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RESOLUTION NO. 03-51

A RESOLUTION OF THE MAYOR AND VILLAGE COUNCIL OF THE VILLAGE OF PALMETTO BAY, FLORIDA, RELATING TO TRANSPORTATION, APPROVING THE VILLAGE OF PALMETTO BAY INITIAL TRANSPORTATION PLAN; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the voters of Miami-Dade County approved a ½ cent Charter County Transit System Surtax; and

WHEREAS, the twenty percent of the proceeds are to be distributed to municipalities; and

WHEREAS, the Village must develop an Initial Transportation Plan in order to obtain the funds.

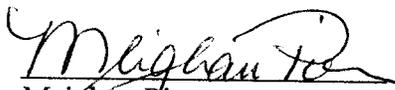
NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND VILLAGE COUNCIL OF THE VILLAGE OF PALMETTO BAY, FLORIDA, AS FOLLOWS:

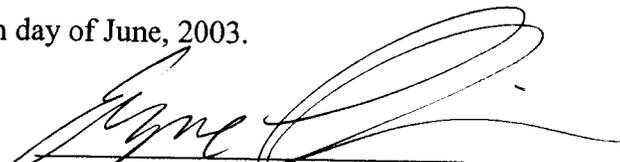
Section 1. The Village Council approves the attached Village of Palmetto Bay Initial Transportation Plan Report.

Section 2. This resolution shall take effect immediately upon enactment.

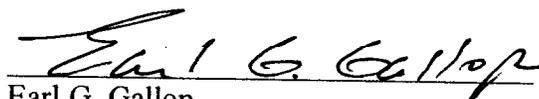
PASSED and ADOPTED this 10th day of June, 2003.

Attest:


Meighan Pier
Village Clerk


Eugene P. Flinn, Jr.
Mayor

APPROVED AS TO FORM:


Earl G. Gallop,
Village Attorney

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FINAL VOTE AT ADOPTION:

- Council Member Ed Feller Aye
- Council Member Paul Neidhart Aye
- Council Member John Breder Aye
- Vice-Mayor Linda Robinson Aye
- Mayor Eugene P. Flinn, Jr. Aye

***Village of Palmetto Bay
Initial Transportation Plan
FINAL REPORT***



***Prepared for:
Village of Palmetto Bay***

***Prepared by:
Kimley-Horn and Associates, Inc.***

044649000
May 2003
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**Kimley-Horn
and Associates, Inc.**

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EXECUTIVE SUMMARY

The purpose of this report is to provide an Initial Transportation Plan for the newly-incorporated Village of Palmetto Bay (Village). Transportation plans were reviewed to gather information about planned and programmed transportation improvements within the Village. Existing traffic conditions within the Village were assessed to evaluate demand on the existing street network and to perform an initial determination of needs. Existing transit service within the Village was inventoried to gauge current transit service levels and identify potential service gaps. A brief review of the bicycle and pedestrian facilities within the Village was conducted to determine initial needs for these non-motorized modes of transportation. Throughout the data collection and analysis portion of this Initial Transportation Plan, transportation deficiencies and needs were identified for both motorized and non-motorized transportation modes. Based on these needs, the following recommendations are made as part of the Initial Transportation Plan for the Village of Palmetto Bay.

Three studies have been identified to analyze high priority improvements to be made to the transportation infrastructure of the Village.

- Roadway Assessment
- Stormwater Master Plan
- Transportation Master Plan

Other needs and recommendations that are discussed in this report are listed below.

- Roadways with capacity deficiencies as determined by this Initial Transportation Plan include U.S. 1, SW 77th Avenue, and Old Cutler Road. Various intersections along these roadways are identified for further study to develop intersection capacity improvements.
- A neighborhood traffic management plan should be included as part of the Transportation Master Plan to develop streetscaping and traffic calming improvements within the Village. This plan should include school-related traffic issues.
- Transit circulation within the interior of the Village was found to be lacking as Miami-Dade Metrobus routes within the Village generally serve regional transportation needs.

- Bicycle path improvements should be studied with the goal of improving the circulation for bicyclists and increasing the viability of the bicycle as an alternative mode of transportation. These improvements could include bicycle lanes along east-west roadways such as SW 136th Street, SW 152nd Street, and SW 184th Street as well as bicycle / pedestrian bridges over canals at locations where a bridge for motorized traffic does not exist.

A priority ranking of the general transportation improvements discussed in this report has been developed based on the initial needs of the Village.

1. Intersection improvements
2. School-related traffic management
3. Neighborhood traffic management including streetscaping and traffic calming
4. Non-motorized transportation improvements
5. Transit improvements

After a review of the recommendations discussed in this report and an initial analysis of the needs of the Village, a preliminary five-year transportation budget was developed. The intent of this budget is to provide the Village with the framework to begin implementing some of the improvements that are associated with enhancing the transportation infrastructure within the Village. Budgetary numbers based on past experience were used to determine the values that are assigned to the tasks within this preliminary five-year budget. A copy of the projected five-year transportation budget is presented in Table 8 at the end of this report.

INTRODUCTION

The residents of Palmetto Bay voted to incorporate on February 5, 2002. During the following months, a Village charter was developed by a committee of Palmetto Bay residents. The charter was overwhelmingly adopted by residents on September 10, 2002, and Palmetto Bay was retained as the name of the Village.

The purpose of this report is to provide an Initial Transportation Plan for the newly-incorporated Village of Palmetto Bay. The relevant findings and recommendations of prior transportation studies and plans will be presented in this report along with an analysis of available transportation data. The goal is to develop an initial list of transportation needs and projects for inclusion in Palmetto Bay's municipal component of the People's Transportation Plan, which is the one-half cent sales tax approved by Miami-Dade County voters to fund transportation improvements. The municipal component of the People's Transportation Plan can be used for transportation expenses such as roadway and right-of-way maintenance, drainage, bridge maintenance, street lighting, signage, pavement markings, traffic engineering, and traffic signals. Each municipality must also apply twenty percent of their share of the surtax proceeds toward transit infrastructure such as bus service, bus pullout bays, and bus shelters.

The Village of Palmetto Bay is located in southern Miami-Dade County south of the Village of Pinecrest and north of the unincorporated area known as Cutler Ridge. The boundaries and roadway network of the Village of Palmetto Bay are depicted in Figure 1. The western boundary of the Village of Palmetto Bay is formed by U.S. 1 (South Dixie Highway) between SW 136th Street and SW 184th Street, which form the Village's northern and southern boundaries, respectively. Biscayne Bay is the eastern boundary of the Village of Palmetto Bay, except for a small segment of northeastern Palmetto Bay, which abuts the City of Coral Gables.

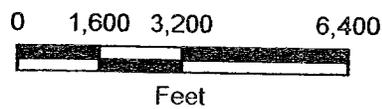
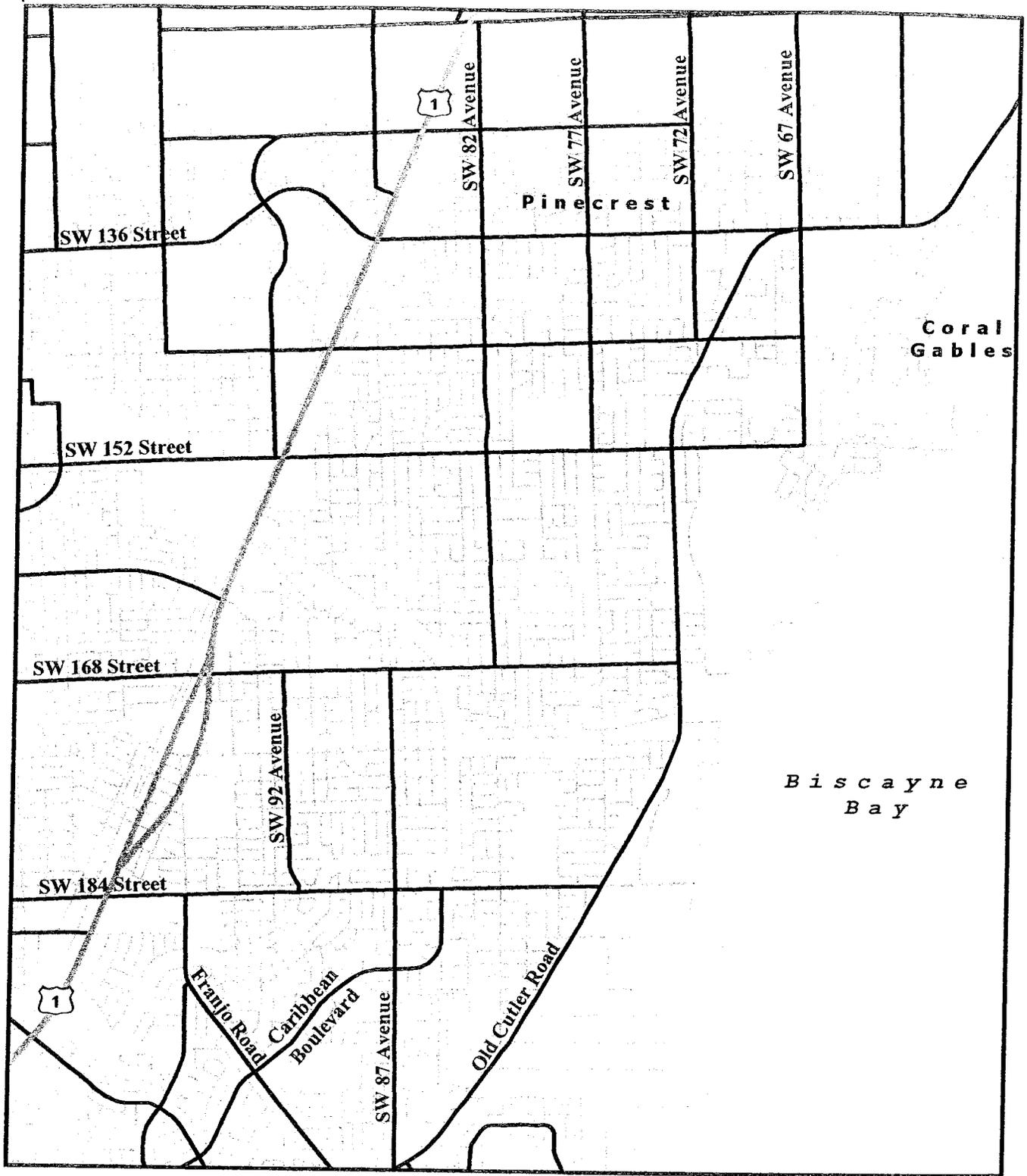


FIGURE 1
VILLAGE OF
PALMETTO BAY

REVIEW OF TRANSPORTATION PLANS

Transportation plans were reviewed to gather information about planned and programmed transportation improvements within the Village of Palmetto Bay. This effort represents a key study component so that recommendations and strategies may be developed consistent with improvements that have been identified in existing plans.

The review undertaken for this project included the following transportation plans:

- Miami-Dade County Comprehensive Development Master Plan
- Miami-Dade 2025 Long Range Transportation Plan
- Miami-Dade Transportation Improvement Program
- Miami-Dade Transit Development Program

The findings of these reports are summarized below.

