

# EAR-Based Comprehensive Plan Amendments

## Volume II: Data, Inventory, and Analysis Future Land Use Element



# 1. FUTURE LAND USE ELEMENT

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# 1. FUTURE LAND USE ELEMENT

## PURPOSE

This component of the City's Future Land Use Element (FLUE) is designed to provide the data and analysis showing current and projected population, existing and future land use conditions, and opportunities to improve the living environment of the City of North Miami. It also forms the basis for the development of the City's Future Land Use Goals, Objectives and Policies, to prudently and strategically guide the future growth of North Miami. Because of this, the Future Land Use Element, more than any other Comprehensive Plan element, provides the direction and guidance to carry the community to its ultimate vision. All other plan elements and sub-elements are dependent upon the land development pattern shown on the Future Land Use Map. This element is a vital guidepost to ensure that the community vision is realized and will flourish into the "City of Progress" expected by current and future residents, businesses and community leaders.

The City has held several City Council and community visioning workshops in preparing this Plan, and comments obtained from these workshops were an integral component to this element and the entire Comprehensive Plan. In an effort to implement the City's vision, this Comprehensive Plan update includes changes to densities and intensities in the City, as also recommended in the redevelopment plan prepared by the Community Redevelopment Agency (CRA). The purpose and intent of the changes to densities and intensities have been outlined herein and also incorporated in other elements.

Pursuant to the requirements of the Florida Statutes, the City has set a short term planning range of five years (2010) and a long term planning range to the year 2025.



## EXISTING LAND USE CONDITIONS

The City of North Miami is located in northeast Miami-Dade County and shares a limited boundary with the cities of North Miami Beach, Opa Locka, Biscayne Park, Sunny Isles Beach and Unincorporated Miami-Dade County. The 9.98 square miles City has earned its name as a coastal community by encompassing Biscayne Bay on the eastern border of the City. North Miami is primarily a built out residential and shopping community, with regional attractors such as the Oleta River State Park and the state-of-the-art John Lehman Museum of Contemporary Art (MoCA).

To sufficiently address the issue of future land use patterns, a community must assess its current land use inventory. In developing the FLUE, an inventory of existing land use was prepared. From this inventory, the Existing Land Use Map (Map 1-1) was created detailing the current land uses present in the City. Also shown on this map are vacant land and water bodies within the North Miami's boundaries. Table 1-1 details the approximate acreage and general range of density or intensity of existing use for the gross land area included in each land use category in North Miami. From the table, it is evident that the City is largely residential with single-family homes comprising 26.52 percent of the total area. The next most prevalent existing land use is Parks, comprising 20.80 percent of the total land area, a large part of which is contributed by Oleta State Park. Commercial areas comprise almost 4 percent of the area.

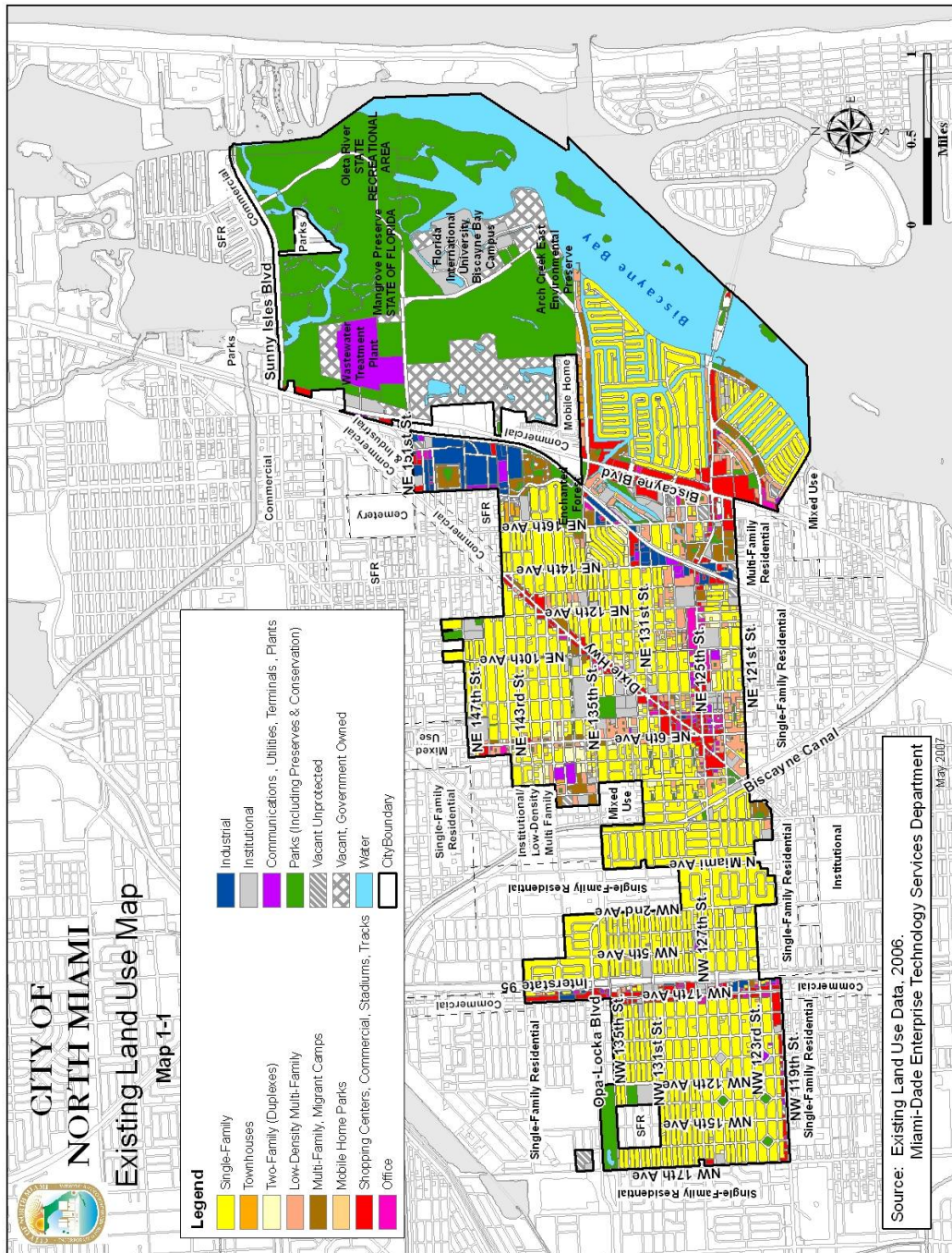
The adjacent jurisdictions to North Miami are comprised of properties that have similar land uses also found in the City. The locations of adjacent land uses are also detailed in Map 1-1.

Table 1-1: Existing Land Use Profile

Land Use Category	Acreage	Percent of Total
<b>Residential</b>		
Single-Family	1,697	26.52%
Low-Density Multi-Family	152	2.36%
Townhouses	23	0.36%
Two-Family (Duplexes)	92	1.44%
Transient-Residential (Hotels/Motels)	9	0.14%
Multi-Family, Migrant Camps	99	1.55%
Mobile Home Parks	2	0.03%
<i>Subtotal</i>	<i>2,074</i>	<i>32.40%</i>
<b>Non-Residential</b>		
Shopping Centers, Commercial, Stadiums, Tracks	205	3.20%
Office	46	0.72%
Communications, Utilities, Terminals, Plants	124	1.94%
Industrial	94	1.47%
Institutional	264	4.13%
Vacant, Government Owned	68	1.06%
Parks (Including Preserves & Conservation Areas)	1,331	20.80%
Water	995	15.55%
Vacant Unprotected	11	0.17%
Expressway Right of Way Open Areas	11	0.17%
Streets/Roads, Expressways, Ramps	1,177	18.39%
<i>Subtotal</i>	<i>4,326</i>	<i>67.60%</i>
<b>Total</b>	<b>6,400</b>	<b>100.00%</b>

Source: Kimley-Horn and Associates, Miami-Dade County Existing Land Use Map, aerial photography (2004), revised May 2007, Michele Mellgren & Associates.

Map 1-1: Existing Land Use Map



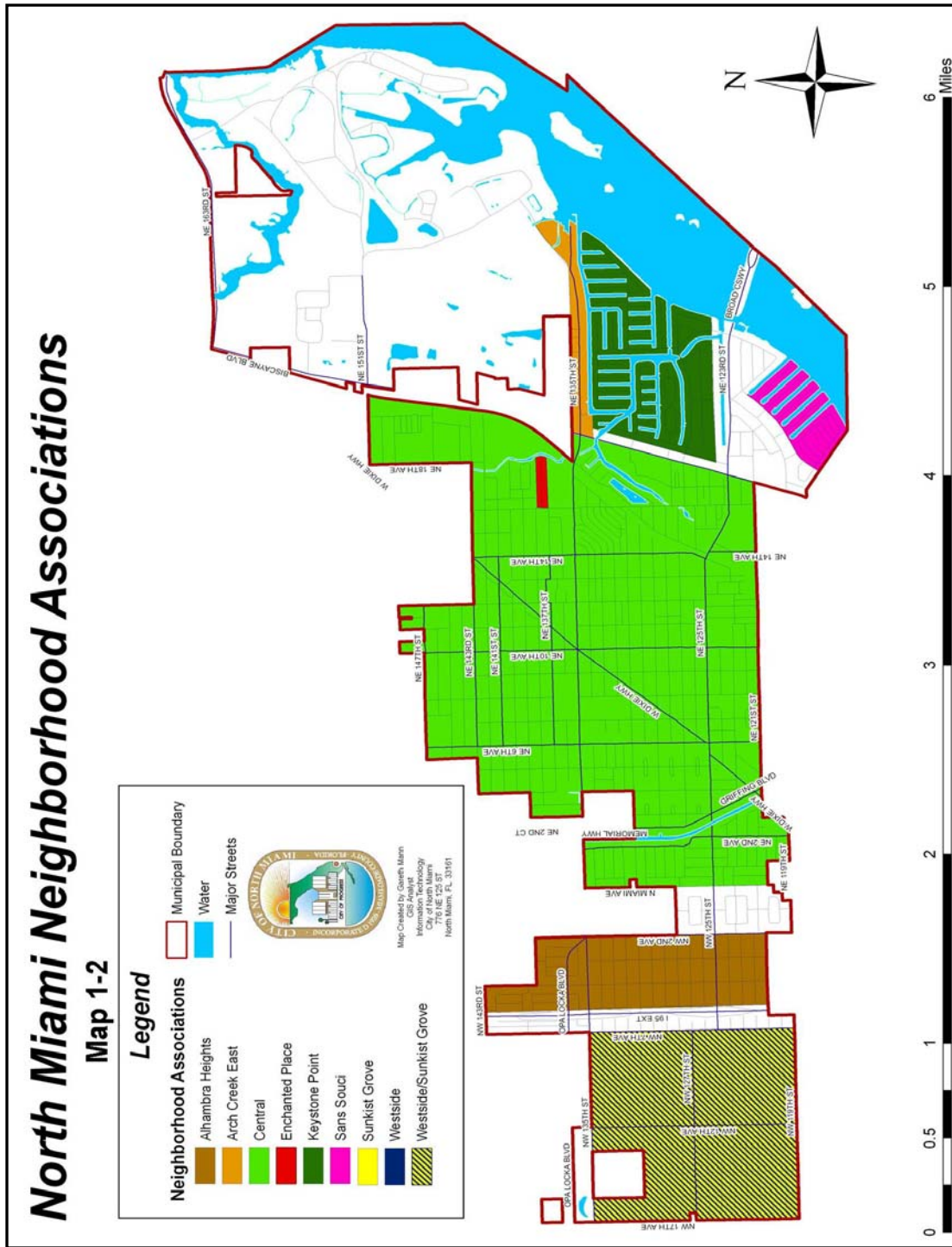
**North Miami Neighborhoods**

North Miami is made up of eight core neighborhoods. Each neighborhood has established Homeowner Associations that maintain neighborhood cohesiveness and advocates on behalf of its residents for services from the City Council. The core neighborhoods are:

- Westside
- Sunkist Grove
- Alhambra Heights
- Central
- Sans Souci
- Keystone Point
- Enchanted Place
- Arch Creek East

Representatives from each of the neighborhood associations were actively involved in community visioning workshops to change height and density in the City. Communities that are not represented by Homeowner Association groups, have been shown on Map 1-2.

Map 1-2: Neighborhoods



The location of the City's vacant lands by future land use is shown on Map I-3. In addition, Table 1-2 provides an acreage breakdown of the vacant land pattern shown on the map. The City of North Miami is considered "built-out" and as such is amending densities and intensities on the Future Land Use Map. Based on the Future Land Use Map presented in this EAR-based amendment cycle, there are an estimated 97 acres of vacant or undeveloped land within the City of North Miami, which comprises approximately 1.5 percent of the total land mass. Residential land totals 51 acres including mixed use low, which is about 52 percent of the City's vacant land inventory. Parks make up 18.56 percent of the undeveloped lands.

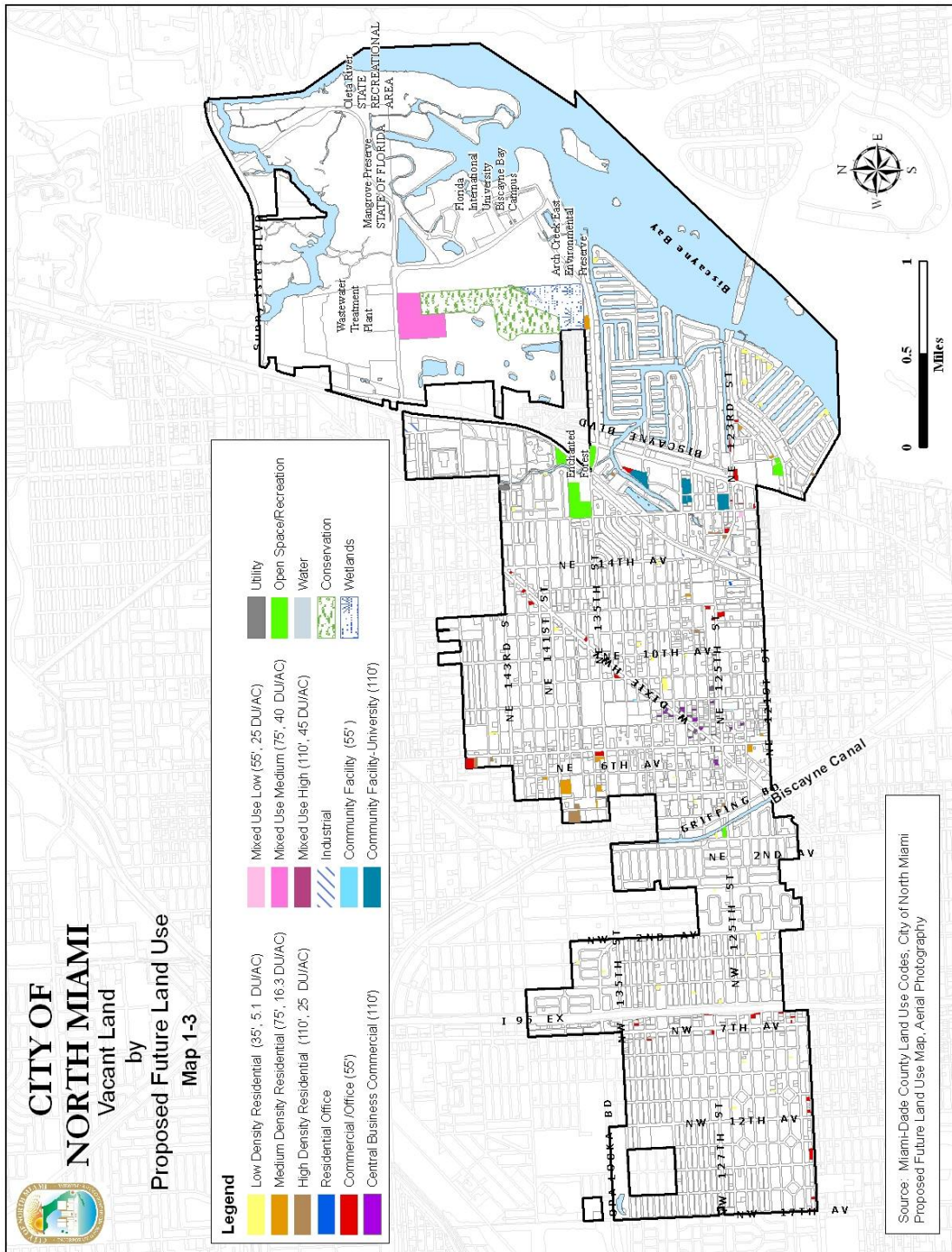
**Table 1-2: Vacant with Future Land Uses Profile**

Land Use	Acres	Percentage
Central Business		
Commercial	4	4.12%
Commercial /Office	10	10.31%
Community Facility- University	10	10.31%
Industrial	3	3.09 %
High Density Residential	5	5.15%
Medium Density Residential	7	7.22%
Low Density Residential	9	9.28%
Mixed Use Low	30	30.93%
Park	18	18.56%
Utility	1	1.03%
<b>TOTAL</b>	<b>97</b>	<b>100.00%</b>

Source: City of North Miami Future Land Use Map.  
Prepared May 2007, Michele Mellgren & Associates, Inc.



Map 1-3: Vacant Land Use Map by Future Land Use



## NATURAL RESOURCES

Natural resources such as soils, rivers, wetlands and estuarine systems, etc. are discussed in detail in the Conservation and Coastal Management Elements. Maps depicting the location of the City's natural resources are also located in the Conservation and Coastal Management Elements.

### Beach, Shores and Estuaries

There is one public beach in the City of North Miami which is located within the state owned Oleta River State Park. There are no other public beaches in the City and there are no future plans for the provision of same.

The shores of Biscayne Bay make up the eastern landscape limits of North Miami. Located within the City limits are five small undeveloped spoil islands, made from dredged material in the 1920's. Three islands are owned by the City and two by the State, one of which is called Sandspur Island. Sandspur Island is used as recreational facility and used extensively by motorized boaters.

### Rivers and Creeks

There are three natural waterways within the City of North Miami: The Oleta River in the vicinity of the Oleta River State Park, Little Arch Creek and Arch Creek. The upper reaches of the Little Arch Creek is a fresh water stream which drains a low lying area south of the City; the lower reach of the Creek is a salt water stream which becomes a tributary of Arch Creek at Biscayne Boulevard. The upper reaches of the Arch Creek, which traverses the City generally in a north/south direction from NE 143rd to NE 135th Street, is a fresh water stream draining the northeast areas of the City and unincorporated Miami-Dade County. East of the NE 135th Street barrier, Arch Creek is a salt water body.

### Bays and Lakes

The Intracoastal waterway of Biscayne Bay is the City's eastern boundary from Sunny Isles Boulevard (State Road 816) to North Bayshore Drive.

Within the City limits there are two lakes, Emerald Lake, located at approximately NE



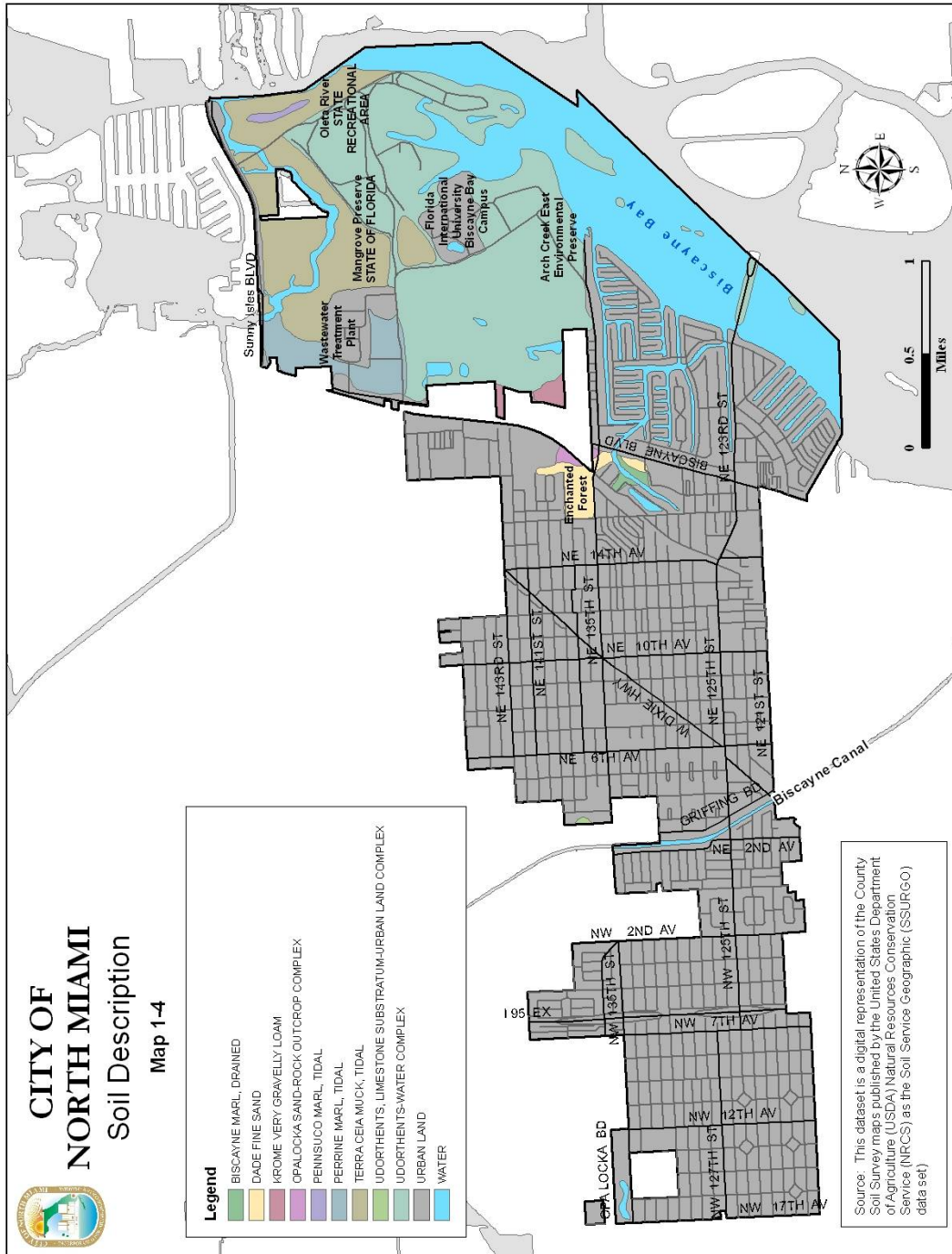
16th Avenue, Arch Creek Road and Emerald Drive, and Pepper Park Lake located at NE 135th Street and NW 17th Avenue.

### **Soils**

The City's surface is covered with more than 85 percent urban land topography (pavement), according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). The soil is generally sandy except for the Biscayne Canal floodplain, as noted on Map 1-4. The bayfront property is classified as peat, muck, marl and other miscellaneous soils.

Miscellaneous soils include, "coastal beach; man-made soils; mangrove swamps; swamps; mines; pits; and dumps" as defined by the USDA. Along Biscayne Boulevard there are areas of rocky lands and fine sand. The glade lines of the Biscayne Canal have been defined as peat and muck.

Map 1-4: Soils



**Floodplains**

The land within the City consists of a mixture of flood zones, based on flood maps maintained for the National Flood Insurance Program (NFIP) administered by the Federal Emergency Management Agency (FEMA). The maps delineate flood hazard zones and indicate the susceptibility of areas that may be prone to flooding in a major storm. The location of each flood zone is shown on Map 6-5.

- The majority of the eastern portion of the City is located within the AE flood zone, with the areas fronting Biscayne Bay in the AV flood zone;
- The central portion of the City is a combination of AE, X, and X-500 flood zones; and
- The western portion of the City is located within the X flood zone.

The definition for the zones are as follows:

**Table 1-3: Description of Flood Zones**

Flood Zone	Description of Zone
AE	Zone AE is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by detailed methods. In most instances, Base Flood Elevations (BFEs) derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.
X	Zone X is the flood insurance rate zone that corresponds to areas outside the 100-year floodplains, areas of 100-year sheet flow flooding where average depths are less than 1 foot, areas of 100-year stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 100-year flood by levees. No Base Flood Elevations (BFEs) or depths are shown within this zone.
X - 500	Zone X-500 is the flood insurance rate zone that corresponds to the 500-year floodplains. No Base Flood Elevations (BFEs) or depths are shown within this zone.

Source: Federal Emergency Management Agency (FEMA), Michele Mellgren & Associates, Inc. 2007.

### Community Rating System (CRS)

The NFIP has established the Community Rating System (CRS) as a voluntary program to rate communities and their ability to implement programs that help to reduce flood losses, facilitate accurate insurance rating, and promote awareness of flood insurance. The CRS program also provides additional incentives for communities that go beyond the minimum requirements of floodplain management. Cities can implement programs targeted to flood preparation, flood damage reduction, mapping and regulatory activities and public information programs, and as a result benefit citizens in the City by receiving a rating from CRS which can help to decrease home owner flood insurance costs. The City's rating is based on educational activities, local mitigation and outreach that exceed the minimum standards for the NFIP. Through its participation in the CRS program, North Miami residents in the Special Flood Hazard Areas (SFHA) are eligible to receive up to 25 percent discount on flood insurance. Residents in non SFHA are eligible for a 10 percent discount. The Storm Water Utility Division provides information regarding flood hazards, flood protection, and flood proofing.

### Wetlands

Wetlands are generally classified as areas where the water table is near or above the surface except during extended dry periods. Wetlands are typically adjacent to natural water bodies and lakes, and in low-lying depressions, and have poorly drained, level, organic or marl soils. Wetlands provide needed habitat for aquatic and land species, including migrating birds. Wetlands also provide storage areas for stormwater and a "filtration system" to cleanse the water.

Map 6-4 in the Conservation Element shows the location of wetland sites in the City of North Miami. The City's wetlands are located primarily in an area bounded by Biscayne Boulevard and Biscayne Bay, and by NE 163<sup>rd</sup> Street and approximately NE 135<sup>th</sup> Street. There is also an additional 4.4 acre wetlands area between Arch Creek Road and Emerald Drive. The City owns an additional 4.7 acre wetlands area, on the northeast corner of NW 17<sup>th</sup> and NE 135<sup>th</sup> St. The majority of these areas include mangrove preserves owned by the State of Florida. Projects within jurisdictional wetland areas are required to obtain all required Federal, State and County permits, and provide mitigation as necessary.

**Native Uplands and Other Flora**

No known plant or animal studies have been completed for the area encompassed by the City of North Miami. The Conservation Element identifies all of the endangered, threatened plant species of special concern native to Miami-Dade County, which may be present in the City. All development applications are required to certify that no known endangered, threatened and plant species of special concern are present on site and must obtain all required permits from environmental agencies.

**Air Quality**

Because of the climate and meteorological conditions in South Florida, Miami-Dade County has better air quality than most major metropolitan areas in the United States. Overall, the Florida Department of Environmental Protection (DEP) rates the air quality throughout Miami-Dade County as good. Because of its geography and generally low density land use pattern, plus the initiatives undertaken by Miami-Dade County, the City of North Miami has good air quality overall. Air pollution is generally not a significant threat to the residents of North Miami.

**Water Quality**

The City meets or exceeds the national water quality standards. As part of the National Pollution Discharge Elimination System (NPDES) permitting process soon to be adopted by the City, drainage outfalls will be monitored on an ongoing and regular basis. A small portion of the City is located within the cone of influence of a County wellfield and thus City policies and regulations must recognize the necessary restrictions on uses and site drainage in these areas. The goals, objectives and policies in this element should address this issue to ensure that adequate regulations are contained in the City's Land Development Code (LDC) to maintain, and enhance where possible, surface and ground water quality in North Miami.

**Wildlife and Habitats**

Oleta River State Park and jurisdictional wetlands provide the most significant and important wildlife and native habitat features.

## HISTORIC AND ARCHEOLOGICAL RESOURCES

The single most important historic resource in the City of North Miami is the Arch Creek Historic and Archaeological Site, most of which is located within the County owned and maintained Arch Creek Park, located at the northwest corner of NE 135th Street and Biscayne Boulevard. The Arch Creek Historic and Archaeological site is listed on the National Register of Historic Places.

The privately owned parcel located south of the Park on the southwest corner of that same intersection, is located in the Arch Creek Southern Archaeological Zone. This parcel was developed in 1988 as a shopping center. Site excavation and preparation activities were monitored by the Miami-Dade County Office of Historic Preservation to ensure the proposed development would not destroy or damage any existing archaeological features. The portion of the property on which development occurred did not show, during the excavation process, to contain archaeologically significant items. The rest of the site, i.e., the mangrove area along Arch Creek was preserved, and remains untouched by the development. The area preserved includes a Tequesta Indian canoe landing.

The Arch Creek Bridge, built in 1925 is listed on the Florida Master Site File, which lists historic sites and archaeological resources in the State of Florida.

According to additional data from the Florida Master Site File, historic structures located in the City of North Miami are listed in Table 1-4 below. A listing of historic residences located in the City can be found in the Housing Element.

Table 1-4: Historic Structures in North Miami

Site Name	Address	Year Built	Structure Use
William Jennings Bryan Elementary	1201 NE 125 ST	1928	School
Bethany Evangelical Covenant Church & School	125 NE 119TH ST	C1934	House of worship
Griffing Park	N/A	C1946	Park
Automatic Car Wash	12300 W Dixie Hwy	C1950	Service station
12310-12320 West Dixie Highway	12310-12320 W Dixie Hwy	C1951	Commercial
Luggen's Discount Photo and Video	12426-12428 W Dixie Hwy	C1925	Commercial
Nightingale Gardens	12221 W Dixie Hwy	C1925	Nursing home/Private residence
Sam's Discount Tires	12305 W Dixie Hwy	C1950	Service station
12343-12345 West Dixie Highway	12343-12345 W Dixie Hwy	C1949	Commercial/Vacant
Intl Brotherhood of Teamsters Local 390	12365 W Dixie Hwy	C1950	Commercial
Northeast Pain Management	12399 W Dixie Hwy	C1949	Commercial
Dixie Medical Center	12429 W Dixie Hwy	C1935	Commercial/Medical

Source: Florida Master Site File, 2007. Michele Mellgren & Associates, Inc. 2007.

The Williams Jennings Bryan Elementary School, built in 1928, is eligible for register on the National Register of Historic Places.

## POPULATION HISTORY, TRENDS AND PROJECTIONS

The Comprehensive Plan must be based on well-documented population estimates and projections. Miami-Dade County requires that its own data be utilized in generating projections for all municipalities located within County jurisdiction. The University of Florida Bureau of Economics and Business Research (BEER) is a well established research center that provides population data to the County. Miami-Dade County uses the BEER estimates as a base for the County population projections. Local data sources for County population projections also include City housing permit and residential capacity data, subarea projections prepared by the Miami-Dade County Planning Department and residential electric meter connections.

Since the City's incorporation, North Miami's population has steadily increased as shown in Table 1-5 below. In the forty year span, from 1960 to 2000, the City experienced a population increase of 31,172 people, which is approximately a 109 percent population growth. This growth is an average increase of 7,793 residents per decennial census. The City also experienced substantial growth over the last decade, growing about 20 percent between 1990 and 2000.

**Table 1-5: North Miami Historic population, 1960-2000**

Year	1960	1970	1980	1990	2000
Population Estimate	28,708	37,767	42,566	49,998	59,880

Source: U.S. Census Bureau, online historical archives, 2007.

### Current population

According to the US Census Bureau, the City's population in 2000 was 59,880. However, North Miami's population has increased by 432, with a 2005 population estimate of 60,312, as stated by BEER and Miami-Dade County. As the official State population estimate, these figures are assumed to be sufficiently accurate as a basis for projecting the future population of the City. The adopted CRA redevelopment plan estimates that approximately 18,000 - 20,000 people in the City have not been officially documented for in the US Census, thus leading to the severe overcrowding of units and



need for the creation of additional housing, particularly affordable housing.

### **Methodology for population projections**

The City of North Miami population figures were derived from the natural growth rate predicted by the County. Miami-Dade County projections are derived by mathematical equations describing logistic or growth curves which describe the typical growth in population over time. Miami-Dade County projects population growth for minor statistical areas (MSAs). The population projections for North Miami were developed by using a 0.69 percent natural growth rate, as confirmed by the South Florida Regional Planning Council and Miami-Dade County for MSA 2.1. As a result, natural projected population growth figures were generated and used to project the need for housing units in the City of North Miami.

Additionally, the impact of the recently approved 5,999 unit Biscayne Landing development was added to the Miami-Dade projections, as this development was not included in either the Miami-Dade or Shimberg projections. The number of anticipated units from Biscayne Landing (developed on a phased schedule) for each planning year increment was multiplied by the average household size of 2.85 to project the population resulting directly from this development. The resulting Biscayne Landing population projections were then added to the anticipated natural growth rate of the City, which is discussed in the paragraph above.

### **Projected Population**

The City of North Miami is a changing community in South Florida. As a result of the existing population and projected growth, accommodations must be provided to not only increase the economic base of the City but to also provide a range of housing for the residents projected to be entering the City. As such, the City has undergone extensive studies and is proposing to increase its current height and density, as will be discussed in the redevelopment section of this Element. Table 1-6 represents the natural projected population estimates for the City of North Miami including additional population projected from the recently approved Biscayne Landing project. By the year 2015 the City is expected to have a population of 78,280 and 86,301 by 2025.

Table 1-6: Population Projections

	2000	2005	2010	2015	2020	2025
<b>Shimberg</b>	59,736	62,245	65,850	69,428	73,056	76,445
<b>Miami-Dade County</b>	59,880*	60,312*	62,422	64,607	66,867	69,206
<b>Projections with 0.69% growth rate &amp; Biscayne Landing</b>	n/a	n/a	65,377	78,280	83,962	86,301

Source: Miami-Dade County Planning and Zoning Department, 2007. Biscayne Landing Development Phase Plan, The Shimberg Center for Affordable Housing and Michele Mellgren & Associates, Inc. 2007.\* Estimate obtained from US Census 2000 and Bureau of Economic and Business Research, respectively.

## ANALYSIS OF LAND NEEDED TO ACCOMMODATE PROJECTED POPULATION

Under the current adopted future land use map, the City of North Miami has 79 acres of vacant land remaining, of which only 17.16 acres is available for future residential use. A total of 241 units could potentially be built on vacant land based on the adopted Future Land Use Map. With a projected population of 86,301 by the year 2025, which is an addition of approximately 25,989 residents, the City will need to increase density to accommodate the natural projected population growth.

Table 1-7: Vacant Residential Land

Land Use	Units per Acre	Acres	Potential Units
Residential Low	7.3	8.25	60
Residential Medium	16.3	4.69	76
Residential High	25	4.22	105
Total		17.16	241

Source: Miami-Dade County Parcel Data Nov. 2006, Michele Mellgren & Associates, 2007.

Much of the low density residential land use category in the City has been developed at lower densities than currently permitted on the Future Land Use Map. It is unlikely that existing single family neighborhoods will be disturbed for redevelopment to the maximum densities permitted, and as such the City is proposing to shift this density to more appropriate transit corridors in the City. Currently, existing single family neighborhoods are permitted to build at a maximum of 7.3 du/a, however, majority of the single family neighborhoods are built at 3.8 dwelling units per gross acre, resulting in a deficit of 8,050 potential units. The 2000 US Census estimates the total number of housing units in the City at 22,267 units and based on the most recent Miami-Dade property appraiser data, there are 19,499 existing units in the City of North Miami. Due to infrastructure capacity restrictions, the City will limit the overall units added to the Future Land Use Map to 5000 units to assist in accommodating the increase in population (see redevelopment section below).

## BOUNDARY EXPANSION

The City of North Miami is constrained in boundary expansion opportunities. To the north, the incorporation of the Biscayne Gardens area is being considered by Miami-Dade County (west of North Miami Beach, east of I-95). An enclave exists within the North Miami boundary south of Claude Pepper Park. This area is considering incorporating with Biscayne Gardens.

The annexation of a parcel at 13800 NE 3<sup>rd</sup> Court in North Miami is currently being reviewed by Miami-Dade County. The City is requesting the annexation to allow a proposed development on a site of which a 5.17 acre portion lies in unincorporated Miami-Dade County. North Miami is not pursuing any other annexations at this time.

## REDEVELOPMENT

The rapidly increasing population in South Florida can only be accommodated through redevelopment in built out urban areas like the City of North Miami. Neighboring jurisdictions have already begun the process of land use amendments to increase height and density to accommodate for natural projected population increases. By the year 2015, the population in North Miami is projected to increase to 78,280 residents, including projections from the recently approved Biscayne Landing development. The City must set the framework for increased population by allowing for greater intensity and density which will assist in enhancing the economic base of the City by providing a range of commercial and residential options through mixed use development. The City has already begun to commit to such a necessity by a recent City charter change, amending the four story height limit restriction that had been in place in the City for approximately 34 years. The City has also committed to change through the identification of slum and blighted areas which resulted in the creation of a Community Redevelopment Agency (CRA) in 2004. The CRA Plan recommends certain future land use map changes and the establishment of mixed-use categories to implement the goals and objectives of Community Redevelopment Area Plan.

The City identified targeted areas for redevelopment, focusing on NW 7<sup>th</sup> Avenue, NE 6<sup>th</sup> Avenue, Dixie Highway, NE 135<sup>th</sup> Street, NE 125<sup>th</sup> Street, and Biscayne Boulevard. Due to limited infrastructure capacity, however, the City has chosen to focus its attention on NE 6<sup>th</sup> Avenue, Dixie Highway, NE 135<sup>th</sup> Street and NE 125<sup>th</sup> Street. Dixie Highway was considered the main business spine for the community, while NE 125<sup>th</sup> Street and NE 6<sup>th</sup> Avenue supported low intensity retail and medium to high density residential development respectively, and both were in need for planned redevelopment. These areas are in the vicinity of existing residential neighborhoods and it is critical that residential neighborhoods not be adversely impacted by any redevelopment.

To accommodate the expected population, the City is proposing to amend the Future Land Use Map by redistributing 5000 units that are already accounted for in the adopted FLUM, but have never been developed. The locations of these units were planned through more than ten community meetings and workshops.

*Strategies for redevelopment*

The CRA Plan approved by Miami-Dade County in June 2005 provides for a number of strategies for redevelopment including:

- Approve a mix of land uses supported by market conditions, a land use plan providing densities, heights, mixed-use alternatives, commercial revitalization and traffic circulation.
- Establish a joint development/budget process between the City and the CRA.
- Prepare a methodology for land assembly to achieve goals in the Community Redevelopment Plan.
- Conduct a market study of real estate market demands.
- Develop a financial and relocation strategy to strengthen businesses in the City's downtown business district.
- Establish a business development and marketing strategy for the commercial corridors.
- Create a sense of identity and purpose in the Central Business District with parks, plazas, pedestrian access, parking, and civic and cultural activities.
- Establish high-density urban residential and mixed-use projects within the Central Business District
- Create a City-wide system of open space and parks with both passive and active areas, pedestrian ways and bikeways.
- Utilize and extend the Munisport development agreement to provide community facilities, project management, and financial commitments to implement the Redevelopment Plan.
- Select a master developer to provide various development services to the CRA including development of 6,000 rehabilitated or new affordable housing units.

As will be discussed below, the City is proposing to adopt a Neighborhood Redevelopment Overlay to implement a substantial portion of the CRA Plan. Additional recommendations from the CRA Plan can be implemented as public services and facilities are available to serve the higher densities and intensities recommended by the CRA Plan for other areas of the City. Particularly, potable water supply and treatment capacity is a constraint.

## **AFFORDABLE HOUSING**

The need for affordable housing is significant in North Miami. In 2002, the population was 60,054 and there were 20,389 households. Approximately, 50 percent of the households own their own home and the median home cost was \$160,498 in 2001 and the median rent was \$613 in 2000. (Source: University of Florida, Shimberg Center, Florida Housing Data Clearinghouse, 2005.) Also in 2002, 37 percent of the North Miami households paid more than 30 percent of their income for housing, a primary indicator that the housing cost is a burden for these families. The median income for a family of 4 was \$45,400 in 2002.

Significant overcrowding exists in North Miami; 28 percent of housing units in North Miami were considered overcrowded, higher than the Miami-Dade County average of 20 percent.

The City has already initiated aggressive affordable housing strategies. In 2003, the Housing Element was amended to require developers to provide affordable housing when their residential products on city-owned land or within the Regional Activity Center (RAC) do not qualify as affordable housing. The developer must provide new or rehabilitate existing affordable housing for each residential unit constructed that does not qualify for affordable housing. The primary development in the RAC, Biscayne Landing, is expected to result in 5,999 new residential units that will not qualify as affordable housing. As a result, the City entered into an agreement with the developers of Biscayne Landing to develop affordable housing units in the City (under the Munisport agreement). Therefore, the developer of Biscayne Landing must contribute toward 6,000 new or rehabilitated affordable housing units. The CRA will coordinate the affordable housing program related to the Biscayne Landing project.

A detailed list of the City's housing programs as well as an identification of housing need by type and size can be found in the Housing Element.

## LAND USE CHANGES

The Future Land Use Map (Map 1-5) provided in this EAR-based amendment cycle includes new land use categories that provide for a mix of uses, densities and intensities that will create a lively and productive downtown, concentrated around the Central Business District. Some of the current land uses have been renamed or reconfigured. The previous land use map (as shown in Map 1-6) had the following 19 land use categories:

1. Central Business Commercial
2. Commercial
3. Commercial/Light Industrial
4. Industrial
5. High Density Residential
6. Low Density Residential
7. Med Density Residential
8. Office Commercial
9. Parking
10. Planned Unit Development
11. Public Educational
12. Public Facilities
13. Public Use Planned Unit Development
14. Recreation/Park/Open Space
15. Residential Office
16. Vacant Unprotected
17. Vacant, Government Owned
18. Water
19. Wetlands

To incorporate mixed-use at varying intensities, and to simplify and reduce overlaps in some of the previous categories, the 19 categories have been replaced by the following 18 categories:

1. Central Business Commercial
2. Commercial /Office
3. Community Facility
4. Community Facility-University
5. Conservation
6. High Density Residential
7. Residential Office
8. Industrial
9. Low Density Residential
10. Low Medium Density Residential
11. Medium Density Residential
12. Mixed Use High
13. Mixed Use Low
14. Mixed Use Medium
15. Park
16. Utility
17. Water
18. Wetlands

The difference between the old and new categories is as follows:

- Commercial and office commercial are merged into Commercial/Office
- Commercial/Light industrial and Industrial are merged into Industrial
- Parking is removed
- Planned Unit Development and Public Use Planned Unit Development shall now be mixed use
- Public Educational is renamed Community Facility - University
- Public Facilities are either Community Facility or Utility
- Recreation/Park/Open Space is split into Park and Conservation
- Vacant Unprotected and Vacant, Government Owned have been removed



As previously mentioned, the existing Low Density Residential neighborhoods are developed at a City-wide average density of 3.8 du/ac even though the maximum density allowed is 7.3 du/ac. The City is proposing to reduce the maximum allowed density from 7.3 to 5.1 du/ac. By doing so, the City will be able to redistribute these units that are already accounted for on the map, to areas that are identified as redevelopment priority areas and areas which are more appropriate for supporting increased density. The City also introduced a low-medium density residential category and a height transition zone to protect established single family neighborhoods from potential visual height impacts caused by redevelopment, at the request of citizens.

The trend toward live work and play environments is reemerging. Not only does it reduce automobile dependency, it is also increases quality of life of the residents. To facilitate such developments, mixed-use is added to the map. In order to allow varying densities and intensities, it is sub-divided into mixed use high, mixed use medium and mixed use low.

In addition, two new categories are shown on the Future Land Use Map. They are the Central City District (CCD) Node and the Neighborhood Redevelopment Overlay (NRO). The purpose of CCD Node is to create a high intensity activity center, which is also a culmination of three major corridors, namely Dixie Highway, NE 6<sup>th</sup> Avenue and NE 125<sup>th</sup> Street. Mixed-use is required in the node and it is envisioned as the tallest development in the City, followed by the above mentioned corridors.

The Neighborhood Redevelopment Overlay encompasses the three corridors and part of residential areas located in the vicinity. The vision for this overlay is to encourage redevelopment that is primarily market driven, but to guide that redevelopment such that it does not mar the urban fabric of the City and character and peace of the existing neighborhoods. It is strongly recommended to adopt form-based land development regulations, to prescribe transitions from tall, intense redevelopment to adjoining residential neighborhoods. While mixed-use is not mandatory in this area, any mix of permitted uses may be developed even if they are not allowed by the underlying land use, as long as there is available infrastructure.

Five thousand new units will be added to the City at this time, unless more infrastructure, particularly potable water, becomes available. Of these 5,000 units, 1,000 units maybe developed outside of the Overlay, wherever redevelopment is desired. The City shall make extensive efforts for water conservation, and toward this goal, green buildings and sustainable developments are highly encouraged in the City. Additional density or heights shall be allowed for developments that implement such environment-friendly techniques.

As and when redevelopment occurs within the CCD Node and NRO, the Future Land Use Map will be revised to reflect any underlying use changes, subject to small/large scale amendment criteria. The City shall maintain a rolling list of units used from the NRO pool.

## **FUTURE LAND USE**

Table 1-8 provides the acreage and general range of density or intensity of the future land use for the gross land area included in each future land use category applicable to the City of North Miami.

The predominant land use in North Miami will continue to be Low Density Residential, comprising 35 percent of the total land area. There is 33 percent open space including Parks, Conservation, Water and Wetlands. Commercial and Industrial uses will make up 11 percent while 3 percent of the total land area is dedicated to educational institutions.

Table 1-8: Future Land Use Profile

Use	Acres	Percentage	Density
Central Business Commercial	129	2%	n/a
Commercial /Office	396	6%	n/a
Community Facility	176	3%	n/a
Community Facility- University	223	3%	n/a
Conservation	456	7%	n/a
Home Office	12	0%	n/a
Industrial	175	3%	n/a
Low Density Residential	2,249	35%	5.1
Low Medium Density Residential	88	1%	
Medium Density Residential	247	4%	16.3
High Density Residential	250	4%	25
Mixed Use High	0	0%	45
Mixed Use Low	78	1%	25
Mixed Use Medium	176	3%	40
Park	107	2%	n/a
Utility	119	2%	n/a
Water	1,027	16%	n/a
Wetlands	497	8%	n/a
	6,400	100%	

Source: Michele Mellgren and Associates, 2007. Prepared June 2007.

Densities outlined above have been proposed based on the need for redevelopment in the City and also conserved due to limitations on infrastructure.

The maximum number of units proposed in this element reflects capacity limitations projected from future projected infrastructure demand. With the pending water plant capacity expansion, the City would be able to conservatively add an additional 6,400

units to the City, thus 5000 units have been proposed to ensure that the City will have the available capacity for increases to density and intensity. The City must allow for future growth and the units projected will be needed to provide for the natural projected population of the City.

### **Economic Impact**

The City will undoubtedly benefit from changes to land use densities and intensities in the urban core. The City will benefit in way of increased tax base, job creation, and also cost effective measures of creating sustainable buildings and infrastructure. The City will institute measures for the Leadership through Energy and Environmental Design (LEED) Standards which will aid in the reduction of waste producing buildings and replace them with environmental friendly buildings.

The City is currently apart of the County's Enterprise Zone Program, which offers fiscal incentives to businesses that locate or expand within the zone. The land use changes will provide opportunities for not only large office and retail businesses, but also provide suitable locations for small mom and pop business and home office establishments. The City plans to develop strategies and incentives to attract and retain businesses. In doing so, the City will also focus on the creation of an identity thus increasing the marketability of attracting businesses to the City.

## **AVAILABILITY OF SERVICES AND FACILITIES**

### **Transportation**

The City's roadway network is a grid network with east-west and north-south corridors providing a vast number of routes for *generally* efficient movement. However, growth in the region continues to place a strain on the City's transportation system resulting in recurring periods of automobile traffic congestion on some roadways compromising the quality of life for residents and adversely impacting residents and business communities.

Interstate 95 (I-95) intersects North Miami on the western side of the City. State principal arterial roadways include Biscayne Boulevard, which intersects the eastern portion of the City and Dixie Highway, which intersects the center of the City. State minor arterials include NW/NE 199<sup>th</sup> Street/Gratigny Highway, NW 163<sup>rd</sup> Street/Sunny Isles Boulevard, NW 7<sup>th</sup> Avenue/US 441, and NE 6<sup>th</sup> Avenue. Roadway links within the City operating at LOS F and below the adopted Level of Service standard include I-95 (NE 199<sup>th</sup> Street to NE 151<sup>st</sup> Street), NE 135<sup>th</sup> Street (NW 2<sup>nd</sup> Avenue to NE 6<sup>th</sup> Avenue), and NE 125<sup>th</sup> Street (NW 7<sup>th</sup> Avenue to US 1).

Excessive traffic congestion on NE 125<sup>th</sup> Street is most notable in the City. Much of this traffic is derived from traffic flowing to and from I-95 ramps. NE 125<sup>th</sup> Street also provides eastern access to the barrier islands, daily trips to North Miami for employment, and deliveries of goods.

On the other hand, the City has an extensive sidewalk network with most streets having sidewalks on both sides of the street. The Level of Service of Sidewalks is largely “C” or better. Improvements are needed in some cases to adapt sidewalks for the disabled, repair gaps, and remove obstructions. No bicycle lanes are available in the City and the LOS for bicycle facilities is largely LOS E or worse.

The City of North Miami is well-served by public transit. The City of North Miami provides a free local public transit called NoMi Express, which services areas within the City Limits. There is no Level of Service standard for the NoMi Express, however, it experiences 18,000 monthly boardings on four routes. Shorter headways and weekend service might increase the service’s reliability and attractiveness. Miami-Dade Transit provides public transit service throughout the County including North Miami and is meeting its Level of Service standards. An increase in connections between these two systems will increase the availability of public transit.

In 2003, North Miami adopted a Transportation Concurrency Exception Area (TCEA) to ensure redevelopment was not hindered by concurrency requirements. As part of the TCEA, the City adopted several policies in the Transportation Element to mitigate traffic issues including conducting a Transit Oriented Design (TOD) Feasibility Study and development of a Transportation Master Plan (TMP).

In 2004, the City established a Community Redevelopment Area (CRA) to guide future redevelopment of slum and blighted areas in the City. The CRA plan, approved in 2005 by Miami-Dade County, includes a number of transportation strategies. Strategies include roundabouts on West Dixie Highway (at NE 125<sup>th</sup> Street, NE 130<sup>th</sup> Street, NW 135<sup>th</sup> Street, and NE 123<sup>rd</sup> Street) and where NE 130<sup>th</sup> Street intersects NE 6<sup>th</sup> Avenue. Other recommendations include streetscape improvements and linkages of sidewalks and bicycle paths for greater connectivity.

In 2005, the City adopted a Transportation Master Plan (TMP), which considers the CRA Plan and the recommended land uses. The TMP include strategies for pedestrian/bicycle facilities, public transit, the NoMi Express, and consideration of Transportation Demand Management, Transportation System Management, and a Neighborhood Traffic Management Plan. The main purpose of the TMP is to establish short-and long-term priorities investment by the City. The plan recommends a multimodal transportation system that provides increase transportation opportunities for all residents of North Miami. The TOD Feasibility Study suggested an overlay district in the land development regulations to address an approved mix of land uses, densities, and site design.

### **Potable Water**

The City of North Miami produces potable water and purchases service from Miami-Dade Water and Sewer Department (WASD) as well. The Biscayne Aquifer is the source of potable water in Miami-Dade County. The City is currently permitted by the South Florida Water Management District (SFWMD) to withdraw up to 9.3 MGD of raw water from the Biscayne Aquifer. Due to recent constraints in water and future demands of the incoming residents, the City will increase the water treatment plant capacity to a maximum of 16 MGD by 2010 and a maximum of 20 MGD b 2015. As required by Florida Statutes in the recent Senate Bill 360, the City must also adopt a 10-year water supply facilities work plan within 18 months of the release of the Lower East Coast Water Supply Plan from the SFWMD. It is expected that the CRA may provide funding for additional capacity needed to meet the needs of high densities provided in this plan.

Land Uses Served: The Winson Treatment Plant and Miami-Dade Water and Sewer

Department (WASD) provide potable water service to residential, commercial, office, and institutional land uses throughout the City and its service area. Within this comprehensive plan update, the arrangement of uses and intensities has been modified to include higher density residential and mixed use development. Redevelopment will be focused along the major corridors: NE 6 Avenue, NE 135 Street, Biscayne Boulevard, Dixie Highway, and NE 125th Street.

### **Sanitary Sewer**

The City of North Miami also provides its own sanitary sewer facilities with a system capacity of 14.1 millions gallons per day. The City is currently meeting its level of service standards for sanitary sewer facilities and maintains excess capacity. It is anticipated that in the future the City will undergo infrastructure upgrades to meet the needs of incoming residents.

### **Drainage Facilities**

The current Level of Service standard for drainage is a five-year design storm with a 24-duration. The City is currently exceeding its level of service standard for stormwater damage.

The Phase II Stormwater Master Plan adopted in 2000 requires a 25-year, 72-hour drainage system in new non-residential development. In addition, the City plans for construction of a new City-wide stormwater system that provides a minimum level-of-service for disposal of a 25-year design storm with a 72-hour duration.

### **Solid Waste**

Solid waste collection shall be maintained at a level of service standard of 0.8 tons of solid waste per capita per year. The City is currently meeting its level of service standard for solid waste. The City also maintains a resource recovery program.

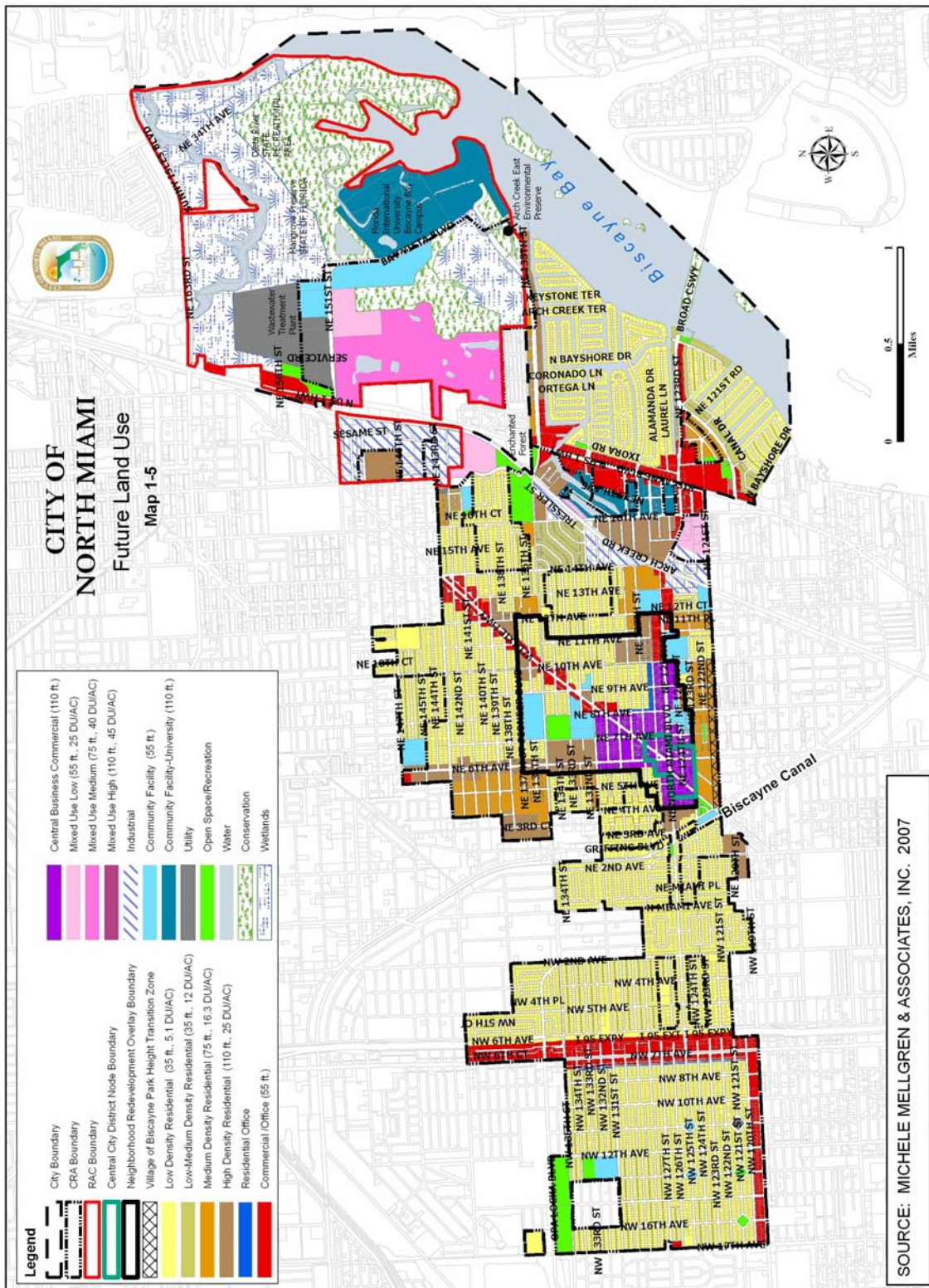
### **Parks and Recreation**

The current level of service (LOS) standard for parks is 2.75 acres of park space per 1,000 residents. Currently, the City is surpassing this with a level of service of 18.9 acres per 1,000 people. Although the City is pleased to provide its residents and visitors with this exceptional LOS, North Miami will continue to maximize opportunities to create

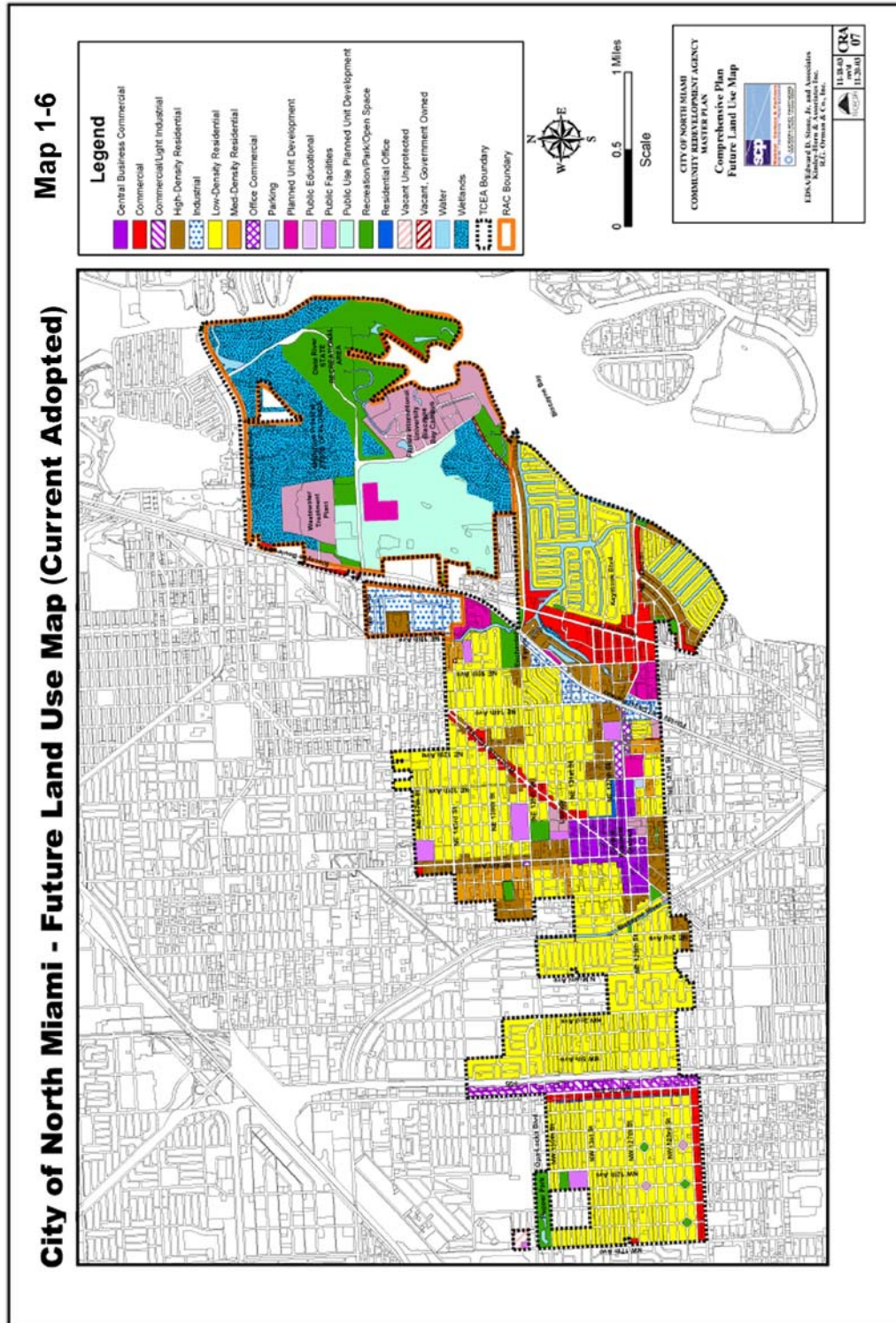
new park facilities and expand existing facilities. The City is also developing a Parks, Recreation, and Open Space Master Plan to facilitate a number of long term aspirations, such as the provision of park space within one half mile of all residential areas.



Map 1-5: Future Land Use Map



Map 1-6: Future Land Use Map (current adopted)



# EAR-Based Comprehensive Plan Amendments

## Volume II: Data, Inventory, and Analysis Transportation Element





## 2. TRANSPORTATION ELEMENT

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## 2. TRANSPORTATION ELEMENT

### PURPOSE

Local governments that have all or part of their jurisdiction included within the urbanized area of a Metropolitan Planning Organization (MPO) are required to prepare and adopt a transportation element consistent with the provisions of Chapter 163, Part III of the Florida Statutes. The purpose of this Transportation Element is to plan for a multimodal transportation system that places emphasis on alternative modes of transportation within the City of North Miami. The objective of this Transportation Element Data, Inventory, and Analysis (DIA) is to describe and analyze transportation resources within the City of North Miami, project future conditions, and prepare a foundation for the formulation of goals, objectives, policies and implementation programs.

Data has been collected, analyzed, and portrayed in text and graphics including a series of transportation maps. In this analysis, the City's Comprehensive Plan horizon year is 2030. The Transportation Element DIA presents:

- An analysis of the existing transportation systems, including the ability of transportation facilities and services to serve existing land uses and the adequacy of the existing and projected transportation system to provide adequate emergency evacuation routes;
- Growth trends and travel patterns, including relationships between land use and transportation systems;
- Projected transportation system levels of service;
- An analysis of local and state transportation programs;
- Maintenance of adopted level of service standards; and
- Land use policy implications of transportation management programs necessary to promote public transportation.

## DEFINITIONS OF TERMS AND CONCEPTS

### Classification of Major Thoroughfares

Major thoroughfares are categorized into functional classification groups according to the character of service they provide. The four functional classification groups for urban areas are principal arterials, minor arterials, collectors and local streets. The extent and degree of access control is a significant factor in defining the functional classification of a roadway. Regulated limitation of access is necessary on arterials to enhance their primary function of mobility, while the primary function of local streets is to provide access. Functional classifications for major thoroughfares are defined in *A Policy on Geometric Design of Highways and Streets* (American Association of State Highway and Transportation Officials, 2001).

#### *Principal Arterials*

The principal arterial system serves the major centers of activity and the highest volume traffic corridors of urbanized areas. Principal arterials typically serve longer distance trips. Although principal arterials constitute a small percentage of the total roadway network, they carry a high proportion of total urban traffic. The principal arterial system also carries most of the trips entering and leaving the urban area. Service on principal arterials is normally continuous with relatively high traffic volumes, long average trip lengths and high operating speeds. Service to abutting land is typically subordinate to the provision of travel service and major traffic movements. Typical principal arterials include interstates, freeways and other limited access facilities.

#### *Minor Arterials*

The minor arterial system interconnects and supports the principal arterial system. It accommodates trips of moderate lengths at a lower level of mobility than provided on principal arterials. Minor arterials provide continuity among communities and may also carry local bus routes. Ideally, minor arterials do not penetrate identifiable neighborhoods. The spacing of minor arterials is typically not much greater than one mile in most urbanized areas.

### *Collectors*

The collector street system provides vehicular access to and mobility within residential neighborhoods, commercial and industrial areas. It differs from the arterial system in that it penetrates neighborhoods and distributes trips from arterials to their ultimate destinations. Conversely, collectors also transition vehicular traffic from local streets onto the arterial system. The collector street system may carry local bus routes. Service on collectors has relatively moderate traffic volumes, average trip lengths and average operating speeds.

### *Local Streets*

The local street system comprises all roadways not in one of the higher systems. It provides direct access to abutting land uses and connections to the higher order systems. It offers the lowest level of vehicular mobility and usually contains no bus routes. Service to through traffic is often discouraged on local streets. Service on local streets has relatively low average traffic volumes, short average trip length or minimal through traffic movements and high land access for abutting property.

### **Level of Service**

Level of Service (LOS) standards can be determined for various public facilities. Within the Miami urbanized area, level of service measurements are maintained for the automobile, however the Miami-Dade Transportation Plan for the Year 2025 also places special emphasis on meeting the needs of those individuals who walk or bike for mobility. Therefore, the Long Range Transportation Plan conducted an inventory of existing conditions for all roads within the MPO's long range street network, including those in the City of North Miami, to determine the bicycle and pedestrian levels of service for each segment. Level of Service standards for automobile, bicycle and pedestrian travel modes are discussed below.

### *Automobile Level of Service*

The *Traffic Engineering Handbook* (Institute of Transportation Engineers 1999) defines level of service for roadways as:

*“A qualitative measure that characterizes operational conditions within a traffic stream and perception of these*



*conditions by motorists and passengers. The descriptions of individual levels of service characterize these conditions in terms of factors such as speed and travel time, freedom to maneuver, traffic interruptions and comfort and convenience.”*

This definition can be further simplified as the ratio of traffic volume to roadway capacity. The six different levels of service are described below:

- **Level of Service A.** This LOS represents an ideal condition of primarily free-flow traffic operations at average travel speeds. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream and delays at intersections are minimal.
- **Level of Service B.** This LOS represents reasonably stable, unimpeded traffic flow at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome.
- **Level of Service C.** Traffic flow is stable but drivers are becoming restricted in their choice of speeds and ability to maneuver. This service level is often selected as being an appropriate criterion for roadway design purposes.
- **Level of Service D.** Most motorists would consider this LOS unsatisfactory, as traffic flow is unstable. Driving speeds are tolerable for short periods but are subject to sudden variance. Time delays do occur due to high volumes of traffic. The ability to maneuver and choose speed is severely restricted.
- **Level of Service E.** Traffic flow is unstable as speeds and flow rates vary. Traffic flow has either stopped or is maintained at a low speed. There is little independence in selection of speeds or ability to maneuver. Driving comfort is low and accident potential is high due to limited space between vehicles and rapidly changing speeds. The roadway may act as a storage area resulting from downstream congestion. Generally, a facility at Level of Service E is operating at or above capacity.

- **Level of Service F.** Traffic flow has generally come to a stopped condition, but will have slight inconsistent movement. No independence in selection of speeds or ability to maneuver exists at this level of service. Driving comfort is low and accident potential is high due to limited space between vehicles and rapidly changing speeds. The roadway is congested. Generally, a facility at Level of Service F is operating above capacity.

### *Bicycle Level of Service*

Bicycle level of service measurements were performed by the Miami-Dade County MPO to assign a level of service, A through F, to all arterial and collector streets within the City of North Miami. Level of service was calculated based on six factors including recorded traffic volumes, percent 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 for bicyclists is described in the Table 2-1.

**Table 2-1: Bicycle Level of Service Classifications**

Level of Service	Range of Scores
A	$\leq 1.5$
B	$> 1.5$ and $\leq 2.5$
C	$> 2.5$ and $\leq 3.5$
D	$> 3.5$ and $\leq 4.5$
E	$> 4.5$ and $\leq 5.5$
F	$> 5.5$

Source: 2002 FDOT Quality/Level of Service Manual

### *Pedestrian Level of Service*

Miami-Dade MPO assigned a level of service, A through F, to all arterial and collector streets within the City of North Miami. Level of service was calculated based on five factors including 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 by 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 for pedestrians is described in the Table 2-2.

**Table 2-2: Pedestrian Level of Service Classifications**

Level of Service	Range of Scores
A	$\leq 1.5$
B	$> 1.5$ and $\leq 2.5$
C	$> 2.5$ and $\leq 3.5$
D	$> 3.5$ and $\leq 4.5$
E	$> 4.5$ and $\leq 5.5$
F	$> 5.5$

Source: 2002 FDOT Quality/Level of Service Manual

## EXISTING TRANSPORTATION DATA REQUIREMENTS

### Existing Transportation Map Series

The following series of maps represent the existing conditions for the transportation network on a multi-modal basis. This includes the roadway system, public transit system and bicycle and pedestrian facilities within the City of North Miami.

- **Map 2-1: Major Thoroughfares by Number of Lanes (2005)** identifies each major thoroughfare within the City by the number of through lanes for the facility.
- **Map 2-2: Major Thoroughfares by Functional Classification (2005)** identifies arterial and collector streets and their functional classification for each facility. The functional classification system indicates the role of each thoroughfare in meeting current travel demands, assists in defining land use relationships and reveals the jurisdiction responsible for maintenance.

- **Map 2-3: Limited Access Facilities, Significant Parking Facilities (2005)** delineates the location of the Interstate 95, which transects the City of North Miami. Significant parking facilities were also identified at Florida International University (surface parking), Johnson and Wales University (5-story parking garage) and some on-street parking in the downtown commercial area (NE 125th Street).
- **Map 2-4: Major Trip Generators and Attractors (2005)** identifies the location of the major traffic generators/attractors in North Miami including the Florida International University (FIU) Biscayne Bay Campus, Johnson and Wales University and the downtown area/commercial corridors within the City (NE 125th Street, West Dixie Highway, Biscayne Boulevard and NW 7th Avenue).
- **Map 2-5a: Existing Regional Transit Facilities (2006)** illustrates the public transit service within the City of North Miami. The City is served by 18 Metrobus routes, including routes 2, 3, 9, 10, 16, 17, 28, 75, 77, 83, 93 (Biscayne Max), 95 (Aventura Mall), 105 (E), 107 (G), 108 (H), 122 (V), 246 (Night Owl) and 277 (7 Max). Six routes run along Interstate 95, but do not provide boarding or alighting opportunities within the City. Currently no public transit terminals or transfer stations exist within the boundaries of North Miami.
- **Map 2-5b: Existing NoMi Circulator (2006)** illustrates the local transit circulator service within the City of North Miami. The NoMi Express service area includes those areas not currently served by Miami-Dade Transit with limited destinations outside of the City limits. The service consists of four routes that divide the City into four districts.
- **Map 2-6: Existing Bicycle Facilities (2006)** identifies existing bicycle facilities located within the City of North Miami. Several bicycle facilities were identified; however, formal connections between many of these facilities appear to be missing.
- **Map 2-7: Existing Pedestrian Facilities (2006)** delineates the pedestrian facilities within North Miami. The pedestrian network within the City is

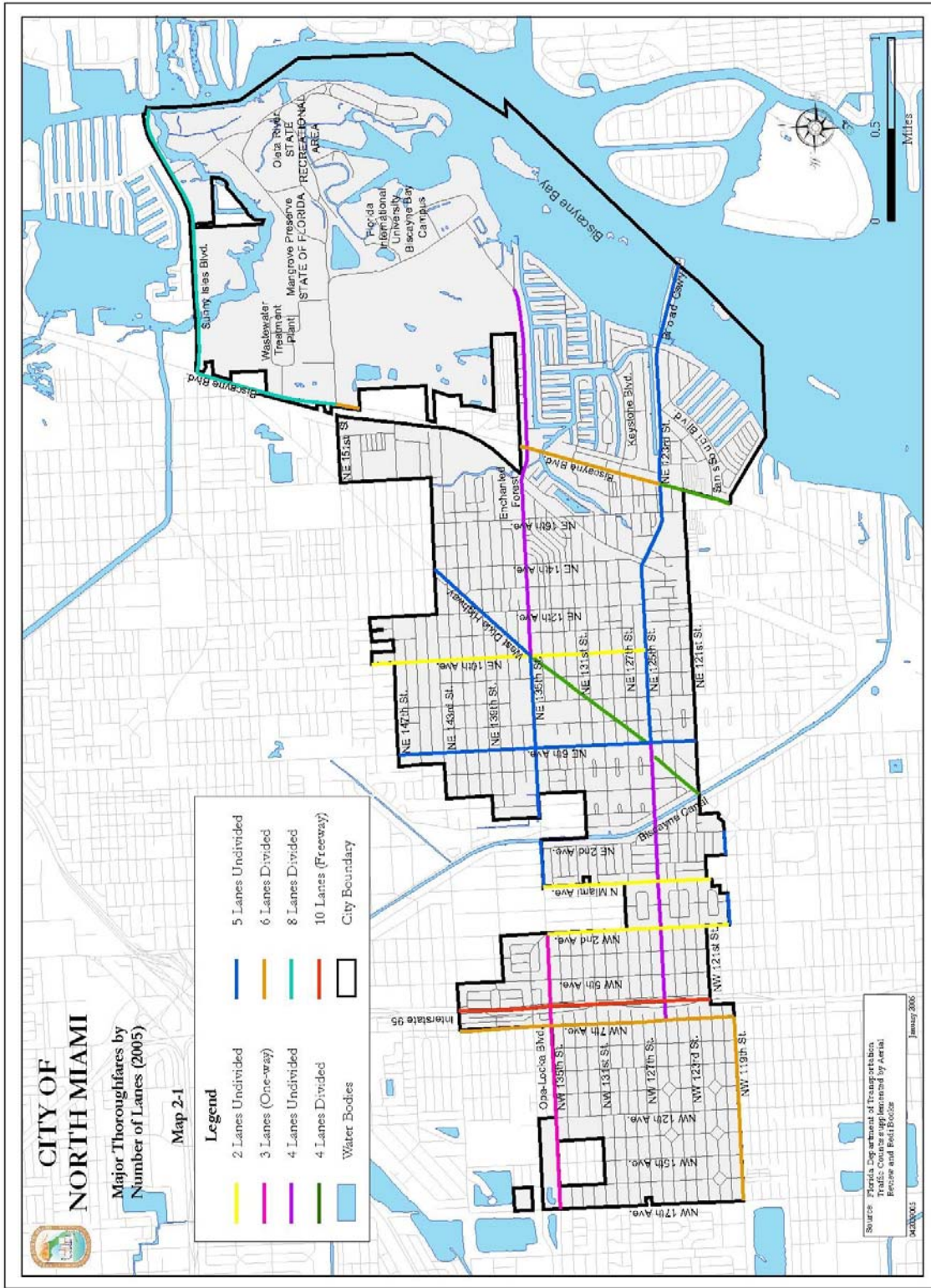
excellent with the majority of local and collector streets throughout the area offering sidewalks on both sides of the roadway.

