CITY OF DORAL

Transportation Master Plan

THE CORRADINO GROUP

CITY OF DORAL · 2003 · FLORIDA

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1. Overview

1. Overview

The Doral Transportation Master Plan is a project funded jointly by the City of Doral and the Miami-Dade County Metropolitan Planning Organization, (MPO). Through its public involvement, data collection and analysis, projects have been recommended based on the needs of three components of the transportation system. These components include:

- Roadway Network (capacity)
- Transit (alternative modes)
- Transportation Management (traffic management, policies)

The project was undertaken with an intensive public involvement process, focused on building consensus. This approach consulted decision makers from state and county, public officials, citizens and business owners. In addition, the transportation network was inventoried, existing conditions were evaluated and projected into the future. A set of projects in each of the three areas of Roadway, Transit and Transportation Management were produced. Projects in each area have been examined in detail and prioritized based on criteria developed within the community. The entire program has gone before the city commission and gained approval.

The following report and accompanying executive summary detail the processes undertaken.

PUBLIC NOTICE
City of Doral - Transportation Master Plan

PUBLIC INFORMATION WORKSHOP

Date:	Thursday, June 9, 2005
Time:	6:00 PM to 8:00 PM
Place:	Miami-Dade Fire Rescue Auditorium – 139 9300 NW 41st Street Doral, FL 33178

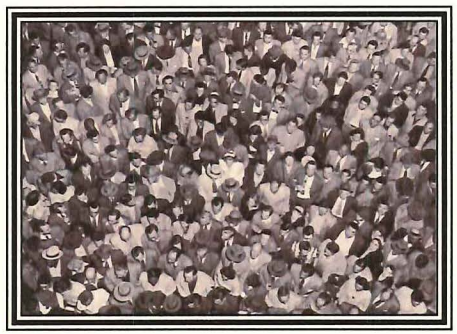
The City of Doral will conduct a public information workshop on the City's Transportation Master Plan project. The workshop will be held on Thursday, June 9, 2005, from 6:00 pm to 8:00 pm at the Miami-Dade Fire Rescue Auditorium 139, 9300 NW 41st Street, Doral, FL.

This interactive workshop is being held in order to inform the public of the project in general, generate ideas for projects, policies and implementation strategies. City representatives will be on hand during the workshop to informally discuss the project and to answer questions. Residents and business owners are encouraged to participate.

Anyone needing special accommodations under the Americans with Disabilities Act of 1990 should contact the City Clerk at City Hall (305-593-6725) at least five (5) working days prior to this information workshop.

2. Task 1 Public Involvement

Public involvement was performed at many levels and was undertaken throughout the project. The goal was to build consensus by having the community understand the effort and take ownership of it. The process was checked by a steering committee that provided input on direction at critical points. Multiple stakeholders were interviewed one-on-one. The goal was to understand the issues of concern from the perspective of the citizen and business person who live and work in the city every day. These issues were refined through debate, resulting in projects which are listed in the Project Bank. A multitude of site visits were conducted to examine issues that surfaced in these meetings.



General issues taken from the stakeholder meetings were distilled into a set of discussion issues, which focused on the areas that were of most concern to citizens and business leaders

Three public workshops were held. An initial workshop presented data and analysis and facilitated discussion. General issues taken from the stakeholder meetings were distilled into a set of discussion points, which focused on the areas of most concern to citizens and business leaders. The discussion culminated in a set of prioritization criteria, and potential projects.

Projects and policies were developed by the project team in light of the analysis performed. These were then prioritized. A final workshop was held to discuss the selected projects, the prioritization criteria and the ranking. This report and executive summary were brought to City Council for approval.

Since so many issues that affect the City of Doral, also translate into county-wide or regional issues affecting Miami-Dade County Public Works, Miami Dade County Planning and Zoning, the MPO and FDOT, these bodies were consulted.

2.1 STEERING COMMITTEE

A steering committee comprised of the project team, staff from the City of Doral and citizen members was set up to assist the process. This group focused on assuring the study progressed in proper direction, particularly after the analysis was completed and again after projects had been prioritized.

2.2 STAKEHOLDERS

Nearly 30 people were met individually or in small groups to gain insight on specific issues in their neighborhoods. Comments were used to develop an initial list of issues, which would serve as the basis for further conversation at the community workshops, and eventually turn into projects and prioritization criteria. The discussion generated was the catalyst for the consensus of priorities and projects. As discussion progressed it became clear that the public perception is that traffic congestion is worsening. The major corridors of 41st Street and 87th Avenue and their connections with the expressway system are very difficult to negotiate. Truck traffic mixed with passenger cars is perceived to be worsening the problem. The ultimate observation is that as businesses and residential development continue to grow, they will put more pressure on the roadway network, which needs to maintain an acceptable level of service. Alternative methods of transportation need to be implemented to provide

people with options of transit, or Transportation Demand Management techniques. The main issues that arose, were used to develop the projects that are recommended in this Master Plan. These main issues focused on:

- Traffic Congestion
- Truck Traffic
- Lack of Transit
- Individual Intersection Improvements
- Pedestrian Safety

Important to the success of any master planning study is the ability to build consensus

2.3 AGENCY COORDINATION

Important to the success of any master planning study is the ability to build consensus, within the community, as well as with the decision makers that have influence on the implementation of projects suggested by the plan. As the City of Doral is an area of regional importance, much of its transportation infrastructure is under the control of Miami-Dade County or FDOT. In addition this study is being funded by the MPO. Many agencies or departments are integral in the implementation process, which will generally follow the MPO guidelines of having projects planned and implemented through the 25 year Long Range Transportation Plan, (LRTP) and the five year Transportation Improvement Program, (TIP). The following people and groups were met with as part of the coordination effort.

- Miami Dade Transit
  - Mario Garcia
  - Mario Falcon
  - Mayra Diaz

- Miami Dade County Public Works
  - Muhammad Hassan

- Miami Dade County Planning and Zoning
  - Chuck Blowers
  - Mark Woerner

- Metropolitan Planning Organization
  - Jose Mesa
  - Oscar Camejo
  - Elizabeth Rockwell
  - Paul Chance

- Florida Department of Transportation
  - Garry Donn
  - David Korros

The project was introduced to each agency, scopes of service were provided for their review and comment. Each was invited to participate in the effort to the extent they would be comfortable. Each shared pertinent data and analysis that they had regarding the study area or items of interest.

2.4 COMMUNITY WORKSHOPS

Two community workshops were held, in addition to one workshop with the City Commission. The first on June 9, 2005, was attended by nearly 20 people. Over 2,100 mailings were sent to citizens and businesses and the meeting was advertised in the Miami Herald. Included was a presentation of the project to date, the data, and analysis. A discussion was held, generating many ideas, which were later converted into the projects put forth by this master plan. Additional time was spent discussing the prioritization criteria by which these projects would be evaluated.

A presentation was made to the City of Doral Planning Board. The presentation was very similar to the first workshop, providing an overview of the project, and an opportunity for the Planning Board to be updated on the projects progress.

The second public workshop shop was held on July 11, 2005. Again over 2,100 mailings were sent and the meeting was advertised in the newspaper. At this workshop a presentation of the projects that had been developed, the prioritization matrix, and the project ranking was provided. The discussion that followed led to general consensus on each.

Each politician was able to ask questions and the public invited to speak on the matter

On August 19, 2005, a workshop was held with the City Commission. Each politician was able to ask questions and the public invited to speak on the matter. Again, consensus was reached on the effort.

2.5 PUBIC HEARINGS

The report was presented to the City Commission on August 19, 2005, and unanimously approved.

2.6 IMPLEMENTATION MEETINGS WITH AGENCIES

This project will be presented to various MPO committees as requested. Each of the agencies met with at the outset of this project will receive a copy of the executive summary.

3. Task 2 Roadway Improvement Related Services

3. Task 2

Roadway Improvement Related Services

The main purpose of the roadway task was to develop a comprehensive roadway inventory and analysis, by which to identify capital projects that could quickly and easily address deficiencies in both the physical conditions of the roadway, as well as in its capacity. The following factors were examined in the physical inventory:

- Segment Identification (name)
- Jurisdiction and Functional Classification
- Lanes/Sidewalks (configuration)
- Presence of ROW Encroachments
- Arterial Classification
- Presence of Transit Routes
- Presence of Transit Facilities (stops)
- Presence / Condition of Pedestrian Facilities (sidewalks)
- Condition of Road Pavement

In order to make suggestions to the program regarding the capacity of the system, each roadway link has been inventoried, and a comprehensive set of 50, traffic counts were taken on the major roadway links and intersections. This provides snapshot of transportation Level of Service as it exists today. These traffic volumes have been analyzed and projected into the future, to the MPO planning horizons of 2015 and 2030, to portray future conditions. Counts occurred at the following locations:

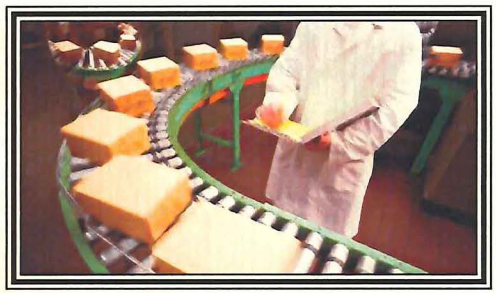


Table 1: Count Locations

Count #	Street	From	To
		Links	
1	**NW 74 St**	NW 117 Ave	NW 107 Ave
2	**NW 58 St**	NW 117 Ave	NW 107 Ave
3		NW 107 Ave	NW 97 Ave
4		NW 97 Ave	NW 87 Ave
5		NW 87 Ave	SR 826
6	**NW 41 St**	NW 117 Ave	NW 107 Ave
7		NW 107 Ave	NW 97 Ave
8		NW 97 Ave	NW 87 Ave
9		NW 87 Ave	SR 826
10	**NW 25 St**	NW 117 Ave	NW 107 Ave
11		NW 107 Ave	NW 97 Ave
12		NW 97 Ave	NW 87 Ave
13		NW 87 Ave	SR 826
14	**NW 12 St**	NW 107 Ave	NW 97 Ave
15		NW 97 Ave	NW 87 Ave
16		NW 87 Ave	SR 826
17	**NW 79 Ave**	NW 25 St	NW 41 St
18		NW 41 St	NW 58 St
19	**NW 82 Ave**	NW 25 St	NW 41 St
20		NW 12 St	NW 25 St
21	**NW 87 Ave**	NW 12 St	NW 25 St
22		NW 25 St	NW 41 St
23		NW 41 St	NW 58 St
24	**NW 97 Ave**	NW 12 St	NW 25 St
25		NW 25 St	NW 41 St
26		NW 41 St	NW 58 St
27	**NW 107 Ave**	NW 12 St	NW 25 St
28		NW 25 St	NW 41 St
29		NW 41 St	NW 58 St
30		NW 58 St	NW 74 St

Table 1: Count Locations (Continued)

COUNT LOCATIONS			
Count #	Street	From	To
Links			
31	**NW 102 Ave**	NW 58 St	NW 41 St
32		NW 41St	NW 97 Ave
33	**NW 114 Ave**	NW 74 St	NW 58 St
34		NW 58 St	NW 41 St
35	**NW 50 St**	NW 117 Ave	NW 107 Ave
36	**NW 52 St**	NW 107 Ave	NW 97 Ave
Intersections			
37	**NW 58th St**	@	NW 107th Ave
38	**NW 58th St**	@	NW 97th Ave
39	**NW 58th St**	@	NW 87th Ave
40	**NW 58th St**	@	NW 79th Ave
41	**NW 41st St**	@	NW 107th Ave
42	**NW 41st St**	@	NW 97th Ave
43	**NW 36th St**	@	NW 87th Ave
44	**NW 36th St**	@	NW 79th Ave
45	**NW 25th St**	@	NW 107th Ave
46	**NW 25th St**	@	NW 97th Ave
47	**NW 25th St**	@	NW 87th Ave
48	**NW 25th St**	@	NW 79th Ave
49	**NW 12th St**	@	NW 107th Ave
50	**NW 12th St**	@	NW 97th Ave
51	**NW 12th St**	@	NW 87th Ave
52	**NW 50th St**	@	NW 114th Ave

Roadway needs, have been treated through a recommended set of projects enumerated in the Project Bank (please refer to section 8 of this report) that deal with capacity, particularly on the various links and intersections within the City. Coordination with all agencies has been provided as part of the public involvement task.

3.1 Inventory

The inventory has been portrayed through the following tables and maps describing the conditions in Doral. The description is provided on a section by section basis.

Doral roadway segments are typified as section-line roads, which are spaced every mile. The main roadway network was inventoried on this section by section basis. Most of the roadway facilities in Doral are under the control of Miami-Dade County, because they are section line roads. Doral, has very few local streets. Many of those roads that are lower on the transportation hierarchy are privately owned as part of gated developments. The functional classification reflects whose control the facility is under and the hierarchical rank of that facility in terms of its importance in moving traffic. Roadways are typified by a cross section with two to three travel lanes in both directions. There are generally one or two left turn lanes at each intersection. Most of the Streets in Doral have sidewalks on both sides which, are generally 5' sidewalks in width and connect with intersections in ADA compliable manners. Roads and sidewalks are in good condition. There are few Right of Way encroachments in Doral. There are 7 transit routes in Doral. On streets where routes exist, stops are announced with a sign, but generally no shelter. Each section of pavement has been inventoried and rated for the condition of the pavement, loosely based on the FDOT road rating standards. Overall roadways in Doral are in good condition. Each section of pavement is rated for cracking, ride and rutting on a 0-10 scale with 0 the worst and 10 the best. Any rating 6.4 or less is considered deficient pavement and is marked by an asterisk.

Table 2

East-West Corridors

Link	ROADWAY NAME	ROADWAY FROM	ROADWAY TO	Presence of Sidewalks	Condition of Road	ROW Encroach	Bus Routes
	1	2	3	6	7	8	9
1	**NW 74 St**	NW 117 Ave	NW 107 Ave	114th to 117th - southside;	7.5	N/A	N/A
2	**NW 58 St**	NW 117 Ave	NW 107 Ave	Northside	6	N/A	N/A
3		NW 107 Ave	NW 97 Ave	Southside	8	N/A	N/A
4		NW 97 Ave	NW 87 Ave	None	7	N/A	N/A
5		NW 87 Ave	SR 826	None	7	N/A	Routes 87 and 242
6	**NW 41 St**	NW 117 Ave	NW 107 Ave	Both sides	7.5	N/A	N/A
7		NW 107 Ave	NW 97 Ave	Both sides	9	N/A	Route 41
8		NW 97 Ave	NW 87 Ave	Both sides	9	N/A	Route 95x and 41
9		NW 87 Ave	SR 826	Both sides from 87th to 79th; none	9 from 87th to 79th; 5	N/A	Routes 95x, 36,41 and 132- Tri Rail
10	**NW 25 St**	NW 117 Ave	NW 107 Ave	Southside	6.4	N/A	N/A
11		NW 107 Ave	NW 97 Ave	Southside	8	N/A	N/A
12		NW 97 Ave	NW 87 Ave	Southside	7	N/A	Routes 95, 242, 238, and 87
13		NW 87 Ave	SR 826	Southside	7	N/A	Route 238
14	**NW 12 St**	NW 107 Ave	NW 97 Ave	Northside	9	N/A	Route 242
15		NW 97 Ave	NW 87 Ave	Southside	7.5	N/A	Route 242
16		NW 87 Ave	SR 826	None	8	N/A	N/A

Table 3

North-South Corridors

Link	ROADWAY NAME	ROADWAY FROM	ROADWAY TO	Presence of Sidewalks	Condition of Road Pavement	ROW Encroachments	Bus Routes
	1	2	3	6	7	8	9
17	**NW 79 Ave**	NW 25 St	NW 41 St	Both sides	7.5	Newspaper stands - Eastside	N/A
18		NW 41 St	NW 58 St	Both sides	5.5	N/A	Routes 36,87, and 132 -
19	**NW 82 Ave**	NW 25 St	NW 41 St	None	8	N/A	Route 242
20		NW 12 St	NW 25 St	Both sides	8	Mail box - Westside	N/A
21	**NW 87 Ave**	NW 12 St	NW 25 St	Both sides	9	N/A	Routes 87 and 95
22		NW 25 St	NW 41 St	Both sides	9	Mail box - Westside	Routes 87, 95, and 242
23		NW 41 St	NW 58 St	Both sides	7.5	N/A	Routes 36, 87, and 132 -
24	**NW 97 Ave**	NW 12 St	NW 25 St	Westside	7.5	N/A	Route 242
25		NW 25 St	NW 41 St	Both sides	6	N/A	Route 95x
26		NW 41 St	NW 58 St	Westside	7	N/A	N/A
27	**NW 107 Ave**	NW 12 St	NW 25 St	Westside Mixed	9	Newspaper stands - Eastside	Routes 41, 238, and 242
28		NW 25 St	NW 41 St	Westside Mixed	9	N/A	Route 41
29		NW 41 St	NW 58 St	Both sides	9	N/A	N/A
30		NW 58 St	NW 74 St	Westside	7.5	N/A	N/A

TABLE 4

Other Corridors

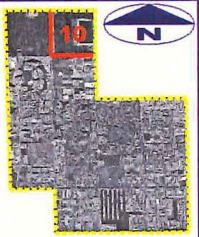
Link	ROADWAY NAME	FROM	TO	Presence of Sidewalks	Condition of Road	ROW Encroach	Bus Routes
	1	2	3	6	7	8	9
31	**NW 102 Ave**	NW 58 St	NW 41 St	Both sides	9.5	N/A	N/A
32		NW 41 St	NW 97 Ave	Mixed on both sides	8	N/A	N/A
33	**NW 114 Ave (approx)**	NW 74 St	NW 58 St	Both sides	9	N/A	N/A
34		NW 58 St	NW 41 St	Both sides	7.5	N/A	N/A
35	**NW 50 St**	NW 117 Ave	NW 107 Ave	Northside	7.5	N/A	N/A
36	**NW 52 St (approx)**	NW 107 Ave	NW 97 Ave	Both sides	9.5	N/A	N/A

TABLE 5

Added Corridors

Link	ROADWAY NAME	FROM	TO	Presence of Sidewalks	Condition of Road Pavement	ROW Encroach ments	Bus Routes
	1	2	3	6	7	8	9
37	**NW 56 Ave**	NW SR 826	NW 87 Ave	None	7	N/A	N/A
38	**NW 54 Ave**	NW SR 826	NW 87 Ave	None	7	N/A	N/A
39	**NW 53 Ave**	NW SR 826	NW 87 Ave	None	8	N/A	N/A
40	**NW 27 Ave**	NW 112 Ave	NW 107 Ave	None	7.5	N/A	N/A
41	**NW 33 Ave**	NW 112 Ave	NW 107 Ave	None	7	N/A	N/A
42		NW 107 Ave	Dead End	None	7	N/A	N/A
43		NW 87 Ave	Dead End	None	8	N/A	N/A
44		NW 87 Ave	NW 79 Ave	None	9	N/A	N/A
45	**NW 34 Ave**	NW 117 Ave	NW 112 Ave	None	7	N/A	N/A
46	**NW 112 Ave**	NW 34 Ave	NW 25 Ave	None	7.5	N/A	N/A
47	**NW 117 Ave**	NW 41 Ave	NW 25 St	None	5	N/A	N/A
48	**NW 84 Ave**	NW 33 Ave	Dead End	None	7.5	N/A	N/A
49		NW 25 Ave	NW 12 Ave	None	7.5	N/A	N/A
50	**NW 21 Ave**	NW 107 Ave	NW 99 Ave	None	7.5	N/A	N/A
51	**NW 17 Ave**	NW 97	NW 102 Ave	None	8	N/A	N/A
52	**NW 19 Ave**	NW 102 Ave	NW 107 Ave	None	7.5	N/A	N/A
53	**NW 102 Ave**	NW 15 Tr	NW 25 Ave	None	9	N/A	N/A
54	**NW 98 Ave**	NW 17 Ave	NW 12 Ave	None	8	N/A	N/A

FIGURE 1



Section 10

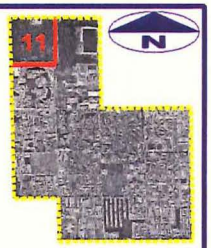
Section Summary

Section 10 is bounded by NW 90th St to the north, NW 74th St to the south, NW 107th Ave to the west, and NW 97th to the east. This section consists of vacant under developed land. The arterials in this section were closed and under constructoin due to future development in the area.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 2



Section 11

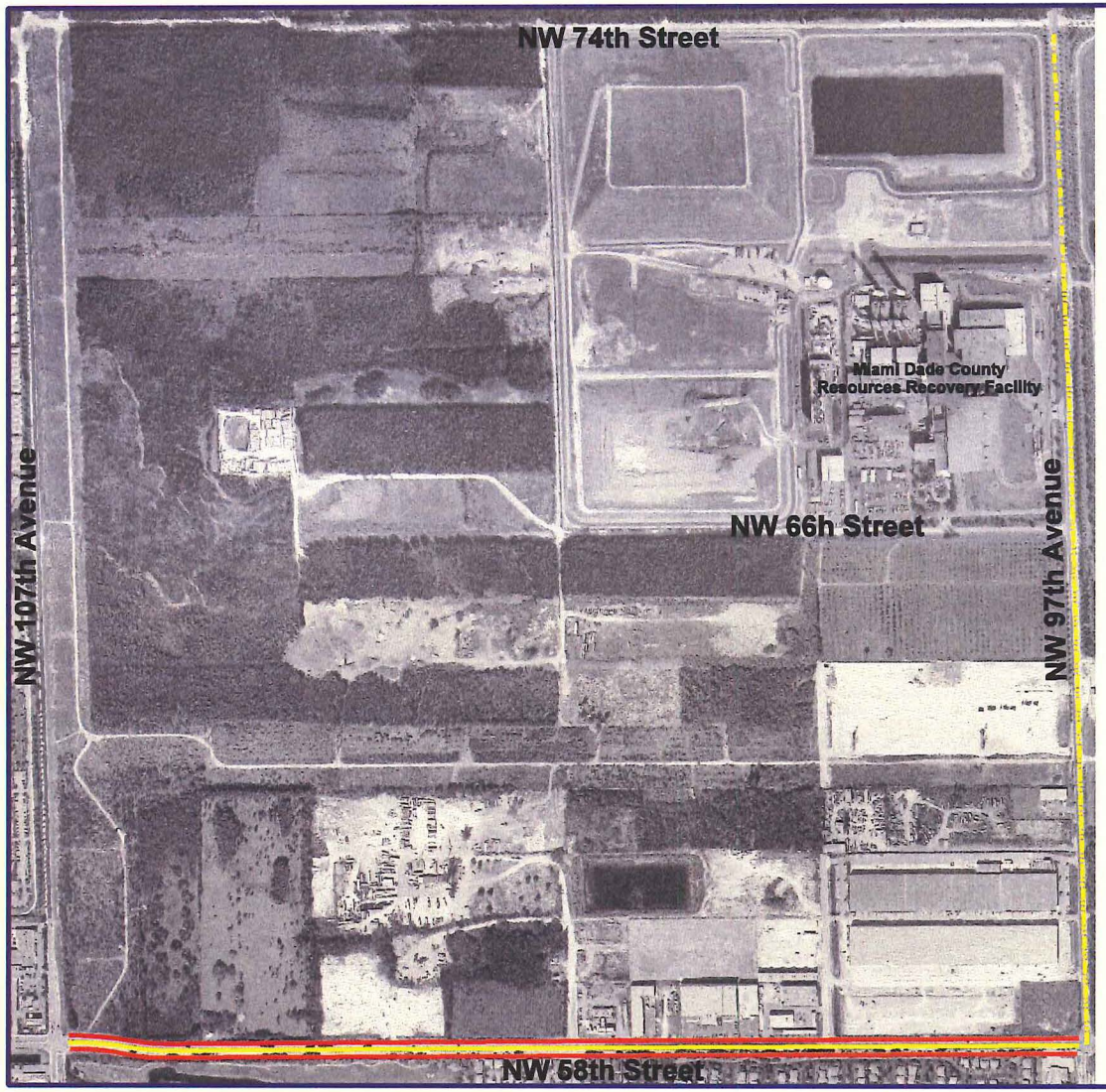
Section Summary

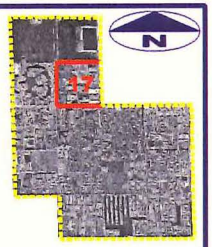
Section 11 is bounded by NW 90th to the north, NW 74th to the south, NW 117th Ave to the west, and NW 107th Ave to the east. This areal was taken in 2003 and since them there have been much development in section. The development consist of housing urban communities and new roadway such as the extention of NW 114th Avenue to NW 80th Street.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 3





Section 17

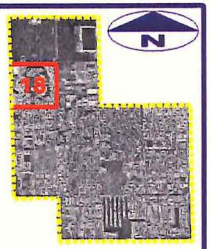
Section Summary

Section 17 is bounded by NW 74th St to the north, NW 58th St to the south, NW 107th Ave to the west, and NW 97th to the east. This section consists of vacant and industrial land. The industrial sections are located off 97th Ave between 70th St and 58th St The conditions of the roads are average without right-of-way encroachments. There are no bus routes that service this section. The only sidewalks that are within this section are along NW 58th St. A large segment of 74th St was closed off due to constrution. NW 97th Ave ended at 70th St due to construction. 74th is currently undergoing a PD & E study evaluation alternatives for its extension between the Palmetto Expressway and Florida's Turnpike.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 4



Section 18

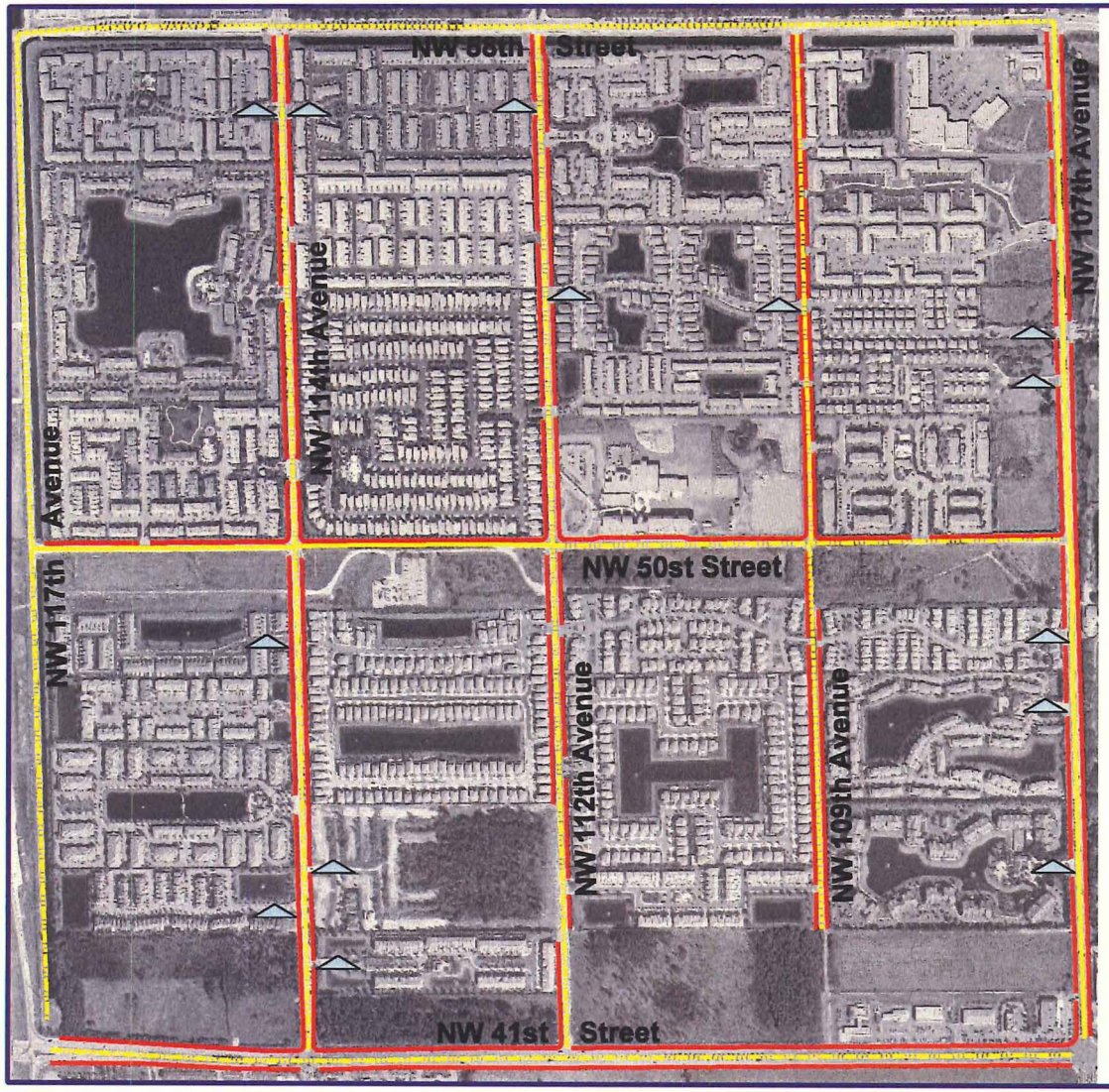
Section Summary

Section 18 is bounded by NW 74th to the north, NW 58th to the south, NW 117th Ave to the west, and NW 107th Ave to the east. Much of the land consists of gated residential communities. The conditions of the roads range from average to good without right-of-way encroachments. There are sidewalks along both sides of SW 114th which is the main arterial for this section. However, the main streets that surround this section only have one sidewalk on one side of the street. There are no bus routes that service this area. This private land is not owned by the City of Doral. The only people who have access in and out are residents and employees that work there. The main issue with Section 18 is truck traffic on NW 114th Ave. This street is heavily used by trucks. This issue is presently being addressed by the proposal of a new road along NW 122nd Ave, which is west of the Turnpike. If this new road gets constructed this would give the truckers access to the Turnpike from the westside.

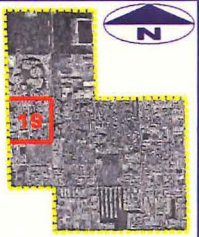
Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 5



Section 19



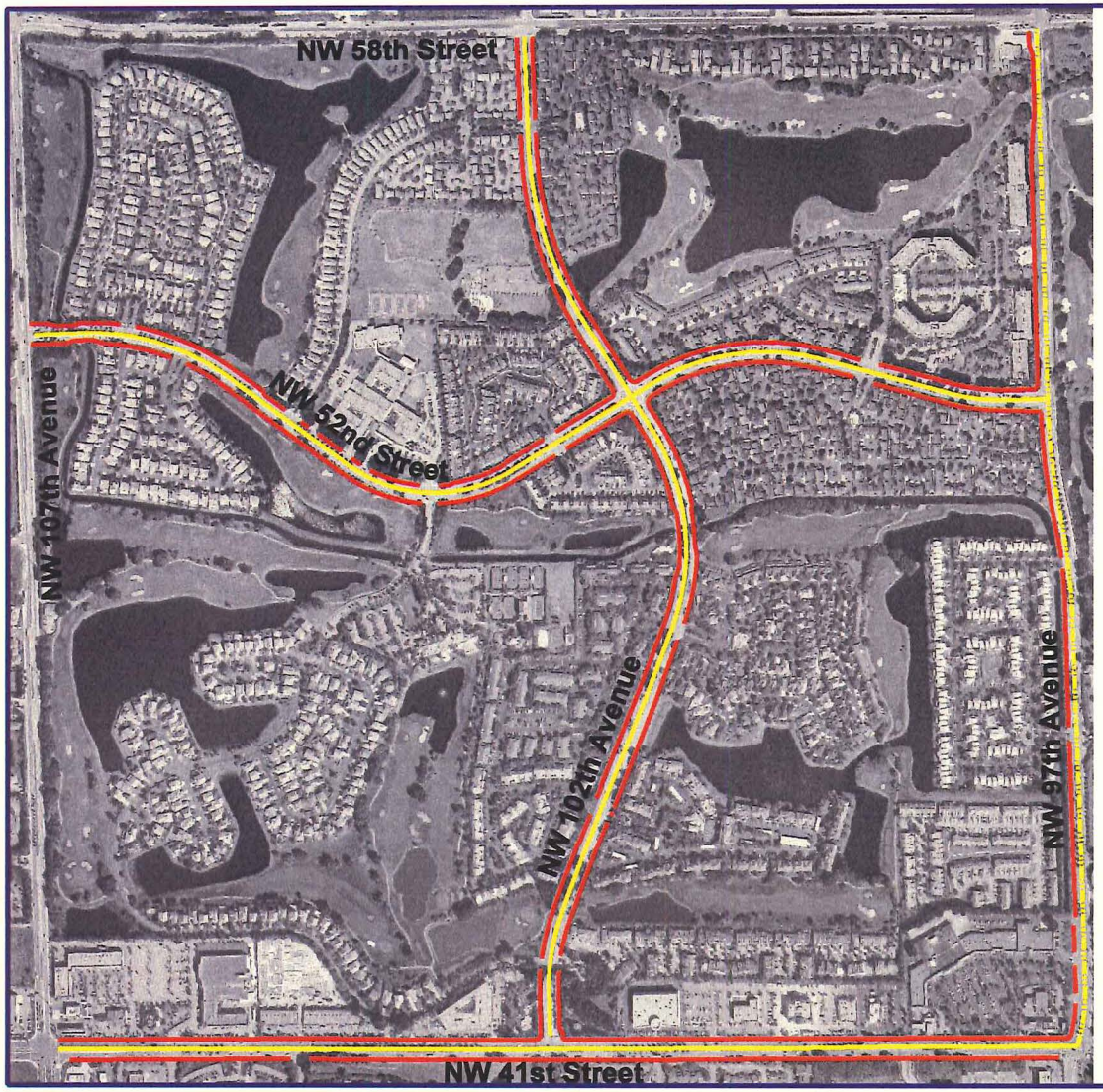
Section Summary

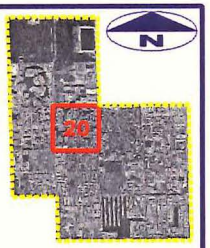
Section 19 is bounded by NW 58th St to the north, NW 41st St to the south, NW 117th Ave to the west, and NW 107th to the east. The section is characterized by gated residential communities. There is vacant land and neighborhood strip commercial along NW 41st St. These communities are well kept and maintained. The roads range from poor to good conditions without right-of-way encroachments. There are no bus routes that service this section. The only street that was in extremely poor condition was 109th Ave south of NW 50th St. Most of the streets in this section have sidewalks on both sides.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 6





Section 20

Section Summary

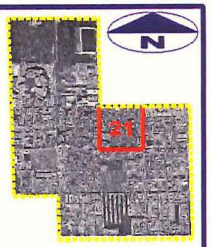
Section 20 is bounded by NW 58th St to the north, NW 41st to the south, NW 107th to the west, and NW 97th to the east. The main feature that dominates Section 20 is the Doral Country Club. The conditions of these streets are from average to good condition without right-of-way encroachments. The only bus route that services this area is MDT Route 41. This services NW 41st St. between 107th and 97th.

