



Miami Gardens Circulator

Feasibility Study

Executive Summary



Overview

The Miami Gardens Circulator Feasibility Study, conducted by the Miami-Dade County Metropolitan Planning Organization (MPO) analyzed the feasibility of implementing a transit circulator for the city of Miami Gardens. In general, the study: identifies the level of interest in such a service; establishes the service parameters to fulfill the need; estimates the capital and operating costs; and identifies potential funding sources.



The City of Miami Gardens, incorporated in 2003, is located in northern Miami-Dade County. The city has put the *Keep Miami Gardens Beautiful* program into effect which included implementation of streetscapes and landscapes along major streets. The City's leaders

identified nodes, corridors and activity areas within the City that were emphasized for mixed uses, especially retail commercial. Transit Oriented Development (TOD) and Highway Corridor Overlay Design Guidelines provided the basis to revitalize the area's major highways. The TOD designation incorporates residential and commercial development patterns that enhance the attractiveness of using transit or other non-motorized transportation to accommodate travel needs which supports exploring various transit options including a circulator within the City.

The city's goals and objectives for the circulator are a system that provides connectivity to existing transit service, is free of charge, offers multiple routes, and provides service on all days of the week.

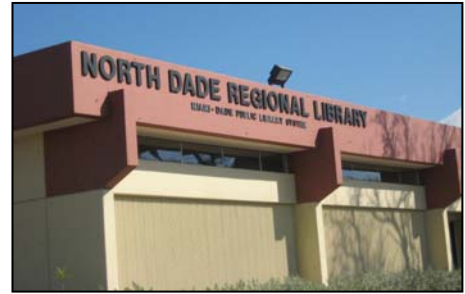
Preliminary Analysis

Major transit generators within the city include: Dolphin Stadium, Calder Race Course, St. Thomas University, Florida Memorial University, Golden Glades Tri-rail Station, Wal-Mart at Dolphin Stadium, Wal-Mart at Golden Glades and the Sunshine State Industrial Park.



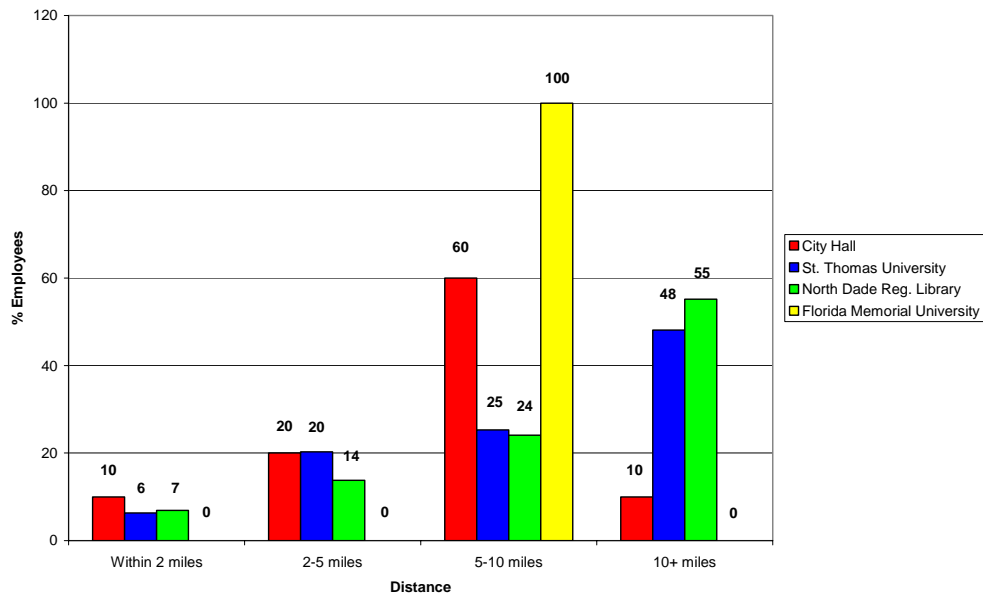
In addition to the existing transit generators, the proposed Metrorail Extension (North Corridor) will provide a unique opportunity to create transit connections with the proposed circulator. The proposed Metrorail Extension will run along NW 27th Avenue from the existing Martin Luther King Station at NW 62nd Street to a termination point at NW 215th Street just south of Florida's Turnpike. The system will have seven new stations, four of them within the city of Miami Gardens. The major activity centers within the city of Miami Gardens were identified as City Hall, Florida Memorial University, St. Thomas University, North Dade Regional Library, Wal-Mart at Dolphin Stadium and Wal-Mart at Golden Glades. These centers were contacted to gather information about the residential addresses of their employees, travel patterns, mode of transportation, as well as their perception of using a Circulator System. Due to company policy the two Wal-Mart stores did not participate in the survey. The surveys at City Hall and Florida Memorial University were filled out by their Human Resources Departments. Responses for these locations were based on 400 and 300 employees respectively. The surveys at St. Thomas University and North Dade Regional Library were filled out by the actual employees. Responses for these locations were based on 79 and 33 employees respectively.