- **Map 2-8: Existing Vehicular Levels of Service on Major Thoroughfares (2006)** illustrates existing daily (AADT) levels of service calculated for major roadways within the City of North Miami.
- **Map 2-9: Existing Bicycle Levels of Service (2006)** illustrates level of service calculations conducted by the Miami-Dade County MPO for major roadways within the City of North Miami.
- **Map 2-10: Existing Pedestrian Levels of Service (2006)** illustrates level of service calculations conducted by the Miami-Dade County MPO for major roadways within the City of North Miami.
- **Map 2-11: Freight/Passenger Rail Facilities (2006)** illustrates one rail corridor operated by the Florida East Coast Railroad within the City of North Miami.
- **Map 2-12: Hurricane Evacuation Routes (2006)** delineates the County's designated local and regional transportation facilities critical to the evacuation of the coastal population prior to an impending disaster. Major evacuation routes within North Miami include State Road 922 (NE 123rd/125th Street) and Interstate 95.

*Airport and Port Facilities.*

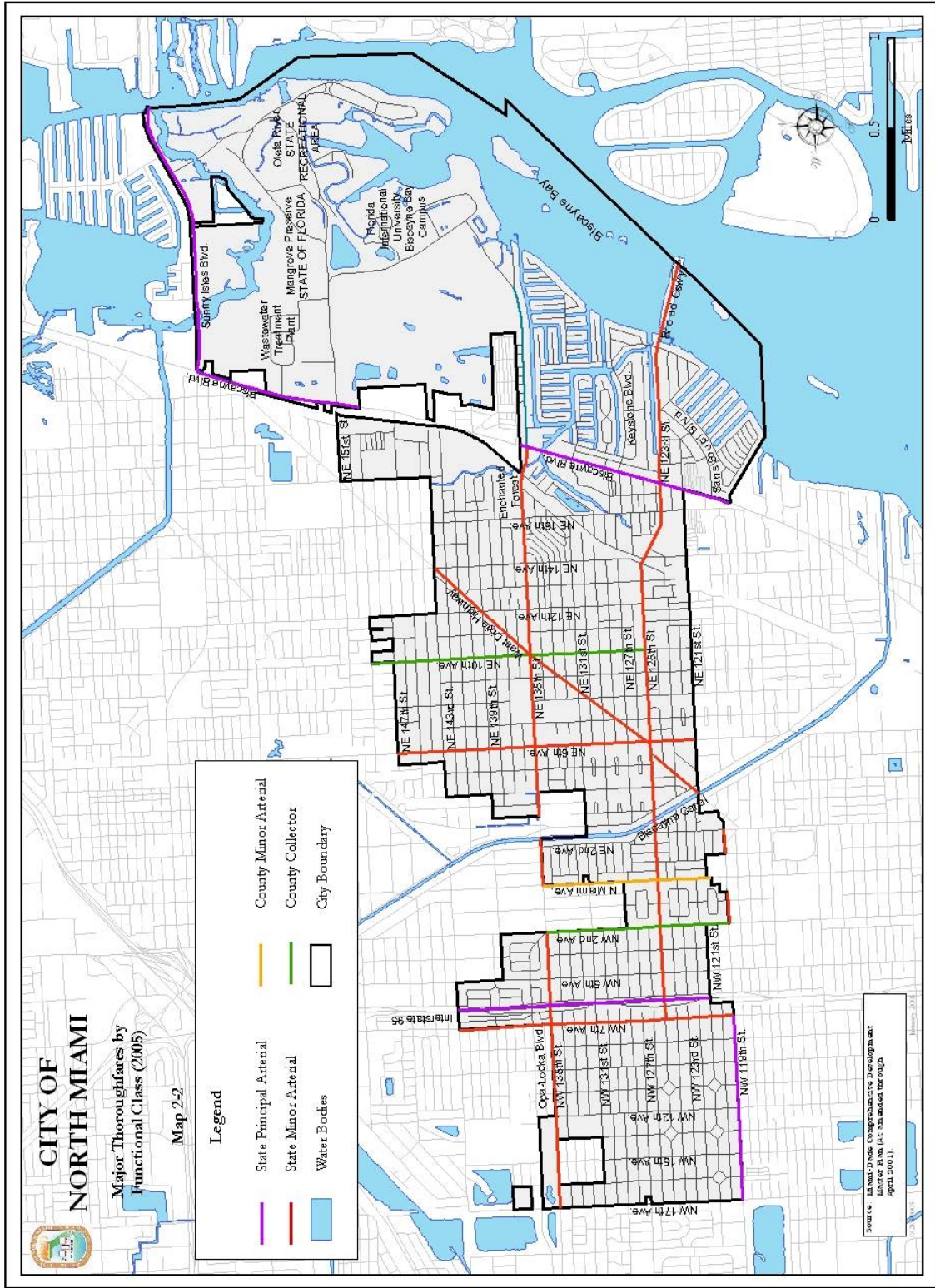
The City of North Miami has no airport or seaport facilities within its municipal boundaries, therefore there are no associated data, analysis, or maps regarding these facilities presented in the City's Comprehensive Plan.

Map 2-1: Major Thoroughfares by Number of Lanes (2005)

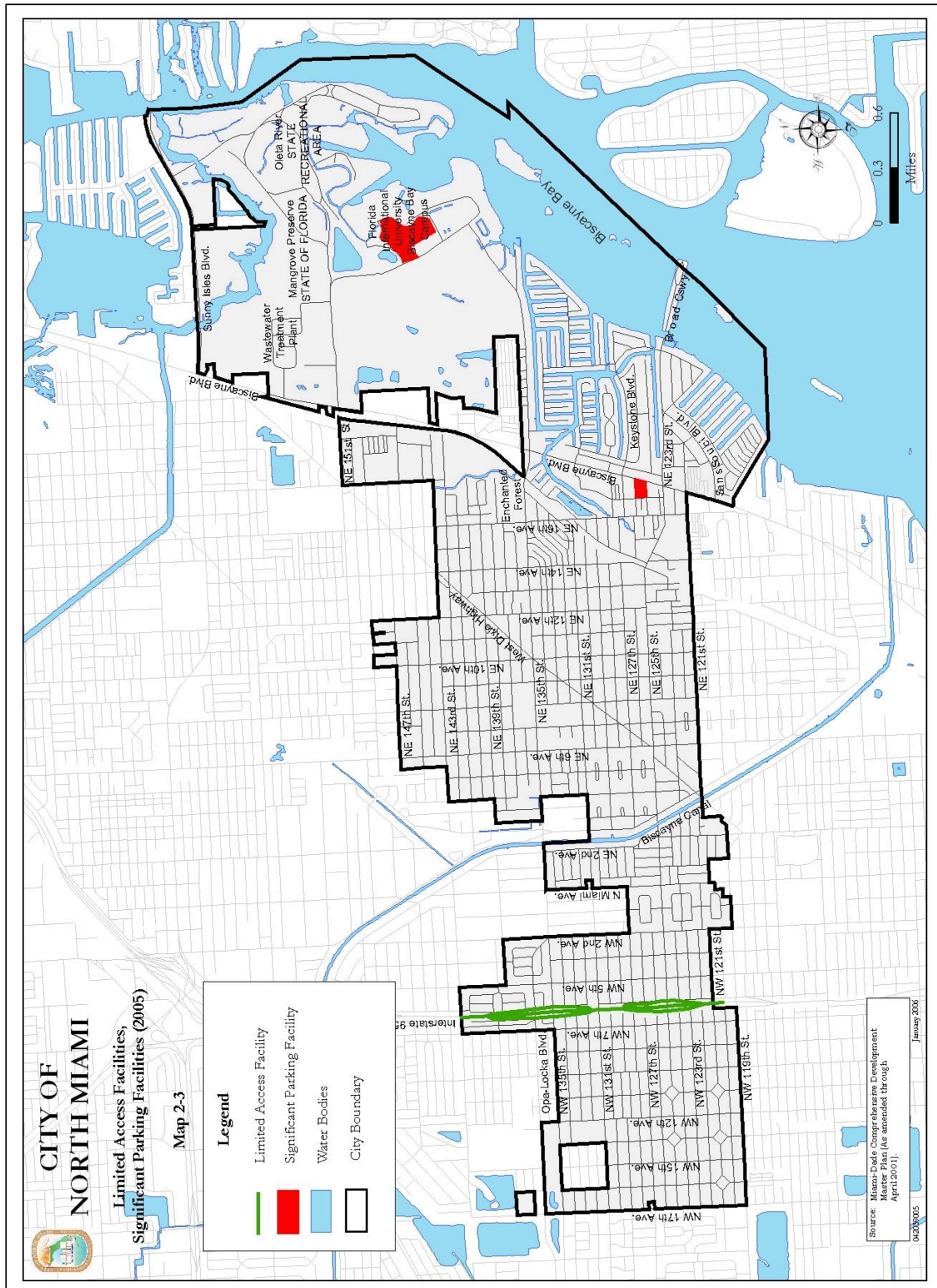




Map 2-2: Major Thoroughfares by Functional Classification (2005)

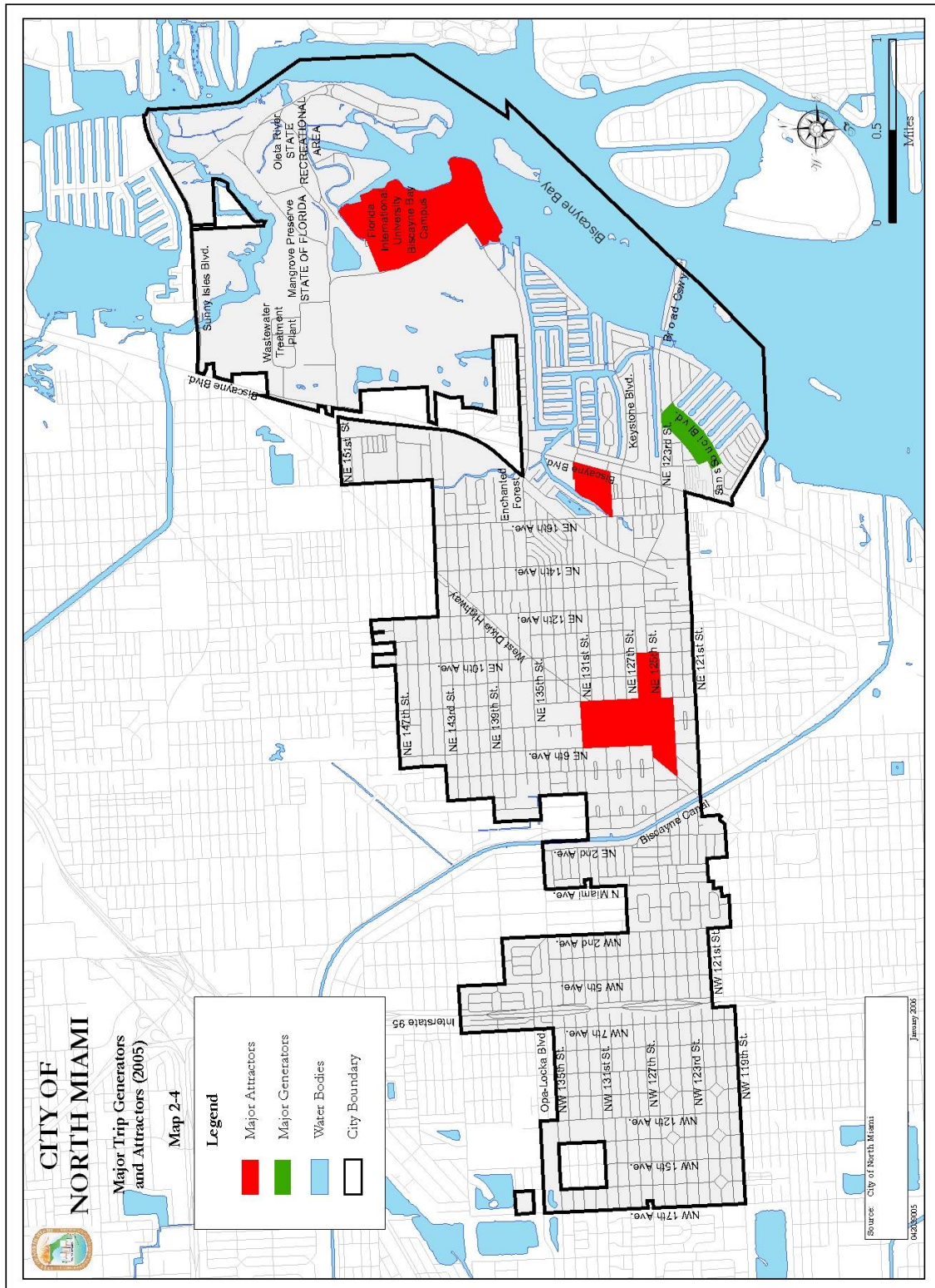


Map 2-3: Limited Access Facilities, Significant Parking Facilities (2005)

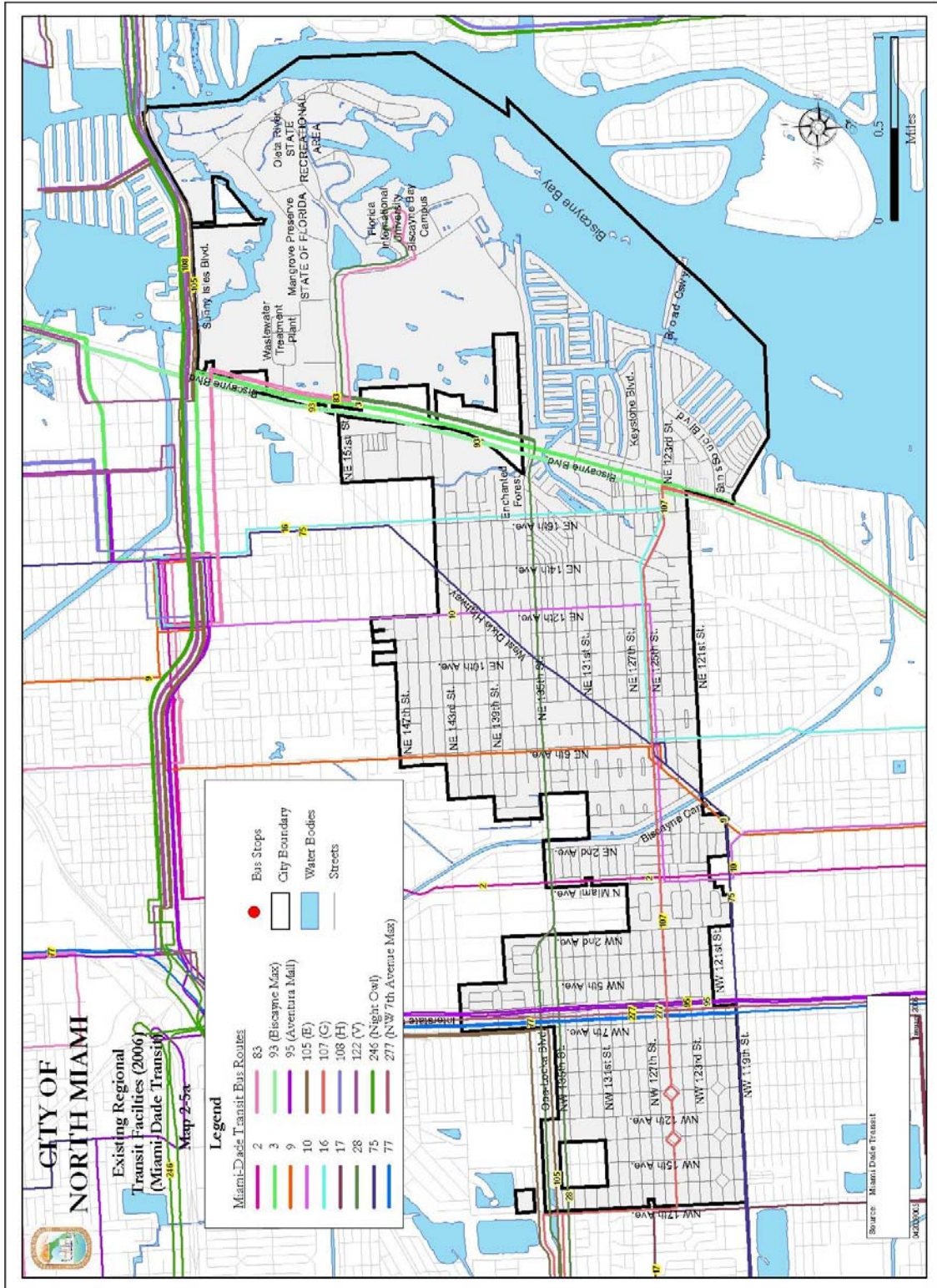




Map 2-4: Major Trip Generators and Attractors (2005)

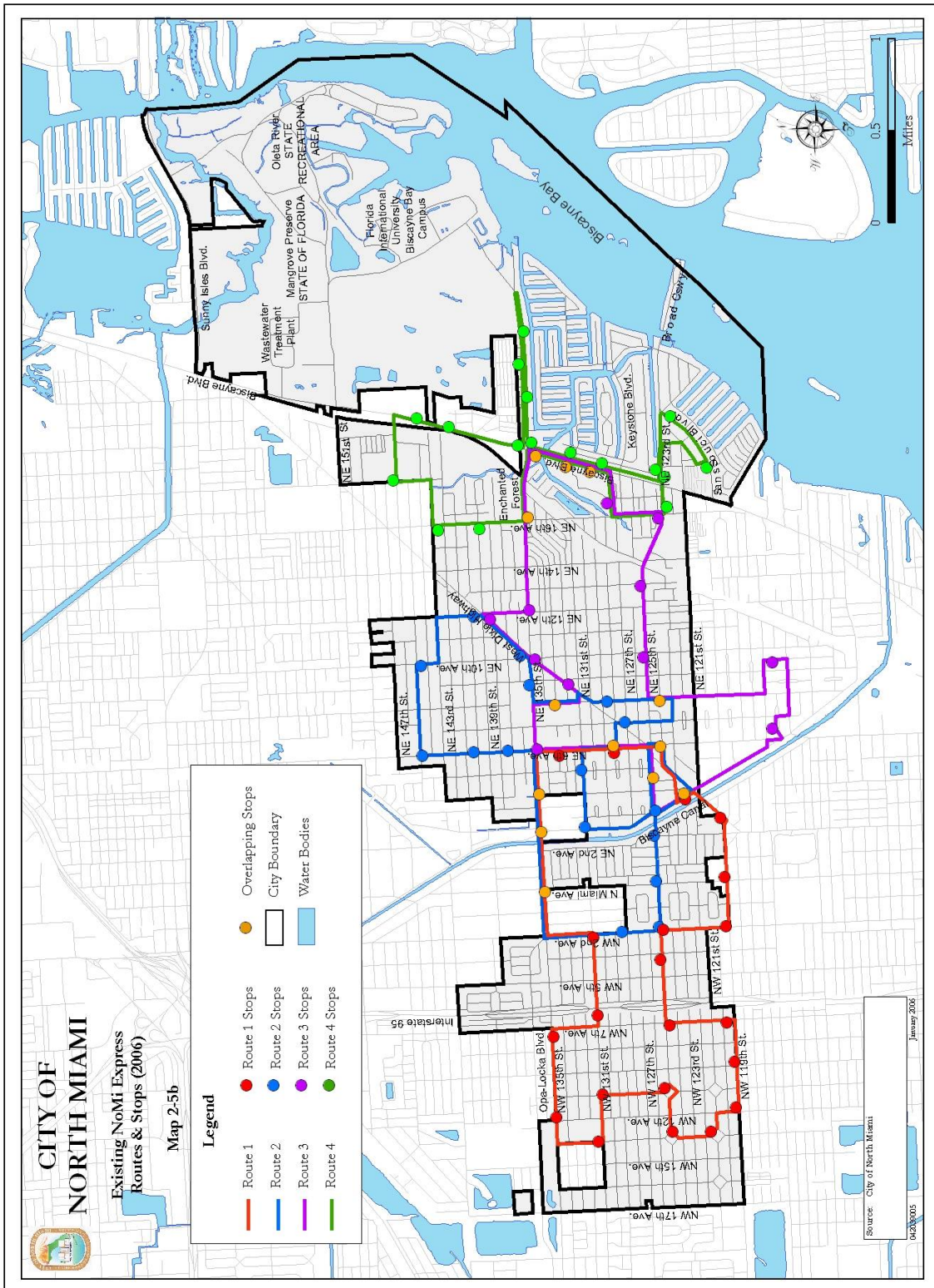


Map 2-5a: Existing Regional Transit Facilities (2006)

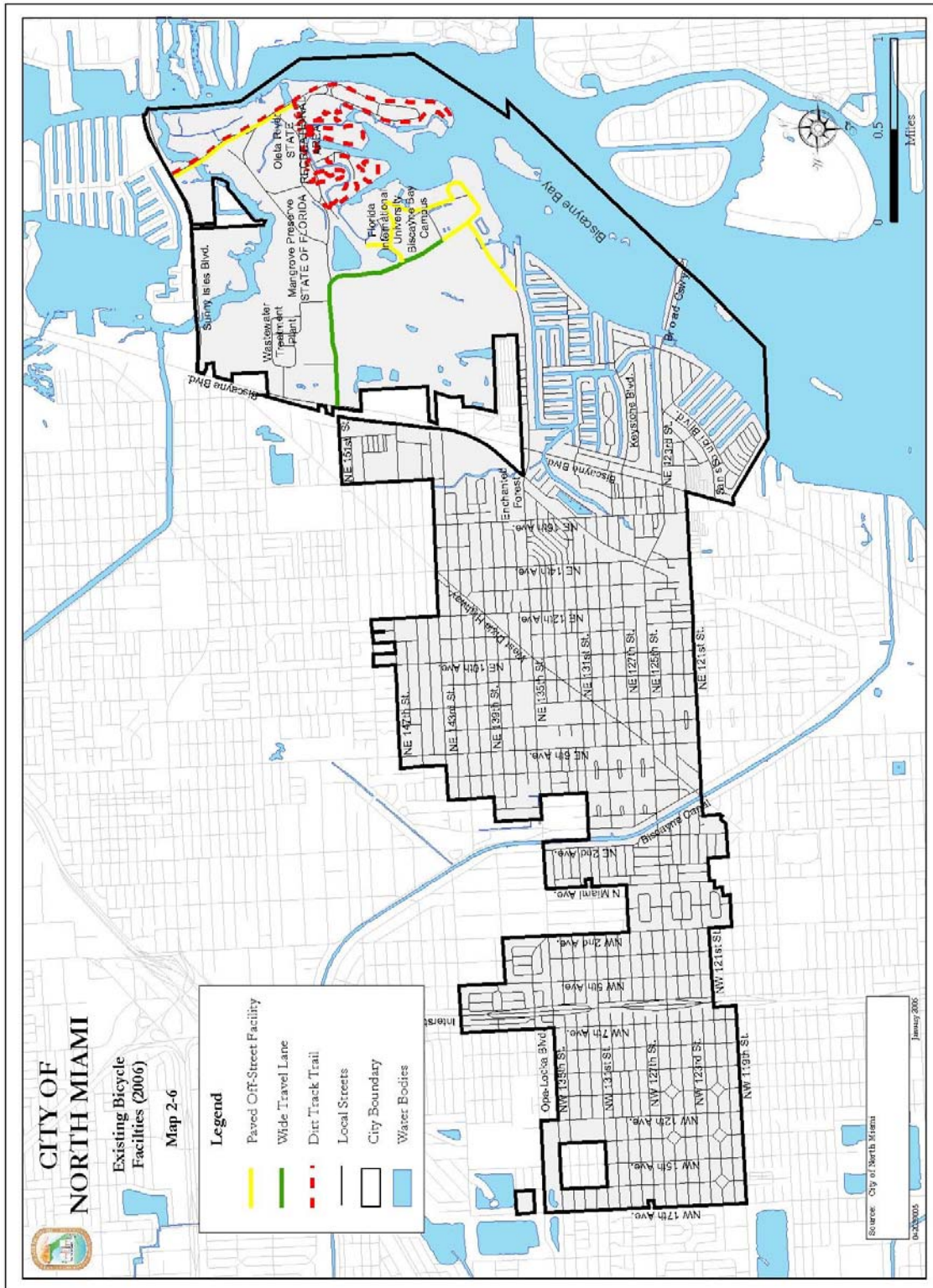




Map 2-5b: Existing NoMi Circulator (2006)

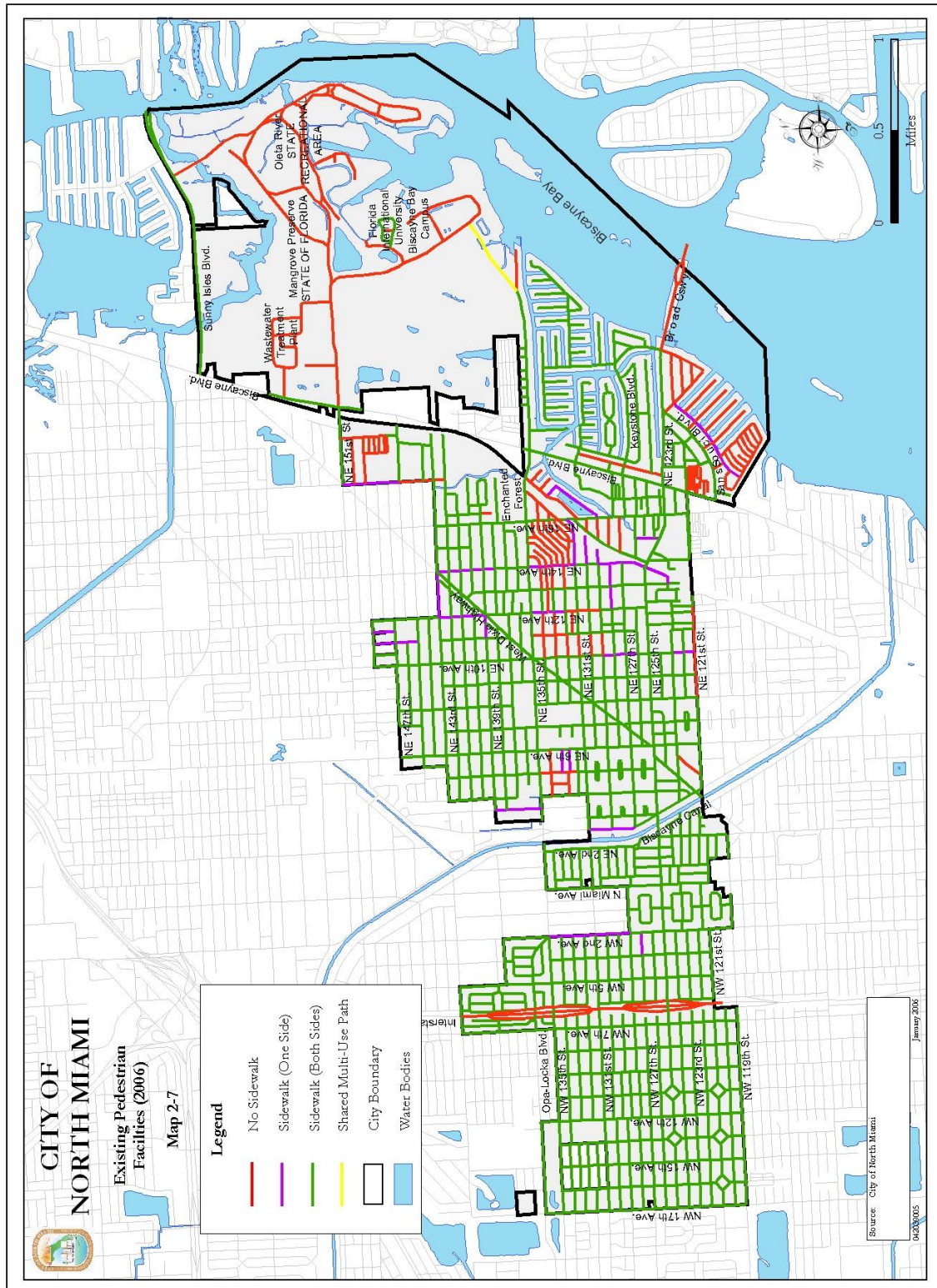


Map 2-6: Existing Bicycle Facilities (2006)

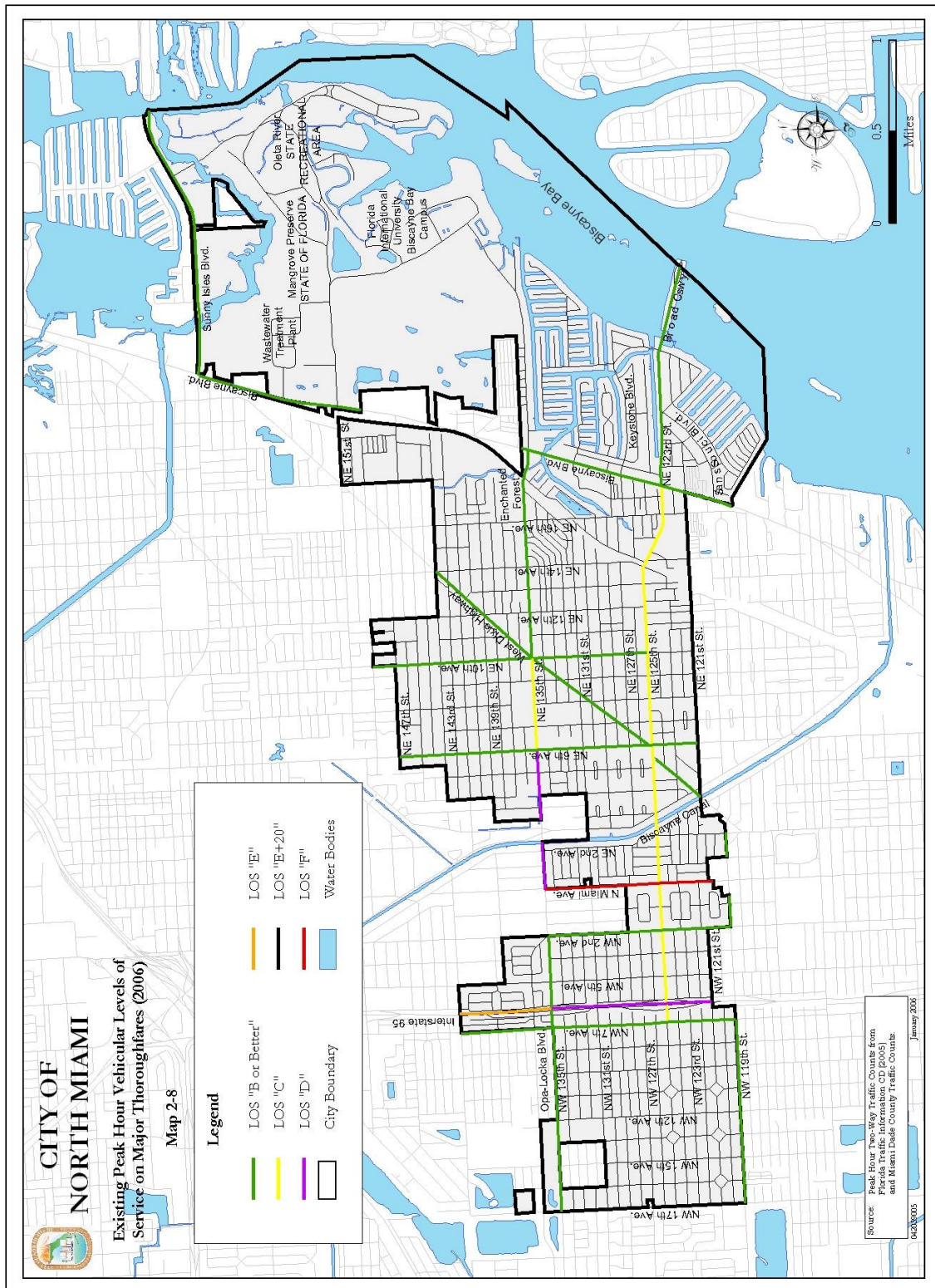




Map 2-7: Existing Pedestrian Facilities (2006)

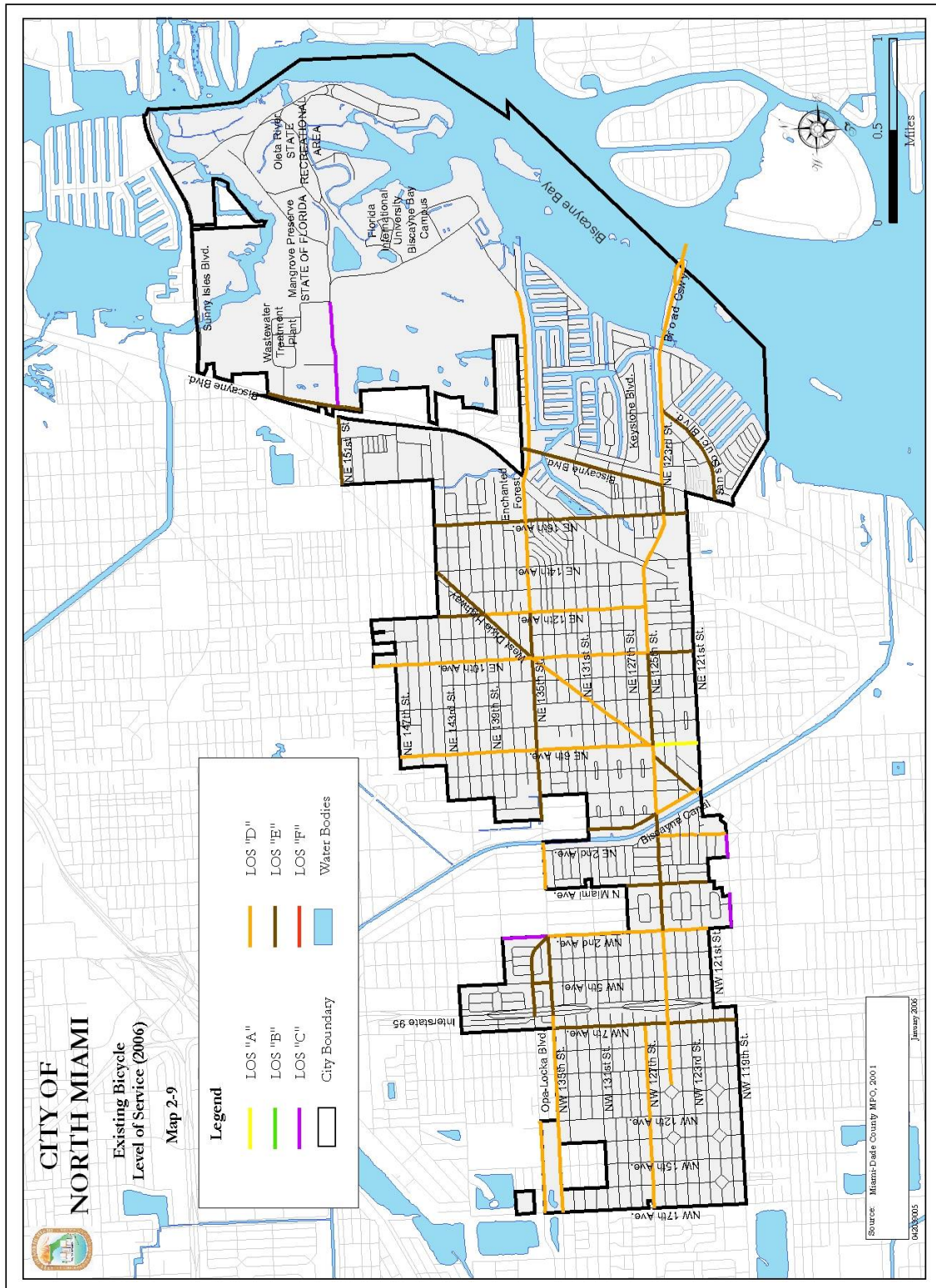


Map 2-8: Existing Vehicular Levels of Service on Major Thoroughfares (2006)

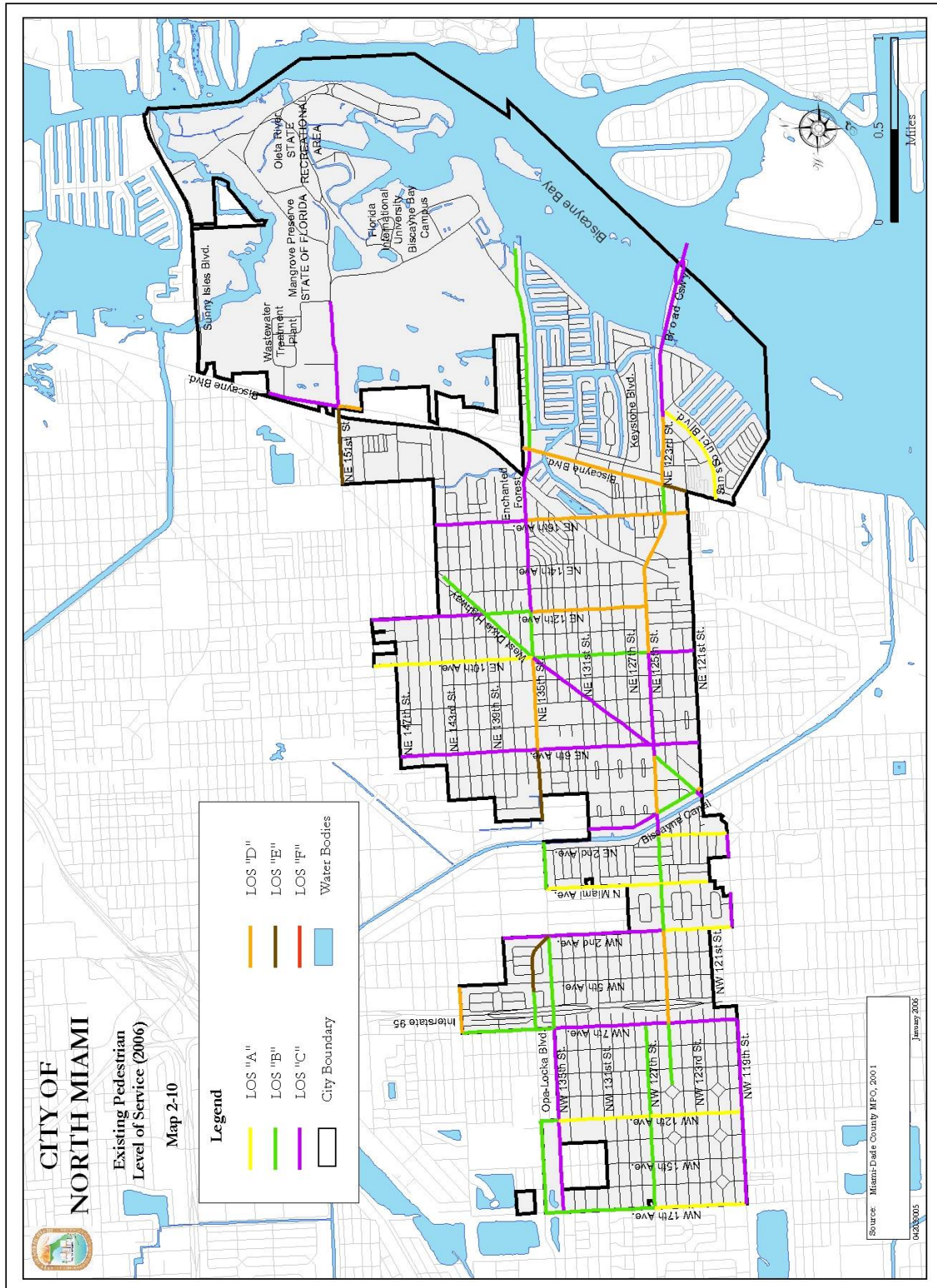




Map 2-9: Existing Bicycle Levels of Service (2006)

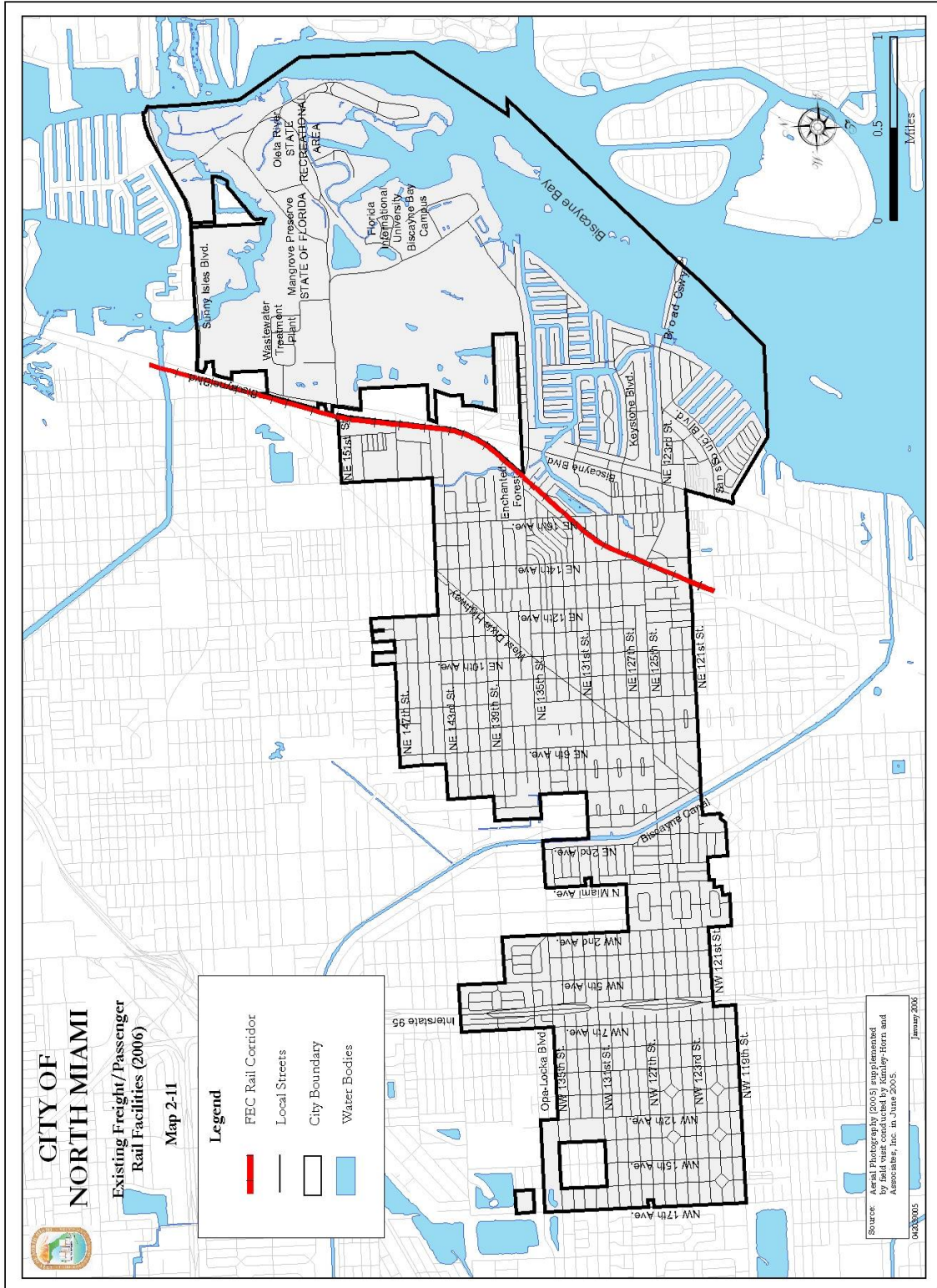


Map 2-10: Existing Pedestrian Levels of Service (2006)

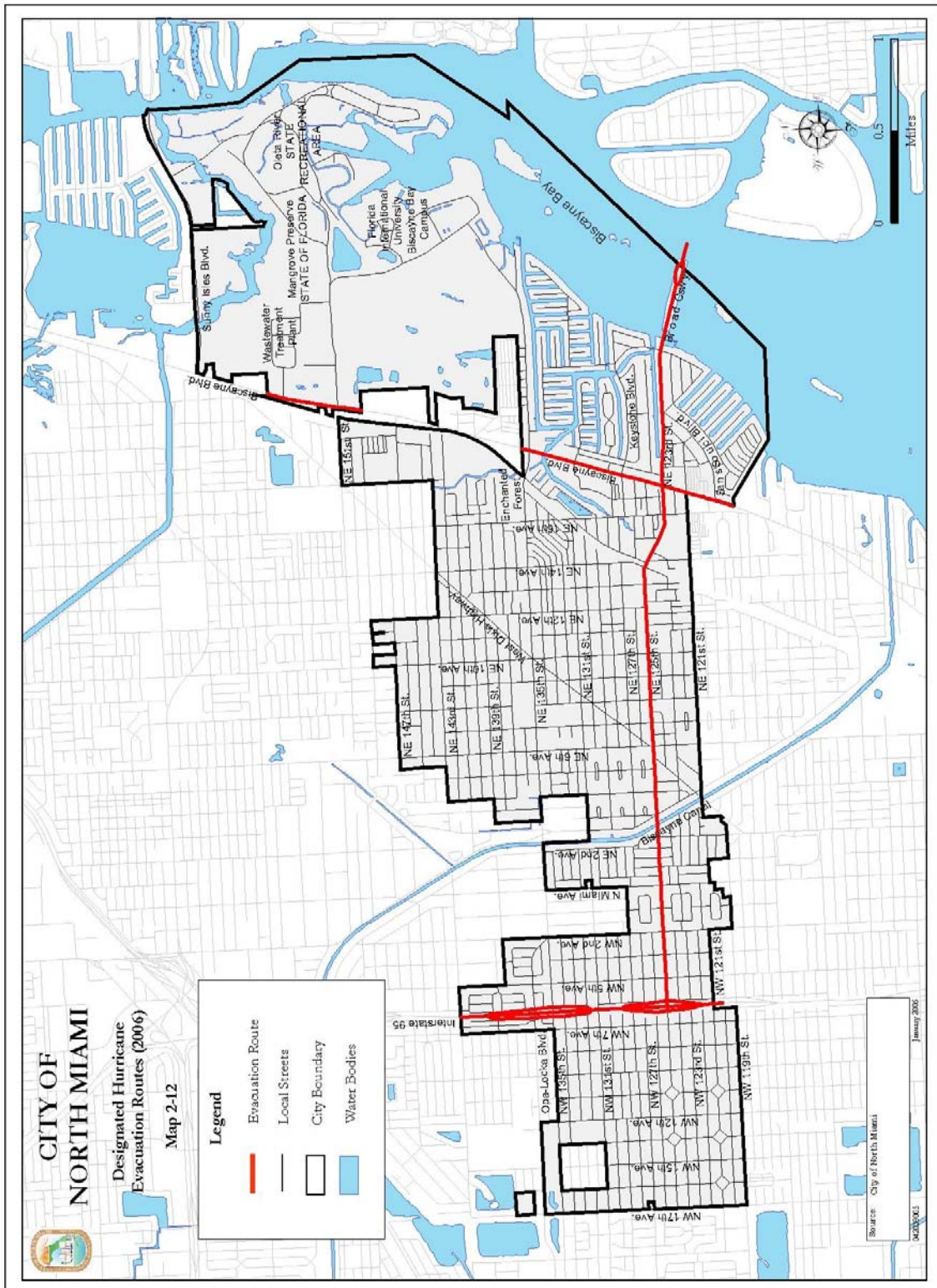




Map 2-11: Freight/Passenger Rail Facilities (2006)



Map 2-12: Hurricane Evacuation Routes (2006)



### **Analysis of Existing Transportation Systems**

This Transportation Element DIA for the City of North Miami has utilized information and analysis supplied by the Miami-Dade Metropolitan Planning Organization and Miami-Dade County. These resources have been used for information that addresses countywide growth trends, travel patterns, and countywide land use and transportation alternatives. North Miami also utilized these resources considering issues such as:

- existing and projected intermodal deficiencies and needs;
- analysis of the transportation system levels of service and system needs based upon the future land use categories; and
- analysis of how North Miami will maintain adopted levels of service standards for roads and transit facilities, which are dependent on alternative land use strategies.

#### *Average Peak Hour Vehicle Trips*

Table 2-3 presents the number of lanes and functional classification for major thoroughfares within the City of North Miami. Table 2-4 presents peak hour trip volumes and level of service grades for those roadways.

#### *Level of Service Calculation Methodology*

Level of service for major thoroughfares within the City was measured using volume to capacity (v/c) ratios for local roadways defined in the Miami-Dade Transportation Plan to the Year 2025. Traffic volumes (2004) were collected from the Florida Department of Transportation Traffic Count 2005 CD and were supplemented with traffic counts obtained from the Miami-Dade County Traffic Division. Roadway capacities for this calculation were obtained from the FDOT 2002 Quality/Level of Service Handbook (FDOT Q/LOS Tables 4-1 and 4-4). This methodology is generally accepted as a preliminary approach. Based on this analysis, the LOS for each roadway in Table 2-4 was determined.

#### *Levels of Service and System Needs Based Upon Existing Design and Operating Capacity*

The Metro-Miami-Dade Service Concurrency Management Program establishes adopted level of service standards for the County. The City of North Miami

recognizes this program for evaluating the traffic impacts to State and County roads that are associated with development petitions inside City limits. The section of Miami-Dade County located east of SR 826 (Palmetto Expressway) and NW/SW 77th Avenue, excluding the area north of SR 826 and west of Interstate 95, is defined as the Urban Infill Area (UIA). The entire City of North Miami lies within this area. The adopted level of service within the UIA is LOS E (100 percent of capacity). Where public transit service exists in the UIA operating with headways of 20 minutes or less, roadways located less than one-half mile of the service may operate at 120 percent of their capacity. Furthermore, on roadways parallel to exceptional transit service (i.e. commuter rail/express bus) the acceptable level of service is 150 percent of their capacity. The currently adopted level of service standard for all other roadways under the City's jurisdiction is LOS E. 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 a part of the TCEA, the City adopted several policies to address the mitigation of traffic issues associated with concurrency exception. The TCEA is exempt from traffic concurrency requirements for development applications. In return, the City will continue to actively pursue the goals and objectives contained in the Transportation Element's goals, objectives, and policies to create a sustainable development pattern within the City supportive of public transit and non-motorized travel modes such as bicycle and pedestrian linkages. The LOS standard will be used however, to monitor and analyze the roadways for mobility.

Table 2-3: Number of Lanes &amp; Functional Classification

Roadway	Segment	Number of Lanes (2006)	Adopted LOS	Functional Class (2006)
US 1 / SR 5	South of NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street	4LD	E+50 <sup>(1)</sup>	State Principal Arterial
US 1 / SR 5	NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street to NE 151 <sup>st</sup> Street	6LD	E+50 <sup>(1)</sup>	State Principal Arterial
US 1 / SR 5	NE 151 <sup>st</sup> Street to NE 163 <sup>rd</sup> Street	8LD	E+50 <sup>(1)</sup>	State Principal Arterial
Interstate 95	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	10LX	E	State Principal Arterial
Interstate 95	NW 135 <sup>th</sup> Street to North of NW 151 <sup>st</sup> Street	10LX	E	State Principal Arterial
NW 135 <sup>th</sup> Street	NW 17 <sup>th</sup> Avenue to NW 2 <sup>nd</sup> Avenue	3L - One-way	E	State Minor Arterial
NW 135 <sup>th</sup> Street	NW 2 <sup>nd</sup> Avenue to NE 6 <sup>th</sup> Avenue	5 LU*	E	State Minor Arterial
NE 135 <sup>th</sup> Street	NE 6 <sup>th</sup> Avenue to NE 10 <sup>th</sup> Avenue	5 LU*	E	State Minor Arterial
NE 135 <sup>th</sup> Street	NE 10 <sup>th</sup> Avenue to US 1/SR 5	4LU	E	State Minor Arterial
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	NW 7 <sup>th</sup> Avenue to NE 6 <sup>th</sup> Avenue	4LU	E+20 <sup>(2)</sup>	State Minor Arterial
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	NE 6 <sup>th</sup> Avenue to US 1/SR 5	5 LU*	E+20 <sup>(2)</sup>	State Minor Arterial
NE 125 <sup>th</sup> / 123 <sup>rd</sup> Street	US 1/SR 5 to Broad Causeway	5 LU*	E	State Minor Arterial
West Dixie Highway	NE 119 <sup>th</sup> Street to NE 10 <sup>th</sup> Avenue	4LD	E+20 <sup>(2)</sup>	State Minor Arterial
West Dixie Highway	NE 10 <sup>th</sup> Avenue to NE 163 <sup>d</sup> Street	5 LU*	E	State Minor Arterial
NW 7 <sup>th</sup> Avenue / US 441	NE 119 <sup>th</sup> Street to NE 135 <sup>th</sup> Street	6LD	E+50 <sup>(1)</sup>	State Minor Arterial
NW 7 <sup>th</sup> Avenue / US 442	NE 135 <sup>th</sup> Street to NE 143 <sup>rd</sup> Street	6LD	E+50 <sup>(1)</sup>	State Minor Arterial
NE 6 <sup>th</sup> Avenue / SR 915	NE 121 <sup>st</sup> Street to NE 135 <sup>th</sup> Street	5 LU*	E+20 <sup>(2)</sup>	State Minor Arterial
NE 6 <sup>th</sup> Avenue / SR 916	NE 135 <sup>th</sup> Street to NE 147 <sup>th</sup> Street	5 LU*	E+20 <sup>(2)</sup>	State Minor Arterial
NW 119 <sup>th</sup> Street / SR 924	NW 17 <sup>th</sup> Avenue to NW 7 <sup>th</sup> Avenue	6LD	E	State Principal Arterial
NW 119 <sup>th</sup> Street / SR 924	Interstate 95 to W. Dixie Highway	5 LU*	E	State Minor Arterial
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	U.S. 1 to NE 35 <sup>th</sup> Avenue	8LD	E+20 <sup>(2)</sup>	State Principal Arterial
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	NE 35 <sup>th</sup> Avenue to Collins Avenue	8LD	E+20 <sup>(2)</sup>	State Principal Arterial
NE 10 <sup>th</sup> Avenue	NE 125 <sup>th</sup> Street to North City Limit	2LU	E+20 <sup>(2)</sup>	County Collector
North Miami Avenue	NW 119 <sup>th</sup> Street to NW 125 <sup>th</sup> Street	2LU	E+20 <sup>(2)</sup>	County Minor Arterial
North Miami Avenue	NW 125 <sup>th</sup> Street to North City Limit	2LU	E+20 <sup>(2)</sup>	County Minor Arterial
NW 2 <sup>nd</sup> Avenue	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	2LU	E+20 <sup>(2)</sup>	County Collector

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



Table 2-4: Existing Traffic Volumes

Roadway	Segment	Adopted LOS	Adopted Pk. Hr. LOS Volume	Peak Hour Two-Way Volume	V/C Ratio	Peak Hour Two-Way LOS
US 1 / SR 5	South of NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> Street	E+50 <sup>(1)</sup>	4,680	2,933	0.63	B
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>	7,035	3,830	0.54	B
US 1 / SR 5	NE 151 <sup>st</sup> Street to NE 163 <sup>rd</sup> Street	E+50 <sup>(1)</sup>	9,090	3,988	0.44	B
Interstate 95	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	E	19,310	16,310	0.84	D
Interstate 95	NW 135 <sup>th</sup> Street to North of NW 151 <sup>st</sup> Street	E	19,310	17,771	0.92	E
NW 135 <sup>th</sup> Street	NW 17 <sup>th</sup> Avenue to NW 2 <sup>nd</sup> Avenue	E	2,952	1,548	0.52	B
NW 135 <sup>th</sup> Street	NW 2 <sup>nd</sup> Avenue to NE 6 <sup>th</sup> Avenue	E	3,270	2,903	0.89	D
NE 135 <sup>th</sup> Street	NE 6 <sup>th</sup> Avenue to NE 10 <sup>th</sup> Avenue	E	3,270	2,350	0.72	C
NE 135 <sup>th</sup> Street	NE 10 <sup>th</sup> Avenue to US 1/SR 5	E	3,107	1,560	0.50	B
NE 135 <sup>th</sup> Street	US 1/SR 5 to FIU	E	3,270	N/A	N/A	N/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>	3,431	2,626	0.77	C
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>	3,612	2,613	0.72	C
NE 125 <sup>th</sup> /123 <sup>rd</sup> Street	US 1/SR 5 to Broad Causeway	E	3,010	1,754	0.58	B
West Dixie Highway	NE 119 <sup>th</sup> Street to NE 135 <sup>th</sup> Street	E+20 <sup>(2)</sup>	3,924	2,037	0.52	B
West Dixie Highway	NE 135 <sup>th</sup> Street to NE 163 <sup>d</sup> Street	E	3,270	1,749	0.53	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>	7,380	3,607	0.49	B
NW 7 <sup>th</sup> Avenue / US 442	NE 135 <sup>th</sup> Street to NE 143 <sup>rd</sup> Street	E+50 <sup>(1)</sup>	7,380	2,171	0.29	B
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>	3,924	1,543	0.39	B
NE 6 <sup>th</sup> Avenue / SR 916	NE 135 <sup>th</sup> Street to NE 147 <sup>th</sup> Street	E+20 <sup>(2)</sup>	3,924	1,543	0.39	B
NW 119 <sup>th</sup> Street / SR 924	NW 17 <sup>th</sup> Avenue to NW 7 <sup>th</sup> Avenue	E	4,920	3,194	0.65	B
NW 119 <sup>th</sup> Street / SR 924	Interstate 95 to W. Dixie Highway	E	3,270	1,718	0.53	B
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	U.S. 1 to NE 35 <sup>th</sup> Avenue	E+20 <sup>(2)</sup>	7,632	4,227	0.55	B
NE 163 <sup>rd</sup> Street / Sunny Isles Blvd.	NE 35 <sup>th</sup> Avenue to Collins Avenue	E+20 <sup>(2)</sup>	7,632	2,834	0.37	B
NE 10 <sup>th</sup> Avenue	NE 125 <sup>th</sup> Street to North City Limit	E+20 <sup>(2)</sup>	1,776	546	0.31	B
North Miami Avenue	NW 119 <sup>th</sup> Street to NW 125 <sup>th</sup> Street	E+20 <sup>(2)</sup>	1,776	2,902	1.63	F
North Miami Avenue	NW 125 <sup>th</sup> Street to North City Limit	E+20 <sup>(2)</sup>	1,776	2,902	1.63	F
NW 2 <sup>nd</sup> Avenue	NW 119 <sup>th</sup> Street to NW 135 <sup>th</sup> Street	E+20 <sup>(2)</sup>	1,440	964	0.67	B

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 volumes obtained from FDOT Traffic Count Information CD (2005)
- (4) N/A means counts not available

*Existing Modal Split and Vehicle Occupancy Rates*

According to journey-to-work data collected in the 2000 Census, single occupant automobile trips account for 69.5 percent of all trips to-and-from-work reported by residents in North Miami. Carpools account for 14.5 percent, public transit for 11.0 percent, bicycles for 0.5 percent and walking for 2.5 percent. Approximately 2.0 percent reported working at home. The information reported in the 2000 Census is consistent with results from the Southeast Florida Regional Travel Characteristics Study. In this study, the average vehicle occupancy for Miami-Dade County was reported to be 1.34 persons per vehicle.

*Existing Public Transit Facilities and Routes*

Public transit within the City of North Miami exists in the form of bus transit. Transit service within the City is operated by two service providers. The County provides transit service through Miami-Dade Transit that covers most of the areas within the County. The City provides a free local transit circulator (NoMi Express) that serves areas within City limits and also a few areas outside the City. The analysis of the existing transit facilities and ridership information for the NoMi Express and MDT service are presented below.

*Miami-Dade Transit*

The City of North Miami is served by Miami-Dade Transit that enables regional travel by transit. The City is served by 18 Metrobus routes, including routes 2, 3, 9, 10, 16, 17, 28, 75, 77, 83, 93 (Biscayne Max), 95 (Aventura Mall), 105 (E), 107 (G), 108 (H), 122 (V), 246 (Night Owl) and 277 (7 Max). Six routes run along Interstate 95, but do not provide boarding or alighting opportunities within the City. The MDT routes are illustrated in Map 2-5a and 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 5:00 a.m. to 11:45 p.m. on the weekdays, 5:30 a.m. to 11:30 p.m. on Saturdays, and 5:30 am to 9:30 p.m. on Sundays. Ridership data from Miami-Dade Transit shows that

approximately 62,170 passengers used this route during the one-year period between December 2004 and October 2005.

- **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. Ridership data from Miami-Dade Transit shows that approximately 155,720 passengers used this route during the one-year period between December 2004 and October 2005.
- **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 a.m. on the weekdays, 5:00 a.m. to 1:00 a.m. on Saturdays and 5:15 a.m. to 11:00 p.m. on Sundays. Ridership data from Miami-Dade Transit shows that approximately 189,840 passengers used this route during the one-year period between December 2004 and October 2005.
- **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 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 a.m. on the weekdays and 5:30 a.m. to 12:30 a.m. on Saturdays and Sundays. Ridership data from Miami-Dade Transit shows that approximately 157,150 passengers used this route during the one-year period between December 2004 and October 2005.
- **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 4:45 a.m. to 11:15 p.m. on the weekdays, 5:15 a.m. to 11:30 p.m. on Saturdays, and



5:30 a.m. to 8:15 p.m. on Sundays. Ridership data from Miami-Dade Transit shows that approximately 224,810 passengers used this route during the one-year period between December 2004 and October 2005.

- **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 a.m. on the weekdays, 5:00 a.m. to 12:30 a.m. on Saturdays and Sundays. Ridership data from Miami-Dade Transit shows that approximately 48,250 passengers used this route during the one-year period between December 2004 and October 2005.
- **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 the weekdays and 6:00 a.m. to 7:45 p.m. on Saturdays and Sundays. Ridership data from Miami-Dade Transit shows that approximately 19,810 passengers used this route during the one-year period between December 2004 and October 2005.
- **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 5:00 a.m. to 12:00 a.m. on the weekdays and 6:15 a.m. to 10:15 p.m. on Saturdays and Sundays. Ridership data from Miami-Dade Transit shows that approximately 135,500 passengers used this route during the one-year period between December 2004 and October 2005.
- **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. Ridership data from Miami-Dade Transit shows that approximately 391,010 passengers used this route during the one-year period between December 2004 and October 2005.

- **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 5:00 a.m. to 12:15 a.m. on the weekdays and 6:00 a.m. to 12:30 a.m. on Saturdays and Sundays. Ridership data from Miami-Dade Transit shows that approximately 68,390 passengers used this route during the one-year period between December 2004 and October 2005.
- **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 5:45 a.m. to 8:15 p.m. Ridership data from Miami-Dade Transit shows that approximately 76,680 passengers used this route during the one-year period between December 2004 and October 2005.
- **Route 95/Aventura Mall** provides limited stop service along Interstate 95. This route provides service only on the weekdays between 5:45 a.m. to 9:00 p.m. It comprises of a total of six routes on Interstate 95.
- **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 9:45 p.m. on the weekdays and 9:00 a.m. to 7:45 p.m. on Saturdays and Sundays. Ridership data from Miami-Dade Transit shows

that approximately 19,700 passengers used this route during the one-year period between December 2004 and October 2005.

- **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 from 5:30 a.m. to 2:00 a.m. on the weekdays, 6:00 a.m. to 12:30 a.m. on Saturdays, and 6:00 a.m. to 12:30 p.m. on Sundays. Ridership data from Miami-Dade Transit shows that approximately 310,830 passengers used this route during the one-year period between December 2004 and October 2005.
- **Route 108/H** provides north-south service from Miami Gardens to South Beach. Within North Miami the route along NE 163rd Street/Sunny Isles Boulevard. The route operates seven days a week. Service is provided from 5:00 a.m. to 1:00 a.m. on the weekdays and 5:00 a.m. to 12:30 a.m. on Saturdays and Sundays. Ridership data from Miami-Dade Transit shows that approximately 30,970 passengers used this route during the one-year period between December 2004 and October 2005.
- **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. Ridership data from Miami-Dade Transit shows that approximately 2,740 passengers used this route during the one-year period between December 2004 and October 2005.
- **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 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. Ridership data from Miami-Dade Transit shows that approximately 4,880 passengers used this route during the one-year period between December 2004 and October 2005.

- **Route 277/7 Max** provides service within North Miami along NW 7<sup>th</sup> Avenue. It is a limited stop route that provides service between Golden Glades terminal and downtown Miami. This route operates only on weekdays from 5:15 a.m. to 10:15 a.m. and again from 2:45 p.m. to 7:45 p.m. Ridership data from Miami-Dade Transit shows that approximately 540 passengers used this route during the one-month period of October 2005.

#### *Peak Hour Capacities and Headways*

As mentioned above, Metrobus provides service to North Miami via 18 routes. Peak hour headways for these routes range between 7.5 and 60 minutes. During the a.m. peak hour there are approximately 169 buses serving the 18 routes. These vehicles have a combined peak hour capacity of approximately 7,605 passengers, assuming 45 passengers per vehicle. During the p.m. peak hour there are approximately 180 buses serving the 18 routes. These vehicles have a combined peak hour capacity of approximately 8,100 passengers, assuming 45 passengers per vehicle. Tables 2-5 through 2-7 show the transit service characteristics of the MDT routes on weekdays, Saturdays, and Sundays.

Table 2-5: Transit Service Characteristics Weekday

Route Name	Headway (minutes)			Total Peak Hour Vehicles	
	A.M. Peak	Mid-Day	P.M. Peak	A.M.	P.M.
2	15/60	15/60	15/50/70	7	8
3	15	15	15	18	20
9	12/30	30	12/24	14	17
10	30	30	30	5	5
16	15	20	15	10	11
17	12/30	30	30	11	12
28	30	30	30	4	4
75	30	30	30	8	8
77	7.5/15	15/30	7.5/15	19	22
83	15/30	30	15/30	12	13
93 (Biscayne Max)	15	30	15	10	10
95 (Aventura Mall)	--	--	--	11	9
105 (Route E)	30	30	30	9	9
107 (Route G)	30	30	30	8	9
108 (Route H)	20	20	20	11	11
122 (Route V)	30	30	30	6	6
246 (Night Owl)	--	--	--	--	--
277 (7 Max)	15	--	15	6	6

Source: Miami-Dade Transit Authority, November 2005

Table 2-6: Transit Service Characteristics Saturday

Route Name	Headway (minutes)			Total Peak Hour Vehicles	
	A.M. Peak	Mid-Day	P.M. Peak	A.M.	P.M.
2	20	20	20	4	4
3	15	15	15	17	17
9	30	30	30	6	6
10	30	30	30	5	5
16	30	30	30	5	5
17	30	30	30	6	6
28	60	60	60	2	2
75	30	30	30	5	5
77	15/30	15/30	15/30	10	10
83	30	30	30	6	6
105 (Route E)	30	30	30	6	6
107 (Route G)	30	30	30	7	8
108 (Route H)	20	20	20	11	11
246 (Night Owl)	--	--	--	--	--

Source: Miami-Dade Transit Authority, November 2005

Table 2-7: Transit Service Characteristics Sunday

Route Name	Headway (minutes)			Total Peak Hour Vehicles	
	A.M. Peak	Mid-Day	P.M. Peak	A.M.	P.M.
2	30	30	30	3	3
3	20	20	20	12	12
9	30	30	30	6	6
10	30	30	30	5	5
16	30	30	30	5	5
17	30	30	30	6	6
28	60	60	60	2	2
75	30	30	30	5	5
77	30/60	30/60	30/60	5	5
83	30	30	30	5	5
105 (Route E)	30	30	30	6	6
107 (Route G)	30	30	30	7	7
108 (Route H)	30	30	30	7	7
246 (Night Owl)	--	--	--	--	--

Source: Miami-Dade Transit Authority, November 2005

### *NoMi Express*

The City implemented the local transit circulator, NoMi Express, in November 2004. The NoMi Express service area includes those areas not currently served by Miami-Dade Transit with limited destinations outside of the City limits. The service consists of four 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 destinations of this service include schools, community centers, shopping centers, and public parks. The NoMi Express routes are illustrated in Map 2-5b and described below:

- Route 1** serves the western portions of the City and runs on portions along NW 131st Street, NW 135th Street, NE 125th Street, NW 119th Street, NW 13th Avenue, and NE 6th Avenue. The major destinations served include Claude Pepper Park, NW 131st fire station, Sunkist Grove Community Center, First Christ KII School, Thomas Sasso Pool, St. James Catholic School, Benjamin Franklin Elementary School, Gratigny Elementary School, and the Gratigny Post Office.

- **Route 2** overlaps the western portions of the service area of Route 1 and also serves NE 135th Street, NE 125th Street, NE 6th Avenue, and NE 8th Avenue. The major destinations along the route include First Christ KII School, Griffing Park, North Miami Elementary School, North Miami Senior High School, Thomas Jefferson Middle School, North Miami Community Center, Griffing Adult Center, and North Miami Library.
- **Route 3** serves the areas around the Central Business District and in the portions of the City east of Route 2. It runs along portions of NE 135th Street, NE 125th Street, West Dixie Highway, NE 8th Avenue, and Biscayne Boulevard. 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 4** runs on the eastern portions of the City mostly along NE 16th Avenue, Biscayne Boulevard/US 1, Natural Bridge Road, and Sans Souci Boulevard. The major destinations 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.

The NoMi Express provides the free of charge local circulator service. It connects the residential neighborhoods to schools, shopping centers, and community facilities. The City currently contracts with a transit service company to provide the service. The transit service company handles all aspects of the service including vehicles, personnel, and operations.

#### *Population Characteristics*

North Miami had a population of 59,880 in 2000, which constitutes approximately 2.66 percent of the total Miami-Dade County population. Thirty-five percent of the North Miami population consider themselves White, 55 percent Black and 2 percent Asian. The average household size is 2.85 persons and the average family size is 3.58 persons. Furthermore, the median age for North Miami is approximately 32 and the median household income is \$29,778. These Census

2000 statistics indicate a racial mix within the City predominately comprised of White and Black individuals (90 percent) living in low- to middle- income brackets.

#### *Transportation Disadvantaged*

The transportation disadvantaged include individuals who, because of physical or mental disability, income status or age, are unable to transport themselves or purchase transportation. As a result, these individuals are dependent upon others to obtain access to health care, employment, education, shopping, social or other life-sustaining activities. Currently, Miami-Dade County offers transportation services to the transportation disadvantaged through the County's Community Action Agency. The Community Action Agency has a transportation unit that offers reliable transportation to disadvantaged citizens. This program benefits approximately 2 percent of those who are unable to commute to work using private transportation. Moreover, it assists approximately 4 percent of families living in poverty.

According to the 2000 US Census, approximately 2,813 or 14 percent of the 20,520 households in the City of North Miami are without a vehicle. The Census also stated that 3,602 persons (14.19 percent of the total 2000 working population not reported to work at home) used public transportation (bus, elevated, rail, ferryboat or taxicab), walked or used a bicycle as their means of transportation to work. It appears that the existing public transportation system provides a significant segment of the City's population access to transportation for work, shopping and other activities; however, the City should place special emphasis on monitoring the local needs of this population to assure that adequate service is always provided.

#### *Existing Characteristics of Major Trip Generators and Attractors*

Two major traffic generators within North Miami are the Florida International University (FIU) Biscayne Bay Campus and Johnson and Wales University. In addition to these centers, major trip generators/attractors include the downtown area (NE 125th Street) and Oleta River State Park.



*Existing Bicycle Facilities*

The availability of bicycle facilities plays an important role in encouraging the use of alternative modes of travel to the automobile. Benefits associated with biking include the ability to ease traffic congestion, personal health/recreation and reduced need for automobile parking facilities. In order to be considered a realistic transportation option, however, existing conditions need to be more favorable for bicycle use.

The existing bicycle network is illustrated in Map 2-7. Currently bicycle facilities exist along NE 151st Street and within the Oleta River State Park. Existing information maintained by Miami-Dade County and the Miami-Dade County MPO show relatively few bicycle facilities within the City of North Miami and formal connections between many of these facilities appear to be missing. Miami-Dade Transit also operates two routes (Route 2 and Route G) within the City that participate in the Agency's Bike and Ride Program. In addition, several neighborhood streets were identified as suitable for bicycle activity with low traffic volumes and low-posted speed limits.

*Existing Pedestrian Facilities*

The availability of pedestrian facilities and amenities plays an important role in encouraging the use of alternative modes of travel to the automobile. Benefits associated with walking include the ability to ease traffic congestion, personal health/recreation and reduced need for automobile parking facilities. In order to be considered a realistic transportation option, however, existing conditions need to be more favorable for pedestrian use.

The existing pedestrian network within North Miami is excellent (see Map 2-7). The 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 7th Avenue (US 441). However, sidewalk deficiencies were noted in the residential area west of Johnson and Wales University.

*Availability of Transportation Facilities and Service to Serve Existing Land Uses*

North Miami contains approximately 6,402 acres of land. Residential land uses account for approximately 32 percent of the total acreage with single family

residential accounting for approximately 27 percent. The next largest existing land use categories are commercial and institutional, which total an estimated five percent and two percent of the total land use respectively. Table 2-8 lists the primary land uses along some of the City's significant transportation corridors.

