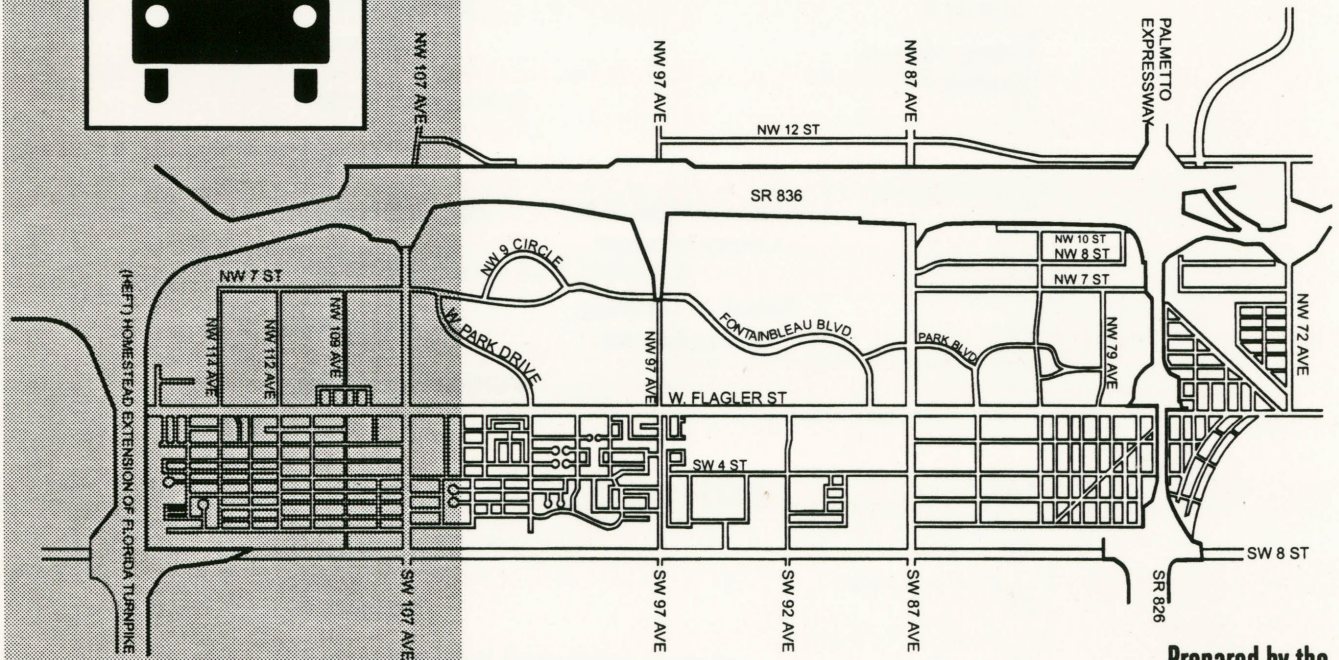
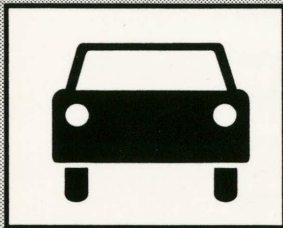


WEST FLAGLER STREET CORRIDOR STUDY

FINAL REPORT

For Improving Mobility Specific Area Planning Report



Prepared by the
Metropolitan Dade County
Department of Planning, Development
and Regulation

September 1997

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EXECUTIVE SUMMARY

The purpose of this report is to seek solutions to mobility problems and promote the use of modes of transportation other than single-occupancy vehicles in the West Flagler Street Corridor through recommendations for capital improvements and revisions to land development policies. Task 2.15 of the adopted *Unified Planning Work Program (UPWP) for Transportation, 1997*, compiled by the Metro-Dade Metropolitan Planning Organization, identifies the Specific Area-Planning and Design for Improved Mobility Work Program for that purpose. While this project focuses only on the West Flagler Street Corridor, it purports to maximize demonstration value and transferability to other corridors in Dade County.

STUDY GOALS

- ♦ To identify area planning and mobility problems and opportunities with special attention to issues related to the area's land use and development patterns, pedestrian, bicycle, public transit, parking, and roadway circulation systems in the area.
- ♦ To prepare specific responses to the identified problems and opportunities that will encourage pedestrian and bicycle mobility and promote development patterns that are supportive of public transit service.

THE PROCESS

Staff of the the Metro-Dade Department of Planning, Development, and Regulation, in consultation with staff of the Florida Department of Transportation, Metropolitan Planning Organization, Metro-Dade Transit Agency, and Metro-Dade Public Works Department first chose the West Flagler Street Corridor as the focus of this report, based on a set of criteria which included location, land use and density, employment and population, development and redevelopment opportunity, transit availability and accessibility, pedestrian and bicycle facilities, and transferability. At the June 4, 1997, Community Council 10 non-zoning meeting, staff informed area citizens about this planning process. A survey was also distributed at this meeting requesting information concerning desired development types and transportation systems. After gathering data on the area, staff prepared this preliminary draft report with recommendations addressing the identified issues and problems. Additional meetings with public agencies and residents were held to request comments on the preliminary draft report, including a presentation of the report to a Community Council 10 non-zoning meeting on September 3, 1997. Staff revised the draft report to incorporate comments and suggestions from the agencies and residents.

CONCLUSIONS AND RECOMMENDATIONS

The preliminary conclusions and recommendations of this draft report are:

Land Use and Development Patterns

A) Land Use

The Study Area contains a variety of segregated land uses which include single-family residential, multifamily residential, commercial, office, industrial, and institutional uses. An opportunity exists to improve the interaction of these land uses by planning better linkages between them and/or combining them, particularly residential uses with commercial uses, in order to reduce the advantage of the automobile over public transit, pedestrian, and bicycle usage. But, more importantly, the Study Area lacks those land uses that generate continuous activity and public transit ridership throughout the day, evening, and night.

Recommendations

- ◆ Concentrate the mixture of land uses at scales and densities required to produce high levels of pedestrian activity and public transit ridership, especially along transit corridors. This can be achieved by concentrating a variety of different land uses (i.e., residential and commercial) within defined areas for maximum impact, rather than spreading single-activity uses over large areas where their impact is diluted.
- ◆ Encourage a variety of compatible uses within individual buildings. The uses should complement each other and the uses in adjacent areas.
- ◆ In multi-story/multi-use developments, restrict ground floor uses to pedestrian-oriented businesses such as convenience stores, video rentals, pharmacies, dry cleaners, bakeries, shoe repair, banks, photographic studios, movie theaters, ice cream parlors and hair salons.
- ◆ Insure that land uses in the Study Area are not undermined or diluted by nearby developments with similar uses (i.e., major shopping centers in close proximity to each other).
- ◆ Incorporate retail uses into the ground floors of parking structures to generate usage from those structures.
- ◆ Allow for the development of undeveloped parcels (i.e., parking lots) with more intense/more dense uses.

These land use recommendations should be established and encouraged through zoning controls and site plan approval.

B) Zoning

The Dade County Zoning Code generally requires separation of land uses. Even those few zoning districts which allow mixed land uses limit and restrict the mixture of those uses. To maximize pedestrian activity and transit usage in a high-intensity area, mixing land uses is essential.

Some commercial activities in the Study Area generate pedestrian and bicycle activity. However, other activities such as automobile sales, rental and repair do not. The Study Area needs more land uses that generate day, evening and night time activities.

Most buildings in the Study Area comply with use and content requirements of the Dade County Zoning Code. However, the scale of most buildings in the Study Area in relation to the streets is low, creating an environment that is not pedestrian-friendly. Setback regulations require buildings to be set back far from the sidewalk, thereby increasing walking distances.

Recommendations

- ◆ Revise the existing Zoning Code, or devise a zoning overlay district tailored to the West Flagler Street Corridor Study Area to create a more pedestrian-, bicycle-, and transit-friendly design.
- ◆ Develop specific plans to target small areas to begin to change the character of the entire area by adopting good urban design principles addressing building mass, density, public open space, and architectural variety to create a more pedestrian-, bicycle- and transit-friendly environment.

Pedestrian and Bicycle Facilities

A) Pedestrian System

Walking in the West Flagler Street Corridor Study Area is discouraged by a lack of shaded sidewalks, crosswalks, pedestrian signals and shelters. While these facilities do not by themselves promote a friendly pedestrian or bicycle environment, they are necessary elements for people who want to use these alternate modes of transportation rather than driving to their destinations.

Recommendations

- ◆ Provide the area with a continuous sidewalk network to link the residential areas, parks, schools, and commercial areas, using Local Option Gas Tax and Secondary Gas Tax funds for construction.
- ◆ Plant street trees to shade sidewalks and pedestrian paths, and encourage colonnades and arcades in building facades to increase shading on sidewalks and pedestrian paths.

- ◆ Enforce the standards of Chapter 18-A of the Dade County Code (Landscaping Ordinance).
- ◆ Provide striped crosswalks at all major intersections and install pedestrian crossing signals where needed.
- ◆ Provide protected pedestrian refuges in center medians at all significant pedestrian crossings.
- ◆ Designate bus stops and bus shelters where necessary according to bus stop/shelter needs, particularly at section and half-section line roads and transfer points, and replace existing bus benches with bus shelters.
- ◆ Improve the information provided at bus stops (maps, schedules and signage), particularly at transfer points.
- ◆ Prohibit blank walls along the edges of sidewalks.
- ◆ Include curb cuts and wheelchair ramps, as required by the Americans With Disabilities Act, in all pedestrian facilities.

B) Bicycle System

The Flagler Street Corridor Study Area is not conducive to travel by bicycle, because bicycling on many of the streets necessitates a moderate to high level of interaction with automobiles, causing hazardous conditions. Therefore, future roadway improvements in the Study Area should take the needs of bicyclists into consideration.

Recommendations

- ◆ Study NW/SW 87, SW 92, 97 and NW/SW 107 Avenues, and West Flagler Street, for realignment to include integrated bicycle lanes to identify areas for cyclists on the roadways, or separated bike paths, both of which reduce interaction with automobile traffic. The inclusion of traffic calming devices should also be considered.
- ◆ Require new development and redevelopment in the Study Area to provide secured bicycle parking and encourage the provision of these facilities in existing development as well. For residential development, separate fenced and gated parking areas should be considered. Simple bicycle racks may suffice for commercial and office development.

Transportation

The West Flagler Street Corridor Study Area is accessible by both roadways and public transit. Some of the roadways are congested and require improvements; however, alternatives to

widening roadways should be considered. As the area experiences increases in population, further improvements in the public transit system are necessary.

Recommendations

- ◆ Plan for maximum utilization of existing and new transportation facilities by providing and integrating all modes of transportation and facilitating transfers between modes.
- ◆ Study the feasibility of implementing other strategies that: (1) increase the efficiency of the existing transportation system, and (2) do not need major capital expenditures, such as contra-flow design in planning urban roads, establishment of exclusive rights-of-way for high-occupancy and public transportation vehicles, and improvement of traffic signal timing through commuter corridors.
- ◆ Encourage employers to institute staggered or flexible working hours to ease traffic congestion during peak hours.
- ◆ Expand the incentive program offered to employers in the Study Area to subsidize transit passes to encourage the use of public transportation and/or encourage their employees to vanpool and carpool by providing preferential parking spaces for participants.
- ◆ Study the feasibility of enhancing the connectivity of the area's most important economic generators (FIU, Miami International Mall, the industrial/office areas west of the airport) to Miami International Airport, the Central Business District, the Seaport and Miami Beach.
- ◆ Prepare criteria for the provision of mass transit facilities (such as bus pullovers and bus shelters) as an integral part of the design of major residential, commercial and industrial complexes along existing or proposed transit corridors.
- ◆ Inventory existing transportation plans and show how they support multimodalism in the Study Area.
- ◆ Investigate the feasibility of connecting the east-west streets, particularly NW 7 Street, that are interrupted by the Palmetto Expressway to improve mobility in the Study Area.

Parking

The Dade County Zoning Code requires off-street parking individually for all land uses, resulting in an inefficient use of parking spaces, as many are not occupied during non-peak periods. The easy access to off-street parking is an amenity for motorists, but this causes a high degree of discomfort for the pedestrian and works against the promotion of alternative transit modes. Future development in the Study Area should avoid an oversupply of parking in order to encourage Metrobus ridership and alternate modes of transportation.

The *Dade County Park and Ride Lot Plan*, prepared by Frederic R. Harris, Inc., for the Florida Department of Transportation, recommends some locations within and adjacent to the Study Area for park and ride lots.

Recommendations

- ◆ Review, and revise as appropriate, the existing Parking Ordinance or enact an Overlay Parking Ordinance for the West Flagler Street Corridor Study Area that encourages shared parking and reduces the parking requirement by at least 20 to 50 percent.
- ◆ Provide preferential parking for high-occupancy vehicles.
- ◆ Adopt minimum requirements and standards for bicycle and motorcycle parking.
- ◆ Provide park-and-ride facilities (and kiss-and-ride facilities, where appropriate) at convenient locations along major Metrobus routes to encourage ridership.
- ◆ Encourage shared parking in existing and new commercial, office and industrial areas.

Urban Design

Urban design provides a means of organizing various urban elements and functions, such as land use, building design, and transportation systems, to create a more "livable community." Scenarios utilizing urban design principles were created to transform neighborhoods into walkable, bicycle- and transit-friendly neighborhoods. Future implementation of urban design principles will result in a healthier environment in which to live, work, and visit.

Recommendations

- ◆ Develop neighborhoods according to urban design principles.
- ◆ Develop with a more compact building form.
- ◆ Include identifiable urban centers with clear edges in neighborhoods and distribute public spaces throughout neighborhoods.
- ◆ Encourage mixed uses in urban centers and along major roadways.
- ◆ Implement a street hierarchy on a modified grid.
- ◆ Limit block length to less than 300 feet and to a maximum of 500 feet.
- ◆ Minimize or eliminate building setbacks to provide spatial enclosure.

- ◆ Incorporate amenities, such as planters, fountains, ornamental benches and lampposts, and public monuments in areas of civic importance.
- ◆ Place parking behind buildings or in alleys.
- ◆ Encourage parallel parking and street trees to act as a buffer between pedestrians and vehicle moving lanes.
- ◆ Place parking for major commercial areas (such as malls) in garages with retail uses on the ground floor. The garages should be architecturally compatible with the rest of the neighborhood.
- ◆ Provide bus stops or vanpool stops at urban centers and along major roadways.

Infrastructure

The Flagler Street Corridor Study Area is provided with potable water, sewer, and solid waste services with enough capacity to accommodate a denser population and more intense development. However, the five elementary schools (and the only middle school) in the area are collectively operating at overcapacity. The area also contains two parks. Police protection in the unincorporated area is provided from the Metro-Dade Police Doral District Headquarters at 9105 NW 25 Street. The Town of Sweetwater provides police services within its borders. Fire and rescue services for both the unincorporated area and the Town of Sweetwater are provided by the Metro-Dade Fire and Rescue Department's Sweetwater Station at 351 SW 107 Avenue.

Recommendation

- ◆ Continue to provide services and facilities in the Study Area in accordance with the provisions of the *Comprehensive Development Master Plan*, and as may be called for to implement the recommendations of this study.

IMPLEMENTATION

Implementation of the recommendations for the West Flagler Street Corridor Study Area will be accomplished over a number of years, depending on their individual complexity. Some recommendations can be implemented fairly quickly, such as the restriping of faded pedestrian crossings. Others, such as changing the mixture of uses in predominantly single-use areas, will take more time and will depend on how quickly the Zoning Code can be modified and the older uses phased out. In addition, inter-agency cooperation will have an effect on how quickly the implementation of certain of these recommendations will occur.

1.0 INTRODUCTION

The federal Intermodal Surface Transportation Efficiency Act (ISTEA) and other recent federal, state, and local legislation have recognized that land use planning, development design, and transportation are fundamental factors of development and are inextricably linked to one another. The lack of recognition of this linkage has contributed to today's mounting traffic congestion.

Transportation planning in Florida has traditionally sought roadway capacity improvements, and recently transit and system management solutions, to mobility problems. However, land use, urban design, and development regulations have been largely neglected, but are now recognized to require attention.

This Mobility Study was undertaken by the Metropolitan Dade County Department of Planning, Development, and Regulation (DPDR) to assist Dade County in further implementing the goals, objectives, and policies of the adopted *Comprehensive Development Master Plan (CDMP)* and the *Metro-Dade Transportation Plan, Long-Range Element, to The Year 2015* to improve mobility. This planning activity is listed in the Metropolitan Planning Organization's (MPO) adopted *Unified Planning Work Program (UPWP) for Transportation, 1997*, as Task 2.15.

The West Flagler Street Corridor Study is the second study of this type undertaken by the DPDR in unincorporated Dade County. The first mobility study was produced in September, 1997, for the Dadeland Regional Activity Center. This report, produced by DPDR in cooperation with the MPO, the Metro-Dade Transit Agency (MDTA), the Metro-Dade Public Works Department (MDPW), and the Florida Department of Transportation (FDOT) District Six Office, seeks to improve mobility and create a more livable environment in the Study Area.

1.1 Objectives

- ◆ To identify area planning and mobility problems and opportunities with special attention to issues related to the area's land use and development patterns, pedestrian, bicycle, public transit, parking, and roadway circulation systems in the area.
- ◆ To prepare specific responses to the identified problems and opportunities that will promote a development pattern that is supportive of public transit service.

1.2 Selection of the Area to be Studied

In preparing this report, DPDR in consultation with MPO, MDTA, MDPW, and FDOT District Six Office, established a set of criteria that were used for the selection of the area to be studied. The criteria include, among other considerations, the following: (1) the area to be studied should be a Metropolitan Activity Center as delineated by the *Comprehensive Development Master Plan*, a Metrorail Station area [up to a quarter-mile radius from the station], or a public transit corridor

heavily served by Metrobus; (2) land use and density; (3) population and/or employment; (4) development and redevelopment opportunity, (5) transit availability and accessibility, (6) pedestrian and bicycle facilities, and (7) transferability. In addition, the criteria established that any area to be studied should be located north of North Kendall Drive (SW 88 Street) in unincorporated Dade County (see Appendix A).

Since the Dadeland Regional Activity Center is both a Metropolitan Activity Center and contains two Metrorail stations, it conforms to two of the three criteria listed above. Therefore, the Work Group (composed of members of the agencies involved in this planning process) resolved to select the West Flagler Corridor as the transit corridor to be studied.

A number of corridors, including West Flagler Street, were analyzed. Others included SW 8 Street, Coral Way, Bird Road, Miller Drive, Sunset Drive, Kendall Drive, and NW 27 Avenue. The Work Group selected the West Flagler Street Corridor for a number of reasons. It has ready accessibility to three expressways: the Dolphin Expressway (SR 836), the Palmetto Expressway (SR 826), and the Homestead Extension of Florida's Turnpike (HEFT). It also has a large employment base, a dense residential population, a metropolitan-scale commercial shopping center (the Mall of the Americas, which has the characteristics of a Regional Activity Center), and two major destinations nearby (Florida International University and Miami International Mall), all with development and redevelopment potential. The corridor is well served by four Metrobus routes with peak headways of 40 minutes or less. Finally, the design and engineering phase of the East-West Multimodal Study's Minimum Operating Segment from the Port of Miami to the Palmetto Expressway is scheduled to be conducted in 1997. For all these reasons, the Work Group resolved that the West Flagler Street Corridor offered the most potential as a subject study area for this report (see Appendix B).

The West Flagler Street Corridor currently exhibits conditions which do not favor walking or bicycling for even the shortest of trips. For even the simplest of trips, such as buying convenience goods, driving instead of walking or bicycling is the most common mode of transportation.

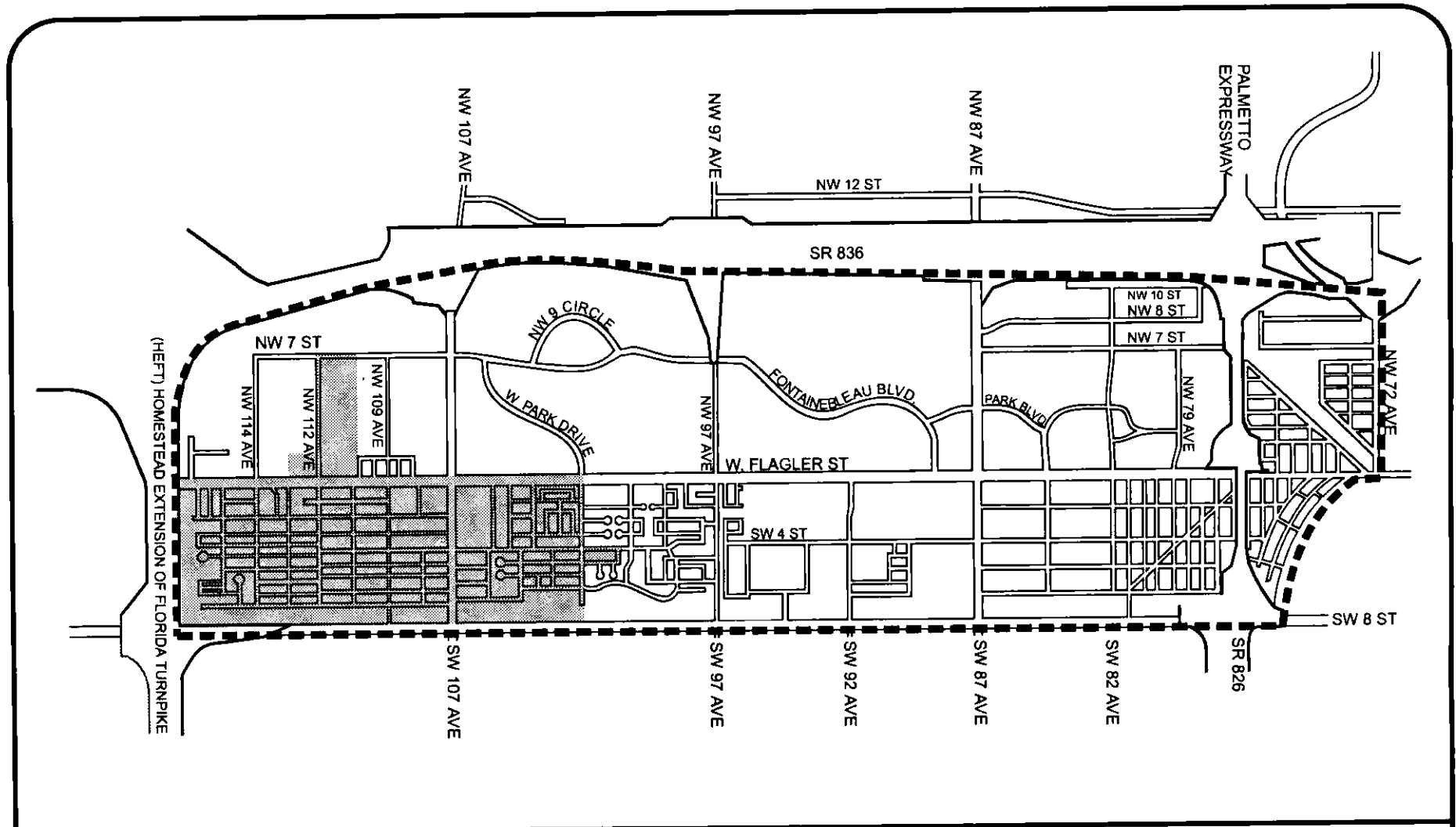
Area to be Studied

The Study Area for the West Flagler Street Corridor is defined by the Dolphin Expressway (SR 836) on the north, NW 72 Avenue on the east¹, the Tamiami Canal on the south, the Homestead Extension of Florida's Turnpike (SR 821) on the west. In all, the Study Area encompasses 3,837.97 acres, or approximately six square miles (see Figure 1).

The existing development pattern has produced a predominantly automobile-oriented, pedestrian-hostile environment.



¹ As this study is conducted exclusively in the unincorporated area of Dade County, the eastern boundary of the study area is defined by NW 72 Avenue and runs southwest along the Tamiami Canal to Tamiami Trail (SW 8 Street).

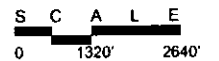
WEST FLAGLER STREET CORRIDOR STUDY AREA



3

Figure 1 WEST FLAGLER CORRIDOR STUDY AREA

-  STUDY AREA BOUNDARY
-  CITY OF SWEETWATER



DEPARTMENT OF PLANNING,
DEVELOPMENT AND REGULATION

1.3 The Process

The process of preparing the report for the West Flagler Street Corridor Study Area involved the following steps: (1) examination of existing and, to the extent feasible, future conditions, particularly land use and mobility; (2) identification of major problems and opportunities; and (3) responses to the identified problems and opportunities with recommendations for specific actions.

Major problems and opportunities were determined primarily by conducting field inspections of the area, comments made by residents at public meetings, and meetings with the Work Group. At a Community Council 10² non-zoning public meeting held on June 4, 1997, an informational presentation on this planning process was given and a public opinion survey was distributed to ascertain the needs and desires of residents, property owners, and other interested groups in the community. The survey included questions concerning neighborhood livability, conditions favoring various transportation modes, needed transportation improvements, and desirable types of development. The analysis of the responses to this survey is presented in Appendix D.

The second step involved the preparation of a draft preliminary report which addressed the major issues. Subsequent to the preparation of this report, a second advertised public meeting was held by Community Council 10 on September 3, 1997, in the area to receive public comments.

Final responses to the identified problems and opportunities were formulated by DPDR staff based primarily on existing programs and facilities, programmed and planned improvements, and comments by the technical Work Group and the public. Where appropriate, recommendations for action were made. Meetings were held with public agencies and residents to request comments on the preliminary draft report.

The following chapters analyze existing and future conditions in the area and a series of planning tools and techniques to implement the objectives of this report.

² Community Councils perform the duties and responsibilities of Zoning Appeals Boards and conduct forums on council area issues to facilitate the exchange of information among residents, property owners, businesses and County officials and administrators. They also disseminate information about council area programs and activities.

2.0 LAND USE AND DEVELOPMENT PATTERNS

2.1 Land Use

Walkable, bicycle- and transit-friendly communities provide an environment that encourages residents, workers, and visitors to walk, bike or use public transit as an alternative to the automobile for at least one or more of their trips. These communities also combine some or all of the following³:

- ♦ A mixture of different types of land use, including shops, housing, offices, and other employment centers, public facilities such as government offices, health care facilities, schools, parks or tourist attractions;
- ♦ Necessary goods and services that are located in close proximity to the public transit station, including day care centers, dry cleaners, and the like. These uses facilitate linking together various trips, thus eliminating the need to travel to different locations during a single trip, and
- ♦ An overall environment that is active with people, features human scale, and contains a variety of scenery and interesting places where people are encouraged to walk.