Existing transit riders surveys were conducted at a selected transit generators and transit stops within the city during the hours of 7:00 – 9:00 am, 11:00 am – 1:00 pm and 4:00 – 6:00 pm. The survey consisted of a simple questionnaire to identify the public's opinion about a Circulator System, intermodal transportation and their perception about using them. The survey sample included a wide range of age groups to represent the city's residents.

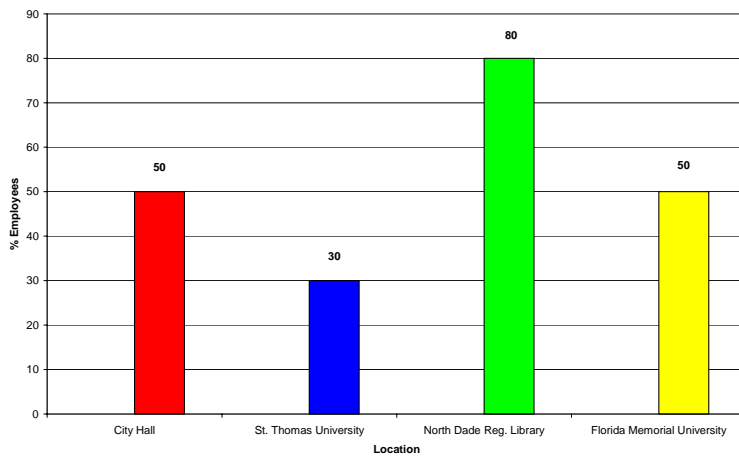


Activity Centers Survey Summary

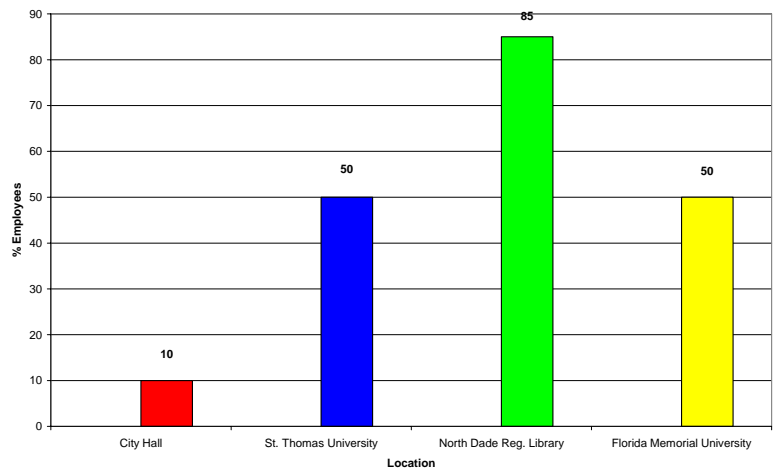
% Distance Employees Live from Work



% Employees Who Would Use Circulator To Get To Work

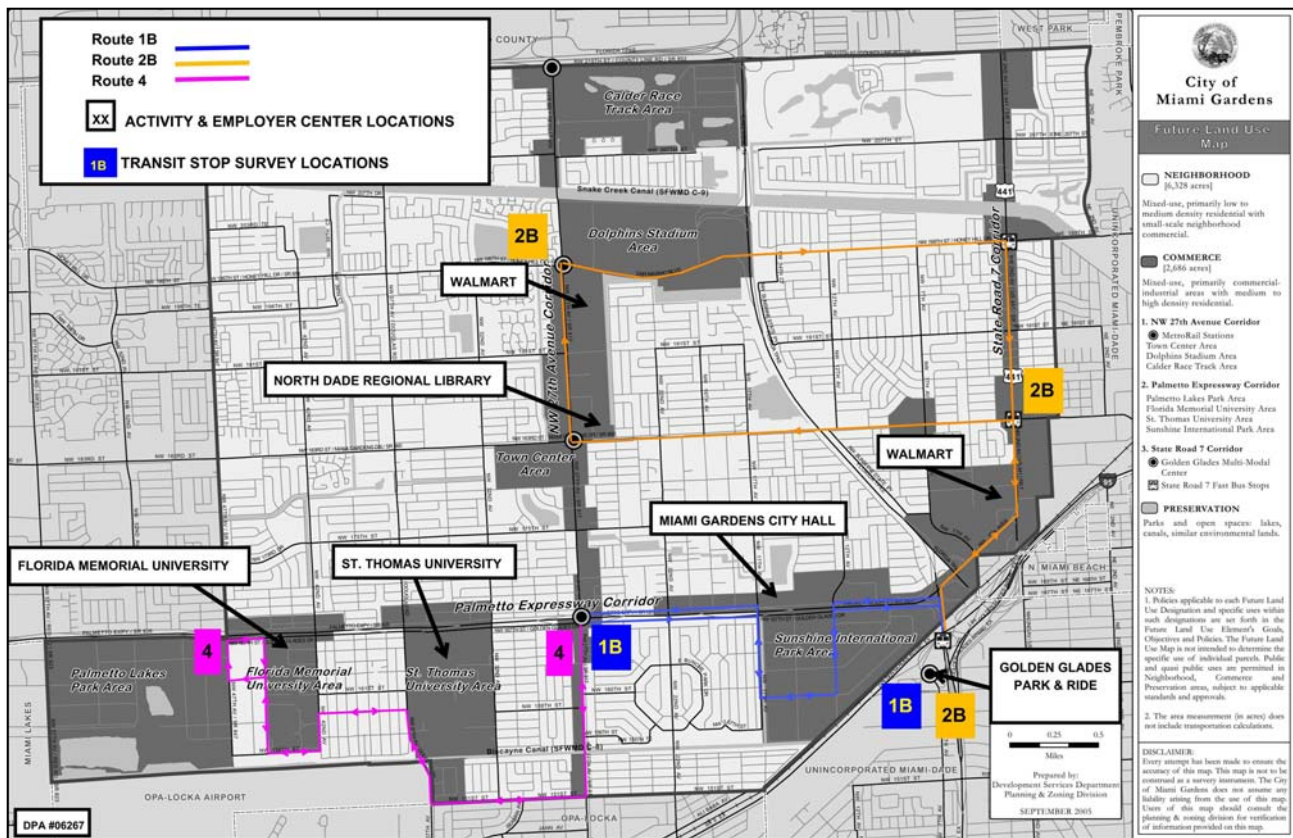


% Employees Who Would Use Circulator During The Day To Reach Other Destinations



Potential Routes

Feedback from city staff and the steering committee established the three potential circulator routes as Routes 1B, 2B and 4. **Route 1B** originates at Golden Glades and travels from NW 167 St to NW 12 Ave into Sunshine International Park Area to NW 17 Ave returns to NW 167 St west to NW 27 Ave and returns traversing the same route terminating at NW 167 St / NW 27 Ave. **Route 2B** originates at Golden Glades providing a “One-Way Loop Service” from Golden Glades north on SR 7 to Miami Gardens Drive, west to NW 27 Ave, north to NW 199 St, east to SR 7, south terminating at Golden Glades. **Route 4** originates at NW 167 St / NW 27 Ave travels south on NW 27 Ave, west on NW 151 St, north on NW 37 Ave crossover to NW 42 Ave, south to NW 156 St, north on NW 45 Ave, crossover to NW 47 Ave north to NW 167 St east to NW 45 Ave and then returns traversing the same route terminating at NW 167 St / NW 27 Ave.



Conclusions and Recommendations

Based on potential ridership, ability to meet the goals and objectives of the study and feedback from the steering committee, Route 2B is recommended. This route would provide connectivity from Golden Glades and between the major corridors of NW 27 Avenue, US 441, Miami Gardens Drive, and the segment of NW 199 Street which currently does not have transit service. In order to provide an attractive commute option, the Miami Gardens circulator should provide reasonable connectivity during peak periods to Golden Glades with truncated service during the off-peak period for service type riders going to appointments, lunch and shopping. The route is initially recommended as a “one-way loop” with the flexibility for modification to provide service in both directions.