**Table 2-8: Primary Land Uses Adjacent to Major Transportation Corridors**

Roadway	Facility Type	Primary Land Uses
NW 7 <sup>th</sup> Avenue (US 441/SR 7)	State Minor Arterial	Commercial; Light Industrial
NW 2 <sup>nd</sup> Avenue	Local	Low-Density Residential
North Miami Avenue	County Arterial	Low-Density Residential
NE 6 <sup>th</sup> Avenue (SR 915)	State Minor Arterial	Commercial; CBD Commercial
NE 10 <sup>th</sup> Avenue	County Collector	Commercial; CBD Commercial; Low-Density Residential
Biscayne Boulevard (US-1/SR 5)	State Principal Arterial	Commercial
NW 119 <sup>th</sup> Street	State Minor Arterial	Commercial; Low-Density Residential
NE 125 <sup>th</sup> Street (SR 922)	State Minor Arterial	Low-Density Residential; Commercial; CBD Commercial; Medium-Density Residential
NW 135 <sup>th</sup> Street (SR 916)	State Minor Arterial	Low-Density Residential; Medium-Density Residential; Commercial; Park Space

Results from the level of service analysis demonstrate poor traffic conditions on the arterial network within North Miami. These facilities play a primary role in the countywide traffic circulation system and carry a high percentage of through trips. The remaining roadways within North Miami primarily serve to provide access to adjacent land uses and the arterial roadways mentioned above. However, as congestion worsens on the arterial roadways, cut-through traffic may increase on collector roadways thereby degrading their level of service. In addition to roadway facilities, the existing land uses are served by transit and pedestrian/sidewalk facilities. Maps 2-5 and 2-7 illustrate the transit and pedestrian/sidewalk facilities that serve North Miami.

*Adequacy of Existing and Projected Evacuation Transportation System*

Miami-Dade County's Adopted Comprehensive Development Master Plan identifies the designated local and regional transportation facilities critical to the evacuation of the coastal population. The evacuation network within North Miami consists of State Road 922 (NE 123rd/125th Street), Interstate 95 and US1/Biscayne Boulevard. According to the South Florida Regional Planning Council, the 2003 Hurricane Evacuation Model it would take 9.15 hours to evacuate residents in the City of North Miami under the then existing development conditions. The SFRPC recently updated their hurricane evacuation model in February 2007, upon finalization of the Future Land Use Map; the SFRPC will run the Hurricane Evacuation Model for the City.

## FUTURE TRANSPORTATION DATA REQUIREMENTS

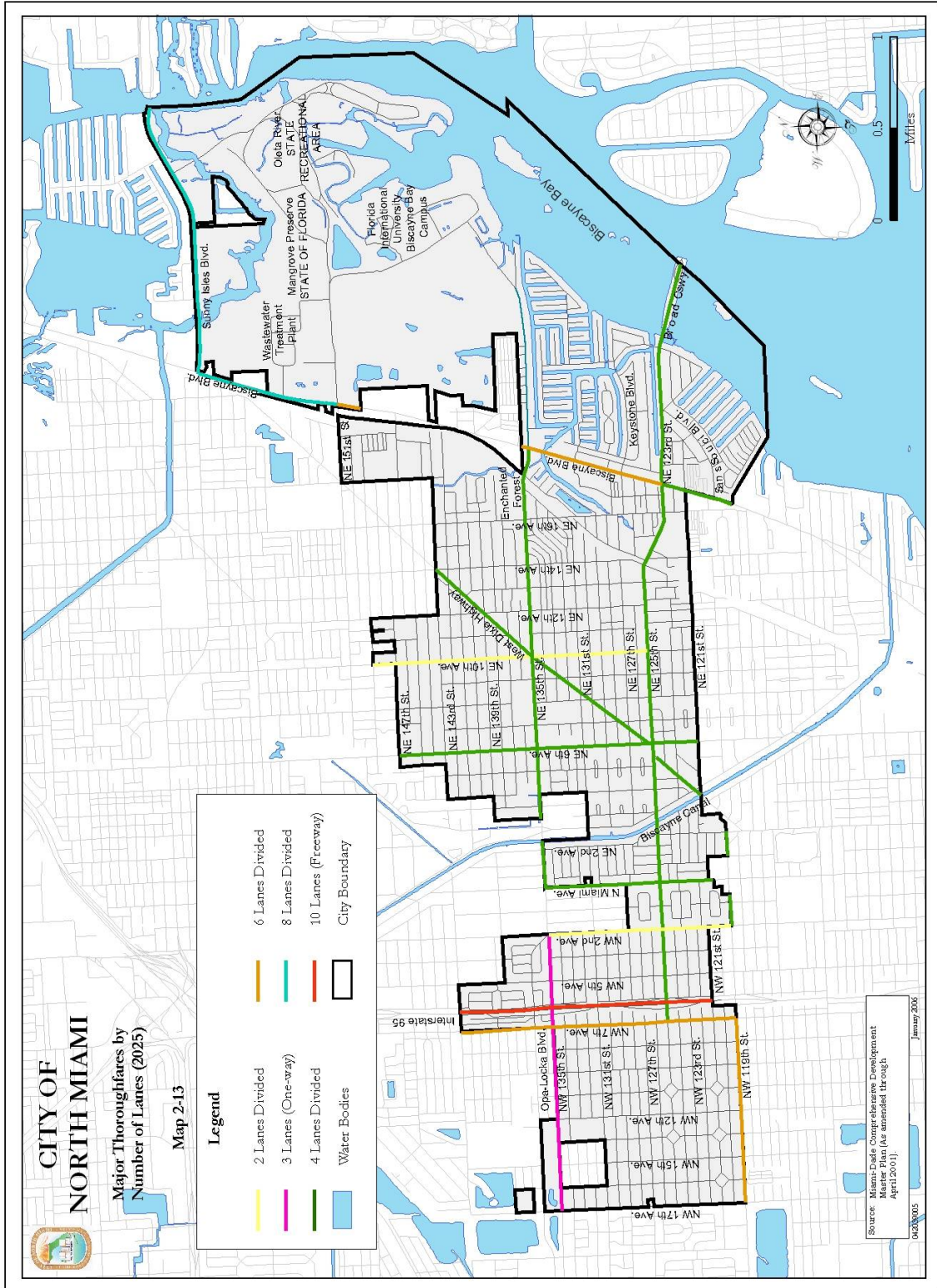
### Future Transportation Map Series

The following series of maps represent the future conditions for the transportation network on a multi-modal basis. This includes the roadway system, public transit system and bicycle and pedestrian facilities within the City of North Miami. Whenever possible, projections of the 2030 transportation system were used.

- **Map 2-13: Major Thoroughfares by Number of Lanes (2025)** illustrates the major thoroughfares in North Miami by the number of through lanes for each facility anticipated in 2025.
- **Map 2-14: Major Thoroughfares by Functional Classification (2025)** identifies the 2025 roadway network, including arterial and collector streets and their functional classification. The functional classification system indicates the role of each thoroughfare in meeting current travel demands, assists in defining land use relationships and reveals the jurisdiction responsible for maintenance.
- **Map 2-15: Limited Access Facilities, Significant Parking Facilities (2025)** delineates the limited and controlled access facilities in North Miami out to the year 2025, as well as the locations of significant parking facilities.

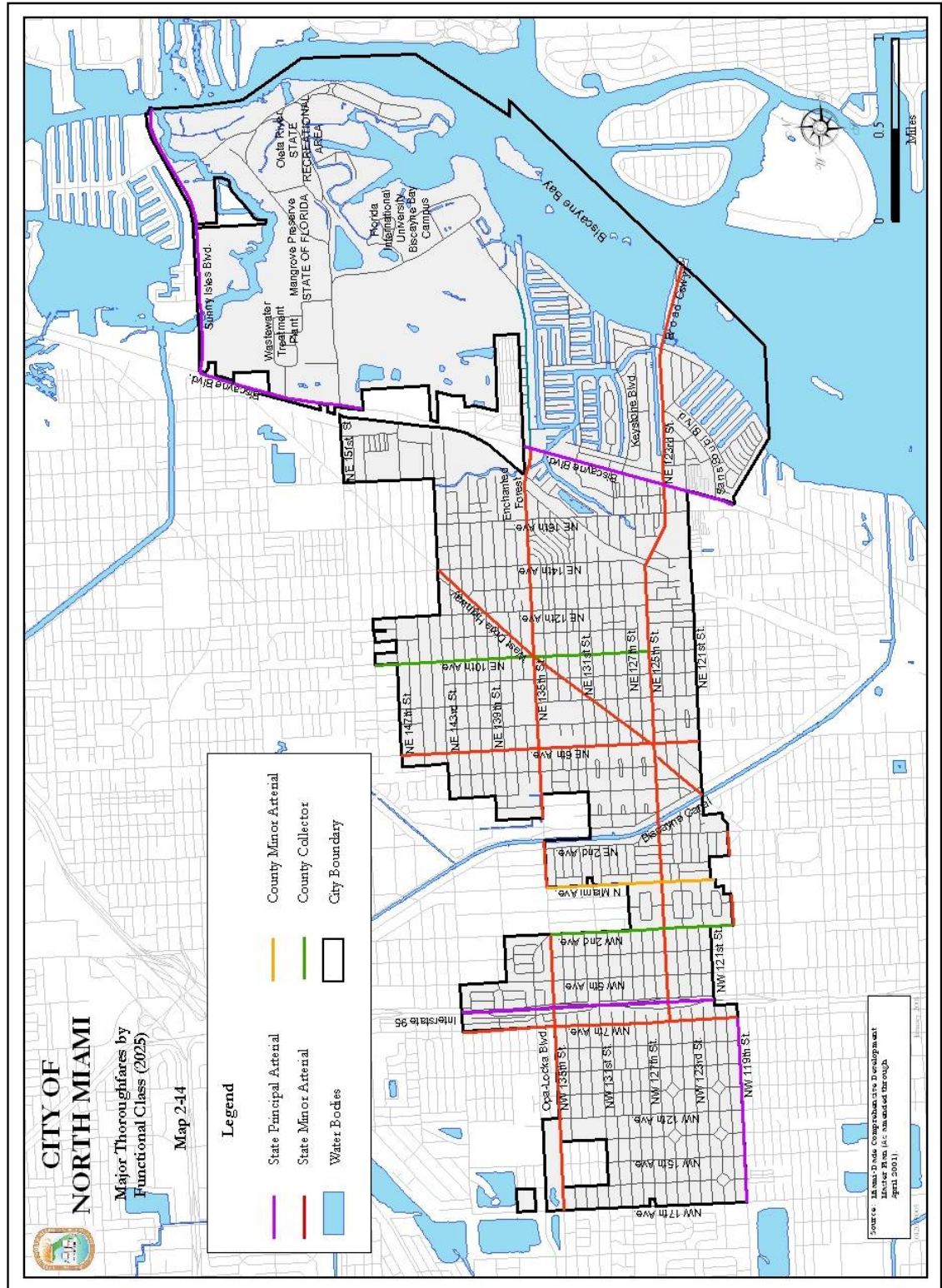
- **Map 2-16: Major Trip Generators and Attractors (2030)** illustrates the existing major trip generators and attractors within North Miami as well as the location of the new mixed use Biscayne Landing project proposed near the southeast corner of Biscayne Boulevard and NE 151st Street and the Special Development and Transit Overlay District identified west of Biscayne Boulevard.
- **Map 2-17a: Future Regional Transit Facilities (2030)** shows the transit route serving the City in 2030. The map indicates the new proposed intermodal center at the intersection of NE 125th street and NE 6th Avenue as identified in the Miami-Dade Transportation Plan for the Year 2030.
- **Map 2-17b: Future Regional Transit Facilities (2030)** shows the proposed long term NoMi Express routes and stops from the 2005 Transportation Master Plan of the City of North Miami.
- **Map 2-18: Future Bicycle Facilities (2030)** identifies several proposed on-street bicycle facilities within the City of North Miami. None of these improvements are currently identified in the Miami-Dade Transportation Plan for the Year 2030 or the MPO's 2001 Bicycle Facilities Plan.
- **Map 2-19: Future Pedestrian Facilities (2030)** identifies several pedestrian-related improvements throughout North Miami based on the Miami-Dade 2030 Transportation Plan, including improvements along NE 12th Avenue, NE 135th Street, NE 6th Avenue and NE 125th Street.

Map 2-13: Major Thoroughfares by Number of Lanes (2025)

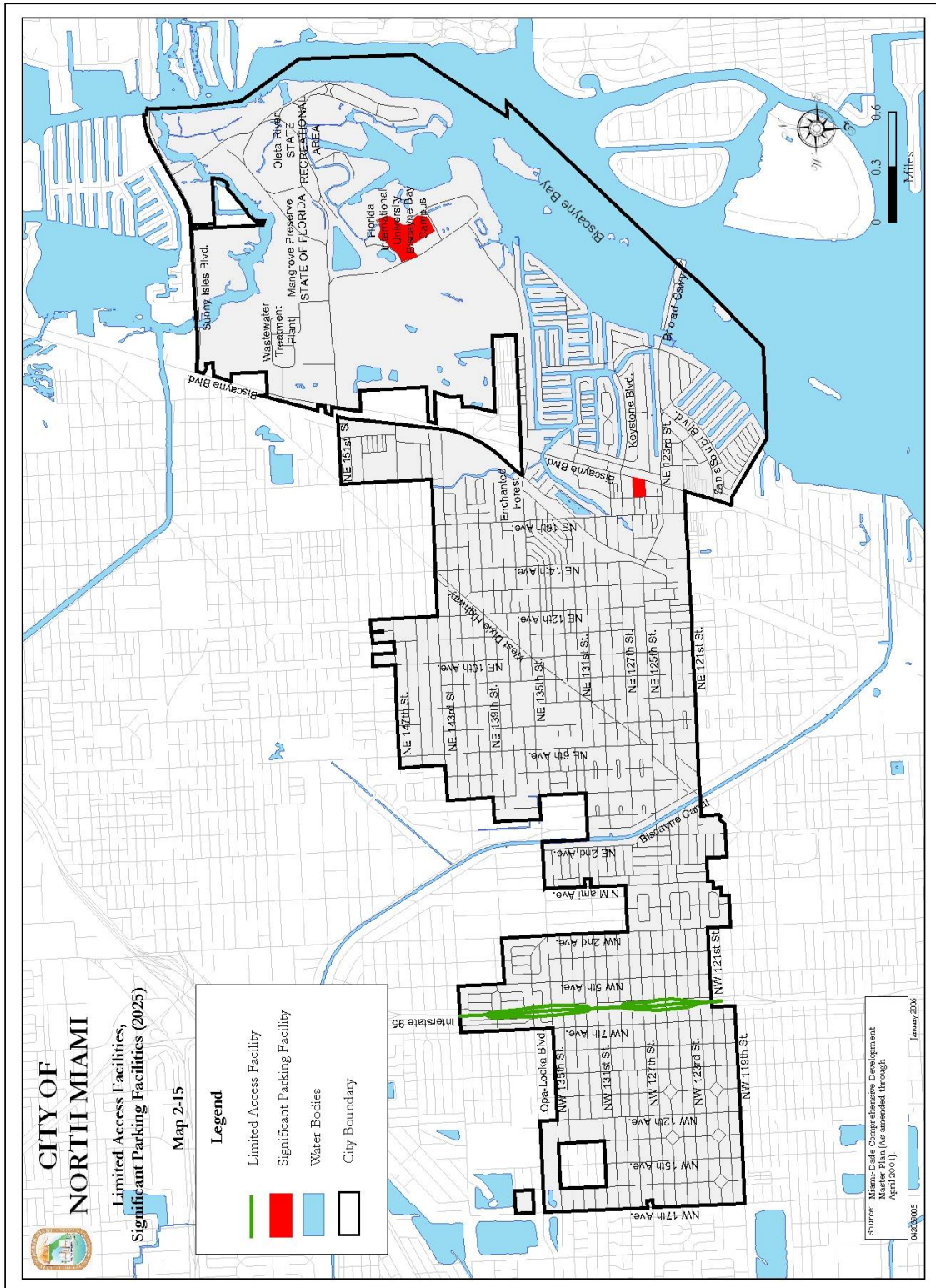




Map 2-14: Major Thoroughfares by Functional Classification (2025)

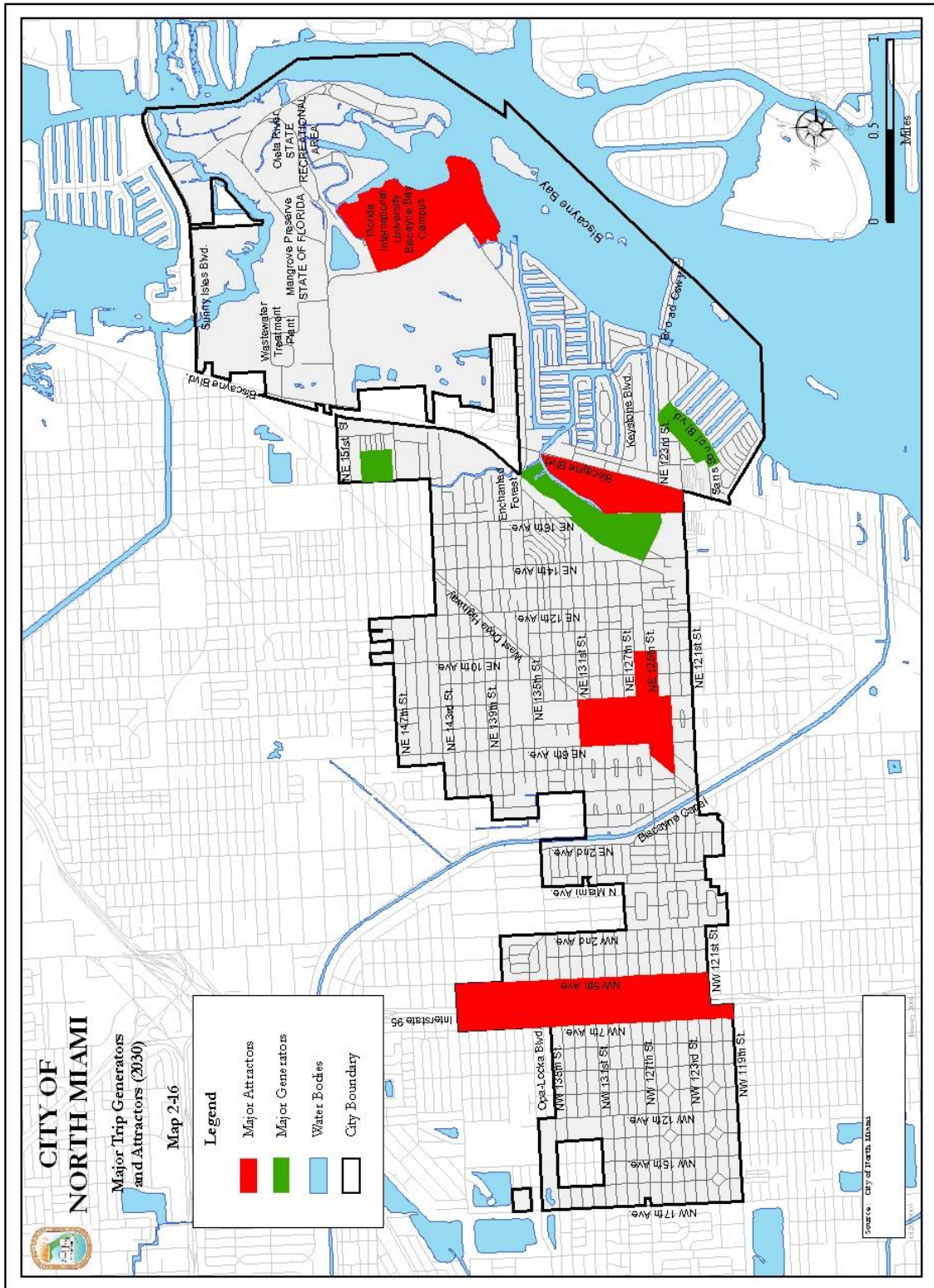


Map 2-15: Limited Access Facilities, Significant Parking Facilities (2025)



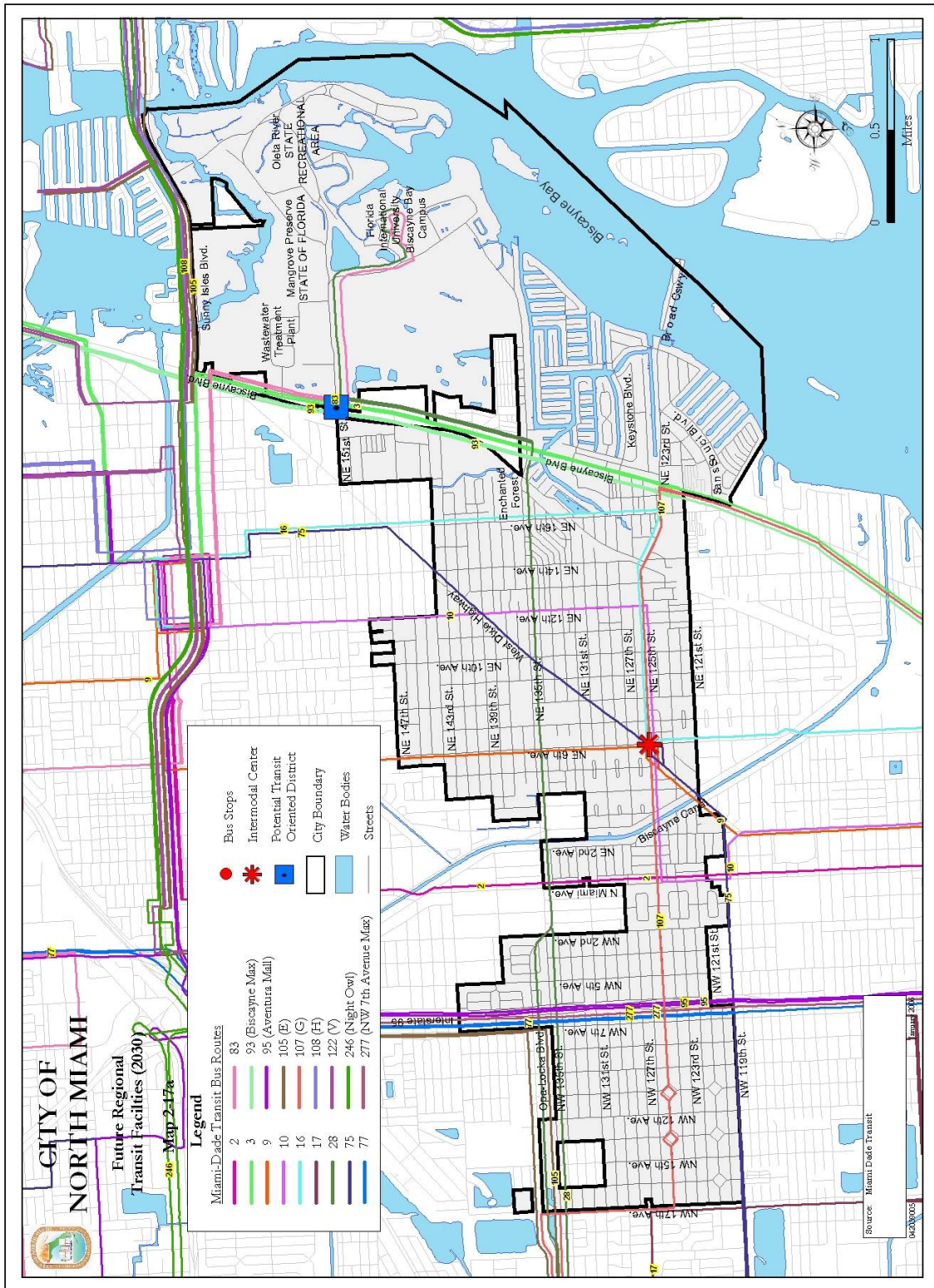


Map 2-16: Major Trip Generators and Attractors (2030)

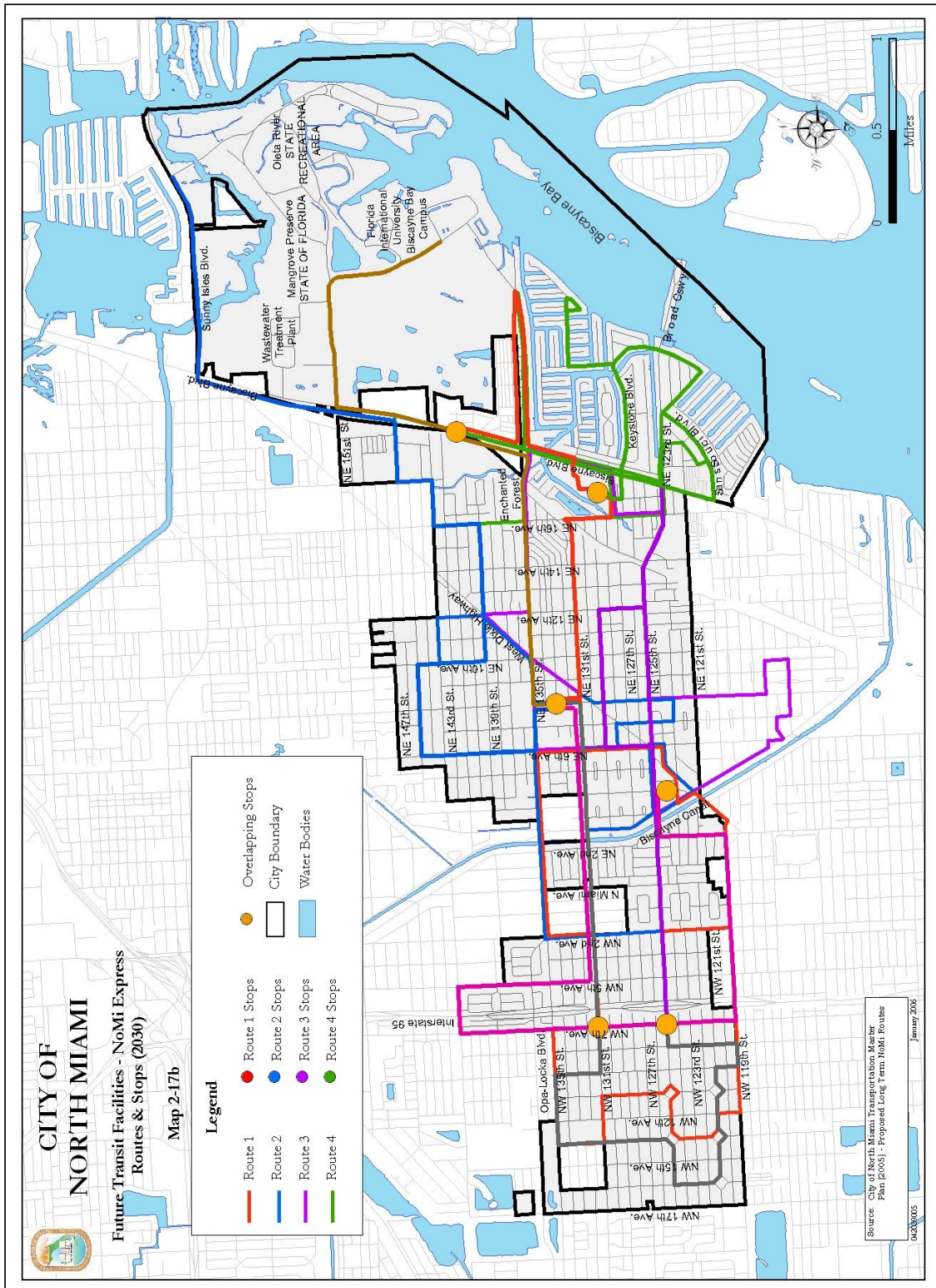




Map 2-17a: Future Regional Transit Facilities (2030)

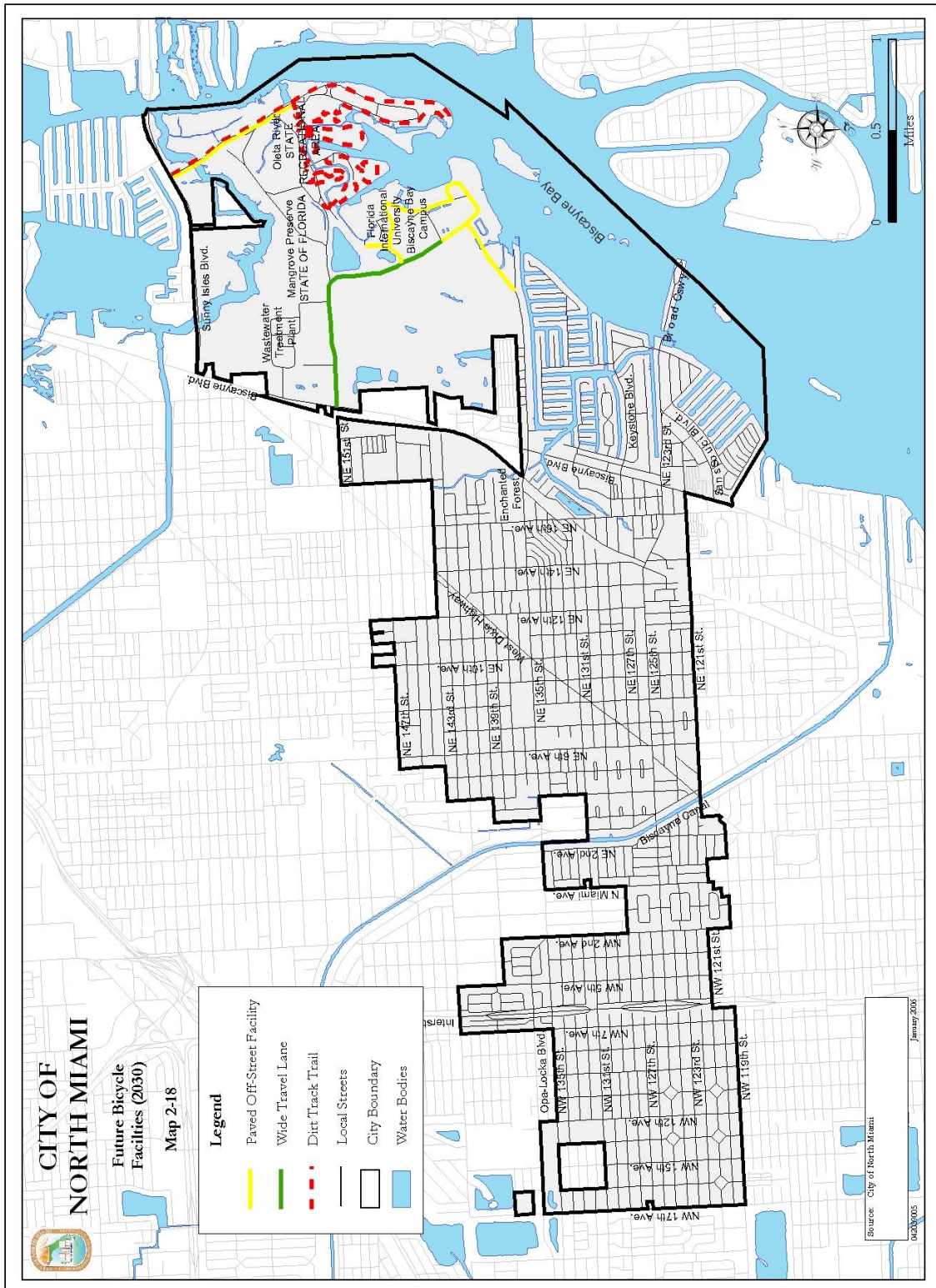


Map 2-17b: Future Regional Transit Facilities (2030)

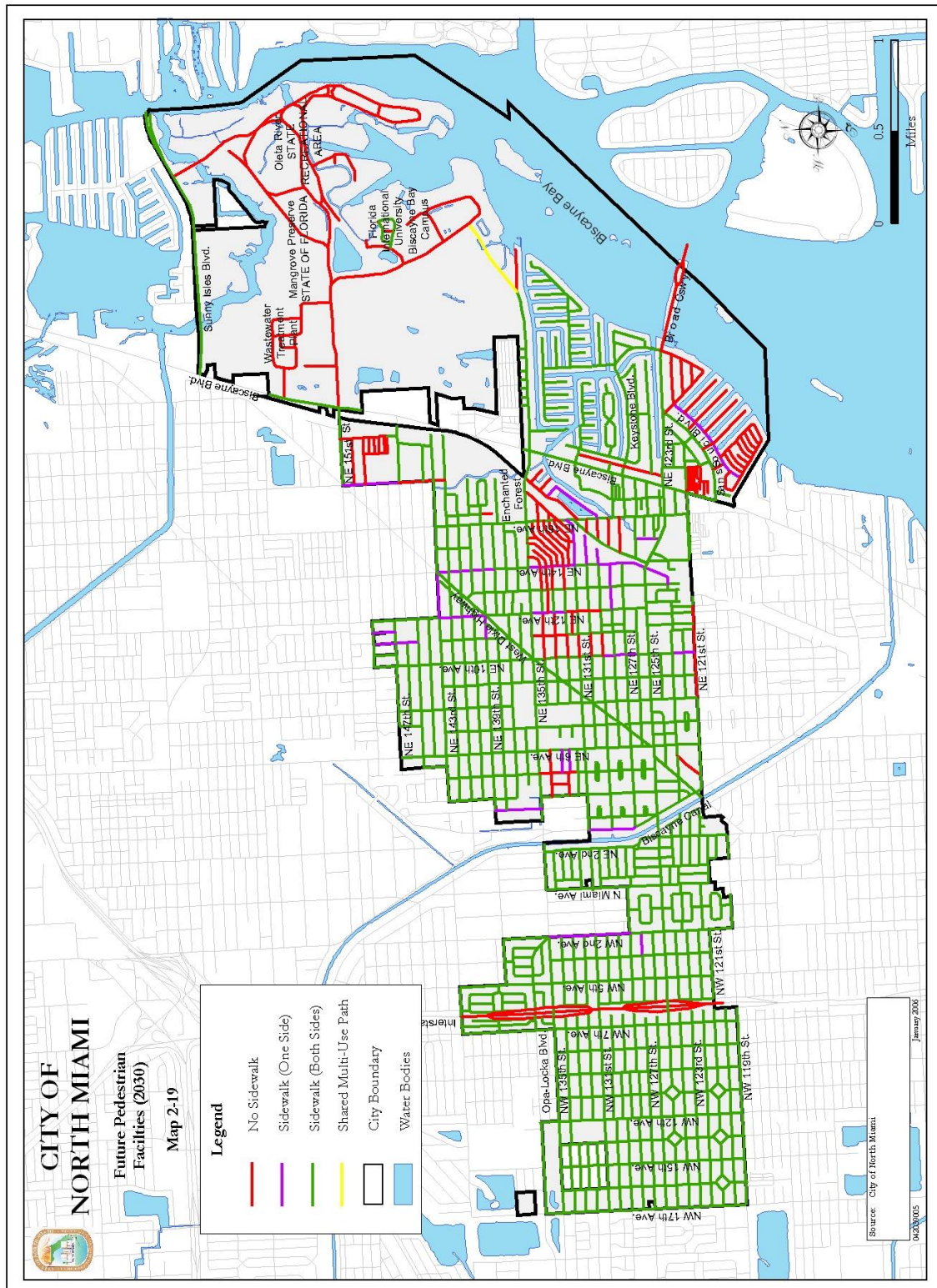




Map 2-18: Future Bicycle Facilities (2030)



Map 2-19: Future Pedestrian Facilities (2030)



### Analysis of Future Transportation System

In August 2003, the City of North Miami and its CRA 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 comprehensive redevelopment plan established goals and objectives to guide the successful implementation of the plan. Specifically, the comprehensive redevelopment plan established Goal No. 5 - Traffic/Transportation in accordance with Goal 1 of the Transportation Element which 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 comprehensive redevelopment plan. These include:

- Complete a traffic/transportation analysis to consider effects of Plan;
- Create a phased program that prioritizes the improvement of the 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 the City limits, and enhance the City’s gateways, boulevards, and streets; and
- Design pedestrian access standards which prioritize pedestrians on City streets utilizing state-of-the-art designs and technologies.

The CRA Redevelopment area is comprised of 3,249 acres of land consisting of approximately 14,353 households and a population of over 44,000. The CRA is generally bounded by Biscayne Boulevard on the east, by the City boundary on the north, south and west. A separate CRA boundary includes some smaller parcels to the east of Biscayne Boulevard. The Redevelopment Plan was programmed to be effectuated in two stages - Phase 1 was conformed to the

City's 1999 Comprehensive Plan and Phase 2 was to be adopted by making revisions to the comprehensive plan and land development regulations. However, full implementation of the comprehensive redevelopment plan cannot be made at this time due to natural and fiscal resource constraints. Therefore, Phase II is preceded by an intermediate phase which consists of shifting 4,000 existing residential units on the Future Land Use Map to specified corridors within the City and the adoption of form based development policies in the FLUE. In general, the City will move forward with the implementation of transportation plans developed in conjunction with the CRA Phase 2 plan as a means to reach its long-term mobility goals.

One of the major components of the Redevelopment Plan was to recommend transportation projects for all modes of travel including pedestrian, bicycle, transit and automobile. The plan proposed several roadway and streetscape elements throughout the City to mitigate the City's congestion and also enhance the traffic flow. Some of the transportation recommendations from Phase I Redevelopment Plan include:

- Roundabouts at the following locations:
  - NE 125th Street, NE 6th Avenue and West Dixie Highway
  - NE 130th Street, NE 8th Avenue and West Dixie Highway
  - NE 130th Street and NE 6th Avenue
  - NE 135th Street and West Dixie Highway
  - West Dixie Highway and NE 123rd Street
- Gateway entrances along Interstate 95 and Biscayne Boulevard.
- Streetscape improvements along several major roads along with new roadway hierarchies and typical road profiles for all roads within the CRA.
- Linkage of pedestrian and bicycle paths to connect residential neighborhoods to schools, parks, recreation areas, shopping and businesses.



- 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 and NE 130th Street and NE 8th Avenue.

#### *Transportation System Levels of Service and Growth Trends*

Most of the land area within the City of North Miami is essentially built out with the exception of the 193-acre Biscayne Landing parcel located in the southeast quadrant of NE 151<sup>st</sup> Street and Biscayne Boulevard, included in the Biscayne Landing Regional Activity Center. The City anticipates that a moderate level of redevelopment activity will occur within the CRA area once the land use plan map changes are adopted by the City and found sufficient by the Department of Community Affairs.

The shifting of residential units to identified corridors and the eventual implementation of the CRA Phase 2 plan will modify the existing travel patterns and vehicular levels of service within the core areas of the City due to its densification and transit-oriented nature. Changes made in 2003 including the development of a Regional Activity Center and the Biscayne Landing project has been incorporated into the approved Miami Urban Area Transportation Study (MUATS) model for the year 2030. The MUATS model has been developed for and accepted by the FDOT as a traffic forecasting model for Miami-Dade County and was used to forecast the traffic impacts from additional growth anticipated in the City of North Miami. The changes made to the FLUM at this time however are anticipated to increase the use of alternate modes of travel including walking, biking, and transit within the City and reduce overall dependence on the automobile. Further, because no additional units are actually being added to the FLUM at this time, the impact to the Florida Interstate Highway System is considered to be negligible. It is also important to realize that the City has recently completed a Transportation Master Plan and Transit Oriented Development Feasibility Study to coordinate mobility improvements with the land use changes at this time. Recommendations to improve mobility in each of the plans have been incorporated into this update.

Information from the 2030 MUATS model run was used to provide the future traffic volumes listed further below. As mentioned earlier, changes made to the FLUM in 2003 were incorporated in the model run and approved prior to its

release. Therefore, the projected traffic conditions take into account all land use changes in North Miami up to the year 2003. Figure 1 illustrates the Future Land Use Map adopted at this time and Figure II illustrates the Future Land Use Map adopted prior to the shift in density towards transit corridors. It should be noted that density increases are made along each of the City's main corridors which are served by current and planned transit routes. It should also be noted that the residential density of existing, well-established and stable neighborhoods has been reduced to offset the increase in density in the City's core areas. Policies have been added to the FLUE to ensure that these neighborhoods remain stable and well-maintained.

#### *Existing and Projected Inter-Modal Deficiencies and Needs*

The City is served by 16 Miami-Dade Transit (MDT) regional routes connecting the City to other parts of Miami-Dade County. The MDT routes through North Miami are mostly linear and provide good coverage within the City. The MDT routes serve all major corridors within the City, including NE/NW 125<sup>th</sup> Street, NE/NW 135<sup>th</sup> Street, Biscayne Boulevard, NW 7<sup>th</sup> Avenue, North Miami Avenue, NE 6<sup>th</sup> Avenue, NE 12<sup>th</sup> Avenue, and NE 16<sup>th</sup> Avenue. The routes provide several opportunities for transfer from one route to another and also from MDT routes to NoMi Express routes.

There are currently no dedicated intermodal facilities within the City of North Miami although there is potential for transit service along the FEC Corridor. Nearby intermodal facilities include the bus transfer station at the 163rd Street Mall and the Tri-Rail Station at the Golden Glades interchange with Interstate 95. Existing transit connections to these facilities in North Miami are provided by Metrobus Routes 2, 16, 75 and 77.

#### *Impact of Projected Land Use on Transportation System Levels of Service*

The 2030 model assumes buildout of the Future Land Use Map (FLUM) which included the additional development potential of the Regional Activity Center. The changes made to the FLUM at this time, however, are anticipated to increase the use of alternate modes of travel including walking, biking, and transit within the City and reduce overall dependence on the automobile. Further, because no additional units are being added to the FLUM at this time, the impact to the Florida Interstate Highway System is considered to be negligible.



*Traffic Forecasting Methodology*

Future traffic volumes for major thoroughfares in North Miami were developed through the Year 2030 using the Miami Urban Area Transportation Study (MUATS) model. Traffic forecasting models are only approximations of actual traffic behavior and have limited capability to predict the impact of shifting towards transit oriented development. As such, they can provide order of magnitude projections rather than accurate traffic volumes. However, it is widely accepted that the strength of these models resides in their capability to illustrate trends. For example, models are better able to forecast future year increases in traffic volumes than predict actual traffic volumes.

*Land Use Alternatives*

The City and its CRA have analyzed a number of land use alternatives over the last year through a series of charrettes and visioning sessions. An overwhelming number of residents desire to have redevelopment breath new life into the City and specifically along its commercial corridors. In order to ensure that mobility will be maintained, the City is focusing on its transit service and encouraging transit oriented development. The primary land use category along the corridors is medium and high density mixed use.

*Projected Traffic Conditions*

The MUATS model run for the Year 2030 Minimum Revenue Plan represents the land use scenario described further above. Growth rate trends between the 2000 validation MUATS model run and the 2030 MUATS model run with the development from the RAC and the CRA Redevelopment Plan were applied to the existing traffic counts to predict traffic volumes for the year 2030. The resulting average daily traffic volumes and associated levels of service are summarized in Table 2-9.

**Table 2-9: Projected 2030 Traffic Volumes**

Facility	Segment	Daily Capacity	2030 Volumes (AADT)	LOS
US 1 / SR 5	South of NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> St.	51,800 <sup>(1)</sup>	63,714	E+50
US 1 / SR 5	NE 123 <sup>rd</sup> / NE 125 <sup>th</sup> St. to NE	51,800 <sup>(1)</sup>	59,570	E+50

Facility	Segment	Daily Capacity	2030 Volumes (AADT)	LOS
	135 <sup>th</sup> St.			
US 1 / SR 5	NE 135 <sup>th</sup> St. to NE 151 <sup>st</sup> St.	51,800 <sup>(1)</sup>	72,002	E+50
US 1 / SR 5	NE 151 <sup>st</sup> St. to NE 163 <sup>rd</sup> St.	51,800 <sup>(1)</sup>	68,376	E+50
US 1 / SR 5	North of NE 163 <sup>rd</sup> St.	51,800 <sup>(1)</sup>	64,750	E+50
Interstate 95	NW 119 <sup>th</sup> St. to NW 135 <sup>th</sup> St.	207,600	253,879	F
Interstate 95	NW 135 <sup>th</sup> St. to North of NW 151 <sup>st</sup> St.	207,600	287,796	F
NE 151 <sup>st</sup> Street	F.I.U. to US-1/SR 5	15,600	14,938 <sup>(3)</sup>	E
NE 151 <sup>st</sup> Street	US-1/SR 5 to West Dixie Hwy.	31,255	32,156 <sup>(3)</sup>	F
NE 151 <sup>st</sup> Street	West of West Dixie Hwy.	15,600	20,790 <sup>(3)</sup>	F
NE 135 <sup>th</sup> Street	NW 17 <sup>th</sup> Ave. to Interstate 95	29,580	21,374	C
NE 135 <sup>th</sup> Street	Interstate 95 to NW 2 <sup>nd</sup> Ave.	29,580	17,765	B
NE 135 <sup>th</sup> Street	NW 2 <sup>nd</sup> Ave. to NE 6 <sup>th</sup> Ave.	32,800	56,092	F
NE 135 <sup>th</sup> Street	NE 6 <sup>th</sup> Ave. to NE 10 <sup>th</sup> Ave.	32,800	50,035	F
NE 135 <sup>th</sup> Street	NE 10 <sup>th</sup> Ave. to US-1/SR 5	32,800	38,551	F
NE 135 <sup>th</sup> Street	US-1/SR 5 to F.I.U.	16,380	10,896 <sup>(3)</sup>	B
NE 125 <sup>th</sup> /123 <sup>rd</sup> Street	NW 7 <sup>th</sup> Ave. to NE 6 <sup>th</sup> Ave.	34,500 <sup>(2)</sup>	45,945	F
NE 125 <sup>th</sup> /123 <sup>rd</sup> Street	NE 6 <sup>th</sup> Avenue to NE 10 <sup>th</sup> Ave.	34,500 <sup>(2)</sup>	51,208	F
NE 125 <sup>th</sup> /123 <sup>rd</sup> Street	NE 10 <sup>th</sup> Avenue to US-1/SR 5	34,500 <sup>(2)</sup>	47,774	F
NE 125 <sup>th</sup> /123 <sup>rd</sup> Street	US-1/SR 5 to Broad Cswy.	34,500	32,804	E
West Dixie Hwy.	NE 119 <sup>th</sup> St. to NE 125 <sup>th</sup> St.	32,800 <sup>(2)</sup>	34,952	E+20
West Dixie Hwy.	NE 125 <sup>th</sup> St. to NE 135 <sup>th</sup> St.	32,800 <sup>(2)</sup>	31,752	E
West Dixie Hwy.	NE 135 <sup>th</sup> St. to NE 151 <sup>st</sup> St.	32,800	21,002	B
West Dixie Hwy.	NE 151 <sup>st</sup> St. to NE 163 <sup>rd</sup> St.	32,800	23,511	C

Notes: (1) This road is allowed to reach 150 percent 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 percent 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) FDOT traffic counts not available on this road; therefore, FSUTMS model volume used.

Traditionally, congestion problems are addressed with either supply-side or demand-side strategies. Supply-side strategies may include tactics such as building more roads to increase capacity. Demand-side strategies may include tactics such as encouraging more ride-sharing among commuters. Potential strategies that North Miami is already considering to ease traffic congestion are summarized in the following sections.

*Transportation Concurrency Exception Area*

The City established a Transportation Concurrency Exception Area (TCEA) for the entire City of North Miami, consistent with Rule 9J-5.005(5) of the Florida Administrative Code, as a means to reduce the adverse impact transportation concurrency may have on potential urban infill development and redevelopment within the City. The designation of the City's TCEA is consistent with Southeast Florida's "Eastward Ho!" initiative, which is intended to concentrate future development and redevelopment within the existing urban core. North Miami also lies entirely within Miami-Dade County's designated Urban Infill Area (UIA), and is thus exempt from the County's transportation concurrency requirements. The boundaries of the TCEA are illustrated in Figure 3.

Under the City's initiative, there is no traffic concurrency requirement for development applications within the TCEA boundaries. In return, the City is actively pursuing the transportation mobility strategies aimed at creating a sustainable development pattern within the City supportive of transit and other non-motorized travel modes (i.e. bicycle and pedestrian linkages listed in the Transportation Element's Goals, Objectives, and Policies). The City has expanded the bicycle path system within the FIU Campus and the Oleta River State Park. The City has been working with the Florida Department of Transportation on several safety initiatives on major state roads. The City has also been working with several neighborhoods on traffic calming efforts. The local transit circulator was introduced in 2004 that connects the City's residential areas to the major commercial destinations and schools.

Figure 1: Adopted Future Land Use Map

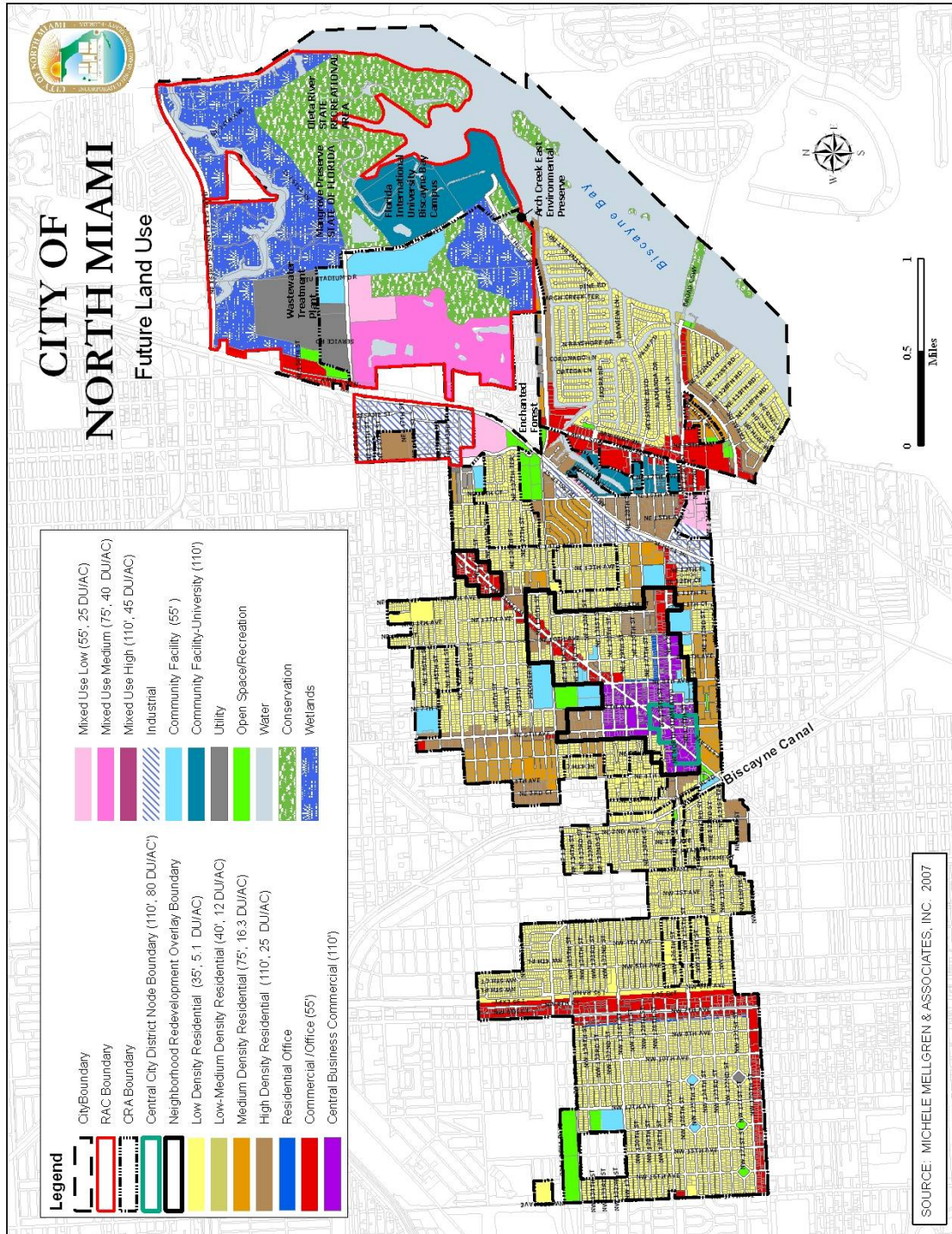




Figure 2: Previously Adopted Future Land Use Map

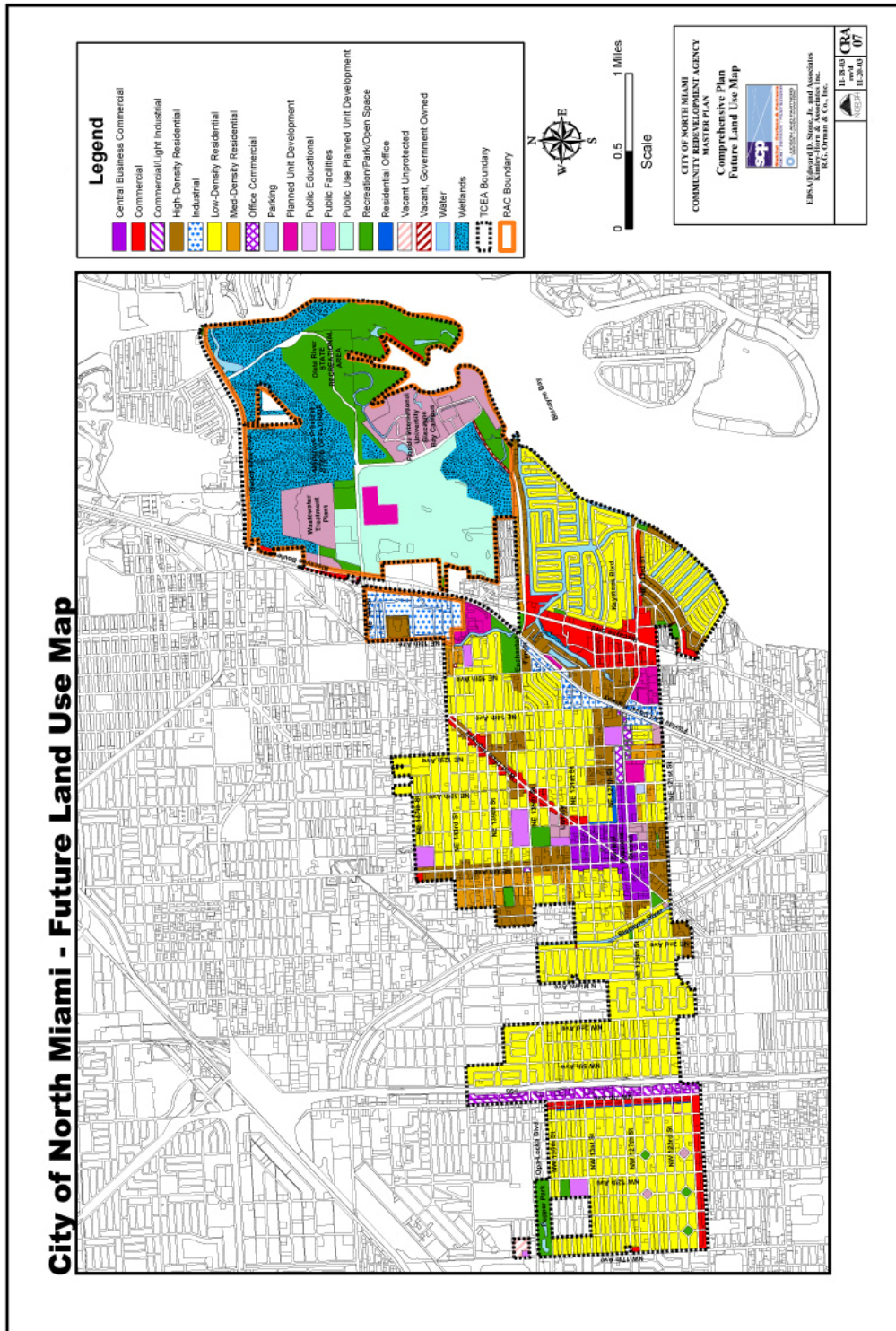
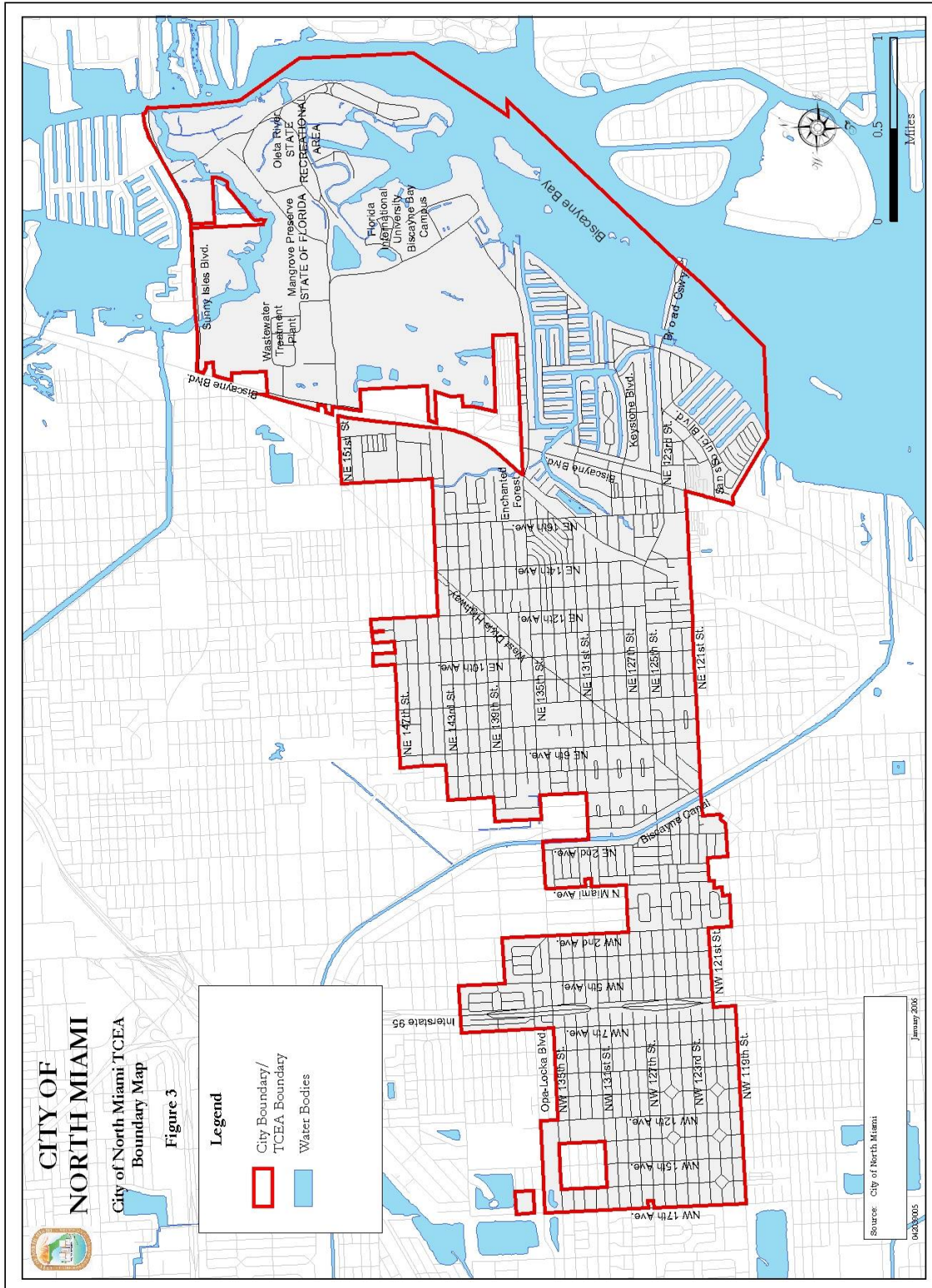


Figure 3: TCEA Boundary Map



### *Community Transportation Plan*

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 fund the *People's Transportation Plan* (PTP). The Plan calls for implementation of improvements to bus service including increases in number of busses, service miles, and operating hours. The PTP is projected to provide an additional \$7.26 billion (in 2003 dollars) for transit and transportation projects over the next 30 years. In 2005, North Miami received \$894,061 which was used to fund a full-time transportation manager position, city-owned transit service (NoMi Express), and various projects, plans, and improvements. It should be noted that the City is required to spend at least 20 percent of its allocated PTP funds on transit projects.

### *FEC Corridor*

The Florida East Coast (FEC) rail corridor west of Biscayne Boulevard has been identified by Miami Dade Transit and the Miami-Dade County MPO as a potential future premium transit corridor linking Downtown Miami with Broward County. In 2003, the local MPO awarded a contract to perform an *Alternatives Analysis/Major Investment Study* for the corridor. The location of the rail corridor and mix of land uses/intensities associated with the Regional Activity Center (RAC) support studying the location south of NE 151st Street for a potential multi-modal transit node. To this end, the City of North Miami is committed to actively work with members of Miami Dade Transit and the MPO to explore the feasibility of linking the mix of transit supportive land uses in the RAC with the possible dedicated transit corridor.

### *151st Street Transit Connector*

A transit connector is proposed within the Regional Activity Center to operate between Florida International University (FIU) and the area of the RAC west of Biscayne Boulevard. The connector would be operated to provide a direct connection between the University and supporting industrial, office, commercial and residential land uses. Streetscape improvements intended to strengthen the connection would also provide for bicycle and pedestrian connections across Biscayne Boulevard.

*Impacts of Land Use Alternatives on Mass Transit*

The mix of land uses proposed in the Community Redevelopment Plan and the Regional Activity Center and improvements in public transit service will make mass transit an integral component of any development program proposed within the City. The linkage between transit-oriented land uses and mass transit systems proposed in the plans will provide infrastructure that could help relieve roadway congestion anticipated in the City in the future. Additionally, the mobility strategies adopted by the City that focus on a multimodal transportation system approach will help relieve congestion in the long run.

*Relationship Between Land Use Alternatives and FLUM*

The land use scenario described above reflects the land use designations within the Future Land Use Map (as adopted in 2007). The Regional Activity Center did not change the underlying land use categories within the boundaries of the RAC; instead, it allows enhanced Development of Regional Impact (DRI) thresholds allowed under Chapter 380 of the Florida Statutes. The boundaries of the RAC are designated as an exhibit in the Future Land Use Element. These changes are provided for in this DIA.

*Existing and Projected Integrated Transportation System*

The City of North Miami is served by a major thoroughfare system including Interstate 95 and Biscayne Boulevard. In addition, 18 Metrobus routes and four NoMi Express routes serve the City connecting residents to major destinations within and outside the City limits. The excellent pedestrian facilities within the City provide connections between home and potential higher order travel modes, such as transit. Bicycle facilities within the City, except the facility within the FIU campus, are currently lacking within the City of North Miami and formal connections between many of the facilities that do exist appear to be missing.

Several commercial and institutional nodes within the City are favorable for promoting walking between the mix of land uses built at higher densities, which ultimately may lead to potential for increases in transit ridership. Over the projected planning horizon to the Year 2030, development within North Miami is anticipated to significantly intensify in specifically designated areas, including the downtown area identified along NE 125th Street and West Dixie Highway and the area contained within the Regional Activity Center.



*Transportation Projects Planned by Other Jurisdictions*

- **Miami-Dade MPO 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, 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 IV Unfunded - Projects that have been identified in the Needs Plan

Transportation projects within the 2030 LRTP that may impact the City of North Miami are presented in Table 2-10.

**Table 2-10: Miami-Dade Metropolitan Planning Organization 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 Street	NW 151st Street	I
Corridor Improvement - SB Thru Lane	SR 9A/I-95 (S/B)	NW 125th Street	NW 135th Street	I
Intelligent Transportation System Devices	NE 125th Street	I-95	US 1	II
Intelligent Transportation System Devices	NE 135th Street	I-95	US 1	II
Roadway Widening	West Dixie Highway	NE 119th Street	NE 163rd Street	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 Avenue	Gwen Cherry Park @ NW 24th Avenue	Greenways Project

Source: Miami-Dade Transportation Plan (to the Year 2030)

- Miami-Dade MPO Transportation Improvement Program (TIP).** The Miami-Dade MPO Transportation Improvement Program (TIP) for the 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. The TIP 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 2-11 indicates the programmed transportation projects in North Miami included in the TIP.

**Table 2-11: Miami-Dade Metropolitan Planning Organization 2005-2009  
Transportation Improvement 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-1 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

Source: Miami-Dade County MPO Transportation Improvement Program 2005-2009

### *Florida Department of Transportation (FDOT)*

- Five-Year Work Program - Fiscal Years 2005 - 2010.** 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 2-12 shows the FDOT Work Program projects currently programmed within North Miami.

**Table 2-12: 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 909/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

Source: State Transportation Improvement Program, 2005-2010

The land use and transportation plans that have the potential to effect mobility within the City were reviewed. The plans were used to identify all the planned and programmed improvements within North Miami.

#### *Adopted Levels of Service Standards for State and County Roads*

Policy makers set the level of service standards for specific roadways as a means of maintaining a level of comfort and convenience for the public. The South Florida Regional Planning Council and the FDOT recommend maintaining LOS D as the standard for roadways within the urbanized area of South Florida. However, the Metro-Miami-Dade Service Concurrency Management Program establishes different adopted level of service standards for portions of the County. The section of Miami-Dade County located east of SR 826 (Palmetto Park Expressway) and NW/SW 77<sup>th</sup> Avenue, excluding the area north of SR 826 and west of Interstate 95, is defined as an Urban Infill Area (UIA). All of North Miami lies within this area. The adopted level of service within the UIA is LOS E (100 percent of capacity). Where public transit service exists in the UIA operating with headways of 20 minutes or less, roadways located less than one-half mile of the service may operate at E+20 (120 percent of capacity). Furthermore, on roadways parallel to exceptional transit service (i.e. commuter rail/express bus) the acceptable level of service is E+50 (150 percent of capacity). The City of North Miami recognizes the County's program described above for evaluating the traffic impacts to State and County roads that are associated with development petitions inside City limits.

The entire City of North Miami has been designated as a TCEA since 2003 and hence is exempt from the concurrency requirement. However, the above referenced LOS standards will be used to analyze and monitor the mobility conditions of the roadways. It is strongly recommended that the City implement the mobility strategies recommended in the 2005 Transportation Master Plan (TMP) and also closely monitor transportation conditions on state and county roads.

*Multi-Agency Review of Development to Ensure Maintenance of Integrated Multi-modal Transportation System, including LOS Standards*

The City of North Miami, through its Development Review Committee, will establish and maintain a continuing technical review and coordination mechanism involving the Miami-Dade County MPO, FDOT and adjacent municipalities to further the objectives, policies and programs related to the maintenance of an integrated multi-modal transportation system that is consistent with adopted level of service standards.

*Internal Consistency within the Comprehensive Plan*

This element was developed in concert with the other elements of the North Miami Comprehensive Plan, particularly the Future Land Use Element. As noted throughout this element, the analysis of the future transportation system for North Miami was based upon the vision of the City as expressed within the Goals, Objectives, and Policies of the Comprehensive Plan and reflected on the Future Land Use Map (FLUM).

North Miami has taken care to incorporate into the Goals, Objectives and Policies section of this element, policies that stress a coordination of effort that will refine the report over time. It is North Miami's intention to produce its data and materials in such a way that it can be used by the MPO and Miami-Dade County with minimal complication.

# EAR-Based Comprehensive Plan Amendments

## Volume II: Data, Inventory, and Analysis Housing Element



# 3. HOUSING ELEMENT

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## 3. HOUSING ELEMENT

### PURPOSE

Local governments are required to prepare and adopt a Housing Element consistent with the provisions of Chapter 163, Part III of the Florida Statutes. This Element presents an overview of the existing and projected future conditions pertinent to the preparation of the housing goal, objectives and policies for the City's Comprehensive Plan. The best available data are provided by the US Census, the State of the Cities Data System (SOCDS) and the Shimberg Center for Affordable Housing, supplemented by local research.

### EXISTING HOUSING DATA REQUIREMENTS

Housing and household characteristics of the City of North Miami are estimated using 2000 Census data, as aggregated in Tables 3-1 through 3-6.

#### Housing and Residential Development.

Per Table 3-1, it is estimated that there were a total of 22,267 housing units in North Miami in 2000, consisting of 9,688 single-family and 12,511 multiple-family units, and 68 mobile home/other units. Multiple-family units within structures containing at least 10 units each constituted approximately 48 percent of the total, while single-family attached and detached homes constituted approximately 44 percent of the total.

Historical building permit data for the 2000 - 2004 period are presented in Table 3-2. This data can assist in substantiating an estimate of the current number of dwelling units in the City. During the 2000 - 2004 period, the City issued a total of 67 residential building permits which, when added to the 2000 Census figure results in a current total of 22,334 units. Further, if the population/dwelling unit ratio (i.e. 2.85 residents per unit) that existed in 2000, is applied to the University of Florida Bureau of Economic and Business Research (BEBR) population estimate (i.e. 60,312 residents) it is estimated that there were 21,162 dwelling units in the City as of April 2005, a decrease from previous estimates.

Housing stock within North Miami constitutes a small share of the countywide total; approximately 2.6 percent of the 852,278 year-round units reported by the US Census in 2000. It should be noted that total units includes all year-round housing units, including occupied and vacant units, and those held for occasional use.

The City's housing stock, by age of structure, is summarized in Table 3-3. Approximately 75 percent of the housing stock was built during period between 1950 and 1979.

**Table 3-1: Units in Structure - Year 2000**

Units in Structure	Total Units	Percent
One Detached	8,585	38.6
One Attached	1,103	5.0
Two	476	2.1
Three or Four	593	2.7
Five to Nine	675	3.0
Ten to Nineteen	1,404	6.3
Twenty to Forty-Nine	3,002	13.5
Fifty or More	6,355	28.5
Mobile Home + Other	68	0.3
Totals	22,267	100.0

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 1/06

**Table 3-2: Building Permit Activity - 2000 to 2004**

Year	Single-Family Units	Multiple-family Units
2000	8	0
2001	37	5
2002	7	0
2003	1	2
2004	0	7
Totals	53	14

Source: U.S. Bureau of the Census, 2000; ILER Planning Group, 1/06

Table 3-3: Housing Units by Age

Year Structure Built	Number of Units	Percentage of Total
1999-3/2000	70	0.3
1995-1998	242	1.1
1990-1994	334	1.5
1980-1989	1,771	8.0
1970-1979	6,297	28.3
1960-1969	4,706	21.1
1950-1959	5,802	26.1
1940-1949	2,479	11.1
1939 or earlier	566	2.5
Total Units	22,267	100.0

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 1/06

### Household Characteristics.

Characteristics of housing within the City, including type, tenure, rent, value, monthly cost and cost-to-income ratio are examined in this section and compared to those characteristics exhibited countywide. The most current statistics available for an inventory and analysis of this type are presented in the 2000 Census.

Comparative tenure statistics are presented in Table 3-4. Of the 22,267 housing units reported in 2000 by the US Census, an estimated 10,302 units, or 46.3 percent, were owner-occupied, while 10,218 units, or 45.9 percent, were renter-occupied. The balance (1,747 units, or 7.8 percent of the total) were classified as vacant. Owner-occupied plus renter-occupied units represent year-round occupancy, while the remainder of the units are vacant or held for seasonal or occasional use.

Table 3-4: 2000 Housing Tenure Characteristics

	North Miami		Miami-Dade County	
	Units	Percent	Units	Percent
Year-round housing units	22,267	100.0	852,278	100.0
Occupied housing units	20,520	92.2	776,774	91.1
Owner-occupied units	10,302	46.3	449,325	52.3
Renter-occupied units	10,218	45.9	327,449	38.4
Vacant housing units	1,747	7.8	75,504	8.9
Vacant for sale	254	1.1	9,855	1.2
Homeowner vacancy rate	2.3%			2.1

	North Miami		Miami-Dade County	
Vacant for rent	729	3.3	19,866	2.3
Renter vacancy rate	6.7%			5.7
Held for seasonal or occasional use	394	1.8	29,587	3.5
Other vacant	181	0.8	16,196	1.9

Source: U.S. Bureau of the Census, 2000: SF 1, 3; ILER Planning Group, 1/06

In relation to total housing stock, the City (92.2 percent) has a year-round housing unit occupancy rate slightly higher than that of Miami-Dade County (91.1 percent) as a whole. Further, the City (45.9 percent) has a higher rate of renter-occupancy than Miami-Dade County (38.4 percent).

In 2000, the City experienced an overall housing vacancy rate (i.e. 7.8 percent) slightly lower than the countywide rate of 8.9 percent. Due to the fact that North Miami remains primarily a resident community, as opposed to a tourist and seasonal destination, it is concluded that this rate has remained constant to date.

Comparative monthly gross rent data for Miami-Dade County and North Miami are presented in Table 3-5. The median monthly rent for renter-occupied units in North Miami was an estimated \$613 per month in 2000, compared to \$647 per month for Miami-Dade County. Approximately 74 percent of all rents within the City were within the \$500 to \$899 per month range.

Comparative housing value data for Miami-Dade County and North Miami are presented in Table 3-6. The estimated median value of owner-occupied units reported in 2000 was \$85,800 in the City compared to \$113,200 for Miami-Dade County. Approximately 70 percent of owner-occupied units within the City were valued at less than \$100,000.

Comparative monthly owner cost data for Miami-Dade County and North Miami are presented in Table 3-7. Census-based estimates of the median cost of owner-occupied housing in 2000 are \$970 per month for those units with a mortgage, and a median cost of \$331 per month for those units not mortgaged.



Table 3-5: 2000 Monthly Gross Rent of Specified Renter-Occupied Units

Gross Monthly Rent Range	North Miami		Miami-Dade County	
	Units	Percent	Units	Percent
Less than \$200	118	1.2	19,076	5.8
\$200-\$299	171	1.7	11,302	3.5
\$300-\$399	358	3.5	18,717	5.7
\$400-\$499	1,130	11.1	35,164	10.8
\$500-\$649	4,244	41.6	76,163	23.3
\$650-\$899	3,283	32.2	99,546	30.4
\$900-\$999	342	3.3	19,266	5.9
\$1,000 and more	393	3.8	38,456	11.8
No cash rent	169	1.6	9,143	2.8
Totals	10,208	100.0	326,833	100.0
Median rent per month	\$613		\$647	

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 1/06

Table 3-6: 2000 Value of All Owner-Occupied Housing Units

Value Range	North Miami		Miami-Dade County	
	Units	Percent	Units	Percent
Less than \$50,000	1,561	15.1	31,585	7.0
\$50,000-\$99,000	5,723	55.6	158,824	35.3
\$100,000-\$149,999	1,615	15.7	126,031	28.1
\$150,000-\$199,999	323	3.1	61,262	13.6
\$200,000-\$299,999	536	5.2	36,620	8.2
\$300,000 and more	544	5.3	35,011	7.8
Totals	10,302	100.0	449,333	100.0
Median value	\$85,800		\$113,200	

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 1/06

The Florida Department of Community Affairs (DCA) has concluded that affordable gross housing costs should fall below 30 percent of a family's income. As a result, a gross housing cost-to-income ratio of more than 30 percent is indicative of an excessive household expenditure (i.e. termed "cost burden") for housing costs, while a ratio of more than 50 percent is termed "severe cost burden."

