2015 Metro-Dade Transportation Plan Long Range Element

MPO METRO-DADE
Metropolitan Planning Organization

DECEMBER 1995

SUMMARY HIGHLIGHTS OF THE METRO-DADE TRANSPORTATION PLAN TO THE YEAR 2015

- Population and traffic forecasts projected for the period 1995 to 2015 point to significant increases in travel within the metropolitan area.

- The twenty-year transportation "Needs" proposals identify nearly one hundred major capacity improvements with a price tag of approximately $6.1 billion. These improvements are defined to address adopted Comprehensive Development Master Plan (CDMP) transportation level of service standards. Operating and maintaining the transportation system during the plan period is estimated to cost an additional $7.4 billion for a total estimated "Needs" plan cost of $13.5 billion.

- An assessment of the ability of the urban area to build the proposed projects identifies a shortage of approximately half the needed capital funds over the plan period ($3 billion), assuming that most revenues for capital improvements will be generated in the future at current levels.

- In addition, projected funds for the operation and maintenance of the transportation system during the plan period will not be sufficient to support the improvements identified in the "Needs" plan. A gap of approximately $1.7 billion has also been identified in this regard.

- A cost feasible plan, estimated to cost $8.8 billion has been developed to implement the projects identified as priorities in the plan. These priorities address service demands of major traffic generators and important economic centers in the county such as Miami International Airport and the Port of Miami. Also, the mobility needs of the many communities in the metropolitan area are addressed.

- Public transportation and ridesharing are emphasized in the projects listed. Identified transit needs call for provision of over 60 miles of exclusive right-of-way priority service along six major travel corridors. Also proposed are approximately 40 miles of High Occupancy Vehicle lanes (HOV) along major expressways. Incorporation of the latest electronics technology (Intelligent Transportation Systems) is also proposed for several major projects as another means of easing congested traffic conditions.

- Proposals for new highways are relatively insignificant when compared to other types of projects, reflecting the fact that the urban area has matured and that the necessary space to build new major highways is either no longer available or extremely costly. The Plan includes, however, many proposals to widen existing primary and arterial roads that carry heavy loads of traffic between urban suburbs and to and from city center.

- A new commitment to non-motorized modes of transportation (bicycling, pedestrians) and to projects that enhance the aesthetics of the urban landscape is proposed in the Plan through the reservation of one and one-half percent of all eligible surface transportation capital funds for these types of projects.

- In addition to proposed transportation infrastructure and capital needs, a variety of short-term strategies are identified to deal with urban travel congestion ranging from highway traffic design solutions to employer-based measures to promote use of carpooling and public transit. Also, the Plan is supported by a program of policy studies that will recommend courses of action to deal with the many funding, private sector involvement and project-related community issues that need to be resolved to allow the proposed Transportation Plan to be successfully implemented.

MPO RESOLUTION # 59-95

RESOLUTION ADOPTING THE METRO-DADE TRANSPORTATION PLAN UPDATE TO THE YEAR 2015

WHEREAS, the Interlocal Agreement creating and establishing the Metropolitan Planning Organization for the Miami Urbanized Area requires that the Metropolitan Planning Organization Governing Board provide a structure to evaluate the adequacy of the transportation planning and programming process, and take action to ensure that legal and procedural requirements are met, as more fully described in the Prospectus for Transportation Improvements for the Miami Urbanized Area, and

WHEREAS, the Metropolitan Planning Organization (MPO) has established the Transportation Planning Council (TPC) to advise it on actions needed to meet the requirements of the planning and programming process, and

WHEREAS, statutory regulations governing the MPO program require that the urban area long range transportation plan be the subject of a major update every three years, and

WHEREAS, the TPC, the Citizens Transportation Advisory Committee (CTAC), and the Transportation Aesthetics Review Committee (TARC) have reviewed the Year 2015 Metro-Dade Transportation Plan and recommend its adoption,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE METROPOLITAN PLANNING ORGANIZATION FOR THE MIAMI URBANIZED AREA:

SECTION 1. That the Metro-Dade Transportation Plan Update to the Year 2015 as attached and made a part hereof is adopted as amended in Sections 2-7 of this resolution.

SECTION 2. That the addition of an aesthetic objective, as articulated through TARC Resolution No. 16-95 be added to the list of Objectives in said Plan, as follows: "Apply aesthetic principles to planning of transportation projects, utilizing a multidisciplinary collaborative team approach which humanizes these projects through the design process, and helps instill a sense of place and community pride."