This section is mainly residential. These residential areas are open to the public. The main streets through this section have sidewalks on both sides. The commercial areas are only along NW 41st St.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 7



Section 21

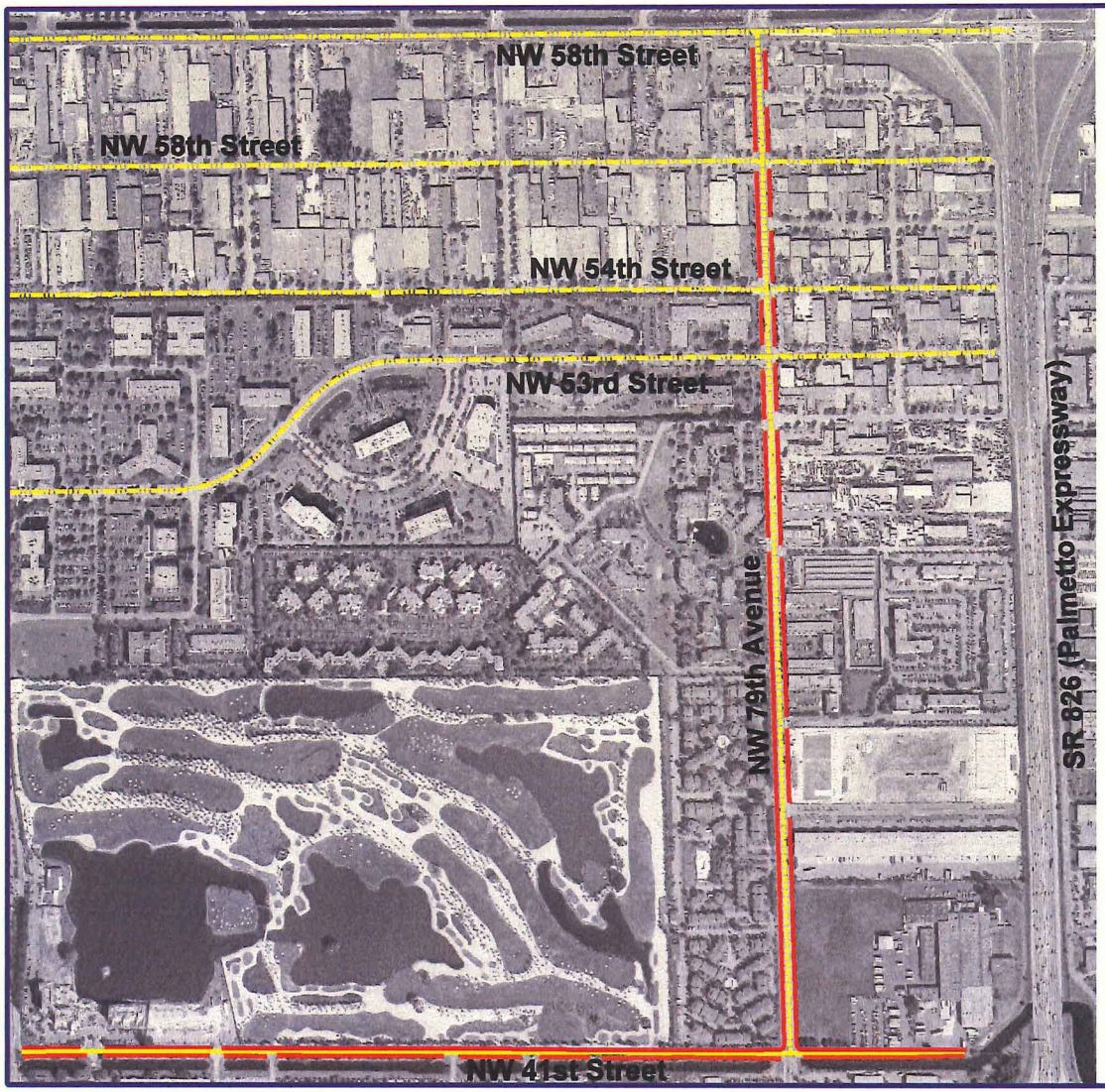
Section Summary

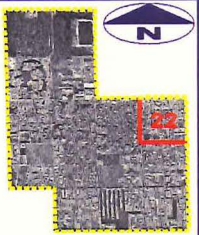
Section 21 is bounded by NW 58th to the north, NW 41st to the south, NW 97th to the west, and NW 87th to the east. The Doral Golf Resort and Spa characterize this section. This section consists of vacant, residential, and commercial lands. Much of the land within this section is vacant. The residential sections are gated private communities which are located at the southern portions of 97th and 87th. The commercial sections are along NW 41st St and NW 58th St. The conditions of the roads are from average to good without right-of-way encroachments. The bus routes that service this section are MDT Routes 36, 87, and 132- Tri-Rail Koger Shuttle. The buses in this area only serve NW 87th between NW 58th and NW 41st St.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 8





Section 22

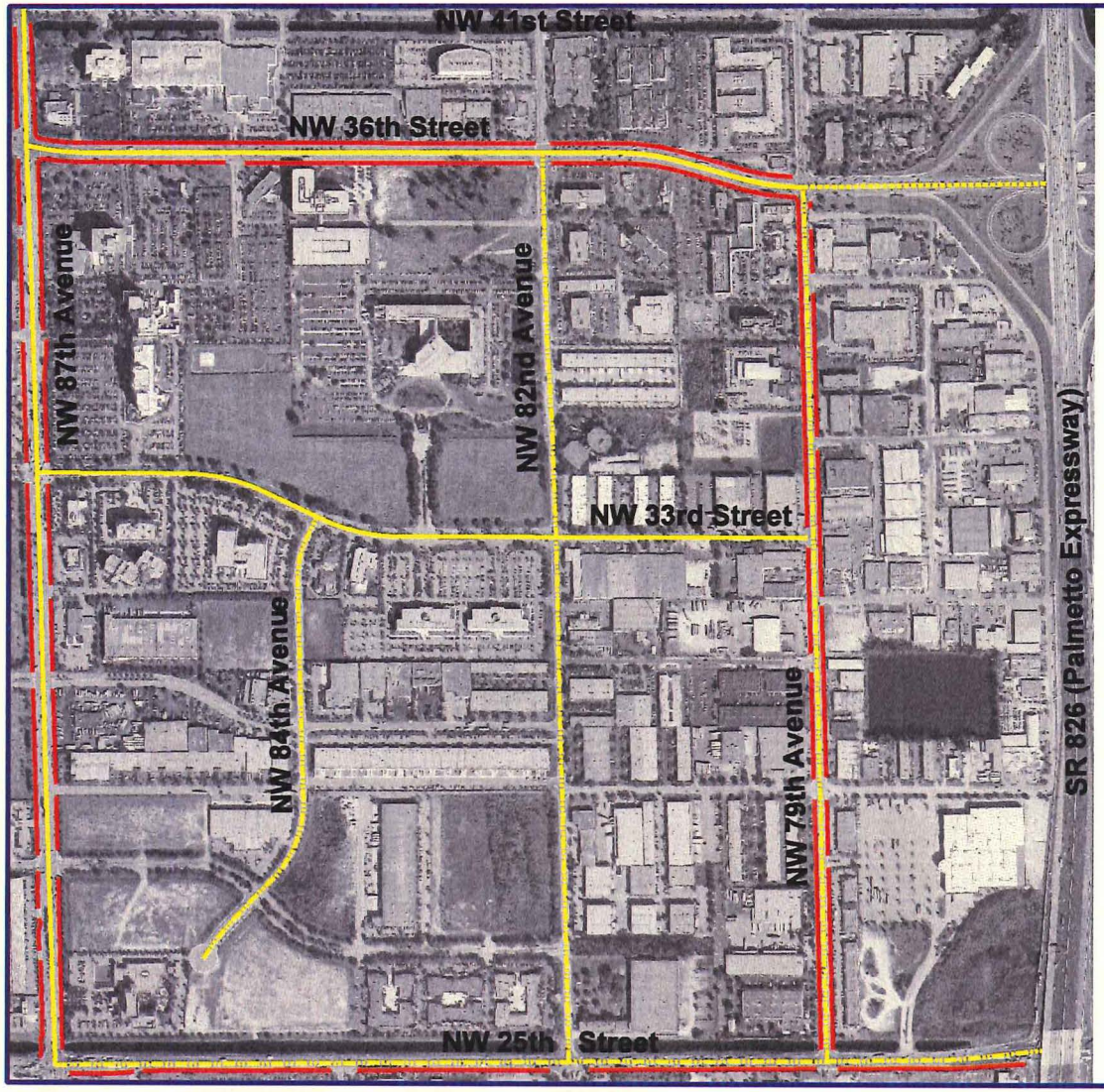
Section Summary

Section 22 is bounded by 58th Ave to the north, 41st St to the south, 87th to the west, and the Palmetto Expressway to the east. This section consists of commercial and residential areas. The conditions of the roads range from poor to good without right-of-way encroachments. There was heavy construction on 79th Ave from 58th to 41st St. NW 58th St. is serviced by MDT Routes 87 and 242 between 87th and the Palmetto Expressway. NW 79th Ave is serviced by MDT Routes 36, 87, 242, and 132 Tri-Rail Koger Shuttle between 58th and 41st St. NW 53rd St. is serviced by MDT Route 87 between 87th and 79th Avenues. The main arterial is NW 79th Ave which has sidewalks on both sides. The other streets within this section don't have sidewalks.

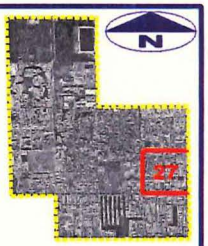
Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 9



Section 27



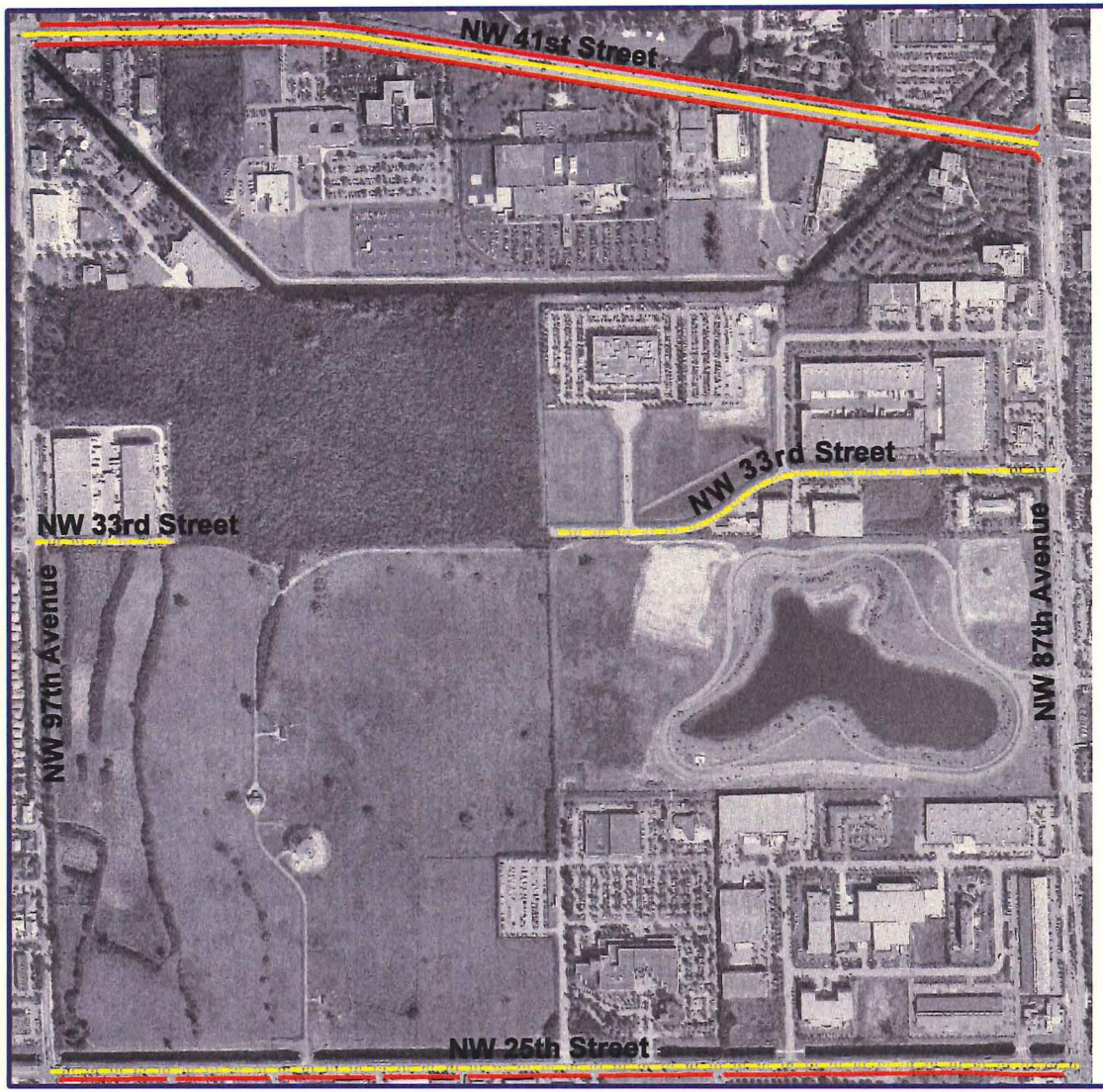
Section Summary

Section 27 is bounded by NW 36th St to the north, NW 25th St to the south, 87th Ave to the west, and the Palmetto Expressway to the east. The section consists of commercial and industrial land uses. The conditions of the roads range from average to good thout right-of-way encroachments. The streets that have sidewalks on both sides are NW 36th, NW 87th, and NW 79th Avenues. NW 25th St. has one sidewalk on the southside. The other streets within this section don◊t have sidewalks. This section has heavy bus transit along its main arterials. NW 36th/41st St is serviced by MDT Routes 36, 41, 95x - Earlington Heights, and the 132 Tri-Rail Koger Shuttle between 87th and the Palmetto Expressway. NW 87th is serviced by MDT Routes 87, 242, and 95x - Earlington Heights between NW 36th and NW 25th Streets. NW 82nd is serviced by MDT Route 242 between NW 36th and NW 25th. NW 25th St is serviced by MDT Route 238 between NW 87th and the Palmetto Expressway. The Palmetto Expressway Interchange has construction that is severely affecting all of NW 36th St.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 10



Section 28

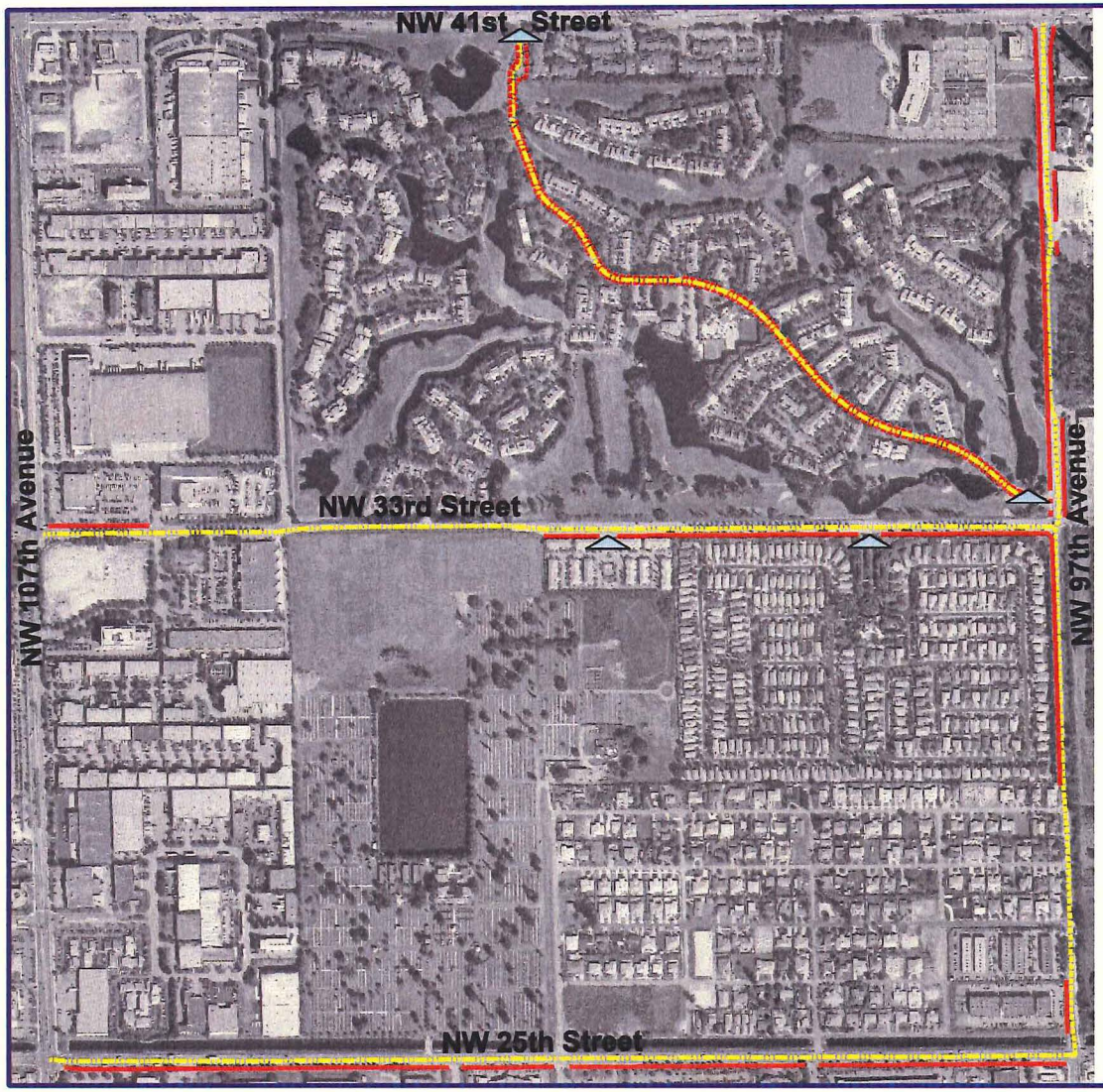
Section Summary

Section 28 is bounded by NW 41st St to the north, NW 25th St to the south, NW 97th Ave to the west, and NW 87th Ave to the east. The conditions of these streets range from poor to good without right-of-way encroachments. The land uses consist of vacant land, commercial and industrial areas. NW 41st St. has sidewalks on both sides. NW 25th St has a sidewalk on the southside. NW 33rd St is without sidewalks. NW 41st St is serviced by MDT Routes 41 and 95x - Earlington Heights between 97th and 87th Streets. NW 25th St is serviced by Routes 87, 238, 242, and 95x - Earlington Heights between 97th and 87th Streets. The main issue is 33rd St. does not go through to 97th Ave which causes a lack of connectivity.

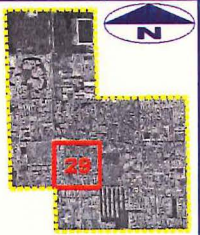
Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 11



Section 29



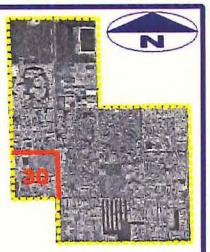
Section Summary

Section 29 is bounded by NW 41st St to the north, NW 25th St to the south, NW 107th Ave to the west, and NW 97th Ave to the east. The conditions of the streets range from poor to good without right-of-way encroachments. The pavement and sidewalk conditions on 97th Ave are in extremely poor condition. NW 97th Ave is serviced by MDT Route 95x - Earlington Heights between NW 41st and NW 25th Streets. NW 25th St. is serviced by MDT Route 238 between 107th and 97th Avenues. The intersection of 97th and 41st is without walking signals for pedestrians. The other issue is connectivity at the northern terminus of 102nd Ave. 102nd Ave is in average condition but has deteriorated sidewalks on both sides.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 12



Section 30

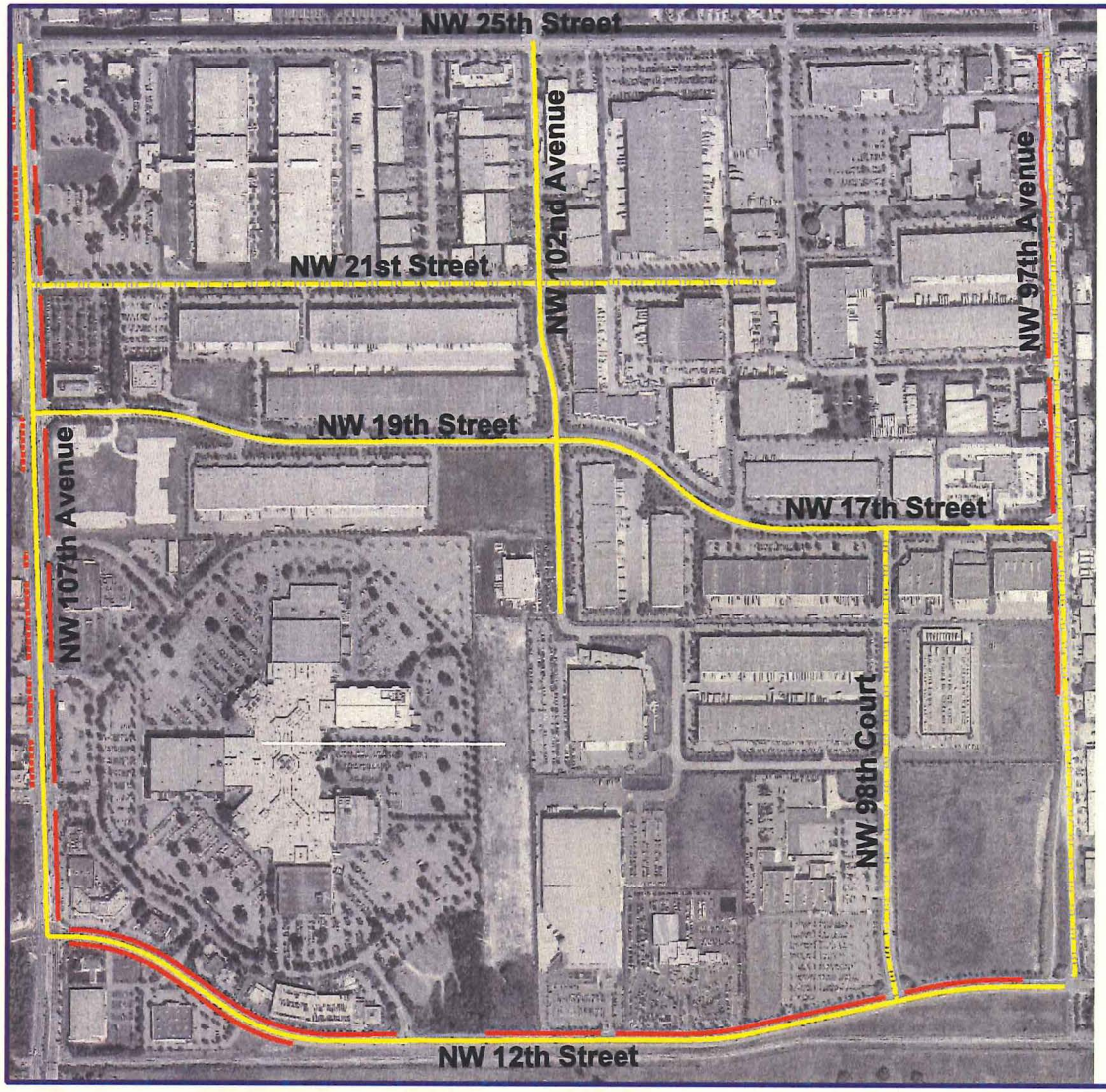
Section Summary

Section 30 is bounded by NW 41st St to the north, NW 25th St to the south, NW 117th Ave to the west, and NW 107th Ave to the east. This section has commercial and retail land uses. The conditions of the streets range from poor to good without right-of-way encroachments. NW 117th Ave has poor and deteriorating pavement conditions. NW 107th Ave has sidewalks that are not fully connected to each other. NW 25th St. has a sidewalk on the southside. The other streets in this section are without sidewalks. The segment of NW 107th Ave. is in good condition but the sidewalk is not fully connected on the west side of the street. NW 107th Avenue is serviced by MDT Route 41 between NW 41st and NW 25th Streets.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 13



Section 32

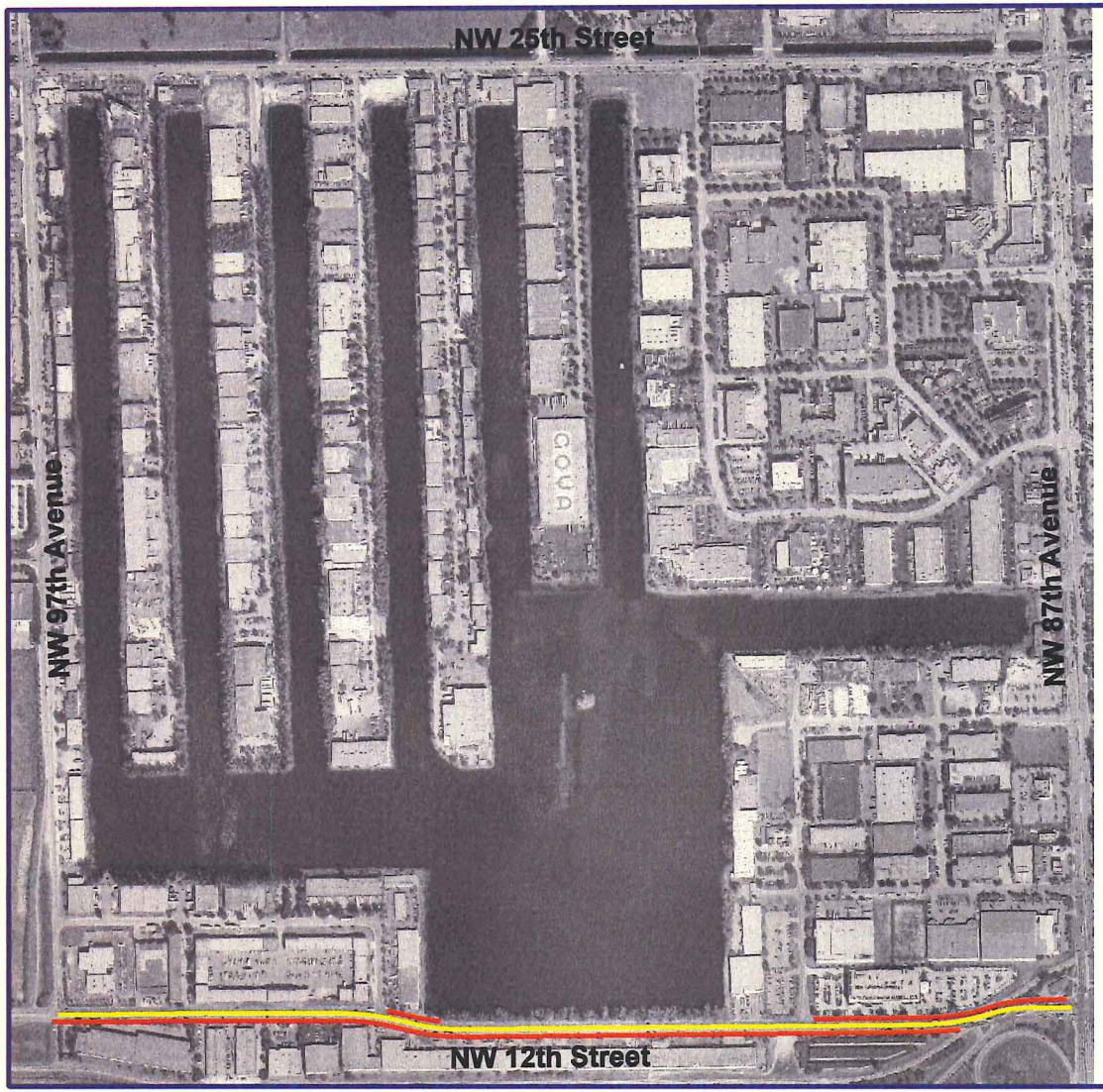
Section Summary

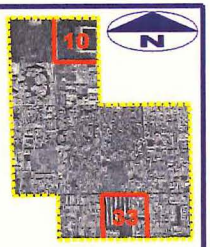
Section 32 is bounded by NW 25th St to the north, NW 12th St to the south, NW 107th Ave to the west, and NW 97th Ave to the east. Section 32 is characterized by the Miami International Mall that is located along 107th between NW 12th St and 19th St. The conditions of the streets in this section are average and good without right-of-way encroachments. The sidewalks on the westsides NW 107th and 97th do not fully connect. The other streets within this section are without sidewalks. NW 107th Ave is served by MDT Routes 41, 238, 242 between 25th and 12th Streets. NW 97th Ave is serviced by MDT Route 242 between 25th and 12th Streets. NW 12th St is serviced by MDT Route 242 between 107th and 97th Avenues. NW 19th and 17th Streets are serviced by MDT Route 87 between 107th and 97th Avenues. There are large sections of community and regional commercial along 107th between NW 12th and 25th streets. The land uses in this section is typified by the abundance of community strip malls and car dealerships along the northside of NW 12th St between NW 107th and NW 97th.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 14





Section 33

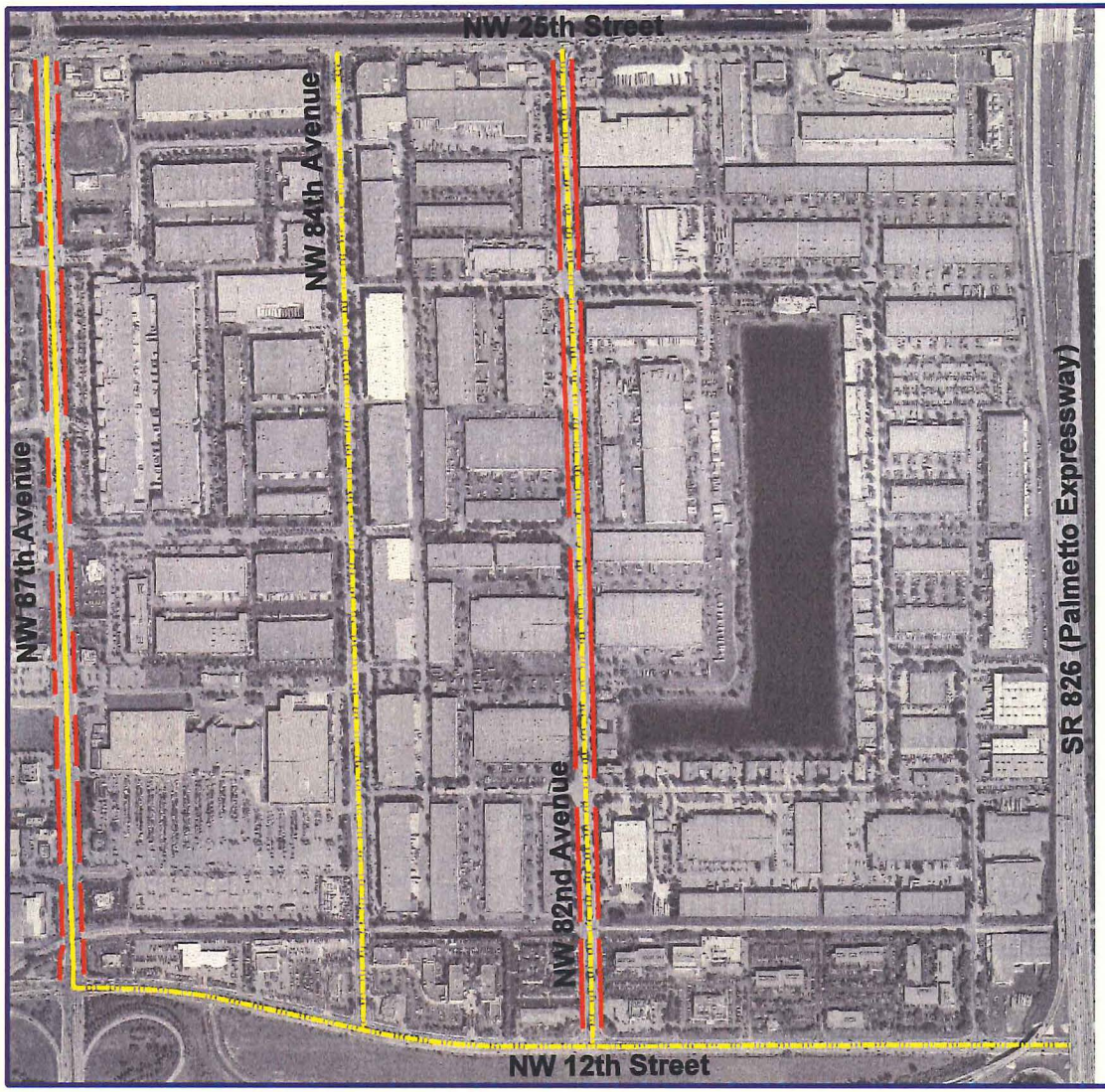
Section Summary

Section 33 is bounded by NW 25th St to the north, NW 12th St. to the south, NW 97th Ave to the west, and NW 87th Ave to the east. The condition of the streets range from average to good without right-of-way encroachments. NW 12th St is serviced by MDT Route 242 between 97th and 87th Avenues. The land uses here are predominantly commercial and typified by the abundance of car dealerships and community strip malls along NW 12th St. NW 12th Ave has one sidewalk on the southside. This is mainly along the northside of NW 12th Ave between 97th and 87th.

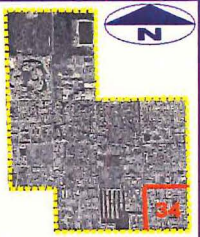
Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

FIGURE 15



Section 34



Section Summary

This section is bounded by NW 25th St to the north, NW 12th St to the south, NW 87th Ave to the west, and the Palmetto Expressway to the east. Commercial land is predominant in this section. The conditions of the streets range from average to good without right-of-way encroachments. NW 87th and 82nd Avenues have sidewalks on both sides. NW 12th St and NW 84th Ave are without sidewalks. NW 87th is serviced by MDT Routes 87 and 95x - Earlington Heights between 25th and 12th Streets. NW 84th Ave is serviced by MDT Route 87 between 25th and 12th Streets. NW 12th St is serviced by MDT Route 87 between 84th and 87th Avenues. The main issue is access and traffic onto the Palmetto. Traffic often builds heavily along NW 12th St onto the Palmetto Expressway. Another traffic concern along NW 12th St is the ingress and egress onto the Dolphin Expressway at 87th Ave. Traffic is always a prevalent issue at this intersection. Traffic build-up not only occurs along NW 12th St but also along the Dolphin offramp onto NW 12th St into Doral. There are retail strip malls and car dealerships along NW 12th St between the Palmetto Expressway and NW 87th St.

Legend

- Good Roadway Condition
- Average Roadway Condition
- Poor Roadway Condition
- Closed Roadway
- Good Sidewalk Condition
- Poor Sidewalk Condition
- Gated Community

3.2 TRAFFIC COUNTS

Fifty traffic counts have been taken as part of the inventory. These were used as a basis for the analysis that was used to understand the actual present and future conditions in the City.

