CORRADINO

FINAL REPORT

Doral Circulator Study

Submitted to:

City of Doral

Submitted by:

The Corradino Group, Inc.

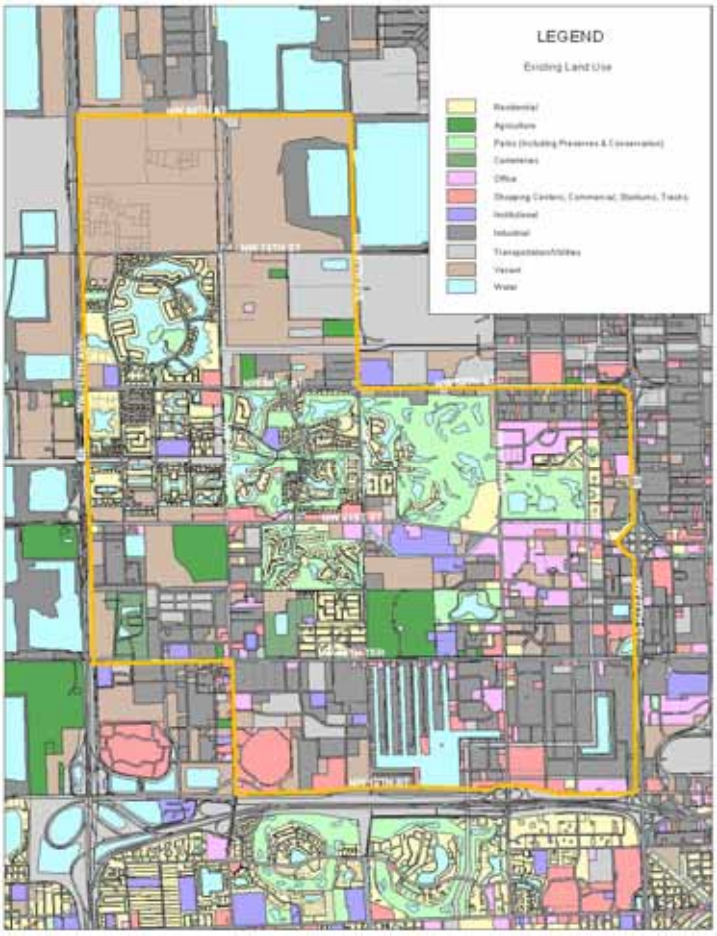
May 2007

Executive Summary

The City of Doral, incorporated in 2003, is located in west-central Miami-Dade County. The City's population (301,000+) and employee (125,000) base is growing rapidly. The City is bounded by SR 836 on the south, the Palmetto Expressway on the east, the Florida Turnpike on the west and NW 58th Street, and NW 90th Street on the north and includes a mix of industrial, commercial, and residential uses (Figure ES-1).

As with many communities in Miami-Dade County, the City of Doral is exploring transit options to help deal with traffic issues. Residents and people working in Doral may be interested in using transit if it were provided to them in a frequent and convenient manner. Proposed concepts include park-and-ride lots, lunchtime shuttles, and connectors to Metrorail. Shuttles have also been suggested to service the residential community by providing trips to shopping, restaurants, and businesses. Routes can connect at intermodal centers or be structured in a grid with transfers occurring at each intersection.

Figure ES-1
Existing Land Use



This study, which was conducted in context of the Miami-Dade Metropolitan Planning Organization's circulator planning process, had several goals:

- Identify the "actual" possible demand for transit to the greatest extent possible;
- Identify the type of service(s) and routes that could be successful in Doral;
- Identify pilot projects for possible implementation; and,
- Develop an implementation program and strategy.

The study was conducted for the City of Doral by The Corradino Group, a Doral-based planning and engineering consulting firm.

Existing Transit Issues

Miami-Dade Transit (MDT) is currently the predominant provider of public transit service in the City of Doral. The MDT route structure is shown in Figure ES-2.

Table ES-1 provides information about these routes.

Table ES-1
Doral Bus Routes

Routes in Doral	Average Weekday	Boarding's By Day of Week			Total Monthly Boarding's	Bus Size
		Weekdays	Saturdays	Sundays		
36	3,271	68,693	6,365	5,095	80,153	40' or 60'
41	N/A	N/A	N/A	N/A	N/A	40' or 60'
87	1,861	39,071	2,748	2,874	44,694	40' or 60'
238	513	10,765	1,807	1,520	14,092	40' or 60'
242	397	8,334	N/A	N/A	8,334	40' or 60'
132-TriRail Shuttle	49	1,030	N/A	N/A	1,030	40' or 60'
95x - Earlington Heights	1,626	34,147	N/A	N/A	34,147	40' or 60'

Source: Miami Dade Transit

As can be seen, most of MDT's service is on 41st Street/Doral Boulevard or to the south. There is very little service in the residential areas in the northwest part of the City and there are a number of shopping areas with minimal or no service.

Traffic generators are those land uses, developments, facilities, activity centers, shopping areas, high density residential facilities, etc. that attract people and to which people may consider transit as a mode of transportation. Figure ES-3 shows key transit generators in Doral. Figure ES-3 also shows areas that may be considered for future park-and-ride and/or transit when projects such as the extension of NW 74th Street and the East-West Corridor are completed.

There are today more than 30 municipal circulator operators in Miami-Dade County. Many of them have been established since the passage of the Peoples Transportation Plan, but several (including Hialeah, Coral Gables and Aventura) have systems that predate the PTP. All have the underlying purpose of supporting and enhancing mobility in their individual communities while complementing Miami-Dade transit service.

Transit propensity is a term that refers to the potential (or lack thereof) of a geographic area to generate transit ridership. Often, maps overlay factors such as population density, percent elderly, percent low income, etc. are created that show areas that may be conducive to transit.

Figure ES-2
MDT Route Structure

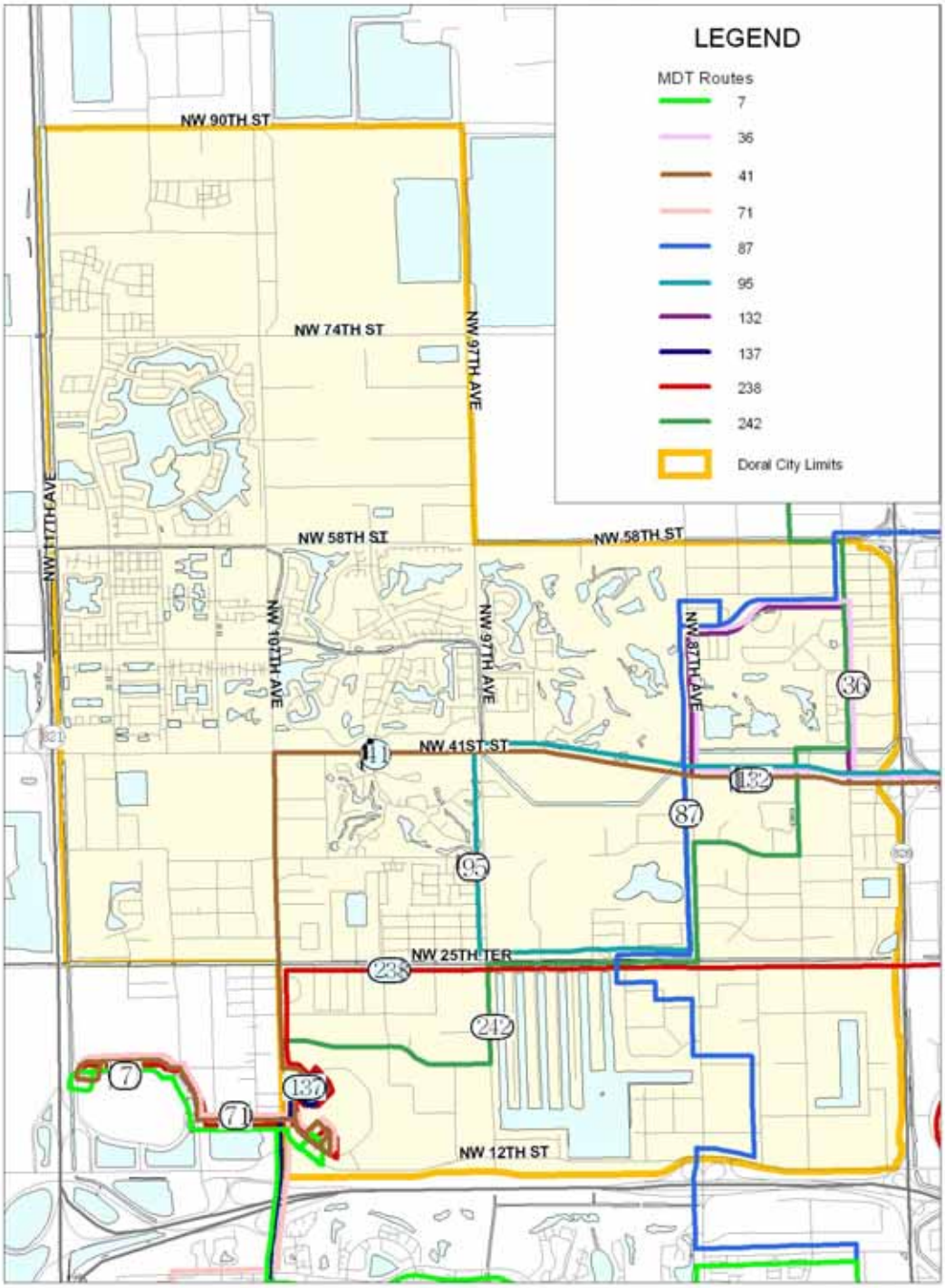
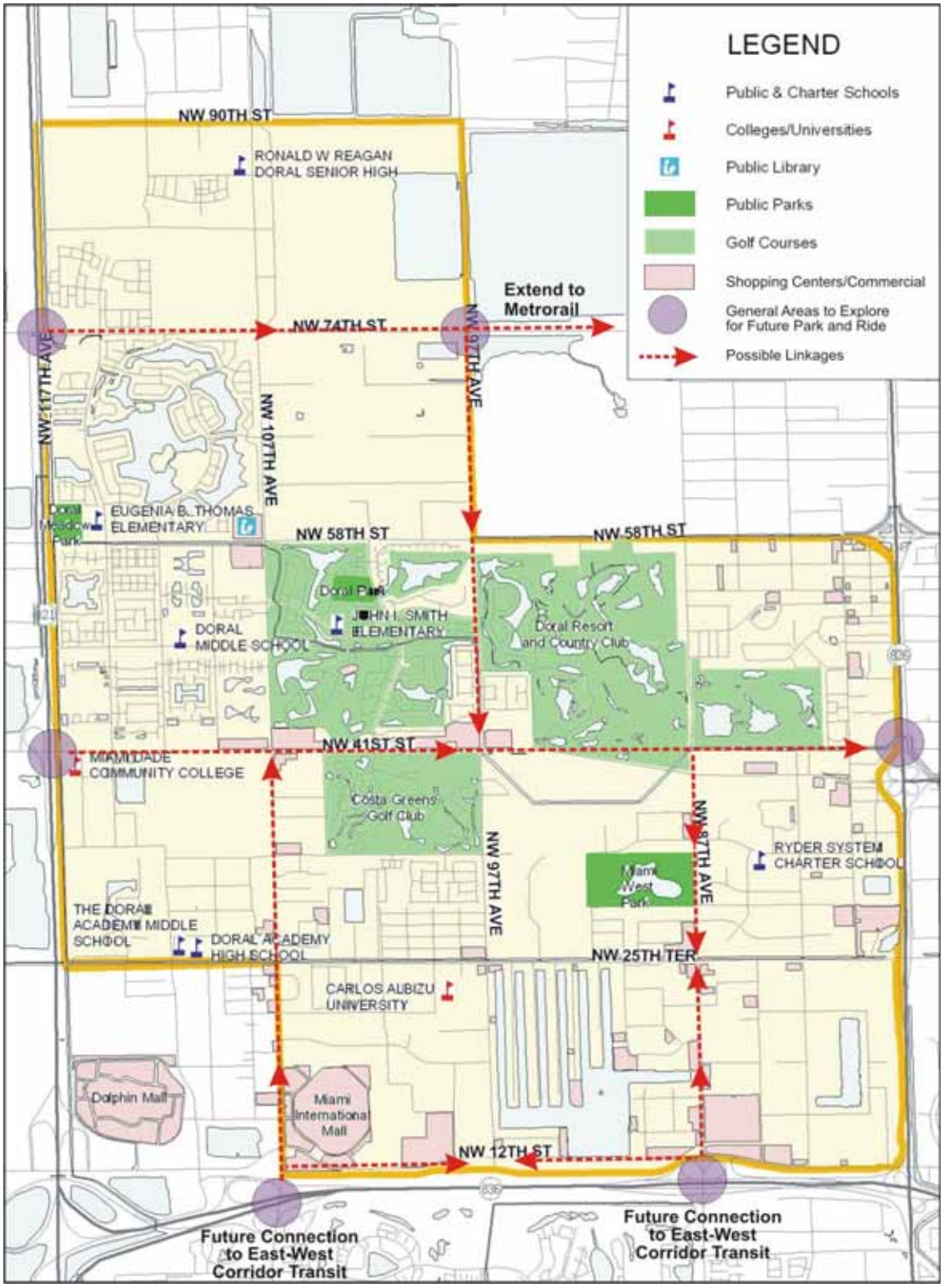


Figure ES-3
Transit Generators



The Miami-Dade Metropolitan Planning Organization in 2002 commissioned a study[1] to help communities develop transit circulators. As part of that study, a rating system or "Score Card" was developed. The Score Card as applied to the City of Doral (Table ES-2) rates a number of factors similar to transit propensity but also some factors relating specifically to Miami-Dade County. This evaluation was considered to be a Step-One evaluation.

Table ES-2
Circulator Feasibility Scorecard

	Points	Score
Population Density (persons per square mile)		
< 3,000	0	0
3,000 to 7,500	5	
7,500 to 10,000	10	
> 10,000	15	
Percent of Residents 65 and Older		
> 20%	0	0
> 25%	5	
> 30%	10	
> 35%	15	
Median Household Income		
> $30,000	0	0
$20,000 to $30,000	5	
< $20,000	10	
Households with Zero Automobiles		
> 10%	5	0
< 10 %	0	
Recognizable Gaps in Transit Service (> 1/4 mile from transit stop)		
Yes	15	15
No	0	
Activity Centers Not Served by MDT		
Yes	10	10
No	0	
Resident/Employer/Employee Requests for Circulator Service		
Yes	10	10
No	0	
Municipality Funded Feasibility Study		
Yes	10	10
No	0	
Identification of a Local Funding Source		
Yes	5	5
No	0	
Score		50

[1] Local Municipal Transit Circulator Policy Study, prepared for Miami-Dade County Metropolitan Planning Organization, prepared by Kimley-Horn Associates, 2002.

The Score Card results in a "score" which can be interpreted as follows:

< 40	=	Community not a good candidate for a circulator
> 40 and < 60	=	Community may be a candidate
> 60	=	Community is a good candidate

As can be seen, Doral scores a 50. This is in the middle of the "may be viable" range. This is due to two factors. The demographics of the community are not those "typical" of transit supportive areas. This indicates generating ridership in Doral will be a challenge. However, the community's feasibility is strengthened by the fact that there is municipal support and funding. In addition, it should be noted that the analysis does not weigh the presence of more than 100,000 employees commuting to and through Doral daily.

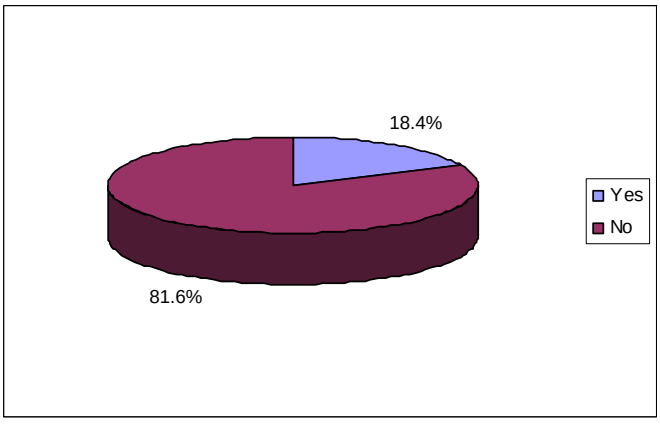
The MPO study recommends that a Step-Two analysis be undertaken if "…Step-One determines transit circulator service is potentially feasible." Doral falls in that category. This Step-Two analysis examines operations, management, and financial plans for the circulator.

Survey Results

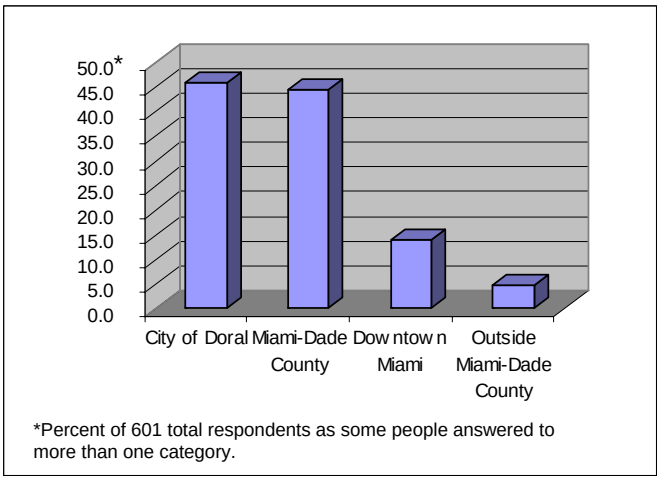
In March 2007, 3,500 survey questionnaires were mailed to randomly selected Doral households. The survey was developed in cooperation with City of Doral staff, and included input from Miami-Dade Transit. The survey distribution plan is included in Appendix B; the survey form in Appendix C (both English and Spanish versions); and, survey results in Appendix D. The 601 returned questionnaires provide a confidence level of 95 percent and a margin of error of ± four percent.

Among the 11 questions asked, the responses to three are cited in this summary.

Have you or anyone in your household used Miami-Dade Transit in the past six months?

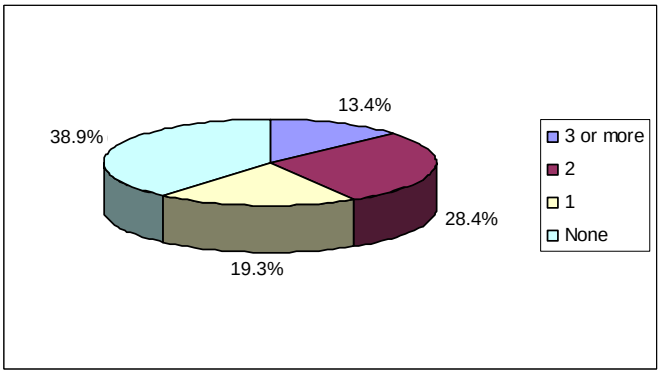


We would like to know the general nature of your typical weekday trip. Which of the following best describes where you work or attend school?



*Percent of 601 total respondents as some people answered to more than one category.

If a Citywide Transit (Trolley) System were available, how many people in your household would use it?



The results of the survey clarify the demographics of Doral residents as being younger, with larger households, and greater income than that of residents of the county or a typical transit rider. Nevertheless, there is clearly a pattern of prior transit use (18 percent reported some prior use of MDT), and an indication of willingness to consider a service (over sixty percent said someone in their household would use a transit service). Coupled with the fact that MDT does not provide service to large portions of residential Doral, there is a possibility that a transit circulator-type service would be used by the residents, despite the challenges that face developing successful public transit in an area with higher incomes and car ownership characteristics.

Transportation Service Concepts

The objective of the City from the standpoint of transportation is to develop an effective transit program that can meet existing needs, complement future growth plans, and see a framework for having options to deal with traffic transportation issues in the future.

As part of this feasibility study, several alternative concepts were explored. Figure ES-4 illustrates this initial identification of service options. Through meetings with City staff and leaders, interaction with the public, and review of existing successful systems in other municipalities, an evaluation and determination of what type of services may best work for Doral was identified.

The routing options present different approaches to providing circulator service in Doral. Each serves different functions. These options and the information developed during the study were presented to the City Commission and to staff in March 2007. The Commission instructed the consultant to develop a pilot program for the circulator. Following that meeting, the consultant met with staff to review the routes to determine an initial route that could serve as a pilot route. The consensus was that, as is discussed in Table ES-3, a combination of the Commercial/Neighborhood Shuttle and the Wal Mart/Restaurant Connector made the most sense as an initial demonstration route. This route is presented in Figure ES-5.

Recommendations

Based on the information developed through the survey, the City should develop a pilot program for the Circulator. The routing should generally follow that described in Figure ES-5 and should be operated as a fixed route. The route should operate from 7 a.m. to 7 p.m. and be truncated to operate as a lunch time shuttle from 11 a.m. to 2 p.m. The morning/afternoon route would operate on one-hour headways while the lunch shuttle would operate on 20 minute headways.