Existing Land Use

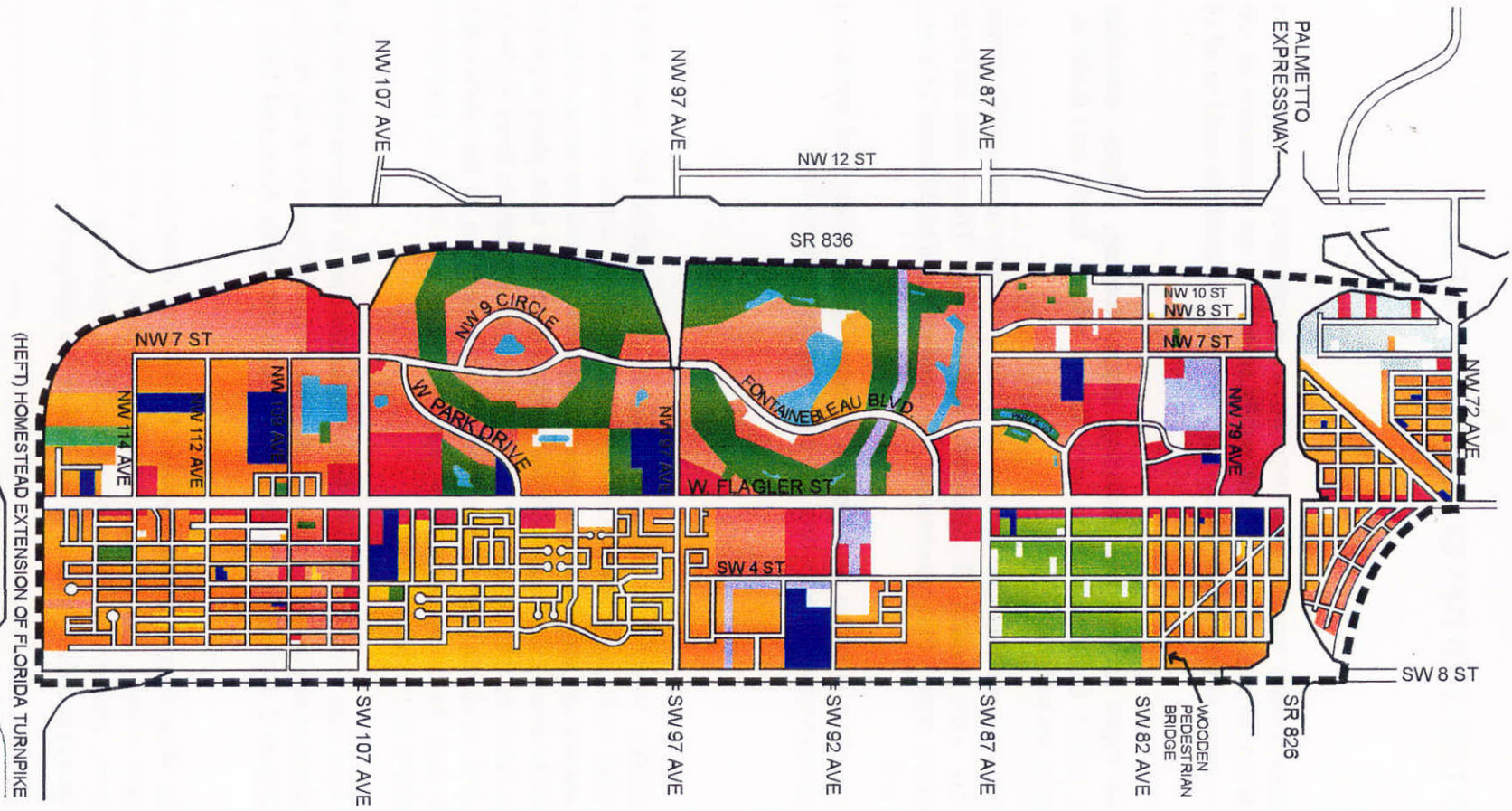
The West Flagler Street Corridor Study Area contains a mixture of segregated land uses which include single-family residential, multifamily residential, commercial, office, institutional uses, and parks and recreation. The amount of land devoted to specific types of use and the siting of those uses determines the interactions among these uses. This interaction of land uses plays a critical role in structuring the urban fabric of the community. A high level of interaction helps to better define the community and give residents and visitors a clearer understanding of the relationship between the physical form and the social network. Conversely, a low level of interaction contributes little to the definition of the community.

An inventory of all existing land uses within the Study Area was conducted to determine how land is currently utilized. An analysis of the land uses shows a mixture of predominantly retail, service, office and industrial uses. Figure 2 depicts the existing land uses in the Study Area, and Table 1 summarizes all land uses.

As indicated by Table 1, the West Flagler Street Corridor Study Area comprises approximately 3,837.97 acres, or six square miles. The largest amount of land in this area is devoted to transportation, communications, and utilities, comprising 1,095.11 total acres, or approximately 29 percent of all land. Roadways account for most of the land in this category.













³ *Planning for Transit-Friendly Land Use, A Handbook For New Jersey Communities*, Federal Transit Agency, U.S. Department of Transportation, June 1994.

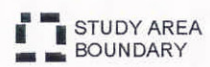
WEST FLAGLER STREET CORRIDOR STUDY



6

Figure 2 **1994 EXISTING LAND USE**
with CDMP use colors and density categories

- | | |
|---|---|
|  ESTATE DENSITY |  INSTITUTIONAL AND PUBLIC FACILITIES |
|  LOW DENSITY |  PARKS AND RECREATION |
|  LOW-MEDIUM DENSITY |  AGRICULTURE |
|  MEDIUM DENSITY |  UTILITIES |
|  INDUSTRIAL AND OFFICE |  WATER |
|  BUSINESS AND OFFICE |  OPEN LAND |



DEPARTMENT OF PLANNING,
DEVELOPMENT AND REGULATION

Table 1
Existing Land Use (1994),
West Flagler Street Corridor Study Area

Land Use Category	Area (Acres)	Percent of Total Area
Residential		
Single-family	822.09	21.0%
Multifamily	655.01	17.0%
Business and Office	346.40	9.0%
Industrial	44.66	1.0%
Institutional	126.27	3.0%
Parks and Recreational Open Space	349.70	9.0%
Transportation, Communications and Utilities	1,095.11	29.0%
Agriculture	8.03	1.0%
Water	208.05	6.0%
Undeveloped Land	182.65	5.0%
Totals	3,837.97	100.0%

Source: Metro-Dade County Department of Planning, Development and Regulation,
May 1997.

Single-family residences account for the next highest use of land, with 822.09 acres, or 21 percent. Multifamily residences comprise 655.01 acres, or approximately 17 percent of the total land use. Business uses are not as prevalent, with only 346.40 acres, or nine percent of the total land use.

Most of the commercial land in the Study Area is stretched along West Flagler Street and the area to the north between the Palmetto Expressway and NW 84 Avenue. The concentration of commercial uses on West Flagler Street deprives other parts of the Study Area of the benefits of convenience retail, necessitating travel by automobile for even the simplest trips, such as going to the grocery store for a small item. In order to encourage more pedestrian-, bicycle-, and transit-friendly neighborhoods, convenient retail uses must be better distributed throughout the Study Area.

The Study Area also has a high concentration of residential use with 87.3 percent of residences defined as multifamily residences and 12.7 percent as single-family residences. Most of the lower density development is located between West Flagler Street and SW 8 Street. Higher density residences are located north of West Flagler Street, particularly along Fontainebleau Boulevard. These areas lack commercial uses, thereby discouraging pedestrians from walking.

Parks and recreational open space comprise nine percent of the total acreage in the Study Area, with 349.70 acres; however, much of this space is confined to the Fontainebleau development. The lack of open space in or near other parts of the Study Area deprives these areas of access to open space. In more pedestrian-friendly environments, open space in the form of parks and plazas is an integral part of the urban fabric.

Institutional uses comprise three percent of the total Study Area, or 126.27 acres. These uses consist of schools, churches, and government offices. Institutional uses contribute to the urban fabric of a pedestrian-friendly environment by providing another set of people with a different schedule on the street at different times of day. Relatively little land is in industrial use, representing only one percent of the total Study Area, or 44.66 acres.

Approximately five percent of the land in the Study Area is undeveloped, consisting of 182.65 acres. Some of these parcels lie directly on West Flagler Street and present opportunities for more intense, transit-friendly, mixed-use development. Recommendations for the implementation of regulations for requiring transit-friendly, mixed-use development on vacant land, or redevelopment of underutilized parcels, are needed to ensure an environment which encourages mobility by modes other than single-occupant vehicles.

Adjacent Land Uses

Miami International Mall, designated as a Metropolitan Activity Center by Dade County's Adopted 2005-2015 Land Use Plan map, lies to the north of the Study Area at the northeast corner of SR 836 and SW 107 Avenue. This activity center contains a large retail establishment in close proximity to the Low-Medium and Medium Density Residential areas on Fontainebleau Boulevard. Another major destination, Florida International University's University Park Campus, is located to the south of the Study Area on SW 8 Street and SW 107 Avenue.

To the north of the West Flagler Street Corridor Study Area west of SR 826, land is mostly utilized for industrial uses. This is the "Airport West" area, Dade County's most active industrial market. To the south of the Study Area, land use is mostly residential in character, with a commercial strip west of SR 826. Land uses to the east of the Study Area consists of the Blue Lagoon Office District (located directly south of Miami International Airport), a row of apartment houses along NW 72 Avenue (bordered farther to the east by a small industrial area), and a park. To the west of the Study Area, the land is devoted mostly to estate density homes.

The County's Land Use Plan map contains various categories of land use, including Residential (ranging from Estate Density [up to 2.5 dwelling units per acre] to High Density [up to 125 dwelling units per acre]); Industrial and Office, Business and Office; Institution and Public Facilities; Parks and Recreation; Agriculture, Open Land, and Environmental Protection, and Transportation and Water.

Future Conditions

Land use in Dade County is regulated by the County's Adopted 2005-2015 Land Use Plan map.⁴ This map serves as a blueprint for growth for the entire County. Areas within municipalities are governed by their own future land use plan maps.

The West Flagler Street Corridor Study Area contains a number of different land use categories including the following: Estate Density Residential (up to 2.5 dwelling units per acre), Low Density Residential (up to 6 dwelling units per acre), Low-Medium Density Residential (up to 13 dwelling units per acre), Medium Density Residential (up to 25 dwelling units per acre), Industrial and Office, Office/Residential, Business and Office, Institution and Public Facility, Parks and Recreation, Transportation, and Water (see Figure 3).

As land is developed in the Study Area, it should be utilized in accordance with the Adopted 2005-2015 Land Use Plan map. Exact development parameters are implemented through zoning, which specifies the types of uses allowed in each zoning district and the physical constraints which establish a particular physical form (please refer to "Zoning," page 13). The *Comprehensive Development Master Plan* (CDMP) generally allows uses in residential areas according to the restrictions placed on density; however it also permits certain neighborhood services including day care centers, schools, houses of worship, group homes, and utility facilities, with the provision that those services conform to the appropriate goals, objectives and policies of the CDMP.

Industrial and Office use allows manufacturing operations, warehouses, mini-warehouses, office buildings, wholesale showrooms, distribution centers, merchandise marts, and similar uses. The CDMP also permits industry-serving uses such as construction and utility-equipment maintenance yards, utility plants, public facilities, hospitals, and medical buildings. Commercial uses are allowed in industrial areas, but they are limited to developments which serve workers in the industrial and office areas to prevent the depletion of land for industrial uses. Residential use is generally considered incompatible with industrial use, except where adjoining land is residentially zoned; however, traditional neighborhood developments may be permitted in Industrial and Office areas if located next to another residential development where they are compatible with nearby development and the Plan's goals, objectives and policies.

The Business and Office category allows a full range of sales and service activities. Residential uses are also allowed, but must conform to the adjacent commercial area and be sensitive to abutting residential areas. Residential development is authorized to occur up to one density category higher than adjacent residentially-designated areas on the same side of an abutting principal roadway, or up to the density of adjacent residential development, whichever is higher.

⁴ The Land Use Plan Map (LUP), in conjunction with all the other adopted components of the CDMP, will govern all development-related activities taken or authorized by Metropolitan Dade County. However, this Plan does not supercede the local land use authority of incorporated (municipal) areas.

WEST FLAGLER STREET CORRIDOR STUDY

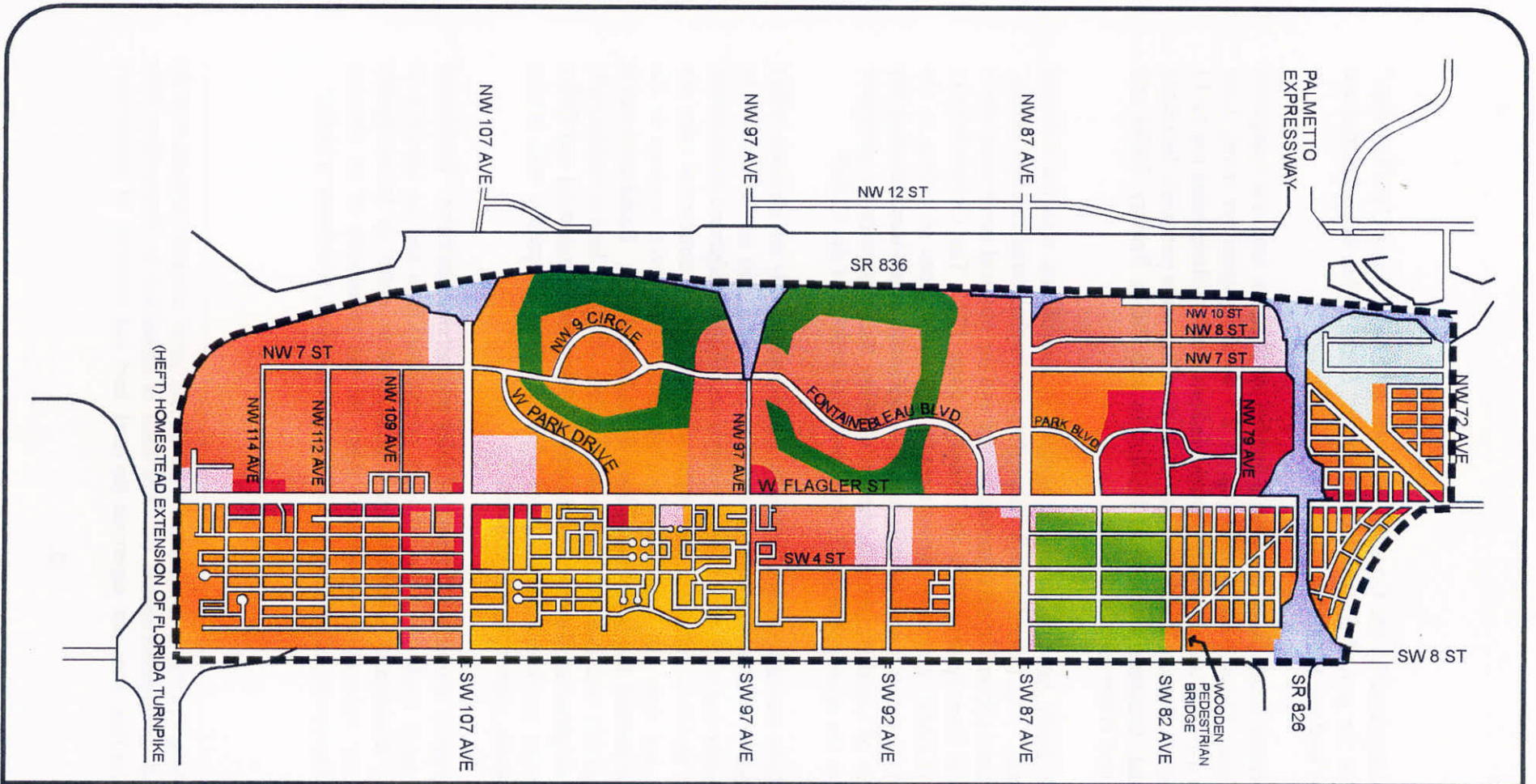













Figure 3 **2005 TO 2015 LAND USE MAP**

- | RESIDENTIAL COMMUNITIES | | | |
|---|--------------------|-----------|--------|
|  | ESTATE DENSITY | UP TO 2.5 | DU/AC* |
|  | LOW DENSITY | UP TO 6 | DU/AC |
|  | LOW-MEDIUM DENSITY | UP TO 13 | DU/AC |
|  | MEDIUM DENSITY | UP TO 25 | DU/AC |
| * DWELLING UNITS PER ACRE | | | |
-
- | | |
|---|------------------------|
|  | PARKS AND RECREATION |
|  | TRANSPORTATION |
|  | INDUSTRIAL AND OFFICE |
|  | OFFICE AND RESIDENTIAL |
|  | BUSINESS AND OFFICE |

 STUDY AREA BOUNDARY

SCALE
0 1320' 2640'

 NORTH

DEPARTMENT OF PLANNING,
DEVELOPMENT AND REGULATION

Institutional and Public Facility uses are depicted on the map to indicate the location of major medical centers, universities, utilities, and government complexes. Offices (less than five acres in size or up to ten percent of an institutional use's floor area) and businesses are also allowed in this category. Private land (not intended for use by a public agency) may be developed as another land use category as long as it is compatible with surrounding development and consistent with the goals, objectives, and policies of the CDMP.

Land designated for Parks and Recreation is intended solely for recreational purposes, allowing such uses as parks and golf courses. Commercial uses, such as tennis and golf clubhouses and cultural facilities may be considered where appropriate.

The Transportation category is used to indicate the location of transportation facilities such as roadways, mass transit facilities and airports. Likewise, the Water category indicates the location of bodies of water for informational purposes.

According to the CDMP, the West Flagler Street Corridor Study Area is intended to contain a mixture of residential, commercial, and institutional land uses. Implementation of this land use plan will occur through the zoning process. Since some of the land use categories allow a mixture of different uses, the use of appropriate zoning districts will be a crucial factor in determining the Study Area's ability to furnish an environment which promotes livability for its inhabitants.

Areas adjacent to the West Flagler Street Corridor contain different land use categories, engendering different characteristics as determined by the CDMP. The areas lying to the north of SR 836 carry a designation that is predominantly industrial and office. This area is buffered from West Flagler Street by SR 836, creating a hard division between the industrial area and the commercial and residential communities of the Study Area. To the south and west of the Study Area, the land use designation is mostly residential, but in lower densities than the West Flagler Street area. To the east of the Study Area north of the Tamiami Canal, the land use designation is predominantly Office/Residential, with some properties designated for Industrial and Office and Parks and Recreation. The area south of the Tamiami Canal falls within the jurisdiction of the City of Miami and contains a mixture of uses, including Single-Family Residential, which allows up to nine dwelling units per acre, as well as supporting services such as houses of worship and day care; Restricted Commercial, which allows a variety of retail, service, and residential uses; General Commercial, which allows a mixture of office and wholesale and distributing businesses, and Recreation, which allows parks and recreation uses.

Compliance with the Comprehensive Development Master Plan

The West Flagler Street Corridor Study Area has generally been developed in accordance with the CDMP, as the current land use patterns of this area generally coincide with the CDMP designations. West Flagler Street is developed on both sides with a mixture of predominantly commercial and residential uses. South of West Flagler Street, the character of the neighborhoods is predominantly single-family residential. North of West Flagler Street, the area is developed with commercial uses along NW 87 Avenue and with mostly multifamily residential

development along Fontainebleau Boulevard. A few areas of industrial use lie east of the Palmetto Expressway. Deviations from the Adopted 2005-2015 Land Use Plan map may require an amendment. Applications for amendment to the map are accepted biennially on May and November cycles.

Areas within the Town of Sweetwater are governed by their Comprehensive Master Plan. Future development within those boundaries will require compliance with the Town of Sweetwater's Future Land Use Plan. Deviation from the Town's Future Land Use Plan for areas within its jurisdiction may require an amendment to this document.

Summary

Future development in the Study Area should strive for land uses and building designs which promote a more pedestrian-, bicycle-, and transit-friendly environment. Land uses should be mixed and distances between land uses should be as short as possible to encourage people to walk to their homes, work places, and places to shop, relax, and be entertained. It is generally considered that one-quarter to one half-mile is the maximum distance that people are willing to walk.⁵ A mixture of land uses supported by a dense network of streets gives pedestrians greater options for choosing different routes to reach destinations. A dense network of streets also provides more retail opportunities along more streets, thereby creating more vitality in the area.

Retail uses should be located on the ground floors of buildings to generate more vibrancy on the streets they front. Residential uses could be located on the floors above the retail stores, with offices interspersed between the retail and residential uses to create a fine-grained mixture of uses located conveniently to public transit.

A high concentration of mixed uses should be located close to transit stops to give residents, workers, and shoppers in adjacent neighborhoods convenient access to public transit. Conversely, conveniently located mixed uses afford the transit rider better access to homes, shops, offices, parks, schools, and sources of entertainment. A distribution of continuous activity and high density land uses along major bus routes encourages greater ridership of public transit. In a like manner, land use densities away from the major bus routes should decrease as distance increases.⁶

Recommendations

1. Concentrate the mixture of land uses at scales and densities required to produce high levels of pedestrian activity and public transit ridership, especially along transit corridors. This can be achieved by concentrating a variety of different land uses (i.e., residential and

⁵ *Planning For Transit-Friendly Land Use, A Handbook For New Jersey Communities*, Federal Transit Agency, U.S. Department of Transportation, p. 5

⁶ *Ibid.*, p. 33

commercial) within defined areas for maximum impact, rather than spreading single-activity uses over large areas where their impact is diluted.

2. Encourage a variety of compatible uses within individual buildings. The uses should complement each other and the uses in adjacent areas.
3. In multi-story/multi-use developments, restrict ground floor uses to pedestrian-oriented businesses such as convenience stores, video rentals, pharmacies, dry cleaners, bakeries, shoe repair, banks, photographic studios, movie theaters, ice cream parlors and hair salons.
4. Insure that land uses in the Study Area are not undermined or diluted by nearby developments with similar uses (i.e., major shopping centers in close proximity to each other).
5. Incorporate retail uses into the ground floors of parking garages to generate usage from these structures.
6. Allow for the development of undeveloped parcels (i.e., parking lots) with more intense/more dense uses.

These land use recommendations should be established or encouraged through zoning controls and site plan approval.

2.2 Zoning

Every parcel of land within unincorporated Dade County is assigned a zoning classification to regulate the type of use and activities permitted on the site, and to establish the conditions governing such uses and activities and the development of land and buildings. Chapter 33 of the Code of Metropolitan Dade County (the Zoning Code) contains all descriptions, regulations and development standards for each zoning district. All of the existing zoning districts and boundaries in the West Flagler Corridor Study Area are shown on the zoning map reproduced in Figure 4.

Uses Permitted

The Dade County Zoning Code generally promotes single types of land uses. Although it makes allowances for mixed uses, these are limited and restricted.

Residential Districts. Residential districts found in the West Flagler Corridor Study Area include: EU-M (Estate Modified, one dwelling unit per 15,000 sq. ft. net), RU-1 (Single-Family), RU-2 (Two-Family), RU-3 (Four-Unit Apartment), RU-TH (Townhouse, up to 8.5 units per net acre), RU-3M (Minimum Apartment House, up to 12.9 units per net acre), RU-4L (Limited

Apartment House, up to 23 units per net acre), RU-4M (Modified Apartment House, up to 35.9 units per net acre), and RU-4 (Apartments, up to 50 units per net acre).

Business and Office Districts. Most of the land along West Flagler Street, and between West Flagler Street and SR 836, and SR 826 and NW 84 Avenue, is designated for commercial and/or office uses. These districts include RU-5A (Semi-Professional Offices), OPD (Office Park District), BU-1 (Neighborhood Business), BU-1A (Limited Business), and BU-2 (Special Business) zoning districts. The RU-5A and OPD districts primarily allow offices. Business districts allow mostly commercial uses, and some residential uses. Likewise, BU-1 allows residences, but they cannot exceed 50 percent of a building's floor area. BU-1A and BU-2 also permit residential use; however they are restricted to approval by special exception.

Industrial Districts. Industrial districts found in the area west of NW 72 Avenue and north of the Northwest Waterway include IU-1 (Light Manufacturing) and IU-C (Conditional Industrial). In addition, there is a small area with AU (Agricultural) district, generally allowing agricultural uses such as greenhouses and nurseries. Table 2 shows all current zoning districts designated within the Study Area and the corresponding permitted uses.

Of all the zoning districts in the West Flagler Street Corridor Study Area, the BU-1 and BU-2 districts most closely approach the concept of mixed use. Few establishments are geared to night time use. Although employment in the corridor is high (at approximately 20,000 people), the lack of other categories of land use, such as residential or institutional mixed together with the commercial uses, causes a failure to create an environment of cross-movement of people between shops, offices, homes, schools, and parks. With the lack of this cross-movement, people are further discouraged from walking to their destinations.

As indicated in Table 2, residential districts mostly allow residential uses. Exceptions include day care centers, recreational uses, houses of worship, and retail and service convenience for development over 300 units. The Semi-Professional Office District (RU-5A), allows a mix of professional offices and for the occupant of an office to have an accompanying residential use.

Business zoning districts allow for retail, service, convenience, and large-scale commercial activities. The BU-2 district typically permits a wide variety of activities not permitted in more restrictive business districts such as BU-1 and BU-1A. For example, bars, liquor stores, adult-oriented activities, and major department stores are not permitted in the BU-1 and BU-1A districts, but are permitted in the BU-2 and BU-3 districts.

Residential uses may also be permitted in the BU-1 district as a combination of permitted business uses and residential uses housed in the same building; however, the floor area of the residential use shall not exceed 50 percent of the floor area of the building. Residential uses are permitted in the BU-1A and BU-2 districts subject to approval at a public hearing.

Uses which can be considered transit-oriented include dry cleaners, banks, general retail, commercial, and convenience stores. However, uses such as automobile rentals, sales, and repair neither encourage transit usage nor create a pedestrian-, bicycle- and transit-friendly environment.