SECTION 3. That the modification articulated through CTAC Resolution No. 48-95 be incorporated into said Plan, as follows: (a) $10 million from Priority III, New and Replacement Buses and Bus Facilities, and (b) $10 million from funded Priority IV, New and Replacement Buses be earmarked for the upgrade of transit-related facilities and/or amenities in the Kendall and Northeast Corridors.

SECTION 4. That the Project Description for both Krome Avenue projects (SW 8 Street to Okeechobee Road, and SW 8 Street to US-1) (Priority IV) be changed from "2 to 4 lanes" to "Control Access Management Plan" which includes funding for the purchase of the necessary access rights as recommended in the Plan upon its completion.

SECTION 5. That the I-395 (elevated) Reconstruction and Port Tunnel projects be advanced from Priority IV (Unfunded), and that the Port Tunnel project be placed in Priority III.

SECTION 6. That the following projects be deferred to Priority IV (Unfunded) in order to fund the I-395 Reconstruction (elevated) and the Port Tunnel:

- I-95 Downtown Distributor Ramps (previously Priority IV Funded)
- I-95 Multimodal Master Plan Improvements (previously Priority IV Funded)
- SR-836/I-395/I-95 Major Interchange Improvement (previously Priority II)
- NW 36/41 Express Street (previously Priority IV Funded)
- NW 74 Street: new 6-lane road from SR-826 to HEFT (previously Priority III).

SECTION 7. That with regard to the Port Tunnel and I-395 Reconstruction:

a. A workshop for Board Members should be held regarding the I-395 Reconstruction and the Port Tunnel.

b. That consideration of the Port Tunnel and I-395 Reconstruction should be returned to the Board for further evaluation within six months or when the preliminary engineering and design is completed.

c. That the Board be afforded the opportunity to approve the use of Surface Transportation Program funds for the construction of the Port Tunnel prior to expenditure of such funds.

The foregoing resolution was offered by Chairperson Arthur E. Teele, Jr., who moved its adoption. The motion was seconded by Board Member Robert Renick, and upon being put to vote, the vote was as follows:

Board Member George Berlin	- aye
Board Member James Burke	- absent
Board Member Miguel Diaz de la Portilla	- aye
Board Member Betty T. Ferguson	- aye
Board Member Maurice Ferre	- aye
Board Member Bruce Kaplan	- absent
Board Member Gwen Margolis	- aye
Board Member Natacha S. Millan	- aye
Board Member Dennis C. Moss	- aye
Board Member Alexander Penelas	- aye
Board Member Pedro Reboredo	- aye
Board Member Robert Renick	- aye
Board Member Katy Sorenson	- aye

Board Member Javier Souto	- aye
Board Member Raul Valdes-Fauli	- aye
Chairperson Arthur E. Teele, Jr.	- aye

The Chairperson thereupon declared the resolution duly passed and approved this 7th day of December 1995.

METROPOLITAN PLANNING ORGANIZATION FOR THE MIAMI URBANIZED AREA

By: ______________________

José-Luís Mesa
MPO Secretariat

METROPOLITAN PLANNING ORGANIZATION
DADE COUNTY
FLORIDA
MPO

EXECUTIVE SUMMARY

This report documents the process by which the Metro-Dade Long Range Plan to the Year 2015 was developed as well as depicting those projects included within the Plan. The development of this Plan is a radical departure from previous long range plans for the area as this Plan is the first to incorporate the tenets of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA).

For the first time the Plan *had* to be cost feasible, with no projects being slated that could not reasonably be expected to be affordable. Not only the capital costs of these projects had to be considered, but ISTEA also demanded that "lifecycle costs" - those costs (including operations and maintenance) that could be expected to be incurred throughout the entire life of the project - had to be considered.

In addition to financial consideration, ISTEA mandated several other unique requirements of this Long Range Plan Update. Highlights of those innovative requirements of this federal legislation are described below, and included in more depth throughout the document. Appendix VII contains a letter describing special State and Federal concerns as they pertain to ISTEA, and the Plan's response to them.

In general, many of the ISTEA factors and considerations were taken into account throughout the entire plan development process by virtue of the composition of the Steering Committee and Technical and Policy Committee structure. The Steering Committee represented a cross-section of planning professionals from aviation, land use, environmental and transportation departments and agencies, as well as representatives of the citizenry. The Plan was reviewed at major milestones by the MPO's technical review committee, the Transportation Planning Technical Advisory Committee (TPTAC), and endorsed by the Transportation Planning Council (TPC) and the Citizens' Transportation Advisory Committee (CTAC).