From Table 3-8, 4,517 households, or 44.3 percent of the total renters in 2000, paid less than 30 percent of household income for gross housing costs. Further, 2,848 specified owner-occupied households or 47.0 percent of the total owners with a mortgage in 2000, paid less than 30 percent of household income for gross housing costs. Based upon DCA standard, these figures indicate that a majority

of the households within the City pay in excess of 30 percent of their income on gross housing costs.

**Table 3-7: 2000 Monthly Owner Costs of Specified Owner-Occupied Units**

Mortgage Status and Selected Monthly Owner Costs	North Miami		Miami-Dade County	
	Units	Percent	Units	Percent
<b>A. Mortgaged Units</b>				
Less than \$500	76	1.3	5,892	2.3
\$500-\$699	589	9.7	18,269	7.1
\$700-\$999	2,020	33.3	58,953	22.9
\$1,000-\$1,249	1,571	25.9	55,726	21.6
\$1,250-\$1,499	712	11.7	41,866	16.2
\$1,500-\$1,999	486	8.0	43,669	16.9
\$2,000 and more	610	10.1	33,627	13.0
Totals	6,064	100.0	258,002	100.0
Median per month	\$1,055		\$796	
<b>B. Units Without a Mortgage</b>				
Less than \$200	102	6.7	3,924	5.1
\$200-\$349	566	36.9	21,104	27.1
\$350-\$499	422	27.5	25,634	32.9
\$500-\$699	170	11.1	15,650	20.1
\$700 and more	273	17.8	11,501	14.8
Totals	1,533	100.0	77,813	100.0
Median per month	\$385		\$580	

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 1/06

### **Household Income Characteristics and Groups.**

Household income distribution data for 2000 are presented in Table 3-9A. From this table, the median household income in North Miami was \$29,778 per year in 2000; less than the \$35,966 figure evidenced countywide. Approximately 42 percent of the households in North Miami earned less than \$25,000 per year in 2000.

State of the Cities Data System (SOCDS) data prepared by the U.S. Department of Housing and Urban Development, are used to estimate the 2000 distribution of households in North Miami, by tenure, among very-low, low and moderate income groups, as measured against the Miami-Dade County median income level. The following definitions are used: Very-low income = 0 to 50 percent of the median income; Low income = 51 percent to 80 percent of the median income; and Moderate income = 81 percent to 120 percent of the median income.

Estimates for the County and City, using the SOCDs data, are presented in Tables 3-9B and 3-9C.

**Table 3-8: 2000 Comparative Cost Burden Characteristics (Specified Units)**

A. Gross Rent as a Percentage of Household Income	North Miami		Miami-Dade County	
	Units	Percent	Units	Percent
Less than 20%	2,320	22.7	75,786	23.2
20%-29%	2,197	21.5	73,417	22.5
30%-39%	1,410	13.8	46,795	14.3
40%-49%	1,007	9.9	27,548	8.4
50% and more	2,517	24.7	79,723	24.4
Not computed	755	7.4	23,564	7.2
<b>Totals</b>	<b>10,206</b>	<b>100.0</b>	<b>326,833</b>	<b>100.0</b>
<b>B. Selected Monthly Owner Costs as a Percentage of Household Income (units with a mortgage)</b>				
Less than 20%	1,416	23.4	78,877	30.6
20%-29%	1,432	23.6	70,447	27.3
30%-39%	953	15.7	39,792	15.4
40%-49%	761	12.5	21,477	8.3
50% and more	1,383	22.8	45,189	17.5
Not computed	119	2.0	2,220	0.9
<b>Totals</b>	<b>6,064</b>	<b>100.0</b>	<b>258,002</b>	<b>100.0</b>

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 1/06

**Table 3-9A: Annual Household Income Distribution**

Income Range	North Miami		Miami-Dade County	
	Households	Percent	Households	Percent
Less than \$15,000	4,941	24.2	166,310	21.4
\$15,000-\$24,999	3,564	17.5	111,649	14.4
\$25,000-\$34,999	3,368	16.5	100,833	13.0
\$35,000-\$44,999	2,446	12.0	87,282	11.2
\$45,000-\$59,999	2,386	11.7	96,224	12.4
\$60,000-\$74,999	1,374	6.7	67,807	8.7
\$75,000-\$99,999	1,026	5.0	63,132	8.1
\$100,000-\$124,999	579	2.8	32,258	4.1
\$125,000 and more	743	3.6	51,883	6.7
<b>Totals</b>	<b>20,427</b>	<b>100.0</b>	<b>777,378</b>	<b>100.0</b>
<b>Median</b>	<b>\$29,778</b>		<b>\$35,966</b>	

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 1/06

**Table 3-9B: Miami-Dade County 2000 Distribution of Households by Income Group\* (Households)**

<b>A. Renter Households**</b>	<b>Very-Low</b>	<b>Low</b>	<b>Moderate+</b>	<b>Total</b>
Elderly (1 & 2 Members)	40,645	9,399	11,724	61,768
Small Related (2 to 4 members)	45,705	29,185	64,679	139,569
Large Related (5 or more members)	14,660	9,535	18,000	42,195
All Other	29,670	13,725	40,270	83,665
<b>Subtotals Renter Households</b>	<b>130,680</b>	<b>61,844</b>	<b>134,673</b>	<b>327,197</b>
<b>B. Owner Households**</b>	<b>Very-Low</b>	<b>Low</b>	<b>Moderate+</b>	<b>Total</b>
Elderly (1 & 2 Members)	29,007	19,004	56,220	104,231
Small Related (2 to 4 members)	18,869	23,250	170,765	212,884
Large Related (5 or more members)	6,925	9,310	58,535	74,770
All Other	8,994	6,154	42,340	57,488
<b>Subtotals Owners</b>	<b>63,795</b>	<b>57,718</b>	<b>327,860</b>	<b>449,373</b>
<b>Totals--All Households</b>	<b>194,475</b>	<b>119,562</b>	<b>462,533</b>	<b>776,570</b>

\* Very-Low Income—0.50% of median; Low Income—51% to 80% of median; Moderate+ Income—81% and more of Median Income. Median Income is the figure for Miami-Dade County

\*\* Small = 1 and 2 persons; Medium = 3 and 4 persons; and Large = 5 and more persons.

Source: State of the Cities Data System (SODCS), Department of Housing and Urban Development, Iler Planning Group,; 12/05

Table 3-9C presents an estimate of the distribution of households in North Miami, by tenure and income-group: The distribution of total households, by income group is as follows: Very-low - 29 percent; Low - 19 percent; and Moderate and above - 52 percent.

**Table 3-9C: North Miami 2000 Distribution of Households by Income Group\* (Households)**

<b>A. Renter Households**</b>	<b>Very-Low</b>	<b>Low</b>	<b>Moderate+</b>	<b>Total</b>
Elderly (1 & 2 Members)	352	164	310	826
Small Related (2 to 4 members)	1,709	1,029	2,020	4,758
Large Related (5 or more members)	555	350	465	1,370
All Other	1,305	680	1,300	3,285
<b>Subtotals Renter Households</b>	<b>3,921</b>	<b>2,223</b>	<b>4,095</b>	<b>10,239</b>
<b>B. Owner Households**</b>	<b>Very-Low</b>	<b>Low</b>	<b>Moderate+</b>	<b>Total</b>
Elderly (1 & 2 Members)	639	379	1,130	2,148
Small Related (2 to 4 members)	610	599	2,720	3,929
Large Related (5 or more members)	398	575	1,290	2,263
All Other	413	165	1,345	1,923
<b>Subtotals Owners</b>	<b>2,060</b>	<b>1,718</b>	<b>6,485</b>	<b>10,263</b>
<b>Totals--All Households</b>	<b>5,981</b>	<b>3,941</b>	<b>10,580</b>	<b>20,502</b>

\* Very-Low Income—0.50% of median; Low Income—51% to 80% of median; Moderate Income—81%and more of Median Income. Median Income is the figure for Miami-Dade County

\*\* Small = 1 and 2 persons; Medium = 3 and 4 persons; and Large = 5 and more persons.

Source: State of the Cities Data System (SODCS), Department of Housing and Urban Development, Iler Planning Group; 1/06.

### **Housing and Living Conditions.**

There are several measures which can be used to evaluate housing stock and living conditions within the City - including age of structure, over-crowding, lack of certain necessary facilities, structural integrity, and Florida Building Code requirements. Specific indicators of substandard housing or living conditions for each of the above measures are as follows:

- **Age of Structure**—A housing unit constructed prior to 1950, which is valued at less than \$25,000.
- **Lacking Facilities**—A housing unit lacking complete plumbing facilities, heating and cooking facilities and/or complete kitchen facilities.
- **Over-Crowding**—1.01 persons per room or more within a dwelling unit.
- **External Housing Conditions**—A housing unit categorized as either of the following by the City of North Miami:
  - **Deteriorated**: Meaning in need of some relatively minor exterior repair which is indicative of a lack of maintenance. Examples include housing that requires painting, fascias and soffits showing signs of deterioration, cracked and broken windows, and even severely overgrown yards which is generally accompanied by a lack of structural maintenance.
  - **Dilapidated**: Meaning in need of substantial rehabilitation. The unit may be considered to be unfit for human habitation or rapidly approaching that condition. This category of substandard housing needs to be addressed immediately, through either rehabilitation or demolition, as the health and safety of the inhabitants may be endangered.
- **Code Violations**—The City has adopted the Florida Building Code (Miami-Dade & Broward Edition) that incorporates the following definition for an unsafe structure:
  - A building deemed a fire hazard, as a result of debris or other combustible material, creates a hazard, vacant and unguarded; or

- A building deemed structurally unsafe by design or deterioration, partially destroyed, unsafe or lack of adequate plumbing, inadequate or unsafe electrical, inadequate waste disposal system or lack of a building permit.

The following discussion outlines the rationale used for preparing definitions of “standard” and “substandard” living and conditions in terms of the five measures listed and discussed above. From Table 3-3, it is observed that there are 3,045 units (13.6 percent of the housing stock) within the City that were constructed prior to 1950. Further, from Table 3-6, there were 1,521 owner-occupied units (15.1 percent of the total) in North Miami valued at less than \$50,000 in 2000. It is concluded that while “age of structure” and “value,” in combination, do not raise any immediate issues regarding overall substandard living and housing conditions, vigilant code enforcement and conservation efforts should be undertaken as a means to preserve the City’s affordable housing stock.

Age and value of the housing stock could become a concern in the future if the City does not implement adequate conservation and preservation measures.

An over-crowded condition is normally defined to occur when there are more than 1.01 persons per room in a dwelling unit (Note: excluding bathrooms, open porches, utility rooms, unfinished attics, etc.; rooms not used for “living” purposes). According to the US Census, in the year 2000 there were an estimated 5,717 households, or 25.2 percent of the total, reporting occupancy of more than 1.0 person per room in North Miami. This rate is higher than the countywide rate of 20.0 percent. Due to this relatively high rate in relation to the County, it is concluded that over-crowding is an issue of significant concern regarding overall substandard living and housing conditions within the City. The City has linked this issue to the large amount of extended families living in the City and also the need to increase affordable housing development. The City has introduced policies in the Housing Element Goals, Objectives and Policies section to assist in reducing overcrowded units and encourage the development and rehabilitation of affordable units.



The 2000 Census reported that high percentages of the year-round housing stock had complete plumbing facilities (98.2 percent) and complete kitchen facilities (98.5 percent). Due to the high level of availability, it is concluded that “lack of facilities” does not, in itself, raise any issues regarding overall substandard living and housing conditions within the City.

City staff has not completed a general survey oriented to evaluating external housing conditions. North Miami has, however, prepared the 2005 - 2010 Consolidated Plan for Housing and Community Development (6/28/05), in which it was estimated that the City had 1,084 substandard housing units. In addition, after the 2004 and 2005 hurricane seasons more units have become substandard.

The City has adopted the Florida Building Code (Miami-Dade & Broward Edition). According to the Building Department, there are housing units within the City that are currently the subject of repairs resulting from Florida Building Code citations; however, the current database is not programmed to provide summary data sufficient for use in this document. Further, the City is subject to the Metropolitan Miami-Dade County minimum housing standards ordinance and has adopted City Ordinance 816 - North Miami Housing Standards which provide minimum acceptable housing and living conditions standards.

#### **Assisted Housing.**

There are several renter-occupied housing developments within the City using Federal, State or local subsidy programs. Assisted housing developments are listed in Table 3-10. From Table 3-10, there are five public housing rental properties containing a total of 726 apartment units in the City. Target populations include family, elderly, and disabled residents

Table 3-10: North Miami Assisted Housing Inventory

Name	Address	Units/Type	Assistance*
Ahepa Apartments	350 NE 141 <sup>st</sup> Street	80/Elderly	5,8
Buena Vista Villas	13555 NE 3 Court	20/Disabled	5,8
Center Court	14795 NE 18 <sup>th</sup> Avenue	589/Family	1,3
Colonial Place Apartments	13898 NE 3 <sup>rd</sup> Court	9/Disabled	5,8
Dixie Belle	1205 NE 138 <sup>th</sup> Street	28/Family	3
Total Units		726	

\* 1 - Bonds; 2 - Loan Guarantee; 3 - Housing Credits; 4 - S.A.I.L.; 5 - Rent supplement; 7 - Section 8 non-insured; 7 - HUD 221(d) (4)); 8 - HUD 202.

Source: Shimberg Center for Affordable Housing, Iler Planning Group; 12/05. revised: Michele Mellgren & Associates, Inc.

### Group Facilities and Homes.

The Florida Department of Health and Rehabilitative Services (HRS) licenses group homes through three of its divisions: Aging and Adult Services (Adult Congregate Living Facilities); Division of Developmental Services (Long-Term Residential Care Facilities and Centers for Independent Living); and Children, Youth and Families (Family Group Home and Family Foster Home facilities).

HRS also provides licensing to individuals or businesses that provide homes to individuals who are developmentally delayed. The individuals placed in homes are typically adults; however, a disability had to have occurred prior to the age of 18 to be eligible. Licensed homes with capacities of less than 3 are considered foster homes, while those with capacities of 4 to 8 are termed group homes.

The City is served by local community-based care agencies, the lead agency for Miami-Dade County is Our Kids, Inc., registered by the Florida Department of Children and Families (DCF). According to DCF, community based care organizations were established as a redesign of Florida's child welfare system increasing and creating innovative strategies by having:

- More children being visited each month;
- Fewer children in out-of-home (foster) care;
- Fewer children re-entering foster care;
- More children adopted;

- More available foster families; and
- Less foster home crowding.

At the time of this comprehensive plan update, there were eight known foster homes in North Miami.

In addition to group homes licensed by HRS, the Agency for Health Care Administration licenses assisted living facilities (ALFs). There are currently two licensed ALFs in the City, with a licensed capacity of 60 beds (see Table 3-12), 40 of which are reserved for very-low income residents (i.e. OSS beds).

**Table 3-12: Inventory of Assisted Living Facilities**

<b>Assisted Living Facility</b>	<b>Address</b>	<b>OSS/Capacity</b>
North Miami retirement Living	1595 NE 145 <sup>th</sup> Street	30/50
JAS Manor	645 NE 131 <sup>st</sup> Street	10/10
<b>Total</b>		<b>40/60</b>

Source: Agency for Health Care Administration, Division of Health Quality Assurance; ILER Planning Group, 1/06, revised: Michele Mellgren & Associates, Inc.

Group home facilities are permitted under City codes at present. It is concluded that no further special measures are needed to accommodate additional group home uses. Population projections do not indicate that the City should incorporate special policies to encourage large-scale facilities to accommodate the unique needs of the elderly population within the indicated planning periods. However, policies to incorporate small-scale affordable elderly rental facilities within existing residential neighborhoods should be encouraged.

#### **Mobile Home and Recreational Vehicle Parks.**

US Census records indicate that there were a total of 68 mobile homes located in North Miami.

#### **Neighborhood Redevelopment and Urban Infill.**

The newly formed Community Redevelopment Agency (CRA) has identified six major corridors for redevelopment or urban infill activity; NW 7 Ave., NE 6 Ave., NE 135 St., Biscayne Boulevard, Dixie Highway and NE 125 St. Due to limitations on the City's infrastructure, particularly potable water, the City has

chosen to focus redevelopment efforts in the core of the City, redistributed 5,000 units to a concentrated node, along NE 125<sup>th</sup>, NE 6<sup>th</sup> Ave and Dixie Highway. According to the land use amendments outlined in the Future Land Use Element, the City will shift these units from the single family residential zoning category to areas where higher density is more appropriate and can be supported. Using good urban design principles and strategies from the Transit Oriented Development Study, the City is able to support increased density in the Neighborhood Redevelopment Overlay and introduce higher densities which will allow for the creation of needed housing in the City.

#### City Housing Programs.

The City has taken an active role in housing stock maintenance, including codification of minimum housing standards and funding of a full-time minimum housing inspector.

The City has also attained the “Entitlement City” designation through the Community Development Block Grant (CDBG) program. Using CDBG funds, the City has prepared a Consolidated Plan and become eligible for grant monies for a variety of housing programs, including SHIP and HOME. Housing priorities established in the Consolidated Plan include: (1) Promote housing rehabilitation through deferred, forgivable loans as a means to increase the availability of affordable housing; (2) promote single-family home ownership and the preservation of existing affordable housing by enforcing the City’s Minimum Housing Ordinance; and (3) increase the diversity of affordable housing through rehabilitation loans and other assistance mechanisms for renter-occupied units.

Further, the 2005 - 2010 Consolidated Plan for Housing and Community Development targets the rehabilitation of an average of 40 units per year during its five-year planning term, the City will aim to surpass this target set forth in the Consolidated Plan.

Affordable housing efforts in the City will further benefit from the strategies created by the CRA. The CRA encompasses approximately 60 percent of the City, or 3,250 acres. A key development within the designated CRA is the Biscayne Landing development, which will contain 5,999 market-rate residential units. As a condition of development approval, an equal number of affordable units will be rehabilitated or constructed throughout the City. The agreement

between the City and the Biscayne Landing developer is referred to as the Munisport agreement.

### **Historic Preservation.**

According to the Florida Master Site File, 14 structures have been identified as historically significant in the City of North Miami. There are no identified preservation activities within the City at this time, however, as North Miami continues to mature as a community, the City may decide to implement a historic preservation program. Funding sources available to assist in this effort include State Historical Resources Grants, the CDBG program and private donations.

The private residence located at 12940 NE 4 Avenue was built in 1927 by architect and early North Miami pioneer Arthur Griffing. The residence was built in a Mediterranean revival style and represents the only historical residence in North Miami eligible for register on the National Register of Historic Places. Majority of the structures below were built circa 1950's in masonry vernacular style. Table 3-13 lists the historical residential structures in the City.

**Table 3-13: Historical Residences**

<b>Inventory of Historical Residences</b>		
<b>Residence</b>	<b>Address</b>	<b>Year Built</b>
11905 NW 2nd Avenue	11905 NW 2nd Avenue	1950
185 NW 119th Street	185 NW 119th St	1950
175 NW 119th Street	175 NW 119th St	1950
165 NW 119th Street	165 NW 119th St	1950
155 NW 119th Street	155 NW 119th St	1950
145 NW 119th Street	145 NW 119th St	1950
135 NW 119th Street	135 NW 119th St	1950
125 NW 119th Street	125 NW 119th St	1950
115 NW 119th Street	115 NW 119th St	1950
85 NW 119th Street	85 NW 119th St	1950
75 NW 119th Street	75 NW 119th St	1950
65 NW 119th Street	65 NW 119th St	1950
Nightingale Gardens	12221 W Dixie Hwy	1925
12940 NE 4th Avenue	12940 NE 4th Ave	1927

Source: Florida Master Site File, 2007, Michele Mellgren & Associates, Inc. 2007

## HOUSING ANALYSIS

### Housing Projections.

The estimated population of North Miami in 2000 was 59,880 residents. Projections prepared in the Future Land Use Element indicate that the population will increase to approximately 78,280 residents in 2015 and 86,301 residents by 2025.

Permanent housing needs projections during the 2000-2025 period accounting for resident household growth, as well as a reasonable vacancy rate, are summarized in Table 3-14.

**Table 3-14: Housing Need Projections (2000-2025)**

	2005	2010	2015	2020	2025
<b>Housing Units</b>	22,367	28,994	31,714	33,058	34,313
<b>Households</b>	21,533	26,757	29,266	30,506	31,664

Source: Iler Planning Group; 1/06.

From the above table, it is projected that 11,946 units will be required during the 2005-2025 period to accommodate the City's housing needs.

Resident household growth projections, based upon the assumption that the historical renter versus owner split is maintained, are presented in Table 3-15.

**Table 3-15: Resident Household Growth Projections**

Growth Period	Resident Household Growth	
	Rented Units	Owned Units
2005-2010	2,601	2,623
2010-2015	1,250	1,259
2015-2020	617	623
2020-2025	577	581
<b>Total Growth 2005-2025</b>	<b>5,045</b>	<b>5,086</b>

Source: ILER Planning Group, 1/06

The above projections are based upon the assumption that Biscayne Landing will be fully developed, as will substantial portions of the mixed-use redevelopment

areas within the City. However, marketing decisions related to these developments can substantially alter the projected mix of renter-occupied versus owner-occupied units. Table 3-16 presents total housing stock projections, by residential density type.

**Table 3-16: Total Housing Stock Projections (2000-2020)**

Residential Density	Projected Housing Units by Year			
	2010	2015	2020	2025
Single-Family <sup>(1)</sup>	9,862	9,929	9,929	9,929
Multiple-Family <sup>(2)</sup>	19,132	21,785	23,129	24,202
<b>Total Units</b>	<b>28,994</b>	<b>31,714</b>	<b>33,058</b>	<b>34,313</b>

(1) Growth consists of remaining Low Density and Medium Density Residential development potential  
 (2) Growth consists of remaining High Density development potential, Biscayne Landing and Mixed-Use redevelopment potential.

Source: ILER Planning Group, 1/06

These projections include the assumption of an adequate number of vacant units to meet the rate defined by the 2000 Census.

**Household Characteristics Projections.**

Using Census data, it is estimated that there were 20,520 resident households in the City in 2000 (i.e., 92.2 percent of the year-round housing units). Projections of household growth, based upon dwelling unit projections and the assumption of maintenance of the current household occupancy rate, are presented as follows: 2010 - 26,757 households, 2015 - 29,266 households, 2020 - 30,506 households, and 2025 - 31,664 households.

Household estimates and projections, by tenure and household size, are presented in Table 3-17. Projections prepared in Table 3-17 are based upon the assumption that tenure and household size distributions, per the 2000 Census, will be maintained through the year 2020. From Table 3-17, the following observations are made:

- Of the total growth (9,986 households) during the 2000-2020 period, a nearly even distribution is projected among owners (50.2 percent) and renters (49.8 percent).



- Owners are projected to increase by 5,012 households, while renters are projected to increase by 4,974 households during the 2000-2020 period.
- Family households (i.e., 3 persons or more per household) will constitute 48 percent of the total growth in the City during the 2000-2020 period, while single-person households are projected to increase by 27percent.

Population projections, by age group, are presented in Table 3-18. Projections prepared in Table 3-18 are based upon age-group growth assumptions used by the Shimberg Affordable Housing Institute, adjusted to account for locally-prepared projections. From Table 3-18, the following observations are significant:

- Prime school-age groups (i.e., 5-19 years of age) are projected to increase by 6,652 residents (or 30 percent of the total projected growth) during the 2000-2020 period.
- Of the total growth (22,510 residents) during the 2000-2020 period, 10,036 residents (46 percent of the total) are projected to be prime working age-groups (i.e., 20-59 years of age).
- Growth in the early retirement age-group (i.e., 60 - 74 years) is projected to constitute 19 percent of the total growth, while the frail elderly (i.e. aged 75 years and older) is projected to decline by 31 percent.

**Table 3-17: 2000-2020 Projections of Household Growth by Tenure and Household Size**

<b>A. Owner-Occupied Housing</b>			
<b>Household Size</b>	<b>2000</b>	<b>2010</b>	<b>2020</b>
1	2,520	3,286	3,746
2	2,482	3,236	3,690
3	1,541	2,009	2,291
4	1,481	1,931	2,202
5	1,032	1,346	1,534
6	640	834	951
7+	606	790	901
<b>Subtotals</b>	<b>10,302</b>	<b>13,432</b>	<b>15,314</b>

<b>B. Renter-Occupied Housing</b>			
Household Size	2000	2010	2020
1	3,021	3,940	4,492
2	2,555	3,332	3,799
3	1,968	2,566	2,926
4	1,295	1,689	1,925
5	835	1,089	1,241
6	321	419	477
7+	223	291	332
Subtotals	10,218	13,325	15,192
<b>C. Total-Occupied Housing</b>			
Household Size	2000	2010	2020
1	5,541	7,226	8,238
2	5,037	6,568	7,488
3	3,509	4,575	5,217
4	2,776	3,620	4,127
5	1,867	2,434	2,776
6	961	1,253	1,429
7+	829	1,081	1,232
Totals	20,520	26,757	30,506

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 1/06

**Table 3-18: 2005-2020 Population Projections by Age Group Distribution**

Age Group (years)	Year (population)			Growth 2000-2020
	2000	2010	2020	
0-4	4,827	5,882	7,126	2,299
5-9	4,624	6,020	7,155	2,531
10-14	4,595	5,593	6,101	1,506
15-19	4,687	6,178	7,302	2,615
20-34	14,199	18,444	22,183	7,984
35-59	19,504	21,991	21,556	2,052
60-74	4,678	5,964	9,011	4,333
75+	2,622	2,062	1,811	(811)
Totals	59,734	72,134	82,244	22,510

Source: U.S. Bureau of the Census, 2000: SF 3; ILER Planning Group, 12/05

### **Housing Delivery Process.**

The housing stock in the City has historically been constructed primarily by the private sector; however, public (i.e. Miami Housing Agency through Section 8 assistance programs), and non-profits have participated, as well. It is concluded that the private sector will continue to provide the bulk of the housing stock necessary to accommodate projected population growth throughout the planning periods. It is anticipated that non-profits will continue to participate to some

extent, while the City's role in maintenance and rehabilitation of the housing stock likely will increase due to participation in the Community Development Block Grant (CDBG) program, as well as program directives of the Community Redevelopment Agency (CRA).

An analysis of vacant residential land and the expectation of mixed-use redevelopment opportunities, provided in the FLUE, lead to the conclusion that additional residential land will be needed to accommodate projected population growth. Current single family residential areas have been built at densities lower than actually designated on the current adopted Future Land Use Map prompting the need to shift additional units to more appropriate areas in the City, to create housing. Under the current adopted future land use map, only 17.16 acres remain vacant which is zoned residential low, medium and high to support future residential growth. By introducing the future land use changes the City will have 254 acres of mixed use and 583 acres of medium and high density residential for redevelopment in the future.

Future residential development will consist primarily of the build out of remaining vacant land and the Biscayne Landing development, with the balance the result of redevelopment activity in designated mixed-use and high density areas. Future redevelopment will also ensure that adequate sites are available for housing very low income, low income and moderate income households.

It is anticipated that private sector developers, including non-profit corporations, will meet additional rental housing demand in the City.

The City's role in the housing delivery process will be concentrated in the following areas: (1) Provision of services, either directly or by contract, necessary to facilitate private sector construction activity; (2) Code enforcement and administration of the City's minimum housing standards; and (3) administration of the CDBG (Federal), HOME (Federal), and State Housing Initiatives Partnership (SHIP -State) programs.

The City administers first time homebuyers' programs through the HOME and SHIP programs. By 2010, the City plans to assist 50 homebuyers. Deferred loans for home repair and "Barrier-Free renovations" to income-eligible

households are available through the CDBG, HOME and SHIP programs, including multi-family housing rehabilitation. The City also maintains a Disaster Mitigation/Recovery Strategy program with SHIP funds assist with post-disaster repairs. The City plans to use these programs to assist in the elimination of substandard housing. The City has also introduced a 24-hour Code Enforcement hotline to increase the efficiency of code enforcement and encourage residents to report code violations, including housing deficiencies.

The City also partners with Miami-Dade County on low and moderate income multifamily rehabilitation loan program. This program will provide low interest loans to property owners along NE 6<sup>th</sup> Avenue (from NW 125<sup>th</sup> Street to NW 143<sup>rd</sup> Street). The HOME Community Housing Development Organization (CHDO) program can also provide for the construction of new affordable housing.

The CRA will coordinate with the developers of Biscayne Landing to implement the related affordable housing provision conditions. The first affordable housing project that the CRA has undertaken is the development of 136 affordable Townhomes built on the CRA-owned property (donated to the CRA by the City), named Pioneer Gardens at North Miami (formerly Ruck's Park), set to be completed in 2009. The CRA will greatly assist the City in the provision of affordable housing and have set these strategies in place to assist with developing housing:

- Homebuyer subsidies
- Developer/Owner incentives
- Single Family Home Rehabilitation
- CRA purchase of existing housing units for preservation as rental units or as homeownership units

#### **Alternative Housing Issues.**

An analysis of 2000 income group data from Table 3-9C leads to the following conclusions:

- Approximately 38 percent of the very-low income households in North Miami are related renter households, while an additional 17 percent are

- related owner households. Elderly households constitute another 17 percent of the total very-low income households;
- Approximately 35 percent of the low income households in North Miami are related renter households, while an additional 30 percent are related owner households;
  - In total, approximately 59 percent of the very-low and low income households are related households (i.e. families), according to the following mix: renters—63 percent; and owners—39 percent. .

The rental unit vacancy rate from Table 3-4 (i.e., 6.7 percent) indicates that overall supply exceeds demand (note: a 5 percent vacancy rate is indicative of an equilibrium situation where supply meets demand, accounting for a normal turnover of tenants).

The incidence of cost burden among renters in the City (i.e., 48 percent versus a countywide rate of 47 percent from Table 3-8) is similar to that of the County. However, the above analysis indicates that related renter households (i.e. families) are likely having the most difficulty finding affordable rents in the City.

It is therefore recommended that the City encourage the development of rental housing alternatives for family households. The increased density outlined in the Future Land Use Element will support the additional need for affordable housing in the City.

#### **Availability of Services.**

North Miami currently has sufficient infrastructure in place, either provided directly by the City or through interlocal agreements, to accommodate current development demands. Plans are in place however, to meet future demand as increases in density and intensity will require additional infrastructure expansions, as detailed in the Infrastructure Element.

At this time, North Miami has sufficient capacity to provide the potable water. As mentioned in the Infrastructure Data, Inventory and Analysis, with improvements, North Miami can provide potable water to future populations through increasing

current plant capacity to 16 million gallons daily (MGD) by 2015 and 20 MGD by the year 2020. The City will have sufficient sanitary sewer services for future development, but will undertake a study analyzing the City's sanitary sewer system and the need for future improvements. Further, the entire City is in a Transportation Concurrency Exception Area (TCEA) with mobility strategies in place to encourage alternative modes of transportation. The City has also adopted a Transportation Master Plan encouraging pedestrian friendly environments and transit oriented development, which will be supported by the shifting of 5,000 units to a central node in the City.

Sufficient solid waste capacity is available at the County's facilities for the disposal of both processable and non-processable solid waste. A contractual agreement exists between North Miami and a contracted hauler for the collection and transport of all solid waste to the County facilities. North Miami has sufficient acres in local and community parks to serve its existing and future residents and plans to add additional park acreage through developer agreement with Biscayne Landing (see Parks and Recreation Element). The City has also recently completed the Parks and Recreation Master Plan which will assist the City in increasing its current parks and opens space acreage.

## **AFFORDABLE HOUSING ASSESSMENT**

Florida Statutes, Chapter 9J-5.010(2)(b) requires that an affordable housing assessment be performed using a methodology established by the Florida Department of Community Affairs (DCA).

Basic data for the Affordable Housing Assessment for North Miami was either extracted from the 2000 Census, or provided by the Shimberg Center for Affordable Housing (i.e., "Shimberg") at the University of Florida.

### **Affordable Housing Demand**

Shimberg projections do not account for expected population growth from Biscayne Landing and expected mixed-use redevelopment activities. As a result, Shimberg data has been factored to account for these eventualities. Using

modified Shimberg data, household growth projections, by income group, are presented in Table 3-19.

Tables 3-20 to 3-23 present the very-low, low and moderate income housing needs estimates and projections using modified Shimberg data. Data is presented in a manner to utilize Shimberg assumptions regarding the relative growth of very-low, low and moderate income households, and do not account for the potential effects upon these assumptions of market-rate housing in developments such as Biscayne Landing.

An affordable home, by definition, is one where a household pays less than 30 percent of its annual income for gross housing costs. A household which pays 30 percent or more of its annual income for gross housing costs is therefore experiencing “cost burden” (i.e. paying too high a percentage of its income for gross housing costs).

From Table 3-20, there are currently (2002) 2,823 owner households and 4,723 renter households in a position of cost-burden. Cost burden becomes more of an issue as the percentage of household income paid for gross housing costs increases, particularly in the lower income groups when the percentage is in excess of 50 percent (i.e. “severe” cost burden). For comparative purposes, the numbers of owner and renter households in North Miami paying 50 percent or more for gross housing costs are also presented in Table 3-20.

Due primarily to the City’s development and re-development potential, demand for additional very-low, low and moderate income housing is projected to be substantial during the projection period. Additional development will also result primarily from Biscayne Landing and mixed-use redevelopment activity. Data in Table 3-20 indicates that the current incidence of cost-burden is an issue for the City, particularly among very-low income renters. Primary City housing objectives should therefore be tailored principally to both maintaining the condition of the housing stock and the provision of additional affordable housing to accommodate additional needs generated by population growth.



**Table 3-19: Modified Shimberg Household Projections, by Income Group 2002–2015 (Households)**

<b>A. Owner-Occupied Households</b>					
Year	Very-Low	Low	Moderate	Moderate+	Total
2002	1,414	1,287	1,795	5,730	10,226
2005	1,472	1,355	1,898	6,085	10,810
2010	1,787	1,682	2,370	7,592	13,432
2020	2,097	1,961	2,719	8,538	15,314
<b>B. Renter-Occupied Households</b>					
Year	Very-Low	Low	Moderate	Moderate+	Total
2002	3,446	2,084	2,084	2,549	10,163
2005	3,656	2,199	2,197	2,681	10,732
2010	4,546	2,724	2,722	3,334	13,325
2020	5,184	3,097	3,109	3,802	15,192

Source: Shimberg Center for Affordable Housing , University of Florida; Iler Planning Group, 1/06.

**Table 3-20: 2002 Cost Burdened Housing (occupied units) Derived from Shimberg Data**

<b>A. Owner-Occupied Housing</b>		
Income Group	At 30% or More Cost Burden*	At 50% or More Cost Burden**
Very-Low	1,007	479
Low	672	246
Moderate	611	95
Moderate+	533	63
Subtotal Owner	2,823	883
<b>B. Renter-Occupied Housing</b>		
Income Group	At 30% or More Cost Burden*	At 50% or More Cost Burden**
Very-Low	2,773	2,005
Low	1,307	216
Moderate	525	25
Moderate+	118	4
Subtotal Renter	4,723	2,250

\* Deficit = Households paying 30 percent or more of gross income for gross housing costs  
\*\* Deficit = Households paying 40 percent or more of gross income for gross housing costs

Source: Shimberg Center for Affordable Housing, University of Florida; ILER Planning Group, 1/06

**Table 3-21: Growth Driven Need for Affordable Owner-Occupied Units Derived from Modified Shimberg Data**

Income Group	Growth Period		
	2002-2005	2005-2010	2010-2020
Very-Low	58	315	310
Low	68	327	279
Moderate	103	472	349

Source: Shimberg Center for Affordable Housing , University of Florida,; Iler Planning Group 1/06

**Table 3-22: Growth Driven Need for Affordable Renter-Occupied Units Derived from Modified Shimberg Data**

Income Group	Growth Period		
	2002-2005	2005-2010	2010-2020
Very-Low	210	890	638
Low	753	525	373
Moderate	113	525	387

Source: Shimberg Center for Affordable Housing , University of Florida,; Iler Planning Group, 1/06

### Supplemental Housing Supply Characteristics

Data regarding the City's housing and household characteristics are discussed using a variety of sources in previous sections of this element. Supplementing previous data are the following data tables prepared by the Shimberg Center for Affordable Housing.

The City's for-sale housing stock, consists primarily of single-family and condominium units. Although the cost of housing has continually increased, the City's housing stock is moderately priced, as indicated in Tables 3-23A and 3-23B:

**Table 3-23A: Yearly Single-Family Housing Sales Activity**

	1999	2000	2001	2002	2003
Units Sold	415	466	520	574	310
Average Price (\$)*	124,027	145,340	163,800	197,192	195,134
Price In 2003 Dollars (\$)	136,832	155,130	169,997	201,467	195,134
Median In 2003 Dollars (\$)	98,188	101,400	107,416	121,069	129,100

Source: Shimberg Center for Affordable Housing.

**Table 3-23B: Yearly Condominium Housing Sales Activity**

	1999	2000	2001	2002	2003
Units Sold	472	408	473	496	254
Average Price (\$)*	58,562	59,880	66,987	79,212	92,849
Price In 2003 Dollars (\$)	64,608	63,913	69,521	80,929	92,849
Median In 2003 Dollars (\$)	62,885	54,436	62,270	73,305	85,000

Source: Shimberg Center for Affordable Housing

In comparison to those for the City of North Miami, the following countywide residential sales statistics are provided by the Shimberg Center for Affordable Housing for the year 2003:

- Single-Family sales: Average price - \$266,191; Median price - \$190,000.
- Condominium sales: Average price - \$200,827; Median price - \$144,834.

## SUMMARY

The support documentation of the Housing Element presents an overview of the existing and projected future conditions pertinent to the preparation of the housing goal, objectives and policies.

Data used to describe the City's existing housing conditions are derived from the US Census, the State of the Cities Data System (SOCDS), the Shimberg Center for Affordable Housing, the City's Evaluation and Appraisal Report, and the 2005 - 2010 Consolidated Plan. The following are pertinent observations regarding the housing and household characteristics of North Miami:

- It is estimated that there were a total of 22,267 housing units in North Miami in 2000, consisting of 9,688 single-family and 12,579 multiple-family units including mobile homes and "other" units.
- Of the housing units reported by the US Census, 46.3 percent were owner-occupied, while 45.9 percent were renter-occupied. The balance (7.8 percent of the total) was classified as vacant.

- The median monthly gross rent for renter-occupied units in North Miami in 2000 was \$613 per month. Approximately 81 percent of all rents were \$500 per month or more in the City.
- The median value of all owner-occupied units reported in 2000 was \$85,800 in North Miami, substantially lower than the countywide median of \$113,200.
- Approximately 44 percent of the total renters in 2000 paid less than 30 percent of household income for gross housing costs. Further approximately 47 percent of the total owners with a mortgage in 2000, paid less than 30 percent of household income for gross housing costs. Based upon the Department of Community Affairs standard, these figures indicate that a majority of the household within the City experience cost burden.

State of the Cities Data System (SOCDS) figures prepared by the U.S. Department of Housing and Urban Development (HUD), are used to estimate the 2000 distribution of households in North Miami, by tenure (i.e. renters and owners), among very-low, low and moderate+ income groups, according to the following distribution:

Very Low Income Renters	19.1%
Low Income Renters	10.8%
Moderate+ Income Renters	20.0%
Very Low Income Owners	10.1%
Low Income Owners	8.4%
Moderate+ Income Owners	<u>31.6%</u>
 Total	 100.0%

- According to the City’s 2005 - 2010 Consolidated Plan for Housing and Community Development, there are 1,084 units that can be classified as substandard. The City has enacted programs of code enforcement and rehabilitation to address the issue.

- There are seven assisted rental housing communities within the City, containing a total of 1,113 units. Target tenants include families, elderly, and disabled residents.
- North Miami currently has several ongoing housing programs available for City residents through the Community Development Block Grant (CDBG) Program, HOME. Federal funds under these programs are used primarily for rehabilitation of residential structures and first time home buyers programs. The City also administers the SHIP program deferred loans for home purchases and home repair with funding from the State of Florida.
- The City has conditioned approval of the Biscayne Landing project on the provision and/or rehabilitation of 6,000 affordable units. The Community Redevelopment Agency (CRA) will oversee projects related to Biscayne Landing's obligation to provide affordable housing. The first affordable housing project related to Biscayne Landing is the development of 136 Townhomes on CRA-owned property. The CRA has also initiated a residential rehabilitation program, providing loans for rehabilitating existing single-family residential units.
- North Miami has identified 14 housing structures listed on the Florida Master Site File as historically significant. In the future, the City may decide to implement an historic preservation program under the Community Development Block Grant program and planning efforts of the Community Redevelopment Agency.
- The US Census estimated the population of North Miami at 59,880 residents in 2000. Projections accounting for expected growth, including Biscayne Landing and designated mixed-use areas, indicate that the City's population will increase to 86,301 residents by 2025. Of the total growth during the 2005 –2025 period, approximately 46 percent are projected to be of prime working age, while prime school-age children are projected to account for approximately 30 percent.. Growth in the retirement age-group is projected to constitute a fairly small share (approximately 19 percent of the total).

- It is projected that 9,347 units will be required during the 2005-2015 period to accommodate the City's housing needs, while an additional 2,599 units will be required to accommodate needs during the 2015-2025 period.
- Of the total growth (10,131 households) projected during the 2005-2025 period, nearly equal amounts are projected to be owners (5,086 households) and renters (5,045 households). Family households (i.e., 3 persons or more per household) are projected constitute approximately 48 percent of the total growth in the City during the 2000-2020 period. Single-person households are projected to increase by 27 percent during the projection period.
- Housing stock in the City has historically been constructed and managed by the both the public and private sectors, including not-for-profit corporations. It is concluded that each sector will continue to provide housing to accommodate projected population growth throughout the 2005-2025 period. The City's role in the new housing delivery process will be based primarily upon the provision of services necessary to facilitate housing delivery by the public and private sector, with active involvement in preservation and rehabilitation through the Community Development Block Grant program. It is further anticipated that the City's role in code enforcement and housing rehabilitation activities will increase as the housing stock ages.
- North Miami has sufficient infrastructure in place, either provided directly by the City or through interlocal agreement, to accommodate current development demands. Plans are in place, however to increase infrastructure capacity to accommodate future growth.
- Due to remaining growth potential, demand for additional very-low, low and moderate income housing will be substantial. The requirement for the developers of Biscayne Landing to construct and rehabilitate a total of 6,000 affordable units will assist the City in meeting projected demand. The changes to density and intensity will assist the City in facilitating suitable locations for new affordable units, particularly along transit corridors and major employment centers.

- An analysis of US Census and Shimberg data indicates that the current incidence of cost-burden is also an issue for the City. Housing goals, objectives and policies should therefore contain language promoting the maintenance and rehabilitation of the City's housing stock, while encouraging or requiring the public and private sectors to provide housing to accommodate additional needs generated by population growth.



# **EAR-Based Comprehensive Plan Amendments**

## **Volume II: Data, Inventory, and Analysis Infrastructure Element**



# 4. INFRASTRUCTURE ELEMENT

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## 4. INFRASTRUCTURE ELEMENT

### PURPOSE

The purpose of the Infrastructure Element is to identify and provide public facilities and services supportive of the future population projections and development patterns envisioned within the Future Land Use Element of the City of North Miami's Comprehensive Plan. The objective of the Infrastructure Element Data Inventory and Analysis Report is to inventory and evaluate existing sanitary sewer, solid waste, drainage, potable water, and natural groundwater aquifer recharge resources within the City and determine the projected demands on these facilities and resources given future service needs and facility levels of service necessary to meet them. Within the Infrastructure Element, each of the public facilities and/or resources mentioned above is treated as a sub-element in the document. Together, this information serves as the foundation for goals, objectives, and policies prepared to guide future development within the City of North Miami.

### DATA AND ANALYSIS REQUIREMENTS

Data and analysis for each of the five sub-elements contained within the Infrastructure Element is provided below in the following order: potable water, sanitary sewer, solid waste, natural groundwater aquifer recharge areas, and drainage.

### POTABLE WATER SUB-ELEMENT

Potable water facilities are defined as structures designed to collect, treat, or distribute potable water - including water wells, treatment plants, reservoirs, and distribution mains.

#### Delivery System and Geographic Service Area

At this time, the Biscayne Aquifer serves as the primary source of potable water in the City of North Miami. The City utilizes the Winson Water Treatment Plant, which pumps an average of 9.0 million gallons of ground water per day from the Biscayne Aquifer. It treats the water through lime softening, filtration and chloramines for disinfection. Then through a vast underground distribution

system, the plant delivers clean and safe potable water to service area customers. In addition, the City also utilizes Miami-Dade Water and Sewer Department (WASD) to satisfy additional potable water needs of the service area.

North Miami's water service area covers approximately 13 square miles and includes the Town of Biscayne Park, portions of Golden Glades, Westview, Pinewood, and areas of unincorporated Miami-Dade County. Extreme boundaries of the water service area are:

1. N.E. 163 Street on the North
2. Biscayne Bay on the East
3. N.W. 105 Street on the South
4. N.W. 27 Avenue on the West

Existing water mains cover the major part of the service area and provide water service to nearly all of its developed properties. North Miami serves an estimated population of 75,000 through 19,000 service connections.

#### **Land Uses Served**

The Winson Water Treatment Plant and Miami-Dade Water and Sewer Department (WASD) provide potable water service to residential, commercial, office, and institutional land uses throughout the City and its service area. Map 4-1 illustrates the City's boundaries from the North Miami water service area.

#### **Potable Water Level of Service**

The City's adopted level of service (LOS) for potable water is based on a design flow/standard of 125 gallons/capita/day, a minimum pressure at the water meter of 30 pounds per square inch, and a total storage capacity of 5 million gallons.

A portion of potable water is also delivered from Miami Dade County. The adopted Miami-Dade County Comprehensive Development Master Plan (CDMP) establishes a LOS standard for potable water that contains the following four (4) components:

- **Regional Treatment.** The regional treatment system shall operate with a rated capacity that is no less than 2 percent above the maximum daily flow for the preceding year.
- **User LOS.** The system shall maintain the capacity to produce and deliver 200 gallons per capita per day.
- **Water Quality.** Water quality shall meet all federal, state, and county primary standards for potable water.
- **Countywide Storage Capacity.** Storage capacity for finished water shall equal no less than 15 percent of the countywide average daily demand.

#### **City of North Miami Level of Service Analysis**

The adopted level of service standard in terms of gallons of potable water delivered per capita per day has been exceeded in the service area for at least the past ten years. The latest potable water consumption figures indicate that the City of North Miami potable water service area consumes an average of 171 gallons per capita per day (gpcpd).<sup>1</sup> This is 37 percent greater than its adopted level of service standard and is uncharacteristically high for an area with a majority of its uses being residential. In coordination with the South Florida Water Management District (SFWMD), the City has committed to reducing its consumption to 165 gallons per capita per day through water conservation efforts. In effect, the City will amend its potable water level of service standard to 165 gallons per capita per day.

The currently adopted level of service standard for storage is a fixed sum that cannot be easily adjusted for population projections. As a result, it is largely ignored or amended periodically to simply reflect current conditions. Therefore, the City should amend its storage level of service standard to equal no less than 15 percent of the service area average daily demand. This will insure that storage capacity improvements are planned for as the demand for portable water increases with population growth.

The minimum flow pressure has been adopted as an operational measurement as opposed to a level of service standard and thus, may be removed from the

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<sup>1</sup> Craig A. Smith & Associates, Initial Capacity Analysis Report, March 2006.

Comprehensive Plan's Goals, Objectives, and Policies, provided that it is adopted in the City's land development regulations.



Map 4-1: 2003 MDWASD Water Service Areas

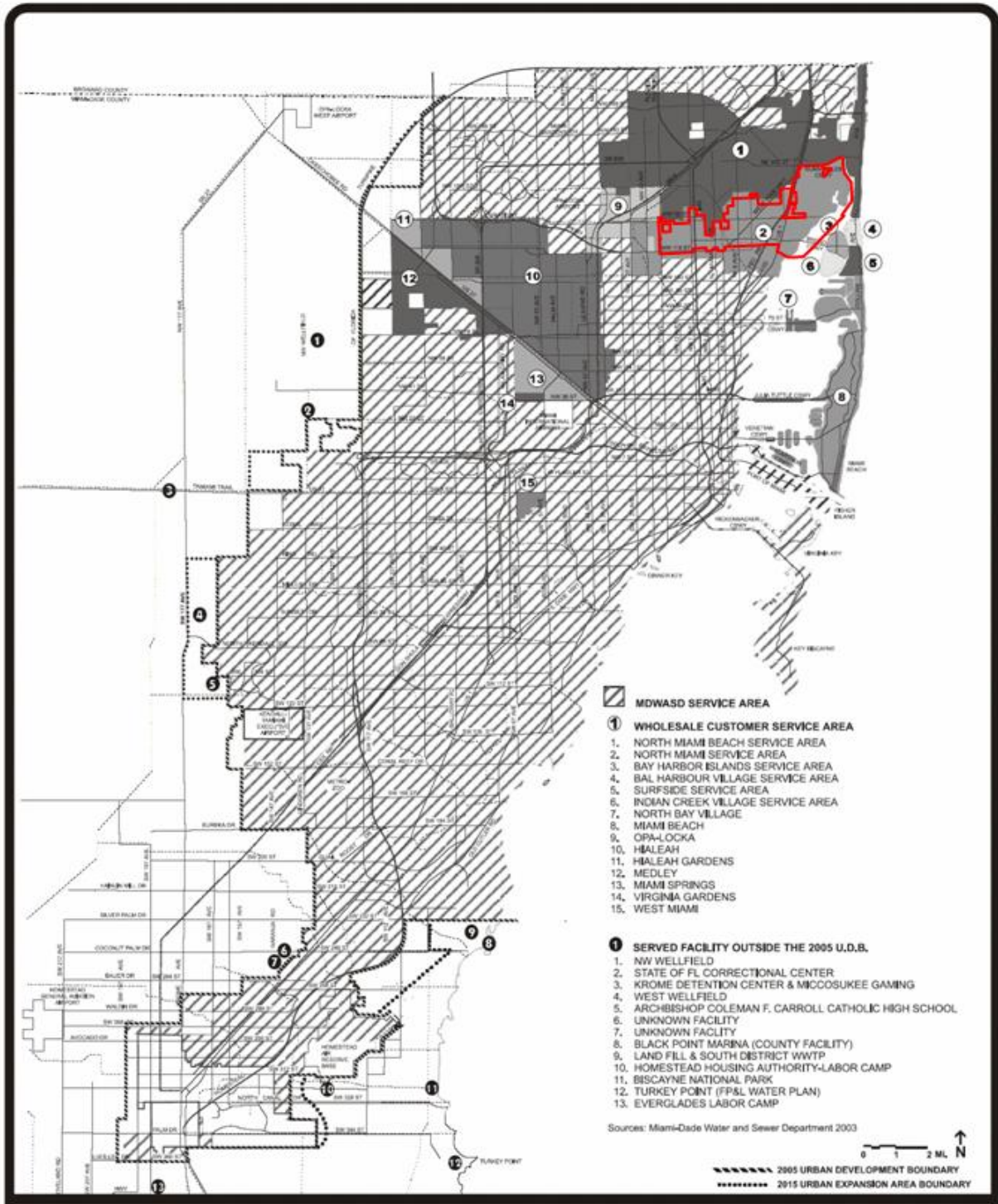


Figure 2.5.1-1

2003 MDWASD WATER SERVICE AREAS

Map 4-1

DEPARTMENT OF  
PLANNING AND ZONING

### Design and Storage Capacities

The Winson Plant is capable of supplying 9.3 million gallons a day (MGD) of water to consumers, but on average the plant produces 8.7 MGD. This is about 65 percent of the total demand which is approximately 13.5 MGD. The other 35 percent of the demand is supplemented by water purchased from Miami-Dade County Water & Sewer Department (WASD) through seven interconnects in the distribution system. The seven interconnections have turbine meters that are read monthly by WASD.

The City of North Miami has two storage tanks that hold treated water prior to being pumped into the distribution system. One tank has a capacity of 1.50 MG while the other tank has a capacity of .75 MG. The total combined storage capacity of the two tanks is 2.25 MG, or 17 percent of the current average daily demand.

The WASD only reports capacity statistics for the entire system. In 2002, the system-wide water treatment plant capacity was 454.8 MGD with a peak water demand of 391.3 MGD. According to the latest Miami-Dade County Evaluation and Appraisal Report (EAR), the capacity of the WASD potable water system has met the County's Level-of-Service (LOS) requirements for the last five years.

All potable water distributed by WASD is treated using a lime-softening method. Finished, or treated, water in the County is generally stored in ground reservoirs or elevated tanks, and storage systems are usually equipped with pumps and valves for operation. The finished water storage system allows the County to meet domestic, industrial, and fire demands. The WASD also uses the finished water storage system to provide water during source or pump failures. According to the 2003 Miami-Dade County EAR, the finished water storage capacity standard of 15 percent has been met continuously since 1995. Beginning this year, the County is going to move forward with alternate water supply projects that expand potable water capacity without further reliance on the Biscayne aquifer.

### Existing and Projected Potable Water Demand

In 2005, the City of North Miami and its service area demanded an average of 12.92 MGD. For a service area population of 75,358, this equates to 171 gallons per capita per day. The projected demand for the service area is illustrated in Table 4-1, Projected Potable Water Demand. As the table demonstrates, the population of the service area is projected to increase by nearly 20,000 residents and over 25,000 residents by the year 2015 and 2025, respectively. For this analysis, the existing level of service of 125 gpcpd has been amended, as it has not been achieved for at least the past ten years. A revised level of service standard of 165 is used to project future water needs. This number while lower than the current rate of consumption, corresponds to the projected water demands for North Miami in the SFWMD Lower East Coast (LEC) Water Supply Plan Update 2005-2006.

**Table 4-1: Projected Potable Water Demand, 2005-2025**

Year	Population of Service Area*	LOS Standard in average gallons per capita per day	Projected Average Demand for Service Area in MGD
2005	75,358	125/171 gpcpd**	9.4/12.92 MGD
2010	81,380	165 gpcpd	13.4 MGD
2015	95,340	165 gpcpd	15.7 MGD
2020	100,951	165 gpcpd	16.7 MGD
2025	101,151	165 gpcpd	16.7 MGD

Source: Miami-Dade County Department of Planning and Zoning, Craig A. Smith & Associates, Initial Capacity Analysis Report, March 2006 and Michele Mellgren & Associates, Inc.

\*Service Area projections reflect natural population growth in the service area and population increases from the addition of Biscayne Landing; \*\*In 2005, the level of service standard was 125 gpcpd, the actual consumption was 171 gpcpd, and therefore the LOS was revised to 165 gpcpd for future years.

**Table 4-2: Projected Potable Water Demand for North Miami based on the SFWMD LEC Water Supply Plan Update 2005-2006**

Year	Population of Service Area*	Average Daily Demand in average gallons per capita per day	Projected Average Demand for Service Area in MGD
2005	95,073	147 gpcpd	12.86 MGD
2010	101,077	147 gpcpd	14.9 MGD

Year	Population of Service Area*	Average Daily Demand in average gallons per capita per day	Projected Average Demand for Service Area in MGD
2015	107,081	147 gpcpd	15.7 MGD
2020	111,058	147 gpcpd	16.3 MGD
2025	115,034	147 gpcpd	16.9 MGD

Source: South Florida Water Management District LEC Plan 2005-2006 Update.

According to the LEC Water Supply Plan 2005-2006 update, Miami-Dade WASD has a current demand of 326.96 MGD and a current supply of 346.50, thereby having a sufficient potable water supply at the present. In 2015, the total potable water demand is anticipated to reach 365.01 MGD and be met by a number of water sources including water from the Biscayne aquifer, Floridian aquifer, reclaimed sources, and other sources, totaling 393.70 MGD. The projected average usage in gallons per capital per day, the projected average demand, and the projected average capacity for the Miami-Dade service area is presented in Table 4-3, below. As projected, Miami-Dade County will have capacity to supply North Miami with at least 6 MGD of potable water through the year 2025.

**Table 4-3: Miami-Dade WASD Projected Potable Water Demand and Capacity, 2005-2025**

Year	Population of Service Area	Projected average usage in gallons per capita per day	Projected Average Demand for Service Area in MGD	Projected Average Capacity in MGD*
2005	2,075,304	157 gpcpd	326.96 MGD	346.50 MGD
2015	2,354,920	155 gpcpd	365.01 MGD*	393.70 MGD
2025	2,598,419	155 gpcpd	402.76 MGD*	412.70 MGD

Source: South Florida Water Management District LEC Plan 2005-2006 Update.  
Projection includes 6.0 MGD of potable water to be distributed to the City of North Miami.

#### *Existing and Projected Agricultural Water Demands*

The existing land use map for the City reports that there is no agriculture land use within the City's boundaries.

*Existing and Projected Commercial/Industrial Water Demands*

The City of North Miami does not plan its water needs exclusively for Commercial and Industrial uses. The level of service standards adopted in this sub-element are based on an average demand for the entire service area divided by the population. As such, residential and non-residential land uses are included in the LOS figure, and current projections take in consideration a similar mix of uses. As the city redevelops, both types of uses will be added to the water service area. Level of service standards can be adjusted over time to reflect any changing conditions if needed.

**Projected Water Supply Needs**

Due to South Florida's increasing demands for water, the area's sole source of fresh ground water, the Biscayne Aquifer, has become less reliable as a water source over the years. This is due to the fact that millions of gallons of this water is pumped out of the ground each day contributing to its vulnerability as a continuing source of ground water. New stringent regulations regarding the Biscayne Aquifer have forced water officials to seek alternative sources of water. Addressing these water issues was a priority during the 2005 Florida legislative session. Two bills, SB 360 and SB 444, were passed and signed into law by Governor Jeb Bush. These bills focus on encouraging cooperation in the development of alternative water supplies and improving the linkage between local governments' land use plans and water management districts' regional water supply plans.<sup>2</sup>

During the past ten years, the annual average water production at the Winson Water Treatment Plant has been approximately 8.0 +/- 0.5 MGD while the annual average water purchase from Miami-Dade WASD has been about 5.0 +/- 0.5 MGD. Overall, the annual average water supplied to the City's service area has been approximately 13.0 +/- 0.5 MGD. However, it is anticipated that the development at Biscayne Landing will further increase the service area water demand and water storage requirements. At the same time, the SFWMD has indicated that no additional water increases from the Biscayne Aquifer will be approved. Given the present withdrawal restrictions it is unlikely that Miami-Dade

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<sup>2</sup> Metcalf & Eddy. 2006. "City of North Miami Winson Water Treatment Plant Expansion Feasibility Study"  
City of North Miami Adopted Comprehensive Plan

WASD will provide this additional water to the City, particularly since the WASD maintains the right to terminate its yearly water agreement with the City of North Miami at any time. Therefore the City has decided to undertake its own potable water supply infrastructure improvements based on alternate water sources to meet the projected needs of its entire service area without reliance on WASD.

To accomplish this task, the City of North Miami consulted with Craig A. Smith & Associates to develop an Initial Capacity Analysis Report to determine future potable water supply and storage needs. Second, the City consulted with the firm of Metcalf & Eddy to conduct a feasibility study for expanding the Winson Water Treatment Plant. It was determined from the feasibility study that the Winson Water Treatment Plant should undergo a modernization that will allow water from the Floridian Aquifer to be withdrawn and treated through Reverse Osmosis (RO) technology. The shift to the Floridian Aquifer will allow the City of North Miami to meet its water demands without making additional withdrawals from the Biscayne Aquifer or having to permanently rely on water supplements from Miami-Dade WASD. The modernization and expansion will be completed in two phases. Phase I expansion (by 2010) will result in a maximum day rating of 7.5 MGD for the current system and an additional 8.5 MGD of capacity for the RO system. While 7.5 MGD is less than the rated capacity of the current system, the rating is lowered as a result of the plant functioning also as a reverse osmosis facility. Finally, the Phase II expansion (by 2015) will result in an additional 4.0 MGD of capacity, totaling 20 MGD of maximum day capacity. Table 4-4, City of North Miami Planned Potable Water Supply and Demand 2005-2025, compares the projected demand with the projected supply based on the proposed expansions. It should be noted that the capacity figures have been revised to reflect average daily demand (based on peaking factors contained in the Initial Capacity Analysis Report) and not the maximum daily demand specified in the feasibility study.

**Table 4-4: City of North Miami Planned Potable Water Supply and Demand 2005-2025**

Year	Projected Average Demand in MGD	Projected Average Supply in MGD
2005	12.9 MGD	15.3 MGD*
2010	13.4 MGD	13.75 MGD **
2015	15.7 MGD	17.25 MGD ***
2020	16.7 MGD	17.25 MGD***
2025	16.7 MGD	17.25 MGD***

Source: Michele Mellgren & Associates, Inc.

\* The City of North Miami will continue to rely on Miami-Dade Water and Sewer Department to supply at least 6 MGD of supplemental water to the service area until the Winson Plant upgrades are complete; \*\* Projected supply assumes phase I expansion has been completed; \*\*\* Projected supply assumes phase II expansion has been completed.

#### **Other Potable Water Supply Planning Issues**

At this time, an extension of the consumptive use permit is pending approval from the SFWMD. It is anticipated that the City will at least maintain its current withdraw allowance of 9.3 MGD for the Biscayne Aquifer in addition to being approved for withdrawals from the Floridian Aquifer to match planned plant capacity increases. Until Phase I and II of the RO Treatment expansion is complete, the City will need to coordinate with Miami-Dade WASD to ensure that available water capacity will be available to supplement North Miami's water service area needs. Currently, the SFWMD LEC Water Supply Plan Update 2005-2006 projects that Miami-Dade County will be able to provide water to North Miami until the year 2025.

#### **Conservation Measures**

In order to reduce the per capita consumption of water in the North Miami water service area, the City will need to aggressively pursue water conservation strategies. These can include measures such as xeriscaping, low-flow plumbing fixtures, and similar measures. A more detailed discussion on water conservation strategies is contained in the Conservation Element. A modest reduction in water consumption is projected which corresponds to the adopted level of service of 165 gpcpd compared to the current consumption rate of 171 gpcpd.

## **SANITARY SEWER SUB-ELEMENT**

Sanitary sewer facilities are defined as structures or systems designed for the collection, transmission, treatment, or disposal of sewage and may include trunk mains, interceptors, and treatment plants/disposal systems.

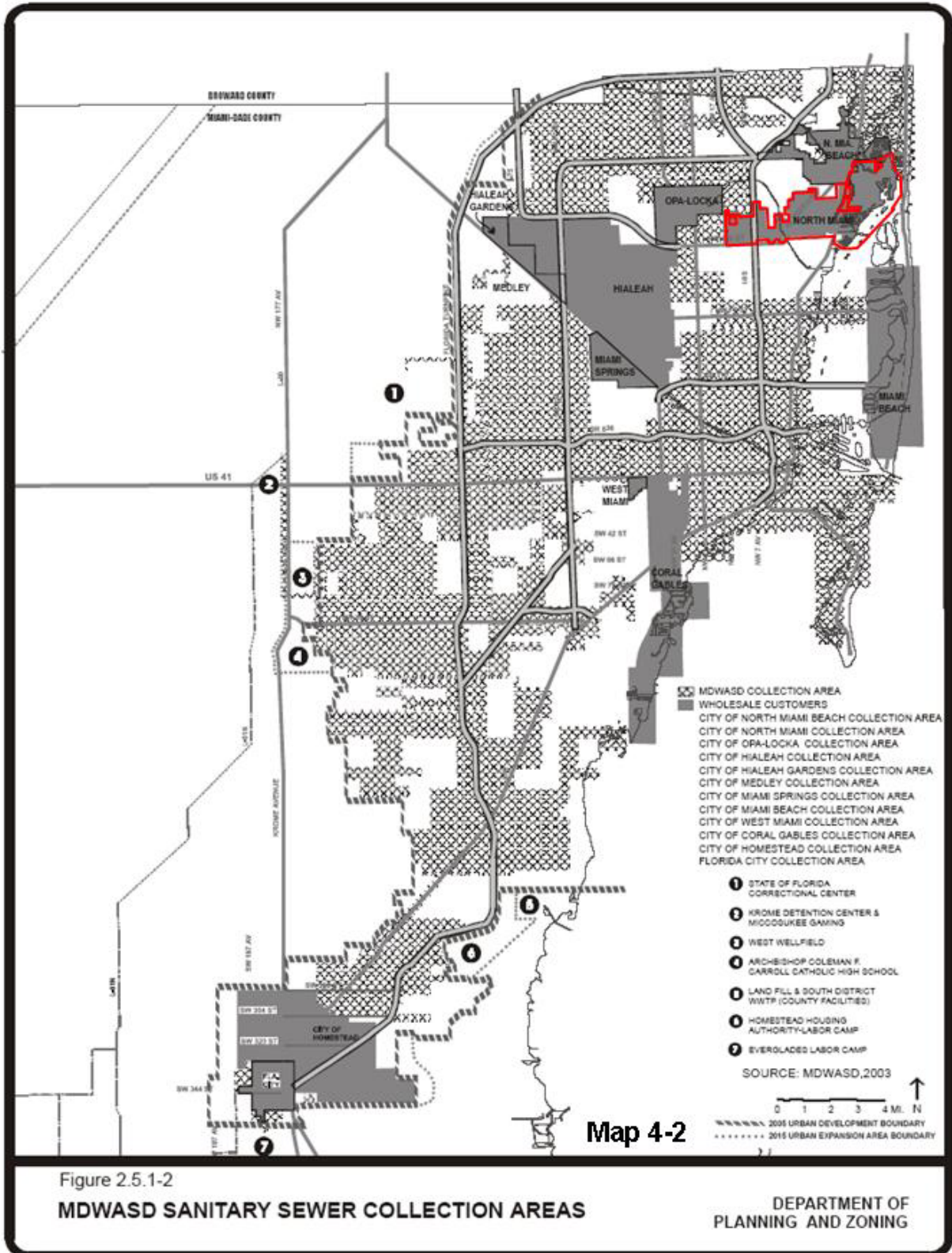
### **Treatment System and Geographic Service Area**

The City is served by Miami-Dade County's North District Wastewater Treatment Plant (WWTP). The North District WWTP is owned and operated by Miami-Dade County; however, the transmission infrastructure is owned and maintained by the City. Map 4-2 illustrates the areas served by the North District WWTP.

The North District WWTP is located at 2575 NE 151<sup>st</sup> Street in North Miami. The WWTP was constructed in 1970 and handles the demand generated by commercial, business, and residential properties in the City. Treated effluent is disposed through a series of deep injection wells and an outfall into the Atlantic Ocean. The North District WWTP has a design flow capacity of 120 million gallons per day (MGD) and is currently operating at 75.6 percent of its capacity



Map 4-2: MDWASD Sanitary Sewer Collection Areas



### Land Uses Served

The North District WWTP serves land uses throughout the City. The majority of land uses served are residential, which accounts for approximately 32.5 percent of the City's land area. Other major land uses served include parks/ conservation areas (20.8 percent), Institutional (4.1 percent), and commercial (3.1 percent). Map 4-2 illustrates the configuration of the wastewater collection system maintained by the City.

### *Facility Capacities*

The County's North District WWTP currently operates below its permitted capacity. The Average Annual Daily Flow (AADF) for the treatment plant in 2005 was 90.72 million gallons per day (MGD) and the permitted design capacity for the treatment plant is 120 MGD. Table 4-5 summarizes the average daily flow and capacity for the City's facility.

**Table 4-5: Wastewater Plant Flows and Capacities (2005)**

Treatment Plant	12-Month Average Flow (MGD)	Average Flow Design Capacity - Permitted (MGD)	Remaining Capacity (MGD)
North District	90.72	120	29.28

Source: Miami-Dade Water and Sewer Department Comprehensive Annual Financial Report, Fiscal Year 2005.

### Current Facility Demand

In 2005, the total demand on the North District WWTP was 90.72 MGD. During the same year, wastewater flows from North Miami equaled 11.18 million gallons per day or 12.3 percent of total demand placed on the North District wastewater facility.

### Sanitary Sewer Level of Service (LOS)

The sanitary sewer facilities are subject to the level-of-service standards established in the Goals, Objectives and Policies contained in the City of North Miami's Comprehensive Plan. In 2005, the population was estimated to be 60,312 people and the measured flowage to the North District Wastewater

Treatment Plant was 11.18 MGD. This equates to a level of service of 185 gallons per capita per day which was within the minimum and maximum levels adopted by the City. However, a minimum and maximum LOS does not serve the City for its capital facilities planning purposes and therefore, was modified to reflect actual sewer demand based on the existing population and land use arrangement. Table 4-6, Projected Wastewater Demand (2005-2025), calculates the projected demand based on a level of service standard of 185 gpcpd and the projected population of North Miami as contained in the Future Land Use Element.

**Table 4-6: Projected Wastewater Demand (2005-2025)**

Year	Population	Sanitary Sewer LOS in gallons per capita per day	Flowage to North District WWTP
2005	60,312	185 gpcpd	11.18 MGD
2010	65,337	185 gpcpd	12.09 MGD
2015	78,280	185 gpcpd	14.48 MGD
2020	83,962	185 gpcpd	15.53 MGD
2025	86,301	185 gpcpd	15.97 MGD

Source: Future Land Use Element (population) and Miami-Dade Water and Sewer Department Comprehensive Annual Financial Report for the Fiscal Year ended September 30, 2005.

Since the North District Wastewater Treatment Plant is maintained by Miami-Dade County, it is important to review the County's policy in regard to maintaining capacity at its facilities. Currently, the County's adopted LOS standard for wastewater treatment and disposal requires that the regional wastewater treatment and disposal system operate with a capacity which is 2 percent above the average daily per capita flow for the preceding five years and a physical capacity of no less than the annual average daily sewer flow. The wastewater effluent must also meet all applicable Federal, State, and County standards and all treatment plants must maintain the capacity to treat peak flows without overflow. This revolving LOS standard ensures that capacity will be available to meet North Miami's projected demand.

**Sanitary System Analysis**

As shown in Table 4-7, the systemwide capacity of 352.50 MGD in 2003 is more than 2 percent above the average daily demand for the past five years. According to this data, the Miami-Dade Wastewater Treatment System is not anticipated to approach its capacity within the next five to ten years.

**Table 4-7: Miami-Dade Wastewater Treatment Capacity and LOS Analysis**

Year	Treatment Capacity (MGD)	102% of Previous Year's Average Daily Flow (MGD)	Average Daily Flow (MGD)
1998	340.5	331.52	314.78
1999	352.5	321.08	308.72
2000	352.5	314.89	318.02
2001	352.5	324.38	311.99
2002	352.5	318.23	302.44
2003	352.5	308.49	293.42
5-Yr Avg.	352.5	310.81	304.71

Source: Miami-Dade County Adopted 2003 Evaluation and Appraisal Report, Water, Sewer, and Solid Waste Element (Table 2.5.1-4)

***Septic Tanks***

There are no properties within the City limits that use septic tanks. The City does not allow the use of septic tanks within the City limits.

**Future Projects, Programs, and Policies**

The City owned sanitary sewer transmission lines are over 40 years old. It is recommended that the City develop a sanitary sewer master plan and begin identifying infrastructure in need of improvement/replacement. It is also recommended that the City use the master plan as an opportunity to reevaluate its sanitary sewer LOS standard and establish a new standard that better reflects the City's collection and distribution system capacity; recognizing that the treatment capacity is maintained by the County, not the City.

The City's Capital Improvement Plan has identified two major types of sanitary sewer improvements that will occur within the next 5 years. The improvements include:

- Sanitary Sewer Rehabilitation - to rehabilitate the existing sewer collection system to eliminate inflow and infiltration from entering the system, thereby lowering the amount of sewer treatment fees paid to Miami-Dade WASD.
- Upgrade Pump Stations - to improve sewer pump station reliability and increase capacity for future service needs.

#### **Conservation Measures**

Although the City is completely sewered, it should consider goals, objectives, and policies to replace/upgrade aging sewer facilities, such as those identified in the City's Five-Year Capital Improvement Plan. The primary concern associated with the aging sewer facilities is possible seepage from the sewer facilities into the groundwater, especially in areas near the City's wellfield, coastal area, and canals.

In addition, the City should consider goals, objectives, and policies that help reduce the demand and usage of the sanitary facilities.

## **SOLID WASTE SUB-ELEMENT**

#### **Inventory of Existing Conditions**

The City of North Miami provides city wide trash (yard debris, large waste items) and garbage (food, containers, diapers) collection to all single-family, duplex and triplex areas. Multi-family developments are offered the option of City service or private collection, and commercial, industrial, and high-density residential developments are serviced by private contract exclusively.

The City transports all garbage to the Miami-Dade County operated Resource Recovery Facility (RRF) in the western Miami-Dade County area, where it is

separated and then processed to produce energy or recovered for recycling. In 2005, the City and its private haulers supplied approximately 3.3 percent of the total garbage incinerated by the RRF in Miami-Dade County.<sup>3</sup> The City transports all its trash in the form of yard debris to the North Dade Landfill.

The City maintains six routes with two payloaders and five trucks. In 2005, the City serviced an approximate total of 9,800 residents while the remainder of the population was serviced by private haulers through contract agreements with homeowner associations, residential development management companies, and private businesses.

#### *Geographic Service Area*

Curbside garbage and trash collection is provided to the City's residents on a routine basis. For collection purposes, the City is divided into five sectors. They are:

1. N.W. 17th Avenue to 7th Avenue (Monday)
2. N.W. 7th Avenue to N.E. 2nd Avenue (Tuesday)
3. N.E. 2nd Avenue to N.E. 10th Avenue (Wednesday)
4. N.E. 10th Avenue to N.E. 16th Avenue (Thursday)
5. N.E. 16th Avenue to Biscayne Bay (Friday)

#### *Solid Waste Disposal System*

The Miami-Dade Department of Solid Waste Management (DSWM) currently operates three disposal sites, three transfer stations, and fourteen neighborhood and trash recycling centers. Solid waste generated within the City is taken to either the RRF, located at 6990 N.W. 97th Avenue, or the Northeast Transfer Station, located at 18701 NE 6 Avenue. Solid waste taken to the Northeast Transfer Station is eventually disposed of at the North Dade Landfill located at 21500 NW 47 Avenue. Map 4-3 illustrates the components of the Miami-Dade County solid waste disposal system.