The City should contract the service out to a private provider and execute a one-year contract. The provider would own, operate, maintain, and fuel the vehicles. Initially, it is envisioned that the vehicles for the pilot program would be cutaway minibuses. These smaller vehicles are more suitable for the passenger volumes and to operate in and out of the many community complexes in the city. The contract should stipulate that the vehicles be new, be "wrapped" in a design approved by the City of Doral, and incorporate guidelines to ensure the highest level of service. The City should consider operating the service with alternative fuel powered vehicles.

Figure ES-4
Initial Identification of Service Options

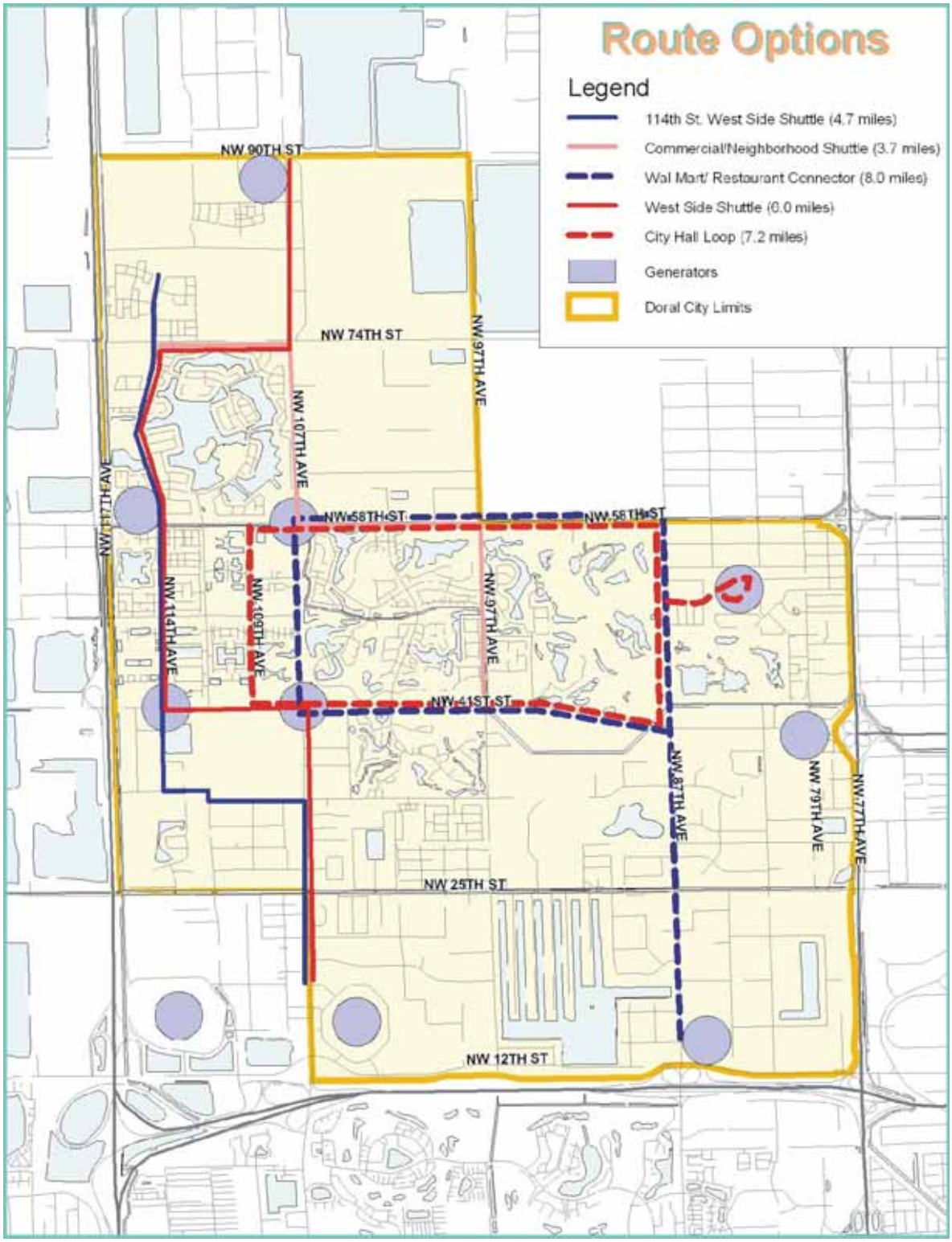
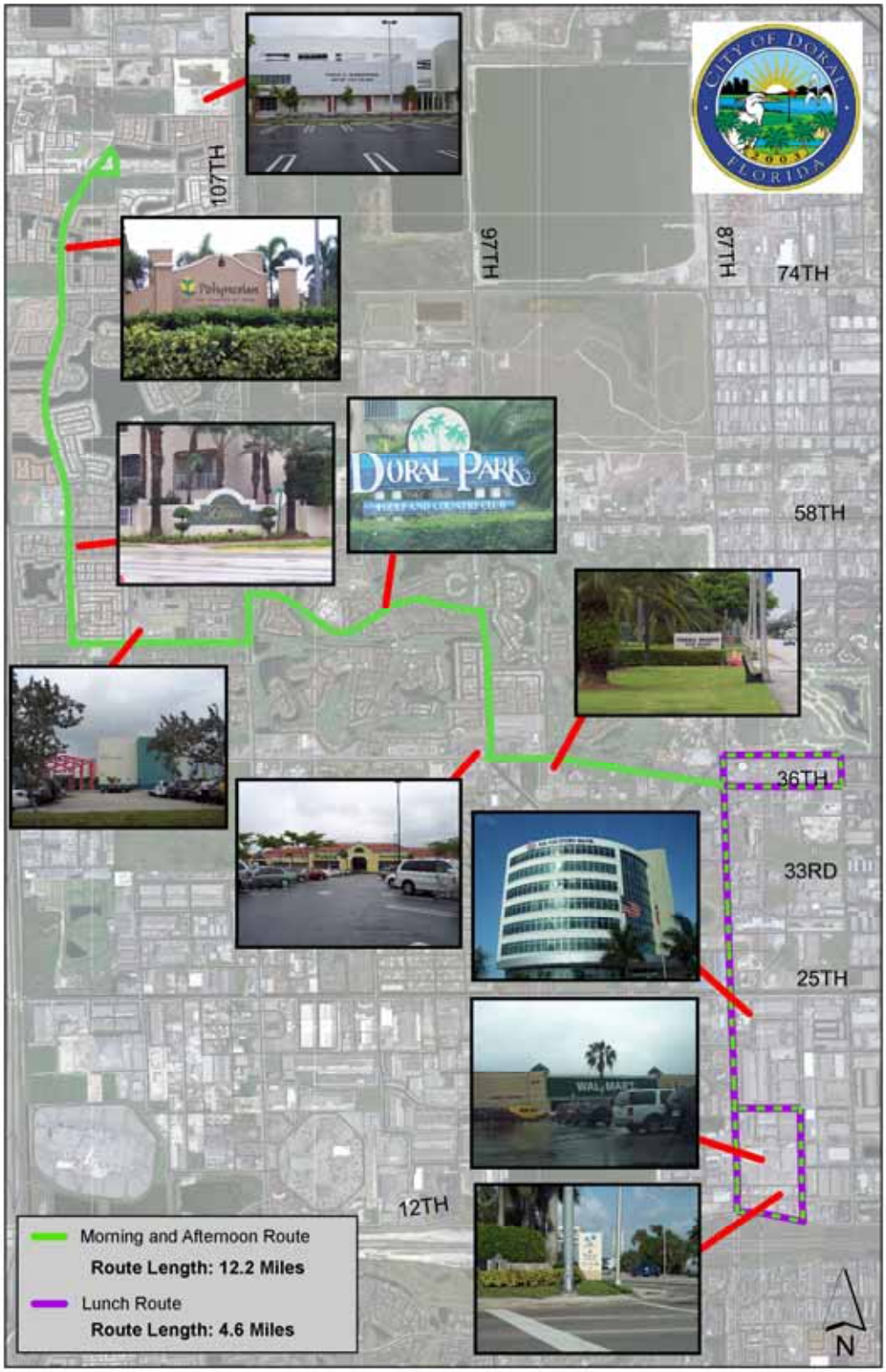


Table ES-3
Discussion of Initial Circulator Routes

Initial Route Proposal	Length	Function	Notes	Ridership	Connectivity
114th Street West Side Shuttle	4.7 miles	Link residential neighborhoods to Miami-Dade Community College, businesses, and malls	Provides service where there currently is none but would likely have limited Ridership. 114th Avenue also has significant peak hour congestion.	Low	Low
Commercial/Neighborhood Shuttle	3.7 miles	Links Doral neighborhoods to shopping	Provides link through Doral current and future residential areas to the City's main shopping plaza.	Medium	High
Wal Mart/Restaurant Connector	8.0 miles	Link residential areas to shopping and jobs	Provides connection to Wal Mart.	Medium	High
West Side Shuttle	6.0 miles	Link residential neighborhoods to Miami-Dade Community College, businesses, and malls	Provides service where there currently is none but would likely have limited Ridership. 114th Avenue also has significant peak hour congestion.	Low	Low
City Hall Loop	7.2 miles	Link neighborhoods and shopping areas to City Hall.	A City Hall connection for the circulator will be more viable after Downtown Doral is rebuilt.	Low	Medium

Figure ES-5
Doral Pilot Program Route



Initially, the service should be free (many circulator services in the county charge no fare) and even with a fare the percentage of operating cost recovered is minimal. The City may want to consider instituting a fare once the service is established. An interlocal agreement should be established with Miami-Dade County (through Miami-Dade Transit).

Table ES-4 presents the anticipated costs that can be expected by the City. The per hour cost for the bus service assumes a contracted service with the contractor providing essentially the entire service. The per-hour cost is an estimate based on existing services in the County and may be more or less depending on the final specifications for the service. The costs for marketing and staff time are estimates.

Table ES-4
Anticipated Circulator Costs (Draft)

Action	Measure	Cost	Total
Morning/Afternoon Route (1 bus, 1 hour headway)	7-11 a.m., 2-7 p.m. (256 weekdays)	$45/Hour	$103,680
Lunch Route (1 bus, 20 minute headway)	11 a.m. to 2 p.m. (256 weekdays)	$45/Hour	$34,560
Marketing	10% of budget	10% of budget	$12,280
Staff Time	¼ person time		$10,000
TOTAL			$160,520

An estimate was made of how many people might use the transit circulator. As noted in the survey discussion, almost over 60 percent of the respondents to the survey indicated that one or more people in their household would use a transit service if available. That is probably not realistic given the other demographic factors in Doral. Nevertheless, if 20 percent of Doral's population made two trips per year that would be 14,000 passenger trips. The Miami-Dade MPO Local Circulator Study recommends minimum thresholds of five riders per hour and 15,000 trips per year for a successful service. It is recommended that Doral adopt these standards as targets. The service should carry a minimum of five people an hour after a reasonable implementation period to be considered successful. This would result in an annual ridership of 15,360 per year.

Implementation of the City of Doral Transit circulator service would need to follow the following steps:

1. Present the recommendations to the City Council for review and approval.

2. Develop an Interlocal Agreement with Miami-Dade County through Miami-Dade County Transit.

3. Develop a set of specifications for the service. These should include type of vehicle, hours of service, requirements for maintenance and fueling (including alternative fuels), requirements for driver appearance, etc.

4. Issue an RFP for service or contract with a private provider with a current competitively bid contract that can be used as the basis for the pilot program.

5. Review submitted bids/proposals and shortlist the prospective bidders to those with reasonable and acceptable proposals (if applicable).

6. Interview candidate bidders (if applicable).

7. Select a contractor and negotiate a contract (if applicable).

8. Establish a process to monitor and evaluate service.

9. Initiate comprehensive marketing program.

10. Start service.

As noted above, the initial cost to the City will be about $145,000 for the pilot program unless the route or service recommendation is modified. Because the City does not receive People's Transportation Plan (PTP) funds, this funding initially will come from the City's general fund. There are programs in place to help communities develop transit service. The Florida Department of Transportation has a program called the Service Development Program (SDP) which is a three-year program to help communities develop transit service. The program funds 50 percent of eligible funds (the program encourages monies to be used for operating expenses) for a period of three years beginning when the service operation starts. The grant deadline for 2007 is June 8, 2007. The City should consider sending an application. Other programs operated by FDOT include the County Incentives Grant Program which is operated by the District VI Planning Office and having a project included in FDOT's work program.

The Doral Transit Circulator as defined in this report is a starting point for developing a sustainable transit system in Doral that can evolve as does this rapidly growing City. There will be many future opportunities – linkages to Metrorail along NW 74th Street, possible Park-and-Rides at interchanges on the Homestead Extension of Florida's Turnpike, and future transit connections to an east-west corridor transit system located in the SR 836 Corridor.

CORRADINO

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1. Introduction

The City of Doral, incorporated in 2003, is located in west-central Miami-Dade County. The City is bounded by SR 836 on the south, the Palmetto Expressway on the east, the Florida Turnpike on the west and NW 58th Street, and NW 90th Street on the north.

Once primarily composed of agricultural and industrial tracts, the area that has become Doral has established itself as a major center of wholesale international trade and as a booming office, commercial, and residential community. Approximately 35,000 people live in Doral and nearly 125,000 more travel to and through the city each day for employment and business activities. Because of its proximity to the urban core of Miami-Dade and major transportation facilities, as well as the rapid development of its component communities, Doral contends with a unique array of transportation concerns that require immediate and significant attention.

These include, but are not limited to:

- Heavy peak period congestion on NW 41st Street and NW 25th Street and also occasionally on north-south streets;
- Significant levels of truck traffic, particularly on NW 25th Street; and,
- Lack of parking at many restaurants during the weekday lunch hour.

As with many communities in Miami-Dade County, the City of Doral is exploring transit options to help deal with traffic issues. Residents and people working in Doral may be interested in using transit if it were provided to them in a frequent and convenient manner. Several ideas have been developed for potential services within the City's Transportation Master Plan. These include park-and-ride lots with shuttles at either the Palmetto Expressway or the Turnpike, servicing employers along 41st Street, or lunchtime service, which takes employees to various restaurants in the area, or connections with potential rail at either the Palmetto Metrorail Station or the future transportation initiatives associated with the East-West Corridor project development effort. Shuttles have also been suggested to service the residential community by providing trips to shopping, restaurants, and businesses. Routes can connect at intermodal centers or be structured in a grid with transfers occurring at each intersection.

Perhaps the biggest challenge to developing an effective transit service in Doral is the existing land use pattern (Figure 1-1). As can be seen, much of the center of the city is residential (primarily apartments, condos and townhouses) distributed around golf courses. Many of the complexes are gated and walking distances to local streets can be lengthy. The southern part of Doral is nearly all commercial and industrial. So, trying to link in a meaningful way this disparate community with transit will be a challenge.

This study, which is being conducted in context of the Miami-Dade Metropolitan Planning Organization's circulator planning process, has two key goals:

- Identify the "actual" possible demand for transit to the greatest extent possible;

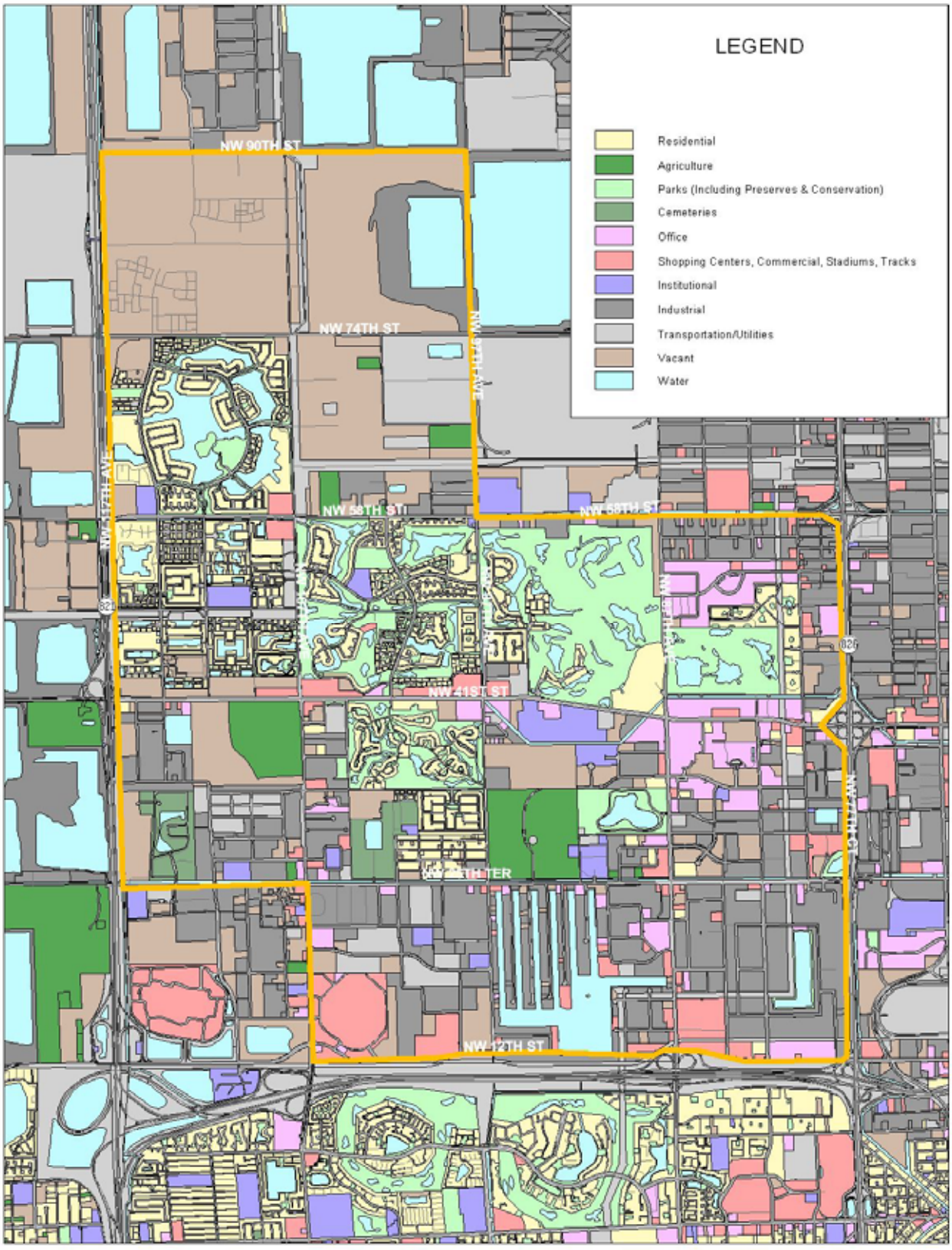
- Identify the type of service(s) and routes that could be successful in Doral;
- Identify pilot projects for possible implementation; and,
- Develop an implementation program and strategy.

The study will be accomplished over a four-month period and encompass the following tasks:

- Task 1: Existing Conditions;
- Task 2: Public Involvement;
- Task 3: Recommended Circulator System; and,
- Task 4: Implementation Program.

The study is being conducted for the City of Doral by The Corradino Group, a Doral-based planning and engineering consulting firm. This report documents all work conducted in the study to date and will be revised into a project final report following completion of the study.

Figure 1-1
Existing Land Use



2. Existing Conditions

2.1 Overview of Transportation in Doral

Miami Dade County began to flourish after World War II, mainly on the coast. Land to the west (currently Doral) was largely everglades and swamps. By the late 1950s, the Doral Country Club had been opened by a Miami Beach developer. It was used as a day-trip golf destination for Miami Beach tourists, who were transported from the Beach to the Country Club for a day on the golf course. Various ebbs and flows in the real estate market occurred until the 1980's when several residential communities were built around the country club. The history of Doral's daily traffic patterns can be traced to this time, and the pattern of daily ins and outs has remained similar. These developments were purely exurban in nature, with no supporting land use infrastructure. The lack of stores, schools and businesses required residents to drive out of the community for services, yet at that time Traffic problems were nonexistent.

Growth in Florida, particularly Miami-Dade County is an anomaly. The pace of development exceeds any government's ability to keep up. In the late 1980s the State of Florida initiated a growth management program called concurrency. This mandated that infrastructure be in place at the time of development. The unintended consequences incentivized development on the urban fringe, and subsequent infrastructure and amenities were built in Doral. Attracted by low real estate costs, vacant land, and rising congestion on the County's eastern edge, more residential and commercial interests began moving into Doral, a trend that has not stopped to this day. Today, the City has nearly 35,000 residents, as well as more than 100,000 workers who enter and exit the community each day through a limited number of roads.

Currently Doral is one of the County's few fully functioning cities, with ample residential, service and industrial bases. The community is typified by low-density residential development in a generally an automobile predominant suburban pattern, developed on a mile grid system, with large setbacks, wide right-of-ways, and few pedestrian amenities.

By 2002, Doral Incorporated as a City. In order to uphold a high quality of life, Doral began the effort of strategic planning in a manner that was unprecedented in Western Miami-Dade County. One of the first efforts undertaken was a Transportation Master Plan which analyzed the existing conditions, and set forth a list of projects to be implemented over the years to address the traffic and transportation issues. From this plan twenty-six projects have been developed in three categories, Roadway, Transit and Transportation Demand Management. These projects were prioritized and ranked.