It is through this combination of (a) the perspectives of a diverse array of professionals in developing the Plan and (b) a comprehensive review and endorsement by the range of departments and interests represented on the policy and citizens' committees that renders certainty that the Year 2015 Transportation Plan has followed the policy direction of ISTEA.

The Year 2015 Transportation Plan has met ISTEA requirements through its:

- emphasis on a systems approach, in particular on alternative modes, environmental protection, regional and intermodal connectivity, and overall mobility of persons and goods;

- emphasis on a holistic approach to planning, which expanded concepts used in previous updates to include equity, reliability and environmental and societal impacts, and made cooperative planing between state and local entities an integral part of the Plan development;

- emphasis on flexibility in allocating funds among modes (roadways, transit, HOV, intermodal, bicycle/pedestrian/greenway) further demonstrating that funding decisions were clearly wide-ranging;

- emphasis on aesthetics, with both its planning objectives and funding set-asides for scenic bayways and similar enhancements to the urban landscape, as well as the policy decision to include the consideration of aesthetic issues as a part of the planning process for all projects; and its

- emphasis on public involvement, reaching out and moving the diverse communities in Dade County toward the transportation decision-making process, and otherwise keeping an informed citizenry as key participants in the transportation visioning of the County.

In addition to meeting the tenets of the ISTEA legislation, this Plan has many other unique characteristics, as outlined below:

- Population and traffic forecasts projected for the period 1995 to 2015 point to significant increases in travel within the metropolitan area.

- The twenty-year transportation "Needs" proposals identify nearly one hundred major capacity improvements with a price tag of approximately $6.4 billion. These improvements are defined as the minimum projects needed to address adopted Comprehensive Development Master Plan (CDMP) transportation level-of-service standards. Operating and maintaining the transportation system during the plan period is estimated to cost an additional $7.6 billion for a total estimated "Needs" Plan cost of $13.9 billion.

- An assessment of the ability of the urban area to build the proposed projects identifies a shortage of approximately half the needed capital funds over the plan period ($3.3 billion), assuming that most revenues for capital improvements will be generated in the future at current levels.

- In addition, projected funds for the operation and maintenance of the transportation system during the plan period will not be sufficient to support the improvements identified in the Needs Plan. A gap of approximately $1.6 billion has also been identified.

- A Cost Feasible Plan, estimated to cost approximately $9 billion ($3.1 billion in capital costs and $5.9 billion in operating & maintenance (O&M) costs for all surface transportation modes) has been developed to implement the projects identified as priorities in the plan. These priorities address service demands of major traffic generators and internationally significant economic centers in the county such as Miami International Airport and the Port of Miami. Also, the mobility needs of the many communities in the metropolitan area are addressed.

- Public transportation and ridesharing are emphasized in the projects listed. Identified transit needs call for provision of over 60 miles of exclusive right-of-way priority service along six major travel corridors. Also proposed are approximately 40 miles of High Occupancy Vehicle (HOV) lanes along major expressways. Incorporation of the latest electronic technology (Intelligent Transportation Systems) is also proposed for several major projects as another means of easing congested traffic conditions and enhancing mobility overall.

- Proposals for new highways are relatively insignificant when compared to other types of projects, reflecting the fact that the urban area has matured and that the necessary space to build new major highways is either no longer available or extremely costly. The Plan includes, however, proposals to widen existing primary and arterial roads that carry heavy loads of traffic among suburbs and to and from the city center.

- A new commitment to non-motorized modes of transportation (bicycling, pedestrians) and to projects that enhance the aesthetics of the urban landscape is proposed in the Plan through the reservation of one and one-half percent of all eligible surface transportation capital funds for these types of projects.

- In addition to proposed transportation infrastructure and capital needs, a variety of short-term strategies is identified to deal with urban travel congestion ranging from highway traffic design solutions to employer-based measures to promote use of carpooling and public transit. Also, the Plan is supported by a program of policy studies that will recommend courses of action to deal with the many funding, private sector involvement and project-related community issues that need to be resolved to allow the proposed Transportation Plan to be successfully implemented.

Clearly, the Year 2015 Transportation Plan for Dade County has been a major departure from previous efforts and has taken every opportunity from ISTEA's potential and turned them into workable strategies and commitments through its goals, objectives, policy recommendations, and project funding decisions.