The North Dade Landfill is a Class III landfill that is permitted to accept only waste that is not expected to produce leachate, which poses a threat to public

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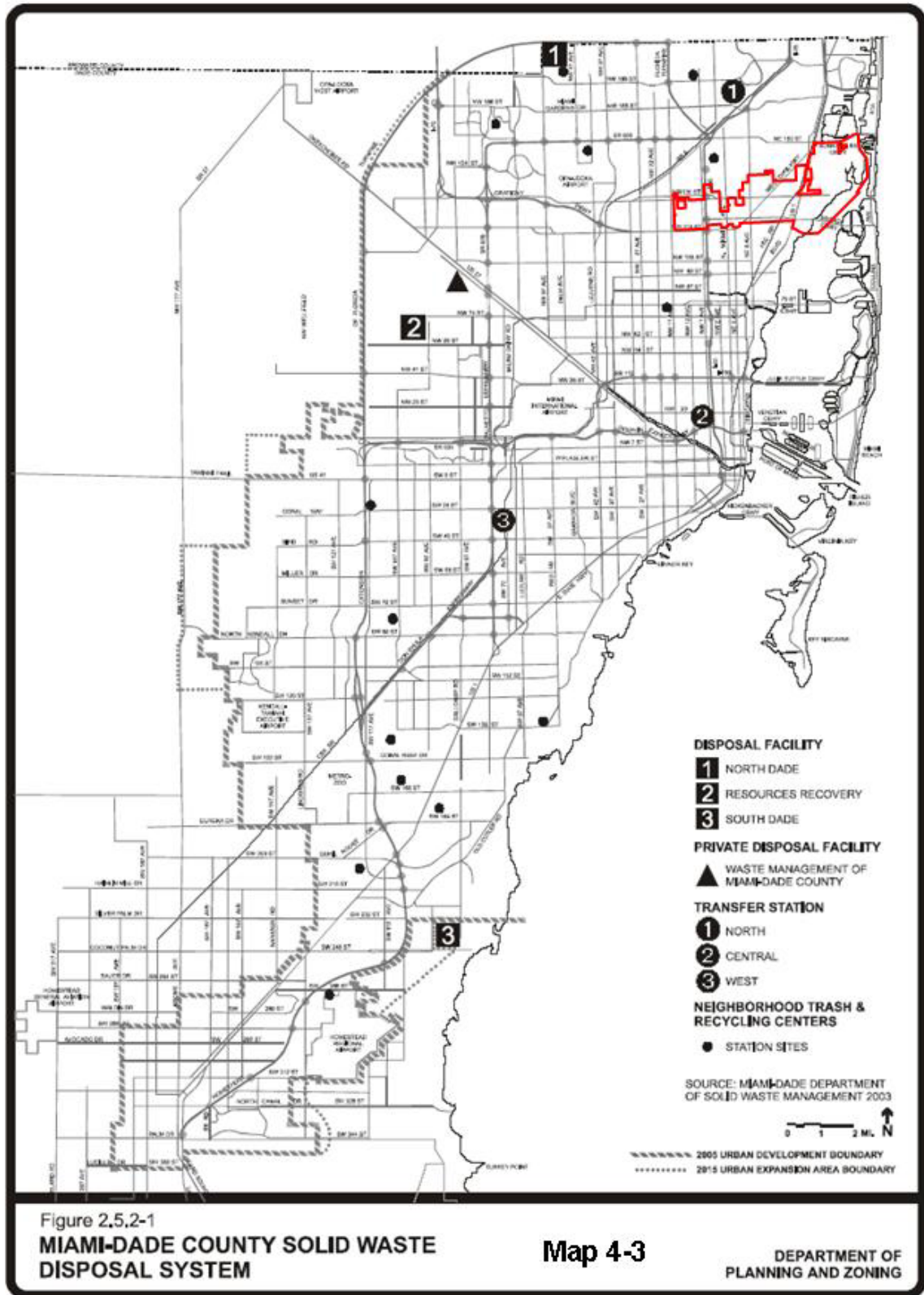
<sup>3</sup> Department of Solid Waste Management 2005 Comprehensive Annual Financial Report.  
City of North Miami Adopted Comprehensive Plan

health or the environment. Examples of this type of waste are trash, yard trash, shredded tires, and construction/demolition debris. In FY2005, the North Dade Landfill received a total of 344,439 tons of solid waste.

The RRF is owned by Miami-Dade County and operated under a management agreement by Montenay-Dade, Ltd. - an affiliate of the Montenay Power Corporation. The RRF converts garbage and trash into refuse-derived fuel that is burned to produce steam used to turn two turbine generators for making electricity. Energy produced from burning the fuel is enough to power the plant and supply the average power needs of 40,000 households per year. The Ash Landfill, located within the RRF facility, is the final disposal site for ash produced by the RRF as well as some ash produced by a co-generation facility in Palm Beach County. In FY2005, the RRF incinerated a total of 495,477 tons of solid waste and disposed of 140,800 tons of ash.

The most current information provided by the DSWM indicates that approximately 1.6 million tons of solid waste is disposed of on average within Miami-Dade County each year. The RRF has typically incinerated about one-third of the waste with the remaining waste transferred to appropriate landfills. In addition to Miami-Dade County facilities, DSWM maintains disposal service contracts with private disposal facilities in Broward County. These are the Waste Management (up to 500,000 tons per year for 20 years) and Wheelabrator (up to 100,000 tons per year for 7 years). These supplemental arrangements allow for waste delivery flexibility, permitting Miami-Dade County the ability to maintain adequate capacity and meet concurrency requirements even as demand varies into the future.

Map 4-3: Miami-Dade County Solid Waste Disposal System





### **Design Capacity of Disposal Facilities**

The 2003 Miami-Dade County Evaluation and Appraisal Report (EAR) estimates the total remaining number of years for disposal facilities within Miami-Dade County under the County's currently adopted level of service standard for solid waste service. Based on this information, the RRF is designed to process 1.206 million tons per year. The supporting ash landfill has a remaining capacity of 2.3 million tons and an estimated remaining lifespan of 16 years (as of 2005). The North Dade Landfill has a remaining capacity of 2.0 million tons and an estimated remaining lifespan of 5 years (as of 2005).

### ***Current Demand on Solid Waste System***

In 2005, the City of North Miami produced a total of 30,332 tons of disposable solid waste.<sup>4</sup> Based on an estimated population of 60,312, this equates to 2.75 pounds per capita per day. This is quite low compared to the current per capita waste generation rate of 9.4 pounds per capita per day, used for estimating demand on the solid waste disposal system (Florida Department of Environmental Protection). The more conservative figure (9.4 lbs per day) is used by DSWM when projecting future demand on the solid waste disposal system. Miami-Dade County has adequate landfill capacity for the next five years based on the generation rate used and the projected population growth.

### **Solid Waste Level of Service**

Miami-Dade County's current level of service standard for solid waste facilities is to maintain solid waste disposal capacity sufficient to accommodate waste flows committed to the system through long-term agreements or service contracts with local municipalities as well as anticipated non-committed waste flows for a period of five years. At the present time, the County anticipates remaining solid waste capacity to meet the five year standard. The City maintains a LOS standard of approximately 4.5 pounds of solid waste per capita per day. While this is lower than the County standard, it does not prevent the County from achieving its own level of service standards but instead can be used by the City for its capital improvements planning purposes. When planning for disposal capacity, the generation rate of 9.4 pounds per capita per day should be used to comply with

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<sup>4</sup> Department of Solid Waste Management 2005 Comprehensive Annual Financial Report.  
City of North Miami Adopted Comprehensive Plan

the standard set by Miami-Dade County and the Florida Department of Environmental Protection. However, when planning for the purchase of solid waste collection vehicles and equipment, the lesser rate (4.5 lbs. per capita/day) can be used. In any case, the City and Miami-Dade County will need to continue implementing procedures to ensure that any existing solid waste facility deficiencies are corrected and that adequate solid waste facility capacity will be available to meet future needs.

#### *Recycling Efforts*

The City participates in a curbside recycling program that accepts newspaper, paper, plastic, glass, and aluminum. The program currently serves all single-family residences within North Miami. The City also has an active educational recycling program and a City employee resource recovery program throughout City facilities.

#### *Home Chemical Collection Program*

The County operates a program to assist residents in disposing of household hazardous wastes, such as pesticides, solvents, oil-based paints, auto fluids, and other home chemical material. Home chemicals can be dropped off at the Permanent Home Chemical Collection Center located at 8831 N.W. 58th Street.

#### *Projected Capacity and Demand*

The projected solid waste generation in Miami-Dade County for the years 2000 through 2015 is reported in Table 4-8. This serves as the best available data from the Department of Solid Waste Management (DSWM) since information is not available at the municipal level. In their projections, the DSWM estimates constant demand over the fifteen year planning horizon at approximately 1.61 million tons of solid waste per year. This represents anticipated waste generated each year through contracts with municipalities and private haulers who have committed their waste flows to the system through interlocal agreements or long term contracts plus anticipated non-committed waste flows in accordance with the County's adopted level of service standard. This determination is contingent upon the continued ability of the County and its disposal service contract providers to obtain and renew disposal facility operating permits from applicable Federal, State, and local regulator agencies.

Table 4-8: Solid Waste Generation, 2000-2015

YEAR	County-Wide Generation	Amount to Ashfill	Remaining Capacity
2000	1,610,000	163,000	2,848,000
2005	1,610,000	163,000	2,033,000
2010	1,610,000	163,000	1,218,000
2015	1,610,000	163,000	403,000

Note: All statistics are in tons per year.

Source: Miami-Dade County Department of Solid Waste Management, 1996 (best available data)

Using the County's level of service standard, capacity should be sufficient to meet the demand until 2013 for the ash fill site with actual capacity not being reached until 2018. At such time when the Ashfill site is deemed full, the DSWM has committed to transport ash to the South Dade Landfill for cover material.

#### **Future Projects, Programs, and Policies**

The County's solid waste level of service will be maintained through the planning period with operation of the countywide solid waste management system in Miami-Dade County. The ability of that system to meet future solid waste needs at the adopted LOS has been shown in this data inventory and analysis report. Since the system is entirely owned and operated by the County, no solid waste facilities or improvements are planned by the City for the foreseeable future. However, the City will coordinate with Miami-Dade County to educate its residents and businesses to encourage their active participation in the waste recycling and chemical collection programs.

The solid waste management environment is constantly changing in Miami-Dade County and this presents potential problems as well as opportunities for both the County and the City. In 1991, two large waste-to-energy facilities became operational in Broward County. The initial excess capacity at these facilities was sold on the open market by the operator. Since that time, solid waste collected by private haulers and municipalities in Miami-Dade County has been disposed of at these facilities at an increasing rate to approximately 600,000 tons in Fiscal Year 1993-1994. This represents approximately 30 percent of the yearly waste stream normally handled by Miami-Dade County. The effects of this diversion

have been two-fold. The County's disposal needs have been significantly reduced, thereby extending landfill life, especially at the South Dade Landfill. However, adverse impacts have also occurred regarding funding the solid waste system on a stable and equitable basis. System revenues are generated by disposal fees and the decline in waste deliveries has resulted in significant reductions in system revenues without a proportional cost reduction. This disparity between revenues and expenditures means that even though the solid waste system was sized to meet projected needs, the projected need has not materialized at the rate anticipated. The County needs to continue to work on offering competitive pricing for disposal of waste to ensure that the solid waste system maintains operational economies of scale.

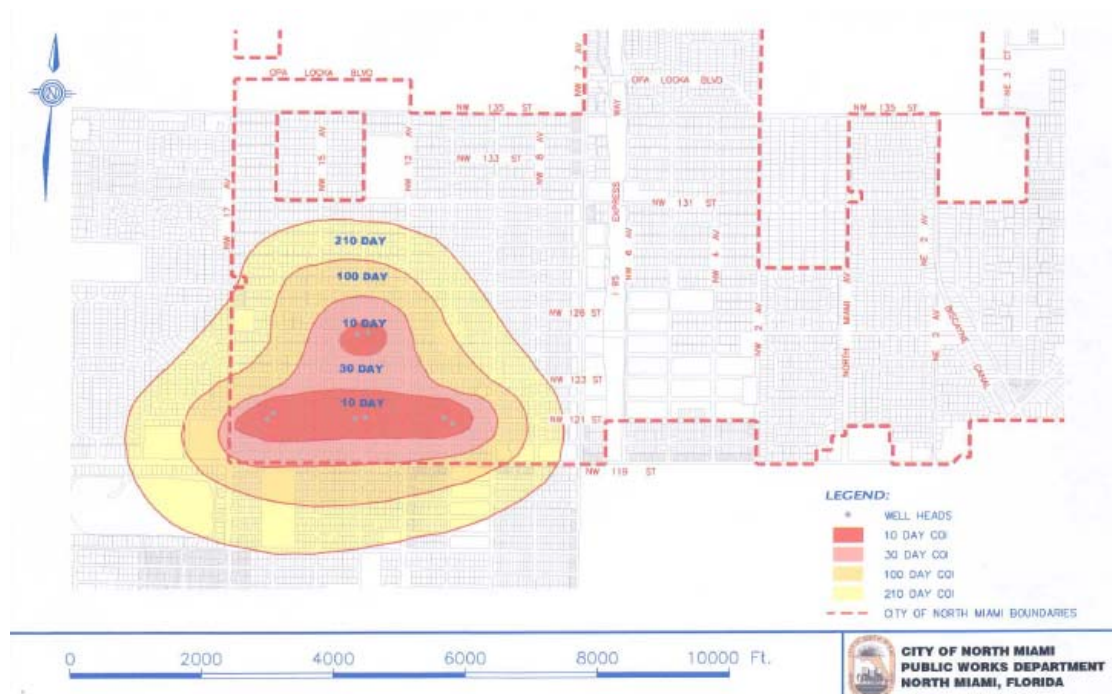
## **NATURAL GROUNDWATER AQUIFER RECHARGE AREAS**

The management of surface water and groundwater resources is an important issue to the long-term environmental quality and economic viability within the City. It is generally recognized that many water management issues are addressed and regulated by either regional water management districts or other state and federal agencies. However, land use decisions made by the local government do have the potential to impact natural resources, both positively and negatively, as vacant land is developed and the impacts to the environment are mitigated. As such, the City should regulate new development within its borders in conformance with best development practices for conserving existing natural groundwater aquifer recharge areas.

### **Identification of Prime Recharge Areas**

The Oleta River State Park is the primary groundwater recharge area in the City of North Miami. Since much of the land in North Miami is developed with a high percentage of impervious surface area, the potential for groundwater recharge has been limited. The Westside wellfield protection area is also located within the City limits as shown in Map 4-4, below.

Map 4-4: Westside Wellfield Protection Area



### **Surficial Aquifer**

The top of the surficial aquifer within the City is generally located between three and five feet below the ground surface, but may be much closer to the ground surface depending upon the amount of rainfall. In areas where rainfall can percolate into the ground, the water table depth will fluctuate with the amount and intensity of the rainfall in the area.

### **Major Natural Drainage Features**

Natural drainage features are typically defined as those that occur naturally in areas that accommodate the flow of stormwater, including streams, rivers, lakes, and wetlands. The City's primary major natural drainage feature is the Biscayne Canal, which comes under the jurisdictional control and ownership of the South Florida Water Management District.

The City follows both the stormwater management requirements set forth by the Miami-Dade County Department Environmental Resource Management (DERM) and the South Florida Water Management District (SFWMD) as they apply to the canal system. Generally, the SFWMD is responsible for maintaining the larger

canals while smaller tributaries within the drainage system are the responsibility of DERM. Typically, the drainage system is such that the smaller canals move runoff from the surrounding land area to the SFWMD regional canals. Therefore, the likelihood for flooding is reduced when each new development is required to retain a portion of new run-off on site. This also increases the available capacity for local and regional canals.

#### **Existing Natural Drainage and Recharge Area Regulations and Programs**

Additional regulations or programs impacting development and/or resource conservation within the City are discussed below.

##### *Local Zoning Regulations*

The City of North Miami has adopted a flood damage prevention ordinance, and subdivision regulations to accomplish an adequate degree of protection for natural drainage and groundwater recharge areas. The zoning regulations however, do not clearly define the maximum amount of impervious surface coverage that may occur on any given site. In order to ensure that the City will maintain an adequate level of groundwater recharge in the future, the City should amend its land development regulations to include maximum impervious surface coverage allowances for all of its zoning districts.

##### *County Regulations*

Miami-Dade County has an adopted a 208 Plan that is administered by the DERM. Implementation of the Plan is done through the County's stormwater management permitting process.

##### *State and County Regulations*

The Florida Department of Environmental Protection (FDEP) has adopted a Stormwater Rule (Ch. 62-25, F.A.C.) to fulfill part of the State's responsibilities under Section 208 of the Federal Water Pollution Control Act. The objective of the Rule is to achieve 80-95 percent removal of stormwater pollutants before discharge to receiving waters. Implementation of the stormwater rule is achieved through the permitting process. FDEP has delegated permitting responsibility to the South Florida Water Management District and the Miami-Dade County Department of Environmental Resource Management. This rule requires

treatment of the first 1” of runoff for sites less than 100 acres in size and the first 0.5” of runoff for sites over 100 acres in size. Treatment is generally accomplished through retention or through detention with filtration. Retention requires the diversion of the required volume of runoff to an impoundment area with no subsequent direct discharge to surface waters. Pollutants are removed by settling and by percolation of the stormwater through soil. Detention facilities are typically within the line of flow for the drainage system. Stormwater from a site passes through the detention facility and is filtered to remove pollutants prior to discharge to a surface water body.

#### *Federal Regulations*

The City is currently part of the National Flood Insurance Program (NFIP). Section 208 of the Federal Water Pollution Control Act (PL92-500, 1972) serves as the directing federal law with respect to water pollution abatement. In implementing the Act, the Environmental Protection Agency (EPA) identified pollutants carried in stormwater runoff as a major source of water contamination. To achieve the pollution abatement goals of the Act, the EPA provided assistance to state and local governments for developing Area Wide Water Quality Management Plans, or “208 Plans” as they are commonly known. These 208 Plans study a broad range of potential water pollution sources, including stormwater, and focus on identifying pollutant sources and abatement needs as well as development of regulatory programs to ensure implementation.

## **DRAINAGE SUB-ELEMENT**

Drainage facilities are defined as a system of man-made structures designed to collect, convey, hold, divert, or discharge stormwater - including stormwater sewers, detention structures, and retention structures.

#### **Inventory of Existing Conditions**

In 1987, the United States Congress established the Clean Water Act and Section 402(p) under that legislation mandated that the Environmental Protection Agency (EPA) formulate a stormwater-permitting program. Under this mandate, the EPA promulgated stormwater regulations in 1990, establishing the National Pollutant Discharge Elimination System (NPDES). In the State of Florida, the

Department of Environmental Protection (DEP) is the agency responsible for implementing the NPDES program. Under the NPDES program, DEP requires each county in Florida to apply for, and meet the requirements of, a Municipal Separate Storm Sewer System (MS4) Permit. These MS4 Permits include municipalities, the Florida Department of Transportation and Tribal Governments as co-permittees responsible for meeting permit requirements.

The City of North Miami is under the Miami-Dade County Department of Environmental Resources Management (DERM) MS4 Permit (Permit ID FLS000003) for a MS4 Phase I. As required by DERM, the City of North Miami developed a Phase I Stormwater Master Plan. Completed in 1998, the plan was limited in scope and addressed, in general terms, the City's needs for compliance with the inter-local agreements it has with Miami-Dade County, NPDES permit compliance, and normal operation and maintenance requirements. Additionally, as part of the NPDES permit requirements, the City developed treatment performance standards set forth in the State Water Policy for areas of new development.

In October of 2000, with the assistance of PBS&J consultants, the City prepared a Phase II Stormwater Master Plan to mitigate areas of chronic flooding, address stormwater quality concerns, and bring the City in compliance with the National Flood Insurance Program's Community Rating System guidelines for Stormwater Management Master Plans. Contained in the Phase II Stormwater Master Plan were recommended capital improvements needed to meet the DERM LOS standards for local roads (reduce the street flooding for the 5-year 24-hour storm to below the centerline of the roadway). At this time, the City is in the process of constructing a number of the recommended capital improvements as prioritized in the Master Plan.

#### **Drainage System Geographic Service Area.**

The City has identified five major stormwater drainage basins which include the Biscayne Canal West Basin, Biscayne Canal East Basin, Arch Creek North Basin, Arch Creek South Basin, and the Biscayne Bay Basin. The boundaries of each basin are delineated in the Phase II Stormwater Master Plan adopted in



2000. In addition a number of sub-basins have been identified to assist in prioritizing drainage improvement needs.

#### *Land Uses Served*

The drainage system in North Miami serves a wide variety of developable and non-developable land uses such as residential, commercial, institutional, park, and utilities. The Phase II Master Plan was developed with assumptions based on land use data contained in the 1994 Metro-Dade Land Use GIS Map. If the City of North Miami decides to move forward with major redevelopment plans and land use changes, policies will need to be included to ensure that the City maintains all LOS standards adopted in the drainage sub-element. Specifically, new policies will need to be added to coordinate the goals of the Phase II Master Plan with the redevelopment goals.

#### *Level of Service Standards*

The City of North Miami will adopt the following system wide drainage level-of-service standards for redevelopment and new development:

- **Water Quality Standard.** Stormwater facilities shall be designed to meet the design and performance standards established in Ch. 62-25, §25.025, F.A.C., with treatment of the runoff from the first 1” of rainfall onsite to meet the water quality standards required by Ch. 62-302, 862-302.500, F.A.C.
- **Water Quantity Standard.** During the five-year SFWMD design storm event, flooding of local roadways shall be below the crown of the roadway.

Where two or more standards impact a specific development, the most restrictive standard shall apply.

#### **Future Projects, Programs, and Policies**

The City will continue to fund and construct drainage improvements as contained and prioritized in the Phase II Stormwater Master Plan. The City will also reevaluate its stormwater system as based on land use plan map changes adopted in this update.

**Operation and Maintenance Plan**

The City of North Miami will continue to maintain the stormwater system as consistent with agreements made under Phase I Stormwater Master Plan.

**Drainage System Recommendations**

The City shall continue to fund and construct drainage improvements as contained in the Phase II Stormwater Master Plan.

**CAPITAL IMPROVEMENTS**

The capital improvement component is based on needs identified in this element and that have been proposed in the City's Five-year Capital Improvement Program for fiscal years 2007-2011, as shown in Table 4-9. Included in this schedule, are funds dedicated to the modernization of the Winson Water Treatment Plant as discussed in the potable water sub-element, drainage improvements prioritized in the City's Phase II Master Plan, and sanitary sewer rehabilitation projects and pump station upgrades needed to maintain the City's sanitary sewer system. A sanitary sewer master plan has not yet been included in the CIP but is anticipated to be added in the next budget year. There are no solid waste deficiencies identified, and thus, there are no corresponding capital improvement projects for solid waste operations.

Table 4-9: Capital Improvements Program FY2007-2011

	PROJECT	Prior Years (Incl. FY 06)	FY 07	FY 08	FY 09	FY 10	FY 11	PROGRAM TOTAL
<b>Water and Sewer Projects</b>								
	Fire Flow Improvements	\$517,500	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$1,017,500
	Sanitary Sewer Rehabilitation	\$3,703,086	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$6,203,086
	Upgrade Pump Stations	\$955,052	\$129,000	\$60,000	\$60,000	\$60,000	\$510,000	\$1,774,052
	Water Line Replacement	\$1,195,813	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$2,695,813
	Water Plant Modernization	\$2,095,000	\$2,075,000	\$215,000	\$20,100,000	\$165,000	\$215,000	\$24,865,000
	<i>Sub-total</i>	<i>\$8,466,451</i>	<i>\$2,104,000</i>	<i>\$1,175,000</i>	<i>\$21,060,000</i>	<i>\$1,125,000</i>	<i>\$1,625,000</i>	<i>\$36,555,451</i>
<b>Stormwater Projects</b>								
	Arch Creek South Drainage Basin (Priority 5)	\$516,450	\$2,329,000	-	-	-	-	\$2,845,450
	Drainage Improvements (Priorities 8 & 9)	-	\$350,000	\$1,468,000	\$295,000	-	-	\$2,113,000
	Drainage Improvements (Priorities 12 & 13)	-	-	-	\$142,500	\$475,000	-	\$617,500
	<i>Sub-total</i>	<i>\$516,450</i>	<i>\$2,679,000</i>	<i>\$1,468,000</i>	<i>\$437,500</i>	<i>\$475,000</i>	<i>\$0</i>	<i>\$5,575,950</i>
	<b>TOTAL</b>	<b>\$8,982,901</b>	<b>\$4,783,000</b>	<b>\$2,643,000</b>	<b>\$21,497,500</b>	<b>\$1,600,000</b>	<b>\$1,625,000</b>	<b>\$42,131,401</b>

Source: City of North Miami Capital Improvements Program FY 2007-2011.

# **EAR-Based Comprehensive Plan Amendments**

## **Volume II: Data, Inventory, and Analysis Coastal Management Element**



# 5. COASTAL MANAGEMENT ELEMENT

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## 5. COASTAL MANAGEMENT ELEMENT

### PURPOSE

As a coastal city, the City of North Miami is required to prepare and adopt a Coastal Management Element consistent with the provisions of Chapter 163, Part III of the Florida Statutes. The purpose of the Coastal Management Element is to plan for, and where appropriate, restrict development activities where they would damage or destroy coastal resources, and protect human life and limit public expenditures in areas that are subject to destruction by natural disaster. The objective of this Coastal Management Element Data, Inventory, and Analysis (DIA) Report is to inventory existing land uses within the coastal planning area, analyze impacts from development and redevelopment in the Future Land Use Element, and inventory estuarine pollution conditions and actions needed to maintain water quality within the City. Together, this information serves as the foundation for goals, objectives, and policies prepared to guide future development patterns along the coastal areas of the City.

### Identification of the Coastal Area

Pursuant to Rule 9J-5.003(18) of the Florida Administrative Code (F.A.C.), the coastal planning area for the City of North Miami lies generally east of Biscayne Boulevard. This Coastal Area also includes five spoil islands in Biscayne Bay, two of which are the property of the State of Florida.

This area also represents the Miami-Dade County Office of Emergency Management (OEM) Hurricane Evacuation Zone B. Map 5-1 delineates the coastal planning area for the City of North Miami.

### DATA & ANALYSIS REQUIREMENTS

Rule 9J-5.012(2) of the Florida Administrative Code requires coastal communities inventory and analyze the following characteristics within their coastal planning area to serve as the foundation of the Coastal Management Element:

- existing land uses
- existing infrastructure

- natural resources, historic resources and sites
- estuarine pollution
- natural disaster concerns
- beach and dune systems
- public access facilities

These items are addressed in the following paragraphs.

## THE BUILT ENVIRONMENT

### Land Uses within the Coastal Planning Area

Map 1-1 in the Future Land Use Element provides a detailed inventory of all the existing land uses within the City. The coastal planning area, lying generally east of Biscayne Boulevard, comprises approximately 3,117 acres, which is approximately 49 percent of the total land area (including water) within City limits.

The northern area of the coastal planning area is dominated by recreational, preserve, conservation, and educational land uses. The following features are included within this area is the Intracoastal Waterway, the Oleta River, the Oleta River State Park, Florida International University's North Campus, Biscayne Landing (formerly known as the Munisport site), the Arch Creek East Environmental Preserve, the North Miami Stadium, and Miami-Dade County Wastewater Treatment Plant.

The southern half of the coastal planning area is, by contrast, fully developed, consisting of high income residences/apartments, retail establishments and offices. Even though this is a much more intensively utilized area, few land use conflicts exist because the residential areas dominate the waterfront, leaving little room for other land uses. Three City parks, including the North Bayshore William Lehman Park, lie in this area along with the five spoil islands, two of which are State-owned. A detailed breakdown of existing land uses within the coastal planning area is summarized in Table 5-1.



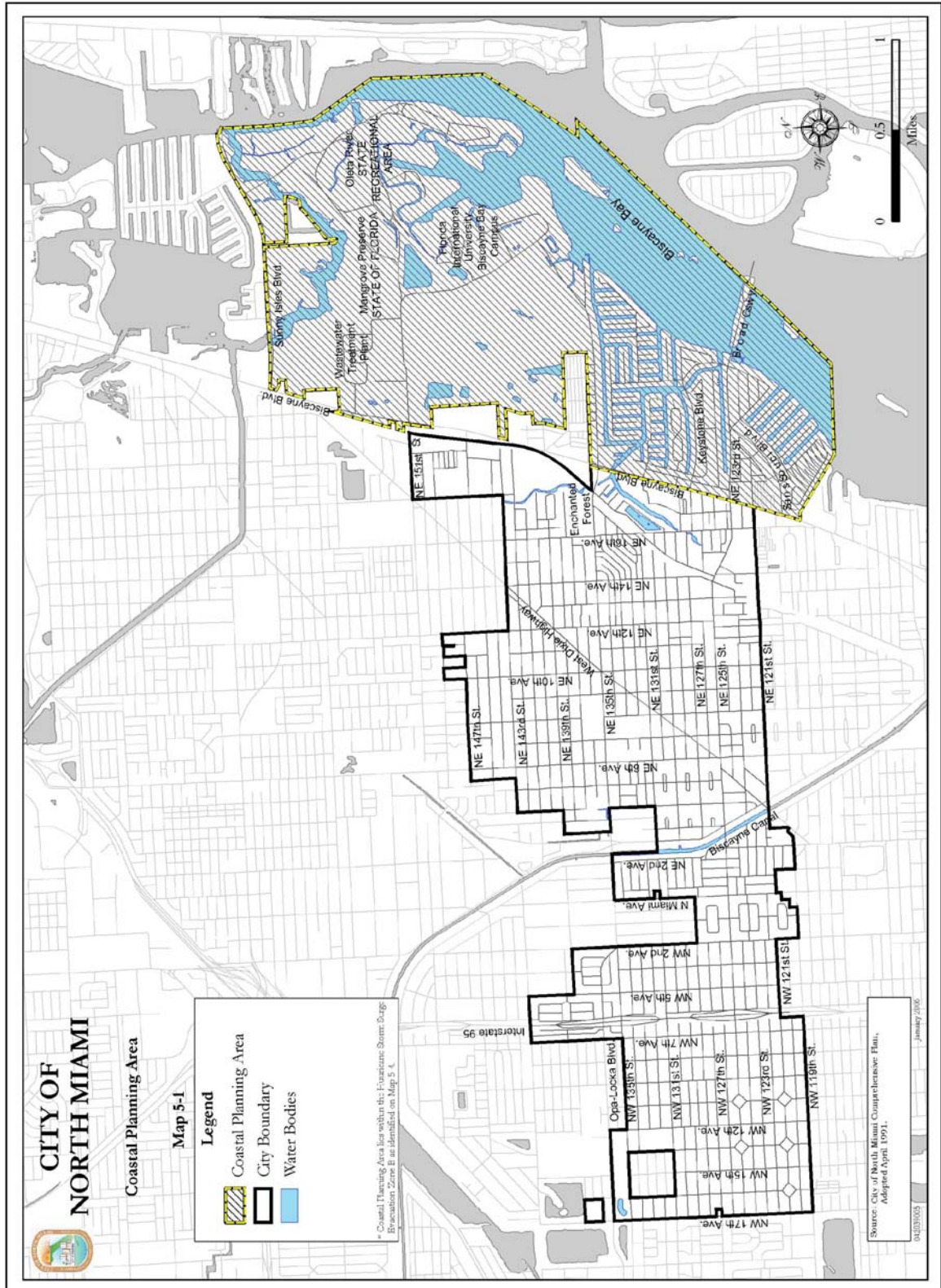
Table 5-1: Existing Land Uses within the Coastal Planning Area

Land Use Category	Acreage	% of Subtotal
<b>Residential</b>		
Single-Family	285.96	80.2%
Low-Density Multi-Family	27.59	7.7%
Townhouses	17.58	4.9%
Two-Family (Duplexes)	0.30	0.1%
Transient-Residential (Hotels/Motels)	1.08	0.3%
Multi-Family, Migrant Camps	24.07	6.7%
<i>Sub-total</i>	<i>356.58</i>	<i>11.4%</i>
<b>Non-Residential</b>		
Shopping Centers, Commercial, Stadiums, Tracks	65.27	2.4%
Office	3.54	0.1%
Communications , Utilities, Terminals , Plants	74.56	2.7%
Institutional	102.92	3.7%
Parks (Including Preserves & Conservation)	1246.51	45.3%
Vacant Unprotected	6.97	0.3%
Vacant, Government Owned	279.42	10.1%
Streets/Roads, Expressways, Ramps	231.74	8.4%
Water	932.73	33.8%
<i>Sub-total</i>	<i>2,760.60</i>	<i>88.6%</i>
<b>Total</b>	<b>3,117.18</b>	<b>100%</b>

Source: Miami-Dade County Land Use Codes, November 2006, Michele Mellgren & Associates, Inc.

Note: Table 5-1 counts the 193-acre Biscayne Landing property as Vacant, Government Owned as of late 2006 (the site of the City's former landfill). One hundred and thirty two (132) acres is buildable and is beginning to undergo construction into a variety of mid- to high-rise condominium towers, townhouses, retail, office, and commercial components.

Map 5-1: Coastal Planning Area



### **Existing Land Use Conflicts**

General areas of potential conflict exist along the Miami-Dade County shoreline between marine commercial/industrial land uses and residential or tourist land uses. Conflicts also exist along areas of the County shoreline in areas where large marinas are located in close proximity to residential areas, and where public access points to the shoreline are sited adjacent to private residential property. In the City of North Miami, there are a total of three marinas and one boat supply establishment within the coastal planning area, none of which pose serious land use conflicts.

### **Water Dependent and Water Related Land Uses**

Activities that can be carried out not only on, but in or adjacent to water areas because the use requires access to the water body for waterborne transportation, recreation, electrical generating facilities, and/or water supply are deemed to be water dependent land uses. In the City of North Miami, these activities include public and private marinas, fishing piers, boating, swimming, beaches, active and passive recreation opportunities.

Activities that are not directly dependent upon access to a water body but which provide goods and services that are directly associated with a water dependent or waterway land use, such as a dry storage marina, are deemed to be water related land uses. Map 5-2 identifies the water dependent and water related land uses within the City of North Miami.

### **Areas in Need of Redevelopment**

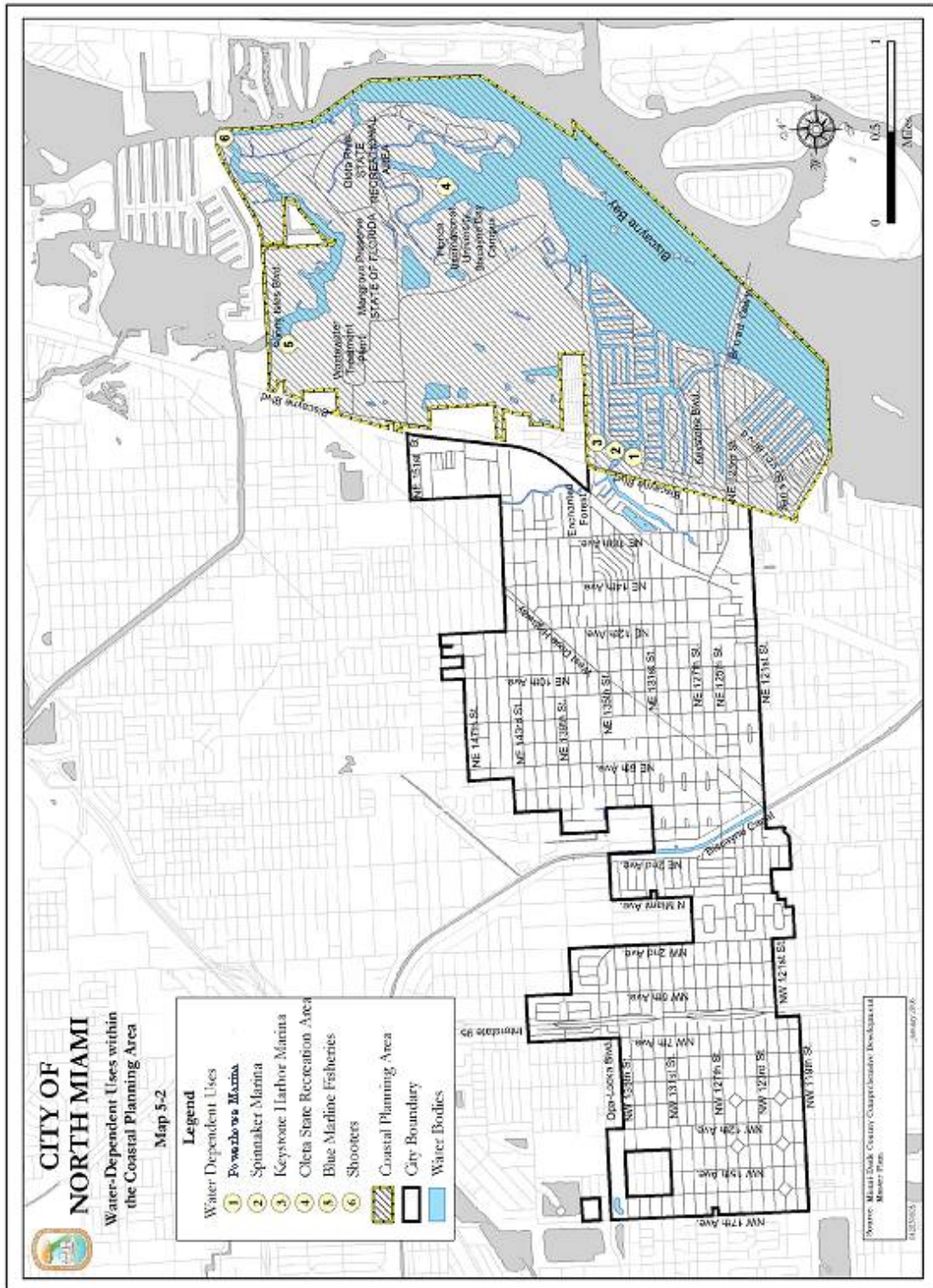
Most of the land area within the coastal planning area is comprised of parks, preserves, and conservation areas. The remainder of the land area is comprised of institutional, utility, office, and residential land uses that are generally in relatively good condition. Approximately 553 acres fall within the North Miami Community Redevelopment Agency (CRA) - 536 of those acres comprising the Biscayne Landing area, which is the site of the former City of North Miami landfill. The remaining 17 acres lie southeast of the corner of Biscayne Boulevard and 123rd Street. No specific locations within the coastal planning area were identified where structures are so badly deteriorated that they pose a threat to human, health, safety, or welfare.

**Economic Base Activities**

For this analysis, any activities that generate income and/or employment within the City of North Miami are referred to as the economic base for the coastal planning area. Economic activities within the coastal planning area are largely influenced by tourism-related business within Oleta River State Park and patronage to the various water-dependant uses. Future commercial uses in the coastal planning area bound to contribute to the future economic base include approximately 72 acres of commercial use.

Construction and real estate represent substantial economic activities as the Biscayne Landing site continues through phases of development. As the Biscayne Landing development occurs within the CRA boundary, significant property taxes shall be generated from the estimated three billion dollars of construction over the next coming decades.

Map 5-2: Water Dependand Land Uses





### **Infrastructure within the Coastal Planning Area**

Infrastructure within the coastal planning area includes roadways, water and sewer facilities, solid waste facilities, stormwater facilities, marinas, park facilities, and shoreline protection structures. These facilities are inventoried and described in the Transportation Element, Infrastructure Element, and Recreation and Open Space Element of the City of North Miami Comprehensive Plan and briefly mentioned below:

#### *Roadways*

Sunny Isles Boulevard (NE 163rd Street) and Broad Causeway (NE 123rd Street) are the two main roadways that provide access through the coastal planning area connecting the mainland to the barrier islands and recreation areas. In addition, Biscayne Boulevard is a major north/south arterial that runs along the western boarder of the coastal management area, providing access to other minor roadways connecting to residential, commercial, institutional, and recreational land uses.

#### *Bridges*

Within the coastal planning area, there exists one County-maintained bridge on Broad Causeway over the Intracoastal Waterway, and two small, public bridges connecting residential areas.

#### *Sanitary Sewer Facilities*

Sanitary sewer treatment is provided by Miami-Dade County's North District Wastewater Treatment Plant (WWTP), and the transmission infrastructure is owned and maintained by the City.

#### *Potable Water Facilities*

Potable water service is provided by the City of North Miami to its residents, through the Winson Water Treatment Plant, owned and maintained by the City.

#### *Solid Waste Facilities*

Solid waste disposal is provided by the Miami-Dade County Solid Waste Authority and there is one wastewater treatment plant located within the coastal planning area that is owned and operated by the City.

*Storm Water Facilities*

Stormwater outfalls within the coastal planning area include residential canals and commercial marinas. In addition, positive drainage outfalls, historically incorporated into older subdivisions and roadway projects, are evident in the northern portion of the coastal planning area.

*Marinas*

Three marinas exist within the coastal planning area including the Keystone Point Marina, Spinnaker Marina, and Powerhouse Marina.

Public access to the coastline within the City of North Miami is limited to portions of the Oleta River State Park (i.e. marina, boat launch, and beach access), and private access through Keystone Point Marina, Keystone Harbor, Shooters Waterfront Café USA, Blue Marlin Fisheries, and Spinnaker Marina.

*Park/Preservation Areas*

Several parks and/or preservation areas are located within the coastal planning area, including the North Bayshore William Lehman Park, Alfred Besade Park, Keystone Point Park, Arch Creek East Environmental Preserve, and the Oleta River State Park.

In March 2007, the North Miami City Council approved legislation creating the "Arch Creek East Environmental Preserve." The resolution ensures that 12 acres of City-owned bayfront property shall be considered an environmental preserve - thereby protecting important natural communities such as mangrove tidal swamps and wildlife habitats. The preserve shall benefit the future water quality and prevent further degradation of the neighboring Oleta River and the adjacent Biscayne Bay waters from potentially harmful effects of urban development. Animals observed in this area include raccoon, fox, mangrove water snake, great blue heron, little blue heron, egret, green heron, white ibis, roseate spoonbill, manatee, numerous mollusks, crabs, and fish.

### *Shoreline Protection Structures*

The North Bayshore William Lehman Park has a wooden boardwalk extending into Biscayne Bay with a fishing pier at the end. There are a few seawalls at the end of the canals in the Keystone and Sans Souci areas maintained by the City.

## **INVENTORY AND ANALYSIS OF NATURAL RESOURCES**

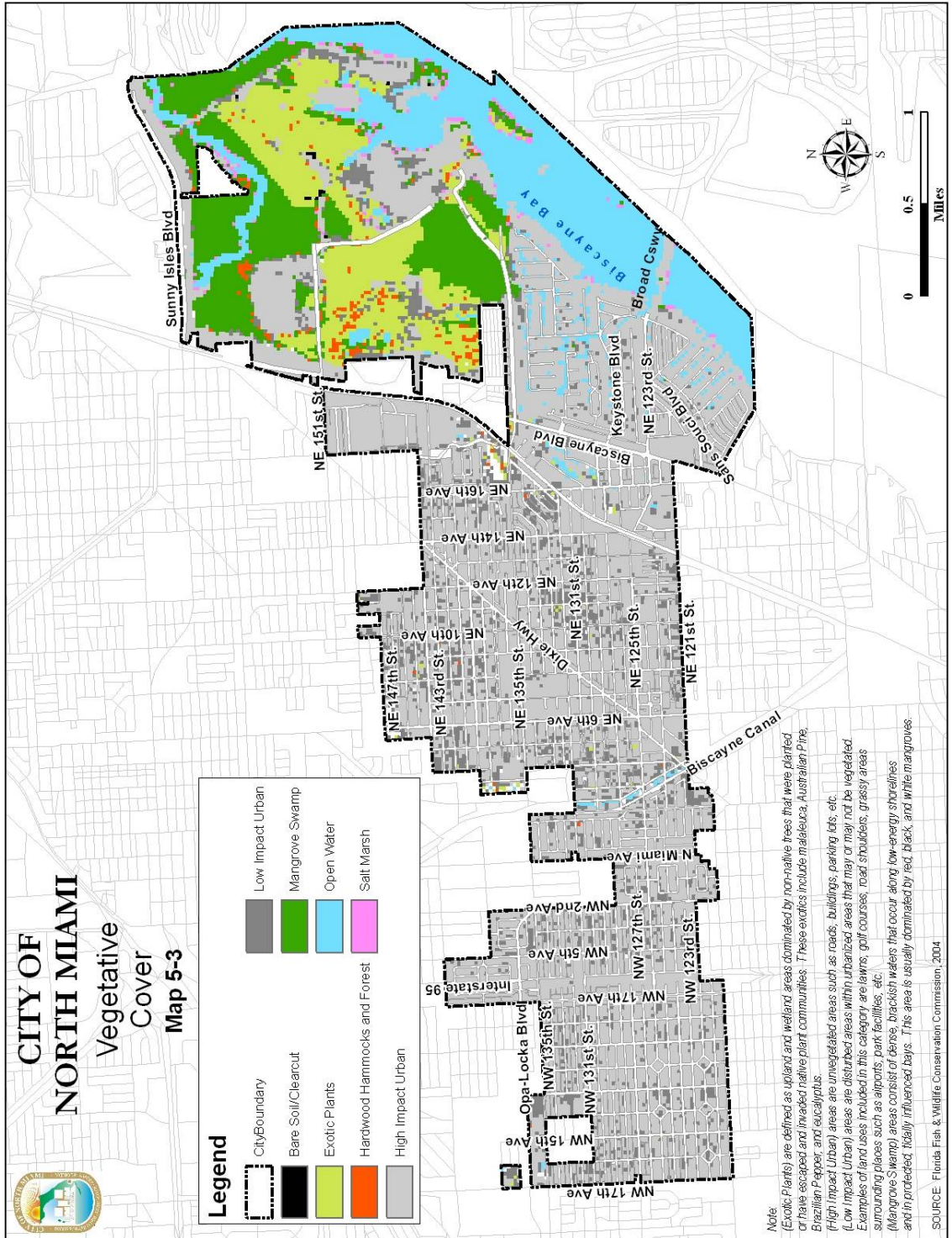
The coastal planning area within the City of North Miami is primarily made up of parks, preserves, and conservation areas concentrated among existing urban development. This section addresses vegetative cover, including wetlands, wildlife habitats, living marine resources, areas subject to coastal flooding, and potential impacts resulting from future development for properties within the coastal planning area.

### **Vegetative Cover**

Vegetation within the coastal planning area is divided into two broad categories: natural communities and man-made vegetative communities. Natural plant communities identified within the City of North Miami include mangroves, mangroves/saltmarsh communities, coastal and tropical hammocks, pinelands, and wetlands. The overwhelming majority of these communities are protected as part of Oleta River State Park. Also dispersed in and around the Oleta River area are clusters and communities of exotic plants - non-native trees that were planted or have escaped and invaded native plant communities. The southern portion of the coastal planning area is mostly defined as high impact urban - areas that are devoid of vegetation such as roads, buildings, and parking lots as well as low impact urban - disturbed areas within urbanized areas that may or may not contain vegetation such as lawns, grassy areas around buildings, and park facilities. Vegetative cover is shown in Map 5-3.



Map 5-3: Vegetative Cover



**Wildlife Habitats**

The vegetative communities within the City of North Miami provide protection, food, water, and nesting materials for local wildlife. The Oleta River State Park area contains nearly all of the natural wildlife habitats in the City. Animals inhabiting the area include many varieties of invertebrates, reptiles, fish, birds, amphibians, and mammals. Table 6-3 lists the existing flora and fauna that live within Miami-Dade County and which may be present in the City of North Miami. A specific list of the plant and animal species within the Oleta River State Park is included in Table 6-3\_of the Data, Inventory, and Analysis Report for the City of North Miami Conservation Element.

**Living Marine Resources**

Living marine resources are oceanic plants or animals, such as sea grasses, algae, mangroves, coral reefs, and living marine animals such as shellfish, fish, crustacea, sea turtles and marine mammals. The Miami-Dade County Department of Environmental Resource Management (DERM) maintains 12 sampling stations within Biscayne Bay for monitoring the abundance and variety of sea life residing off the Miami-Dade County coastline. Information collected from these monitoring stations indicates that over 850 species of benthic communities and 270 fish species live within Biscayne Bay. A formal study of the benthic communities and fish species that exist near North Miami has not been completed specifically; however, it is believed that the proximity of the City to the Biscayne Bay maximizes natural diversity within the waters off the coast as it serves to protect native species.

**Areas Subject to Coastal Flooding**

The coastal planning area for the City of North Miami is prone to coastal flooding from hurricane storms as it is located entirely within a hurricane storm surge evacuation zone designated by the Miami-Dade County Department of Emergency Management (Evacuation Zone B) shown later in this element on Map 5-4. The majority of land within the coastal planning area falls under the Federal Emergency Management Agency (FEMA) flood zone "AE" - or an area inundated by 100-year flooding. The land directly adjacent to Biscayne Bay is categorized as zone "VE" - or an area inundated by 100-year flooding with velocity hazard/wave action.

*Community Rating System (CRS)*

The National Flood Insurance Program (NFIP) has established the Community Rating System (CRS) as a voluntary program to rate communities and their ability to implement programs that help to reduce flood losses, facilitate accurate insurance rating, and promote awareness of flood insurance. The CRS program also provides additional incentives for communities that go beyond the minimum requirements of floodplain management. Cities can implement programs targeted to flood preparation, flood damage reduction, mapping and regulatory activities and public information programs, and as a result benefit citizens in the City by receiving a rating from CRS which can help to decrease home owner flood insurance costs. The City's Class 5 rating is based on educational activities, local mitigation and outreach that exceed the minimum standards for the NFIP. Moreover, the Class 5 rating achieved by the City is superior to 96 percent of all other NFIP participating municipalities throughout the United States. Through its participation in the CRS program, North Miami residents in the Special Flood Hazard Areas (SFHA) are eligible to receive up to 25 percent discount on flood insurance. Residents in non SFHA are eligible for a 10 percent discount. The Storm Water Utility Division provides information regarding flood hazards, flood protection, and flood proofing.

*Repetitive Loss Properties*

FEMA describes a Repetitive Loss (RL) property as any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. A RL property may or may not be currently insured by the NFIP. Such frequently flooded properties strain the National Flood Insurance Fund, and represent the largest draw upon the fund. The FEMA Repetitive Loss properties strategy is to eliminate or reduce property damage and disruption to life brought about by instances of repeated flooding of the same properties. Presently there are 16 repetitive loss properties within the City. The City of North Miami is committed to work on eliminating repetitive loss properties and continues to enforce City ordinances in place that endeavor to prevent an increase of such properties.

### Effect of Future Land Uses on Natural Systems

The land uses in the City of North Miami's Future Land Use Map for the coastal planning area are generally consistent with existing development and land use patterns currently in the area with one exception. Currently, 193 acres of a former Superfund site are being redeveloped as Public PUD/Special District and Planned Unit Development, named Biscayne Landing. The City is also planning changes to density in areas already "built out", and do not contain significant natural communities. These changes to the Future Land Use Map are not anticipated to have a significant negative impact on the natural systems within the coastal planning area.

### Impacts of Development and Redevelopment on Historic Resources

Historic resources typically include areas, districts, or sites containing properties listed on the Florida Master Site File, the National Register of Historic Places, or designated by the County or City as historically, architecturally, or archeologically significant. A survey of these records finds several sites in the coastal planning area listed in the Florida Master Site File, including 12 previously recorded archaeological sites, one historic resource group, one historic bridge, and eight historic standing structures. However, the Florida Division of Historical Resources is careful to mention that the entry of an archaeological site or a historic structure on the Florida Master Site File does not necessarily mean that the structure is deemed significant. Table 5-2 and Map 5-4 summarize the locations of archeological sites and historic structures listed in the Florida Master Site File for the coastal planning area in the City of North Miami.

**Table 5-2: Archeological Sites and Historic Structures Listed on the Florida Master Site File**

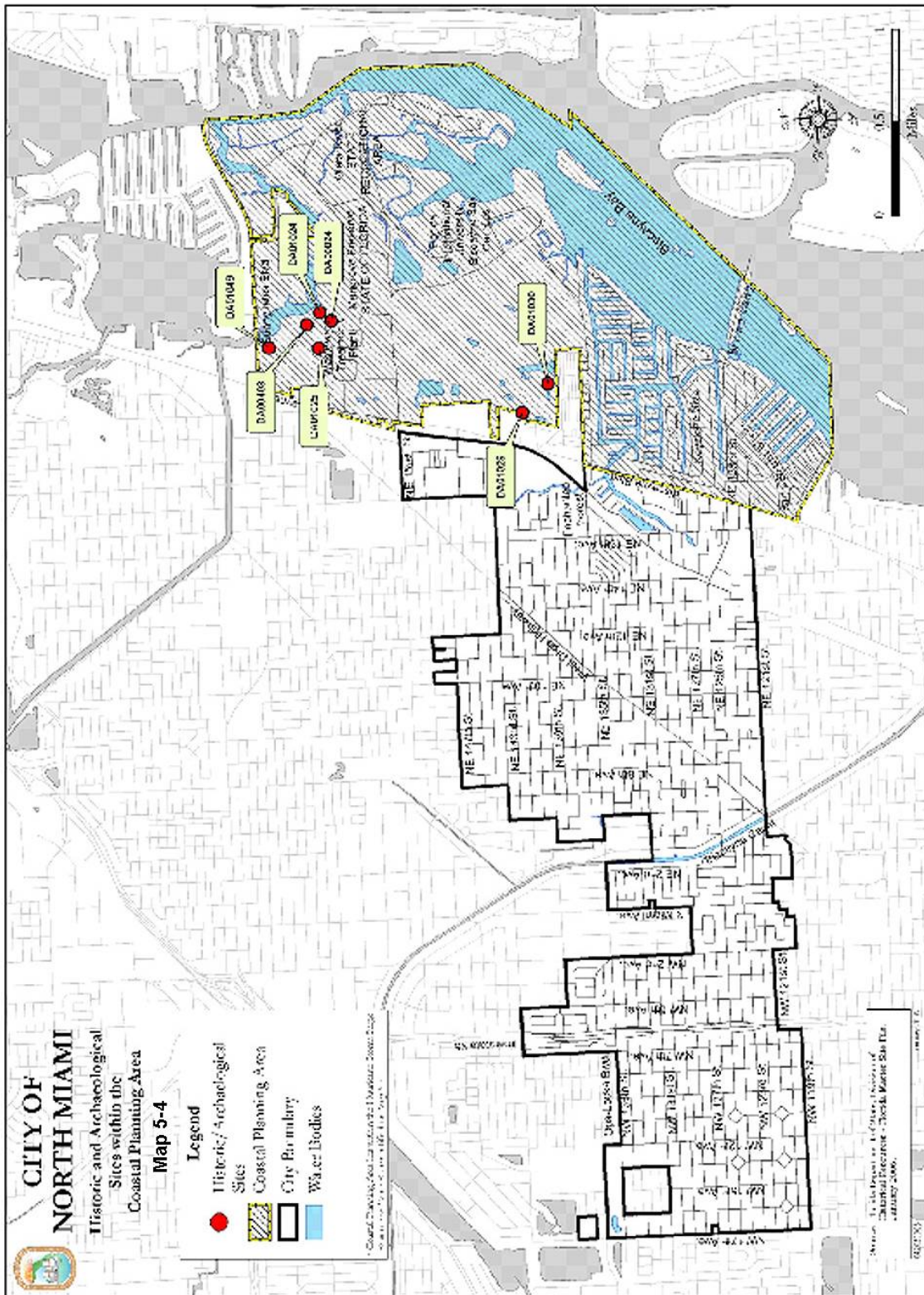
Site ID	Site Name	Location	Type
DA00024	Oleta River Mound	See Map	AR
DA00403	Oleta River Still	See Map	AR
DA01024	Oleta River 2	See Map	AR
DA01025	Oleta River 4	See Map	AR
DA01029	Bay Ridge	See Map	AR
DA01030	Arch Creek Ridge	See Map	AR
DA01049	Fish Camp	See Map	AR

Notes: AR = Recorded Archeological Site, Florida Master Site File, January 2006.

The locations of the sites lie within areas with an existing land use of parks, recreation, or conservation. According to the future land use map designations, three sites will fall under the category of Wetlands, two sites under the category of Utility, and the remaining site lies in the Mixed Use High category. The five sites in the Wetlands and Government-owned Utility future land use areas should be protected from future development. The site located in the Biscayne Landing area, known as Arch Creek Ridge could be exposed to the expected future development of the surrounding area. However, according to the Proposed Conceptual Master Plan, this portion of the project is to remain a natural setting.



Map 5-4: Historical Sites in Florida Master Site File



## INVENTORY AND ANALYSIS OF ESTUARINE AREAS

An estuarine area is defined as a semi-enclosed, naturally existing coastal body of water in which saltwater is naturally diluted by freshwater and which has an open connection with oceanic waters. The City's coastal area includes portions of Biscayne Bay, the Intracoastal Waterway, and the Oleta River, which are considered estuarine areas.

### General Conditions

Since 1979, Miami-Dade County DERM has continued to perform monthly monitoring of surface water quality at 101 sites throughout Biscayne Bay and the watershed. This monthly program has been instrumental in identifying sources of water quality degradation. Water samples are collected and the physical, chemical, and biological parameters are analyzed, in addition to epibenthic habitat monitoring. This data is essential in developing freshwater flow, water quality targets, and pollutant loading criteria for the Bay.

The South Florida Water Management District characterizes the northern portion of Biscayne Bay as a section that retains the most estuarine habitat found in the Bay, but also is the most altered by dredging and bulkheading. Roughly 40 percent of this section of the Bay is too deep or too turbid to support a productive estuarine ecosystem. However, the remaining areas of shallow waters contain highly productive seagrass beds. In addition, northern Biscayne Bay water quality trends have been continuously improving according to the results of the Biscayne Bay Surface Water Improvement and Management (SWIM) Plan. The SWIM Plan, initiated in 1988 and most recently updated in 1995 by the South Florida Water Management District (SFWMD), covers 938 square miles of southeast Florida waters, including all of North Miami.

### Development/Redevelopment Impacts

Approximately 40 percent of the land located within the coastal planning area is reserved for park, preserve, and conservation uses, and 30 percent is water. The remaining 30 percent of the coastal planning area is comprised of single family, institutional, utility, commercial, and office land uses. Development on the former Munisport site, now referred to as Biscayne Landing will increase storm water runoff rates, however the impacts are considered negligible. All redevelopment in

the coastal planning area is subject to development standards that require on-site storm water retention improvements.

### Regulations

Programs are in place protecting Biscayne Bay resources from industrial contaminants, particularly from marinas and other water-dependent activities, inland industrial sites and non-point source pollution. The City of North Miami will coordinate with the U.S. Department of Environmental Protection, U.S. Army Corps of Engineers, the South Florida Water Management District (SFWMD), and the Miami-Dade County DERM to ensure that the regulatory programs administered through each of these agencies is integrated into the rules and regulations adopted by the City of North Miami.

The surface waters of Biscayne Bay are protected under Section 17-302 of the Florida Statutes. All surface waters within, or adjacent to, Miami-Dade County are classified as Class III water bodies. As such, water quality in these water bodies is required to maintain such levels to protect recreational uses and the propagation and maintenance of a healthy, well-balanced population of fish and wildlife.

All tidal areas of Biscayne Bay have been formally designated by the State of Florida as part of the Biscayne Bay Aquatic Preserve with water quality additionally protected under the provisions for an Outstanding Florida Water Body. In addition, water quality is also protected under Chapter 24-11 of the Miami-Dade County Code of Ordinances. Actions to maintain water quality and minimize estuarine pollution are defined in the Biscayne Bay Aquatic Preserve Management Plan under the authority of federal, state, regional, and county regulatory agencies.

Other items of particular concern to the City are addressed in the SWIM Plan include water quality, improvements, and preservation along the Oleta River, shoreline stabilization in Oleta River State Recreation Area, the former Munisport Landfill site (currently the Biscayne Landing PUD), and water quality studies and recommendations for Arch Creek. The SWIM Plan also contains Goals and Objectives regarding stormwater treatment and the provision of sanitary sewer



service. Upon expiration of the SWIM legislation and due to the importance of Biscayne Bay as an Outstanding Florida Water, the Florida Legislature, in 1999, created the Biscayne Bay Partnership Initiative (BBPI); a community-based forum tasked with providing recommendations for actions to protect, improve and enhance Biscayne Bay. In 2001, the BBPI released a series of reports by its committees and team members entitled Survey Team Final Reports, one of which addressed "Water and Sediment Quality". This report states that the most notable water quality exceedances between 1995 and 1999 involved coliform, ammonia, phosphorus, and nitrate/nitrite. In each case the report shows that the open waters of Biscayne Bay rarely exceed standards and that most exceedances occur in the canals and tributaries.

## NATURAL DISASTER PLANNING CONCERNS

The most catastrophic threat to public safety in coastal areas of Florida is the potential loss of life and property from storm surge, flooding, and/or high winds associated with hurricane storm events. The City of North Miami, being located in the lower southeast region of Florida, is identified by the National Oceanic and Atmospheric Administration (NOAA) as the one area in the United States most vulnerable to hurricane storms. Therefore, it is imperative that the City identify programs and strategies for disaster preparedness.

In Miami-Dade County, the Office of Emergency Management (OEM), in partnership with the South Florida Regional Planning Council (SFRPC), coordinates pre-disaster planning and post-disaster recovery plans for all municipalities, including the City of North Miami. The Comprehensive Emergency Management Plan (CEMP) prepared by OEM serves as the coordinating policy for administrative and operational procedures for all hazards, including storm events with a landfall, parallel or exiting tracts impacting Miami-Dade County. This detailed operations plan assigns responsibilities to City and County departments and private agencies during the watch, warning, emergency period and recovery stages of a hurricane emergency. The OEM is also responsible for hurricane emergency planning, including protection of hurricane evacuation routes and the coordination of adequate sheltering.

### Definitions

The following definitions are useful to the discussion of hurricane preparedness for the City of North Miami:

#### *Evacuation Zones*

- **Zone A (Red Zone)** - Miami Beach, Virginia Key, Key Biscayne and all islands lying within Biscayne Bay including the municipalities of Golden Beach, Sunny Isles Beach, Bal Harbor, Bay Harbor Islands, Indian Creek Village, Surfside, North Bay Village, City of Miami Beach and the island portions of the City of Miami. (Note: That area west of the L-31N levee known as the 8 ½ Square Mile Area is ordered to evacuate because of its inaccessibility to rescue vehicles following a major storm.)
- **Zone B (Yellow Zone)** - All areas of mainland Miami-Dade County lying (north to south) east of Biscayne Boulevard, Brickell Avenue, S. Miami Avenue, South Bayshore Drive, Main Highway, Ingraham Highway, Old Cutler Road, the Florida Turnpike south to U.S. 1 to State Road 9336 [SW 344th Street (Palm Drive), SW 192nd Avenue (Tower Road) and Ingram Highway] south to Everglades National Park. The only exception to this pattern is a small area east of Old Cutler Road, west of SW 67th Avenue and north of SW 152nd Street that is not in the evacuation zone.
- **Zone C (Green Zone)** - The area of Miami-Dade County west of Zone B and a line defined by SW 152nd Street (Coral Reef Drive) at Old Cutler Road going west to U.S. 1, then south to SW 184th Street (Eureka Drive), then west to SW 127th Avenue (Burr Road), then south to U.S. 1 to SW 312th Street (Campbell Drive or Homestead's NW 8th Street), then west to Everglades National Park.

### Hurricane Evacuation Zones

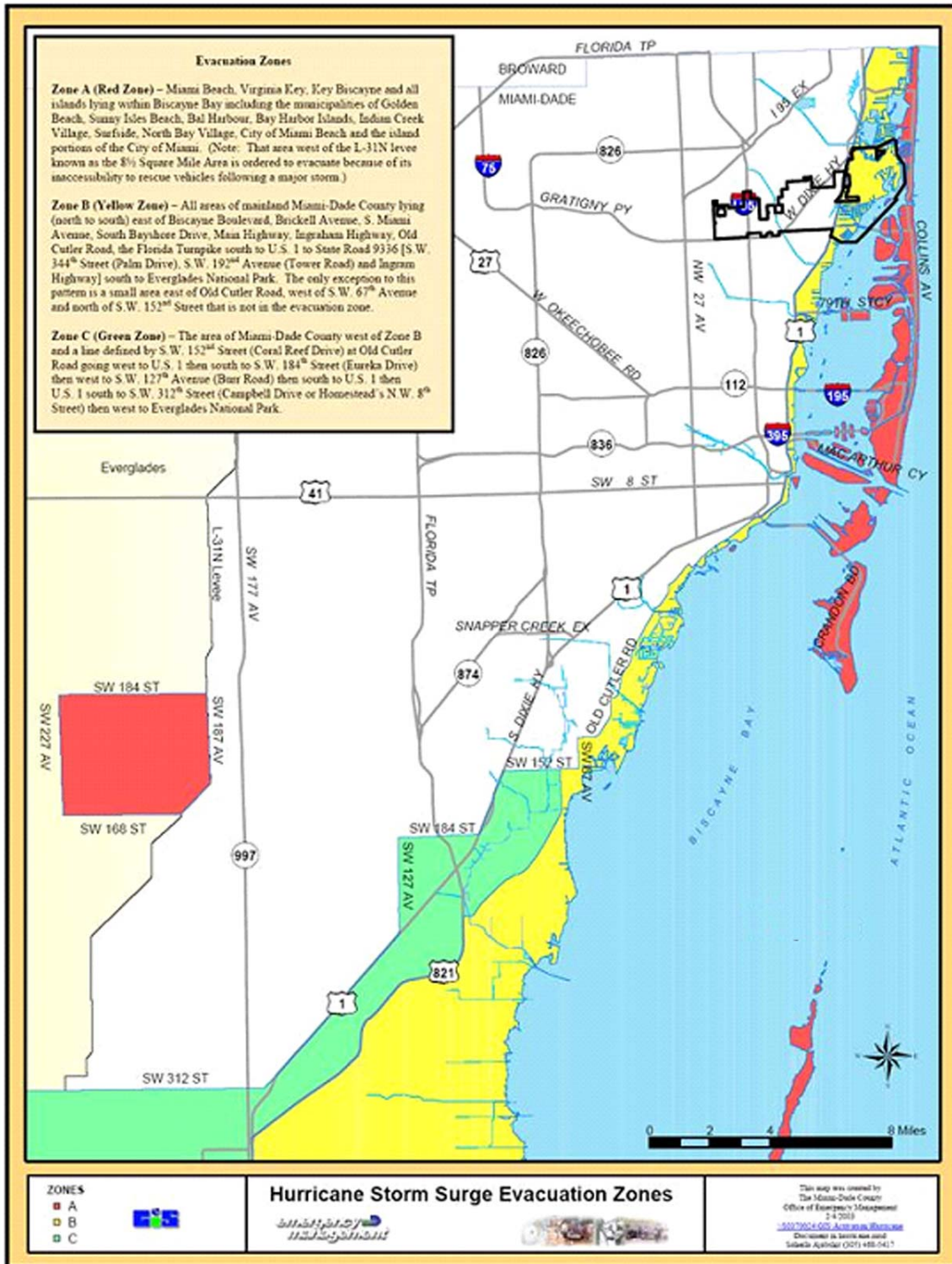
The Miami-Dade County storm surge evacuation zones were redrawn in 2003 because of data acquired through the release of the SLOSH II computer model developed by the storm surge group at the National Hurricane Center working with the U.S. Army Corps of Engineers, the U.S. Geological Survey and FEMA, in

cooperation with state and local offices of emergency management. The new hurricane evacuation zones, designated Zones A, B, and C, reflect a reduced storm surge impact area, thus reducing the number of potential evacuees during a hurricane.

<u>New Zone Designation</u>	<u>Previous Evacuation Zone Designation</u>
▪ Zone A	Coastal High Hazard Area (CHHA) / Cat. 1
▪ Zone B	Hurricane Vulnerability Area (HVA) / Cat. 1-3
▪ Zone C	Category 4-5

Map 5-5 is a reproduction of the official Miami-Dade County Hurricane Storm Surge Evacuation Map. The new evacuation zones were designated so that they are not hurricane category specific giving OEM maximum flexibility for evacuating the appropriate zones based upon the anticipated impact of the storm. For example, if a Category 3 hurricane approaches Miami-Dade County from the west and produces a storm surge which will impact only Zone A, the OEM can announce an evacuation of Zone A without confusion to persons in other zones. The change in Hurricane Evacuation Zones directly impacts the potential number of persons who may require shelter during a storm event.

Map 5-5: Miami-Dade County Evacuation Map



### Hurricane Evacuation Planning

The coastal planning area within the City of North Miami for hurricane evacuation purposes lies inside the Hurricane Vulnerability Zone (HVZ) designated as Evacuation Zone B by the Miami-Dade County OEM. As defined by Florida Administrative Code (FAC), the HVZ means the area delineated by the local regional hurricane evacuation plan as requiring evacuation. The HVZ shall include areas requiring evacuation in the event of a 100-year storm or Category 3 storm event. The following information forms the baseline for determining the evacuation needs of the community:

#### *Persons Requiring Evacuation*

Census 2000 data shows that 9,029 people, living within 4,097 households, would need to be evacuated under a mandatory evacuation order for Zone B issued by the Miami-Dade County OEM.

#### *Available Hurricane Shelters*

There are six hurricane shelters located within five miles of the City of North Miami, one of which is located in the City. The shelters are provided by the American Red Cross. They include:

<u>Name (Shelter Capacity)</u>	<u>Address</u>
North Miami Senior (1000)	800 NE 137th ST, North Miami
North Miami Beach Senior (3152)	1247 NE 167th AV, North Miami Beach
Dr. Michael M Krop Senior (3383)	1410 Countyline RD, Miami
Miami Carol City Senior (2929)	3422 NW 187th ST, Opa-Locka
Hialeah Senior (1400)	251 E 47th ST, Hialeah
Miami Northwestern Senior (567)	1100 NW 71st ST, Miami

#### *Evacuation Routes*

Miami-Dade County's Adopted Comprehensive Development Master Plan (CDMP) identifies the designated local and regional transportation facilities critical to the evacuation of the coastal population. The designated evacuation routes include: Sunny Isles Boulevard (NE 163rd Street), Broad Causeway (NE 125th Street), Biscayne Boulevard (US 1), and Interstate 95.

The South Florida Regional Planning Council (SFRPC) identifies critical links as sections of roadway considered to be limiting factors in a regional hurricane evacuation. In North Miami, both the Sunny Isles and Broad Causeways are considered critical links, and although these roadways lie to the east of the City, they are likely to be heavily congested during an evacuation event - slowing the westward evacuation efforts of North Miami residents. The SFRPC model analyzes the critical links to determine final clearance times - defined as the ratio of the volume of total evacuation traffic on a roadway link to the roadway capacity of that link.

#### *Evacuation Clearance Times*

In 2003, the SFRPC estimated that it would take 9.15 hours to evacuate residents of the City under the existing land use plan. The evacuation of the coastal planning area is affected by the critical roadway links located throughout the City, as well as the surrounding region, as clearance times on regional roadways can accumulate. The SFRPC released an update of the South Florida Regional Hurricane Evacuation Model in early 2007 outlining various hurricane scenario outcomes. The output of such scenarios, which include category 1-2, category 3, and category 4-5 hurricane events, is in the form of mutually exclusive clearance times for each critical roadway link. The overall Miami-Dade County clearance time is 28.4 hours - based on a worst case scenario model - a scenario designed to represent the simultaneous directed evacuation of all Monroe, Miami-Dade and Broward Counties under category 4-5 storm conditions.

#### *Special Needs Population*

The “special needs” population includes those that are disabled, infirmed, or elderly. As a general rule, the Miami-Dade County OEM estimates that one-half of one percent (0.5 percent) of the population within an evacuation area may need special assistance. Therefore, the special needs population in City of North Miami is estimated to be approximately 45 people, based on the population of evacuation Zone B. After identifying those individuals with special needs, City officials should coordinate evacuation for these people with the Miami-Dade County OEM. A special needs evacuation and emergency center is located at Miami Edison Senior High School. It is located approximately 3.5 miles to the south of the City, and can accommodate 500 people.

Miami-Dade County OEM has developed the Emergency Evacuation Assistance Program (EEAP) designed to provide assistance to special needs residents living at home during a hurricane evacuation. Eligible applicants have a medical condition that requires specialized sheltering unavailable at hurricane evacuation centers. A registry is created of special needs residents, who are assigned to an appropriate facility and transportation type.

#### *Emergency Warning System*

The State of Florida Division of Emergency Management is responsible for maintaining and administering a state-wide emergency warning system. As a municipality in Miami-Dade County, the City of North Miami maintains a liaison with the Miami-Dade County Emergency Operations Center and participates in the County's administration through the State emergency warning system. In the event of an emergency, the City of North Miami's Manager and Police Chief communicate with officials at the County level to disseminate information accordingly.

#### *Public Notice of Potential Hazard*

Public notification of the potential dangers and appropriate preparatory measures for severe storms are provided in a special section of the Miami Herald each year; usually in May or June. Miami-Dade County has also prepared a bilingual public information brochure on hurricane preparedness. Also, several local businesses have produced their own brochures. Staff from Miami-Dade OEM conduct about 100 speaking engagements per year to better inform the public about hurricane preparedness. Additionally, they make a video available before and during hurricane season.

All of the information above should be coordinated with the Miami-Dade County OEM to ensure consistency with the County's Comprehensive Emergency Management Plan (CEMP) and the recently completed Miami-Dade County Local Mitigation Strategy (LMS).

#### **Impacts of Future Land Use Map**

The completion of the Biscayne Landing construction in the year 2017 is expected to create an additional 5,999 residential units, which, at 2.85 people per

unit, will total 17,097 residents. In addition, the Future Land Use Map will allow for a maximum of 5,000 additional permanent residential units. Using those figures, the SFRPC hurricane evacuation traffic model update is expected to predict that the Biscayne Landing project, along with other foreseen growth, shall increase evacuation times for the City of North Miami, while also increasing the cumulative evacuation times for all Miami-Dade residents.

The model developed by the SFRPC is regional in nature and is therefore calibrated to calculate regional evacuation clearance times. Definitive housing unit and population projections are necessary to run the model analysis - enabling the SFRPC to incorporate the City's full development scenario into the model and produce optimal, realistic results. Upon adoption of the Future Land Use Map, the SFRPC will run their traffic model update with definitive data detailing the location and anticipated increases in housing units throughout the City.