WEST FLAGLER STREET CORRIDOR STUDY AREA

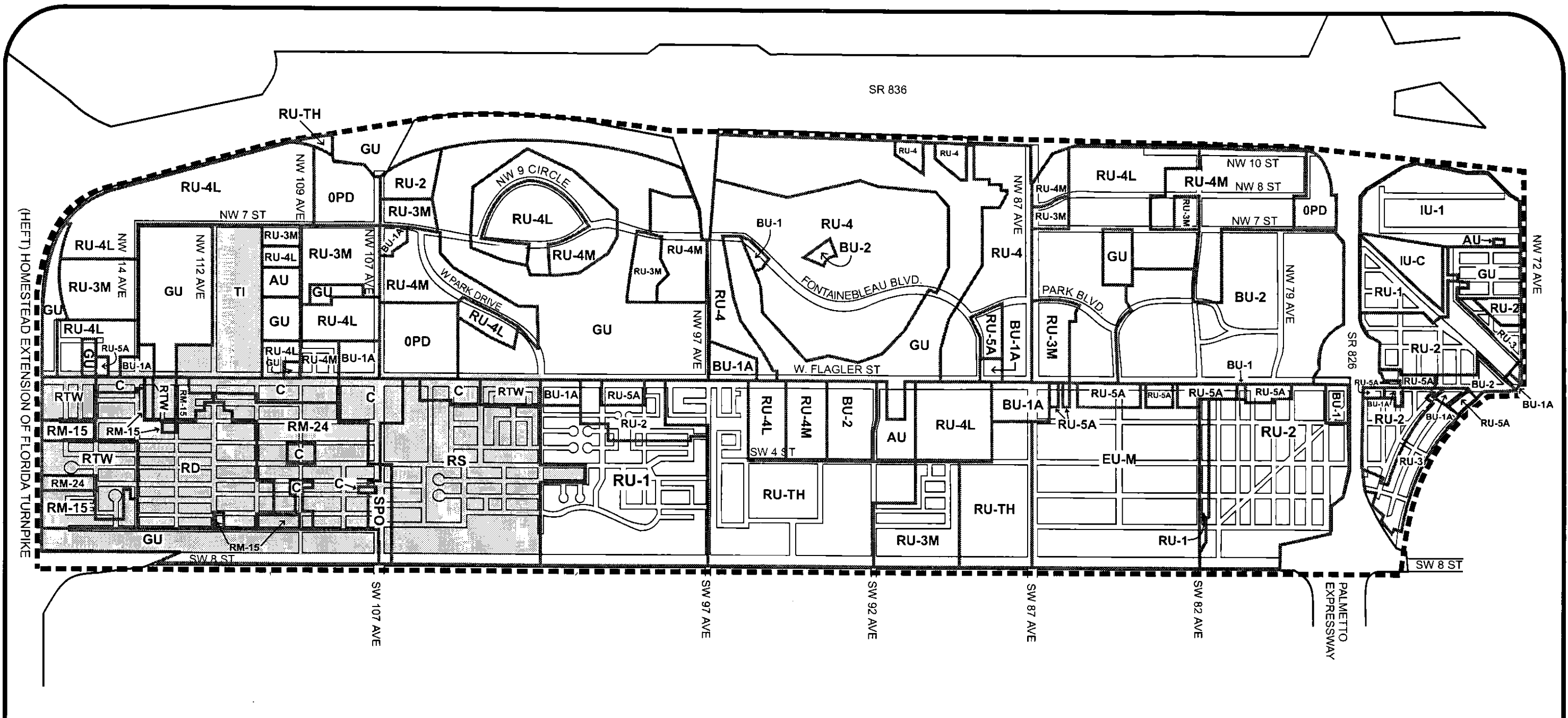


Figure 4 ZONING CLASSIFICATIONS

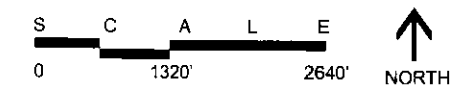
UNINCORPORATED DADE COUNTY

- | | | | |
|-------|-------------------|--------|---------------------------|
| AU | AGRICULTURE | RU-4M | MODIFIED APARTMENT |
| GU | INTERIM | RU-5A | SEMI-PROFESSIONAL OFFICES |
| EU-M | ESTATE MODIFIED | RU--TH | TOWNHOUSES |
| RU-1 | SINGLE FAMILY | BU-1 | NEIGHBORHOOD BUSINESS |
| RU-2 | TWO FAMILY | BU-1A | LIMITED BUSINESS |
| RU-3 | 4 UNIT APARTMENT | BU-2 | SPECIAL BUSINESS |
| RU-3M | MINIMUM APARTMENT | IU-C | INDUSTRIAL - CONTROL |
| RU-4 | HIGH DENSITY | OPD | OFFICE PARK DISTRICT |
| RU-4L | LIMITED APARTMENT | | |

CITY OF SWEETWATER

- | | |
|-------|--|
| RS | SINGLE FAMILY RESIDENTIAL DISTRICT |
| RM-15 | LOW DENSITY MULTI-FAMILY RESIDENTIAL DISTRICT |
| RM-24 | HIGH DENSITY MULTI-FAMILY RESIDENTIAL DISTRICT |
| RTW | TWIN HOMES RESIDENTIAL DISTRICT |
| T1 | TRAILER PARK DISTRICT |
| C | COMMERCIAL DISTRICT |
| SPO | SEMI-PROFESSIONAL OFFICE DISTRICT |
| RD | DUPLEX RESIDENTIAL DISTRICT |

CITY OF SWEETWATER
 STUDY AREA BOUNDARY



**DEPARTMENT OF PLANNING,
DEVELOPMENT AND REGULATION**

DISK 18.Napoleon Zoning 6/07

Table 2
Zoning Districts,
West Flagler Street Corridor Study Area

Land Use Category	Zoning District	Permitted Density	Typical Permitted Uses*
Dade County			
Residential	GU -- Interim	1 unit/5 gross acres	uses depend on character of neighborhood
	AU -- Agricultural District	1 unit/5 gross acres	agriculture and one family residence
	EU-M -- Estate Modified District	1 unit/15,000 sq. ft.	one-family residence
	RU-1 -- Single-Family Residential District	1 unit/7,500 sq. ft.	one-family residence, day care
	RU-2 Two-Family Residential District	2 units/7,500 sq. ft. net	duplex, two-family residence, garage apartment
	RU-3 Four-Unit Apartment House District	4 units/7,500 sq. ft. net	multifamily apartment house, rooming house
	RU-TH -- Townhouse District	8.5 units/net acre	townhouse
	RU-3M Minimum Apartment House District	12.9 units/net acre	multifamily apartment house, community residential facility
	RU-4L High-Density Apartment House District	23 units/net acre	one BU-1 retail use per development, multifamily apartment house, community residential facility
	RU-4M High-Density Apartment House District	35.9 units/net acre	multifamily apartment house, community residential facility
RU-4 High-Density Apartment House District	50 units/net acre	multifamily apartment house, community residential facility	
Office/Resid.	RU-5A -- Semiprofessional Office District	professional offices, banks, travel agency	
	OPD Office Park District	administrative and professional offices, banks, day care, and research and development	
Business and Office	BU-1 Neighborhood Business District	mixed use (residence/business), retail and service convenience facilities, offices	
	BU-1A Limited Business District	retail and service convenience facilities, service stations, health clubs, animal hospitals, supermarkets, movie theaters	
	BU-2 -- Special business District	larger-scale commercial facilities, office parks, pubs and bars	
Indus./Office	IU-C -- Controlled Industrial District	large industrial projects and industrial parks	
Sweetwater			
Residential	RS Single-Family Residential District	5.0 units/net acre	one-family attached residence, day care, public parks
	RD Duplex Residential District	11.6 units/net acre	two-family residence, public parks, day care, religion
	RM-15 Low-Density, Multi-Family Residential District	15.0 units/net acre	multifamily apartment house, accessory structures
	RM-24 High-Density, Multi-Family Residential District	24.0 units/net acre	multifamily apartment house, accessory structures
	RTW Twin Homes Residential District	11.6 units/net acre	two-family detached and detached residence
	TI -- Trailer Park District	residential mobile home and accessory	
Business and Office	C -- Commercial District	banks, medical, retail/service industry	
	SPO -- Semi-Professional Office District	professional offices, medical doctors, travel agency, etc.	

* Zoning is cumulative. Therefore, with the exception of agricultural uses, all uses allowed in one district are generally allowed in the next most intensive district.

Sources: Chapter 33, Zoning, of the Code of Metropolitan Dade County, July 1997; Article II, Code of the City of Sweetwater, August 1997.

As discussed in the Land Use Section, more pedestrian and public transit-friendly uses are needed throughout the West Flagler Street Corridor Study Area, especially around the bus stops. As some areas are developed and redeveloped with more intense uses, priority should be given to those uses that complement each other and those of the adjacent areas that promote higher transit patronage.

Building Content and Setbacks

Table 3 compares the zoning districts according to regulations concerning lot coverage, landscaped open space, building setbacks, floor area ratio, and height. As shown by the table, the effect of these regulations has been to promote land use patterns and building designs that are more comfortable for motorists than for pedestrians.

The land use pattern generated by existing zoning ordinances is low in density and intensity. Generally, lot coverage is not allowed to exceed 40 percent, floor area ratio is more restricted, setbacks must be at least 15 feet between the building line and the sidewalk, and parking is required on an individual basis.

Lot Coverage. In the RU-2, RU-3M, RU-4L, and RU-4M districts, lot coverage is restricted to 30 percent of the total lot area. In the RU-4, RU-5A, and all BU districts, this requirement is 40 percent of the total lot area. In RU-TH and OPD, lot coverage is not restricted. Adherence to this policy creates a building form in which buildings and land uses are placed farther apart. This creates a typical suburban pattern of widely-spaced buildings, rather than a more compact urban pattern. As a result, walking distances increase, discouraging pedestrians from walking to their destinations. In most compact urban areas, buildings cover most of the entire lot and are adjacent to each other.

Building Height. Height requirements vary for zoning districts. In the BU-1 district, buildings may reach a maximum height of two stories or 35 feet. In BU-1A, height may reach four stories or 45 feet, and in more liberal business zoning districts, such as BU-2, height is not restricted; rather, it is determined by lot size and other standards such as floor area ratio and lot coverage.

In residential districts, height is less restrictive as zoning becomes more liberal. The RU-2 and RU-3M districts allow only two stories or 35 feet. More intense residential zones allow greater building heights. In the RU-4L and RU-4M districts, buildings may reach six stories or 75 feet and eight stories or 100 feet, respectively. The RU-4 district allows building heights to reach 100 feet or more depending on the lot size. In the RU-5A district, height is restricted to 24 feet.

As the West Flagler Street Corridor Study Area is located along the flight path for aircraft serving Miami International Airport (MIA), additional restrictions on height are imposed by the Dade County Zoning Code. Section 33-334 of the Code establishes zone classification districts for the airport zoning area and criteria for review of land use and zoning. Structures within the HZ (Horizontal District) are limited to 150 feet in height. This zone includes that part of the Study

Table 3
Building Content, Setbacks, and Lot Area,
West Flagler Street Corridor Study Area

Building Characteristic	Zoning Districts															
	EU-M	RU-1	RU-2	RU-3M	RU-TH	RU-4L	RU-4M	RU-4	RU-5A	BU-1	BU-1A	BU-2	IU-C	IU-1	OPD	AU
Minimum Lot Area (sq. ft.)	15,000	7,500	7,500	16,884	1 net acre	10,000	10,000	10,000	10,000	5,000	5,000	5,000	10 acres	7,500	3 net acres	old 10,000 new 5 acres
Max. Lot Coverage	30%	35%	30%	30%	30%	30%	30%	40%	40%	40%	40%	40%		no limit		1+ acres 15% <1 acre 25%
Maximum Height	2 stories or 35'	2 stories or 35'	2 stories or 35'	2 stories or 35'	40'	6 stories or 75'	8 stories or 100'	100' if >100' shadow controlled by 41° angle	2 stories or 35'	2 stories or 35 ft	4 stories or 45 ft	no limit		equal to width of widest adj street	8 stories or 100'	2 stories or 35'
Front Setback (ft.)*	25'	25'	25'	25'	15'	25'	25'	25' if height ≤ 35' 25' + 40% of height if height > 35' maximum 50'	25'	20'	20'	20'	25' if ≤ 2 acres 25' or 10% of lesser dimension	20'	30' if abuts EU, RU-1, RU-2 50' for structures, 15' for pkg.	1+ acres 50' <1 acre 25'
Rear Setback (ft.)	25'	25'	25'	25'	10'	25'	25'	25' or line formed by sun angle of 63°	25'	20' if adj to RU/EU 5' if adj to BU/IU (walls w/ opening) 0' if adj to BU/IU (walls w/o opening)	20' if adj to RU/EU 5' if adj to BU/IU (walls w/ opening) 0' if adj to BU/IU (walls w/o opening)	20' if adj to RU/EU 5' if adj to BU/IU (walls w/ opening) 0' if adj to BU/IU (walls w/o opening)	20' if adj to RU/EU 5' if adj to BU/IU (walls w/ opening) 0' if adj to BU/IU (walls w/o opening)	20' if adj to RU/EU 5' if adj to BU/IU (w/o wall opening) maximum 35'	15'	1+ acres 25' <1 acre 25'
Interior Side Setback (ft.)	15'	10% of lot width 5' - 7.5'	7.5'	20'	20' btwn groups	2 story 15' >2 story 20'	2 story 15' >2 story 20'	25' if height ≤ 35' 25' + 40% of height if height > 35'	15'	15' if adj to RU/EU 5' - 10' if BU contains residential use 0' if adj to BU/IU	15' if adj to RU/EU 5' - 10' BU if contains residential use 0' if adj to BU/IU	15' if adj to RU/EU 5' - 10' if BU contains residential use 0' if adj to BU/IU	10'	0' if adj to BU/IU 5' w/o wall opening 10' for rear portion 15' if adj RU/EU	15'	1+ acres 15' <1 acre 15'
Side Street Setback (ft.)	25'	15'	15'	25'	15'	25'	25'	25' or line formed by 63° angle	15'	15' or 25' if adj to RU/EU	15' or 25' if adj to RU/EU	15' or 25' if adj to RU/EU	25'	15' or 25' if adj to RU/EU	15'	1+ acres 25' <1 acre 25'
Maximum Floor Area Ratio (FAR)			na	1 fl .30 2 fl .50		1 story .30 2 story .50 3 story .75 4 story .80 5 story .85 6 story .90	1 story .30 2 story .50 3 story .75 4 story .80 5 story .85 6 story .90 7 story .95 8 story 1.0	1 story .40 2 story .60 3 story .80 4 story 1.0 5 story 1.2 6 story 1.4 7 story 1.6 8 story 1.8 9 story 2.0	1 story .40 2 story .60	1 story .40 >2 story .11 for each additional story	1 story .40 >2 story .11 for each additional story	1 story .40 2-8 story .11 for each additional story 9+ story .06 for each additional story		no limit	1 story .30 .08 for each add'l story	
Minimum Open Space (percentage of total lot area)			na	25%	30%	1-4 story 25% >4 story 35%	1-4 story 25% 5-6 story 30% >5 story 35%	40%	25%	<1 acre 18% 1-5 acres 16% 5-25 acres 14% 25+ acres 12% additional 1.5% for each add. story	(one story) <1 acre 18% 1-5 acres 16% 5-25 acres 14% 25+ acres 12% (2-8 stories) add 1.5% for each add'l story (9+ stories) add 2.5% per story	(one story) <1 acre 18% 1-5 acres 16% 5-25 acres 14% 25+ acres 12% (2-8 stories) add 1.5% for each add. story (9+ stories) add 2.5% per story	20%	10% or 15% if abuts RU/EU	1 story 40% 3% each add'l story	

* Setbacks in BU and IU districts are determined by adjacent zoning districts where noted.
Building content, setbacks, and lot area in the GU District is determined by the trend of development

Source: Chapter 33, Zoning Code, of the Code of Metropolitan Dade County, July 1997.

Area south of NW 7 Street and east of NW/SW 87 Avenue. The area between NW/SW 87 Avenue and NW/SW 97 Avenue is contained within the CN (Conical District). Structures within this district are restricted to 150 feet plus one foot of elevation for every 20 feet of distance westerly from the boundary of the Horizontal District. An area defined by a triangle formed by SR 836 and an imaginary line running southwest from the junction of SR 836 and SW 82 Avenue is part of the PA (Precision Instrument Approach District). Within this district, structures are limited to one foot of height to every 40 feet of distance from a point 10,200 feet from the end of runway 9R/27L.

Setbacks. Building setback is one of the design characteristics typical of modern suburbia. Setbacks are required in most zoning districts on all sides: front, rear, and sides. Setbacks at ground level, especially in the front of major streets, separate buildings from the street and cause the pedestrian to lose perspective.

Front Setback. Requirements for the front setback range from 20 feet for Business and Industrial districts to 25 feet for Residential and Office districts. In the RU-4 district, the minimum front setback is 25 feet, increased by 40 percent if the building is over 35 feet. Maximum setback distance is 50 feet.

Interior Setbacks. The minimum setback distances and spacing requirements for all business and industrial uses (except IU-C) range from five feet (no minimum if a side wall has no openings and meets fire regulations), if adjacent property is zoned BU or IU, to 15 feet if adjacent property is zoned RU or EU. For residential districts, the setback ranges from 7½ feet for RU-2 to 20 feet for RU-3M. In RU-4L and RU-4M districts, the minimum interior side setback is 15 feet for one- and two-story buildings, and 20 feet for buildings over two stories. For RU-4, the minimum interior side setback is 25 feet or measured by building containment within a line formed by a vertex of a 63° angle at the property line and the ground. For office districts, the minimum interior side setback is 15 feet.

Side Street Setback. The minimum distance a building should be placed from the right-of-way is 15 feet in BU and IU districts, and 25 feet if the adjacent property is zoned residential. In the RU-5A district, the minimum side street setback distance is 15 feet.

Floor Area Ratio. Floor area ratio (FAR) becomes less restrictive as zoning districts become more liberal. FAR ranges from 0.30 for one-story buildings in the RU-3M District to 2.0 in the RU-4 District. FAR in office districts permits 0.40 for one-story buildings and increases to 0.60 for two-story buildings.

Business zoning districts utilize a more complicated formula for FAR. In the BU-2 district, FAR starts at 0.40 for a one-story building, increases 0.11 for each additional story up to the eighth story, and thereafter increases by 0.06 for each additional story. Thus, a four-story building would have a floor area ratio of 0.73, while a ten-story building in the BU-2 district would have a floor area ratio of 1.29.

Landscaped Open Space. All zoning districts in the West Flagler Street Corridor Study Area, except EU-M, RU-1, RU-2, GU and AU, require the provision of landscaped open space. In the residential districts, minimum landscaped open space ranges from 25 percent of total lot area in the RU-3M district to 40 percent in the RU-4 district. In office districts, 25 percent is required. In all BU districts, the minimum landscaped open space for one-story buildings occupying one acre is 18 percent of total lot area. This decreases to 16 percent on lots greater than one acre and up to five acres; to 14 percent on lots of more than five acres up to 25 acres; and to 12 percent on lots greater than 25 acres. These minimum requirements are increased by 1½ percent for each additional story. In BU-2 district, the landscaped open space is increased by 2½ percent for additional stories after the eighth story. In IU-1 district, the minimum landscaped open space requirement is ten percent of the net lot area and 20 percent in the IU-C district. This increases 15 percent if the use abuts a residentially-zoned or developed property.

Landscaping beautifies the environment and provides shade for pedestrians. However, in more urbanized areas, this requirement is tailored to the conditions of the area. Colonnades can provide protection from sun and rain as well as sense of human scale.

All these regulations have produced a scale of buildings that is inappropriate to the area as the low-rise (often one-story) structure does not relate well to the width of streets. Various sources cite different scales as ideal, ranging from ratios of one increment of height to one increment of width to one increment of height to six increments of width⁷. The implementation of proper scale, which relates well to the street, is necessary to promote favorable walking conditions.

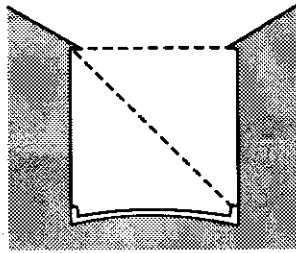
The purpose of providing scale which relates buildings to the street is to create a sense of place by defining spatial enclosure (see Figure 5). Utilizing proper scale, which relates well to the street creates a sense of place necessary to promote safety and favorable walking conditions.

The right-of-way on the West Flagler Street varies from 100 to 135 feet. If the one-to-one ratio were to be applied, buildings fronting West Flagler Street would be at least 14 stories high. Yet the corridor is generally dominated by low-rise buildings. With wider parking lots in the front setback, buildings must be taller still.

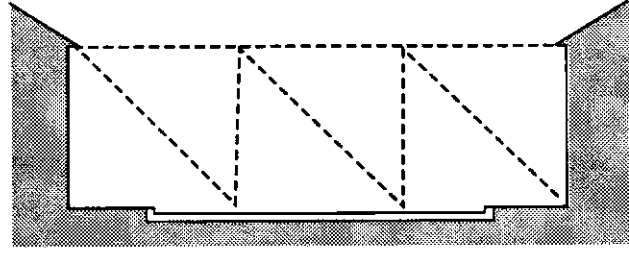
Summary

In the West Flagler Street Corridor Study Area, conditions do not favor a pedestrian- and bicycle-friendly environment. This can be attributed to the current zoning regulations which encourage an environment in which land uses are segregated, spaced far apart, and where buildings do not relate well to the street. In general, the scale of the buildings is low, thereby failing to define the corridor and to provide a sense of place. The lot coverage requirements also cause buildings to be spaced far apart, making pedestrians walk greater distances. Buildings are set back more deeply from the streets, separating them from sidewalks, thereby creating an environment which discourages people from walking. The lack of a sense of place, wide spacing of land uses, and

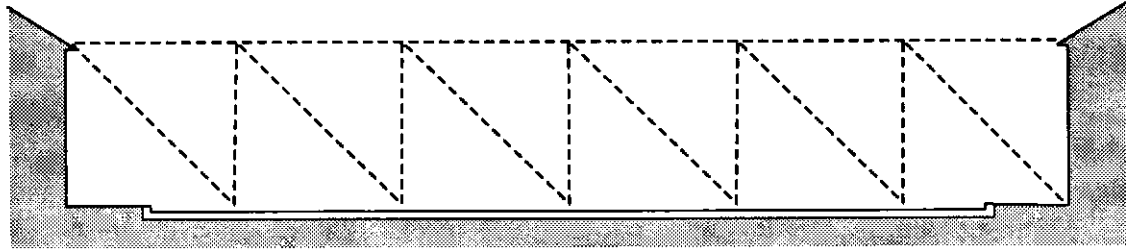
⁷ Reid Ewing, *Pedestrian and Transit Friendly Design*, March, 1996, p. 27



RATIO 1 : 1

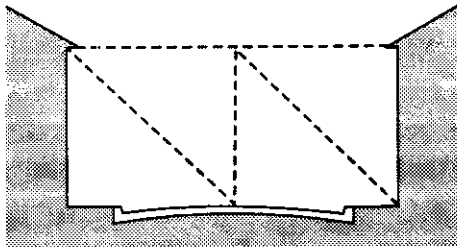


RATIO 1 : 3

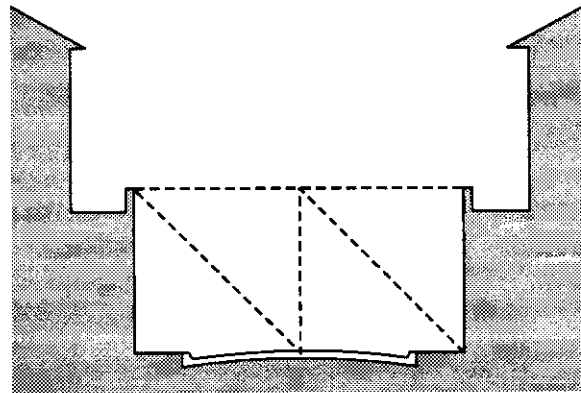


RATIO 1 : 6

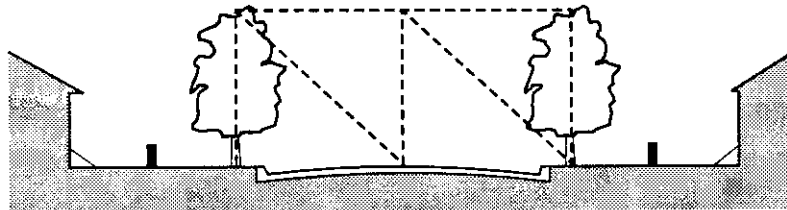
PROPORTIONS



BY FACADE



BY RECESS LINE



BY LANDSCAPING

Figure 5 PROPORTION OF BUILDING TO EXTERIOR SPACE

SOURCE: Architectural Graphic Standards,
Ninth Edition American Institute of Architect, p.86.

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the poor relationship between streets and buildings discourage residents and visitors from walking and causes them to utilize automobiles for even the shortest of trips.

To create a pedestrian-friendly and human-scaled community, is it necessary to bring buildings and structures closer to the streets to help define the corridors and reinforce a human scale environment. In cases of tall buildings, they should be located no more than 20 feet from the street line; however, for uses that generate a high percentage of auto trips, deeper setbacks may be permitted, but parking within the setback should be restricted. In addition, buildings should include, at the street level, design elements that encourage pedestrian interest such as large display windows, multiple entries, and clear signs.

One way to implement all these requirements is to revise the Zoning Code or to create a zoning overlay district for the corridor. For example, a zoning district could be created that would allow a mixture of land uses including residential, office, hotel, clubs, restaurants, theaters, and retail uses. However, since the Study Area is not currently served by fixed-guideway transit, parking should be required. Since the various uses will be located in close proximity or in the same building; however, parking can be shared and easily serve a number of different land uses.

Recommendations

1. Revise the existing Zoning Code, or devise a zoning overlay district tailored to the West Flagler Street Corridor Study Area to create a more pedestrian-, bicycle-, and transit-friendly design.
2. Develop specific urban plans for small areas to begin to change the character of the entire area by adopting good urban design principles addressing building mass, density, public open space, and architectural variety to create a more pedestrian-, bicycle- and transit-friendly environment.

3.0 PEDESTRIAN AND BICYCLE FACILITIES

The passage to the Intermodal Surface Transportation Efficiency Act (ISTEA) and the Clean Air Act Amendments (CAAA) have renewed incentives for planning agencies to emphasize walking and bicycling as significant components of the transportation mix. As a result, Dade County is directing its efforts at diverting automobile trips to other modes of transportation by diversifying its transportation system.