Unfortunately the City is at a competitive disadvantage in implementing these projects. Doral is not eligible for funds from the Peoples Transportation Plan because it was incorporated after the passage of the plan and supporting tax. This fund represents a $16 billion, 30-year transportation investment. Twenty percent of the total annual revenue is divided among the municipalities on a pro-rata basis, (determined by population) for transportation enhancement projects. Doral is not eligible for this funding source. If it were it would be due to receive about $700,000 per year. In

addition the city is burdened by an expensive mitigation payment made to the County, which further hampers their ability to supply infrastructure.

Without an effective and adequately funded program of transportation improvement projects and policies to manage the anticipated growth, the overall quality of life within the City could be expected to deteriorate as the result of increasing levels of congestion with associated long delays, inconvenience and user costs.

2.2 Comprehensive Plan

The Doral Comprehensive Plan is the guiding document for growth in the City. The Future Land Use Map shown in Figure 2-1 illustrates that the three northernmost sections (Sections 10, 11, and 12) make up the area that will accommodate a large part of the future development in the City. The mixed-use, higher density development will occur in what will become "downtown" Doral which is located on and immediately around Doral Boulevard primarily on the east end of the City. The map calls out several areas as Downtown Mixed Use Opportunity Areas in this same section just west of the Palmetto Expressway. The first two sections to the north and to the south of Doral Boulevard on the east are designated as the mixed use areas.

Essentially, the growth plans as shown in Figure 2-1 will continue to emphasize residential and mixed use development north of 41st Street/Doral Boulevard and commercial/industrial to the south. A major factor in Doral's evolution will be the effective creation of the two mixed use developments referenced above which will effectively be downtown Doral (Figure 2-2). An important function of the circulator could be to connect these two areas when completed.

Transportation Element

The transportation element of the plan has a number of key objectives. The priority strategy is to maintain a Level of Service D on City streets. The plan also calls for a number of transit-related strategies including ensuring adequate transportation to the "transportation disadvantaged," a community bus service linking the downtown, neighborhoods, and public facilities, and creating an exclusive transit route from the downtown north on 87th Avenue to NW 74th Street and the NW 74th Street Metrorail station.

2.3 Demographics

The demographics presented in Table 2-1 are from the 2000 U.S. Census. In 2000, Doral was not yet incorporated. However, it was listed as a Census Designated Place (CDP) for purposes of the U.S. Census. The data summarized below are for the Doral CDP, which excludes a small portion of the incorporated area of Doral.

As of the 2000 Census, the Doral CDP has a population of 25,513. It is important to note that the population of Doral has increased since the 2000 Census. According to the Bureau of Economic and Business Research, the population of the City of Doral as of April 1, 2005 was 30,331. This is an increase of nearly 49 percent.

Figure 2-1
Future Land Use

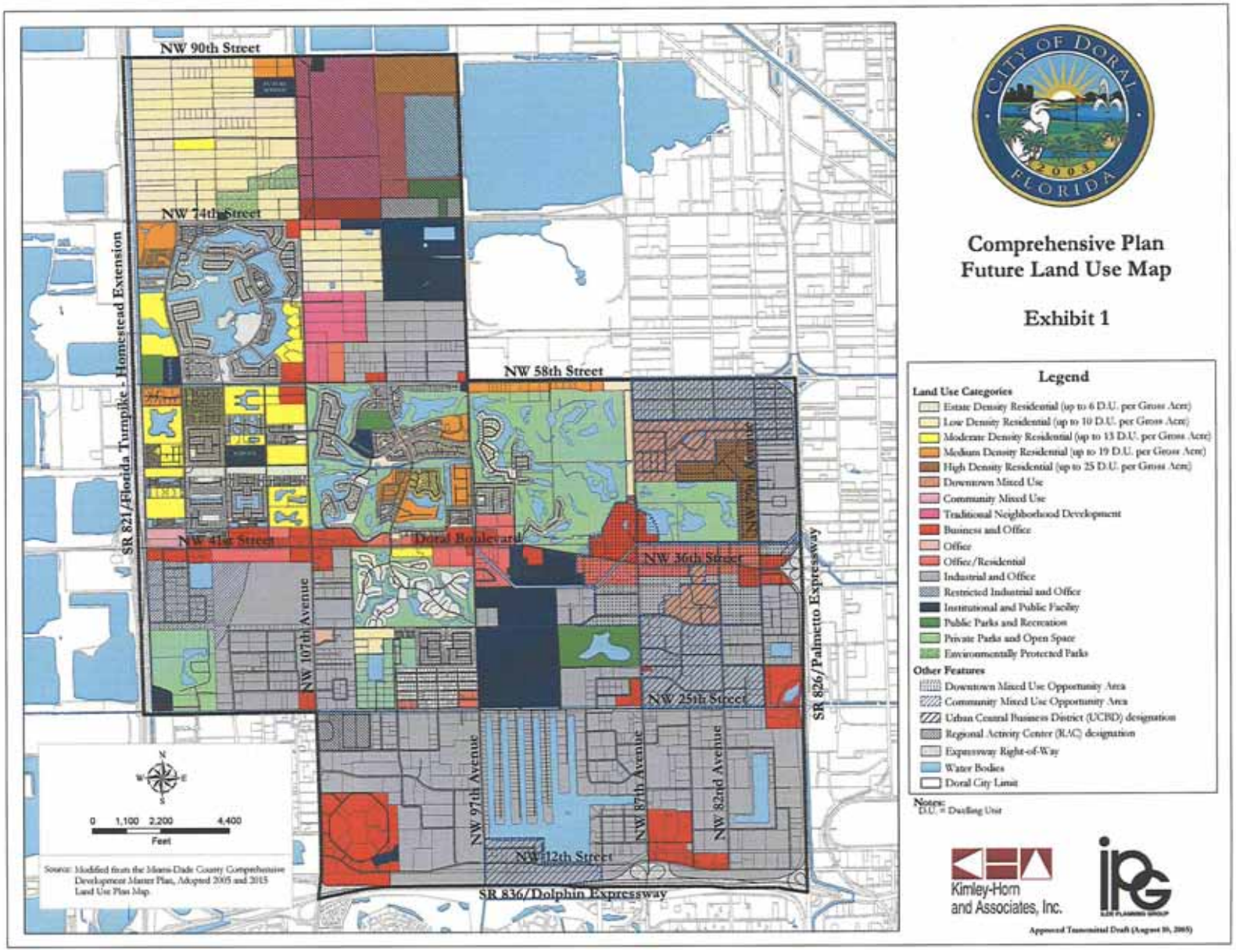


Table 2-1
Demographics

Age

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Age 0 to 4	1,978	9.6	144,850	6.4
Age 5 to 17	3,139	15.3	412,572	18.3
Age 18 to 34	6,221	30.3	537,574	23.9
Age 35 to 64	8,271	40.3	858,049	38.1
Age 65 and over	904	4.4	300,317	13.3
Total Population	20,513	100.0	2,253,362	100.0

Source: U.S. Census Bureau, Census 2000

Race

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
White alone	5,094	24.8	465,894	20.7
Black or African American alone	370	1.8	423,656	18.8
American Indian and Alaska Native alone	11	0.1	2,626	0.1
Asian alone	1,186	5.8	29,736	1.3
Native Hawaiian and Other Pacific Islander alone	0	0.0	344	0.0
Other	1,186	5.8	30,080	1.3
Hispanic or Latino	13,625	66.4	1,291,681	57.3
Total	20,513	100.0	2,253,362	100.0

Source: U.S. Census Bureau, Census 2000

Households

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
1-person household	1,671	21.6	181,076	23.3
2-person household	2,498	32.3	213,390	27.4
3-person household	1,451	18.8	141,181	18.2
4-person household	1,321	17.1	121,726	15.7
5-person household	538	7.0	66,408	8.5
6-person household	227	2.9	31,826	4.1
7-or-more-person household	32	0.4	21,771	2.8
Total Households	7,738	100.0	777,378	100.0

Source: U.S. Census Bureau, Census 2000

Table 2-1 (continued)
Demographics

Means of Transportation to Work
(Workers 16 years and over)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Car, truck, or van:	9,082	93.0	795,204	88.4
Drove alone	7,789	79.7	663,902	73.8
Carpooled	1,293	13.2	131,302	14.6
Public transportation	76	0.8	47,087	5.2
Motorcycle	0	0.0	890	0.1
Bicycle	7	0.1	4,079	0.5
Walked	182	1.9	19,367	2.2
Other means	19	0.2	8,547	1.0
Worked at home	401	4.1	24,149	2.7
Total	9,767	100.0	899,323	100.0

Source: U.S. Census Bureau, Census 2000

Travel Time to Work
(Workers 16 years and over)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Less than 5 minutes	115	1.2	11,481	1.3
5 to 9 minutes	796	8.1	49,971	5.6
10 to 14 minutes	1,974	20.2	90,487	10.1
15 to 19 minutes	1,871	19.2	123,790	13.8
20 to 24 minutes	1,393	14.3	126,890	14.1
25 to 29 minutes	447	4.6	48,772	5.4
30 to 34 minutes	1,209	12.4	173,451	19.3
35 to 39 minutes	298	3.1	25,342	2.8
40 to 44 minutes	353	3.6	39,425	4.4
45 to 59 minutes	570	5.8	95,732	10.6
60 to 89 minutes	224	2.3	63,477	7.1
90 or more minutes	116	1.2	26,356	2.9
Worked at home	401	4.1	24,149	2.7
Total	9,767	100.0	899,323	100.0

Source: U.S. Census Bureau, Census 2000

Table 2-1 (continued)
Demographics

Travel Time to Work by Mode
(Workers 16 years and over)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Less than 30 minutes:	6,596	70.4	451,391	51.6
Public transportation	12	0.1	10,407	1.2
Other means	6,584	70.3	440,984	50.4
30 to 44 minutes:	1,860	19.9	238,218	27.2
Public transportation	25	0.3	11,631	1.3
Other means	1,835	19.6	226,587	25.9
45 to 59 minutes:	570	6.1	95,732	10.9
Public transportation	0	0.0	7,157	0.8
Other means	570	6.1	88,575	10.1
60 or more minutes:	340	3.6	89,833	10.3
Public transportation	39	0.4	17,892	2.0
Other means	301	3.2	71,941	8.2
Total	9,366	100.0	875,174	100.0

Source: U.S. Census Bureau, Census 2000

Private Vehicle Occupancy
(Workers 16 years and over)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Car, truck, or van:	9,082	93.0	795,204	88.4
Drove alone	7,789	79.7	663,902	73.8
Carpooled:	1,293	13.2	131,302	14.6
In 2-person carpool	1,015	10.4	100,773	11.2
In 3-person carpool	165	1.7	18,747	2.1
In 4-person carpool	43	0.4	6,667	0.7
In 5- or 6-person carpool	70	0.7	3,601	0.4
In 7-or-more-person carpool	0	0.0	1,514	0.2
Other means (including those who worked at home)	685	7.0	104,119	11.6
Total	9,767	100.0	899,323	100.0

Source: U.S. Census Bureau, Census 2000

Table 2-1 (continued)
Demographics

School Enrollment
(Population 3 years and over)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Enrolled in nursery school, preschool:	651	3.4	39,440	1.8
Public school	110	0.6	18,708	0.9
Private school	541	2.8	20,732	1.0
Enrolled in kindergarten:	299	1.6	34,034	1.6
Public school	191	1.0	26,975	1.2
Private school	108	0.6	7,059	0.3
Enrolled in grade 1 to grade 4:	1,209	6.3	128,465	5.9
Public school	926	4.8	112,962	5.2
Private school	283	1.5	15,503	0.7
Enrolled in grade 5 to grade 8:	811	4.2	133,454	6.2
Public school	466	2.4	117,875	5.4
Private school	345	1.8	15,579	0.7
Enrolled in grade 9 to grade 12:	668	3.5	147,899	6.8
Public school	411	2.1	130,916	6.0
Private school	257	1.3	16,983	0.8
Enrolled in college, undergraduate years:	1,137	5.9	131,627	6.1
Public school	850	4.4	97,410	4.5
Private school	287	1.5	34,217	1.6
Enrolled in graduate or professional school:	590	3.1	28,808	1.3
Public school	255	1.3	13,984	0.6
Private school	335	1.7	14,824	0.7
Not enrolled in school	13,925	72.2	1,522,424	70.3
Total Population 3 years and over	19,290	100.0	2,166,151	100.0

Source: U.S. Census Bureau, Census 2000

Table 2-1 (continued)
Demographics

Educational Attainment
(Population 25 years and over)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
No schooling completed	107	0.8	43,971	2.9
Nursery to 4th grade	20	0.1	24,263	1.6
5th and 6th grade	135	1.0	81,556	5.5
7th and 8th grade	178	1.3	69,276	4.6
9th grade	112	0.8	54,001	3.6
10th grade	40	0.3	41,894	2.8
11th grade	74	0.5	38,931	2.6
12th grade, no diploma	539	3.9	125,461	8.4
High school graduate (includes equivalency)	2,069	15.0	332,997	22.3
Some college, less than 1 year	688	5.0	85,249	5.7
Some college, 1 or more years, no degree	1,784	12.9	176,908	11.9
Associate degree	1,503	10.9	93,883	6.3
Bachelor's degree	3,902	28.2	183,978	12.3
Master's degree	1,490	10.8	69,075	4.6
Professional school degree	1,038	7.5	55,679	3.7
Doctorate degree	157	1.1	14,667	1.0
Total Population 25 years and over	13,836	100.0	1,491,789	100.0

Source: U.S. Census Bureau, Census 2000

Table 2-1 (continued)
Demographics

Disability Status by Employment Status
(Civilian Non-institutionalized Population 5 years and over with disabilities)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
5 to 15 years:	2,851	100.0	349,790	100.0
With a disability	71	2.5	17,521	5.0
No disability	2,780	97.5	332,269	95.0
16 to 20 years:	901	100.0	150,742	100.0
With a disability:	143	15.9	24,014	15.9
Employed	95	10.5	9,021	6.0
Not employed	48	5.3	14,993	9.9
No disability:	758	84.1	126,728	84.1
Employed	285	31.6	40,137	26.6
Not employed	473	52.5	86,591	57.4
21 to 64 years:	13,762	100.0	1,286,009	100.0
With a disability:	2,701	19.6	300,048	23.3
Employed	1,671	12.1	161,207	12.5
Not employed	1,030	7.5	138,841	10.8
No disability:	11,061	80.4	985,961	76.7
Employed	7,478	54.3	669,210	52.0
Not employed	3,583	26.0	316,751	24.6
65 to 74 years:	657	100.0	161,007	100.0
With a disability	158	24.0	58,046	36.1
No disability	499	76.0	102,961	63.9
75 years and over:	247	100.0	130,158	100.0
With a disability	128	51.8	74,363	57.1
No disability	119	48.2	55,795	42.9

Source: U.S. Census Bureau, Census 2000

Employment Status
(Population 16 years and over)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Total:	15,684	100.0	1,758,374	100.0
In labor force:	10,401	66.3	1,010,965	57.5
In Armed Forces	117	1.1	1,509	0.1
Civilian:	10,284	98.9	1,009,456	99.9
Employed	9,841	95.7	921,208	91.3
Unemployed	443	4.3	88,248	8.7
Not in labor force	5,283	33.7	747,409	42.5

Source: U.S. Census Bureau, Census 2000

Table 2-1 (continued)
Demographics

Employment by Industry
(Population 16 years and over)

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	61	0.6	6,635	0.7
Construction	226	2.3	63,135	6.9
Manufacturing	763	7.8	65,041	7.1
Wholesale trade	1,811	18.4	55,398	6.0
Retail trade	883	9.0	113,333	12.3
Transportation and warehousing, and utilities	1,232	12.5	69,072	7.5
Information	719	7.3	28,890	3.1
Finance, insurance, real estate and rental and leasing	781	7.9	73,893	8.0
Professional, scientific, management, administrative, and waste management services	1,178	12.0	106,641	11.6
Educational, health and social services:	879	8.9	165,357	18.0
Arts, entertainment, recreation, accommodation and food services	617	6.3	84,129	9.1
Other services (except public administration)	280	2.8	51,737	5.6
Public administration	411	4.2	37,947	4.1
Total	9,841	100.0	921,208	100.0

Source: U.S. Census Bureau, Census 2000

Table 2-1 (continued)
Demographics

Household Income

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Less than $10,000	612	7.9	107,901	13.9
$10,000 to $14,999	187	2.4	58,409	7.5
$15,000 to $19,999	282	3.6	55,140	7.1
$20,000 to $24,999	394	5.1	56,509	7.3
$25,000 to $29,999	283	3.7	51,980	6.7
$30,000 to $34,999	539	7.0	48,853	6.3
$35,000 to $39,999	416	5.4	44,982	5.8
$40,000 to $44,999	487	6.3	42,300	5.4
$45,000 to $49,999	215	2.8	34,498	4.4
$50,000 to $59,999	815	10.5	61,726	7.9
$60,000 to $74,999	997	12.9	67,807	8.7
$75,000 to $99,999	870	11.2	63,132	8.1
$100,000 to $124,999	538	7.0	32,258	4.1
$125,000 to $149,999	427	5.5	15,995	2.1
$150,000 to $199,999	228	2.9	15,222	2.0
$200,000 or more	448	5.8	20,666	2.7
Total	7,738	100.0	777,378	100.0

Source: U.S. Census Bureau, Census 2000

Median Household Income

	City of Doral	Miami-Dade County
Median household income	$53,060	$35,966

Source: U.S. Census Bureau, Census 2000

Households Below Poverty

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Income below poverty level:	2,404	11.7	396,995	18.0
Total Households	20,479	100.0	2,209,089	100.0

Source: U.S. Census Bureau, Census 2000

Table 2-1 (continued)
Demographics

Housing Tenure

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
Owner occupied	4,382	56.4	449,333	57.8
Renter occupied	3,382	43.6	327,441	42.2
Total	7,764	100.0	776,774	100.0

Source: U.S. Census Bureau, Census 2000

Household Size

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
1-person household	1,690	21.8	180,973	23.3
2-person household	2,531	32.6	215,033	27.7
3-person household	1,465	18.9	141,970	18.3
4-person household	1,292	16.6	120,938	15.6
5-person household	560	7.2	65,837	8.5
6-person household	196	2.5	30,673	3.9
7-or-more-person household	30	0.4	21,350	2.7
Total	7,764	100.0	776,774	100.0

Source: U.S. Census Bureau, Census 2000

Vehicles Available by Household

	City of Doral		Miami-Dade County	
	Number	Percent	Number	Percent
No vehicle available	230	3.0	111,323	14.3
1 vehicle available	2,898	37.3	301,500	38.8
2 vehicles available	3,938	50.7	263,256	33.9
3 vehicles available	552	7.1	73,233	9.4
4 vehicles available	106	1.4	20,610	2.7
5 or more vehicles available	40	0.5	6,852	0.9
Total Households	7,764	100.0	776,774	100.0

Source: U.S. Census Bureau, Census 2000

Doral has a younger population than that of Miami-Dade County. Only 4.4 percent of Doral's residents are 65 and over compared to 13.3 percent of the County residents. In terms of race, whites, Asians and Hispanics comprise the majority of the population. Households are also smaller in Doral than those of the County. In Doral, 53.9 percent of the households are comprised of two or less people as compared with 50.7 percent for the County.

Doral's commuting and employment demographics also differ from those of the County. Doral has a lower percentage of public transportation use than Miami-Dade County. Less than one percent of Doral's workers used transit compared to five percent of County residents. Those living in Doral also have shorter travel times to work. Over 67 percent of Doral workers had a commute time of less than 30 minutes as compared with 50.3 percent of workers living in Miami-Dade County.

Doral's residents are more educated than the population of Miami-Dade County. Only 12.3 percent of County residents have a bachelor's degree compared with 28.2 percent of Doral residents. In addition, residents of Doral with a disability are more likely to be employed than Miami-Dade County residents with disabilities. Unemployment is also lower in Doral (4.3%) as compared with the County (8.7%). The majority of those employed and living in Doral work in the wholesale trade; transportation and warehousing; and, professional, scientific, management administrative and waste management industrial sectors.

Doral's residents also enjoy higher income levels than those living in the rest of Miami-Dade County. Nearly 56 percent of Doral's households have an annual income of $50,000 or more as compared with 35.6 percent of Miami-Dade County. In addition, the median household income for Doral is $53,060 compared with $35,966 for the County.

Doral has slightly higher rate of renter occupied housing units as compared with that of Miami-Dade County. Doral's households are also somewhat smaller than those of the County with 54 percent of Doral's households comprised of two or less people compared to 51 percent in the County. Doral has a higher rate of vehicle ownership than the County. In Doral, only three percent of the households do not have a vehicle as compared to 14.3 percent for the County.

