The City of Miami Gardens

Transportation Master Plan

Executive Summary

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Introduction

The Miami Gardens Transportation Master Plan has been developed to provide the public with an opportunity to have a voice in the planning of the City's future transportation system. This plan considers land use and transportation as it recommends multi-modal projects to satisfy the transportation needs over the next several years.

Located in northern Miami-Dade County, Miami Gardens is the County's third largest city with a population of 105,000 people living in about 30,000 households. Incorporated in 2003 as the County's 33rd City and covering over 20 square miles of land, Miami Gardens is centrally located in the region. The boundaries are from I-95 and NE 2nd Avenue on the East; NW 47th Avenue and NW 57th Avenue on the west; County Line Road on the north; and 151st Street on the South. This central location at the border of Miami-Dade and Broward Counties makes Miami Gardens extremely accessible, and a viable residential and business destination. The City is easily accessed by I-95, the Palmetto Expressway (SR 826), the Florida Turnpike, as well as numerous other County and State surface roads that form a relatively uninterrupted grid through the City. In addition, the City boasts multi-modal access to rail through the Florida East Coast Railway and the South Florida Tri-Rail System and is easily connected to both the Miami International Airport and Fort Lauderdale / Hollywood International Airport, as well as Opa-Locka Airport. It's centrality was key in the location of the Dolphins Stadium, near the County line in a sports complex that also houses Calder Race Track.

The incorporation of Miami Gardens and the subsequent detailed planning which is currently being undertaken will serve to boost the quality of life in the area. This coupled with a burgeoning multimodal transportation system, easy accessibility, and regional attractions promise to provide the City with a competitive advantage is it moves into the 21st century.

The purpose of this study is to develop a transportation master plan which will serve as the implementing arm of the Comprehensive Plan's Transportation Element. This study is needed to develop and prioritize local transportation projects and initiatives that supplement major State and County investments. A holistic approach was taken in the development of this study using the "art" and "science" of transportation planning. The art consists of the ability to interact with the public to identify the desires of the community. The science consists of an evaluation of data and analyses which point to transportation needs. The two are combined and a list of projects developed as a Project Bank, which describes the purpose, need and cost of each recommended improvements. They are then prioritized based on criteria developed in consultation with the community through the various stakeholders meetings or public workshops. These criteria are also used as the basis for the Goals, Objectives and Policies required in the Comprehensive Plan. Additionally, the study will be used as a portion of the City of Miami Gardens public input to the Miami Dade Metropolitan Planning Organization's (MPO) Long Range Transportation Plan (LRTP).

Public Involvement
Principles, Goals and Objectives

Extensive public involvement effort has been invested into the development of the Principles, Goals and Objectives that will guide the City as it moves forward in the planning process. These have been constructed as part of a larger planning effort relative not only to transportation, but to land use and will be instrumental in the development of the City's Comprehensive Plan. The principles enumerated herein have been refined into a goal statement and further into several objectives. The projects that have been developed as part of this Master Plan will be implemented as policies in the Transportation Element of the Comprehensive Plan.

Guiding Principles

As part of the Transportation Master Plan process a series of principles were discussed. These have been expressed as the City's transportation vision and have shaped the plan. These principles are:

- Safe
- Diverse
- Potential
- Pride
- Multimodal
- Attractive
- Clean
- Responsible
- Vital
- Creative

Members of the community and elected officials desire that the transportation system provide for the efficient movement of people and goods not only through the City as part of the regional transportation system,but within the City, in a safe, convenient, accessible and attractive manner. In doing so the City will be able, in partnership with other entities, to capitalize on its strengths to build an array of multimodal transportation options, specifically; various transit modes, automobile, bicycle and pedestrian. This will lead to the development and service of a diverse and vital land use mix, with appropriate intensities around transit hubs.The City desires that its transportation and land use systems be developed in coordination with each other.

Goal

From these principles a goal was defined: It shall be the goal of the City of Miami Gardens to develop and maintain a safe, convenient, accessible and efficient transportation system which:

- Is coordinated with future land use and transportation plans of the City and adjacent municipalities, Miami Dade & Broward Counties, and the State of Florida.
- Fosters efforts that will enhance the economic vitality of the City.
- Enhances the quality of life for the citizens.
- Emphasizes efforts within control and responsibility of the City.
- Recognizes the use of accessible alternative modes.
- Develops projects that promote safety for the citizens of the City.
- Develops projects that enhance the community aesthetically.
- Develops projects that support existing and future approved transportation improvements once considered and approved by the City.
- Develops projects that not only service the regional transportation system, but those that are meant for the efficient movement of Miami Gardens residents.
- Develop projects that encourage a mix of land uses where appropriate.