FIGURE 16

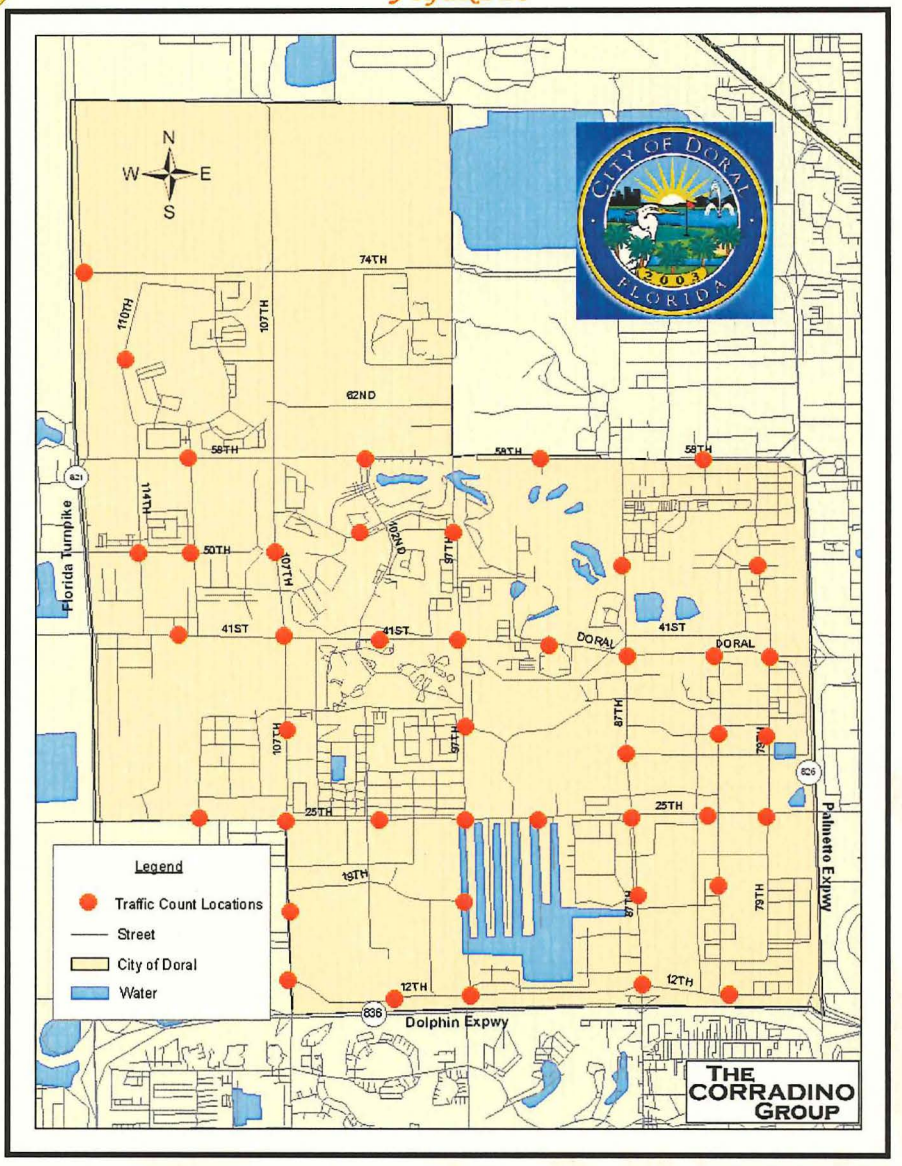


Table 6: Existing Locations

Asset #	Control	Intersection	UNOPTIMIZED					OPTIMIZED, ACTUATED-CO-ORDINATED				
			Existing Lane Geometry			Mitigated Lane Geometry		Existing Lane Geometry			Mitigated Lane Geometry	
			Delay* (sec/veh/hr)	LOS*	Mitigation	Delay* (sec/veh/hr)	LOS*	Delay* (sec/veh/hr)	LOS*	Mitigation	Delay* (sec/veh/hr)	LOS*
6095	Signal	NW 58th Street @ NW 107th Avenue	34.4	C				31.9	C			
5669	Signal	NW 58th Street @ NW 97th Avenue	21.2	C				20.9	C			
4596	Signal	NW 58th Street @ NW 87th Avenue	103.8	F	*Add SB RT*	37.8	D	85.3	F	*Add EB RT, Add SB RT, NB Dual LT*	32.1	C
4176	Signal	NW 58th Street @ NW 79th Avenue	42.2	D				20.1	C			
4887	Signal	NW 41st Street @ NW 107th Avenue	62.2	E	*EB Dual LT, Add EB RT, WB triple LT, NB Dual LT*	54.9	D	38.7	D			
4885	Signal	NW 41st Street @ NW 97th Avenue	100.0	F	*Add NB and SB LT*	48.2	D	37.8	D			
4477	Signal	NW 36th Street @ NW 87th Avenue	76.0	E	*NB Triple LT*	34.3	C	39.9	D			
4575	Signal	NW 36th Street @ NW 79th Avenue	17.6	B				16.3	B			
4697	Signal	NW 25th Street @ NW 107th Avenue	79.4	E	*Add WB RT*	39.2	D	34.3	C			
5112	Signal	NW 25th Street @ NW 97th Avenue	31.8	C				25.4	C			
4333	Signal	NW 25th Street @ NW 87th Avenue	34.3	C				34.4	B			
5111	Signal	NW 25th Street @ NW 79th Avenue	37.0	D				15.8	D			
4592	Signal	NW 12th Street @ NW 107th Avenue	51.9	D				37.6	D			
5938	Unsignalized	NW 12th Street @ NW 97th Avenue										
4338	Signal	NW 12th Street @ NW 87th Avenue	157.7	F	*Add EB through lane*	32.0	C	82.8	F	*Add EB Through*	40.4	D
	Unsignalized	NW 50th Street @ NW 114th Avenue										

*Based on HCM 2000, using Synchro (Version 6)

Table 7: Link Volume AADT Estimate - Existing Condition

Link	ROADWAY NAME	FROM	TO	Source	Date From	Date To	SF	ACF	DIR	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	AVE ADT	AADT Calculation	Rounded AADT
	EXISTING CONDITION (Seasonally Adjusted)																				
	1	2	3	4	5	6	7	8	9	10	11	12	10	11	12	10	11	12	13	14	15
1	**NW 74 St**	NW 117 Ave	NW 107 Ave	RGA	3/15/05	3/17/05	0.99	0.98	EB	808	573	1381	817	567	1384	830	552	1382	1382	**1341**	3,000
									WB	461	1075	1536	457	1112	1569	566	1112	1678	1594	**1547**	
									LINK	**1269**	**1648**	**2917**	**1274**	**1679**	**2953**	**1396**	**1664**	**3060**	**2977**	**2888**	
2	**NW 58 St**	NW 117 Ave	NW 107 Ave	RGA	3/1/05	3/3/05	0.99	0.98	EB	2609	3336	5945	2043	3442	5485	2137	2027	4164	5198	**5043**	13,000
									WB	1910	6294	8204	1631	6443	8074	1570	6358	7928	8069	**7828**	
									LINK	**4519**	**9630**	**14149**	**3674**	**9885**	**13559**	**3707**	**8385**	**12092**	**13267**	**12871**	
3		NW 107 Ave	NW 97 Ave	RGA	3/1/05	3/3/05	0.99	0.98	EB	3349	2781	6130	3409	2808	6217	3312	3057	6369	6239	**6053**	18,000
									WB	3379	8924	12303	3006	8962	11968	3248	9165	12413	12228	**11864**	
									LINK	**6728**	**11705**	**18433**	**6415**	**11770**	**18185**	**6560**	**12222**	**18782**	**18467**	**17916**	
4		NW 97 Ave	NW 87 Ave	RGA	3/1/05	3/3/05	0.99	0.98	EB	9156	8700	17856	9132	8706	17838	9200	8585	17785	17826	**17295**	35,000
									WB	4744	13035	17779	4760	13323	18083	5149	13005	18154	18005	**17469**	
									LINK	**13900**	**21735**	**35635**	**13892**	**22029**	**35921**	**14349**	**21590**	**35939**	**35832**	**34764**	
5		NW 87 Ave	SR 826	RGA	3/1/05	3/3/05	0.99	0.98	EB	7470	7777	15247	7058	8108	15166	7404	6631	14035	14816	**14374**	32,000
									WB	7070	11308	18378	7070	11255	18325	7063	9885	16948	17884	**17351**	
									LINK	**14540**	**19085**	**33625**	**14128**	**19363**	**33491**	**14467**	**16516**	**30983**	**32700**	**31725**	
6	**NW 41 St**	NW 117 Ave	NW 107 Ave	RGA	3/8/05	3/10/05	0.99	0.98	EB	10975	10684	21659	10710	10164	20874	10954	11328	22282	21605	**20961**	42,000
									WB	4618	17174	21792	4469	17123	21592	4523	17498	22021	21802	**21152**	
									LINK	**15593**	**27858**	**43451**	**15179**	**27287**	**42466**	**15477**	**28826**	**44303**	**43407**	**42113**	
7		NW 107 Ave	NW 97 Ave	RGA	3/8/05	3/10/05	0.99	0.98	EB	12400	11736	24136	11883	9063	20946	9869	8712	18581	21221	**20589**	44,000
									WB	6332	17746	24078	6182	17345	23527	6391	18238	24629	24078	**23360**	
									LINK	**18732**	**29482**	**48214**	**18065**	**26408**	**44473**	**16260**	**26950**	**43210**	**45299**	**43949**	
8		NW 97 Ave	NW 87 Ave	RGA	3/8/05	3/10/05	0.99	0.98	EB	14848	14103	28951	14681	13658	28339	14838	15176	30014	29101	**28234**	54,000
									WB	7604	19405	27009	7406	19310	26716	7599	19789	27388	27038	**26232**	
									LINK	**22452**	**33508**	**55960**	**22087**	**32968**	**55055**	**22437**	**34965**	**57402**	**56139**	**54466**	
9		NW 87 Ave	SR 826	RGA	3/8/05	3/10/05	0.99	0.98	EB	9895	14835	24730	9821	14018	23839	10072	15759	25831	24800	**24061**	39,000
									WB	4545	10124	14669	5221	9975	15196	5582	10492	16074	15313	**14857**	
									LINK	**14440**	**24959**	**39399**	**15042**	**23993**	**39035**	**15654**	**26251**	**41905**	**40113**	**38918**	
10	**NW 25 St**	NW 117 Ave	NW 107 Ave	RGA	3/1/05	3/3/05	0.99	0.98	EB	4405	3518	7923	4069	3458	7527	4117	3436	7553	7668	**7439**	16,000
									WB	2684	5945	8629	2799	6146	8945	2790	6131	8921	8832	**8568**	
									LINK	**7089**	**9463**	**16552**	**6868**	**9604**	**16472**	**6907**	**9567**	**16474**	**16499**	**16008**	
11		NW 107 Ave	NW 97 Ave	RGA	3/1/05	3/3/05	0.99	0.98	EB	10998	9116	20114	8903	9838	18741	10442	12767	23209	20688	**20071**	35,000
									WB	4280	10487	14767	4277	10757	15034	4306	10958	15264	15022	**14574**	
									LINK	**15278**	**19603**	**34881**	**13180**	**20595**	**33775**	**14748**	**23725**	**38473**	**35710**	**34646**	
12		NW 97 Ave	NW 87 Ave	RGA	3/1/05	3/3/05	0.99	0.98	EB	18121	14115	32236	14197	15716	29913	17488	21334	38822	33657	**32654**	52,000
									WB	6455	13751	20206	6452	13896	20348	6446	14153	20599	20384	**19777**	
									LINK	**24576**	**27866**	**52442**	**20649**	**29612**	**50261**	**23934**	**35487**	**59421**	**54041**	**52431**	
13		NW 87 Ave	SR 826	RGA	3/22/05	3/24/05	0.99	0.98	EB	8749	14011	22760	8543	13478	22021	9172	14561	23733	22838	**22157**	46,000
									WB	11465	13012	24477	11937	13209	25146	12308	13072	25380	25001	**24256**	
									LINK	**20214**	**27023**	**47237**	**20480**	**26687**	**47167**	**21480**	**27633**	**49113**	**47839**	**46413**	

Yellow Indicates Entry Location

TABLE 7: LINK VOLUME AADT ESTIMATE - EXISTING CONDITION (CONTINUED)

Link	ROADWAY NAME	FROM	TO	Source	Date From	Date To	SF	ACF	DIR	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	AVE ADT	AADT Calculation	Rounded AADT
	EXISTING CONDITION (Seasonally Adjusted)																				
	1	2	3	4	5	6	7	8	9	10	11	12	10	11	12	10	11	12	13	14	15
14	**NW 12 St**	NW 107 Ave	NW 97 Ave	RGA	3/8/05	3/10/05	0.99	0.98	EB	7365	5622	12987	7319	5027	12346	7367	6122	13489	12941	**12555**	24,000
									WB	2492	9321	11813	2514	9024	11538	2654	10028	12682	12011	**11653**	
									LINK	**9857**	**14943**	**24800**	**9833**	**14051**	**23884**	**10021**	**16150**	**26171**	**24952**	**24208**	
15		NW 97 Ave	NW 87 Ave	RGA	3/8/05	3/10/05	0.99	0.98	EB	5195	8107	13302	5178	7483	12661	5207	8694	13901	13288	**12892**	26,000
									WB	3781	9307	13088	3781	8885	12666	3965	9773	13738	13164	**12772**	
									LINK	**8976**	**17414**	**26390**	**8959**	**16368**	**25327**	**9172**	**18467**	**27639**	**26452**	**25664**	
16		NW 87 Ave	SR 826	RGA	3/8/05	3/10/05	0.99	0.98	EB	9934	8983	18917	9593	8359	17952	10021	9524	19545	18805	**18244**	36,000
									WB	5286	12969	18255	5204	12562	17766	5319	13273	18592	18204	**17662**	
									LINK	**15220**	**21952**	**37172**	**14797**	**20921**	**35718**	**15340**	**22797**	**38137**	**37009**	**35906**	

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Source of Data: RGA=Richard Garcia & Associates, Inc.
5 Beginning of data count
6 Ending of data count
7 Season Factor obtained from 2003 Florida Traffic Information CD, Miami-Dade South Category 8701
8 Axle Correction Factor used for Citywide Analysis based on average data obtained from 2003 Florida Traffic Information CD from adjacent State Roads.
9 Link Direction
10, 11 Raw Data
12 Daily Count=AM Count + PM Count (10+11)
13 Average of Daily Count (ADT)
14 AADT Calculation=Average ADT*SF*ACF
15 Link AADT Rounded Per AASHTO rounding standards (FDOT Project Traffic Forecasting HB 1.12)

Table 8: Link Volume AADT Estimate - Existing Condition

Link	ROADWAY NAME	FROM	TO	Source	Date From	Date To	SF	ACF	DIR	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	AVE ADT	AADT Calculation	Rounded AADT
	EXISTING CONDITION (Seasonally Adjusted)																				
	1	2	3	4	5	6	7	8	9	10	11	12	10	11	12	10	11	12	13	14	15
17	**NW 79 Ave**	NW 25 St	NW 41 St	RGA	3/15/05	3/17/05	0.99	0.98	NB	2781	4875	7656	2807	5124	7931	3067	4971	8038	7875	**7640**	15,000
									SB	2826	4492	7318	2808	4385	7193	2843	4711	7554	7355	**7136**	
									LINK	**5607**	**9367**	**14974**	**5615**	**9509**	**15124**	**5910**	**9682**	**15592**	**15230**	**14776**	
18		NW 41 St	NW 58 St	RGA	3/15/05	3/17/05	0.99	0.98	NB	3727	6100	9827	4229	6037	10266	4007	5586	9593	9895	**9600**	14,000
									SB	2301	2560	4861	1620	2708	4328	1564	1687	3251	4147	**4023**	
									LINK	**6028**	**8660**	**14688**	**5849**	**8745**	**14594**	**5571**	**7273**	**12844**	**14042**	**13624**	
19	**NW 82 Ave**	NW 25 St	NW 41 St	RGA	3/2/04	3/4/04	0.99	0.98	NB	1845	3144	4989	1860	3230	5090	1821	3147	4968	5016	**4866**	10,000
									SB	2084	2906	4990	2101	3012	5113	2110	2888	4998	5034	**4884**	
									LINK	**3929**	**6050**	**9979**	**3961**	**6242**	**10203**	**3931**	**6035**	**9966**	**10049**	**9750**	
20	**changed**	NW 12 St	NW 25 St	RGA	3/8/05	3/10/05	0.99	0.98	NB			0			0			0	0	**0**	0
									SB			0			0			0	0	**0**	
									LINK	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
21	**NW 87 Ave**	NW 12 St	NW 25 St	RGA	3/8/05	3/10/05	0.99	0.98	NB	12453	12503	24956	12416	11453	23869	12618	13064	25682	24836	**24096**	46,000
									SB	6142	16598	22740	6004	15125	21129	6207	16660	22867	22245	**21582**	
									LINK	**18595**	**29101**	**47696**	**18420**	**26578**	**44998**	**18825**	**29724**	**48549**	**47081**	**45678**	
22		NW 25 St	NW 41 St	RGA	3/8/05	3/10/05	0.99	0.98	NB	9591	11976	21567	9417	11399	20816	9578	12328	21906	21430	**20791**	38,000
									SB	5155	12524	17679	5107	11673	16780	5139	12834	17973	17477	**16957**	
									LINK	**14746**	**24500**	**39246**	**14524**	**23072**	**37596**	**14717**	**25162**	**39879**	**38907**	**37748**	
23		NW 41 St	NW 58 St	RGA	3/8/05	3/10/05	0.99	0.98	NB	5659	7332	12991	5658	7398	13056	5559	7569	13128	13058	**12669**	25,000
									SB	4137	8429	12566	4181	8194	12375	4046	8984	13030	12657	**12280**	
									LINK	**9796**	**15761**	**25557**	**9839**	**15592**	**25431**	**9605**	**16553**	**26158**	**25715**	**24949**	
24	**NW 97 Ave**	NW 12 St	NW 25 St	RGA	3/15/05	3/17/05	0.99	0.98	NB	3464	4384	7848	3447	4326	7773	3439	4124	7563	7728	**7498**	14,000
									SB	1797	4959	6756	1858	4859	6717	1787	4848	6635	6703	**6503**	
									LINK	**5261**	**9343**	**14604**	**5305**	**9185**	**14490**	**5226**	**8972**	**14198**	**14431**	**14001**	
25		NW 25 St	NW 41 St	RGA	3/15/05	3/17/05	0.99	0.98	NB	2334	4893	7227	2387	4853	7240	2401	4758	7159	7209	**6994**	15,000
									SB	3083	4768	7851	3044	4901	7945	3057	4550	7607	7801	**7569**	
									LINK	**5417**	**9661**	**15078**	**5431**	**9754**	**15185**	**5458**	**9308**	**14766**	**15010**	**14562**	
26		NW 41 St	NW 58 St	RGA	3/15/05	3/17/05	0.99	0.98	NB	2404	6223	8627	2426	6242	8668	2442	5951	8393	8563	**8307**	17,000
									SB	3046	5967	9013	3147	5825	8972	3082	5923	9005	8997	**8729**	
									LINK	**5450**	**12190**	**17640**	**5573**	**12067**	**17640**	**5524**	**11874**	**17398**	**17559**	**17036**	
27	**NW 107 Ave**	NW 12 St	NW 25 St	RGA	3/8/05	3/10/05	0.99	0.98	NB	12169	14083	26252	11842	12789	24631	12200	15118	27318	26067	**25290**	48,000
									SB	6201	16776	22977	5841	15857	21698	6279	17790	24069	22915	**22232**	
									LINK	**18370**	**30859**	**49229**	**17683**	**28646**	**46329**	**18479**	**32908**	**51387**	**48982**	**47522**	
28		NW 25 St	NW 41 St	RGA	3/8/05	3/10/05	0.99	0.98	NB	7166	12735	19901	6988	12157	19145	7189	13481	20670	19905	**19312**	37,000
									SB	6390	11513	17903	6081	11260	17341	6476	12344	18820	18021	**17484**	
									LINK	**13556**	**24248**	**37804**	**13069**	**23417**	**36486**	**13665**	**25825**	**39490**	**37927**	**36796**	

Yellow Indicates Entry Location

Table 8: Link Volume AADT Estimate - Existing Condition (Continued)

Link	ROADWAY NAME	FROM	TO	Source	Date From	Date To	SF	ACF	DIR	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	AVE ADT	AADT Calculation	Rounded AADT
	EXISTING CONDITION (Seasonally Adjusted)																				
	1	2	3	4	5	6	7	8	9	10	11	12	10	11	12	10	11	12	13	14	15
29		NW 41 St	NW 58 St	RGA	3/8/05	3/10/05	0.99	0.98	NB	4680	9412	14092	4642	8757	13399	4712	9929	14641	14044	**13625**	25,000
									SB	4802	7476	12278	4330	6608	10938	4823	7664	12487	11901	**11546**	
									LINK	**9482**	**16888**	**26370**	**8972**	**15365**	**24337**	**9535**	**17593**	**27128**	**25945**	**25172**	
30		NW 58 St	NW 74 St	RGA	3/8/05	3/10/05	0.99	0.98	NB	2909	3487	6396	2932	3437	6369	3029	5143	8172	6979	**6771**	13,000
									SB	2145	4807	6952	2163	4714	6877	2256	3832	6088	6639	**6441**	
									LINK	**5054**	**8294**	**13348**	**5095**	**8151**	**13246**	**5285**	**8975**	**14260**	**13618**	**13212**	

Notes: 1 Roadway Name
2 Begining of Link
3 End of Link
4 Source of Data: RGA=Richard Garcia & Associates, Inc.
5 Beginning of data count
6 Ending of data count
7 Season Factor obtained from 2003 Florida Traffic Information CD, Miami-Dade South Category 8701
8 Axle Correction Factor used for Citywide Analysis based on average data obtained from 2003 Florida Traffic Information CD from adjacent State Roads.
9 Link Direction
10, 11 Raw Data
12 Daily Count=AM Count + PM Count (10+11)
13 Average of Daily Count (ADT)
14 AADT Calculation=Average ADT*SF*ACF
15 Link AADT Rounded Per AASHTO rounding standards (FDOT Project Traffic Forecasting HB 1.12)

TABLE 9: LINK VOLUME AADT ESTIMATE - EXISTING CONDITION

Link	ROADWAY NAME	FROM	TO	Source	Date From	Date To	SF	ACF	DIR	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	ADT AM COUNT	ADT PM COUNT	ADT DAILY COUNT	AVE ADT	AADT Calculation	Rounded AADT
	EXISTING CONDITION (Seasonally Adjusted)																				
	1	2	3	4	5	6	7	8	9	10	11	12	10	11	12	10	11	12	13	14	15
31	**NW 102 Ave**	NW 58 St	NW 41 St	RGA	3/15/05	3/17/05	0.99	0.98	NB	1279	2500	3779	1288	2438	3726	1318	2332	3650	3753	**3641**	
									SB	1465	2613	4078	1426	2540	3966	1494	2432	3926	4022	**3902**	
									LINK	**2744**	**5113**	**7857**	**2714**	**4978**	**7692**	**2812**	**4764**	**7576**	**7775**	**7543**	7,500
32		NW 41 St	NW 97 Ave	RGA	3/15/05	3/17/05	0.99	0.98	NB			0			0			0	0	**0**	
									SB			0			0			0	0	**0**	
									LINK	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
33	**NW 114 Ave**	NW 74 St	NW 58 St	RGA	3/15/05	3/17/05	0.99	0.98	NB	1219	3649	4868	1244	3857	5101	1157	3367	4524	4985	**4836**	
									SB	2066	2727	4793	2116	2836	4952	2125	2464	4589	4873	**4727**	
									LINK	**3285**	**6376**	**9661**	**3360**	**6693**	**10053**	**3282**	**5831**	**9113**	**9857**	**9563**	9,600
34		NW 58 St	NW 41 St	RGA	3/15/05	3/17/05	0.99	0.98	NB	2353	5963	8316	2412	6067	8479	2409	5636	8045	8398	**8147**	
									SB	2995	5074	8069	3222	5224	8446	3263	4929	8192	8258	**8011**	
									LINK	**5348**	**11037**	**16385**	**5634**	**11291**	**16925**	**5672**	**10565**	**16237**	**16655**	**16159**	16,200
35	**NW 50 St**	NW 117 Ave	NW 107 Ave	RGA	3/15/05	3/17/05	0.99	0.98	EB	1086	1035	2121	1032	1028	2060	1071	982	2053	2091	**2028**	
									WB	635	1610	2245	650	1478	2128	634	1429	2063	2187	**2121**	
									LINK	**1721**	**2645**	**4366**	**1682**	**2506**	**4188**	**1705**	**2411**	**4116**	**4277**	**4150**	4,100
36	**NW 52 St**	NW 107 Ave	NW 97 Ave	RGA	3/15/05	3/17/05	0.99	0.98	EB	780	3347	4127	816	3447	4263	844	3405	4249	4195	**4070**	
									WB	2253	1959	4212	2362	2048	4410	2286	1895	4181	4311	**4183**	
									LINK	**3033**	**5306**	**8339**	**3178**	**5495**	**8673**	**3130**	**5300**	**8430**	**8506**	**8253**	8,300

Notes:
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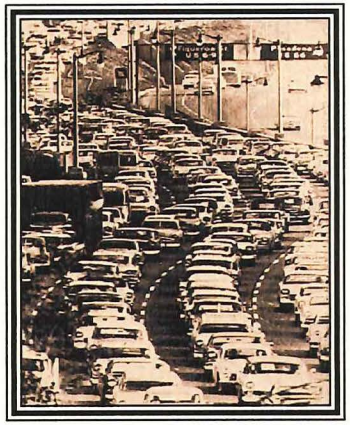
3.3 ANALYSIS

Roadway Vehicular Traffic Conditions

The main objectives of the Doral Transportation Master Plan (TMP) are to determine the current and future roadway traffic volumes and conditions.

It is important to view Doral as part of a larger region

Key to developing effective transportation projects for Doral is understanding why traffic behaves the way it does. It is important to view Doral as part of a larger region. Examining details on an ever narrowing scale leads to an understanding of the influential dynamics. Transportation and land use are inextricably linked. To plan one without consideration for the other can lead to an inefficient and ineffective transportation system, which does not live up to its potential. On the most basic level, transportation in Doral, or anywhere else, is essentially based on capacity, which can be defined as the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point. Whether this is in number of lanes, sidewalks, higher capacity vehicles, bus transit or rails, the number of people moved in an hour, and further more the intensity, vitality and nature of an area are very much dependant on capacity. The utilization of this capacity, which is generally a local policy decision, also determines how the city develops. This utilization is called Level of Service, (LOS). This is a quality measure describing operational conditions within a traffic stream. It is generally stated in terms of service measures, such as speed, travel time, delay, comfort and convenience. Determining what Level of Service is acceptable, is a policy position that, by state mandate, must be lived up to.



Before LOS and magnitude of traffic congestion can be determined, it is essential to obtain vehicular traffic volume counts at selected roadway links throughout the study area. These traffic counts are normally collected by electronic or mechanical traffic count machines covering a period of 24 to 72 hours. For the Doral Transportation Master Plan, 72 hour traffic counts were collected at 36 locations throughout the City. Fourteen manual turning movement counts were also collected.

After the existing traffic counts were taken, planning level analyses were performed to determine the traffic capacity and LOS of each of the selected roadway segments and modes.

Furthermore, the existing traffic volumes were projected to the years 2015 and 2030 to be consistent with the Miami-Dade Metropolitan Planning Organization (MPO) Long Range Transportation Plan. Planning level analyses were also performed to determine LOS and capacities for both years 2015 and 2030.

The following tables depict all the traffic data that was collected as well as all the related analyses for existing conditions and future years indicated above.

Table 13 Link Volume AADT Estimate. This table reflects the selected roadway links throughout the City with the collected traffic count data and the estimated Average Annual Daily Traffic (AADT) or the total volume of traffic passing a point in both directions divided by the number of days in the year.

The links (or segments of roadway) are identified by the intersecting roadways at each end of the link. The table depicts the dates the traffic counts were taken, their corresponding 24-hour volumes, related analysis factors, average daily traffic (ADT) numbers and finally the AADT calculations.

These tables, as the title implies, reflect existing (year 2005) traffic conditions, most notably the corresponding Levels-of-Service (LOS) for each of the roadway segments. These LOS are broken down to reflect both daily volumes (AADT) and Peak-Hour (in both directions) traffic conditions. The table also contains a wealth of additional information such as number of lanes, LOS standards and roadway functional classification among others. Functional classification reflects the relative importance or hierarchy of the specific roadway segment when compared with all other roads. For example, a designation of "Class II -SPA" means State Principal Arterial which reflects a high ranking roadway whose primary function is to provide traffic mobility and usually carries high volumes of traffic at higher operating speeds. On the other hand, a designation of "Non-State" means lower ranking roadway that are not part of the State Highway System, usually associated with lower volume thresholds, lower operating speeds and greater emphasis on providing local access.

Finally, the designation "SUMA" means State Urban Minor Arterial which have lower hierarchy than State principal arterials, but still carry relatively large volume of traffic, higher operating speeds and with more emphasis on mobility than local access.

In Doral the State Roads designed for the highest level of mobility are, 41st Street, 87th Avenue and 107th Avenue.

The "LOS Thresholds" reflect the standards adopted by the Board of County Commissioners for purposes of Growth Management/Concurrency and the corresponding LOS volumes obtained from the Florida Department of Transportation (FDOT) LOS manual.

Level of Service

The analysis of street systems is based upon the concept of level of service (LOS). The presentation of LOS is indicated by the letters "A" through "F" with LOS A representing the best operating conditions and LOS F the worst. When the LOS is presented it generally represents the ratio of volume to capacity (V/C). Volume is the number of vehicles that actually pass a given point on the road in a given time. Capacity is the maximum number of vehicles that can pass a given point on the road in a given time.

TABLE 10

LOS	Volume/Capacity
A	<.60
B	.61 to 0.70
C	.71 to 0.80
D	.81 to 0.90
E	.91 to 1.00
F	>1.00

From an engineering standpoint, every roadway has a design capacity that is a maximum number of cars per lane that can cross through a segment of roadway. This varies based on several factors, including lane width, number of lanes, number and location of intersections, number and location of signals, etc. Each roadway segment is given a "functional classification" based on these factors.

Essentially the capacity of a roadway is represented as 1.0. or 100%. The Level of Service of the roadway represents a percentage of that capacity. Level of Service A is between 0 and .6, or 60% of capacity. The generally acceptable LOS for roadways in Miami-Dade County is LOS D, which is between .81 and .9 (81% - 90%) of capacity. Level of Service F is anything over 1.0 or 100% of capacity. Table 2 shows the volume capacity ratio for each LOS category. Level of service is provided for "links" (segments) of roadway, and "nodes" (intersections). This analysis primarily examined roadway level of service.

These LOS standards represent a range of operating conditions and the driver's perception of those conditions, as described below.

- LOS A describes free-flow operations at average travel speeds, usually at about 90% of the free flow speed. Vehicles are unimpeded in their ability to maneuver within the traffic stream. Distance between vehicles is +- 30 car lengths. On most of Doral's roads (speed limit of 35 mph) this is represented by a speed of 31 mph or greater.

- LOS B describes reasonably unimpeded operation at an average travel speed, usually about 70% of the free flow speed. The ability to maneuver is only slightly restricted. Distance between vehicles is about 20 car lengths. On most of Doral's roads (speed limit of 35 mph) this is represented by a speed of about 25 mph.

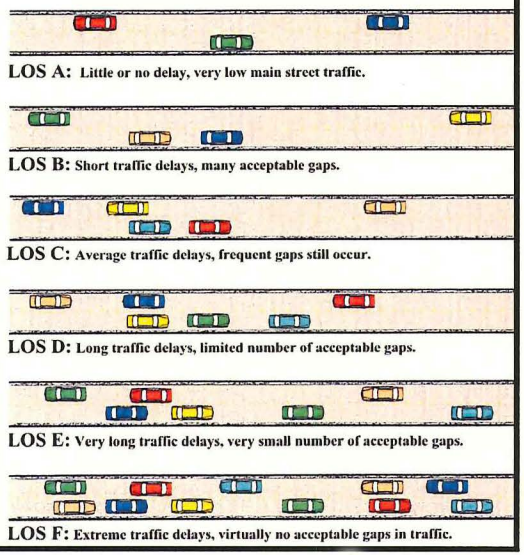
- LOS C describes stable operating conditions with some restrictions of driver ability to maneuver and change lanes in midblock locations. Longer queues and signal coordination will contribute to a lower average speed of about 50% of free flow speed. The distance between vehicles is about 15 car lengths. On most of Doral's roads (speed limit of 35 mph) this is represented by a speed of about 17 mph.

- LOS D borders on a range in which small increases in flow may cause substantial increases in delay in travel speed. LOS D may be caused by poor signal progression, inappropriate signal timing or high volumes. Average travel speed is about 40% of the free flow speed. The distance between vehicles is about 10 car lengths. On most of Doral's roads (speed limit of 35 mph) this is represented by a speed of about 14 mph.

INTERSECTION LEVEL OF SERVICE

Level of Service	Seconds Delay/Vehicle	Description
LOS A	≤ 10	Most vehicles do not stop at all
LOS B	> 10 and ≤ 20	More vehicles stop than for LOS A
LOS C	> 20 and ≤ 35	The number of vehicles stopping is significant, although many pass through without stopping
LOS D	> 35 and ≤ 55	Many vehicles stop
LOS E	> 55 and ≤ 80	Considered being the limit of acceptable delay
LOS F	> 80	Unacceptable delay

ROADWAY LEVEL OF SERVICE



- LOS E is characterized by significant delays and average travel speed of 33% or less of the free flow speed. LOS E is caused by a combination of high traffic volumes, high signal density, adverse signal progression, and inappropriate signal timing, all of which result in extensive delays at critical intersections. The distance between vehicles is minimal. On most of Doral's roads (speed limit of 35 mph) this is represented by a speed of about 12 mph.

- LOS F is characterized by urban street flow at extremely low speeds, typically 25% of the free flow speed. Intersection congestion exists at critical signalized intersections with high delay, high volumes and extensive queuing. There is generally less that one car length distance between vehicles. On most of Doral's roads (speed limit of 35 mph) this is represented by a speed of less than 9 mph.

On urban streets with traffic signals, LOS is directly related to the free flow speed found on each type of street.

Intersection / Link Analysis

Being west of the Palmetto Expressway, (the Urban Infill Boundary), Doral's Level of Service threshold is D. Where specialized transit exists the LOS threshold is E, headways of twenty minutes or less. On state urban minor arterials the threshold is E.

Levels of service have been projected in the following tables. For ease of analysis each link has been color coded. Three colors are shown in the table, green, yellow and red. Green indicates that the roadway link is operating better than the LOS standard, meaning that in general, there is no significant congestion and the roadway segment can absorb additional traffic volumes. Yellow indicates that the roadway segment is operating at the LOS standard and may be able to absorb some additional traffic volumes depending on the specific case at hand. Finally, the red is indicative that the LOS standards have been exceeded, in others words, the roadway segment is experiencing higher traffic congestion with associated longer delays and should not absorb significant amount of additional traffic volumes.

Inspection of the tables indicate that under current traffic conditions, some of the roadway segments have already exceeded the LOS standards and volumes thresholds such as NW 58th Street (97th Ave. to the Palmetto Exwy); NW 41st Street/Doral Blvd. (97th Ave. to 87th Ave.); and NW 25th Street (107th Ave. to the Palmetto) among others.

Of the 16 intersections counted, nine 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 able to be cured by either signal optimization or capital improvement projects.

The 2015 tables contain the same information as the existing conditions (year 2005) tables, except for the fact that they reflect future year 2015 traffic volumes and associated LOS.

Table 11: Average Travel Speeds

Urban Street Class	I	II	III	IV
Range of free-flow speeds (FFS)	55-45 MPH	45-35 MPH	35-30 MPH	35-25 MPH
Typical FFS	50 MPH	40 MPH	35 MPH	30 MPH
LOS	Average Travel Speed (MPH)			
A	>42	>35	>30	>25
B	>34-42	>28-35	>24-30	>19-25
C	>27-34	>22-28	>18-24	>13-19
D	>21-27	>17-22	>14-18	>9-13
E	>16-21	>13-17	>10-14	>7-9
F	<16	<13	<10	<7

It is obvious that traffic volumes are expected to increase over the years; however, inspection of the table indicates that the LOS has deteriorated on some of the roadways, to the point of exceeding the LOS standards and the volume thresholds. Among these roadway segments we can find NW 41st

Street/Doral Blvd. (107th Ave. to 97th Ave.); NW 97th Avenue (12th Street to 25th Street) and the remaining segments of NW 107th Avenue within the City boundaries.

The 2030 tables also contain the same information as the existing conditions (year 2005) tables, except for the fact that they reflect future year 2030 traffic volumes and associated LOS.

Traffic volumes will increase significantly by 2030 to the point that most roadway segments within the City will be exceeding LOS standards and volume thresholds with overall worsening of traffic conditions and an increase in traffic congestion and associated delays.

TABLE 12: INTERSECTION DELAY / LOS

#	Intersection	Delay (sec/veh/hr)	LOS*
1	NW 58th Street @ NW 107th Avenue	34.4	C
2	NW 58th Street @ NW 97th Avenue	21.2	C
3	NW 58th Street @ NW 87th Avenue	103.8	F
4	NW 58th Street @ NW 79th Avenue	42.2	D
5	NW 41st Street @ NW 107th Avenue	62.2	E
6	NW 41st Street @ NW 97th Avenue	100.0	F
7	NW 36th Street @ NW 87th Avenue	76.0	E
8	NW 36th Street @ NW 79th Avenue	17.6	B
9	NW 25th Street @ NW 107th Avenue	79.4	E
10	NW 25th Street @ NW 97th Avenue	31.8	C
11	NW 25th Street @ NW 87th Avenue	43.3	C
12	NW 25th Street @ NW 79th Avenue	37.0	D
13	NW 12th Street @ NW 107th Avenue	59.1	D
14	NW 12th Street @ NW 97th Avenue	11.1	B
15	NW 12th Street @ NW 87th Avenue	157.7	F
16	NW 12th Street @ NW 50th Street / NW 114th Avenue	18.0	B

Table 13: East-West Corridors: Existing Conditions (2005)

East-West Corridors: Existing Condition (2005)

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
1	NW 74 St	NW 117 Ave	NW 107 Ave	Non-State	4	32,900	3,000	D	C	9.5	285	C
2	NW 58 St	NW 117 Ave	NW 107 Ave	Non-State	4	32,900	13,000	D	C	9.5	1,235	C
3		NW 107 Ave	NW 97 Ave	Non-State	4	32,900	18,000	D	C	9.5	1,710	C
4		NW 97 Ave	NW 87 Ave	Non-State	4	32,900	35,000	D	E+20	9.5	3,325	E+20
5		NW 87 Ave	SR 826	Non-State	4	32,900	32,000	D	E	9.5	3,040	E
6	NW 41 St	NW 117 Ave	NW 107 Ave	Class II - SPA	6-Divided	51,800	42,000	D	D	9.5	3,990	D
7		NW 107 Ave	NW 97 Ave	Class II - SPA	6-Divided	51,800	44,000	D	D	9.5	4,180	D
8		NW 97 Ave	NW 87 Ave	Class II - SPA	6-Divided	51,800	54,000	D	E+20	9.5	5,130	E+20
9		NW 87 Ave	SR 826	Class II - SPA	6-Divided	51,800	39,000	E	C	9.5	3,705	C
10	NW 25 St	NW 117 Ave	NW 107 Ave	Non-State	4	32,900	16,000	D	C	9.5	1,520	C
11		NW 107 Ave	NW 97 Ave	Non-State	4	32,900	35,000	D	E+20	9.5	3,325	E+20
12		NW 97 Ave	NW 87 Ave	Non-State	4	32,900	52,000	D	F	9.5	4,940	F
13		NW 87 Ave	SR 826	Non-State	4	32,900	46,000	D	F	9.5	4,370	F
14	NW 12 St	NW 107 Ave	NW 97 Ave	Non-State	4	32,900	24,000	D	D	9.5	2,280	D

Table 13: East-West Corridors: Existing Conditions (2005) (Continued)

East-West Corridors: Existing Condition (2005)

Link	ROADWAY NAME	ROADWAY FROM	ROADWAY TO	Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY AADT	DAILY LOS Threshold	DAILY LOS	PEAK Hr. (Two-way) K_{100} (%)	PEAK Hr. (Two-way) Peak Hr. Volume	PEAK Hr. (Two-way) LOS
	1	2	3	4	5	6	7	8	9	10	11	12
15		NW 97 Ave	NW 87 Ave	Non-State	4	32,900	26,000	D	D	9.5	2,470	D
16		NW 87 Ave	SR 826	Non-State	4	32,900	36,000	D	E+20	9.5	3,420	E+20

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E.
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Table 14: North-South Corridors: Existing Conditions (2005)

North-South Corridors: Existing Condition (2005)

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
17	NW 79 Ave	NW 25 St	NW 41 St	Non-State	4	32,900	15,000	D	C	9.5	1,425	C
18		NW 41 St	NW 58 St	Non-State	4	32,900	14,000	D	C	9.5	1,330	C
19	NW 82 Ave	NW 25 St	NW 41 St	Non-State	2	15,600	10,000	D	D	9.5	950	D
20	Changed	NW 12 St	NW 25 St	Non-State	4	32,900	additional	count	needed			
21	NW 87 Ave	NW 12 St	NW 25 St	SUMA	6-Divided	51,800	46,000	E	D	9.5	4,370	D
22		NW 25 St	NW 41 St	SUMA	6-Divided	51,800	38,000	E	C	9.5	3,610	C
23		NW 41 St	NW 58 St	SUMA	4-Divided	34,500	25,000	E	C	9.5	2,375	C
24	NW 97 Ave	NW 12 St	NW 25 St	Non-State	2	15,600	14,000	D	D	9.5	1,330	D
25		NW 25 St	NW 41 St	Non-State	4	32,900	15,000	D	C	9.5	1,425	C
26		NW 41 St	NW 58 St	Non-State	4	32,900	17,000	D	C	9.5	1,615	C
27	NW 107 Ave	NW 12 St	NW 25 St	SUMA	6-Divided	51,800	48,000	D	D	9.5	4,560	D
28		NW 25 St	NW 41 St	SUMA	4-Divided	34,500	37,000	D	E+20	9.5	3,515	E+20

Table 14: North-South Corridors: Existing Conditions (2005) (Continued)

North-South Corridors: Existing Condition (2005)

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
29		NW 41 St	NW 58 St	SUMA	4-Divided	34,500	25,000	D	C	9.5	2,375	C
30		NW 58 St	NW 74 St	Non-State	2	15,600	13,000	D	D	9.5	1,235	D

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Table 15: Other Corridors: Existing Conditions (2005)

