NE 12th Avenue, NE 16th Avenue, NW 119th Street, NE 151st Street, and NE 163rd Street.

A quarter-mile area around a public transit stop is usually considered the “capture area” or service area for the public transit service. A quarter-mile is the distance that can be covered on foot comfortably in five-minutes. Hence, this is considered the distance that public transit patrons

are likely to walk to use the public transit service. Using a quarter-mile radius as the capture area for the public transit service routes and stops, the City of North Miami is well served by Miami-Dade Transit with more than 90% of the City lying within capture areas.

**Table 5** (see above) presents North Miami's proportional share of the annual ridership along the MDT routes for the one-year period from September 2003 to August 2004. The monthly ridership for each route is obtained by multiplying the total boardings for the route by the percentage of the route that passes through North Miami. It is not the most accurate way of estimating ridership within the City, but it is an approximate value based upon North Miami's proportionate share of the ridership by route length within the City. The annual ridership information obtained from Miami-Dade Transit for this

period illustrates that approximately 1.8 million passengers used the service for that reporting year within North Miami. According to the Miami-Dade County's Comprehensive Plan Evaluation and Appraisal Report (EAR), the MDT System is meeting all level of service standards established for the system.

### 3. Transit Mobility Needs

The City of North Miami is well served by public transit in terms of route coverage. NoMi Express is a free local public transit service provided by the City with coverage by four routes. Public transit is provided at the regional level by MDT through 16 routes that travel through the City. Despite the good coverage and options for public transit, there is still an opportunity to enhance services to improve travel and mobility by public transit.

The NoMi Express routes are circular dividing the City into four districts. This makes it difficult to travel in an east-west direction because public transit riders have to change buses several times to travel from one end of the City to the other. It is recommended that the route alignments be modified to reduce the number of transfers required to travel across the City. Long-term programming should increase the number of routes and connections to MDT.

A public transit service is perceived as more reliable when it picks up riders with minimal wait time at the stop and takes them where they want to go when they want to go. The NoMi Express routes currently operate on weekdays from 7 a.m. to 9 p.m. with 30- to 60-minute

headways. Shorter headways and weekend service would increase the service's reliability and its attractiveness.

The NoMi Express and MDT have different service areas and users. The NoMi Express is primarily used by school children and senior citizens. MDT is used by a broader range of the population. There currently are very limited connections utilized by riders between the two systems. Therefore, the NoMi Express is primarily serving North Miami residents, but it is not expanding its regional travel opportunities by connecting riders to MDT. **Figure 8** (see page 18) shows the NoMi routes and the MDT routes within the City. Part of the challenge to encourage connections is that many residents enjoy the free service NoMi Express provides and perceives MDT as less than convenient or reliable. The City will need to consider strategies to subsidize MDT use and work with MDT to change perceptions of the service. In addition, there needs to be increased coordination between the two services.

Based on the U.S. Census 2000, there are a significant number of people that use public transit in North Miami. This is achieved without a centralized public transit hub. A hub could facilitate and increase multimodal transfers in the area, thus greatly increasing the convenience of public transit and the coverage of each system.

Due to increased traffic congestion in the City and limited opportunities to expand roadways, there is a need to promote public transportation as a comfortable, convenient, and reliable transportation choice. To achieve this, the public transit





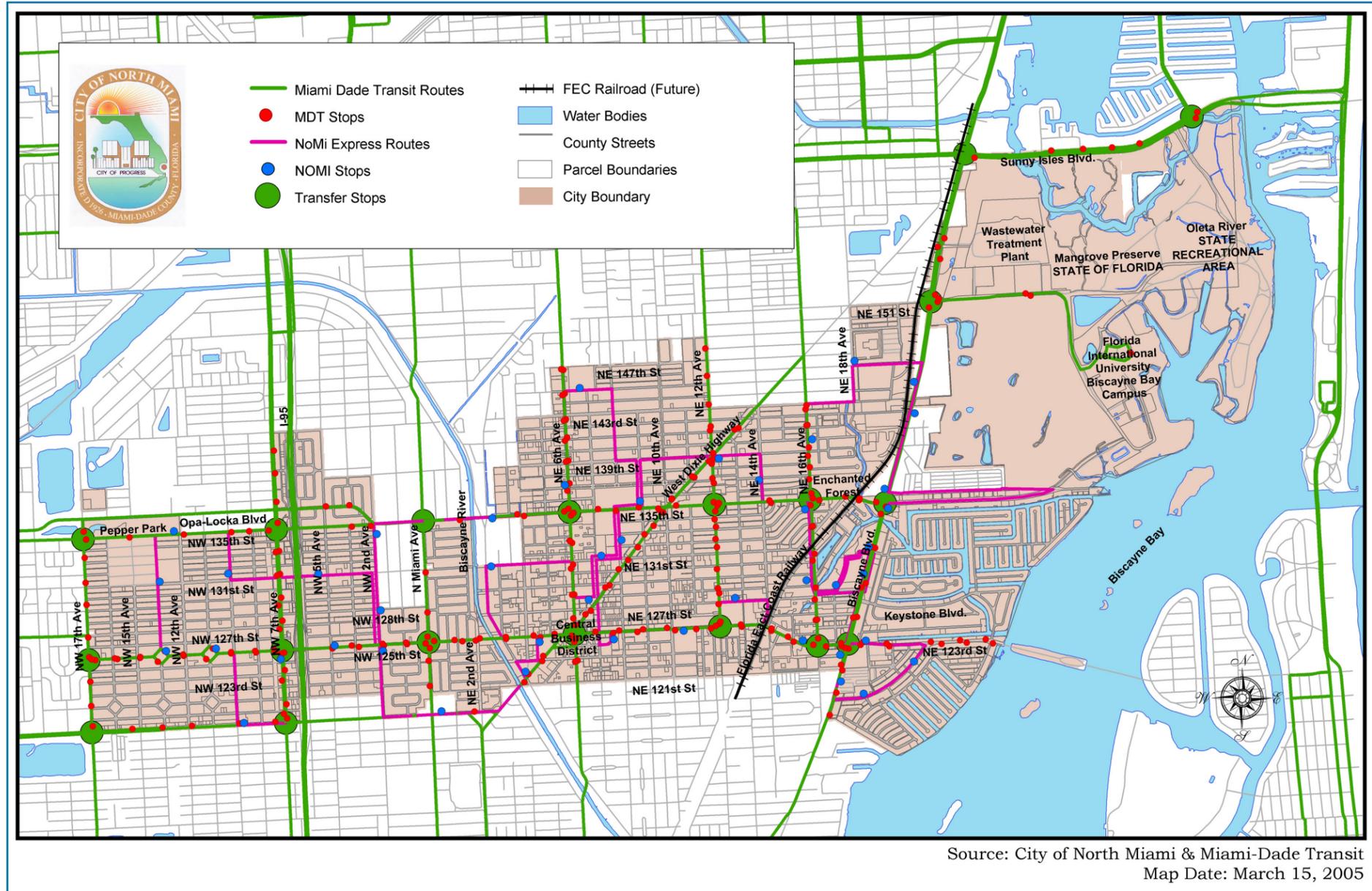
# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

system must include reliable schedules, convenient headways, and comfortable facilities. Published transit research indicates that a public transit service is perceived as comfortable when transit rider amenities are provided at the public transit stops as well as within the bus. At a minimum, public transit stops should include shelters, benches, trash cans, and basic route schedules. Transfer stops should include transfer route schedules and headway information. Stops which have a high number of boardings and alightings should also include water fountains, bike racks, and restrooms. Overall, the facilities, including the bus stops and the buses, should be clean and comfortable.

A public transit service will be successful when it caters to all types of transit riders. Public transit literature separates riders into two types — captive riders and choice riders. Captive riders are patrons dependent on public transit as their chief mode of transportation due to socioeconomic conditions. Choice riders are patrons that “choose” to take public transit if the facilities are clean and comfortable and if the service is efficient and convenient.

Public transit users are very sensitive to the operational efficiency of the public transit system when compared to the users of the other modes. The public transit system should provide services and amenities to attract the choice riders. Detailed strategies/projects to achieve this objective are provided in Section IV.

Figure 8 — NoMi and MDT Bus Routes Within North Miami





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## D. Roadways

### 1. Network

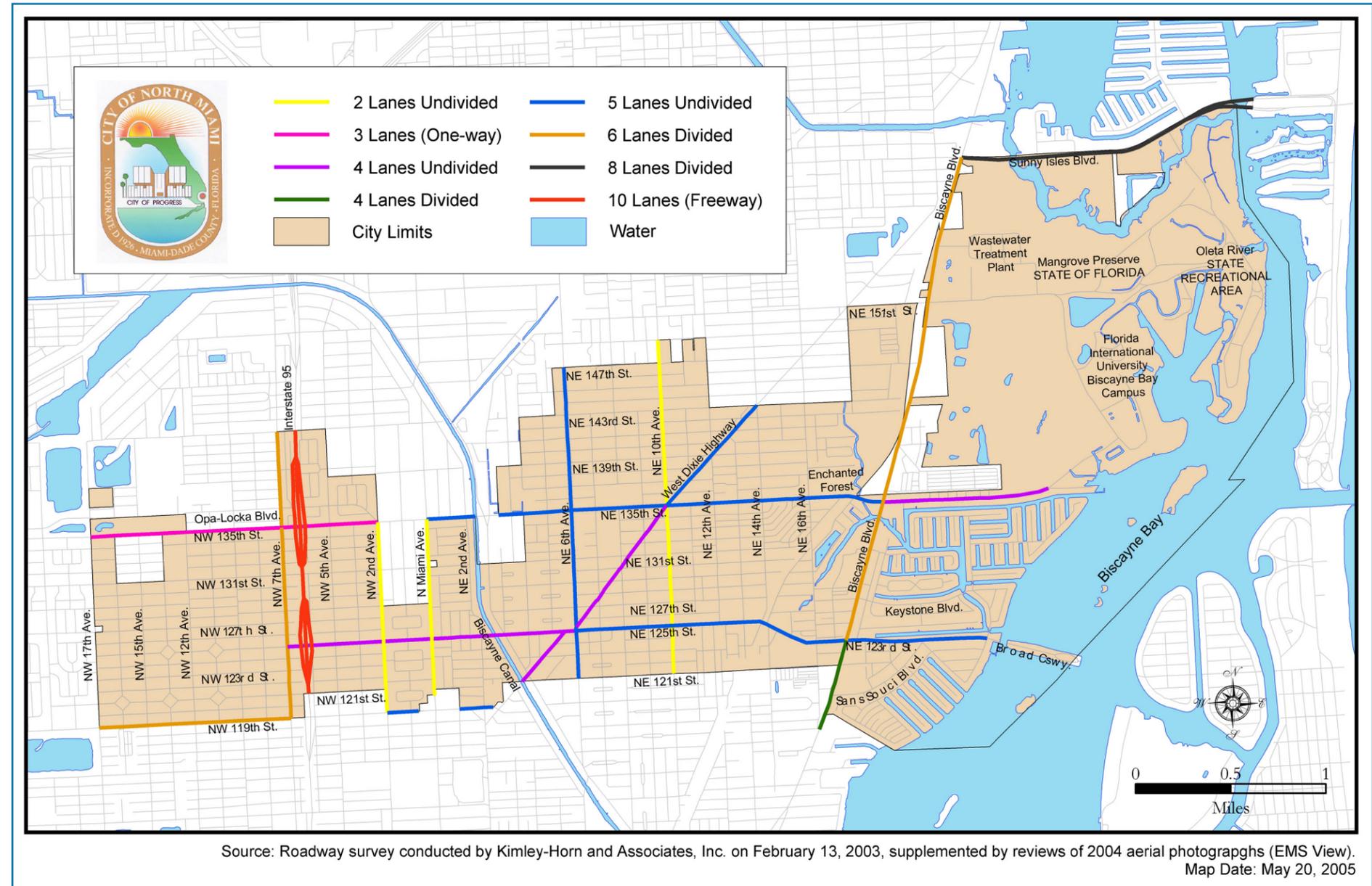
The City of North Miami's roadway network is a grid network with east-west and north-south corridors. The network is divided into a hierarchical street system made up of local, collector, and arterial streets. The grid network provides a vast number of routes for efficient movement of pedestrian, bicycle, transit, and automobile traffic. **Figure 9** (shown right) shows the number of lanes for major roadways within the City.

### 2. Roadway Levels of Service

The roadway level of service (LOS) is a quantitative representation of the quality of service of a roadway. The *Highway Capacity Manual (HCM)* divides the level of service into six letter grades, A through F. In Miami-Dade County, roadway LOS are expressed as a volume-to-capacity (V/C) ratio. It is the ratio of the volume of traffic on a roadway to the service capacity of the road. The V/C ratios have been categorized



**Figure 9 — Number of Lanes of Major Roadways**





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

into letter grades as shown in **Table 6** (see below). The level of service analyses were performed using both daily and peak hour traffic conditions.

Roadway facilities are usually categorized by their functional classification that determines the characteristics of a roadway. The functional classifications were obtained from the FDOT's 2002 *Quality/Level of Service Handbook*. These functional classifications determine the capacity and the operating characteristics of a roadway. Roadways are usually categorized as limited access facilities, principal arterials, minor arterials, collectors and local streets. **Figure 10** (shown right) shows the functional classifications of major roadways within the City.

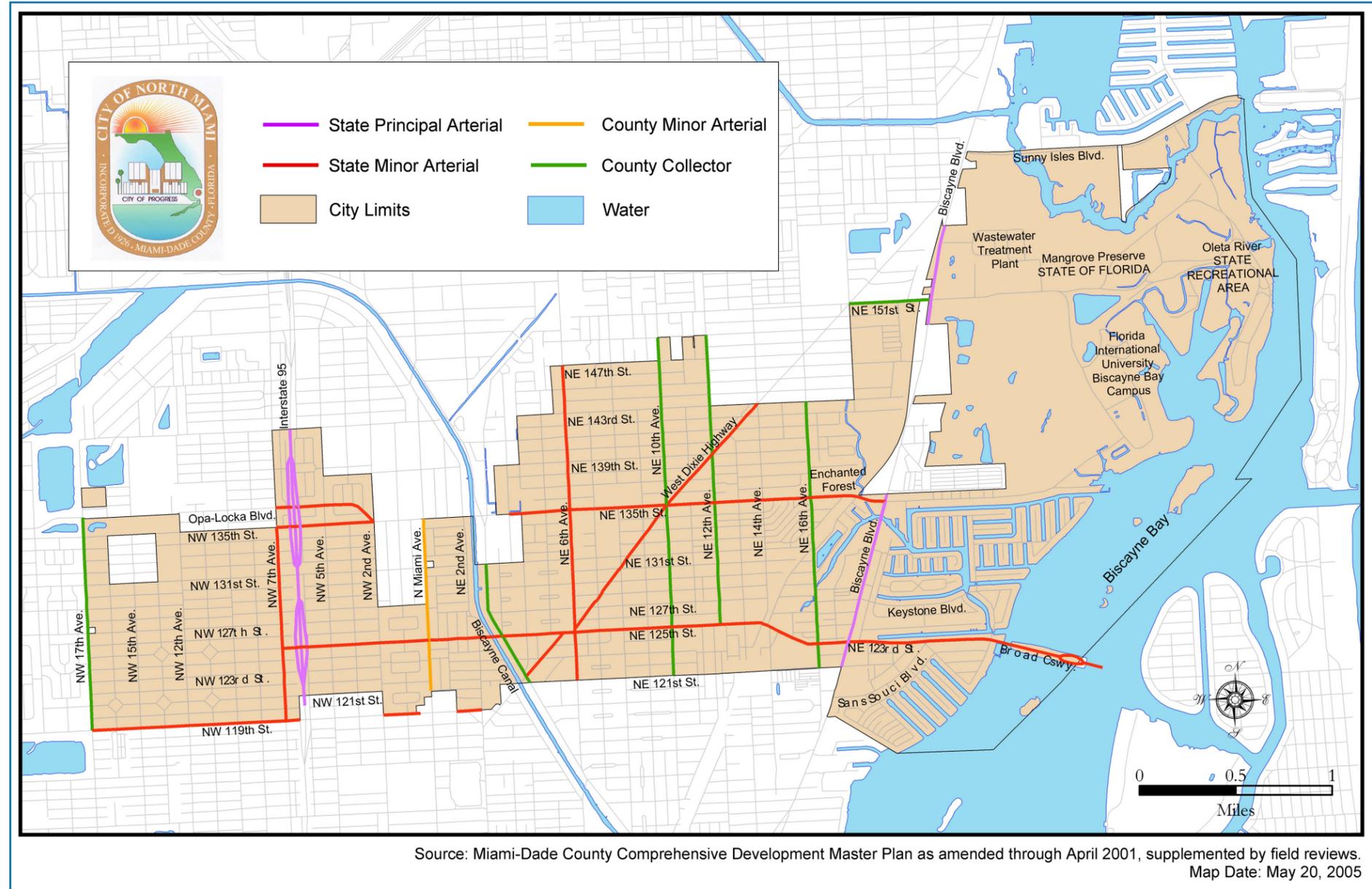
V/C Ratio	Range of Scores
A	Less than 0.60
B	0.61 - 0.70
C	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	Greater than 1.01

■ **Limited Access Facilities**

Limited access facilities are roadways utilized for regional trips with limited access points. It typically carries heavy traffic volumes at high speeds. In North Miami, there is only one Limited Access Facility described below.

- *Interstate 95*: This is a 10-lane limited access facility that runs through the western portion of the City of North

**Figure 10 — Functional Classifications of Major Roadways**





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN



Miami. It runs in the north-south direction and primarily serves regional trips. The interchanges along I-95 within the City of North Miami are at NW 125th Street and NW 135th Street.

### Principal Arterials

A principal arterial serves primarily through movements between commercial centers and serves the urban core. Principal arterials are typically used for longer trips. In North Miami, there are two principal arterials.

- *Biscayne Boulevard/US 1*: This is a thoroughfare running north-south through the eastern portion of the City. Biscayne Boulevard varies from a four-lane facility to an eight-lane facility from the south to the north through the City and provides access to one of the City's major commercial corridors.
- *West Dixie Highway*: This is a five-lane facility (with center turn lanes) that runs diagonally from south-west to northeast portions of the City.

### Minor Arterials

A minor arterial connects and augments the principal arterial system. It provides mobility with greater property access than the principal arterial. Several streets in North Miami are considered minor arterials.

- *NW/NE 119th Street/Gratigny Highway*: This six-lane facility is at the southern boundary of the City and is an east-west arterial. It serves only the western portions of the City because it ends at NW/NE 125th Street. It passes through the central business district and other major activity centers. This street also provides access to City Hall.
- *NW/NE 135th Street*: This is a three-lane, one-way facility from the western boundary of the City eastbound to NE 2nd Avenue and a five-lane, two-way facility to the east. The other direction for the one-way pair, Opa-Locka Boulevard, is located on the northern side of NW 135th Street and is outside of the City.



**Table 7  
Roadway Functional Characteristics**

Roadway	Segment	Number of Lanes	Functional Class Type	LOS
Biscayne Blvd. US 1 / SR 5	South of NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street	4 LD	State Two-Way Arterial Class III	E+50 <sup>(1)</sup>
Biscayne Blvd. US 1 / SR 5	NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street to NE 151 <sup>st</sup> Street	6 LD	State Two-Way Arterial Class III	E+50 <sup>(1)</sup>
Biscayne Blvd. US 1 / SR 5	NE 151 <sup>st</sup> Street to NE 163 <sup>rd</sup> Street	6 LD	State Two-Way Arterial Class III	E+50 <sup>(1)</sup>
Interstate 95	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	10 LX	Freeway, Int. Spacing < 2.0 miles	E
Interstate 95	NW 135 <sup>th</sup> Street to North of NW 151 <sup>st</sup> Street	10 LX	Freeway, Int. Spacing < 2.0 miles	E
NW 135 <sup>th</sup> Street	NW 17 <sup>th</sup> Avenue to NW 2 <sup>nd</sup> Avenue	3L - One-way	State Two-Way Arterial Class II	E
NW 135 <sup>th</sup> Street	NW 2 <sup>nd</sup> Avenue to NE 6 <sup>th</sup> Avenue	5 LU*	State Two-Way Arterial Class II	E
NE 135 <sup>th</sup> Street	NE 6 <sup>th</sup> Avenue to NE 10 <sup>th</sup> Avenue	5 LU*	State Two-Way Arterial Class II	E
NE 135 <sup>th</sup> Street	NE 10 <sup>th</sup> Avenue to US 1/SR 5	5 LU*	State Two-Way Arterial Class II	E
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	NW 7 <sup>th</sup> Avenue to NE 6 <sup>th</sup> Avenue	4 LU	State Two-Way Arterial Class II	E+20 <sup>(2)</sup>
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	NE 6 <sup>th</sup> Avenue to US 1/SR 5	5 LU*	State Two-Way Arterial Class IV	E+20 <sup>(2)</sup>
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	US 1/SR 5 to Broad Causeway	5 LU*	State Two-Way Arterial Class II	E
West Dixie Highway	NE 119 <sup>th</sup> Street to NE 10 <sup>th</sup> Avenue	4 LU	State Two-Way Arterial Class II	E+20 <sup>(2)</sup>
West Dixie Highway	NE 10 <sup>th</sup> Avenue to NE 163 <sup>rd</sup> Street	5 LU*	State Two-Way Arterial Class II	E
NW 7 <sup>th</sup> Avenue / US 441	NE 119 <sup>th</sup> Street to NE 135 <sup>th</sup> Street	6 LD	State Two-Way Arterial Class II	E+50 <sup>(1)</sup>
NW 7 <sup>th</sup> Avenue / US 441	NE 135 <sup>th</sup> Street to NE 143 <sup>rd</sup> Street	6 LD	State Two-Way Arterial Class II	E+50 <sup>(1)</sup>
NE 6 <sup>th</sup> Avenue / SR 915	NE 121 <sup>st</sup> Street to NE 135 <sup>th</sup> Street	5 LU*	State Two-Way Arterial Class II	E+20 <sup>(2)</sup>
NE 6 <sup>th</sup> Avenue / SR 915	NE 135 <sup>th</sup> Street to NE 147 <sup>th</sup> Street	5 LU*	State Two-Way Arterial Class II	E+20 <sup>(2)</sup>
NW 119 <sup>th</sup> Street / SR 924	NW 17 <sup>th</sup> Avenue to NW 7 <sup>th</sup> Avenue	6 LD	State Two-Way Arterial Class II	E
NW 119 <sup>th</sup> Street / SR 924	Interstate 95 to W. Dixie Highway	5 LU*	State Two-Way Arterial Class II	E
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	U.S. 1 to NE 35 <sup>th</sup> Avenue	8 LD	State Two-Way Arterial Class II	E+20 <sup>(2)</sup>
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	NE 35 <sup>th</sup> Avenue to Collins Avenue	8 LD	State Two-Way Arterial Class II	E+20 <sup>(2)</sup>
NE 10 <sup>th</sup> Avenue	NE 125 <sup>th</sup> Street to North City Limit	2 LU	Major Non-State Roadway	E+20 <sup>(2)</sup>
North Miami Avenue	NW 119 <sup>th</sup> Street to NW 125 <sup>th</sup> Street	2 LU	Major Non-State Roadway	E+20 <sup>(2)</sup>
North Miami Avenue	NW 125 <sup>th</sup> Street to North City Limit	2 LU	Major Non-State Roadway	E+20 <sup>(2)</sup>
NW 2 <sup>nd</sup> Avenue	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	2 LU	Other Signalized Roadways	E+20 <sup>(2)</sup>

Notes: (1) This road is allowed to reach 150% of capacity for LOS E due to its location in the urban infill area with extraordinary transit service  
 (2) This road is allowed to reach 120% of capacity for LOS E due to its location in the urban infill area and the presence of transit service operating with less than 20 minute headways  
 \* 5 LU represents a road with two lanes in each direction with center two-way turn lanes

- *NW 163rd Street/Sunny Isles Boulevard*: This east-west, eight-lane facility forms the northern boundary of the City east of Biscayne Boulevard.
- *NW 7th Avenue/US 441*: This six-lane facility runs north-south through the City parallel and to the west of Interstate 95. It is the main alternative to Interstate 95 during congested conditions or incidents.