3.1 Pedestrian Facilities

Sidewalks

The County's *Comprehensive Development Master Plan* (CDMP) has a policy emphasizing that streets be designed for pedestrian and bicycle mobility as well as vehicular mobility. It provides for "sidewalks with width and street-edge landscaping increased where necessary to accommodate pedestrian volumes or to enhance safety or comfort of pedestrians on sidewalks along any high-speed roadways. Crosswalks will be provided, and all multi-lane roadways shall be fitted with protected pedestrian refuges in the center median at all significant pedestrian crossings." (CDMP, Land Use Element, Page I-39.)

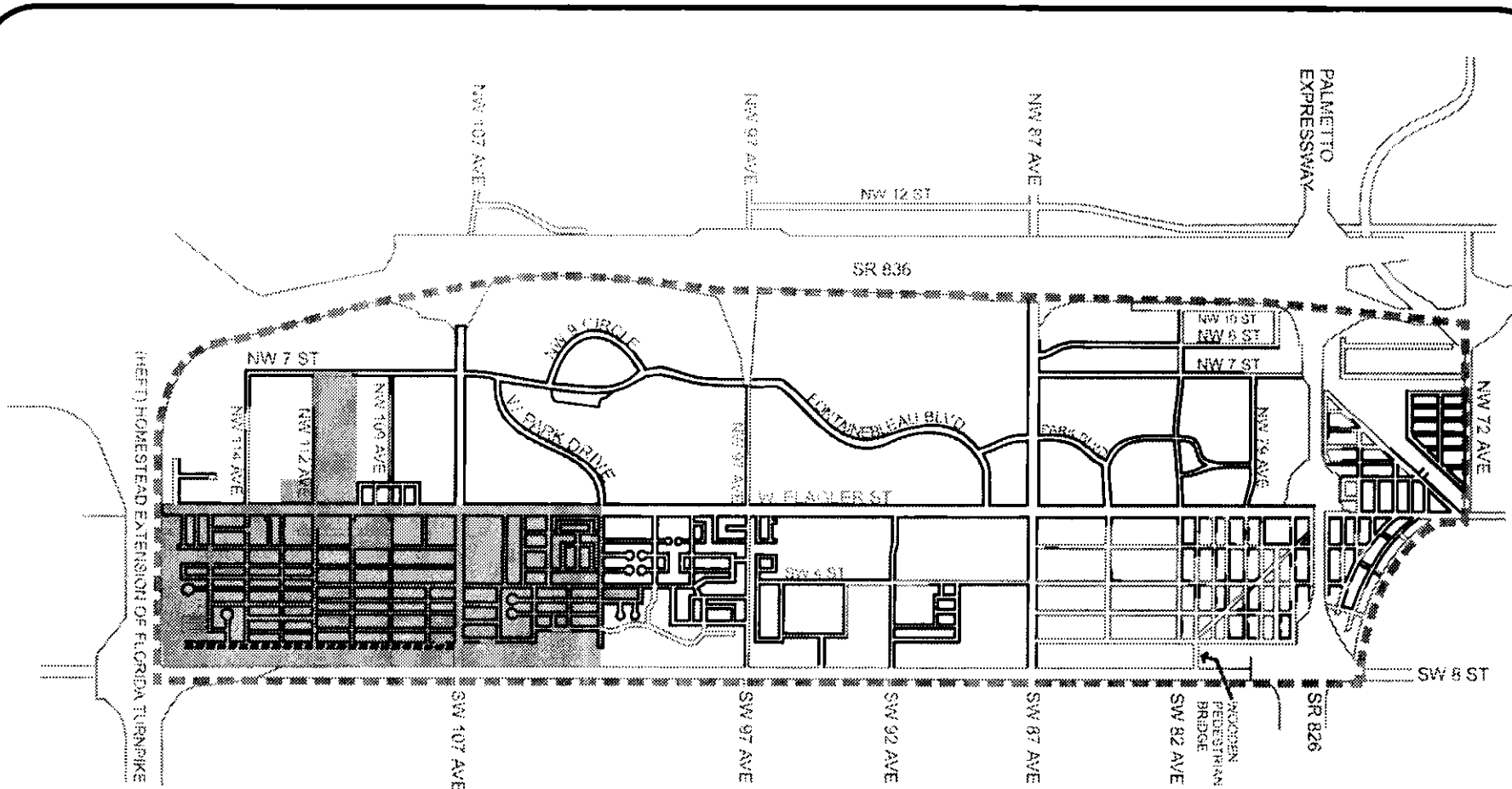
As shown in Figure 6, sidewalks are provided in most parts of the Study Area. The commercial areas are well-served with sidewalks on most blocks; however, sidewalks are less prevalent in the single-family residential areas. Sidewalks are provided on corridors such as West Flagler Street, Fontainebleau Boulevard, NW 7 Street, and NW/SW 107, 97 and 87 Avenues. In most locations the sidewalks are in good condition, without cracks, impediments, or interruptions.

Some locations in the Study Area lack sidewalks on one or both sides of the roadways. A lack of sidewalks is particularly prevalent in the residential area south of West Flagler Street between SW 97 Avenue and the Palmetto Expressway. Other areas lacking sidewalks include the residential area north of West Flagler Street between the Homestead Extension of Florida's Turnpike and NW 107 Avenue, and east of the Palmetto Expressway between the Tamiami Canal and NW 8 Street. Table 4 lists all improvements needed to provide a continuous sidewalk network in the Study Area.

Crosswalks and Pedestrian Signals





Crosswalks marked with solid white lines and pedestrian signals are provided at some major intersections. Figure 7 shows the location of all existing pedestrian crossings within the Study Area, and Table 5 lists all crosswalk and pedestrian signal locations in the area. More crosswalks with pedestrian-activated signals are needed at other intersections to allow people to cross roads safely. Table 6 lists all future traffic signals, and Table 7 lists all crosswalks and pedestrian signal needs in the Study Area, as determined by an evaluation of where such facilities are deficient.

WEST FLAGLER STREET CORRIDOR STUDY AREA



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Figure 6 **EXISTING SIDEWALKS AND BICYCLE PATHS**

-  SIDEWALK
-  BICYCLE PATH
-  STUDY AREA BOUNDARY
-  CITY OF SWEETWATER



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Table 4
Sidewalks Needed To Complete Network,
West Flagler Street Corridor Study Area

Roadway	Segment		Side	Width (ft.)*
	From	To		
NW 73 Avenue	NW 6 Street	Northwest Drive	East, West	5
NW 74 Avenue	NW 6 Street	Northwest Drive	East, West	5
NW 76 Avenue	NW 4 Street	NW 3 Street	East, West	5
NW 76 Avenue	NW 2 Street	W. Flagler Street	West	5
Northwest Blvd.	NW 77 Avenue	NW 3 Street	East, West	5
Northwest Drive	NW 74 Avenue	NW 72 Avenue	West	5
NW 77 Avenue	Northwest Blvd.	NW 2 Terrace	East	5
NW 78 Avenue	NW 10 Street	NW 8 Street	East, West	5
NW 82 Avenue	NW 10 Street	NW 8 Street	East	5
NW 82 Avenue	NW 8 Street	NW 7 Street	West	5
NW 109 Avenue	NW 7 Street	W. Flagler Street	West	5
NW 112 Avenue	NW 7 Street	W. Flagler Street	East	5
NW 112 Avenue	NW 7 Street	NW 4 Terrace	West	5
NW 114 Avenue	NW 7 Street	W. Flagler Street	East	5
NW 114 Avenue	NW 4 Street	NW 2 Street	West	5
NW 117 Avenue	NW 3 Street	W. Flagler Street	West	5
NW Flagler Terrace	NW 76 Court	NW 76 Avenue	North, South	5
NW 2 Street	NW 76 Court	NW 76 Avenue	South	5
NW 2 Terrace	NW 73 Avenue	NW 72 Avenue	North, South	5
NW 3 Street	NW 77 Avenue	Northwest Blvd.	North, South	5
NW 3 Street	NW 74 Avenue	NW 72 Avenue	North, South	5
NW 4 Street	NW 77 Avenue	Northwest Blvd.	North, South	5
NW 4 Street	NW 74 Avenue	NW 72 Avenue	North, South	5
NW 5 Street	NW 77 Avenue	Northwest Blvd.	North, South	5
NW 5 Street	NW 74 Avenue	NW 72 Avenue	North, South	5
NW 6 Street	NW 74 Avenue	NW 72 Avenue	North, South	5
NW 7 Street	NW 76 Avenue	NW 72 Avenue	North, South	5
NW 7 Street	NW 79 Avenue	Palmetto Expwy.	North	5
NW 7 Street	NW 112 Avenue	NW 110 Avenue	South	5
NW 8 Street	NW 76 Avenue	NW 72 Avenue	North, South	5
NW 8 Street	NW 82 Avenue	Palmetto Expwy.	North	5

Table 4 (Cont'd.)
Sidewalks Needed To Complete Network,
West Flagler Street Corridor Study Area

Roadway	Segment		Side	Width (ft.)*
	From	To		
NW 10 Street	NW 83 Avenue	NW 78 Avenue	North, South	5
Grand Canal Drive	SW 3 Street	SW 5 Street	East	5
Grand Canal Drive	SW 5 Street	Tamiami Canal	East, West	5
Florida Blvd.	SW 2 Street	SW 3 Street	East, West	5
Florida Blvd.	SW 4 Street	Palmetto Expwy.	East, West	5
SW 2 Street	SW 77 Avenue	Florida Blvd.	South	5
SW 2 Street	SW 87 Avenue	SW 78 Place	North	5
SW 2 Street	SW 87 Avenue	SW 78 Avenue	South	5
SW 4 Street	SW 87 Avenue	SW 78 Avenue	North, South	5
SW 4 Street	SW 92 Avenue	SW 87 Avenue	North	5
SW 4 Street	SW 93 Avenue	SW 89 Place	South	5
SW 5 Street	SW 87 Avenue	SW 78 Avenue	North, South	5
SW 5 Street	Florida Blvd.	Grand Canal Drive	North, South	5
SW 6 Street	SW 116 Court	SW 115 Avenue	North, South	5
SW 6 Terrace	SW 116 Court	SW 115 Avenue	North, South	5
SW 7 Street	SW 116 Court	SW 115 Avenue	North, South	5
SW 7 Street	SW 108 Avenue	SW 106 Avenue	South	5
SW 7 Street	SW 103 Court	SW 103 Avenue	South	5
SW 7 Street	SW 87 Avenue	SW 78 Avenue	North, South	5
SW 7 Terrace	SW 102 Avenue	SW 97 Court	North, South	5
SW 76 Avenue	W. Flagler Street	SW 2 Street	East, West	5
SW 76 Avenue	SW 2 Street	SW 3 Street	East	5
SW 76 Court	SW 2 Street	SW 4 Street	East, West	5
SW 77 Court	W. Flagler Street	Central Blvd.	West	5
SW 78 Avenue	W. Flagler Street	SW 5 Street	West	5
SW 78 Avenue	SW 2 Street	SW 5 Street	East	5
SW 78 Court	SW 2 Street	SW 7 Street	East, West	5
SW 78 Place	W. Flagler Street	SW 7 Street	West	5
SW 78 Place	SW 2 Street	SW 7 Street	East	5
SW 79 Avenue	W. Flagler Street	SW 5 Street	West	5
SW 79 Avenue	W. Flagler Street	Central Blvd.	East	5

Table 4 (Cont'd.)
Sidewalks Needed To Complete Network,
West Flagler Street Corridor Study Area

Roadway	Segment		Side	Width (ft.)*
	From	To		
SW 79 Court	SW 4 Street	SW 7 Street	East	5
SW 79 Court	W. Flagler Street	SW 7 Street	West	5
SW 80 Avenue	W Flagler Street	SW 7 Street	East, West	5
SW 81 Avenue	W. Flagler Street	SW 7 Street	East, West	5
SW 82 Avenue	W. Flagler Street	SW 7 Street	West	5
SW 82 Avenue	SW 4 Street	SW 7 Street	East	5
SW 84 Avenue	W. Flagler Street	SW 7 Street	East, West	5
Central Blvd.	SW 2 Street	SW 7 Street	North, South	5
SW 93 Avenue	SW 4 Street	SW 7 Street	East	5
SW 97 Avenue	W. Flagler Street	Tamiami Trail	East	5
SW 99 Court	SW 4 Street	SW 7 Terrace	East, West	5
SW 107 Avenue	SW 7 Terrace	Tamiami Canal	East, West	5
SW 109 Avenue	W. Flagler Street	SW 2 Street	West	5
SW 110 Avenue	W. Flagler Street	SW 2 Street	East	5
SW 112 Avenue	W. Flagler Street	SW 1 Street	East	5
SW 114 Avenue	SW 1 Street	SW 2 Street	East	5
SW 115 Avenue	W. Flagler Street	SW 1 Street	East	5
SW 115 Avenue	SW 2 Street	SW 3 Street	East, West	5
SW 115 Avenue	SW 6 Street	SW 7 Street	West	5
SW 116 Court	SW 6 Street	SW 7 Street	East, West	5
SW 7 Terrace	SW 108 Avenue	SW 107 Avenue	North	5

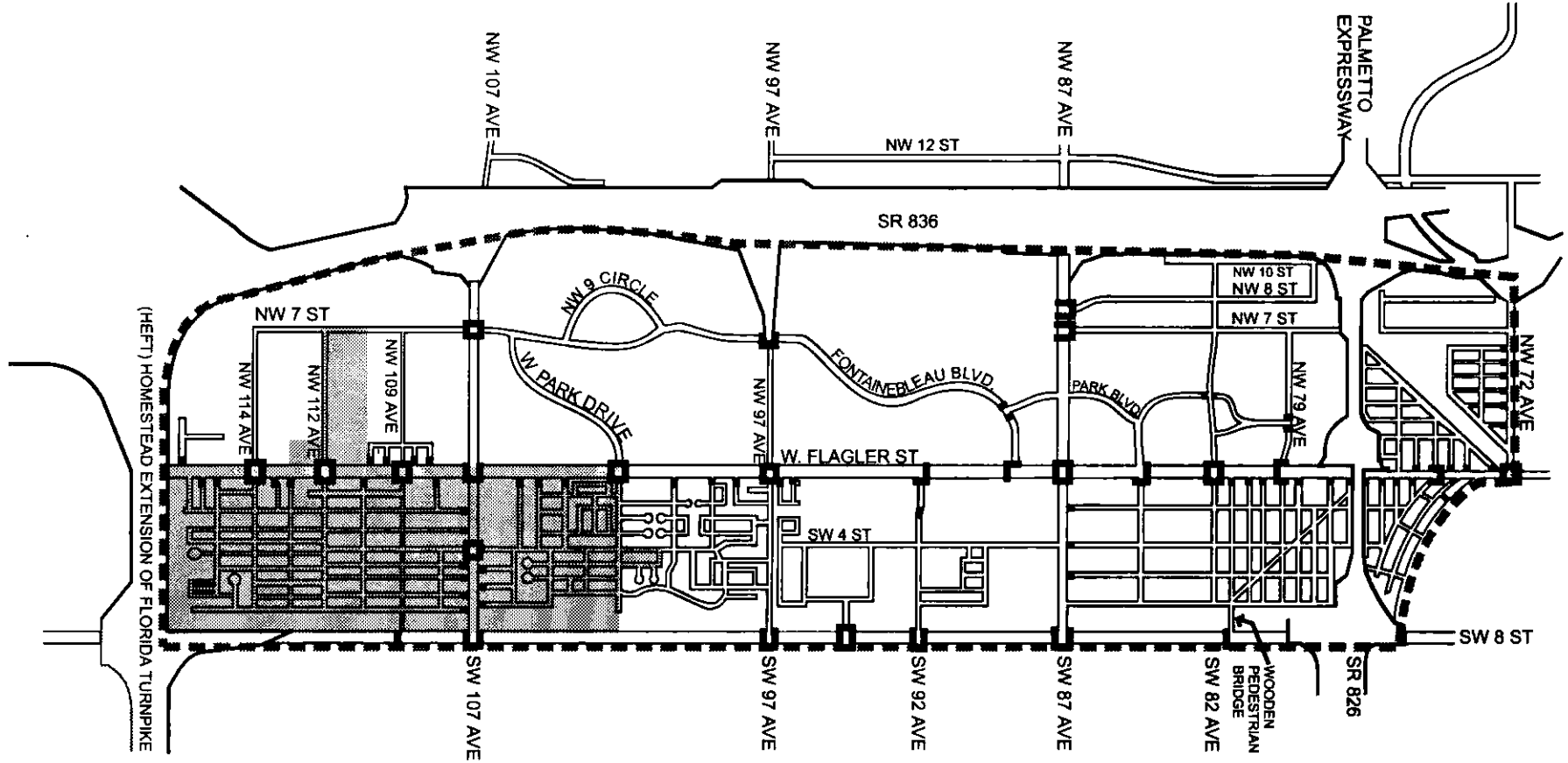
Source: Metro-Dade Department of Planning, Development and Regulation, July 1997.

* Minimum Width proposed to match existing sidewalk width. However, when appropriate, wider sidewalks are desirable.

Traffic Signals




Another important element in ensuring pedestrian safety is the provision of traffic lights. Traffic lights stop traffic regularly, allowing pedestrians to cross busy thoroughfares.

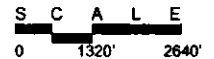
WEST FLAGLER STREET CORRIDOR STUDY AREA



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Figure 7 **EXISTING PEDESTRIAN CROSSWALKS**

-  CROSSWALK WITH SOLID LINES
-  STUDY AREA BOUNDARY
-  CITY OF SWEETWATER



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Table 5
Existing Crosswalks and Pedestrian Signals,
West Flagler Street Corridor Study Area

Roadway	Intersecting Road	Crosswalk (Location)	Traffic Signal	Pedestrian Signal
W. Flagler Street	SW 11700 Block	N	SS	-
W. Flagler Street	SW 116 Avenue	S	-	-
W. Flagler Street	SW 115 Avenue	S	-	-
W. Flagler Street	NW/SW 114 Avenue	N,E,S,W	SA	H
W. Flagler Street	SW 113 Court	S	-	-
W. Flagler Street	SW 113 Avenue	S	-	-
W. Flagler Street	NW/SW 112 Avenue	N,E,S,W	SA	P
W. Flagler Street	SW 110 Avenue	S	-	-
W. Flagler Street	NW 109 Court	N	-	-
W. Flagler Street	NW 109 Place	N	-	-
W. Flagler Street	NW 109 Avenue	N,E,S,W	SA	P
W. Flagler Street	NW 108 Court	N	-	-
W. Flagler Street	NW 108 Place	N	-	-
W. Flagler Street	SW 108 Avenue	S	-	-
W. Flagler Street	NW/SW 107 Avenue	E,S,W	SA	P
W. Flagler Street	SW 106 & 105 Block	S	SS	-
W. Flagler Street	SW 104 Court	S	-	-
W. Flagler Street	SW 103 Court	S	-	-
W. Flagler Street	NW/SW 102 Avenue	N,E,S,W	SA	P
W. Flagler Street	SW 99 Court	S	-	-
W. Flagler Street	SW 98 Court	S	SS	-
W. Flagler Street	SW 97 Place	S	-	-
W. Flagler Street	SW 97 Avenue	N,E,S,W	SA	XH
W. Flagler Street	SW 96 Court	S	-	-
W. Flagler Street	SW 96 Avenue	S	SS	-
W. Flagler Street	SW 95 Avenue	S, E	PA	XH
W. Flagler Street	SW 92 Avenue	S,E	SA	P
W. Flagler Street	Fontainebleau Blvd.	N,W	SA	P
W. Flagler Street	NW/SW 87 Avenue	N,E,S,W	SA	P
W. Flagler Street	SW 84 Avenue	S,E	SA	H
W. Flagler Street	NW/SW 82 Avenue	N,E,S,W	SA	H

Table 5 (Cont'd.)
Existing Crosswalks and Pedestrian Signals,
West Flagler Street Corridor Study Area

Roadway	Intersecting Road	Crosswalk (Location)	Traffic Signal	Pedestrian Signal
W. Flagler Street	SW 81 Avenue	S	-	-
W. Flagler Street	SW 80 Avenue	S	-	-
W. Flagler Street	SW 79 Court	S	-	-
W. Flagler Street	NW/SW 79 Avenue	N,S,W	SA	H
W. Flagler Street	SW 78 Place	S	-	-
W. Flagler Street	SW 7810 & 7850 Blocks	-	SS	-
W. Flagler Street	SW 78 Avenue	S	-	-
W. Flagler Street	SW 77 Court	S	H	-
W. Flagler Street	SW 77 Avenue	S	-	-
W. Flagler Street	SR 826	-	-	-
W. Flagler Street	NW/SW 76 Court	N,S	-	-
W. Flagler Street	SW 76 Avenue	S	-	-
W. Flagler Street	NW/SW 75 Avenue	N,S	-	-
W. Flagler Street	Florida Blvd	N,E,S	SA	H
W. Flagler Street	Grand Canal Drive	S	-	-
W. Flagler Street	NW 73 Court	N	-	-
W. Flagler Street	NW 73 Place	N	-	-
W. Flagler Street	NW 72 Avenue	-	SA	H
NW 7 Street	NW 10800 Block	-	SA	-
NW 7 Street	NW 107 Avenue	N,E,S,W	SA	P
NW 7 Street	NW 8300 & 8400 Blocks	-	SS	-
NW 7 Street	NW 84 Avenue	-	PA	XH
NW 7 Street	NW 82 Avenue	-	PA	XH
Fontainebleau Blvd.	NW 97 Avenue	E,S,W	SA	XH
Fontainebleau Blvd.	Park Blvd.	N,S	SA	-
NW 109 Avenue	SW 8 Street	W	SA	-
NW 107 Avenue	SR 836 (South)	W	SA	-
NW 107 Avenue	SW 2 Street	W	-	-
SW 107 Avenue	SW 200 Block	W	SS	-
SW 107 Avenue	SW 3 Street	W	-	-
SW 107 Avenue	SW 4 Street	E,W	SA	XH

Table 5 (Cont'd.)
Existing Crosswalks and Pedestrian Signals
West Flagler Street Corridor Study Area

Roadway	Intersecting Road	Crosswalk (Location)	Traffic Signal	Pedestrian Signal
SW 107 Avenue	SW 5 Street	E,W	SS	-
SW 107 Avenue	SW 6 Street	E,W	-	-
SW 107 Avenue	SW 7 Street	E,W	-	-
SW 107 Avenue	SW 7 Terrace	W	-	-
SW 107 Avenue	SW 8 Street	N,E,W	SA	P
SW 97 Avenue	SW 8 Street	E,S,W	SA	P
SW 92 Avenue	W. Flagler Street	E, S	PA	XH
SW 92 Avenue	SW 4 Street	-	PA	XH
SW 92 Avenue	SW 8 Street	E,S,W	SA	P
NW 87 Avenue	SR 836	-	SA	-
NW 87 Avenue	NW 8 Street	N,S,E	SA	P
NW 87 Avenue	NW 7 Street	N,S,E	SA	XH
NW 87 Avenue	Park Blvd.	N,E,S,W	SA	P
SW 87 Avenue	SW 2 Street	E	-	-
SW 87 Avenue	SW 4 Street	E	-	-
SW 87 Avenue	SW 5 Street	E	-	-
SW 87 Avenue	SW 8 Street	E,S,W	SA	P
SW 82 Avenue	Park Blvd.	E,W	-	-
NW 79 Avenue	NW 2 Street	N, S	SA	-
NW 72 Avenue	NW 7 Street	W	SA	-
NW 72 Avenue	NW 6 Street	W	-	-
NW 72 Avenue	NW 5 Street	W	-	-
NW 72 Avenue	NW 3 Street	W	-	-
NW 72 Avenue	NW 2 Terrace	W	-	-
NW 72 Avenue	NW 2 Street	W	-	-

Source: Metro-Dade Department of Planning Development and Regulation, July 1997.

Notes: N means north, E means east, S means south, W means west.

PA means Pedestrian Actuated Midblock Signal

SA means Semi-actuated by Vehicles (and possibly pedestrians) Signal

SS means School Speed Zone Control Sign

H means Pedestrian Heads

P means Pedestrian Buttons Without Pedestrian Heads

X means Exclusive Pedestrian Heads

Future Traffic Signals

The Traffic Signals and Signs Division of the Dade County Public Works Department has plans to install new traffic signals in the Study Area. Table 6 lists the locations and type of traffic signal controllers to be installed in the future, and Table 7 indicates crosswalk and pedestrian signal needs in the Study Area.

Table 6
Future Traffic Signals,
West Flagler Street Corridor Study Area

Roadway	Intersecting Road	Traffic Signal	Pedestrian Signal	Construction Year
NW 109 Avenue	NW 7 Street	SA	No	1997
SW 109 Avenue	SW 4 Street	SA	Yes	1998
SW 109 Avenue	SW 6 Street	SA	No	1998
NW 82 Avenue	NW 7 Street	SA	Yes	1997
Park Blvd.	NW 84 Avenue	SA	No	U/C
Park Blvd.	NW 82 Avenue	SA	No	1997

Source: Metro-Dade Public Works Department, February 1997.

Note: SA means Semi-actuated traffic signal controller.

U/C means Under Construction

Bus Benches and Shelters

Another element needed to encourage walking and to increase transit ridership is the provision of bus shelters. Public transit riders need these facilities to be located conveniently and accessibly within walking distance to homes and businesses. As maximum walking distance is generally considered to be one quarter-mile, transit stops should be located at least every half-mile. If transit stops are not located within walking distance of trip origins and destinations, people will be inclined to use automobiles instead of public transit.

Also, the provision of bus stops with shelters⁸ (as opposed to signs or benches) will attract ridership. Shelter provides protection from the elements such as rain and intense sun. Riders are also attracted by aesthetically-pleasing shelters with decorative elements.

In 1990, The West Flagler Street Corridor Study Area contained 65,484 residents, or 10,914 residents per square mile. Research published recently indicates that a minimum of 23 residents or employees per acre are necessary to support minimum bus service.⁹ The Study Area also

⁸ Reid Ewing, *Pedestrian and Transit Friendly Design*, p. 29

⁹ *Ibid.*, p. 6.