Other Corridors: Existing Condition (2005)

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
31	NW 102 Ave	NW 58 St	NW 41 St	Non-State	4	32,900	7,500	D	C	9.5	713	C
32	redo	NW 41 St	NW 97 Ave	could not find								
33	NW 114 Ave	NW 74 St	NW 58 St	Non-State	4	32,900	9,600	D	C	9.5	912	C
34		NW 58 St	NW 41 St	Non-State	2	15,600	16,200	D	F	9.5	1,539	F
35	NW 50 St	NW 117 Ave	NW 107 Ave	Non-State	2	15,600	4,100	D	C	9.5	390	C
36	NW 52 St	NW 107 Ave	NW 97 Ave	Non-State	4	32,900	8,300	D	C	9.5	789	C

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Table 16: East-West Corridors: Future Conditions (Year 2015)

East-West Corridors: 2015 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
1	NW 74 St	NW 117 Ave	NW 107 Ave	SUMA	4	32,900	17,000	E	C	9.5	1,615	C
2	NW 58 St	NW 117 Ave	NW 107 Ave	Non-State	4	32,900	16,000	D	C	9.5	1,520	C
3		NW 107 Ave	NW 97 Ave	Non-State	4	32,900	25,000	D	D	9.5	2,375	D
4		NW 97 Ave	NW 87 Ave	Non-State	4	32,900	40,000	D	F	9.5	3,800	F
5		NW 87 Ave	SR 826	Non-State	4	32,900	35,000	D	E+20	9.5	3,325	E+20
6	NW 41 St	NW 117 Ave	NW 107 Ave	Class II - SPA	6-Divided	51,800	46,000	D	D	9.5	4,370	D
7		NW 107 Ave	NW 97 Ave	Class II - SPA	6-Divided	51,800	50,000	D	E	9.5	4,750	E
8		NW 97 Ave	NW 87 Ave	Class II - SPA	6-Divided	51,800	61,000	D	E+20	9.5	5,795	E+20
9		NW 87 Ave	SR 826	Class II - SPA	6-Divided	51,800	42,000	E	D	9.5	3,990	D
10	NW 25 St	NW 117 Ave	NW 107 Ave	SUMA	4	32,900	23,000	E	D	9.5	2,185	D
11		NW 107 Ave	NW 97 Ave	SUMA	4	32,900	37,000	E	E+20	9.5	3,515	E+20
12		NW 97 Ave	NW 87 Ave	SUMA	4	32,900	59,000	E	F	9.5	5,605	F
13		NW 87 Ave	SR 826	SUMA	4	32,900	54,000	E	F	9.5	5,130	F

Table 16: East-West Corridors: Future Conditions (Year 2015) (Continued)

East-West Corridors: 2015 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
14	NW 12 St	NW 107 Ave	NW 97 Ave	Non-State	4	32,900	28,000	D	D	9.5	2,660	D
15		NW 97 Ave	NW 87 Ave	Non-State	4	32,900	29,000	D	D	9.5	2,755	D
16		NW 87 Ave	SR 826	Non-State	4	32,900	39,000	D	E+20	9.5	3,705	E+20

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E.
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Table 17: North-South Corridors: Future Conditions (Year 2015)

North-South Corridors: 2015 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
17	NW 79 Ave	NW 25 St	NW 41 St	Non-State	4	32,900	16,000	D	C	9.5	1,520	C
18		NW 41 St	NW 58 St	Non-State	4	32,900	14,000	E	C	9.5	1,330	C
19	NW 82 Ave	NW 25 St	NW 41 St	Non-State	2	15,600	11,000	D	D	9.5	1,045	D
20		NW 41 St	NW 58 St	Non-State	4	32,900	0	count	needed			
21	NW 87 Ave	NW 12 St	NW 25 St	SUMA	6-Divided	51,800	47,000	E	D	9.5	4,465	D
22		NW 25 St	NW 41 St	SUMA	6-Divided	51,800	39,000	E	C	9.5	3,705	C
23		NW 41 St	NW 58 St	SUMA	4-Divided	34,500	31,000	E	D	9.5	2,945	D
24	NW 97 Ave	NW 12 St	NW 25 St	Non-State	2	15,600	18,000	D	E+20	9.5	1,710	E+20
25		NW 25 St	NW 41 St	Non-State	4	32,900	19,000	D	C	9.5	1,805	C
26		NW 41 St	NW 58 St	Non-State	4	32,900	21,000	D	C	9.5	1,995	C
27	NW 107 Ave	NW 12 St	NW 25 St	SUMA	6-Divided	51,800	54,000	E	E+20	9.5	5,130	E+20
28		NW 25 St	NW 41 St	SUMA	4-Divided	34,500	45,000	E	F	9.5	4,275	F

Table 17: North-South Corridors: Future Conditions (Year 2015) (Continued)

North-South Corridors: 2015 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
29		NW 41 St	NW 58 St	SUMA	4-Divided	34,500	45,000	E	F	9.5	4,275	F
30		NW 58 St	NW 74 St	Non-State	2	15,600	16,000	D	E+20	9.5	1,520	E+20

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E.
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Table 18: Other Corridors: Future Conditions (Year 2015)

Other Corridors: 2015 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
31	NW 102 Ave	NW 58 St	NW 41 St	Non-State	4	32,900	11,000	D	C	9.5	1,045	C
32		NW 41 St	NW 97 Ave	could not find	0	0	0					
33	NW 114 Ave	NW 74 St	NW 58 St	Non-State	4	32,900	11,000	D	C	9.5	1,045	C
34		NW 58 St	NW 41 St	Non-State	2	15,600	20,000	D	F	9.5	1,900	F
35	NW 50 St	NW 117 Ave	NW 107 Ave	Non-State	2	15,600	6,000	D	C	9.5	570	C
36	NW 52 St	NW 107 Ave	NW 97 Ave	Non-State	4	32,900	8,300	D	C	9.5	789	C

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E.
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Table 19: East-West Corridors: Future Conditions (Year 2030)

East-West Corridors: 2030 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
1	NW 74 St	NW 117 Ave	NW 107 Ave	SUMA	4	32,900	39,000	E	E+20	9.5	3,705	E+20
2	NW 58 St	NW 117 Ave	NW 107 Ave	Non-State	4	32,900	21,000	D	C	9.5	1,995	C
3		NW 107 Ave	NW 97 Ave	Non-State	4	32,900	36,000	D	E+20	9.5	3,420	E+20
4		NW 97 Ave	NW 87 Ave	Non-State	4	32,900	48,000	D	F	9.5	4,560	F
5		NW 87 Ave	SR 826	Non-State	4	32,900	40,000	D	F	9.5	3,800	F
6	NW 41 St	NW 117 Ave	NW 107 Ave	Class II - SPA	6-Divided	51,800	41,000	D	D	9.5	3,895	D
7		NW 107 Ave	NW 97 Ave	Class II - SPA	6-Divided	51,800	58,000	D	E+20	9.5	5,510	E+20
8		NW 97 Ave	NW 87 Ave	Class II - SPA	6-Divided	51,800	70,000	D	F	9.5	6,650	F
9		NW 87 Ave	SR 826	Class II - SPA	6-Divided	51,800	46,000	E	D	9.5	4,370	D
10	NW 25 St	NW 117 Ave	NW 107 Ave	SUMA	4	32,900	32,000	E	E	9.5	3,040	E
11		NW 107 Ave	NW 97 Ave	SUMA	4	32,900	41,000	E	F	9.5	3,895	F
12		NW 97 Ave	NW 87 Ave	SUMA	4	32,900	67,000	E	F	9.5	6,365	F
13		NW 87 Ave	SR 826	SUMA	4	32,900	66,000	E	F	9.5	6,270	F

Table 19: East-West Corridors: Future Conditions (Year 2030) (Continued)

East-West Corridors: 2030 Condition

Link	ROADWAY NAME	ROADWAY FROM	ROADWAY TO	Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY AADT	DAILY LOS Threshold	DAILY LOS	PEAK Hr. (Two-way) K_{100} (%)	PEAK Hr. (Two-way) Peak Hr. Volume	PEAK Hr. (Two-way) LOS
	1	2	3	4	5	6	7	8	9	10	11	12
14	NW 12 St	NW 107 Ave	NW 97 Ave	Non-State	4	32,900	34,000	D	E+20	9.5	3,230	E+20
15		NW 97 Ave	NW 87 Ave	Non-State	4	32,900	35,000	D	E+20	9.5	3,325	E+20
16		NW 87 Ave	SR 826	Non-State	4	32,900	41,000	D	F	9.5	3,895	F

Notes: 1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E.
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Table 20: North-South Corridors: Future Conditions (Year 2030)

North-South Corridors: 2030 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
17	NW 79 Ave	NW 25 St	NW 41 St	Non-State	4	32,900	17,000	D	C	9.5	1,615	C
18		NW 41 St	NW 58 St	Non-State	4	32,900	15,000	E	C	9.5	1,425	C
19	NW 82 Ave	NW 25 St	NW 41 St	Non-State	2	15,600	13,000	D	D	9.5	1,235	D
20		NW 41 St	NW 58 St	Non-State	4	32,900		count	needed			
21	NW 87 Ave	NW 12 St	NW 25 St	SUMA	6-Divided	51,800	41,000	E	D	9.5	3,895	D
22		NW 25 St	NW 41 St	SUMA	6-Divided	51,800	39,000	E	C	9.5	3,705	C
23		NW 41 St	NW 58 St	SUMA	4-Divided	34,500	40,000	E	E+20	9.5	3,800	E+20
24	NW 97 Ave	NW 12 St	NW 25 St	Non-State	2	15,600	24,000	D	F	9.5	2,280	F
25		NW 25 St	NW 41 St	Non-State	4	32,900	26,000	D	D	9.5	2,470	D
26		NW 41 St	NW 58 St	Non-State	4	32,900	41,000	D	F	9.5	3,895	F
27	NW 107 Ave	NW 12 St	NW 25 St	SUMA	6-Divided	51,800	63,000	E	F	9.5	5,985	F
28		NW 25 St	NW 41 St	SUMA	4-Divided	34,500	58,000	E	F	9.5	5,510	F
29		NW 41 St	NW 58 St	SUMA	4-Divided	34,500	74,000	E	F	9.5	7,030	F

Table 20: North-South Corridors: Future Conditions (Year 2030) (Continued)

North-South Corridors: 2030 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
30		NW 58 St	NW 74 St	Non-State	2	15,600	20,000	D	F	9.5	1,900	F

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Table 21: Other Corridors: Future Conditions (Year 2030)

Other Corridors: 2030 Condition

Link	ROADWAY			Jurisdiction / Functional Classification	Configuration (No. of Lanes)	LOS Standard	DAILY			PEAK Hr. (Two-way)		
	NAME	FROM	TO				AADT	LOS Threshold	LOS	K_{100} (%)	Peak Hr. Volume	LOS
	1	2	3	4	5	6	7	8	9	10	11	12
31	NW 102 Ave	NW 58 St	NW 41 St	Non-State	4	32,900	41,000	D	F	9.5	3,895	F
32		NW 41 St	NW 97 Ave	could not find	0	0	0					
33	NW 114 Ave	NW 74 St	NW 58 St	Non-State	4	32,900	13,000	D	C	9.5	1,235	C
34		NW 58 St	NW 41 St	Non-State	2	15,600	25,000	D	F	9.5	2,375	F
35	NW 50 St	NW 117 Ave	NW 107 Ave	Non-State	2	15,600	10,000	D	D	9.5	950	D
36	NW 52 St	NW 107 Ave	NW 97 Ave	Non-State	4	32,900	41,000	D	F	9.5	3,895	F

Notes:
1 Roadway Name
2 Begining of Link
3 End of Link
4 Functional Classification from FDOT Q/LOS HB. The extension of FDOT roadways were considered as State Two-Way Arterials of the appropriate Class., SUMA=St Urban Minor Arterial =LOS E
5 Number of Through Lanes in both directions
6 Level of Service Standard for this type of roadway at LOS E.
7 Link AADT from Traffic Projections (DMP-3)
8 Volume threshold for LOS standard as adopted by Miami-Dade County
9 Link LOS (Level of Service) From FDOT Q/LOS HB Table 4-1
10 K value for 100th Hour (From FDOT Statewide Average, Table 3-3 Q/LOS HB)
11 Peak Hour Design Volume (AADT*K*D)
12 Two-way Peak Hour LOS (From FDOT Q/LOS HB Table 4-4)

Figures 17 to 21

These figures were developed from the LOS data and results from the previous tables 11 through 19.

Figure 17, shows the roadway Levels-of-Service (LOS) for current conditions, - year 2005.

Only three road segments are operating at LOS F, namely NW 25th Street east of 97th Avenue and NW 114th Ave. between 41st and 58th streets. However, a great portion are already operating at either LOS D or E, meaning that soon these may be experiencing traffic congestion and longer delays.

FIGURE 17

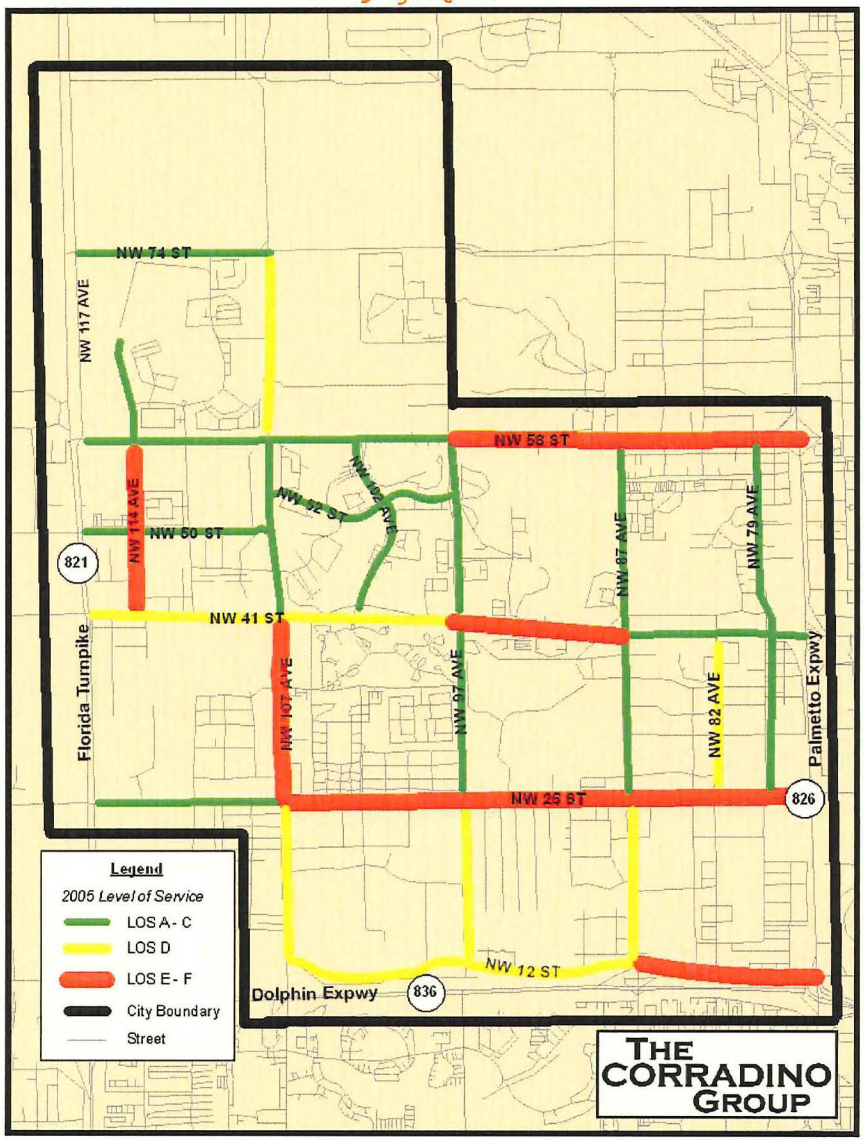


Figure 18, LOS are shown to reflect year 2015 traffic projections. When compared with existing conditions, the number of roadway segments operating at LOS F has increased from three to six. The new links operating at LOS F are now NW 58th Street between 97th and 87th Avenues and NW 107th Avenue between 25th and 58th streets. However, only a few links went from LOS C to D+E when compared with year 2005 figure.

FIGURE 18

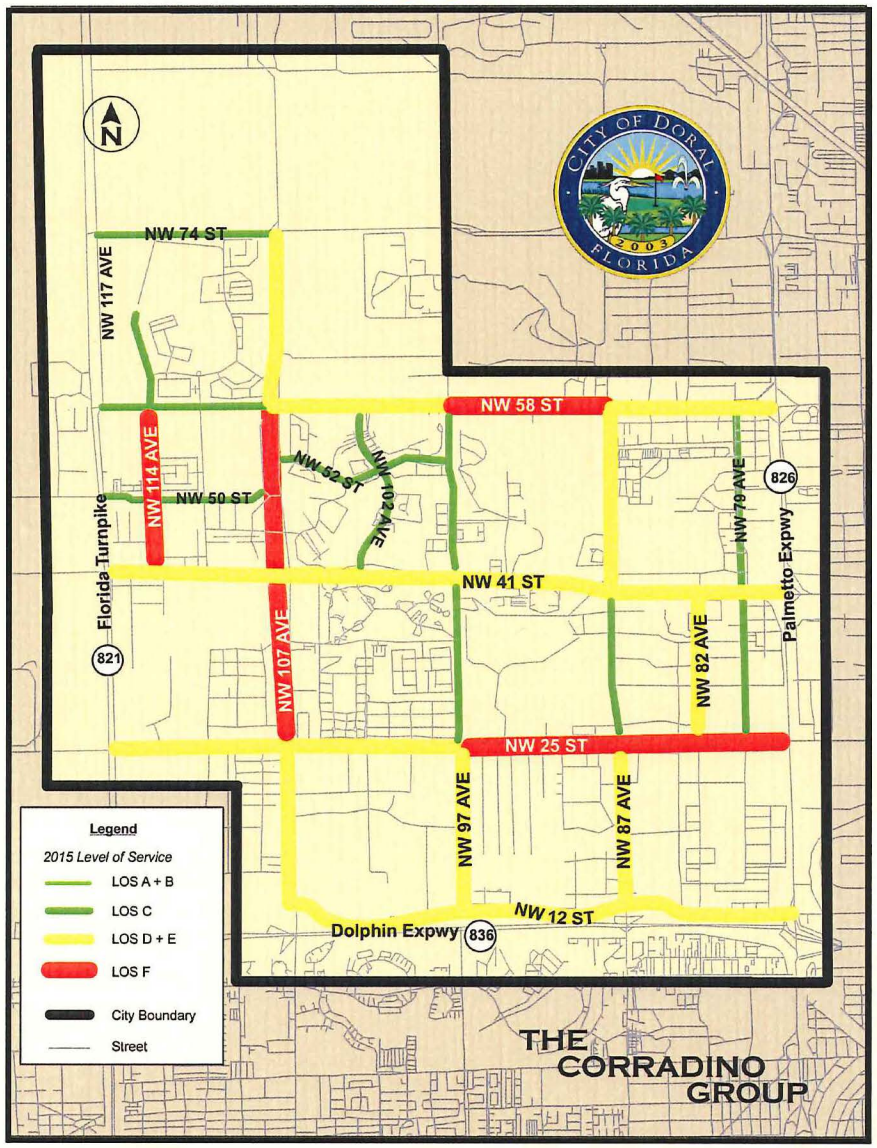


Figure 19, as can be expected, LOS have significantly deteriorated for the year 2030. Roadway segments operating at LOS F will increase to approximately fifteen. Noteworthy is the fact that all of NW 107th Avenue will be at LOS F within the City boundaries as well as most of NW 25th Street and the eastern portion of NW 58th Street.

FIGURE 19

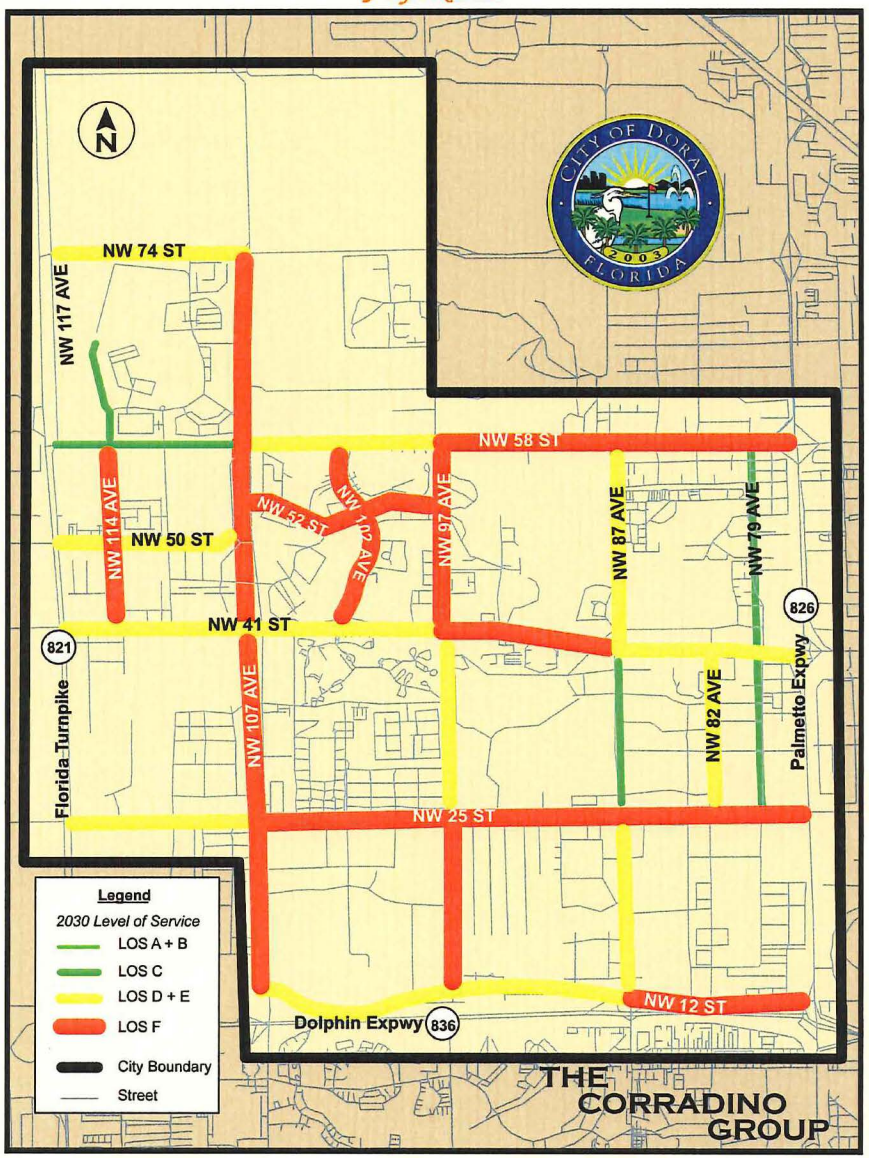


Figure 20, generally shows the number of vehicles entering and exiting the City during both the morning (A.M.) and the afternoon (P.M.) peak hours at selected points. It also depicts the number of "in" and "out" vehicles at other roadway segments throughout the City. Furthermore, the small table at the lower left portion of the figure reflects the overall totals for the City.

Data shows that the number of vehicles entering the City during the morning peak is much higher than the vehicles exiting the City at the western boundaries. However, examination of the numbers at the eastern boundary of the City, indicate that for the most part, the number of vehicles exiting is greater than the number of vehicles entering. This suggests that the vehicles coming from the west are heading for destinations outside the City, thus roads within Doral are serving significant numbers of "through traffic".

During the P.M. peak hour at the eastern City boundary, two of the four data collection sites show significantly higher traffic volumes entering the City. Thus supporting the observation made above that a significant portion of the P.M. traffic goes through the City, instead of stopping there. It is believed that many of these vehicles may be "cutting through" the City to avoid other heavily congested arterials within the overall road network.

FIGURE 20

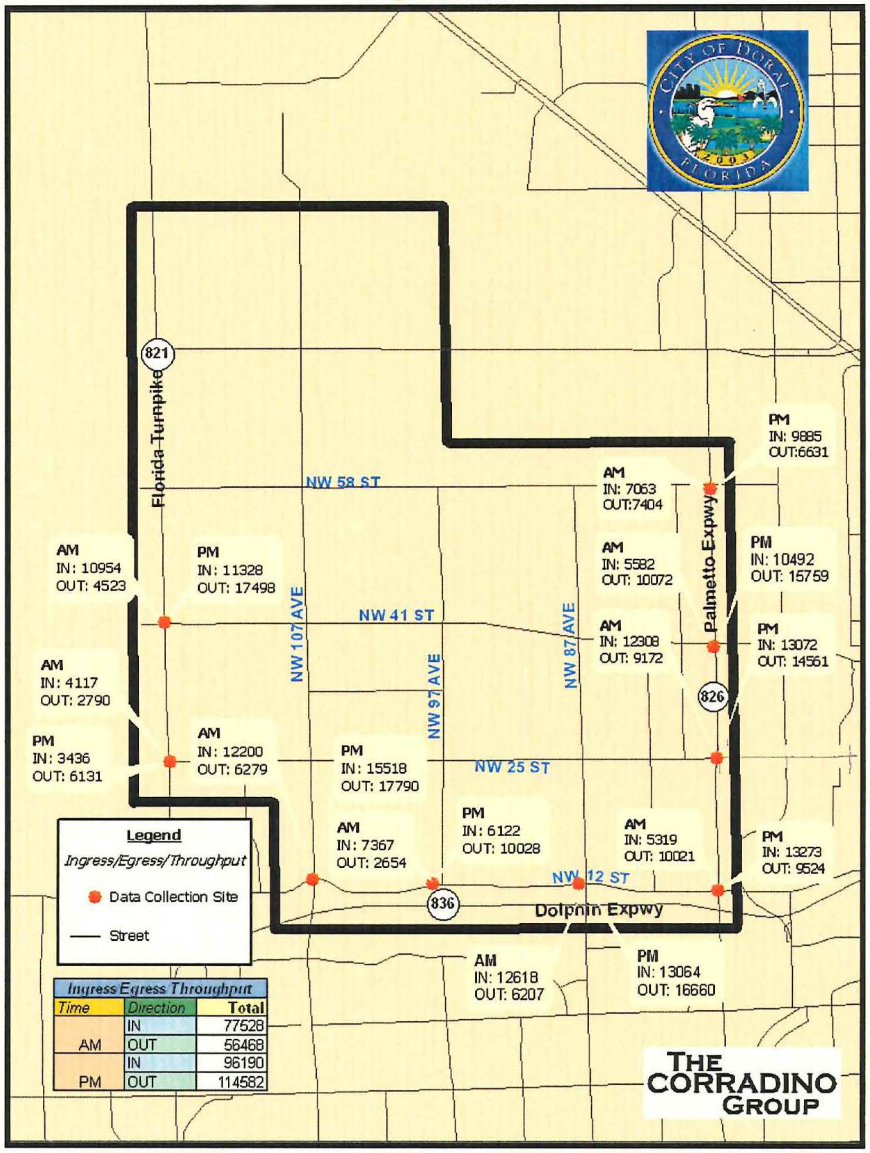


Figure 21, is a way to depict the major daily link traffic volumes by direction. It also shows within orange boxes the maximum recorded number of vehicles or most heavily traveled segment on each road.

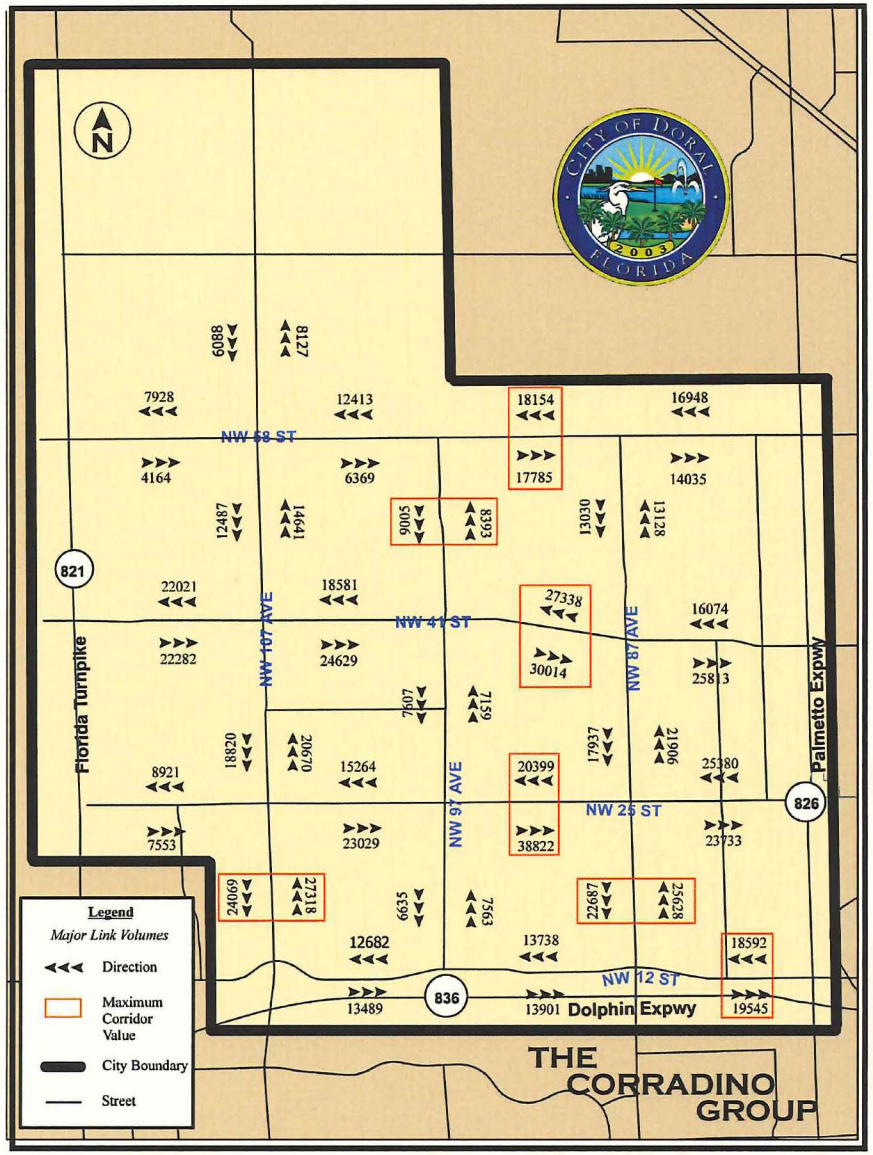
Observations/Conclusions

It is shown that under year 2005 conditions, most of the East-West roadways within the City are either operating at or above the LOS standard. Conversely, most of the North-South major roads are either operating at the LOS standard or better. Traffic volumes and corresponding levels of congestion will increase by the year 2015 and will continue to increase by the year 2030.

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

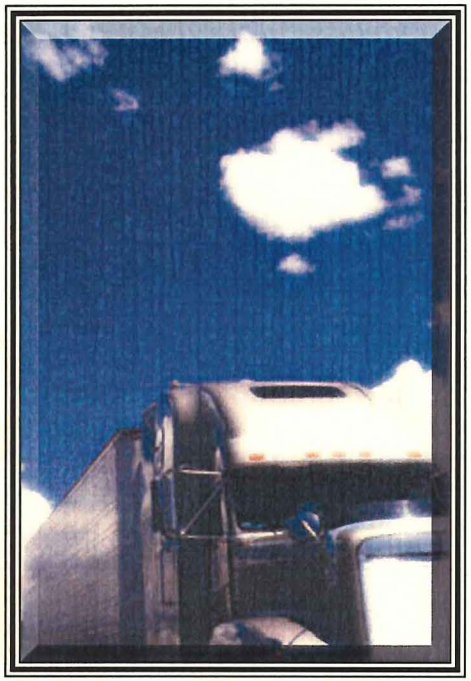
In Doral east/west access and mobility is adequate. With parallel facilities of 58th Street, 41st Street, 25th Street and 12th Street, and soon to be 74th Street, traffic can move east and west with relative ease. The Turnpike interchange at 41st Street, and the four interchanges on the east side of the City at the Palmetto expressway, encourage east and west flow. North / south flow is minimal, because currently only 87th Avenue and 107th Avenue move through the City. The Turnpike and Palmetto Expressway carry other traffic in those directions. Roads that go through on the north end are blocked by the

FIGURE 21



Okeechobee Canal. This pattern of an interrupted grid repeats itself throughout the county, concentrating traffic on to expressways, and deteriorating levels of service.

The attractiveness of Doral as a place to live, work and play is in large part due to its geographic location in the west center of Miami Dade County. Its proximity to expressways, metrorail and the airport make the City highly accessible locally and regionally, making Doral a natural location as an international business center. Nestled between Florida's Turnpike, SR 836 (the Dolphin Expressway), SR 826 (the Palmetto Expressway), and the fact that 41st/36th Street directly links with SR 112, makes Doral one of the most accessible locations in the region. Because of its central location, people converge on Doral. These regional facilities carry so much volume on a daily basis that their interchanges and tolls become congestion points. Doral, therefore is experiencing cut through traffic, as people traverse the City east and west trying to bypass expressway congestion on the way to their destination. The a.m. peak shows about 10,000 vehicles coming east on 41st street from the turnpike, while only 4,500 move west on 41st Street to access the turnpike in that peak. About 53,000 vehicles exit Doral to the east every morning. Only about 25,000 people live in Doral. For all its congestion and poor levels of service during typical week-days, many of the street lights blink by 9 p.m. on weekdays and all weekend. The trend of ingress and egress is reversed in the p.m. peak hours.



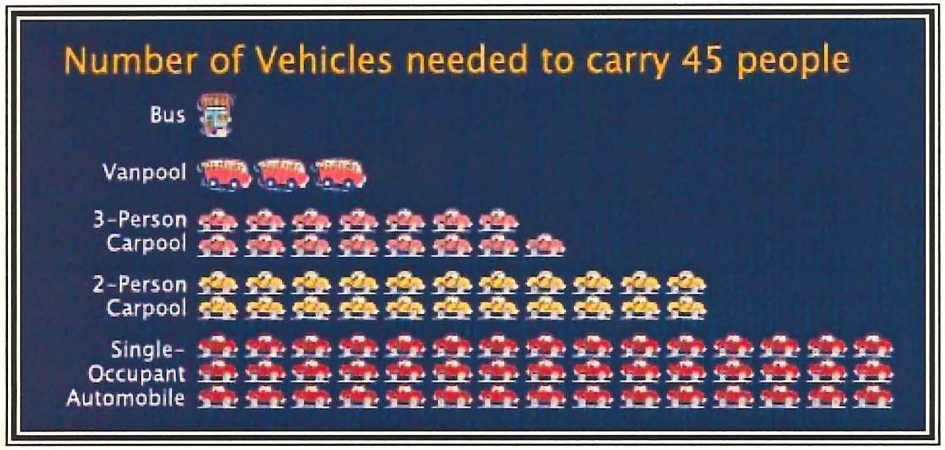
Doral's proximity to expressways, metrorail and the airport make the City highly accessible locally and regionally

In addition to the cut through traffic, Doral's land use pattern is separated into zones. Residential areas are generally located north of 41st Street and light industrial and warehouse areas are to the south of 41st Street. The industrial, warehouse and "tile" type facilities all require trucks to do their business. Freight is one of the economic engines of not only Doral, but Miami-Dade County. Trucks use the streets of Doral as an origin, destination and conduit, mixing with the automobile traffic. This creates conflicts, and quickly deteriorates available capacity and service levels on the roadways. The entry of heavy vehicles into the traffic stream affects the number of vehicles that can be served. Trucks have poor operating capabilities particularly in respect to acceleration and deceleration. The inability of these trucks to keep pace with passenger cars creates large gaps in traffic, which are difficult to fill. The resulting inefficiency in the use of the roadway is nearly impossible to overcome.

Doral has evolved to a community built inside large superblocks. The superblocks are framed by the County's, section line roads, and nearly all development; residential, industrial and service oriented commercial fits in to the many that make up Doral. There is nearly no through access inside these section lines. In residential areas, it is not uncommon for the sections to be gated and for private access only. The roads are privately owned and maintained, so there are few local streets. All activity happens on the section line roads. Aside from a spatially diverse land use pattern, the intensity of development in Doral is suburban.