- *NE 6th Avenue/SR 915*: This five-lane facility runs north-south through the middle of the City.

### Collectors

Collector streets provide both access and traffic circulation within residential, commercial, and industrial areas. Their access function is more important than





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

that of arterials. North Miami has the following collectors:

- *NE 10th Avenue*: This two-lane facility runs north-south through the City and mainly serves the residential neighborhoods adjacent to it.
- *North Miami Avenue*: This two-lane facility also runs north-south through the City.

### Local Streets

All other streets are considered local streets that provide access to properties and connect to collector roads. The local streets in North Miami are in a grid pattern.

The characteristics of the limited access facilities, principal arterials, and collectors within the City of North Miami are shown in **Table 7** (see page 21). The adopted levels of service for the roadways were obtained from the Miami-Dade Comprehensive Development Master Plan (CDMP). The CDMP contains the following traffic circulation level of service standards applicable to the City of North Miami:

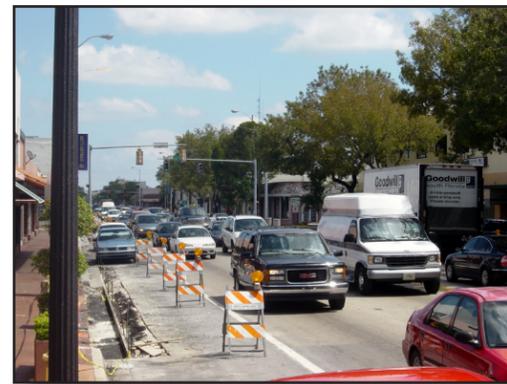
- *Non-FIHS Roadways* (for locations within the urban infill area) adhere to the following adopted levels of service. This applies to all roadways in North Miami (except Interstate 95) because the City lies within the urban infill area:

- LOS E (100% of capacity), if no public transit service is available.

- LOS E+20 (120% of capacity), if public transit service exists within 1/2-mile with less than 20-minute headways.
  - LOS E+50 (150% of capacity), if extraordinary (commuter rail or express bus) public transit service exists.

- *FIHS Roadways* (within the Transportation Concurrency Exception Area):

- LOS E, when exclusive through lanes exist. This will apply to Interstate 95 because it has exclusive high-occupancy vehicle (HOV) lanes.



### 3. Existing Levels of Service

#### a. Daily Level of Service Analysis

The existing traffic conditions and their corresponding LOS were assessed to evaluate the mobility conditions on the street network. The evaluation also helps identify roadway segments that

**Table 8  
Existing Daily LOS**

Roadway	Segment	Adopted LOS Standard	Adopted Daily LOS Volume	2004 Daily Volume	2004 V/C Ratio	2004 LOS
Biscayne Blvd. US 1 / SR 5	South of NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street	E+50 <sup>(1)</sup>	32,800	45,760	1.40	E+50
Biscayne Blvd. US 1 / SR 5	NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street to NE 151 <sup>st</sup> Street	E+50 <sup>(1)</sup>	49,300	57,942	1.18	E+50
Biscayne Blvd. US 1 / SR 5	NE 151 <sup>st</sup> Street to NE 163 <sup>rd</sup> Street	E+50 <sup>(1)</sup>	49,300	54,000	1.10	E+50
Interstate 95	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	E	207,600	257,580	1.24	F
Interstate 95	NW 135 <sup>th</sup> Street to North of NW 151 <sup>st</sup> Street	E	207,600	283,176	1.36	F
NE 135 <sup>th</sup> Street	NW 17 <sup>th</sup> Avenue to NW 2 <sup>nd</sup> Avenue	E	25,400	19,240	0.76	C
NE 135 <sup>th</sup> Street	NW 2 <sup>nd</sup> Avenue to NE 6 <sup>th</sup> Avenue	E	32,775	51,775	1.58	F
NE 135 <sup>th</sup> Street	NE 6 <sup>th</sup> Avenue to NE 10 <sup>th</sup> Avenue	E	32,775	32,760	1.00	E
NE 135 <sup>th</sup> Street	NE 10 <sup>th</sup> Avenue to US 1/SR 5	E	32,775	21,840	0.67	B
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	NW 7 <sup>th</sup> Avenue to NE 6 <sup>th</sup> Avenue	E+20 <sup>(2)</sup>	25,875	39,713	1.53	F
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	NE 6 <sup>th</sup> Avenue to US 1/SR 5	E+20 <sup>(2)</sup>	30,115	37,230	1.24	F
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	US 1/SR 5 to Broad Causeway	E	32,775	22,880	0.70	B
West Dixie Highway	NE 119 <sup>th</sup> Street to NE 135 <sup>th</sup> Street	E+20 <sup>(2)</sup>	25,875	24,960	0.96	E
West Dixie Highway	NE 135 <sup>th</sup> Street to NE 163 <sup>rd</sup> Street	E	32,775	20,196	0.62	B
NW 7 <sup>th</sup> Avenue / US 441	NE 119 <sup>th</sup> Street to NE 135 <sup>th</sup> Street	E+50 <sup>(1)</sup>	51,800	36,750	0.71	B
NW 7 <sup>th</sup> Avenue / US 441	NE 135 <sup>th</sup> Street to NE 143 <sup>rd</sup> Street	E+50 <sup>(1)</sup>	51,800	29,160	0.56	A
NE 6 <sup>th</sup> Avenue / SR 915	NE 121 <sup>st</sup> Street to NE 135 <sup>th</sup> Street	E+20 <sup>(2)</sup>	32,775	21,420	0.65	B
NE 6 <sup>th</sup> Avenue / SR 915	NE 135 <sup>th</sup> Street to NE 147 <sup>th</sup> Street	E+20 <sup>(2)</sup>	32,775	28,770	0.88	D
NE 119 <sup>th</sup> Street / SR 924	NE 17 <sup>th</sup> Avenue to NE 7 <sup>th</sup> Avenue	E	51,800	44,100	0.85	D
NE 119 <sup>th</sup> Street / SR 924	NE 7 <sup>th</sup> Avenue to West Dixie Highway	E	32,775	27,250	0.83	D
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	U.S. 1 to NE 35 <sup>th</sup> Avenue	E+20 <sup>(2)</sup>	67,000	73,575	1.10	E+20
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	NE 35 <sup>th</sup> Avenue to Collins Avenue	E+20 <sup>(2)</sup>	67,000	43,350	0.65	B
NE 10 <sup>th</sup> Avenue	NE 125 <sup>th</sup> Street to North City Limit	E+20 <sup>(2)</sup>	15,600	N/A	N/A	N/A
North Miami Avenue	NW 119 <sup>th</sup> Street to NW 125 <sup>th</sup> Street	E+20 <sup>(2)</sup>	15,600	N/A	N/A	N/A
North Miami Avenue	NW 125 <sup>th</sup> Street to North City Limit	E+20 <sup>(2)</sup>	15,600	N/A	N/A	N/A
NW 2 <sup>nd</sup> Avenue	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	E+20 <sup>(2)</sup>	12,600	N/A	N/A	N/A

Notes: (1) This road is allowed to reach 150% of capacity for LOS E due to its location in the urban infill area with extraordinary transit service  
 (2) This road is allowed to reach 120% of capacity for LOS E due to its location in the urban infill area and the presence of transit service operating with less than 20 minute headways  
 (3) 2004 daily volumes obtained from 2004 FDOT Traffic Count Information CD  
 (4) Roadway capacities obtained from 2002 FDOT Quality/Level of Service Handbook  
 (5) N/A means counts not available

are operating below the LOS standard established for that segment. Daily traffic information was obtained from the Florida Traffic Information 2004 CD from FDOT. The Annual Average Daily Traffic (AADT) volumes were multiplied by the Florida

Department of Transportation (FDOT) seasonal adjustment factors to obtain peak season daily volumes. These volumes were assessed against the roadway capacities to determine their LOS. The existing daily LOS is shown in **Table 8** (shown above)



# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

and depicted in **Figure 11** (shown right). According to the table, the following roadway links are operating below the adopted LOS standard:

- Interstate 95 from NE 119th Street to NE 151st Street is operating at LOS F against its adopted LOS E.
- NE 135th Street from NW 2nd Avenue to NE 6th Avenue is operating at LOS F against its adopted LOS E.
- NE 125th Street from NW 7th Avenue to US 1 is operating at LOS F against its adopted LOS E+20.

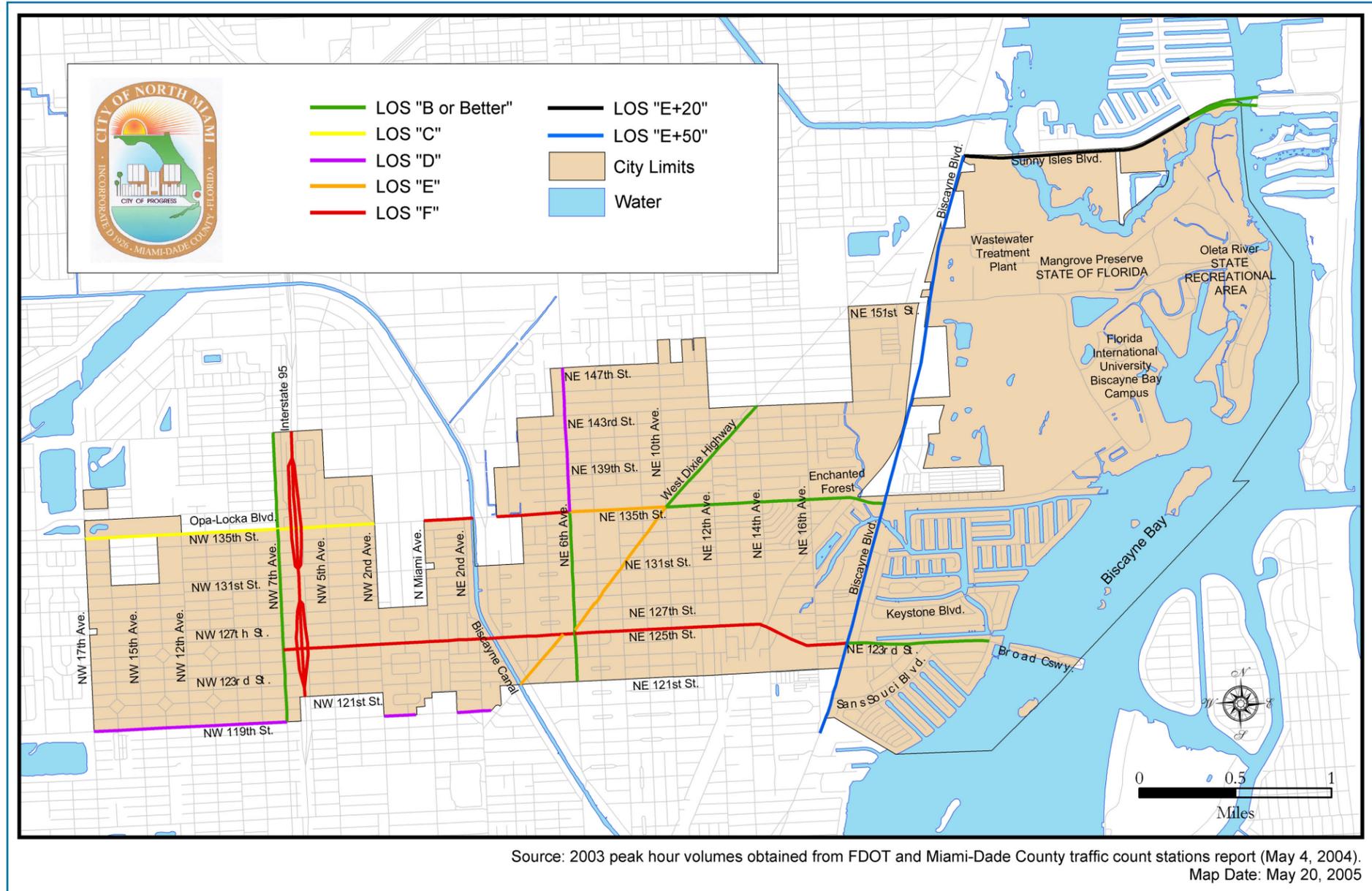
### b. Peak Hour Levels of Service Analysis

Peak hour levels of service are shown in **Table 9** (see page 24) and depicted in **Figure 12** (see page 25). The peak hour, two-way volumes were obtained from FDOT and Miami-Dade County count stations. Peak hour roadway volumes were compared against their adopted LOS volumes obtained from the *FDOT 2002 Quality/Level of Service Handbook*. Peak hour traffic volumes were obtained from the counts collected at the FDOT and Miami-Dade County traffic count stations. The roadway links operating below the adopted LOS standard are as follows:

- NE 135th Street from NW 2nd Avenue to NE 6th Avenue is operating at LOS F against its adopted LOS E.

Several other roads are operating at their maximum capacity.

**Figure 11 — Existing Daily LOS**





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN



## 4. Future Levels of Service

### a. Daily Level of Service Analysis

The future traffic conditions and their corresponding LOS were assessed to evaluate the mobility conditions of the roadway network in the year 2025. The year 2025 traffic volumes were obtained by projecting the existing traffic volumes into the future by using a calculated annual growth rate. The annual growth rate was calculated from the year 1999 and 2025 traffic volumes from the Miami-Dade County Transportation Model. The growth rate was used to project the year 2025 daily and peak hour volumes. The County's model incorporates the future land use potential for the entire County including North Miami.

The daily and peak hour levels of service were calculated for the year 2025. The year 2025 daily roadway levels of service are shown in [Table 10](#) (see page 27) and [Figure 13](#) (see page 26). According to the table the following roadway links are operating below the adopted LOS standard:

- Interstate 95 from NE 119th Street to NE 151st Street is operating at LOS F against its adopted LOS E.
- NE 135th Street from NW 2nd Avenue to NE 10th Avenue is operating at LOS F against its adopted LOS E.
- US 1/SR 5 from NE 123rd Street/NE 125th Street to NE 151st Street is operating at LOS F against its adopted LOS E+50.
- NE 125th Street from NW 7th Avenue to US 1/SR 5 is operating at LOS F against its adopted LOS E+20.
- NE 119th Street from NE 17th Avenue to West Dixie Highway is operating at LOS F against its adopted LOS E.
- NE 163rd Street from US 1/SR 5 to NE 35th Avenue is operating at LOS F against its adopted LOS E+20.

The year 2025 peak hour roadway levels of service are shown in [Table 11](#) (see page 28) and [Figure 14](#) (see page 29). According to the table the following roadway links are operating below the adopted LOS standard:

- Interstate 95 from NE 119th Street to NE 151st Street is operating at LOS F against its adopted LOS E.
- NE 135th Street from NW 2nd Avenue to NE 10th Avenue is operating at LOS F against its adopted LOS E.
- US 1/SR 5 from NE 123rd Street/NE 125th Street to NE 151st Street is operating at LOS F against its adopted LOS E+50.

**Table 9  
Peak Hour LOS**

Roadway	Segment	Adopted LOS Standard	Adopted PM Peak Hour LOS Volume	2004 PM Peak Hour Volume	2004 V/C Ratio	2004 LOS
Biscayne Blvd. US 1 / SR 5	South of NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street	E+50 <sup>(1)</sup>	3,120	3,051	0.98	E
Biscayne Blvd. US 1 / SR 5	NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street to NE 151 <sup>st</sup> Street	E+50 <sup>(1)</sup>	4,690	4,136	0.88	D
Biscayne Blvd. US 1 / SR 5	NE 151 <sup>st</sup> Street to NE 163 <sup>rd</sup> Street	E+50 <sup>(1)</sup>	4,690	4,307	0.92	E
Interstate 95	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	E	19,310	17,289	0.90	D
Interstate 95	NW 135 <sup>th</sup> Street to North of NW 151 <sup>st</sup> Street	E	19,310	17,662	0.91	E
NW 135 <sup>th</sup> Street	NW 17 <sup>th</sup> Avenue to NW 2 <sup>nd</sup> Avenue	E	2,710	1,610	0.59	A
NW 135 <sup>th</sup> Street	NW 2 <sup>nd</sup> Avenue to NE 6 <sup>th</sup> Avenue	E	3,107	3,164	1.02	F
NE 135 <sup>th</sup> Street	NE 6 <sup>th</sup> Avenue to NE 10 <sup>th</sup> Avenue	E	3,107	2,444	0.79	C
NE 135 <sup>th</sup> Street	NE 10 <sup>th</sup> Avenue to US 1/SR 5	E	3,107	1,622	0.52	A
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	NW 7 <sup>th</sup> Avenue to NE 6 <sup>th</sup> Avenue	E+20 <sup>(2)</sup>	2,453	2,820	1.15	E+20
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	NE 6 <sup>th</sup> Avenue to US 1/SR 5	E+20 <sup>(2)</sup>	2,860	2,665	0.93	E
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	US 1/SR 5 to Broad Causeway	E	3,107	1,824	0.59	A
West Dixie Highway	NE 119 <sup>th</sup> Street to NE 135 <sup>th</sup> Street	E+20 <sup>(2)</sup>	2,453	2,118	0.86	D
West Dixie Highway	NE 135 <sup>th</sup> Street to NE 163 <sup>rd</sup> Street	E	3,107	1,578	0.51	A
NW 7 <sup>th</sup> Avenue / US 441	NE 119 <sup>th</sup> Street to NE 135 <sup>th</sup> Street	E+50 <sup>(1)</sup>	4,920	3,787	0.77	C
NW 7 <sup>th</sup> Avenue / US 441	NE 135 <sup>th</sup> Street to NE 143 <sup>rd</sup> Street	E+50 <sup>(1)</sup>	4,920	2,345	0.48	A
NE 6 <sup>th</sup> Avenue / SR 915	NE 121 <sup>st</sup> Street to NE 135 <sup>th</sup> Street	E+20 <sup>(2)</sup>	3,107	1,574	0.51	A
NE 6 <sup>th</sup> Avenue / SR 915	NE 135 <sup>th</sup> Street to NE 147 <sup>th</sup> Street	E+20 <sup>(2)</sup>	3,107	2,266	0.73	C
NW 119 <sup>th</sup> Street / SR 924	NW 17 <sup>th</sup> Avenue to NW 7 <sup>th</sup> Avenue	E	4,920	3,354	0.68	B
NW 119 <sup>th</sup> Street / SR 924	Interstate 95 to W. Dixie Highway	E	3,107	1,873	0.60	A
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	U.S. 1 to NE 35 <sup>th</sup> Avenue	E+20 <sup>(2)</sup>	6,360	4,608	0.72	C
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	NE 35 <sup>th</sup> Avenue to Collins Avenue	E+20 <sup>(2)</sup>	6,360	2,890	0.45	A
NE 10 <sup>th</sup> Avenue	NE 125 <sup>th</sup> Street to North City Limit	E+20 <sup>(2)</sup>	1,480	291	0.20	A
North Miami Avenue	NW 119 <sup>th</sup> Street to NW 125 <sup>th</sup> Street	E+20 <sup>(2)</sup>	1,480	1,547	1.05	E+20
North Miami Avenue	NW 125 <sup>th</sup> Street to North City Limit	E+20 <sup>(2)</sup>	1,480	1,547	1.05	E+20
NW 2 <sup>nd</sup> Avenue	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	E+20 <sup>(2)</sup>	1,200	514	0.43	A

Notes: (1) This road is allowed to reach 150% of capacity for LOS E due to its location in the urban infill area with extraordinary transit service  
 (2) This road is allowed to reach 120% of capacity for LOS E due to its location in the urban infill area and the presence of transit service operating with less than 20 minute headways  
 (3) 2004 peak hour volumes obtained from FDOT and Miami-Dade County traffic count stations  
 (4) Roadway capacities obtained from 2002 FDOT Quality/Level of Service Handbook  
 (5) N/A means counts not available





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

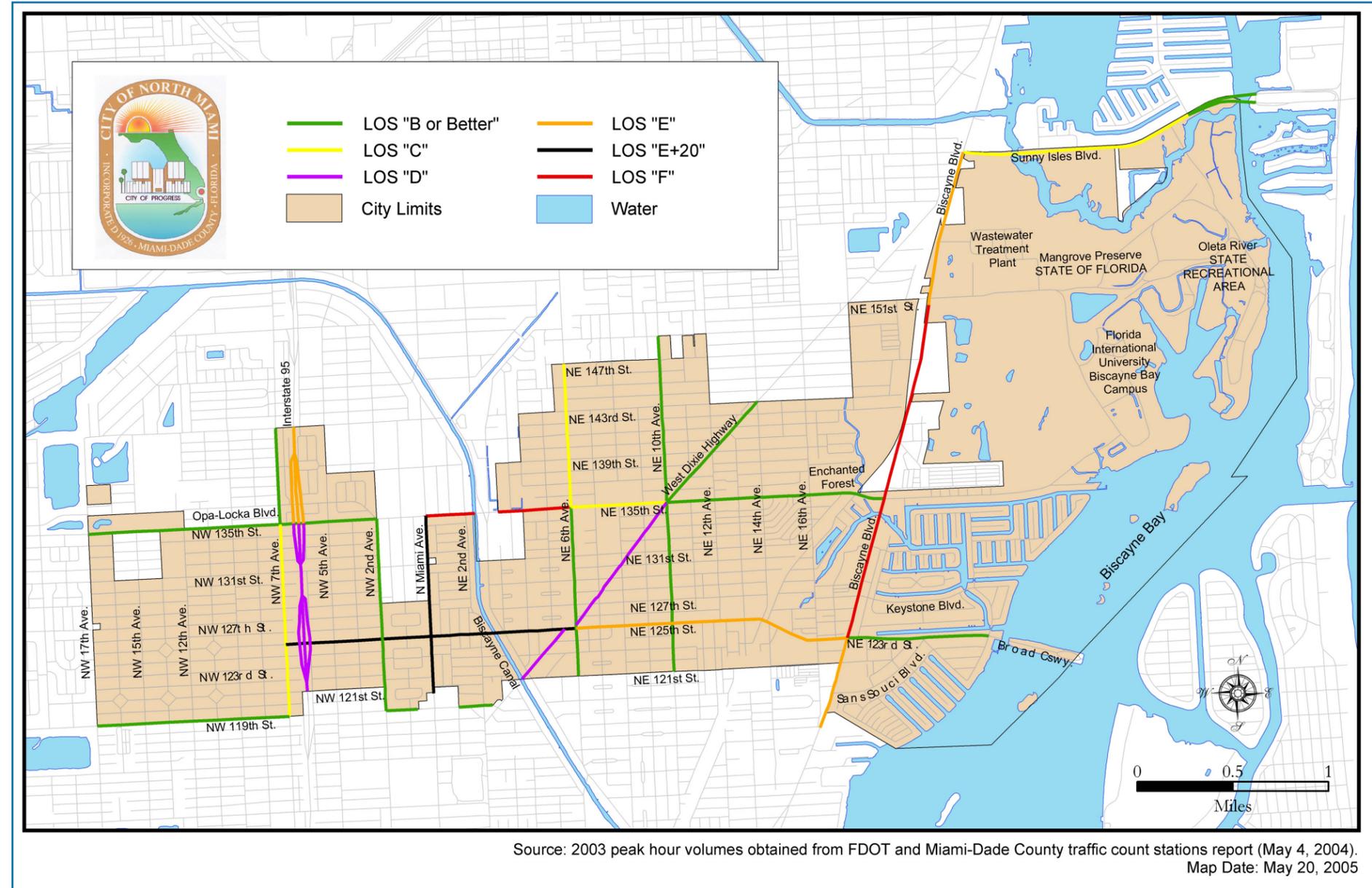
- NE 125th Street from NW 7th Avenue to NE 6th Avenue is operating at LOS F against its adopted LOS E+20.
- North Miami Avenue NE 119th Street to the north city limit is operating at LOS F against its adopted LOS E+20.