#### **Post-Disaster Redevelopment**

The City of North Miami will cooperate with the Miami-Dade County OEM to coordinate damage assessments with assistance from other federal, state, regional, and local agencies. The City has complied with the requirements of Chapter 161.56(1) of the Florida Statutes regarding the adoption of the Miami-Dade County building code to regulate construction within the coastal area. Any redevelopment that would be done following a natural disaster would comply with all applicable regulations. No beaches or dunes exist within the City that would require preventative planning measures to reduce exposure to hazards, and no structures with a history of repeated damage in coastal storms have been identified within the City's coastal planning area.

#### ***Mitigation Measures***

The Disaster Mitigation Act of 2000 mandates that all local governments prepare a local mitigation plan approved by FEMA in order to be eligible to receive federal post-disaster, and certain pre-disaster, mitigation funds. The Miami-Dade LMS was updated December 2006, and identifies necessary mitigation measures such as countywide initiatives and municipal projects. Countywide initiatives in the LMS include: flood control and reduction, sheltering and evacuation, counter-



terrorism, debris clearance, canals and waterways maintenance, tree trimming, transportation systems, mechanical maintenance of critical facilities, public information and education, hazardous materials response, controlled or prescribed burns, and beach and dune restoration and maintenance.

Completed LMS projects in the City include:

- Hardening of the Florida International University (FIU) Biscayne Campus library for use as a hurricane shelter,
- Creation of a hurricane shelter on the campus of Johnson & Wales University,
- Retrofit of North Miami Middle School to serve as a hurricane evacuation center serving the public during a hurricane evacuation, and
- A Residential Shuttering Program which installs aluminum storm panels on the homes of low-income elderly residents of Miami-Dade County and its municipalities.

Current or Proposed Hazard Mitigation Projects in the City of North Miami submitted to the LMS (listed by project number):

1. Flood Prevention and Mitigation at Arch Creek East Drainage Basin
2. Flood Prevention and Mitigation: Basins 8 and 9
3. Critical Facilities Hazard Mitigation
4. Non-critical Facilities Hazard Mitigation
5. Embankment Stabilization at Keystone Point Bridge #2
6. Surge Resistance and Flood Mitigation at Keystone Point and Sans Souci
7. Sanitary Sewer Backup
8. Safeguarding Availability of Potable Water
9. Flood Zone Data Maintenance: GIS System
10. Global Positioning System
11. Emergency Portable Stormwater Pumps
12. Gravity Sewer Systems Improvements: Groundwater Infiltration Reduction
13. Emergency Power: Water and Sewer Utility Operations Center
14. Communications and Records Management System
15. Marine Patrol Vessel

16. Security for Police Station
17. Security for City Hall
18. Security for the Winson Water Plant at Sunkist Grove
19. Correct Water Infiltration at City Hall (EOC) Basement
20. Structural Hardening for Police Station

The National Incident Management System (NIMS) was published by the Department of Homeland Security to provide a comprehensive and consistent national approach to the management of all hazards, at all jurisdictional levels, and across all functional emergency management disciplines. The City continues to remain involved in the NIMS program, as the benefit of NIMS is especially evident at the local level - when entire communities prepare for and provide an integrated response to an incident.

In addition to the aforementioned hazard mitigation projects and initiatives, the City can strive for compliance with NIMS standards in the following ways: increased enforcement by the North Miami Police Marine Patrol vessels; the adoption of stringent landscaping requirements in the City Land Development Regulations which restrict certain invasive and problematic plants and species; the implementation of a hurricane plan providing for debris clearance and repair or replacement of public infrastructure; coordinating with surrounding local governments to protect natural resources within and abutting the City; and whenever possible, prohibiting density increases within the coastal planning area - east of Biscayne Boulevard - limiting future population concentrations in the area while avoiding an increase of hurricane evacuation times.

#### **Beach, Dunes and Dune Vegetation**

The City of North Miami does not contain any major beaches, dunes, or dune vegetation within the coastal planning area. However, the Oleta River State Park contains a small 2.4 acre beach dune that is reclaimed habitat. In 1988, the dune community was cleared of exotic plants and regraded to create a beach, swimming area, and coastal berm.

**Public Access Facilities**

Public access to the coastline within the City of North Miami is limited to portions of the Oleta River State Park (i.e. marina, boat launch, and beach access), and private access through North Bayshore William Lehman Park, Keystone Point Marina, Keystone Harbor, Shooters Waterfront Cafe USA, Blue Marlin Fisheries, and Spinnaker Marina.

# EAR-Based Comprehensive Plan Amendments

## Volume II: Data, Inventory, and Analysis Conservation Element



# 6. CONSERVATION ELEMENT

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## 6. CONSERVATION ELEMENT

### PURPOSE

Pursuant to Rule 9J-5.013 F.A.C., the purpose of the Conservation Element is to promote the conservation, use and protection of natural resources within the City of North Miami. The objective of this Conservation Element Data, Inventory, and Analysis (DIA) Report is to document the conditions for all natural resources found within the City and identify key community priorities for conservation strategies. The DIA Report also presents the current and projected water needs for the community over the 10-year planning horizon to document adequate water supply is available to support future demands. Together, this information serves as the foundation for the goals, objectives, and policies for this element.

### IDENTIFICATION & ANALYSIS OF NATURAL RESOURCES

The natural resources found within the City include rivers, bays, lakes, wetlands, ground water, air, floodplains, minerals, flora and fauna. The conditions for all natural resources found within the City are addressed in the following paragraphs:

#### Surface Water Quality

Water resources within the City generally consist of the Oleta River Estuary, Arch Creek, Little Arch Creek, Biscayne Bay, Emerald Lake, and man-made drainage systems. The City is located within portions of the C-7, C-8, Intracoastal Drainage Basins and Arch Creek Basin, which includes the Biscayne Canal. The drainage basins serve three primary functions:

- To provide drainage and flood protection;
- To supply water for irrigation;
- To maintain a groundwater table elevation near the lower reach of the Biscayne Canal adequate to prevent saltwater intrusion to local groundwater.

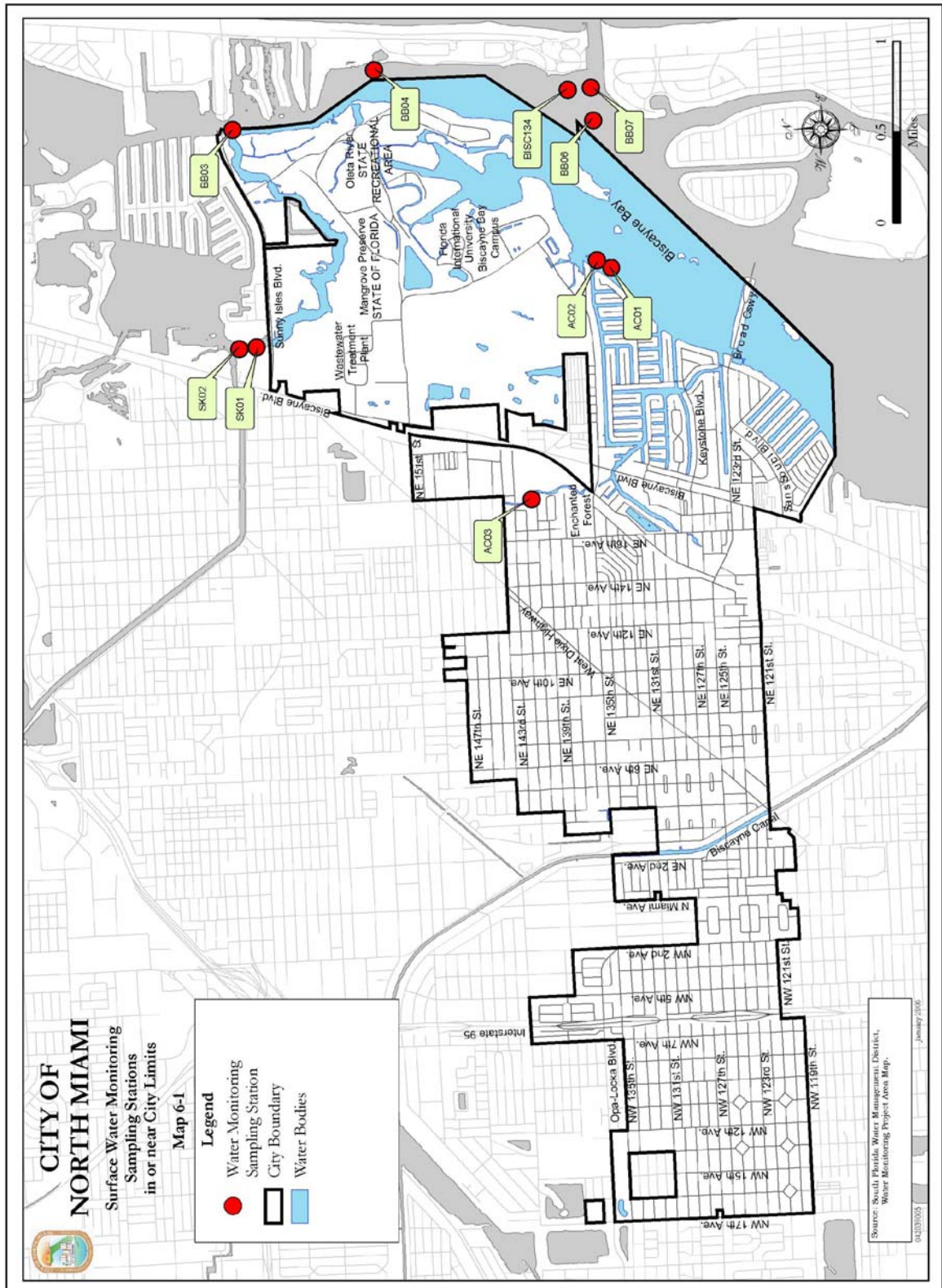
The City of North Miami can be divided into two major drainage areas, (1) the area west of the Biscayne Canal, and (2) the area east of the Biscayne Canal.

The area west of Biscayne Canal has primarily sandy soil and a very low water table elevation; whereas, the area east of Biscayne Canal consists of muck, marl and sand, and has primarily high water table levels.

Water quality data for the abovementioned water bodies are available from the Miami-Dade County Department of Environmental Resource Management (DERM). DERM has 10 water quality monitoring sites either within or near the City's municipal boundaries. These locations are depicted in Map 6-1.



Map 6-1: Surface Water Monitoring Locations



Surface water monitoring for the loads and concentrations of the 14 different indicator pollutants are measured at all three locations. These pollutants are identified under the United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) regulations and DERM's Planning Criteria and Procedures.

The 14 indicator pollutants include:

- 5-day Biochemical Oxygen Demand (BOD5)
- Chemical Oxygen Demand (COD)
- Total Suspended Solids (TSS)
- Total Dissolved Solids (TDS)
- Total Nitrogen (TN)
- Nitrate-Nitrite (Nox-N)
- Ammonia Nitrogen (NH<sub>3</sub>-N)
- Total Kjeldahl Nitrogen (TKN)
- Total Phosphorus (TP)
- Orthophosphate, also known as Soluble or Dissolved Phosphorus (DP)
- Total Cadmium (Cd)
- Total Copper (Cu)
- Total Lead (Pb)
- Total Zinc (Zn)

Data collected at the sampling locations is analyzed by DERM and compared to load concentration standards for each pollutant maintained by Federal and County agencies to ensure that the natural and man-made water resources have not exceeded safe levels. The most recent data collected by DERM includes hydrologic and hydraulic modeling and pollutant loading estimates for the existing and future conditions. DERM uses this information as part of its Stormwater Master Plan to rank and prioritize stormwater problem areas that directly relate to the water quality level of service and flood protection level of service for the drainage basins.

The ranking and prioritization of stormwater problem areas identified in the DERM report was also used to develop the City's Stormwater Phase II Master Plan. Priority areas to alleviate major street flooding and meet the DERM Level of Service for local roads, and other necessary improvements to convey flow to existing pump stations, as identified in this master plan are listed in Table 6-1.

Table 6-1: Top Priority Stormwater Problem Areas

Project Number	Basin Ranking	Basin/Subbasin	Description	Required	Units
1	1	Arch Creek North <sup>1</sup>	36-inch RCP	1600	LF
			Catch basins	8	ea
<i>SUB-TOTAL Project 1</i>					
2	1	ACN1-1	French Drains	159	LF
3	1	ACN1-2	French Drains	105	LF
4	1	ACN1-5	French Drains	321	LF
5	1	ACN1-7	French Drains	449	LF
6	2	ACS2-1	French Drains	234	LF
7	2	ACS2-2	French Drains	269	LF
8	2	ACS3-1	French Drains	469	LF
9	2	ACS3-3	French Drains	135	LF
10	2	ACS3-4	French Drains	579	LF
11	2	ACS3-5	French Drains	1693	LF
12	2	BE6-3	French Drains	64	LF
13	3	Arch Creek South <sup>2</sup>	24-inch RCP	1300	LF
			36-inch RCP	2200	LF
			36-inch RCP	1700	LF
			Rail Road Crossing	200	LF
			Catch basins	24	ea
<i>SUB-TOTAL Project 13</i>					
14	3	ACN3-6	French Drains	518	LF
15	3	ACS1-5	French Drains	386	LF
16	3	ACS3-5	French Drains	1693	LF
17	3	BE4-1	French Drains	67	LF
18	3	BE4-4	French Drains	128	LF
19	4	BW1-1	French Drains	57	LF
20	4	BW1-3	French Drains	36	LF
21	4	BW1-5	French Drains	172	LF
22	4	BW1-9	French Drains	49	LF
23	5	ACS1-2	French Drains	328	LF
24	5	ACS1-4	French Drains	242	LF
25	5	BE4-3	French Drains	246	LF
26	5	BE4-5	French Drains	225	LF
27	6	BE1-1	French Drains	591	LF
28	6	BE1-2	French Drains	655	LF
29	6	BE1-3	French Drains	1665	LF
30	8	BE2-7	French Drains	134	LF
31	8	BE3-1	French Drains	359	LF
32	9	BW3-4	French Drains	1093	LF
33	9	BW4-1	French Drains	1060	LF
34	10	BW3-3	French Drains	1245	LF
35	10	BW3-4	French Drains	1093	LF
36	11	BE2-8	French Drains	1954	LF
37	11	BE4-7	French Drains	378	LF
38	12	BE4-8	French Drains	705	LF

Project Number	Basin Ranking	Basin/Subbasin	Description	Required	Units
39	14	BW2-7	French Drains	402	LF
40	18	BW5-1	French Drains	2075	LF
41	19	BE3-1	French Drains	359	LF
42	20	BW3-4	French Drains	1093	LF
<b>Total</b>					

Source: City of North Miami Phase II Stormwater Master Plan , 2000

### Air Quality

Due to prevailing climate and meteorological conditions, Miami-Dade County traditionally experiences better air quality than most other metropolitan areas in the nation. This is primarily due to the prevailing atmospheric conditions, trade winds, and convective activity common to South Florida that provide for the mixing and diffusion of air pollutants. Such favorable atmospheric conditions have a direct relationship with the good air quality enjoyed in the City of North Miami. Nonetheless, adverse meteorological conditions, including limited vertical mixing and slow air-mass movement, do contribute to occasional buildup of emissions at ground level which have resulted in infrequent exceedances of the National Ambient Air Quality Standards (NAAQS) for Miami-Dade County.

Hazardous air pollutants, also known as toxic air pollutants or air toxics, are those pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. EPA is required to control **188 hazardous air pollutants**. Examples of toxic air pollutants include benzene, which is found in gasoline; perchlorethylene, which is emitted from some dry cleaning facilities; and methylene chloride, which is used as a solvent and paint stripper by a number of industries.

Miami-Dade County Department of Environmental Resources Management (DERM) currently maintains 14 air monitoring stations within their ambient air network. There are no stations located within the City of North Miami. The nearest air quality monitoring station is WASD, as shown on Map 6-2.

Between 1980 and 1988 there were 36 exceedances of NAAQS for ozone particulate matter recorded in Miami-Dade County, including 28 exceedances for

ozone and eight exceedances for particulate matter. In addition, carbon monoxide exceedances ranged from a high in 1981 of 71 recorded on Flagler Street in Downtown Miami to one recorded in 1986.

Table 6.2: Air Exceedances from 1995 Through 2001

Parameter	1995	1996	1997	1998	1999	2000	2001
Ozone (1-hr O <sub>3</sub> )	0	0	0	0	0	0	0
Ozone (8 hr O <sub>3</sub> )	2 <sup>**</sup>	2 <sup>**</sup>	3 <sup>**</sup>	11 <sup>*</sup>	6 <sup>*</sup>	0	2 <sup>*</sup>
Carbon Monoxide (CO) 0	0	0	0	0	0	0	0
Particulate Matter <2.5 Microns (PM <sub>2.5</sub> )	-	-	-	-	-	-	0
Particulate Matter <10 Microns (PM <sub>10</sub> ) 0	0	0	0	0	0	0	0
Sulfur Dioxide (SO <sub>2</sub> )	0	0	0	0	0	0	0
Nitrogen Dioxide (NO <sub>2</sub> ) 0 0	0	0	0	0	0	0	0

Source: Department of Environmental Resources Management, Air Section, 2003

\* The 8-hour ozone did not violate the National Ambient Air Quality Standards (NAAQS) for the year.

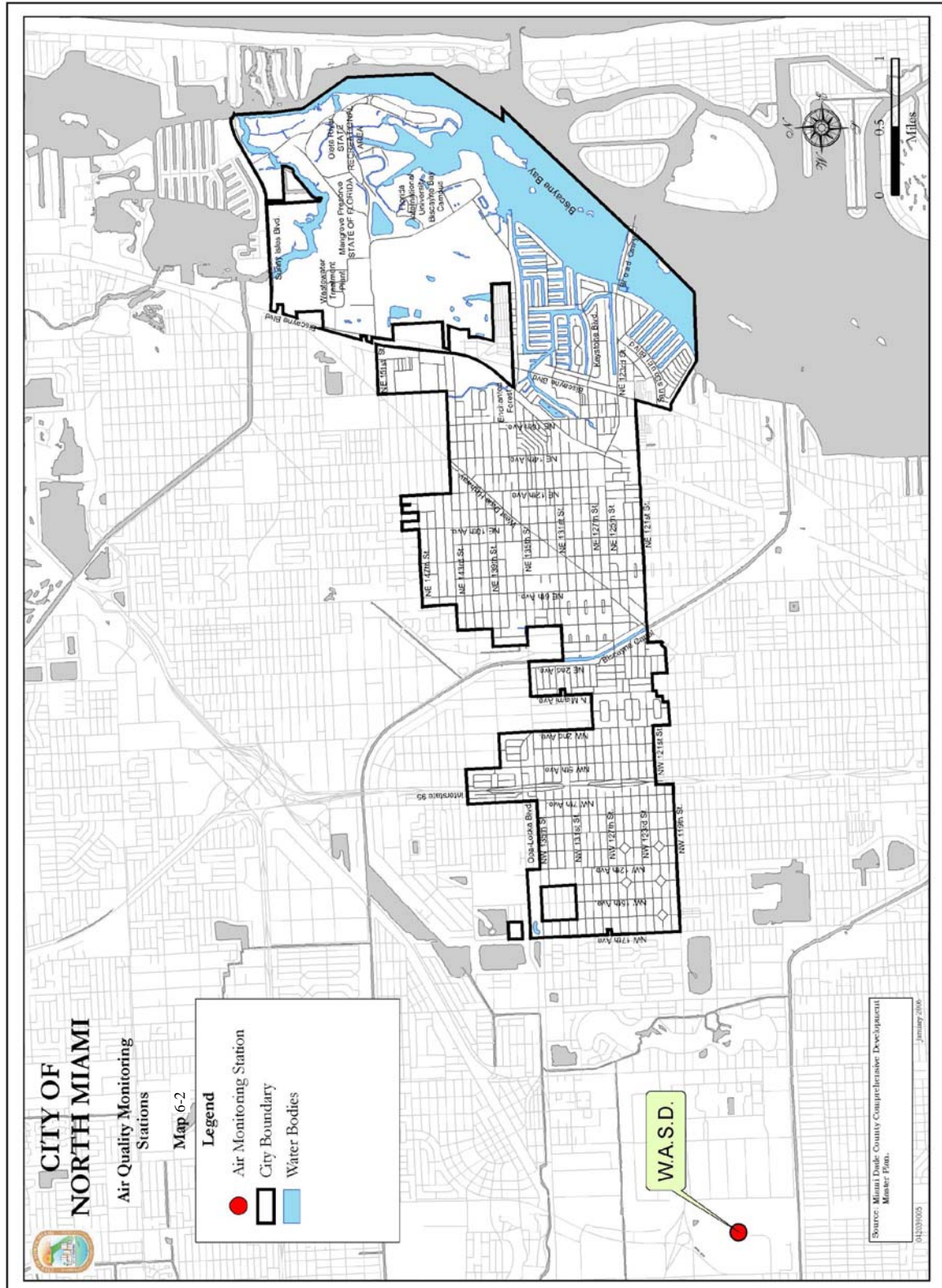
^ These values are for comparison only. The 8-hour ozone NAAQS started in 1998.

Since 1995 no National Ambient Air Quality Standards (NAAQS) were exceeded. It should be noted that the 8-hour Ozone limit was exceeded on 17 occasions since the establishment of the official standard in 1998. This figure excludes two of the exceedances in 1998, which were due to fires in Central America. Although the 8-hour Ozone limit was exceeded the NAAQS associated with the 8-hour Ozone is based on the three-year average of the fourth highest 8-hour reading for each year. Using this method of calculation no NAAQS exceedances for Ozone occurred.

There were no recorded exceedances of NAAQS near the City of North Miami that were reported in the 2003 Miami-Dade County Evaluation and Appraisal Report.



Map 6-2: Air Quality Station Locations



### Ground Water

The Biscayne Aquifer is a deep water aquifer located under the majority of Miami-Dade, Broward, and southern Palm Beach Counties that serves as the main source of potable water for all of these areas. The South Florida Water Management District (SFWMD) establishes conservation policies for the regional water supply and the City has coordinated with the SFWMD through the consumptive use permitting process to ensure conservation of this vital natural resource. The biggest threat to the water supply is generally the potential for saltwater intrusion; thus the primary concern of the SFWMD is to reasonably limit groundwater extraction from the water supply and to the balance needs between development and conservation.

The City continues to work with Miami-Dade County DERM to encourage aquifer recharge and storage capacity for the Biscayne Aquifer through stormwater management permitting. Under this initiative, stormwater runoff generated from a five-year storm for any new development within the City would be retained on-site through the use of swales, exfiltration systems, and drainage wells. By keeping water on-site, these systems allow water to infiltrate into the aquifer and thereby recharge groundwater. They also provide water quality treatment as runoff must percolate through the soil before entering the groundwater system.

### Wetlands

Wetlands are generally classified as areas where the water table is near or above the surface except during extended dry periods. Wetlands are typically adjacent to natural water bodies and lakes, and in low-lying depressions, and have poorly drained, level, organic or marl soils. Wetlands provide needed habitat for aquatic and land species, including migrating birds. Wetlands also provide natural storage areas for stormwater and a “filtration system” to cleanse the water.

According to the National Wetland Inventory, most of the wetlands in the City are located to the east of Biscayne Boulevard and north of NE 135<sup>th</sup> Street, with the exception of Biscayne Canal and Emerald Lake. Map 6-3 graphically illustrates the location of wetland systems within the City.



The three main categories of wetlands found in the City are Palustrine, Estuarine, Riverine. They are defined as the following:

Palustrine systems include all nontidal wetland denominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived sales is below 0.5 percent. Emerald lake (privately owned) is a Palustrine wetland. Also included are wetlands lacking such vegetation but with all of the following four characteristics:

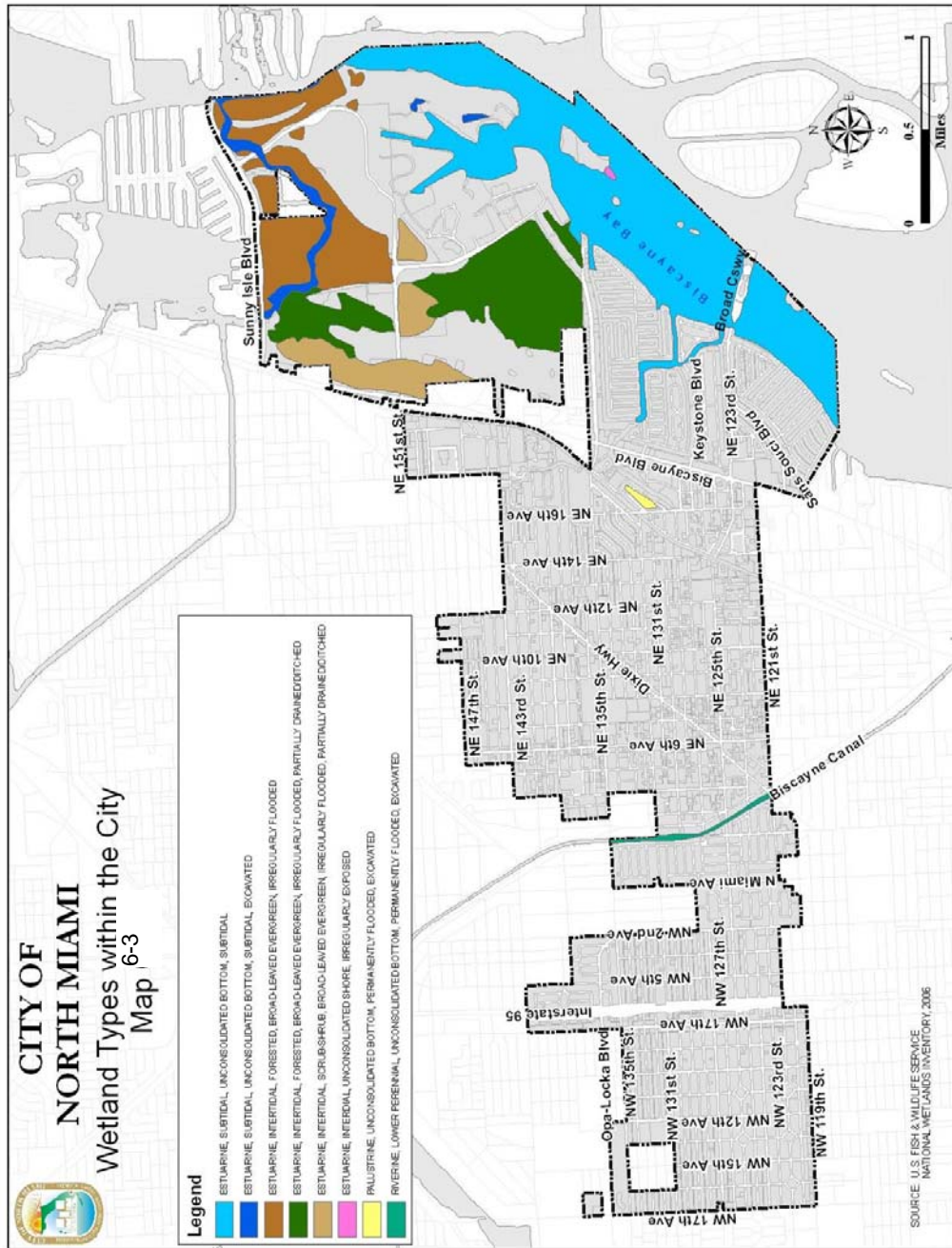
- Area less than 20 acres
- Active wave-formed or bedrock shoreline features lacking
- Water depth in deepest part of the basin less than 2 meter at low water
- and salinity due to ocean derived salts less than 0.5 percent

Estuarine systems consist of deepwater tidal habitats and adjacent tidal wetlands that are usually semi enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by fresh water run-off from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines there is appreciable dilution of sea water. Offshore areas have typical estuarine plants and animals, such as red mangroves etc. All the wetlands east of Biscayne Boulevard, including the Biscayne Bay, are estuarine systems.

Riverine systems, like the Biscayne Canal, include all wetlands and deepwater habitats contained within a channel, with two exceptions:

- Wetlands dominated by tree, shrubs, persistent emergents, emergent mosses, or lichens
- Habitats with water containing ocean derived salts in excess of 0.5 percent.

Map 6-3: Wetland Location



### Uplands

Uplands are primarily made up of pine flatwoods and oak hammocks that provide habitat for many species of animals to nest and forge (particularly mammals). There are three sites within the City that are in the Miami-Dade County Environmentally Endangered Land (EEL) program. They include:

- The Oleta River Tract C, which is located just north of Sunny Isles Boulevard (163rd Street) and just east of Biscayne Boulevard (US-1).
- Arch Creek Addition, which is located near the intersection of NE 135th Street and Biscayne Boulevard (US-1).
- Interama Tract (DEP), which is located in the Oleta preserve.

### Floodplains

The land within the City consists of a mixture of several flood zones based on flood maps maintained for the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA). The location of each flood zone is shown on Map 6-5. Table 6-3 describes the FEMA flood zones designations.

- The majority of the eastern portion of the city is located within the AE flood zone, with the areas fronting Biscayne Bay in the AV flood zone;
- The central portion of the City is a combination of AE, X, and X-500 flood zones; and
- The western portion of the City is located within the X flood zone.

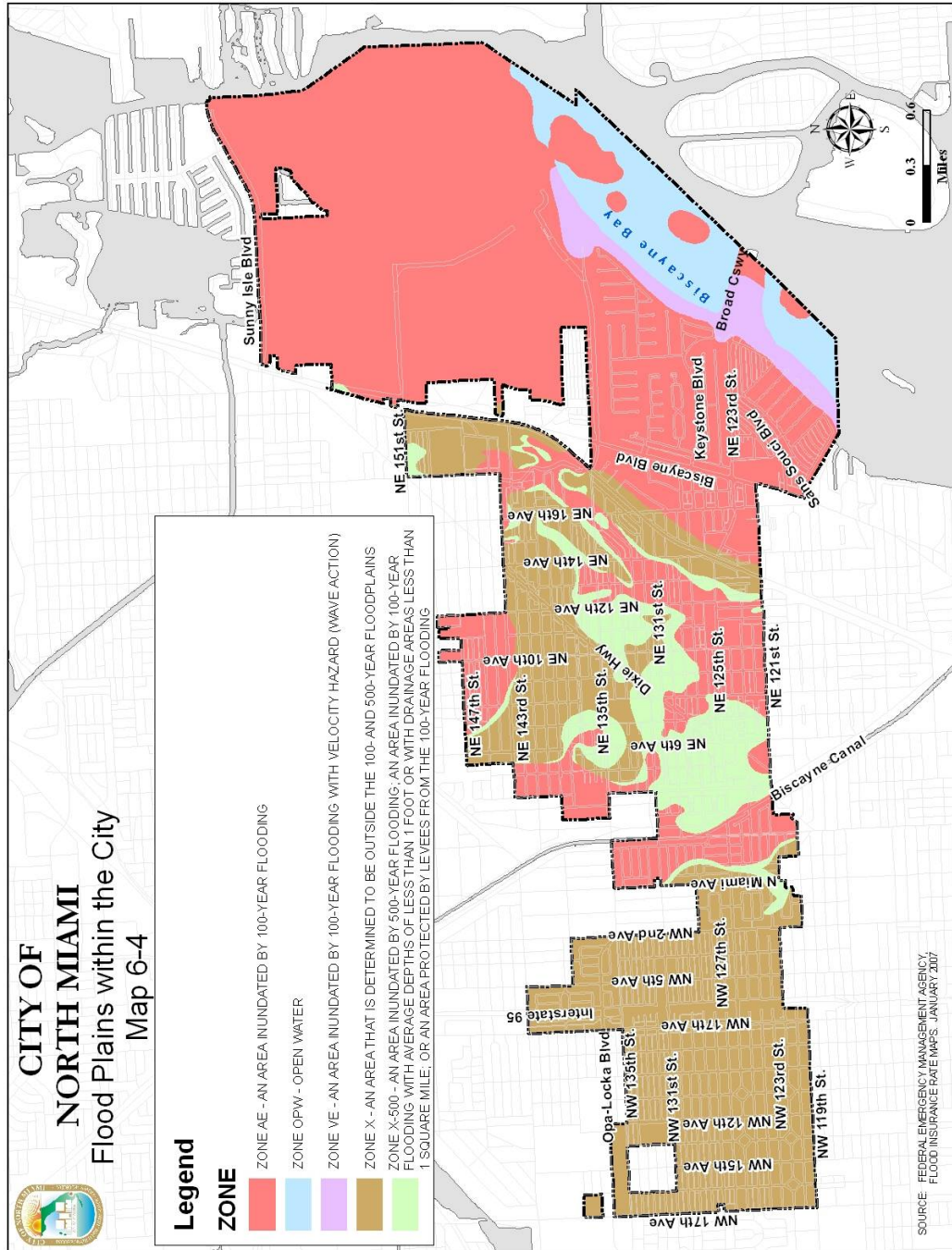
**Table 6-3: FEMA Flood Zones Designations**

Flood Zone	Description of Zone
A	Zone A is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no Base Flood Elevations (BFEs) or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.
AE	Zone AE is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by detailed methods. In most instances, Base Flood Elevations (BFEs) derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.
AH	Zone AH is the flood insurance rate zone that corresponds to the areas of 100-year

Flood Zone	Description of Zone
	shallow flooding with a constant water-surface elevation (usually areas of ponding) where average depths are between 1 and 3 feet. The Base Flood Elevations (BFEs) derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.
VE	Zone VE is the flood insurance rate zone that corresponds to the 100-year coastal floodplains that have additional hazards associated with storm waves. Base Flood Elevations (BFEs) derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance requirements apply.
X	Zone X is the flood insurance rate zone that corresponds to areas outside the 100-year floodplains, areas of 100-year sheet flow flooding where average depths are less than 1 foot, areas of 100-year stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 100-year flood by levees. No Base Flood Elevations (BFEs) or depths are shown within this zone.
X - 500	Zone X-500 is the flood insurance rate zone that corresponds to the 500-year floodplains. No Base Flood Elevations (BFEs) or depths are shown within this zone.

Source: Federal Emergency Management Agency

Map 6-4 Flood Zone Location



### **Known Source of Commercially Valuable Minerals**

There are no known significant deposits of commercially valuable minerals within City of North Miami.

### **Soil Erosion**

Due to the area's relatively flat topography, dry land within the City is not threatened with significant soil erosion potential. The highest potential for soil erosion within the City occurs at dredged depression and/or channel locations where the edges between the deeper channel and shallow bay bottom are especially susceptible to erosion. Boat traffic and increased water circulation triggers erosion of these dredged banks and informal channels are especially impacted. Marine patrol enforcement of speed limits is the principal mitigation for this type of erosion. There are no known occurrences of significant soil erosion in the City of North Miami.

### **Ecological Communities**

North Miami is mostly urbanized except for significant areas of the eastern section of the City. However, the Arch Creek, Biscayne Bay, the Enchanted Forest, Elaine Gordon Park, Oleta River State Park, and Interama do contain a relatively wide variety of plants and animals including red, white, and black mangroves. These mangrove forests are extremely important natural habitats, providing a nursery for young animals as well as contributing significantly to Biscayne Bay's food chain. In addition, these forests help stabilize adjacent shorelines, mitigate storm surges, improve water clarity, and filter upland runoff pollutants before they reach open water. Preservation of this area is extremely important since it is one of the few mangrove areas left in Biscayne Bay (north of Coral Gables). Table 6-4 identifies all of the endangered, threatened, and species of special concern for plants and animals native to Miami-Dade County that may be present in the City.

As of December 1999, ten federally listed endangered species and four federally listed threatened species reside in Miami-Dade County, a net decrease of five Endangered and one Threatened species. The Key Deer, Atlantic ridley turtle, Florida grasshopper sparrow, Ivory-billed woodpecker and Bachman's warbler, while still listed as Endangered species, are no longer shown as present in Miami-Dade County and the designation of the American Bald Eagle has been

changed from an Endangered species to a Threatened species. Additionally, the Schaus swallowtail butterfly has been added to the Endangered species list as an invertebrate present in Miami-Dade County.

As of December 2000, critical habitat was designated in Miami-Dade County for four of the endangered species: the American crocodile, the Cape Sable seaside sparrow, the Everglades snail kite and the West Indian manatee.

The current Federal list contains six Endangered plants from Miami-Dade County, the same number and species found on this list in 1995. As noted in the 1995 EAR, five of the six Endangered species are found in pineland habitats. The State list of Endangered and Threatened Plant Species of Miami-Dade County identifies a total of 173 Endangered species and 58 Threatened species.

**Table 6-4: Flora and Fauna Found in Miami-Dade County which are Considered Endangered, Threatened, or Species of Special Concern**

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
<i>Rana capito</i> (= <i>areolata</i> ) <i>aesopus</i>	Florida gopher (=crewfish) frog	SSC	C2
<i>Sceloporus woodi</i>	Florida scrub lizard		C2
<i>Storeria dekayi victa</i>	Florida brown snake	T	
<i>Tantilla oolitica</i>	Miami black-headed; rimrock crowned snake	T	C2
<b>Birds</b>			
<i>Ajaja ajaja</i>	Roseate spoonbill	SSC	
<i>Ammodramus maritimus</i>	Cape Sable seaside sparrow	E	E
<i>Ammodramus savannarum floridanus</i>	Florida grasshopper sparrow	E	E
<i>Aphelocoma coerulescenes coerulesc</i>	Florida scrub jay	T	T
<i>Aramus guarauna</i>	Limpkin	SSC	
<i>Campephilus principalis</i>	Ivory-billed woodpecker	E	E
<i>Charadrius melodus</i>	Piping plover		
<i>Circus cyaneus</i>	Marsh hawk; northern harrier		
<i>Columba leucocephala</i>	White-crowned pigeon	T	
<i>Dendroica kirtlandii</i>	Kirtland's warbler	E	E
<i>Egretta caerulea</i>	Little blue heron	SSC	
<i>Egretta rufescens</i>	Reddish egret	SSC	
<i>Egretta thula</i>	Snowy egret	SSC	
<i>Egretta tricolor</i>	Tricolored (=Louisiana) heron	SSC	
<i>Eudocimus albus</i>	White ibis	SSC	
<i>Falco columbarius</i>	Pigeon hawk or merlin		
<i>Falco sparverius paulus</i>	Southeastern American kestrel	T	
<i>Haliaeetus leucocephalus</i>	Bald eagle	T	T



Table 6-4 continued

Flora and Fauna Found in Miami-Dade County which are Considered  
Endangered, Threatened, or Species of Special Concern

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
<i>Lanius ludovicianus</i>	Loggerhead shrike	C2	
<i>Mycteria americana</i>	Wood stork	E	E
<i>Pandion haliaetus</i>	Osprey	SSC	
<i>Pelecanus occidentalis</i>	Brown pelican	SSC	
<i>Rallus longirostris insularum</i>	Mangrove clapper tail		C2
<i>Rostrhamus sociabilis</i>	Snail kite	E	E
<i>Rynchops niger</i>	Black skimmer	SSC	
<i>Speotyto cunicularia</i>	Burrowing owl	SSC	
<i>Sterna antillarum</i>	Least tern	T	
<i>Vermivora bachmanii</i>	Bachman's warbler	E	E
<b>Mammals</b>			
<i>Felis concolor coryi</i>	Florida panther	E	E
<i>Magaptera novaengliae</i>	Humpback whale	E	E
<i>Mustela vison evergladensis</i>	Everglades mink	T	
<i>Neofiber alleni</i>	Round tailed muskrat		C2
<i>Odocoileus virginianus clavium</i>	Key deer; toy deer	E	E
<i>Peromyscus polionotus niveiventrus</i>	Southeastern beach mouse	T	T
<i>Physeter catodon</i>	Sperm whale; cachalot	E	E
<i>Plecotus rafinesquil</i>	Southeastern big eared bat		C2
<i>Podomys floridanus</i>	Florida mouse	SSC	C2
<i>Sciurus niger avicennia</i>	Big Cypress fox squirrel	SSC	C2
<i>Trichechus manatus</i>	West Indian/Florida manatee	E	E

Table 6-4 continued

Flora and Fauna Found in Miami-Dade County which are Considered  
Endangered, Threatened, or Species of Special Concern

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
<i>Ursus americanus floridanus</i>	Florida black bear	T	
<i>Anaea troglodyte florldalis</i>	Florida leafwing butterfly	C2	
<i>Aphodisu troglodytes</i>	Aphodius tortoise commensal scarab beetle		C2
<i>Atrytone arogos arogos</i>	Eastern beard grass skipper		C2
<i>Ceracoclea floridana</i>	Florida ceracleen longhorn caddisfly		C2
<i>Cyclocephala miamiensis</i>	Miami roundhead sacrab beetle		C2
<i>Eumaeus atala florida</i>	Florida atala butterfly		C2
<i>Micronaspsis floridana</i>	Florida intertidal firefly		C2
<i>Mixogaster delongi</i>	Delong's mixogaster flowerfly		C2
<i>Mycotrupes pedester</i>	Scurb Isle burrowing scarab beetle		C2
<i>Onthopheagus polyphemi</i>	Tortoise Commensal scarab		C2
<i>Oxyethira florida</i>	Florida oxyethiran micro-caddisfly		C2
<i>Photuris brunnipennis floridana</i>	Everglades brownwing firefly		C2
<i>Strymon acis bartrami</i>	Bartram's hairstreak butterfly		C2
<b>Crustaceans</b>			
<i>Crangonyx gradimanus</i>	Florida cave amphipod	C2	
<i>Crangonyx hobbsi</i>	Hobb's cave amphipod	C2	
<b>Molluscs</b>			
<i>Liguus fasciatus</i>	Florida tree snail	SSC	

**Table 6-4 continued**  
**Flora and Fauna Found in Miami-Dade County which are Considered**  
**Endangered, Threatened, or Species of Special Concern**

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
<b>Plants</b>			
<i>Acrostichum aureum</i>	Golden leather fern	E	
<i>Adiantum melanoleucum</i>	Fragrant maidenhair fern	E	
<i>Adiantum tenerum</i>	Maidenhair fern (unnamed)	T	
<i>Adiantum tetraphyllum</i>	Not listed	T	
<i>Amorpha crenulata</i>	Crenulata lead plant	E	E
<i>Argythamnia blodgettii</i>	Blodgett's wild-mercury	E	
<i>Asplenium dentatum</i>	Slender spleenwort	E	
<i>Asplenium serratum</i>	Bird's nest spleenwort, wild birdnest fern	E	
<i>Bourreria cassinifolia</i>	Little strongback	E	
<i>Brassia caudata</i>	Long-tailed spider orchid	T	
<i>Brickellia eupatoriodes</i>	Florida brickeel-bush Florida boneset	E	C2
<i>Byrsonima lucida</i> DC	Not listed	E	
<i>Calyptanthes zuzygium</i>	Not listed	E	
<i>Campylonerum angustifolium</i>	Narrow strap fern	E	
<i>Canella winterana</i>	Not listed	E	
<i>Cassia keyensis</i>	Big Pine Partridge pea; Florida Keys senna	T	
<i>Catopsis berteroniana</i>	Powdery catopsis	E	
<i>Centrogenium setaceum</i>	Spurred neottia	E	
<i>Cereus gracilis</i>	Aboriginal prickly apple	E	
<i>Cereus gracilis</i> var. <i>simpsonii</i>	Simpson's prickly apple	E	

**Table 6-4 continued**  
**Flora and Fauna Found in Miami-Dade County which are Considered**  
**Endangered, Threatened, or Species of Special Concern**

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
<i>Cereus pentagonus</i>	Dilldoe cactus	T	
<i>Chamaesyce deltoidea</i>	Wedge spurge	E	E
<i>Chamaesyce garberi</i>	Garber's spurge	E	T
<i>Chamaesyce porteriana</i>	Porter's hairy-podded spurge	E	
<i>Chamaesyce porteriana</i> var. <i>scoparia</i>	Porter's broom spurge	E	
<i>Cheilanthes microphylla</i>	Southern lip fern	E	
<i>Chrysophyllum oliviforme</i>	Satinleaf	E	
<i>Coccothrinax argentata</i>	Silver palm	C	
<i>Culubrina cubensis</i>	Not listed	E	
<i>Conradina grandiflora</i>	Large-flowered rosemary	E	
<i>Cordia sebestena</i>	Geiger tree	E	
<i>Crossopetalum ilicifolium</i>	Quailberry	E	
<i>Crossopetalum rhacoma</i>	Rhacoma	E	
<i>Cucurbita okeechobeensis</i>	Okeechobee gourd; Indian pumpkin	E	E
<i>Cyrtopodium punctatum</i>	Cowhorn orchid	E	E
<i>Digitaria pauciflora</i>	Two spiked finger		C2
<i>Elytraria carolinensis</i> var. <i>angustiflora</i>	Narrow leaved Carolina scalystem		C2
<i>Encyclia boothiana</i> var. <i>erythroniodes</i>	Dollar (dogtooth) orchid	E	
<i>Eriochloa michauxii</i> var. <i>simpsonii</i>	Longleaf (=Simpson's) cup grass	T	C2
<i>Ernodia littoralis</i>	Beach creeper	T	
<i>Eugenia confusa</i>	Redberry ironwood	T	
<i>Eugenia rhombea</i>	Red stopper	E	

Table 6-4 continued

Flora and Fauna Found in Miami-Dade County which are Considered  
Endangered, Threatened, or Species of Special Concern

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
<i>Forestiera segregata</i> var. <i>pinetorum</i>	Pinewood (narrow-leaf Florida) privet	C2	
<i>Galactia pinetorum</i>	Narrow-leaf milkpea		C2
<i>Galactia smallii</i>	Small's milkpea	E	E
<i>Gossypium hirsutum</i>	Wild cotton	E	
<i>Guaiacum sanctum</i>	Lignum-vitae tree	E	
<i>Guzmania monostachia</i>	Fuch's bromeliad	E	
<i>Halophila johnonii</i>	Johnson's seagrass	T	
<i>Helianthus debilis</i> ssp. <i>Vestitus</i>	Hairy cucumber-leaf sunflower; hairy beach sunflower		C2
<i>Hippomane mancinella</i>	Manchineel	T	
<i>Ionopsis utricularioides</i>	Delicate ionopsis; violet orchid	E	
<i>Ipomoea microdactyla</i>	Wild potato morning glory	E	
<i>Ipomoea tenuissima</i>	Rocklands morning glory	E	
<i>Jacquemontia curtissii</i>	Pineland clustervine	E	
<i>Jacquemontia reclinata</i>	Beach clustervine	E	E
<i>Jacquinia keyensis</i>	Joewood	T	
<i>Lantana depressa</i>	Pineland Lantana		C2
<i>Lechea divaricata</i>	Pine pinweed	E	C2
<i>Licaria triandra</i>	Licaria	E	
<i>Linum arenicola</i>	Sand flax	E	C2
<i>Linum carteri</i> var. <i>carteri</i>	Miami (=Carter's small-flowered) flax	E	C2
<i>Linum carteri</i> var. <i>smallii</i>	South Florida (=Carter's large-flowered) flax	E	C2
<i>Lomariopsis kunseana</i>	Holly fern	T	C2

Table 6-4 continued

Flora and Fauna Found in Miami-Dade County which are Considered  
Endangered, Threatened, or Species of Special Concern

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
<i>Lythrum flagellare</i>	Lowland loosestrife	C2	
<i>Mallotonia gnaphalodes</i>	Sea lavender	E	
<i>Melanthera parvifolia</i>	Small-leaved (S. FL.) cat tongue		C2
<i>Microgramma heterophylla</i>	Polypody fern (unnamed)	T	
<i>Myrcianthes fragrans</i> var. <i>simpsonii</i>	Simpson's stopper; twinberry		C2
<i>Okenia hypogaea</i>	Burrowing four o'clock	E	
<i>Ophioglossum plamatum</i>	Hand adder's tongue fern	E	
<i>Peperomia humilis</i>	Peperomia (unnamed)	E	
<i>Peperomia magnoliifolia</i>	Magnolia-leaved peperomia	E	
<i>Phoradendron rubrum</i>	Mahogany mistletoe	E	
<i>Peperomia obtusifolia</i>	Florida peperomia	E	
<i>Polygala smallii</i>	Tiny (=Small's) milkwort	E	E
<i>Polyrrhiza lindenii</i>	Ghost orchid; palm polly	E	
<i>Pseudophoenix sargentii</i>	Buccaneer (=Sargent's cherry) palm	E	
<i>Pteris longifolia</i>	Ladder brake fern	T	
<i>Pteroglossapis</i>	Wild coco; false coco ( <i>Eulphia</i> ) <i>ecristata</i>	T	
<i>Remirea maritime</i>	Beach star	E	
<i>Rhipsalis baccifera</i>	Mistletoe cactus	E	
<i>Rhynchosia cinerea</i>	Not listed	E	
<i>Roystonea elata</i>	Florida royal palm	E	
<i>Sabal miamiensis</i>	Not listed	E	

**Table 6-4 continued**  
**Flora and Fauna Found in Miami-Dade County which are Considered**  
**Endangered, Threatened, or Species of Special Concern**

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
<i>Sachsia bahamensis</i>	Bahama sachsia	E	
<i>Schizaea gemanii</i>	Ray (=tropical curly-grass) fern	E	
<i>Spiranthes polyantha</i>	Florida Keys (=Fort George; =green) ladies' tresses	E	C2
<i>Stillingia sylvatica</i> ssp. <i>Tenuis</i>	Slender queen's delight		C2
<i>Surian maritime</i>	Bay cedar	E	
<i>Swietenia mahogany</i>	West Indian mahogany	T	
<i>Tectaria coriandrifolia</i>	Hairy (Hattie Bauer) Halberd fern		C2
<i>Tectaria xamesiana</i>	Not listed	T	
<i>Tephrosia angustissima</i>	Narrow-leaved (=coastal) hoary pea	E	
<i>Tetrazygia bicolor</i>	Tetrazygia	T	
<i>Trichomanes krausii</i>	Filmy fern (unnamed)	T	
<i>Trichomanes punctatum</i>	Filmy fern (unnamed)	T	
<i>Tripsacum floridanum</i>	Gama grass		C2
<i>Tropidia polystachya</i>	Young-palm orchid	E	
<i>Vanilla barbellata</i>	Worm-vine orchid; link vine	E	
<i>Vanilla mexicana</i>	Vanilla (unnamed)	T	
<i>Verbena</i> (=Glandularia) <i>maritime</i>	Coastal vervain	E	
<i>Verbena</i> (=Glandularia) <i>tampensis</i>	Tampa vervain	E	
<i>Warea carteri</i>	Carter's mustard	E	E

**Table 6-4 continued**  
**Flora and Fauna Found in Miami-Dade County which are Considered**  
**Endangered, Threatened, or Species of Special Concern**

Scientific Name	Common Name	State Status (GFC)	Federal Status (FWS)
Zamia floridana	Florida coontie	C	
Zamia umbrosa	East coast coontie	C	
Zanthoxylum coriaceus	Wild prickly ash	E	

Table Key

- GFC = Florida Game and Fresh Water Fish Commission  
 FWS = United States Fish and Wildlife Services  
 C = Commercially Exploited  
 E = Endangered Species  
 SSC = Species of Special Concern  
 T = Threatened Species  
 C1 = Candidate Species for addition to the List of Endangered and Threatened Wildlife and Plants, Category 1. The US Fish and Wildlife Service (USFWS) currently has substantial information on hand to support the biological appropriateness of proposing to list the species as endangered or threatened.  
 C2 = Candidate Species, Category 2. The USFWS has in its possession information which indicates that proposing to list the species as endangered or threatened is possibly appropriate, but for which conclusive data on biological vulnerability and threats are not currently available to support proposed rules at this time.



**Table 6.5: Endangered and Threatened Species and Species of Special Concern  
Biscayne Bay**

Species	Status	Agency	
<b>Atlantic Marine Turtles</b>			<p>E = Endangered: A species, subspecies, or isolated population, so limited or depleted in number, or so restricted in range or habitat due to any man-made or natural factors, that it is in imminent danger of extinction or expiration from the State, or may attain such a status within the immediate future.</p>
Loggerhead ( <i>Caretta caretta</i> )	T	FWS, NMFS	
Green ( <i>Chelonia mydas</i> )	E	FWS, NMFS	
Leatherback ( <i>Dermohelys coriacea</i> )	E	FWS, NMFS	
Hawkbill ( <i>Eretmochelys imbricate</i> )	E	FWS, NMFS	
Kemp's ridley ( <i>Lepidochelys kempii</i> )	E	FWS, NMFS	
<b>Intercoastal Marine Mammals</b>			<p>T = Threatened: A species, subspecies, or isolated population that is so acutely vulnerable to environmental alteration, or declining in number at a rapid rate, or whose Range or habitat is declining in area at a rapid rate, that as a consequence it is destined or very likely to become an endangered species within the foreseeable future</p>
Florida Manatee ( <i>Trichecus manatus</i> )	E	FWS	
<b>Coastal Wading and Shore Birds</b>			<p>SSC = Species of Special Concern: A species, subspecies, or isolated population that warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alternation, human disturbance, or substantial human exploitation that may, in the foreseeable future, result in its becoming a threatened species, may already meet certain criteria for designation as a threatened species but for which conclusive data are limited or lacking; may occupy such an unusually vital and essential ecological niche that should it decline significantly in numbers or distribution other species would be adversely affected to a significant degree; or has not sufficiently recovered from past population depletion</p>
Peregrine falcon ( <i>Falco peregrinus</i> )	E	FWFC	
Least tern ( <i>Sterna albifrons</i> )	T	FWFC	
Brown pelican ( <i>Pelecanus occidentalis</i> )	T	FWFC	
American oystercatcher ( <i>Hamatopus palliates</i> )	T	FWFC	
Osprey ( <i>Pandion haliaetus</i> )	T	FWFC	
Great white heron ( <i>Ardea herodias occidentalis</i> )	SSC	FWFC	
Great (common) egret ( <i>Casmerodius albus</i> )	SSC	FWFC	

Sources: U.S. Fish and Wildlife Service, Marine Fisheries Service, Florida Game and Freshwater Fish Commission, Florida Natural Areas Inventory 2006. Michele Mellgren & Associates, Inc.

**Rank Explanations  
For FNAI Global Rank, FNAI State Rank,  
Federal Status And State Status**

The Nature Conservancy and the Natural Heritage Program Network (of which FNAI is a part) define an element as any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature. An element occurrence (EO) is a single extant habitat that sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element.

Using a ranking system developed by The Nature Conservancy and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks to each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element occurrences, estimated abundance (number of individuals for species; area for natural communities), range, estimated adequately protected EOs, relative threat of destruction, and ecological fragility.

Federal and State status information is from the U.S. Fish and Wildlife Service; and the Florida Game and Freshwater Fish Commission (animals), and the Florida Department of Agriculture and Consumer Services (plants), respectively.

**FNAI GLOBAL RANK DEFINITIONS**

G1	=	Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2	=	Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3	=	Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
G4	=	apparently secure globally (may be rare in parts of range)
G5	=	demonstrably secure globally
GH	=	of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
GX	=	believed to be extinct throughout range
GXC	=	extirpated from the wild but still known from captivity or cultivation
G#?	=	tentative rank (e.g., G2?)
G#G#	=	range of rank; insufficient data to assign specific global rank (e.g., G2G3)
G#T#	=	rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)
G#Q	=	rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)
G#T#Q	=	same as above, but validity as subspecies or variety is questioned.
GU	=	due to lack of information, no rank or range can be assigned (e.g., GUT2).
G?	=	not yet ranked (temporary)
S1	=	Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2	=	Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3	=	Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
S4	=	apparently secure in Florida (may be rare in parts of range)
S5	=	demonstrably secure in Florida
SH	=	of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
SX	=	believed to be extinct throughout range
SA	=	accidental in Florida, i.e., not part of the established biota
SE	=	an exotic species established in Florida may be native elsewhere in North America
SN	=	regularly occurring, but widely and unreliably distributed; sites for conservation hard to determine
SU	=	due to lack of information, no rank or range can be assigned (e.g., SUT2).
S?	=	not yet ranked (temporary)

**Rank Explanations  
For FNAI Global Rank, FNAI State Rank,  
Federal Status And State Status**

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**LEGAL STATUS**

- N = Not currently listed, nor currently being considered for listing, by state or federal agencies.
- FEDERAL** (Listed by the U. S. Fish and Wildlife Service - USFWS)
  - LE = Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species that is in danger of extinction throughout all or a significant portion of its range.
  - PE = Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.
  - LT = Listed as Threatened Species. Defined as any species that is likely to become an endangered species within the near future throughout all or a significant portion of its range.
  - PT = Proposed for listing as Threatened Species.
  - C = Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Defined as those species for which the USFWS currently has on file sufficient information on biological vulnerability and threats to support proposing to list the species as endangered or threatened.
  - E(S/A) = Endangered due to similarity of appearance.
  - T(S/A) = Threatened due to similarity of appearance.

**STATE**

**Animals**

(Listed by the Florida Fish and Wildlife Conservation Commission - FFWCC)

- LE = Listed as Endangered Species by the FFWCC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state, or which may attain such a status within the immediate future.
- LT = Listed as Threatened Species by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
- LS = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species.

**Plants**

(Listed by the Florida Department of Agriculture and Consumer Services - FDACS)

- LE = Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.
- LT = Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered.

Table 6-6: Species found in Oleta River State Park

Oleta River State Park			
Designated Species			
Plants			
Common Name/ Scientific Name	<u>Designated Species Status</u>		
	FDA	USFWS	FNAI
Cinnecord <i>Acacia choriophylla</i>	E		G4, S1
Golden leather fern <i>Acrostichum aureum</i>	E		G5, S3
Cinnamon bark <i>Canella winterana</i>	E		G4/G5, S2
Satinleaf <i>Chrysophyllum olivaeforme</i>	E		
Silver palm <i>Coccothrinax argentata</i>	E		G3, S2?
Geiger tree <i>Cordia sebestena</i>	E		
Beach creeper <i>Ernodea littoralis</i>	T		
Redberry stopper <i>Eugenia confusa</i>	T		G4/G5, S2/S3
Wild coco <i>Eulophia alta</i>	T		
Lignum-vitae <i>Guaiacum sanctum</i>	E		G4/G4, S2
Twinberry Stopper <i>Myrcianthes fragrans, var. simpsonii</i>	T		G4/T3, S3
Inkberry <i>Scaevola plumieri</i>	T		
Bay cedar <i>Suriana maritima</i>	E		
West Indian mahogany <i>Swietenia mahagoni</i>	E		G3/G4, S2
Florida thatch palm <i>Thrinax radiata</i>	E		G4/G5, S2
Coontie <i>Zamia integrifolia</i>	C		
Biscayne prickly ash <i>Zanthoxylum coriaceum</i>	E		

## Oleta River State Park

## Designated Species

## Animals

Common Name/ Scientific Name	Designated Species Status		
	FFWCC	USFWS	FNAI
<b>REPTILES</b>			
Gopher tortoise <i>Gopherus polyphemus</i>	SSC		G3, S3
<b>BIRDS</b>			
Roseate spoonbill <i>Ajaia ajaja</i>	SSC		G5, S2/S3
Short-tailed hawk <i>Buteo brachyurus</i>			G4?, S3
Mangrove cuckoo <i>Coccyzus minor mynardi</i>			G5, S3
Little blue heron <i>Egretta caerulea</i>	SSC		G5, S4
Snowy egret <i>Egretta thula</i>	SSC		G5, S4
Tricolored heron; Louisiana heron <i>Egretta tricolor</i>	SSC		G5, S4
American swallow-tailed kite <i>Elanoides forficatus</i>			G4, S2/S3
White ibis <i>Eudocimus albus</i>	SSC		G5, S4
Peregrine falcon <i>Falco peregrinus</i>			G4, S2
Southeastern American kestrel <i>Falco sparverius paulus</i>	T		G5/T3/T4, S3?
Magnificent frigatebird <i>Fregata magnificens rothschildi</i>			G5, S1
Bald eagle <i>Haliaeetus leucocephalus</i>	T	T	G4, S3
Wood stork <i>Mycteria americana</i>	E	E	G4, S2
Osprey <i>Pandion haliaetus</i>			G5, S3/S4
Brown pelican <i>Pelecanus occidentalis</i>	SSC		G4, S3
Least tern <i>Sterna antillarum</i>	T		G4, S3
Royal tern <i>Thalasseua maximus</i>			G5, S3
Black-whiskered vireo <i>Vireo altiloquus</i>			G5, S3
<b>MAMMALS</b>			
West Indian manatee <i>Trichechus manatus latirostris</i>	E	E	G2, S2

### **Hazardous Waste Management**

Hazardous wastes are by-products of industrial or commercial processes, which are discarded when produced. In Miami-Dade County, hazardous wastes further includes all interim products that if introduced to the water supply would threaten public health. The Miami-Dade County DERM regulates the hazardous waste monitoring program for all of Miami-Dade County.

According to the Environmental Protection Agency, there are no known hazardous materials waste sites. The only superfund site was the Munisport landfill, which has been remediated for the Biscayne Landing development. There are three locations in the City that have been reported as having hazardous waste in 2006. They are:

- Motor Pool
- The Winson Water Treatment Plant
- Museum of Contemporary Art

## **EXISTING AND POTENTIAL CONSERVATION AND USAGE OF NATURAL RESOURCES**

Rule 9-J5.013(1)(b) of the Florida Administrative Code requires that a local government inventory and analyze all natural resources found within its local jurisdiction in terms of commercial use, recreational use, conservation use, and pollution problems. These items are addressed in the following paragraphs:

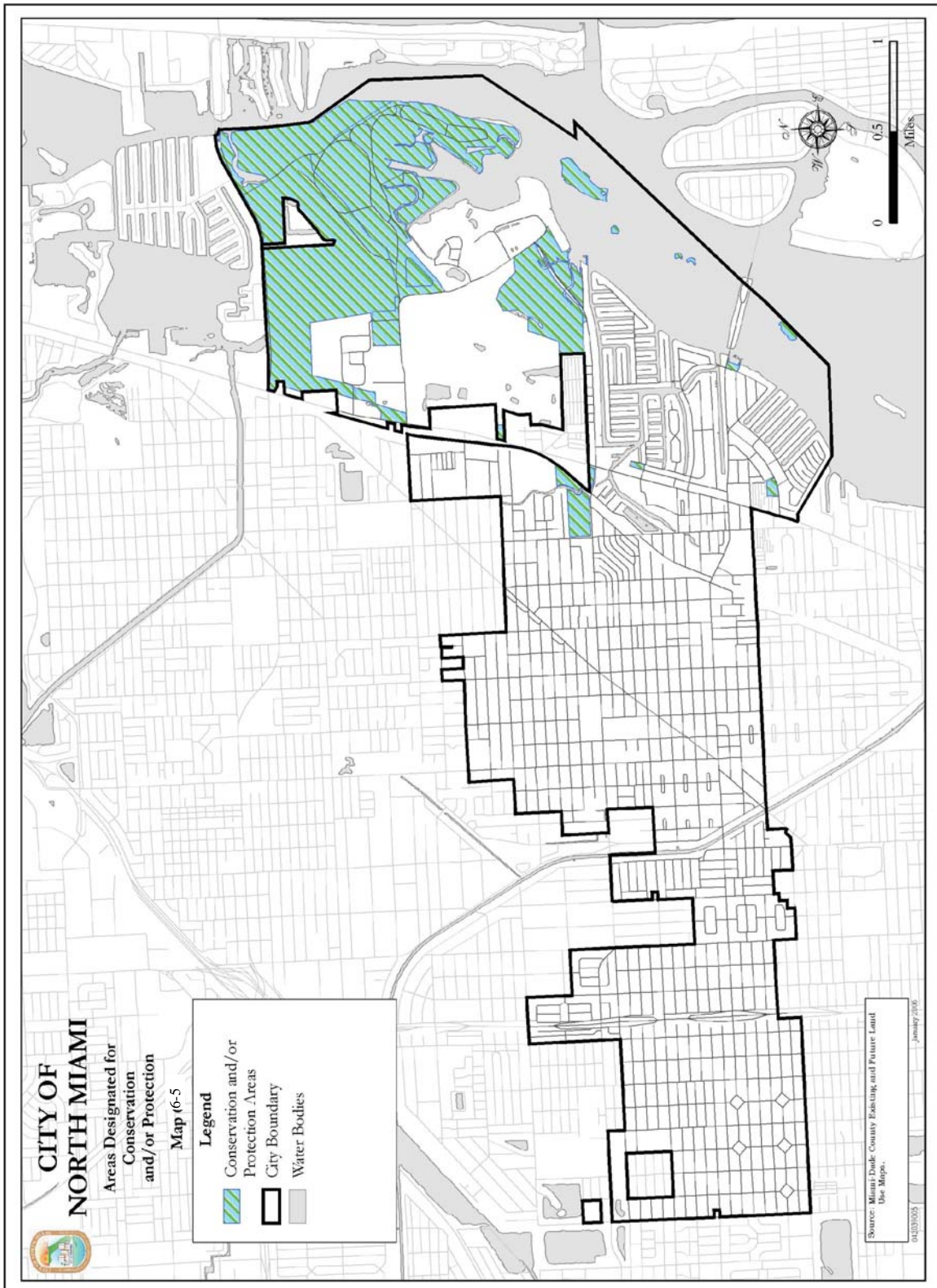
### **Existing and Potential Usage of Natural Resources**

None of the natural resources identified within the City of North Miami are currently being used explicitly for commercial purposes, nor is it anticipated that they will in the future.

Other community parks and preserves located within the City serve as transition between the built and natural environments allowing residents to connect with nature while protecting certain areas for local plant and animal habitat. Air quality is considered good by the Florida Department of Environmental Protection and soil erosion is not a primary concern.

Some areas in the City have been formally designated for conservation and/or protection of natural resources to guard against encroachment from development and pollution. These areas are depicted in Map 6-5.

Map 6-5: Protection Areas





Furthermore, actions to ensure the perpetuation of recreation and conservation areas within the city limits are summarized below:

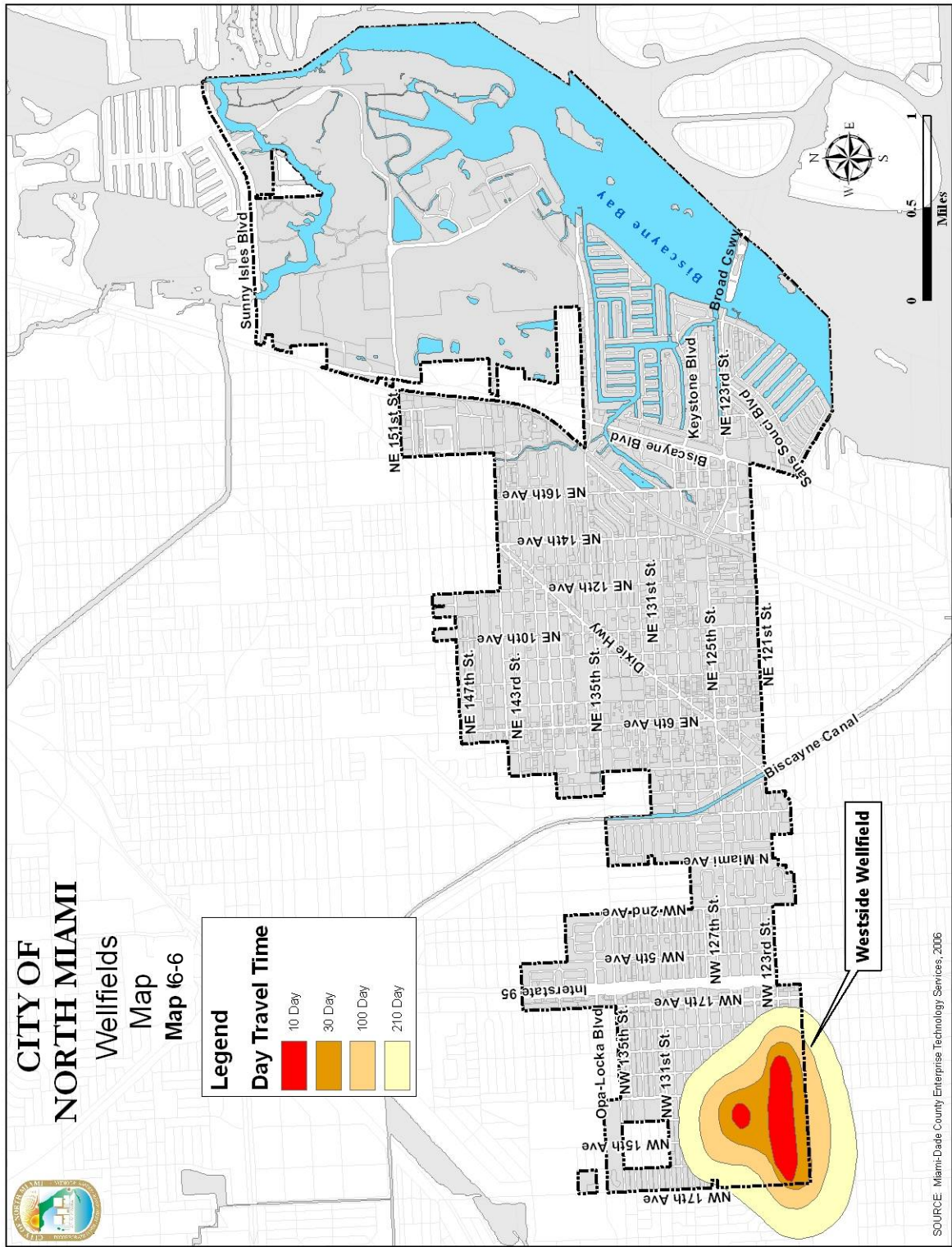
*Protection of Quality and Quantity of Ground Water*

There is one well-field protection area within North Miami's municipal boundaries as shown in Figure 6-6. The City of North Miami currently works with Miami-Dade County DERM to enforce the wellfield protection ordinance which limits the allowable land uses within the wellfield's cone of influence.

*Protection of Quality and Quantity of Surface Waters*

There are several drainage canals that traverse the City, providing drainage and connecting to small estuaries and Biscayne Bay. Surface water drainage is the primary contributor to pollution in these canals. Officials with the City of North Miami should coordinate with Miami-Dade County and continue to monitor water quality levels in the drainage basins and target improvements, where necessary, to maintain minimum level of service standards.

Map 6-6: Well Field Protection Areas



*Protection of Vegetative Communities and Wildlife Habitats*

The overwhelming majority of vegetative and wildlife habitat in the City of North Miami lies within the Oleta River State Recreation Area. Within the built environment, the majority of the City consists of single-family lots and low density development patterns, which serve as secondary habitats for small animals and some plant life. Additional areas to serve as small vegetative communities for local wildlife could be maintained on private property within the city through initiation of a preservation landscape ordinance and/or requiring more landscaping on lots when natural habitat is not available. The City should also work with Miami-Dade County to further implement their Environmentally Endangered Lands (EEL) program for securing additional land within the City for conservation land use. The properties listed in Table 6-7 have already been acquired through the EEL program.

**Table 6-7: Properties in City Acquired Through County EEL Program**

Location	TYPE	ACRES	LOCATION	% ACQUIRED
Arch Creek Addition	Buffer	1.2	NE 135th St. & US-1	> = 50%
Tract C (FCT)	Coastal Wetland	2.5	NE 163rd St. & US-1	> = 50%
Terama Tract (DEP)	Coastal Wetland	29.5	In Oleta preserve	> = 50%

To protect the native vegetative communities and wildlife habitats, the removal of prevalent exotic plants is pertinent. Exotic, or non-native, plants are those species found outside of their natural ranges. Since these plants came from other areas of the world, many times, their natural population controls (disease, insects, etc.) were left behind in their native homes and these controls are not present in their new homes.

In absence of their natural controllers they can monopolize resources, overwhelm native plants and even displace native wildlife by adversely altering the habitat. For example, Brazilian pepper greatly reduces biodiversity by forming impenetrable thickets, suppressing beneficial fire, and cutting off sunlight to the native understory plants. Even shady hardwood hammocks are not immune to exotic plant invasion. The most troublesome species in hammocks are vines, which tend to completely enshroud trees and shrubs and cut off light to the

understory plants below. DERM has a list of such invasive species (Table 6-8) that are prohibited in the County.

**Table 6-8: Prohibited Plant Species in Miami-Dade County**

Air Potato ( <i>Dioscorea bulbifera</i> )
Australian Pine ( <i>Casurina equisetifolia</i> )
Banyan Fig ( <i>Ficus benghalensis</i> )
Bishopwood ( <i>Bischofia javanica</i> )
Brazilian Jasmine ( <i>Jasminum fluminense</i> )
Brazilian Pepper ( <i>Schinus terebinthifolius</i> )
Burma Reed (Cane Grass) - <i>Neyaudia reynaudiana</i>
Carrotwood ( <i>Cupaniopsis anacardioides</i> )
Castor Bean ( <i>Ricinus communis</i> )
Catclaw Mimosa ( <i>Mimosa pigra</i> )
Climbing Fern ( <i>Lygodium japonicum</i> , <i>Lygodium microphyllum</i> )
Day Blooming Jasmine ( <i>Cestrum diurnum</i> )
Earleaf Acacia ( <i>Acacia auriculiformis</i> )
Gold Coast Jasmine ( <i>Jasminum dichotomum</i> )
Governor's Plum ( <i>Flacourtia indica</i> )
Indian Rosewood ( <i>Dalbergia sissoo</i> )
Lather Leaf ( <i>Colubrina asiatica</i> )
Lead Tree ( <i>Leucaena leucocephala</i> , <i>Leucaena glauca</i> )
Lofty Fig (Banyan Tree) - <i>Ficus altissima</i>
Mahoe ( <i>Hibiscus tiliaceus</i> )
Melaleuca (Punk Tree) - <i>Melaleuca quinquenervia</i> , <i>Melaleuca leucadendron</i>
Napier Grass ( <i>Pennisetum purpureum</i> )
Puncture Vine ( <i>Tribulus cistoides</i> )
Queensland Umbrella Tree ( <i>Schefflera actinophylla</i> , <i>Brassaia actinophylla</i> )
Red Sandalwood ( <i>Adenanthera pavonina</i> )
Seaside Mahoe ( <i>Thespesia populnead</i> )
Shoebuttan Ardisia ( <i>Ardisia elliptica</i> , <i>Ardisia humilis</i> )
Tropical Soda Apple ( <i>Solanum viarum</i> )
Woman's Tongue ( <i>Albizia lebeck</i> )
Woodrose ( <i>Merremia tuberosa</i> )

### *Protection of Air Quality*

Miami-Dade County generally enjoys good air quality throughout the year as a result of mitigation completed in the early 1990's. The City of North Miami should continue to work with the Miami-Dade County Department of Environmental Resources, U.S. Environmental Protection Agency, and the Florida Department of Environmental Protection to institute policies and projects aimed at

maintaining current air quality levels in conformance with the National Ambient Air Quality Standards.