Table 7
 Crosswalk and Pedestrian Signal Needs,
 West Flagler Street Corridor Study Area

Road To Cross	Intersecting Road	White-line Crosswalk	Striped Crosswalk	Pedestrian Signal
NW 8 Street	NW 87 Avenue	Yes	No	No
NW 8 Street	NW 82 Avenue	Yes	No	No
NW 8 Street	NW 109 Avenue	Yes	No	No
NW 7 Street	NW 107 Avenue	No	Yes	No
NW 7 Street	NW 87 Avenue	No	Yes	No
NW 7 Street	NW 82 Avenue	Yes	No	No
NW 7 Street	NW 79 Avenue	Yes	No	No
Fontainebleau Blvd.	W. Park Drive	No	Yes	No
Fontainebleau Blvd.	NW 97 Avenue	No	Yes	Yes
Fontainebleau Blvd.	Park Blvd.	No	Yes	No
Park Blvd.	NW 87 Avenue	No	Yes	No
Park Blvd.	NW 84 Avenue	No	Yes	Yes
Park Blvd.	NW 82 Avenue	No	Yes	Yes
NW 2 Street	NW 82 Avenue	Yes	No	No
NW 2 Street	NW 79 Avenue	No	Yes	Yes
W. Flagler Street	NW/SW 107 Avenue	No	Yes	No
W. Flagler Street	W. Park Dr./ SW 102 Ave.	No	Yes	No
W. Flagler Street	NW/SW 97 Avenue	No	Yes	No
W. Flagler Street	SW 92 Avenue	No	Yes	No
W. Flagler Street	Fontainebleau Blvd.	No	Yes	No
W. Flagler Street	NW/SW 87 Avenue	No	Yes	No
W. Flagler Street	NW/SW 84 Avenue	No	Yes	No
W. Flagler Street	NW/SW 82 Avenue	No	Yes	No
W. Flagler Street	NW/SW 79 Avenue	No	Yes	No
W. Flagler Street	NW/SW 72 Avenue	No	Yes	No
SW 107 Avenue	SW 4 Street	No	Yes	No
SW 107 Avenue	SW 8 Street	No	Yes	No
West Park Drive	Fontainebleau Blvd.	Yes	No	No
SW 92 Avenue	SW 4 Street	No	Yes	No
SW 92 Avenue	SW 8 Street	No	Yes	No
SW 87 Avenue	SW 8 Street	No	Yes	No

Source: Metro-Dade Department of Planning, Development and Regulation, July 1997.

contained 17,918 employees in 1990. Therefore, the combined resident/employee total per acre for West Flagler Street Corridor Study Area is 21.7. In the year 2000, the Study Area is projected to contain 70,883 residents and 20,883 employees which translates into 23.9 residents/employees per acre to support minimum bus service. The locations of existing bus stops with benches or shelters are displayed in Table 8, and a list of transit stops needing shelters is displayed in Table 9.

Table 8
Existing Bus Stops With Benches and Shelters,
West Flagler Street Corridor Study Area

Road	Segment		Bus Stop		Side of Street
	From	To	Bench	Shelter	
W. Flagler Street	SW 116 Avenue	SW 115 Avenue		Yes	South
W. Flagler Street	SW 115 Avenue	SW 114 Avenue		Yes	South
W. Flagler Street	SW 112 Avenue	SW 110 Avenue	Yes		South
W. Flagler Street	SW 109 Avenue	SW 108 Avenue		Yes	South
W. Flagler Street	SW 108 Avenue	SW 107 Avenue		Yes	South
W. Flagler Street	SW 107 Avenue	SW 105 Place	Yes		South
W. Flagler Street	SW 105 Place	SW 104 Court	Yes		South
W. Flagler Street	SW 103 Court	SW 102 Avenue	Yes		South
W. Flagler Street	SW 102 Avenue	SW 99 Court		Yes	South
W. Flagler Street	SW 98 Court	SW 97 Place	Yes		South
W. Flagler Street	SW 97 Place	SW 97 Avenue	Yes		South
W. Flagler Street	SW 96 Avenue	SW 92 Avenue	Yes		South
W. Flagler Street	SW 92 Avenue	SW 87 Avenue		Yes	South
W. Flagler Street	SW 87 Avenue	SW 84 Avenue	Yes		South
W. Flagler Street	SW 84 Avenue	SW 82 Avenue	Yes		South
W. Flagler Street	SW 78 Place	SW 78 Avenue	Yes		South
W. Flagler Street	SW 78 Avenue	SW 77 Court	Yes		South
W. Flagler Street	SW 76 Court	SW 76 Avenue	Yes		South
W. Flagler Street	SW 75 Avenue	Florida Blvd.	Yes		South
W. Flagler Street	Florida Blvd.	Grand Canal Dr.	Yes		South
W. Flagler Street	NW 73 Court	NW 73 Place	Yes		North

Table 8 (Cont'd.)
Existing Bus Stops With Benches and Shelters,
West Flagler Street Corridor Study Area

Road	Segment		Bus Stop		Side of Street
	From	To	Bench	Shelter	
W. Flagler Street	NW 73 Place	Florida Blvd.	Yes		North
W. Flagler Street	NW 75 Avenue	NW 76 Avenue	Yes		North
W. Flagler Street	NW 79 Avenue	NW 82 Avenue	Yes		North
W. Flagler Street	NW 82 Avenue	NW 84 Avenue		Yes	North
W. Flagler Street	NW 84 Avenue	NW 87 Avenue	Yes		North
W. Flagler Street	Fontainebleau Blvd.	NW 97 Avenue		Yes	North
W. Flagler Street	NW 97 Avenue	NW 100 Avenue		Yes	North
W. Flagler Street	NW 100 Avenue	NW 102 Avenue		Yes	North
W. Flagler Street	NW 102 Avenue	NW 107 Avenue		Yes	North
W. Flagler Street	NW 107 Avenue	NW 108 Court	Yes		North
W. Flagler Street	NW 109 Avenue	NW 109 Court	Yes		North
W. Flagler Street	NW 109 Place	NW 112 Avenue	Yes		North
W. Flagler Street	NW 112 Avenue	NW 114 Avenue	Yes		North
W. Flagler Street	NW 114 Avenue	NW 117 Avenue		Yes	North
NW 7 Street	NW 112 Avenue	NW 109 Avenue		Yes	North
NW 7 Street	NW 112 Avenue	NW 109 Avenue	Yes		South
NW 7 Street	NW 109 Avenue	NW 108 Avenue	Yes		North
NW 7 Street	NW 107 Avenue	N. Park Drive	Yes		South
NW 7 Street	N. Park Drive	NW 97 Avenue	Yes		North
NW 7 Street	N. Park Drive	NW 97 Avenue	Yes		South
Fontainebleau Blvd.	NW 97 Avenue	Park Blvd.	Yes		North
Fontainebleau Blvd.	NW 97 Avenue	Park Blvd.		Yes	South
NW 107 Avenue	NW 7 Street	SR 826	Yes		West
NW 107 Avenue	NW 7 Street	SR 826		Yes	East
SW 107 Avenue	W. Flagler Street	SW 2 Street		Yes	West
SW 107 Avenue	W. Flagler Street	SW 2 Street	Yes		East
SW 107 Avenue	SW 2 Street	SW 3 Street	Yes		West

Table 8 (Cont'd.)
Existing Bus Stops With Benches and Shelters,
West Flagler Street Corridor Study Area

Road	Segment		Bus Stop		Side of Street
	From	To	Bench	Shelter	
SW 107 Avenue	SW 5 Street	SW 6 Street	Yes		East
SW 107 Avenue	SW 7 Street	SW 7 Terrace	Yes		West
SW 87 Avenue	SW 5 Street	SW 4 Street	Yes		East
NW 72 Avenue	W. Flagler Street	NW 1 Terrace	Yes		East
NW 72 Avenue	NW 2 Street	NW 2 Terrace	Yes		East
NW 7 Street	NW 112 Avenue	NW 109 Avenue	Yes		North

Source: Metro-Dade Department of Planning, Development and Regulation, May 1997.

Table 9
Bus Shelter Needs
West Flagler Corridor Study Area

Road	Segment		Side of Street
	From	To	
W. Flagler Street	SW 112 Avenue	SW 110 Avenue	South
W. Flagler Street	SW 107 Avenue	SW 105 Place	South
W. Flagler Street	SW 105 Place	SW 104 Court	South
W. Flagler Street	SW 103 Court	SW 102 Avenue	South
W. Flagler Street	SW 98 Court	SW 97 Place	South
W. Flagler Street	SW 97 Place	SW 97 Avenue	South
W. Flagler Street	SW 96 Avenue	SW 92 Avenue	South
W. Flagler Street	SW 87 Avenue	SW 84 Avenue	South
W. Flagler Street	SW 84 Avenue	SW 82 Avenue	South
W. Flagler Street	SW 78 Place	SW 78 Avenue	South
W. Flagler Street	SW 78 Avenue	SW 77 Court	South
W. Flagler Street	SW 76 Court	SW 76 Avenue	South
W. Flagler Street	SW 75 Avenue	Florida Blvd.	South
W. Flagler Street	Florida Blvd.	Grand Canal Dr.	South
W. Flagler Street	NW 73 Court	NW 73 Place	North

**Table 9 (Cont'd.)
Bus Shelter Needs,
West Flagler Street Corridor Study Area**

Road	Segment		Side of Street
	From	To	
W. Flagler Street	NW 73 Place	Florida Blvd.	North
W. Flagler Street	NW 75 Avenue	NW 76 Avenue	North
W. Flagler Street	NW 79 Avenue	NW 82 Avenue	North
W. Flagler Street	NW 84 Avenue	NW 87 Avenue	North
W. Flagler Street	NW 107 Avenue	NW 108 Court	North
W. Flagler Street	NW 109 Avenue	NW 109 Court	North
W. Flagler Street	NW 109 Place	NW 112 Avenue	North
W. Flagler Street	NW 112 Avenue	NW 114 Avenue	North
NW 7 Street	NW 112 Avenue	NW 109 Avenue	South
NW 7 Street	NW 109 Avenue	NW 108 Avenue	North
NW 7 Street	NW 107 Avenue	N. Park Drive	South
NW 7 Street	N. Park Drive	NW 97 Avenue	North
NW 7 Street	N. Park Drive	NW 97 Avenue	South
Fontainebleau Blvd.	NW 97 Avenue	Park Blvd.	North
NW 107 Avenue	NW 7 Street	SR 826	West
SW 107 Avenue	W. Flagler St.	SW 2 Street	East
SW 107 Avenue	SW 2 Street	SW 3 Street	West
SW 107 Avenue	SW 5 Street	SW 6 Street	East
SW 107 Avenue	SW 7 Street	SW 7 Terrace	West
SW 87 Avenue	SW 5 Street	SW 4 Street	East
NW 72 Avenue	W. Flagler Street	NW 1 Terrace	East
NW 72 Avenue	NW 2 Street	NW 2 Terrace	East
NW 7 Street	NW 112 Avenue	NW 109 Avenue	North

Source Metro-Dade Department of Planning, Development, and Regulation, May 1997.

Shade

A significant problem in the Study Area is the lack of shade trees. Some streets have shade trees, most noticeably NW 87 Avenue and Fontainebleau Boulevard. Shade may be provided by trees with spreading canopies over sidewalks and pedestrian paths or by incorporating colonnades and

arcades into building facades. However, most roadways have very little shade. In climates with lots of rain and intense sun, shade is a necessary component to encourage people to walk to their destinations. Shade makes walking in hot weather more comfortable. Without proper shading, people will be less inclined to walk and will more likely use single-occupant vehicles to reach their destinations. Table 10 displays roadway segments which lack shade.

Table 10
Shade Tree Needs,
West Flagler Street Corridor Study Area

Roadway	From	To	Side of Street
W. Flagler Street	NW 72 Avenue	NW 84 Avenue	North
W. Flagler Street	SW 87 Avenue	SW 72 Avenue	South
W. Flagler Street	NW 97 Avenue	NW 107 Avenue	South
W. Flagler Street	NW 97 Avenue	HEFT	North
SW 87 Avenue	W. Flagler Street	SW 8 Street	East
SW 87 Avenue	SW 4 Street	SW 8 Street	West
SW 92 Avenue	W. Flagler Street	SW 8 Street	East, West
NW/SW 97 Avenue	Fontainebleau Blvd.	SW 8 Street	East, West
NW/SW 107 Avenue	SR 836	SW 8 Street	East, West

Source: Metro-Dade Department of Planning Development and Regulation, May 1997.

Recommendations

1. Provide the area with a continuous sidewalk network to link the residential areas, parks, schools, and commercial areas, using Local Option Gas Tax and Secondary Gas Tax funds for construction.
2. Plant trees to shade sidewalks and pedestrian paths, and encourage colonnades and arcades in building facades to increase shading on sidewalks and pedestrian paths.
3. Enforce the standards of Chapter 18-A of the Dade County Code (Landscaping Ordinance).
4. Provide striped crosswalks at all major intersections and install pedestrian crossing signals where needed.
5. Provide protected pedestrian refuges in center medians at all significant pedestrian crossings.

6. Designate bus stops and bus shelters where necessary according to bus stop/shelter needs, particularly at section and half-section line roads and transfer points, and replace existing bus benches with bus shelters.
7. Improve the information provided at bus stops (maps, schedules and signage), particularly at transfer points.
8. Prohibit blank walls along the edges of sidewalks.
9. Include curb cuts and wheelchair ramps, as required by the Americans With Disabilities Act, in all pedestrian facilities.

3.2 Bicycle Facilities Improvements

Currently, there are no bicycle facilities along the corridor; however, bicycle routes are proposed for SW 8 Street and SW 87, SW 92, SW 97, SW 102, SW 107, SW 117, SW 127, and SW 137 Avenues, and the east-west rail line. Table 11 displays existing roadway conditions as they apply to the safety of bicyclists.

Table 11
Bicycle Provisions and Conditions,
West Flagler Street Corridor Study Area

Road	Limits		Provisions/ Conditions
	From	To	
W. Flagler Street	Tamiami Canal	HEFT	Poor
Fontainebleau Blvd.	W. Flagler Street	NW 107 Avenue	Best
NW/SW 87 Avenue	NW 12 Street	W. Flagler Street	Worst
NW/SW 87 Avenue	W. Flagler Street	SW 8 Street	Poor
SW 92 Avenue	W. Flagler Street	SW 8 Street	Poor
NW/SW 97 Avenue	Fontainebleau Blvd.	SW 8 Street	Marginal
NW/SW 107 Avenue	Fontainebleau Blvd.	SW 8 Street	Worst
NW 117 Avenue	NW 7 Street	W. Flagler Street	Fair
Provisions/Conditions			
Best (Suitable roadway conditions requiring the least amount of traffic interaction)			
Fair (Less suitable roadway conditions requiring a low to moderate amount of traffic interaction)			
Marginal (Unsuitable roadway conditions requiring a moderate to high amount of traffic interaction)			
Poor (Inadequate roadway conditions requiring a high to extremely high amount of traffic interaction)			
Worst (Hazardous roadway conditions requiring an extreme amount of traffic interaction)			

Source: *Bicycle Facilities Plan*, Barton-Aschman Associates, adopted July 1995.

As shown by Table 11, the West Flagler Street Corridor Study Area exhibits generally poor conditions for bicycling. Only two road segments, Fontainebleau Boulevard and NW/SW 117 Avenue, exhibit conditions which favor safety and comfort for bicyclists. Future improvements of roadways should account for bicycle safety to ensure that people will feel comfortable in using bicycles to reach their destinations.

Recommendations

1. Study NW/SW 87, SW 92, 97 and NW/SW 107 Avenues, and West Flagler Street, for realignment to include integrated bicycle lanes to identify areas for cyclists on the roadways, or separated bike paths, both of which reduce interaction with automobile traffic. The inclusion of traffic calming devices should also be considered.
2. Require new development and redevelopment in the Study Area to provide secured bicycle parking and encourage the provision of these facilities in existing development as well. For residential development, separate fenced and gated parking areas should be considered. Simple bicycle racks may suffice for commercial and office development.

4.0 TRANSPORTATION

The West Flagler Street Corridor Study Area is provided with transportation services that include roadways that connect the area with other parts of the County and the Interstate Highway System, and public transit in the form of buses.

4.1 Roadways

Table 12 provides a list of the existing major roadways in the area, their functional classification, the number of lanes, and levels of service (LOS). Figure 8 illustrates the existing roadway network serving the Study Area. The major travel corridors which provide accessibility to and within the Study Area include east-west arterials such as the Dolphin Expressway (SR 836), West Flagler Street and Tamiami Trail (SW 8 Street), and north-south arterials such as the Homestead Extension of Florida's Turnpike (SR 821), NW/SW 107, 97 and 87 Avenues, and the Palmetto Expressway (SR 826). These corridors also provide access to other portions of the County. There is adequate access to the Palmetto Expressway with interchanges at West Flagler Street and SW 8 Street, to the Homestead Extension of Florida's Turnpike with an interchange at SW 8 Street, and to the Dolphin Expressway with interchanges at NW 87 and 107 Avenues. These arterial roadways provide good connections to the rest of the County's highway system located north, south and east of the Study Area. The several County collector roads that traverse the area feed the major arterial roadways. Certain east-west traversing roads, particularly NW 7 Street, are interrupted by the Palmetto Expressway (SR 826). With fewer routes to choose, motorists must crowd on to fewer roads, thereby increasing congestion. Future improvements should address to need to improve connectivity in the Study Area's roadway network.

Existing Roadway Level of Service

The level of service (LOS) of a roadway is a measurement that describes the operational condition of a roadway. Typically, roadway segments are rated on a scale from LOS A (free-flowing traffic) through LOS F (extremely congested). LOS C is defined as "uncongested," LOS D as "high density but stable flow," and LOS E as "operating conditions at or near capacity level."

Extremely congested conditions (LOS F) exist on West Flagler Street between SW 57 Avenue and the Palmetto Expressway and on SW 107 Avenue between SR 836 and SW 8 Street. There is only one roadway operating at LOS E, the Palmetto Expressway between SR 836 and SW 56 Street. Roadway segments operating at LOS D include SR 836 between SW 72 and SW 87 Avenues and SW 87 Avenue between SR 836 and SW 40 Street. All other expressways and arterial roadways that are currently monitored show acceptable peak-period LOS conditions.

The above information indicates that the Study Area suffers from some traffic congestion. This represents longer delays in traffic, deterioration of the quality of life, and environmental problems.

In keeping with the intent of the federal Intermodal Surface Transportation Efficiency Act (ISTEA), the County has adopted a transportation plan, the *Metro-Dade Transportation Plan to the Year 2015*, which includes projects that integrate multimodal transportation systems.

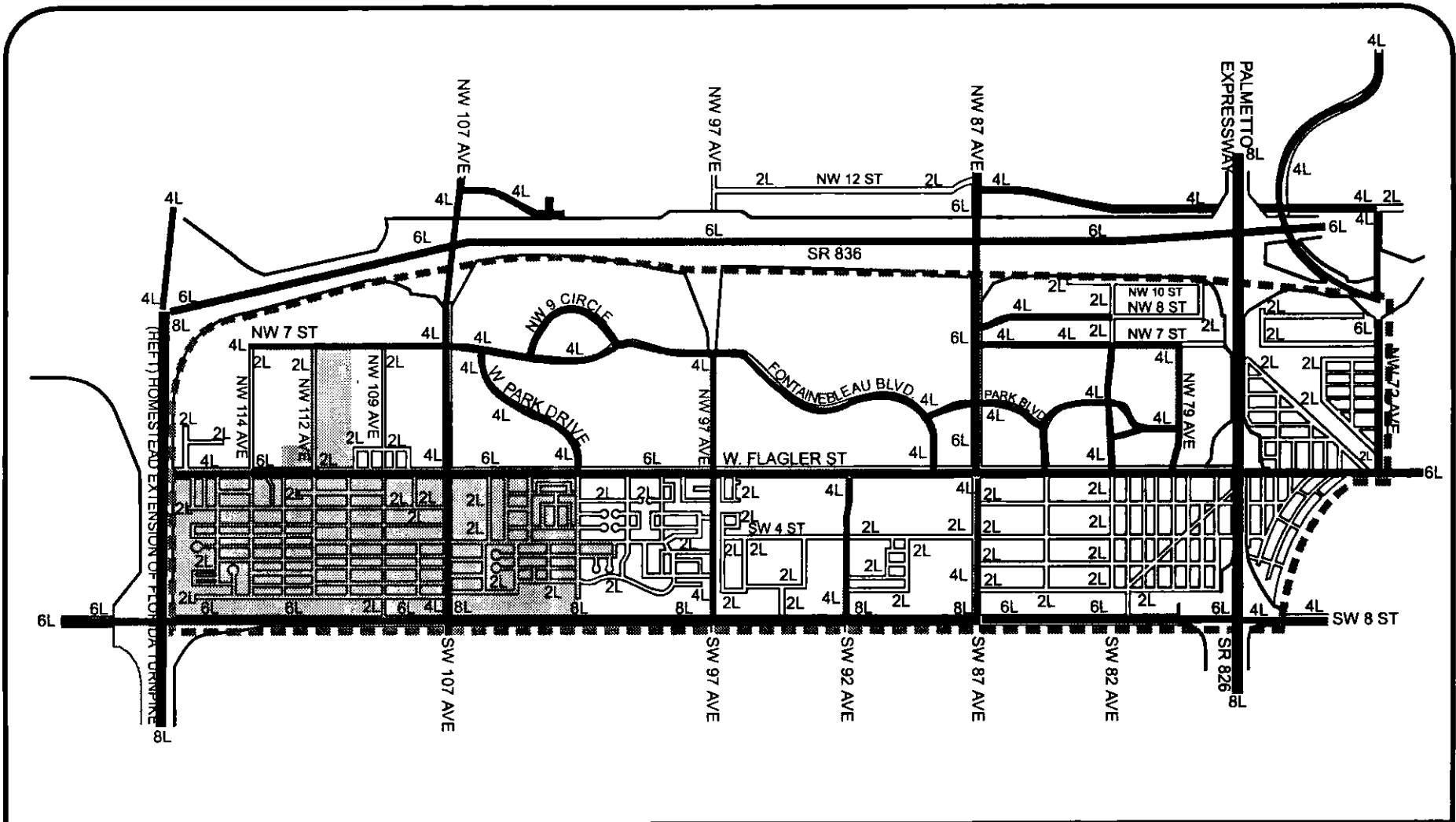
Table 12
Existing Major Roadways,
West Flagler Street Corridor Study Area

State Roads					
Roadway	Segment		Functional Classification	Number Lanes	LOS
	From	To			
Palmetto Expwy. (SR 826)	Dolphin Expwy.	W. Flagler Street	Principal Arterial -Limited Access	8	E
Dolphin Expwy. (SR 836)	NW 117 Avenue	NW 87 Avenue	Principal Arterial -Limited Access	6	C
	NW 87 Avenue.	NW 72 Avenue	Principal Arterial -Limited Access	6	D
The Homestead Extension of Florida's Turnpike - HEFT (SR 821)	Dolphin Expwy.	Tamiami Trail/ SW 8 Street	Principal Arterial -Limited Access	8	C
W. Flagler Street (SR 968)	NW 107 Avenue	NW 87 Avenue	Minor Arterial	6	C
	NW 87 Avenue	Palmetto Expwy.	Minor Arterial	6	D
	Palmetto Expwy	NW 72 Avenue	Minor Arterial	6	F
Milam Dairy Road/ NW 72 Avenue (SR 969)	Dolphin Expwy.	W. Flagler Street	Minor Arterial	6	C
NW 87 Avenue (SR 973)	Dolphin Expwy.	W. Flagler Street	Minor Arterial	6	D
SW 87 Avenue (SR 973)	W. Flagler Street	Tamiami Trail/ SW 8 Street	Minor Arterial	4	D
NW 107 Avenue (SR 985)	Dolphin Expwy.	W. Flagler Street	Minor Arterial	4	F
SW 107 Avenue (SR 985)	W. Flagler Street	Tamiami Trail/ SW 8 Street	Minor Arterial	4	F
County Roads					
NW 79 Avenue	NW 7 Street	W. Flagler Street	Collector	4	N/A
NW 82 Avenue	NW 7 Street	W. Flagler Street	Collector	4	N/A
SW 92 Avenue	W. Flagler Street	SW 8 Street	Collector	4	N/A
SW 97 Avenue	W. Flagler Street	SW 8 Street	Collector	4	C
NW 97 Avenue	Fontainebleau Blvd.	W. Flagler Street	Collector	4	N/A
NW 114 Avenue	W. Flagler Street	NW 7 Street	Collector	2	N/A
NW 7 Street	NW 117 Avenue	NW 114 Avenue	Collector	4	N/A
NW 7 Street	NW 87 Avenue	NW 79 Avenue	Collector	4	N/A
Fontainebleau Blvd.	NW 107 Avenue	W. Flagler Street	Collector	4	N/A
W. Park Drive	Fontainebleau Blvd.	W. Flagler Street	Collector	4	N/A
Park Blvd.	NW 79 Avenue	NW 87 Avenue	Collector	4	N/A
W. Flagler Street	NW 114 Avenue	NW 107 Avenue	Collector	6	N/A

Source: Metro-Dade Department of Planning, Development, and Regulation, June 1997.

N/A means Not Available

WEST FLAGLER STREET CORRIDOR STUDY AREA



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Figure 8

ROADWAYS - EXISTING NUMBER OF LANES

- 8 LANES
- 6 LANES
- 4 LANES
- 2 LANES
- CITY OF SWEETWATER
- STUDY AREA BOUNDARY

SCALE
0 1320' 2640'



**DEPARTMENT OF PLANNING,
DEVELOPMENT AND REGULATION**

Programmed and Planned Improvements

For a number of years, the areas to the west and southwest of the County have been experiencing a high rate of growth. It is expected that by the year 2015, this growth will result in increased traffic on major arterials and consequently, in unacceptable levels of service. Projected development and land use changes will contribute to an expected 25 percent increase in peak-hour traffic. As a result, a number of roadway improvements are programmed and planned. Table 13 shows the roadway capacity improvements programmed within and around the Study Area for the next five years.

Table 13
Programmed Road Capacity Improvements
for Fiscal Years 1998-2002,
West Flagler Street Corridor Study Area

Roadway	From	To	Type of Improvement	Fiscal Year
HEFT	I-75	Dolphin Expwy.	4 to 6 lanes	2001/2002
HEFT	At NW 12 Street		New Interchange	1997/1998
SW 109 Avenue	W. Flagler Street	Tamiami Canal	2 to 3 lanes	1997/1998
NW 107 Avenue	NW 25 Street	NW 12 Street	4 to 6 lanes	1997/1998
NW 97 Avenue	NW 25 Street	NW 12 Street	2 to 4 lanes	1997/1999
NW 97 Avenue	NW 12 Street	Fontainebleau Blvd.	New 4-lane Road & Bridge over SR 836	1997/1998
NW 12 Street	NW 127 Avenue	NW 107 Avenue	New 4-lane Road	1997/1998
	NW 97 Avenue	NW 87 Avenue	2 to 4 lanes	1997/1998

Source: 1998 Transportation Improvement Program, Metropolitan Planning Organization, May 1997.

