

Building the Transportation System of the Future

Summary of Major Activities 1997-1998



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OH MISSION.

To plan for the provision of integrated and efficient transportation facilities and services in Miami-Dade County while ensuring the highest possible level of community participation in the transportation planning process.



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"As we approach the next millennium, the Metropolitan Planning Organization (MPO) for the Miami Urbanized Area is committed to improve the transportation infrastructure and services for the Miami-Dade citizenry through innovative transportation planning, in a spirit of cooperation amongst transportation agencies throughout Miami-Dade County and with the full participation of the community.

Recognizing that constructing highways is no longer sufficient to ease traffic congestion, the MPO Governing Board has acknowledged the need to develop alternative modes of transportation to move people and goods in an efficient and effective manner.

Solutions to the transportation problems that Miami-Dade County faces for the new century can be found. We, the public sector, working with the private sector and with our citizens, need to work as a team to create the best possible urban travel alternatives with the limited resources available. By combining short, medium and long term projects, all parties involved in this effort will be looking for both immediate solutions, and for establishing the foundations for the future projects that will significantly alleviate traffic congestion and improve the quality of life. The challenge is difficult, but it can be met."

José-Luis Mesa



The Metropolitan Planning Organization (MPO) for the Miami Urbanized Area is the organization responsible for the transportation planning process in Miami Dade County.

The MPO was created as required under the provisions of Florida Statutes and established by an Interlocal Agreement between Miami-Dade County and the Florida Department of Transportation (FDOT).

Transportation planning in the Miami-Dade County metropolitan area is becoming an increasingly difficult task. In terms of traffic congestion, the area is the fourth most congested metropolitan area in the country. Additionally, more than two (2) million people call Miami-Dade County home with a population predicted to soar to 3.3 million by the year 2020. Additionally, there are many visitors to the area that increase these figures threefold.

In addition to planning for transportation infrastructure and services, a major role of the MPO is to insure conformance with federal and state laws and regulations. Federal rules require that highways, mass transit and other transportation facilities and services be properly deployed and developed in relation to the overall plan of urban development. Furthermore, they must comply with approved plans for regional and state transportation network accessibility. Federal, state and local transportation planning funds are provided on an on-going basis to insure the effectiveness of the MPO process.

To fulfill its responsibilities, the MPO has a staff of fifteen professionals and several standing committees which provide the technical expertise and input from all affected parties in developing and implementing the transportation plans and projects for Miami-Dade County.

MPO Ongoing Activities

Each year the MPO performs major functions as part of its ongoing transportation planning process. Amongst the most significant of these functions are the following:

Long Range Transportation Plan (LRTP)

A central feature in the MPO's program efforts is the development, maintenance and continuing refinement of the Miami-Dade Long Range Transportation Plan (LRTP). The MPO is currently performing an update to the year 2023. The updated plan is scheduled to be adopted by the MPO Governing Board in December 1998. The plan is intended to guide transportation investments in the metropolitan area during a period of twenty (20) years. It includes:

- Connections to major activity centers, between and among roadways
- > Transit facilities and services and commuter rail
- The role and nature of other means of transportation (bicycles, pedestrians...)
- > Interconnecting all of the above physically and through the latest available technology

The plan must also include a financial feasibility assessment indicating the funding necessary to implement improvements for its duration.

The LRTP, covering a twenty (20) year planning period, is required of all urban area recipients of federal funds. An update of the plan is conducted every three (3) years. The plan is consistent with policies established in the Comprehensive Development Master Plan (CDMP). Additionally, the plan addresses long range transportation planning issues in the areas of travel demand, financial feasibility and air quality.

Transportation Improvement Program (TIP)

The TIP document is prepared by the MPO and is the capital improvement element of the LRTP. The TIP consists of a five (5) year program of projects, of which one (1) year is current and four (4) are future. Each year, the TIP is modified by adding a new fifth year and advancing the first of its future years to current status. Improvements identified in the TIP are carried out through order of priorities. The TIP is required to be prioritized and financially constrained.

The TIP reflects the first five year priorities of the LRTP for Miami-Dade County.



The LRTP and the TIP documents are adopted by the MPO Governing Board, and accepted by the following state and federal agencies involved in monitoring local transportation planning and implementation:

- □ Florida Department of Transportation (FDOT)
- □ Federal Highway Administration (FHWA)
- □ Federal Transit Administration (FTA)

Approximately 600 million dollars were allocated for investment in the TIP for the preservation and improvement of the transportation system for Fiscal Year 1998. These funds include major investments in state and county roads, transit and ground access improvements to the Miami International Airport (MIA) and the Seaport.