2.4 Existing and Future Roadway Traffic Conditions

As part of the City's adopted Transportation Master Plan, the principal roadway links and intersections were analyzed for existing as well as future year traffic conditions. Intersections, as well as roadway links traffic counts were taken during the year 2005. These formed the basis for the existing capacity and level-of-service (LOS) analyses. Then the year 2005 traffic volumes were projected to the years 2015 and 2030 to conform to target years of the Miami Dade MPO's adopted long range transportation plan (LRTP). Capacity/LOS analyses were then performed using the projected traffic volumes.

Table 2-2 depicts the roadway links that were selected for the year 2005 traffic conditions analyses. It includes information such as the roadway segment or link limits, daily as well as peak hour traffic volumes and other related data and information. Table 2-3 and Figure 2-2 depict the results of the Year 2005 LOS analyses for the intersections and roadway links respectively. With regards to future years, Figures 2-3 and 2-4 reflect the forecasted roadway link LOS for the years 2015 and 2030. Finally, Figure 2-5 illustrates how the different roadway links would be failing LOS over time.

Table 2-2a
City of Doral
Year 2005 Two-way Volumes
East-West Roads

Road	Limits	Function Class	# Lanes	Year 2005 AADT	Peak Hour K%	Peak Hour Volume
NW 74th Street	117Ave - 107 Ave	County Minor Arterial	4	3,000	0.109	327
NW 58th Street	117 Ave - 107 Ave	Local road	4	13000	0.097	1261
	107 Ave - 97 Ave	County Minor Arterial	4	18000	0.082	1476
	97 Ave - 87 Ave	County Minor Arterial	4	35000	0.082	2870
	87 Ave - SR 826	County Minor Arterial	4	32000	0.073	2336
NW 41st Street	117 Ave - 107 Ave	State Principal Arterial	6 D	42000	0.079	3318
	107 Ave - 97 Ave	State Principal Arterial	6 D	44000	0.079	3476
	97 Ave - 87 Ave	State Principal Arterial	6 D	54000	0.084	4536
	87 Ave - SR 826	State Principal Arterial	6 D	39000	0.082	3198
NW 25th Street	117 Ave - 107 Ave	County Collector	4	16000	0.095	1520
	107 Ave - 97 Ave	County Minor Arterial	4	35000	0.093	3255
	97 Ave - 87 Ave	County Minor Arterial	4	52000	0.097	5044
	87 Ave - SR 826	County Minor Arterial	4	46000	0.075	3450
NW 12th Street	107 Ave - 97 Ave	County Minor Arterial	4	24000	0.095	2280
	97 Ave - 87 Ave	County Minor Arterial	4	26000	0.086	2236
	87 Ave - SR 826	County Minor Arterial	4	36000	0.085	3060
NW 50th Street	117 Ave - 107 Ave	Local road	2	4100	0.185	759
NW 52nd Street	107 Ave - 97 Ave	Local road	2	8300	0.121	1004

Notes:

Func Class Roadway functional classification as established by FDOT
AADT Average Annual Daily Traffic
K% Percent of traffic occurring during the peak hour

Table 2-2b
City of Doral
Year 2005 Two-way Volumes
North-South Roads

Road	Limits	Function Class	# Lanes	YR 2005 AADT	Peak Hour K%	Peak Hour Volume
NW 79th Avenue	25 St - 41 St	City Collector	4	15,000	0.09	1350
	41 St - 58 St	City Collector	4	14000	0.088	1232
NW 82nd Avenue	25 St - 41 St	City Collector	2	10000	0.1	1000
	12 St - 25 St	City Collector	4	19,000	0.08	1520
NW 87th Avenue	12 St - 25 St	County Minor Arterial	6D	46000	0.075	3450
	25 St - 41 St	County Minor Arterial	6D	38000	0.078	2964
	41 St - 58 St	County Minor Arterial	4D	25000	0.092	2300
NW 97th Avenue	12 St - 25 St	County Collector	4	14000	0.094	1316
	25 St - 33 St	County Collector	2	15000	0.092	1316
	33 St - 41 St	County Collector	4	15000	0.092	1380
	41 St - 58 St	County Collector	4	17000	0.1	1700
NW 107th Avenue	12 St - 25 St	County Minor Arterial	6D	48000	0.073	3504
	25 St - 41 St	County Minor Arterial	4D	37000	0.074	2738
	41 St - 58 St	County Minor Arterial	4D	25000	0.072	1800
	58 St - 74 St	County Collector	2	13000	0.076	988
NW 102nd Avenue	58 St - 41 St	Local road	4	7500	0.118	885
NW 114th Avenue	74 St - 58 St	Local road	4	9600	0.087	835
	58 St - 41 St	Local road	2	16000	0.083	1328

Notes:

Func Class	Roadway functional classification as established by FDOT
AADT	Average Annual Daily Traffic
K%	Percent of traffic occurring during the peak hour

Table 2-3
City of Doral
Year 2005 Intersection Traffic Volumes

#	Intersection	Peak Hr LOS
1	NW 58th Street @ 107th Ave	C
2	NW 58th Street @ 97th Ave	C
3	NW 58th Street @ 87th Ave	F
4	NW 58th Street @ 79th Ave	D
5	NW 41st Street @ 107th Ave	E
6	NW 41st Street @ 97th Ave	F
7	NW 36th Street @ 87th Ave	E
8	NW 36th Street @ 79th Ave	B
9	NW 25th Street @ 107th Ave	E
10	NW 25th Street @ 97th Ave	C
11	NW 25th Street @ 87th Ave	C
12	NW 25th Street @ 79th Ave	D
13	NW 12th Street @ 107th Ave	D
14	NW 12th Street @ 97th Ave	B
15	NW 12th Street @ 87th Ave	F
16	NW 50th Street @ 114th Ave	B

Figure 2-2
2005 Level of Service

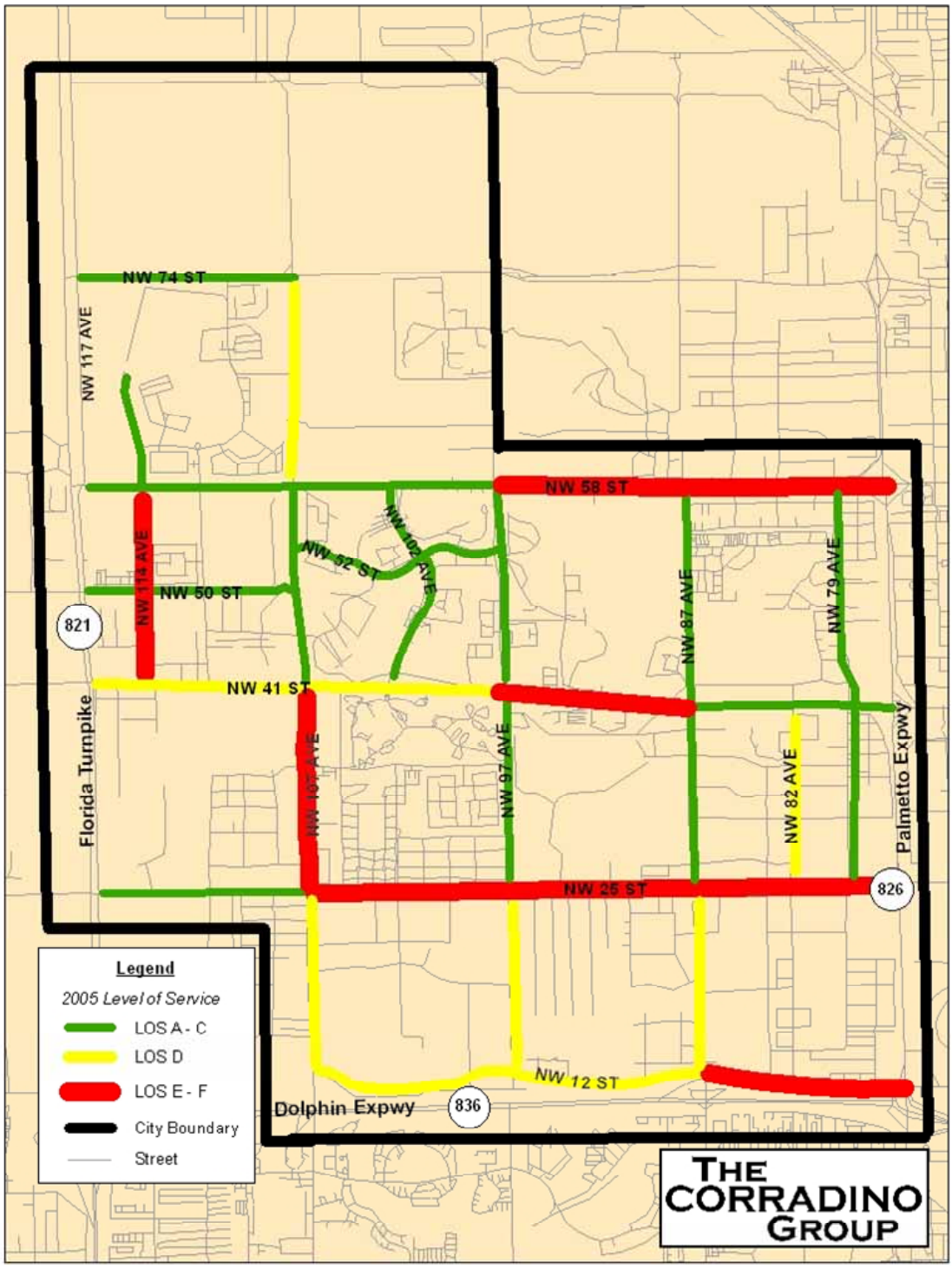


Figure 2-3
2015 Level of Service

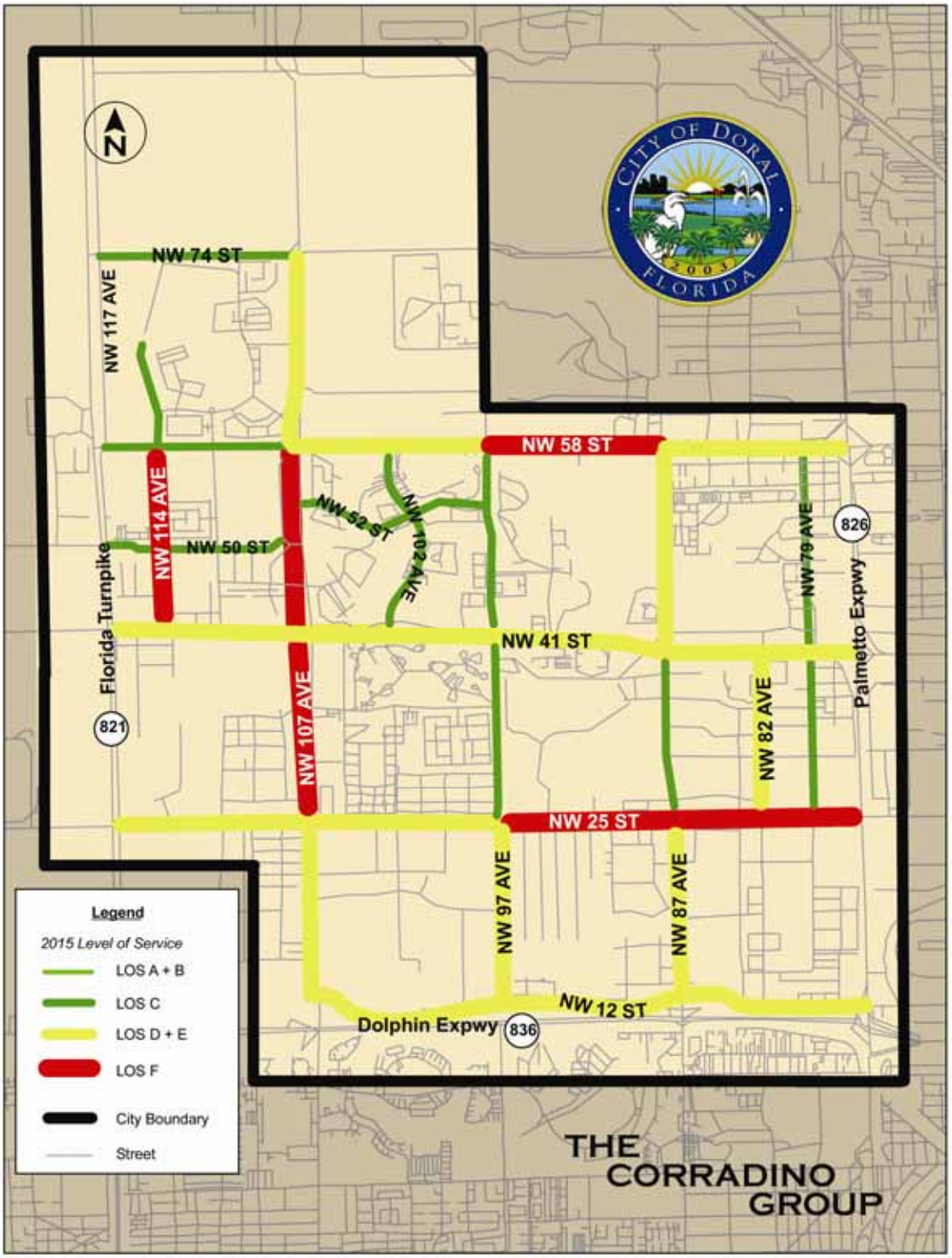


Figure 2-4
2030 Level of Service

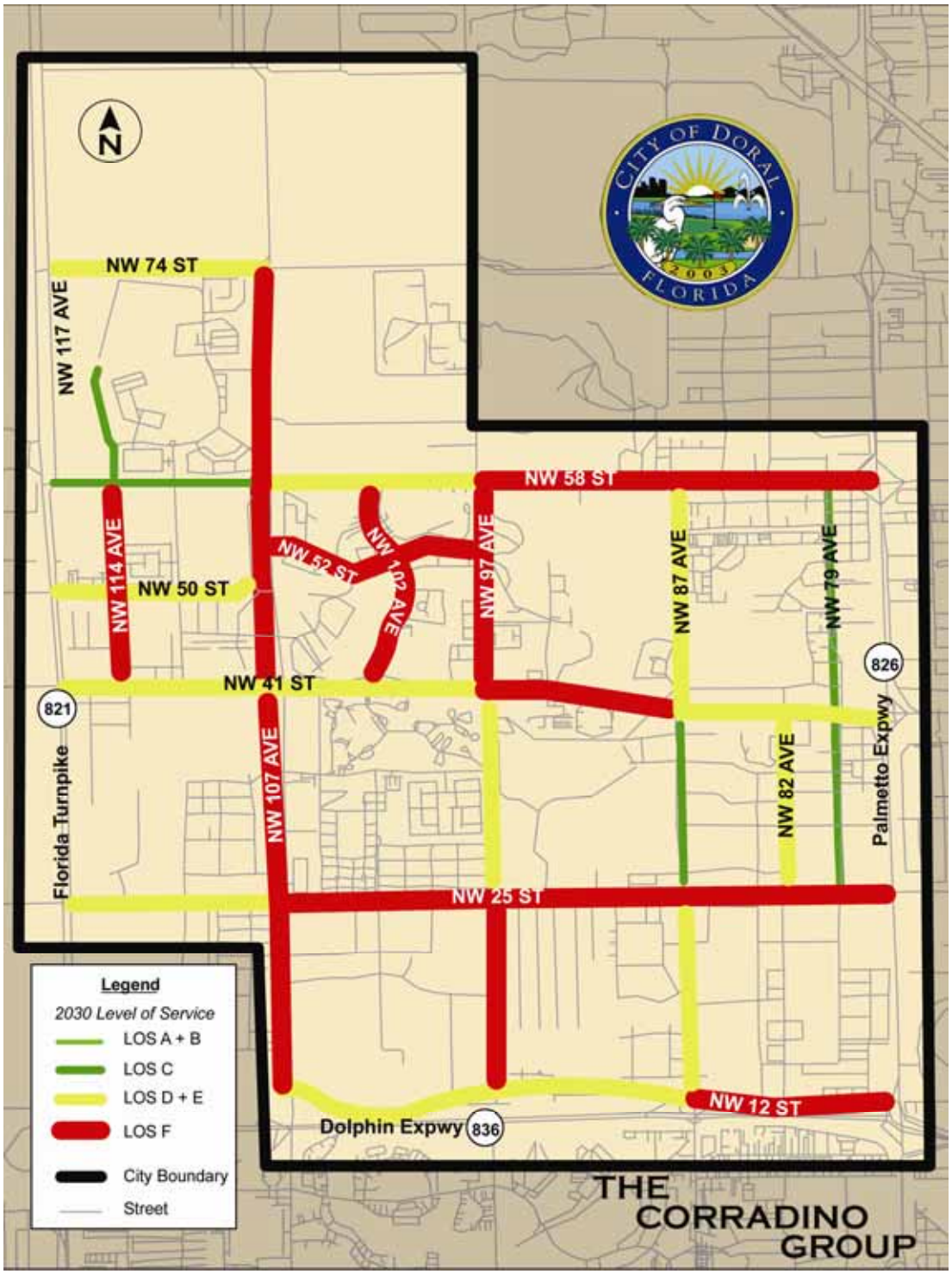
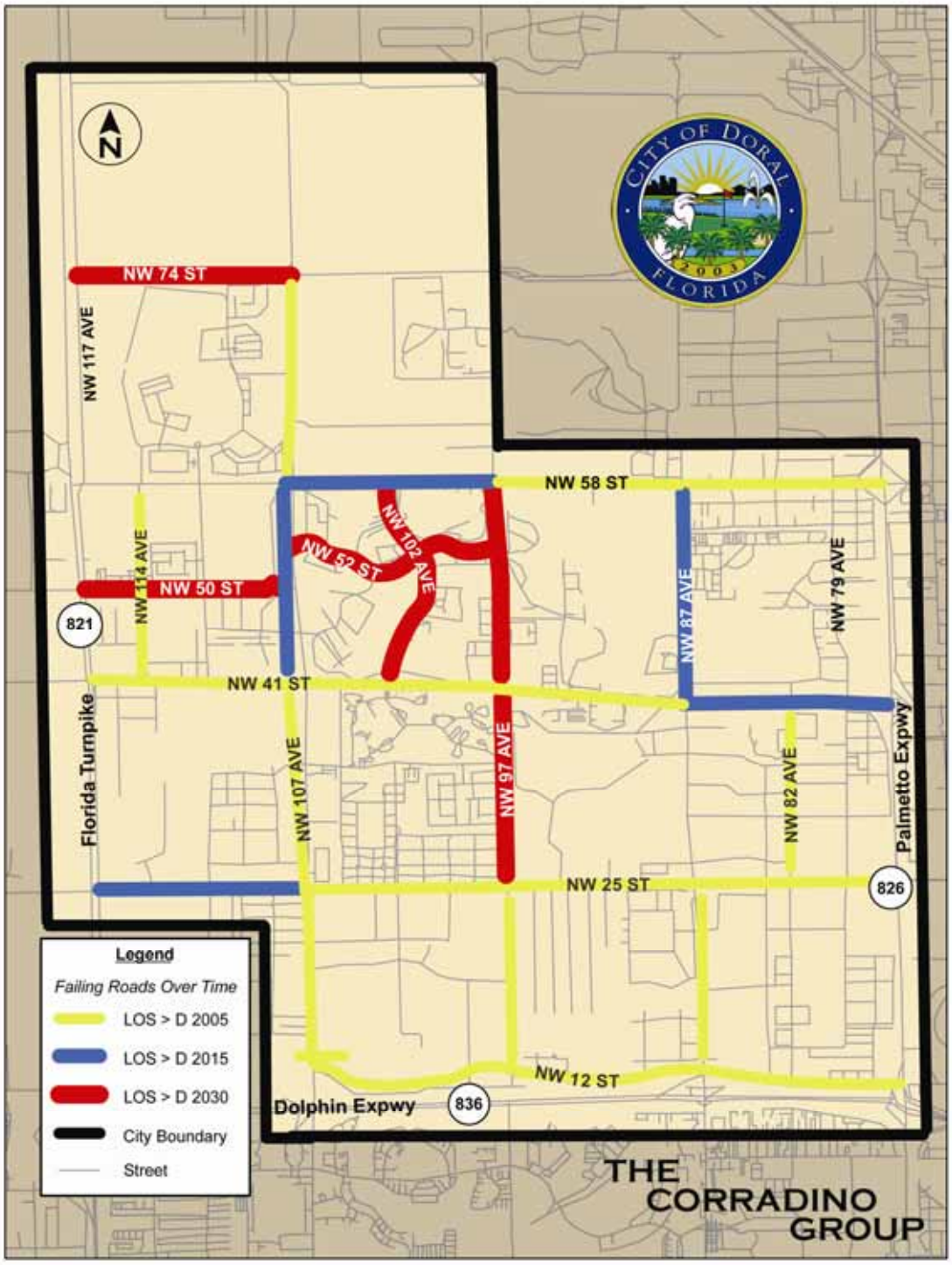


Figure 2-5
Failing Roads Over Time



Of the 16 intersections analyzed, ten meet or exceed the level of service thresholds. The most problematic areas are along 87th Avenue, 107th Avenue and 41st Street. Intersections along 58th Street, 25th Street and 12th Street generally run in an acceptable manner. Poorly operating intersections may be improved by signal optimization, roadway capital improvements projects or multimodal transportation options such as enhanced transit service among others.