## 5. Roadways Mobility Needs

Like most other cities in the country, the single occupant vehicle is currently the dominant mode of transportation within the City of North Miami. A majority of trips (including commuting, shopping, and recreational trips) are made in the automobile. Even though this study focuses on a comprehensive review of the transportation system including all modes of travel, automobile traffic congestion is a predominant mobility issue on several of the major arterials within the City as confirmed by the analysis. Capacity constraints and heavy congestion were identified on several roadways in the existing conditions analysis. The analysis of traffic in the year 2025 shows a further decline in the levels of service.

Under both existing and future conditions, several of the roadways within the City are shown to be operating *below* the adopted LOS. Several roadways already have an adopted LOS of E+20 and E+50 which permits the V/C ratio to exceed the typical LOS E by 20 to 50 percent. While these roadways may not exceed their adopted LOS there may still be a high level of congestion affecting mobility in North Miami since the adopted LOS volume threshold is above the LOS E threshold. An example of this is Biscayne Boulevard/US 1.

Figure 12 — Peak Hour LOS





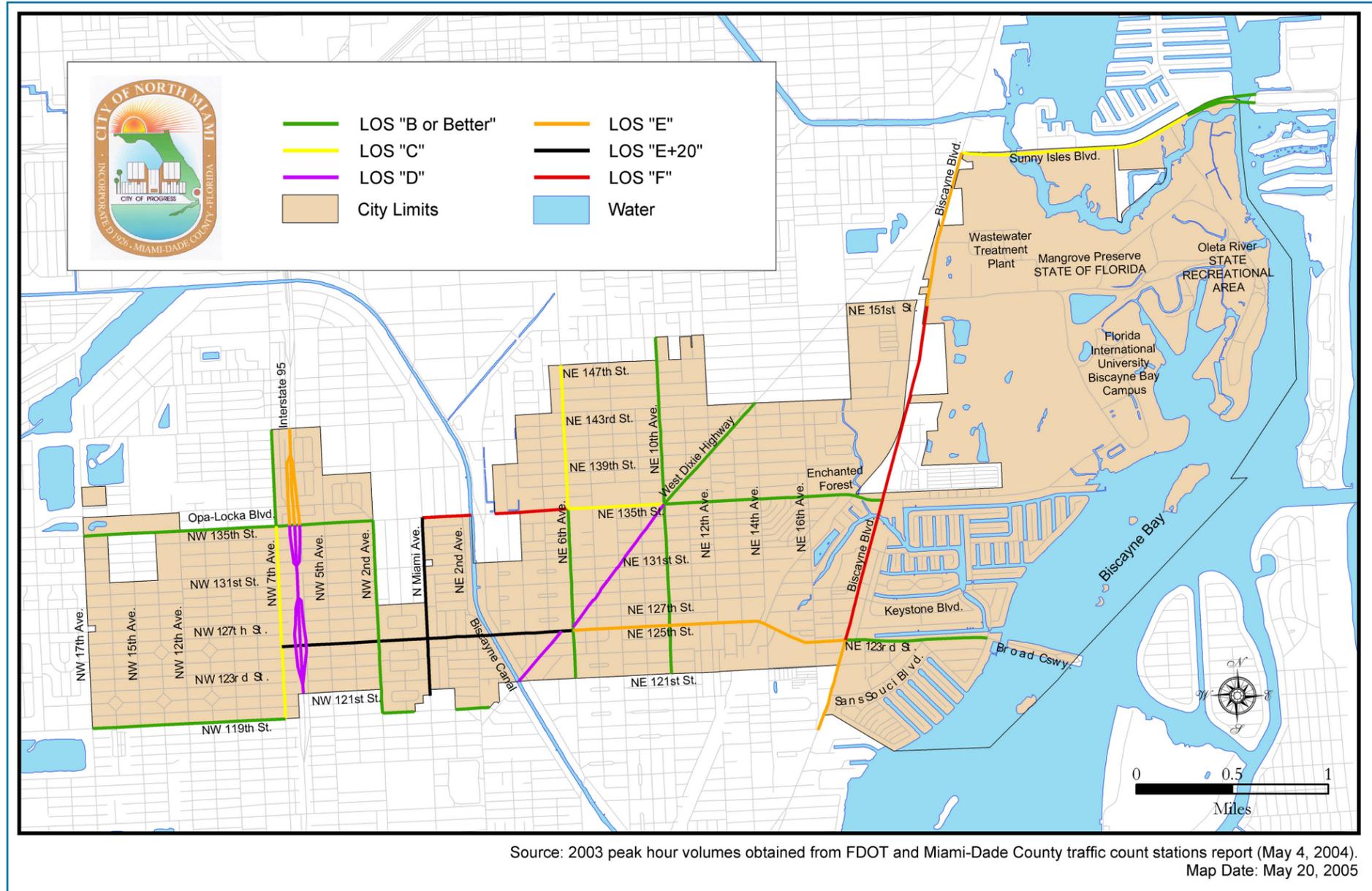
# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

Several major roadways have constrained right-of-ways; that is, the right-of-way is currently built-out and expansion would require significant expense and negatively impact the existing community and businesses. Hence, widening of the roadways to provide for additional roadway capacity is not a feasible option and was not a major consideration in the TMP. Additionally literature and research reveal that road widening is not always the best solution to alleviate congestion, especially in built-up urban areas, because it forces the latent demand on the widened roadway, leading once again to increased traffic congestion. Therefore, the TMP recommends a multimodal transportation system as a solution to address mobility issues.

Brief descriptions of the existing LOS conditions on the major roadways and recommendations to improve their operations are presented below:

- Interstate 95 (I-95):** I-95 is projected to operate below its adopted level of service in the year 2025 under daily and peak hour conditions. This roadway comes under the jurisdiction of the Florida Department of Transportation. FDOT proposes the addition of auxiliary lanes and several other corridor modifications including the addition of a southbound through lane from NW 135th Street to NW 151st Street. Several Intelligent Transportation System (ITS) improvements have also been programmed, including ramp metering at the interchange of I-95 and NW 125th Street. These projects are proposed to improve the operating conditions on I-95 in the future.

Figure 13 — Daily 2025 LOS





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

- NW/NE 135th Street:** This is an important east-west thoroughfare in the City and falls under the jurisdiction of FDOT. This roadway is also projected to operate below its adopted level of service. Measures of increasing capacity should be considered along this corridor, such as additional turn lanes at heavily congested intersections and the implementation of access management standards to eliminate closely spaced driveways.
- NW/NE 125th Street:** This major thoroughfare passes through the central business district (CBD) of the City. NW/NE 125th Street has significant traffic congestion during the morning and evening peak hours especially within the CBD and at interchanges with I-95. The interchange at I-95 and NW 125th Street is programmed for ramp metering and construction is expected to begin soon. The ramp metering is expected to improve operating conditions on I-95. This roadway provides access to City Hall and other government buildings in addition to the local commercial establishments in the CBD. There is a need for capacity improvements and an access management plan for this roadway. However, an operational analysis should be conducted before implementation of any capacity improvement projects.
- Biscayne Boulevard/US 1:** Biscayne Boulevard is under the jurisdiction of FDOT. The arterial is subject to significant traffic congestion during peak hours. This arterial is a heavily used

public transit corridor with several MDT routes operating along the corridor. It also has the potential to serve as a major public transit corridor in the future with the expansion of public transit services along the FEC railroad.

- West Dixie Highway:** This is also a heavily used public transit corridor with significant traffic congestion during peak hours. This roadway is programmed for access management improvements by the FDOT. These improvements are expected to enhance the operating conditions of the roadway.

In the year 2025, however, a majority of the roadways are operating below their adopted LOS. It is anticipated that the traffic congestion would increase in severity in the future unless the City takes a proactive approach to creating and promoting a multimodal transportation system.

**Table 10  
City of North Miami Traffic Volumes and Corresponding Levels of Service  
2025 Roadway Daily Level of Service Analysis**

Roadway	Segment	Adopted LOS Standard	Adopted PM Peak Hour LOS Volume	2025 PM Daily Volume	2025 V/C Ratio	2025 LOS
US 1 / SR 5	South of NE 123rd / NE 125th Street	E+50 (1)	32,800	54,669	1.67	F
US 1 / SR 5	NE 123rd / NE 125th Street to NE 151st Street	E+50 (1)	49,300	75,771	1.54	F
US 1 / SR 5	NE 151st Street to NE 163rd Street	E+50 (1)	49,300	69,994	1.42	E+50
Interstate 95	NW 119th Street to NW 135th Street	E	207,600	291,761	1.41	F
Interstate 95	NW 135th Street to North of NW 151st Street	E	207,600	347,782	1.68	F
NE 135th Street	NW 17th Avenue to NW 2nd Avenue	E	25,400	25,323	1.00	E
NE 135th Street	NW 2nd Avenue to NE 6th Avenue	E	32,775	66,831	2.04	F
NE 135th Street	NE 6th Avenue to NE 10th Avenue	E	32,775	43,314	1.32	F
NE 135th Street	NE 10th Avenue to US 1/SR 5	E	32,775	29,315	0.89	D
NE 125th /123rd Street	NW 7th Avenue to NE 6th Avenue	E+20 (2)	25,875	43,462	1.68	F
NE 125th /123rd Street	NE 6th Avenue to US 1/SR 5	E+20 (2)	30,115	47,333	1.57	F
NE 125th /123rd Street	US 1/SR 5 to Broad Causeway	E	32,775	28,575	0.87	D
West Dixie Highway	NE 119th Street to NE 135th Street	E+20 (2)	25,875	25,945	1.00	E
West Dixie Highway	NE 135th Street to NE 163rd Street	E	32,775	24,605	0.75	C
NW 7th Avenue / US 441	NE 119th Street to NE 135th Street	E+50 (1)	51,800	51,276	0.99	E
NW 7th Avenue / US 441	NE 135th Street to NE 143rd Street	E+50 (1)	51,800	50,814	0.98	E
NE 6th Avenue / SR 915	NE 121st Street to NE 135th Street	E+20 (2)	32,775	28,993	0.88	D
NE 6th Avenue / SR 915	NE 135th Street to NE 147th Street	E+20 (2)	32,775	36,209	1.10	E+20
NE 119th Street / SR 924	NE 17th Avenue to NE 7th Avenue	E	51,800	53,986	1.04	F
NE 119th Street / SR 924	NE 7th Avenue to West Dixie Highway	E	32,775	34,267	1.05	F
NE 163rd Street / Sunny Isles Blvd.	U.S. 1 to NE 35th Avenue	E+20 (2)	67,000	92,078	1.37	F
NE 163rd Street / Sunny Isles Blvd.	NE 35th Avenue to Collins Avenue	E+20 (2)	67,000	53,422	0.80	C
NE 10th Avenue	NE 125th Street to North City Limit	E+20 (2)	15,600	N/A	N/A	N/A
North Miami Avenue	NW 119th Street to NW 125th Street	E+20 (2)	15,600	N/A	N/A	N/A
North Miami Avenue	NW 125th Street to North City Limit	E+20 (2)	15,600	N/A	N/A	N/A
NW 2nd Avenue	NW 119th Street to NW 135th Street	E+20 (2)	12,600	N/A	N/A	N/A

Notes: (1) This road is allowed to reach 150% of capacity for LOS E due to its location in the urban infill area with extraordinary transit service  
 (2) This road is allowed to reach 120% of capacity for LOS E due to its location in the urban infill area and the presence of transit service operating with less than 20 minute headways  
 (3) 2004 peak hour volumes obtained from FDOT and Miami-Dade County traffic count stations  
 (4) Roadway capacities obtained from 2002 FDOT Quality/Level of Service Handbook  
 (5) N/A means counts not available





# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN

While the conventional way of alleviating traffic congestion is by providing more infrastructure, this method is not favored due to its failure in preventing traffic congestion in the long-run. As mentioned earlier, it is this plan's approach to alleviate congestion by means of providing for and encouraging alternative modes of transportation and efficiently manage existing infrastructure. It is also not supported by the TCEA and would have a detrimental effect on the community.

Currently, the County, MPO, and FDOT plans do not provide for roadway widenings in the future within the City. Both the existing and 2025 traffic analysis verify that congestion is a major issue in North Miami. Section IV presents strategies/projects to manage the levels of congestion so that the City can effectively manage the TCEA and future redevelopment efforts. It is suggested that future traffic be managed by means of selective modifications to the roadway infrastructure that would allow for efficient and maximum use of the existing infrastructure.

**Table 11**  
**City of North Miami Traffic Volumes and Corresponding Levels of Service**  
**2025 Roadway Peak Hour Level of Service Analysis**

Roadway	Segment	Adopted LOS Standard	Adopted PM Peak Hour LOS Volume	2025 PM Peak Hour Volume	2025 V/C Ratio	2025 LOS
US 1 / SR 5	South of NE 123rd / NE 125th Street	E+50 (1)	3,120	3,645	1.17	E+50
US 1 / SR 5	NE 123rd / NE 125th Street to NE 151st Street	E+50 (1)	4,690	5,409	1.15	F
US 1 / SR 5	NE 151st Street to NE 163rd Street	E+50 (1)	4,690	5,583	1.19	E+50
Interstate 95	NW 119th Street to NW 135th Street	E	19,310	19,583	1.01	F
Interstate 95	NW 135th Street to North of NW 151st Street	E	19,310	21,692	1.12	F
NW 135th Street	NW 17th Avenue to NW 2nd Avenue	E	2,710	2,118	0.78	C
NW 135th Street	NW 2nd Avenue to NE 6th Avenue	E	3,107	4,084	1.31	F
NE 135th Street	NE 6th Avenue to NE 10th Avenue	E	3,107	3,231	1.04	F
NE 135th Street	NE 10th Avenue to US 1/SR 5	E	3,107	2,177	0.70	B
NE 125th / 123rd Street	NW 7th Avenue to NE 6th Avenue	E+20 (2)	2,453	3,086	1.26	F
NE 125th / 123rd Street	NE 6th Avenue to US 1/SR 5	E+20 (2)	2,860	3,388	1.18	E+20
NE 125th / 123rd Street	US 1/SR 5 to Broad Causeway	E	3,107	2,278	0.73	C
West Dixie Highway	NE 119th Street to NE 135th Street	E+20 (2)	2,453	2,202	0.90	D
West Dixie Highway	NE 135th Street to NE 163rd Street	E	3,107	1,922	0.62	B
NW 7th Avenue / US 441	NE 119th Street to NE 135th Street	E+50 (1)	4,920	5,284	1.07	E+50
NW 7th Avenue / US 441	NE 135th Street to NE 143rd Street	E+50 (1)	4,920	4,086	0.83	D
NE 6th Avenue / SR 915	NE 121st Street to NE 135th Street	E+20 (2)	3,107	2,130	0.69	B
NE 6th Avenue / SR 915	NE 135th Street to NE 147th Street	E+20 (2)	3,107	2,852	0.92	E
NW 119th Street / SR 924	NW 17th Avenue to NW 7th Avenue	E	4,920	4,106	0.83	D
NW 119th Street / SR 924	Interstate 95 to W. Dixie Highway	E	3,107	2,355	0.76	C
NE 163rd Street / Sunny Isles Blvd.	U.S. 1 to NE 35th Avenue	E+20 (2)	6,360	5,767	0.91	D
NE 163rd Street / Sunny Isles Blvd.	NE 35th Avenue to Collins Avenue	E+20 (2)	6,360	3,562	0.56	A
NE 10th Avenue	NE 125th Street to North City Limit	E+20 (2)	1,480	729	0.49	A
North Miami Avenue	NW 119th Street to NW 125th Street	E+20 (2)	1,480	3,293	2.22	F
North Miami Avenue	NW 125th Street to North City Limit	E+20 (2)	1,480	2,559	1.73	F
NW 2nd Avenue	NW 119th Street to NW 135th Street	E+20 (2)	1,200	655	0.55	A

- Notes: (1) This road is allowed to reach 150% of capacity for LOS E due to its location in the urban infill area with extraordinary transit service  
 (2) This road is allowed to reach 120% of capacity for LOS E due to its location in the urban infill area and the presence of transit service operating with less than 20 minute headways  
 (3) 2004 peak hour volumes obtained from FDOT and Miami-Dade County traffic count stations  
 (4) Roadway capacities obtained from 2002 FDOT Quality/Level of Service Handbook  
 (5) N/A means counts not available

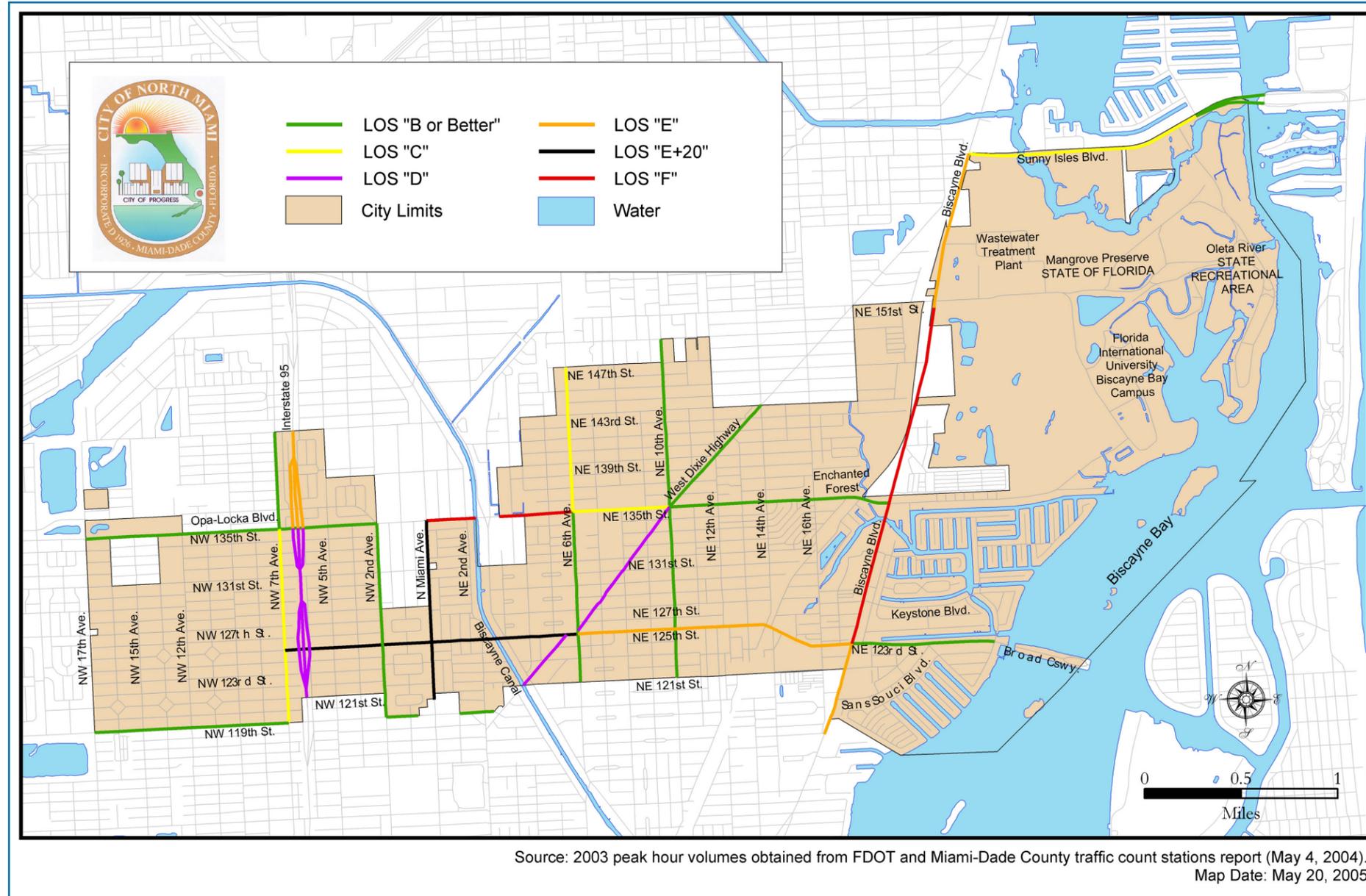




# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN

Figure 14 — 2025 Peak Hour LOS





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## III. Land Use and Transportation Plans

The manner in which land uses develop at the local and regional levels greatly affects the ability of the transportation system to provide a range of mobility choices. In addition, the City of North Miami's residents and businesses are affected by the transportation plans and programs implemented by Miami-Dade County, the Miami-Dade Metropolitan Planning Organization (MPO), and the Florida Department of Transportation (FDOT). This section of the TMP focuses on the following five goals (identified earlier in the Plan) as they relate to the land use and transportation plans affecting the City of North Miami:

- Invest wisely in the City's transportation system
- Provide greater transportation choices
- Integrate land use and transportation
- Create effective regional partnerships
- Engage the business community

The reviews of the land use and transportation plans conducted in this section are intended to ensure that consideration is given to integrate land use and transportation. The information provided consists of the relevant details of the plans that affect the City of North Miami. The review of land use and transportation plans provides a better understanding of the mobility needs for future development, the current transportation projects, and the existing transportation funding sources. All of this information is considered in the development of the recommended transportation strategies/projects.

The following land use and transportation plans pertaining to the City of North Miami and relevant to the TMP have been reviewed.