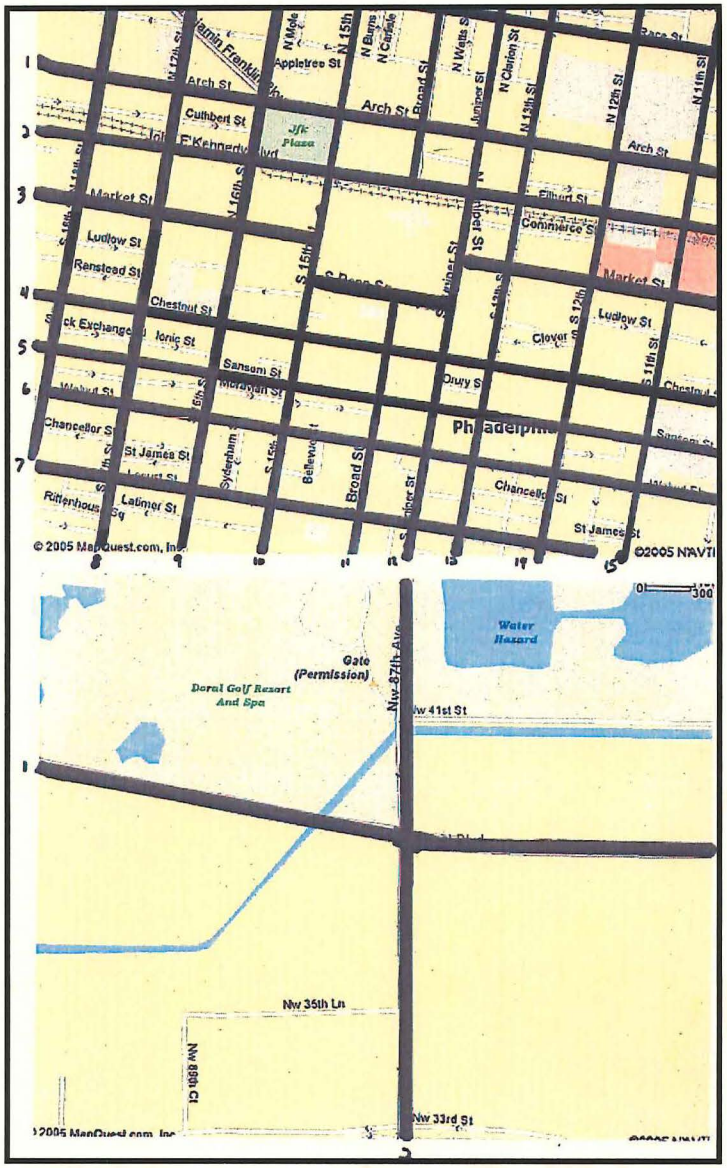
The patterns of land use, development and transportation have already been formed in Doral. Unless alternative methods of gaining capacity are found, Doral will be limited in its ability to grow. Greater intensities of development

can only be supported by the existing transportation system in a limited manner. Capacity can be had by many means. These will need to be capitalized on if significant growth and intensity of development is going to occur. To illustrate capacity, the following graphic has been developed. To carry 45 people you could have 45 single occupancy vehicles, or 22 two person car pools, or 15 three person car pools, or three van pools, or one bus.



Roughly figured, two typical travel lanes can carry a certain capacity of people per hour. If these lanes are filled with cars, as they are today, this capacity is generally about 1,920 people. Convert one lane to a bus lane with minimal headways and the capacity is increased to about 2,500 people. Add light rail and the capacity becomes about 5,100 people. Develop heavy rail and now the space can carry 6,300 people.

An analysis of access was done. Doral's 100% corner, 87th Avenue and 41st Street was placed at the center of a one square mile. This was compared with Philadelphia's 100% corner at the same scale. In this same space, nearly 100,000



people work in Philadelphia while only several thousand work in Doral. Philadelphia can handle this intensity because the roadway and alternative mode capacity is significant. While Doral has only two streets that connect both ends of this one square mile, Philadelphia has 15 streets that do the same, in addition to light rail, heavy rail and bus transit.

Intersections in need of new signals or timing adjustments and segments and intersections in need of capacity improvements

Several projects stem from the need to deal with roadway capacity. This section identifies intersections in need of new signals or timing adjustments, and calls out roadways or intersections that need capacity enhancements. These are further enumerated in the Project Bank. The traffic signals in Doral are generally well maintained and functional. Miami Dade County does good job in the upkeep and maintenance of these. There are opportunities to enhance signal timing and intersection operation prior to moving to physical improvements.

NW 87TH AVENUE @ 41ST ST.

Based on the analysis there are needs for roadway capacity improvements at both the links (roadways) and the nodes (intersections) now and in the future. It would be most useful to focus on the links and nodes that are surpassing their level of service thresholds in the current condition. Those that surpass these thresholds in the future can be dealt with at a later date as conditions warrant. Remedies consist of effectively and efficiently utilizing all of the available right of way, in areas like on 97th Avenue between 25th Street and 41st Street. Other segments which are built out, need to explore the more effective utilization of right of way to gain capacity. This may be addition of a lane or expansion of ROW in segments similar to the area along 25th Street between 87th and 97th Avenues, where canal frontage may exist. The use of reversible lanes along 41st Street and other corridors where traffic flow is directional, should be explored. The utilization of 41st Street as an express arterial connecting the Turnpike the Palmetto Expressway and SR 112 would enhance mobility. At intersections, remedies include implementation of dual left turn lanes, bus pull out bays and dual right turning lanes in addition to maximized travel lanes. At intersections where level of service is surpassing LOS D, optimization of the signals should be done immediately. If this does not mitigate the issue, the more physical measures should be studied.

NW 97 AVENUE @ 41ST ST.

These projects have been recommended and prioritized in the project bank section of this report.

Consideration of better utilization of capacity made at the following links:

- 58th Street (97th Ave. to the Palmetto Exwy)
- 41st Street (97th Ave. to 87th Ave.)
- 25th Street (107th Ave. to the Palmetto)
- 12th Street (87th Ave. to the Palmetto)
- 107 Avenue (41st Street to 58th Street)
- 114th Avenue (41st Street to 58th Street)

Intersections in need of improvements include:

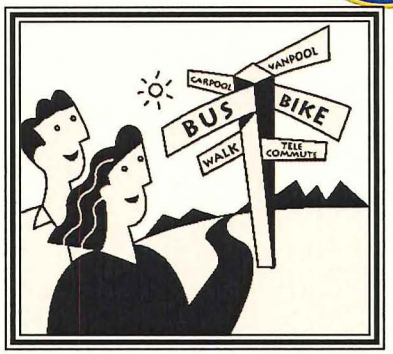
Location	Mitigation
58th Street @ 87th Avenue	Add South Bound Right Turn Lane
12th Street @ 87th Avenue	Add East Bound Through Lane
58th Street @79th Avenue	Optimize
41st Street @ 107th Avenue	Add East Bound Dual Left Turn Lanes Add East Bound Right Turn Lane Add West Bound Triple Left Turn Lanes Add North Bound Dual Left Turn Lanes
41st Street @ 97th Avenue	Add North Bound and South Bound Left Turn Lanes
41st Street @ 87th Avenue	Add North Bound Triple Left Turn Lanes
25th Street @ 107th Avenue	Add West Bound Right Turn Lane
25th Street @ 79th Avenue	Optimize
12th Street @ 107th Avenue	Optimize
12th Street @ 87th Avenue	Add East Bound Through Lane

NW 107TH AVENUE @ 41ST ST.

NW 79TH AVENUE @ 41ST ST.

4. Task 3 Traffic Management Services

The purpose of this task is to ensure that all existing roadways perform to their potential in terms of capacity and safety. While the previous section dealt with projects that mainly attempt to increase capacity, traffic management is viewed as the development of policy tools or focused on management of traffic, by directing it, or changing driving behavior. A description is made of various access management and transportation demand management strategies, as well as how they may be implemented. Specific projects are listed in the Project Bank.



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

Access management relates to how people physically access an area

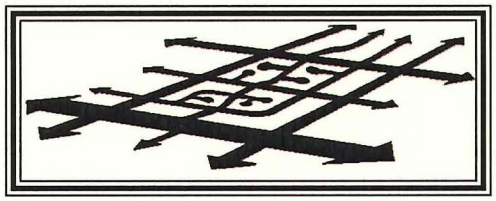
4.1 ACCESS MANAGEMENT

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

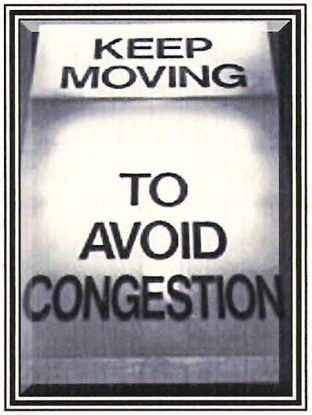
In Doral there is essentially a limited hierarchy of roads. There are the Section Line Roads, which function as state principal arterials and state minor arterials, county section line roads and then few others. All transportation, mobility, and access must come from these facilities, which were built for the through movement of vehicles. Many curb cuts, and the ability for people exiting the various land uses to attempt left turns across several traffic lanes creates conflict. Many roads do not sufficiently recognize the pedestrian. The goals of access management are accomplished by applying the following principles:

1. **Provide a Specialized Roadway System:** Different types of roadways serve different functions. It is important to design and manage roadways according to the primary functions that they are expected to serve.
2. **Limit Direct Access to Major Roadways:** Roadways that serve higher volumes of regional through traffic need more access control to preserve their traffic function. Frequent and direct property access is more compatible with the function of local and collector roadways.
3. **Promote Intersection Hierarchy:** An efficient transportation network provides appropriate transitions from one classification of roadway to another. For example, freeways connect to arterials through an interchange that is designed for the transition. Extending this concept to other roadways results in a series of intersection types that range from the junction of two major arterial roadways, to a residential driveway connecting to a local street.
4. **Locate Signals to Favor Through Movements:** Long, uniform spacing of intersections and signals on major roadways enhances the ability to coordinate signals and to ensure continuous movement of traffic at the desired speed. Failure to carefully locate access connections or median openings that later become signalized, can cause substantial increases in arterial travel times. In addition, poor signal placement may lead to delays that cannot be overcome by computerized signal timing systems.
5. **Preserve the Functional Area of Intersections and Interchanges:** The functional area of an intersection or interchange is the area that is critical to its safe and efficient operation. This is the area where motorists are responding to the intersection or interchange, decelerating, and maneuvering into the appropriate lane to stop or complete a turn. Access connections too close to intersections or interchange ramps can cause serious traffic conflicts that result in crashes and congestion.

6. **Limit the Number of Conflict Points:** Drivers make more mistakes and are more likely to have collisions when they are presented with the complex driving situations created by numerous conflict points. Conversely, simplifying the driving task contributes to improved traffic operations and fewer collisions. A less complex driving environment is accomplished by limiting the number and type of conflicts between vehicles, vehicles and pedestrians, and vehicles and bicyclists.



7. **Separate Conflict Areas:** Drivers need sufficient time to address one set of potential conflicts before facing another. The necessary spacing between conflict areas increases as travel speed increases, to provide drivers adequate perception and reaction time. Separating conflict areas helps to simplify the driving task and contributes to improved traffic operations and safety.
8. **Remove Turning Vehicles from Through Traffic Lanes:** Turning lanes allow drivers to decelerate gradually out of the through lane and wait in a protected area for an opportunity to complete a turn. This reduces the severity and duration of conflict between turning vehicles and through traffic and improves the safety and efficiency of roadway intersections.
9. **Use Nontraversable Medians to Manage Left-Turn Movements:** Medians channel turning movements on major roadways to controlled locations. Research has shown that the majority of access-related crashes involve left turns. Therefore, nontraversable medians and other techniques that minimize left turns or reduce the driver workload can be especially effective in improving roadway safety.
10. **Provide a Supporting Street and Circulation System:** Well-planned communities provide a supporting network of local and collector streets to accommodate development, as well as unified property access and circulation systems. Interconnected street and circulation systems support alternative modes of transportation and provide alternative routes for bicyclists, pedestrians, and drivers. Alternatively, commercial strip development with separate driveways for each business forces even short trips onto arterial roadways, thereby reducing safety and impeding mobility.



Doral often lacks the supporting roadway network and circulation system which provides access. The Doral hierarchy should be enhanced. The primary conduits of traffic surrounding Doral are contained in the expressway system, including the Turnpike, 826 Palmetto Expressway and 836 Dolphin Expressway. Direct connections between these facilities should be emphasized as major transportation corridors. These included 74th Street, 41st Street, 25th Street for trucks, 87th Avenue and 107th Avenue. Enhancement of these can be made by making sure they have sufficient capacity and traverse the city, as well as through implementation of progressive techniques such as grade separated intersections, signal timing, intelligent transportation systems, reversible lanes and specialized transit. These should carry traffic to and through the city. Enhancement of these would focus traffic and mitigate cut through traffic on other roads. The remaining section line roads can be for more local access.

It is recommended that the City of Doral, set up a Transportation Management Association or a transportation liaison

4.2 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) is defined as the use of incentives, disincentives, and market management to affect travel behavior to shift to non-motorized and/or higher-occupancy modes, reduce or eliminate the need to travel, and/or shift travel onto less congested routes. TDM is also used to mean the provision or expansion of alternatives to Single

Occupancy Vehicle (SOV) travel, such as transit, bicycling, and walking. In recent years TDM has been targeted in federal legislation as potentially important pieces of the overall strategy to address congestion and air quality issues. The City should coordinate with South Florida Commuter Services to facilitate implementation of TDM procedures and serve as an interface between the public and private sectors.

This section describes programs or initiatives that can be included in such TDM strategies. It then discusses the programs made available in our region, by the South Florida Commuter Services. It is recommended that the City of Doral, set up a Transportation Management Association or a transportation liaison to develop, coordinate and implement TDM strategies, in partnership with the South Florida Commuter Services.

Transportation Management Associations (TMA's) are organizations that operate within a city, district or are made up of employers in a district or city. They are formed to assist in the planning coordination and implementing of TDM measures, and to provide the private sector with an organized means of providing input into public sector planning, decision-making, and project development.

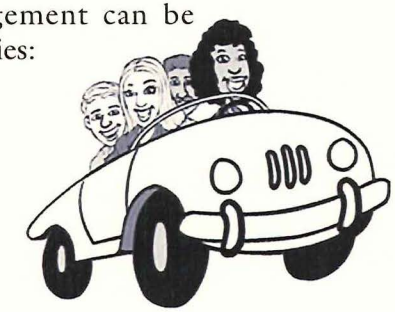
The goal of TMA's is synergistic, in that individual employers will be able to create more effective TDM programs by pooling their resources with other employers than they would be able to alone. TMA's are especially beneficial to their smaller members who are able to offer their employees more transportation options than they would be able to in isolation. The concept is used successfully in many areas.

TMA's are especially beneficial to their smaller members who are able to offer their employees more transportation options than they would be able to in isolation

South Florida Commuter Services acts as a large TMA for our region. Among the services provided by TMA's are:

- Ridematching
- Vanpools
- Guaranteed Ride Home programs
- Coordination of alternative work schedules
- Shuttle services between work sites and commercial areas
- Promotion and marketing of TDM strategies

Transportation Demand Management can be grouped into three general categories:



- Alternative Transportation Modes
- Alternative Work Schedules and Sites
- Incentives and Disincentives

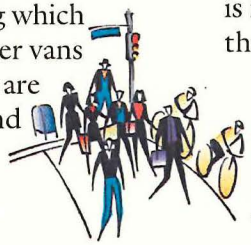
Alternative Modes

Ridesharing

The concept behind ridesharing is fairly straightforward; reduce the number of vehicles on the road by shifting drivers of single- occupant vehicles into multi-occupant vehicles. In part because of this, ridesharing is the most widely utilized and most commonly recognized of all the TDM measures. The two oldest and most common forms of ridesharing are carpooling and vanpooling.

Carpooling is done between at least two people who desire to share driving duties and/or costs, using their own private vehicles. These are either arranged independently or with the assistance of a ridematching service. SFCS provides matching service in our region. Often carpools are more formalized, to the extent that the vehicles are provided by an employer, a Transportation Management Association, a private contractor, or a public agency.

Often the provider also assists in the creation of the carpools and the administration of the program, although in some cases the two tasks are handled by separate entities. This is more similar to vanpooling which is done with larger groups. These consist of 7-to-15 passenger vans which are used instead of automobiles. In general, vanpools are only used for longer commute trips due to time, cost, and convenience factors.



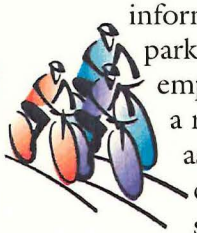
Walking and Bicycling

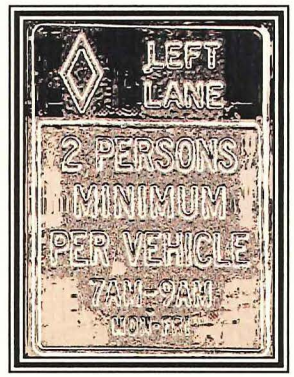
Two of the most basic transportation modes which TDM measures try to encourage are bicycling and walking. People begin and end each trip as a pedestrian. Often in the Doral area, the urban environment precludes convenient walking and bicycle trips. These are frequently seen as hazardous. Many urban design and management techniques can be developed to make these trips more attractive. These include:

- Use of FDOT Livable communities initiative
- Colored and or textured crosswalks
- Sidewalks around individual sites
- Wide curb lanes for bicyclists
- Facilities to allow pedestrians and bicyclists to bypass natural and man-made barriers
- Off-road bicycle paths
- Designated bike lanes (with appropriate striping and signing)
- Sidewalks on both sides of arterial and collector streets
- Traffic control devices allowing pedestrians to safely cross at intersections
- Bicycle-sensitive loop detectors to enable bicyclists to trip traffic signals
- Showers and locker rooms at individual sites
- Adequate bicycle storage facilities at individual sites

Ridematching

Although, not exactly alternative transportation mode, ridematching is integral to ridesharing. Ridematching is a service that assists individuals in the creation or expansion of carpools and vanpools, and also provides information on vanpool and transit routes, and the location of park-and-ride lots. Such a service can be limited to a specific employer or an individual site, or it can be organized through a regional ridematching provider. The actual service can be as simple as a bulletin board or as complex as a GIS-based computer system.





High Occupancy Vehicles (HOV) Lanes

Any vehicle carrying more than two occupants gets to bypass back-ups and cut commute time by an average of 20 minutes a day by using an HOV lane.

Land Use Techniques

Land use and transportation cannot be separated. Transportation inadequacies, are symptomatic of land use decisions. Again, while not an alternative mode, land use techniques are mentioned in this category because of their importance in encouraging the use of alternative modes. Land use techniques that enhance the viability of alternative modes center primarily around zoning requirements to encourage high density, mixed-use development that is easily accessible to transit, and provides quality bicycle, pedestrian, and transit links between homes, shops, and jobs.

Alternative Work Schedules

Alternative work schedules (AWS) is a TDM technique that seeks to relieve congestion by shifting the hours an employee reports to and leaves work.

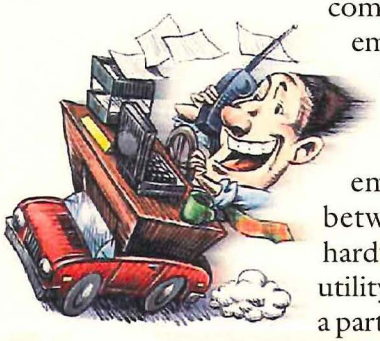
The types of AWS are:

Flextime
Employees are allowed to set their own workday start and finish times, provided that they work an agreed upon number of hours. Generally, employees are required to be at work during a "core" period each day (for example, between 9 a.m. and 3 p.m.).

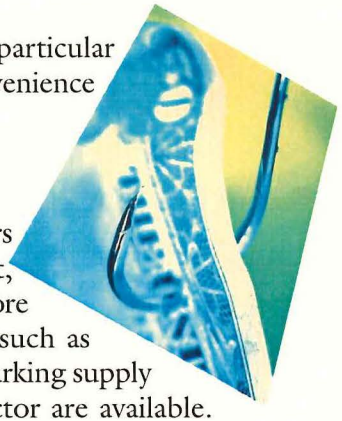
Compressed Work Week
Employees work more hours per day, but work fewer days per week. The most common programs involve employees working four 10-hour days in a one week period, or working 80 hours in nine days during a two-week period.

Staggered Work Hours
Employees' work times are staggered in such a way that their arrival and departure times are spread over a longer period of time.

Telecommuting
Employees are enabled to work at a location other than their conventional office, in order to reduce or eliminate their normal commute. The most common alternative site is the employee's home, although in some cases "satellite" work offices are also used. Additional costs associated with telecommuting from an employee's home may be covered entirely by the employer, entirely by the employee, or jointly between the two. Costs may include computer hardware and software, additional phone lines, and utility costs. Telecommuting is most often applied on a part-time basis, with the majority of participants only telecommuting one or two days per week.



Incentives and Disincentives
These are measures which motivate people to use a particular mode. Incentives generally focus on the cost and convenience of particular items.



Parking Management
The availability and cost of parking are key factors underlying travelers' choice of travel mode. In short, if parking is expensive and scarce, individuals will be more likely to select alternative modes of transportation such as transit and ridesharing. A range of methods to alter parking supply and costs involving both the public and private sector are available. Measures that can be used by municipalities include:

- Establishing differential parking fees at public parking facilities, based upon the number of vehicle occupants, with single-occupant vehicles paying the highest fee
- Reserving the most desirable parking locations at public parking facilities for high occupancy vehicles
- Installing on-street parking controls (meters, timed zones, neighborhood preferential parking)
- Imposing parking pricing through regulations
- Placing controls on the amount of parking built and operated in an area
- Altering parking codes to discourage oversupplying parking
- Giving HOVs priority in constrained parking situations
- Eliminating or monthly discounts favoring long-term commuter parking

Transportation Allowances and Other Financial Incentives
In order to encourage the use of transportation alternatives, a number of different incentives are available. The majority of such incentives are usually provided by employers and developers, however there are several incentives

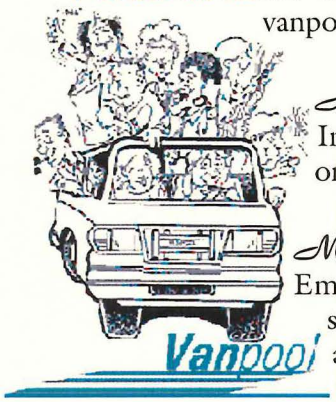
that can be provided by the public sector. Employer-based incentives include the following:

General Transportation Allowances

Employer provides each employee with a fixed amount of money to cover their transportation costs, regardless of the commute mode which is selected. Parking fees are generally increased in combination with the allowance in one of two ways: Parking fees are increased by an amount equivalent to the allowance. In this way, individuals are provided with an incentive to use a transportation alternative, yet they are still not penalized for driving. Parking fees are increased by an amount greater than the allowance. In this way, individuals are penalized for driving, while users of alternatives are not. Often the excess revenue which is collected from SOV's is used to help fund the allowance program.

Targeted Transportation Allowances

Employer provides those employees who travel by selected modes with a set amount of money to cover their transportation costs. The most frequently used allowance is a free or reduced-cost transit pass, although in some cases the allowance is broadened to include carpooling, vanpooling, bicycling, and/or walking.



New Vanpooler Benefits

In order to attract new vanpoolers, employers cover all or part of the fares for the first several months of usage.

Miscellaneous Financial Incentives

Employer provides those employees who travel by selected modes with incentives which, although they are not a direct payment, still provide a financial benefit to users of alternative modes. Examples include:

- Allowing the use of fleet vehicles for ridesharing.
- Providing free or discounted fuel for pooling vehicles.
- Providing free or discounted maintenance and repair for pooling vehicles.
- Providing free or discounted equipment for users of alternative modes.
- Awarding additional vacation time to users of alternative transportation modes.

Financial incentives under the control of public agencies include:

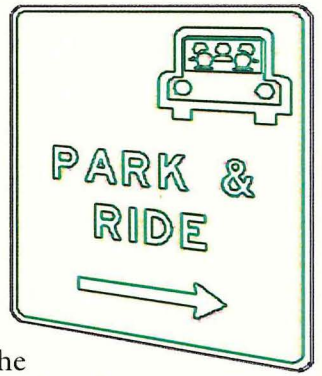
Transit Fare Incentives

A local agency provides employers with the opportunity to purchase transit passes at reduced fees, which the employers then provide to their employees for a free or reduced price.

New Vanpooler Benefits

In order to attract new vanpoolers, a local agency pays for all or part of the vanpool fares for the first several months of usage.

HOV Facilities/Park-and-Ride Lots



HOV facilities serve as an incentive for people to use buses, carpools, and vanpools by providing travel time savings to them. Generally, an HOV lane is available to buses and vehicles with 2 or more occupants, although in some cases it is limited to buses only. Such facilities are generally oriented to serve the downtown core of a metropolitan area along radial corridors, and are focused on downtown oriented work trips. In many cases the facilities are in operation only during the morning and afternoon peak periods.

Park-and-Ride lots are often developed in conjunction with HOV facilities, although they are also used in areas that do not have a designated HOV facility. In general, park-and-ride lots are developed to serve as a collection point for individuals using HOV modes such as transit, vanpooling, and carpooling.

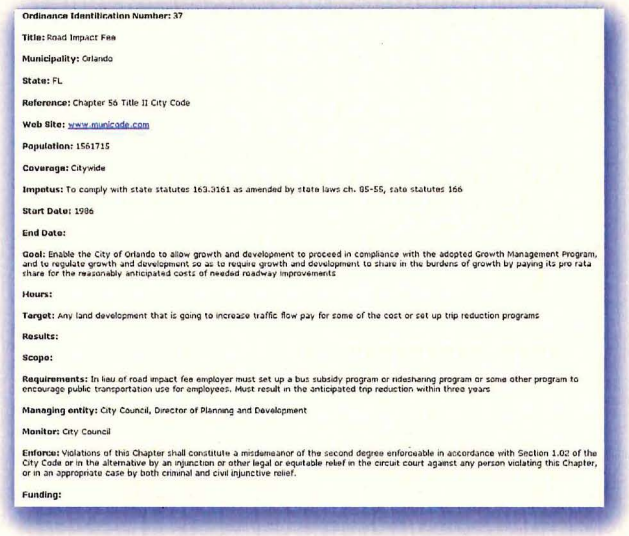
No-Drive Days

The concept behind no-drive day programs is to reduce congestion and air pollution problems by restricting the number of vehicles that are allowed to use the roadways. Although mandatory no-drive days have been established in several foreign cities, including Athens and Mexico City, only voluntary no-drive days have been tried in the United States, most notably in Phoenix and Denver. Generally, such programs are aimed at private automobile users and are tied to their license plate numbers.

Pricing Measures

Pricing measures related to TDM can be classified under one of the following two categories:

- General Tolls: Flat fees that users of a transportation facility are charged regardless of the time of day that the facility is used. The same fee is enforced throughout the day.
- Congestion Tolls: Variable fees that users of a specific transportation facility are charged that are dependent upon the time of day that the facility is used.
- Generally, congestion tolls are set at a relatively high level during peak periods, and are set at a very low rate (or eliminated altogether) during off-peak periods.



Ordinance Identification Number: 37

Title: Road Impact Fee

Municipality: Orlando

State: FL

Reference: Chapter 56 Title II City Code

Web Site: www.municode.com

Population: 1561715

Coverage: Citywide

Impetus: To comply with state statutes 163.3161 as amended by state laws ch. 85-55, sate statutes 166

Start Date: 1986

End Date:

Goal: Enable the City of Orlando to allow growth and development to proceed in compliance with the adopted Growth Management Program, and to regulate growth and development so as to require growth and development to share in the burdens of growth by paying its pro rata share for the reasonably anticipated costs of needed roadway improvements

Hours:

Target: Any land development that is going to increase traffic flow pay for some of the cost or set up trip reduction programs

Results:

Scope:

Requirements: In lieu of road impact fee employer must set up a bus subsidy program or ridesharing program or some other program to encourage public transportation use for employees. Must result in the anticipated trip reduction within three years

Managing entity: City Council, Director of Planning and Development

Monitor: City Council

Enforce: Violations of this Chapter shall constitute a misdemeanor of the second degree enforceable in accordance with Section 1.02 of the City Code or in the alternative by an injunction or other legal or equitable relief in the circuit court against any person violating this Chapter, or in an appropriate case by both criminal and civil injunctive relief.

Funding:

Areawide Pricing Measures

Congestion tolls that motor vehicle users are charged for entering a congested zone, regardless of the facility that is utilized. Of these measures, only general tolls have been used extensively to date. However the primary reason for using tolls on such facilities is not to manage transportation demand. Instead, the major impetus for using tolls to date has been to provide another means to finance a facility that otherwise may not have been built. Congestion tolls and areawide pricing measures have been studied and proposed for implementation in several areas of the United States over the past 25 years. However neither has ever been implemented primarily because of political barriers and public opposition.

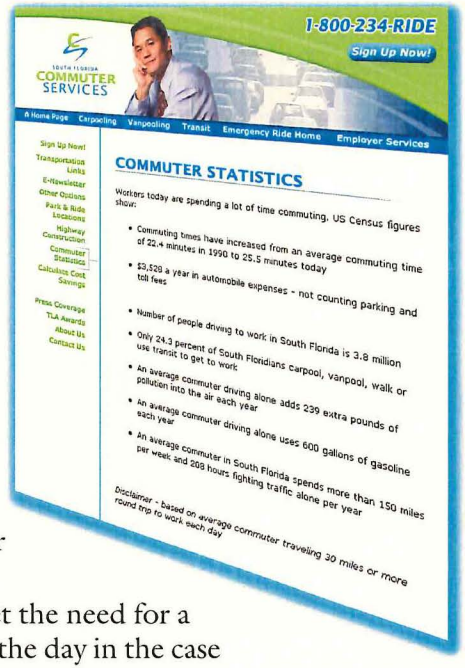
Trip Reduction Ordinances

Trip reduction ordinances (TRO's) are local, regional, or state regulations requiring developer and employer participation in the implementation of TDM. TRO's can be applied based on a variety of different criteria, including number of employees, size of development, type of development, and motor vehicle trip generation. In most cases, the key component of the TRO is the creation and implementation of a TDM plan. Generally, TDM plans must include a description of what measures will be used to meet the requirements of the TRO, and a timetable for implementing the TDM program. Once an initial plan has been developed, it is then reviewed and updated on a regular basis by a regulatory agency. If the review shows the plan is not meeting the requirements of the TRO, further action is often required. The enforcement of TRO's can vary widely, from no penalties at all (in voluntary programs) to a scale of fines for failing to meet the requirements of the TRO. Generally, fines are not assessed if an entity fails to meet trip reduction requirements. In most cases, punitive

action is taken only if an entity fails to make a good- faith effort to meet the requirements of a TRO.

Complementary Incentives

Although the measures described above are generally regarded as the most effective means of encouraging the use of transportation alternatives, several other TDM measures are also often identified as playing a complementary role, primarily by addressing the reasons individuals frequently give for using SOVS. These measures include:



- Providing fleet vehicles for at-work trips, in order to offset the need to drive a personal vehicle to work for work-related use during the day.
- Providing shuttle service between multiple sites of an individual employer, to offset the need for a personal vehicle to make at-work trips between sites
- Providing on-site day care, to offset the need for a vehicle to pick up and drop off children before and after work
- Providing mid-day shuttle service to nearby activity centers, to offset the need for a vehicle to run errands or go to lunch over the noon hour
- Establishing a guaranteed ride home program, to offset the need for a vehicle should an employee need to leave work during the day in the case of an emergency or should they need to work overtime

All of these complementary measures are in most cases primarily the responsibility of an individual employer or a Transportation Management Association.

Control of Truck Movements

Trucks can be major contributors to congestion and air pollution problems in urban areas, particularly during peak travel periods. Because of this, methods of controlling and directing truck movements are often explored as one means to address congestion and air quality problems. Such methods include techniques such as incident management programs, adjustments in sign placement, and variable message signs. In addition, other techniques that have been explored but not implemented in other parts of the country include:

- Requirements that businesses do most of their shipping and receiving at night when there is generally excess capacity is available
- Bans on truck travel on freeways during peak periods

South Florida Commuter Services

In our region TDM is marketed under the auspices of South Florida Commuter Services (SFCS), which is a regional commuter assistance program funded by the Florida Department of Transportation (FDOT) providing assistance to commuters and businesses in Miami-Dade, Broward and Palm Beach Counties. This program was established to increase the use of alternative modes of transportation by offering South Florida employers and their employee's alternatives to driving to work alone. SFCS provides free assistance to employers that would like to implement transportation solutions within their company. There are several TDM initiatives that are offered for organization by SFCS. It is important to note that TDM is most potent and flexible, given that local municipalities and the private sector are able to use resources as they see fit. The will or

incentive to do so becomes integral to the success of each program. SFCS provides free assistance to employers in the tri-county area that would like to implement transportation solutions at their company. Programs offered include:

Work Plan Needs Assessments & Program Development

SFCS Outreach Coordinators assist employers with conducting on-site analysis of the work-site and employee commuting habits and behaviors to establish tailored strategies to meet the needs of the employer and employees.

Carpooling Programs

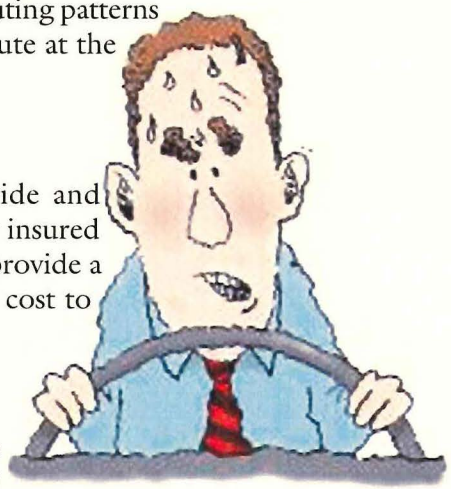
SFCS will create a Zip Code Analysis identifying clusters of possible carpools. The state ridematching software can match employees commuting patterns with those people who live and work near them and commute at the same time.

Vanpooling Programs

A vanpool is a group of 5-15 individuals sharing the ride and commuting costs to get to work. SFCS can provide a fully insured van, offer employees a flexible month-to-month lease, and provide a subsidy toward the operating expenses of the van, all at no cost to employers.

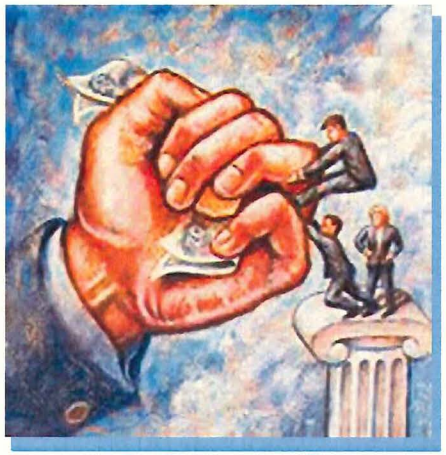
Emergency Ride Home (ERH)

SFCS gives employees a "commuter insurance". Commuters who carpool, vanpool, bike, use transit, or walk get a free taxi ride in the event of an emergency or unscheduled overtime. Registered users receive up to six free taxi rides per year.



Employer Tax Benefits Assistance

There are several ways an employer can save on taxes by offering employees benefits that encourage commuting to work by vanpooling or using transit. SFCS can provide employers with information on these programs and assistance in implementing them at the worksite.

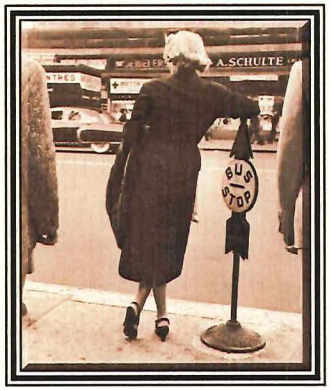


5. Task 4 Transit Related Services

Transit Related Services

The purpose of this task is to assist the City in improving overall transit service within its boundaries.

There are seven transit routes operating within Doral. These generally run northeast to southwest from the Palmetto Metrorail Station to and from the Dolphin Mall area. Headways are typically 15 minutes in the peak hours. Buses are between 40' and 60' in length. The most successful route is the Route 36, which has about 3,200 passengers on the average weekday, and up to 80,000 riders per month. The least impactfull route is the TriRail Shuttle, which has on average 49 riders per month. Many stakeholders suggest that they would ride transit if provided frequently.



An inventory of the physical transit facilities located in Doral is contained in table 20 the roadway inventory. Transit facilities in Doral, mainly consist of bus stops with out shelters. There are private jitney services offered in Doral. South Florida Commuter Services remarks that there are several carpool and vanpool services operating in the City.

The density of development in Doral may not warrant more transit services than what is currently provided. Many stakeholders feel that transit would be better utilized if offered on a very frequent basis. Other alternative transportation services can potentially be developed. Since Doral is a significant employment center, it has been suggested that park and ride facilities be developed within the City, which could eventually be used as intermodal centers where people could leave their cars and take transit. The following locations have been identified for further consideration, these include:

- 41st Street @ Turnpike
- 36th Street @ 826
- Area south of 41st Street @ 107th Avenue
- The Proposed Downtown Doral Redevelopment Area
- The Palmetto Metrorail Station
- 74th Street @ Turnpike
- 25th Street @ 826

Table 22: Doral Bus Routes

Routes in Doral	Average Weekday	Boardings By Day of Week			Total Monthly Boardings	Headways	Bus Size
		Weekdays	Saturdays	Sundays			
36	3,271	68,693	6,365	5,095	80,153	15 minutes	40' or 60'
41	N/A	N/A	N/A	N/A	N/A	N/A	40' or 60'
87	1,861	39,071	2,748	2,874	44,694	15 minutes	40' or 60'
238	513	10,765	1,807	1,520	14,092	15 minutes	40' or 60'
242	397	8,334	N/A	N/A	8,334	15 minutes	40' or 60'
132-TriRail Shuttle	49	1,030	N/A	N/A	1,030	N/A	40' or 60'
95x - Earlington Heights	1,626	34,147	N/A	N/A	34,147	N/A	40' or 60'

Note: Route 41 not in MDT Ridership Technical Report or PTP

There are about eight jitney services that operate in Miami-Dade County, and Doral. These are generally available for free, or a nominal fee of between $1.25 and $2.50 each way. Ambulatory services range from between $32 and $125. Generally these services transport elderly passengers, and require some notice prior to scheduling service.