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METRO•DADE

METROPOLITAN
PLANNING
ORGANIZATION

GOVERNING BOARD

Acknowledgments

TRANSPORTATION PLANNING COUNCIL

Voting Members	Alternates	
J.A. Ojeda		Chairman, Assistant County Manager
Chester Colby	Aurelio Rodriguez	Metro-Dade Transit Agency
Ana Rijo-Conde	Giovanni Batista	Dade League of Cities
Gary Dellapa	Manuel Rodriguez	Dade County Aviation Department
Pedro Hernandez	Esther Calas	Dade County Public Works Department
Jeff Jackson	Beth Beltran	Tri-County Commuter Rail Authority
Carmen Lunetta	Claude Bullock	Dade County Seaport
John Martinez	Joe Gomez	FDOT, District VI
Bruce Offord	Stephanie Brooks	Florida Department of Environmental Protection
Guillermo Olmedillo	Allan Bly	Dade County Planning Department
Servando Parapar	Joe Gomez	FDOT, District VI
Carey L. Rawlinson	Helen Fogaros	Dade County Developmental Impact Committee
John Renfrow	Douglas Yoder	Dade County Department of Environmental Resource Mgmt. (DERM)
Katherine Wilbur	Leon Valentine	Dade County School Board

Non-Voting Members

Larry Anderson	Federal Highway Administration	Roger Krahl	Federal Transit Administration
Carolyn Dekle	South Florida Regional Planning Council	Jose- Luis Mesa	MPO Secretariat

TRANSPORTATION PLANNING TECHNICAL ADVISORY COMMITTEE

Jose-Luis Mesa	Chairman, Director of M. P. O. Secretariat	Richard Lee	Dade County Public Works Department
Chuck Blowers	Dade County Planning Department	Ruth Ellis	Developmental Impact Committee
Rick Busch	Dade County Aviation Department	Irma San Roman	M.P.O. Secretariat
Anita Vandervalk	FDOT, District VI	Robert Usherson	Dade County Planning Department
Mario Garcia	Metro-Dade Transit Agency	Bruce Coward	Dade County DERM
Gary Donn	FDOT, District VI	David Daniels	Tri-County Commuter Rail Authority
Rene Rodriguez	FDOT, District VI	Walt Jagemann	Dade County Public Works Department

STEERING COMMITTEE

Ossama Al Aschkar	Broward County MPO	Mario Garcia	MDTA - Planning & Development
Frank Baron	MPO Secretariat	Don Hinson	CTAC
Beth Beltran	Tri-County Commuter Rail Authority	Walt Jagemann	Dade County Public Works
Chuck Blowers	Dade County Planning Department	Franklin Adams	MPO Secretariat
David Bjorneboe	Dade County Aviation Department	Jose-Luis Mesa	MPO Secretariat
Rick Busch	Dade County Aviation Department	Michael Moore	Project Manager, MPO Secretariat
Bill Carreras	Dade County Aviation Department	Carlos Roa	MPO Secretariat
Ping Chang	South Florida Regional Planning Council	Rene Rodriguez	FDOT District VI Programs
Bob Cincotta	Dade County Public Works	Phil Steinmiller	FDOT District VI Planning
David Daniels	Tri-County Commuter Rail Authority	Anita Vandervalk	FDOT District VI Planning
Wilson Fernandez	MDTA - Planning & Development	Norman Wartman	CTAC Chairman
Carl Filer	FDOT District VI Programs	Mark Woerner	Dade County Planning Department

The Metropolitan Planning Organization Acknowledges The Valuable Assistance of The CITIZENS' TRANSPORTATION ADVISORY COMMITTEE in Conducting the Public Review Process for the Year 2015 Transportation Plan Throughout the Various Neighborhoods of the County, and Advising Staff on the Many Complex Issues Involved in the Development and Preparation of the Plan.

I. INTRODUCTION AND PURPOSE

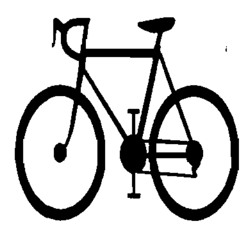
I. INTRODUCTION AND PURPOSE

The Year 2015 Long Range Transportation Plan Update is the 1995 version of the state and federally mandated Long Range Plan for the Metro-Dade urbanized area. The Long Range Plan Update was developed to ascertain the multi-modal transportation improvements necessary to enhance urban mobility in the metropolitan area.

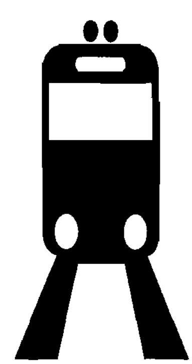
The Metro-Dade Transportation Plan Update to the Year 2015 has been developed to guide transportation investments in the metropolitan area during the next twenty years. The Plan is intended to be comprehensive, including connections to major activity centers, between and among roadways, transit facilities and other means of transportation.