- North Miami
  - Comprehensive Plan and Evaluation and Appraisal Report (EAR)
  - CRA Redevelopment Plan
  - 2007-2011 Capital Improvement Program (CIP)
- Miami-Dade County
  - Comprehensive Development Master Plan (CDMP)
  - 2005 Evaluation and Appraisal Report (EAR)
  - 2004 People's Transportation Plan (PTP)
  - Miami-Dade Transit Development Plan (TDP)
- Miami-Dade Metropolitan Planning Organization (MPO)
  - 2025 Long-Range Transportation Plan (LRTP)
  - 2008 Transportation Improvement Program (TIP)
- Florida Department of Transportation (FDOT)
  - 2004 Five-Year Work Program

Relevant information pertaining to the City of North Miami and the TMP from the land use and transportation plans is presented below. This information is provided to ensure that the plans address and support the TMP recommendations and/or projects. In addition, the City needs to evaluate whether the proposed plans continue to support its transportation goals.

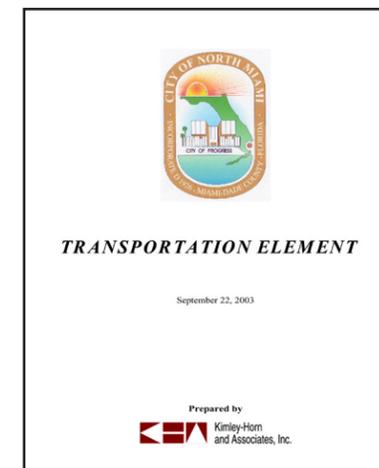
### A. North Miami

#### I. North Miami Comprehensive Plan

##### a. Transportation Element

The Transportation Element of the City's Comprehensive Plan was adopted in September 2003 and establishes North Miami's goals, objectives, and policies toward meeting the community's transportation system needs. The main purpose of the Transportation Element is to plan for a **multimodal transportation system** that emphasizes multiple transportation mode choices, including walking, bicycling, and public transit.

As part of the new Transportation Element, the City of North Miami adopted a Transportation Concurrency Exception Area (TCEA). The intent of the TCEA is to reduce the adverse impact transportation concurrency may have on potential urban infill and redevelopment within the City, particularly the recent Community Redevelopment Plan (discussed in the next section). In exchange for eliminating the concurrency requirements, the City agreed to actively pursue transportation strategies aimed at increasing transportation choices.



Specifically, the Transportation Element states that the City should develop a transportation master plan to accommodate local mobility needs as stated in Policy 1.3.6. This policy is being achieved through development of this master plan. The Element also includes several other objectives and policies to support a multimodal transportation system including:

- Complete a citywide pedestrian facilities study
- Complete a citywide bicycle facilities study
- Work with Miami-Dade Transit (MDT) to increase the number of MDT routes in North Miami that accommodate bicycles
- Provide incentives for inclusion of public transit facilities in future development
- Perform a public transit oriented development feasibility study (completed May 2005)

##### b. Future Land Use Element

The City's Future Land Use Element was adopted in April 1991. It is expected to change significantly by the end of 2005. The changes are primarily to incorporate the Community Redevelopment Plan created by the Community Redevelopment Agency (CRA). A summary of the CRA Redevelopment Plan is included in the next section.

The current Future Land Use Element and its development potential are part of the 2025 traffic projections discussed earlier. The traffic analysis for the CRA Redevelopment Plan will be completed as part of the amendment to the Future Land Use Element and the updates to the





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

Element's Data, Inventory, and Analysis (DIA) as part of the Evaluation and Appraisal Report.

## 2. Evaluation and Appraisal Report

The City of North Miami is currently evaluating its Comprehensive Plan as required by Florida Statutes. The Evaluation and Appraisal Report (EAR) is expected to be adopted by the City in June 2005. Following the adoption of the EAR, the City expects to begin EAR-based amendments. A significant focus of the EAR-based amendments is directed at incorporating the CRA Redevelopment Plan into the Comprehensive Plan so that the provisions and the intent of documents are consistent.

## 3. North Miami Community Redevelopment Agency — Redevelopment Plan

In August 2003, the City of North Miami began preparing a comprehensive redevelopment plan to transform the City into a desirable urban place for residents, businesses, and visitors. Similar to the City's Comprehensive Plan, the CRA Redevelopment Plan established goals and objectives to guide the successful implementation of the plan. Specifically, the Redevelopment Plan established Goal No. 5 (Traffic/Transportation) which is the same as Comprehensive Plan, Transportation Element Goal 1 and states:

*Provide for a safe, convenient, effective and efficient motorized and non-motorized transportation system that is intricately related to the land use pattern and improves the level of mobility of all the City's residents and visitors.*

Goal No. 5 is reinforced by five objectives that support the Redevelopment Plan and implement the goal. These include:

- Complete a traffic/transportation analysis to consider the effects of the Plan.
- Create a phased program that prioritizes the improvement of traffic flow and patterns to the maximum extent economically feasible.
- Participate in regional transportation initiatives that optimize the City's opportunities of enhancing multimodal services.
- Design a circulation plan, road typology, profiles and nodes that will promote City identity, define its limits, and enhance its gateways, boulevards, and streets.
- Design pedestrian access standards which prioritize pedestrians on City streets and utilize state-of-the-art designs and technologies.

The CRA Redevelopment area is comprised of 3,249 acres of land consisting of 14,353 households and a population of over 44,000 officially recognized citizens. The Redevelopment Plan is planned to be effectuated in two stages — Stage 1 is in conformity with the City's current



Comprehensive Plan, and Stage 2 will also be in conformity with the completion and approval of revisions to the Comprehensive Plan and Zoning Ordinances.

The Redevelopment Plan includes several components and elements that support the goals and objectives of the TMP:

- *Land Use Element:* It contains a residential land use approach to develop the potential maximum number of residential units that could be developed in conformity with the City's Comprehensive Plan. The element includes plans to phase out functionally obsolete buildings, create mixed-use districts with high density, and expand civic/cultural buildings.
- *Transportation Improvements:* The plan recommends implementing necessary infrastructure for all modes of transportation, including pedestrian, bicycle, and public transit facilities. The plan proposes several traffic and streetscape elements throughout the City to mitigate its traffic problems and also to enhance the traffic ways. Some of the transportation recommendations from the CRA Stage 2 Plan include:

- The Redevelopment Plan recommends implementing roundabouts at the following locations:
  - NE 125th Street, NE 6th Avenue and West Dixie Highway
  - NE 130th Street, 8th Avenue and West Dixie Highway
  - NE 130th Street and 6th Avenue
  - NE 135th Street and West Dixie Highway
  - West Dixie Highway and NE 123rd Street
- The plan proposes to build gateway entrances along Interstate 95 and Biscayne Boulevard that will serve as important entry points to the City.
- The plan proposes streetscape improvements along several major roads. It also assigns new roadway hierarchies and typical road profiles to all the roads within the City.
- The entire CRA will be served by a linkage of sidewalks and bicycle paths to allow connection from all residential neighborhoods to schools, parks, recreation areas, shopping, and businesses.
- The plan proposes designated parking areas at the intersection of NE 125th Street, NE 6th Avenue, and West Dixie Highway, along with additional areas along NE 125th Street to the east, NE 130th Street, and NE 8th Avenue.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

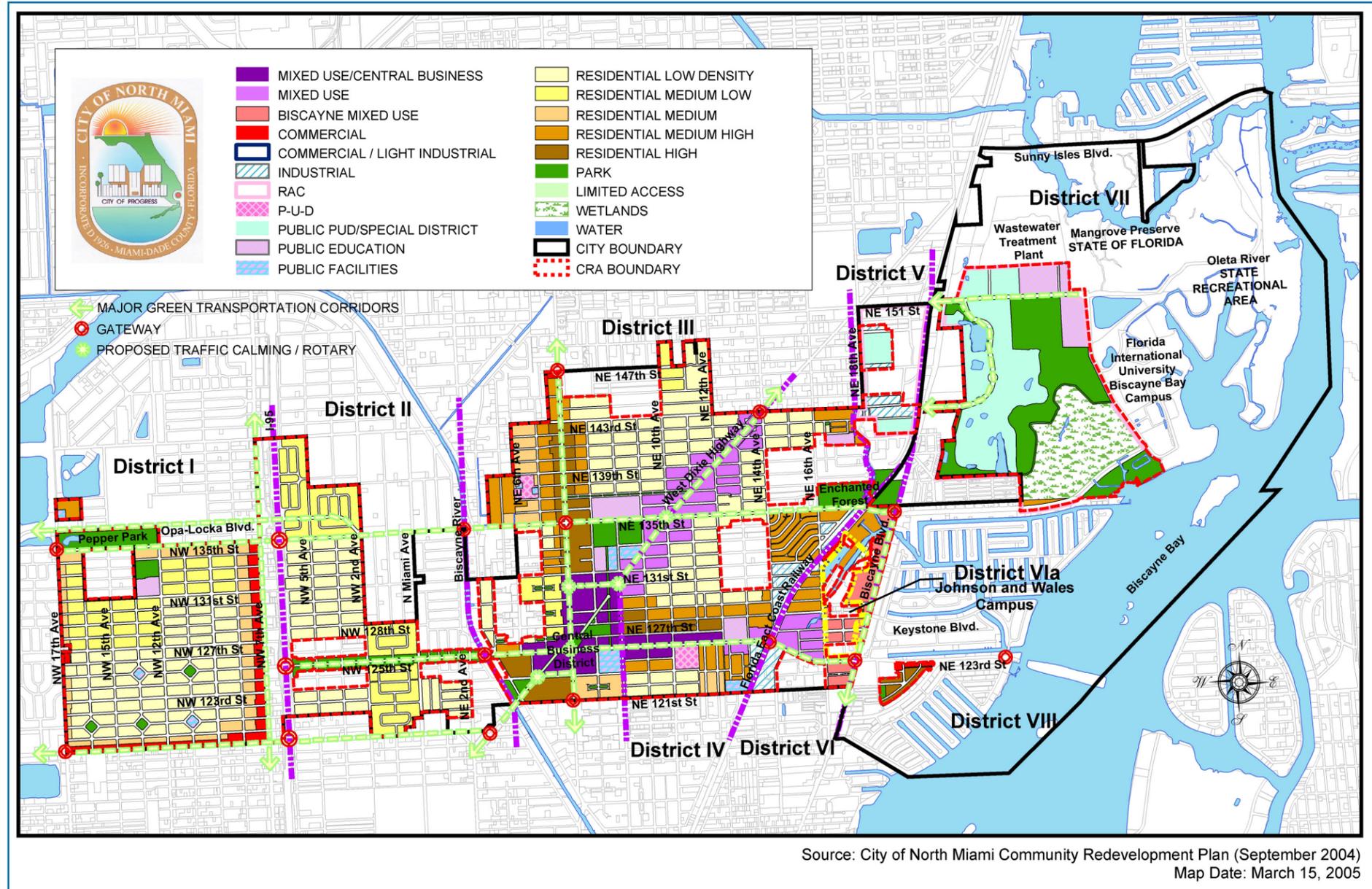
- Open Space & Parks Plan: The Stage 2 plan contains an “Open Space Plan” that addresses the City’s Parks and Recreation redevelopment goals and objectives. According to the plan, every major neighborhood will have a park with pedestrian and bikeway connections. **Figure 15** (shown right) shows the CRA Redevelopment Stage 2 improvements within the City.

## B. North Miami Capital Improvement Program (CIP)

The City of North Miami is a five-year municipal CIP from Fiscal Year 2007 to Fiscal Year 2011 contains all the capital improvements that have been programmed within the City for the next five years. The CIP is funded through various sources including the gas tax and the People’s Transportation Plan (PTP) funds. The improvements identified in the CIP are shown in **Table 12** (see page 33).

The recommendations included in the TMP are consistent with the goals and objectives of the North Miami Comprehensive Plan and the City’s long-term vision to develop a truly multimodal transportation system. It also takes into consideration the improvements included in the North Miami CIP and the CRA Redevelopment Plan.

**Figure 15 — CRA Redevelopment Plan Stage 2**





# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN

**Table 12**  
**Five-Year Capital Improvement Plan**  
**Fiscal Years 2006-2011**

Improvement	Location	Funding Source	Through FY 06	FY07	FY08	FY09	FY10	FY11	Total Estimate
Breesewep Right-of-Way Improvements	Area between NE 2nd Ave., N. Miami Ave., NE 125th St., and NE 135th St.	G.F./Gas Tax	\$1,240,500	\$411,250	\$432,000	\$452,750	\$477,000	\$500,500	\$3,514,000
City Entrance Features		G.F./Other	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$450,000
Street & Alley Resurfacing	Citywide	G.F./Gas Tax	\$1,174,000	\$400,000	\$415,000	\$430,750	\$450,000	\$467,500	\$3,337,250
Installation of Sidewalks	Citywide	G.F./C.D.B.G./Grant/Other	\$0	\$540,000	\$250,000	\$250,000	\$250,000	\$0	\$1,290,000
Sidewalks and Handicap Ramps	Citywide	G.F./Gas Tax	\$1,355,750	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$1,680,750
Curb & Gutter Installation	Citywide	G.F./Gas Tax	\$55,195	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$155,195
Street Lighting Improvements	Citywide	G.F./Gas Tax	\$130,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$530,000
Traffic Calming Devices	NW 7th Ave., to NW 17th Ave., and from 119th St. to 135th St. 125th St., from NE 13th Pl. to NE 14th Ave.	G.F./Gas Tax/Other	\$510,000	\$255,000	\$255,000	\$255,000	\$255,000	\$0	\$1,530,000
Intersection Improvements	Citywide	G.F./Gas Tax	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Street Tree Maintenance & Damage Prevention	Citywide	G.F./Gas Tax	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Street Tree Replacement	Citywide	G.F.	\$63,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$113,000
Streetscape Beautification	Citywide	G.F.	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$300,000
Bollard Replacement	Citywide	Gas Tax	\$60,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$160,000
Bicycle Program	Citywide	Gas Tax/Grant	\$0	\$0	\$1,200,000	\$0	\$0	\$0	\$1,200,000

### C. Miami-Dade County

#### 1. Miami-Dade County Comprehensive Development Master Plan and Evaluation and Appraisal Report (EAR)

Miami-Dade County CDMP is the adopted comprehensive plan for the County that provides the goals, objectives, and policies for the plan elements for Miami-Dade County. The Miami-Dade County CDMP was revised April 2001 and an Evaluation and Appraisal Report (EAR) was completed and adopted in October 2003. The EAR assesses the achievement of goals, objectives, and policies included in the CDMP. The Transportation Element of the CDMP was the focus of the review for this Transportation Master Plan.

The main goal of the Transportation Element of the CDMP is to:

*Develop and maintain an integrated multimodal transportation system in Miami-*

*Dade County to move people and goods in a manner consistent with overall countywide land use and environmental protection goals.*

The CDMP objective to achieve this goal include:

- Provide an integrated multimodal transportation system for the circulation of motorized and non-motorized traffic by enhancing the CDMP and its transportation plans and implementing programs to provide competitive surface transportation mode choice, local surface mode connections at strategic locations, and modal linkages between the airport, seaport, rail and other inter-city and local transportation facilities.

The Miami-Dade County CDMP Transportation Element consists of five sub-elements:

- Traffic Circulation
- Mass Public Transit
- Aviation

- Port of Miami River
- Port of Miami Master Plan

Traffic circulation and mass public transit sub-elements are the most relevant sections for this study and, hence, were reviewed in greater detail.

#### a. Traffic Circulation Sub-element

The Traffic Circulation Sub-element provides an overview of the current and future transportation needs within the County. The Sub-element analyzes the existing roadway capacities and existing traffic volumes in order to identify deficiencies on the roadway network and makes recommendations to address the deficiencies.

The goal of the County's Traffic Circulation Sub-element is to:

*Develop, operate and maintain a safe, efficient and economical traffic circulation system in metropolitan Dade County that provides ease of mobility to all people and for all goods, is consistent with desired land use patterns, conserves energy, and protects the natural environment.*

The objectives of the Traffic Circulation Sub-element to achieve this goal include:

- Objective 1:** It is desirable that all roadways in Dade County operate at level of service (LOS) C or better.
- Objective 2:** Rights-of-way and corridors needed for existing and future transportation facilities will be designated and reserved.

- Objective 3:** The County's transportation system will emphasize safe and efficient management of traffic flow.

- Objective 4:** The Traffic Circulation Sub-element will continue to be coordinated with the goals, objectives, and policies of the Land Use Element and all other elements of the CDMP.

- Objective 5:** The traffic circulation system will protect community and neighborhood integrity.

- Objective 6:** Plan and develop a transportation system that preserves environmentally sensitive areas, conserves energy and natural resources, and promotes community aesthetic values.

- Objective 7:** Miami-Dade County's Traffic Circulation Sub-element, and the plans and programs of the State, region, and local jurisdictions will continue to be coordinated.

The achievement of the above-mentioned objectives was evaluated in the EAR. The existing LOS analysis included in the EAR shows NE 135th Street between NE 6th Avenue and NE 10th Avenue as operating below the adopted LOS. The roadway capacity improvements identified in the EAR do not indicate any programmed widening of North Miami's roadways. An important fact to note is that none of the high accident locations identified in the CDMP EAR are located within North Miami.



# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## b. Mass Public Transit Sub-element

The purpose of the County Mass Public Transit Sub-element is to provide a basis for the development of mass public transit facilities as a major component of the overall transportation system to enhance mobility in Dade County. It is recommended that highway improvements be complemented with public transit improvements in order to achieve a balanced transportation system. The goal of the Mass Public Transit Sub-element is:

*Maintain, operate and develop a mass public transit system in Metropolitan Dade County that provides efficient, convenient, accessible, and affordable service to all residents and tourists.*

The objectives included in the Mass Public Transit Sub-element to achieve this goal include:

- **Objective 1:** By the year 2005, the mass public transit system shall not operate at a LOS lower than the adopted standard.
- **Objective 2:** Coordinate the provision of efficient public transit service and facilities with the location and intensity of designated future land use patterns as identified on the Land Use Plan Map.
- **Objective 3:** Provide a sound funding base utilizing public and private sources that will assure maintenance of existing service operations and timely implementation of needed transportation improvement projects and services.

- **Objective 4:** Provide convenient, accessible, and affordable mass public transit services and facilities.
- **Objective 5:** Provide equitable transportation services to all groups in the metropolitan population.
- **Objective 6:** Continue to coordinate Dade County's Mass Public Transit Sub-element, as well as the plans and programs of the State, regional, and local jurisdictions.

The achievement of the above-mentioned objectives was evaluated in the EAR. The existing public transit LOS analysis included in the EAR shows that all areas of Miami-Dade County have met or exceeded adopted LOS standards for mass public transit. It is also mentioned that with the available People's Transportation Plan (PTP) funds, the existing bus headways will be improved. The existing bus routes will provide 15-minute or better peak hour headways and 30-minute or better off-peak hour headways. Additionally, 24-hour service will be provided on certain major corridors. No specific public transit improvements within the City of North Miami have been included in this sub-element.

## 2. People's Transportation Plan (PTP)

On November 5, 2002, the citizens of Miami-Dade County approved a half-cent sales tax increase to be the dedicated source of revenue to support transportation improvements and to

**Table 13  
Miami-Dade Metropolitan Planning Organization  
2025 Long Range Transportation Plan Improvements**

Improvement	Facility Name	From Point	To Point	Priority
Corridor Improvement - SB Thru Lane	SR 9A/I - 95 (N/B)	NW 135th St.	NW 151st St.	I
Corridor Improvement - SB Thru Lane	SR 9A/I - 95 (S/B)	NW 125th St.	NW 135th St.	I
Intelligent Transportation System Devices	NE 125th St.	I-95	US I	II
Intelligent Transportation System Devices	NE 135th St.	I-95	US I	II
Roadway Widening	West Dixie Hwy.	NE 119th St.	NE 163rd St.	IV Unfunded
Premium Transit (Heavy Rail)	East -West Corridor	FIU	MIC	I
Transit Improvement	Golden Glades Multimodal Terminal			II
New paved path and on - road facilities along				
Biscayne Canal and NW 154th St.	Memorial Trail	Miami Canal	FEC Railroad	Greenways Project
New paved path along FEC Railroad	Unity Trail	NE 2nd Ave.	Gwen Cherry Park @ NW 24th Ave.	Greenways Project

**Table 14  
Miami-Dade Metropolitan Planning Organization  
2005-2009 Transportation Plan Improvements**

Improvement	Facility Name	Location	Funding	Source of Funding
Landscaping	SR 5/US 1/Biscayne Blvd.	W. of NE 16th Ave. to West Dixie Hwy.	2004 -05	DIH
Flexible Pavement Reconstruction	SR 5/US 1/Biscayne Blvd.	NE 105th St. to NE 123rd St.	2005 -06	DS
Rigid Pavement Reconstruction	SR 9A/I - 95	US -I to NW 11th St.	2004 -07	IMAC
Corridor Improvement	SR 9A/I - 95 (NB)	NW 135th St. to NW 151st St.	2004 -06	XU/DDR
Corridor Improvement	SR 9A/I - 95 (SB)	NW 125th St. to NW 135th St.	2006 -07	DIH/DS
Resurfacing	SR 922/NE 125th St.	NE 9th Ave. to NE 18th Ave.	2004 -06	ACSS
Landscaping	SR 9A/I - 95	NW 130th St. to NW 154th St.	2004 -07	DDR/DIH
Landscaping	SR 9A/I - 95	NW 110th St. to NW 130th St.	2004 -07	DDR/DIH
Traffic Signal Modifications	SR 916/NE 135th St.	At NE 10th Ave.	2004 -05	MG
Access Improvement	SR 909/W. Dixie Hwy.	NE 119th Str. To NE 151st St.	2004 -05	MG
Access Improvement	SR 915/NE 6th Ave.	NW 126th St. to NE 145th St.	2004 -05	MG
Drawbridge Operations Contract	Sunny Isles Bridge	Not Available	2004 -08	D
Widening to 3 lanes/T.O.P.I.C.S Improvement	NE 15th Ave.	NE 159th St. to NE 163rd St.		
Widening Intersections/T.O.P.I.C.S Improvement	NW 159th St.	NE 8th Ave. to NE 19th Pl.		
Widening to 3 lanes/T.O.P.I.C.S Improvement	NE 12th Ave.	NE 151st St. to NE 167th St.		
Bus Facilities -Renovation/Replacement/Construction	Countywide		2004 -09	TA/FTS/FL TOLL
Intersection Renovation: Reposition of median	NW 7th Ave. & NW 119th St.			
Park and Ride Lots	SR 9A/I - 95	Golden Glades Multimodal Terminal	2007 -08	DI/LF/NHAC
Resurfacing	SR 916/NW 136th St.	NW 22nd Ave. to NW 135th St.	2004 -08	DIH/DS
Bus Facilities -Renovation/Replacement/Construction	Countywide		2004 -09	TA/FTS/FL TOLL
Intersection Renovation: Reposition of median	NW 7th Ave. & NW 119th St.			
Park and Ride Lots	SR 9A/I - 95	Golden Glades Multimodal Terminal	2007 -08	DI/LF/NHAC





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

fund the People's Transportation Plan (PTP). The Plan calls for implementation of improvements to bus service including increases in number of buses, service miles, and operating hours. The PTP is projected to provide an additional \$7.26 billion (in 2003 dollars) for public transit and transportation projects over the next 30 years. North Miami has already received \$2.2 million through the year 2004. It is projected to receive approximately \$1.23 million every year through 2008. It should be noted that the City is required to spend 20% approximately (\$245,000) of its allocated PTP funds on public transit projects.