Data Collection / Analysis

The analysis has been coupled with the information gathered as part of the public involvement process to develop a series of multimodal mobility projects in the Project Bank. The overriding principle that transportation and land use are inextricably linked has been used as the basis for this analysis. Quality transportation planning and land use development is best achieved if the two are closely coordinated. Transportation and land use is the framework on which our communities are built. Coordination of them creates places with high quality of life. The City's Future Land Use Map essentially reinforces this concept. The analysis of street systems is based upon the concept of level of service (LOS). Level of Service (LOS) was examined as a measure of how the transportation system is performing. The presentation of LOS is indicated by the letters “A” through “F” with LOS A representing the best operating conditions and LOS F the worst. For typical urban streets, LOS is generally expressed as a qualitative measure describing operational conditions within the traffic stream based on service measures such as speed, travel time, delays, freedom to maneuver, traffic interruptions, comfort and convenience.

Roadway Level-of-Service (LOS)

A qualitative measure describing operational conditions within a traffic stream based on service measures such as speed, travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

LOS A

LOS C

LOS F

Physical Capacity / Levels- of- Service

Miami Gardens' transportation network is set up on a grid system based on section lines and half section lines. This forms a mile to a half mile grid of roadways to carry traffic. At the present time, levels of service would be classified as adequate, with the majority of segments operating at LOS D or LOS E. A few segments are operating better than LOS C. These included portions of Florida Turnpike and portions of NW 183 St. west of NW 22 Ave. Fewer segments are operating at LOS F. These include NW 199 St. between NW 32 Ave. and NW 27 Ave. and again between NW 2 Ave. and the City limits, part of NW 2 Ave. and half mile segments on NW 37 Ave., NW 22 Ave. and NW 17 Ave. around the Palmetto Expressway. Most of the LOS E and F conditions are on roadway segments entering/exiting the City. As a result of forecasted growth, not only within the City but regionally as well, the roadway LOS will continue to deteriorate as shown below:

2004 Level Of Service (LOS)

2015 LOS

2030 LOS

Alternative Modes

As time progresses, land use changes focused on improving vitality will be implemented along major corridors. This will lend to the attractiveness of the City as a place of business. The intent is to develop employment and residential centers in the city which will provide incentive to the commuter who currently drives through Miami Gardens to live, work or shop in the area. This will serve the City and the region by shortening commute times. Metrorail along the north corridor will be integral to this.

Additionally, according to public input, bus transit does not adequately service the local community. Public input also included the implementation of a community transit circulator. A review of the bus routing reveals that most of the routes also move through the community connecting with other destinations. Most of the major roadways have bus routes on them. The routing is regional in nature. This may require several transfers for a rider to reach an in-city destination. A circulator may help in this respect. The bulk of the transit routes are focused along the Palmetto, Golden Glades, NE 167 St. and NW 22 Ave. corridors.

Transportation Management

Within the realm of traffic management, the fields of access management and transportation demand management (TDM) are key policy components of the transportation network. Access management relates to how people physically access an area. TDM relates more to policy related methods as opposed to physical tools for traffic control.

Access Management

As defined by the Transportation Research Board, Access Management programs seek to limit and consolidate access along major roadways, while promoting a supporting street system, unified access and circulation systems for development. The result is a roadway that functions safely and efficiently for its useful life, becoming a more attractive corridor.

- Provides a Specialized Roadway System
- Limit Direct Access to Major Roadways
- Promote Intersection Hierarchy
- Locate Signals to Favor Through Movements
- Preserve the Functions Area of Intersections and Interchanges
- Limit the Number of Conflict Points
- Separate Conflict Areas
- Remove Turning Vehicles from Through Traffic Lanes
- Use Non-traversable Medians to Manage Left-Turn Movements
- Provide Supporting Street and Circulation Systems

Transportation Demand Management

Transportation Demand Management (TDM) is defined as the use of incentives, disincentives, and market management to affect travel behavior to shift to non-motorized and/or higher-occupancy modes, reduce or eliminate the need to travel, and/or shift travel into less congested time periods. TDM is also defined as the provision or expansion of alternatives to Single Occupancy Vehicle (SOV) travel such as transit, bicycling, and walking. In recent years TDM has been targeted in federal legislation as potentially important pieces of the overall strategy to address congestion and air quality issues.