Potential Ridership Estimates

Route	Potential Daily Riders	Average Daily Potential Riders	Low Estimate Daily Riders ¹	High Estimate Daily Riders ²	Low Estimate Yearly Riders	High Estimate Yearly Riders
1B	5,725 – 7,187	6,456	65	129	16,786	33,571
2B	7,602 – 11,103	9,352	94	187	24,316	48,632
4	6,801 – 8,904	7,852	79	157	20,416	40,833

¹1% of Potential Riders

²2% of Potential Riders

Source: Miami Dade Transportation Model

The service would be free based on the apparent benefits of other cities having a free circulator system. Patronage would probably be higher, reflecting the City’s desire for a successful system. There is also less potential for operational delays and desired headways would be easier to maintain.

Several power sources are now commonly available for vehicles, but low-emission diesel vehicles are recommended for this system. They are the vehicle of choice for their reliability and overall performance for shuttle/circulators across the United States. These vehicles, also ADA compliant, have lower emissions than standard diesel vehicles and have reduced overall noise levels.



The costs of the total circulator system were estimated at the planning level. Costs were based on a fleet of three, 25-foot vehicles. The initial cost for low-emission diesel is approximately \$1,049,000; this is for the vehicles, shelters, signs and amenities. The total annual operating costs of \$253,500 were estimated based on 75 vehicle-hours per week. There are many funding options for capital costs at the federal, state and local levels. A more detailed evaluation beyond the feasibility level is recommended to determine which financial options are best for the city of Miami Gardens.

Circulator Route Cost Summary

Capital Cost

Item	Quantity	Cost per Unit	Cost
Vehicles	3	\$300,000	\$900,000
Shelters	8	\$16,000	\$128,000
Signs	7	\$3,000	\$21,000
Total Capital Cost		\$1,049,000	

Operating Costs

Item	Quantity	Cost per Unit	Cost
Weekly operating costs	75 hours	\$65	\$4,875
Annual operating costs	52 weeks	\$4,875	\$253,500

Implementation of this circulator service can be divided into three phases. First would be the specific costs and funding, second the final design and construction of needed roadway improvements and finally, the actual operations of the system.

Prepared For:



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in association with:

PROTOCOLE