Miami-Dade County Comprehensive Development Master Plan

The *Miami-Dade Comprehensive Development Master Plan* (CDMP) provides the framework that guides development within Miami-Dade County. The CDMP is organized into the following "Plan Elements":

1. Land Use Element
2. Transportation Element
3. Housing Element
4. Conservation, Aquifer Recharge and Drainage Element
5. Water, Sewer, and Solid Waste Element
6. Recreation and Open Space Element
7. Coastal Management Element
8. Intergovernmental Coordination Element
9. Capital Improvements Elements
10. Educational Element

The "Transportation Element" was the primary focus of this review for the Village of Palmetto Bay's Initial Transportation Plan. The purpose of the "Transportation Element" of the CDMP is to plan for an integrated multimodal transportation system providing for the circulation of motorized and non-motorized traffic in Miami-Dade County. The "Transportation Element" is divided into five subelements, two of which are most relevant to this study and are discussed further in the following sections. The "Traffic Circulation Subelement" addresses the needs of automobile traffic, bicyclists, and pedestrians. The "Mass Transit Subelement" addresses the need to continue to promote and expand the public transportation system to increase its role as a major component of the County's overall transportation system.

Traffic Circulation Subelement

The "Traffic Circulation Subelement" (1) analyzes current roadway capacity and deficiencies in Miami-Dade County, (2) provides recommendations for improving future highway capacity, and (3) establishes goals, objectives, and policies aimed at meeting future needs. The overall goal of the "Traffic Circulation Subelement" is to develop, operate, and maintain a safe, efficient, and economical traffic circulation system in Miami-Dade County that provides ease of mobility for people and goods, is consistent with desired land use patterns, conserves energy, and protects the natural environment. Specific objectives toward attaining this goal include the following:

- Objective 1 – It is desirable that all roadways in Miami-Dade County operate at level of service (LOS) C or better.¹
- Objective 2 – Right-of-way and corridors needed for existing and future transportation facilities should be designated and reserved.
- Objective 3 – The County's transportation system should emphasize safe and efficient management of traffic flow.
- Objective 4 – The "Traffic Circulation Subelement" should continue to be coordinated with the goals, objectives and policies of the "Land Use Element," including the land uses, "Urban Development Boundary," and "Urban Expansion Area" designated on the Land Use Plan map. The "Traffic Circulation Subelement" should also be coordinated with the goals, objectives, and policies of all other Elements of the CDMP.

¹ Although the CDMP presents LOS C as a desirable objective, the actual peak period LOS standard set forth by the CDMP is LOS E for roadways within the Urban Infill Area (east of SW 77th Avenue). Outside of the Urban Infill Area, the LOS standard is LOS D. Please note that lower levels of service are allowed in areas where transit services are provided.

- Objective 5 – The traffic circulation system should protect community and neighborhood integrity.
- Objective 6 – The transportation system should preserve environmentally sensitive areas, conserve energy and natural resources, and promote community aesthetic values.
- Objective 7 – Miami-Dade County’s “Traffic Circulation Subelement,” and the plans and programs of the state, region and local jurisdiction, should continue to be coordinated.

Both the CDMP and the *Miami-Dade 2025 Long-Range Transportation Plan* (LRTP) present planned improvements to the transportation system. However, the improvements identified in the CDMP are based on the 2015 LRTP, which was the adopted transportation plan at the time the CDMP was developed. Nevertheless, the projects presented in Table 1 are listed as improvements in the CDMP within the Village of Palmetto Bay.

Table 1. Comprehensive Development Master Plan Improvements

Status	Project / Facility	From	To	Project Description
Unfunded	SW 77 th Avenue	SW 104 th Street	SW 152 nd Street	Widen 2 to 4 Lanes
Unfunded	SW 87 th Avenue	SW 168 th Street	SW 216 th Street	Widen 2 to 4 Lanes

According to the CDMP, these projects are part of the Needs Plan, but are unfunded and not contained in the Cost Feasible Plan. In addition, the SW 77th Avenue widening has been removed from the 2025 LRTP, as discussed later in this section of the report.

Mass Transit Subelement

The purpose of the “Mass Transit Subelement” is to provide a basis for the development of mass transit facilities to enhance mobility as a major component of the overall transportation system in Miami-Dade County. The Adopted Components of this subelement contain the mass transit goal, objectives and policies, a series of mass transit maps showing planned future facilities and service areas, and procedures for monitoring and evaluating conditions. The overall goal of the “Mass Transit Subelement” is to maintain, operate, and develop a mass transit system in Miami-Dade County that provides efficient, convenient, accessible, and affordable service to all residents and tourists.

The use of the term rapid transit in the CDMP refers to any heavy rail, light rail, or express buses operating on exclusive rights-of-way. Therefore, the South Dade Busway running west of U.S. 1 is the only rapid transit near the Village of Palmetto Bay. Although no planned extensions of the rapid transit system are identified in the CDMP within the Village of Palmetto Bay, planning efforts following the passage of the People's Transportation Plan have identified the portion of the South Dade Busway corridor between Kendall Drive and Cutler Ridge for a southward extension of the Metrorail line that currently terminates at Kendall Drive.

The CDMP also identifies Transit Centers, such as Metrobus terminals, rapid transit stations, and transit transfer facilities. These centers are locations where several routes or lines, or different modes, converge. These facilities are designed to handle the movement of transit vehicles and the boarding, alighting, and transferring of passengers between transit routes, lines, or transit modes. A Transit Center is identified in the CDMP along the South Dade Busway south of SW 152nd Street.

In addition, the CDMP identifies a potential Metrobus service expansion along SW 184th Street between SW 142nd Avenue and Old Cutler Road.

Miami-Dade 2025 Long Range Transportation Plan

The *Miami-Dade 2025 Long Range Transportation Plan (LRTP)*, adopted by the Miami-Dade County Metropolitan Planning Organization (MPO), was developed to guide long-term transportation investments in Miami-Dade County. The LRTP focuses on the County's transportation infrastructure needs including connections to major activity centers. The LRTP also addresses transit facilities, bicycle facilities, pedestrian facilities, and other modes of transportation.

The LRTP lists a number of improvements that are categorized based on priority and project description. The improvements were selected and prioritized based on goals and objectives approved by the MPO. The LRTP divides Miami-Dade County into six analysis areas; the Village of Palmetto Bay is part of the "South Area." The projects presented in Table 2 are listed as improvements in the LRTP that will affect transportation facilities within and near the Village of Palmetto Bay.

Table 2. Long Range Transportation Plan Improvements

Priority	Time	Project / Facility	From	To	Project Description
I	2006 - 2010	South Dade Greenway Corridor	Kendall Drive	West Palm Drive	Greenway
I	2006 - 2010	SW 97 th Avenue	SW 175 th Terrace	SW 184 th Street	Pedestrian Facility
III	2016 - 2020	SW 87 th Avenue	SW 168 th Street	SW 216 th Street	Widen 2 to 4 Lanes
IV	2021 - 2025	SW 87 th Avenue	SW 168 th Street	SW 232 nd Street	On-road Bicycle Facility
IV - Unfunded	2021 - 2025	U.S. 1	SW 104 th Street	Cutler Ridge	Premium Transit

The projects identified in Table 2 are part of the recommended minimum revenue (cost feasible) plan. This indicates that these projects are candidate projects for which funding is projected to be available, but no funding has been specifically identified. The U.S. 1 premium transit project represents a southward extension of the Metrorail system along the U.S. 1 / South Dade Busway corridor. This project was listed as a separate type of Priority IV called unfunded, although this Metrorail extension project could receive funds from the recent passage of the People's Transportation Plan.

While the South Dade Greenway Corridor is outside of the Village of Palmetto Bay, it is adjacent to the Village and is part of a greenway network that has been identified for Miami-Dade County. The bicycle path adjacent to the South Dade Busway (west of U.S. 1) is part of this greenway network. The SW 87th Avenue widening project from SW 168th Street to SW 216th Street is identified as Priority III in the recommended minimum revenue plan. This project was also identified in the "Traffic Circulation Subelement" of the *Miami-Dade Comprehensive Development Master Plan* (CDMP). One project listed in the CDMP has been removed from the 2025 LRTP - the SW 77th Avenue widening from SW 104th Street to SW 152nd Street.

Miami-Dade Transportation Improvement Program

The *Miami-Dade Transportation Improvement Program* (TIP) was approved by the MPO in May 2002 for Fiscal Years 2003-2007. The TIP specifies proposed improvements to be implemented in Miami-Dade County over the next five years. The TIP is organized into the following three parts:

1. Three-Year Federal Funded Project Listing – As required by federal regulations, projects receiving federal funding must be chosen from this list.
2. Five-Year Project Listing – Projects beyond the third year are included as proposed, so these projects are periodically evaluated by the MPO.
3. Unfunded Priority Needs – This category includes MPO priorities not included in the other two sections.

Improvements included in the TIP are characterized as Intermodal, Highway, Transit, Aviation, Seaport, and Non-Motorized.

The only project programmed in the TIP for the Village of Palmetto Bay is presented in Table 3.

Table 3. Transportation Improvement Program Improvements

Year	Project / Facility	From	To	Project Description
2004	U.S. 1	@ 14600 Block (Publix Entrance)		Minor Intersection Improvements

Miami-Dade Transit Development Program

The *Miami-Dade Transit Development Program (TDP)* was completed by Miami-Dade Transit (MDT). The 2002 Update to the TDP presents the operating environment, committed improvements, an amended 5-year Recommended Service Plan (RSP), and financial analysis of proposed transit improvements for the period ending in 2007. The “Committed Improvements” are projects that affect the delivery of transit services and are expected to be implemented during the next five years. These improvements, in conjunction with the 2002 TDP’s existing conditions, form the baseline conditions from which the “2007 Recommended Service Plan” is developed. The “Recommended Service Plan” addresses unmet community transit needs and prioritizes these needs. The “Committed Improvements” shown are projects that are funded and are expected to be implemented; however, projects in the “Recommended Service Plan” are unfunded. Table 4 presents the improvements listed in the TDP that would affect routes passing through the Village of Palmetto Bay or along the South Dade Busway to the west of U.S. 1.

Table 4. Transit Development Program Improvements

Route	Committed Bus Service Improvements	2007 Recommended Service Plan
1	No planned improvements	No planned improvements
35	No planned improvements	Extend weekend service to Miami-Dade Community College (South); re-align southern portion of route along Busway Phase II Extension
52	No planned improvements	Improve peak period headways from 30 to 20
57	No planned improvements	Extend route to Miami International Airport along SW 57 th Avenue
65	No planned improvements	No planned improvements
Busway Local	Weekday and weekend schedules will be modified to reduce overcrowding	Re-align along Busway Phase II Extension; improve peak period headways from 15 to 10; improve mid-day headways from 30 to 20
Busway MAX	No planned improvements	Re-align along Busway Phase II Extension; improve peak period headways from 15 to 10; improve mid-day headways from 30 to 20; improve weekend headways from 30 to 20
Coral Reef MAX	No planned improvements	Improve peak period headways from 20 to 15; improve off-peak headways from 45 to 30
Saga Bay MAX	No planned improvements	No planned improvements

In addition to the service improvements, fifteen new Metrobus routes are identified as part of the recommended service plan in the TDP. None of these routes pass through the Village of Palmetto Bay, although the proposed Route 120/136 Crosstown would serve "The Falls" on SW 136th Street west of U.S. 1 (just outside the Village of Palmetto Bay's boundary) and the areas to the west along SW 136th Street, SW 107th Avenue, and SW 120th Street.