Additional roadway improvements are planned for the Year 2015. Table 14 lists all roadway improvements planned for the Study Area.

The detrimental community impacts associated with massive roadway widenings, and the recently-adopted Florida Intrastate Highway System statute that allows for a maximum of six lanes on a major state roadway, means that the transportation agencies must use "mobility options," traffic demand management, and other ways to find solutions to traffic congestion.

While the above programmed and planned projects include roadway widening, the most ambitious local project in history -- the East-West Project -- includes a commuter rail line from the Palmetto Expressway to the Seaport, a railroad transfer station near the airport, and a new

Table 14
Year 2015 Planned Roadway Improvements,
West Flagler Street Corridor Study Area

Roadway	From	To	Type of Improvement	Priority
East-West Project (SR 836 Corridor)	Palmetto Expwy.	Port of Miami	Rail Transit Line; Highway improvements; Add two HOV lanes	2, 3, 4
SR 836	HEFT	Palmetto Expwy.	Add two HOV lanes	2, 3, 4
SR 826	SR 874	I-75	Add two HOV lanes	2
NW/SW 107 Ave.	NW 41 Street	SW 8 Street	4 to 6 lanes	4
SR 836	HEFT	NW 137 Avenue	New 6-lane Expwy. Ext.	4

Source: The 2015 Metro-Dade Transportation Plan, Metropolitan Planning Organization, December 1995.

Priority 2-- Improvements where project development efforts should commence before the year 2000, with construction of the project to take place between 2000 and 2005.

Priority 3 -- Improvements to be completed between the years 2005 and 2010.

Priority 4 -- Improvements to be completed by the year 2015.

expressway connecting State Road 836 to State Road 112. This project promotes a concept of "multimodalism" under which commuters will be given the option of choosing from a variety of travel modes.

4.2 Public Transit Service

The West Flagler Street Corridor Study Area is currently served by five Metrobus Routes: 7, 11, 73, 87 and Flagler MAX. Table 15 lists all the bus routes currently serving the Study Area. Figure 9 displays the alignment of these bus routes.

Programmed and Planned Improvements

The projected growth in the Study Area will warrant some improvements to the transit service. The 1996 *Transit Development Program (TDP)* and the 1997 *Administrative Update to the 1996 TDP* produced by Metro-Dade Transit Agency (MDTA) has targeted two new routes in the Study Area. The West Dade Express would provide a premium-type transit service alternative along the heavily-congested east-west corridor. Service would originate from the Florida International University (FIU) Main Campus and Miami International Mall before providing non-stop service along SR 836 to the Miami Central Business District. This route would operate only during peak periods and serve park-and-ride locations. Peak headways would be every 15 minutes. Providing service to the Mall of the Americas may be a possible variation to this route.

Table 15
 Metrobus Route Service and Schedule Headways,
 West Flagler Street Corridor Study Area

Metrobus Route	Weekday			Saturday	Sunday
	Peak	Off-Peak	Night		
7 Miami International Mall	40	40	60	40	60
11 East of SW 79 Avenue	7½	10	30	10	15
Mall of the Americas	15	20	30	20	30
FIU South Campus	15	20	30	20	30
73 North of SW 16 St./67 Ave.	30	60	60	60	60
Miami Children's Hospital	60	n/a	n/a	n/a	n/a
Dadeland South Station	60	60	60	60	60
87 Okeechobee/Dadeland North Metrorail Stations	30	60	n/a	60	60
Flagler MAX Downtown/SW 137 Ave. and Coral Way	15	n/a	n/a	n/a	n/a

Source: 1997 Development Program, Metro-Dade Transit Agency, May 1997.

Headways in minutes

n/a means no service or not applicable

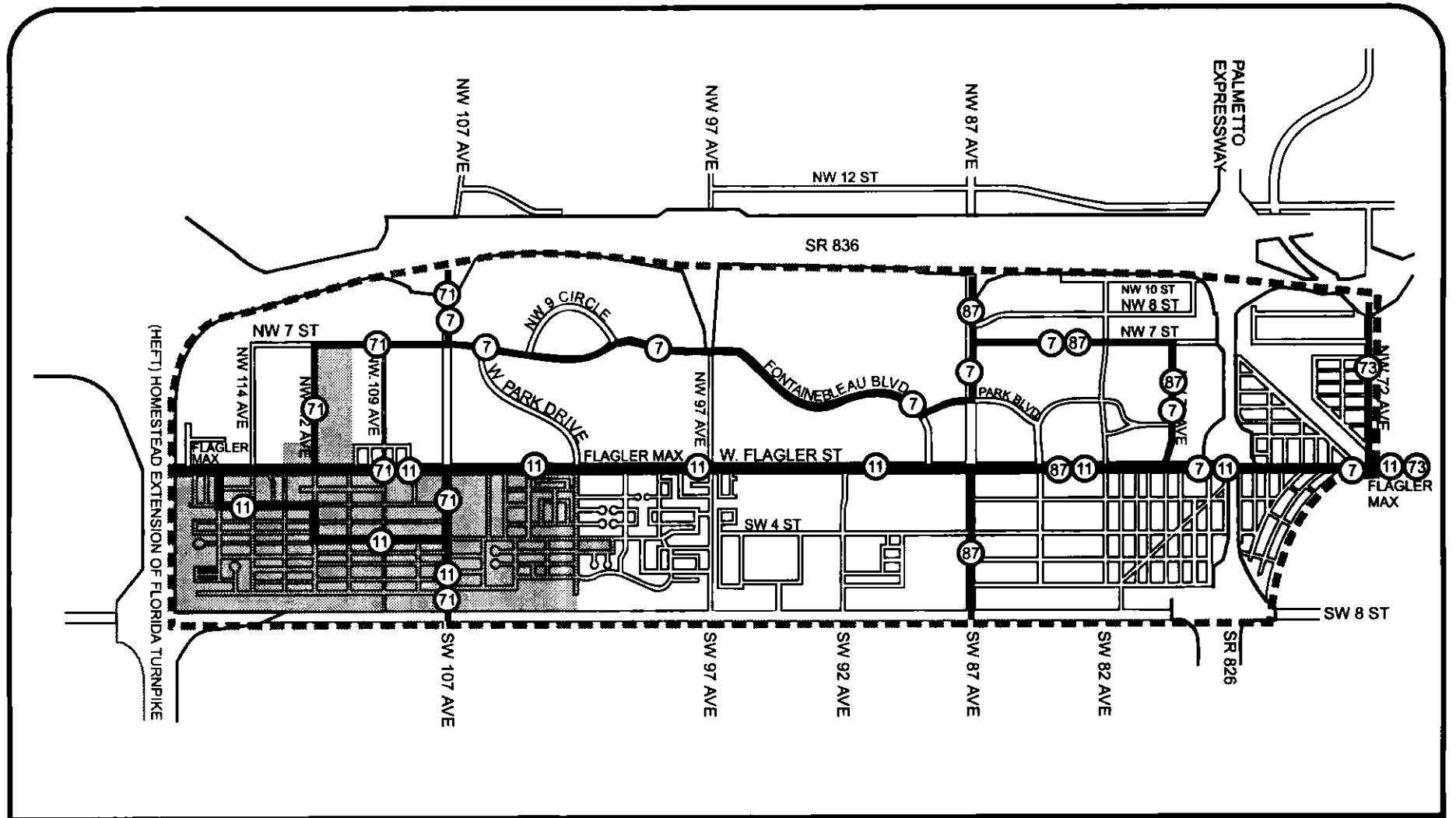
MAX means Metro Area Express.

Route 137, a cross-town local bus route, would operate from SW 152 Street (Country Walk area) to the FIU Main Campus and Miami International Mall. This route would serve as a north-south connector for the various east-west routes in the west Dade region. Service levels would be 20 minutes during the peak periods and 45 minutes during the off-peak period. These two new routes are programmed to be implemented between the years 1999 and 2001.

In addition to these new routes, other adjustments to existing routes are needed to accommodate additional transit trips that are being generated by projected growth in the Study Area. Route 87 would have its northern terminus realigned to serve the proposed Palmetto Metrorail Station instead of the Okeechobee Station. The realignment of Route 87 is programmed for Fiscal Year 2001 when the station is scheduled to be opened.




Table 16 shows those bus routes serving the area which have been determined by the Metro-Dade Transit Agency to be in need of improved service frequency for peak and off-peak periods.

WEST FLAGLER STREET CORRIDOR STUDY AREA



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Figure 9 **EXISTING METROBUS ROUTES**

-  METROBUS ROUTES
-  STUDY AREA BOUNDARY
-  CITY OF SWEETWATER

SCALE
0 1320' 2640'



NORTH

DEPARTMENT OF PLANNING,
DEVELOPMENT AND REGULATION

Table 16
Proposed Service Frequency Improvements,
West Flagler Street Corridor Study Area

Route	Peak Headway	Off-Peak Headway	Fiscal Year
7 Miami Int'l. Mall	20	No Change	1999-2001
73 SW 16 Street	20	40	1999-2001
87	20	30	1999-2001

Source: 1996 Transit Development Program and 1997 Administrative Update to the 1996 TDP, Metro Dade Transit Agency, June 1996 and May 1997.
Headway in minutes.

East-West Corridor¹⁰

The East-West Corridor project examines multimodal solutions for severe traffic congestion along SR 836, which is the principal east-west expressway in central Dade County. Through an integrated system of highway improvements, high-occupancy vehicle (HOV) lanes, a new rail transit line, bus system enhancements and pedestrian and bicycle facilities, the East-West Corridor project will provide a dramatic increase in capacity and mobility options. The proposed 24-mile rail line would connect some of the region's most important economic generators (FIU, Miami International Airport, Downtown Miami, the Port of Miami), with direct transfers to Metrorail, Metromover, Tri-Rail, Amtrak, and eventually high-speed rail. The project will also link the suburban areas west of Miami with a separate rail line from downtown Miami to Miami Beach.

The Locally Preferred Alternative (LPA) was chosen by the MPO in March 1996. The LPA consists of a 12-mile minimal operable segment of transit line, which begins at the Palmetto Expressway on the west, runs through the Miami Intermodal Center (MIC) adjacent to the airport, then runs through a tunnel under downtown Miami, and on to the Seaport. It will also have a one-mile branch connecting the MIC to the airport terminals and HOV lanes along SR 836 from the HEFT to SR 836/SR 112 interconnector. The preparation of the Final Environmental Impact Statement (FEIS) is currently underway and will be completed in 1997.

Once the FEIS is completed, location and design approval will be received from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), and the project can proceed into the next engineering phase and final design, followed by a full-funding agreement for federal participation in project financing, construction of facilities, procurement of equipment and vehicles, pre-operation testing and the beginning of operation.

¹⁰ *East-West Multimodal Corridor Study: Metropolitan Planning Organization Locally Preferred Alternative Report*, Florida Department of Transportation, June 1996.

Recommendations

1. Plan for maximum utilization of existing and new transportation facilities by providing and integrating all modes of transportation and facilitating transfers between modes.
2. Study the feasibility of implementing other strategies that: (1) increase the efficiency of the existing transportation system, and (2) do not require capital expenditures, such as contra-flow design in planning urban roads, establishment of exclusive rights-of-way for high-occupancy and public transportation vehicles, and improvement of traffic signal timing through commuter corridors.
3. Encourage employers to institute staggered or flexible working hours to ease traffic congestion during peak hours.
4. Expand the incentive program offered to employers in the Study Area to subsidize transit passes to encourage the use of public transportation and/or encourage their employees to vanpool and carpool by providing preferential parking spaces for participants.
5. Study the feasibility of enhancing the connectivity of the area's most important economic generators (FIU, Miami Int'l. Mall, the industrial/office areas west of the airport) to Miami International Airport, the Central Business District, the Seaport and Miami Beach.
6. Prepare criteria for the provision of mass transit facilities (such as bus pullovers and bus shelters) as an integral part of the design of major residential, commercial and industrial complexes along existing or proposed transit corridors.
7. Inventory existing transportation plans and show how they support multimodalism in the Study Area.
8. Investigate the feasibility of connecting the east-west streets, particularly NW 7 Street, that are interrupted by the Palmetto Expressway to improve mobility in the Study Area.

4.3 Parking

Park-and-Ride Lots

Currently, MDTA does not have park-and-ride lots in the Study Area. However, the *Dade County Park-and-Ride Lot Plan*,¹¹ prepared by Frederic R. Harris, Inc. for the FDOT District VI Public Transportation Office, recommends some locations within and adjacent to the Study Area. The Plan, developed in three planning phases (the Short- Range Plan, the Intermediate Plan and the Long-Range Plan), addresses existing, near- and long-term needs. The Intermediate Plan is an extension of the Short-Range Plan which indicates where additional facilities should be

¹¹ *Dade County Park-and-Ride Lot Plan*, Florida Department of Transportation District VI. Prepared by Frederic R. Harris, Inc., July 1993.

programmed based on monitoring of the Short-Range Plan. The Long-Range Plan is conceptual in nature and includes (by reference) planned facilities to support the Metro-Dade County Transitional Corridors Study. This study is an evaluation of alternative transportation modes along key corridors of the County's transportation system. The East-West Corridor project is one of the six corridors studied in the Transitional Corridors Study.

Potential sites for park-and-ride lots were identified based on the results of a System and Project Level Analysis. Table 17 lists the proposed locations within the Study Area. Although some of the locations selected are outside the West Flagler Street Corridor Study Area, the idea is to intercept SR 836 traffic. The potential sites include vacant parcels, roadway rights-of-way, shopping centers/malls, parks, houses of worship, powerline easements, public facilities with unused parking, and universities.

Table 17
Proposed Park and Ride Lots,
West Flagler Street Corridor Study Area

Location	Potential Site	2010 Parking Demand	Priority
SR 826 & SR 836	Mall of the Americas	262	1
	NW 7 St. & W/O SR 826		
SR 826 W. Flagler St.	La Catedral del Pueblo	400	1
	NW 2 St. & NW 79 Ave.		
SR 836 & NW 107 Ave.	Miami Int'l. Mall	280	1
	FDOT 1000 Bldg.		
SW 8 St.	Florida Int'l. University	164	1 & 2

Source : Dade County Park-and-Ride Lot Plan, Florida Department of Transportation District VI. Prepared by Frederic R. Harris, Inc., July 1993.

Priority 1 -- immediate needs by utilizing existing services.

Priority 2 -- intermediate plan (an extension of the short-range measures)

The Plan determined that the proposed FIU/HEFT lot is the only site feasible for development of a park-and-ride facility in the short-range horizon, as the park-and-ride facilities for other locations require express service on SR 836.

Off-Street Parking

Parking is recognized to play an important role in fostering more efficient modes of travel, primarily through provisions favoring shared parking, ride sharing and public transit.

Parking in the Study Area is mostly provided by the private sector. Requirements for parking are based on standards set forth in Article VII, Off-Street Parking, of the Code of Metropolitan Dade County. Table 18 summarizes those standards. It should be pointed out that the Code does not have any prohibition against the provision of parking in excess of the minimum requirement.

Since 1964, the Dade County Parking Ordinance has been amended several times to require more parking. Before 1964, the Code required single-family and multifamily developments to provide only one parking space per unit. In October 1969, the Parking Ordinance was amended to require multifamily developments to provide 1.25 parking spaces per unit, commercial development to provide one parking space for every 300 square feet of gross floor area, and professional offices to provide one parking space for every 400 square feet of gross floor area.

Table 18
Existing Off-Street Parking Standards,
West Flagler Street Corridor Study Area

Uses	Requirements
Single-Family Dwelling	Two parking spaces per unit
Two, Three & Four-Unit Dwelling	Two parking spaces per unit
Townhouses	Two parking spaces per townhouse unit, plus a minimum of 25 (0.25) hundredths visitor parking spaces per townhouse unit
Zero Lot Line Communities	Two parking spaces per unit
Multifamily Apartment Buildings:	
Efficiency/One-Bedroom Unit	One and one-half (1.50) parking spaces per unit
Two-Bedroom Unit	One and three-quarters (1.75) parking spaces per unit
Three or more Bedroom Unit	Two parking spaces per unit
Mobile Home Park	Two parking spaces per mobile home space
Churches	One parking space for every 50 sq. ft. of seating area
Commercial	
Retail	One parking space for each 250 sq. ft. of GFA*
Retail (malls >300,000 sq. ft.)	One parking space for each 350 sq. ft. of GFA
Office, Professional Building	One parking space for each 300 sq. ft. of GFA

* GFA means Gross Floor Area

Source: Chapter 33, Zoning, the Code of Metropolitan Dade County, Florida, July 1997.

In 1991, the Ordinance was amended again to require single-family dwellings to provide two parking spaces per unit, commercial uses to provide one parking space per every 250 square feet of gross floor area, and professional and other office uses to provide one parking space per every 300 square feet of gross floor area. These amendments were intended to provide sufficient parking for peak parking demand. However, with an oversupply of parking, people are much less inclined to walk, bike or use public transit, as they will ultimately view driving as more expedient and convenient. Moreover, the provision of surface parking is very land intensive, while a creative accommodation of parking needs will allow that land to be utilized more efficiently.

In preparing this study, an inventory of all existing parking spaces within the Study Area was conducted (see Appendix E). Analysis of field data indicates that there is a shortage of parking in the area. Approximately 17,725 parking spaces are available in the commercial areas; however, according to current Code requirements, approximately 18,213 parking spaces be required to serve the business and office areas, or approximately 488 spaces fewer than provided. This shortage is due to the fact that before 1991, commercial developments were required to provide one parking space for every 300 square feet of gross floor area, and professional and other offices to provide one parking space for every 400 square feet of gross floor area.

Currently, Metro-Dade is considering changes to the Parking Ordinance to include minimum bicycle parking requirements pending the completion of the Bicycle Parking Study. Bicycle and motorcycle parking has not traditionally been required in the past. However, bicycle and motorcycle parking is needed to further support the overall effort of improving mobility. A proposed reduction of current standards will reverse the increment adopted by the Board of County Commissioners in 1991. Thus, the parking requirement for retail uses should be decreased from one parking space for every 250 square feet of gross floor area to one parking space for every 300 square feet of gross floor area.

The potential exists to transform the West Flagler Street Corridor into an area that is more friendly to pedestrians, bicyclists, and public transit users. In order to change present conditions, it is necessary to either amend the Parking Ordinance or create an overlay Parking Ordinance to reduce the parking standards that will help create the conditions to encourage people to walk, bike, or use public transit. Also, Mobility Management Programs can be used effectively to promote and facilitate public transit, pedestrian and bicycle travel. Such programs may include the provision of transit priority lanes for high-occupancy vehicles, the provision of park-and-ride facilities, shared parking, and the provision of direct links between major commuter arterial roads and park-and-ride facilities. Fundamentally, shared parking is more efficient because each space can be used more hours during the day, week, or month.

Recommendations

1. Review, and revise as appropriate, the existing Parking Ordinance or enact an Overlay Parking Ordinance for the West Flagler Corridor Study Area that encourages shared parking and reduces parking requirements by at least 20 to 50 percent.
2. Provide preferential parking for high-occupancy vehicles.
3. Adopt minimum requirements and standards for bicycle and motorcycle parking.
4. Provide park-and-ride facilities (and kiss-and-ride facilities, where appropriate) at convenient locations along major Metrobus routes to encourage ridership.
5. Encourage shared parking in existing and new commercial, office and industrial areas.

5.0 URBAN DESIGN

Urban design provides a means of manipulating and reorganizing urban elements and functions, including land use, building design, transportation systems, and amenities to create an environment attuned to the needs and desires of the population. In the past, urban design elements were tailored to address the comfort of motorists with wide streets having ready access to ample off-street parking. Buildings were usually placed behind large parking lots and were typically low in scale. Land use was usually singular in character, with different uses separated from each other. The result of this type of urban design has been an environment that favors travel by automobile to conveniently overcome long distances.

Modern urban design stresses the need to create an urban environment that is walkable, bicycle- and transit friendly, vibrant and characterized by mixed uses, while recognizing that a segment of the population will continue to travel by automobile. When these designs are realized in the built environment, individuals may use automobiles if they so desire.

The inclusion and interaction of various elements in an urban design scheme determines how often or how much people will walk to their destinations. According to *Pedestrian and Transit-Friendly Design* by Reid Ewing, certain elements are essential to encourage street life, walking and pedestrian use¹²:

1. **Density** - A certain minimum housing density is necessary to place potential transit riders closer to transit stations to produce adequate transit ridership. Higher densities also generate more street life and add security by causing streets to be more occupied. Various sources cite different minimum densities to promote neighborhood livability ranging from 10 to 20 units per acre to 100 units per acre.
2. **Mix of Land Uses** - Varied and integrated land uses place different activities within closer proximity. Thus, people will be more inclined to walk or bicycle to obtain most goods and services when located nearby.
3. **Short- to Medium-Length Blocks** - Shorter blocks (300 feet long or less to a maximum of 500 feet long) engender more intersections, causing motorists to stop, and allowing pedestrians to cross more frequently. Many streets also provide more direct routes, making it easier for pedestrians to reach their destinations. Also, a dense network of streets disperses traffic, so that each street carries less traffic, thereby making streets safer and more pleasant for walking.
4. **Frequent Public Transit Stops** - A generally accepted standard places one quarter-mile as the maximum distance the average person will walk to reach a certain destination or public transit stop. Therefore, placing public transit stops every half-mile gives the public transit rider a transit stop within a quarter-mile walking distance.

¹² Ewing, pp. 5-30

5. **Limiting Roadway Width to Four Lanes** - Wide roadways (greater than four lanes) deter people from crossing streets. As for six-lane roads, pedestrians are more comfortable when sidewalks are appropriately buffered from traffic by street trees, curbside parking or wide, raised planted medians to break up the paved expanse.

6. **Continuous Sidewalks** - A continuous sidewalk network is necessary to ensure a more walkable environment. Sidewalks must be wide enough to accommodate pedestrians without feeling crowded, but not so wide as to appear empty. At minimum, a five-foot sidewalk is necessary for any pedestrian usage. It is also important to remember that as the sidewalk width increases, building height should increase to maintain spatial enclosure. Table 19 below contains necessary widths for sidewalks.

Table 19
Minimum Sidewalk Widths,
West Flagler Street Corridor Study Area

Functional Class Road	Sidewalk Width (in feet)
Local Streets	
Residential Areas	4'
Commercial Areas	8' or greater
Urban Collectors	
Residential Areas	4'-6'
Commercial Areas	8'
Urban Arterials	
Residential Areas	4'-6'
Commercial Areas	8'

Source: American Association of State Highway
and Transportation Officials (AASHO),
A Policy in Geometric Design of Highways
and Streets, Washington, D.C., 1990.

If street lights and various types of street furniture are plentiful, and extra 2½ feet of width must be allowed as clear sidewalk width. If buildings run up to the sidewalk, an additional 1 to 1½ feet of width is desirable due to the tendency of pedestrians to maintain this clear distance from walls.

7. **Safe Crossings** - In order to ensure a walkable environment, pedestrians must feel comfortable to cross streets. Well-marked and lighted crosswalks are essential for both "walkability" and transit access. Providing crosswalks at midblock with warning flashers and pedestrian-oriented signals is desirable, as frequent crosswalks slow traffic and discourage pedestrians from crossing from between parked cars.

8. **Buffer Pedestrians from Traffic** - On roadways with design speeds higher than 20 miles per hour, pedestrians will not feel comfortable unless a buffer is provided between themselves and automobile traffic to designate the space reserved for pedestrians from moving vehicles. These buffers may be in the form of wide sidewalks planting strips and/or parking lanes. With roadways designed for more than 35 miles per hour, a physical barrier (such as a row of street trees in the planting strip between the sidewalk and moving lanes) is necessary. However, all streets benefit from the presence of trees in the planting strips.
9. **Street-Oriented Buildings** - Buildings must define spatial enclosure to streets. As a general guide, buildings should be set back no farther than 25 feet from the street edge. Deeper setbacks (more than 25 feet) cause the pedestrian to lose perspective with the surrounding environment.
10. **Comfortable and Safe Places to Wait** - Comfort has two elements -- seating and protection from weather. Canopies, awnings, and colonnades help to shield pedestrians and public transit users from harsh weather elements, such as intense sun and rain. Sheltered bus stops protect transit users as well as pedestrians. Bus stops should be easily seen from travel lanes and nearby buildings to enhance their visibility.

Likewise, David Sucher, author of *City Comforts*, proffers three rules crucial to create livable communities.¹³

1. **Build to The Sidewalk** - Put buildings flush with the sidewalk to channel pedestrian movement and allow people to casually meet.
2. **Make the Streetfront Permeable** - Allow people to see into and enter storefronts by placing windows and doors on the sidewalks.
3. **Put Parking Behind, to the Side, or Above Buildings** - Parking is a necessity, but should remain out of sight.

Public transit and mixed land uses support each other because those uses are located conveniently for the transit rider. By locating these uses conveniently to public transit, transit riders are able to link their trips for various goods and services into one shopping trip.¹⁴ Mixed use may also generate more transit riders during more hours of the day, generating transit ridership with both peak uses and off-peak uses.

Retail uses should be located on the ground floors of buildings to encourage a high level of pedestrian activity through people coming and going to stores and enlivening the street. Residences should be located above retail uses to provide a fine-grained mixture of land uses

¹³ David Sucher, *City Comforts*, p. 12

¹⁴ Reid Ewing, *Pedestrian and Transit-Friendly Design*, p. 9

within close proximity to one another. Office uses could be interspersed between the retail and residential uses, but should avoid locating on the ground floors of buildings, as they do not produce as much pedestrian activity as retail uses.

Surface parking facilities should limited discourage automobile usage. When possible, structured parking should be combined with storefronts or display cases at ground level.

In addition, providing streetscape amenities enhances the visual experience and makes the environment more interesting for pedestrians, encouraging them to walk more often. These amenities may be aesthetically tailored for a particular environment and may include planters, fountains, ornamental benches and lampposts, and public monuments.