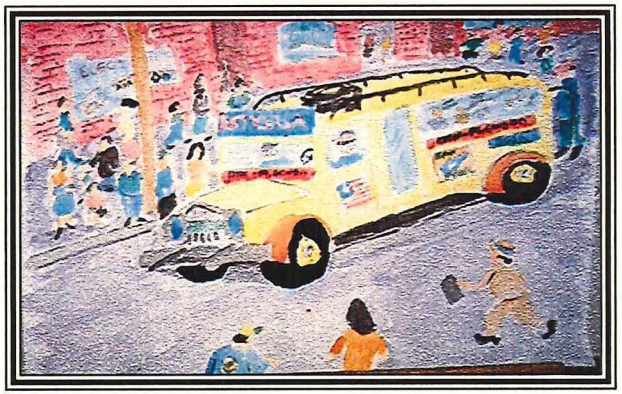


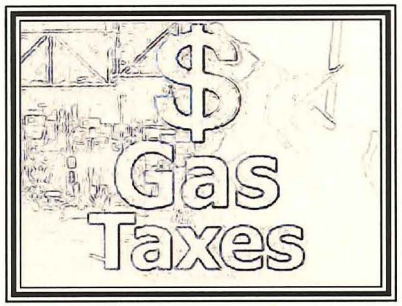
TABLE 23

Jitney Services - Miami-Dade and Doral	Cost	Vehicle Type	Notification Time	Customers Served	Fixed Route
MDT Paratransit	$2.50 each way	ambulatory van	24hrs notice	Elderly, Disabled	N/A
Transportation Program	Free	ambulatory van	N/A	Elderly, Disabled	N/A
Dade Jitney Service	$1.25 each way	ambulatory van	N/A	Elderly, Disabled General Public	N/A
Dade County Community Action Agency	$32.00	ambulatory van, Mini-Bus	3-days	Elderly, Disabled	N/A
Conchita/Metro Jitney	$1.25 each way	Mini-Bus, Bus	N/A	Elderly, Disabled	N/A
Sallies Shuttle Service	Cost Variable	Car, Van	N/A	Elderly, Disabled	N/A
Able Transport	Cost Variable	ambulatory van, car	N/A	Elderly, General Public	N/A
Florida Senior Safety Resource Center	$125.00	ambulatory van	N/A	Elderly, Disabled	N/A

6. Task 5 Funding Sources

Funding Sources

The purpose of this task is to optimize the use of existing and potential funding sources that the City can pursue to improve transportation infrastructure. Funding sources have been researched, explained, and presented in this chapter. Essentially there are many sources, Local, County, State and Federal. Each derives their funding from gasoline taxes at the County, State and federal levels. The People's Transportation Plan derives its funding from sales tax revenues. This money percolates down to the municipalities.



The two most pertinent sources of funding for municipalities in Miami-Dade County are from the FDOT Local Agency Program (LAP) and the People's Transportation Plan

The two most pertinent sources of funding for municipalities in Miami-Dade County, those which afford Doral the most control it will have in funding its projects are from the FDOT Local Agency Program (LAP) and the People's Transportation Plan, of which Doral is not a part of at this time.

Almost all transportation money is paid for with fuel taxes. The federal government collects 24.4 cents per gallon on diesel and 18.4 cents per gallon on gasoline to fund the Federal transportation projects identified below. 2.86 cents goes to transit, 1 cent goes to cleaning up leaking tanks and the remainder goes to roads and bridges.

The State of Florida collects 10.1 cents per gallon that the Florida Department of Transportation (FDOT) retains. 15% of that money goes to transit and the remainder goes to any legitimate state transportation need. The State also collects 4.6 cents on gasoline and 5.6 cents on diesel under the SCETS tax (State Comprehensive Enhanced Transportation System), which must be spent in the district that it is collected.

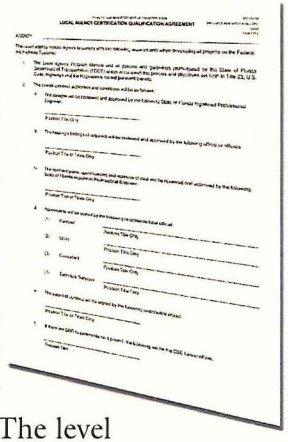
The State also collects fuel tax money that is distributed directly back Counties and local governments. Two cents are collected as the Constitutional Fuel tax which can go only to the acquisition, construction, and maintenance of roads. The County fuel tax collects an additional 1 cent that can be spent on any legitimate county transportation purpose. The municipalities collect another 1 cent that can be spent on any legitimate municipal transportation purpose. Counties can elect to collect one more cent on what is referred to as the ninth-cent fuel tax, and between 5 cents and 11 cents under the Local Option Gas Tax. The ninth cent and the local option gas tax go right back to the local jurisdiction for local transportation needs. Miami-Dade County only collects 10 of the 12 cents that is available to the local governments.

An additional source of local transportation funds comes from the Charter County Transportation System Surtax which allows transit counties to collect between .5% and 1% sales tax on gasoline to be spent on transit programs. These funds must provide a provision for distribution of some funds back to the municipalities. Miami-Dade County collects .5 cent sales tax on gasoline.

The only transportation money that is not collected from gasoline taxes was instituted when the residents of Miami-Dade County passed a .5 cent sales tax on merchandise to develop the People's Transportation Plan. The legislation requires that 20% of the sales tax money be distributed to the municipalities for their use for transportation related expenditures. This money is redistributed to the municipalities, (except Doral and Miami Gardens) based upon an annual population estimate.

6.1 FLORIDA DEPARTMENT OF TRANSPORTATION LOCAL AGENCY PROGRAM (LAP)

The LAP Certification provides local government agencies an opportunity to administer their own transportation projects by receiving federal funds via a reimbursement process administered by FDOT. The program allows FDOT to forge contractual relationships with local governmental agencies that have the authority to plan, develop, design, acquire right-of-way, and construct transportation facilities. Local agencies must be LAP-certified before entering into a LAP Agreement. FDOT is responsible for ensuring the certified Local Agencies comply with all applicable Federal Statutes, rules and regulations. Local Agencies are reimbursed with Federal funds administered by the Federal Highway Administration (FHWA).



The Local Agency Program (LAP) is administered in each District by a District LAP Administrator designated by the District Secretary. The District LAP Administrator consults and advises the Local Agency on project management procedures to be followed. The level of assistance provided is based on the nature of each project and the demonstrated capabilities of the Local Agency. In addition, the District Administrator annually selects certain projects for a Process Review. Project-level direction and oversight are provided through the District Offices of Planning, Environmental Management, Design, Right-of-Way, Policy Planning, Environmental Management, Federal-Aid, Design, Contracts Administration, Equal Opportunity, Comptroller, and Program Development. The Central Office LAP Administrator chairs the standing committee on standards and practices for local agencies. At this time, District Six does not grant LAP certification for right-of-way projects.

Local Agencies seeking LAP certification must submit the following to the District LAP Administrator:

- Two (2) copies of the Local Agency Certification Qualification Agreement (Form No. 525-010-33); This form is available at: *http://formserver.dot.state.fl.us/MiscRepository/forms/52501033.pdf*
- The Agency's Organization Chart.
- A narrative addressing qualifications in specific areas where certification is requested: Planning; Right-of-Way; Design; Estimates; Construction; Environmental Assessments; Bid & Award; Consultant Selection; Financial Systems; & capability of matching Federal funds.
- A transmittal letter signed by an appointed or elected official of the Local Agency.

District Local Agency Program Administrator and Task Team will conduct an interview to determine whether the Agency is capable of administering an FHWA funded project. Past performance, current staffing, as well as capability and knowledge of federal and state requirements are considered in the determination of Local Agency Certification. Based on the interview and information provided, the District Local Agency Program Administrator will opt to permit full administration by the Local Agency of all projects, allow limited Local Agency administration, allow Local Agency administration on projects up to a maximum dollar limit, or deny local agency certification. The District Local Agency Program Administrator will advise the Local Agency by letter that they have been certified or denied certification. Local Agencies that are denied certification may apply again after correcting

the deficiencies indicated in the rejection letter. The same steps are followed as in the original application, except that the application package needs only to address those areas affected by the corrected deficiency. Local Agencies that have been granted certification must obtain the District Administrator's approval to administer each Federal-aid project.

6.2 PEOPLE'S TRANSPORTATION PLAN

While our region is the twelfth largest in the nation, it is ranked the fifth worst nationally for urban traffic congestion. Before November of 2002, Miami-Dade County was one of two metropolitan areas that did not have a dedicated source of funds for public transportation. This meant there was little or no chance of receiving federal funding for mobility enhancement projects. Subsequently, 66% of the voters in the county approved the People's Transportation Plan, (PTP). With the passage of the is half-penny sales tax, the county began a $16 billion, 30 year transportation investment which as advertised would double the number of buses on the road, quadruple the size of Metro Rail to 90 miles and speed the construction of new roads.

Of the $150 million projected to be raised annually, 40% will be paid by tourists, as well as the 80,000 Broward County residents that work in Miami-Dade County. This will allow for municipal and county funds which are already in place for transit to remain in the budget. These current funds cannot be replaced by the new revenue. Twenty percent of the total annual revenue will be divided among the municipalities on a pro-rata basis,

TABLE 23: PEOPLE'S TRANSPORTATION PLAN MUNICIPAL DISBURSEMENTS (ESTIMATED)

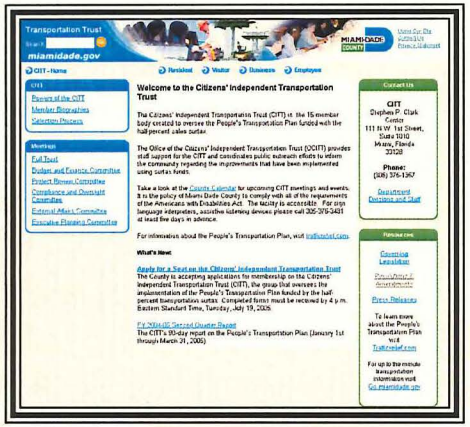
Jurisdiction	Percent	1 YR
Aventura	1.90%	$475,679.00
Bal Harbour Village	0.24%	$59,135.00
Bay Harbor Islands	0.45%	$112,405.00
Biscayne Park	0.40%	$99,232.00
Coral Gables	5.34%	$1,334,919.00
El Portal	0.29%	$73,462.00
Florida City	0.96%	$241,060.00
Golden Beach	0.08%	$19,519.00
Hialeah	20.71%	$5,177,944.00
Hialeah Gardens	1.70%	$424,524.00
Homestead	3.50%	$873,952.00
Indian Creek Village	0.02%	$5,962.00
Key Biscayne	0.94%	$234,714.00
Medley	0.30%	$74,039.00
Miami	31.81%	$7,953,265.00
Miami Beach	7.76%	$1,940,022.00
Miami Lakes	2.09%	$521,737.00
Miami Shores	1.12%	$280,580.00
Miami Springs	1.84%	$459,813.00
North Bay Village	0.53%	$133,271.00
North Miami	5.53%	$1,382,420.00
North Miami Beach	3.93%	$983,665.00
Opa-Locka	1.40%	$351,062.00
Palmetto Bay	2.18%	$696,000.00
Pinecrest	2.35%	$587,988.00
South Miami	1.22%	$305,388.00
Sunny Isles Beach	1.15%	$287,888.00
Surfside	0.46%	$115,674.00
Sweetwater	1.20%	$300,196.00
Virginia Gardens	0.23%	$56,924.00
West Miami	0.53%	$133,559.00

(determined by population) for transportation enhancement projects. Currently, Doral is not eligible for this funding source. If it were it would be due to receive about $700,000 per year.

To ensure that this additional revenue is spent in a proper manner, the Citizens Independent Transportation Trust (CITT) has been developed to review, audit, and investigate the implementation of transportation and transit projects. The trust consists of 15 members; one from each of Miami-Dade County's thirteen commission districts, one member appointed by the Mayor, and one appointed by the Miami-Dade League of Cities. There are two municipal liaisons, which are there to assist each municipality with the implementation of the effort.

If the city does not authorize and appropriate or contract with the county for such a project, that portion of the funds will revert to the county for redistribution

All municipalities are required to submit a plan of projects for CITT approval. At least 20% of the money received by the cities must be used for transit purposes. Examples of transit include circulator buses, bus shelters, bus pullout bays or other transit related infrastructure. If a city cannot apply at least 20% of its surtax proceeds to transit purposes, the city may contract with the county for the county to provide a project that enhances transit in the immediate vicinity. If the city does not authorize and appropriate or contract with the county for such a project, that portion of the funds will revert to the county for redistribution. Similarly, the cities may spend up to 80% of the money they receive on non transit, but transportation related projects. This would include the building, operating, and maintenance of roads or bridges. If this money is not appropriated and approved it will revert to the county. It is understood that both transit and transportation projects may take longer than a year to develop and construct. As such, it is understood that not all of the money received needs to be spent in any given year, but it must be authorized and appropriated.



Miami-Dade County will be spending its 80% share of the tax on the following types of projects:

- Bus Service Improvements 2003 - 2008
  - Increase fleet from 700 to 1335
  - Increase service miles from 27 million to 44 million
  - Increase operating hours form 1.9 million to 3.3 million
  - Provide 15-minute or better bus service
- Rapid Transit Improvements 2003 - 2008
  - Construct up to 90 miles of county wide rapid transit lines
- The **North Corridor** is a 9.5-mile, heavy rail alternative running from the Dr. Martin Luther King Jr. Metrorail Station along NW 27th Avenue to NW 215th Street (Miami-Dade/Broward County line); with proposed stations at Northside Shopping Center, MDCC-North Campus, City of Opa-locka, Palmetto Expressway, Carol City Shopping Center, Pro-Player Stadium, and Florida's Turnpike.
- The **East-West Corridor** consists of two segments, one from the Florida Turnpike east to the Palmetto Expressway (SR 826) and the other from the Palmetto, through Miami International Airport, downtown Miami, and to the Port of Miami, 6-miles and 11.2-miles respectively. These sites have been identified as potential station locations: Florida's Turnpike, NW 107th Avenue, NW 97th Avenue, NW 87th Avenue, Milam Dairy Road, Blue Lagoon area, Miami Intermodal Center, NW 27th Avenue, Orange Bowl, Government Center (downtown Miami), and the Port of Miami
- **Earlington Heights/Airport Connector**: a 3.1-mile extension from the Earlington Heights Metrorail station to the Miami Intermodal Center, located on the east side of Miami International Airport.

- **Baylink**: A 5.1-mile corridor between downtown Miami and south Miami Beach.
- **Kendall Corridor**: a 15-mile corridor with both east-west and north-south segments.
- **Northeast Corridor**: a 13.6-mile corridor from downtown Miami, through Little Haiti, to NE 215 Street, generally along the Biscayne Blvd./US 1 Corridor and Florida East Coast railroad right-of-way.
- **South Dade Corridor**: a 21-mile rail extension along U.S. 1 consisting of two segments: one from Dadeland South Metrorail station to Cutler Ridge; a second segment from Cutler Ridge to Florida City.
- **Douglas Road Extension**: A 4.5-mile corridor from the Douglas Road Metrorail station to the Miami Intermodal Center

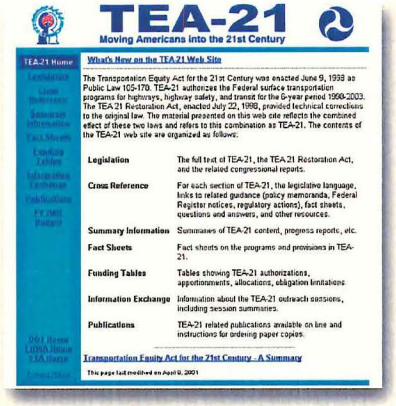
- Major Highway and Road Improvements 2003 - 2008
  - Upgrade the County's traffic signalization system
  - Accelerate program to provide ADA accessibility to bus stops
- Other
  - Expand the Golden Passport Program for the elderly
  - County cannot spend more than 5% on administration
  - County cannot delete or materially change any of the projects in the Plan without review by the CITT.
  - Twenty percent of the surtax proceed shall be distributed to those cities existing as of November 5, 2002
  - Cities must apply 20% of their funds to transit uses such as circulators, bus shelters, bus pull outs
  - Surtax proceeds are distributed among existing cities on a pro rata basis based on the ratio of a city's population to the total of all cities population - adjusted annually.

On May 31, 2005 the Surface Transportation Extension Act was passed allowing funding to continue for federal transportation programs

- Newly incorporated cities have the right to negotiate with the County for a pro rata share of the surtax. This shall not affect the 20% going to existing cities.

Federal Transportation Programs

Federal transportation funds are currently authorized under the TEA-21 legislation. The TEA-21 program actually expired in 2003, but is operating under a continuing resolution due to the inability of Congress to pass a new transportation authorization bill. There are House and Senate versions of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act, (SAFE-TEA) which are being negotiated. On May 31, 2005 the Surface Transportation Extension Act was passed allowing funding to continue for federal transportation programs. Below is a very brief description of the Federal transportation programs that are available to state and local governments. Many of the Federal programs are available only to State DOT's, which are in turn passed on to County's and local governments. TEA-21 funds are distributed between transit, highway, and safety projects.



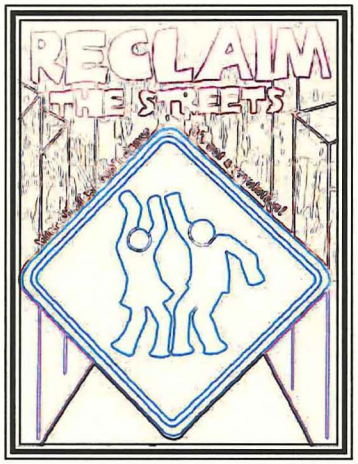
Transit funds available to local governments

- Job Access and Reverse Commute Grants are available to provide a transit connection between areas with heavy concentrations of welfare recipients and suburban job markets.

- Transit Enhancements is a 1% set aside for projects that enhance transit facilities in urbanized areas over 200,000 population.

Transit funds to operators of transit systems

In Miami-Dade County the County is the only local government permitted to operate public transit services. The County has recently been entering interlocal agreements with municipalities which enable the municipalities to operate local bus circulators, provided they do not duplicate more than 30% of existing MDT service.



- Clean Fuel Formula Grant funds are available to transit operators to convert equipment to cleaner fuels.
- Urbanized Area Formula Grant Program money is available to transit operators for capital and operating assistance. These funds only go to urbanized areas over 50,000 in population.
- Transit Preventative Maintenance grants are monies that are available to transit operators that report National Transit Database information.
- Paratransit services are funded through transit operators to provide service to people with disabilities that cannot use a bus.
- Transit Capital Investment Grants and Loans provide capital for new fixed guideway systems and extensions, as well as new bus and bus facilities.

Transit funds passed through the State.

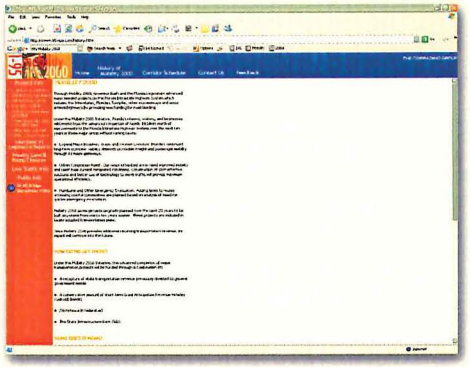
- Formula Grants for Non-urbanized Areas are for areas under 50,000 in population to provide rural transportation.
- Rural Transportation Accessibility Program is federal funds passed through the state DOT to provide handicapped accessibility in areas under 50,000 in population.

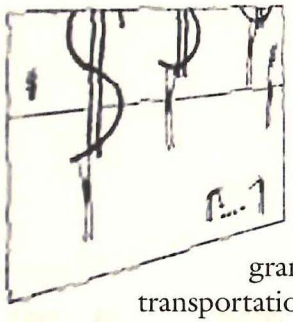
Highway Funds passed through the State.

- National Highway System (NHS) these funds go directly to FDOT for work on the Interstate system.
- Surface Transportation Program (STP) provides flexible funds through the State to local agencies for any project on any Federal-Aid highway.
- Congestion Management and Air Quality Program (CMAQ), provides flexible funds for projects in Air Quality non-attainment or maintenance areas. The project must show that it will reduce emissions. (Currently Miami-Dade is an attainment area and is not eligible for CMAQ funds)
- Bicycle Transportation and Pedestrian Walkway funds are eligible for funding through these programs: NHS, STP, CMAQ, Federal Land, Scenic Byways and Recreational Trails. NHS monies can be used for trails within an interstate corridor.
- Recreational Trail Program is for the maintenance of trails for motorized and non-motorized recreational uses. Locals apply directly to state for funds.
- National Scenic Byways program is discretionary money for planning, design, and development of a scenic byway program. Roads must be designated by the state prior to a federal designation.
- The recently passed SAFE-TEA legislation would provide:
  - The State & Community Formula Grants would continue to be authorized from the Highway Trust Fund under the existing formula

based on population (75 percent) and road mileage (25 percent). At least 40 percent of these funds are to be used to address local traffic safety problems.

- The General Performance Grants, from the Highway Trust Fund, would be awarded to a State based upon the performance of its highway safety program (achievement and annual progress, as determined by the Secretary through a rulemaking proceeding) in the three categories noted above. The Federal share for these grants would be 80 percent.
- ITS Performance Incentive Performance Program is a new formula program designed to provide States with financial incentives to support the deployment and integration of intelligent transportation systems based on the performance of these systems in reducing traffic congestion, improving transportation system reliability, providing better service to users of the highway system, and improving safety and security. This program builds upon the ITS Integration Program, a discretionary deployment incentives program authorized in TEA-21





- The New Freedom Initiative provides formula grants to the States for new transportation services and transportation alternatives for individuals with disabilities beyond those required by the Americans with Disabilities Act of 1990, including motor vehicle programs that assist persons with disabilities with transportation to and from jobs or employment support services. States solicit applications for grants and then award the grants on competitive basis.

Flexible funding

- Up to 50% of NHS money may be transferred to maintenance, to STP, to CMAQ and to Bridge Replacement and Rehab programs
- Up to 100% of the NHS money may be transferred to STP if approved by FHWA in advance.
- Up to 50% of maintenance funds can be transferred to NHS, STP, CMAQ and Bridge Programs.
- Up to 50% of the Bridge program money can be transferred to maintenance, NHS, STP and CMAQ.
- Only STP programs and CMAQ programs can be used to fund transit projects. (South Florida is being redesignated as an Air Quality Attainment Area and will no longer be eligible for CMAQ money.)

State of Florida Transportation Programs

The current State legislative transportation program divides the state revenues under several broad programs:

- Mobility 2000 provides funding for projects that could be considered as either important to trade and tourism or that would provide urban congestion relief.
- State Infrastructure Bank loaned money to areas to advance projects that were scheduled beyond the current 5-year programming cycle. Localities can borrow and repay the money for these projects.
- TOP program (Transportation Outreach Program) is a program that funds high priority projects that preserve existing transportation infrastructure and enhance economic growth.
- County Incentive Grant Program provides matching funds for various highway programs.

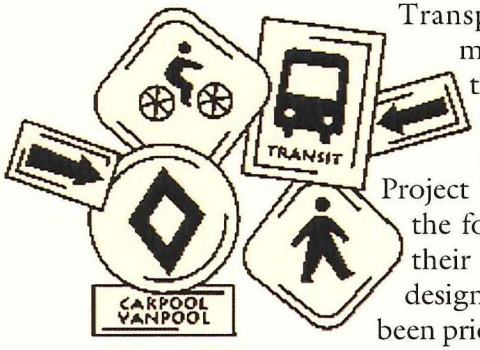
7. Project Bank

7. Project Bank

Doral is influenced by many issues that are regional in nature. These are in the ultimate control of either Miami-Dade County or FDOT. The City seeks to partner with the primary transportation providers, so as to have input to the transportation that may be implemented in and around its borders. Many of the projects described in the Project Bank will need to be done in partnership with other entities.

Many of the projects described in the Project Bank will need to be done in partnership with other entities

Twenty seven projects have been developed in the three categories, Roadway, Transit and Transportation Management. As they were evaluated some projects are broad in nature, and have several specific efforts listed within them. Roadway projects deal with capacity and physical improvements to the roadway. Transit deals with alternative modes. Transportation Management deals with methods of controlling the way and times that people travel. The following is an unprioritized list of the projects in each category that make up the Project Bank. Each is described in detail in the following project sheets which discuss their purpose, need and cost, (planning, design, construction). These projects have been prioritized and ranked. In addition there are several projects that exist on the MPO's Long Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP), which if implemented may work in concert with the city's concerns regarding transportation.



Long Range Transportation Plan (LRTP)

The LRTP- 2030 has outlined projects that are grouped into priorities based on funding availability. The breakdowns of these priorities are as follows:

Table 24: Project Bank

Project	Type
1. Traffic Calming	Roadway
2. 41st Street Roundabouts	Roadway
3. Additional Turnpike Interchanges	Roadway
4. LAP Certification	Roadway
5. PTP Funding	Roadway
6. Enhanced ROW on 25th Street	Roadway
7. Comprehensive Signal Timing Study	Roadway
8. Level of Service Improvements @ Intersections	Roadway
9. Access Management	Roadway
10. Maximize Capacity of Section line Roads	Roadway
11. Haul Road	Roadway
12. Support 25th Street Viaduct (Apt to Tpk)	Roadway
13. Park and Ride Lots	Transit
14. Linear Parks	Transit
15. Municipal Circulator	Transit
16. Link Transit with Metrorail	Transit
17. Doral Heavy Truck Movement / Mobility Study	TDM
18. Transportation Liaison / TMA	TDM
19. Implement TDM Strategies	TDM
20. 25th Street Truck Route	TDM
21. Peak Hour Truck Prohibition	TDM
22. Livable Communities	TDM
23. Concurrency Management System	TDM
24. Transportation Impact Fees	TDM
25. Reversible Flow Lanes	TDM
26. Support LRTP development of Hierarchy	TDM
27. Additional County and State Funding	TDM

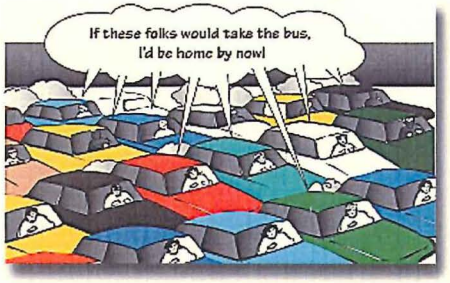
7. Project Bank

Priority 1 - Funds are programmed in the 2005-2010 Miami Dade Transportation Improvement Program. These projects are needed to respond to the most pressing and current urban travel problems.
Priority 2 - Funds are planned to be funded between 2010 and 2015.

Priority 3 - Funds are planned to be funded between 2016 and 2020

Priority 4 - Funds are planned to be funded between 2021 and 2030

For the purposes of this report, these are the projects that will have a direct impact on the City of Doral.



NW 74th Street

The NW 74th Street project is divided into two phases:
Phase 1 - Priority 1 funding and Phase 2 - Priority 2 funding. The project encompasses the extension of NW 74 St. from the Turnpike to the Palmetto Expressway. This will be a new 3 lane roadway that will be built as a short term measure to provide continuity from the Turnpike to NW 82nd Ave. and beyond. This will become half of the ultimate 6 lane cross section to the Palmetto Expressway. The second phase of this project will widen NW 74th St. to 6 lanes from SR 826 to the Turnpike. This will coincide with a new interchange with the Florida Turnpike at NW 74th St.

NW 87th Avenue

The NW 87th Avenue project is also divided into two phases: Phase 1 - Priority 1 funding and Phase 2 - Priority 2 funding. The first phase of this project will be a new 4 lane roadway to be constructed from NW 58th St. to Okeechobee Ave. Phase 2 of the project will widen NW 87th Ave. from 4 to 6 lanes from NW 36th St. to NW 58th St.

NW 97th Avenue

The NW 97th Avenue project is also divided into two phases. Phase 1 has Priority 1 funding and Phase 2 has Priority 2 funding. Phase 1 of this project will be to widen NW 97 Ave. from 2 to 4 lanes from NW 25th St. to NW 41st St. The second phase of the project will widen from 2 to 4 lanes from NW 58th St. to NW 74th St.

NW 25th St.

The NW 25th St. project has Priority 2 funding and will be to construct a new 2 lane viaduct from NW 68th Ave. to NW 77th Ave. into Doral. This is a very important area of the airport. This project will be done jointly by FDOT and Miami-Dade Aviation Department.

NW 107th

The NW 107th project has Priority 3 funding and encompasses the widening from 4 to 6 lanes from NW 41st St. to NW 25th St.

Express Arterial - Doral

This express street (ITS, grade separations, etc.) is to be constructed from NW 42nd Ave. to the Turnpike and will improve mobility on NW 36th/41st St.; however, it has Priority 4 funding.

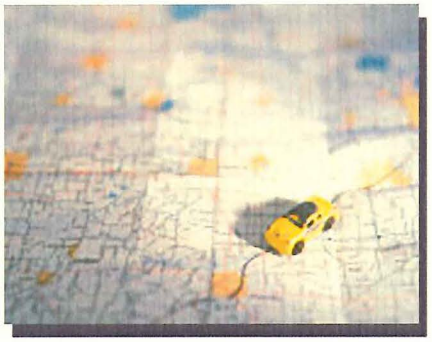
Bus Purchases Project - Priority 2

The purpose of this project is to enhance current service levels through frequency improvements, service expansion in areas with limited or nonexistent service and to promote intermodal linkages between Metrobus, Metrorail, Metromover, Tri-Rail, and Broward County Transit.

7. Project Bank

Prioritization

Important to making this Transportation Master Plan most useful is the prioritization of the project bank, so that there is an implementation plan. Prioritization criteria have been developed. Each project has been evaluated based these.



The City is currently developing its Comprehensive Development Master Plan, In the Transportation Element there are several Goals, Objectives and Policies. From these the prioritization criteria have been taken. The goal of the Transportation Element, is to provide a Safe, Convenient, Effective and Energy efficient multimodal transportation system, which is intricately related to the land use pattern and improves the level of mobility of all the City's residents and visitors. The following list coordinates with the goals objectives and policies of this element.

Prioritization Criteria

- Coordinated with Land Use Element
- Maintain LOS D
- Complete County Grid System (sections, 1/2 , 1/4)
- Coordinate with County and State Governments
- Enhance Movement of Freight and Passengers
- Enhance Pedestrian and Bicycle Opportunities
- Enhance Public Transportation Opportunities
- Ease of Implementation

A matrix has been developed and each project has been evaluated based whether it compares favorably, neutral or unfavorably with the criteria. Each criterion has received a symbol and a color that coordinates with its "rank". A (+) has been developed for a favorable comparison, (+/-) for a neutral comparison and (-) for an unfavorable comparison. For ease of analysis each evaluation has been color coded, green for favorable, yellow for neutral, and red for unfavorable. Each project was ranked within their project category and in total.

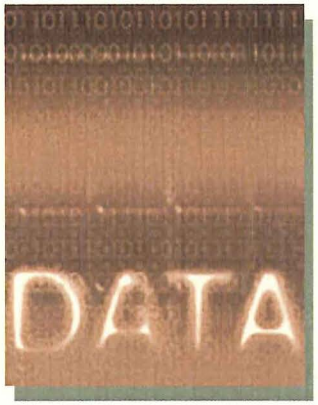


Table 25: Roadway Project Prioritization Matrix

	Criteria						
Projects: ROADWAY	Coordinate w/ Land Use Element	Maintain LOS D	Complete Grid System	Coordinate with County / State Governments	Enhance Movement of Freight and People	Enhance Pedestrian and Bicycle Opportunities	Enhance Public Transportation Opportunities
Traffic Calming	+	-	+/-	+-	-	-	+/-
41st Street Roundabouts	+/-	+	+	+/-	+	+/-	+/-
Turnpike Interchange at 25th Street	-	-	+/-	-	+	-	-
LAP Certification	+	+	+	+	+	+	+
PTP Funding	+	+	+	+	+	+	+
Enhanced ROW on 25th Street	+/-	+	+	+/-	+	+/-	+/-
Comprehensive Signal Timing Study	+	+	+	+	+	+	+
Level of Service							

Table 25: Roadway Project Prioritization Matrix

Projects: ROADWAY	Criteria						
	Coordinate w/ Land Use Element	Maintain LOS D	Complete Grid System	Coordinate with County / State Governments	Enhance Movement of Freight and People	Enhance Pedestrian and Bicycle Opportunities	Enhance Public Transportation Opportunities
Access Management	+	+	+/-	+	+	+/-	+/-
Maximize Capacity of Section line Roads	+/-	+	+	+	+	+/-	+/-
Haul Road	+/-	+	+	+/-	+	+/-	+/-
Support 25th Street Viaduct (Airport to Turnpike)	+/-	+	+	+/-	+	+/-	+/-

+: compares favorably with criteria (green)
-: compares unfavorably with criteria (red)
+/- compares neutrally with criteria (yellow)

Table 26: Transit Project Prioritization Matrix

Projects: TRANSIT	Criteria						
	Coordinate w/ Land Use Element	Maintain LOS D	Complete Grid System	Coordinate with County / State Governments	Enhance Movement of Freight and People	Enhance Pedestrian and Bicycle Opportunities	Enhance Public Transportation Opportunities
Park and Ride Lots	+	+	+/-	+/-	+	+	+
Linear Parks	+	+	+/-	+/-	+	+	+
Municipal Circulator	+	+	+/-	+	+	+	+
Link Transit with Metrorail	+	+	+/-	-	+	+	+

+: compares favorably with criteria (green)
-: compares unfavorably with criteria (red)
+/- compares neutrally with criteria (yellow)

Table 27: Transportation Demand Management Project Prioritization Matrix

Projects: TDM	Criteria						
	Coordinate w/ Land Use Element	Maintain LOS D	Complete Grid System	Coordinate with County / State Governments	Enhance Movement of Freight and People	Enhance Pedestrian and Bicycle Opportunities	Enhance Public Transportation Opportunities
Additional Funding	+/-	+	+	+	+	+	+
Doral Heavy Truck Movement / Mobility Study	+	+	+/-	+	+	+/-	+/-
Transportation Liaison	+	+	+	+	+	+	+
Implement TDM Strategies	+	+	+/-	+	+	+	+
25th Street Truck Route	+	+	+/-	+	+	+/-	+/-
Peak Hour Truck Prohibition	+	+	+/-	+/-	+	+/-	+/-
Livable Communities	+	+	+	+	+	+	+
Concurrency Management System	+	+	+	+	+	+	+
Transportation Impact Fees	+/-	+	+	+/-	+/-	+	+
Reversible Flow Lanes	+/-	+	+	+	+	+/-	+/-
Participate in LRTP Projects	+	+	+	+	+	+	+

+: compares favorably with criteria (green)
-: compares unfavorably with criteria (red)
+/- compares neutrally with criteria (yellow)

7. Project Bank

Project Number:

1

Project Name:

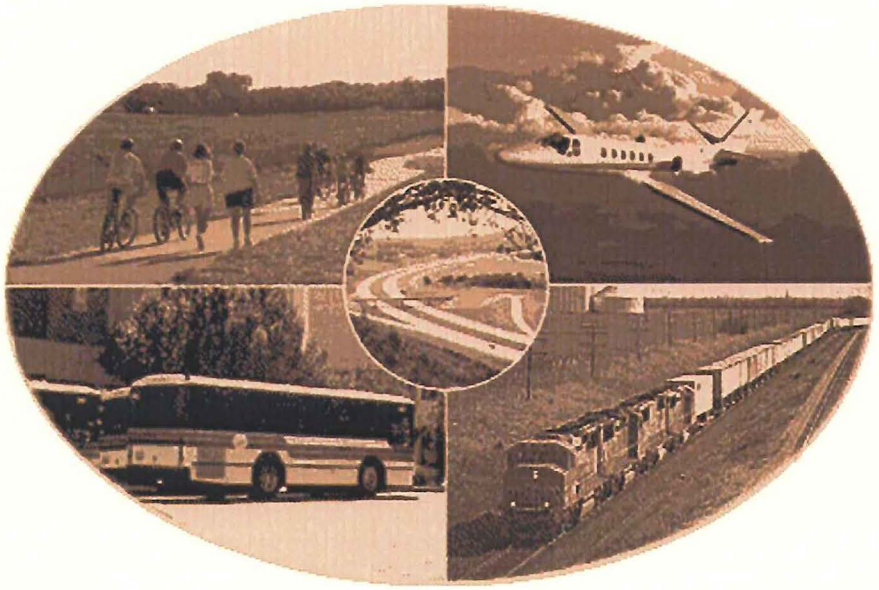
Attain People's Transportation Plan Funds

Project Category:

Roadway

Purpose:

The purpose of this project is to enhance the City's ability to plan, design and construct roadway and transit projects by attaining additional funding for them.



Need:

Doral, having incorporated after November of 2002, is not eligible to receive funds allocated as part of the People's Transportation Plan. Twenty percent of funds collected as part of this ½ penny sales tax goes to the municipalities, and is distributed in a prorated share based on population. Doral would be eligible for approximately $700,000 per year in funding. As of this date Doral has no dedicated source of funding for transportation projects, and therefore has very little control over what projects are planned and implemented on the transportation network.

Description:

Work with the Miami-Dade County Board of County Commissioners to have Doral's share of this funding approved.

Cost:

Planning:	NA
Design:	NA
Construction:	NA

7. Project Bank

Project Number:

2

Project Name:

Apply for Local Agency Program Certification

Project Category:

Roadway

Purpose:

The purpose of this project is to take advantage of the opportunity to administer its own transportation projects by receiving federal funds via a reimbursement process administered by FDOT through the Local Agency Program.

Need:

The nature of the roadway network in Doral, leaves the City with little control over its fate. There are few if any local roads. The vast majority of roads are under the control of other entities, particularly MDCPW and FDOT. Doral needs to have excellent working relationships and partner with these entities in order to have its voice heard regarding future planning and implementation along these facilities.