## D. Miami-Dade Metropolitan Planning Organization (MPO)

### I. 2025 Long Range Transportation Plan (LRTP)

The purpose of the LRTP is to guide transportation investments in Miami-Dade County over a long-term planning horizon to achieve the best possible mobility options within the transportation system. The LRTP is comprehensive in nature and includes improvements to pedestrian, bicycle, greenways and trails facilities, public transit, and roadways. The transportation improvements are included in the 2030 Cost Feasible Plan that is developed based on the projected revenue for the plan period. The Miami-Dade LRTP Update to the Year 2030 was reviewed to identify mobility improvements within the City of North Miami. The projects in the

2030 Cost Feasible Plan are grouped into priorities based on the funding availability and are described as follows:

- **Priority I** — Projects scheduled to be funded through 2009
- **Priority II** — Projects scheduled to be funded between 2010 and 2015
- **Priority III** — Projects scheduled to be funded between 2016 and 2020
- **Priority IV** — Projects scheduled to be funded between 2021 and 2030
- **Priority V** — Unfunded projects that have been identified in the Needs Plan

The following projects included in [Table 13](#) (see page 34) are transportation projects within the 2030 LRTP that may impact the City of North Miami.

### 2. Miami-Dade MPO Transportation Improvement Program (TIP)

The Miami-Dade MPO Transportation Improvement Program (TIP) for fiscal years 2005–2009 is technically the capital improvements plan of the Miami-Dade County LRTP. The TIP serves as the functional document for implementing the LRTP goals, objectives, and policies. It is a staged, multi-year program that prioritizes transportation projects for federal, state, and local funding. The 2005 TIP was reviewed in order to identify programmed transportation projects within the City of North Miami. [Table 14](#) (see page 34) indicates the programmed transportation projects in North Miami included in the TIP.

**Table 15**  
**Florida Department of Transportation**  
**Five-Year Work Program 2005-2010**

Improvement	Facility Name	From Point	To Point	Year
Add Auxillary Lanes	SR 9A/I - 95 (N/B)	NW 135th St.	NW 151st St.	2005 -06
Add Auxillary Lanes	SR 9A/I - 95 (S/B)	NW 125th St.	NW 135th St.	2005 -09
Access Improvement	SR 915/NE 6th Ave.	NE 126th St.	NE 145th St.	2005 -06
Access Improvement	SR 9 09/West Dixie Hwy.	NE 119th St.	NE 151st St.	2005 -06
Corridor Improvement	Miami - Dade Countywide	Advanced Right -of-Way Acquisition		2005 -09
Corridor/Subarea Planning	Liveable Communities	Enhancements		2005 -10
Transit Improvement : Bus pull -out bays	Miami - Dade County - MDTA			2005 -08
Park and Ride Lots	SR 9A/I - 95	Golden Glades Multimodal Terminal		2005 -08
Sidewalks	Miami -Dade Countywide	Concrete Installation		2005 -09
Sidewalks (ADA) Missing Ramps	City of North Miami			2006
Pedestrian Safety Improvement	SR 924/NW 119th St.	NW 17th Ave.	NW 7th Ave.	2007
Pedestrian Safety Improvement	SR A1A/Collins Ave.	Sunny Isles Causeway	Lehman Causeway	2007
Bike Path	Bike Path	Snake Creek Canal @ NE 167th St.	Oleta State Park Entrance	2010

**Table 16**  
**Summary of All Improvements within City of North Miami**

ID	Improvement	Facility	Location		Type
			From	To	
1	Corridor Improvement - SB Thru Lane	SR 9A/I-95 (N/B)	NW 135th St.	NW 151st St.	LRTP
2	Corridor Improvement - SB Thru Lane	SR 9A/I-95 (S/B)	NW 125th St.	NW 135th St.	LRTP
3	Roadway Widening	West Dixie Hwy.	NE 119th St.	NE 163rd St.	LRTP
4	Flexible Pavement Reconstruction	SR 5/US 1/Biscayne Blvd.	NE 105th St.	NE 123rd St.	TIP
5	Corridor Improvement	SR 9A/I-95 (NB)	NW 135th St.	NW 151st St.	TIP
6	Corridor Improvement	SR 9A/I-95 (SB)	NW 125th St.	NW 135th St.	TIP
7	Resurfacing	SR 922/NE 125th St.	NE 9th Ave.	NE 18th Ave.	TIP
8	Landscaping	SR 9A/I-95	NW 130th St.	NW 154th St.	TIP
9	Landscaping	SR 9A/I-95	NW 110th St.	NW 130th St.	TIP
10	Traffic Signal Modifications	SR 916/NE 135th St.	At NE 10th Ave.	-	TIP
11	Access Improvement	SR 909/W. Dixie Hwy.	NE 119th St.	NE 151st St.	TIP
12	Access Improvement	SR 915/NE 6th Ave.	NW 126th St.	NE 145th St.	TIP
13	Intersection Renovation: Reposition of median	NW 7th Ave. & NW 119th St.	-	-	TIP
14	Add Auxillary Lanes	SR 9A/I-95 (N/B)	NW 135th St.	NW 151st St.	FDOT
15	Add Auxillary Lanes	SR 9A/I-95 (S/B)	NW 125th St.	NW 135th St.	FDOT
16	Access Improvement	SR 915/NE 6th Ave.	NE 126th St.	NE 145th St.	FDOT
17	Access Improvement	SR 909/West Dixie Hwy.	NE 119th St.	NE 151st St.	FDOT
18	Bike Path	Bike Path	Snake Creek Canal @ NE 167th St.	Oleta State Park Entrance	FDOT
19	Right-of-way Improvements	Breezeswept Right-of-Way	The area of NE 2nd Ave., N. Miami Ave., NE 125th St., and NE 135th St.		PTP
20	Traffic Calming	-	The area of NW 7th Ave., to NW 17th Ave., NW 119th St. and NW 135th St.		PTP
21	Traffic Calming	NE125th St.	NE 13th Pl.	NE 14th Ave.	PTP





# CITY OF NORTH MIAMI

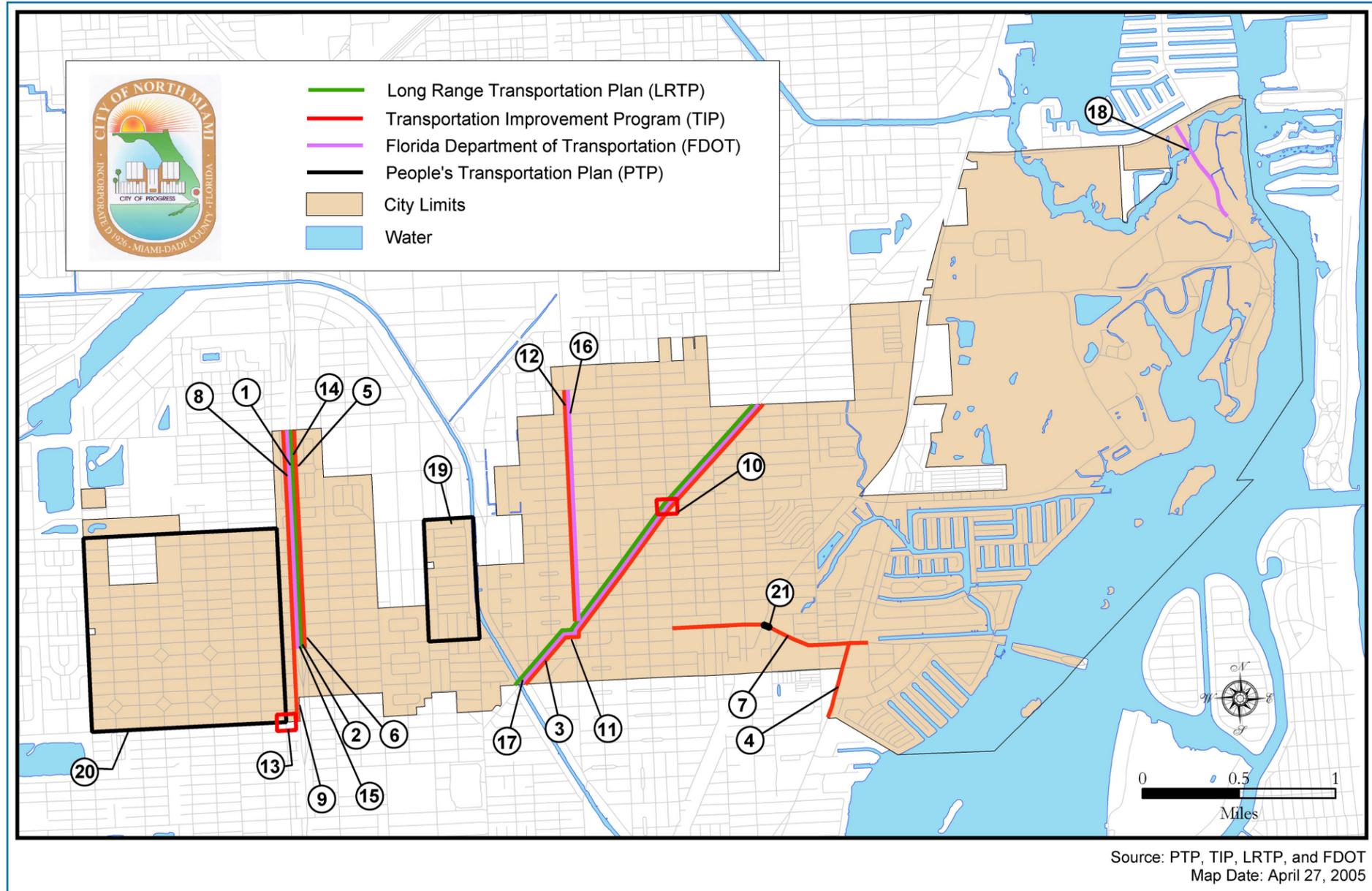
## TRANSPORTATION MASTER PLAN

### E. Florida Department of Transportation (FDOT) — Five-Year Work Program FY 2005-10

According to Section 339.135 of the Florida Statutes, the FDOT develops a Five-Year Work Program that contains a statewide project-specific list of transportation activities and projects. The work program is prepared in coordination with all the FDOT District offices, the Turnpike Enterprise Office, the MPOs, and the local governments. The 2005-2010 Tentative Work Program was reviewed to identify transportation projects within the City of North Miami. **Table 15** (see page 35) shows the FDOT Work Program projects currently programmed within North Miami.

The land use and transportation plans that have the potential to impact mobility within the City were reviewed. The plans were used to identify all the planned and programmed improvements within North Miami. A summary of improvements from the above-referenced plans are shown in **Table 16** (see page 35) and depicted in **Figure 16** (shown right). The strategies/projects identified in the next section are recommended in addition to the projects identified in **Table 16**.

**Figure 16 — Illustration of All Improvements**





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## IV. Transportation Strategies

The review of existing mobility conditions and identification of mobility needs were used to develop strategies and projects to address mobility issues. The strategies/projects were developed for the following categories — pedestrian, bicycle, public transit, roadway, TDM, TSM and NTM strategies.



Each of these strategies are discussed in detail followed by a list of recommended strategies/projects specific to the City of North Miami. These strategies/projects are recommended to address existing and future mobility in North Miami.

### A. Pedestrian

Walking is the beginning and end of all trips. A well-conceived pedestrian environment takes into account the quality of pedestrian facilities (sidewalks, pedestrian paths, etc.), roadway conditions, land use patterns, community support, security, and overall comfort of the facility for walking.

Improved non-motorized transportation conditions, such as walking, increases both travel choice and mobility, especially for non-drivers. Walking is the most affordable mode of transportation and is often heavily relied upon to access public transit. Another benefit of an improved pedestrian network relates to health. Recent studies indicate that many Americans' lives are at serious risk because of their sedentary

lifestyles. Walking provides significant aerobic fitness benefits. According to the Physical Task Force (1995), "Regular walking and cycling are the only realistic ways that the population as a whole can get the daily half-hour of moderate exercise which is the minimum level needed to keep reasonably fit." To promote walking and the associated benefits, there are several coalitions and non-profit organizations that exist in the United States, such as:

- **America WALKs** ([www.webwalking.com/amwalks](http://www.webwalking.com/amwalks)) — a coalition of walking advocacy groups.
- **Partnership for a Walkable America** (<http://nsc.org/walk/wkabout.htm>) — which promotes the benefits of walking and supports efforts to make communities more pedestrian friendly.
- **Walkable Communities, Inc.** ([www.walkable.org](http://www.walkable.org)) — which works with communities to create more people-oriented environments.

These coalitions, as well as others, promote local advocacy groups that work with the communities and elected officials to promote walkable communities.

The quality of the pedestrian environment depends on several factors:

- **Sidewalk/roadway separation** — the lateral distance from the sidewalk to the outside travel lane
- **Sidewalk/roadway protective barrier** — on-street parking, trees, and other such barriers

- **Width of sidewalks** — sidewalk width for people to walk comfortably and be able to pass others without stepping into roadway
- **Amenities** — existence of pedestrian features like benches, art, restrooms, etc.
- **Safety** — crosswalks at intersections, street lighting, etc.
- **Sidewalk quality** — continuous sidewalk surfaces that are not cracked or blocked
- **Handicap Ramps** — provisions for wheelchair accessibility in the sidewalks

A good pedestrian network is the most essential component to promoting downtown vitality and a truly multimodal transportation system. Walking enhances bicycle, public transit, and automobile modes of travel. In particular, the quality of the public transit system has a direct correlation to the quality of the sidewalk system.

In order for North Miami to become a walkable, pedestrian-friendly community, the City needs to implement pedestrian-oriented projects at various scales. At a site plan level, walking is affected by the quality of pathways, building accessways, and related facilities. At a street or neighborhood level, walking is affected by the existence of sidewalks, crosswalks, and roadway conditions (road widths, traffic volumes and speeds). At the community level, walking is also affected by land use accessibility such as the relative location of common destinations and the quality of connections between them.



The recommended transportation strategies to enhance the pedestrian environment are as follows:

- Analyze sidewalk quality to identify deficiencies in sidewalk widths and connections, identify obstructions, and need for handicap ramps.
- Construct missing sidewalk links or gaps in the sidewalk network.
- Install pedestrian activated signals at six key intersections at a minimum.
- Appoint a pedestrian/bicycle coordinator who will work with the community to increase awareness of walking and bicycling through educational programs and workshops.

Figure 17 (see page 38) shows the proposed sidewalk improvements within the City.

### B. Bicycle

North Miami has a unique opportunity to become a great place for bicycling. The climate and terrain are ideally suited for





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

bicycling to be an integral part of the City's quality of life. However, new facilities and programs are necessary to make this possible.

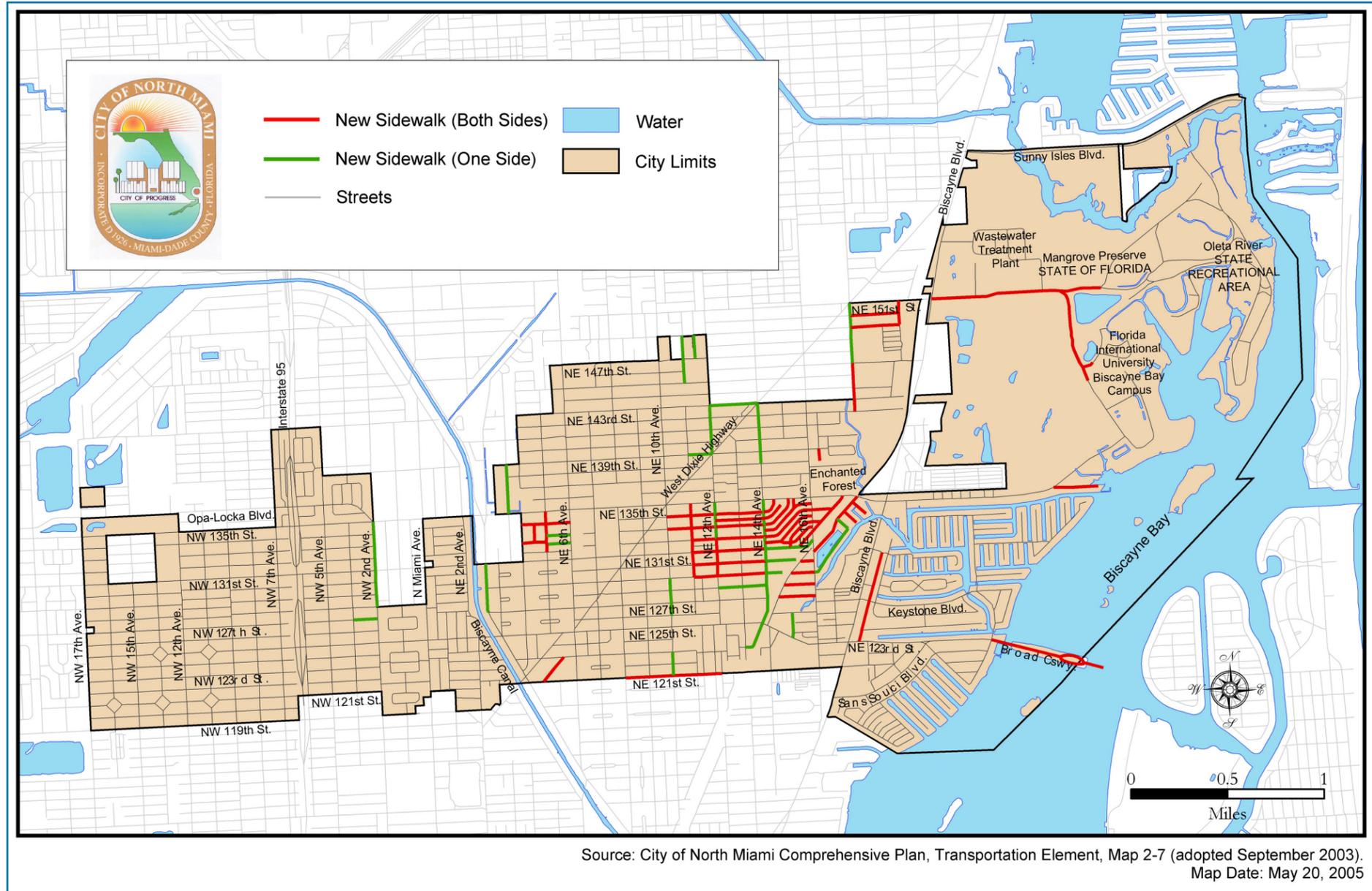


A model that can be used to guide the City's transformation is the League of American Bicyclists' Bicycle Friendly Communities (BFC) program at <http://www.bicyclefriendlycommunity.org/>. The BFC program is a national initiative designed to encourage the creation of balanced local bicycle programs consisting of engineering, education, enforcement, and encouragement. When applied in a coordinated approach, these "Four E's" can create a community where bicycling becomes a safe, fun, and healthy form of transportation for all ages and abilities. The specifics of the "Four E's" are discussed on the following pages.

## I. Engineering: Projects, Policy, and Process

Engineering is the 'E' on which most communities focus, with an emphasis on the physical planning, design, construction, and management of bicycling facilities. For the purposes of this plan, the proposed future facilities have been identified as projects, which can be implemented through a combination of both policy and process.

Figure 17 — Missing Sidewalk Links





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## a. Projects

In order for bicycling to be a viable component of the transportation system, a community's transportation system requires a network of safe facilities for recreational and utilitarian bicycle trips. The CRA Redevelopment Plan proposes a street hierarchy that could provide both recreational and utilitarian cycling opportunities. Specific bicycle corridors have been identified in the CRA Redevelopment Plan as described earlier.

Enhancements to the City's sidewalks will also provide a degree of improvement for the bicycling community, particularly children and older bicyclists, whose skill level does not match the skill needed to negotiate an on-street bike lane. Conversely, providing high quality on-street bicycling facilities will enhance the pedestrian environment since cyclists will be less likely to ride on the sidewalk. An existing benefit for the bicycling environment within the City is the well-connected existing grid network of local streets providing bicyclists opportunities to access most destinations and travel on streets with lower vehicle speed limits and travel speeds.

Multimodal connections between bicycling and local public transit can extend the range of both bicycling and public transit systems. Miami-Dade Transit currently provides opportunities for bikes on buses on two routes. By increasing the number of MDT routes that accommodate bicycles and by adding bicycle racks to the NoMi Express, multimodal opportunities will increase and further extend the range of bicycling in the City.

## b. Policy

Identifying specific infrastructure projects is one way to develop facilities for bicycling, but it is equally important to ensure that bicycle (and pedestrian) solutions are integrated into planned and programmed street, highway, and public transit projects. Integrating the appropriate designs into the planning and development process encourages good design throughout the community, not just on designated facilities. Adopting a policy that makes this a standard operating procedure will require county, state, and private sector projects to provide bicycle facilities and infrastructure. An excellent prototype for this type of 'complete streets' policy is provided by the U.S. Department of Transportation's *Accommodating Bicycle and Pedestrian Travel: A Recommended Approach*. Adopting this policy and integrating bicycle (and pedestrian) facilities is a vital step towards making North Miami a "Bicycle Friendly Community."



## c. Process

With a facilities plan in place and a 'complete streets' policy adopted, the third component of providing bicyclist facilities is a process for ensuring that the plan and policies are implemented. This can occur at a variety of levels and requires the community to pay continuous attention to the review of individual projects, site plans, roadway designs, and streetscape programs. This is an opportunity for partnering with

review agencies. Citizen advocates can be involved, and professional staff should be trained to identify opportunities in ongoing projects and programs.

## 2. Education

One of the challenges North Miami and other Florida communities face is the need to educate motorists, bicyclists, and pedestrians about their respective rights and responsibilities. Even if the City were to build all the bikeways proposed in this plan, it would still be necessary to communicate to the public that all transportation choices have certain rights and obligations under Florida law.

Fortunately, the Florida Bicycle Association, working in cooperation with Florida DOT and other partners, has developed an excellent "Share the Road" program that is available to local communities. The program's website ([www.bikeflorida.org](http://www.bikeflorida.org)), provides public service announcements in both English and Spanish, free brochures and documents, and a local training program.