Implementation of these recommendations may result in other benefits including a more active community; a reduction in the number of automobile trip lengths, and reduced exhaust emissions.¹⁵

To demonstrate how urban design can influence the development of neighborhoods to be safer and more aesthetically pleasing, staff from The Metro-Dade Department of Planning, Development and Regulation developed design case studies for two portions of the Study Area, one predominantly residential and the other predominantly commercial. A series of designs for these areas shows how the areas could be improved with alternative designs and building forms. Four master plan scenarios are presented.

5.1 Case Study - Residential Area

The residential area is bounded by SR 826 on the east, SW 82 Avenue on the west, West Flagler Street on the north and the Tamiami Canal on the south (see Figure 10). The commercial area is bounded by SR 826 on the east, NW 82 Avenue on the west, West Flagler Street on the south, and NW 7 Street on the north (see Figure 12).

Current Scenario

In the residential area (see Figure 10), land uses are completely segregated. Most of the neighborhood is characterized by low-density, single-family residences, with no place for convenience shopping. The neighborhood also lacks alleys and a hierarchy of streets, which together with long blocks and garages fronting on streets, leads to automobiles dominating the streetscape and curb cuts interrupting sidewalks. Central Boulevard, the diagonal roadway running through the neighborhood, ends abruptly at SR 826 and does not provide any sense of leading to a destination. This roadway also destroys the existing block structure, leaving small islands of unusable land. The buildings form lacks character and unifying architectural styles. Their low scale also does not relate well to streets, having deep setbacks and no perceptible street edges. The neighborhood lacks a central focus, as well as public spaces and focal points. One

¹⁵ *Ibid.*, p. 15

amenity of the neighborhood is its existing grid pattern of streets, laying a foundation for a more walkable environment.

Alternative Scenario

An alternative future scenario (see Figure 11) raises the level of pedestrian and bicyclist comfort with a moderate amount of intervention, transforming the residential area to have a more livable environment. Within a one-half mile radius, a system of public spaces, single-family residences, townhouses, apartments, mixed-uses, and businesses is distributed throughout the neighborhood. The neighborhood would contain an urban center with mixed commercial and residential uses. The urban center would serve as the focal point of the neighborhood and provide a place for social interaction. Traffic would be allowed to enter the center, but would be controlled through narrow lanes and decorative paving to indicate a prioritization for pedestrians. The urban center would also feature pedestrian facilities including decorative benches, lamp posts, and fountains. Buildings of civic importance would cluster around the urban center, surrounded by dense housing. Visually conspicuous sites are reserved for civic areas and the termination of vistas, or where land is underdeveloped or vacant.

Some of the open space would be provided by a *paseo*-type of wide median running the length of Central Boulevard and SW 79 Avenue. This corridor then becomes a linear park with sidewalks and open space amenities, such as benches and kiosks in the median.

A hierarchy of streets is superimposed on the existing grid street pattern with a loop road, which provides a sense of destination by visually connecting other public spaces and adjacent neighborhoods, instead of ending abruptly at SR 826. The street network connects the urban center with nearby homes, other commercial areas, and public spaces. Major streets are more defined architecturally by larger scale, mixed-use buildings. Lower-order streets are maintained through the single-family sections. Central Boulevard, in this scheme, ends in the middle of the neighborhood at the urban center, then connects to SW 79 Avenue. Alleys, as another amenity, provide access to the garages behind homes, while also shortening the length of blocks, making the neighborhood more amenable to walking. A bridge across the Tamiami Canal provides pedestrians, bicyclists, and motorists with better access to the Tamiami Trail.

Parking for new development and redevelopment is placed behind buildings and away from sidewalks. Commercial buildings and denser housing would have no setback, while single-family residences would have setbacks at a maximum of 15 feet. Porches, up to ten feet deep, provide a unifying element for the neighborhood.

Sidewalks are distributed throughout the neighborhood, with the widest sidewalks part of the higher-level streets, or where higher densities are proposed. The sidewalks would also be complemented by a system of bicycle paths throughout the neighborhood.

The neighborhood would also have better landscaping treatment with different tree species on different streets, helping to identify various sections of the neighborhood. In all cases, emphasis

WEST FLAGLER STREET CORRIDOR STUDY

The illustrated neighborhood, situated between SR 826 and SW 82 Avenue and south of Flagler Street, developed along a grid of blocks consisting of an interconnected network of streets. Generally, the adoption of a grid is fundamental in establishing a good urban pattern; however, in this scenario, block design was patterned for automobile convenience and not pedestrian comfort. Streets connect and provide good traffic dispersal, but the long blocks (average 600'), absence of communal spaces, and convenience retail discourages pedestrian activity. The single diagonal street was probably introduced to create some variety in the block pattern, but failed to create public spaces of important significance while unceremoniously ending the street vista at the base of SR 826. Diagonal streets are visually dramatic when two or more converge at a street intersection, plaza or some other form of public space. In this neighborhood, the separation of uses encourages auto dependence. Convenience shopping is available only to those residents living in close proximity to Flagler Street. Additionally, the neighborhood is mostly developed with single family residential units. There is no variety of building types and there is a complete absence of human scaled building forms which are necessary to foster pedestrian activity. Single family detached homes, set back from the street, do not successfully define street spatial enclosure which can only be attained through the use of more intense building forms such as townhouses, apartments and mixed-use buildings.



1. Commercial Developments
 2. Residential Single Family Detached Housing Type
 3. Educational Facility (school)
 4. Green Area
 5. Central Blvd.
 6. Canal
- Strip Commercial Development
 - Interconnecting system of Blocks and Streets
 - No neighborhood system
 - No public plazas or parks
 - Streets are simply traffic collectors
 - Depend on the car for its survival

Figure 10 **EXISTING DEVELOPMENT CONDITION OF A RESIDENTIAL NEIGHBORHOOD**



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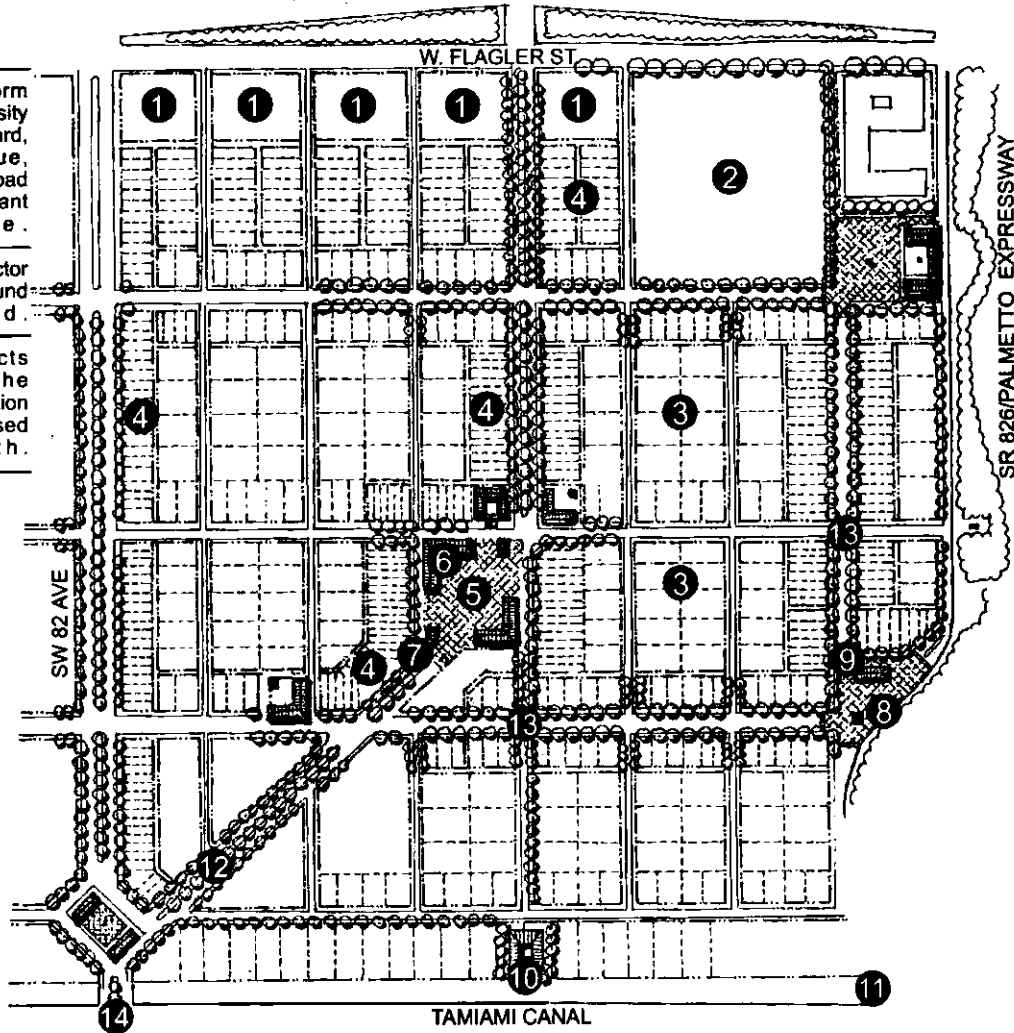
WEST FLAGLER STREET CORRIDOR STUDY

A more compact architectural form and a high level of building intensity are desirable along the Central Boulevard, SW 87 Avenue, SW 97 Avenue, West Flagler Street, and the Loop Road to provide streets with a significant degree of human scale.

The Loop Road serves as a connector to all of the major open spaces found within the neighborhood.

The Central Boulevard connects with SW/NW 79 Avenue at the Neighborhood Center. This intervention helps connect it with the proposed neighborhood to the north.

A single diagonal street is a weak urban intervention, an imperceptible moment in the urban fabric. Pedestrians and vehicular travelers perceive the visual power of diagonals when two or more converge at a street intersection, square, plaza or green. In the previous scenario (Figure 10), the diagonal commences at SW 82 Avenue and abruptly ends at SR 826, producing irregular shaped block formation and left over greens. To correct this problem, the diagonal is terminated at the main neighborhood center, the affected blocks develop along the established grid, and the "leftover" greens are incorporated within the blocks.



1. Mixed-Use (Residential above Business area office)
 2. Educational Facility (school)
 3. Single Family Residential Use
 4. High Density Residential (i.e. Townhouses, small apartments)
 5. Neighborhood Center (This area shall incorporate mixed-uses which included convenient shopping as well as buildings of civic importance.)
 6. Buildings of Civic importance (i.e. Churches, meeting halls, post office)
 7. Termination of streets vista through the use of architecturally important buildings
 8. Neighborhood Square, Plaza or Green.
 9. Focal Point (i.e. Buildings of architectural merit or elements of civic importance.)
 10. Club House (i.e. Swimming pool, canoeing, etc.)
 11. Canal
 12. Central Boulevard
 13. Loop Road
 14. Pedestrian and Vehicular Bridge
- A network of streets and building types
 - Streets are designed to enhance pedestrian activities.
 - Crime free through environmental center
 - There is a neighborhood center
 - Hierarchy of plazas and squares

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Figure 11 **MODERATE INTERVENTION TO AN EXISTING RESIDENTIAL NEIGHBORHOOD (Alternative Scenario)**

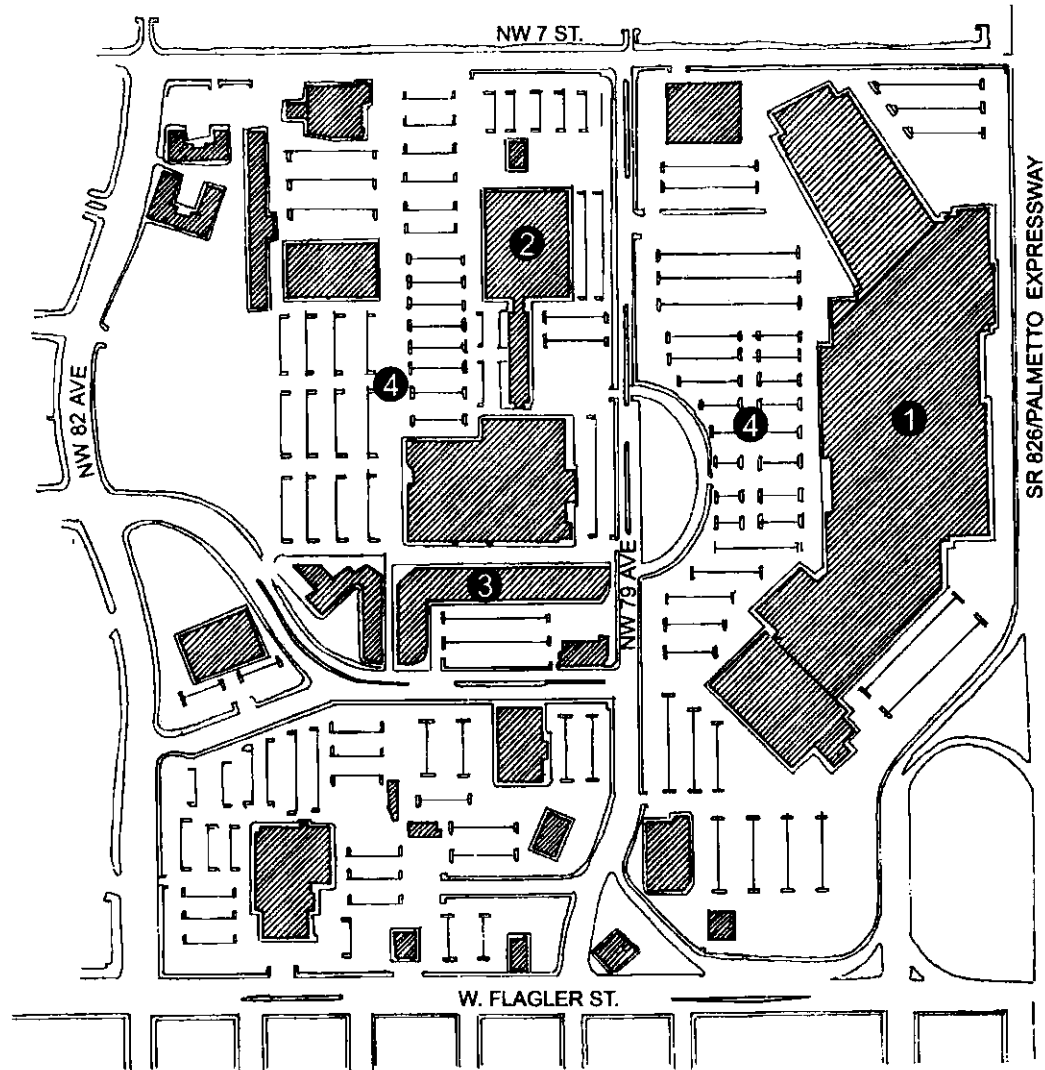
① Proposed Neighborhood Facilities



NORTH

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WEST FLAGLER STREET CORRIDOR STUDY



1. Mall of the Americas
2. Bell South Office Buildings
3. Strip Commercial Center
4. Surface Parking

- Streets are simply traffic collectors
- No neighborhood centers
- No public plazas or green
- Depends on the car for its survival

The sketch shows the existing development pattern for the area surrounding the Mall of the Americas. Commercial and office buildings are dispersed throughout the parcels, each having little or no relationship to the street or each other. The pervasive use of surface parking eliminates any potential for the creation of pedestrian scaled streets or any type of pedestrian activity.

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Figure 12 **EXISTING DEVELOPMENT CONDITION OF THE MALL OF AMERICAS COMMERCIAL AREA**

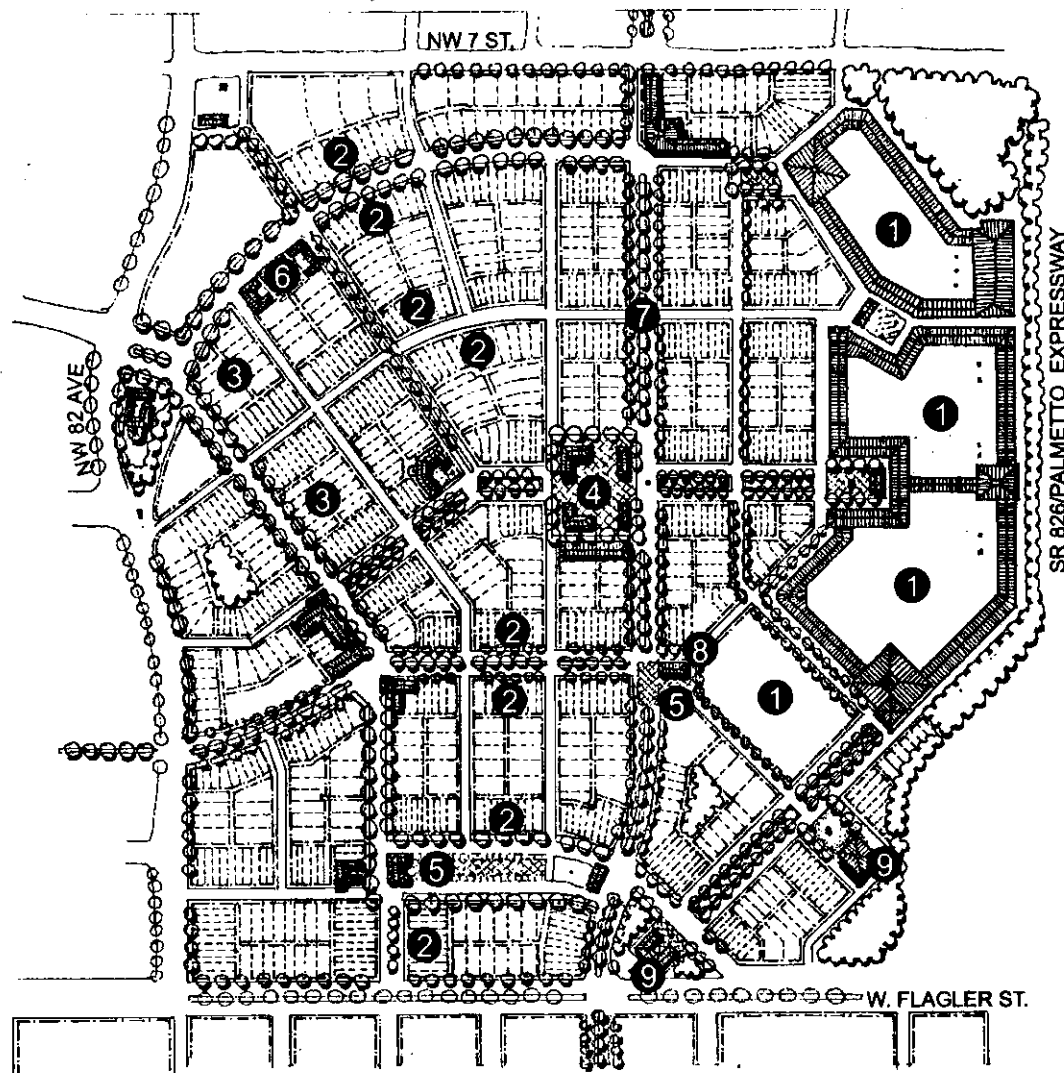


NORTH

**DEPARTMENT OF PLANNING,
DEVELOPMENT AND REGULATION**

WEST FLAGLER STREET CORRIDOR STUDY

In this hypothetical scenario, a complete design for the parcels adjacent to the Mall of the America's site has been generated using urban design principles. The system of blocks is arranged along a modified grid containing curved and diagonal streets. Long vistas are deflected by the modification to the grid, affording a greater opportunity for the creation of communal focal points and a more interesting visual experience for the pedestrian due to the variety of street design. The road network is also arranged using a hierarchy of streets, some of which serve to connect to nearby neighborhoods, provide uninterrupted access throughout the proposed neighborhood, and visually as well as physically unify public spaces. In the evolution of this hypothetical neighborhood, most of the major street infrastructure was left intact and the existing tracts were then divided into the illustrated block and street system. Some streets were introduced into the existing mall to provide some connectivity on the east side of the neighborhood while the presence of blocks located immediately in front of the mall's building assemblage assist in visually reducing its scale. The parcel's proximity to higher residential commercial uses located to the north and west creates an opportunity for a more architecturally compact type of neighborhood development for this area which is envisioned as consisting of a variety of mixed-use and higher residential densities.



1. Mall of the Americas Shopping Center
 2. Mixed-use development (Residential above above business and office)
 3. Parking to be provided at rear of buildings
 4. Neighborhood Center (This area shall be completely developed with mixed-use)
 5. Neighborhood Square, Plaza or Green area
 6. Buildings of civic importance.
 7. Boulevard
 8. Focal Point (buildings of architectural merit or elements of civic importance)
 9. Open space addressing corner center
- A network of streets and building types
 - Streets designed to enhance pedestrian activities
 - Cruise free through environmental design

Figure 13 COMPLETE INTERVENTION OF THE MALL OF AMERICAS COMMERCIAL AREA

1 Proposed Neighborhood Facilities



DEPARTMENT OF PLANNING,
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should be placed on shade trees to provide a higher degree of pedestrian comfort. Heavy landscaping is placed on the eastern boundary of the neighborhood, buffering SR 826 from homes and public spaces.

5.2 Case Study - Commercial Area

Current Scenario

The commercial area (see Figure 12), identified most easily by the Mall of The Americas, exhibits many of the same problems as the residential neighborhood, if current trends continue. This area contains off-street parking bordering most of the roadways, creating a pedestrian-hostile environment. The area has no identifiable center or architectural style, and is devoted almost entirely to commercial uses and some office uses. Buildings are not built to human scale, and are set back far from the street edges. The area's edges are ill-defined and it lacks connections to adjacent neighborhoods. It exhibits neither a street hierarchy nor a block structure, which lengthens possible walking distances. Roadways exist almost exclusively to expedite automobile traffic. The area also displays an almost complete lack of vegetation.

Alternative Scenario

For this area, a complete intervention of urban design was conducted to transform the area into a more livable neighborhood (see Figure 13). Existing streets are maintained and a hierarchy of streets and alleys is introduced, creating short blocks along a modified grid. An identifiable urban center was created with other focal points and public spaces, greens, and plazas distributed throughout the neighborhood. Diagonal streets and curbs deflect the complete imposition of a hard grid pattern, but also transforms NW 79 Avenue into a primary road. This road acts as an axis, connecting this proposed neighborhood with adjacent neighborhoods to the north, south, and west. Streets are also placed through and around the existing structure of the Mall of the Americas to integrate the mall with the rest of the neighborhood. It is also intended for the mall to have greater visual permeability by providing storefronts along its street edge. Buildings in this area would exhibit unifying architectural styles, reflected in both commercial and residential buildings.

Due to the proximity of higher-density housing and other commercial areas, the character of this neighborhood is proposed to be more intensely developed with more dense housing than that of the residential area discussed above. While single-family homes predominate in that residential area (although not exclusively), the Mall of the Americas commercial area would contain more townhouses, apartments, and mixed use buildings.

If current trends are permitted to continue, the neighborhoods in the West Flagler Street Corridor Study Area will exhibit conditions favoring travel by single-occupant vehicles for most trips. However, with the implementation of urban design principles, these areas have the potential to be transformed into an environment more hospitable to pedestrians, bicyclists, and public transit

users. The provision of the various elements discussed for these two neighborhoods will make the area more vibrant and livable with healthier environments in which to live, raise families, work, shop, and visit.

5.3 Recommendations

1. Develop neighborhoods according to urban design principles.
2. Develop with a more compact building form.
3. Include identifiable urban centers with clear edges in neighborhoods and distribute public spaces throughout neighborhoods.
4. Encourage mixed uses in urban centers and along major roadways.
5. Implement a street hierarchy on a modified grid.
6. Limit block length to less than 300 feet and to a maximum of 500 feet.
7. Minimize or eliminate building setbacks to provide spatial enclosure.
8. Incorporate amenities, such as planters, fountains, ornamental benches and lampposts, and public monuments in areas of civic importance.
9. Place parking behind buildings or in alleys
10. Encourage parallel parking and street trees to act as a buffer between pedestrians and vehicle moving lanes.
13. Place parking for major commercial areas (such as malls) in garages with retail uses on the ground floors. The garages should be architecturally compatible with the rest of the neighborhood.
14. Provide bus stops or vanpool stops at urban centers along major roadways.

6.0 SERVICES

Services and facilities have been provided to the Flagler Street Corridor in keeping with the area's dominance by the automobile. If the environment in the Study Area is to become more pedestrian-, bicycle- and transit-friendly, changes in the existing infrastructure may be necessary, and additional studies would be required to determine the nature and magnitude of these changes. The following is an inventory of existing services and facilities in the Study Area.

6.1 Water

All of the Flagler Street Corridor Study Area is provided with public potable water by the Miami-Dade Water and Sewer Department. North of West Flagler Street, treated water comes from the Department's Hialeah-Preston Water Treatment Plants. This combined facility has a permitted treatment capacity of 225.0 million gallons per day (mgd) and a current maximum plant production of 173.6 mgd, leaving 51.4 mgd available for future development. South of West Flagler Street, treated water comes from the Department's Alexander Orr, Jr., Water Treatment Plant, which has a permitted treatment capacity of 190.0 mgd and a maximum plant production of 179.1 mgd, leaving 10.9 mgd available for future development.

6.2 Sewer

Most of the West Flagler Street Corridor Study Area is provided with public sanitary sewers. The area east of SW 87 Avenue south of the commercial frontage on West Flagler Street, and the central and southeastern parts of the Town of Sweetwater, however, are on septic tanks.

Sanitary sewage collection and disposal is provided by the Miami-Dade Water and Sewer Department. Treatment and disposal occur at its Central District Sewage Treatment Plant on Virginia Key, which has a design capacity of 143.0 mgd and an average flow of approximately 123.9 mgd, leaving 19.1 mgd available for future development.

6.3 Schools

There are five elementary schools located in the West Flagler Street Corridor Study Area -- Charles R. Hadley/Primary Learning Center "A," at 8400 NW 7 Street; Seminole Elementary, at 121 SW 78 Place; Stirrup Elementary, at 330 NW 97 Avenue; Sweetwater Elementary, at 10655 SW 4 Street in the Town of Sweetwater, and Marjorie Stoneman Douglas Elementary, at 11901 SW 2 Street. As a group, these five elementary schools are operating at 139 percent of their capacity. Ruben Dario Middle, at 350 NW 97 Avenue, is operating at 137 percent of its capacity. There are no senior high schools located in West Flagler Street Corridor Study Area, and no new schools are planned for construction in this area.

6.4 Parks

There are two Metro-Dade parks located in the West Flagler Street Corridor Study Area -- Ruben Dario Park, located at West Flagler Street and 97 Avenue, and The Woman's Park, located at West Flagler Street and 103 Court. Ruben Dario Park is a community park that comprises 15.2 acres, and The Woman's Park is a special purpose park that comprises 15.0 acres.