I(A). Transportation Planning in the Miami Urbanized Area

This Plan was developed by the staff of the Metropolitan Planning Organization (MPO) and their consultants in cooperation with the Year 2015 Transportation Plan Update Steering Committee. The members of the Steering Committee, as well as the agencies they represent, are detailed in the "Acknowledgments" section of this report.



The agencies listed are all responsible for some aspect of transportation planning in the Metro-Dade area. Their representation on this Committee ensured coordination among the transportation planning efforts of the individual agencies. Section IV of this report describes the inter-relationship between this Long Range Plan and the various other transportation-related plans developed by these other agencies.



I(B). Purpose of the Long Range Transportation Plan (LRTP)

Having a current, carefully developed Long Range Transportation Plan in place gives an urbanized area the ability to plan ahead regarding:

- right-of-way reservation or acquisition for new or expanding transportation facilities;
- land use and zoning decisions, where the capacity of the adjacent transportation system will impact these decisions; and
- budgetary considerations, so that long range financial planning for transportation improvements can occur.

To effectuate these planning measures, a "Needs Plan" or list of all of the transportation improvements found to be *needed* between the present and the horizon year (2015), is first developed. The Needs Plan illustrates the facilities necessary to maintain or achieve acceptable congestion, where possible. This plan is developed without regard to the costs of the proposed projects.

A Financial Resources Plan is subsequently developed to ascertain the funding levels that will be available toward financing the aforementioned Needs Plan. The financial analysis document allows those developing the Long Range Plan to determine at what levels the Needs Plan can be financed. This allows a subset of the Needs Plan to be extracted. Those Needs Plan projects that are affordable, per the Financial Resources Plan become the *Cost Feasible Plan.*

Finally, the Cost Feasible Plan projects are prioritized. Priority I projects consist of those found in the current (FY96) Transportation Improvements Program (TIP). Other priority years are as follows:

- Priority II 2000-2005
- Priority III 2005-2010
- Priority IV 2010-2015

The Cost Feasible Plan, with projects listed by priorities can be found in Section III of this document.

The Year 2015 Transportation Plan can be considered a refinement and enhancement of the last major update of the Plan (Year 2010 Plan), which was adopted in November, 1990. The current update effort was started in November, 1993. The resulting two-year study has consisted of a complete reassessment of the future capital and operational needs for the County's transit systems and roadway network. In particular, the intent, provisions, and considerations articulated in the Federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 served as direction through the Plan development process, resulting in a comprehensive, multimodal transportation plan for Dade County.

Plan development took many months of technical work and public involvement activities. The Plan was developed through the use of a detailed behavioral model and other analytical tools, the results of which were evaluated by a Steering Committee made up of professionals representing state, regional and local agencies as intended by ISTEA. This multidisciplinary perspective facilitated the development of the Plan using a multimodal approach and looked beyond strictly transportation considerations. The citizenry was also represented on the Steering Committee, by members of the Citizens Transportation Advisory Committee.

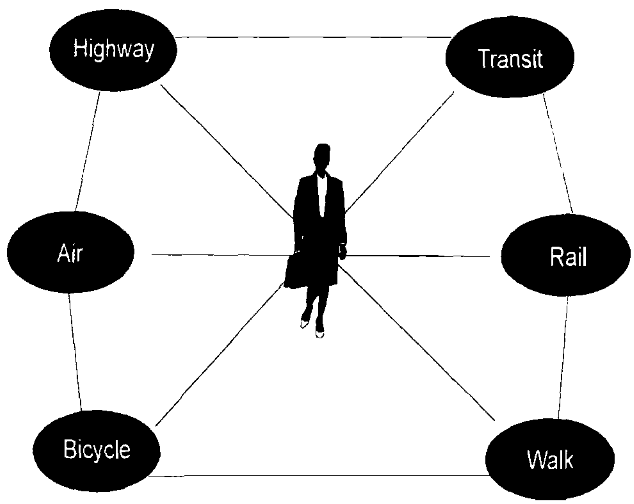
I(C). Legislative Requirements of the LRTP

Chapter 339 of the Florida Statutes mandates the formation of a Metropolitan Planning Organization (MPO) ". . . within each urbanized area or group of contiguous urbanized areas. . .." The Statutes go on to describe the responsibilities of the MPOs. Relative to long range planning, the MPO is required to develop a comprehensive long range plan that considers the area's goals and also considers the implementation of Transportation Systems Management (TSM) measures.