Unified Planning Work Program (UPWP) for Transportation

The UPWP describes transportation planning activities for the Miami-Dade Urbanized Area scheduled to be completed during a given annual period. The document outlines the technical and policy studies that will assist in further defining the comprehensive and multimodal transportation improvement program approved for the metropolitan area. The work outlined in the UPWP is undertaken in a cooperative manner between the various participating Miami-Dade County agencies and FDOT.

Example of activities contained in the UPWP are:

- program administration
- · data surveillance
- urban travel modeling and forecasting
- · policy studies and community involvement
- highway, transit, financial, special technical studies
- technical support necessary to the transportation planning process



Municipal Grant Program

One element of the UPWP is the Municipal Grant Program. The MPO awards grants to municipalities in Miami-Dade County to conduct transportation studies that relate to the metropolitan transportation program. This work element encourages municipalities to participate in a competitive program to receive funding to perform relevant transportation planning studies stressing community-based methods and cost-effective solutions.

Recent examples of such studies include:

A study by the **City of Miami Beach** to develop a citywide municipal mobility plan for the city which integrates truck and automobile traffic with a more localized public transit service with parking facilities supporting park-and-ride activities and a system of bikeways and pedestrian routes to improve local mobility, reduce congestion, maintain the safety and viability of neighborhoods and improve the city's overall quality of life.



A comprehensive transportation study by **the City of Miami** to look at Coconut Grove, its past, present and future, with the goal of using transportation to help it retain its unique identity as part of the surrounding urban community.

A planning and research study by the **City of Coral Gables** for the proposed development of a city trolley service relieving downtown traffic and parking congestion.

A study by the **City of North Miami Beach** to identify locations and to analyze the economic, environmental and traffic impacts of a courtesy minibus service available to residents and businesses within the city.

A traffic and mobility study by the **City of Homestead** to plan the needs of the future growth of the city. This includes the interconnection of roadways to unincorporated Miami-Dade County and Florida City.



The MPO funds studies each year carried out by various consultants and educational institutions to identify critical transportation issues and propose recommendations and strategies that may alleviate traffic congestion that we experience in our county. Also, some studies may target social issues as they relate to transportation. Listed below are some of these studies grouped by area of action and a brief description of each:

Policy...

The following are examples of recent studies that have been instrumental in the formation of needed new entities and/or establishing policies to address transportation related issues:

Based on the results of a feasibility study conducted by the MPO in 1995, the Dade County Expressway Authority (DCEA) was formed. The DCEA is charged with the operation and maintenance of certain toll facilities throughout the County. The DCEA is currently focusing on the implementation of Electronic Toll Collection (ETC) systems, in addition to the preparation of comprehensive plans for future transportation improvements in Miami-Dade County.

Thanks to efforts of elected officials from Miami-Dade, Broward and Palm Beach Counties and the implementation of a tri-county study on the subject, the Regional Transit Organization (RTO) was formed in January 1998. The RTO provides a forum for discussing regional transit issues and working on activities and projects of collective interest. One of the primary functions of the RTO is to monitor new transit funding opportunities. The first study undertaken by the RTO relates to the establishment of one telephone number for the three counties for general transit information.

The Miami-Dade Countywide Parking Policy Study is a comprehensive study of parking. The study recommended a parking policy complementary to the development of the adopted Transportation Plan and the Comprehensive Development Master Plan (CDMP). Additionally, specific measures and actions are recommended to alleviate traffic congestion and parking problems within the county. The creation of a Parking Coordinating Body is recommended to integrate county and municipal government with the private sector for addressing parking issues.

nte ligent transportation Systems (15)

The MPO has committed to bringing state-of-the-art technology in the transportation area to Miami-Dade County. In that respect, the MPO is an active member of ITS America. Additionally, in 1997, the MPO hosted an **Intelligent Transportation System (ITS) Executive Workshop** that gathered experts throughout the country to provide updated information concerning deployment of ITS in other parts of the nation.

Intelligent Transportation Systems (ITS) will be part of Miami-Dade County's transportation system in the next few years. The MPO and FDOT are leading efforts to bring ITS to Miami-Dade County. ITS applications include an improved traffic control center, traffic signal systems, highway message signs, vehicle detection devices, roadside surveillance cameras, and computer systems that will help the consumer avoid getting stuck in traffic. ITS will provide more capacity out of existing roads.

The Miami Intermodal Center (MIC) will be a focal point for air and surface transportation users in the County and will also be equipped with the latest technology. The MIC will serve as an extension of MIA and allow arriving passengers to choose from Metrorail/Metrobus, Tri-Rail, Amtrak or high-speed rail to get to their destinations. The MIC will also provide direct access to rental car facilities, buses and taxis.