6.5 Police Protection and Fire/Rescue Service

Police protection for the Flagler Street Corridor Study Area is provided by the Metro-Dade Police Department from its Doral District Headquarters located at 9105 NW 25 Street, and by the Town of Sweetwater's Police Department within its municipal boundaries. Fire protection for both the unincorporated area and the Town of Sweetwater is provided by the Metro-Dade Fire and Rescue Department's Sweetwater Station located at 351 SW 107 Avenue.

6.6 Solid Waste

Solid waste in the West Flagler Street Corridor Study Area is collected and disposed of by the Metro-Dade Department of Solid Waste Management. Countywide, the solid waste disposal system has sufficient capacity to maintain the adopted level of service of seven pounds per person per day through the year 2005.

6.7 Recommendation

1. Continue to provide services and facilities to the Study Area in accordance with the provisions of the *Comprehensive Development Master Plan*, and as may be called for to implement the recommendations of this study.

APPENDIX A

CRITERIA FOR SELECTION OF AREA TO BE STUDIED

**SPECIFIC AREA PLANNING AND DESIGN
FOR IMPROVING MOBILITY
Work Group Meeting**

November 18, 1996.
Stephen P. Clark Center
111 NW 1 Street, Suite 1220
Director's Conference Room
2:00 P.M.

Attendance

Metropolitan Dade County

Walter Geiger, Area/Special Studies Section Chief, Department of Planning, Development and Regulation (DPDR)

Napoleon Somoza, Principal Planner, DPDR

Pearl Lazarus, Senior Planner, DPDR

Michael Bregman, Senior Planner, DPDR

Mario Garcia, Chief, Transit System Development Division, Metro-Dade Transit Agency

Susan Schreiber, Administrative Assistant II, Metropolitan Planning Organization

Florida Department of Transportation

Rene Rodriguez, Public Transportation Manager

David Korros, Assistant District Planning Manager

Jo Laurie Penrose, Transportation Planner

SUMMARY OF MEETING

Call to Order

Mr. Walter F. Geiger called the meeting to order at 2:00 p.m. He welcomed everyone and asked the participants to introduce themselves. Mr. Geiger stated that with the completion of the Dadeland Regional Activity Center Specific Area Planning Report For Improving Mobility, the Work Group should re-evaluate the criteria adopted last year before the next area or corridor is selected.

Criteria For Selection of Area to be Studied

The Work Group led by Mr. Geiger reviewed each of the criteria established last year. After some discussion, the Group adopted the following criteria:

Location. The Study Area should be an Activity Center, a Metrorail station, or a Transit Corridor, and it should be located in unincorporated Dade County and north of the Dadeland South Metrorail Station (approximately north of SW 88 Street).

Land Use And Density. The Study Area should be designated Low-Medium Density Residential (up to 13 dwelling units per gross acre), Business and Office, or Industrial and Office on the County's Adopted 2015 Land Use Plan map.

Employment and Population. The Study Area should be an employment center, located near a employment center, or have the potential to become an employment center. The Work Group agreed to include population information as part of this criterion.

Development and Redevelopment Opportunity. The Study Area should have existing or potential opportunity for development and redevelopment.

Transit Availability and Accessibility. The Study Area should be served or programmed to be served with rapid transit (commuter rail or exclusive busway), and/or bus routes operating with a minimum peak-hour headway of twenty minutes or less. Park-and-Ride and Kiss-and-Ride facilities, both existing and recommended, should be considered during the selection process. The Dade County Park and Ride Lot Plan and Justification Reports should be used as a resource.

Pedestrian and Bicycle Facilities. The Study Area should have a demonstrated need for the improvement of pedestrian and bicycle facilities, or the expansion of existing facilities.

Transferability. In the previous study, this criterion was "Demonstration Value." The Work Group felt that transferability would be a more appropriate criterion, since there are several similar types of areas that may be considered for the study. The Study Area should have the elements necessary to be considered a model project.

The Work Group members present unanimously approved the above described criteria, and asked the DPDR staff to prepare a list of potential study areas, evaluate the areas using the criteria adopted and make its recommendation to the group.

Mr. David Korros, FDOT, asked how the Dadeland Study would be implemented. Mr. Geiger said that it would be placed on the Transportation Planning Committee (TPC) agenda for presentation and discussion. Mr. Garcia suggested that the implementation be included in the Transportation Improvement Program (TIP) as part of the Station Area Design and Development Plan.

Adjournment

There being no further business, the meeting adjourned at 4:10 p.m.

APPENDIX B

**WEST FLAGLER STREET CORRIDOR
AREA ANALYSIS**

WEST FLAGLER STREET CORRIDOR STUDY AREA ANALYSIS

Location. The study area for the West Flagler Street Corridor lies within unincorporated Dade County and comprises the segment of road between SW/NW 72 Avenue and the Homestead Extension of the Florida Turnpike (HEFT) and State Road 836 and the Tamiami Trail. This area does not include the segments on the south side of the corridor between SW/NW 102 Avenue and SW/NW 117 Avenue and on both sides of the corridor between SW/NW 110 Avenue and SW/NW 112 Avenue, which are in the Town of Sweetwater.

Land Use and Density. Different land use categories are located adjacent and proximate to this corridor. These land uses include Estate-Density Residential (up to 2.5 dwelling units per gross acre), Low-Density Residential (up to 6 dwelling units per gross acre), Low-Medium Density Residential (up to 13 dwelling units per gross acre), Medium-Density Residential (up to 25 dwelling units per gross acre), Office/Residential, Business and Office, and Park and Recreation. In 1990, the area along this corridor contained 23,611 dwelling units and the projected total for the year 2000 is 25,821. A large percentage (87 percent) of the dwelling units are multi-family and that percentage is projected to increase slightly to 88 percent in the year 2000.

The Adopted 2000 and 2010 Land Use Plan designates the area between SW 82 and SW 87 Avenues, south of West Flagler Street, for Estate-Density Residential use. The area between SW 97 and NW/SW 107 Avenues is designated for Low-Density Residential use. Low-Medium Density Residential use lies south of Flagler Street between the Palmetto Expressway and SW 82 Avenue. Medium-Density Residential use is generally designated for the area between NW/SW 87 and NW/SW 97 Avenues on both sides of the corridor, and on the north side of the corridor between NW/SW 107 and NW/SW 117 Avenues.

Major destinations along the corridor include the Mall of the Americas, a regional shopping center on about 70 acres, and the Fontainebleau residential development, occupying two square miles. In addition, the south campus of Florida International University is only one half-mile south of this corridor on SW 107 Avenue.

Population and Employment. Total population numbered 65,484 in 1990 and is projected to grow to 70,883 in the year 2000. Employment in 1990 numbered 20,130 and is projected to grow to 20,883 in the year 2000. School enrollment in 1990 was 7,016 and is projected to grow to 7,640 in the year 2000.

Development and Redevelopment Opportunity. Although this corridor is mostly developed, opportunities exist to develop vacant lots in the short-term planning horizon, and the redevelopment of some parcels in the long-term planning horizon.

The Mall of the Americas and its vicinity could be designated a Metropolitan Activity Center and high-density development should be encouraged around the "activity center." Mixtures of

residential and selected commercial uses should be encouraged where commercial uses directly serve the neighborhood.

Transit Availability and Accessibility. Areas along the corridor are accessible by three expressways: the Dolphin, the Palmetto, and the Homestead Extension of the Florida Turnpike, as well as by two minor arterials, NW/SW 107 and NW/SW 87 Avenues. The corridor is currently served by three Metrobus Routes: 7, 11, and Flagler MAX which have peak headways of 40, 7½, and 15 minutes, respectively. In the near future, peak headways for Routes 7 and 11 are programmed to be improved to 12-24 and 6 minutes, respectively. A planned route, The West Dade Express, would provide another premium transit service alternative originating from the south campus of Florida International University and Miami International Mall with non-stop service to the Central Business District. This route would operate only during the peak period and serve park-and-ride locations. Peak headways would be every 15 minutes. Providing service to the Mall of the Americas may be a possible variation to this route.

In addition, Metrobus Routes 87 and 71 traverse SW 87 and SW 107 Avenues, respectively, intersecting West Flagler Street with peak headways of 30 and 60 minutes, respectively.

Pedestrian and Bicycle Facilities. Most of the corridor has sidewalks; however, sidewalks on West Flagler Street lack shade and buffering from high-speed/high-volume traffic. Currently, there are no bicycle facilities along the corridor; however, bicycle routes are proposed for SW 8 Street and SW 87, SW 92, SW 97, SW 102, SW 107, SW 117, SW 127, and SW 137 Avenues, and the East-West rail line.

Transferability. This corridor has great potential and characteristics which would make it a good candidate for a demonstration project for improving mobility and some, if not all of the recommendations would be applicable to similar corridors in Dade County.

Recommendation

This Department recommends selecting the subject corridor for the improving mobility study based on several reasons. First, this corridor benefits from excellent accessibility with State Road 836, the Palmetto Expressway, and the Homestead Extension of the Florida Turnpike. Second, the corridor benefits from a large employment base and a dense residential population with multifamily dwellings comprising 87 percent of all dwelling units. Third, the area is served by a major commercial center, the Mall of the Americas, which has all the characteristics of a regional shopping center. Another major destination in the area is Florida International University, located only one-half mile south of this corridor. The corridor is well-served by Metrobus routes with peak headways of 15 minutes or less and a new route, the West Dade Express, would provide non-stop service from the south campus of Florida International University and the Miami International Mall to the Central Business District. Finally, the design and engineering of the East-West Multimodal Study's Minimum Operating Segment from the Seaport to the Palmetto Expressway (SR 836) is scheduled to be conducted this year. For all these reasons, DPDR highly recommends that this corridor be selected as the study area.

WEST FLAGLER STREET CORRIDOR						
Population, Housing, School Enrollment, and Employment Data for 1990						
TAZ	Population	Dwelling Units	Multi-family Units	Multi-family Percent	School Enrollment	Employment
477	10,653	3,126	2,746	87.84	0	845
478	9,055	3,045	2,963	97.31	426	1,367
484	8,353	3,350	3,250	97.01	3,685	724
485	4,283	1,226	229	18.68	1,119	431
486	5,415	1,917	1,391	72.56	0	4,681
487	12,082	5,558	5,540	99.68	0	1,191
494	5,864	2,000	1,976	98.8	0	113
495	0	0	0	0	0	1,307
496	0	0	0	0	0	4,969
497	2,462	973	820	84.28	1,075	546
498	2,401	740	386	52.16	711	1,374
499	912	311	249	80.06	0	102
507	975	311	195	62.7	0	342
508	3,029	1,054	864	81.97	0	2,138
Total	65,484	23,611	20,609	87.29	7,016	20,130

Source: Metro-Dade Department of Planning, Development, and Regulation, 1994.

TAZ means Traffic Analysis Zones

WEST FLAGLER STREET CORRIDOR						
Population, Housing, School Enrollment, and Employment Data for 2000						
TAZ	Population	Dwelling Units	Multi-family Units	Multi-family Percent	School Enrollment	Employment
477	11,044	3,310	2,930	88.52	0	890
478	9,886	3,581	3,500	97.74	674	1,431
484	8,747	3,429	3,307	96.44	3,872	756
485	4,535	1,250	250	20	1,101	453
486	5,875	2,176	1,648	75.74	0	4,661
487	14,069	6,522	6,500	99.66	0	1,253
494	6,144	2,100	2,073	98.71	0	118
495	0	0	0	0	0	1,409
496	0	0	0	0	0	5,210
497	2,994	973	820	84.28	1,345	572
498	2,605	788	389	49.37	648	1,445
499	932	322	260	80.75	0	107
507	986	317	202	63.72	0	363
508	3,066	1,053	864	82.05	0	2,215
Total	70,883	25,821	22,743	88.08	7,640	20,883

Source: Metro-Dade Department of Planning, Development, and Regulation, 1994.

TAZ means Traffic Analysis Zones

APPENDIX C
CITIZEN SURVEY

**WEST FLAGLER STREET MOBILITY STUDY
CITIZEN SURVEY**

After completing this survey, please return it to the DPDR staff, or mail it to the address shown on page two of this survey.

1. How do you describe your relationship with the West Flagler Street Study area?

- a. Resident b. Property owner c. Business owner
d. Employee e. Other _____

2. Please indicate what section of the study area you are closest to:

- a. Between SR 836 and W. Flagler St.
b. Between W. Flagler St. and Tamiami Trail.

3. How many years have you lived in your neighborhood? _____

4. All factors listed below are some elements of what we believe to be a good neighborhood. In your opinion, how important is each? **Please rank them by importance, with #1 being the most important and #2 being less so, and so forth. Rank as many as you wish:**

- | | |
|---|--------------------------------|
| a. ___ Friendly neighborhood streets | f. ___ Availability of Transit |
| b. ___ Low traffic volume and slow speeds | g. ___ Bicycle paths |
| c. ___ Access to major roadways | h. ___ Sidewalks |
| d. ___ Well-maintained road system | i. ___ Shaded Streets |
| e. ___ Landscaped median | j. ___ Inviting parks |

5. In the last five years, would you say that the quality of each of the following has gotten better or worse?

	Better	Worse	No Change	Don't Know
a. Interstate Highways	_____	_____	_____	_____
b. Major Arterials	_____	_____	_____	_____
c. Neighborhood Streets	_____	_____	_____	_____
d. Bus Service	_____	_____	_____	_____
e. Bicycle/Pedestrian Facilities	_____	_____	_____	_____

6. What type of transportation do you use? (check all that apply)

- a. Personal automobile b. Car pool c. Bicycle
d. Walk e. Other _____

7. Could you or your children walk or bike to go shopping, go to school, or go to the park?

	Yes	No	Don't Know
Walk	_____	_____	_____
Bike	_____	_____	_____

8. Is it safe as a pedestrian or cyclist to cross West Flagler Street, SW 87, 97 and 107 Avenues?

	Yes	No	Don't Know
W. Flagler St.	_____	_____	_____
SW 87 Ave.	_____	_____	_____
SW 97 Ave.	_____	_____	_____
SW 107 Ave.	_____	_____	_____

9. What prevents you from walking or bicycling? _____

10. What type of development or redevelopment do you think should take place in the area?
 (You may circle more than one)

- | | | |
|------------------------|-------------------------|--------------------------|
| a. none | d. Townhouses | g. Offices |
| b. Single family homes | e. Condominiums | h. Commercial (shopping) |
| c. Mobile home parks | f. Apartments (rentals) | i. Mixed-use |

11. If you had to spend future available funds on transportation improvements in your community, what types of projects would you concentrate on?

- _____ New or expanded highways exclusively.
- _____ Expanded bus or rail transit service exclusively.
- _____ Combination favoring new or expanded highways.
- _____ Combination favoring expanded bus or rail transit service.
- _____ Traffic signals and turn lanes.
- _____ Streets with bikeways and sidewalks.

12. Your input is important to us. Please use the space below to write your comments or questions about the West Flagler Street Corridor Mobility Study.

Would you like to be notified of other meetings? Yes ___ No ___
 Would you like to review and comment on the proposed recommendations? Yes ___ No ___

Name: _____
 Address: _____
 City, State, Zip Code: _____
 Telephone: _____ Fax: _____

Thank you! Please sent the complete survey to: Metropolitan Dade County Department of Planning,
 Development and Regulation
 111 NW 1 Street, Suite 1220
 Miami, FL 33128-1972
 Attention: Napoleon Somoza

or call: 375-2805

APPENDIX D
CITIZEN SURVEY ANALYSIS

WEST FLAGLER STREET MOBILITY STUDY CITIZEN SURVEY

ANALYSIS

As part of the community input process for the Specific Area Planning Report for Improving Mobility in the West Flagler Street Corridor Study Area, a public opinion survey was distributed at a Community Council 10 non-zoning meeting on June 4, 1997. Seven responses were mailed to the Metro-Dade Department of Planning, Development, and Regulation. The results obtained helped the planning professionals to gain insight into the needs and desires of the community. However, since the Department received only seven responses from the public, inferences to the general population could not be made.

The survey is divided into sections related to neighborhood livability, conditions favoring various transportation modes, transportation improvements needed, and desirable types of development.

Question 1 asks the respondent how he/she describes his/her relationship to the West Flagler Street Study Area. Choices include "resident," "property owner," "business owner," "employee," or "other." As only one respondent chose the "other" category, for the purposes of this summary, the "other" and "employee" categories were combined. The most frequent response to this question was "property owner," with five responses, followed by "employee/other," with two responses. The categories of "resident" and "business owner" received one response apiece. Thus, the results of this survey heavily favor the opinions of some property owners.

Question 2 asks for the section of the Study Area in which the respondent lives and/or works. Choices include between SR 836 and West Flagler Street and between West Flagler Street and Tamiami Trail. Responses were almost even with three in the former category and two in the latter.

Question 3 asks how long the respondent has lived in his neighborhood. Responses vary. As some do not live within the West Flagler Street Corridor Study Area, they indicated that the question was not applicable. Other responses range from five to 32 years, with an average of 17 years.

Question 4 asks respondents to rank elements present in livable neighborhoods from 1 to 10, with 1 as most important. Choices include "friendly neighborhood streets," "low traffic volume," "access to major roadways," "a well-maintained road system," "landscaped medians," "availability of transit," "bicycle paths," "sidewalks," "shaded streets," and "inviting parks." Respondents most often ranked "low traffic volume" first, and ranked "access to major roadways" second, "a well-maintained road system" third, "the availability of transit" fourth, "friendly neighborhood streets" fifth, "sidewalks" sixth, "bicycle paths" seventh, "landscaped medians" eighth, "shaded streets" ninth, and "inviting parks" tenth.

Question 5 asks respondents to rate the quality of various modes of transportation including interstate highways, major arterials, neighborhood streets, bus service, and bicycle and pedestrian

facilities. Respondents indicated that most modes of transportation have gotten worse or have not had any change. Concerning interstate highways and major arterials, four respondents indicated that facilities have worsened in quality, one respondent said that they have gotten better and one said that there was no change. For neighborhood streets, three respondents said that conditions have worsened and three said that there was no change. Two respondents indicated that conditions for bus service have gotten worse, one indicated that they have gotten better, and one responded that there was no change. Concerning bicycle and pedestrian facilities, one respondent indicated that conditions have gotten worse, one respondent indicated that there was no change and four indicated that they did not know.

Question 6 asks what modes of transportation respondents use, and all seven respondents checked that they only use their personal automobile.

Question 7 asks if respondents or their children could walk or bike to go shopping, to school, or to parks. For both walking and biking, two respondents indicated "yes," two respondents indicated that they did not know, and the other respondents did not answer the question.

Question 8 asks whether particular corridors in the Study Area are safe to cross. Five respondents indicated that West Flagler Street is not safe to cross, one said that it is safe to cross, and one respondent indicated that he/she did not know. Three respondents indicated that SW 87 Avenue is not safe to cross, two indicated that it is safe to cross, and two said that they did not know. Three respondents indicated that it is safe to cross SW 97 Avenue, one said that it is not safe to cross, and two indicated that they did not know. Finally, no respondent indicated that it is safe to cross SW 107 Avenue, two respondents indicated that it is not safe, and five indicated that they did not know.

Question 9 is an open-ended question asking respondents about what prevents them from walking and bicycling. Responses include physical conditions, convenience, "crazy" drivers, negligent motorists, and traffic congestion.

Question 10 asks respondents what type of development or redevelopment they would like to see take place in the area. Choices include "none," "single-family homes," "mobile home parks," "townhouses," "condominiums," "rental apartments," "offices," "commercial shopping," "or mixed use." Four respondents chose "none," two indicated "single-family homes," and one indicated "mixed use."

Question 11 asks respondents how they would like to see funds for future transportation needs spent. Choices include "new or expanded highways exclusively," "expanded bus or rail transit service exclusively," "a combination favoring new or expanded highways," "a combination favoring expanded bus or rail transit service," "traffic signals and turn lanes," "and streets with bikeways and sidewalks." Four respondents chose "new or expanded highways," two chose the "combination favoring bus and rail transit service," and one indicated "traffic signals and turn lanes."

Finally, question 12, an open-ended question, asked respondents for comments or questions about the West Flagler Street Corridor Mobility Study. Comments included preventing further residential densification, the need for more police visibility, flooding problems, the need for more off-street parking, and the difficulty in implementing mass transit in low-density areas.

Summary

Responses to this survey indicate that citizens who attended the non-zoning meeting for Community Council 10 on June 4, 1997 generally perceive that the West Flagler Street Study Area does not provide an environment which encourages people to walk or bike between their homes, shopping areas, parks, and schools. Moreover, respondents are also unlikely to utilize modes of transportation other than personal automobiles. However, given the conditions favoring transportation by walking, biking, or public transportation, they may feel inclined to do so.

APPENDIX E

INVENTORY OF EXISTING COMMERCIAL AND OFFICE USES AND ANALYSIS OF PARKING

INVENTORY OF EXISTING COMMERCIAL AND OFFICE USES AND ANALYSIS OF PARKING

West Flagler Street Corridor Study Area

BUSINESS OWNER	Land Use	Address	ZIP Code	Zoning District	Parking Spaces	Parking by Code Requirements	Parking Difference	Const. Area (sq. ft.)
Plaza Del-Rey	Retail	10000 West Flagler Street	33174	BU-1A	250	205	45	51,335
Biltmore Plaza	Retail	10300-62 West Flagler Street	33174	C	97	183	-86	45,979
Centro Comercial Managua	Retail	10404 West Flagler Street	33174	C	38	56	-18	14,000
Edward A. Matson, Tr.	Retail	10500 West Flagler Street	33174	C	22	42	-20	10,672
Fontainebleau Plaza	Retail	10700 Fontainebleau Boulevard	33172	BU-1A	212	211	1	52,682
West Flagler Plaza Shopping Center	Retail	10720 West Flagler Street	33174	C	416	199	217	49,872
Laguna Plaza	Retail	10777 West Flagler Street	33172	BU-1A	314	205	109	51,487
El Camino De Oriente	Retail	10900 West Flagler Street	33172	C	194	232	-38	58,089
Jose E. Guillen & Aida Costa Q.	Retail	11040-48 West Flagler Street	33174	C	36	18	18	4,679
Cindal Corporation	Retail	11180 West Flagler Street	33174	C	25	40	-15	10,074
Zadok B. Kestenbaum	Retail	11190 West Flagler Street	33174	C	20	3	17	995
Tower Shopping Center	Retail/Medical	11200 West Flagler Street	33174	C	47	67	-20	20,176
Flagler Square Shopping Plaza	Retail	11317 West Flagler Street	33172	BU-1A	199	213	-14	53,377
Valentine Plaza	Retail	11398 West Flagler Street	33174	C	30	29	1	7,335
Flagler Shopping Plaza No. 1	Retail	11400 West Flagler Street	33174	C	58	96	-38	24,125
Holiday Plaza	Retail	125 SW 107 Avenue	33174	C	199	180	19	45,000
Miami International Mall	Retail/Mall	1455 NW 107 Avenue	33172	BU-2	4,994	4,483	511	1,120,827
Expressway Toyota*	Retail/Auto	150 NW 79 Avenue	33126	BU-2	129	117	12	22,421
Homer Meruelo & Belinda	Retail	201 Park Boulevard	33126	BU-2	83	57	26	14,482
Pep Boys	Retail/Auto Parts	211 NW 82 Avenue	33126	BU-2	102	88	14	22,078
Tivoli Shopping Center	Retail	250 SW 107 Avenue	33174	C	57	64	-7	16,008
Centro Medico Qururgico	Retail	300 SW 107 Avenue	33174	C	57	3	54	950
Sweetwater Plaza 300	Retail	300 SW 109 Avenue	33174	C	48	63	-15	15,998
Southern Bell	Office	600 NW 79 Ave	33126	BU-2	1,743	2,159	-416	539,983
Triangle Shopping Center	Retail	7309 West Flagler Street	33126	BU-2	45	38	7	9,700
Mall of the Americas	Retail/Mall	7827-B West Flagler Street	33126	BU-2	2,927	3073	-146	768,451
Palm Plaza	Retail	7900 NW 2 Street	33126	BU-2	223	207	16	51,947
Meruelo Enterprises	Retail	7901 NW 2 Street	33126	BU-2	134	207	-73	51,947
Wendy's	Retail/Restaurant	7901 West Flagler Street	33126	BU-2	64	20	44	5,001
Burger King	Retail/Restaurant	7955 West Flagler Street	33126	BU-2	54	15	39	3,857
Boston Market	Retail/Restaurant	7993-95 West Flagler Street	33126	BU-2	38	13	25	3,457
Midway Ford*	Retail/Auto	8155 West Flagler Street	33126	BU-2	553	86	467	43,972
Golden Plaza	Retail	8190 West Flagler Street	33144	RU-5A	35	36	-1	9,151
Olive Garden	Retail/Restaurant	8201 West Flagler Street	33126	BU-2	102	36	66	9,068
Costco	Retail	8300 Park Boulevard	33126	BU-2	582	515	67	128,899
La Roma Plaza	Retail	8300 West Flagler Street	33144	RU-5A	188	251	-63	62,850
Flagler Park Plaza	Retail	8301 West Flagler Street	33126	BU-2	1,006	1,414	-408	353,713
Nations Bank	Retail/Bank	8313 West Flagler Street	33126	BU-2	38	21	17	5,474
Flagler 82 Plaza	Retail	8360 West Flagler Street	33144	RU-5A	157	142	15	35,656
Coral Point Plaza	Retail	8400 West Flagler Street	33144	RU-5A	143	161	-18	48,356
Garden Office Condominium	Office	8500 West Flagler Street	33144	RU-5A	47	53	-6	16,100
West Flagler Office Condominium	Office	8550 West Flagler Street	33144	RU-5A	60	50	10	15,176
FPL	Office/Utility	9250 West Flagler Street	33174	BU-2	1,500	2,333	-833	700,000
Park Hill Plaza	Retail	9501-11 West Flagler Street	33172	BU-1A	399	476	-77	119,058
Blue Groto Shopping Center	Retail	9610 Fontainebleau Boulevard	33172	BU-1	60	53	7	13,425
Total					17,725	18,213	-488	4,707,882

Source: Metro-Dade Department of Planning, Development, and Regulation, July 1997.

Notes: Formulas

Parking by Code Requirements = Const. Area/(250 if retail or 300 if office).

*Parking by Code Requirements = 3 spaces per 1st 2,500 sq. ft. 1 space per each 500 sq. ft. of remaining bldg. sq. ft. and 3 spaces per 5,000 sq. ft. of remaining open lot area.

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