Palmetto Bay’s Transportation Master Plan is the result of several months of data collection, analysis, public discussion, and strategic planning.

The Results are presented in three documents: an executive summary, a detailed report, and appendices.

It is hoped that this process will add value in guiding the transportation decisions of the future.
Chicanes
- Cut Bulbs on Alternating Sides of Street
- Beautiful When Placed Mid Block
- Decrease Speed 5 – 15mph

Humps
- 14ft Hump Decrease Speed up to 25mph
- 22ft Hump Decrease Speed up to 33mph
- Can Increase Noise
- Can Interfere With Emergency Vehicles

Palmetto Bay Transportation Master Plan

Summary

Introduction

Palmetto Bay has newly incorporated, and has adopted a master planning strategy to discover and mitigate transportation issues that impact the Village. Located in South Dade, thousands of people move through the Village each day. In addition, it is expected that thousands of more housing units will be developed to the south of the Village in the coming years. With the advent of the People’s Transportation Plan, Palmetto Bay has the ability to control transportation and mobility as it relates to the area within its boundaries. From a regional perspective, participation and cooperation with the State and County will be important in developing transportation systems that positively impact the Village’s quality of life. The entire Village has been examined to address the issue of mobility. With a foundation based on intensive public involvement, this project focused heavily on data collection and analysis. A five-year plan of projects was developed, fulfilling the 20% Transit / 80% Transportation requirements of the People’s Transportation Plan. This Master Plan is a policy document that recommends projects to be developed as needed. The Village should use this as a guide in making transportation investments.

Vision

Palmetto Bay’s Transportation Vision was formulated through intensive public involvement, including conversations with community members, elected officials and Village staff. The following are the key points from which this plan has developed.
- Serving the Needs of the Residents by Controlling Congestion
  Palmetto Bay is primarily a residential community with a number of schools, parks and recreational amenities. It is on both the east and west by the major transportation corridors of US-1 and Old Cutler Road. A major concern is to maintain the Village character by not encouraging additional traffic through the Village.
- Promote a Safe but Efficient Traffic Flow while Controlling Intrusion
  As development to the south becomes more intensive, traffic will attempt to find alternative routes that will include neighborhood streets within the Village. It is desired to keep this traffic on the State and County road system and protect these neighborhood streets from traffic intrusion.
- Provide Alternatives by Supporting Multimodal and Transit Policy Initiatives
  Palmetto Bay realizes that transportation alternatives will need to be provided to effectively move people in the future. The Village supports Miami-Dade County’s efforts to develop transit. In addition, a major focus will be to provide for alternatives that enhance the ability for transit to circulate within the Village.
- Enhance the Quality of Life by Protecting Village Amenities
  Through a multi-modal focus, using the funding available through the People’s Transportation Plan, Palmetto Bay will be able to increase the quality of life for its citizens.
Involvement
Public Meetings

A multifaceted public involvement process was undertaken to establish consensus and create ownership for the Transportation Master Plan.

Working with a steering committee gathered by the Village, a stakeholders list was developed. One-on-one “stakeholder” meetings were held with over 20 individuals and groups to gain insight into neighborhood specific issues. At the first public workshop data analysis was presented, and an open discussion was facilitated. General topics taken from the stakeholder meetings were distilled by the group into a set of discussion issues focused on the areas of concern. The discussion of these issues resulted in the development of policies, which culminated in a set of consensus agreement on prioritization criteria and potential projects. Where consensus could not be reached, further study was recommended. The policies and issues were thoroughly examined as light of the analysis performed, and a full set of projects were created and prioritized.

Issues

Transportation Topics from Stakeholders Meetings:
- Traffic congestion
- Traffic speed
- Enhancing, connecting, protecting Village amenities
- Supporting multi-modal alternatives

Issues of General Discussion from the Workshop (The Basis of the Project Bank):
- Old Cutler Road / US-1
- The Biscayne impact on US-1 and mobility in Palmetto Bay
- Traffic flows through the Village both east and west and north and south
- Major growth occurring in South Dade
- Traffic calming on the neighborhood streets
- The possible expansion of the Section Roads across canals
- Safety of pedestrians and bicyclists
- Speeding
- City-sponsored local transit

Consensus Prioritization Criteria:
- Do not encourage additional traffic through the Village
- Protect neighborhood streets from traffic intrusion in levels of service determined over time
- Support County efforts to develop transit
- Enhance the ability of people to walk or bike
- Encourage projects that are acceptable as part of the People’s Transportation Plan
- Projects should have a positive impact on the Village image and quality of life
- Solve an identified problem
- Projects should be cost effective
- Projects should be under Village control