EXISTING TRAFFIC CONDITIONS

Existing traffic conditions within the Village of Palmetto Bay were assessed to evaluate demand on the existing street network and to perform an initial determination of needs. Data collection was limited to data readily available from other sources to facilitate the initial determination of needs in an efficient manner. Please note that no new traffic data was collected in the field as part of this effort.

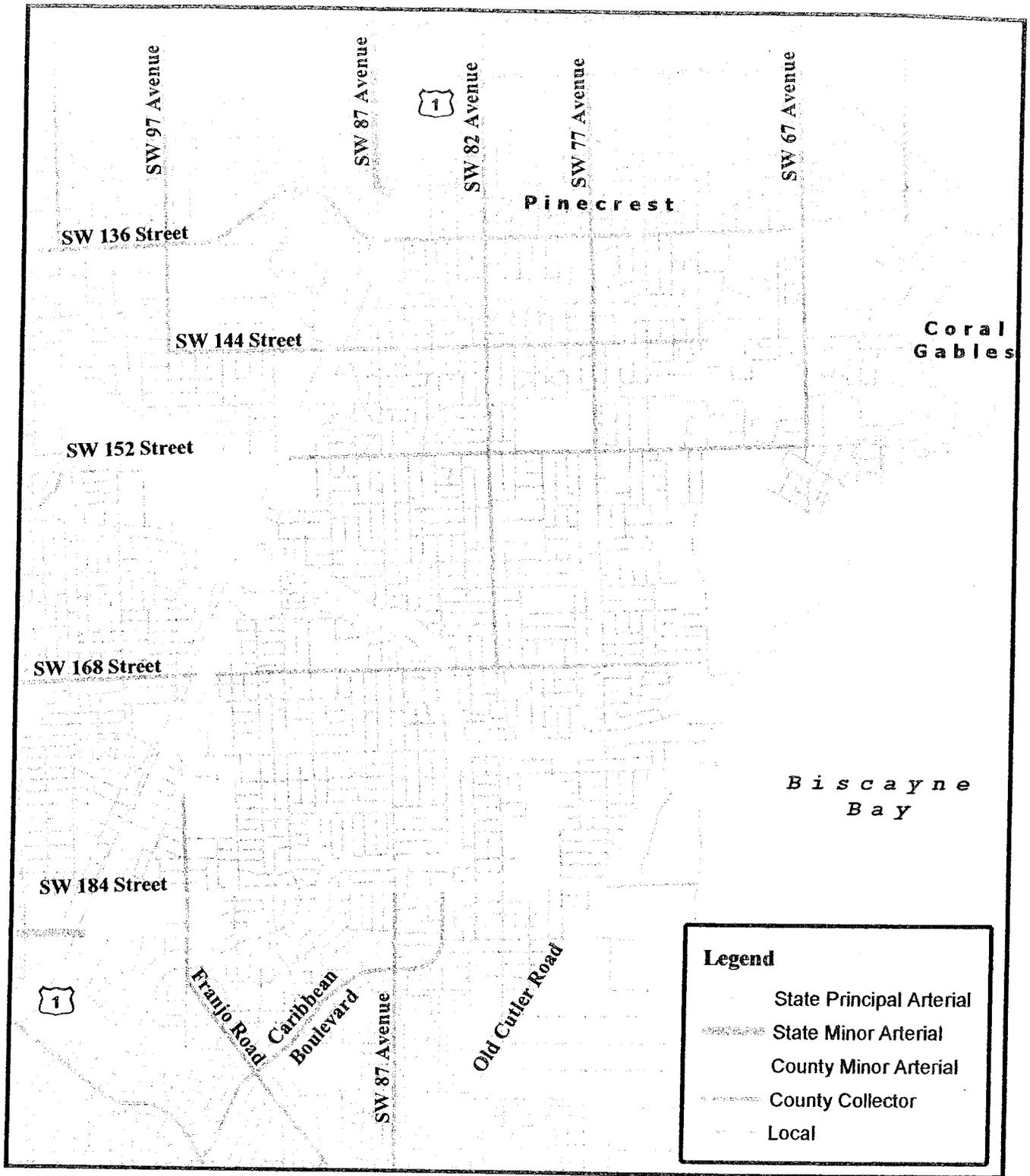
Traffic data obtained from the Florida Department of Transportation (FDOT) and Miami-Dade County were compiled in a database. Included in the analysis of existing traffic conditions are the identification of the primary roadway network, functional classification, traffic volumes, and level of service measurements. The existing traffic conditions provide a base to make an initial determination of needs for various transportation studies and improvements. However, a more refined analysis is recommended to identify specific recommendations.

Roadway Network

For transportation planning purposes, roadway facilities are grouped by functional classification to help define the roadway's character. In urban areas the hierarchy of the functional system consists of principal arterials, minor arterials, collectors and local streets. Principal arterials primarily serve through traffic and carry the highest traffic volumes; minor arterials augment principal arterials at a somewhat lower level of mobility; collector roadways carry lower traffic volumes and provide a connection between high traffic corridors and the local street network; and local streets provide access to adjacent land uses.

Figure 2 presents the functional classification of the roadway network within the Village of Palmetto Bay. The *Miami-Dade County Comprehensive Development Master Plan (CDMP)* identifies one principal arterial, two minor arterials, and eight collector roadways within the Village of Palmetto Bay.

As shown in Figure 2, U.S. 1 is the only state principal arterial within the Village of Palmetto Bay. U.S. 1 serves a significant number of through trips and provides connections to Downtown Miami, Homestead, and the Florida Keys. U.S. 1 is a six-lane divided facility running along the western edge of the Village of Palmetto Bay. A portion of U.S. 1 between SW 184th Street and



Legend

- State Principal Arterial
- - - State Minor Arterial
- · · County Minor Arterial
- · - County Collector
- Local

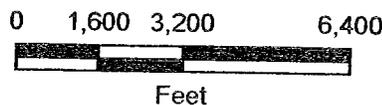


FIGURE 2
ROADWAY
FUNCTIONAL
CLASSIFICATION

SW 168th Street is a one-way pair, with commercial and institutional land uses between the two directional roadways.

SW 184th Street and Old Cutler Road are county minor arterials within the Village of Palmetto Bay. SW 184th Street is a two-lane east-west roadway that forms the southern border of the Village of Palmetto Bay. Old Cutler Road is a two-lane north-south roadway running between Cutler Ridge and Coral Gables.

The CDMP identifies eight collector roadways within the Village of Palmetto Bay. Most sectionline and half-sectionline roadways within the Village of Palmetto Bay are classified as collector roadways. The east-west collector roadways include SW 136th Street, SW 144th Street, SW 152nd Street, and SW 168th Street. The north-south collector roadways include portions of SW 97th Avenue, SW 82nd Avenue, SW 77th Avenue, and SW 67th Avenue.

In addition to these arterials and collectors, the Village of Palmetto Bay has a supporting local street system that forms a grid network. The configuration of the grid network provides convenient access and circulation alternatives, but may also cultivate cut-through traffic in residential neighborhoods when there is congestion on arterials and collectors.

Traffic Data

Traffic count data were compiled from information provided by the Florida Department of Transportation (FDOT) and Miami-Dade County for roadways within the Village of Palmetto Bay. Table 5 presents annual average daily traffic (AADT) volumes for the primary roadways in the Village of Palmetto Bay for which data were readily available. U.S. 1 carries the highest volume of traffic since it serves the function of providing mobility for through trips in the area. SW 77th Avenue also carries a high volume of traffic for a two-lane facility. SW 152nd Street carries the highest volume of east-west traffic within the Village of Palmetto Bay.

Table 5. Traffic Data for Major Roadways within the Village of Palmetto Bay

Segment	Number of Lanes	Median	Functional Classification	AADT	Daily LOS ⁽¹⁾
<i>East-West Roads</i>					
SW 136th Street					
West of U.S. 1	4	Divided	County Collector	20,500	C
East of U.S. 1	2	Undivided	County Collector	13,500	D
SW 152nd Street					
East of U.S. 1	2	Undivided	County Collector	16,500	F
SW 168th Street					
West of SW 87 th Avenue	2	Undivided	County Collector	4,600	C
SW 184th Street					
West of Old Cutler Road	2	Undivided	County Minor Arterial	5,300	C
<i>North-South Roads</i>					
U.S. 1					
South of SW 136 th Street	6	Divided	State Principal Arterial	77,400	F
SW 97th Avenue					
South of SW 184 th Street	2	Undivided	County Collector	11,600	D
SW 77th Avenue					
South of SW 136 th Street	2	Undivided	County Collector	25,200	F
Old Cutler Road					
South of SW 136 th Street	2	Undivided	County Minor Arterial	17,600	F
South of SW 152 nd Street	2	Undivided	County Minor Arterial	19,100	F
South of SW 168 th Street	2	Undivided	County Minor Arterial	15,900	F
South of SW 184 th Street	2	Undivided	County Minor Arterial	11,700	D
SW 67th Avenue					
South of SW 136 th Street	2	Undivided	County Collector	4,300	C

Note:

(1) Based on volume thresholds provided in FDOT's 2002 *Quality / Level of Service Handbook*

Figure 3 depicts the AADT volumes on a map of the Village of Palmetto Bay.

Traffic signals and flashers were inventoried from data provided by Miami-Dade County. Figure 4 illustrates the location and type of traffic signals and flashers in the Village of Palmetto Bay. Traffic signals are necessary components of an urban traffic network that facilitate traffic flow by assigning right of way to specific movements. However, an excessive number of traffic signals can constrict the capacity of roadways. Therefore, traffic signal data must be considered when calculating level of service (LOS), as described in the next subsection of the report.