Some of the existing links already failed Level of Service thresholds. Specifically 41st Street between 97th Avenue and 87th Avenue and 25th Street between 107th Avenue and the Palmetto Expressway. The remaining links currently meet or exceed LOS thresholds. It should be noted that although NW 58th Street is shown operating at LOS E-F east of 97th Avenue, it is based on year 2005 traffic conditions. The road has been recently widened to four lanes and it is operating at improved LOS.

In conclusion, traffic volumes will increase significantly by 2030 to the point that most roadway segments within the City will be operating at undesirable LOS standards and with an overall worsening of traffic conditions and an increase in traffic congestion and delays.

2.5 MDT Service

Miami-Dade Transit (MDT) is currently the predominant provider of public transit service in the City of Doral. The MDT route structure is shown in Figure 2-6. The individual maps for each route are included in Appendix A.

Table 2-4 provides information about these routes.

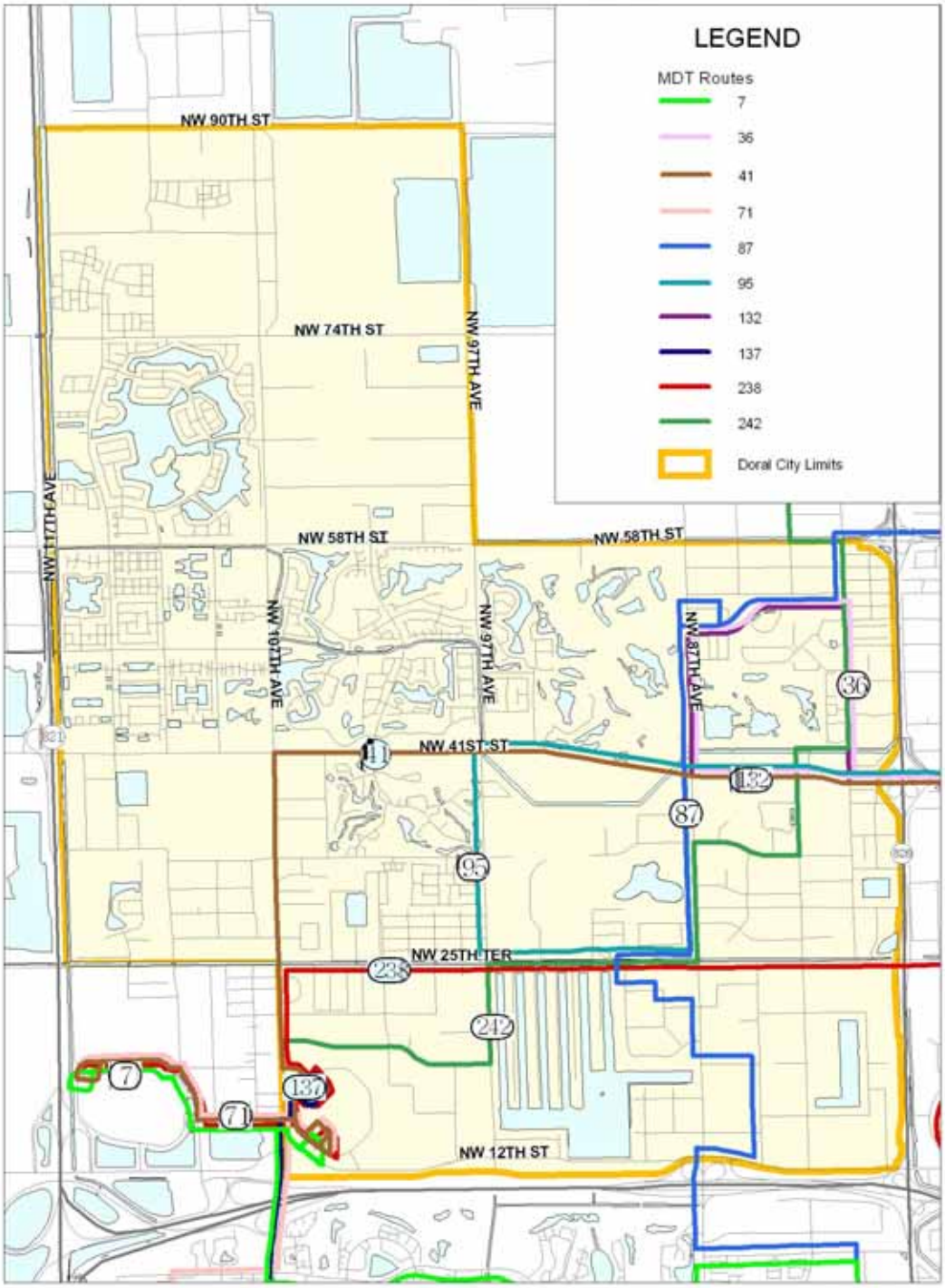
Table 2-4
Doral Bus Routes

Routes in Doral	Average Weekday	Boarding's By Day of Week			Total Monthly Boarding's	Bus Size
		Weekdays	Saturdays	Sundays		
36	3,271	68,693	6,365	5,095	80,153	40' or 60'
41	N/A	N/A	N/A	N/A	N/A	40' or 60'
87	1,861	39,071	2,748	2,874	44,694	40' or 60'
238	513	10,765	1,807	1,520	14,092	40' or 60'
242	397	8,334	N/A	N/A	8,334	40' or 60'
132-TriRail Shuttle	49	1,030	N/A	N/A	1,030	40' or 60'
95x - Earlington Heights	1,626	34,147	N/A	N/A	34,147	40' or 60'

Source: Miami Dade Transit

As can be seen, most of MDT's service is on 41st Street/Doral Boulevard or to the south. There is very little service in the residential areas in the northwest part of the City and there are a number of shopping areas with minimal or no service.

Figure 2-6
MDT Route Structure



2.6 Traffic Generators

Traffic generators are those land uses, developments, facilities, activity centers, shopping areas, high density residential facilities, etc. that attract people and to which people may consider transit as a mode of transportation. Figure 2-7 shows key transit generators in Doral. Figure 2-7 also shows areas that may be considered for future park-and-ride and/or transit when projects such as the extension of NW 74th Street and the East-West Corridor are completed.

2.7 Existing Municipal Circulators in Miami-Dade County

There are today more than 30 municipal circulator operators in Miami-Dade County. Many of them have been established since the passage of the Peoples Transportation Plan, but several (including Hialeah, Coral Gables and Aventura) have systems that predate the PTP. All have the underlying purpose of supporting and enhancing mobility in their individual communities while complementing Miami-Dade transit service.

Table 2-5 lists the various systems in operation. As options for the Doral circulator are considered, the "lessons learned" from these systems will be invaluable.

2.8 Transit Propensity

Transit propensity is a term that refers to the potential (or lack thereof) of a geographic area to generate transit ridership. Often, maps overlay factors such as population density, percent elderly, percent low income, etc. are created that show areas that may be conducive to transit.

The Miami-Dade Metropolitan Planning Organization in 2002 commissioned a study[2] to help communities develop transit circulators. As part of that study, a rating system or "Score Card" was developed. The Score Card as applied to the City of Doral (Table 2-6) rates a number of factors similar to transit propensity but also some factors relating specifically to Miami-Dade County. This evaluation was considered to be a Step-One evaluation.

The Score Card results in a "score" which can be interpreted as follows:

< 40	=	Community not a good candidate for a circulator
> 40 and < 60	=	Community may be a candidate
> 60	=	Community is a good candidate

As can be seen, Doral scores a 50. This is in the middle of the "may be viable" range. This is due to two factors. The demographics of the community are not those "typical" of transit supporting areas. This indicates generating ridership in Doral will be a challenge. However, the community's feasibility is strengthened by the fact that there is municipal support and funding. In addition, it should be noted that the analysis does not weigh the presence of more than 100,000 employees commuting to and through Doral daily.

[2] Local Municipal Transit Circulator Policy Study, prepared for Miami-Dade County Metropolitan Planning Organization, prepared by Kimley-Horn Associates, 2002.

Figure 2-7
Transit Generators

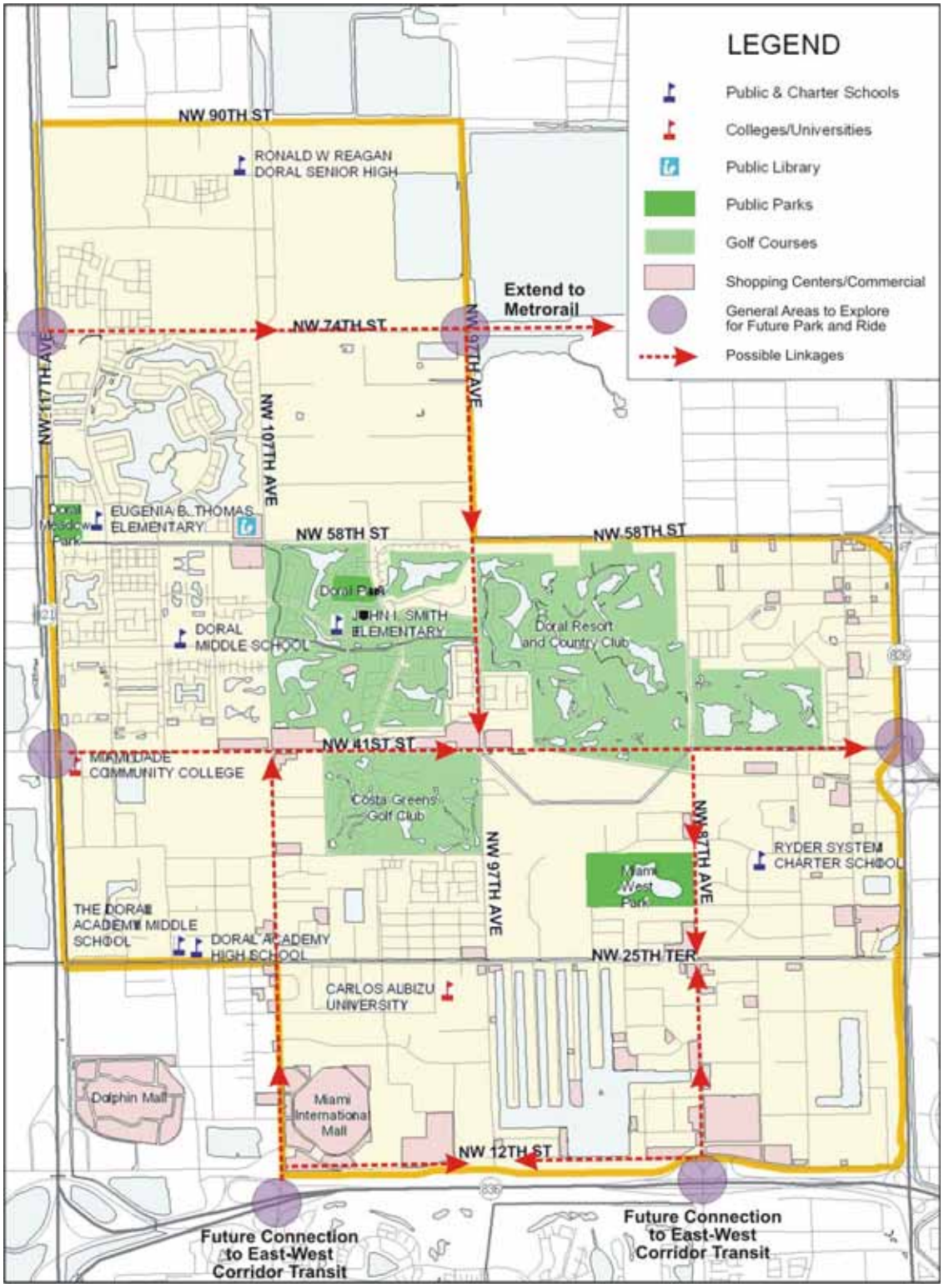


Table 2-5
Overview of Circulators in Miami-Dade County

City	Bus System	Routes	Vehicles	Times	Fares
Aventura	Aventura Shuttle Bus Transit System	Blue – Northside, Yellow – Southside, Red – Westside, Green – Eastside	Shuttle	Mon – Fri: 8:45 am to 6:20 pm Sat: 8:45 am to 9:20 pm	Free
Bal Harbour	None	None	None	None	None
Bay Harbor Islands	Mini-bus service	Connects Bay Harbor Islands to Surfside and North Miami	Shuttle	Mon – Fri: 9 am to 4 pm	Free
Biscayne Park	None	None	None	None	None
Coral Gables	Coral Gables Trolley	Ponce de Leon Blvd. Biltmore Way	Trolley	Mon – Thurs: 7 am to 7 pm Fri: 7 am to 10 pm	Free
Doral	None	None	None	None	None
El Portal	None	None	None	None	None
Florida City	None	None	None	None	None
Golden Beach	None	None	None	None	None
Hialeah	Hialeah Transit System	Marlin (blue bus) & Flamingo (red bus)	Bus	Mon – Fri: 6 am to 9 pm Sat: 9 am to 5 pm	Full Fare – $1.25; Reduced Fare – .60 cents; Monthly Full Pass – $60.00; Monthly Reduced Pass – $30.00 Golden Passport Pass – Free
Hialeah Gardens	Hialeah Transit System	Marlin (blue bus) & Flamingo (red bus)	Bus	Mon – Fri: 6 am to 9 pm Sat: 9 am to 5 pm	Full Fare – $1.25; Reduced Fare – .60 cents; Monthly Full Pass – $60.00; Monthly Reduced Pass – $30.00 Golden Passport Pass – Free
Homestead	None	None	None	None	None
Indian Creek Village	None	None	None	None	None
Islandia	None	None	None	None	None
Key Biscayne	Yes – Senior Transportation Program	Connects to all local points on the island	Shuttle	Tues, Wed, and Thurs	Free
Medley	None	None	None	None	None
Miami	Super Shuttle	To and from airport	Shuttle	24 hrs a day, 7 days a week	Varies with distance
Miami Beach	Electrowave	Along Washington to Lincoln Road Mall	Shuttle	Mon – Sat: 8 am to 1 am; Sundays & Holidays: 10 am to 1 am	25 cents at each boarding
Miami Gardens	None	None	None	None	None
Miami Lakes	None	None	None	None	None
Miami Shores	None	None	None	None	None
Miami Springs	None	None	None	None	None
North Bay Village	Mini-Bus	Connects points within North Bay, Harbor, and Treasure Islands	Mini-Bus that seats 20 people	Mon, Wed and Thurs: 9 am to 9:30 am and Friday at 10 am to a shopping mall	Free – Mon, Wed, and Thurs; $3.00 on Fridays
North Miami	NoMi Express	1,2,3,4	Shuttle	Mon – Fri: 8 am to 9 pm	Free
North Miami Beach	NMB-Line	Takes residents to the grocery store, medicate appointments, and the library	Shuttle	5 days a week	Free
Opa-Locka	None	None	None	None	None
Palmetto Bay	None	None	None	None	None
Pinecrest	None	None	None	None	None
South Miami	Trolley Pilot Program	Services South Miami and South Miami Metrorail	Trolley	Fri – Sat and first Sunday of every month	Free
Sunny Isles Beach	Community Shuttle Service	Orange Line, Blue Line, Mall Line – These lines provide free service to residents and visitors through the city	Shuttle	7 days per week, Orange Line – 9 am to 4 pm, Blue Line – 9 am to 5 pm Mall Line – 8 am to 8 pm	Free
Surfside	Surfside Mini-bus	Services various points through city	Shuttle	Mon – Fri: 7:30 am to 12 pm and from 1 pm to 1:45 Sat: 7:30 am to 11:45 am	Free
Sweetwater	None	None	None	None	None
Virginia Gardens	None	None	None	None	None
West Miami	None	None	None	None	None

Table 2-6
Circulator Feasibility Scorecard

	Points	Score
Population Density (persons per square mile)		
< 3,000	0	0
3,000 to 7,500	5	
7,500 to 10,000	10	
> 10,000	15	
Percent of Residents 65 and Older		
> 20%	0	0
> 25%	5	
> 30%	10	
> 35%	15	
Median Household Income		
> $30,000	0	0
$20,000 to $30,000	5	
< $20,000	10	
Households with Zero Automobiles		
> 10%	5	0
< 10 %	0	
Recognizable Gaps in Transit Service (> 1/4 mile from transit stop)		
Yes	15	15
No	0	
Activity Centers Not Served by MDT		
Yes	10	10
No	0	
Resident/Employer/Employee Requests for Circulator Service		
Yes	10	10
No	0	
Municipality Funded Feasibility Study		
Yes	10	10
No	0	
Identification of a Local Funding Source		
Yes	5	5
No	0	
Score		50

The MPO study recommends that a Step-Two analysis be undertaken if "…Step-One determines transit circulator service is potentially feasible." Doral falls in that category. This Step-Two analysis will examine operations, management, and financial plans for the circulator. That work will be undertaken in the next phase of the study.

3. Survey Results

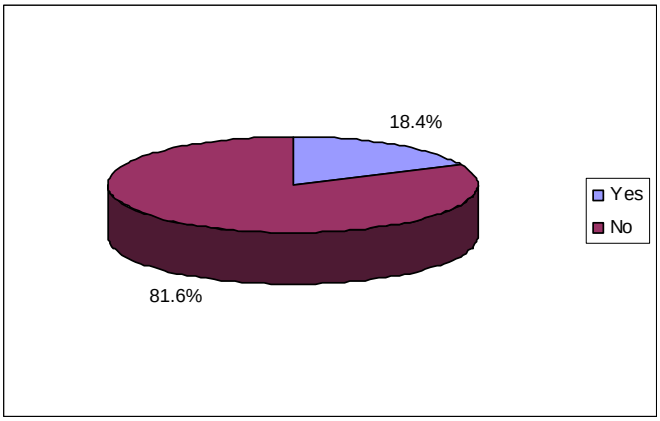
In March 2007, 3,500 survey questionnaires were mailed to randomly selected Doral households. The survey was developed in cooperation with City of Doral staff, and included input from Miami-Dade Transit. The survey distribution plan is included in Appendix B; the survey form in Appendix C (both English and Spanish versions); and, survey results in Appendix D. The 601 returned questionnaires provide a confidence level of 95 percent and a margin of error of ± four percent. The margin of error is related to the number of returns—the lower number of returns, the higher the margin of error.

Overall, 601 properly completed questionnaires were returned by the end of first week of April from full-time or part-time residents of the area. This is 17 percent of the 3,500 survey forms that were mailed. Of these, 483 were returned in English and 118 were returned in Spanish.

3.1 Survey Responses

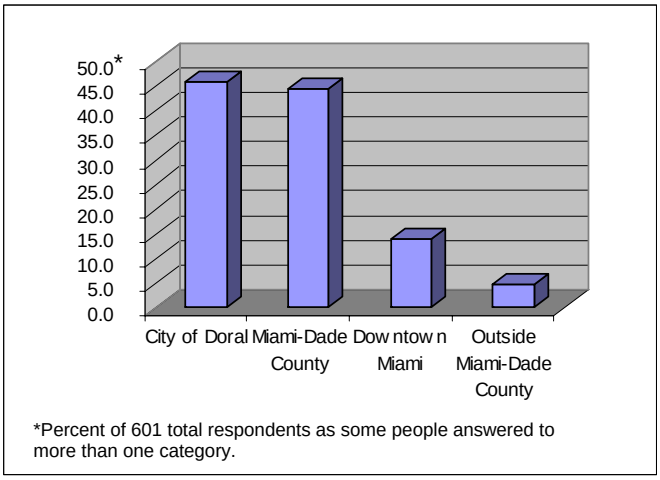
Questions were posed with the objective of providing insight for the analysis of the Circulator Study. The results are tabulated in Appendix C. The following discussion summarizes the results.

Have you or anyone in your household used Miami-Dade Transit in the past six months?



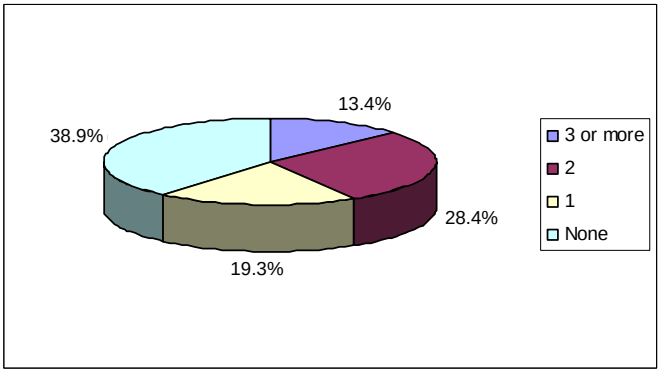
The survey results indicate that 81 percent had not used MDT in the past six months, while 18 percent had. By comparison, a recent survey conducted by MDT indicates that Countywide, 17 percent of residents had used MDT twice in the last month and 21 percent had ridden once in the last year.