The East/West Corridor will provide urban rail service from Florida International University's (FIU) west campus to MIA and a connection to the Miami Beach Convention Center. The first phase is designed to offer services between the Palmetto Expressway, MIA and the Seaport.

Interactive Transportation Information Stations look at deploying kiosks designed to increase overall mobility in Miami-Dade County by using the latest technology to better inform travelers regarding available transportation alternatives.



The MPO finalized a report titled "Financing Dade County's Long Range Transportation Plan" which provides a comprehensive analysis of projected transportation expenses and revenues in the context of

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anticipated federal, state and local funding as we approach the new millennium. The report contains a financial analysis of Miami-Dade County's transportation investments, addressing project implementation schedules, service growth, and the structuring of the funding and financing for these projects and services.

Land Use

Working together with the State, municipalities, regional organizations and local agencies, the MPO is reviewing and assessing land use developments concurrent with transportation-related actions.

The Station Area Aesthetics, Design and Development Planning (SAADD) Study is seeking to implement station area concept plans for rail stations located on the future East-West transit line. It will also prepare implementation mechanisms addressing station area land use, development potential, traffic circulation and parking and urban design and aesthetics.

The Aesthetics and Urban Design in Transportation Planning and Project Development Processes Study will develop a process by whereby aesthetics, community and multimodal street and roadway design goals and considerations are integrated into the transportation planning and project development processes.



A Specific Area Planning and Design for Improved Mobility Plan is being prepared to produce land use pattern and development designs for transit-served locations.

The Downtown Miami Transportation Masterplan, funded by the MPO, and carried out by the Downtown Development Authority (DDA) will examine and update conceptual planning work for the areas of the Performing Arts Center, Overtown and Bayfront.

Community Impact

As a result of the national "Welfare-to-Work" initiative, the **Welfare to Work Transportation Study** recently approved by the MPO Governing Board will analyze and recommend commuting alternatives for Miami-Dade County's welfare recipients and the unemployed/underemployed. This program could be tied to the existing Vanpool Program in order to provide mobility links between employers and job seekers.



The Effects of Transportation Plan Development on Minority and Impoverished Communities in the Miami Urbanized Area Study will survey and develop a report on the effects of transportation plan development on minority and impoverished communities as well as other stakeholders. A plan of action will be developed to prevent detrimental effects on ethnic and minority neighborhoods in the future.

The Historical Impacts of Transportation Projects in the Overtown Community Study was conducted to assess the impacts of transportation projects in the Overtown area and suggest possible mitigation measures that would help preserve its integrity as a viable neighborhood and community into the future. Specific recommendations included community access and aesthetics improvements, as well as additional transit services.



The MPO focuses on multimodal transportation improvements and intermodal connectivity enhancements to provide mobility needs in targeted congested areas. An example in this particular area is the previously mentioned MIC. In addition, other study efforts have been made, such as:

- The Alternatives for Intermodal Improvements in Miami-Dade County Study seeks to identify physical locations that may be developed as intermodal facilities, as well as to improve transfer conditions between the different transportation modes.
- The Golden Glades Intermodal Center Study proposes the use of the Golden Glades intersection as an intermodal facility by combining different transportation modes, parking, terminals and future office and industrial developments. This facility alleviates traffic congestion by providing an excellent park & ride location for single occupant vehicles (SOV) entering Miami-Dade county on I-95.
- In coordination with the Airport and Seaport Departments, the **Freight Movement Study** identifies ways to improve freight movement on the surface transportation network. Based on this study, a Freight/Truck Advisory Committee has been formed to work closely with the freight industry and incorporate it into Miami-Dade County's transportation planning process.



In order to ensure that the LRTP and the TIP are consistent with and conform and meet federal requirements, the MPO conducts an annual Transportation/Air Quality Conformity Determination Assessment. This assessment addresses air quality issues in coordination with Broward and Palm Beach counties. As a result, contingency actions are taken and implemented if there is an air quality exceedance or violations to the rules.

Non-Mororized Modes...

The MPO is responsible for the Miami-Dade Bicycle/Pedestrian program. The adopted Bicycle Facilities Plan establishes level of service (LOS) standards for bicycling. Additionally, the program provides equipment and training for the Dade County Public Schools' Traffic Safety Program, administers the Metrorail bicycle locker and Bikes-On-Trains programs, and maintains an on-going inventory of the bike facilities using a geographic information system (GIS).