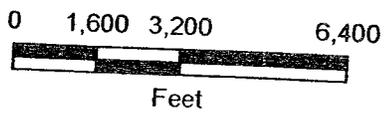
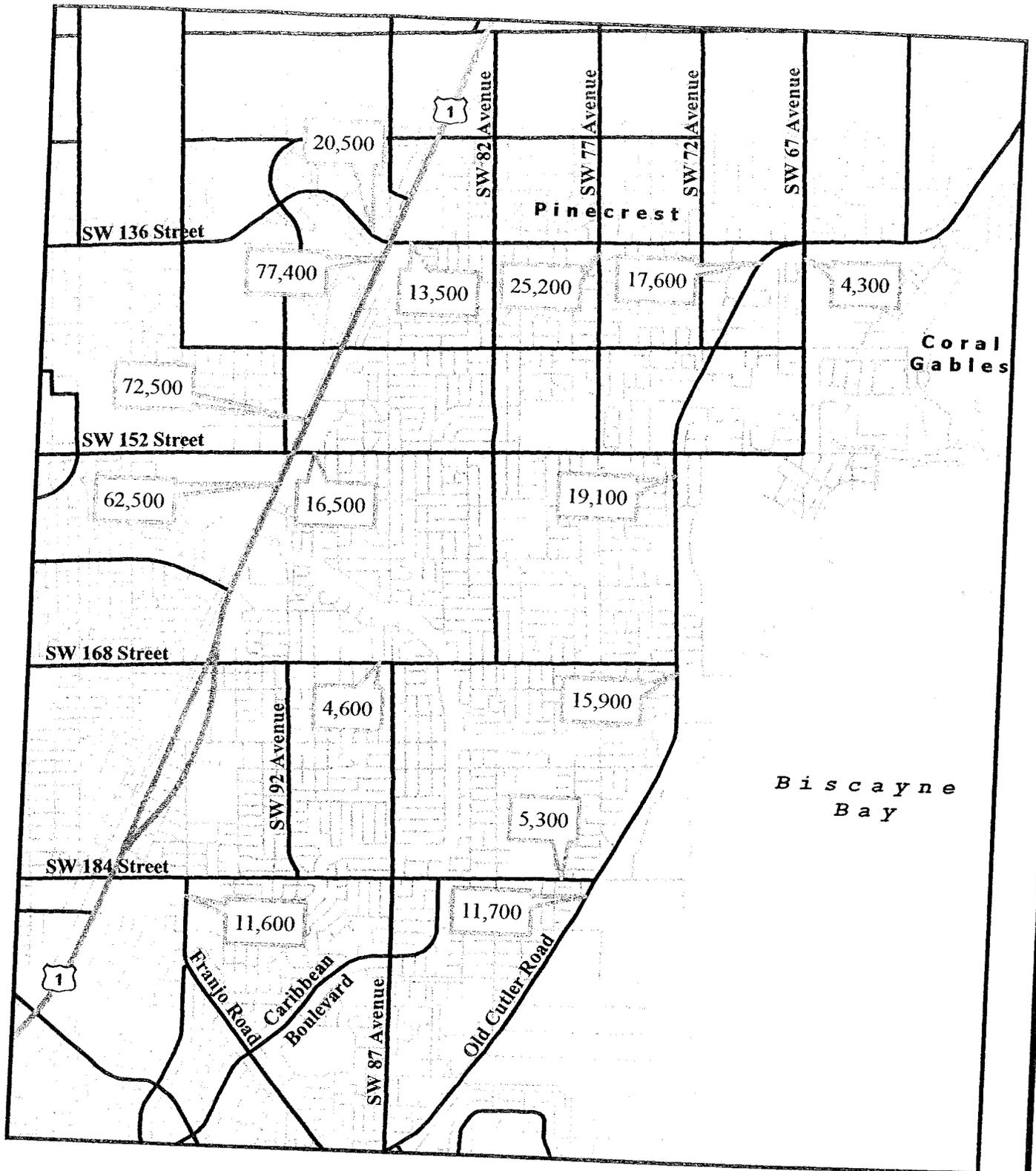


FIGURE 3
AVERAGE ANNUAL DAILY TRAFFIC (AADT)

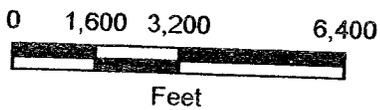
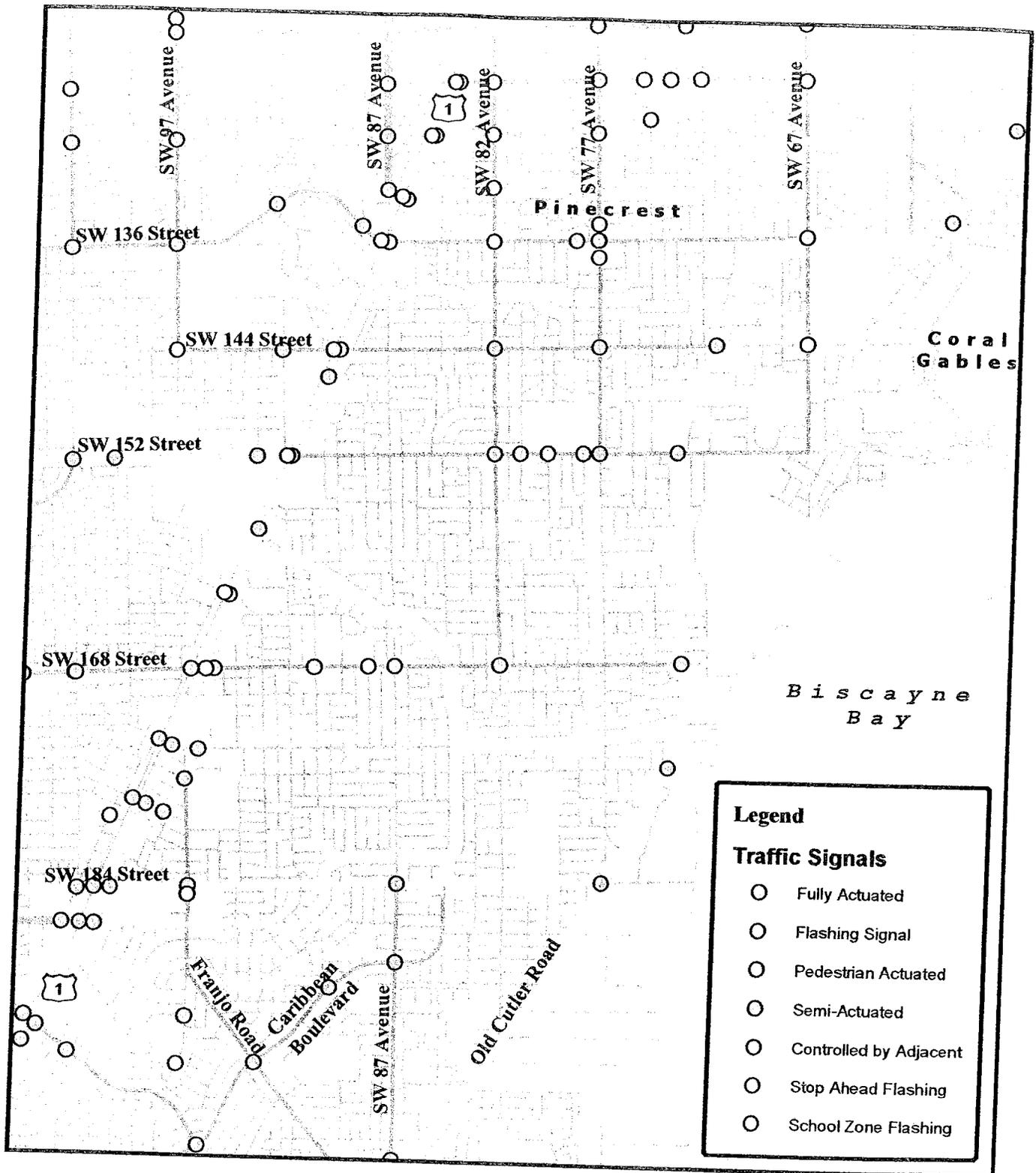


FIGURE 4
TRAFFIC SIGNALS

Level of Service

Level of service (LOS) is a quality measure describing operational characteristics within a traffic stream generally in terms of such characteristics as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. The level of service for a roadway is represented by one of the letters A through F, with LOS A representing the best operating conditions and LOS F the worst. Analytical methods specified in the *Highway Capacity Manual* (HCM 2000) establish methodologies to approximate level of service based upon quantitative measures such as maximum flow rates, volume-to-capacity ratios, and travel speeds.

The existing level of service for roadways within the Village of Palmetto Bay was determined at locations where traffic count data was available, as shown in Table 5 and Figure 3. Levels of service were based upon the maximum flow rates provided in FDOT's 2002 *Quality / Level of Service Handbook*, which provides generalized level of service tables. These service volume tables estimate the number of vehicles a facility can carry at various levels of service considering factors such as functional classification, number of lanes, and density of traffic signals. Table 5 presented the level of service based on the daily traffic volumes that were readily available for this study. This analysis relied upon "Table 4-1" from FDOT's 2002 *Quality / Level of Service Handbook*, which provides daily volume thresholds.

Table 6 presents the peak period level of service for roadways within the Village of Palmetto Bay. Peak period level of service is more specific than daily level of service in that the calculations are made for a specific direction during the specific time periods corresponding to the heaviest traffic volumes of the day. Table 6 presents level of service for both AM and PM peak periods of travel, based on the traffic counts available for this study. This analysis relied upon "Table 4-7" from FDOT's 2002 *Quality / Level of Service Handbook*, which provides peak period directional volume thresholds.

Table 6 shows that level of service is generally worse on north-south roadways than on east-west roadways within the Village of Palmetto Bay. The peak traffic direction is northbound during the AM peak and southbound during the PM peak. However, these level of service figures do not account for specific traffic deficiencies at intersections, such as long traffic queues along east-west streets approaching U.S. 1. More refined traffic data needs to be collected to identify these site-specific deficiencies. Figures 5 and 6 depict the peak period level of service values shown in Table 6 for the AM and PM peak periods, respectively.

VILLAGE OF PALMETTO BAY
Initial Transportation Study

Table 6. Peak Period Level of Service (LOS)