Traffic Calming
Primary Focus

Hustling traffic intensity on the neighborhoods was the primary focus of the Palmetto Bay Transportation Master Plan. Because the major transportation corridors are under the jurisdiction of either the County or the State, Palmetto Bay is only truly in control of the neighborhood streets. Traffic calming will benefit both developing character and image, keeping pedestrians and motorists safe and creating a relaxed and efficient flow of traffic. This is a method of slowing automobile traffic on residential and local streets with road obstructions which impede speed. A successful traffic calming program will redirect non-local traffic onto main arterials and reserve local streets for local traffic.

There is a need for traffic calming at various locations in Palmetto Bay.

There are myriad of traffic calming techniques employed throughout the country. Some of the best examples are found on the West Coast of the United States, where a strong commitment to planned urban growth has been made. Many times traffic calming is regional, due to it being the result of local approving engineers with either the State or County. Miami-Dade County has recognized a need to strengthen its commitment to quality planning and design by developing the Miami-Dade County Street Closure / Traffic Flow Modification Manual.

Process

The Miami-Dade County Street Closure / Traffic Flow Modification Manual provides guidelines for implementing traffic calming projects within Miami-Dade County. The process outlined suggests studying traffic conditions before calming measures are implemented to determine if traffic calming is needed and what measures may be appropriate on a temporary basis. Once traffic calming measures are installed on an experimental basis, the manual recommends that a traffic study be conducted to determine the impact and effectiveness of the measures. If proven effective, the traffic calming measures may be implemented on a permanent basis. However, if the measures are proven ineffective, other measures may be implemented until the issues are mitigated.

Traffic calming is best done as a program. Generally, one device has little substantive impact. Each program should begin with a stated goal and work toward that goal. Initials with the least obstrusive device. Cure must be taken to make sure the study area is large enough so that unforeseen results are not created. There are minimum vehicle-per-day thresholds that must be met in order to consider traffic calming. In addition, public involvement must be held to the extent that a required percentage of affected citizens must sign a petition prior to the implementation of devices.

Devices

- Circles
  - Reduce Speed
  - Beautify
  - Reduce Collisions
The Performance of the Roadway System
Existing and Future Level of Service

The Palmetto Bay Transportation Master Plan is comprehensive in nature. A blending of approaches was used to determine the needs and desires in an effort to develop a list of projects that would make tangible and targeted improvements to the transportation system. This plan focused on community input as well as data collection and analysis. Forty traffic counts were collected at various locations in the Village to portray the existing conditions. The counts were projected to 2010 and 2020 to show roadways where level of service deficiencies will be in the future. It was determined volumes will increase steadily over time and level of service, which is already unacceptable on US-1 and Old Cutler Road, will deteriorate. A north/south route through the Village becomes apparent. This route (87th Ave - 168th St - 82nd Ave) will deteriorate to an unacceptable LOS within the study horizon.

Existing LOS
Currently LOS is unacceptable on Old Cutler Rd. and US-1. All other roads are in the acceptable range. Between 2004 and 2010 very little change in the LOS is realized, however, a comparison of the direct volumes shows a major increase in traffic on every roadway segment. Through the analysis it has been shown that traffic moves north and south through the Village using SW 87th Avenue, SW 168th Street, and SW 82nd Avenue. This route, currently at LOS D, shows deterioration of LOS accompanying the high growth rate in traffic. The interconnected grid system exacerbates the situation.

Future LOS
The growth through 2020 shows both a considerable increase in traffic volumes and a decrease in LOS. Since Palmetto Bay is nearly built out, the growth in volumes and decline in LOS will be mostly the result of additional trips as commuters attempt to access points north and south on a daily basis. US-1 and Old Cutler will both be entirely over capacity within the Village limits of Palmetto Bay. The majority of the roadway segments that make up the alternate north-south route, SW 87th Avenue, SW 168th Street, and SW 82nd Avenue, will also be over capacity. The result is that the remaining capacity in the rest of the network is disappearing as drivers begin to use the neighborhood streets trying to find a path that is not congested. The result will be traffic congestion across...
Prioritization (cont.)

Year 2 of the plan is focused on neighborhood mobility and alternative mode projects that will fulfill the transit requirements. This accounts for over $5 million in total costs, $73,000 in planning, $950,000 in design, and $7.3 million in construction.