*Protection of Flood Plain Areas*

Development in the flood plain should be regulated through the enforcement of a flood plain management ordinance.

*Protection of Natural Areas as Recreational Uses*

Some of the natural resources within the City could be maintained as low impact park and recreation facilities; supportive of bicycle and pedestrian paths, natural reserves, or passive park opportunities.

## CURRENT AND PROJECTED POTABLE WATER NEEDS

Rule 9-J5.013(1)(c) of the Florida Administrative Code requires that a local government determine its current and projected water needs for the 10-year planning horizon and identify new water supply sources to service future demand in the quality and quantity required by the new development. This section of the Conservation Element Data Inventory and Analysis Report provides an inventory of the current and projected water needs and potential sources to the year 2015. The demand projections are based on the population in entire water service area and the level of service standards recommended in the Potable Water sub-element. The water supply projections are based on current permitted capacity and planned capital facility improvements.

### Existing Potable Water Sources

At this time, the Biscayne Aquifer serves as the primary source of potable water in the City of North Miami. The City utilizes the Winson Water Treatment Plant, which has the capacity to pump 9.3 million gallons of ground water per day from the Biscayne Aquifer. It treats the water through lime softening, filtration and chloramines for disinfection. Then through a vast underground distribution system, the plant delivers clean and safe potable water to service area customers. In addition, the City also utilizes Miami-Dade Water and Sewer Department (WASD) to satisfy additional potable water needs of the service

area. In 2005, WASD supplied an average total of 4.23 MGD of potable water to the City of North Miami.

### **Existing and Projected Potable Water Available: Capacity and Demand**

The adopted level of service standard in terms of gallons of potable water delivered per capita per day has been exceeded in the service area for at least the past ten years. The latest potable water consumption figures indicate that the City of North Miami potable water service area consumes an average of 171 gallons per capita per day. This is thirty-seven percent (37%) greater than its adopted level of service standard and is uncharacteristically high for an area with a majority of its uses being residential. In coordination with the South Florida Water Management District (SFWMD), the City has committed to reducing its consumption to 165 gallons per capita per day through water conservation efforts. In effect, the City has amended its potable water level of service standard to 165 gallons per capita per day.

In the next ten years, the City of North Miami is going to upgrade and expand the Winson Water Treatment Plant and begin treating water from the Floridian Aquifer through a reverse osmosis process. As discussed in greater detail in the Infrastructure Element, this improvement will allow North Miami to meet its projected water demands without assistance from Miami-Dade County Water and Sewer Department. Table 6-9 provides a summary of the projected potable water supply and demand for the North Miami service area until the year 2025. The capacity increases are based on the proposed expansions of the Winson Water Treatment Plant.

**Table 6-9: City of North Miami Planned Potable Water Supply and Demand 2005-2025**

Year	Projected Average Demand in MGD	Projected Average Supply in MGD
2005	12.9 MGD	15.3 MGD*
2010	13.4 MGD	13.75 MGD **
2015	15.7 MGD	17.25 MGD ***
2020	16.7 MGD	17.25 MGD***
2025	16.7 MGD	17.25 MGD***

Source: Michele Mellgren & Associates, Inc.

\* The City of North Miami will continue to rely on Miami-Dade Water and Sewer Department to supply at least 6 MGD of supplemental water to the service area until the Winson Plant upgrades are complete; \*\* Projected supply assumes phase I expansion has been completed; \*\*\* Projected supply assumes phase II expansion has been completed.

According to the Lower East Coast Water Supply Plan 2005-2006 update, Miami-Dade WASD has a current demand of 326.96 MGD and a current supply of 346.50, thereby having a sufficient potable water supply at the present. In 2015, the total potable water demand is anticipated to reach 365.01 MGD and be met by a number of water sources including water from the Biscayne Aquifer, Floridian Aquifer, reclaimed sources, and other sources, totaling 393.70 MGD. The projected average usage in gallons per capita per day, the projected average demand, and the projected average capacity for the Miami-Dade service area is presented in Table 6-10, below.

**Table 6-10: Miami-Dade WASD Projected Potable Water Demand and Capacity, 2005-2025**

Year	Population of Service Area	Projected average usage in gallons per capita per day	Projected Average Demand for Service Area in MGD	Projected Average Capacity in MGD*
2005	2,075,304	157 gpcpd	326.96 MGD	346.50 MGD
2015	2,354,920	155 gpcpd	365.01 MGD*	393.70 MGD
2025	2,598,419	155 gpcpd	402.76 MGD*	412.70 MGD

Source: South Florida Water Management District LEC Plan 2005-2006 Update.

\* Projection includes 6.0 MGD of potable water to be distributed to the City of North Miami.

### **Future Water Conservation Efforts**

As a potable water utility provider, it is the responsibility of North Miami to implement water conservation strategies to reduce its demand on natural water systems. Further, the justification for adopting a level of service standard which is slightly lower than historical use is that the City will work towards reducing its consumption on a per capita basis. As such, the City will need to develop and implement a comprehensive strategy to reduce its potable water consumption. Strategies should include the following:

- adoption of local government Xeriscape/Florida friendly landscape ordinances requiring landscaping methods that maximize the conservation

of water through the use of site-appropriate plants and efficient watering systems;

- utilization of native plant material as a first priority in landscaping;
- implementation of a water conservation public education program;
- implementation of a leak detection and repair program for public water supply systems;
- adoption of a water conservation-based rate structure by utilities that provides a financial incentive for users to reduce demand;
- implementation of water loss prevention programs including the adoption of a rain sensor device ordinance for automatic sprinkler systems;
- adoption of an ultra-low volume fixtures ordinance;
- adoption of an irrigation hours ordinance and reduction in the use of potable water for irrigation; and
- utilization of reuse water wherever and whenever possible based upon the ecological and technical factors involved, and analysis of reclaimed water feasibility by potable water supply utilities.
- Offering incentives to encourage the development of “green buildings” which offer the benefits of reduced water usage.



# EAR-Based Comprehensive Plan Amendments

## Volume II: Data, Inventory, and Analysis Parks and Recreation Element



# 7. PARKS AND RECREATION ELEMENT

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## 7. PARKS AND RECREATION ELEMENT

### PURPOSE

State growth management rules provide for the preparation of a Parks and Recreation Element as an *optional* element of a Comprehensive Plan. Because parks, recreation, and open space are important to a City's quality of life, the City of North Miami has chosen to include a Parks and Recreation Element in its Comprehensive Plan.

This element catalogs the existing recreation and open space facilities within the City of North Miami, as well as current plans for new park creation (such as those in the Community Redevelopment Plan and the Parks Master Plan). This element also analyzes the inventory of recreation and open space to ensure the adopted level of service standard is being provided. Additionally, the data, inventory, and analysis provides the basis for the goals, objectives, and policies to protect and preserve existing recreational areas, and provides guidelines for acquiring additional recreation and open space within the City to maintain a minimum level of service for the community.

### DEFINITIONS

The Florida Department of Environmental Protection's Division of Recreation and Parks developed the Statewide Comprehensive Outdoor Recreation Plan (SCORP) to address the growing need for recreational parks and facilities in the State of Florida. This plan defines and establishes standards for park types and facilities. These guidelines are intended for broad statewide application and therefore the State encourages localities, such as cities, to make modifications for individual areas. Below are the recommendations for specific types of parks based on the 2000 SCORP. The City of North Miami Parks, Recreation, and Open Space Master Plan utilize these definitions to categorize, analyze, and plan for existing and future facilities.

**Equipped Play Area or Tot Lot.**

Equipped play areas or “tot lots” are open areas that generally include some or all of the following: play structures, benches, picnic tables, landscaping, and open space. Tot lots are a minimum of one acre in size; however they can be as small as ¼ of an acre if they are adjacent to an existing recreation facility or elementary school. These parks serve neighborhoods of between 500 and 2,500 people.

**Neighborhood Park.**

The neighborhood park is a “walk-to” park that is typically accessed by pedestrians and bicyclists, and is generally located on streets with sidewalks and bike lanes that limit encounters with vehicular traffic. It serves the population of a neighborhood varying from 3,000 to 5,000 persons, in a radius of up to ½ mile and should have two acres for each 1,000 persons. Since recreation needs vary from one neighborhood to another, site design should be flexible. These parks are designed for intense and diverse recreational activities. Amenities may include, but are not limited to, play structures, recreation buildings, multi-purpose courts, sports fields, picnic areas, and free play areas.

**Community Park.**

A community park is a “ride to park,” typically accessed by motor vehicles and located near major streets. The park is designed to provide service for up to six neighborhoods, or a service population of 25,000 people, within a 3 mile radius. A minimum of 20 acres is recommended for a community park; however, the recommended acreage can be reduced to five acres if the park is adjacent to a junior or senior high school. Typical facilities for a community park may include, but are not limited to, swimming pools, ball fields, tennis courts, play areas, picnic areas, multi-purpose fields and courts, recreation buildings, and sports fields. Landscaping and passive recreation activity areas are crucial amenities of a community park.

**Urban Open Space.**

Urban open space areas are landscaped or natural open areas, located within built-up areas, and are typically between one-tenth of an acre and one acre in size. These areas can serve a single neighborhood or the entire City, depending

on their location. Examples of urban open space areas include linear, pocket or traffic circle parks, boulevard medians, plazas, courthouse squares, and promenades. Their principle function is to intersperse congested urban environments with aesthetically pleasing buffer areas. Because of their size, they are typically limited in terms of amenities, but may include such items as benches, commemorative structures, trails and pathways.

#### **Urban-District Park.**

An urban-district park is designed to serve several communities, a city or a county, and should serve an average population of 50,000. Typical facilities may include natural areas, campgrounds, and play structures. This park should be a minimum of 50 acres in size; however, the optimal size would be 75 or more acres.

#### **Regional Park.**

Regional parks are large areas designed to serve two or more communities or counties, and should serve a minimum of 100,000 people. The size of these parks range from a minimum of 250 acres to several thousand acres. Facilities provided at regional parks typically include water-based recreation areas, camping areas, hiking/nature trails, picnic areas, and other facilities not requiring intensive development.

#### **Passive Park.**

A passive park is a recreational area that encourages activities that do not necessarily raise the heart rate significantly above the normal resting rate; however, these parks do provide the user with enjoyment through the visual aesthetics of a natural environment. Typical amenities for these types of parks may include picnic tables, observation areas, botanical gardens, historical or archaeological sites, and benches. These types of parks include open spaces such as fields, walking/nature trails, and scenic vistas.

#### **Active Park.**

An active park is a recreational area that encourages active participation involving physical exertion that raises the heart rate significantly above the

normal resting rate. Typical activities for these types of parks may include such group activities as football, baseball, soccer, basketball, tennis, and shuffleboard, as well as individual activities such as jogging, bicycling, hiking, swimming, and playground activity. The typical amenities for these parks promote the aforementioned activities, and may also include passive park amenities such as picnic tables and open space.

Table 7-1 provides the guidelines established by the State for outdoor recreation areas found in the 2000 SCORP. Tot lots, neighborhood parks, community parks, and regional parks are the most applicable categories for North Miami resident use.

**Table 7-1: Site Guidelines for Outdoor Recreation Resources/Facilities**

Park Facility	Location	Population Served	Area Per 1,000 People	Park Size if Next to School	Size as a Separate Park	Facilities
Equipped Play and Tot Lot	Less than 0.25 mile in residential setting	2,500 max.	0.5 acre	Min. of 0.25 acre	Min. of 1 acre	Play structures, benches, picnic areas, open spaces, landscaping
Neighborhood Park	Neighborhood Area: 0.25 to 0.5 mile distance	5,000 max.	2 acres	Min. of 2 acres	Min. of 5 acres	Play structures, recreation buildings, court games, hard courts, tennis courts, internal trails, shuffleboard, volleyball courts, picnic areas, open area, landscaping
Community Park	Usually serves two or more neighborhoods and 0.5 to 3 miles distance	25,000 max.	2 acres	Min. of 5 acres	Min. of 20 acres; optimal is 20 to 50 acres	All of the facilities found in a neighborhood park plus informal ball fields, swimming pools, archery ranges, golf areas, ornamental gardens, open space and facilities for cultural activities
Urban Open Space	Urban Areas	0.25 to 0.5 mile	1 acre	n/a	Min. of 0.1 acre	Resource-based recreation area
Urban-District Park	In large urban area or periphery within 30 to 40 minute drive	One park per 50,000	5 acres	n/a	Min. of 50 acres; optimal is 75+ acres	Play structures, restrooms, trails, nature center, boating, swimming, picnic areas, sports fields

Park Facility	Location	Population Served	Area Per 1,000 People	Park Size if Next to School	Size as a Separate Park	Facilities
Regional Park	Periphery of an urban area 30 to 60 minute drive	Greater than 100,000	20 acres	n/a	250 acres to several thousand acres	Camping, nature and bridle paths, picnicking, and other facilities non-intensive development

Source: Florida Department of Environmental Protection, Division of Recreation and Parks, *Outdoor Recreation in Florida-2000: Florida's Statewide Comprehensive Outdoor Recreation Plan*.

### EXISTING CONDITIONS & LEVEL OF SERVICE ANALYSIS

The 1989 Comprehensive Plan set a level of service for parks, recreation and open space of 2.75 acres per 1,000 people. Using this standard along with the current park inventory acreage of ~~1,140.32~~ 1337.53 and the 2005 population of 60,312 the City has a level of service of ~~18.9~~ 22.2 acres per 1,000 people. The City will continue to provide an exceptional level of service through the 2025 planning horizon, with at least ~~12.9~~ 15.5 acres per 1,000 people (based on a 2025 projected population of 86,301). This is considered an enviable level of service for most communities.

By SCORP definitions, Oleta River State Park is considered a Regional Park. North Miami considers this park to be a great asset to the City for its resource-based recreation area and includes the park in its overall acreage. Although Oleta River State Park comprises a majority of the City's total park acreage, North Miami recognizes that its residents deserve a variety of parks and recreation facilities to serve the City's diverse needs. Understanding that no single park type can meet all recreation needs, the Parks and Recreation Department maintains a number of neighborhood parks, tot lots, passive greenspaces, sports parks, and special use parks, and a community park. In addition, the City has recently created a Parks, Recreation, and Open Space Master Plan that will be used to direct future park development and the maintenance and expansion of existing parks, to the greatest extent feasible.

This being stated, Oleta River State Park comprises about 1,033 acres of park and open space and makes up about ~~94~~ 77 percent of the available park and



open space within the City boundary. If Oleta River State Park were to be removed from the total park acreage, ~~107.32~~ 304.53 acres would be available within the City and the park level of service would be reduced to 5.05 acres per 1,000 people based on the 2005 population of 60,312, which exceeds the adopted LOS. ~~For this reason~~

The City has produced a Parks, Recreation, and Open Space Master Plan to guide future park expansion and development, which will ensure residents a variety of recreation opportunities.

### Current Park Inventory

Table 7-2 categorizes and inventories existing park and open space facilities in the City of North Miami according to the categories set by the Parks and Recreation Department, which are based on the 2000 SCORP. In addition, Map 7-1 shows the location for each of the City's park and open space areas listed below.

**Table 7-2: Park and Open Space Facilities in North Miami**

PARK TYPE	PARK NAME	FACILITIES	ACRES	TOTAL ACRES
Community Parks				29.2
	Claude Pepper Park	3 baseball fields, 2 basketball courts, 1 soccer field, 8 handball/ racquetball courts, 12 tennis courts, 1 playground, 1 concession, 1 picnic area, 1 shelter	29.2	
Neighborhood Parks				8.21
	Sunkist Grove Park	1 community center, 1 basketball courts, 1 playground, 1 picnic area, 1 shelter	1.21	
	Griffing Park	1 community center, 1 multi-purpose field, 1 swimming pool, 24 shuffleboard courts, 1 picnic area, 1 shelter	5.40	
	Alfred Besade Park	1 playground, 1 multi-purpose field, 1 picnic area, 1 shelter	1.60	
Tot Lots				4.08
	Kiwanis Park	1 community center, 1 multi-purpose field, 1 playground	1.21	
	Overbrook Shores Tot Lot	1 playground	0.37	
	North Miami Tot Lot	1 playground	0.10	
	Breezeswept Tot Lot	1 playground, 1 basketball court, 1 picnic area	1.01	
	Keystone Park	1 community center, 1 multi-purpose field, 1 playground, 1 basketball court, 2 handball/	1.39	

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Data, Inventory, and Analysis Report

PARK TYPE	PARK NAME	FACILITIES	ACRES	TOTAL ACRES
		racquetball courts		
Passive Greenspaces				<del>1.80</del> 199.0
	North Bayshore Park	boardwalk, passive open space	1.46	
	Jaycee Park	1 picnic area, passive open space	0.34	
	Biscayne Landings	Passive conservation area	183.04	
	Arch Creek Preserve	Interpretative facilities	14.16	
Sports Parks				39.58
	Ben Franklin Park	2 basketball courts, 2 soccer fields, 1 concession, 1 picnic area	6.88	
	Oleander Park	1 baseball field	1.21	
	Penny Sugarman Tennis Center	14 tennis courts, 1 practice wall	2.75	
	North Miami Athletic Stadium	1 football, 1 track, 1 stadium, 4 concessions	20.0	
	Ray Cagni Park	2 baseball fields, 1 playground, 1 skating rink, 4 basketball courts, 4 handball/ racquetball courts, 3 tennis courts, 1 playground	8.73	
Special Use Parks				24.46
	Thomas Sasso Pool	1 community center, 1 swimming pool, 1 playground	2.0	
	Liberty Gardens Park	urban garden, public art	0.04	
	Gwen Margolis Center	1 community center	0.42	
	Elaine Gordon Enchanted Forest	1 nature center, 1 community center, equestrian center, 1 boardwalk, trails, 2 playgrounds, 2 picnic areas, 2 shelters	22.0	
State Regional Park				1,033.0
	Oleta River State Park	Beach, trails, nature and wildlife viewing, fishing, camping, playgrounds, picnic areas, 9 shelters, canoeing and kayaking, bicycling, showers, concession, and restaurant	1,033.0	
<u>Total (city parks)</u>				<u>304.53</u>
Total (all parks)				<del>1,140.32</del> 1,337.53

Source: City of North Miami Parks and Recreation Department, 2007. Parks, Recreation, and Open Space Master Plan. Florida Division of Recreation and Parks, 2007. Michele Mellgren & Associates, Inc.

### **New Park Development**

#### *CRA Plan*

A component of the Community Redevelopment Agency Redevelopment Plan Phase I (CRA Plan Phase I) is increasing park space. Within the Community Redevelopment Area (CRA), there are currently 126.18 acres of park and open space excluding the park and open space area east of Biscayne Boulevard. Once implemented, the CRA Plan would increase park and open space to 148.48 acres within the CRA. This increases overall park space by 22.3 acres.

The CRA Plan prescribes investment in existing parks and new park creation. New parks include a regional athletic facility (to be provided by the Biscayne Landing development as an Olympic Training facility) a waterfront park, Central Town Square, new neighborhood parks, and a greenway. Additional facilities include soccer fields, swimming pools, and bike trails.

Potential new neighborhood parks within the CRA have been identified in the recently adopted Parks, Recreation, and Open Space Master Plan. Public meetings were held to determine the location, size, and facilities of these potential future parks and possible expansions of existing facilities.

The new waterfront park will be constructed on the property currently known as the Bayfront property north of NE 135<sup>th</sup> Street along Biscayne Bay. The property is currently classified as an Urban Open Space and it has no facilities.

The CRA Plan also calls for a pedestrian system to link the Central Town Park, schools, and other parks. The major City collector roads will also act as pedestrian greenways.

#### *Parks, Recreation, and Open Space Master Plan*

In April 2007, the City has adopted a Parks, Recreation and Open Space Master Plan, which provides prototypes and potential locations for new parks within the City, including the CRA. As well, it provides recommendations for the expansion and upgrading of existing recreational facilities. The development of the Master Plan included public and City staff input to ensure the plan reflected a community

vision with a variety of recreation opportunities.

#### *Transportation Master Plan*

In 2005, the City created the North Miami Transportation Master Plan (TMP). 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. It establishes the strategies and priorities for short- and long-term transportation decisions and investments by the City. One such recommendation of the TMP is to expand and improve the existing pedestrian and bicycle paths and networks within the City of North Miami, and creating new paths and networks in areas needing these amenities.

#### *Biscayne Landing Development*

The existing land use for the Biscayne Landing development (formerly known as the Munisport site) is categorized as vacant and has a future land use designation of Planned Unit Development (PUD); however, the area was historically used for waste disposal and the land was not viable for environmental conservation or recreational uses. The developer has agreed to clean up the land as part of the agreement to develop the area by building 5,999 market rate residential units and approximately 250 hotel units.

The community is planned to include a 230 acre nature preserve, as well approximately 35 acres of park and open space areas. The developer has dedicated approximately 150 acres to the City, of which approximately 102 acres will remain in its natural state. A park has been proposed on the southwest corner of the property to include walking trails with exercise stations. Additional walking trails throughout the site will allow access into the mangroves as well.

The developer has also agreed to fund an environmental park, estimated at ~~12~~ 4 acres, with a proposed name of the Arch Creek East Environmental Preserve. The park is being proposed at the end of NE 135th Street. In addition to the funding provided by Biscayne Landing, the City is applying for funding from the State and County to complete the project. Overall, this open space resource will be a significant addition to the City and will be useful in meeting the City's

recreation and open space LOS standards.

The agreement with the developer of Biscayne Landing also provides for an Olympic Training Center and expansion of the North Miami Library. The developer will contribute \$20 million toward the construction and development of these two facilities. The Olympic Training Center will be constructed on the City-owned parcel next to the North Miami Library. In addition to the developer's contribution, Miami-Dade County has also approved the project as a "Regional Facility" and awarded \$5 million to the facility through the Miami-Dade Building Better Communities General Obligation Bonds. The Olympic Training Center should be completed at the end of the 2008 fiscal year. (Proposed 5-Year Capital Improvement Program, Fiscal Years 2007-2011.)

The North Miami Library currently resides in a 20,000 square foot facility, which was built in 1953. The Library will be replaced with an 80,000 square foot library by 2009 with funds through the agreement with Biscayne Landing, fundraising, and through the Friends of the Library organization. The total cost for the new building will be \$17.97 million.

#### *Cagni Park Replacement*

The Miami-Dade County School Board, in conjunction with the City, is replacing Cagni Park, North Miami Senior High, and North Miami Middle School. These facilities currently maintain a joint-use agreement and will continue this agreement upon replacement of the facilities. The educational facilities are anticipated to open for the 2008-2009 and 2009-2010 school years. The replacement of Cagni Park should be completed by late 2010 and will be slightly larger than the existing Cagni Park. The new park is expected to offer the same amenities with state-of-the-art advantages, including but not limited to basketball, tennis and racquetball courts, and two playing fields for baseball, football, and soccer.

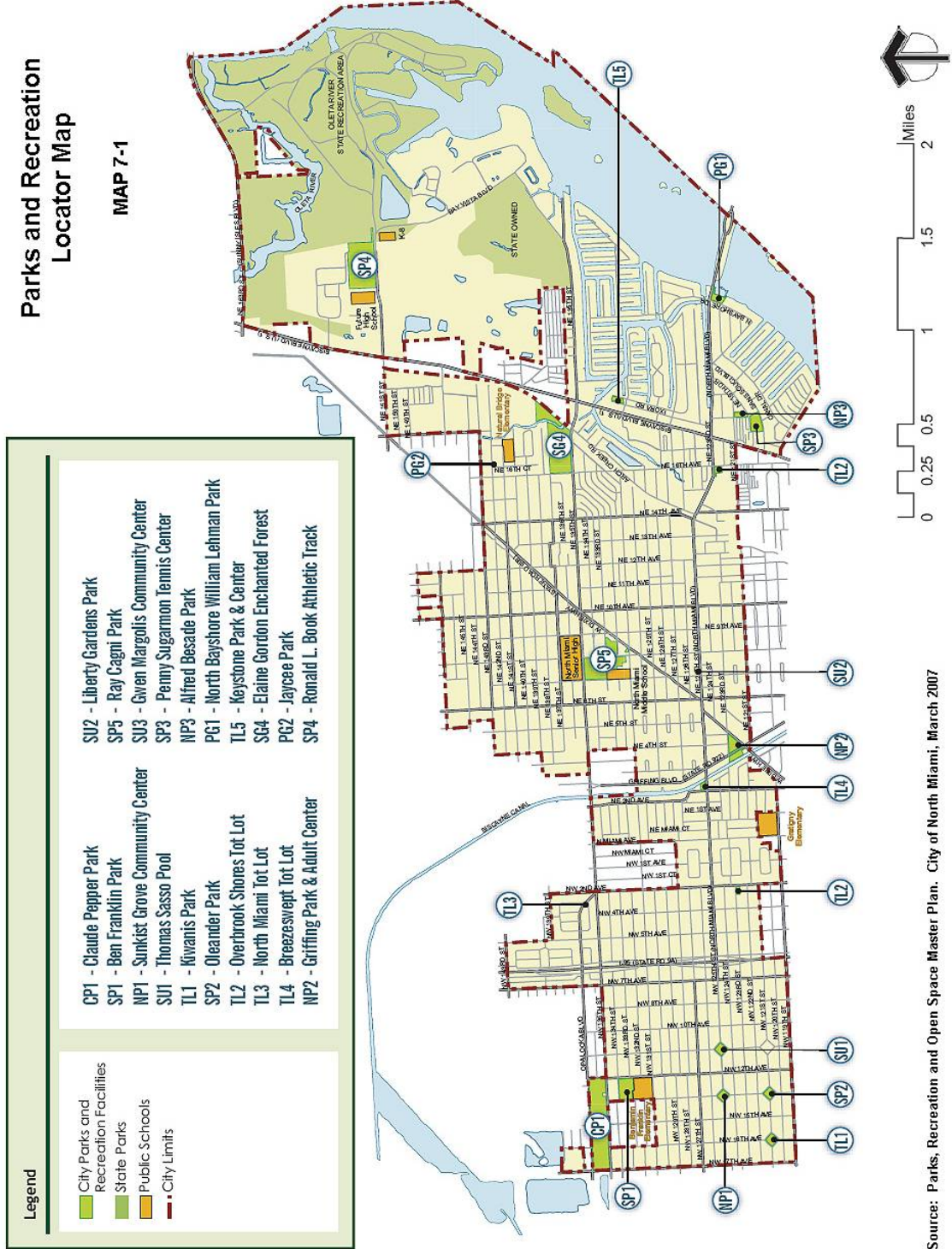
#### *Facility Reconstruction*

The Parks and Recreation Department has recognized the need for updating and improving a number of City recreation facilities. The City is planning to replace

existing facilities at the following parks for a cost of \$10 million over the next five years, as outlined in the Proposed 5-Year Capital Improvement Program (Fiscal Years 2007-2011):

- Enchanted Forest Nature Center
- Sunkist Grove Community Center
- Gwen Margolis Community Center
- Pepper Park & Cagni Recreation Buildings
- Keystone Center
- Kiwanis Community Center

Map 7-1: Existing Park and Open Space Areas



## **PARKS, RECREATION, AND OPEN SPACE MASTER PLAN**

The CRA Plan calls for developing a Parks Master Plan through neighborhood workshops in the CRA Phase I Implementation Plan. In response to this, the City has developed the North Miami Parks, Recreation, and Open Space Master Plan, which is a wish list of park facilities and LOS standards to serve residents and visitors of North Miami. The City anticipates adopting this Master Plan by 2008. Both, the City and the CRA will encourage development and redevelopment to include the recommendations of the plan so that recreation and open space will continue to be an amenity enjoyed by the residents of North Miami.

The Parks Master Plan process has included the following steps:

- Direction from the Parks and Recreation Commission;
- A planning framework, public involvement process, and guiding mission statement for the project;
- A baseline inventory of all publicly owned park and recreation facilities and program offerings;
- Identification of potential needs and potential locations for new park facilities and expansions of existing facilities with input from the public and recreation providers;
- Development of park level of service recommendations, for which the City will aspire to reach; although North Miami will not formally adopt these recommendations as a part of the Comprehensive Plan;
- Conceptual implementation costs and prototypical designs;
- Promotion of special events such as arts and crafts fairs, cultural activities, and festivals;
- Consideration of new recreational amenities such as an amphitheater or cultural center; and
- Recommended action steps for facilities, programming, capital improvements, management and maintenance, funding, communication, and monitoring and evaluation.



### Level of Service Standards

The Parks, Recreation, and Open Space Master Plan suggests two alternate methods that can be considered for measuring Park Level of Service:

1. Level of Service based upon park categories, and
2. A distance requirement that ensures all residents are within a reasonable distance from park facilities.

#### *Categorizing North Miami Parks*

Although North Miami presently categorizes its parks, recreation, and open space, the City calculates LOS based on the total acreage of all the categories. The Parks, Recreation, and Open Space Master Plan suggests applying LOS standards to the individual park categories as a means for prioritizing new park projects. To the greatest extent feasible, the City will consider this and the other recommendations of the Parks, Recreation, and Open Space Master Plan as a guide for creating new parks, and expanding and upgrading existing facilities. However, the City will continue to use its adopted LOS to assess current conditions and any proposals for development or redevelopment, which is 2.75 acres per 1,000 people (of total park, recreation, and open space facility acreage).

The Parks, Recreation, and Open Space Master Plan suggested level of service standards for park categories are shown in Table 7-3.

**Table 7-3: City Park Categories and Suggested Levels of Service**

Park Category	Area per 1,000 Population	Service Area
Community Park	1.2 acres	1 mile
Neighborhood Park	0.4 acres	0.5 miles
Urban Trails	1 mile	Citywide
Special Use Facility	As appropriate	Citywide

Source: City of North Miami Parks, Recreation, and Open Space Master Plan.

### *Park Service Radii*

A recommendation of the Parks, Recreation, and Open Space Master Plan is to incrementally increase the number of residents living near parks and open space. The Master Plan suggests that residential areas should be within a one-half mile radius of a park facility. This idea of a park service radius is becoming popular in cities with considerable vacant land resources. Although, North Miami has very little vacant land available, to the greatest extent possible, the City will prioritize opportunities to create new park facilities in residential areas lying outside a one-half mile service radius.

The use of a park service radius is to ensure relatively equal access to parks and open space. An analysis of the City using a one half mile radius reveals that some areas of the City are underserved by parks and open space. The most obvious areas in need of more park space are the residential areas immediately east of Interstate 95 (I-95). Specifically between I-95 and NE 2nd Avenue, no significant park or open space is available within this one mile wide area that consists of mostly single family homes. Other underserved areas include residential areas just west of the Florida East Coast Railway, north of the southern City boundary and the easternmost residential neighborhoods near Biscayne Bay north of Keystone Boulevard.

## **LIBRARY LEVEL OF SERVICE**

The City has one public library facility on NE 132nd Street. The library follows the Florida Library Association's *2004 Standards and Guidelines for Florida Public Library Services*. The Florida Library Association's *Standards for Florida Public Libraries* provides for three quality levels of libraries: Essential, Enhanced and Exemplary. The quality levels depend on a number of variables, including hours of operation, staffing, continuing education, amount of materials, technological resources, and facility size.

The Library currently operates and offers services at the Essential quality level. According to the Florida Library Association, the essential level standards define the basics of library service. Every library can and should offer basic services in

response to the local community. These five basic services are: providing information on request, lending of materials, public space, public programs, and public access to the Internet and personal computing applications.

Table 7-5 presents the Florida Library Association’s quality levels regarding facility space, which is followed by an analysis of North Miami’s library space.

**Table 7-4: Library Level of Service: Facility Space**

Quality Level	Total gross square feet per capita			
	Up to 25,000 population	25,001 to 100,000 population	100,001 to 750,000 population	>750,001 population
<b>Essential</b>	<b>0.6 SF with 0.8 desired</b>	<b>0.6 SF</b>	<b>0.6 SF</b>	<b>0.6 SF</b>
<b>Enhanced</b>	<b>0.9 SF</b>	<b>0.8 SF</b>	<b>0.7 SF</b>	<b>0.65 SF</b>
<b>Exemplary</b>	<b>1.0 SF</b>	<b>1.0 SF</b>	<b>1.0 SF</b>	<b>0.85 SF</b>

Source: Florida Library Association, *Standards for Florida Public Libraries 2004*.

Using a 2005 population of 60,312, the City of North Miami has 0.33 square feet of library space per person, which is less than recommended by the Florida Library Association for this population size. However, the City plans to replace the existing 20,000 square foot facility with a new 80,000 square foot facility, through contributions from the developer of Biscayne Landing, which is expected to open in 2009.

With the new 80,000 square foot library, the City will be able to provide 1.22 square feet of library facility space per capita in 2010. This is surpassing the Exemplary quality level in regard to facility space (considering a projected population of 65,377 in 2010). The City anticipates providing the Enhanced quality level by 2025, providing 0.91 square feet per capita of library facility space for the projected population of 88,231.

As well, the public schools located in the City are equipped with library facilities, which serve North Miami residents after regular school hours, further increasing library access for residents. Continuing the shared use of these facilities,

combined with the new library will allow the City to continue facilitating education and cultural activities in the North Miami community, resulting in an increased quality of life.

As mentioned previously there are a number of variables considered by the Florida Library Association, Table 7-6 details the City's library LOS for a selection of these variables.

**Table 7-5: North Miami Public Library LOS Analysis**

Recommended Level of Service Standards for Essential Quality Rating (Florida Library Association, 2004)	Suggested L.O.S. based on 60,312 residents	2005 Actual	Analysis based on suggested standard
0.6 square feet per capita	36,187.2	20,080 (or 0.33 sqft per capita)	Deficient facility size
Minimum of 1 public internet-connected computer workstation per 3,000 population	20.1	15 (or 0.25 per 1,000)	Add at least 5 computers
Minimum of 2 items per capita of volumes in all formats	120,624	108,089 (or 1.79 vol per capita)	Add 12,535 Volumes
Minimum of 40 operation/service hours per week	40	61	Exceeds standard
Minimum of 0.3 FTE library staff per 1,000 population	18.1	14 (or 0.23 staff per 1,000)	Add a minimum of 4 staff
Minimum 30 percent of population has a library card	18,094	25,971 (or 43%)	Exceeds standard

Source: Florida Department of State, Florida Division of Library and Information Services, 2006 Florida Library Directory with Statistics. Michele Mellgren & Associates, Inc, 2007.

As shown in the table above, the Library has a few deficiencies. However, this did not preclude or discourage residents and visitors from utilizing the facility. In 2005, the North Miami Library experienced 181,752 visits, which equals 3.01 visits per capita. Since some of these deficiencies can be directly correlated with facility space, it is anticipated that the lack of computers and volumes will be rectified with the construction of the new facility. The City may also consider adding additional staff to ensure proper library function and the optimal experience for library visitors.

# EAR-Based Comprehensive Plan Amendments

## Volume II: Data, Inventory, and Analysis Intergovernmental Coordination Element



# 8. INTERGOVERNMENTAL COORDINATION ELEMENT

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## 8. INTERGOVERNMENTAL COORDINATION ELEMENT

### PURPOSE

The purpose of the Intergovernmental Coordination Element is to coordinate goals, policies, and objectives and development with related governmental entities and agencies. Ultimately, the Intergovernmental Coordination Element should reduce growth and development conflict and increase cooperation among governmental entities.

### INTERGOVERNMENTAL COORDINATION INVENTORY

This section presents an inventory of existing intergovernmental coordination processes and mechanisms involving North Miami. This includes governmental entities, which have formal or informal intergovernmental relationships with the City of North Miami. The inventory provides a brief description of the coordination mechanisms, subject area, and the office with primary responsibility of coordination. Table 8-1 summarizes entities involved in the City of North Miami intergovernmental coordination.

**Table 8-1: Inventory of Intergovernmental Coordination Responsibilities**

<b>Governmental Entity</b>	<b>Relationship</b>	<b>Major Subjects of Mutual Interest</b>
City of North Miami Beach	The City of North Miami Beach abuts the City.	<ol style="list-style-type: none"> <li>1. Planning and development.</li> <li>2. Traffic flow from one jurisdiction to the next.</li> <li>3. Emergency management.</li> </ol>
Village of Biscayne Park	The Village of Biscayne Park abuts the City.	<ol style="list-style-type: none"> <li>1. Planning and development.</li> <li>2. Traffic flow from one jurisdiction to the next.</li> <li>3. Emergency management.</li> <li>4. Formal franchise agreement for provision of water.</li> </ol>
City of Opa Locka	The City of Opa Locka abuts the City.	<ol style="list-style-type: none"> <li>1. Planning and development.</li> <li>2. Traffic flow from one jurisdiction to the next.</li> <li>3. Emergency management.</li> </ol>

Governmental Entity	Relationship	Major Subjects of Mutual Interest
Miami-Dade County: – Planning, Building and Zoning Dept. – Water and Sewer Dept. – Environmental Resources Mgmt. Dept. – Parks and Recreation Dept. – Solid Waste Mgmt. Dept. – Public Works Dept. – Fire Rescue Dept. – Emergency Mgmt. Dept. – Police Dept. – Historic Preservation Div. – Finance Dept. – Information Technology Dept. – Transit Dept.	County in which North Miami is located.	1. County road system improvements. 2. Water and sewer issues. 3. Funding for municipal services. 4. Funding for transportation services. 5. Public safety. 6. Solid waste services for Biscayne Landing.
Miami-Dade County School Board	School Board facilities are located within North Miami.	1. Coordination of recreation facilities/programs (shared use and co-location). 2. Coordination of school facilities planning programs. 3. Procedures for communication and input. 4. Ingress and egress to schools.
South Florida Water Management District	District includes City of North Miami within jurisdiction.	1. Stormwater drainage. 2. Wetlands protection. 3. Consumptive use permits. 4. Grant funding to perform stormwater evaluations and improvements. 5. Coordination with regional water supply plan.
South Florida Regional Planning Council	Council includes City of North Miami within jurisdiction.	1. Comprehensive Regional Policy Plan. 2. Socio-economic data projections. 3. Intergovernmental review. 4. Development of Regional Impact issues.
Florida Department of Community Affairs	DCA is the state land planning agency and administers grant programs.	1. City's Comprehensive Plan must meet both statutory and administrative requirements with review by DCA. 2. Coordinating resource conservation and growth management issues. 3. Funding assistance for local comprehensive planning activities, and emergency aid and assistance.
Florida Department of Children and Families	DCF administers programs that provide housing or shelter for people with special needs.	1. Regulates community residential homes, mobile homes, foster care homes, and homes for special children.



Governmental Entity	Relationship	Major Subjects of Mutual Interest
Florida Department of Health	DOH administers all health related issues formerly under Health and Rehabilitative Services (HRS).	1. Well permits; septic tank permits are also handled by this agency but North Miami does not allow septic tanks.
Florida Department of Environmental Protection	DEP has statewide jurisdiction for protecting and conserving Florida's natural resources, managing State owned lands/aquatic preserves, and regulating impacts on the environment.	1. Monitoring/reporting on quality of drinking water supply and wastewater treatment. 2. Air quality monitoring/reporting. 3. Hazardous and solid waste disposal 4. Alteration to environmentally sensitive areas. 5. Oleta River State Park management. 6. Acquisition and development of parks and recreation.
Florida Department of Transportation	FDOT has jurisdiction over all state roads.	1. Improvements to State roads (planning/construction). 2. Installation of traffic control devices.
Florida Department of State Division of Historic Resources	Historic Survey Grants; Review of any project with Federal and/or State Involvement.	1. There are 16 historical/archaeological sites within North Miami listed on the Florida Master Site File. Although the City has not designated any historically significant residences the Florida Master Site File lists 14 residences as historically significant.
Department of Agriculture and Consumer Services	DACS promotes the Florida agriculture economy, ensures food safety and wholesome-ness through inspection and testing programs, and provides consumer information.	1. Promote the well-being of native wildlife.
Florida Fish and Wildlife Conservation Commission	FWC enforces regulation that protects the natural resources and wildlife of Florida.	1. Florida's agriculture market and consumers.
Environmental Protection Agency	EPA has jurisdiction over all environmental issues of federal concern.	1. Minimum federal standards for wastewater, drinking water, and air quality. 2. Funding of wastewater facilities.
Federal Emergency Management Agency, Flood Insurance Administration	FEMA has responsibility for all 100-year flood zone mapping.	1. Compliance with federal flooding regulations. 2. Emergency management and disaster mitigation, preparedness, response, and recovery.

Governmental Entity	Relationship	Major Subjects of Mutual Interest
US Department of Agriculture, Natural Resources Conservation Service	NRCS has responsibility in conjunction with Miami-Dade County for mapping soil types and describing their suitability for agricultural and urban uses.	1. Ensuring land use activities occur consistent with specific soil properties.
US Fish and Wildlife Service	FWS provides leadership in the conservation of fish and wildlife.	1. Review of permits that affect wetlands, endangered species, and other environmental issues. 2. Land acquisition for environmental restoration. 3. Compliance with federal regulations.
US Army Corps of Engineers	ACE provides leadership in engineering and environmental matters.	1. Review of permits that affect aquatic and other environmental issues. 2. Environmental stewardship and programs for natural resources. 3. Compliance with federal regulations.
National Oceanic and Atmospheric Administration National Hurricane Center	NOAA provides hurricane warnings and watches for incoming storms.	1. Provides watches and warnings through its hurricane tracking service.
Florida Power and Light Company	Provides the City with electricity.	1. Generation and distribution of adequate and dependable supply of electricity. 2. Franchise fees and utility taxes.
Local gas companies: People's Gas City Gas	Provides natural gas service.	1. Generation and distribution of adequate and dependable supply of natural gas 2. Franchise fees and utility taxes.
Local cable company: Comcast Cable	Provides cable television and internet service.	1. Generation and distribution of adequate and dependable cable television and internet service. 2. Franchise fees.
Local telephone company: BellSouth Telephone Company	Provides phone and internet service.	1. Generation and distribution of adequate and dependable telephone and internet service. 2. Franchise fees.

Sources: City of North Miami, 2005

Prepared by: Iler Planning Group (IPG) and Michele Mellgren & Associates, Inc.

### Local Agencies

#### *City of North Miami Beach*

Because of their proximity to each other, the City of North Miami coordinates with the City of North Miami Beach as needed. Issues include planning and development, emergency management and development and traffic.

*Village of Biscayne Park*

Because of their proximity to each other, the City of North Miami coordinates with the Village of Biscayne Park as needed. Issues include planning and development, emergency management and traffic. As well the City and the Village coordinate water service and associated fees.

*City of Opa Locka*

Because of their proximity to each other, the City of North Miami coordinates with the City of Opa Locka as needed. Issues include planning and development, emergency management and traffic.

The principal contacts for the City of North Miami in matters relating to abutting municipalities are the City Manager, the Department of Community Planning and Development, and the Public Works Department.

*Miami-Dade County*

The City of North Miami coordinates with Miami-Dade County on numerous issues regarding managing community development, traffic, infrastructure, and service delivery systems. Major components of the County's service delivery system include:

- Drainage and NPDES permitting;
- Traffic control issues: signage/signalization;
- Transit;
- Social Services and public health services;
- Water and sewer services;
- Planning and Growth Management for the unincorporated areas;
- Construction and maintenance of County roads;
- Emergency management, including disaster preparedness and hurricane evacuation;
- County Tax collector and Property Appraisers Services;
- County Court System and Clerk's Offices;
- Fire and Rescue services; and
- Economic Development, including tourism.

Due to the various interests shared by the City and the County, there are many contact points. Three of the principal contacts are the City Manager, the Public Works Department, and the Department of Community Planning and Development.

*Miami-Dade County School Board*

Miami-Dade County School Board consists of five members and a superintendent who are elected at-large. The board is charged with formulating policy governing the administration and operation of public schools, including the following facilities in North Miami:

- Benjamin Franklin Elementary
- W.J. Bryan Elementary
- North Miami Elementary
- Natural Bridge Elementary
- North Miami Middle
- North Miami Senior High School
- ASPIRA Youth Leadership Charter School
- Sunshine Academy

The City coordinates with the School Board on issues such as the impact of these schools on North Miami's transportation system and the use of school recreation facilities. The City also coordinates with the School Board to encourage the siting of future schools, if needed, and expansion of existing schools as closely to residential areas as practical; to encourage the co-location of City public facilities, such as parks, libraries, and community centers, with schools to the extent possible; and to encourage the use of elementary schools as focal points for neighborhoods. The School Board and the City coordinate through an interlocal agreement, meetings, and information sharing on a continuous basis. As well coordination occurs through the shared land provision program where possible, and parking. The City Manager is the principal contact for the City in matters relating to the School Board.

### Regional Agencies

#### *South Florida Water Management District*

The South Florida Water Management District (SFWMD), an agency created by the State, is a multi-county independent special district responsible for flood-control and water conservation within the South Florida Region. As one of Florida's five regional water management districts, SFWMD issues permits for the consumptive use of water, well construction, surface water management, and artificial recharge and creates a regional water supply plan. Local governments including the City of North Miami, must base their local water supply plan on the SFWMD's regional water supply plan. Therefore the principal contact for the City in matters relating to the SFWMD is the Public Works Department. The SFWMD and the City coordinate through meetings and information sharing on a continuous basis.

Besides its permitting activities, the district is authorized to:

- Construct and operate water control works
- Engage in water resource planning
- Participate in technical investigations of water resources
- Gather water resource data
- Monitor discharges into SFWMD canals from City canals

An executive director appointed by a Citizen Board administers the staff of each district. The Board renders decisions on policy matters based upon staff recommendations and public testimony received at Board meetings and public hearings. The South Florida Water Management District office is located in West Palm Beach.

#### *South Florida Regional Planning Council*

The South Florida Regional Planning Council (SFRPC), located in Hollywood, is one of Florida's 11 regional planning councils. The SFRPC provides technical assistance to local government. In addition, the SFRPC has the responsibility for reviewing comprehensive plans or portions thereof in order to ensure consistency with the Strategic Regional Policy Plan goals, objectives, and policies. The City also coordinates with SFRPC on matters involving review and evaluation of

developments of regional impact (DRI), which are, projects generating regionally significant impacts.

The South Florida Regional Planning Council may also submit recommendations to the State requesting modification of local plans. The City Council maintains responsibility for managing City issues that impact or are impacted by regional planning activities. An executive director who reports to a Board administers the SFRPC. Two-thirds of the Board is made up of elected officials from local government belonging to the Council and the Governor appoints one-third. The South Florida Regional Planning Council includes the counties of Miami-Dade, Monroe and Broward. The SFRPC and the City coordinate through formal and informal meetings and information sharing, depending on the subject this communication occurs on a continuous or an as-needed basis. The Department of Community Development and Planning is the principal contact for the City in matters relating to the SFRPC.

### **State Agencies**

#### *Department of Community Affairs*

The Florida Department of Community Affairs (DCA) is headquartered in Tallahassee. A Secretary appointed by the Governor administers Department affairs. DCA provides technical assistance to local governments in the areas of:

- Housing
- Resource planning and management
- Community services
- Community development
- Land and water management
- Public safety
- Post-disaster recovery
- Emergency management preparedness

DCA administers a variety of grant programs designed to assist local governments in improving growth management resources, community infrastructure, and service delivery systems. The City of North Miami has been

coordinating with DCA in amending its comprehensive plan pursuant to Chapter 163, Florida Statutes. DCA and North Miami coordinate through formal and informal methods of information sharing on a continuous basis to achieve the aforementioned. The City Director of Community Planning and Development is the project director for comprehensive planning issues and is the principal liaison with DCA on this activity.

#### *Department of Environmental Protection*

The Departments of Natural Resources (DNR) and Environmental Regulations (DER) merged in 1993 to form the Department of Environmental Protection (DEP), the State administrative agency in charge of environmental issues and natural resource protection. In addition to managing Oleta River State Park located within the City's boundaries, DEP's duties include:

- Protecting and conserving Florida's natural resources,
- Managing State owned lands/aquatic preserves, and
- Regulating industrial waste, air pollution emission, hazardous wastes, potable water usages, solid waste disposal, dredge and fill activities, and alteration to environmentally sensitive areas.

DEP also issues National Pollution Discharge Elimination System (NPDES) water quality certifications and serves as an umbrella agency for Florida's five regional water management districts. DEP is headquartered in Tallahassee. A Secretary appointed by the Governor administers the Department. North Miami coordinates with FDEP on environmental resource issues involving public projects and private development. This coordination occurs through informal methods and information is shared as needed. The principal contact for the City in matters related to DEP is the Public Works Department.

#### *Department of Transportation*

The Florida Department of Transportation (FDOT) directs planning functions and coordinates maintenance and development of Florida's transportation system. FDOT has authority to direct the design, construction, maintenance, and related activities of the Florida Highway System. The following arterials lie within the boundaries of North Miami:

State Principal Arterials

- Interstate 95
- Dixie Highway
- Biscayne Boulevard

State Minor Arterials

- NW/NE 199th Street/Gratigny Highway
- NW 163rd Street/Sunny Isles Boulevard
- NW 7th Avenue/US 441
- NE 6th Avenue

FDOT has limited regulatory authority over the use of land along State roads including design standards for curb cuts on the State's major highway system. In addition, FDOT is responsible for determining the functional classification of roads within North Miami. The FDOT District 6 office is responsible for coordinating most FDOT issues with the City of North Miami. The City and FDOT coordinate through formal and informal methods of information sharing on an as-needed basis. The Department of Community Planning and Development is the principal contact for the City in matters relating to FDOT.

*Department of Agriculture and Consumer Services*

The Florida Department of Agriculture and Consumer Services (DACS) coordinates with the City of North Miami through its Division of Forestry. The Department also operates an agricultural agent extension service within the Miami-Dade County Governmental Center. The City staff and residents receive technical assistance, consumer related services, and publications, which address a broad range of special services. DACS and the City of North Miami coordinate through formal and informal arrangements, sharing information on an as-needed basis. The City Manager and Department of Community Planning and Development are the principal contacts for the City in matters relating to DACS.

*Department of State*

The Florida Department of State (DOS) coordinates with the City of North Miami on issues related to State archives and records as well as issues related to the



historic sites and properties within the City of North Miami. The City works with the Division of Historical Resources (DHR), Bureau of Historic Preservation, in addressing comprehensive planning issues surrounding historic and archaeological sites of significance. The Department of State is also the City's primary source for obtaining rules and regulations promulgated by State agencies. DHR and the City share information on an as-needed basis through formal and informal coordination methods. The Department of Community Planning and Development is the principal contact for the City in matters relating to the DOS.

#### *Department of Health*

The Florida Department of Health (DOH) coordinates with the City of North Miami on issues related to public health and environmental control. The City principally coordinates through the Miami-Dade County Department of Environment Resource Management (DERM). DERM incorporates not only conventional public health functions but also environmental health programs. The latter entity is charged with managing a broad range of environmental issues, including septic tank regulation, water quality, and pollution control. The City Manager is the principal contact for the City in matters relating to DOH.

#### *Department of Children and Families*

The Florida Department of Children and Families (DCF) coordinates with the City of North Miami on issues surrounding the delivery of rehabilitative, social and medical services for children, youth, family and elderly, including services directed toward special needs, such as physically and mentally challenged, and impoverished. DCF also coordinates with North Miami on Assisted Living Facilities (ALF) that are classified as Community Residential Homes according to Florida Statutes and regulates community residential homes, mobile homes, foster care homes, and homes for special children. The City and DCF coordinate through formal and informal information sharing methods on an as-needed basis. The City Manager is the principal contact for the City in matters relating to DCF.

#### *Florida Fish and Wildlife Conservation Commission*

The Florida Fish and Wildlife Conservation Commission (FWC), formerly the Game and Fresh Water Fish Commission, has jurisdiction over all terrestrial and

aquatic wildlife, including both freshwater and saltwater. Its mission is to manage fish and wildlife resources for their long-term well-being and the benefit of people.

The FWC coordinates with the City of North Miami primarily through the review of projects that may have potential impacts on local fish and wildlife habitat or which may intrude on and disturb habitats of endangered species. The City coordinates its comprehensive planning activities with the FWC in order to achieve professional fish and wildlife management perspectives on issues potentially impacting fish and wildlife habitat, particularly habits of species listed as endangered, threatened or species of special concern. The City also coordinates with DERM on these issues. North Miami, DERM, and FWC coordinate information sharing through formal and informal arrangements on an as-needed basis. The Director of Community Development is the principal contact for the City in matters relating to FWC.

### **Federal Agencies**

#### *Environmental Protection Agency*

The Environmental Protection Agency (EPA) is the federal agency responsible for protection of the environment. The EPA administers a variety of programs ranging from air and water quality protection to noise abatement. EPA exerts authority through the issuance of grant monies and through its power to fine violators. The agency establishes national drinking water and air quality standards with which all local agencies must comply. EPA standards are generally administered at the local level through the Florida Department of Environmental Protection and DERM. The EPA will coordinate clean-up efforts and advise the Department about safety measures for handling unusual materials.

The Environmental Protection Agency (EPA) issues National Pollution Discharge Elimination System (NPDES) permits and reviews permits issued by DEP for the treatment, disposal, and storage of hazardous waste. EPA may also prohibit or otherwise restrict the discharge of dredge and fill material. The Southeast Regional Office of the EPA is located in Atlanta. (The EPA does not have a Florida office.) All EPA permits for facilities constructed or operated in Florida are issued from the Atlanta regional office. The City and EPA coordinate through

formal and informal information sharing methods on an as-needed basis. The Department of Community Planning and Development is the principal contact for the City in matters relating to the EPA.

*Department of Agricultural, Natural Resource Conservation Services*

The Natural Resources Conservation Service (NRCS) has responsibility for mapping soils according to type, including soils that define wetlands, and this information is used to assist in locating areas that deserve special attention. In addition, the educational and informative information concerning prevention of soil erosion is disseminated to the public, development industries, and agricultural operations.

*Miami-Dade Soil and Water Conservation District*

The Miami-Dade Soil and Water Conservation District is a sub-agency of the Department of Agriculture. The District staff provides technical assistance in Miami-Dade County and North Miami on large-scale development impacts.

The City coordinates with NRCS and the County District office to ensure land use activities occur consistent with specific soil properties. North Miami, NRCS, and the County coordinate through formal and informal information sharing methods on an as-needed basis. The Building Department and the Department of Community Planning and Development are the principal contacts for the City in matters relating to these two agencies.

*Federal Emergency Management Agency*

The Federal Emergency Management Agency's (FEMA) continuing mission is to lead the effort to prepare the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program.

Although not specifically related to the issue of environmental conservation, the 100-year flood zone mapping effort carried out by the Federal Emergency Management Agency, Flood Insurance Administration often tends to be useful in defining sensitive areas. As indicated on the Water Resources map, the aerial

extent of the 100-year flood zones do not always correspond exactly to the wetland areas defined by other agencies, but they do correlate closely with the existence of sensitive areas. If an area is both flood prone and environmentally unique, the flood protection policies tend to provide additional reinforcement to the other City policies created for protection of the area.

North Miami coordinates with FEMA regarding emergency management and disaster mitigation, preparedness, response, and recovery. Coordination is also in place for compliance with federal flooding regulations; FEMA is responsible for mapping 100-year flood zones. The City and the FEMA coordinate through formal and informal information sharing methods on an as-needed basis. The City Manager is the principal contact for the City in matters relating to FEMA.

#### *National Oceanic and Atmospheric Administration*

The National Oceanic and Atmospheric Administration (NOAA) is responsible for a variety of issues. The two most pertinent to North Miami are the National Weather Service and the National Hurricane Center; both of these agencies have a role in the City. The National Weather Service provides weather forecasts for North Miami, including boating forecasts. The National Hurricane Center aids in emergency preparedness by providing watches and warnings through its hurricane tracking services. NOAA and the City coordinate through informal information sharing methods on an as-needed basis. The City Manager and Department of Community Planning and Development are the principal contacts for the City in matters relating to NOAA.

#### *US Fish and Wildlife Service*

The US Fish and Wildlife Service (FWS) is responsible for providing expert leadership in the conservation of fish and wildlife affected by federally funded or licensed land development actions. The FWS reviews permits that affect wetlands, endangered species, and other environmental issues. The FWS evaluates land acquisition related to the restoration of the Everglades including compliance review for the Endangered Species Act, Fish and Wildlife Coordination Act, and other Federal laws. FWS works in cooperation with state and local agencies to achieve its mission. The City and the FWS coordinate

through formal and informal information sharing methods on an as-needed basis. The City Manager is the principal contact for the City in matters relating to FWS.

#### *US Army Corps of Engineers*

The US Army Corps of Engineers (ACE) consists of military and civilian engineers, scientists and other specialists that work together as leaders in engineering and environmental matters. The ACE serves the Armed Forces and the Nation by providing vital engineering services and capabilities, as a public service, across a full spectrum of operations in support of national interests. Specifically, the ACE's mission is to:

- Assist in caring for the nations aquatic resources ,
- Act as a steward of the environment and engage in environmental restoration projects,
- Build and sustain critical infrastructure facilities for national water resources, military global missions, and growing security objectives,
- Expand capabilities that support growing national homeland security missions, and
- Shape capabilities and agency structure that provide highly adaptable and effective support of the National Defense Strategy and the National Military Strategy.

The ACE works in cooperation with state and local agencies to achieve its mission. The ACE reviews permits that affect water resources and other environmental issues, including endangered species for compliance with the Clean Water Act, the Endangered Species Act, and other Federal laws. The ACE, the City, and other involved agencies coordinate through informal and formal information sharing methods on an as-needed basis. The City Manager is the principal contact for the City in matters relating to ACE.

#### **Franchise Agreements and Related Services**

##### *Electric Service*

Miami-Dade County maintains a franchise agreement with the Florida Power and Light Company (FP&L) for the provision of electricity within its corporate limits. The City Manager is the principal contact for the City in matters relating to FP&L,.

*Telephone Service*

Miami-Dade County maintains a franchise agreement for the provision of telephone service within its corporate limits. The City Manager is the principal contact for the City in matters relating to telephone franchise service agreements.

*Television Cable Service*

Miami-Dade County maintains a franchise agreement with cable television companies to provide cable television and internet service within the corporate limits of the City. The City Manager is the principal contact for the City in matters relating to cable TV franchise service agreements.

*Gas Service*

City Gas and Peoples Gas provide natural gas service for customers in North Miami.

*Solid Waste Collection*

The City of North Miami is part of the Miami-Dade County Solid Waste District. The County collects all residential solid waste and recycling. The City Manager is the principal contact for the City in matters relating to solid waste franchise service agreements.

*Bus Benches Company*

The City maintains a franchise agreement with Gateway Advertising for provision of bus bench advertising.

*Shelter Advertising*

The City maintains a franchise agreement with Clear Channel Outdoor, Inc. for provision of bus shelter advertising, which is expiring on 1/31/06. Preliminary negotiations are underway with a new company and should be finalized in the next few months.

## INTERGOVERNMENTAL COORDINATION ANALYSIS

This section provides an analysis of the Intergovernmental Coordination mechanisms, problems, and needs within the City of North Miami.

### Effectiveness of Existing Coordination Mechanisms

This subsection provides an analysis of the effectiveness of the existing intergovernmental coordination mechanisms. This analysis has been separated by each individual mechanism to ensure proper coverage of the coordination mechanisms that are utilized within the City of North Miami.

The most prevalent method of ensuring intergovernmental coordination is the implementation of an interlocal or service agreement. These agreements serve as coordination mechanisms in cases where the City of North Miami receives a service from another unit of local government or provides a service to a unit of local government outside the City's jurisdiction. The agreements also serve as coordination when two or more entities will be collaborating for a special purpose, such as public schools. North Miami finds interlocal and service agreements to be very productive and useful in facilitating intergovernmental coordination and projects. Table 8-2 inventories each of these mechanisms.

Other techniques that promote intergovernmental coordination include, but are not limited to, joint or work groups, meeting attendance, and special legislation. Each of these techniques is employed by North Miami and has been deemed as effective coordination mechanisms by the City and other participating entities.

Although existing methods are effective, each agency partnered in the interlocal agreement is continually working to improve efficiency, services, and communication. Below are two brief descriptions of existing effective mechanisms: special legislation and an interlocal agreement.

#### *Local Option Gas Tax*

On January 1, 1994, the City approved an interlocal agreement with Miami-Dade County, which provides the City with approximately \$880,000 annually in local option gas taxes.

*School Board*

Pursuant to recent amendments to the State Growth Management requirements, the City was required to enter into an interlocal agreement with the Miami-Dade County School Board to address issues such as attendance boundaries, planning, zoning and site plan coordination, special educational programs, over-crowding, and new school location. This agreement was adopted by the City Council in 2003, in coordination with the School Board and all other local agreements in Miami-Dade County. The City also has other joint agreements with the School Board to allow public use of school recreation facilities during non-school hours. These agreements are functioning in a productive manner and are an added benefit to the City residents.



Table 8-2: Interlocal Agreements

Functional Category	Name of Agreement	First Party	Second Party	Services	Resol.	Effective Date	Length of Service	Comments
Public Safety	Mutual Aid Agreement	Bal Harbor Village	North Miami	Police services	R-2005-1	1/31/2005	1/1/2011	
Public Safety	Mutual Aid Agreement	Indian Creek Public Safety Department	North Miami Police Department	Police services	R-2005-4	2/9/2005	2/1/2010	
Solid Waste	Interlocal Agreement	Miami-Dade County	North Miami	Solid waste services for Biscayne Landing	R-2004-2	1/12/2004	10/1/1935	
Public Safety	Mutual Aid Agreement	North Miami	Aventura	Police services	R-2004-3	1/13/2004	1/1/2005	
Stormwater	Interlocal Agreement	Various municipalities names as co-permittees	North Miami	Coordinate control of pollutant discharges.	R-2004-26	3/11/2004	11/16/2005	Renewable every five years for twenty-five years.
Stormwater	Interlocal Agreement	North Miami	Miami-Dade Stormwater Utility	Share costs on drainage system.	R-2004-30	4/13/2004	9/30/2005	
Library	Interlocal Agreement	North Miami	Miami-Dade County/Various municipalities	Reciprocal borrowing agreement	R-2004-65	9/28/04	Ongoing	
Public Safety	Mutual Aid Agreement	Miami-Dade County	Municipal Police Departments	Police services	R-2004-83	12/14/2004	1/1/2010	
Public Safety	Mutual Aid Agreement	North Miami	Various local governments	South Florida Money Laundering Strike Force	R-2004-84	12/14/2004	9/30/2006	
Public Schools	Interlocal Agreement	Miami-Dade County	North Miami/ various municipalities	Public school facility planning	R-2003-9	2/25/2003	Ongoing	
Stormwater	Interlocal Agreement	North Miami	Miami-Dade Stormwater Utility	Coordinated stormwater services	R-2003-15	3/15/2003	3/15/2008	
Stormwater	Interlocal Agreement	North Miami	Miami-Dade Stormwater Utility	Canal cleaning and service	R-2003-63	10/14/2003	11/16/2005	
Solid Waste	Interlocal Agreement	Miami-Dade County	North Miami	Assess fees for solid waste and stormwater services	R-2002-5	10/1/2002	Ongoing	

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Data, Inventory, and Analysis Report

Functional Category	Name of Agreement	First Party	Second Party	Services	Resol.	Effective Date	Length of Service	Comments
Technical Assistance	Interlocal Agreement	Broward County	North Miami	CDBG technical assistance	R-2002-10	2/12/2002	Ongoing	
Elections	Interlocal Agreement	Miami-Dade County	North Miami	Translations services for election	R-2000-6	1/11/2000	3/14/2000	Service for election day only.
Public Safety	Mutual Aid Agreement	Miami-Dade County	North Miami/Various municipalities	Law enforcement assistance	R-2000-23	3/14/2000	1/1/2005	
Public Safety	Mutual Aid Agreement	Various municipalities	North Miami	Multi-agency money laundering and anti-drug trafficking task force	R-2000-30	3/28/2000	9/30/2003	
Public Safety	Mutual Aid Agreement	North Miami	Miami	Police services	R-2000-38	5/9/2004	12/31/2002	
Stormwater	Interlocal Agreement	North Miami	Miami-Dade County	Professional services for National Pollutant Discharge Elimination System	R-2000-68	10/10/2000	11/16/2005	
Stormwater	Interlocal Agreement	North Miami Stormwater Utility	Miami-Dade County Stormwater Utility	Agreement on shared responsibilities.	R-99-23	3/23/1999	3/23/2004	Renewable every five years.
Public Safety	Mutual Aid Agreement	North Miami	School Board	Police services	R-98-30	7/14/1998	12/31/2001	
Disaster Mitigation	Interlocal Agreement	North Miami	Miami-Dade County	Receive DCA funding	R-98-31	7/14/1998	7/1/1999	
Disaster Mitigation	Interlocal Agreement	North Miami	Various municipalities	Joint completion of disaster mitigation strategy	R-98-32	7/14/1998	7/1/1999	
Parking	Interlocal Agreement	Miami-Dade County	North Miami	Disabled parking fine distribution	R94-16	3/22/1994	NA	
Film Permitting	Interlocal Agreement	North Miami	Miami-Dade County	Expedite film permitting.	R93-39	8/24/1999	9/15/1995	

Functional Category	Name of Agreement	First Party	Second Party	Services	Resol.	Effective Date	Length of Service	Comments
Stormwater	Interlocal Agreement	North Miami	Miami-Dade County Stormwater Utility	Allow city to collect stormwater utility fees.	R-93-52	10/26/1993	10/26/1998	

### Potential Intergovernmental Coordination Improvements

The City of North Miami has identified a number of intergovernmental issues, which are currently the subject of discussion between the City of North Miami and respective public agencies.

#### *Use of Existing School Facilities*

The City should continue to work with the School Board in order to promote wider application of the joint-use recreation concept. Mutual issues, such as avoiding conflicts in activity schedules and organized play rules, should continue to be coordinated.

#### *Affordable Housing*

As discussed in the Future Land Use and Housing Elements, affordable housing is a major issue within Miami-Dade County and the City of North Miami. The City is undertaking an aggressive strategy for developing new affordable housing and rehabilitation of existing housing. Nevertheless, the City understands that affordable housing is a regional issue and needs to be addressed on a regional basis. Miami-Dade County has established a Housing Affordability Task Force to address this issue on a countywide basis. Specific actions recommended to address affordable housing issues in North Miami include:

- **Coordination with Miami-Dade County's Task Force.** The City of North Miami should proactively work with Miami-Dade County's Affordable Housing Task Force to ensure that northeast Miami-Dade affordable housing initiatives are implemented concurrent with needs.
- **Coordination with Regional Agencies.** The City of North Miami shall participate in the South Florida Regional Planning Council's affordable housing committees as requested by the SFRPC.
- **Coordination with Appropriate Agencies.** Where appropriate, the City shall coordinate planning efforts with the Miami-Dade County's Housing Authority as well as appropriate federal and State agencies.

- **Coordination with State Departments.** The City shall coordinate siting and permitting activities impacting group home facilities with the State Departments of Health and Children and Families.

#### *Transportation*

The City can increase its coordination with Miami-Dade County and FDOT relating to regional traffic and community redevelopment utilizing Biscayne Boulevard, Dixie Highway and Interstate 95. Additional transit service to the City should also be addressed more intensively as recommended in the City's Transportation Master Plan. Specific actions recommended to address transportation issues include:

- **Coordination with Miami-Dade County Long-Range Plan for Transportation.** The City of North Miami shall participate in Miami-Dade County's transportation planning initiatives that integrate the transportation plans of Miami-Dade County with plan of all incorporated areas.
- **Coordinate with FDOT, MPO, DCA, SFRPC, and Other State and Regional Agencies.** The City of North Miami shall coordinate on a continuing basis with FDOT and the Miami-Dade County Metropolitan Planning Organization (MPO), particularly with regards to planned improvements to State roads, updates to the MPO's five-year improvement plan, and the State long-range plan for State roadway improvements impacting the City of North Miami. The City shall also coordinate with FDOT, DCA, SFRPC, and other state and regional agencies concerned with assessing traffic impacts of proposed development. This coordination shall be achieved through an agreement requiring these agencies to notify the City of any potential action, which may directly or indirectly impact the City of North Miami's transportation system.

#### *Hurricane Evacuation and Disaster Preparedness*

All portions of the City lying east of Biscayne Boulevard are within the Hurricane Evacuation Zone B pursuant to the County's hurricane evacuation plan. The

Miami-Dade County Office of Emergency Management (OEM) maintains a countywide disaster preparedness program. The Office of Emergency Management has divided the County into operation areas. Hurricane evacuation plans, shelter space allocations, and post-disaster recovery management plans should continue to be closely coordinated among the County and nearby municipalities within Miami-Dade County. Specific actions recommended to address disaster preparedness should include:

- **Coordinate with Miami-Dade County in Emergency Preparedness.** Coordinate with the Miami-Dade County OEM to ensure consistency with the County's Comprehensive Emergency Management Plan (CEMP) and the Miami-Dade Local Mitigation Strategy (LMS) currently under development and in updating hurricane evacuation shelter assignments. This update shall enable Miami-Dade County and the incorporated municipalities to plan for future population densities, which will neither adversely impact the efficiency of the evacuation plan nor increase evacuation times.
- **Implement a Local Hazard Mitigation Strategy.** The City shall adopt the County-wide Local Mitigation Strategy for hazard mitigation. Within two years of the effective date of the Plan the City shall evaluate and adopt a Post Disaster Redevelopment Plan to increase public safety and reduce damages and public expenditures.

#### *Conflict Mediation*

The City, pursuant to Chapter 163, Part II, F.S. and Chapter 9J-5, F.A.C., shall develop a program for conflict resolution. The following are specific actions recommended to address issues related to conflict mediation:

- **Informal Mediation Process.** The City of North Miami shall work within Miami-Dade County's established informal mediation process for solving intergovernmental coordination problems among local governments and other units of local governments providing services but not having regulatory authority over the use of land. The City of North Miami shall use

this informal mediation process to assist resolution of intergovernmental coordination problems.

- **South Florida Regional Planning Council's Mediation Process.** Where the City is unable to resolve intergovernmental conflicts through the Miami-Dade County structure, the City Council shall use informal mediation processes provided by the South Florida Regional Planning Council.

## REGIONAL PLANNING IMPLICATIONS

This Element has presented an inventory and analysis of entities with which the City of North Miami coordinates multi-jurisdictional issues surrounding growth, development, and resource conservation. In addition, the Comprehensive Plan: Data Inventory and Analysis for each functional element of the Plan identifies and analyzes issues having multi-jurisdictional impacts. Finally, the Comprehensive Plan: Goals, Objectives and Policies for each functional element of the Plan shall provide a pro-active approach for guiding the governmental coordination process in order to promote and further the resolution of intergovernmental coordination issues and/or conflicts.

The intergovernmental coordination issues involving land use, transportation, housing, public facilities, and resource conservation shall be coordinated with Miami-Dade County and the City of North Miami. In addition, intergovernmental coordination policy issues shall also be reviewed for consistency with the State of Florida Plan and South Florida Regional Planning Council Strategic Policy Plan.

## INTERGOVERNMENTAL COORDINATION WITHIN AREAS OF CRITICAL CONCERN

No Areas of Critical State Concern are located within the City of North Miami.

# EAR-Based Comprehensive Plan Amendments

## Volume II: Data, Inventory, and Analysis Economic Element





# 9. ECONOMIC ELEMENT

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## 9. ECONOMIC ELEMENT

### PURPOSE

The Economic Element is an optional element that is not required by Chapter 163 of the Florida Statutes. Although optional, it is an integral part of the North Miami Comprehensive Plan and is not an isolated set of policies. This element and other elements of the Comprehensive Plan form a system of development management, which includes the Comprehensive Plan, the land development regulations, and concurrency management.

There are several reasons why local communities, such as North Miami actively participate in economic development. The first and perhaps, one of the strongest reasons is to increase and diversify the tax base. Second, commercial and industrial properties pay more in taxes and consume less in services. Third, creating a city where residents can both live and work reduces commuting time, energy usage, air pollution, and increases quality of life. Also, providing jobs for residents that will increase overall household income is important.

### DEMOGRAPHICS

During the 1980's, there was a tremendous shift in the ethnic composition of Miami-Dade County's population. A continuing in-migration of Cuban, Haitian and Central and South Americans has occurred while the native population migrated out of Miami-Dade County, mostly to Broward County.

According to the 2000 Census, North Miami had a population of 59,880, representing a 20 percent population increase since the 1990 Census base line population of 49,998.

The City's racial/ethnic portrait has changed significantly over the past 10 years. In 1990, Blacks or African-Americans comprised 32 percent of the total population. However, in 2000 the Black or African-American population represented a majority, with 55 percent of the total population. It is also

significant that as of the 2000 Census, 31 percent of the population noted their ancestry as Haitian.

The Hispanic population (which can be of any race) increased its total numbers slightly from 12,279 in 1990 to 13,869 in 2000. However, in terms of percent of total population, their numbers have decreased from 25 percent in 1990 to 23 percent in 2000.

**Table 9-1: Racial and Ethnic Characteristics of Population**

Race	1990		2000	
	Number	Percent	Number	Percent
White	31,210	62 %	20,841	35 %
Black or African-American	15,041	32 %	32,867	55 %
Asian	1,206	2 %	1,152	2 %
Other	1,533	3 %	2,068	3 %
Multiracial (New category in 2000)	n/a		2,907	5 %

Source: U.S. Bureau of the Census, 2000 Decennial Census

Generally, the presence and growth from ethnically diverse households in North Miami provides an environment, which encourages investment and services to attract and serve these populations.

### Age

According to the Census 2000 information, the median age for the City of North Miami is 31.8 years, compared to 35.6 for the County. The City has a very young population, with 31 percent of the total population being under 19 years of age, and another 31 percent between 25 through 44 years of age. The City is getting younger, compared to 26 percent people under 20 years and 35 percent people between 25 to 44 years of age, from the 1990 census.