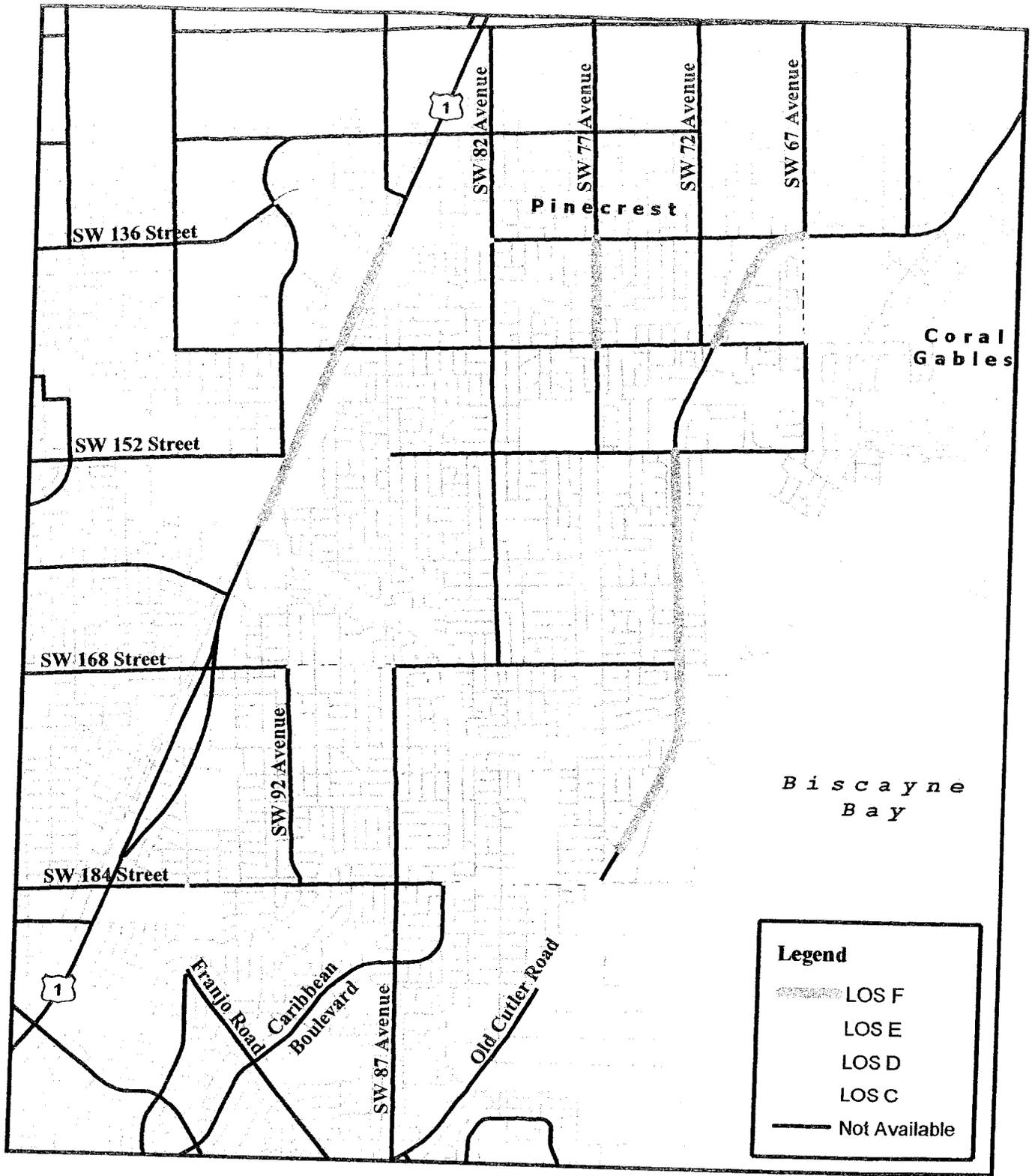
East-West Roadways

Roadway	Location	Peak Hour Directional LOS			
		AM Peak		PM Peak	
		EB	WB	EB	WB
SW 136 Street	west of U.S. 1	C	C	C	C
SW 136 Street	east of U.S. 1	C	D	D	D
SW 152 Street	east of U.S. 1	C	D	D	E
SW 168 Street	west of SW 87 Avenue	C	C	C	C
SW 184 Street	west of Old Cutler Road	C	C	C	C

North-South Roadways

Roadway	Location	Peak Hour Directional LOS			
		AM Peak		PM Peak	
		NB	SB	NB	SB
U.S. 1	south of SW 136 Street	F	D	E	F
SW 97 Avenue	south of SW 184 Street	D	C	C	D
SW 77 Avenue	south of SW 136 Street	F	D	E	F
Old Cutler Road	south of SW 136 Street	F	C	C	F
Old Cutler Road	south of SW 152 Street	F	C	D	F
Old Cutler Road	south of SW 168 Street	F	C	C	F
Old Cutler Road	south of SW 184 Street	E	C	C	D
SW 67 Avenue	south of SW 136 Street	C	C	C	C

LOS calculations presented in this table are based on traffic volumes obtained from Miami-Dade County's traffic counting program.



Legend

-  LOS F
-  LOS E
-  LOS D
-  LOS C
-  Not Available

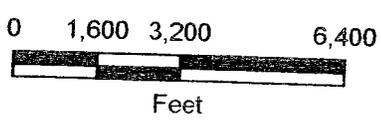
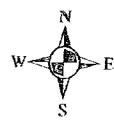
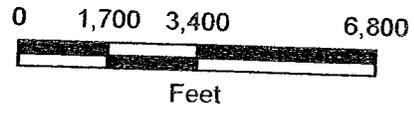
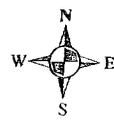
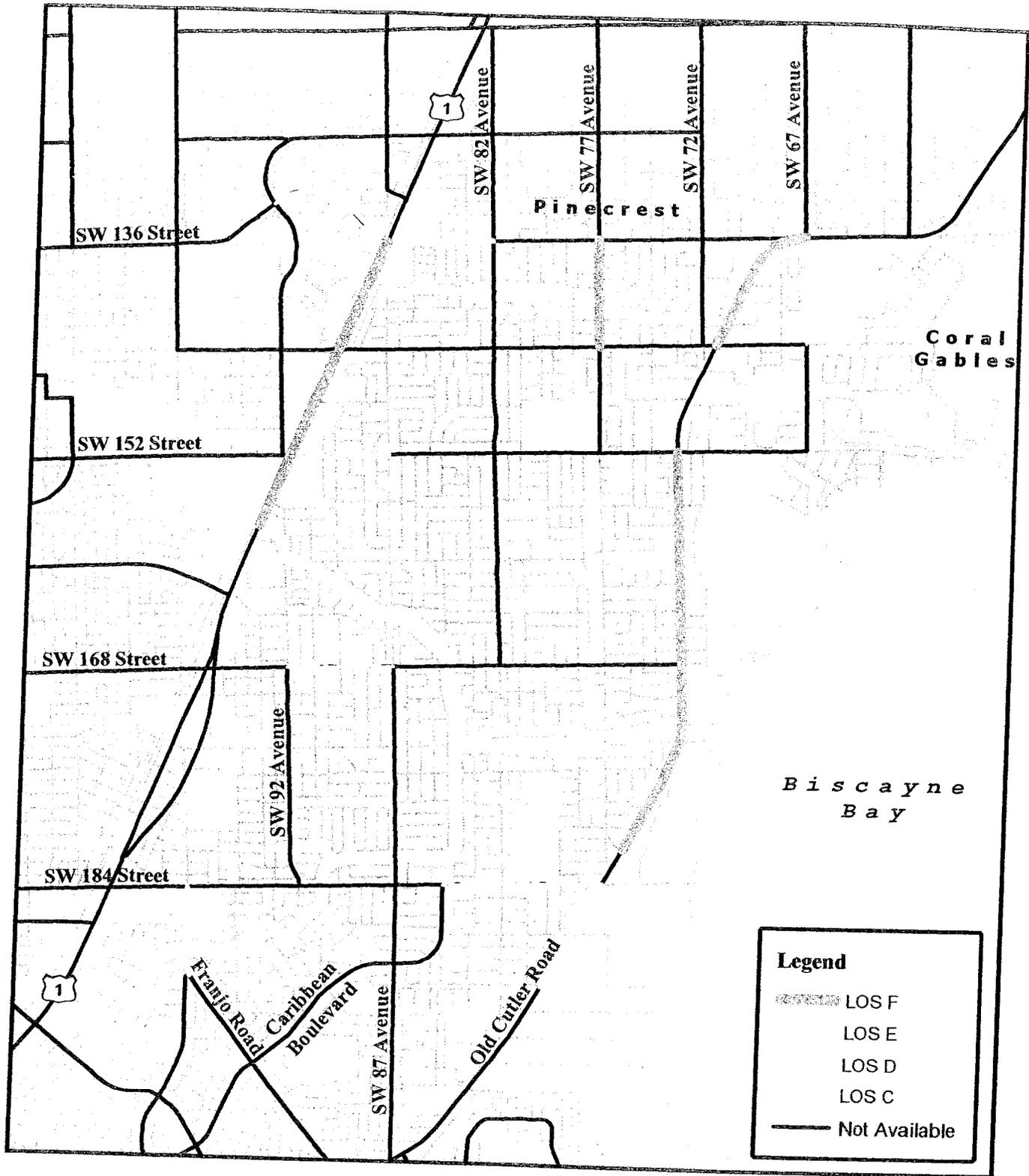


FIGURE 5
AM PEAK PERIOD
LEVEL OF SERVICE



Legend

-  LOS F
-  LOS E
-  LOS D
-  LOS C
-  Not Available

FIGURE 6
PM PEAK PERIOD
LEVEL OF SERVICE

EXISTING TRANSIT CONDITIONS

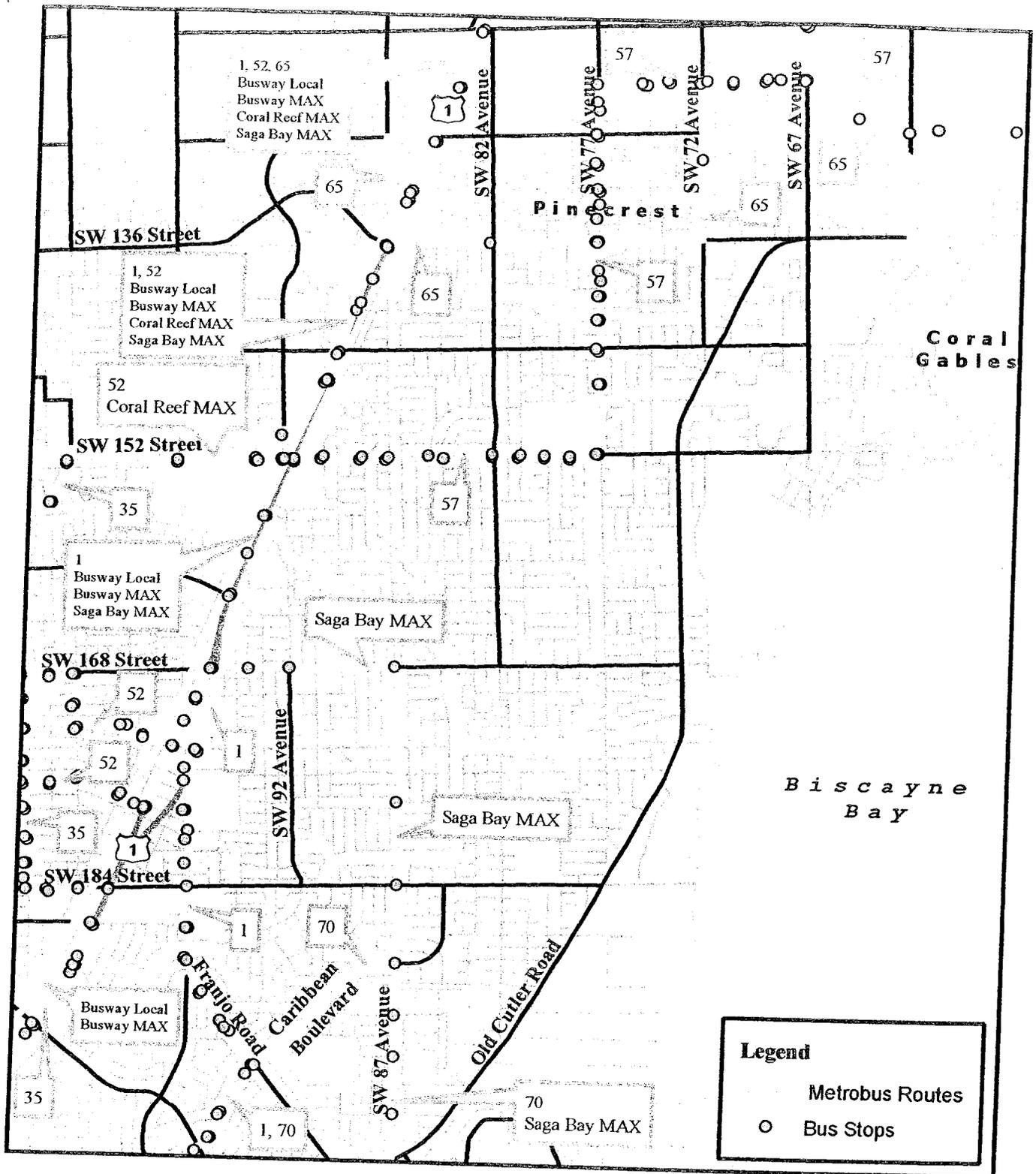
Existing transit service within the Village of Palmetto Bay was inventoried to gauge current transit service levels. Characteristics that were identified for this study include route alignments, hours of operation, headways, ridership, and planned service expansion.