*The "Share the Road" program provides excellent resources to develop a local bicyclist safety education program. License plates, the Street Smarts safety manual, and bi-lingual public service announcements (including "Get Out and Ride" and "Go With the Flow" are available through the Florida Bicycle Association. Source: <http://www.bikeflorida.org>*

Since children can only travel independently by walking and bicycling, it is very important to educate them and their parents about the rules of the road. The State of Florida has a nationally recognized program that is available to local schools. This program is described as follows:

*"The Florida Traffic and Bicycle Safety Education Program is a state-wide, comprehensive school-based program geared for teaching elementary and middle school children traffic savvy through classroom instruction and on-bike skills. The program teaches educators, youth leaders, and resource officers' bicycle & traffic safety skills and rules of the road. They, in turn, teach children to act predictably and competently in traffic. The program is funded by the Florida Department of Transportation." (Source: <http://www.dcp.ufl.edu/centers/trafficsafetied/>)*

## 3. Enforcement

Law enforcement is a critical part of ensuring a community's mobility and safety. For bicyclists, this includes both enforcing motorists' behavior toward cyclists and ensuring that bicyclists follow the rules of the road. It is common to see bicyclists riding the wrong way (against traffic), disregarding traffic signals, and riding on the sidewalk (when inappropriate). In many cases this is because bicyclists have never been taught the rules of the road, or because they perceive the roadway system to be unsafe. At the same time, motorists often intimidate cyclists, do not yield the right-of-way, and act as if bicyclists do not have a legal right to ride on the road.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

Appropriate enforcement of the law is necessary to create a level playing field for all modes of transportation. The Florida Bicycle Association provides several excellent resources for law enforcement, including the following:

- **Florida Bicycle Law Enforcement Guide**  
This booklet was created specifically to help familiarize law enforcement officers with portions of the Florida vehicle code that relate to two-wheeled human-powered vehicles.
- **New Bicycle Law Enforcement Video**  
“Ride on By” is a video program that places the law enforcement professional in the key position of modifying bicyclist behavior. It raises officer awareness of needless serious injuries and fatalities that occur due to illegal riding behaviors. Palm Beach County Sheriff’s Office assisted in the production of this program.  
(Source: <http://www.bikeflorida.org>)

Law enforcement officials can send a very positive signal and improve community policing by utilizing Police Bicycle Patrols. This is common in downtown areas, public parks, and neighborhoods. Additional information is available at [www.nationalbikeregistry.com](http://www.nationalbikeregistry.com).



## 4. Encouragement

It is important to recognize that creating a Bicycle Friendly Community includes promoting bicycling for transportation and recreation within the City. Public events — including *Bike to Work Day*, *Bicycle Month* and *Safe Routes to School Week* — encourage local residents, visitors and businesses to make bicycling part of the community. The events also increase awareness of bicycling and safety in the community.

Encouragement efforts can be as simple as a local proclamation for public events, participation by local leaders in bike events, or partnership with the local health department to encourage more physical activity through bicycling. These initiatives can be a cost-effective way to improve the quality of life and provide support for citizens who enjoy cycling.

The recommended bicycle network strategies require implementation of a balanced program consisting of the “Four E’s.” Some of the recommended bicycle strategies/projects applicable to North Miami are included below:

- Adopt a “Complete Streets” policy to integrate bicycling (and walking) into all highway and public transit projects, based on the USDOT policy model.
- Develop and sign a designated bicycle route network.
- Create a “bicycle suitability” map for distribution to provide residents with information on the routes where bicycling is safer and more comfortable.

- Provide bicycle parking at key destinations, starting with City Hall.
- Install bicycle activated signals at six key intersections and gradually install it along all significant bicycle corridors and crossings.
- Work with MDT to increase the number of routes with bicycle racks.
- Add bicycle racks to NoMi Express routes.
- Establish a “Safe Routes to School” program, utilizing the Florida model.
- Initiate a multilingual “Share the Road” safety campaign based on the Florida Bicycling Coalition materials.
- Utilize targeted enforcement by the Police Department for both motorists and bicyclists.
- Encourage the Police Department to review the Florida Bicycle Law Enforcement Guide and the new Bicycle Law Enforcement Video.
- Host local events for “National Bike Month,” “Bike to Work Week,” and/or “Safe Routes to School Week,” including City Council proclamations.
- Implement the bicycle corridors recommended in the CRA Redevelopment Plan.



## C. Public Transit

Public transit by bus is the most dominant form of public transportation in the country, followed by commuter rail. In North Miami, bus travel is the only form of public transportation currently available. Service is provided by Miami-Dade County through Miami-Dade Transit System which provides regional commuter service within the County. In addition, the City provides free local public transit circulator services (NoMi Express) within the City and to a few areas outside the City that predominantly caters to the elderly and student populations. The strategies/projects presented below are intended to address mobility needs for public transit service within the City.



**Figure 18** (see page 41) shows the proposed bicycle network recommended in the CRA Redevelopment Plan.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

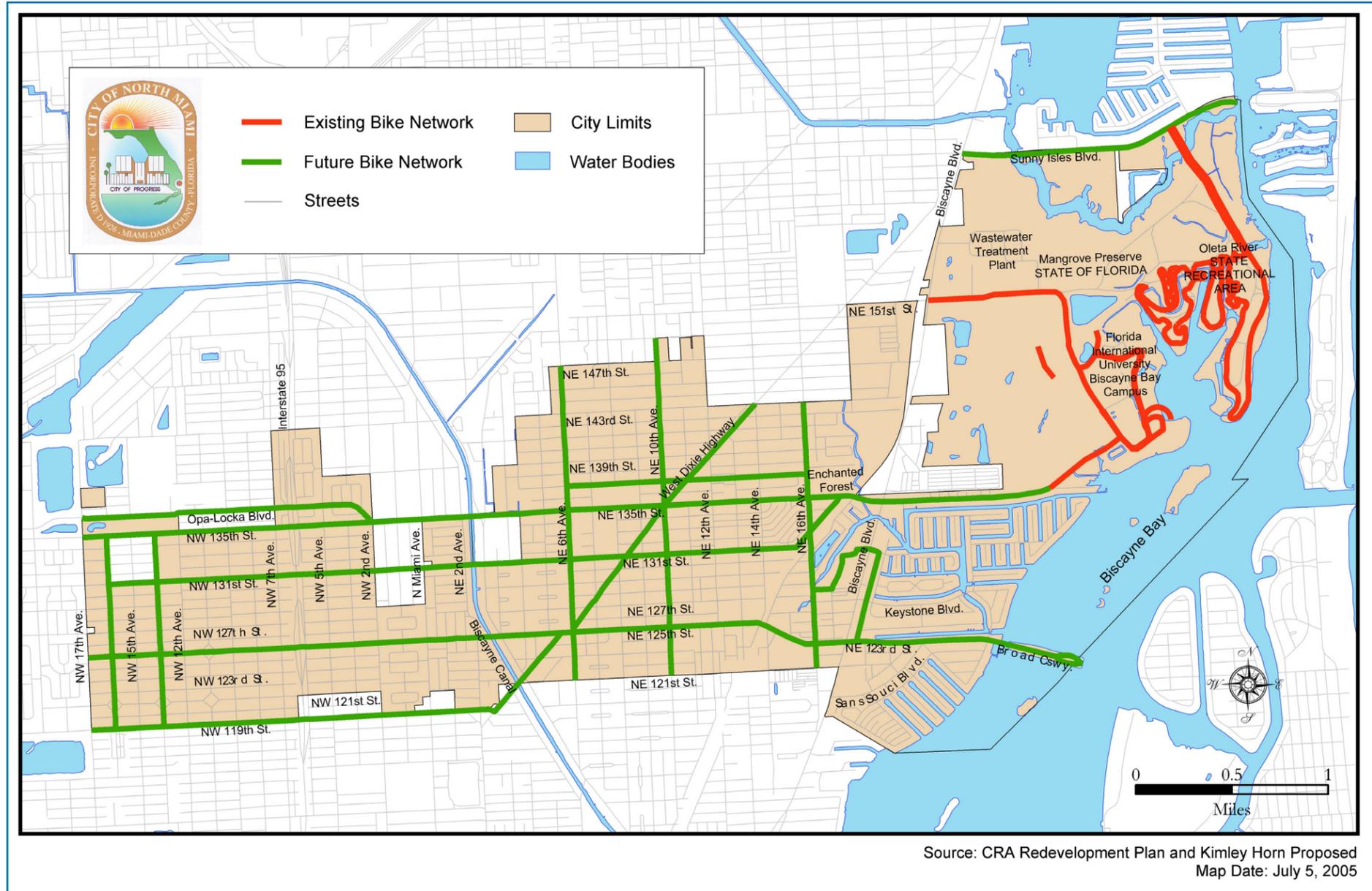
## I. NoMi Express

### a. Vehicles and Management

The NoMi Express is a free circulator service provided by the City and is provided as a complimentary service aimed at areas not served by MDT. Currently, the City of North Miami is leasing the vehicles from a local public transit service provider. Though leasing the vehicles reduces initial capital costs, it is more expensive in the long term. It is recommended that the City create a finance plan to purchase the vehicles for NoMi Express. One option for the finance plan may be to request federal funds available from the Federal Transit Agency (FTA) for purchasing vehicles. The purchase price for the type of vehicle currently in use in North Miami is between \$60,000 and \$80,000 per new vehicle (depending on options). Trolleys or other specialized vehicles are slightly more expensive.

The City of North Miami also contracts the operations of the NoMi Express from a local public transit service provider. The contracting of the operations is appropriate for the City and the size of the NoMi Express system. It allows the City to offer the NoMi Express service without becoming a public transit service provider. Contracting the service provides the City a cost savings as it does not have to expend time and money on administration, personnel, vehicle service, maintenance, and storage, and other associated costs.

Figure 18 — CRA Redevelopment Plan Stage 2, Proposed Bicycle Network





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## b. Operations

As illustrated previously, the NoMi Express consists of four routes providing a “district” or closed loop route structure dividing the City into four quadrants with minimal route overlaps. This type of route alignment provides adequate coverage of the City and increases public transit service for areas not currently served by MDT. The disadvantage is that it requires multiple transfers between routes to travel east to west and back. Other route alignment options used in other cities consist of hub and spoke and modified closed loop.

The headways for NoMi Express are between 30 to 60 minutes. Headways of 10-15 minutes are ideal for circulator services since it offers convenience to the riders and is perceived more reliable. Headways or stop times should be “clock face,” meaning every location should be served at the same time or increments of time every hour of the day. For example, if stop 1 on a route with 15-minute headways begins at 7:00 a.m., the next buses should arrive at 7:15, 7:30, 7:45, 8:00, and so on. This provides additional predictability further increasing the convenience and reliability of the service.

NoMi Express provides service on weekdays from 7:00 a.m. to 9:00 p.m. with 30- to 60-minute headways. Operational improvements such as shorter headways



and weekend service will increase operational costs for the City and require additional vehicles for the routes.

## c. Financial Plan

Currently, NoMi Express is funded until fall of 2007 through the FDOT Transportation Outreach Program and the Miami-Dade County Half-Cent Surtax (People’s Transportation Plan). The annual operating costs are \$480,000.

There are several funding sources available for local municipalities to promote local public transit services at the federal, state, and local levels. The sources available are:

### ■ Federal Transit Administration (FTA) Funds

FTA’s Transit Capital Investment Program (49 U.S.C. 5309) provides capital assistance for new and replacement buses and facilities. Eligible recipients for capital investment funds are public bodies and agencies including states, municipalities, and other political subdivisions of states. Funds are allocated on a discretionary basis. Eligible purposes are:

- acquisition of buses for fleet and service expansion
- bus maintenance and administrative facilities
- transfer facilities
- bus malls
- transportation centers
- intermodal terminals

- park-and-ride stations
- acquisition of replacement vehicles
- bus rebuilds
- bus preventive maintenance
- passenger amenities such as passenger shelters and bus stop signs
- accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers, shop and garage equipment
- costs incurred in arranging innovative financing for eligible projects

The City should work with its House Representatives and Senators to seek these federal funds. Since funds are allocated on a discretionary basis, active representation and enthusiasm by local authorities play a significant role in earmarking federal funds for smaller municipalities. Several municipalities like Lake Worth, Cocoa Beach, and West Palm Beach have been very successful in acquiring capital funds from the FTA for purchase of vehicles. These funds should be used for capital investments only and are available for the first few years of service. It is important to note that 20 percent of Section 5309 capital funds are allocated for public transit projects.

### ■ Community Redevelopment Area (CRA) Funds

Another common source of funding that municipalities use to fund public transit projects are CRA funds. Tax Increment Financing (TIF) dollars are used to fund the operating expenses in the short term. The City should also consider the



feasibility of imposing a public transit impact fee for developments within the CRA in order to have a mechanism in place to pay for operating funds. Since the CRA is located within the TCEA, developers do not have to go through rigorous traffic analyses. A public transit impact fee could be applied to developments of TCEA in order to fund local public transit circulator operations to mitigate the TCEA impacts.

## d. Monitoring Plan

Evaluating the performance of the NoMi Express is vital to the successful continuation of its service and its achievement of service objectives. Monitoring should be performed on a fixed time frame (an annual or semi-annual basis) with equal input from service operators, users, and the general public. A periodic monitoring plan will also help evaluate the financial plan and identify potential future funding sources.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## e. Marketing Plan

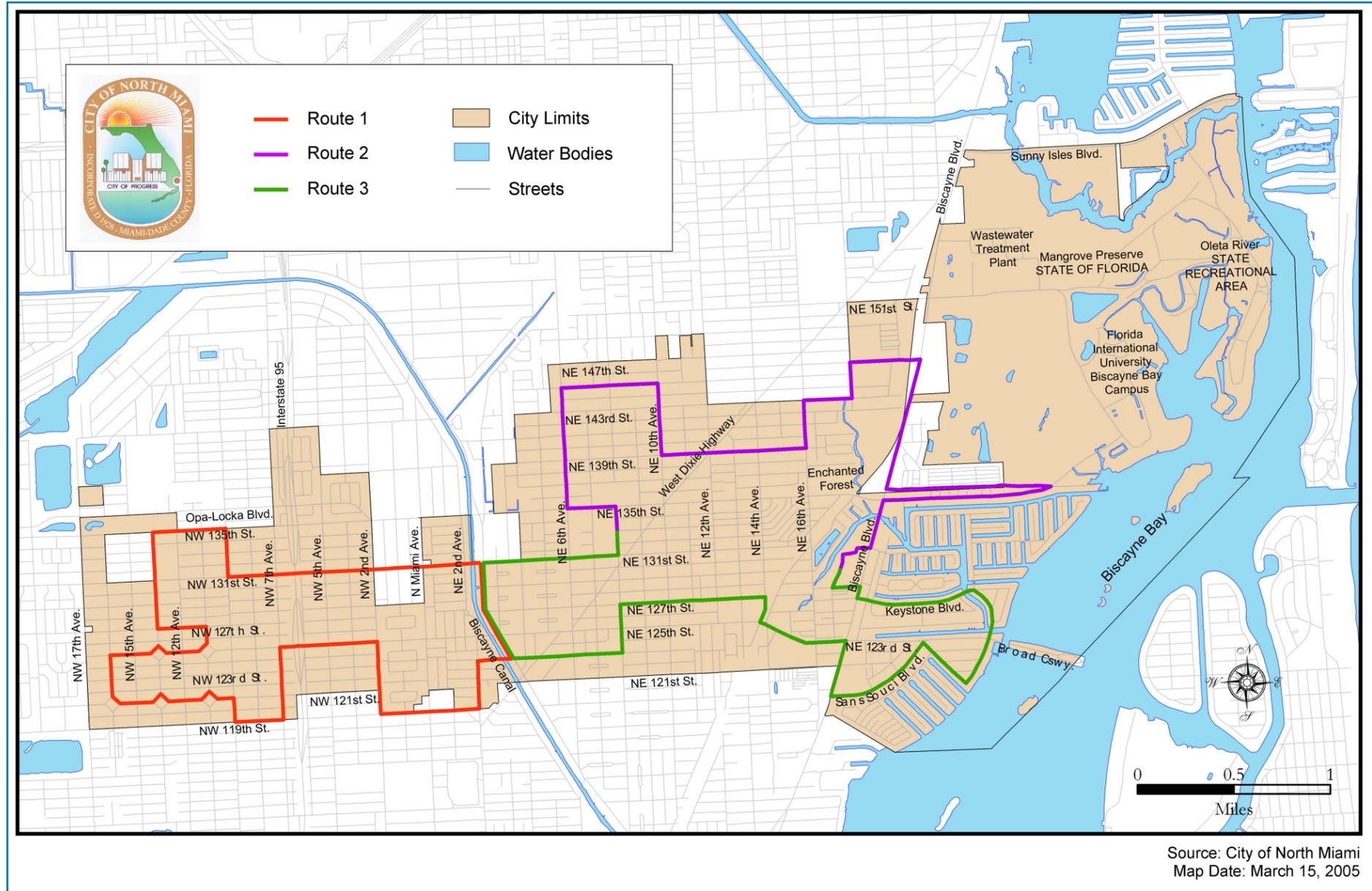
Community public transit services require a significant amount of public relations and marketing in the initial years to “get the word out” and increase resident awareness. There are also ways to involve the community in certain aspects of the service development that engender a greater sense of community ownership and pride. Once the service is operational, there are limitless opportunities to promote the service and engage the business community.

NoMi Express has been operational for nearly six months and, based upon the ridership information provided by the service provider, residents are aware of the service. That does not mean that marketing is still not an important component of its success. One way other communities have utilized the creativity of its residents is through a contest of catchy names for the routes. This approach builds a stronger identity for the service. For example, the City of Boulder, Colorado’s local public transit service has names such as BOUND, DASH, HOP, JUMP, SKIP, and STAMPEDE. Another way the community has been involved is through designing special looks for each route. For example, Miami Beach coordinated with the local art community to create special designs for each of the city’s new shuttle buses.

The following are the strategies/projects recommended to improve mobility through the NoMi Express service:

- Realign existing NoMi routes in order to overcome existing route inefficiencies. **Figure 19** (shown right) represents

**Figure 19 — Proposed Short-Term NoMi Express Routes Modifications**



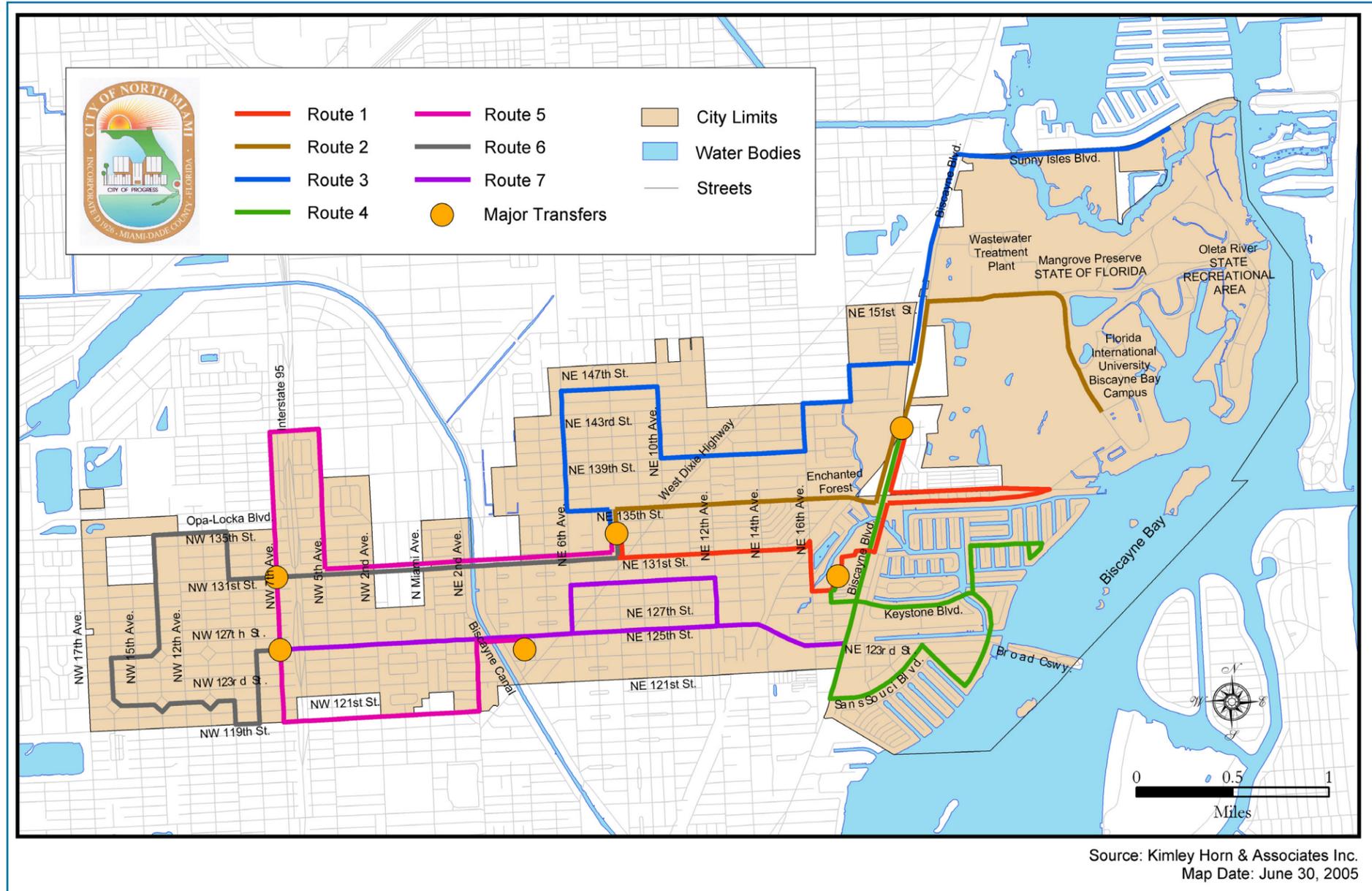


# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

three proposed NoMi routes that are proposed as short-term NoMi improvements. Currently the system has four buses operating on four routes with one spare bus. Due to the operational difficulties mentioned earlier, it is recommended that some short-term adjustments be made to improve NoMi circulation. Three short-term NoMi realignment routes are proposed below:

- **Route 1:** This route will serve the western portion of the City. It is recommended that this route have two buses during the school peak hour, one in a clockwise direction and the other in a counter-clockwise direction.
- **Route 2:** This route will serve the northeastern portions of the City. It is recommended that this route have two buses during the afternoon peak hour for senior citizens, one in a clockwise direction and the other in a counter-clockwise direction.
- **Route 3:** This route will serve the southeastern portions of the City, including the Sans Souci neighborhood.
- Construct bus shelters with passenger amenities like benches, bike racks, lighting, trash cans, maps, etc., at 10 priority NoMi Express stops. For bus stops with significant number of boardings, it is recommended that the City progressively enhance the stops in order to make public transit travel more comfortable.

**Figure 20 — Proposed Long-Term NoMi System Routes**



Source: Kimley Horn & Associates Inc.  
Map Date: June 30, 2005





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN



- Expand NoMi Express to serve the proposed Charter High School and the K-8 Elementary School within the development. It is also recommended that the service be extended to serve the Florida International University campus and NE 151st Street.
- Implement a NoMi Express monitoring plan (such as public transit user surveys) in order to assess system performance.
- It is recommended that the City apply for federal funds to purchase at least six buses in order to provide efficient service. In the short term, it is suggested that the City lease an additional bus so the proposed route alignments function effectively.
- In the long term, it is recommended that the City operate NoMi Express on the weekends to provide more opportunities for public transit riders to use the service.
- In the long-term, it is recommended that the City own the buses and consider operating the NoMi Express

system. It is also recommended that the system provide increased coverage with shorter headways. A preliminary analysis of the major transit destinations was performed with special emphasis on transfer centers/points. **Figure 20** (see page 44) shows the recommended long-term transit routes for the NoMi Express, consisting of seven routes with two buses serving in opposite directions on each route. However, it is recommended that a detailed transit route study be conducted before implementing the recommended routes to ensure that the alignments are effective.