Mobility Projects - Project Bank

As noted in the report, there are very few issues that the City of Miami Gardens controls on its own. The City is influenced by issues that are regional in nature. Many of the issues that are faced are under the ultimate control of either Miami-Dade County or the Florida Department of Transportation (FDOT)

Several projects have been developed in three general broad categories: Physical Capacity, Alternative Modes, and Transportation Management. Some of these have been broken down further into sub-categories such as transit, transportation planning, safety, roadway, and traffic operations/safety. Some projects are broad in nature, and have several specific efforts listed within them. Physical Capacity deals with roadway capacity and physical improvements to the roadway like traffic operations and safety. Alternative modes deals with walking, biking or transit. Transportation Management deals with methods of controlling the way and times that people travel, as well as growth management and concurrency issues. In addition, it deals with many planning and coordination issues relative to developing transportation policy. The following is a list of the projects in each category that make up the Project Bank. These projects have been prioritized and ranked as part of the public involvement process, as depicted on pages eight through ten.

Proposed Project Bank (the list below does not reflect priorities)

Project	Type
1. Support the Metrorail North Corridor Project	Transit
2. Active Participation in State and Regional Projects	Transportation Planning
3. Greenways along Canal	Transportation Planning
4. ADA Compliant Sidewalks	Safety
5. Street Repaving Program, including markings and signs	Roadway
6. Safe Routes to School	Traffic Operations and Safety
7. Participate in LRTP	Transportation Planning
8. Concurrency Management System	Transp Demand Management
9. Municipal Transit Circulator	Transit
10. Attain PTP Funding	Roadway
11. Transit Bus Routes Improvements	Transit
12. Vehicular Access to Walmart from Neighborhood	Traffic Operations and Safety
13. South Florida Commuter Services Liaison	Transportation Planning
14. Maximize Roadway Intersection Capacity/Operations	Traffic Operations and Safety
15. Promote Infill Development @ Transit Stations	Transp Demand Management
16. Access Management	Traffic Operations and Safety
17. Coordinate with Surrounding Communities	Transportation Planning
18. Livable Communities on Major Corridors	Transportation Planning
19. Traffic Calming	Traffic Operations and Safety
20. Bus Shelters	Transit
21. Transportation Impact Fees	Transp Demand Management
22. Signal Progression Analysis	Traffic Operations and Safety
23. SR 826 Service Roads/Ramp Study	Traffic Operations and Safety
24. Park and Ride Feasibility Study	Transp Demand Management
25. Stadium Circulation Plan	Traffic Operations and Safety
26. Transit Marketing Plan	Transit
27. Parking at Bunche Park	Transp Demand Management
28. Traffic Flow at Lake Lucerne	Traffic Operations and Safety
29. LAP Certification	Roadway
30. Support FDOT SR 7 Fast Bus	Transit
31. City Wide Streetscape Plan	Roadway

Prioritization Criteria

As part of the transportation master planning process, a series of principles were discussed. These will be developed into criteria by which the projects recommended through the master plan will be prioritized. In addition they will be refined into the Goals, Objectives and Policies in the Transportation Element. Many have been expressed as the City's transportation vision and have shaped the plan. The defining principles are as follows:

- Safe
- Diverse
- Potential
- Pride
- Multimodal
- Attractive
- Clean
- Responsible
- Vital
- Creative

Again, It has been made clear by members of the community that they desire that the transportation system provide for the efficient movement of people and goods not only through the city as part of the regional transportation system, but within the City in a safe, convenient, accessible and attractive manner. In order to attract and retain businesses and therefore enhance the tax base there is a need for an efficient transportation system to service land uses, receive materials, deliver services and interact with customers

The resulting Prioritization Criteria are as follows

1. Develop projects that are within the control and responsibility of the City.
2. Focus on projects that enhance the use of alternative modes.
3. Develop projects that promote safety for the Citizens of the City.
4. Develop projects that enhance the community aesthetically.
5. Develop projects that supplement future land uses.
6. Develop projects that support existing and future approved transportation improvements.
7. Develop projects that not only service the regional transportation system, but those that are meant for the efficient movement of Miami Gardens residents.
8. Develop projects that encourage a mix of land uses where appropriate.
9. Develop projects that will enhance the economic vitality of the City.