Transit service in the Village of Palmetto Bay is provided by Miami-Dade Transit (MDT). MDT operates the 16th largest public transit system in the United States and the largest transit system in Florida. Within Miami-Dade County, MDT's transit service consists of (1) the Metrobus bus system, (2) the Metrorail rapid transit system, and (3) the Metromover automated people mover (APM) system.

MDT's transit service within the Village of Palmetto Bay includes several Metrobus routes. In addition, the South Miami-Dade Busway runs parallel to U.S. 1 just west of the Village of Palmetto Bay. The Busway is a dedicated bus facility operating in a former railroad corridor along the west side of U.S. 1. The Busway serves as a southward extension of the Metrorail system, which currently terminates at the Dadeland South station located just south of SW 88th Street (Kendall Drive). The Busway runs along the entire western edge of the Village of Palmetto Bay and presently extends south to SW 112th Avenue (Allapatah Road) near the Cutler Ridge Mall.

The Village of Palmetto Bay is currently serviced by nine Metrobus routes operated by MDT. The majority of the Metrobus routes operate on the Busway for all or part of their route near the Village of Palmetto Bay. Consequentially, heavy traffic volumes on U.S. 1 inhibit pedestrian access to most transit routes from the Village of Palmetto Bay. The alignments of the nine Metrobus routes are illustrated in Figure 7 and each route is described below.

- **Metrobus Route 1** runs along the Busway from the Dadeland Mall and the Dadeland South Metrorail Station to SW 168th Street. Route 1 then exits the Busway to the east, serving the Perrine Shopping Center, Franjo Road, Caribbean Boulevard, and the Cutler Ridge Mall. Route 1 operates Monday through Friday on 20-minute headways during peak travel periods and 40-minute headways during mid-day and evening hours. Saturday and Sunday service operate on 40- and 60-minute headways respectively.



Legend

- Metrobus Routes
- Bus Stops

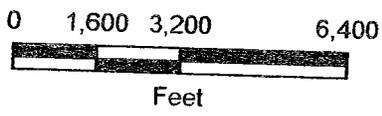
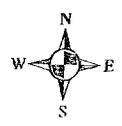


FIGURE 7
MIAMI-DADE
TRANSIT ROUTES

- **Metrobus Route 35** operates between the Prime Outlets at Florida City in the south and the Miami-Dade Community College Kendall Campus in the north. The only portion of the Village of Palmetto Bay served by Route 35 is the intersection of U.S. 1 and SW 184th Street. Route 35 operates on 30-minute headways during peak daytime hours and on 60-minute headways during off-peak and evening hours. Weekend service operates on 60-minute headways.

- **Metrobus Route 52** runs north-south between the South Miami-Dade Government Center and Coral Gables. Within the Village of Palmetto Bay, Route 52 serves the Perrine Shopping Center and then operates in the Busway between SW 152nd Street and the Dadeland South Metrorail Station. Route 52 operates on 30-minute headways during peak daytime hours and 60-minute headways during off-peak and evening hours. Weekend service operates on 60-minute headways.

- **Metrobus Route 57** is a peak period route that operates north-south between Columbia Deering Hospital and the South Miami Metrorail Station. The route operates along SW 152nd Street between the Columbia Deering Hospital and SW 77th Avenue, and along SW 77th Avenue between SW 152nd Street and SW 124th Street. Route 57 operates only during weekday peak periods and provides service with 30-minute headways.

- **Metrobus Route 65** is a peak period route that operates north-south between “The Falls,” Cocoplum Plaza, and the Douglas Road Metrorail Station. Route 65 operates southbound during the AM peak period and northbound during the PM peak period. Within the Village of Palmetto Bay, Route 65 runs along SW 136th Street to SW 72nd Avenue. Route 65 operates Monday through Friday on 30-minute headways during peak hours.

- **Metrobus Busway Local** runs north-south along the entire length of the Busway serving every stop. Busway Local operates on 15-minute headways during weekday peak daytime hours and on 30-minute headways during off-peak and evening hours. Weekend service operates on 30-minute headways.

- **Metrobus Busway MAX** runs from the Prime Outlets at Florida City in the south to the Dadeland South Metrorail Station in the north. Busway MAX operates along U.S. 1 south of the Cutler Ridge Mall and along the Busway north of the Cutler Ridge Mall.

During weekday peak periods, Busway MAX is a limited stop route to improve travel times. Busway MAX operates Monday through Friday on 15-minute headways during peak daytime hours and 30-minute headways during off-peak and evening hours. Weekend service operates on 30-minute headways.

- **Metrobus Coral Reef MAX** operates in the Busway from the Dadeland South Metrorail Station to SW 152nd Street. Coral Reef MAX operates along SW 152nd Street to the west of the Busway. Coral Reef MAX operates Monday through Friday on 20-minute headways during peak daytime hours and 45-minute headways during off-peak hours. Weekend service operates on 40-minute headways.
- **Metrobus Saga Bay MAX** is a peak period route that operates from Saga Bay in the south to the Dadeland South Metrorail Station in the north. Saga Bay MAX operates in the Busway from Dadeland South to SW 168th Street. The route utilizes SW 168th Street between the Busway and SW 87th Avenue, then SW 87th Avenue as far south as SW 212th Street. Saga Bay MAX operates Monday through Friday on 24-minute headways during peak hours. No weekend service is provided.

Listed in Table 7 are service and performance data for the Metrobus routes in the vicinity of the Village of Palmetto Bay. This information was obtained from Metrobus route schedules, the *2002 Transit Development Program* prepared by MDT, and *Miami-Dade Transit Ridership Technical Reports* prepared by MDT for the period from January 2001 to December 2001. In addition, service improvements implemented since the passage of the People's Transportation Plan were researched and included in Table 7.

Table 7. Metrobus Route Information

Route	Weekday Hours of Operation	Headway (Peak/Off-Peak) ⁽¹⁾	Average Weekday Ridership ⁽²⁾	Boardings per Revenue Hour ⁽²⁾
1	5:15 AM – 11:15 PM	20/40	1,574	23.0
35 ⁽³⁾	5:15 AM – 11:45 PM	30/60	2,002	19.5
52	5:00 AM – 11:30 PM	30/60	1,106	17.3
57 ⁽³⁾	6:15 AM – 9:30 AM	30/(n/a)	1,740	26.6
	2:45 PM – 7:00 PM			
65 ⁽³⁾	6:45 AM – 10:00 AM (SB)	30/(n/a)	195	28.8
	1:15 PM – 5:30 PM (NB)			
Busway Local	5:15 AM – 9:45 PM	15/30	1,660	34.5
Busway MAX ⁽³⁾	5:15 AM – 1:45 AM	15/30	3,598	26.7
Coral Reef MAX ⁽³⁾	5:45 AM – 8:15 PM	20/45	957	20.6
Saga Bay MAX	5:45 AM – 9:15 AM	24/(n/a)	309	17.4
	4:00 PM – 7:15 PM			

Notes:

- (1) Source: Transit Development Program 2003 & www.co.miami-dade.fl.us/transit/
- (2) Source: Miami-Dade Transit Ridership Technical Report (Jan 2001-Dec 2001)
- (3) Routes with service improvements made since the passage of the People's Transportation Plan on November 5, 2002

Data presented in Table 7 and the route descriptions presented earlier indicate that a high density of transit routes exist along the South Dade Busway. However, interior sections of the Village of Palmetto Bay are not served well by Metrobus routes. Only four routes pass through the Village including Route 1, Route 57, Route 65, and Saga Bay MAX. Three of these four routes only operate during peak periods. Only Route 1, which serves the area around the Perrine Shopping Center, operates during off-peak hours. Additionally, none of the Metrobus routes in the Village of Palmetto Bay are designed to effectively circulate the residents of Palmetto Bay to retail or employment areas.

EXISTING NON-MOTORIZED TRANSPORTATION CONDITIONS

A brief review of the bicycle and pedestrian facilities within the Village of Palmetto Bay was conducted to determine initial needs for these non-motorized modes of transportation. Making the Village of Palmetto Bay more friendly to non-automobile forms of transportation could reduce traffic congestion by encouraging short trips to be made on foot or on a bicycle.

Only two bicycle routes presently exist in the vicinity of the Village of Palmetto Bay. A bicycle path is found along the entire length of the South Dade Busway from the Cutler Ridge Mall to the Dadeland South Metrorail Station. Similar to the Busway, this bicycle path is not easily accessible by the residents of Palmetto Bay since U.S. 1 acts as a barrier for bicyclists between the Village and the Busway. The other bicycle path in the vicinity of Palmetto Bay is found along Old Cutler Road. This bicycle path runs north-south through the eastern portion of the Village of Palmetto Bay.

Figure 8 depicts the existing bicycle facilities in the vicinity of the Village of Palmetto Bay. As evidenced in Figure 8, the existing bicycle facilities serve north-south trips and there is a lack of east-west bicycle facilities. In particular, no facilities connect the bicycle path along the Busway with the bicycle path along Old Cutler Road.

Sidewalks exist along most sectionline and half-sectionline roads within the Village of Palmetto Bay. East-west roadways with sidewalks include SW 136th Street, SW 144th Street, SW 152nd Street, SW 160th Street, SW 168th Street, and the western portion of SW 184th Street. North-south roadways with sidewalks include U.S. 1, SW 92nd Avenue, SW 87th Avenue, SW 82nd Avenue, and SW 77th Avenue. Sidewalks along these roadways are typically offset from the roadway, which provides a sense of separation between the pedestrians and the vehicular traffic. In addition, many local residential streets have sidewalks that provide connections to the sidewalks along the collector and arterial roadways.