## 2. Miami-Dade Transit

There is also a need to promote the MDT service as an extension of the public transit system in the City. NoMi Express provides an added layer of public transit service to the residents of North Miami. However, there currently is marginal use of the service to connect to MDT routes for longer travel distances. Much of the feedback received from the City of North Miami suggests that the residents enjoy the



“free” service provided by NoMi and are reluctant to pay for MDT service. One suggested marketing effort would be to offer NoMi users a free MDT bus pass good for one bus ride to encourage the connection between the two services. An extension of this effort to illustrate the City’s commitment to public transit would be to offer reduced MDT bus passes to residents of North Miami. This effort will increase patronage for transit by encouraging riders to use both services.

The following are recommended public transit strategies for NoMi Express and MDT:

- Implement an annual resident discount bus pass program that subsidizes travel on Miami-Dade Transit service in order to encourage public transit riders and to create awareness of the City’s intentions to promote public transit as a viable mode of transportation.
- Coordinate with Miami-Dade Transit to integrate the two services in a manner that is more efficient for public transit riders to transfer between the two services and to view the two services as part of one cohesive public transit system.

## D. Roadways

Traffic congestion on major thoroughfares is a major issue within the City of North Miami. Traditionally, efforts to relieve traffic congestion have been through building new roadways. Conventional transportation strategies are focused on the supply of

transportation facilities, typically to achieve increased roadway capacity. These types of supply-oriented projects often require significant funding for right-of-way and construction, thus placing a strain on limited land resources in urban areas. However, over recent years, the focus has shifted to transportation systems management and operations, thanks to the Federal Highway Administration (FHWA) and other national organizations. Trends have been moving away from new construction to improved management and operations in order to make the most efficient use of infrastructure already in place. Operational strategies are less expensive and quicker to implement than new infrastructure projects and can be very effective in relieving traffic congestion and improving infrastructure performance.

Supply-oriented transportation strategies (such as road widenings) have been a major component of the existing transportation system in North Miami, but it is important to balance these with strategies that affect demand and ultimately achieve more efficient use of the system. The analysis of the existing conditions for vehicular traffic indicates that several of the major roadways experience significant traffic congestion during peak hours. The conventional solution of widening the roadways to provide for additional capacity is not considered appropriate to promote a truly multimodal environment. In addition, widening these already wide facilities would be detrimental to the goal of preserving the community fabric.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

The theme of this master plan is to promote a multimodal system of transportation within the City so there are increased transportation choices available to its residents. While the need for capacity improvements have been identified in many of the major arterials within the City, most of those roadways fall under state or county jurisdiction. Hence, those roadways will be upgraded by the concerned agencies. Some of the roadway strategies that the City should consider implementing are described below.



- **I-95 Interchange Capacity Improvements**  
Capacity enhancements at I-95 interchanges. It is recommended that the City implement these improvements to enhance mobility and address traffic congestion.
- **Implement Recommended Traffic Improvements in the CRA Redevelopment Plan**  
Improvements to enhance mobility within the City including the location of five roundabouts, and other roadway enhancements.
- **Implement Transportation System Management and Operational Improvements**  
Work with the County and FDOT to implement operational improvements

on roads experiencing traffic congestion. These improvements include relieving bottlenecks by providing additional capacity at key locations, implementing Intelligent Transportation System (ITS) devices to update users about traffic conditions, adding turn lanes at intersections to avoid backed-up traffic, etc.

- **Prepare an Access Management Plan**  
Several major roadways within the City experience operating deficiencies due to improperly located access openings. Driveways are located very close to each other, impeding the flow of traffic and creating an undulating sidewalk surface. West Dixie Highway is committed for access management improvements by the FDOT. It is recommended that the City prepare an access management plan for all major roadways within the City in order to improve operating conditions and ease traffic flow.

## E. Transportation Demand Management (TDM)

TDM is a term used for strategies that achieve efficient use of the transportation system without physical modifications to the transportation network. TDM strategies are policies or programs intended to achieve shifts of travel to non-automobile modes, increase the number of persons per vehicle, and influence peak hour travel. TDM strategies typically involve employers and public agencies such as the City of North Miami who can influence the travel behavior of employees and citizens through various policies and provisions.

Numerous TDM programs and strategies are currently being employed in urban areas across the country. Potential TDM strategies which the City can actively promote or provide support for include the following:

- **Commuter Tax Benefit** – Federal tax law stipulates that employers can subsidize their employees’ vanpool or public transit commutes. An employer can give its employees up to \$100 per month tax-free to commute in a qualified vanpool or by public transit. The employer can deduct the cost of this assistance as a business expense. The City can play an active role in educating employers about commuter tax benefits.
- **Compressed Work Week** – A compressed work week is an alternative work schedule in which employees work longer hours each day but fewer days per week. Compressed work weeks typically allow employees to travel to and from work outside of traditional peak hours of travel. The strategy also reduces the number of vehicles on the road during certain days of the week.
- **Flex-Time** – Flex-time is an alternative work schedule in which employees choose their own work schedule within a set standard number of hours. Employees can choose a schedule that allows them to travel outside of the traditional peak hours of travel. Organizations with a large number of employees will likely experience a broad range of working hours, thereby reducing the strain on the transportation system

caused by many employees arriving and departing within a small window of time.

- **Staggered Work Hours** – Staggered work hours is an alternative work schedule in which different groups of employees arrive and depart at different times to offset the employment center’s congestion impacts on the surrounding roadway network. This strategy is similar to flex-time, but is typically a schedule provided by the employer rather than employee selected.
- **Parking Management** – Parking management strategies utilize a variety of methods to manage the availability of parking and reduce single-occupant automobile travel. Numerous strategies are included in parking management, including parking pricing, shared-use parking, and time restrictions. One common strategy is preferential parking locations, or discounted parking for carpools, provided by employers to encourage ridesharing. The City can affect parking management through parking requirements, on-street parking regulations, and other arrangements with developers.
- **Transportation Management Organization/Coordinator** – A public or private organization or professional staff can help provide information and guidance to businesses and individuals to increase awareness and participation in TDM programs. In addition, employers can appoint their own employee transportation coordinators (ETC) who can help coordinate transportation options.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

- **Transportation Management Association (TMA)** – A TMA is an independent transportation association formed to help solve transportation issues within a specific area, such as a downtown, a central business district, or a university campus. A TMA is incorporated to combine business resources and expertise with government efforts to solve local transportation problems. Funding typically comes from both public and private sectors, including government grants, dues paid by member companies, and tax deductible in-kind contributions. TMAs often serve as operators for public transit circulator systems.

- **Transportation Management Initiative (TMI)** – A TMI is a variation of a TMA sponsored by the Florida Department of Transportation. A TMI is a cooperative effort between the local business community and the FDOT to implement transportation solutions for a designated business community and/or area.

Many of these TDM strategies have potential application in the City of North Miami. One of the first steps toward implementing TDM strategies is to coordinate with local businesses. It is important to understand their perspective on transportation issues and what assistance they need to implement employer-based TDM programs.

Collecting data from businesses would provide the City with detailed information on the most appropriate TDM strategies for them in the City of North Miami.

Pertinent data that could be collected from employers include the number of employees per shift, the level of interest in participating in commuter assistance programs, and the current modal split of commuters (i.e., what percentage of commuters drive alone to work versus carpooling, riding public transit, or walking).

FDOT operates a commuter assistance program called South Florida Commuter Services (SFCS). SFCS is dedicated to improving South Florida’s traffic conditions by promoting alternatives to drive-alone commuting. SFCS also works closely with businesses to serve as a resource to guide employee transportation issues and a source of information on TDM strategies.

The following are the recommended TDM strategies for the City of North Miami:

- **Citywide Parking Master Plan**  
The City should prepare a citywide parking master plan that includes an inventory of existing parking facilities that will allow for efficient parking management within the City. The parking plan can be used to assess residential parking issues, inventory public and private parking areas within the CBD, quantify existing and future parking demands, and identify future parking locations.
- **Transportation Coordinator Position**  
The City should create a staff position (or devote a portion of a staff member’s time) to serve as transportation coordinator with the responsibility of



championing TDM strategies within the City and coordinating with local businesses. This person could also lead the TDM education /awareness efforts.

- **Education/Awareness about TDM Strategies**  
The City should work with SFCS to conduct workshops with local businesses to present the various advantages and strategies to their business and employees. The City should be an active leader in implementing TDM strategies.

## F. Transportation System Management (TSM)

TSM is the process of modifying or optimizing the existing transportation system through less capital-intensive means to increase effectiveness of the signalized intersections and their ability to process vehicles. Unlike TDM strategies which focus on driver behavior, TSM strategies focus on enhancing the existing roadway network to increase capacity through less capital intensive measures than traditional roadway widening.

Potential TSM strategies that are commonly practiced include:

- **Traffic Signal Optimization**  
Coordinating a series of traffic signals and optimizing the signal cycle lengths can provide efficient vehicle progression along a roadway corridor with many traffic signals. Cycle lengths and signal offsets can be optimized to increase

vehicle throughput. However, the needs of pedestrians must also be considered when timing traffic signals by providing sufficient pedestrian clearance intervals in the signal phase timings.

- **Geometric Roadway Modifications**  
Spot roadway and lane modifications can be implemented to increase capacity along a particular segment of a roadway.
- **Intersection Modifications**  
Intersections often represent the most severe capacity restraints on roadway networks in urban environments. Intersection modifications can often increase the capacity of an urban transportation network. Projects include changes in traffic control, signal phasing modifications, safety enhancements, pedestrian infrastructure, construction of additional turn lanes, or other treatments.
- **Access Management**  
Access management is a comprehensive approach to the management and regulation of driveways, medians, median openings, and traffic signals. The goal of access management is to limit and separate traffic conflict points. Urban corridors with a proliferation of poorly located and closely spaced driveways, intersections, and traffic signals are candidates for access management enhancements.

TSM strategies offer the potential to increase transportation network capacity without conflicting with the City’s livability and quality of life goals. The following TSM strategy is recommended for the City of North Miami:





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## ■ **Traffic Signal Timing Optimization and Annual Monitoring**

It is recommended that the City improve the operating conditions of roadways without making huge capacity improvements. This will allow for more effective progression of traffic through intersections. This strategy is recommended especially on NE 135th Street, NE 125th Street, and Biscayne Boulevard. It is recommended that the City work with Miami-Dade County to implement this strategy. It is also important to perform continuous monitoring of the signals to maintain optimization.

## **G. Neighborhood Traffic Management (NTM)**

Neighborhood traffic management seeks to improve neighborhood livability by reducing the impact of traffic in residential neighborhoods and promoting safe conditions for all users of local streets. Neighborhood traffic management can be accomplished through means such as traffic calming measures to physically alter the environment or increased enforcement levels to change driver behavior. Since funding for increase enforcement is often limited, local agencies often employ traffic calming techniques as a method of slowing automobile traffic on residential and local streets. Traffic calming includes measures such as streetscaping, speed humps, traffic circles, and chicanes. Traffic circles are circles retrofitted for residential intersections that require motorists to slowly maneuver around a landscaped median. Chicanes are curb extensions

that alternate from one side of the street to the other, forming S-shaped curves that discourage high speeds by forcing horizontal deflection.

Neighborhood traffic management strategies are important components of enhancing the quality of life for residents of North Miami. The following are the recommended neighborhood traffic management strategies:

### ■ **Safe Routes to School**

In addition to teaching children and adults to behave safely in traffic, there is a new program evolving to ensure that schools are accessible by children who walk or bicycle. This is part of a national “Safe Routes to School” movement that recognizes the safety, health, and environmental benefits of walking and bicycling to school. Safe Routes programs integrate the “Four E’s” to make schools a central part of community-based transportation solutions. In Florida, a model program has been developed that can assist North Miami in enhancing safety and mobility in neighborhoods and school zones. It is described as follows:

*“The program, administered by the Florida Traffic and Bicycle Safety Education Program in the Department of Urban and Regional Planning at the University of Florida, has developed a set of tools to help schools assess and improve hazardous conditions that exist around school sites and in surrounding neighborhoods. The project is implemented by creating school-based safety teams that work with parents, students, school staff and city/county officials to carry out various assessments, surveys, and an on-going educational component.*

*“The Florida Traffic and Bicycle Safety Education Program used the information obtained from a two-year pilot program to create a “tool kit” that can be used by schools throughout the state and nation to create a safer bicycling and walking environment for children. The tool kit (available in Florida) includes a student travel survey, a school site design assessment, a neighborhood site assessment, parent and student attitudinal surveys, a video, “How To” manual, clipboard, pen and file folders, all in a schoolhouse box carrying case.”*



*Information about Florida’s model “Safe Ways to School” program is available at [www.dcp.ufl.edu/centers/trafficsafetied/safeways.htm](http://www.dcp.ufl.edu/centers/trafficsafetied/safeways.htm)*

### ■ **School-Related Traffic Mitigation**

Congestion in most urban areas increases greatly when schools are in session, especially within close proximity to the schools. School-related traffic issues are considered neighborhood traffic management issues. Six public schools exist within North Miami:

- Benjamin Franklin Elementary School
- North Miami Elementary School
- North Miami Middle School
- North Miami Senior High School
- William Jennings Bryan Elementary School
- Natural Bridge Elementary School

It is recommended that a preliminary analysis be performed regarding traffic flow issues associated with daily commencement and dismissal at the six public schools.

**Figure 21** (see page 49) shows the location of all schools within the City on the following page.

A detailed study of specific traffic flows around the public schools should be conducted, including the potential for the following strategies:

- Shifting traffic movements from one intersection to an alternate intersection(s) could significantly degrade operations and increase overall system travel time.
- Providing proper signing is a primary concern in cases where traffic flow rules are significantly altered at different times of the day.
- Long, single-file queues often form to enter a school driveway, especially during the afternoon dismissal period. Since the entrances and exits are often one-lane driveways, providing two lanes of capacity by implementing one-way traffic flow on a two-lane roadway approaching a school may not be an appropriate solution to reduce traffic queues. However, this solution would allow traffic with a destination other than the school to pass without having to wait in the queue for the school. Removing these vehicles from the school queue would also slightly reduce the length of the queue.

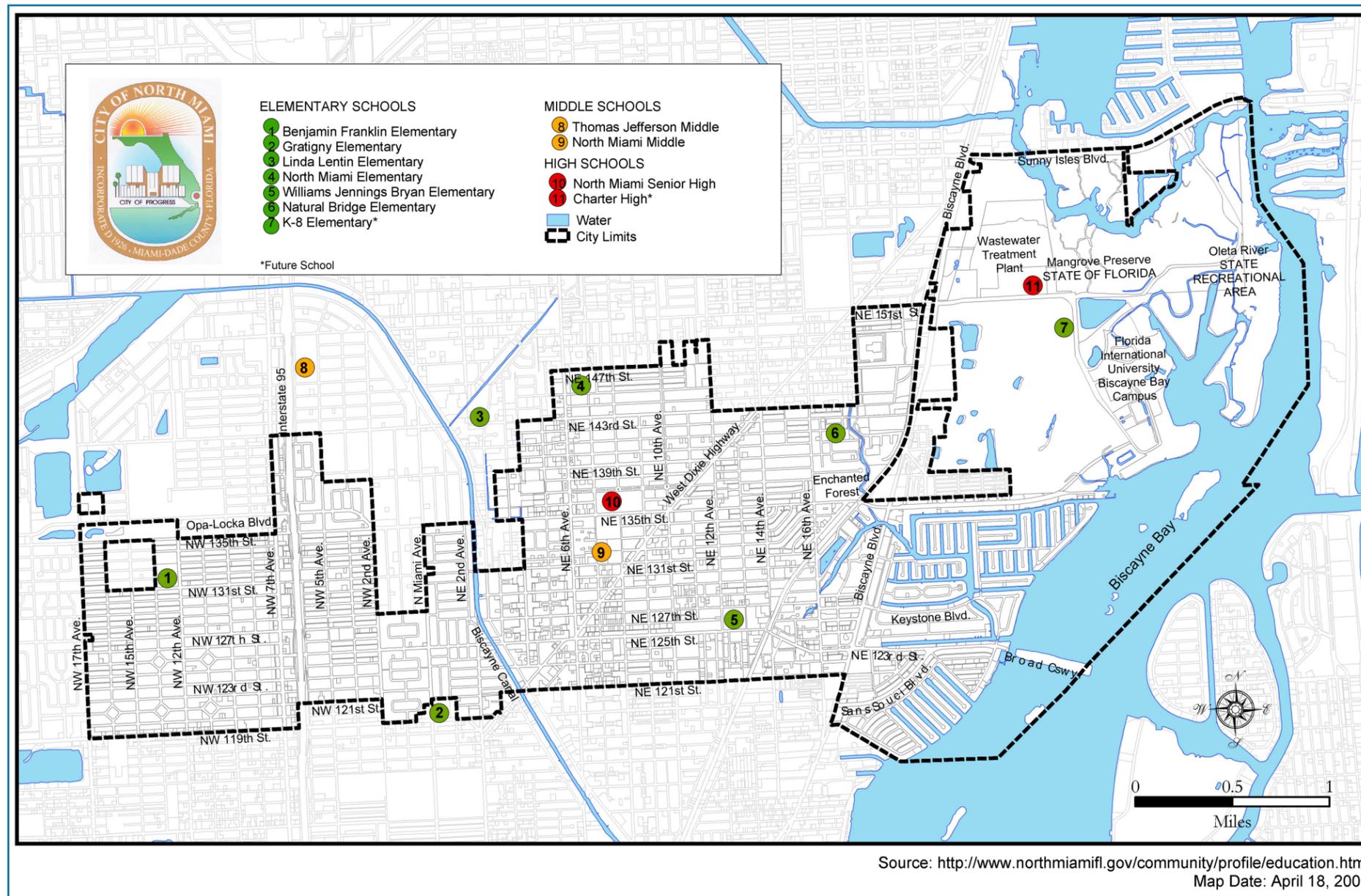




# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN

Figure 21 — Location of Public Schools





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## V. Transportation Strategies: Evaluation & Prioritization

### A. Strategy/Project Evaluation

The previous sections identified recommended strategies/projects that are applicable to the City of North Miami. The next step in the process is to evaluate all the recommended strategies/projects to identify those that support the goals of the TMP. The strategies/projects identified in this master plan are categorized into the following:

- Pedestrians
- Bicycles
- Public Transit
- Roadways
- Transportation Demand Management (TDM)
- Transportation System Management (TSM)
- Neighborhood Traffic Management (NTM)

Ten criteria were used to evaluate the strategies/projects identified in this plan and to prioritize them for future implementation. The criteria include:

#### 1. Minimizes Construction Costs

The strategy/project enhances mobility in a cost-efficient manner and focuses on minor operating modifications without significant construction costs.

#### 2. Maximizes Multimodal Transportation Choices

The strategy/project offers increased transportation mode choices for City residents by improving operating conditions and providing adequate infrastructure for all modes.

#### 3. Enhances Mobility for a Mode of Transportation

The strategy/project enhances mobility for the particular mode of transportation in consideration.

#### 4. Increases Safety

The strategy/project generally increases safety for the particular mode.

#### 5. Increases Capacity

The strategy/project increases the capacity of the facilities of the transportation mode in consideration.

#### 6. Supports Context Sensitive Streets

The strategy/project supports the creation of streets that are sensitive to adjacent land uses and the urban context within which it exists, in addition to addressing the mobility needs of all users.

#### 7. Supports Public Transit Oriented Development

The strategy/project promotes the concept of public transit oriented development by supporting the use of public transit, walking, or bicycling through the enhancement of existing facilities or provision of new facilities for these travel modes.

#### 8. Enhances Quality of the User's Experience

The strategy/project enhances the experience of the user through facility modifications and infrastructure enhancements.

#### 9. Efficiently Utilizes Existing Transportation System

The strategy/project is an efficient use of the existing transportation system without significant capital investment but through a cost-effective addition/modification of the existing transportation facility or service.

#### 10. Satisfies Multiple Project Categories

This criterion was developed to satisfy the objective of providing a program of interrelated projects. The score for this criterion depends on the score of the other nine criteria. The scoring for this criterion is as follows:

Condition	Score
Score of '0' on less than 2 criteria	2
Score of '0' on 3 to 5 criteria	1
Score of '0' on more than 5 criteria	0

Ability to Satisfy Criteria	Score
Does not meet or has an unfavorable relationship to the criterion	0
Partially meets or has a moderately favorable relationship to the criterion	1
Meets or has a favorable relationship to the criterion	2



The recommended strategies/projects were evaluated against the project criteria based on a scoring method that assesses the relationship of the project to the criterion. Projects were assigned a score of 0, 1 or 2 based on their ability to satisfy the evaluation criterion.

The scores for the evaluation criteria were added together to determine an overall score for each strategy/project. The maximum possible score for any strategy/project is 20. The strategies/projects were then ranked within each category based on their overall scores. **Table 17** (see page 52) presents the initial ranking of the strategies/projects based on their overall scores.

### B. Opinions of Probable Cost Estimates for Planning Purposes

Preliminary planning level costs were estimated for the recommended strategies/projects based on comparable projects in South Florida. These estimates are very general in nature and are presented to help the City prioritize its transportation spending. Cost estimates are provided for most of the strategies/projects and the source of funding is also indicated. The cost estimates for the recommended strategies/projects are presented in **Table 18** (see page 53).





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN



## C. Prioritization

The recommended strategies/projects were developed to address the existing and future mobility within the City and to develop a multimodal transportation system. The strategies provide a short-term and long-range plan for mobility. The plan should be monitored and re-evaluated at least every three years to ensure the City is meeting its transportation objectives and to update strategies.

As previously mentioned, each of these recommended strategies/projects was assigned an overall point score based on the criteria evaluation and ranked within each category based on the score. Planning level cost estimates were also developed for each strategy/project. The initial ranking of the strategies/projects in [Table 17](#) (see page 52) was purely based on the total scores obtained from the evaluation.

After the preliminary ranking of the strategies/projects, additional factors were taken into consideration such as impact on mobility, relative cost, and applicability of the strategy/project. These factors

provided an additional dimension to the preliminary ranking. The additional factors are:

- **Mobility Impact — High, Medium, or Low:** The projects were assigned a value of “high,” “medium,” or “low” based on their contribution toward enhancing mobility of the overall transportation system or a specific mode. This value has a direct correlation with the overall evaluation score.
- **Relative Cost — High, Medium or Low:** The projects were assigned a value of “high,” “medium,” or “low” based on the relative costs associated with implementing a strategy/project as compared to the other strategies/projects.
- **Applicability — Citywide or Area Specific:** This measure was used to identify whether the applicability of a strategy/project was “citywide” or “area specific” in nature. Citywide means that the project will address mobility throughout the City, while area specific means the project addresses mobility in a smaller geographic area or corridor.