Year 3 costs begin to address facilities that are mainly the jurisdiction of the State or County. As such coordination will needed to address these issues. This represents about $715,000 in total projects. Years 4 and 5 projects are similar in nature and represent approximately $600,000 in projects respectively.

### RADIATE PROJECTS

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<thead>
<tr>
<th>Project</th>
<th>Planning Costs</th>
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<td>4. Pedestrian Access</td>
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### YEAR 1 TRANIT

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<td>4. New Bus Routes</td>
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<td>5. New Bicycle Access</td>
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### YEAR 2 TRANIT

<table>
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</thead>
<tbody>
<tr>
<td>1. New Bus Traffic Control Projects</td>
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<td>2. Optimal Traffic Control Projects</td>
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<tr>
<td>3. New Bus Traffic Control Projects</td>
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<td>$30,000</td>
<td>$33,000</td>
<td>$93,000</td>
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<tr>
<td>4. New Bicycle Access</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$18,000</td>
<td>$48,000</td>
</tr>
</tbody>
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* Coordinate w/ State or County
** Coordinate w/ School Board
Funding
Peoples Transportation Plan

While South Florida is the 12th largest region in the nation, it is ranked the fifth worst nationally for urban traffic congestion. Before November 2002, Miami-Dade County was one of only two metropolitan areas that did not have a dedicated source of funds for public transportation. This meant there was little or no chance of receiving federal funding for mobility enhancement projects. Subsequently, 66% of the voters in the county approved the Peoples Transportation Plan (PTP). With the passage of this half-cent sales tax, the County is beginning a $16 billion, 30-year transportation investment which will double the number of buses on the road, quadruple the size of Metro Rail to 90 miles, speed the construction of new roads and provide municipalities with the ability to have meaningful input into the projects that affect them. The PTP will allow for municipal and county funds to be used for transit and transportation to remain in the budget. Current funds cannot be replaced by the new revenue. Twenty percent of the total annual revenue will be divided among the municipalities on a per capita basis (determined by population) for transportation enhancement projects. Palmetto Bay is due to receive about $700,000 per year.

Peoples Transportation Plan Municipal Disbursements (estimated):

<table>
<thead>
<tr>
<th>Jurisdiction</th>
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<tbody>
<tr>
<td>Miami Beach</td>
<td>3.05%</td>
<td>$17,400,022</td>
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<tr>
<td>Miami Lakes</td>
<td>2.04%</td>
<td>$2,517,372</td>
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<tr>
<td>Miami Shores</td>
<td>1.15%</td>
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<td>Miami Springs</td>
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<tr>
<td>North Bay Village</td>
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<tr>
<td>North Miami</td>
<td>5.53%</td>
<td>$1,382,420</td>
</tr>
<tr>
<td>North Miami Beach</td>
<td>3.95%</td>
<td>$983,665</td>
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<tr>
<td>Opa Lock</td>
<td>1.48%</td>
<td>$335,002</td>
</tr>
<tr>
<td>Palmetto Bay</td>
<td>2.18%</td>
<td>$690,000</td>
</tr>
<tr>
<td>Pineland</td>
<td>2.14%</td>
<td>$870,988</td>
</tr>
<tr>
<td>South Miami</td>
<td>1.22%</td>
<td>$305,398</td>
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<tr>
<td>Sunny Isles Beach</td>
<td>1.15%</td>
<td>$287,888</td>
</tr>
<tr>
<td>Surfside</td>
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<tr>
<td>Sweetwater</td>
<td>1.50%</td>
<td>$390,196</td>
</tr>
<tr>
<td>Virginia Gardens</td>
<td>0.25%</td>
<td>$36,924</td>
</tr>
<tr>
<td>West Miami</td>
<td>0.33%</td>
<td>$135,359</td>
</tr>
</tbody>
</table>

(Source: Miami-Dade County)

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

All municipalities are required to submit a plan of projects for CITT approval. At least 70% of the money received by the cities ($140,000 for Palmetto Bay) must be used for transit purposes. Examples of transit include: circulator buses, bus shelters, bus pullout bays or other transit related infrastructure. If the city cannot apply at least 20% of its money proceeds to transit purposes, the city must contact the County for the County to provide a project that enhances transit in the immediate vicinity. If the city does not authorize and appropriate and notify the County for such a project, that portion of the funds will revert to the County for disbursement. Similarly, the Cialis may spend up to 80% of the money they receive on non-transit but transportation related projects. This would include the building, operating, and maintenance of roads or bridges. If this money is not appropriated and approved, it will revert to the county. It is understood that both transit and transportation projects may take longer than a year to develop and construct. As such, it is understood that not all of the money received needs to be spent in any given year. It must be authorized and appropriated. Approval of the Palmetto Bay Transportation Master Plan sets policy direction and suggests projects that will fulfill these requirements.