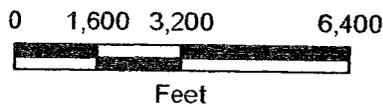
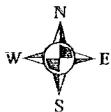
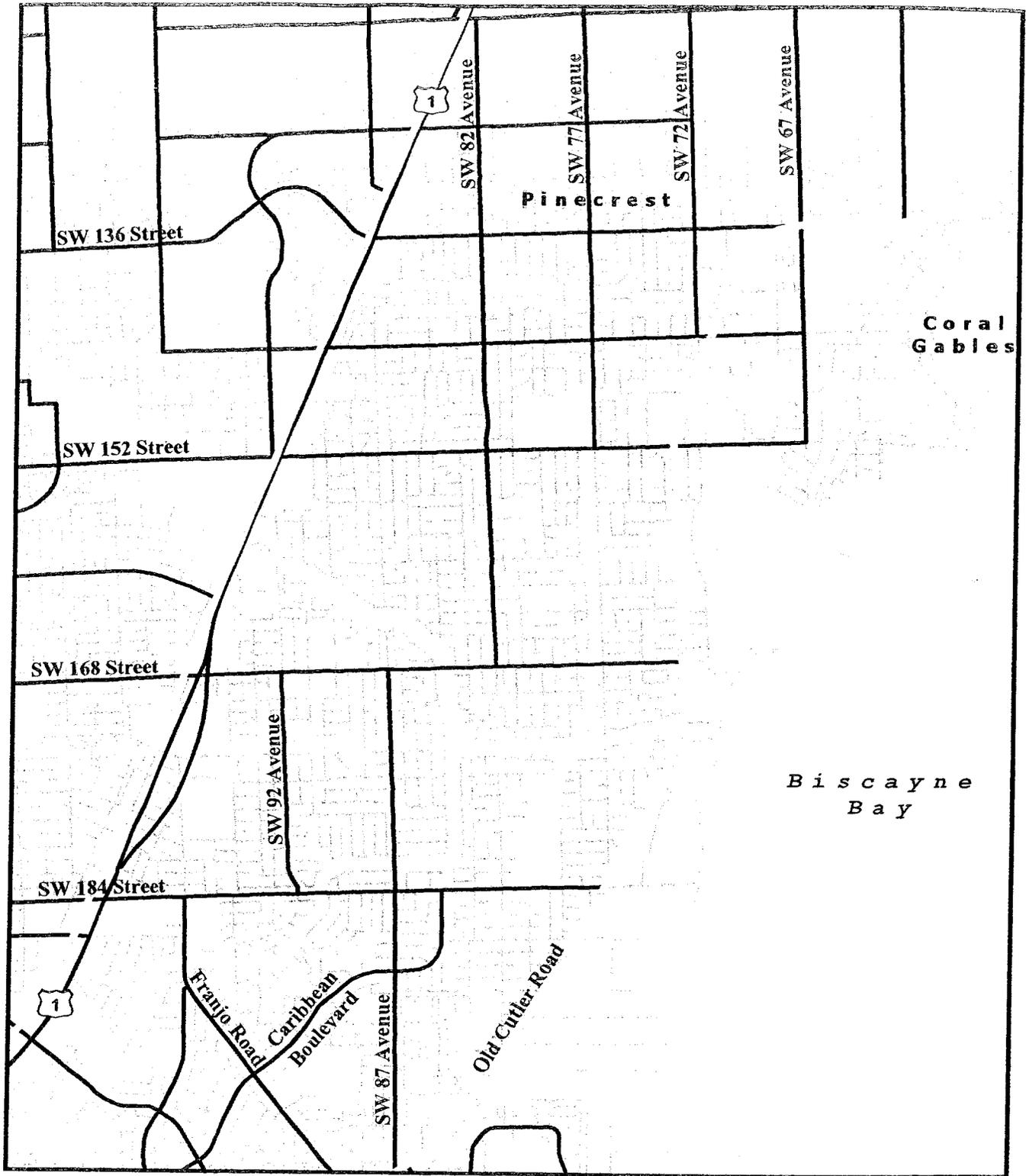


FIGURE 8
EXISTING
BICYCLE PATHS

INITIAL DETERMINATION OF NEEDS

Throughout the data collection and analysis portion of this Initial Transportation Plan, transportation deficiencies and needs were identified for both motorized and non-motorized transportation modes. Additionally, input was obtained from Village of Palmetto Bay staff to further develop the list of transportation needs. This section of the report outlines a general description of the initial determination of transportation needs for the Village of Palmetto Bay.

Data Needs

A lack of traffic count data exists for roadways within the Village of Palmetto Bay. This study utilized traffic data obtained from the Florida Department of Transportation (FDOT) and Miami-Dade County. However, traffic data was not available for all roadways or all segments of major roadways such as U.S. 1, SW 77th Avenue, and SW 152nd Street. Particularly important is an absence of turning movement counts (TMCs) that will allow a detailed evaluation of intersection performance that cannot be achieved from the 24-hour machine traffic counts obtained for this study. A program of traffic counts, particularly TMCs, should be undertaken as part of a larger transportation planning process to allow more detailed analysis of transportation deficiencies and potential solutions.

Neighborhood Traffic Management

The Village of Palmetto Bay has a supporting local street system that forms a grid network. The grid network may cultivate cut-through traffic in residential neighborhoods when there is congestion on arterials and collectors unless specific measures are taken to manage cut-through traffic. An investigation of cut-through traffic should be undertaken in specific residential neighborhoods with street networks conducive to cut-through traffic. Traffic calming techniques and landscaping improvements should be studied to reduce traffic speed in residential neighborhoods and to enhance the character of the community.

Capacity Improvements

Several north-south roadways in the Village of Palmetto Bay were found to carry high traffic volumes. Aside from U.S. 1, these north-south roadways are two-lane streets with a low density

of traffic signals that pass through established residential neighborhoods. Therefore, intersection capacity improvements are more appropriate for improving traffic flow than roadway widening.

East-west roadways within the Village of Palmetto Bay tend to carry fewer vehicles than north-south roadways. However, long queues are often experienced by motorists crossing or turning onto U.S. 1 from east-west streets such as SW 136th Street and SW 152nd Street. These types of specific traffic deficiencies can be studied in-depth during a more detailed transportation analysis. Intersection improvements will be key recommendations to improve traffic flow, as extensive roadway widening within the Village of Palmetto Bay is undesirable.

Transit

A general lack of transit service exists within the interior of the Village of Palmetto Bay. Three of the four Metrobus routes that pass through the interior of the Village are peak period routes only and thus do not provide service for typical off-peak trips/purposes such as recreation and shopping. Additionally, one of the Metrobus routes within the Village are designed to effectively circulate the residents of Palmetto Bay to retail or employment areas.

Most Metrobus routes in the vicinity of Palmetto Bay operate along the South Dade Busway west of U.S. 1. However, U.S. 1 forms a barrier restricting pedestrian access to the South Dade Busway and thus reduces access to these Metrobus routes.

Bicycle/Pedestrian

Similar to the Busway, the bicycle path along U.S. 1 is not easily accessible by the residents of Palmetto Bay since U.S. 1 acts as a barrier for bicyclists between the Village and the Busway. A general lack of east-west bicycle facilities exist within the Village to connect to the north-south bicycle paths along the Busway and Old Cutler Road. In addition, a network of mixed use paths could encourage short trips within the Village to be made on foot or on a bicycle. This network of bicycle/pedestrian facilities could include mixed use paths along canals, bicycle/pedestrian bridges over canals at strategic locations where crossings are not provided for motorized traffic, and bicycle lanes along collector roadways.

RECOMMENDATIONS

The following recommendations are provided as part of the Initial Transportation Plan for the Village of Palmetto Bay.

Studies

Three studies are recommended to plan high priority improvements to the transportation infrastructure of the Village of Palmetto Bay.

- Roadway Assessment – This study will provide an inventory of the street network within the Village and identify various aspects of the roadways including pavement conditions, pavement marking conditions, sidewalk conditions, and existing signage. The product of this study will be a prioritized listing of improvements along with a five-year capital improvement program (CIP).
- Stormwater Master Plan – This study will develop a master plan for drainage improvements within the Village of Palmetto Bay and will also prioritize improvements, estimate construction costs, and provide a five-year CIP. If the Village desires to assume responsibility for the stormwater utility from Miami-Dade County, this study will develop the methodology for establishing the stormwater utility rate and outline the operations and maintenance budget and functions. A grant application was submitted to the State for this study.
- Transportation Master Plan – This study will refine the initial transportation deficiencies identified in this Initial Transportation Plan and develop specific strategies to improve motorized and non-motorized transportation within the Village of Palmetto Bay. The result of this study will be a prioritized listing of specific transportation projects with an implementation plan and cost estimates.

Roadway Capacity Deficiencies

Roadways with capacity deficiencies as determined by this Initial Transportation Plan include U.S. 1, SW 77th Avenue, and Old Cutler Road. In particular, the following intersections are recommended for further study to develop intersection improvements to enhance traffic flow.

- U.S. 1 & SW 136th Street
- U.S. 1 & SW 144th Street
- U.S. 1 & SW 152nd Street
- U.S. 1 & SW 168th Street
- U.S. 1 & SW 184th Street
- SW 77th Avenue & SW 136th Street
- SW 67th Avenue & Old Cutler Road/SW 136th Street

Neighborhood Traffic Management

A neighborhood traffic management component plan should be included as part of the Transportation Master Plan to identify streetscaping and traffic calming improvements within the Village of Palmetto Bay. The goal of neighborhood traffic management is to discourage cut-through traffic in residential neighborhoods and improve the “livability” of local streets within the Village. One specific area to be addressed in the neighborhood traffic management component is the area surrounding Southwood Middle School, which is nestled within a residential neighborhood and must be accessed from local streets.

School-related traffic improvements should be evaluated to address traffic and pedestrian flow issues associated with the schools. The following three elementary schools within the Village of Palmetto Bay are all situated directly along collector roadways with significant traffic speeds.

- Howard Drive Elementary School
- Coral Reef Elementary School
- Perrine Elementary School

Transit

The need for transit improvements will be further assessed in the Transportation Master Plan. In general, the transit needs within the Village of Palmetto Bay include the following.

- Circulation within the interior of the Village of Palmetto Bay including access to shopping and employment destinations

- Feasibility of trolley or shuttle bus service connecting to the South Dade Busway, which carries the majority of the regional Metrobus routes that serve the vicinity of Palmetto Bay

Non-motorized Transportation

Bicycle facilities should be considered with the goal of improving the circulation for bicyclists and increasing the viability of the bicycle as an alternative mode of transportation. Specific bicycle improvements may include the following.

- Bicycle lanes along east-west streets such as SW 136th Street, SW 152nd Street, and SW 184th Street
- Bicycle / pedestrian bridges over canals at specific locations where a bridge for motorized traffic does not exist, such as SW 87th Avenue (north of SW 168th Street) and SW 77th Avenue (south of SW 152nd Street)

Priority of Improvements

A initial priority ranking of the general transportation improvements discussed in this report has been developed based on the identified needs of the Village of Palmetto Bay.

6. Intersection improvements
7. School-related traffic improvements
8. Neighborhood traffic management including streetscaping and traffic calming
9. Non-motorized transportation improvements
10. Transit improvements

Five-Year Transportation Budget

Based on the recommendations discussed above and an initial analysis of the needs of the Village, a preliminary five-year transportation budget was developed. The intent of this budget is to provide the Village with the framework to begin to implement some improvements to the transportation infrastructure within the Village. Because a detailed analysis was not undertaken to determine the costs associated with the improvements identified within this budget, the

provided cost estimates are only for budgetary purposes based on past experience. A more detailed analysis is recommended to specifically outline the specific costs and line items for the improvements recommended within this budget.

A copy of the projected five-year transportation budget is provided in Table 8 at the end of this section. This budget is divided into two sections (outlays and revenues). The outlays include the capital expenditures such as roadway improvements, beautification, stormwater, and personnel. The revenues are limited to the local option gas tax, transit tax, and stormwater utility fees. These figures are stated in 2003 dollars and are not escalated for inflation.

Within the outlays section of the budget, two separate items are identified. These items are capital outlays and other outlays. The capital outlays include roadway, stormwater, streetscape, and level of service improvements. The roadway improvements range from the standard maintenance of the roadways to deficiencies such as potholes, broken curbing, faded/missing striping, and roadway signage. Miami-Dade County noted that the County currently spends approximately \$125,000 to maintain the roadways within the Village. This level of general fund support needs to be maintained to be in compliance with standards linked to receiving funds from the transit tax.