MIAMI GARDENS TRANSPORTATION MASTER PLAN PROJECT PRIORITY MATRIX

Project / Criteria	City Project Control	Alternative Modes	Enhances Safety	Enhances Aesthetics	Coordinated with Future Land Uses	Supports Existing Transportation Improvements	Support Residents	Support Mixed Land Uses	Support Economic Vitality	Total No. of Green +
MetroRail North Transit Corridor	+ / -	+	+ / -	+ / -	+	+	+	+	+	6
Regional Projects	+ / -	+	+	+	+	+	+ / -	+ / -	+	6
Greenways along canals	+	+	+	+	+	+	+	+ / -	+ / -	7
ADA Sidewalks	+	+ / -	+	+ / -	+	+ / -	+	+ / -	+	5
Street Repaving	+ / -	+ / -	+	+ / -	+ / -	+	+	+ / -	+	4
Safe Routes to School	+ / -	+	+	+	+ / -	+ / -	+	+ / -	+	5
Participate in LRTP	+ / -	+	+	+ / -	+	+	+	+ / -	+	6
Concurrency Mgt System	+	+	+ / -	+ / -	+	+ / -	+	+	+	6
Transit Circulator	+ / -	+	+	+ / -	+	+	+	+	+	7
PTP Funding	+	+	+	+	+ / -	+	+	+ / -	+	7
Bus Routes Improvements	+ / -	+	+ / -	+ / -	+	+	+	+ / -	+	5
Access to Wal-Mart	+	+ / -	+	+ / -	+	+ / -	+	+	+	6
So Fl Commuter Services	+ / -	+	+	+ / -	+	+ / -	+	+ / -	+	5
Roadway Intersection Improvements	+ / -	+ / -	+	+ / -	+	+	+	+	+	6
Infill Development at Transit Stations	+	+	+ / -	+ / -	+	+	+	+	+	7
Access Management	+ / -	+ / -	+	+ / -	+	+ / -	+	+	+	5
Coordinate w/surrounding communities	+	+ / -	+ / -	+ / -	+	+	+	+	+	6
Livable Community major corridors	+ / -	+	+	+	+ / -	+ / -	+	+ / -	+	5
Traffic Calming	+ / -	+ / -	+	+	+	+ / -	+	+ / -	+	5
Bus Shelters	+ / -	+	+	+	+ / -	+	+	+ / -	+ / -	5
Transportation Impact Fees	+	+	+	+	+ / -	+	+	+ / -	+	7
Traffic Signal Progression	+ / -	+	+	+ / -	+	+	+	+ / -	+	6
SR 826 / Palmetto Improvements	+ / -	+ / -	+	+ / -	+ / -	+	+	+ / -	+	4
Park-n-Ride Facilities	+	+	+	+ / -	+	+	+	+ / -	+	7
Stadium Circulation Plan	+ / -	+	+	+ / -	+	+ / -	+ / -	+	+	5
Transit Marketing Plan	+ / -	+	+ / -	+ / -	+	+	+	+ / -	+	5
Parking at Bunche Park	+	+ / -	+	+ / -	+	+ / -	+	+ / -	+ / -	4
Traffic Flow - Lake Lucerne	+ / -	+ / -	+	+ / -	+ / -	+	+	+ / -	+	4
LAP Certification	+	+ / -	+	+	+ / -	+	+	+ / -	+	6
FDOT D-4 Rapid Bus	+ / -	+	+ / -	+ / -	+	+	+	+	+	6
City Wide Streetscape Plan	+	+ / -	+	+	+	+	+	+ / -	+	7

Contributes Favorably (+)

Contributes Negatively (-)

Neutral (+/-)

Projects receiving highest number of + (7) = (Highest Priority):

Greenways Along Canals; Transit Circulator; PTP Funding; Infill Development at Transit Stations; Transportation Impact Fees; Park-n-Ride Facilities; City Wide Streetscape Plan

Projects receiving NEXT highest number of + (6) = (High Priority):

MetroRail North Transit Corridor; Participate in LRTP; Concurrency Mgt System; Access to Wal-Mart; Coordinate with Surrounding Communities; Traffic Signal Progression; Intersection Improvements; FDOT SR-7 Rapid Bus; Participate in Regional Projects; and LAP Certification.

Final List of Projects with Priorities

This section consists of the prioritized list of recommended actions and improvements arising from the process of developing the Miami Gardens Master Transportation Plan; these are essentially the Plan.

Highest Priority

Reference # Description
3 Greenways along canals
9 Municipal Transit Circulator
10 Attain PTP Funding
15 Promote infill development at transit stations
21 Transportation Impact Fees
24 Park-n-Ride facilities
31 City wide Streetscape Plan

High Priority

Reference # Description
1 Support MetroRail North Corridor project
2 Participation in Regional Projects
7 Participate in the LRTP
8 Concurrency Management System
12 Vehicular access to Wal-Mart from neighborhoods
14 Maximize roadway intersection capacity and operations
17 Coordination with surrounding communities
22 Traffic signals progression/synchronization
29 LAP certification
30 FDOT district four SR-7 Rapid Bus project

Medium-High Priority

Reference # Description
4 ADA compliant sidewalks
6 Safe Routes to School
11 Transit bus routes improvements
13 South Florida Commuter Services
16 Access management
18 Livable Communities on Major Corridors
19 Traffic Calming
20 Bus Shelters
25 Stadium Circulation Plan
26 Transit Marketing Plan

Medium Priority

Reference # Description
5 Street paving Program
23 SR 826/Palmetto Service Roads
27 Parking at Bunche Park
28 Traffic Flow at Lake Lucerne