These additional measures of assessment were used to prioritize the preliminary ranked strategies/projects. The projects were grouped into three priority levels based on the assessment of the three additional measures. For example, strategies/projects with higher mobility,



low or medium cost, and broad applicability scored higher in the priority list. In contrast, projects with low or medium mobility, higher cost and specific applicability scored lower in the priority list. A system of color coding was used to prioritize the strategies/projects into three priority levels as shown below. The projects in the first three levels are recommended for short-term implementation. It was observed that some of the projects coded as high priority result in increased financial investment by the City. For example, construction of missing sidewalk links is a very high priority strategy. However, the implementation of this strategy throughout the City will require heavy financial investments and may also take time. Hence, some projects were repeated in each of the three priority levels so that the strategies are implemented in an incremental fashion over the years. A fixed amount of dollars can be set aside for those strategies every year. Additionally, some projects were drawn out over a 5- or 10-year horizon and were clarified as priority level 4 and priority level 5. These are usually projects with heavy financial investment and long-term implementation. The strategies in each priority level are color coded as follows:

Priority Color Coding	Years
Priority Level 1	1-3
Priority Level 2	1-3
Priority Level 3	1-3
Priority Level 4	5
Priority Level 5	6

[Table 18](#) (see page 53) shows the recommended strategies/priorities along with the associated costs and assessment of the three additional measures. The priority levels that were determined using the assessment of the three additional measures are color coded. Additional projects have been added to address the five- and ten-year planning horizons.

The strategies/projects were then grouped based on their priority levels. [Table 19](#) (see page 54) shows the final prioritization schedule for the recommended strategies/projects.

The City’s share of the total cost of the strategies/projects included in each of these priority phases is assumed to be approximately equal to the City’s appropriated share of the People’s Transportation Plan (PTP) funds. The City’s current PTP allocation is approximately \$1.2 million each year. The CRA projects have been separated from the other projects in each phase because those projects are expected to be funded by the CRA funds. The long-term NoMi improvements which include new bus routes with increased coverage of the City and purchase of new buses has been prioritized for the 5-year horizon. The City may be eligible to receive federal funds through federal public transit grants to purchase the buses thus lowering the cost of Phase 4.





# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

**Table 17  
City of North Miami Transportation Master Plan  
Strategy/Project Evaluation Matrix**

STRATEGY/PROJECT	Minimizes Construction Costs	Maximizes Multimodal Transportation Choices	Enhances Mobility for a Mode of Transportation	Increases Safety	Increases Capacity	Supports Context Sensitive Streets	Supports Transit Oriented Development	Enhances Quality of the User's Experience	Efficiently Utilizes Existing Transportation System	Satisfies Multiple Project Categories	TOTAL SCORE (Max = 20)
<b>Pedestrians</b>											
Sidewalk network study	1	2	2	2	1	2	2	2	2	2	18
Construct missing sidewalk links	0	2	2	2	2	2	1	2	1	2	16
Install pedestrian activated signals at six key intersections	1	2	2	2	0	1	1	2	2	2	15
Create a pedestrian/bicycle coordinator position	1	2	0	1	0	0	1	1	1	1	8
<b>Bicycles</b>											
Implement CRA bicycle corridors	0	2	2	2	2	2	2	2	1	2	17
Install bicycle activated signals at six key intersections	1	2	2	2	0	1	1	2	2	2	15
Add bicycle racks to MDT buses that serve North Miami (cost sharing with MDT)	2	2	2	0	1	0	2	2	2	2	15
Add bicycle racks to NoMi Express routes (6 buses)	2	2	2	0	1	0	2	2	2	2	15
Adopt a "Complete Streets" policy based on the US DOT policy model	2	2	1	1	1	2	1	1	1	2	14
Develop and sign a designated bicycle route network	2	1	1	2	1	0	0	2	2	2	13
Create a bicycle suitability map for public distribution	2	1	1	2	1	0	0	2	2	2	13
Establish a Safe Routes to School program, utilizing the Florida model	2	1	1	2	0	0	0	2	2	1	12
Initiate a multilingual "Share the Road" safety campaign	2	1	1	2	0	0	0	2	2	1	11
Provide bicycle parking at City Hall	1	2	1	0	0	0	1	2	1	1	9
Utilize targeted enforcement for both motorists and bicyclists	2	0	0	2	0	0	0	2	2	0	8
Encourage the Police Dept to review the Florida Bicycle Law Enforcement Guide & Bicycle Law Enforcement Video	2	0	0	1	0	0	0	2	2	0	7
Host local events for National Bike Month, Bike to Work Week, and/or Safe Routes to School Week	2	0	0	1	0	0	0	1	1	0	5
<b>Public Transit</b>											
Realign NoMi Express routes for short term improvement	2	2	2	0	1	2	2	2	2	2	17
Implement proposed long-term NoMi routes	2	2	2	0	1	2	2	2	2	2	17
Construct bus shelters at 10 priority MDT stops including benches, maps, trash cans, lighting, bike racks	1	2	2	1	0	2	2	2	2	2	16
Construct bus shelters at 10 priority NoMi Express stops including benches, maps, trash cans, lighting, bike racks	1	2	2	1	0	2	2	2	2	2	16
Extend NoMi Express service to NE 151st Street & Florida International University	2	2	1	0	2	0	2	2	2	2	15
Creating a transit hub as a converging point for NoMi Express and MDT	0	2	2	0	1	1	2	2	0	2	12
Coordination of NoMi service with MDT service	0	2	2	0	0	1	2	2	2	1	12
City-sponsored resident discount bus pass program (annually)	2	2	0	0	0	0	2	1	2	1	10
Develop and implement NoMi Express monitoring plan including a transit user survey	2	1	0	0	0	0	1	2	1	2	8
Purchase 7 NoMi Express buses	1	2	2	0	0	0	0	0	0	0	5
<b>Roadways</b>											
Develop an access management plan	2	0	2	2	2	1	1	2	2	2	16
Implement intelligent transportation system improvements	2	0	2	1	1	0	0	2	2	2	12
Implement CRA roundabouts	0	0	1	2	1	2	0	1	1	1	9
Implement capacity enhancements @ I-95 Interchanges	0	0	2	1	2	0	0	2	1	1	9
Implement FDOT capacity improvements on state roads	0	0	2	1	2	0	0	2	1	0	8
Implement capacity enhancements at constrained intersections	0	0	2	1	2	0	0	2	1	0	8
CRA roadway enhancements	0	1	1	1	1	1	0	1	0	1	7
<b>Transportation Demand Management (TDM)</b>											
Create transportation coordinator position	2	1	0	0	0	0	1	1	2	1	8
Conduct "Commuter Benefits" workshops with business community through SFCS	2	1	0	0	0	0	1	0	2	0	6
Prepare a Parking Master Plan - Citywide	2	0	0	0	0	0	1	1	1	0	5
<b>Transportation System Management (TSM)</b>											
Implement annual traffic signal operation/optimization monitoring	2	0	2	2	2	0	0	2	2	1	13
Optimize traffic signal coordination along NE 125th Street and Biscayne Boulevard	2	0	2	2	2	0	0	2	2	1	13
<b>Neighborhood Traffic Management (NTM)</b>											
Implement Safe Routes to School Program	2	1	1	2	0	1	1	2	1	2	13
Traffic study to address school related traffic mitigation	2	0	1	2	1	0	0	2	2	1	11

Note:  
The score recorded for each project was based on a qualitative evaluation of how well it satisfied the evaluation criteria. A point value was assigned to each criterion using the following point system:  
0 = The project does not meet/has an unfavorable relationship to the criterion.  
1 = The project partially meets/has a moderately favorable relationship to the criterion.  
2 = The project meets/has a favorable relationship to the criterion.  
For the criteria - Satisfies Multiple Project Categories - the points were assigned as follows:  
0 = 5 or more criteria with scores of 0  
1 = 3 to 4 criteria with scores of 0 or more than 5 criteria with scores of 1  
2 = 2 or less criteria with scores of 0



# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN

**Table 18**  
**City of North Miami Transportation Master Plan**  
**Priority Matrix Analysis - Cost, Mobility, and Applicability Factors**

Strategy/Project	Total Score	Planning Level Cost Estimate	Funding Source <sup>(13)</sup>	Mobility Impact	Relative Cost	Applicability
<b>Pedestrians</b>						
Sidewalk network study	18	\$15,000	City	High	Low	Citywide
Construct missing sidewalk links	16	\$1.5 M - \$2M <sup>(1)</sup>	City	High	High	Citywide
Install pedestrian activated signals at six key intersections	15	\$100,000*	City/Other	Medium	High	Area Specific
Create a pedestrian/bicycle coordinator position	8	\$45,000 <sup>(2)</sup>	City	Medium	Low	Citywide
<b>Bicycles</b>						
Implement CRA bicycle corridors	17	\$2 M - \$3M <sup>(2)</sup>	City	High	Medium	Citywide
Install bicycle activated signals at six key intersections	15	\$20,000*	City/Other	Medium	Low	Area Specific
Add bicycle racks to MDT buses that serve North Miami (cost sharing with MDT)	15	\$6,000 <sup>(4)</sup>	City/MDT	Medium	Low	Area Specific
Add bicycle racks to NoMI Express routes (6 buses)	15	\$6,000 <sup>(5)</sup>	City	Medium	Low	Citywide
Adopt a "Complete Streets" policy based on the US DOT policy model	14	\$5,000	City	Medium	Low	Citywide
Develop and sign a designated bicycle route network	13	\$60,000	City	High	Medium	Citywide
Create a bicycle suitability map for public distribution	13	\$25,000	City	High	Low	Citywide
Establish a Safe Routes to School program, utilizing the Florida model	12	\$25,000	City	Medium	Low	Citywide
Initiate a multilingual "Share the Road" safety campaign	11	\$25,000	City	Low	Low	Citywide
Provide bicycle parking at City Hall	9	\$5,000	City	Low	Low	Area Specific
Utilize targeted enforcement for both motorists and bicyclists	8	\$10,000	City	Low	Low	Citywide
Encourage the Police Dept to review the Florida Bicycle Law Enforcement Guide & Bicycle Law Enforcement Video	7	\$10,000	City	Low	Low	Citywide
Host local events for National Bike Month, Bike to Work Week, and/or Safe Routes to School Week	5	\$10,000	City	Low	Low	Citywide
<b>Public Transit</b>						
Realign NoMI Express routes for short-term improvement	17	\$6,000	City	High	Low	Citywide
Implement proposed long-term NoMI routes	17	\$6,000	City	High	Low	Citywide
Construct bus shelters at 10 priority MDT stops including benches, maps, trash cans, lighting, bike racks	16	\$150,000	City/MDT	Medium	High	Area Specific
Construct bus shelters at 10 priority NoMI Express stops including benches, maps, trash cans, lighting, bike racks	16	\$150,000	City	Medium	High	Area Specific
Extend NoMI Express service to NE 151st Street & Florida International University	15	(6)	City	Medium	High	Area Specific
Creating a transit hub as a converging point for NoMI Express and MDT	12	\$75,000 - \$250,000	City/MDT	High	Medium	Citywide
Coordination of NoMI service with MDT service	12	-	-	High	Low	Citywide
City-sponsored resident discount bus pass program (annually)	10	\$5,000 <sup>(7)</sup>	City	Medium	Low	Citywide
Develop and implement NoMI Express monitoring plan including a transit user survey	8	\$45,000	City	Medium	Medium	Citywide
Purchase 7 NoMI Express buses	5	\$750,000	City/Other	Low	High	Citywide
<b>Roadways</b>						
Develop an access management plan	16	\$30,000	City	High	Low	Citywide
Implement intelligent transportation system improvements	12	\$1M - \$3M <sup>(8)</sup>	City/Other	High	Medium	Citywide
Implement CRA roundabouts	9	\$3M - \$10M <sup>(9)</sup>	City/Other	Medium	Medium	Area Specific
Implement capacity enhancements @ I-95 Interchanges	9	\$125,000 <sup>(10)</sup>	City/Other	Medium	High	Area Specific
Implement FDOT capacity improvements on state roads	8	(11)	FDOT	High	Medium	Area Specific
Implement capacity enhancements at constrained intersections	8	(12)	City/Other	High	Medium	Area Specific
CRA roadway enhancements	7	\$15M - \$25M <sup>(13)</sup>	City	Medium	Medium	Citywide
<b>Transportation Demand Management (TDM)</b>						
Create transportation coordinator position	8	\$60,000 <sup>(2)</sup>	City	Medium	Low	Citywide
Conduct "Commuter Benefits" workshops with business community through SFCS	6	\$25,000 <sup>(14)</sup>	City	Low	Low	Citywide
Prepare a Parking Master Plan - Citywide	5	\$100,000	City	Medium	High	Citywide
<b>Transportation System Management (TSM)</b>						
Implement annual traffic signal operation/optimization monitoring	13	\$30,000 <sup>(15)</sup>	City	High	Low	Citywide
Optimize traffic signal coordination along NE 125th Street and Biscayne Boulevard	13	\$15,000	City/Other	High	Low	Area Specific
<b>Neighborhood Traffic Management (NTM)</b>						
Implement Safe Routes to School Program	13	\$25,000 <sup>(16)</sup>	City	Medium	Low	Area Specific
Traffic study to address school related traffic mitigation	11	\$15,000	City	Medium	Low	Area Specific

Notes:

- (1) Assumes current funding distribution in City's Capital Improvement Plan FY 2007-2011
  - (2) Full-Time position with City of North Miami.
  - (3) Costs expected to be funded by CRA as part of roadway enhancements.
  - (4) Assumes a 50/50 match with Miami-Dade Transit.
  - (5) Assumes \$1,000 per rack including installation.
  - (6) Incorporated in the long-term NoMI routes plan.
  - (7) Assumes purchase of 300 monthly passes @ \$65 per pass, sold to residents for \$50 per pass; purchase of 1,000 single far passes @ \$1.50 per pass, sold for \$1.00 per pass.
  - (8) Cost dependent on City's participation and/or cost sharing with FDOT.
  - (9) Costs expected to be funded by CRA. Does not include right-of-way acquisition or utilities.
  - (10) Costs for conducting detailed study of the I-95 corridor; does not include construction costs. (FDOT Funding)
  - (11) Funded by FDOT
  - (12) Improvements and Funding requires further study
  - (13) Costs expected to be funded by CRA. Does not include right-of-way acquisition or utilities.
  - (14) South Florida Commuter Services; assumes up to 3 Workshops.
  - (15) Assumes monitoring of 12 priority intersections.
  - (16) No associated costs for the program tool kit and associated training. Funding needs to be obtained when improvements are identified.
- \* Cost for materials and installation only; does not include design costs.





# CITY OF NORTH MIAMI

## TRANSPORTATION MASTER PLAN

**Table 19**  
**City of North Miami Transportation Master Plan**  
**Priority Matrix Analysis - Cost, Mobility and Applicability Factors**

Strategy/Project	Total Score	Planning Level Cost Estimate	Funding Source <sup>(15)</sup>
<b>Priority Phase 1 Projects - Year 1</b>			
Sidewalk network study	18	\$15,000	City
Construct missing sidewalk links	16	\$300,000 <sup>(1)</sup>	City
Create a pedestrian/bicycle coordinator position	8	\$45,000 <sup>(2)</sup>	City
Add bicycle racks to MDT buses that serve North Miami (cost sharing with MDT)	15	\$6,000 <sup>(4)</sup>	City/MDT
Add bicycle racks to NoMi Express routes (6 buses)	15	\$6,000 <sup>(5)</sup>	City
Develop and sign a designated bicycle route network	13	\$60,000	City
Realign NoMi Express routes for short term improvement	17	\$6,000	City
Construct bus shelters at 10 priority MDT stops including benches, maps, trash cans, lighting, bike racks	16	\$150,000	City/MDT
Construct bus shelters at 10 priority NoMi Express stops including benches, maps, trash cans, lighting, bike racks	16	\$150,000	City
Coordination of NoMi service with MDT service	12	-	-
Develop an access management plan	16	\$30,000	City
Implement intelligent transportation system improvements	12	\$250,000 <sup>(8)</sup>	City/Other
Create transportation coordinator position	8	\$60,000 <sup>(2)</sup>	City
Implement annual traffic signal operation/optimization monitoring	13	\$30,000 <sup>(15)</sup>	City
<b>Total Planning Level Cost Estimate for Priority Phase 1</b>		<b>\$1,108,000</b>	
Implement CRA bicycle corridors	17	\$250,000 <sup>(9)</sup>	City
CRA roadway enhancements	7	\$1M - \$3M <sup>(13)</sup>	City
<b>Total Planning Level Cost Estimate for Priority Phase 1 - CRA Projects</b>		<b>\$1.25M - \$3.25M</b>	
<b>Priority Phase 2 Projects - Year 2</b>			
Construct missing sidewalk links	16	\$300,000 <sup>(1)</sup>	City
Install pedestrian activated signals at six key intersections	15	\$100,000*	City/Other
Install bicycle activated signals at six key intersections	15	\$20,000*	City/Other
Adopt a "Complete Streets" policy based on the US DOT policy model	14	\$5,000	City
Create a bicycle suitability map for public distribution	13	\$25,000	City
Implement intelligent transportation system improvements	12	\$250,000 <sup>(6)</sup>	City/Other
Establish a Safe Routes to School program, utilizing the Florida model	12	\$25,000	City
Extend NoMi Express service to NE 151st Street & Florida International University	15	(6)	City
Creating a transit hub as a converging point for NoMi Express and MDT	12	\$75,000 - \$250,000	City/MDT
City-sponsored resident discount bus pass program (annually)	10	\$5,000 <sup>(7)</sup>	City
Implement FDOT capacity improvements on state roads	8	(11)	FDOT
Implement capacity enhancements at constrained intersections	8	(12)	City/Other
Prepare a Parking Master Plan - Citywide	5	\$100,000	City
Optimize traffic signal coordination along NE 125th Street and Biscayne Boulevard	13	\$15,000	City/Other
Implement Safe Routes to School Program	13	\$25,000 <sup>(16)</sup>	City
Traffic study to address school related traffic mitigation	11	\$15,000	City
<b>Total Planning Level Cost Estimate for Priority Phase 2 - City Projects</b>		<b>\$960,000 - \$1,135,000</b>	
Implement CRA roundabouts	9	\$250,000 <sup>(9)</sup>	City/Other
Implement CRA bicycle corridors	17	\$250,000 <sup>(8)</sup>	City
CRA roadway enhancements	7	\$1M - \$3M <sup>(13)</sup>	City
<b>Total Planning Level Cost Estimate for Priority Phase 2 - CRA Projects</b>		<b>\$1.5 M - \$3.5M</b>	
<b>Priority Phase 3 Projects - Year 3</b>			
Construct missing sidewalk links	16	\$300,000 <sup>(1)</sup>	City
Implement intelligent transportation system improvements	12	\$250,000 <sup>(8)</sup>	City/Other
Initiate a multilingual "Share the Road" safety campaign	11	\$25,000	City
Provide bicycle parking at City Hall	9	\$5,000	City
Utilize targeted enforcement for both motorists and bicyclists	8	\$10,000	City
Encourage the Police Dept to review the Florida Bicycle Law Enforcement Guide & Bicycle Law Enforcement Video	7	\$10,000	City
Host local events for National Bike Month, Bike to Work Week, and/or Safe Routes to School Week	5	\$10,000	City
Develop and implement NoMi Express monitoring plan including a transit user survey	8	\$45,000	City
Implement capacity enhancements @ I-95 interchanges	9	\$125,000 <sup>(10)</sup>	City/Other
Conduct "Commuter Benefits" workshops with business community through SFCs	6	\$25,000 <sup>(14)</sup>	City
<b>Total Planning Level Cost Estimate for Priority Phase 3</b>		<b>\$805,000</b>	
Implement CRA roundabouts	9	\$250,000 <sup>(9)</sup>	City/Other
Implement CRA bicycle corridors	17	\$250,000 <sup>(8)</sup>	City
CRA roadway enhancements	7	\$1M - \$3M <sup>(13)</sup>	City
<b>Total Planning Level Cost Estimate for Priority Phase 3 - CRA Projects</b>		<b>\$1.5 M - \$3.5M</b>	
<b>Priority Phase 4 Projects - By Year 5</b>			
Construct missing sidewalk links	16	\$500,000 <sup>(1)</sup>	City
Purchase 7 NoMi Express buses	5	\$750,000	City/Other
Implement proposed long-term NoMi routes	17	\$6,000	City
Implement intelligent transportation system improvements	12	\$500,000 <sup>(8)</sup>	City/Other
<b>Total Planning Level Cost Estimate for Priority Phase 4</b>		<b>\$1,756,000</b>	
Implement CRA roundabouts	9	\$500,000 <sup>(9)</sup>	City/Other
Implement CRA bicycle corridors	17	\$500,000 <sup>(8)</sup>	City
CRA roadway enhancements	7	\$2M - \$6M <sup>(13)</sup>	City
<b>Total Planning Level Cost Estimate for Priority Phase 4 - CRA Projects</b>		<b>\$3 M - \$7M</b>	
<b>Priority Phase 5 Projects - By Year 10</b>			
Construct missing sidewalk links	16	\$600,000 <sup>(1)</sup>	City
Purchase 7 NoMi Express buses - if shorter headways are warranted on the 7 NoMi Routes	5	\$750,000	City/Other
Implement intelligent transportation system improvements	12	\$1M - \$2M <sup>(8)</sup>	City/Other
<b>Total Planning Level Cost Estimate for Priority Phase 5</b>		<b>\$2.35M - \$3.35M</b>	
Implement CRA roundabouts	9	\$4M - \$9M <sup>(9)</sup>	City/Other
Implement CRA bicycle corridors	17	\$1M - \$4M <sup>(8)</sup>	City
CRA roadway enhancements	7	\$11M - \$13M <sup>(13)</sup>	City
<b>Total Planning Level Cost Estimate for Priority Phase 5 - CRA Projects</b>		<b>\$16 M - \$26M</b>	



# CITY OF NORTH MIAMI TRANSPORTATION MASTER PLAN

## VI. Conclusion

The *City of North Miami Transportation Master Plan* is a multimodal plan for the City of North Miami aimed at accommodating local travel and mobility needs while enhancing the character of the community and improving the quality of life for its residents. The product of the plan is a program of interrelated **multimodal transportation strategies/projects** that will enhance the mobility of the transportation system while efficiently utilizing the existing transportation infrastructure. The recommended strategies/projects will help the City proceed towards its goal of developing a truly multimodal transportation system.

The Master Plan is not intended to “solve” the City’s mobility issues. It is a guide to try to improve the existing transportation system and manage the City’s mobility issues. The strategies/projects individually will have a minimal impact on the City’s transportation issues. Collectively, the strategies/projects will positively affect the City’s transportation system and support its vision. The Master

Plan does not include roadway expansions, except the proposed roadway modifications in the CRA plans, as it is intended to work within the existing transportation system and not negatively impact the community simply to move more cars through North Miami, which would only come at a great social, economic, and financial expense.



The Master Plan contains recommended strategies/projects that are grouped in priority phases with the total associated costs lower than the City’s appropriated share of PTP funds. It is recommended that the City incorporate the strategies/projects from Priority Phase I in order to address the immediate mobility issues concerning the City. Additionally the strategies/projects from Priority Phases II through V could be included in future Capital Improvement Programs.

The Master Plan supports implementation of a truly **multimodal transportation system** focusing primarily on non-automobile forms of transportation. The plan should be used as a tool for the City to seek funding from state and federal

sources to implement the strategies presented, as the plan demonstrates that the City has a comprehensive vision toward providing multimodal transportation opportunities.

This Master Plan is a working document. It should be evaluated and updated periodically to assess the status of the implementation of the

projects identified and ensure that the City is achieving its transportation and quality of life goals. The Master Plan evaluation should include an examination of project scheduling, costs, and funding sources. Updates should occur no less than every three years.