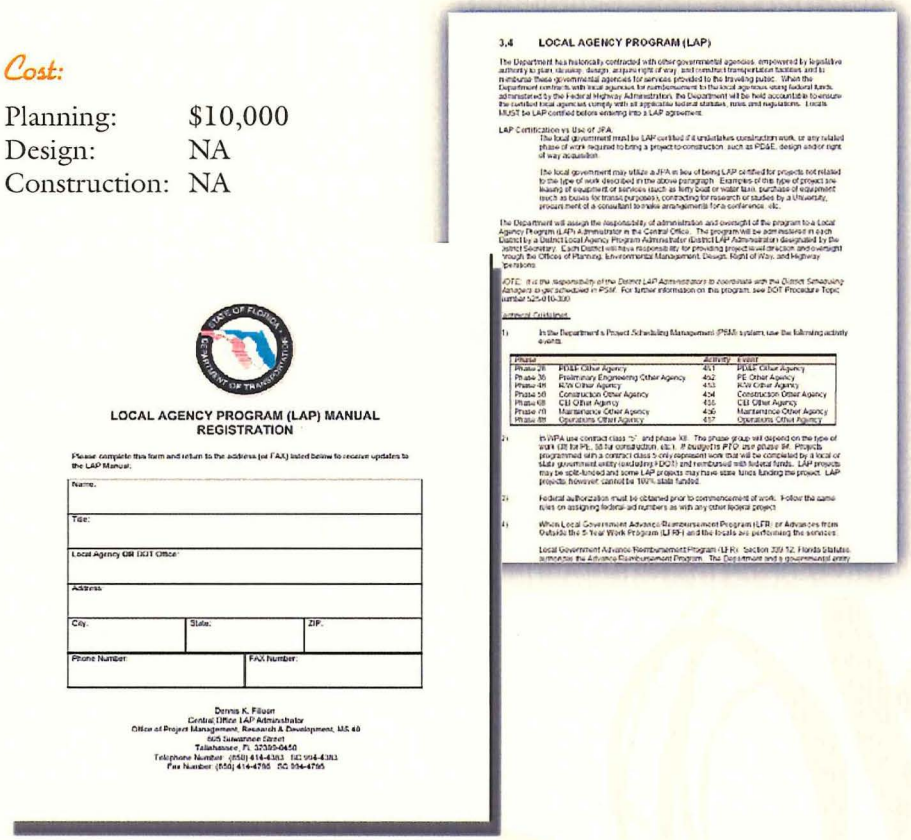
Description:

The program allows FDOT to forge contractual relationships with local governmental agencies that have the authority to plan, develop, design, acquire right-of-way, and construct transportation facilities. Local agencies must be LAP-certified before entering into a LAP Agreement. FDOT is responsible for ensuring the certified Local Agencies comply with all applicable Federal Statutes, rules and regulations. Local Agencies are reimbursed with Federal funds administered by the Federal Highway Administration (FHWA).

The Local Agency Program (LAP) is administered in each District by a District LAP Administrator designated by the District Secretary. The District LAP Administrator consults and advises the Local Agency on project management procedures to be followed. The level of assistance provided is based on the nature of each project and the demonstrated capabilities of the Local Agency. In addition, the District Administrator annually selects certain projects for a Process Review. At this time, District Six does not grant LAP certification for right-of-way projects.

Cost:

Planning:	$10,000
Design:	NA
Construction:	NA



3.4 LOCAL AGENCY PROGRAM (LAP)

LOCAL AGENCY PROGRAM (LAP) MANUAL REGISTRATION

Please complete this form and return to the address (or FAX) listed below to receive updates to the LAP Manual.

Name:

Title:

Local Agency OR DOT Office:

Address:

City: State: ZIP:

Phone Number: FAX Number:

Dennis K. Filson
Central Office LAP Administrator
Office of Project Management, Research & Development, MS 46
605 Suwannee Street
Tallahassee, FL 32399-0450
Telephone Number: (850) 414-4383 SC 994-4383
Fax Number: (850) 414-4786 SC 994-4786

7. Project Bank

Project Number:

3

Project Name:

Haul Road

Project Category:

Roadway

Purpose:

The purpose of this project is to assist in focusing the movement of trucks by providing them a segregated route for their travel.

Need:

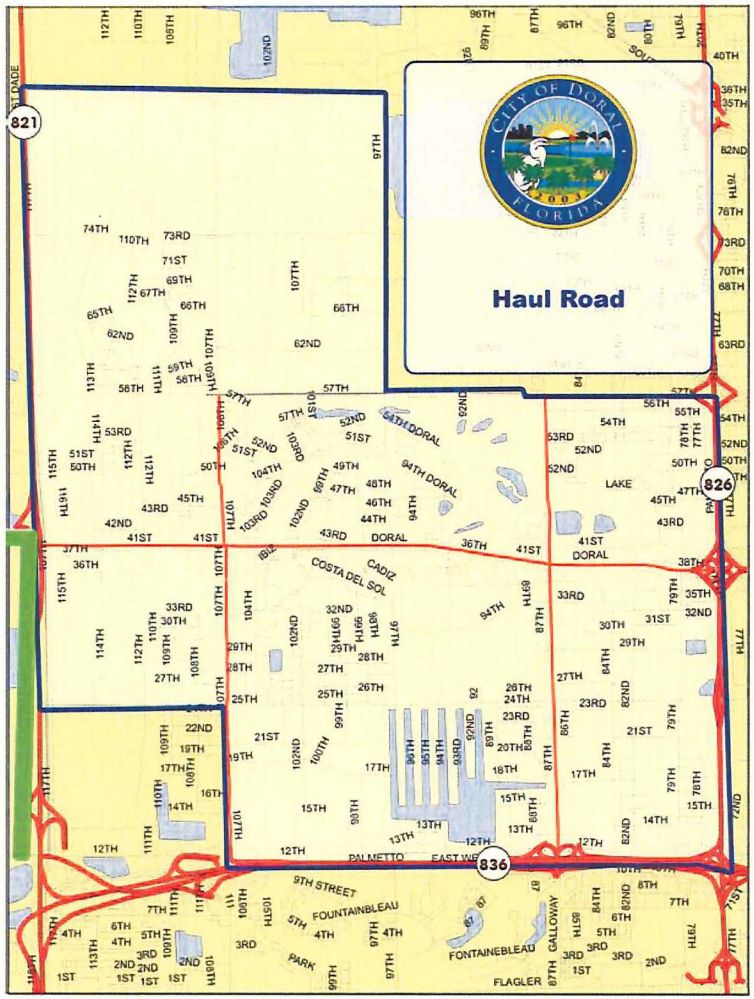
The automobile / truck mix on many of the roadways in Doral has created a situation where levels of service have begun to deteriorate prematurely. Truck management would assist in improving mobility in the City.

Description:

The City supports and will work with the necessary authorities to plan, design and implement a truck route west of the turnpike between 41st Street and 12th Street, to provide access for quarry hauling vehicles, so they do not have to mix with automobiles on other streets as frequently. This project should be formally defined and attempted to be placed on the LRTP and TIP.

Cost:

Planning:	$ 750,000
Design:	$ 1,000,000
Construction:	$ 4,000,000 (excludes ROW acquisition)



7. Project Bank

Project Number:

4

Project Name:

25th Street Truck Route

Project Category:

Transportation Demand Management

Purpose:

The purpose of this is to develop an interim step in the process of segregating trucks and automobiles to the extent it is possible.

Need:

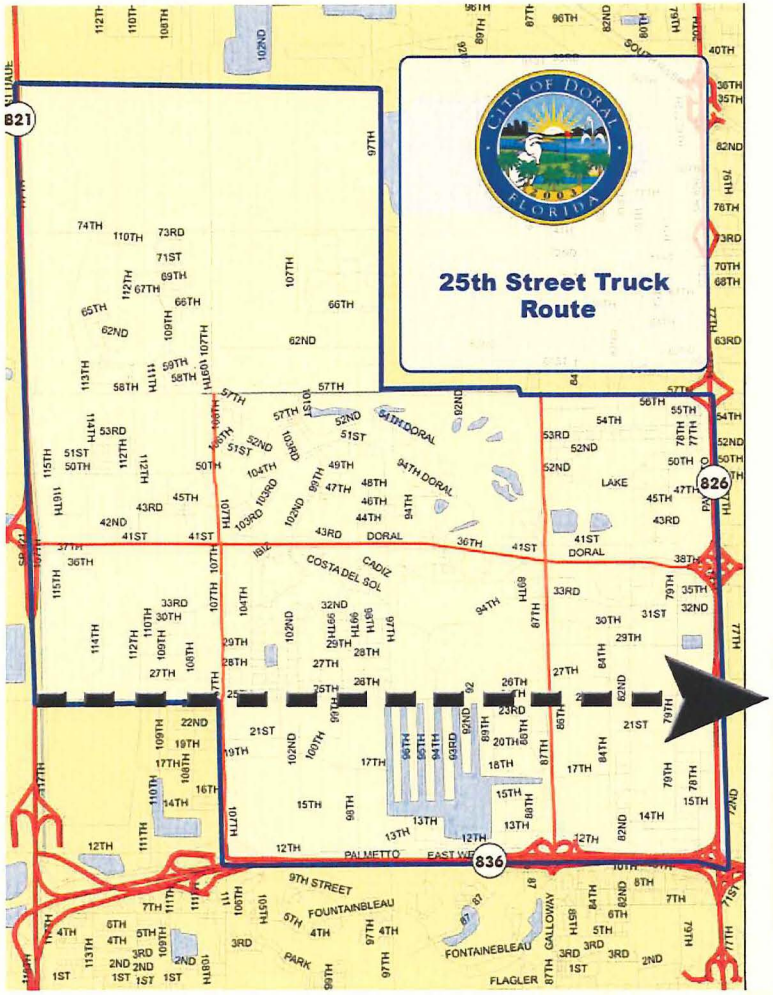
The vast number of trucks mixing with automobile traffic, particularly in peak hours, is exacerbating already deteriorating levels of service. The land use mix essentially has residential traffic in the north west of the City, service industry in the center of the City and light industrial to the South. It appears that 25th Street would be a natural truck route.

Description:

The City should work in cooperation with the freight and rock haulers, to develop a voluntary truck route that would be used to carry a majority of traffic, particularly in the peak hours, until more formal and permanent measures can be developed. This route should be explored as part of the Doral Heavy Truck Movement Mobility Study recommended in this master plan.

Cost:

Planning:	$15,000
Design:	$ 3,000
Construction:	$30,000



7. Project Bank

Project Number:

5

Project Name:

Support 25th Street via duct from Airport to Turnpike

Project Category:

Roadway

Purpose:

The purpose of this is to provide trucks with an exclusive route, from their warehouse locations in Doral, to the Airport and through Doral.

Need:

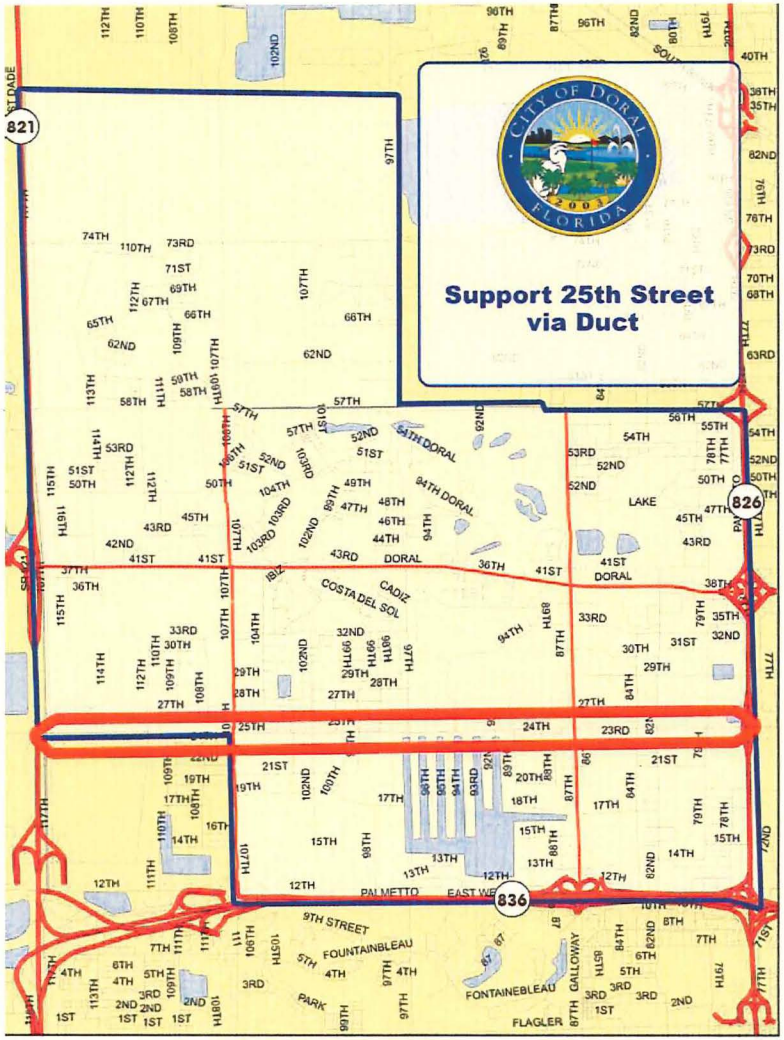
The significant number of heavy trucks, both freight and quarry, mixing with automobile traffic exacerbates already deteriorating levels of service. The segregation of trucks and automobiles through the provision of an exclusive route would help mitigate this situation.

Description:

Doral should advocate for this solution, working within the FDOT and MPO processes to assure that it comes to a reality. The NW 25th St. project has LRTP Priority 2 funding and is planned to construct a new 2 lane viaduct from NW 68th Ave. to NW 77th Ave. into Doral. This is a very important area of the airport. This project will be done jointly by FDOT and MDAD. The City should explore options to extend this facility to the Turnpike.

Cost:

Planning: NA
Design: NA
Construction: NA



Project Number:

6

Project Name:

Transportation Impact Fees

Project Category:

Transportation Demand Management

Purpose:

The purpose of this project is to develop a method of charging impact fees to the development community, so that various transportation projects can be planned, designed and constructed to enhance mobility in the City.

Need:

As mobility becomes more constrained in Doral in large part due to the continued development of residential units and businesses, various transportation projects designed to alleviate the congestions such as those recommended in this master plan, will need to be built. The process for attaining funds for transportation projects is highly competitive, and local funds always enhance a city's ability to move projects forward in an expedited manner.

Description:

The City should examine their ability to utilize impact fees from developments to raise funds for transportation projects.

Cost:

Planning:	$50,000
Design:	NA
Construction:	NA

7. Project Bank

Project Number:

7

Project Name:

Doral Heavy Truck Movement / Mobility Study

Project Category:

Transportation Demand Management

Purpose:

The purpose of this study is to work on a regional basis through the MPO and FDOT and in cooperation with the trucking industries to create goals, objectives, policies, and implementation procedures, which will increase mobility for trucks and passenger vehicles alike.

Need:

Mobility in Doral is influenced by multiple factors, including land use, major expressways, section line roads, lack of local streets, and truck traffic. Tens of thousands of vehicles converge on Doral each day. The City experiences significant cut through traffic as well as destinational traffic for those that live and work in the area. In addition to the passenger automobile, freight and rock quarry trucks utilize the same roads. The roadway network is typified by section line roads with little if any interior access. The truck, automobile mix exacerbates an already deteriorating LOS condition. The City is interested in working with the trucking industries to find acceptable methods by which to enhance mobility in the region.

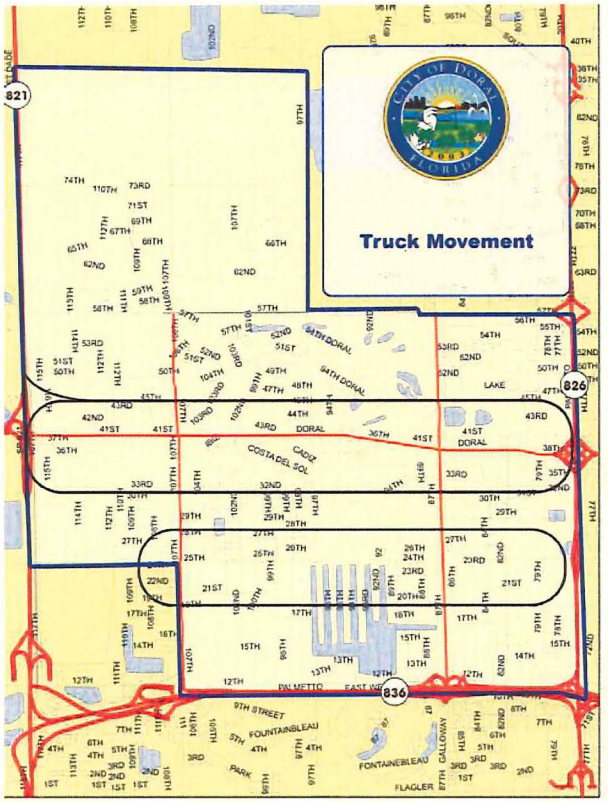
Description:

The City should request the MPO study this further and work to implement improvements. This project would seek to develop strategy with the consensus of the citizens, business, trucking industries in Doral, as well as the MPO and FDOT, for an immediate implementation strategy to ameliorate the condition. The City would request that this study be performed under the MPO's Unified Planning Work Program. The following scope outline has been developed:

- Public Involvement / Consensus Building
- Previous Study Review / State of the Art Truck Management Trends
- Identification of Origins, Destinations, Generators, Land Use and Levels of Service
- Network Analysis Model of Traffic Behavior as a Result of Recommended Improvements
- Develop Truck Management Goals
- Develop Specific Projects for Implementation
- Develop Monitoring Process

Cost:

Planning: $75,000
Design: NA
Construction: NA



Project Number:

8

Project Name:

Peak Hour Truck Prohibition

Project Category:

Transportation Demand Management

Purpose:

The purpose of this is to develop an interim step in the process of segregating trucks and automobiles to the extent it is possible.

Need:

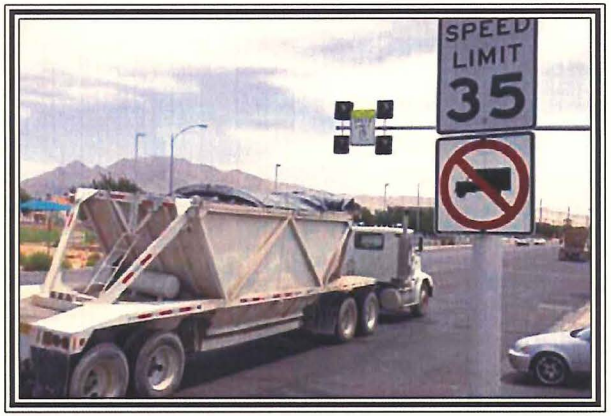
The vast number of trucks mixing with automobile traffic, particularly in peak hours, is exacerbating already deteriorating levels of service. Commuter traffic is heaviest in the A.M. (7-9 a.m.) and P.M. (4-6 p.m.). A voluntary limitation of movement of trucks on 41st Street during these peaks may ease congestion, while more permanent means are sought.

Description:

The City should work in cooperation with the freight and rock haulers, to develop at first a voluntary moratorium on truck movement in the peak hours along 41st Street, until more formal and permanent measures can be developed. Research into legal ramifications should be developed.

Cost:

Planning:	$10,000
Design:	NA
Construction:	NA



7. Project Bank

Project Number:

9

Project Name:

Additional County and State Funding

Project Category:

Transportation Demand Management

Purpose:

The purpose of this project is to raise funds for transportation projects.

Need:

Doral has many transportation needs, which are enumerated in this master plan.

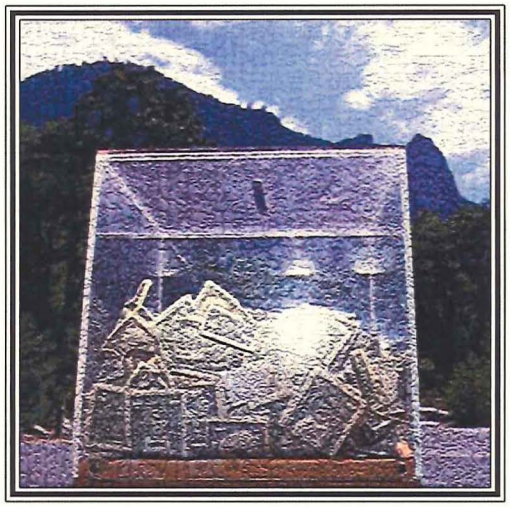
Funding for these projects does not exist other than what is generated from tax revenues used to operate the remainder of the City. This puts Doral at a disadvantage when compared to other cities that have dedicated a dedicated funding source for the projects. Because Doral is effected by transportation that is regional in nature, it must find ways of coping with the traffic. New tolls and new interchanges will encourage more external traffic to cut through on Doral's streets. State and county funding above and beyond the amount that could be allocated as part of the People's Transportation Plan should be developed.

Description:

The City should work with state and county officials and attain additional funding for the implementation of transportation projects that will mitigate the external strain placed upon its roads. Additional funding from the PTP, proceeds from turnpike and MDX tolls or a toll on Doral roads (97th Avenue @ 12th Street) should be developed help pay for improvements.

Cost:

Planning:	$10,000
Design:	NA
Construction:	NA



7. Project Bank

Project Number:

10

Project Name:

Comprehensive Signal Timing Study

Project Category:

Roadway

Purpose:

The purpose of this is to assure that the signals along the major east/west and north/south corridors (58th Street, 41st Street, 25th Street, 12th Street, 87th Avenue, and 107th Avenue) are synchronized so that they afford the maximum progression of vehicles at the most efficient Level of Service.

Need:

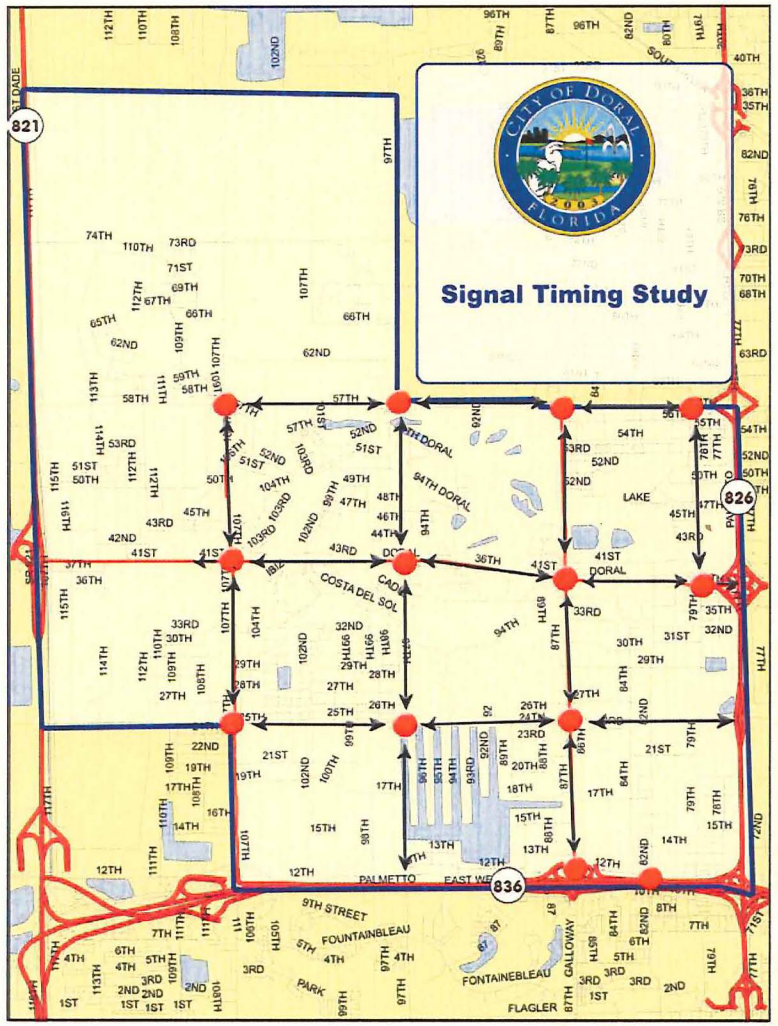
Many of the major transportation corridors in Doral are exhibiting deteriorated levels of service due to constriction at the intersections.

Description:

This project should coordinate with Miami-Dade County Public Works Department Signals Division to examine the synchronization of the signals on the major county section line roads.

Cost:

Planning:	$60,000
Design:	NA
Construction:	NA



7. Project Bank

Project Number:

11

Project Name:

Transportation Liaison / Transportation Management Association

Project Category:

Transportation Demand Management

Purpose:

The purpose of this is to coordinate and manage transportation in the City of Doral. This position would act as a liaison between the City, the citizens, the development community, local employers, trucking interest, and other local, county and state transportation authorities. The primary focus would be to manage concurrency, oversee developer activity, and interface with South Florida Commuter Services (SFCS) and local businesses to implement TDM Strategies.

Need:

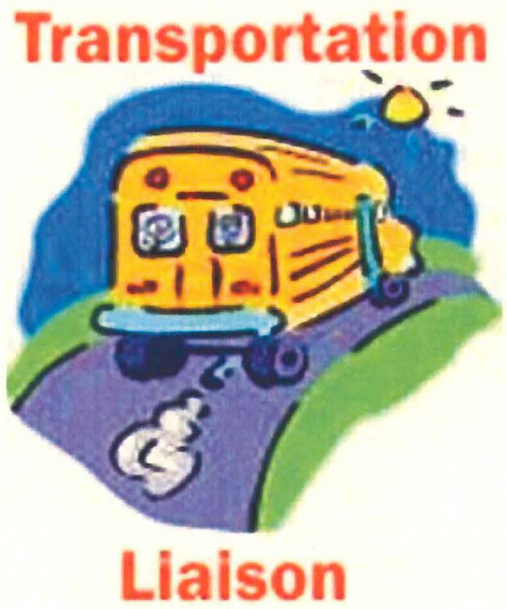
Doral is one of the most accessible locations within Miami-Dade County. Many constituencies need to be served, each with various interests. Local residents have differing needs and goals than the trucking interests, land developers, area employees and pass by users of the transportation system. The constant is that all desire and would benefit from greater mobility. Implementing TDM strategies would provide the opportunity to have less automobile trips and free up capacity on the network.

Description:

This position would coordinate Transportation Demand Management strategies with local employers, act as a liaison primarily with SFCS and with MDCPW, MDT, MPO, and FDOT, in an attempt to develop and implement TDM strategies and other projects as a result of this report. In addition this could develop a trip reduction ordinance or programs with new developments. This could be an additional position, one which could be added to an existing position.

Cost:

Planning:	$10,000 - 40,000 per year, depending on formalized description of services
Design:	NA
Construction:	NA



7. Project Bank

Project Number:

12

Project Name:

Concurrency Management System

Project Category:

Transportation Demand Management

Purpose:

The purpose of this is to create a simple and easy method by which development and concurrency are tracked, so as to ease the development approval process, and maintain the ability to develop.

Need:

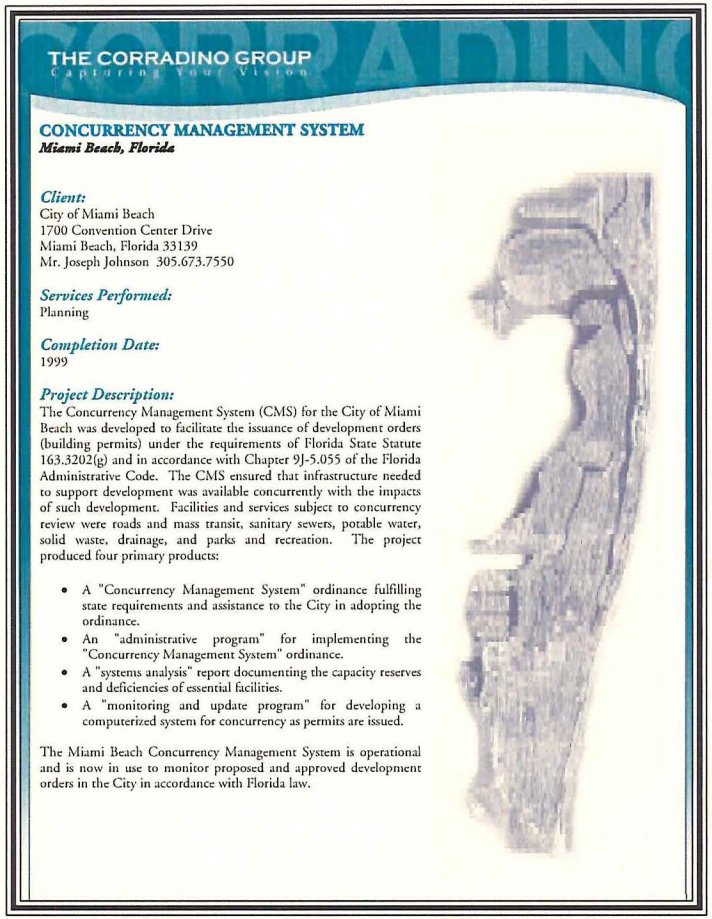
The pace of development is rapid in Doral. Applications are received frequently and decisions on their ability to meet City and State requirements are needed in an expedited manner. Miami-Dade County has turned over tracking of concurrency to the City, and there is currently no standard method by which available capacities are maintained. Development of a concurrency management system would save time, money and provide a consistent tracking mechanism, which is easily verified and maintained.

Description:

The project would entail the development of an automated windows based computer program that would track capacities, and subtract demand to keep a running total of the availability of capacities, and maintain the ability to grow. This program should have the ability for the developers or planners to examine information on remaining capacities, and the ability to reserve capacities as they enter the development queue. The program should be uncomplicated to use and easily updated on a regular basis.

Cost:

Planning: $65,000
Design: NA
Construction: NA



THE CORRADINO GROUP

Capturing Your Vision

CONCURRENCY MANAGEMENT SYSTEM

Miami Beach, Florida

Client:
City of Miami Beach
1700 Convention Center Drive
Miami Beach, Florida 33139
Mr. Joseph Johnson 305.673.7550

Services Performed:
Planning

Completion Date:
1999

Project Description:
The Concurrency Management System (CMS) for the City of Miami Beach was developed to facilitate the issuance of development orders (building permits) under the requirements of Florida State Statute 163.3202(g) and in accordance with Chapter 9J-5.055 of the Florida Administrative Code. The CMS ensured that infrastructure needed to support development was available concurrently with the impacts of such development. Facilities and services subject to concurrency review were roads and mass transit, sanitary sewers, potable water, solid waste, drainage, and parks and recreation. The project produced four primary products:

- A "Concurrency Management System" ordinance fulfilling state requirements and assistance to the City in adopting the ordinance.
- An "administrative program" for implementing the "Concurrency Management System" ordinance.
- A "systems analysis" report documenting the capacity reserves and deficiencies of essential facilities.
- A "monitoring and update program" for developing a computerized system for concurrency as permits are issued.

The Miami Beach Concurrency Management System is operational and is now in use to monitor proposed and approved development orders in the City in accordance with Florida law.

Project Number:

13

Project Name:

Implement Transportation Demand Management Strategies

Project Category:

Transportation Demand Management

Purpose:

The purpose of this project is to utilize alternative means to move people, particularly the TDM strategies offered by South Florida Commuter Services.

Need:

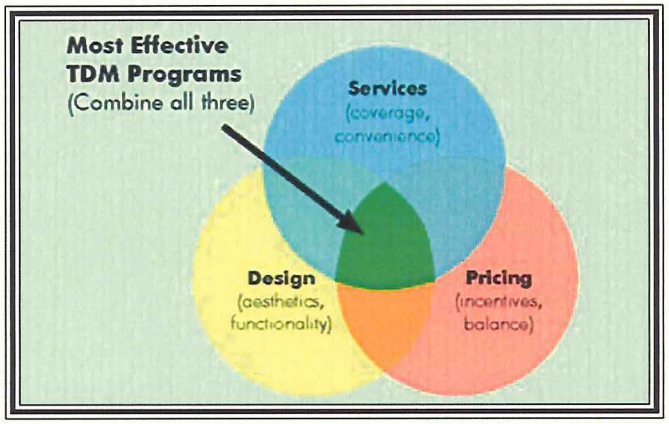
As the Transportation Master Plan has shown, tens of thousands of people either live, work, play or drive through Doral on a daily basis. There is a significant commuting population employed by the many businesses in the City. The roadway network is quickly becoming overloaded manifesting in long commute times, even for those who both live and work in the City.

Description:

This would essentially utilize the services offered by the South Florida Commuter Services, by encouraging businesses to take advantage of the programs. The City should consider incentvizing the use of these services, and assisting SFCS by helping them gain access to major employers in the City. A transportation liaison would be key in facilitation their implementation.

Cost:

Planning:	Can be implemented as part of the Transportation Liaison Position
Design:	NA
Construction:	NA



7. Project Bank

Project Number:

14

Project Name:

Participate in LRTP Projects

Project Category:

Transportation Demand Management

Purpose:

The purpose of this study is to work on a regional basis through the MPO and FDOT to participate in the further development of roads in Doral.

Need:

Doral is extremely accessible and therefore experiences much non local traffic. It is acknowledged that this traffic needs options to flow through the City. As a developing city there are natural connections between existing facilities. These should be strengthened thereby creating a hierarchy of roads where one loosely exists at this point. Doral needs to be officially involved in the planning, design and construction phases of these projects.

Description:

The City should work with the MPO to become part of the project team in all projects as to advance the priority of these projects through their expedited study.

41st Street Express Arterial.

This facility services people coming to and from the turnpike from the north and south, who either have their origin or destination in Doral or are passing through. Its link with SR 112 makes it particularly attractive for trips traversing the county. This would study 41st Street as an express street, with intelligent transportation systems technology, grade separations, reversible lanes etc.) the study area should be between SR 112 and Florida's Turnpike.

87th Avenue

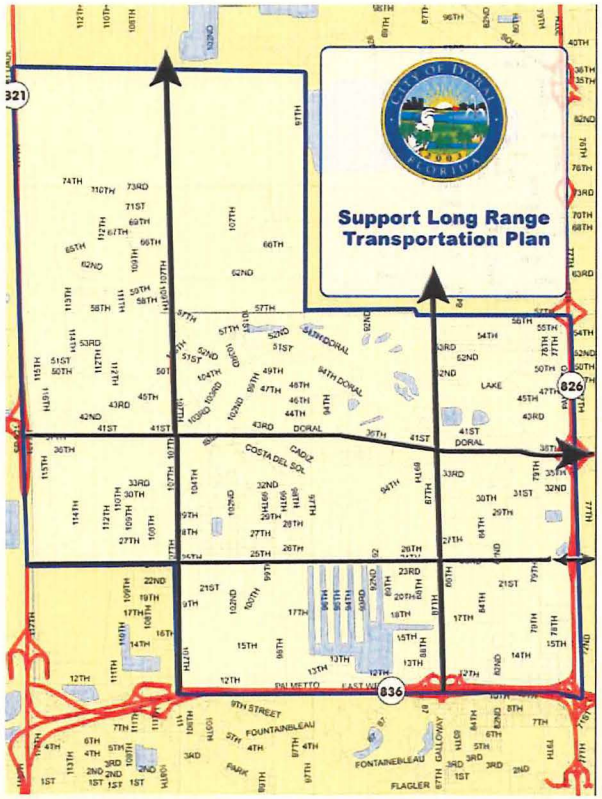
This facility should go through the city and link with Okeechobee Road. Currently it is only planned that the road would be 4 lanes between 58th Street to Okeechobee. The City should support it being 6 lanes from 58th Street to Okeechobee.

107th Avenue

This facility planned for widening from 4 to 6 lanes from NW 41st St. to NW 25th St. Doral should support it being widened to 6 lanes through the City, connecting with Okeechobee Road.

25th Street

This project currently plans to construct a new 2 lane viaduct from NW 68th Ave. to NW 77th Ave. into Doral. Doral should support this project and its extension to the Turnpike.



Cost:

Planning:	NA
Design:	NA
Construction:	NA

7. Project Bank

Project Number:

15

Project Name:

Level of Service Improvements at Intersections

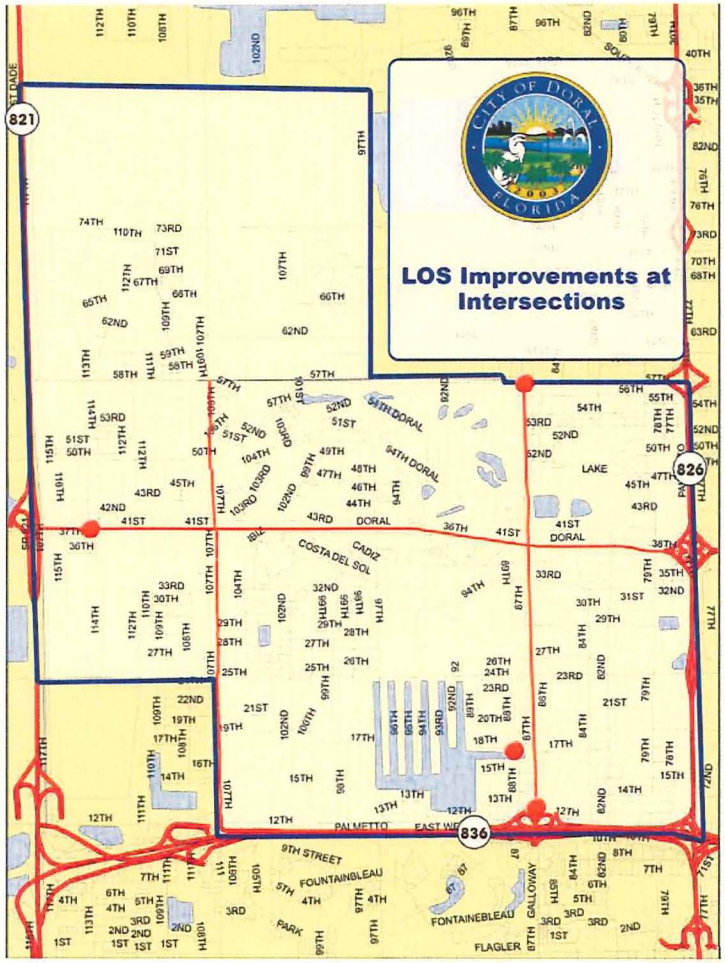
Project Category:

Roadway

Purpose:

This study is designed to improve the level of service at major signalized through various improvements.