Table 9-2: Age of Population, 2000

Age - 2000	People	Percent
Under 9	9,451	15.78%
10-19 years	9,284	15.50%
20-24	4,827	8.06%
25-34	9,438	15.76%
35-44	9,609	16.05%
45-54	7,490	12.51%
55-59	2,479	4.14%
60-64	1,792	2.99%
65-74	2,888	4.82%
75-85	1,798	3.00%
85 and over	824	1.38%
<b>Total</b>	<b>59,880</b>	<b>100.00%</b>

Source: U.S. Census, 2000 Decennial Census, Summary File 3 (SF3)

Table 9-3: Age of Population, 1990

AGE -1990	People	Percent
Under 5 years	3,708	7%
5 to 17 years	7,642	15%
18 to 20 years	1,853	4%
21 to 24 years	3,090	6%
25 to 44 years	17,515	35%
45 to 54 years	4,639	9%
55 to 59 years	1,938	4%
60 to 64 years	2,076	4%
65 to 74 years	3,845	8%
75 to 84 years	2,701	5%
85 years and over	991	2%
<b>Total</b>	<b>49,998</b>	<b>100%</b>

Source: U.S. Census, 1990 Summary Tape File 1 (STF 1) - 100-Percent data

A younger population typically requires different social and recreational infrastructure and facilities. A plan must be in place to increase employment opportunities, create active recreation areas, develop community based programs for teens, and build additional schools and libraries, so that people are

not forced to migrate to satisfy their varying needs and livelihoods, but can maintain an adequate quality of life within the City.

### **Education**

The City of North Miami lags the County in terms of professional education. Approximately 16 percent of the people in the City have a bachelor's degree or higher compared to 21.7 percent for the County.

**Table 9-4: Educational Attainment 25 Years and Over, 2000**

<b>Educational Category</b>	<b>Population</b>	<b>Percent</b>
Less than 9th grade	5,078	14 %
9th to 12th grade, no diploma	6,925	19 %
High school graduate (includes equivalency)	9,382	26 %
Some college, no degree	6,999	19 %
Associate degree	2,225	6 %
Bachelor's degree	3,273	9 %
Graduate or professional degree	2,478	7 %
<b>Total</b>	<b>36,360</b>	<b>100%</b>

Source: US Census Bureau, Census 2000, Summary File (SF 3), DP-2, Profile of Selected Social Characteristics, 2000.

North Miami is host to two major four-year universities- Florida International University (FIU) and Johnson & Wales University (JWU). There may be a need for facilities specifically geared to the working adult.

### **Household Income**

According to the Shimberg Center for Affordable Housing, the median income for the Miami-Dade Primary Metropolitan Statistical Area (PMSA) in 2005 was \$46,350. This figure will be used here to identify very low, low, and moderate income households in North Miami. The following table defines very low, low and moderate incomes and the number of North Miami households that fit each category relative to the Miami-Dade median income.

Table 9-5: Very Low, Low, and Moderate Income Households

	Percent of Median Income (Miami-Dade PMSA)	Number of Households	Percent of Total Households
Very Low	<30	3,261	16%
Low	31-50	2,636	13%
Moderate	51-80	3,865	19%

Source: Shimberg Center for Affordable Housing

There were 20,389 households in North Miami in 2002 and of those households, 29 percent fit within the very low income and low income. Also in 2002, 37 percent of the North Miami households paid more than 30 percent of their income for housing, a primary indicator that the housing cost is a burden for these families. Considering the income level and the housing cost burden, the need for higher paying employment and affordable housing is significant in the City of North Miami.

## Employment

### *New Job Growth*

From 1995 to 2000, the retail and services sectors created nearly two-thirds of net new jobs during that period. Government employment also increased approximately 15 percent. Although the County's retail space market is perceived as somewhat overbuilt, retail employers continue to hire new employees in response to both population and tourism growth. The services sector benefits from the County's tourism traffic; however, small business expansion will also help to fuel the growth. (City of North Miami Economic Development Plan, Lambert Advisory, 2002.)

The total number of jobs forecasted in Miami-Dade County is projected to increase by approximately 12,500 annually from 1997 to 2007. The services sector will continue to lead the employment growth, the majority of which will be business services. Despite the nationwide setbacks, technology is anticipated to play an increasing role in the region's economy due to its proximity to Latin America. (Lambert Advisory, 2002)

Table 9-6: Employment Forecast (by Industry) 1997-2007

Industry	1997	Percent of Total	2007	Percent of Total	Percent Change 1997-2007
Agriculture & Mining	15,094	1.6%	16,276	1.5%	0.8%
Construction	33,844	3.5%	32,924	3.0%	0.3%
Manufacturing	75,478	7.8%	66,971	6.1%	1.2%
Trans., Comm. & Utility	83,300	8.6%	98,648	9.1%	1.7%
Wholesale Trade	81,946	8.5%	93,044	8.5%	1.3%
Retail Trade	171,395	17.7%	189,540	17.4%	1.0%
FIRE	67,221	7.0%	74,533	6.8%	1.0%
Services	302,878	31.3%	368,681	33.8%	2.0%
Government	135,351	14.0%	149,242	13.7%	1.0%
Total	966,507	100.0%	1,089,859	100.0%	10.3%

Source: Florida Bureau of Labor Statistics, ES-202 Reports, Lambert Advisory.

Relative to the City of North Miami, employment growth has been steady during the past five years, increasing slightly less than 1.0 percent annually during the period. Although the City's employment growth trailed that of the greater region, unemployment trends mirror that of the County, decreasing from 8.0 percent in 1995 to 6.9 percent in 2000.

A study of occupational licenses published by the City in 1998, pointed out the following trends:

- There is substantial business activity in the City, equally represented by the number of new and revoked occupational licenses.
- New and revoked licenses seem to occur in the same business categories --- Restaurants, Beauty/Hair Services, Clothing Stores, Computer Sales/Services, with apparently no major impact to the City's overall economic climate.
- There is no clear geographic pattern for either new licenses issued or revoked licenses. The data seems to indicate an equal distribution among the City's major business corridors.

- However, the constant “For Rent” signs displayed in the local storefronts, as a result of high business turnover, tend to project a negative image and give the impression that the City is constantly losing businesses.

The reoccurrence in the opening and closing of the same type of under-capitalized businesses may be a result of new entrepreneurs with limited managerial experience, housed in outdated spaces provided at “cheap rent” on a year-to-year lease basis, contributing to the perception of an unstable business environment.

Local industry strongly represents the film, video, and recording industries. The City's largest industrial area located north of 141 Street and adjacent to Biscayne Boulevard and the Florida East Coast Railway is the core of the Film, Video, and Recording Telecommunications Industrial Park with over 250 businesses related to the industry. Over 70 companies provide studio space, post-production facilities, sound stages, equipment rentals, camera operators, writers, producers, and music arrangers to the many productions taking place in North Miami every year. In addition, many other businesses provide support services such as legal, accounting, and catering.

Growth in overall employment and a loss in the number of establishments indicate that the existing business community in North Miami is continuing to grow. At the end of fiscal year 2001, there were 3,226 occupational licenses compared to 3,173 active occupational licenses in the City at the end of fiscal year 2005. Furthermore, the on-going expansion of institutional anchors in and around the City such as Johnson & Wales University and Florida International University will only help in the area's economic stability and growth.

North Miami's major employers include the following businesses:

- 50 State Security
- Florida International University
- Villa Maria Health Care
- Publix Super Markets
- Johnson & Wales University



- World Emblem
- Comtel Inc./PBS Channel 2
- Farrey's Wholesale Hardware
- Genesis Health Care
- A.E.S.P. Inc.
- Techno Coatings, Inc.
- Jewish Community Services
- TKO Apparel, Inc.

Source: Economic Development, City of North Miami Community Planning and Development, 2005.

## REAL ESTATE

A competitive analysis by real estate use (for each corridor) was completed in the City of North Miami Economic Development Plan that provides some indication of the redevelopment potential for the various areas throughout the City. Key findings by real estate use include:

### Office

The office market is relatively stable. For the City of North Miami, the office market is generally contained along Biscayne Boulevard and NE 125 Street (Downtown). The Biscayne Boulevard corridor has been experiencing relatively strong leasing rates in the range of \$17.00 per square foot (gross) and 91 percent occupancy. The NE 125 Street office market is characterized by a mix of smaller, older buildings and has been reporting leasing in the \$12.50 per square foot range with 79 percent occupancy. Overall, performance along the Biscayne Boulevard corridor coupled with the strong office market to the north (Aventura) portends well for office development at the Munisport site. Accordingly, there may be potential to draw limited office demand to the downtown area as indicated by the lower rental rates on NE 125 Street.

### Retail

All of the transportation corridors in North Miami are dominated by retail use. However, the opportunity to capitalize on retail as a catalyst for redevelopment in any of the corridors is limited. Biscayne Boulevard is a self-sustaining district that will improve with added enhancement from the proposed roadway improvements.

West Dixie Highway, State Road 7 and NE 119 Street all share one limiting element affecting the redevelopment process: physical characteristics of the parcels along the corridor lack enough depth to support a project of critical mass. The depth of the parcel size also limits a good site layout, specifically parking provisions. This is compounded by the fact that there is limited availability of vacant land to promote such development.

Relative to the downtown area, the solution to any retail success is a likely “non-retail” solution, such as encouraging parcel aggregation and mixed use will help creating a sense of place in the City. The opening of an Olympic Training Facility in the Central Business District (as part of the agreement with the developer of the Biscayne Landing development, also referred to as the Munisport site) will also attract customers to retail services.

Also, if multiple adjacent parcels could be acquired and some right-of-ways closed, further demand for retail could be accommodated. (Addendum to City of North Miami Economic Development Plan, Lambert Advisory, 2002.)

#### *For-Sale Residential*

The resale market continues to strengthen, increasing substantially in terms of volume and pricing; however, in the corridors examined, single-family home values were in the range of \$115,000 (or \$75 to \$80 per square foot) and condominium values are at \$50,000 (or \$50 per square foot) which is considered modest for the region. (Lambert Advisory, 2002.)

A new development at the Munisport site, Biscayne Landing, will provide 5,999 new residential units on that site. The developer is also required to provide a match of 6,000 affordable units throughout the City, new and rehabilitated.

#### *Rental Residential*

The Northeast Miami-Dade area, heavily influenced by the Aventura sub-market, is one of the strongest rental markets in the County with average rents nearing \$1,025 per month and occupancy at 95 percent. Within North Miami, the larger rental complexes (primarily situated within the eastern periphery) have a lower average rent than the overall Northeast Dade market, achieving rental rates in

the \$875 per month range and occupancy of 95 percent. Moreover, the level of activity in North Miami is approaching support for new rental development.

### **Industrial**

According to Beacon Council overall, the industrial market including multi-tenant and single-user facilities, is quite strong, with an estimated 2.8 percent vacancy range, with an average weighted rental rate of \$8.60 per square foot, which is an average rate for the surrounding area. .

**Table 9-7: Miami-Dade County industrial market 2007**

<b>Market</b>	<b>Total Inventory (MSF)</b>	<b>Direct Vacancy (%)</b>	<b>Direct Weighted Average Rental Rate (\$/SF)</b>
Central Miami-Dade	3,570,691	2.2	N/A
East Miami-Dade	3,561,914	6.3	\$10.00
Hialeah	35,695,752	7.0	\$6.43
Medley	21,964,934	4.4	\$9.14
Miami Airport	71,611,759	5.0	\$9.14
Miami Lakes	10,405,256	5.9	\$8.28
North Miami	30,157,646	2.8	\$8.60
South Central	14,936,678	6.2	\$7.98
South Dixie Highway	8,678,509	1.6	\$6.75
SW Dade	7,408,180	2.0	\$9.74
West Miami	4,530,842	1.0	\$9.88

Source: CB Richard Ellis, 1Q07 MarketView

## OVERRIDING ECONOMIC DEVELOPMENT GOALS

According to the Economic Development Plan, “if the City is able to push for the creation of a CRA [Community Redevelopment Area], it will provide for the broadest governmental powers and financing capabilities and therefore is considered the most appropriate for the redevelopment programs set forth herein. To this extent, there may be an opportunity to create a non-contiguous CRA whereby a “single” district may include the Munisport site and the downtown corridor; as such, development financing and subsequent incremental tax growth from the Munisport project may be utilized to directly support the Downtown district (and perhaps others as well).” (Lambert Advisory, 2002).

With an adopted CRA Plan in place and a development agreement in hand for the Munisport site, North Miami is on its way toward successful redevelopment. It is estimated that Biscayne Landing will contribute over \$6 billion in revenues to the City.

## CRA PLAN

Miami-Dade County approved the North Miami Community Redevelopment Plan in June 2005. The Community Redevelopment Plan states that “overcrowded, substandard, and deteriorating housing, land use conflicts, combined with the lack of business vitality of the City’s commercial core” led to the creation of a Community Redevelopment Plan. (Community Redevelopment Agency, Redevelopment Plan Phase I, 2005). An additional indicator of a poor economic condition was that over 50 percent of the City’s properties experienced a stagnation in their taxable value.

The approved plan includes a number of strategies that will foster economic development:

- Approve a mix of land uses supported by market conditions and a land use plan that provides densities, heights, mixed-use alternatives, commercial revitalization and circulation.

- A need for a market study of real estate market demands.
- A financial and relocation strategy to strengthen businesses and the Central business district.
- Establish a business development and marketing strategy for the commercial corridors.
- Create a sense of identity and purpose in the City Center [Central City District Node] with parks, plazas, pedestrian access, parking, and civic and cultural activities.
- Establish high-density urban residential and mixed-use projects within the City Center [Central Business Commercial/Central City District Node].
- Create a City-wide system of open space and parks with both passive and active areas, pedestrian ways and bikeways.
- To utilize and extend the Biscayne Landing development agreement to provide community facilities, project management, and financial commitments to implement the Redevelopment Plan.

The CRA offers financial incentives to owners/operators of businesses and/or the owners of commercial buildings located within the CRA boundaries, to complete a façade rehabilitation project through their Commercial Rehabilitation Program in order to help improve local commercial corridors. It also offers financial incentives through its Commercial Façade Beautification Program for minor repairs and/or improvement of properties/businesses to reduce the incidence of slum and/or blighting conditions.

## TECHNOLOGICAL SUPPORT FOR ECONOMIC DEVELOPMENT

Workshops with the North Miami City Council and North Miami residents revealed interest in advancing community technology through a citywide wireless internet connection and fiber optic network. A Citywide wireless internet connection would provide opportunities for more residents to have access to cyberspace and email communication, which are current information retrieval and communication standards. The fire optic network would allow for increased interbuilding communication allowing data to be transmitted digitally.

Additionally, residents were concerned about post-storm communication and the inability to use cellular phones. Investigation of cellular phone systems and post-storm coordination of cellular phone services should be conducted. Likewise, a Business Continuity and Disaster Recovery Planning training program for local businesses would mitigate negative impacts from storms and other disasters on the local economy.

## **WORKFORCE DEVELOPMENT**

Finally, expanding educational opportunities through the City would enhance the economic environment by preparing an educated workforce. The City should consider encouraging adult education, language classes, and college courses at storefront universities and libraries. The agreement with the developer of Biscayne Landing requires the developer to contribute toward expansion of the existing library and contributing to construction of a charter high school on NE 151<sup>st</sup> Street, which add to the facilities available for adult education.

North Miami is host to two major four-year universities: Florida International University (FIU) and Johnson & Wales University (JWU). The North Miami campus of FIU includes the School of Nursing, Journalism and Mass Communication and one of the top hospitality management programs in the country. JWU has 2,300 student enrolled at their North Miami campus in their College of Business, Culinary Arts College, and Hospitality College. JWU has a master plan approved by the City to expand their urban campus. FIU and JWU are also two of North Miami's top employers.

## **BUSINESS INCENTIVE PROGRAMS**

The current commercial façade program offers grants up to 50 percent of projects under \$350,000 and no more than \$45,000 per building. This program should continue as North Miami redevelops.

In addition to the commercial façade program, a section of the City is also a part of Miami-Dade County’s Enterprise Zones. An Enterprise Zone is a designated area that offers financial incentives to businesses that locate or expand there. Incentives include:

- Property Tax Abatement
- Refund of Impact Fees
- Enterprise Zone Property Tax Credit
- Qualified Target Industry
- Enterprise Zone Jobs Tax Credit
- Sales Tax Refund
- Federal Job Training Tax Credits

# EAR-Based Comprehensive Plan Amendments

## Volume II: Data, Inventory, and Analysis Capital Improvement Element





# 11. CAPITAL IMPROVEMENT ELEMENT

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# 11. CAPITAL IMPROVEMENT ELEMENT

## PURPOSE

The Capital Improvement Element, consisting of the Goals, Objectives, and Policies and the supporting Data, Inventory, and Analysis Report, has a critical role within the City's comprehensive planning process. It provides a general overview and discussion of the City's financial situation and sets the overall economic framework that evaluates the combined fiscal impact of all improvements specified in the Plan. The purpose of the CIE is threefold: to evaluate the need for future capital improvements for each type of public facility identified in the other elements of the Comprehensive Plan in order to maintain the adopted public facility levels-of-service (LOS) pursuant to State law; to provide for funding for such improvements by estimating the costs for which the City has fiscal responsibility, assessing the City's fiscal capability to finance and construct improvements, and adopting financial policies to guide the funding of improvements; and to schedule the funding and construction of improvements in a manner which ensures that public facilities are provided, as necessary, based upon the deficiencies identified in this Plan.

The CIE also has a key relationship to the Future Land Use Element through concurrency, which stipulates that facilities and services must be available at their adopted service standard concurrent with the impacts of development. Therefore, decisions concerning the planning of capital improvements and land use are directly correlated with each other. The CIE specifies guidelines for the future implementation of the City's Concurrency Management System (CMS) to be included in the Land Development Code.

## CAPITAL IMPROVEMENTS DATA REQUIREMENTS

This subsection presents an inventory of the public facility needs, existing revenue sources and funding mechanisms as they apply to the City of North Miami.

### Public Facility Needs

A summary of the public facilities needs identified in the Infrastructure, Transportation, Parks and Recreation Elements of this Comprehensive Plan are included below. Most of these projects are scheduled for funding in the 5-Year Capital Improvement Program (CIP), however, some projects will need to be scheduled in next year's Capital Improvement Program.

#### *Potable Water Facility Needs*

Based on the data and analysis provided in the Potable Water Sub-Element, the Winson Water Treatment Plant is planned to undergo Phase I and Phase II modernization by 2010 and 2015, respectively. As stated in the Infrastructure Element, however, if Phase I is not completed by the year 2010, supplemental water purchases (up to 6 MGD) from Miami-Dade County will meet projected demand. It is important to realize that the Phase I improvements scheduled to be completed in 2010 will not meet 2015 projected demand and therefore, if the City of North Miami delays construction of Phase I improvements, the City must immediately move forward with plans equivalent to Phase II capacity improvements by the year 2015.

**Table 11-1: Potable Water Facility Needs through the short and long term planning horizons**

<b>Potable Water Facility Needs</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>
Projected Potable Water Demand	12.9 MGD	13.4 MGD	15.7 MGD
Existing Plant Capacity (9.3 MGD) + Purchases from Miami-Dade County (6.0 MGD)	15.3 MGD	15.3 MGD	9.3 MGD*
Winson Plant Capacity after modernization (Phases I and II in 2010 and 2015, respectively)	15.3 MGD	13.75 MGD	17.25 MGD

\* Miami-Dade County will supply up to 6 MGD of potable water to the City of North Miami until the year 2015.

#### *Sanitary Sewer Facility Needs*

Based on data and analysis provided in the Sanitary Sewer Sub-Element, the City of North Miami is projected to maintain its Level of Service through the years of 2010 and 2015 without any additional capital improvements. Sanitary Sewer Line upgrades, pump station replacements, and various rehabilitation projects

have been identified, and are currently funded in the 2008-2012 Capital Improvement Program. As identified in the Infrastructure Element, a Sanitary Sewer Master Plan will need to be developed in the near future.

#### *Solid Waste Facility Needs*

The County's solid waste level of service will be maintained through the planning period with operation of the countywide solid waste management system in Miami-Dade County. The ability of that system to meet future solid waste needs at the adopted LOS has been shown in this data inventory and analysis report. Since the system is entirely owned and operated by the County, no solid waste facilities or improvements are planned by the City for the foreseeable future. However, the City will coordinate with Miami-Dade County to educate its residents and businesses to encourage their active participation in the waste recycling and chemical collection programs. No improvements are planned by the City of North Miami; however, to ensure LOS standards are met in the future, the City will need to take a more active role in coordinating with Miami-Dade County to educate its residents and businesses on the importance of their active participation in the waste recycling and chemical collection programs.

#### *Stormwater Facility Needs*

In October of 2000, with the assistance of PBS&J consultants, the City prepared a Phase II Stormwater Master Plan to mitigate areas of chronic flooding, address stormwater quality concerns, and bring the City in compliance with the National Flood Insurance Program's Community Rating System guidelines for Stormwater Management Master Plans. Contained in the Phase II Stormwater Master Plan were recommended capital improvements needed to meet the DERM LOS standards for local roads (reduce the street flooding for the 5-year 24-hour storm to below the centerline of the roadway). At this time, the City is in the process of constructing projects in the Arch Creek South Drainage Basin and other various locations throughout the City.

#### *Parks and Recreation Facility Needs*

Based on data and analysis provided in the Parks and Recreation Element, the City of North Miami is projected to exceed its level of service through the planning period without any additional capital improvements. However, the City feels that parks and recreation are an important component in maintaining a high quality of

life for its residents and has committed funds for improving its existing facilities in the 2008-2012 Capital Improvement Program. The City has also developed a Parks, Recreation, and Open Space Master Plan to help guide future park projects.

*Transportation Facility Needs*

Under the City’s initiative, there is no traffic concurrency requirement for development applications within the TCEA boundaries. In return, the City is actively pursuing the transportation mobility strategies aimed at creating a sustainable development pattern within the City supportive of transit and other non-motorized travel modes (i.e. bicycle and pedestrian linkages listed in the Transportation Element’s Goals, Objectives, and Policies). The City has expanded the bicycle path system within the FIU Campus and the Oleta River State Park. The City has been working with the Florida Department of Transportation on several safety initiatives on major state roads. The City has also been working with several neighborhoods on traffic calming efforts. The local transit circulator was introduced in 2004 that connects the City’s residential areas to the major commercial destinations and schools. The City has included within the Capital Improvements Program a number of transportation projects that are aimed at improving mobility within the City.

**Table 11-2: Level of Service (LOS) Standards for the City of North Miami**

Public Facility	Level of Service Standard
Potable Water <sup>a</sup>	<p><u>User LOS</u> - The system shall maintain the capacity to produce and deliver 165 gallons per capita per day.</p> <p><u>Water Storage</u> - The City shall provide total storage capacity equal to no less than 15 percent of the service area average daily demand.</p> <p><u>Water Pressure</u> - The City shall maintain a minimum water pressure at the water meter of 30 pounds per square inch.</p> <p><u>Water Quality</u> - Water quality shall meet all federal, state, and county standards for potable water.</p>
Sanitary Sewer <sup>a</sup>	<p><u>User LOS</u> - The system shall maintain the capacity to collect a minimum of 100 gallons per capita per day and a maximum of 200 gallons per capita per day.</p>

Public Facility	Level of Service Standard
Stormwater Drainage	<p><u>Water Quality Standard</u> - Stormwater facilities shall meet the design and performance standards established in Chapter 62-25, Rule 25.025, Florida Administration Code (FAC), with treatment of the runoff from the first one inch of rainfall onsite to meet the water quality standards required by Chapter 62-302, Rule 862-302.500, FAC.</p> <p><u>City-owned system</u>- Maintain 5-year design storm with a 24-hour duration.</p> <p><u>Private systems</u>-Minimum 25-year design storm with a 72-hour duration for new development.</p>
Solid Waste <sup>a</sup>	<p><u>Service population</u>: Collection of 4.5 lbs of solid waste per capita/year.</p>
Recreation/Open Space	<p>The City shall provide a level of service for parks, recreation, and open space of 2.75 acres per 1,000 residents.</p>
Transportation: FIHS Roadways	<p>All Florida Intrastate Highway System (FIHS) roadways must operate at LOS D or better (at peak hour), except where 1) exclusive through lanes exist, roadways may operate at LOS E (at peak hour), or 2) such roadways are parallel to exclusive transit facilities or are located inside designated transportation concurrency management areas (TCMA's), roadways may operate at LOS E (at peak hour). Constrained or backlogged limited and controlled access FIHS roadways operating below the foregoing minimums must be managed to not cause significant deterioration.</p>
Transportation: County Roadways within the Urban Development Boundary (UDB), but Outside the Urban Infill Area (UIA)	<p>All major County roadways must operate at LOS D or better, expect where mass transit service having headways of 20 minutes or less is provided within ½ mile distance, then a roadway shall operate at or above LOS E at peak hour. When extraordinary transit service such as commuter rail or express bus service exists, parallel roads within ½ mile shall operate at no greater than 120 percent of their capacity at peak hour.</p>
Transportation: City Streets	<p>Roadways with no mass transit service- LOS E                      Roadways with mass transit with headways of 20 minutes or less- LOS E+20                      Roadways with extraordinary transit- LOS E+50</p>

Notes:

<sup>a</sup> These public facilities and services are provided by Miami-Dade County and are subject to the level of service standards established in the Miami-Dade County Comprehensive Development Master Plan (CDMP). The City of North Miami will adopt these same level of service standards to be consistent with the CDMP, as amended.

**Medical Facilities**

No major health care facilities are located within the City. Nearby hospitals include North Shore Hospital in Miami, Aventura Hospital in Aventura, and Parkway Regional Medical Center in North Miami Beach.

The closest hospital is the North Shore Medical Center approximately 2.6 miles from center of North Miami. There are seven hospitals located outside the City but within a 3-mile radius.

**Table 11-3: Miami-Dade County Hospitals within 3 miles of the City of North Miami**

No.	Name	Address	City	Beds
1	North Shore Hospital	1100 N W 95TH ST	Miami	357
2	Aventura Hospital	20900 Biscayne Boulevard	Aventura	407
3	Parkway Regional Hospital	160 NW 170TH ST	North Miami Beach	412

Source: North Miami Evaluation and Appraisal Report, 2005, Mapquest, 2006.

### **Schools**

There are seven public schools and eight private schools in the City of North Miami.

#### *Elementary Schools*

Four elementary schools are located within the City of North Miami: Benjamin Franklin Elementary, W.J. Bryan Elementary, Natural Bridge Elementary, and North Miami Elementary. All primarily serve the City of North Miami student residents.

#### *Middle Schools*

North Miami Middle is the only public, non-charter middle school located within the City of North Miami.

#### *High Schools*

North Miami Senior High is the only public, non-charter high school located within the City of North Miami.



*Charter Schools*

There are presently 2 charter schools located within the City of North Miami:

- The ASPIRA North Youth Leadership Charter School helps youth who want to improve their educational outcomes, reduce the learning gaps of basic skills and want to further their educational achievement.
- Sunshine Academy may serve a maximum of 150 students in grades Kindergarten through five in its first year of operation; however as of August 15, 2005, Sunshine Academy had an enrollment of 100 students.

*Private Schools*

The following private schools are located in North Miami:

- |  |                                  |
|--|----------------------------------|
| ▪ Bethany Covenant School (pre-K - 5)                      | 125 NE 119 <sup>th</sup> Street  |
| ▪ Beth Moshe Congregation (pre-K - K)                      | 2225 NE 121 <sup>st</sup> Street |
| ▪ Holy Cross Lutheran Christian Day School<br>(pre-K2 - 8) | 650 NE 135 <sup>th</sup> Street  |
| ▪ Holy Family Catholic School (pre-K - 8)                  | 14650 NE 12 <sup>th</sup> Avenue |
| ▪ Miami Union Academy (pre-K - 12)                         | 12600 NW 4 <sup>th</sup> Avenue  |
| ▪ Montessori School of North Miami (pre-K - 8)             | 695 NE 123 <sup>rd</sup> Street  |
| ▪ North Miami Baptist Academy (pre-K - K)                  | 12905 NE 8 <sup>th</sup> Avenue  |
| ▪ St. James Catholic School (pre-K - 8)                    | 601 NW 131 <sup>st</sup> Street  |

*Future Schools*

In order to accommodate an increase in population due to the construction of Biscayne Landing, a number of new schools will be constructed. Miami-Dade Public Schools has committed to the following new schools:

- The David Lawrence Jr. K-8 Center (S/S QQ1), located at 15000 Bay Vista Boulevard, was completed in Fall 2006. This facility will have a maximum capacity of 1,593 student stations.
- A new 2,020-seat K-8 center (1,220 elementary; 800 middle) is to be built on the existing North Miami Senior High School site owned by the Miami-Dade School Board with recreation facilities constructed to the east at the Future Cagni Park. This project, including development of the new park, is fully funded at \$36.5 Million. The school has a projected August 2008

opening while the recreation facilities at the Future Cagni Park have a projected opening date of August 2010.

- A new 1,560-seat charter senior high school called Biscayne Landing High School is to be constructed on land owned by the City immediately adjacent to the Miami Athletic Stadium located in the vicinity of Biscayne Landing under a long-term lease agreement between the Miami-Dade School Board and the City. The school is fully funded at \$42.5 Million and is scheduled to be completed by the August 2008 school year.
- A replacement for North Miami Senior High School (S/S BBB-1) will be constructed on a 17-acre site just south of the existing high school, comprised of approximately 13.9-acres of City-owned land and approximately 3.7-acres of Miami-Dade School Board-owned land. This project requires the relocation of the existing Cagni Park, a City-owned facility which is currently used by the District during school hours under an existing agreement, as well as the demolition of the existing City Library, City Community Center and the existing 51 year old North Miami Middle School facility. This project is fully funded at \$93 Million and will have a maximum capacity of 3,661 student stations projected opening for the August 2009 school year. In accordance with the Munisport Development Agreement between the City and the developer of Biscayne Landing and as part of the CRA Redevelopment Plan, the City plans to make capital improvements including a new City library, an Olympic Training Facility, Olympic sized swimming pool, and a new community center immediately east of the proposed school.

### **Existing Revenue Sources and Funding Mechanisms**

The City of North Miami utilizes a diversified and stable revenue system to implement the financing administration, operations, and capital improvements required to efficiently maintain City functions. This section describes the revenue sources and funding mechanisms currently used by the City. The City of North Miami's budget presently consists of five categories: General Fund, Special Revenue Funds, Debt Service Funds, Enterprise Funds, and Internal Service Funds. Stormwater Fund, Transportation Fund and Capital Projects Fund. Table 11-4 shows the City of North Miami's General Fund Summary for the years 2004-2006.

Table 11-4: City of North Miami General Fund Summary for FY 2004-2006

Category/Program	Actual Revenue FY04	Adopted Budget FY05	Estimated Revenue FY05	Adopted Budget FY06	Increase/ (Decrease)
<b>General Fund:</b>					
Total Ad Valorem Taxes	\$ 13,647,612	\$ 15,644,500	\$ 15,502,822	\$ 17,650,536	\$ 2,006,036
Local Option Gas Tax Trust Fund	\$ 882,228	\$ 837,888	\$ 899,066	\$ 908,407	\$ 70,519
Total Franchise Fees	\$ 2,841,720	\$ 2,623,808	\$ 2,941,620	\$ 2,744,000	\$ 120,192
Total Utility Services	\$ 2,458,734	\$ 2,473,952	\$ 2,273,991	\$ 2,401,450	\$ 75,502
Total Communications Service Tax	\$ 1,729,145	\$ 1,634,926	\$ 1,800,000	\$ 1,750,000	\$ 115,074
Total Licenses and Permits	\$ 1,348,970	\$ 1,492,650	\$ 1,964,938	\$ 1,572,700	\$ 80,050
Total Federal Grants	\$ 1,428,154	\$ 267,477	\$ 347,493	\$ 892,813	\$ 625,336
Total State Grants	\$ 131,419	\$ 822,000	\$ 481,834	\$ 769,872	\$ (52,128)
Total State Shared Revenues	\$ 5,322,084	\$ 5,036,070	\$ 5,562,835	\$ 5,529,197	\$ 493,127
Total Shared Revenues - Local Units	\$ 132,578	\$ 71,000	\$ 107,000	\$ 97,000	\$ 26,000
Total Private Grants			\$ 4,580		
Total Charges for Services	\$ 616,651	\$ 589,167	\$ 631,313	\$ 605,839	\$ 16,672
Total Fines and Forfeitures	\$ 371,845	\$ 799,790	\$ 277,394	\$ 278,700	\$ (521,090)
Total Miscellaneous Revenues	\$ 1,724,157	\$ 674,825	\$ 675,316	\$ 1,294,807	\$ 619,982
Total Non-Revenues	\$ 5,864,204	\$ 9,409,545	\$ 11,250,746	\$ 11,907,129	\$ 2,497,584
Total Transfers Out	\$ (315,000)	\$ (329,236)	\$ (329,236)	\$ (243,039)	\$ 86,197
<b>Total General Fund</b>	<b>\$ 38,184,501</b>	<b>\$ 42,048,362</b>	<b>\$ 44,391,712</b>	<b>\$ 48,159,411</b>	<b>\$ 6,111,049</b>
<b>Special Revenue Funds:</b>					
Total CRA Fund				\$ 2,470,828	\$ 2,470,828
Total C.D.B.G. Entitlement Fund	\$ 567,151	\$ 3,266,268	\$ 855,006	\$ 3,458,756	\$ 192,488
Total Home Investment Partnership Fund	\$ -	\$ 147,155	\$ -	\$ 1,697,074	\$ 549,919
Total State Housing Initiative Program Fund	\$ 498,784	\$ 513,653	\$ 653,036	\$ 931,946	\$ 418,293
Total Police Training Fund	\$ 9,245	\$ 9,142	\$ 15,476	\$ 16,014	\$ 6,872
Total Law Enforcement Trust Fund	\$ 210,101	\$ 215,868	\$ 319,258	\$ 173,517	\$ (42,351)
Total Federal Forfeiture Fund	\$ 339	\$ 904	\$ 11,285	\$ 6,851	\$ 5,947
Total Law Enforcement Block Grant Fund	\$ 82,370	\$ 249,692	\$ 166,293	\$ 18,810	\$ (230,882)
Total Justice Administration Grant				\$96,020	\$ 96,020
Total Downtown Incentives Fund	\$ 96	\$ 20,978	\$ 23,151	\$ 10,000	\$ 10,978
Total Multi-Family Rehab Program		\$ 507,500			\$ 507,500
Total Biscayne Boulevard Improvement Fund	\$ 16	\$ 6,180	\$ 6,190	\$ 6,180	\$ (6,180)
Total 1/2 Cent Transportation Surtax Fund	\$ 1,750,630	\$ 3,637,388	\$ 4,182,987	\$ 4,300,461	\$ 663,073
Total Landfill Closure Fund	\$ 615,402	\$ 32,588,405	\$ 32,730,704	\$ 22,481,781	\$ (10,106,624)
<b>Debt Service Funds</b>					
Total F.M.L.C. - Series 2002A - G.O. Debt Fund	\$ 422,091	\$ 420,895	\$ 429,097	\$ 426,105	\$ 426,105
Total Pension Obligation Bond Fund	\$ 1,208,515	\$ 1,206,233	\$ 1,205,219	\$ 1,199,053	\$ (7,180)
<b>Capital Projects Funds:</b>					
Total City of Progress Capital Improvement Fund	\$ 9,754	\$ 117,841	\$ 480,970	-	\$ (117,841)
Total E May Avil Library Fund	\$ 1,063	\$ 16,864	\$ 17,145	\$ 50,292	\$ 33,428
Total Transportation Gas Tax Fund	\$ 342,862	\$ 975,221	\$ 1,121,344	\$ 1,195,632	\$ 220,411
Total Safe Neighborhood Parks Fund	\$ 54,098	\$ 350,000	\$ 1,275	\$ 377,475	\$ 27,475
<b>Enterprise Funds:</b>					
Total Water and Sewer Revenue Fund (FEMA Reimbursement)	\$ 5,420,366	\$ -	\$ 24,815,525	\$ -	\$ -
Total Water & Sewer Operation & Maint. Fund	\$ 12,015,263	\$ 18,515,340	\$ (6,518,478)	\$ 25,238,271	\$ 4,464,840
Total Water and Sewer Revolving Fund	\$ 372,250	\$ 2,283,791	\$ 1,839,647	-	-
Total W & S Rev. Bonds/Interest Sinking Fund	\$ 26,883	-	-	-	-
Total Water Fire Flow Demand Fund	\$ 47,579	\$ 3,510,943	\$ 734,443	\$ 891,701	\$ (2,619,242)
Total Solid Waste Services Fund	\$ 6,382,066	\$ 6,180,340	\$ 7,795,719	\$ 8,555,664	\$ 2,375,324
Total Stormwater Utility Fund	\$ 7,028,908	\$ 6,343,768	\$ 6,014,964	\$ 6,668,197	\$ 379,029
<b>Internal Service Funds:</b>					
Total Risk Management Fund	\$ 2,022,015	\$ 7,066,493	\$ 5,439,412	\$ 5,958,692	\$ 1,107,801
Total Fleet Management Fund	\$ 3,247,402	\$ 4,870,427	\$ 5,238,725	\$ 510,710	\$ (320,981)
Total Health Insurance Trust Fund	\$ 112,901	\$ 6,142	\$ 5,857	-	\$ 6,142
<b>Total All Funds</b>	<b>\$ 80,632,651</b>	<b>\$ 136,075,793</b>	<b>\$ 131,975,962</b>	<b>\$ 139,493,261</b>	<b>\$ 3,944,761</b>

Source: City of North Miami Annual Budget 2005-2006.

*General Fund Revenue Sources*

- **Ad Valorem Taxes-Real and Personal Property.** These are taxes on nonexempt real and personal property according to a millage rate. The FY05 ad valorem tax rate levied by the City of North Miami for municipal services was 8.7322 mills. At the end of FY05, the assessed value of property was estimated to be \$2.3 billion, an increase of \$366 million over the previous year. The City collected an estimated \$15.5 million in FY05.
- **Local Option Gas Tax.** These taxes are combined in the City's budget as the "Local Option Gas Tax". The "six cent" tax is levied on motor and diesel fuel and distributed to the City by the State based upon a predetermined formula that includes weighted population ratios and centerline miles. Proceeds of this tax must be used on transportation expenditures including public transportation operations and maintenance, roadway and right-of-way maintenance, roadway and right-of-way drainage, street lighting, traffic signals and signs, bridge maintenance and operation, and debt service for transportation capital projects.

The "three cent" tax is also levied on motor and diesel fuel and distributed to the City by the State. Proceeds of this tax must be used on transportation expenditures needed to meet the requirements of the capital improvements element of the Comprehensive Plan.

In FY2005, the City expects approximately \$899,066 from the Local Option Gas Tax.

- **Utility Taxes.** North Miami's utility taxes include taxes on electricity, gas water, and fuel oil. In FY06, \$2.3 million are estimated to be collected, a slight decrease from \$2.5 in FY04.
- **Franchise Fees.** These common local fees are charged to service providers for an exclusive or non-exclusive right to operate within the municipal boundaries of the City and are levied on a percentage of gross receipts basis. The most significant portions of the franchise fees are the fees collected from Florida Power and Light (FPL). In FY04, the total

franchise fees collected were \$2.8 million and were expected to increase slightly in FY05 to \$2.9million.

- **State Shared Revenues.** This funding category consists of four (4) separate sources. They are as follows:
  - State Revenue Sharing: These dollars are provided to the City by the State based on a predetermined allocation methodology. In FY04, the City received \$1.69 million of State Revenue Sharing and is expected to collect \$1.88 in FY05.
  - Mobile Home Licenses: The owner of a mobile home who does not own the lot or land on which the mobile home is situated is required to pay the annual license tax under Chapter 320, F.S. In FY04, the City received \$2,181 from these fees. The City expects to collect \$2,000 for FY05.
  - Alcoholic Beverage Licenses: Section 561.568 of the Florida Statutes describes the levy, distribution and use restrictions associated with alcoholic beverages. This amounted to \$17,500 in FY04 and the City expects to collect \$16,000 in FY05.
  - Local Government Half-Cent Sales Tax: Use of these tax revenues is unrestricted. Chapter 82-154 of the Florida Statutes describes the levy, distribution and use restrictions associated with the local government half-cent sales tax. This tax generates the largest amount of state-shared revenue. In FY 2004, the City collected \$3.6 million in revenues from this source and was expected to collect \$3.66 million in FY05.
- **Licenses, Permits and Service Charges.** These revenues serve to offset City staffing costs for the services provided. In FY04, license and permit fees were \$1.3 million and were expected to increase to \$1.9 in FY05.
- **Grants.** The City of North Miami received \$1.4 million in federal grants in FY04 including funding for sidewalks through the Federal Highway Administration funding for police services, and FEMA reimbursements. Total federal grants is estimated to be \$347,493 in FY05.

State grant funding constitutes \$481,834 of the FY05 estimated revenue, a large portion of which are grants for the library.

- **Shared Revenues.** Shared revenues constituted \$5.3 million in funds in FY04. Collected Shared revenues are expected to increase to \$5.6 in FY04.
- **Fines and Forfeitures.** Fines include code enforcement fines, disabled parking fines, and library fines among others. These funds constitute \$314,845 of the FY04 General Fund. They are expected to increase to \$277,394 in FY05.
- **Miscellaneous Revenues.** This set of revenues includes interest, lease payments received, and library donations. This constituted \$1.72 million of the FY04 budget. One million of this resulted from the Biscayne Landing lease. Miscellaneous revenues are estimated as \$675,318 in FY05.
- **Non-Revenues.** Non-revenue funds come from contributions from enterprise funds, advances from grants such as the CDBG and the Law Enforcement Trust Fund. Non-revenues made up \$5.86 million of the General Fund in FY04 and were expected to increase to an estimated \$12 million in FY05.
- **Transfers Out.** Transfers out include SHIP program and Solid Waste Services Funds. These transfers reduced the General Fund by \$315,000 in FY04 and were expected to reduce the fund by \$243,039 in FY05.

#### *Special Revenue Funds*

- **CRA Fund.** The Community Redevelopment Agency collects tax increment financing (TIF) for projects within the Community Redevelopment Agency. The CRA was created in June of 2005 and has received TIF revenue for FY 2005-06 in the amount of \$2.47 million and for FY 2006-07 in the amount of \$6.64 million.

- **CDBG Entitlement Fund.** City is expecting funding from the CDBG Entitlement Fund to increase from \$567,151 in FY04 to \$855,006 in FY05.
- **State Housing Initiative Program (SHIP) Fund.** The City collected \$498,784 in SHIP program funds and is expecting to receive \$653,036 in funding for FY05.
- **½ Cent Transportation Surtax Fund.** In 2002, Miami-Dade County voters approved a ½ cent tax for transportation related projects such as sidewalk repairs. Allocations to local municipalities are based on population. This fund provides \$1.75 million in funding for transportation projects. It is expected to increase to \$4.18 million in FY05.

#### *Enterprise Funds*

- **Water and Sewer Revenue Fund.** The Water and Sewer fund received FEMA reimbursements of \$5.42 million in FY 04 and \$24.8 million in FY05.
- **Water and Sewer Operation and Maintenance Fund.** The City is projecting a loss of \$3.5 million and proposing increasing fees. This fund was expected to collect \$12 million in revenues in FY04 and is expected to lose \$6.5 million on FY 05.
- **Solid Waste Services Fund.** This fund collected \$6.38 million in revenues in FY04 and was expected to see a slight decrease to \$6 million in FY05.
- **Stormwater Utility Fund.** Both Federal and State law mandate that local governments develop regulations for the permitting of stormwater discharge (“Clean Water Act”) and establish stormwater management programs (“Florida Air and Water Pollution Control Act”). The City of North Miami’s Stormwater Utility Fund is a user-fee-supported Enterprise Fund intended to develop a Stormwater Master Plan for the City and construct stormwater facilities as needed throughout the City.

In December 2004, Stormwater rates were increased from \$2.10 to \$4.65 per household to cover annual Stormwater operations. The increase did

not cover the entire projected loss for that fiscal year or the subsequent year, FY 05. This fund collected \$7 million in FY04 and was expected to collect \$6 million in FY05. The City is considering increasing the rate from \$4.65 to \$4.93 to cover the projected deficit.

*Capital Projects Fund Revenues*

The Capital Projects Fund, supported by General Fund Operating Transfers, is used to account for all resources used towards the acquisition or construction of major capital facilities, excluding infrastructure financed by special assessment or enterprise funds. It is established for those Capital Improvement Projects that are funded through transactions such as debt issuance, bond anticipation notes, special assessments or grant proceeds.

Table 11-5 provides a list of potential federal grant sources that could be accessed by the City of North Miami. Additional grants are administered by the State of Florida with State executive departments acting as “pass-through agencies” for federally-funded project grants. The U.S. Department of Transportation's "TEA-21" Transportation Program is a good example of a multi-level funding program which is available on a competitive/need basis. These funds are passed through the Florida Department of Transportation and administered by the County's MPO Program, which the City can access through formal application.

**Table 11-5: Federal Grants and Programs Available to City of North Miami**

Administering Federal Agencies	Program Titles
Department of Commerce and Economic Development Administration	<ul style="list-style-type: none"> <li>• EDA Public Works Program</li> <li>• Planning Programs for State and Urban Areas</li> <li>• Local Technical Assistance Program</li> </ul>
Department of Health and Human Services	<ul style="list-style-type: none"> <li>• Community Initiative Programs</li> <li>• Community Health Centers</li> </ul>
Department of Housing and Urban Development	<ul style="list-style-type: none"> <li>• Youthbuild</li> <li>• Family Investment Centers</li> </ul>
Department of Justice	<ul style="list-style-type: none"> <li>• Byrne Discretionary Grant Program</li> <li>• Community Policing Discretionary Programs</li> <li>• Discretionary Grant Program</li> </ul>
Department of the Interior	<ul style="list-style-type: none"> <li>• Urban Park and Recreation Recovery</li> </ul>



Administering Federal Agencies	Program Titles
	Program
Department of Transportation	<ul style="list-style-type: none"> <li>• Intermodal Surface Transportation Efficiency Act (ISTEA)</li> </ul>
Environmental Protection Agency	<ul style="list-style-type: none"> <li>• Environmental Equity Grants</li> <li>• National Pollution Discharge Eliminate System</li> <li>• Eco-Industrial Parks and Environmental Technology Initiatives</li> </ul>
Small Business Administration	<ul style="list-style-type: none"> <li>• One Stop Capital Shop</li> </ul>

Source: "Catalog of Federal Domestic Assistance," 2001 Government Printing Office, Washington, DC

*Other Potential Revenue Sources*

- **Special District Assessments.** Special assessments may be levied against those who directly benefit from a new service or facility. Funds collected from such assessments are used to finance the service or facility benefiting a special group, need or area.
  
- **Bonds.** City has the ability to issue bonds in order to finance capital improvements within the municipality. (Information on bonds requested from the Finance Department.)
  - General Obligation Bonds. These bonds are backed by the full faith and credit of a local government and are required to be approved by voter referendum. General obligation bonds offer lower interest rates than other bonds since they are secured by the taxing power of the government. Revenues collected from ad valorem taxes are generally used to service the government’s debt.
  
  - Special Revenue Bonds. Revenue bonds, unlike general obligation bonds, are financed by those directly benefiting from the capital improvement. Revenue obtained from the issuance of these bonds is used to finance publicly-owned facilities, such as stormwater projects. Charges collected from the users of these facilities are used, in turn, to retire the bond obligations. In this respect, the capital project is self-supporting. Interest rates tend to be higher than for general obligation bonds, and issuance of the bonds may

be approved by the City Council without voter referendum. User fees collected are retained in a special fund to repay debt service. Similarly, the borrowed funds are maintained in a separate fund earmarked for the specific improvements for which the funds were borrowed.

- Industrial Revenue Bonds. This type of bond is issued by a local government, but is actually assumed by companies or industries that use the revenue for construction of plants or facilities. The attractiveness of these bonds to industry is that they carry comparatively low interest rates due to their tax-exempt status. The advantage to the local government is that the private sector is responsible for retirement of the debt and that new employment opportunities are created in the community.

Policies regarding debt management are essential to effective financial management. One typical policy that is used to manage debt is to limit the government's total debt service expenditures to a specific percentage of its total revenue. This ratio measures the relative burden that total debt service costs bear to the General Fund expenditures as a whole. Research of other municipalities with policies limiting the ratio of total debt service to total revenue shows that ratios of between 5 percent and 30 percent are used. The credit rating industry generally considers net debt service exceeding 20 percent of operating expenditures a potential problem.

Another typical policy that is used to manage debt is to limit the maximum ratio of outstanding capital indebtedness to property tax base. Research of other municipalities with policies limiting the ratio of outstanding capital indebtedness to property tax base shows that ratios of between 2½ percent and 20 percent are used; however, ratios in the range of 3 percent to 5 percent are considered acceptable.

## **CAPITAL IMPROVEMENT ANALYSIS REQUIREMENTS**

This subsection presents an analysis of the fiscal implications of the identified capital improvement needs within the City of North Miami. A summary of local practices to guide the timing and location of construction and/or extension of

public facilities and services needed to keep pace with new development are also included. These capital improvements are identified to continue to meet minimum level of service standards.

### **Current Local Practices That Guide Capital Improvements**

Current local practices that guide the timing and location of construction, extension or increases in capacity of each public facility system are detailed below.

#### *Level of Service Standards*

Level of Service (LOS) is a performance measurement used to evaluate the extent to which a public facility or service satisfies the demands placed on that system. LOS indicates the capacity per unit of demand of each public facility. They are, in short, a summary of existing or desired public facility conditions.

A level of service “standard” sets the minimum expectations for performance of a particular public facility or service that is maintained by a governmental agency. The State of Florida typically monitors level of service for potable water, sanitary sewer, stormwater drainage, solid waste, recreation and open space, transportation, and public schools as addressed in local government comprehensive plans. These standards become the criteria used to evaluate and the adequacy of new development applications and determine the appropriateness of issuing development orders or permits to ensure that adequate facility capacity will be maintained and available for future development. LOS standards affect the timing and location of development by encouraging development in areas where facilities have excess capacity, and not permitting development unless needed facilities and services are provided. Such provision and development may occur in a phased sequence over time.

### **Potable Water**

The Winson Water Treatment Plant is planned to undergo a modernization that will allow water from the Floridian Aquifer to be withdrawn and treated through Reverse Osmosis (RO) technology. The shift to the Floridian Aquifer will allow the City of North Miami to meet its water demands without making additional withdrawals from the Biscayne Aquifer or having to permanently rely on water supplements from Miami-Dade WASD. The modernization and expansion will be

completed in two phases, as shown in Table 11-6. Phase I expansion (by 2010) will result in an additional 8.5 MGD of capacity, and Phase II expansion (by 2015) will result in an additional 4.0 MGD of capacity, totaling 20 MGD of maximum day capacity.

In addition, the City owned water transmission lines are over 40-years old. One-hundred and fifty miles of water transmission lines will be replaced over the next five years totaling \$1.5 million in improvements from water and sewer fees and bond funds.

**Table 11-6: Estimated Cost of Upgrading Winson Water Treatment Plant for Phase I and Phase II**

Program Element	Phase I (2010)	Phase II (2015)	Total Costs
Lime-Softening Upgrades	\$15,000,000	--	\$15,000,000
Reverse Osmosis	\$42,000,000	\$10,000,000	\$52,000,000
Floridan Wells	\$17,500,000	\$7,500,000	\$25,000,000
Deep Injection Well	\$10,000,000	--	\$10,000,000
East Storage & Repump Facility	\$10,000,000	--	\$10,000,000
<b>Grand Total</b>	<b>\$94,500,000</b>	<b>\$17,500,000</b>	<b>\$112,000,000</b>

Source: City of North Miami Winson Water Treatment Plant Expansion Feasibility Study prepared by Metcalf & Eddy, 2006. The actual schedule of improvements will be contained in the Capital Improvements Plan.

**Table 11-7: Potable Water System Projects Scheduled in the FY2008-FY2012 Capital Improvement Plan**

Potable Water Projects*	2008	2009	2010	2011	2012
Water Line Replacement 08-WS-649-5.12	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Stainless Steel Column Piping 08-WS-646-3.12	\$25,000	\$0	\$0	\$0	\$0
New Reverse Osmosis WTP 08-WS-646-3.11	\$20,838,692	\$12,400,00	\$18,400,000	\$25,300,000	\$12,700,000
Upgrade of Existing Lime Softening WTP 08-WS-646-3.10	\$9,062,729	\$10,750,000	\$9,000,000	\$0	\$0

Potable Water Projects*	2008	2009	2010	2011	2012
Water Plant #6 High Speed Rotating Assembly Replacement 08-WS-646-3.6	\$10,000	\$0	\$0	\$0	\$0
Lime Slaker Replacement 08-WS-646-3.4	\$216,591	\$33,182	\$33,182	\$33,182	\$33,182

\* None of the potable water projects listed above are required to meet adopted level of service standards for the potable water system within the next five years. Table is provided for informational purposes only.

**Sanitary Sewer**

The City is served by Miami-Dade County’s North District Wastewater Treatment Plant (WWTP). Although the North District WWTP is owned and operated by Miami-Dade County, the transmission infrastructure is owned and maintained by the City. As such, the City continues to fund projects aimed at improving the efficiency and reliability of the sanitary sewer transmission system.

**Table 11-8: Sanitary Sewer System Projects Scheduled in the FY2008-FY2012 Capital Improvement Plan**

Sanitary Sewer Projects*	2008	2009	2010	2011	2012
Sanitary Sewer Rehabilitation 08-WS-646-3.11	\$1,381,413	\$500,000	\$500,000	\$500,000	\$0
Oleta Force Main Installation 08-WS-650-6.17	\$373,275	\$0	\$0	\$0	\$0
Sanitary Sewer Lining & Point Repairs 08-WS-650-6.16	\$4,600,957	\$520,957	\$520,957	\$520,957	\$520,957

\* None of the sanitary sewer system projects listed above are required to meet adopted level of service standards for the sanitary sewer system within the next five years. Table is provided for informational purposes only.

**Solid Waste**

There are no facility needs identified in the Solid Waste Sub-Element. The City of North Miami does not maintain its own disposal facilities and therefore, it does not have capital improvements associated with solid waste disposal. The City of North Miami budgets solid waste operational needs within the yearly budget cycle.

**Stormwater**

At this time, the City is in the process of constructing projects in the Arch Creek South Drainage Basin and other various locations throughout the City. Projects are prioritized according to the Phase II Stormwater Master Plan and those currently scheduled in the five-year Capital Improvement Plan are shown below in Table 11-9.

**Table 11-9: Stormwater System Projects Scheduled in the FY2008-FY2012 Capital Improvement Plan**

<b>Stormwater Projects*</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Arch Creek South Drainage Basin (Priority #5) 08-SW-638-2.2	\$1,800,000	\$0	\$0	\$0	\$0
Drainage Improvements (Priority #9) 08-SW-638-2.7	\$350,000	\$1,744,000	\$369,000	\$450,000	\$0
Drainage Well Development 08-SW-638-2.4	\$80,000	\$0	\$0	\$0	\$0

\* None of the stormwater system projects listed above are required to meet adopted level of service standards for the stormwater system within the next five years. Table is provided for informational purposes only.

**Parks and Recreation**

As identified within the Parks and Recreation Element of this Comprehensive Plan, the City will continue to exceed its adopted level of service through the planning horizon. Since the City is committed to providing a variety of recreational opportunities to its residents, North Miami has dedicated funds toward improving existing facilities before building new facilities. The City has also developed a Parks, Recreation, and Open Space Master Plan, which was adopted in April 2007. To the greatest extent feasible, the Master Plan will help determine long and short range recreation priorities for the City. The long-range priorities include establishing a ½ mile service radius for parks and creating more neighborhood parks. The short-range priorities for the City are to develop an Olympic Training Facility, relocate Cagni Park to the eastern section of the existing North Miami High School site to allow for a new Pre-K-8 Center and the relocation of North Miami High School. Alongside these improvements will be the construction of a new 80,000 square foot library. The funding for these projects will come from the developer of the Biscayne Landing. These park improvement

projects along with new community centers are summarized in Table 11-10, including the timing and cost estimates. Funding sources earmarked for supporting these projects come from developer contributions, grants, and the General Fund. Together these funding sources provide for a financially feasible parks and recreation action plan for repair and refurbishment.

**Table 11-10: Parks and Recreation Projects Scheduled in the FY2008-FY2012 Capital Improvement Plan**

<b>Parks and Recreation Projects*</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Reconstruction of Cagni Park Recreation Bldg 08-GF-462-3.5	\$40,000	\$275,000	\$0	\$0	\$0
Ben Franklin Park Facility Improvement 08-GF-462-3.8	\$76,000	\$0	\$0	\$0	\$0
Sasso Pool Decking 08-GF-463-4.4	\$50,000	\$0	\$0	\$0	\$0
Griffin Center Expansion 08-GF-465-6.6	\$75,000	\$0	\$0	\$0	\$0
POC Equipment Warehouse 08-GF-466-12.9	\$160,000	\$0	\$0	\$0	\$0
Tree Inventory System 08-GF-466-12.9	\$30,000	\$30,000	\$0	\$0	\$0
North Miami Stadium Improvement 08-GF-467-18.3	\$809,000	\$0	\$0	\$0	\$0
Kiwanis Park Adult Center & Playground 08-GF-468-13.3	\$180,000	\$0	\$0	\$0	\$0
North Bayshore Park Boardwalk Repairs 08-GF-468-13.4	\$150,000	\$0	\$0	\$0	\$0
Keystone Park Tot Lot Reconstruction 08-GF-468-13.5	\$115,000	\$0	\$0	\$0	\$0
Veterans Memorial Replacement 08-GF-468-13.6	\$50,000	\$0	\$0	\$0	\$0
Facility Painting & Park Identification Signs 08-GF-468-13.10	\$25,000	\$15,000	\$15,000	\$15,000	\$9,000
North Bayshore Dog Park 08-GF-468-13.13	\$20,000	\$0	\$0	\$0	\$0
Keystone Point Entrance Feature 08-GF-469-14.8	\$76,140	\$0	\$0	\$0	\$0

Parks and Recreation Projects*	2008	2009	2010	2011	2012
Land and Water Conservation Fund Grant 08-GF-471-15.7	\$359,615	\$0	\$0	\$0	\$0
Enchanted Forest Building Replacement 08-GF-471-15.8	\$45,000	\$0	\$0	\$0	\$0
Enchanted Forest Corral & Walk Bridge Restoration 08-GF-471-15.9	\$50,000	\$0	\$0	\$0	\$0
Pepper Park Youth Center 08-PPYCF-487-1.1	\$2,348,688	\$8,320,000	\$0	\$0	\$0
Kiwanis Playground 08-SNP-627-1.1	\$112,000	\$0	\$0	\$0	\$0
City of North Miami Parks Study 08-GF-168-13.16	\$25,000	\$0	\$0	\$0	\$0

\* None of the parks and recreation projects listed above are required to meet adopted level of service standards for the parks and recreation system within the next five years. Table is provided for informational purposes only.

**Transportation**

*Transportation Concurrency Exception Area*

They City established a Transportation Concurrency Exception Area (TCEA) for the entire City of North Miami, consistent with Rule 9J-5.005(5) of the Florida Administrative Code, as a means to reduce the adverse impact transportation concurrency may have on potential urban infill development and redevelopment within the City. The designation of the City’s TCEA is consistent with Southeast Florida’s “Eastward Ho!” initiative, which is intended to concentrate future development and redevelopment within the existing urban core. North Miami also lies entirely within Miami-Dade County’s designated Urban Infill Area (UIA), and is thus exempt from the County’s transportation concurrency requirements.

Under the City’s initiative, there is no traffic concurrency requirement for development applications within the TCEA boundaries. In return, the City is actively pursuing the transportation mobility strategies aimed at creating a sustainable development pattern within the City supportive of transit and other non-motorized travel modes (i.e. bicycle and pedestrian linkages listed in the Transportation Element’s Goals, Objectives, and Policies). The City has expanded the bicycle path system within the FIU Campus and the Oleta River



State Park. The City has been working with the Florida Department of Transportation on several safety initiatives on major state roads. The City has also been working with several neighborhoods on traffic calming efforts. The local transit circulator was introduced in 2004 that connects the City's residential areas to the major commercial destinations and schools.

**Table 11-11: Transportation System Projects Scheduled in the FY2007-FY2011 Capital Improvement Plan**

Transportation System Projects*	2008	2009	2010	2011	2012
Biscayne Blvd. Corridor Plans 08-GF-439-1.11	\$20,000	\$0	\$0	\$0	\$0
Bike Path 08-GF-439-1.13	\$423,000	\$0	\$0	\$0	\$0
Bike Parking and Transit Circulator Feasibility Study 08-GF-439-1.14	\$55,258	\$0	\$0	\$0	\$0
131 Street Roadway Improvements 08-GT-620-1.1	\$600,000	\$0	\$0	\$0	\$0
City Entrance Signs and Features 08-GT-642-1.2	\$125,000	\$80,000	\$80,000	\$80,000	\$80,000
Median Improvement Phase II 08-GT-642-2.2	\$40,000	\$0	\$0	\$0	\$0
Swale & Road Improvement 08-GT-620-1.3	\$250,000	\$0	\$0	\$0	\$0
Municipal Parking Lots 08-GT-620-1.5	\$80,000	\$80,000	\$80,000	\$0	\$0
Courtyard Bollard Replacement 08-HC-552-3.3	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
123 Street Roadway Improvement 08-HC-551-2.9	\$165,000	\$0	\$0	\$0	\$0
Breezeswept Right of Way Improvements 08-HC-551-2.6	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000
Citywide Bike Network and Bike Rack 08-HC-550-1.4	\$420,000	\$200,000	\$200,000	\$200,000	\$200,000
Parking Master Plan 08-HC-550-1.9	\$100,000	\$0	\$0	\$0	\$0
Traffic Calming Devices 08-HC-550-1.3	\$440,000	\$220,000	\$220,000	\$220,000	\$220,000
Traffic Study and Monitoring System 08-HC-550-1.6	\$175,000	\$0	\$0	\$0	\$0

Transportation System Projects*	2008	2009	2010	2011	2012
Roadway Signage Improvements 08-HC-551-2.5	\$170,000	\$170,000	\$20,000	\$20,000	\$20,000
Sidewalks & Handicap Ramps 08-HC-551-2.2	\$160,000	\$80,000	\$80,000	\$80,000	\$80,000
Street Resurfacing 08-HC-551-2.1	\$975,000	\$975,000	\$975,000	\$975,000	\$975,000
Street Lighting Improvements 08-HC-551-2.4	\$275,000	\$150,000	\$100,000	\$100,000	\$100,000
Sunkist Grove Traffic Calming Devices 08-HC-551-2.3	\$420,000	\$0	\$0	\$0	\$0
Street Tree Maintenance and Damage Prevention 08-HC-552-3.1	\$100,000	\$0	\$0	\$0	\$0

\* None of the transportation projects listed above are required to meet adopted level of service standards for the transportation system within the next five years. The series of improvements represent a general shift towards improving mobility within the City. Table is provided for informational purposes only.

#### *Transportation Level of Service*

The Metro-Miami-Dade Service Concurrency Management Program establishes adopted level of service standards for the County. The City of North Miami recognizes this program for evaluating the traffic impacts to State and County roads that are associated with development petitions inside City limits. The section of Miami-Dade County located east of SR 826 (Palmetto Expressway) and NW/SW 77th Avenue, excluding the area north of SR 826 and west of Interstate 95, is defined as the Urban Infill Area (UIA). All of North Miami lies within this area. The adopted level of service within the UIA is LOS E (100 percent of capacity). Where public transit service exists in the UIA operating with headways of 20 minutes or less, roadways located less than one-half mile of the service may operate at 120 percent of their capacity. Furthermore, on roadways parallel to exceptional transit service (i.e. commuter rail/express bus) the acceptable level of service is 150 percent of their capacity. The currently adopted level of service standard for all other roadways under the City's jurisdiction is LOS E. 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 a part of the TCEA, the City adopted several policies to address the mitigation of traffic issues associated with concurrency exception. The TCEA is exempt from traffic concurrency requirements for development applications. In return, the City will continue to

actively pursue the goals and objectives contained in the Transportation Element's goals, objectives, and policies to create a sustainable development pattern within the City supportive of public transit and non-motorized travel modes such as bicycle and pedestrian linkages. The LOS standard will be used however, to monitor and analyze the roadways for mobility.

*Miami-Dade MPO 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, 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 IV Unfunded - Projects that have been identified in the Needs Plan

Transportation projects within the 2030 LRTP that may impact the City of North Miami are presented in Table 11-12.

**Table 11-12: Miami-Dade Metropolitan Planning Organization 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 Street	NW 151st Street	I
Corridor Improvement - SB Thru Lane	SR 9A/I-95 (S/B)	NW 125th Street	NW 135th Street	I
Intelligent Transportation System Devices	NE 125th Street	I-95	US 1	II
Intelligent Transportation System Devices	NE 135th Street	I-95	US 1	II
Roadway Widening	West Dixie Highway	NE 119th Street	NE 163rd Street	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 Avenue	Gwen Cherry Park @ NW 24th Avenue	Greenways Project

*Miami-Dade MPO Transportation Improvement Program (TIP)*

The Miami-Dade MPO Transportation Improvement Program (TIP) for the 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. The TIP 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 11-13 indicates the programmed transportation projects in North Miami included in the TIP.

**Table 11-13: Improvements scheduled in the Miami-Dade Metropolitan Planning Organization Transportation Improvement Plan 2005-2009.**

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-1 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

*Florida Department of Transportation (FDOT)*

FDOT Five-Year Work Program - Fiscal Years 2005 - 2010: 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 11-14 shows the FDOT Work Program projects currently programmed within North Miami.

**Table 11-14: 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 909/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

The land use and transportation plans that have the potential to affect mobility within the City were reviewed. The plans were used to identify all the planned and programmed improvements within North Miami.

### Capital Improvement Program

A Capital Improvement Program (CIP) is a schedule for capital expenditures to be incurred each year over a fixed period of years (usually five years) to meet anticipated capital needs. The CIP is revised annually and adopted by the City Council typically with the first year converting into the annual capital budget. The mechanism for implementing the CIP is the Five-Year Schedule of Capital Improvements (SCI).

The CIP must be consistent with the Capital Improvement Element (CIE) of the Comprehensive Plan and addresses the projects required to maintain and improve, where applicable, at a minimum the adopted Level of Service standards in accordance with the provisions of Rule 9J-5, F.A.C. Furthermore, the CIP must reflect the goals, objectives and policies of this Comprehensive Plan and its implementation strategies.

Appendix A, the Five-Year Capital Improvements Plan (CIP), summarizes the timing, cost estimates and potential revenue sources for all of the projects being proposed by the City of North Miami at this time.

### **General Fiscal Implications of Existing Deficiencies and Future Needs**

The Five-Year Capital Improvement Program (CIP) lists those capital facilities which generally help address existing deficiencies and projected needs for which the City has operation and maintenance responsibility. Areas of service that are outside the City's responsibility are not addressed here. The schedule of projects, plus improvements by other governmental entities charged with operation and maintenance of certain infrastructure within the City, should maintain the minimum level of services standards set forth in this Comprehensive Plan to support the land uses and densities/intensities set forth in the Future Land Use Element.

At this time, the City does not have any existing deficiencies to address through capital improvement planning. The City also does not need any future capital improvements within the next five years to maintain its adopted level of service standards. In general, however, the City is undertaking a number of projects to address anticipated long term (beyond the five-year timeframe) deficiencies and improve the quality of life in North Miami.

### **CONCURRENCY MANAGEMENT**

A Concurrency Management System (CMS) insures the availability and sufficiency of public facilities and services at the time that the impacts of development occur and provides a program to prevent a reduction in the levels of service (LOS) below the adopted LOS standards. Furthermore it assures the proper timing, location and design of supportive urban service systems concurrent with the impacts of new development. The following benefits may also be realized with the adoption of a CMS:

- Support consistency of the Capital Improvement Element with the Future Land Use Element;
- Provide for the orderly and cost-effective expansion of public facilities;
- Supplement capital improvements expenditures and taxing structures for capital improvements; and
- Reduce the possibility of damage to the environment from the use of overburdened facilities.

Concurrency is typically applied during the development review process wherein approval is conditioned on demonstrated compliance with the local concurrency ordinance. Concurrency may also function at the building permit stage where it controls development in areas that are already approved but not yet built out, such as pre-platted lands.

#### *Other Public Facility Timing and Location Practices*

There are several other local practices for controlling the timing and location of construction, extension or increases in capacity of each public facility system that are either not currently in use or minimally used by the City of North Miami. These are described below.

#### **User Charges and Connection Fees**

User charges are designed to recoup the costs of public facilities or services by charging those who benefit from them. They are employed in many areas of local government service. The technique may be applied to potable water usage, sanitary sewer fees, solid waste services, recreation and parking.

As a tool for affecting the pace and pattern of development, user charges may be designed to vary for the quantity and location of the service provided. Thus, charges could be greater for providing services further distances from urban areas. The City of North Miami currently charges user fees for the use of tables and ballfields by residents, nonresidents and private groups.

#### **Mandatory Dedications of Fees in Lieu of**

The City may require, as a condition to plat approval, subdivision developers dedicate a certain portion of the land in the development to be used for public purposes, such as roads, parks and schools. Dedication may be made to the governing body or to a private group, such as a homeowners association.

When a subdivision is too small or topographical conditions exist such that a land dedication cannot reasonably be required, the City may require the developer to pay a fee in lieu of dedication that is equivalent to the amount of land that would otherwise have been dedicated by the developer. The fee may be deposited into a separate account for future use toward provision of such facility.



As a result of the public facility provision, the adjacent area benefiting from the initiative would likely become more attractive to development. The acquired service potential may be used to encourage growth in desired areas.

### **Moratoria**

A moratorium, or stop-gap ordinance, may temporarily halt or freeze development for a specified period of time on an emergency basis. It may be imposed on building permits, development approvals or governmental services, such as potable water connection, sanitary sewer extensions or hook-ups. Moratoria may generally be imposed for a “reasonable time” to allow for necessary planning activities pending comprehensive plan preparation, adoption or amendment. Florida courts have found development moratoria to be a valid measure of last resort for the protection of local public health, safety and welfare when adopted in accordance with applicable procedures. Additional considerations in adopting a moratorium include:

- Determining the legal status of existing permit applications and approvals to determine the extent of “vested rights” for developments approved prior to ordinance adoption;
- Specifying the geographic extent of the moratorium (whether it will be jurisdiction-wide or limited to specific hazard areas or areas with existing service insufficiencies); and
- Specifying the time frame and conditions under which the moratorium will be imposed moratoria.

### *Impact Fees*

Impact fees are imposed by many local governments on new development to offset the costs of new capital facilities necessitated by that development. Local governments may use this financing technique as one strategy for implementing the CIE. Chapter 163, F.S., which includes impact fees as an innovative technique that may be integrated into the land development regulations. Currently the School Board assesses a School Impact Fee within the City. The City of North Miami does not currently have impact fees, but will be considering adopting an impact fee ordinance in the coming months.

**Impact of Proposed School or Medical System Facilities on Public Facilities**

A hospital or other major public health facility has not established a presence within the City's corporate limits. As of May 2005, no medical corporation has contacted the City to indicate an interest to locate with the City; however, the City would be open to such dialogue, if approached. Any improvements to the closest area hospitals will not have a direct impact on the City of North Miami.

Pursuant to the Interlocal Agreement for Public School Facility Planning that the City of North Miami entered into with Miami-Dade County in 2003 the City will coordinate land use and public school facilities planning with all affected parties of the Agreement. As detailed in the Public School Facilities Element, the Miami-Dade County School Board has proposed three new school facilities for the City of North Miami. Any impacts that these schools will place on North Miami's public facilities will be addressed on a case-by-case basis after development sites have been acquired. It is anticipated that these improvements will not have any significant effect on current or proposed levels of service for short- and long-range planning periods.

**Timing and Location of Capital Improvements in Accordance with the FLUM**

The City's Comprehensive Plan has incorporated management concepts that require the efficient location and timing of supportive urban infrastructure to service existing and anticipated future development. Existing and anticipated future land use patterns are included in the Future Land Use Element Data, Inventory and Analysis Report. The Future Land Use Map (FLUM) is adopted as part of the Comprehensive Plan Goals, Objectives and Policies.

Management techniques, which have been applied in order to control the location, timing and design of public facilities, are summarized below. Application of the following techniques has been mandated through goals, objectives and policies within the Future Land Use, Transportation, Infrastructure and Capital Improvement Elements. This section primarily emphasizes techniques applicable to the location, timing and design of potable water and wastewater systems as well as transportation system improvements since these facilities most significantly impact the location and timing of future development and redevelopment. These techniques are as follows:

- Minimum level of service standards have been adopted for potable water, sanitary sewer, solid waste, drainage, recreation and open space and the transportation system.
- A concurrency management system (CMS) is incorporated in the Future Land Use Element and Capital Improvements Element. The CMS shall assure the proper timing, location and design of supportive urban service systems concurrent with the impacts of new development. This management program stipulates that no new development will be approved unless the applicant has presented plans demonstrating that the new development shall:
  - Be serviced with all requisite public facilities concurrent with the impacts of development;
  - Provide LOS for all requisite facilities which is compliant with the City's adopted LOS standards; and
  - Shall not cause a reduction of LOS for existing infrastructure below minimum adopted thresholds.
- A schedule of capital improvements has been established within the Capital Improvements Element. The schedule provides a process for inventorying and evaluating needed public improvements that require City participation. The capital improvement programming process is a continuing process, which includes annual evaluations and updates of the Capital Improvement Program. Each year a capital improvement schedule is adopted which describes capital improvement expenditures programmed for the current fiscal year as well as a schedule of anticipated capital improvements that are programmed over the following four-year period. Major factors explained in the capital improvement program include the following:
  - The nature of the respective projects, including location and brief project descriptions;
  - Estimated cost of respective projects;
  - Scheduled phasing and/or timing of respective projects;

- Sources of funding for respective projects; and
- Identification of other governmental or private entities responsible for assisting in the execution of capital improvements.

This consideration incorporates intergovernmental coordination concepts which link local interests with those of Miami-Dade County, State and regional agencies and special purpose districts.

- The Transportation, Infrastructure, and Capital Improvements Elements include stipulations that commit the City to continued enforcement of performance standards within the City's land development code. These standards address the location, timing and design of on-and off-site facilities required to alleviate anticipated impacts of proposed new development. They apply to traffic impact analysis, availability of water and wastewater systems, surface water management improvements and recreation.
- Finally, the City of North Miami has adopted intergovernmental coordination policies for purposes of assuring continued coordination with local, State and regional agencies that are responsible for major components of urban infrastructure.

Comprehensive Plan Goals, Objectives and Policies, which address preservation of natural resources, also impact the location of development within the City of North Miami. These policies have a major bearing on locations within the City where development shall not occur. Therefore, these policies work in conjunction with the above-described public facility policies in controlling the location, timing and quality of new development.