We would like to know the general nature of your typical weekday trip. Which of the following best describes where you work or attend school?



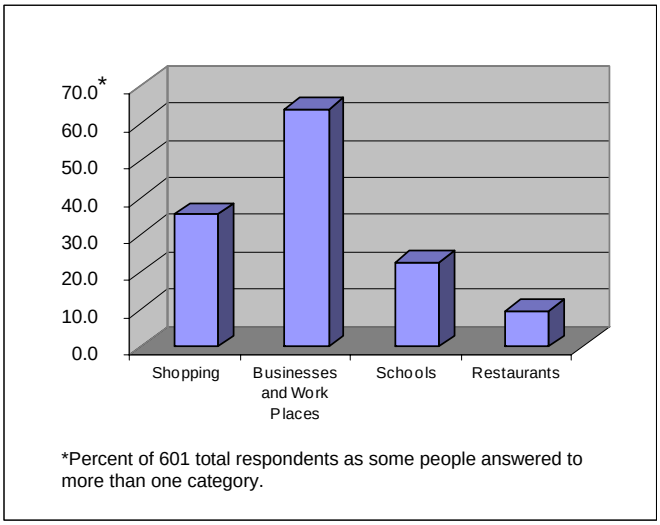
Forty-six percent of the respondents work or go to school in Doral. This may indicate that people are moving to Doral to avoid County traffic and that a circulator/trolley should have a primary focus on work trips.

If a Citywide Transit (Trolley) System were available, how many people in your household would use it?



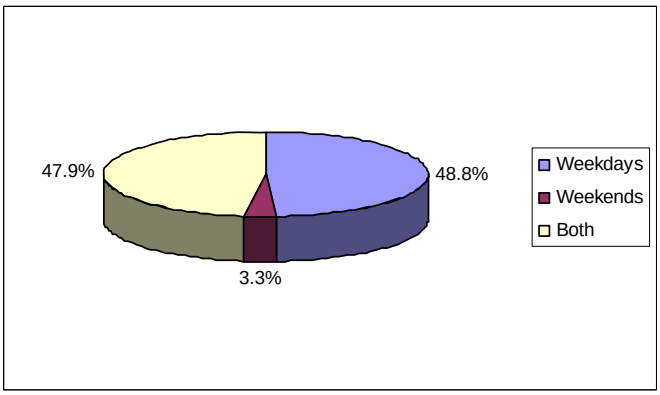
Over 60 percent of households indicated that somebody in their household would use a circulator if available. This is significantly greater than the percentage of people who have ever used Miami-Dade Transit and likely relates to the fact that MDT does not serve much of the residential area of the City. By comparison, MDT's recent survey indicated that only 15 percent would not use transit under any condition and 47 percent might use MDT if service improvements were made.

Which of the following locations to you think should have the highest priority for service by a City Transit (Trolley) system?



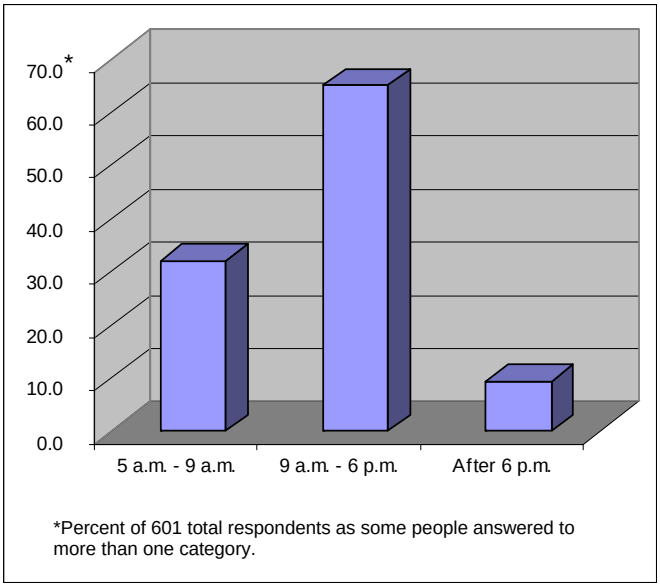
Approximately 64 percent identified business and work locations when asked to indicate service priorities for a transit system. Thirty-five percent suggested shopping, and about 23 percent said schools. Only nine percent specified restaurants. The total exceeds 100 percent given that people responded to more than one category.

What days would it be most important for the transit system to operate? Please check the one you think is most important.



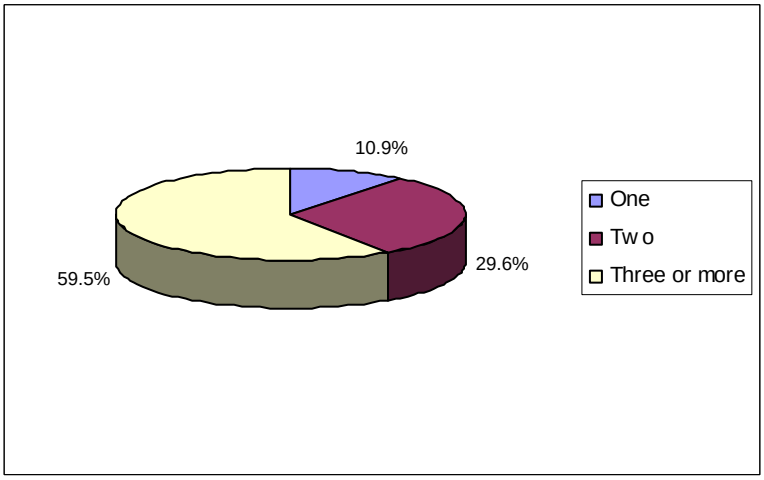
Forty-eight percent thought weekdays only were most important, three percent thought weekends only, and 47 percent thought the service should operate on both weekdays and weekends.

What hours would it be most important for the transit system to operate?



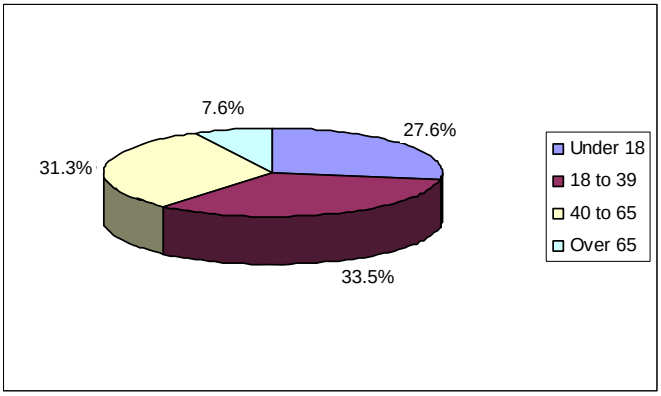
Most people thought the system should operate during the day, with less than 10 percent indicating it should operate in the evening after 6 p.m.

How many people are in your household?



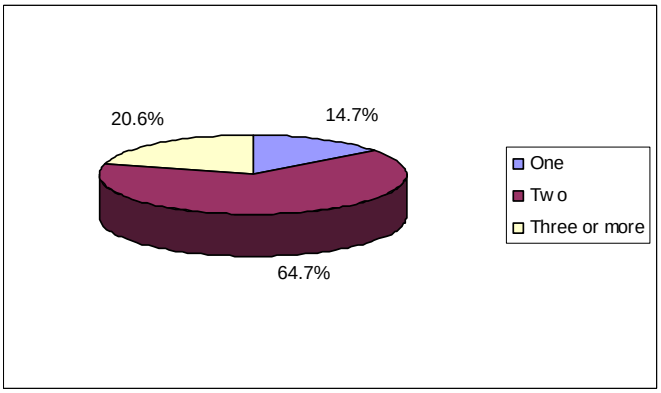
Almost 60 percent of the households have three or more residents, with 11 percent have one resident and 29 percent have two residents.

How many people in your household are? (age ---)



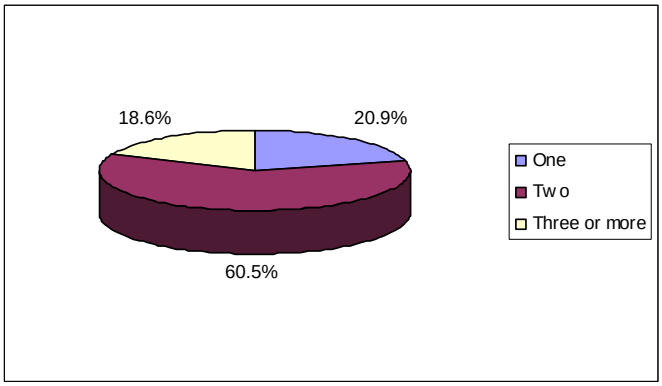
Of the responding households and out of a total of 1,755 people in those households, 7.6 percent were over 65, with 27 percent being under 18 and approximately 64 percent between 18 and 65. This would indicate a relatively young, family-oriented population.

How many licensed drivers are in your household?



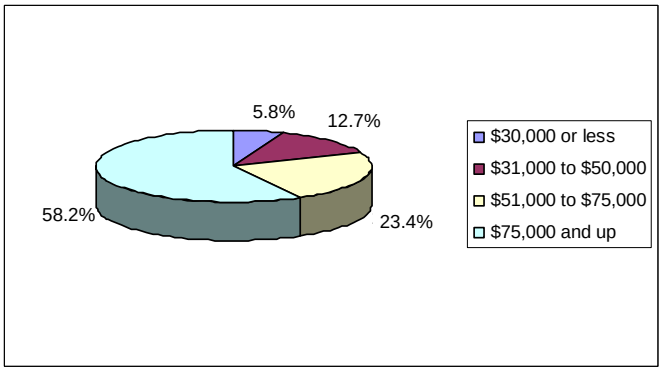
Almost 65 percent of the households had two licensed drivers with over twenty percent having three or more. Only three respondents did not respond to this question, indicating that almost every household has at least one licensed driver.

How many automobiles are available to your household?



Thirty percent of the households reported having one vehicle, while 60 percent had two. Slightly less than 19 percent of the households said they had three or more vehicles.

What is the approximate annual household income of your household?



Nearly 60 percent of the responding households cited a household income of over $75,000, while less than six percent had an income of less than $30,000. By comparison, only 20 percent of households in Miami-Dade have a household income over $75,000. The 2005 median household income in Miami-Dade is estimated at $37,148.

3.2 Findings and Next Steps

The results of the survey clarify the demographics of Doral residents as being younger, with larger households, and greater income than that of residents of the county or a typical transit rider. Nevertheless, there is clearly a pattern of prior transit use (18 percent reported some prior use of MDT), and an indication of willingness to consider a service (over sixty percent said someone in their household would use a transit service). Coupled with the fact that MDT does not provide service to large portions of residential Doral, there is a possibility that a transit circulator-type service would be used by the residents.

4. Transportation Service Concepts

The objective of the City from the standpoint of transportation is to develop an effective transit program that can meet existing needs, complement future growth plans, and see a framework for having options to deal with traffic transportation issues in the future.

As part of this feasibility study, several alternative concepts were explored. These included:

- Neighborhood oriented school, shopping, and park circulation;
- Lunchtime services for Doral businesses;
- Demand response service;
- Express bus service combined with reversible lanes and park-and-ride on 41st/36th Street;
- Improved connection to MDT bus service;
- Feeder service to and from Metrorail and Tri-Rail;

Figure 4-1 illustrates this initial identification of service options. Through meetings with City staff and leaders, interaction with the public, and review of existing successful systems in other municipalities, an evaluation and determination of what type of services may best work for Doral was identified.

The routing options presented in Figure 4-1 present different approaches to providing circulator service in Doral. There are five options, ranging in length from 3.7 miles to eight miles. Each serve different functions. These options and the information developed during the study were presented to the City Commission and to staff in March 2007. The Commission instructed the consultant to develop a pilot program for the circulator. Following that meeting, the consultant met with staff to review the routes to determine an initial route that could serve as a pilot route. The consensus was that, as is discussed in Table 4-1, a combination of the Commercial/Neighborhood Shuttle and the Wal Mart/Restaurant Connector made the most sense as an initial demonstration route. This route is presented in Figure 4-2.

Figure 4-1
Initial Identification of Service Options

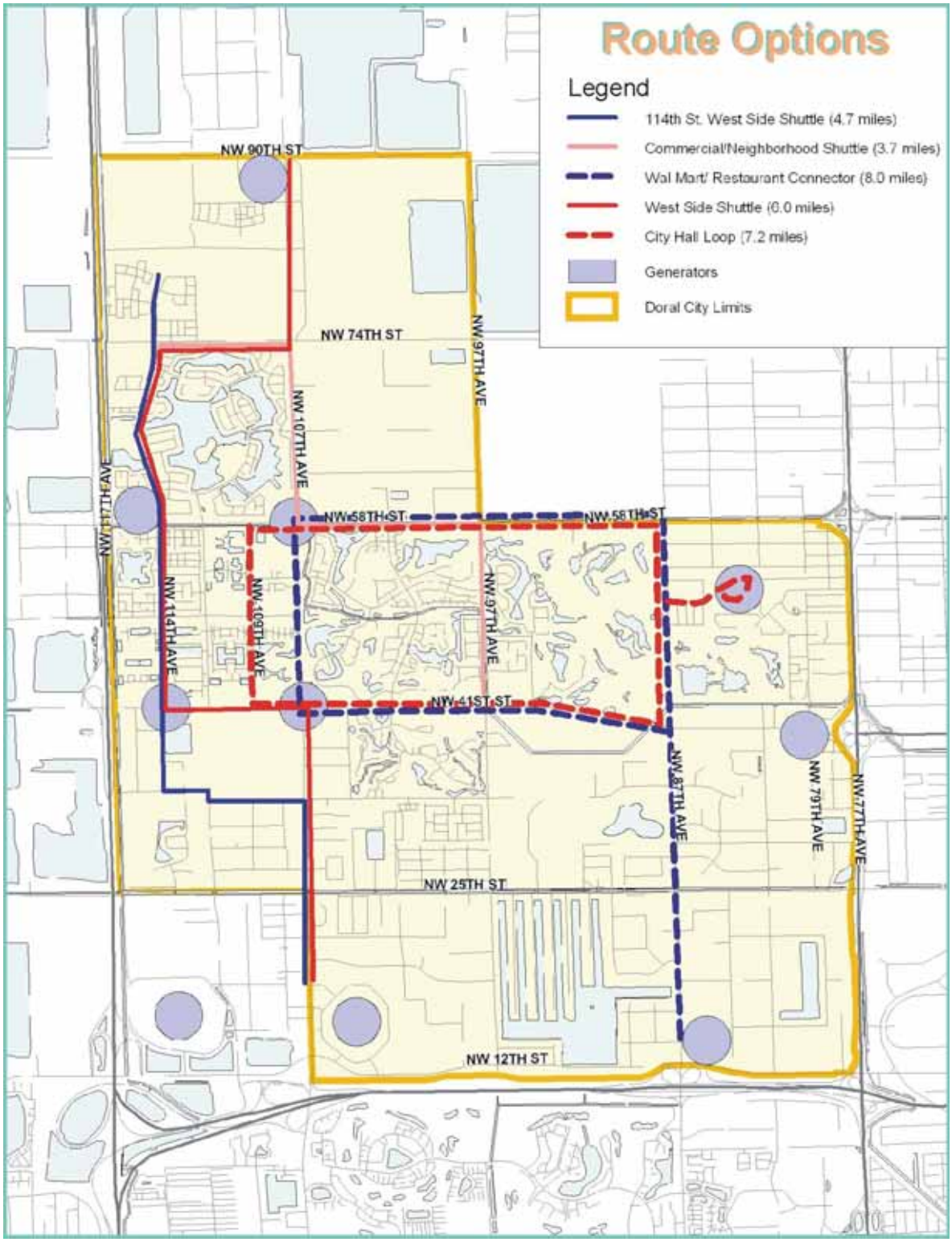
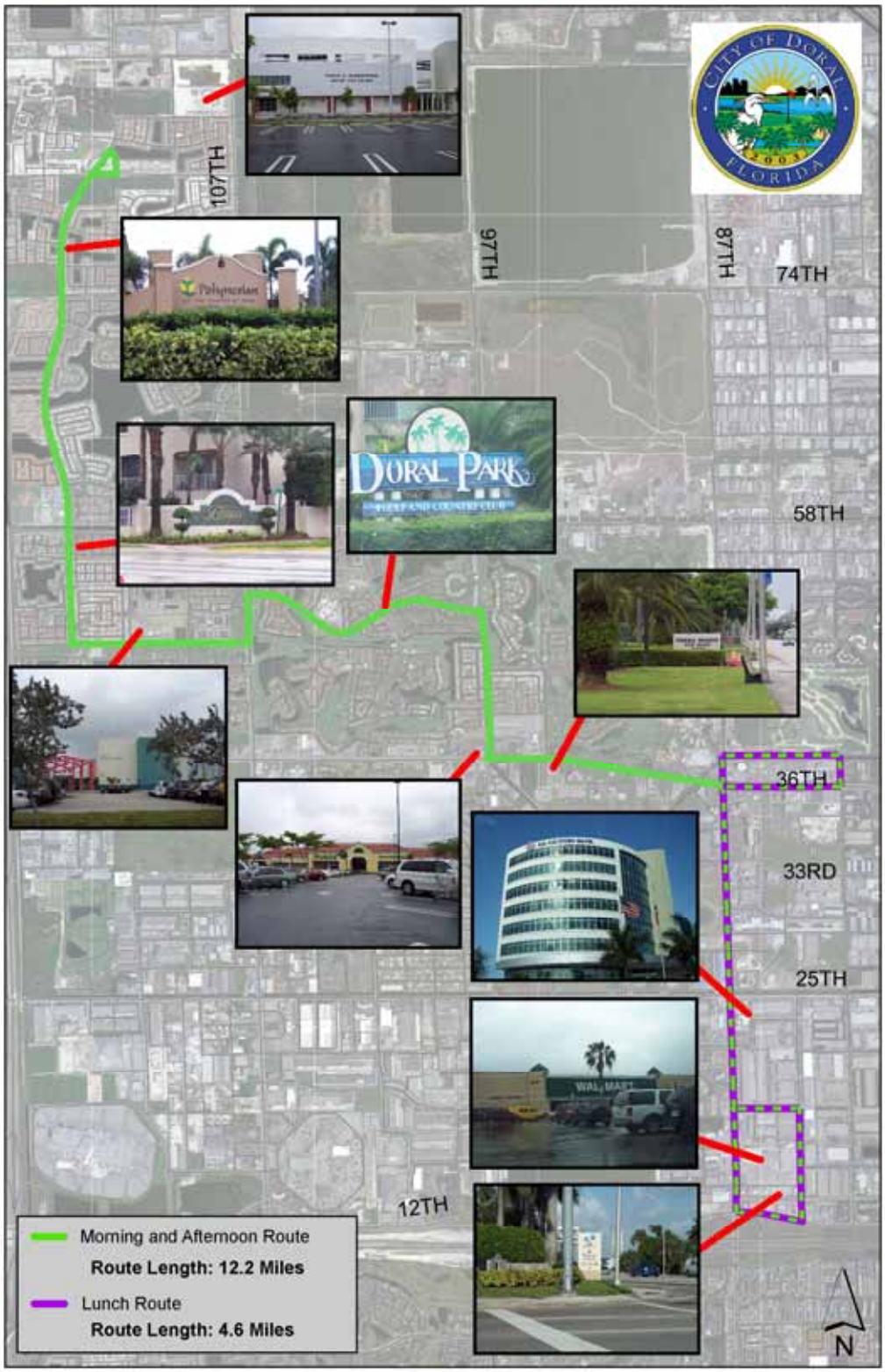


Table 4-1
Discussion of Initial Circulator Routes

Initial Route Proposal	Length	Function	Notes	Ridership	Connectivity
114th Street West Side Shuttle	4.7 miles	Link residential neighborhoods to Miami-Dade Community College, businesses, and malls	Provides service where there currently is none but would likely have limited Ridership. 114th Avenue also has significant peak hour congestion.	Low	Low
Commercial/Neighborhood Shuttle	3.7 miles	Links Doral neighborhoods to shopping	Provides link through Doral current and future residential areas to the City's main shopping plaza.	Medium	High
Wal Mart/Restaurant Connector	8.0 miles	Link residential areas to shopping and jobs	Provides connection to Wal Mart.	Medium	High
West Side Shuttle	6.0 miles	Link residential neighborhoods to Miami-Dade Community College, businesses, and malls	Provides service where there currently is none but would likely have limited Ridership. 114th Avenue also has significant peak hour congestion.	Low	Low
City Hall Loop	7.2 miles	Link neighborhoods and shopping areas to City Hall.	A City Hall connection for the circulator will be more viable after Downtown Doral is rebuilt.	Low	Medium

Figure 4-2
Doral Pilot Program Route



The information in Table 4-1 is based on the consultant's experience. Ridership on any type of transit circulator in Doral is going to be difficult because of the physical and demographic makeup of the community, as discussed in Chapter 2 (Section 2.8). Nevertheless, development of a circulator begins laying the foundation for having a means in place to maximize transit use in the city and to attempt to begin to provide options to automobile traffic, particularly as the city continues to grow.