Location	Mitigation
58th Street @ 87th Avenue	Add South Bound Right Turn Lane
12th Street @ 87th Avenue	Add East Bound Through Lane
58th Street @79th Avenue	Optimize
41st Street @ 107th Avenue	Add East Bound Dual Left Turn Lanes
	Add East Bound Right Turn Lane
	Add West Bound Triple Left Turn Lanes
	Add North Bound Dual Left Turn Lanes
41st Street @ 97th Avenue	Add North Bound and South Bound Left Turn Lanes
41st Street @ 87th Avenue	Add North Bound Triple Left Turn Lanes
41st Street @ 114th Avenue	Add North Bound Triple Left Turn Lanes
41st Street @ 112th Avenue	Add North Bound Triple Left Turn Lanes
25th Street @ 107th Avenue	Add West Bound Right Turn Lane
25th Street @ 79th Avenue	Optimize
12th Street @ 107th Avenue	Optimize
12th Street @ 87th Avenue	Add East Bound Through Lane
Study the need for a traffic signal @ 114th Avenue and 50th Street	



Need:

Many of the signals in Doral are exhibiting deteriorated levels of service, which may be able to be improved though more in-depth analysis. Results may include, signal optimization, additional turn lanes, acceleration or deceleration lanes, pedestrian islands, or grade separations.

Description:

The scope of services for this project should focus on examining the existing traffic counts at intersections that are experiencing marginal levels of service. Recommendations for how to improve the levels of service at these intersections should be made. These may include needs for right-of-way, additional turning lanes or optimization. This should occur as shown in the above table.

Cost:

Planning: $7,000/Intersection
Design: $10,000-$100,000/Intersection
Construction: $50,000-$250,000/Intersection

7. Project Bank

Project Number:

16

Project Name:

Municipal Circulator

Project Category:

Transit

Purpose:

The purpose of this would be to study the need for a community circulator to complement existing MDT services.

Need:

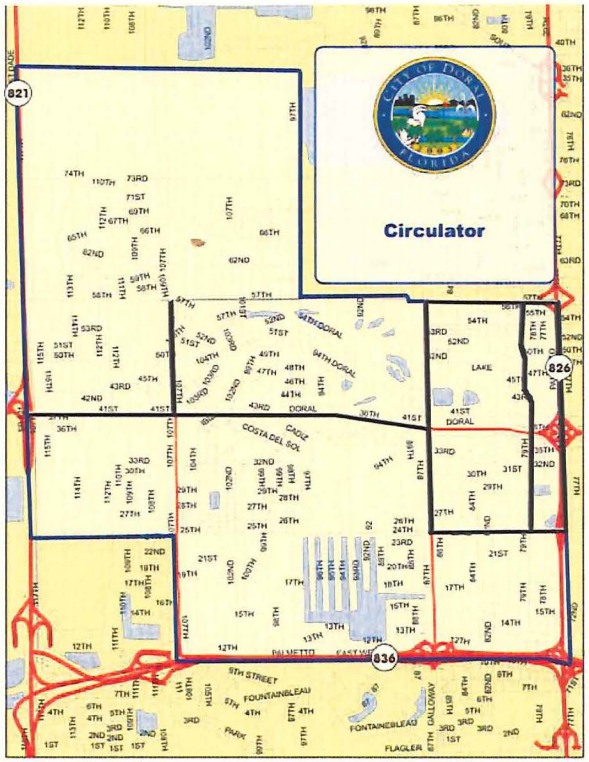
Many people in Doral would be interested in using transit if it were provided to them in a frequent and convenient manner. Several ideas have been developed for potential services. These include, park and ride lots with shuttles at either the Palmetto Expressway and the Turnpike, servicing employers along 41st Street, or lunch-time service which takes employees to the various restaurants in the area. 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.

Description:

This study would examine potential circulator transit by examining the existing service, the population demographics, of income and transit dependency, as well as potential user groups. Also the scope would look at potential transit generators. It would survey potential riders and recommend a potential transit routes, implementation procedures, and cost of operations and maintenance. Comparisons of the use of different operations, (city, MDT or private operators) will be provided. Information relative to the development of an interlocal agreement with MDT as well as potential RFP's soliciting operators can be provided.

Cost:

Planning:	$40,000
Design:	NA
Implementation:	$100,000 - 200,000/year



Project Number:

17

Project Name:

Livable Communities

Project Category:

Transportation Demand Management

Purpose:

The purpose of this project is to enhance pedestrian connections as a means to facilitate pedestrianism as an alternative. In addition this can assist in beautifying the roadway network and creating character in Doral.

Need:

As the roadways become ever more crowded, and vehicular trips take longer, more people will be searching for alternative means of travel. The greatest opportunity for redevelopment is during the midday peak hours when many people choose to walk to lunch or midday errands at the various nearby commercial areas. Pedestrian crossings at many of Doral's automobile oriented streets is uncomfortable and potentially hazardous.

Description:

Work with FDOT's Planning Department to see if the Livable Communities initiatives can be implemented on the major transportation thoroughfares. Recommendations may include enhanced pedestrian crossings, striping, count down pedestrian lights, special signal phasing during periods of high pedestrian use, mid block crossings, bicycle lanes, bus pull out bays, enhanced transit stops, wider sidewalks, and enhanced landscaping.

Cost:

Planning:	$70,000 per study
Design:	TBD
Construction:	TBD

7. Project Bank

Project Number:

18

Project Name:

Link Transit with Palmetto Metrorail Station or East/West Transit Line

Project Category:

Transit

Purpose:

Doral is one of the most accessible Cities in Miami-Dade County, serviced by three expressways, and major county arterials which service as a conduit for regional traffic. In addition it is in close proximity to Miami International Airport. The City wishes to enhance these connections by more formally linking with the Palmetto Metrorail station on the future East/West corridor, first by bus, servicing the origins and destinations in Doral, then by a potential extension of Metrorail into Doral.

Need:

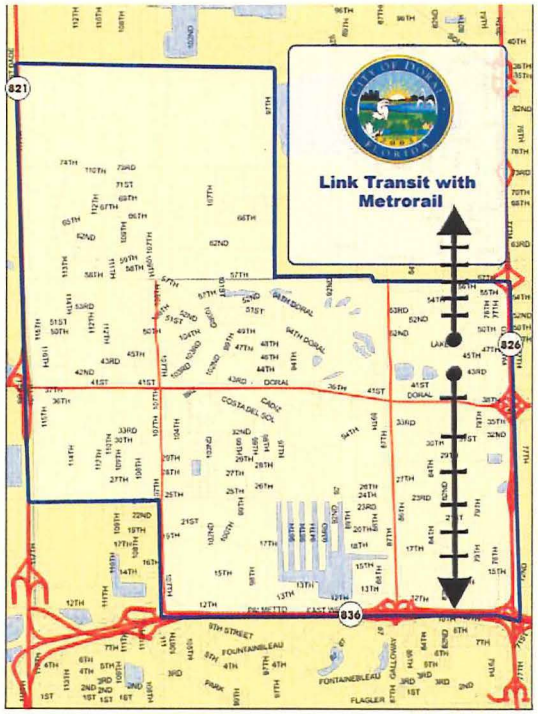
Doral's Comprehensive Plan, has called for the redevelopment of a Central Business District (CBD) in the north east quadrant of the city, generally in the area bound by 58th Street, 87th Avenue, 25th Street and the Palmetto Expressway. Doral recognizes that its ability to enhance its status as a major economic generator and be a city where people can live, work and play is heavily dependant on it linking regionally, with the Metrorail. The ability of this CBD to thrive will be heavily dependant on alternative transportation, because there is limited roadway capacity in the City.

Description:

Doral should begin coordination with MDT, MPO, FDOT and other pertinent parties, to plan for an extension of transit into the future Downtown Doral. This will initially result in amending the Long Range Transportation Plan, then identifying funding sources and having the project placed on the Transportation Improvement Plan for planning, design and construction. Such a short extension may not require federal funding, and therefore be significantly less time consuming to implement.

Cost:

Planning:	$700,000 (various stages)
Design:	$20,000,000
Construction:	$200,000,000



7. Project Bank

Project Number:

19

Project Name:

Development of Park and Ride Lots

Project Category:

Transit

Purpose:

The purpose of this study is to formally identify the need, feasibility and location of park and ride lots within the City of Doral.

Need:

Utilization of Park and Ride lots may help alleviate traffic congestion in Doral by intercepting vehicle trips at the City's perimeter and distributing people via transit to their destinations. This can be coupled with the proposed municipal circulator, or various other transit opportunities.

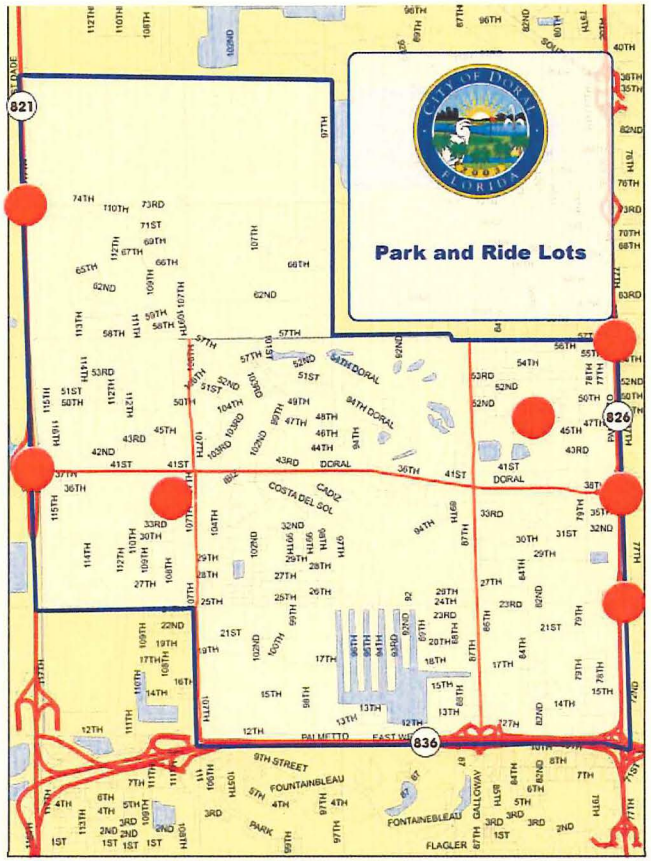
Description:

This study should identify the need, location and feasibility of potential park and ride locations. The scope would consist of examining areas of high vehicular access, areas of heavy transit usage, the potential for transit usage along major corridors, the potential modes of transit to service such facilities, the cost of property acquisition, potential ridership and the implementation time frame. Potential areas interest include:

- 41st Street @ Turnpike
- 36th Street @ 826
- Area south of 41st Street @ 107th Avenue
- The Proposed Downtown Doral Redevelopment Area
- The Palmetto Metrorail Station
- 74th Street @ Turnpike
- 25th Street @ 826

Cost:

Planning:	$70,000
Design:	$400,000
Construction:	$4,000,000



7. Project Bank

Project Number:

20

Project Name:

Linear Parks on Available ROW

Project Category:

Transit

Purpose:

The purpose of this is to enhance internal connectivity of the citizens of Doral by using latent right-of-way on canal edges and in FPL easements. This would serve to provide an alterative transportation network for pedestrians and bikers, as well as create additional recreation space within the City.

Need:

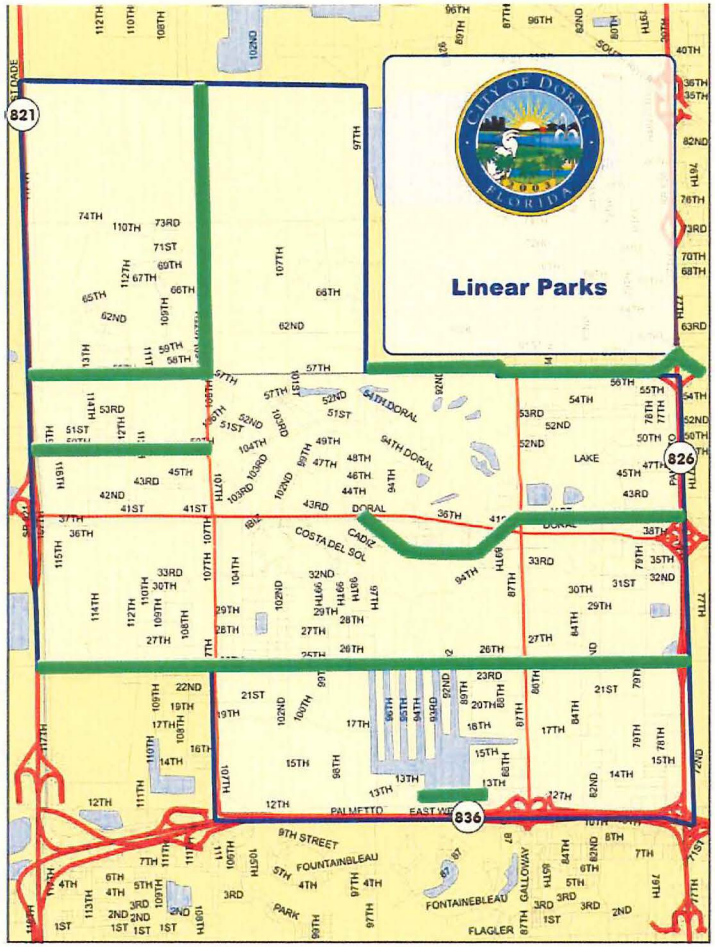
Doral's transportation network consists, almost solely on the County Section Line roads. Bicycle Facilities on these roadways are marginal or non existent. By utilizing latent rights-of-way, which are prevalent thought the community, access will be enhanced and beatification will occur.

Description:

This study should identify all canal, and utility easements in the City. Their owners should be identified and the right-of-way width should be gathered. Minimum standards for bicycle trails, pedestrian paths and vita courses should be developed. A pilot project should be planned. This could be along the 58th Street Canal between 107th Ave. and 112th Ave. Funding sources should be sought. Local and State transportation authorities should be coordinated, and a linear parks master plan should be developed, this should include locations of trail heads, activity centers, trails and general beautification.

Cost:

Planning: $60,000
Design: $ TBD
Construction: $ TBD



7. Project Bank

Project Number:

21

Project Name:

Access Management

Project Category:

Roadway

Purpose:

The purpose of this project is ease the flow of traffic by examining access management techniques were possible on the major roadways in the City.

Need:

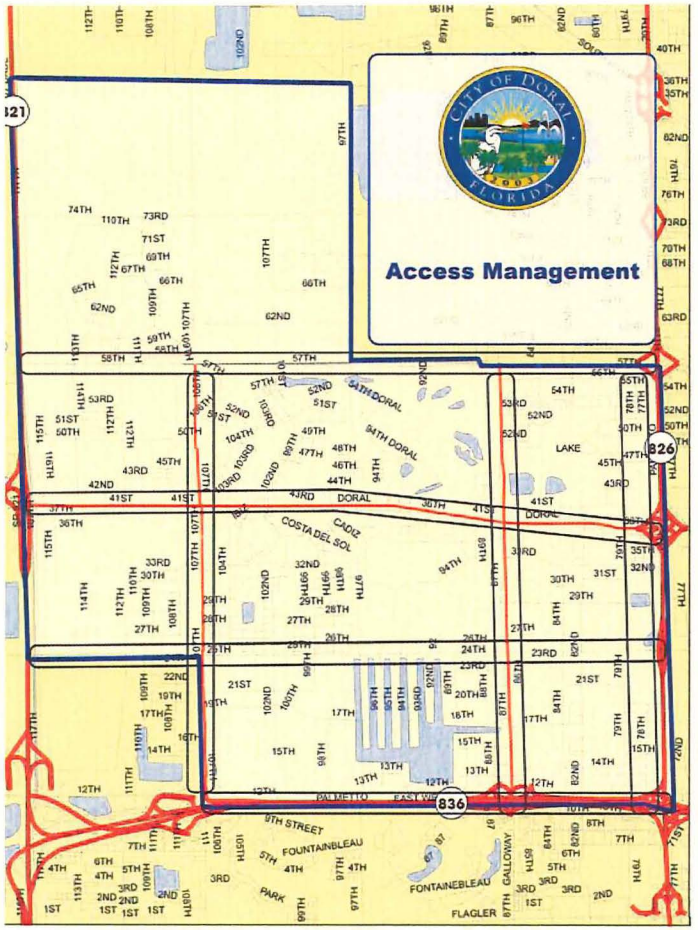
Many of the roadways in Doral serve multiple purposes. Each facility needs to have the ability to efficiently move vehicles, provide for the safe and convenient movement of pedestrians, as well as provide access to the businesses that line the roads edge. This project will examine each roadway and make specific recommendations to lessen the conflicts of vehicles. Results may include the consolidation of curb cuts, the elongation of medians to prohibit certain left turns in and out of retail and commercial areas, etc.

Description:

Working in conjunction with planners and designers regarding streetscape improvements an inventory of roadway conditions on each of the major through streets (58th Street, 41st Street, 25th Street, 12th Street, 107th Avenue 87th Avenue and 79th Avenue). This inventory should include areas and intersections of poor level of service, high accidents and areas receiving high complaints. Driveway counts needed to be performed to formally examine the extent of the problems. Recommendations should be made.

Cost:

Planning: $55,000
Design: TBD
Construction: TBD



7. Project Bank

Project Number:

22

Project Name:

Reversible Lanes

Project Category:

Transportation Demand Management

Purpose:

The purpose of this study is to take advantage of the latent capacity left on the major east/west and north/south corridors, particularly along 41st Street.

Need:

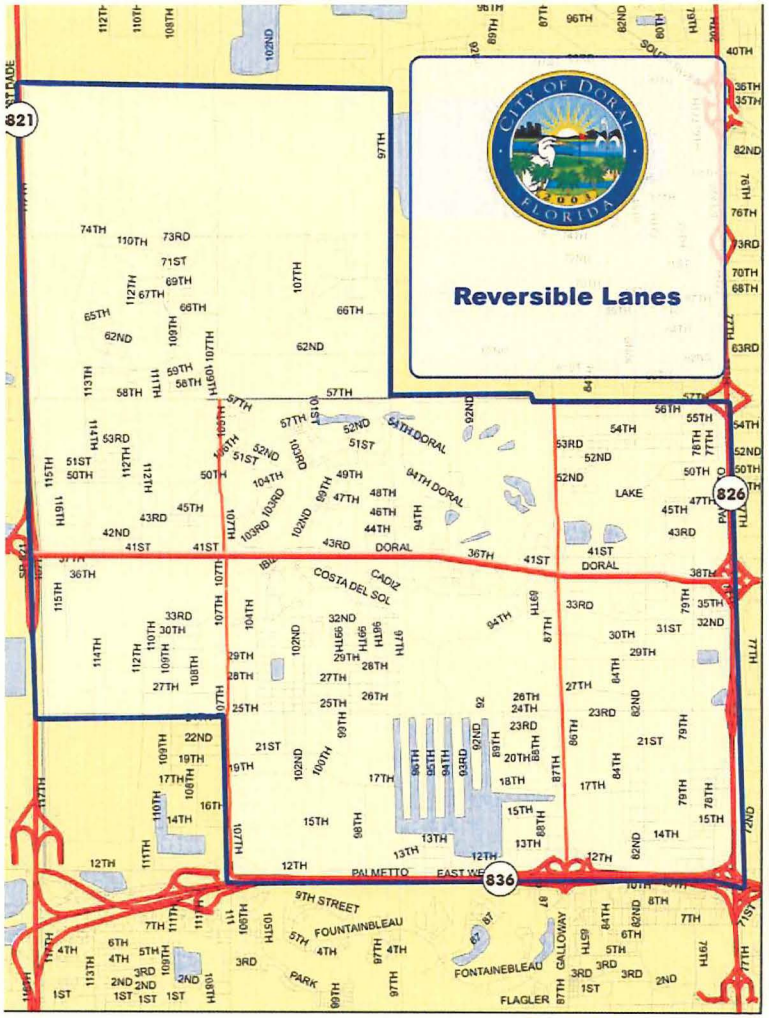
Traffic flow in Doral is highly directional. As such peak hour traffic flow can be at a LOS E or worse in one direction and LOS A in the other. Adding capacity to the directional flow by being able to utilize a lane from the other direction would add capacity at various periods of the day, when needed.

Description:

This project would research existing technologies, and projects where similar reversible lanes are in use. Study the opportunities to implement a similar project in Doral, by examining traffic flow patterns, right-of-way widths, connectivity and potential costs.

Cost:

Planning:	$50,000
Design:	NA
Construction:	NA



7. Project Bank

Project Number:

23

Project Name:

Maximize Capacity of Section Line, 1/2 section and 1/4 Section Roads

Project Category:

Roadway

Purpose:

The purpose of this is to maximize the capacity of all section line roads to enable maximum vehicular mobility on the existing but limited roadway network.

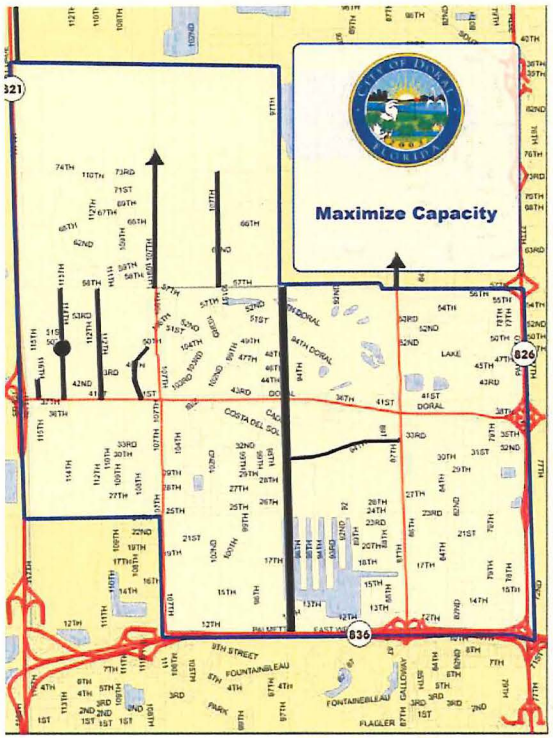
Need:

The need for this comes from the fact that there are limited roadways in which to carry traffic. Essentially all traffic is carried on the section line roads, and there is limited opportunity to provide access and mobility inside this major grid. As such the capacity of the existing roadways need to be maximized.

Description:

Several areas of concern were presented to the project team during the public involvement portion of this project. These are listed below. Others should be examined as they arise or are identified by the City over time. The appropriate analyses (LOS, Capacity, Turning Movements, Stop Sign and Signal Warrants) should be conducted. Coordination will need to be made with MDCPW and FDOT as appropriate. Locations currently identified include:

- Widen 97th Avenue to maximum cross section, between 12th Street and 58th Street.
- Widen 114th Avenue and 112th Ave. between 41st Street and 58th Street
- Extend 102 Avenue from 58th Street to 74th Street
- Extend 109th Avenue to 41st Street
- Extend 117 Avenue south of 41st Street and north to 90th Street, connect Turnpike via 117th Street North of 41st Street
- Examine the ability to enhance capacity along 107th Avenue between 41st Street and 58th Street
- Extend 87th Avenue completely through the City to connect with Okeechobee Rd.
- Extend 107th Avenue completely through the City to connect with Okeechobee Rd.
- Connect 33rd Street between 97th Avenue and 87th Avenue



Cost:

Planning: TBD +/- 40,000/Project
Design: TBD +/- 50,000-100,000/Project
Construction: TBD 1,000,000-10,000,000/Project

7. Project Bank

Project Number:

24

Project Name:

Enhanced ROW on 25th Street

Project Category:

Roadway

Purpose:

The purpose of this project is to gain more ROW for travel along 25th Street.

Need:

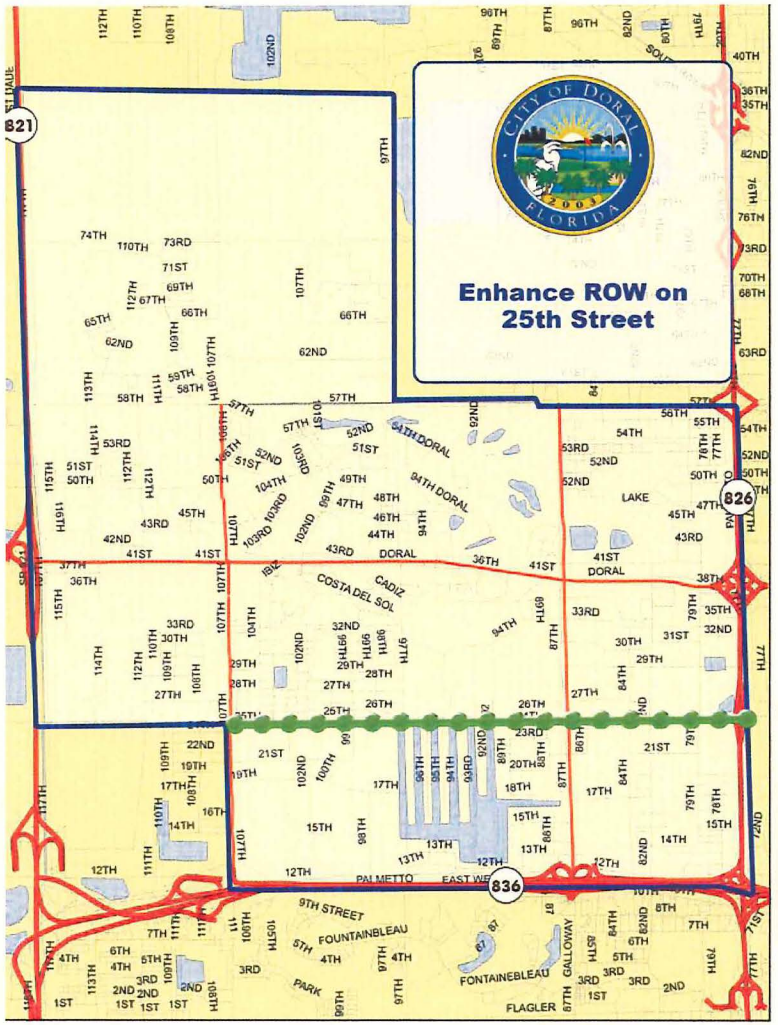
As mobility becomes more constrained, additional right-of-way may be required for either automobiles or alternative modes should they be planned.

Description:

The north side of 25th Street is lined by a canal. The ability to utilize this area for additional right-of-way should be examined. This could mean using the edges of the canal or covering it. Doral should coordinate with MDCPW and DERM to initiate this project.

Cost:

Planning:	$50,000 (initial stages)
Design:	TBD
Construction:	TBD



7. Project Bank

Project Number:

25

Project Name:

41st Street Roundabouts

Project Category:

Roadway

Purpose:

The purpose of this is to examine the feasibility of the implementation of roundabouts along 41st Street at 97th Avenue and 87th Avenue.

Need:

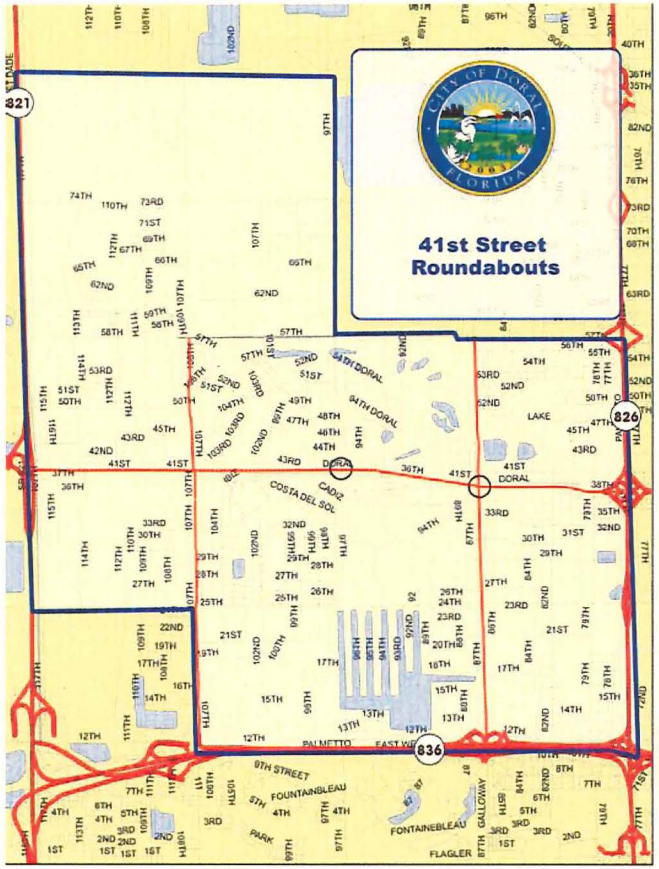
41st Street carries tremendous amounts of traffic in the a.m. , p.m. and midday peak periods. It is believed that roundabouts would enhance the flow of traffic through this corridor, as well as provide aesthetic enhancement and character to the community. The concept is similar to those facilities along Hollywood Boulevard in Hollywood.

Description:

Work with the MPO, MDCPW and FDOT to develop a feasibility study for such devices, examining minimum required right-of-way, the level of enhancement of flow, need and cost of any right-of-way that may need to be acquired, the cost of design and construction, the magnitude of disrupted traffic flow during construction, and research the ability to have the projects approved, funded and placed on the LRTP and eventually the TIP. This can be done either through the MPO as a project on the Unified Planning Work Program (UPWP), for which an application and scope should be submitted. It also can be done as a municipal grant from the MPO, which must be applied. This can also be done as an FDOT planning project if acceptable to that agency. Opportunities to attain funding for such a project should be developed.

Cost:

Planning:	$80,000
Design:	$500,000
Construction:	$5,000,000



7. Project Bank

Project Number:

26

Project Name:

Traffic Calming Program

Project Category:

Roadway

Purpose:

The purpose of this project is to assure that driving behavior and speeds are maintained in a reasonable manner and that vehicles use the appropriate routes.

Need:

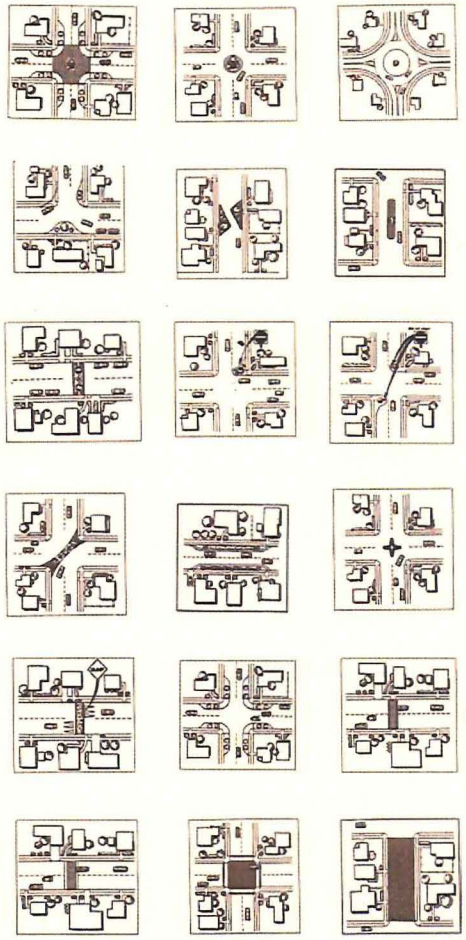
Doral experiences regional cut through traffic similar to a residential neighborhood on a smaller scale. It is important for the cut through traffic, as well as the destination traffic to be controlled in an appropriate manner. This means that traffic should be focused on locations where it desired, and that its speed should be controlled. Heavy truck traffic in residential neighborhood should be curtailed.

Description:

This project should examine the ability to focus the primary traffic calming tool, law enforcement, in the appropriate locations at the appropriate times. Speed limits should be posted at the municipal boundaries of major roadway facilities, where they are not currently. In areas were intrusion is not desired, the nature of the problem must be quantified, then a diverse program of enforcement and appropriate physical traffic calming devices should be planned. The goals would be primarily to control vehicle speeds, to protect pedestrians, as well as to safeguard residential areas from unwanted traffic intrusion. Coordination with Miami-Dade County Public Works division is necessary.

Cost:

Planning:	$45,000
Design:	TBD
Construction:	TBD



7. Project Bank

Project Number:

27

Project Name:

Turnpike Interchange at 25th Street

Project Category:

Roadway

Purpose:

The purpose of this study is to facilitate mobility by providing more access to the Turnpike, primarily to facilitate lunch movement along 25th Street.

Need:

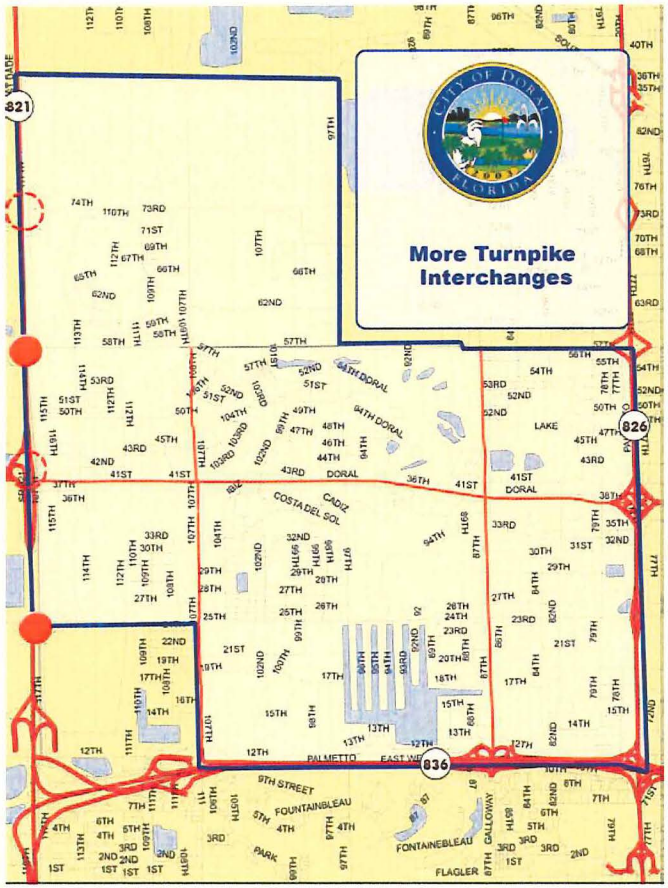
Doral experiences cut through traffic, coming to and from both the Turnpike and the Palmetto Expressway. The City is used for cut through traffic by motorists who are trying to avoid other congestion points in the network. This traffic has four (soon to be five with 74th Street coming on line) access points off of the Palmetto Expressway (58th Street, 41st Street/36th Street, 25th Street, and 12th Street), and only one (soon to be two with 74th Street coming on line), at the Turnpike. This currently focuses traffic on the west side of the City along 41st Street. It is believed that additional Turnpike access at 25th Street would spread the travel patterns, create direct access for trucks to 25th Street and enhance mobility throughout the City.

Description:

Coordination with FDOT and the Turnpike Authority should be initiated, with the hopes of developing a study to show the benefits of the plan, through traffic flow analysis. Funding and costs should be developed and programming of the projects on the LRTP and eventually the TIP should be investigated.

Cost:

Planning:	$40,000
Design:	$400,000
Construction:	$400,000



7. Project Bank

Project Ranking - Roadway

1. PTP Funding
2. LAP Certification
3. Comprehensive Signal Timing Study
4. Support 25th Street Viaduct (Airport to Turnpike)
5. Level of Service Improvements @ Intersections
6. Haul Road
7. Access Management
8. Enhanced ROW on 25th Street
9. Maximize Capacity of Section line Roads
10. 41st Street Roundabouts
11. Traffic Calming
12. More Turnpike Interchanges

Project Ranking - Transit

1. Municipal Circulator
2. Link Transit with Metrorail
3. Park and Ride Lots
4. Linear Parks

Project Ranking - Transportation Demand Management

1. Doral Heavy Truck Movement / Mobility Study
2. Peak Hour Truck Prohibition
3. Additional County and State Funding
4. Transportation Liaison
5. Concurrency Management System
6. Implement TDM Strategies
7. Support LRTP Development of Hierarchy
8. 25th Street Truck Route
9. Reversible Flow Lanes
10. Transportation Impact Fees
11. Livable Communities

Overall Ranking

Project	Type
1. PTP Funding	Roadway
2. LAP Certification	Roadway
3. Haul Road	Roadway
4. 25th Street Truck Route	TDM
5. Support 25th Street Viaduct (Airport to Turnpike)	Roadway
6. Transportation Impact Fees	TDM
7. Doral Heavy Truck Movement / Mobility Study	TDM
8. Peak Hour Truck Prohibition	TDM
9. Additional County & State Funding	TDM
10. Comprehensive Signal Timing Study	Roadway
11. Transportation Liaison	TDM
12. Concurrency Management System	TDM
13. Implement TDM Strategies	TDM
14. Participate in LRTP Projects	TDM
15. Level of Service Improvements @ Intersections	Roadway
16. Municipal Circulator	Transit
17. Livable Communities	TDM
18. Link Transit with Metrorail	Transit
19. Park and Ride Lots	Transit
20. Linear Parks	Transit
21. Access Management	Roadway
22. Reversible Flow Lanes	TDM
23. Maximize Capacity of Section line Roads	Roadway
24. Enhanced ROW on 25th Street	Roadway
25. 41st Street Roundabouts	Roadway
26. Traffic Calming	Roadway
27. Turnpike Interchange at 25th Street	Roadway

The City should immediately begin to implement these projects in coordination with FDOT and Miami Dade County