- A Comprehensive Bicycle/Pedestrian Program is being managed by the MPO to increase the use of bicycle and pedestrian facilities. This program provides for continuing Engineering, Education, Enforcement and Encouragement (4-E) activities.
- The South Dade Greenways Study and the North Dade Greenways Study identified transportation corridors for non-motorized modes. These include off-road multi-use paths, bike lanes and trails. Portions of the South Dade Greenways are currently under construction.



The Miami-Dade Vanpool Program started in January 1998. The purpose of this program is to provide vans to individuals traveling together to work on a regular basis. User fees help to support the operation of this pilot program. The program provides service in Palm Beach, Broward, Miami-Dade and Monroe counties and has attracted interest from corporations wishing to participate. Additionally, a Vanpool Marketing Plan is also in place to support the Vanpool Program.

The MPO, FDOT and Gold Coast Commuter Services (GCCS) work together in the formation of **Transportation Management Associations (TMAs)**. These groups help in developing "grass-roots" solutions to urban travel congestion. TMAs have been established in Miami Beach (**MBTMA**) and the Civic Center (**CCTMO**) area. The Airport West and Downtown areas are in the process of creating TMAs as well.

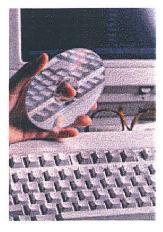
The MBTMA and the City of Miami Beach, with the assistance of the MPO, has been successful in launching the **South Beach Electric Shuttle** called the "Electrowave" in January 1998. It is a free two-way circulator system operating in the trendy South Beach area. To date, it has been hugely successful.

The Miami-Dade County Congestion Management System recommended a process for implementing low cost improvement projects. A Resourceful Use of Streets and Highways (RUSH) concept was developed. The **Congested Intersection Improvements Study** is being conducted to provide RUSH with low cost projects for implementation under the TIP.

In conjunction with FDOT, a pilot **Arterial Investment Study** for SW/NW 107th Ave. was conducted to evaluate multi-modal solutions. This study was considered as a pre-PD&E study which resulted in a wide range of recommendations.

The **Superarterial Study** identifies an arterial network parallel to the main congested corridors. Recommended improvements to this arterial network will improve mobility and alleviate traffic congestion in Miami-Dade County.

Management Systems



In compliance with federal requirements, the MPO is developing an Integrated Transportation Management Systems (ITMS) using a geographical information system (GIS) platform. ITMS incorporates different data sources to generate reports, tables, maps and graphics, as an excellent working tool in the decisionmaking process. Additionally, ITMS provides for analysis and evaluation of data. Other elements considered in developing the ITMS are expansion to other management systems, the integration with other software packages and transferability of data.

The ITMS includes the following management systems: Congestion (CMS), Pavement (PMS), Intermodal (IMS), Public Transportation (PTMS), Safety (SMS) and the Traffic Monitoring System for Highways (TMS/H).

MPO Support

Under the **Public Information Program**, informational materials are prepared. Activities to meet MPO public involvement program requirements such as informing the citizenry of Miami-Dade County regarding the transportation planning process and the development of transportation projects and programs within the county are also conducted under this program.

The MPO also provides support to various committees that advise the MPO Governing Board: the Citizens Transportation Advisory Committee (CTAC), the Bicycle/Pedestrian Advisory Committee (BPAC) and the Transportation Aesthetic Review Committee (TARC). Other activities sponsored or coordinated by the MPO include:

- Review socio-economic data needed for the LRTP
- ♦ Updating the Miami-Dade County urban travel model
- Development of a priority setting model for project selection
- ♦ Highway Traffic Counting Program
- ♦ Transit Route-Level Monitoring System
- ♦ Transit reporting and ridership forecasting
- ♦ Compliance with Americans with Disabilities Act (ADA)
- ♦ Provide legislative assessment
- ♦ Improvement of regional planning
- ♦ Encourage public/private sector joint venture projects

The **Euture**

There are clearly no simple solutions to alleviate traffic congestion, particularly with limited resources; therefore, those involved in transportation planning need to do more with what is available. It is imperative to be innovative, visionary, as well as practical, when approaching possible solutions to move people and goods more efficiently and effectively.

Miami-Dade County is the fourth most congested metropolitan area in the U.S. in terms of urban travel congestion, and the number of vehicles and miles traveled continue to increase at a fast pace. With highways increasingly becoming more congested and the inability of government to add new highway capacity due to the scarcity of available urban land, an important part of the future of the county's transportation system would appear to lie with mass transportation -- moving more people more efficiently. Major future mass transit projects include: The extension of the South Dade Busway, the East-West Transit Line, the Miami Intermodal Center (MIC), the North Corridor transit line and the Kendall and Northeast Dade Major Investments studies.



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