There are a myriad of issues and decisions that need to be made for a transit circulator, including type of service, routing, the operator, span of service (hours and days), type of vehicle, etc. The following discussion addresses these issues and how they relate to the Doral program.

4.1 Type of Service

The type of service relates to the service delivery. There are three basic service options: fixed route, point or route deviation demand response, and total demand response. Fixed route is your traditional bus route operating on a fixed route on a fixed time schedule. Most transit circulators in the County operate on a fixed route --- largely because they are operating with People's Transportation Plan (PTP) funds and the PTP program stipulates that circulators being operated with PTP monies must be on a fixed route. The opposite of fixed route service is demand response service. Essentially, demand response is like service provided by a taxi cab, a person calls in and gets picked up. Transit systems generally try to manage demand response services so they can carry more than one rider per vehicle. That is often done by requiring people wanting rides to call in advance and schedule a trip, as much as 24 hours. The City has indicated that a budget in the neighborhood of $100,000 could be appropriated for this demonstration service.

4.2 Routing

The routing of most transit circulators in Miami-Dade County has been evolutionary. Typically, routes are put in place and modified (sometimes more than once). Based on discussions with the City, it is recommended that the initial service be a fixed route operating on an alignment as shown in Figure 4-2. Coincident with the start-up of the service, a strong marketing campaign should be put in place and all requests for service should be identified. More detailed refinement of the route will be conducted with the selected operator during the implementation phase of the pilot program. Consideration should also be given to truncating the route in the mid-day (lunch period) to provide more frequent service between the businesses and restaurants.

4.3 Operations

The City has indicated that initially it would prefer to contract the entire service to an outside vendor. This is the approach that has been taken by many municipalities in Miami-Dade County with some purchasing the vehicles and others choosing to lease them. The advantages in the short term lay in the fact that the City is not making a huge investment initially in a service that may or may not work and that people and organizations experienced in operating circulator and transit service are those that do the operations. The biggest advantage of operating the service in-house (i.e., the City has its own drivers, owns the vehicles, etc.) is that the City can control the hours of operation. It is difficult for contractors to operate on multiple shifts (i.e., say three hours in the morning, two hours

at noon, and three hours in the afternoon). And, while a bidding process could be let for a service with split shift qualifications, the cost would be higher.

4.4 Span of Service

Most circulators in the County operate on a typical weekday schedule. The problem with this approach is that the mid-am and mid-pm periods are generally unproductive, particularly in a community like Doral where most people are of working age. Nevertheless, for the initial pilot program it is recommended that the service operate from 7 a.m. to 7 p.m., Monday through Friday, excluding holidays.

4.5 Type of Vehicle

Most circulator services in the County operate using one of three types of vehicles, as shown in the following photographs of systems operated in the County along with a brief description of their operating environment. In addition to vehicle type, the City may want to consider, in the short- or long-term, use of alternative fuel vehicles. For the short-term, use of biodiesel, such as is being used in Fort Lauderdale's downtown trolley system, would appear to be the best alternative for the City to pursue if it decides to use alternative fuel.

A typical bus operated by the City of Hialeah. The cost for this medium-duty bus was $120,000 in 2001. The City is now purchasing heavy duty vehicles as replacements that cost $260,000. This vehicle carries 26 people or 24 with wheelchairs. The Hialeah Transit System has a fleet of eleven buses. The City fuels and maintains the vehicles and will own them after seven years. The cost of the lease is built into an hourly rate of $33 (for operation and lease of the vehicles) under a contract with First Transit.

The Village of Palmetto Bay began operating a circulator system in 2006. The City owns two Eldorado cutaway minibuses that cost approximately $60, 000 each. The vehicles are operated by a private contractor, which provides drivers and maintenance for the vehicles at a cost of $31.00 per hour. Fuel is an additional cost.

The City of Coral Gables operates traditional rubber tired trolleys. These vehicles cost approximately $250,000, carry 20 passengers with room for 2 wheel chairs. The City owns, maintains, and operates the vehicles.

5. Recommendations

Based on the information provided in Chapter 4, the City should develop a pilot program for the Circulator. The routing should generally follow that described in Figure 4-2 and initially should be operated as a fixed route. The route should operate from 7 a.m. to 7 p.m. and be truncated to operate as a lunch time shuttle from 11 a.m. to 2 p.m. The morning/afternoon route would operate on one-hour headways while the lunch shuttle would operate on 20 minute headways.

The City should contract the service out to a private provider and execute a one-year contract. The provider would own, operate, maintain, and fuel the vehicles. Initially, it is envisioned that the vehicles for the pilot program would be the cab-on-chassis type as seen in the Village of Palmetto Bay vehicle shown in Chapter 4. These smaller vehicles are more suitable for the passenger volumes and to operate in and out of the many community complexes in the city. The contract should stipulate that the vehicles be new, be "wrapped" in a design approved by the City of Doral, and incorporate guidelines to ensure the highest level of service.

Initially, the service should be free (many circulator services in the county charge no fare) and even with a fare the percentage of operating cost recovered is minimal. The City may want to consider instituting a fare once the service is established. An interlocal agreement should be established with Miami-Dade County (through Miami-Dade Transit).

Table 5-1 presents the anticipated costs that can be expected by the City. The per hour cost for the bus service assumes a contracted service with the contractor providing essentially the entire service. The per-hour cost is an estimate based on existing services in the County and may be more or less depending on the final specifications for the service. The costs for marketing and staff time are estimates.

Table 5-1
Anticipated Circulator Costs (Draft)

Action	Measure	Cost	Total
Morning/Afternoon Route (1 bus, 1 hour headway)	7-11 a.m., 2-7 p.m. (256 weekdays)	$45/Hour	$103,680
Lunch Route (1 bus, 20 minute headway)	11 a.m. to 2 p.m. (256 weekdays)	$45/Hour	$34,560
Marketing	10% of budget	10% of budget	$12,280
Staff Time	¼ person time		$10,000
TOTAL			$160,520

An estimate was made of how many people might use the transit circulator. As noted in Chapter 3, almost over 60 percent of the respondents to the survey indicated that one or more people in their household would use a transit service if available. That is probably not realistic given the other demographic factors in Doral. Nevertheless, if 20 percent of Doral's population made two trips per

year that would be 14,000 passenger trips. The Miami-Dade MPO Local Circulator Study recommends minimum thresholds of five riders per hour and 15,000 trips per year for a successful service. It is recommended that Doral adopt these standards as targets. The service should carry a minimum of five people an hour after a reasonable implementation period to be considered successful. This would result in an annual ridership of 15,360 per year.

Implementation of the City of Doral Transit circulator service would need to follow the following steps:

1. Present the recommendations to the City Council for review and approval.
2. Develop an Interlocal Agreement with Miami-Dade County through Miami-Dade County Transit.
3. Develop a set of specifications for the service. These should include type of vehicle, hours of service, requirements for maintenance and fueling (including alternative fuels), requirements for driver appearance, etc.
4. Issue an RFP for service or contract with a private provider with a current competitively bid contract that can be used as the basis for the pilot program.
5. Review submitted bids/proposals and shortlist the prospective bidders to those with reasonable and acceptable proposals (if applicable).
6. Interview candidate bidders (if applicable).
7. Select a contractor and negotiate a contract (if applicable).
8. Establish a process to monitor and evaluate service.
9. Initiate comprehensive marketing program.
10. Start service.

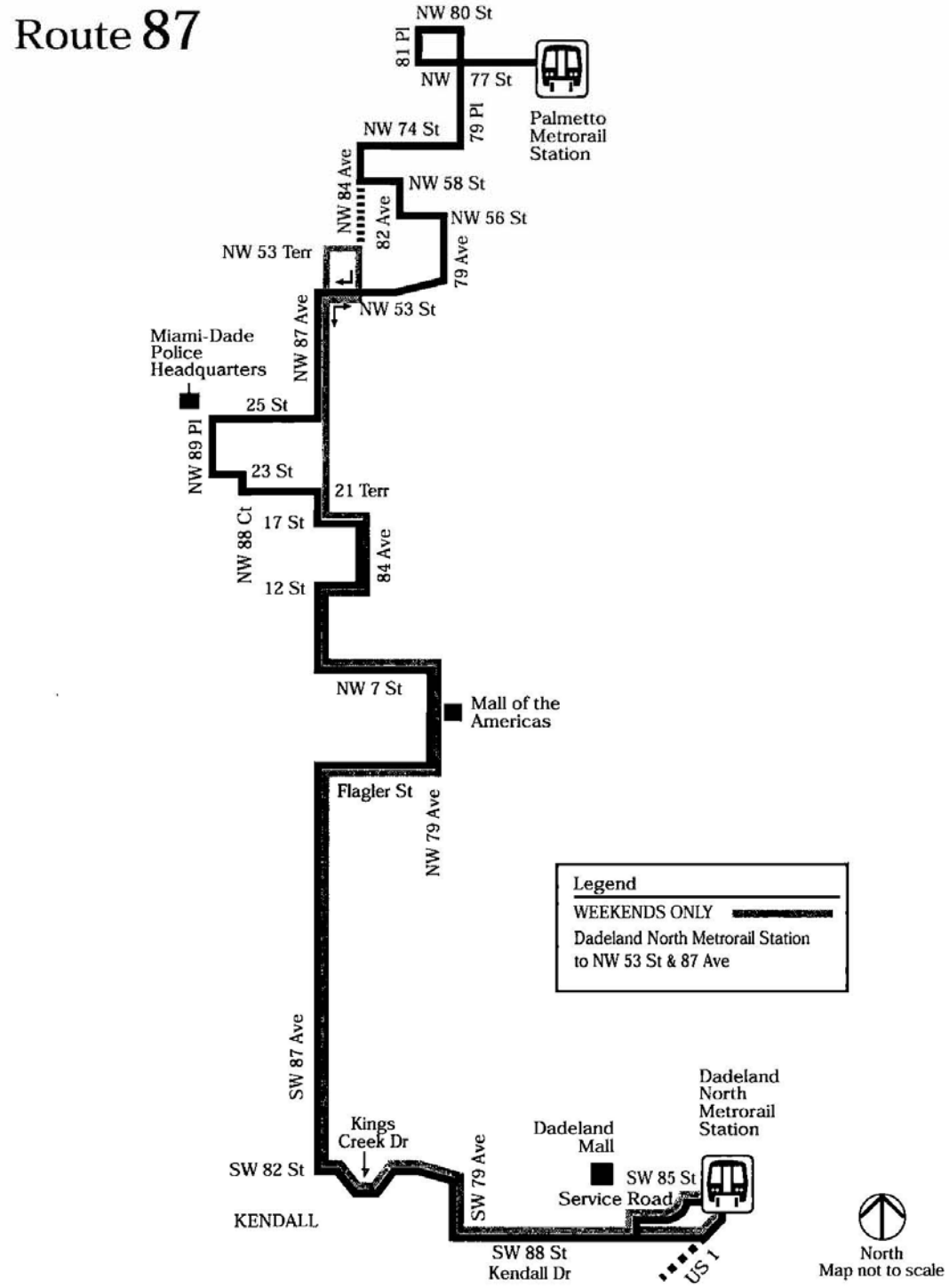
As noted above, the initial cost to the City will be about $145,000 for the pilot program unless the route or service recommendation is modified. Because the City does not receive People's Transportation Plan (PTP) funds, this funding initially will come from the City's general fund. There are programs in place to help communities develop transit service. The Florida Department of Transportation has a program called the Service Development Program (SDP) which is a three-year program to help communities develop transit service. The program funds 50 percent of eligible funds (the program encourages monies to be used for operating expenses) for a period of three years beginning when the service operation starts. The grant deadline for 2007 is June 8, 2007. The City should consider sending an application. Other programs operated by FDOT include the County Incentives Grant Program which is operated by the District VI Planning Office and having a project included in FDOT's work program.

The Doral Transit Circulator as defined in this report is a starting point for developing a sustainable transit system in Doral that can evolve as does this rapidly growing City. There will be many future opportunities – linkages to Metrorail along NW 74th Street, possible Park-and-Rides at interchanges on the Homestead Extension of Florida's Turnpike, and future transit connections to an east-west corridor transit system located in the SR 836 Corridor.

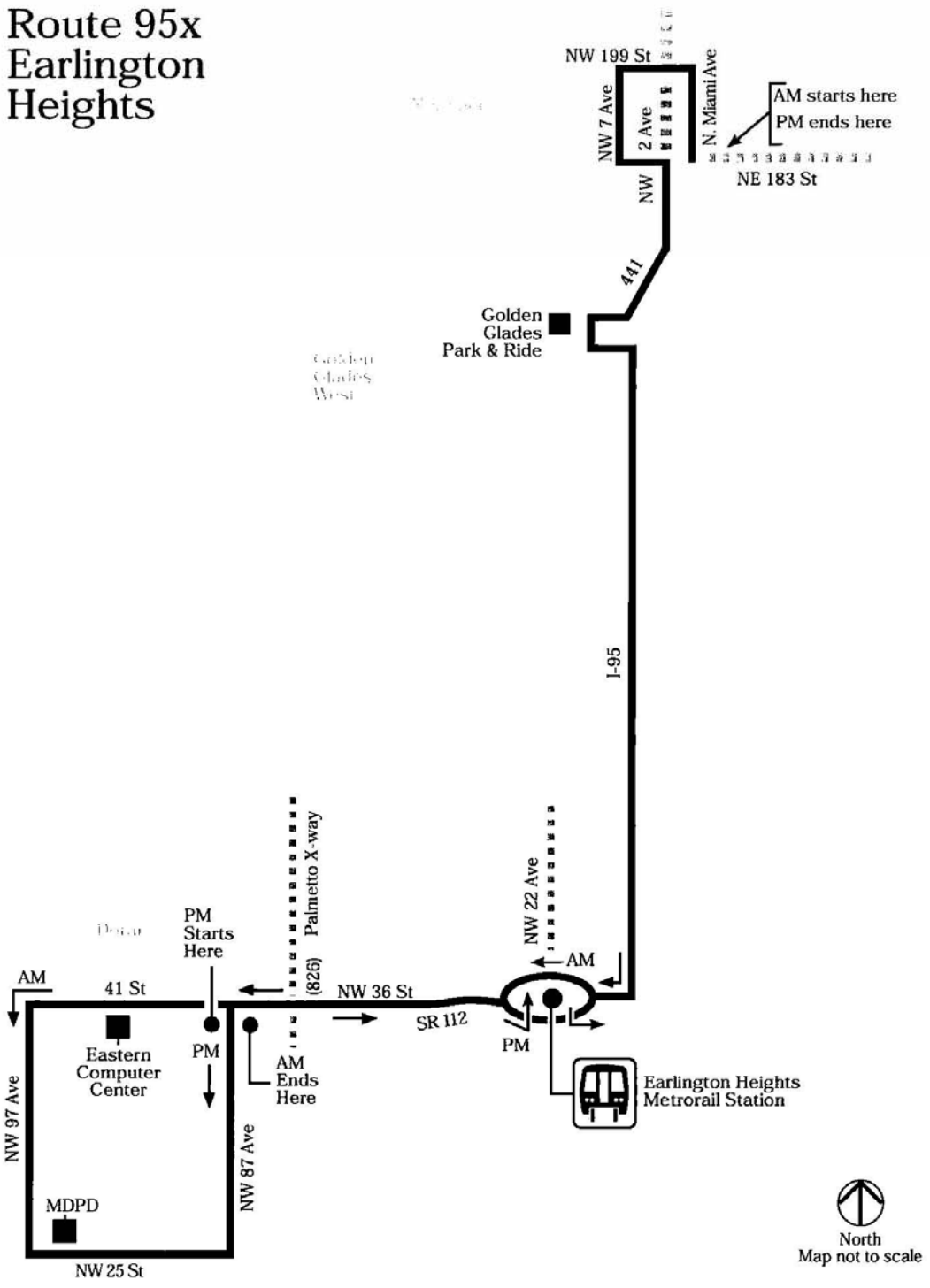
Appendix A

MDT Routes in Doral

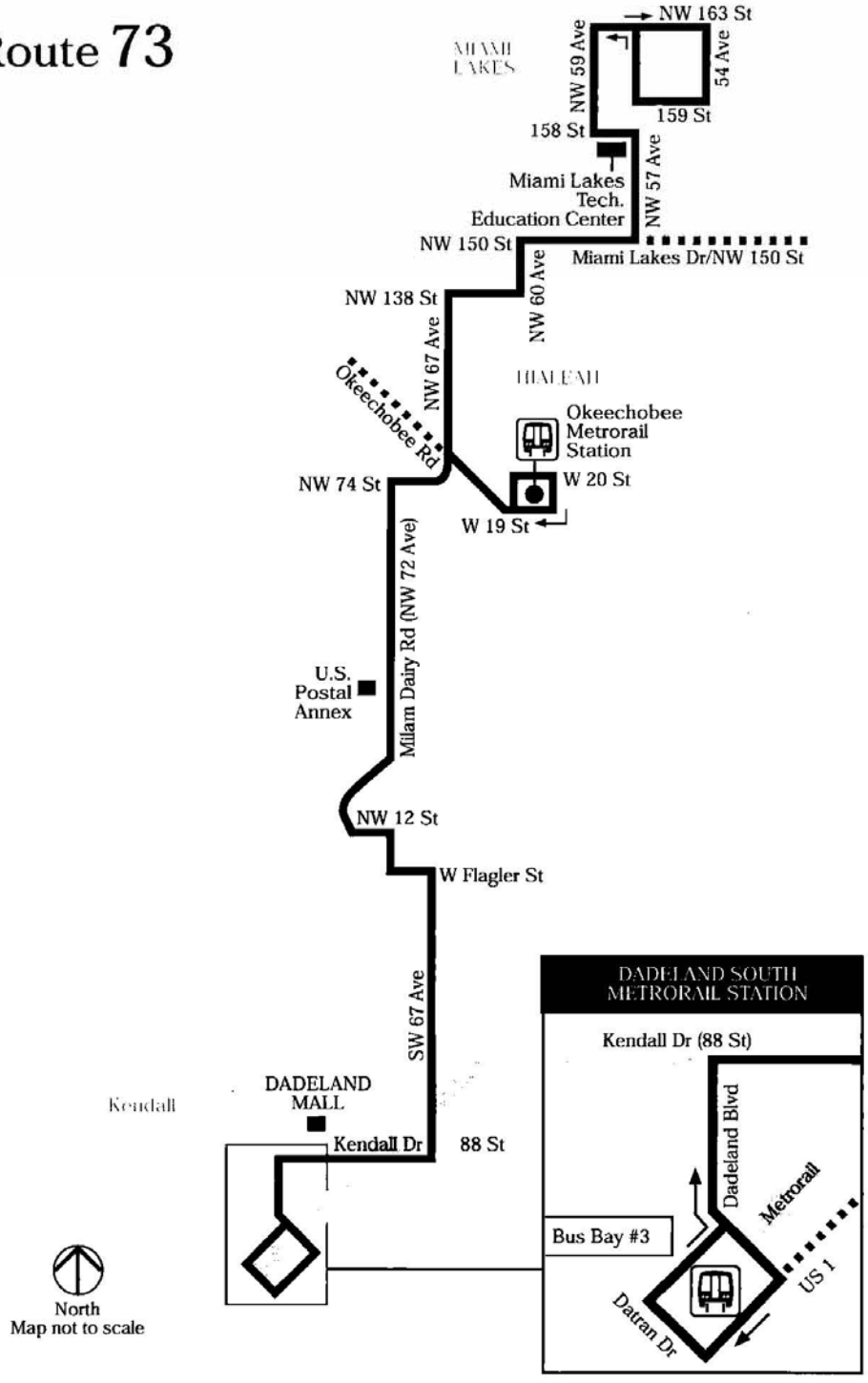
Route 87


NW 80 St
81 Pl
NW 77 St
Palmetto Metrorail Station
79 Pl
NW 74 St
NW 84 Ave
NW 58 St
82 Ave
NW 56 St
NW 53 Terr
79 Ave
NW 53 St
NW 87 Ave
Miami-Dade Police Headquarters
25 St
NW 89 Pl
23 St
21 Terr
NW 88 Ct
17 St
84 Ave
12 St
NW 7 St
Mall of the Americas
Flagler St
NW 79 Ave
Legend
WEEKENDS ONLY
Dadeland North Metrorail Station to NW 53 St & 87 Ave
SW 87 Ave
Dadeland North Metrorail Station
Kings Creek Dr
Dadeland Mall
SW 82 St
SW 79 Ave
SW 85 St
Service Road
KENDALL
SW 88 St
Kendall Dr
US 1
North
Map not to scale