Prioritization Criteria

Projects in the Project Bank are prioritized based on criteria developed as part of the interactive stakeholder/workshop process. Participants were asked about their priorities. The first public workshop held in June 2004 discussed transportation assets, potential projects, and community transportation preferences (policies) to be used as a basis for prioritization criteria.

Policies Developed
- Do not encourage additional traffic through the Village.
- Protect neighborhood streets from traffic intrusion as levels of service deteriorate.
- Support County efforts to develop transit.
- Enhance the ability of people to walk or ride.
- Encourage projects that are acceptable as part of the Peoples Transportation Plan.
- Perform projects that have a positive impact on the Village image and quality of life.
- Perform projects that solve an identified problem.
- Perform projects that are cost effective.
- Perform projects that the Village can control.

Projects were scored, ranked, and assembled into four categories:
- Capacity
- Alternative Mode
- Corridor
- Sustainable Community

In total, this Transportation Master Plan represents about $13.5 Million in improvements. This includes $600,000 in planning, $1.3 Million in design and $51.2 million in construction costs. As some of these projects include coordination with the County and State.

Year one represents about $1 Million in spending. With $221,000 in planning, which can be completed in the first year, $57,000 in design, which may take up the second year, and nearly $755,000 in construction costs, which can be implemented beginning in year three. Based on community objectives, projects that deal with traffic calming, transit and alternative modes were of the highest priorities. These are listed below in the Year 1 Table.

Transit was one year one received about $195,000 in spending. This includes $62,000 in studies, 19,000 in design and $114,000 in construction.
Project Bank

Projects

The Palmetto Bay Transportation Master Plan has identified transportation issues through a series of stakeholder meetings and public workshops in coordination with data collection and analysis. This interactive and analytical process led to the formulation of the Project Bank, which is the list of projects of all sizes that have been prioritized to develop the implementation plan. Projects were developed in four categories:

- Corridor
- Capacity
- Alternative Mode
- Sustainable Connectivity

As part of the interactive nature of this study, the issues that were initially developed were subsequently converted into projects after intensive discussion. Generally, there is frustration that US-1 and Old Cutler Road are congested, and becoming worse each year. This has begun to impact the Village in the form of cut through traffic, a situation which is exacerbated by the tremendous growth of the region, particularly in South Dade, which is fueling this traffic as commuters need to access business and commercial centers north of the Village.

While there is little that can be done to prevent traffic from entering the Village, there is much that can be done to protect the neighborhood streets from traffic intrusion. The Village is primarily residential, and there are several schools, parks, and natural areas that can be found in all neighborhoods. The ability to provide alternatives for people to access these facilities is important.

Transit is a key issue because alternatives need to be provided as roadway capacity is diminished and travel times are extended.

Palmetto Bay has a wealth of natural resources, from its parks and schools, to the Deering Estate, the Sadozowski Preserve and the canal system. Here lies an opportunity to provide transportation and recreation facilities by integrating transportation into them or linking them by paths, trails, sidewalks, encouraging multimodal alternatives such as transit, bicycling and walking.

Forty nine projects were developed to address these issues Village wide.

Cost Estimates

Each of the projects includes preliminary cost estimates for planning, design and construction, developed to provide an order-of-magnitude cost. Such estimates are general approximations and are to be utilized for planning purposes.

The planning component of the project primarily consists of feasibility studies, environmental studies, operational studies and public involvement. The design component of the project consists of preparing design, plans specifications, details, construction contract documents, and permits. The construction component estimates the cost to build the project including acquisition of right-of-way, utility relocation and construction engineering and inspections.

After the planning component determines precisely what actually needs to be constructed, a more detailed engineering cost estimate should be prepared. This detailed cost estimate will identify the required funds that should be programmed for the project. Additionally, the costs reflect current values and should be adjusted in the future to reflect current economic conditions in the year they are bid.

Costs for the projects in the project bank were developed based on comparisons with similar projects and unit cost comparisons for industry standards and market-specific items.