The stormwater improvements element outlines two separate line items. The drainage correction line item is for drainage improvements in areas of the Village that are currently experiencing flooding or ponding. This line item will fund the survey, engineering, and construction of improvements. This report did not include an analysis of the existing drainage conditions and therefore this line item is only a general budget guideline based on similar systems. A Stormwater Master Plan is recommended for the Village to identify and prioritize the improvements within the Village. The other component of the stormwater improvements element is the operation and maintenance of the stormwater system. Elements such as pipe and inlet cleaning, street sweeping, and water quality monitoring are included in the operation and maintenance of the stormwater system. Please note that until the Village completes and Miami-Dade County accepts the Stormwater Master Plan, no revenues from the stormwater utility will be available to the Village.

Streetscape/beautification was included in the Budget to set aside funding to provide improvements to the Village such as additional landscaping along the roadways and at

intersections. Additionally, this category can include enhancements such as decorative paving at crosswalks, entry signage into the Village, and upgraded street signage.

This report outlines numerous transportation level of service improvements that are recommended throughout the Village. Included in Table 8 is a line item to address expanding some intersections and roadways to address capacity deficiencies. Additionally, Table 8 budgets for sidewalk improvements/expansions and for the construction of bike paths within the Village. Other improvements that are identified include traffic calming to address neighborhood traffic management and school-related transportation improvements.

Other outlays within the budget include staffing for a public works director and some support staff. The support staff may include some laborers and equipment to perform minor public works improvements such as cleaning up debris, installing signage, or other maintenance issues.

Additionally, several studies are recommended to evaluate the conditions of the existing infrastructure and prepare for improvements. These studies include a roadway/sidewalk evaluation to prioritize the resurfacing and improvements to these facilities and develop a five-year program to maintain these facilities. A Transportation Master Plan will specifically identify locations of improvements to the transportation network. The Transportation Master Plan may be partially funded by the Metropolitan Planning Organization (MPO), based on a grant application. Finally, a Stormwater Master Plan is recommended and required if the Village intends on taking control of the stormwater system within the Village. The Stormwater Master Plan will evaluate the existing system, provide general budgets for improvements, set a maintenance and operation program, and establish the utility fee.

Three revenue sources were identified by the Village to be included in this report. These three sources are the local option gas tax, transit tax, and the stormwater utility fee. The local option gas tax is provided to the Village and is typically used for transportation improvements. The transit tax allows municipalities to utilize 80 percent of the revenues for items such as transportation operations and maintenance, roadway and drainage improvements, signage, bridge maintenance, and other transportation related items. The remaining 20 percent of the transit tax revenues must be applied to transit-related improvements items such as bus service, bus pullout bays, shelters at transit stops and any other transit-related infrastructure. The stormwater utility fee can only be applied to stormwater related improvements. Miami-Dade County is currently

collecting this fee and until the County allows the Village to opt out of their utility, the Village cannot collect these utility fees. Several steps must be taken before the Village can take over the stormwater utility. These steps include preparing a Stormwater Master Plan, setting a utility rate and structure, providing for a method of collection, passing resolutions, and other minor items.

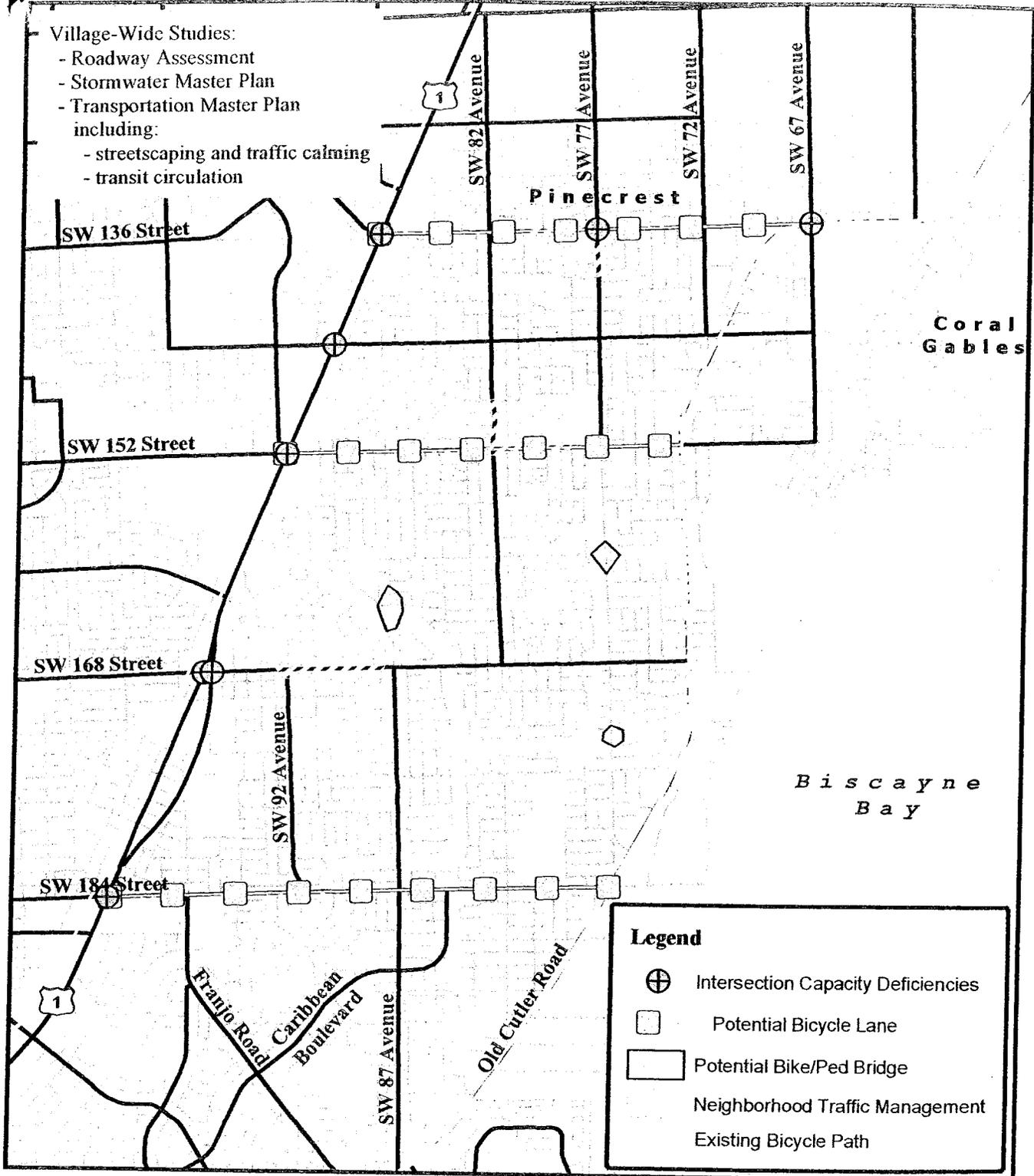
Table 8 presents the Five-Year Transportation Budget outlays and revenues and Figure 9 presents the potential transportation improvements identified in this Initial Transportation Plan.

TABLE 8. VILLAGE OF PALMETTO BAY - 5 YEAR TRANSPORTATION BUDGET

	Fiscal Year 2002-2003	Fiscal year 2003-2004	Fiscal Year 2004-2005	Fiscal Year 2005-2006	Fiscal Year 2006-2007
Capital Outlays					
<u>Roadway Repair / Resurfacing</u>					
Roadway Maintenance (6)		\$125,000	\$125,000	\$125,000	\$125,000
Resurfacing		\$100,000	\$100,000	\$100,000	\$100,000
<u>Stormwater Improvements</u>					
Drainage Corrections		\$100,000	\$100,000	\$100,000	\$100,000
Operation Maintenance		\$350,000	\$350,000	\$350,000	\$350,000
<u>Streetscape/Beautification</u>					
Landscaping Improvements	\$25,000	\$175,000	\$175,000	\$175,000	\$175,000
Hardscape/Signage	\$50,000	\$25,000	\$25,000	\$25,000	\$25,000
<u>Level of Service (LOS) Improvements</u>					
Intersections		\$125,000	\$125,000	\$125,000	\$125,000
Roadways		\$80,000	\$80,000	\$80,000	\$80,000
Sidewalks		\$25,000	\$25,000	\$25,000	\$25,000
Bike Paths		\$40,000	\$40,000	\$40,000	\$40,000
Traffic Calming		\$70,000	\$70,000	\$70,000	\$70,000
Transit Improvements		\$135,000	\$135,000	\$135,000	\$135,000
Other Outlays					
<u>Personnel</u>					
Public Works Director	\$18,000	\$75,000	\$75,000	\$75,000	\$75,000
Public Works Staff	\$25,000	\$150,000	\$150,000	\$150,000	\$150,000
<u>Studies / Analysis</u>					
Roadway / Sidewalk Evaluation	\$60,000				
Transportation Master Plan (4)	\$60,000				
Stormwater Master Plan (5)		\$200,000			
TOTAL	\$238,000	\$1,775,000	\$1,575,000	\$1,575,000	\$1,575,000
Projected Revenue Sources (1)					
Local Option Gas Tax	\$80,000	\$639,000	\$639,000	\$639,000	\$639,000
Transit Tax 80% (3)	\$272,500	\$545,000	\$545,000	\$545,000	\$545,000
Transit Tax 20% Dedicated to Transit	\$67,500	\$135,000	\$135,000	\$135,000	\$135,000
Stormwater Utility fees (2)		\$450,000	\$450,000	\$450,000	\$450,000
Grants (7)		\$150,000	\$30,000		
TOTAL	\$420,000	\$1,919,000	\$1,799,000	\$1,769,000	\$1,769,000

- (1) Revenue projections provided by Village.
- (2) Stormwater Utility fees can not be collected until the Village takes over control of the stormwater utility from the County.
- (3) 20 percent of the transit tax must be applied to transit improvements within the Village.
- (4) An MPO Grant could possibly fund a portion of this study
- (5) A grant was submitted to FDEP to fund this study. This study is required to establish the Villages own stormwater utility.
- (6) Miami-Dade County estimated that the County spends approximately \$125,000 annually to maintain the Village's roadway network.
- (7) Grants have been submitted or will be submitted for these amounts.
There is no guarantee that these grants will be approved.

- Village-Wide Studies:
- Roadway Assessment
 - Stormwater Master Plan
 - Transportation Master Plan including:
 - streetscaping and traffic calming
 - transit circulation



Legend

- ⊕ Intersection Capacity Deficiencies
- Potential Bicycle Lane
- ▣ Potential Bike/Ped Bridge
- - - Neighborhood Traffic Management
- Existing Bicycle Path

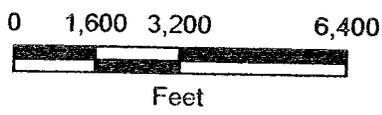
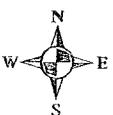


FIGURE 9
POTENTIAL
TRANSPORTATION
IMPROVEMENTS