Route 95x Earlington Heights

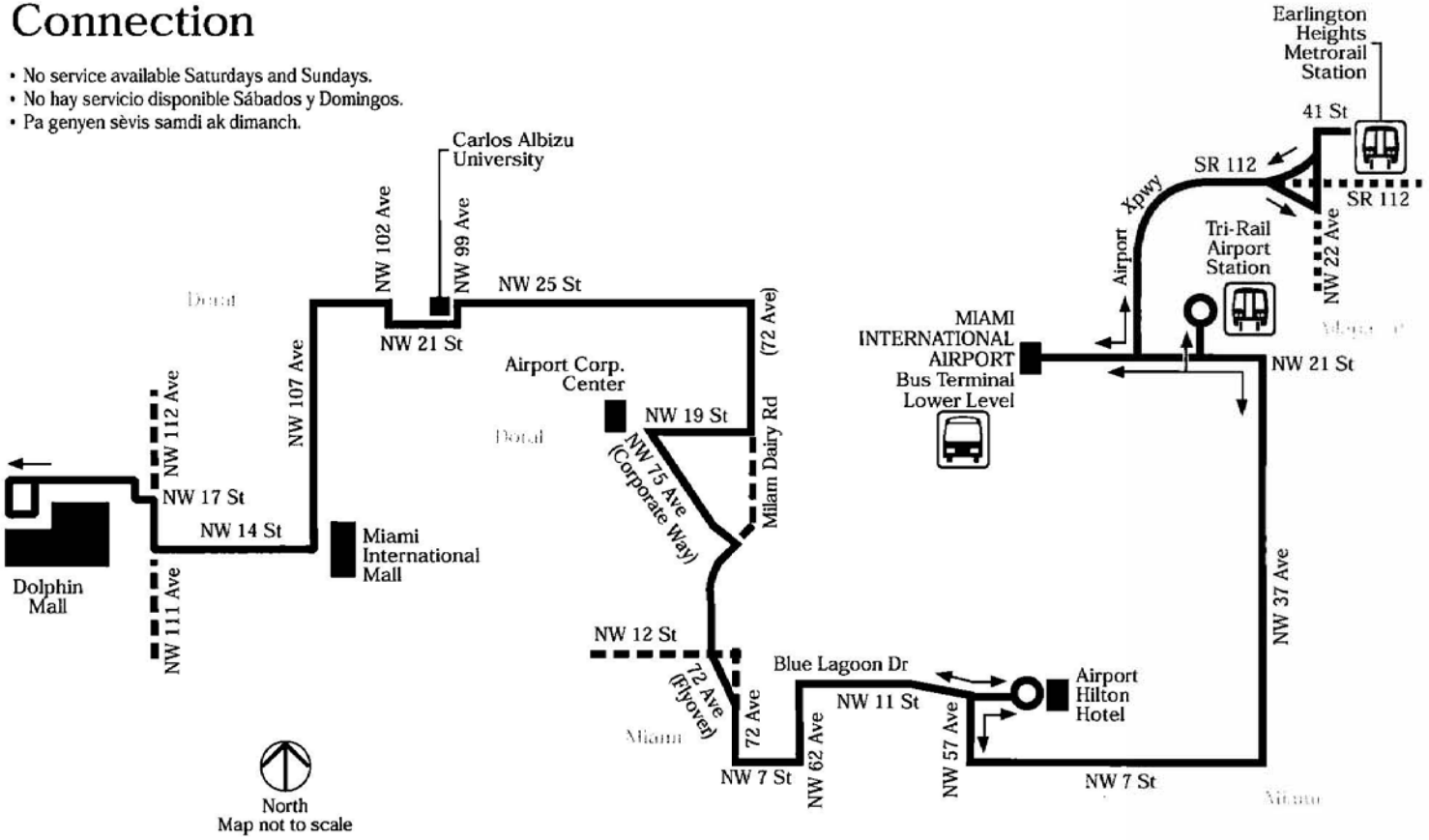


Route 73

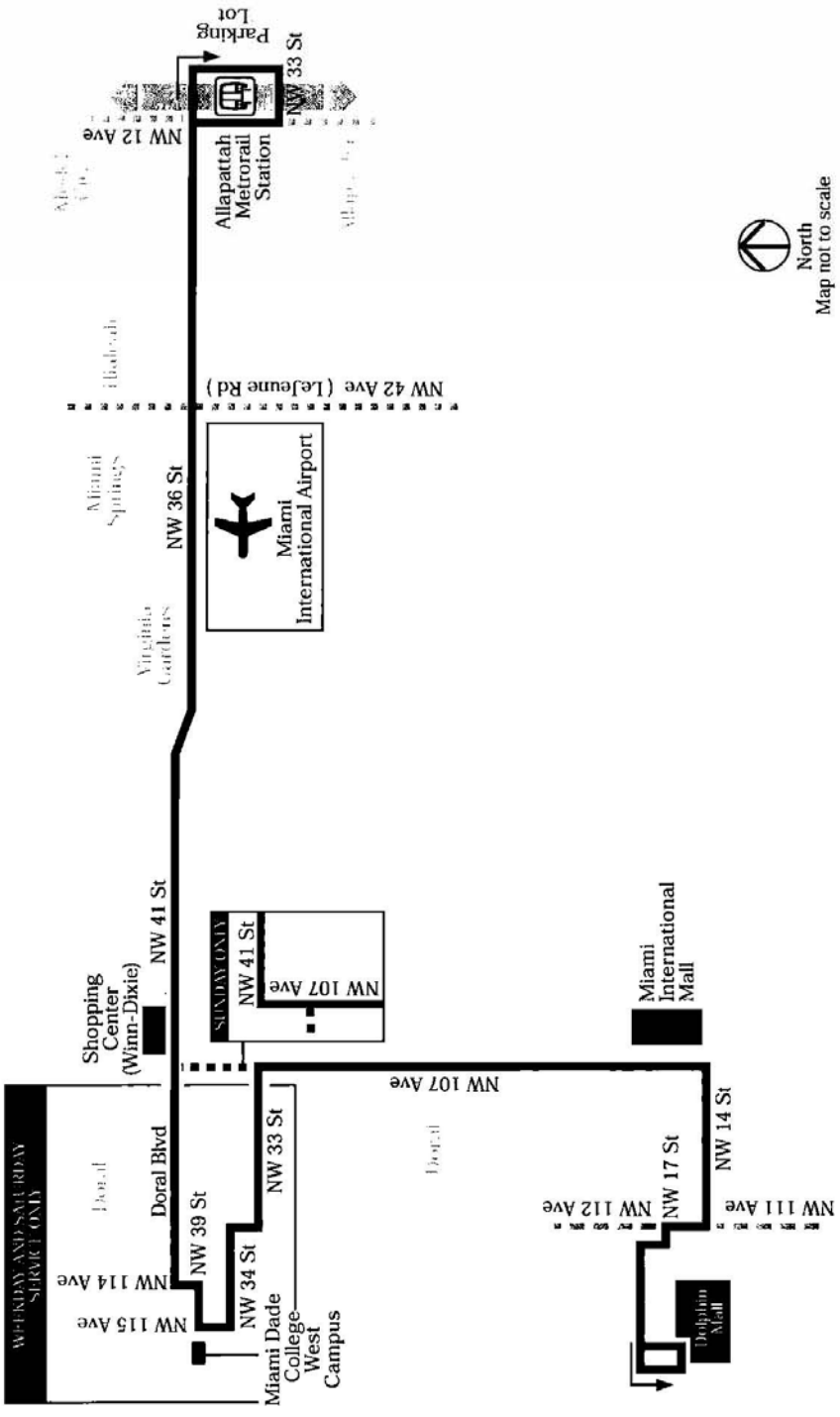

NW 163 St
MIAMI LAKES
NW 59 Ave
54 Ave
159 St
158 St
Miami Lakes Tech. Education Center
NW 57 Ave
NW 150 St
Miami Lakes Dr/NW 150 St
NW 60 Ave
NW 138 St
NW 67 Ave
HIALEAH
Okeechobee Rd
Okeechobee Metrorail Station
W 20 St
NW 74 St
W 19 St
Milam Dairy Rd (NW 72 Ave)
U.S. Postal Annex
NW 12 St
W Flagler St
SW 67 Ave
DADELAND SOUTH METRORAIL STATION
Kendall Dr (88 St)
Dadeland Blvd
Metrorail
Bus Bay #3
US 1
Datran Dr
Kendall
DADELAND MALL
Kendall Dr
88 St
North
Map not to scale

Route 238
East-West Connection

- No service available Saturdays and Sundays.
- No hay servicio disponible Sábados y Domingos.
- Pa genyen sèvis samdi ak dimanch.

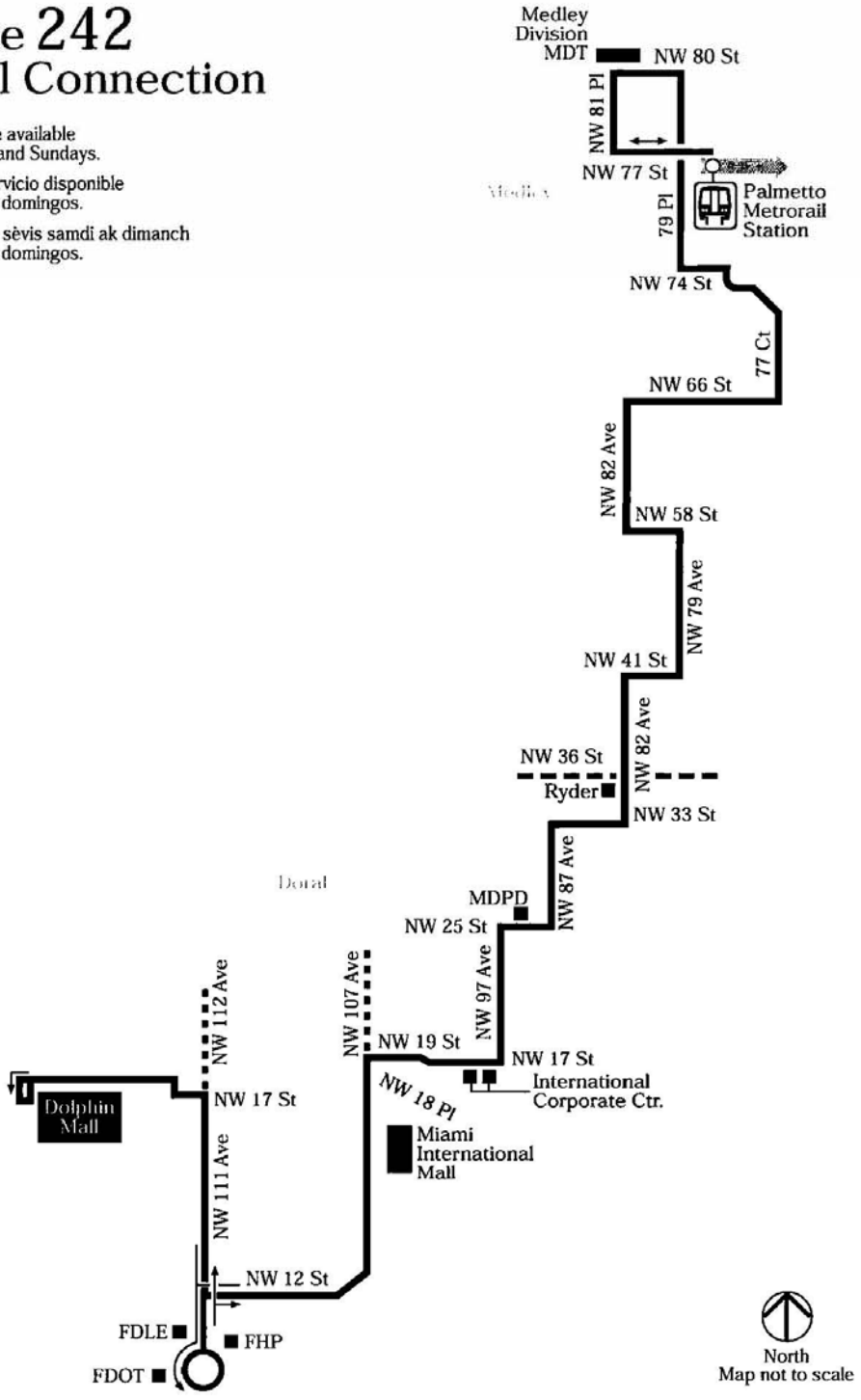


Route 41


Parking Lot
NW 33 St
NW 12 Ave
Allapattah Metrorail Station
NW 42 Ave (LeJeune Rd)
NW 36 St
Miami International Airport
NW 41 St
Shopping Center (Winn-Dixie)
SUNDAY ONLY
NW 41 St
NW 107 Ave
Miami International Mall
NW 107 Ave
Doral Blvd
NW 39 St
NW 33 St
NW 14 St
NW 17 St
NW 112 Ave
NW 111 Ave
NW 114 Ave
NW 115 Ave
NW 34 St
Miami Dade College-West Campus
Dolphin Mall
North
Map not to scale

Route 242
Doral Connection

- No service available Saturdays and Sundays.
- No hay servicio disponible sábados y domingos.
- Pa genyen sèvis samdi ak dimanch sábados y domingos.



Appendix B

Survey Questionnaire Distribution Plan

Doral Circulator Study
Household Survey Methodology

A mail back survey of 3,500 randomly selected households was conducted. Addresses were obtained from AccuData, a firm that specializes in generating address mailing lists. The addresses were for residential listings in Doral and include both owner and rental properties. The list contained approximately 12,500 records. The sample of 3,500 was drawn from these records. Amplitude Research, International, a market research firm that specializes in a variety of surveys, prepared the mailings and conducted the data entry of the results. The surveys were available to the respondent in either English or Spanish.

Appendix C

Doral Circulator Study
Survey-by-Mail Questionnaire

Doral Transit Circulator Study General Public Survey

1. Have you or anyone in your household used Miami-Dade Transit in the past six months?

   ☐$_1$ Yes ☐$_2$ No If yes, what route _____

2. We would like to know the general nature of your typical weekday trip. Which of the following best describes where you work or attend school?

   ☐$_1$ City of Doral ☐$_2$ Miami-Dade County

   ☐$_3$ Downtown Miami ☐$_4$ Outside Miami-Dade County

3. If a Citywide Transit (Trolley) System were available, how many people in your household would use it?

   ☐$_1$ 3 or more ☐$_2$ 2 ☐$_3$ 1 ☐$_4$ None

4. Which of the following locations do you think should have the highest priority for service by a City Transit (Trolley) system?

   ☐$_1$ Shopping ☐$_2$ Businesses and Work Places ☐$_3$ Schools ☐$_4$ Restaurants

5. What days would it be most important for the transit system to operate? Please check the one you think is most important.

   ☐$_1$ Weekdays ☐$_2$ Weekends ☐$_3$ Both

6. What hours would it be most important for the transit system to operate? Please check the one you think is most important.

   ☐$_1$ 5 a.m. – 9 a.m. ☐$_2$ 9 a.m. – 6 p.m. ☐$_3$ After 6 p.m.

The following information is to get an understanding of the household characteristics of the respondents to this survey and will be kept strictly confidential.

7. How many people are in your household? ☐$_1$ 1 ☐$_2$ 2 ☐$_3$ 3 or more.

8. How many people in your household are? Under 18 ____ 18 to 39 ____ 40 to 65 ____ Over 65 ____
   (For question 8, indicate write in the number from your household in each category)

9. How many licensed drivers are in your household? ☐$_1$ 1 ☐$_2$ 2 ☐$_3$ 3 or more.

10. How many automobiles are available to your household? ☐$_1$ 1 ☐$_2$ 2 ☐$_3$ 3 or more.

11. What is the approximate annual household income of your household?

    ☐$_1$ $30,000 or less ☐$_2$ $31,000 to $50,000 ☐$_3$ $51,000 to $75,000 ☐$_4$ $75,000 and up

Thank you for your time.

Versión en español al dorso

Encuesta Pública para Estudio sobre Circulación de Transporte de Doral

1. ¿Usted o alguien en su núcleo familiar utilizó el Transporte Público de Miami-Dade en los últimos seis meses?

   ☐$_1$ Sí ☐$_2$ No En caso afirmativo, qué ruta _____

2. Nos gustaría conocer el tipo de viaje en general que usted hace habitualmente los días entre semana. ¿Cuál de los siguientes enunciados describe mejor el lugar donde usted trabaja o estudia?

   ☐$_1$ Ciudad de Doral ☐$_2$ Condado Miami-Dade

   ☐$_3$ Downtown de Miami ☐$_4$ Fuera del Condado Miami-Dade

3. En caso de que existiera un sistema de transporte público para toda la ciudad (Trolley), ¿cuántas personas de su núcleo familiar lo usarían?

   ☐$_1$ 3 o más ☐$_2$ 2 ☐$_3$ 1 ☐$_4$ Ninguna

4. Según su opinión, ¿cuál de los siguientes lugares gozaría de la mayor prioridad de servicio dentro de un sistema de transporte público de la ciudad (Trolley)?

   ☐$_1$ Las tiendas ☐$_2$ Los negocios y centros de trabajo ☐$_3$ Las escuelas ☐$_4$ Los restaurantes

5. ¿Qué días serían los más importantes para el funcionamiento de un sistema de transporte público? Marque el que usted considere como más importante.

   ☐$_1$ Días entre semana ☐$_2$ Fines de semana ☐$_3$ Ambos

6. ¿Qué horarios serían los más importantes para el funcionamiento de un sistema de transporte público? Marque el que usted considere como más importante.

   ☐$_1$ de 5 a.m. a 9 a.m. ☐$_2$ de 9 a.m. a 6 p.m. ☐$_3$ Después de las 6 p.m.

Se solicita la siguiente información para tener una idea de las características del núcleo familiar del encuestado y se mantendrá estrictamente confidencial.

7. ¿Cuántas personas conforman su núcleo familiar? ☐$_1$ 1 ☐$_2$ 2 ☐$_3$ 3 o más

8. ¿Cuántas personas de su núcleo familiar tienen? Menos de 18 ___ de 18 a 39 ___ de 40 a 65 ___ más de 65 ___
   (En la pregunta 8 indique con números la cantidad en cada una de las categorías)

9. ¿Cuántos conductores con licencia hay en su núcleo familiar? ☐$_1$ 1 ☐$_2$ 2 ☐$_3$ 3 o más

10. ¿Con cuántos automóviles cuenta su núcleo familiar? ☐$_1$ 1 ☐$_2$ 2 ☐$_3$ 3 o más

11. ¿Cuál es el ingreso anual aproximado de su núcleo familiar?

    ☐$_1$ $30,000 o menos ☐$_2$ $31,000 a $50,000 ☐$_3$ $51,000 a $75,000 ☐$_4$ $75,000 o más

Gracias por su tiempo.

English version on the other side

Appendix D

Survey Results

RESULTS
Doral Transit Circulator Study
General Public Survey
April 2007
(601 Completed Questionnaires)

Have you or anyone in your household used Miami-Dade Transit in the past six months?

	Number	Percent
Yes	109	18.4
No	485	81.6
Total	594	100.0

We would like to know the general nature of your typical weekday trip. Which of the following best describes where you work or attend school?

	Number	Percent*
City of Doral	277	46.1
Miami-Dade County	268	44.6
Downtown Miami	85	14.1
Outside Miami-Dade County	29	4.8

*Percent of 601 total respondents. Some people responded to more than one category so there is no total

If a Citywide Transit (Trolley) System were available, how many people in your household would use it?

	Number	Percent
3 or more	80	13.4
2	169	28.4
1	115	19.3
None	232	38.9
Total	596	100.0

RESULTS (continued)
Doral Transit Circulator Study
General Public Survey
April 2007
(601 Completed Questionnaires)

Which of the following locations do you think should have the highest priority for service by a City Transit (Trolley) system?

	Number	Percent*
Shopping	213	35.4
Businesses and Work Places	384	63.9
Schools	136	22.6
Restaurants	57	9.5

*Percent of 601 total respondents. Some people responded to more than one category so there is no total.

What days would it be most important for the transit system to operate? Please check the one you think is most important.

	Number	Percent
Weekdays	280	48.8
Weekends	19	3.3
Both	275	47.9
Total	574	100.0

What hours would it be most important for the transit system to operate?

	Number	Percent*
5 a.m. - 9 a.m.	192	31.9
9 a.m. - 6 p.m.	391	65.1
After 6 p.m.	56	9.3

*Percent of 601 total respondents. Some people responded to more than one category so there is no total.

How many people are in your household?

	Number	Percent
One	65	10.9
Two	177	29.6
Three or more	355	59.5
Total	597	100.0

RESULTS (continued)
Doral Transit Circulator Study
General Public Survey
April 2007
(601 Completed Questionnaires)

How many people in your household are…?

	Number	Percent
Under 18	485	27.6
18 to 39	588	33.5
40 to 65	549	31.3
Over 65	133	7.6
Total	1,755	100.0

How many licensed drivers are in your household?

	Frequency	Percent
One	88	14.7
Two	387	64.7
Three or more	123	20.6
Total	598	100.0

How many automobiles are available to your household?

	Frequency	Percent
One	125	20.9
Two	361	60.5
Three or more	111	18.6
Total	597	100.0

What is the approximate annual household income of your household?

	Frequency	Percent
$30,000 or less	33	5.8
$31,000 to $50,000	72	12.7
$51,000 to $75,000	133	23.4
$75,000 and up	331	58.2
Total	569	100.0