More recent legislation has impacted the long range planning process, as well. This legislation includes the Intermodal Surface Transportation Efficiency Act (ISTEA); the Clean Air Act Amendments of 1990 (CAAA); and the Americans with Disabilities Act (ADA). The nature of each piece of legislation and its impacts upon the Dade County's Long Range Transportation Plan Update are discussed in the following sections.

I(C)1. Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991

Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. The purpose of this legislation was to increase the efficiency of all modes of transportation - particularly those alternatives to the single occupant vehicle. ISTEA also mandated new transportation planning requirements for the Metropolitan Planning Organizations (MPOs) and for the various state Departments of Transportation.

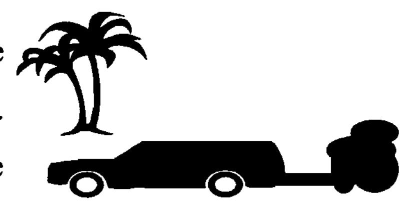


Effective November 29, 1993, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) jointly issued revised planning regulations governing the development of (1) statewide transportation plans and programs and (2) transportation plans and programs for urbanized areas. The subject plan, the *Metro-Dade Long Range Transportation Plan Update to the Year 2015*, is subject to these new regulations.

The new planning requirements under ISTEA are commonly referred to as the "15 factors" or the "15 planning elements." Section 134(f) of Title 23, U.S.C., and Federal Transit Act Section 8(f) (49 U.S.C. app. 1607 (f)) both list 15 factors that must be considered as part of the planning process for all metropolitan areas.

These 15 factors are considered in this Plan Update. They were integrated into the development of the Goals and Objectives of the Long Range Plan Update. The Goals and Objectives were, in turn, used to develop evaluation criteria, that were used to evaluate the various plan alternatives, and to eventually adopt a final Plan. The 15 factors are listed in this report under Section II.(A) Goals and Objectives. Their relationship to the Goals and Objectives, and to the Long Range Plan Update is also discussed in that Section. In addition, Appendix VII, FHWA/FDOT Letter and Response, summarizes how the Plan meets the requirements of the 15 ISTEA factors.

I(C)2. The Clean Air Act Amendments (CAAA) of 1990



The Clean Air Act Amendments (CAAA) of 1990, for the first time mandated a fiscally-constrained Long Range Transportation Plan. The need for financial feasibility was reiterated in ISTEA. The need to develop a plan that could reasonably be expected to be paid for was mandated in the CAAA so that when projections of air quality were developed based upon the plan, there was some assurance that most of the projects that contributed to attainment of air quality standards would actually be constructed.

In order to remain eligible for federal transportation funding, a region must demonstrate that the highway and transit projects included in the plan will help attain and maintain federal air quality standards. The air quality impacts of the plan must be evaluated via computer modeling to demonstrate "conformity" with federal air quality standards. *Projects must have a strong likelihood of being funded to be factored into the conformity equation.* The results of mobile source air quality modeling for the subject plan are included in Appendix I.

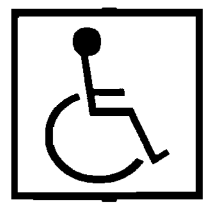
The CAAA provides conformity standards for Long Range Plans that are to be adhered to until new State Implementation Plans (SIPs) can be prepared and approved. The Year 2015 Transportation Plan must meet these interim standards, which state:

- that the plan must be consistent with the most recent estimates of mobile source emissions,

- that the plan must provide for the expeditious implementation of transportation control measures in the applicable implementation plan, and

- that with respect to ozone and carbon monoxide non-attainment areas, the plan must contribute to annual emissions reductions.

I(C)3. Americans with Disabilities Act (ADA)

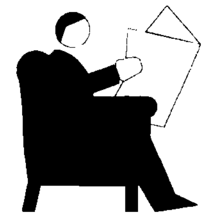


The American with Disabilities Act (ADA), essentially a civil rights act for the disabled, calls on public transit systems to make their services more fully accessible; as well as to underwrite a parallel network, or paratransit services, for those riders whose physical or mental condition prevents them from using regular fixed-route service. The most significant barrier to implementing the paratransit provisions of the ADA is lack of funding, particularly for operating and maintenance costs. In order to maximize the use of limited resources, the Metro-Dade MPO and private transit operators will focus on improving coordination between federal social service programs that fund paratransit services and transit operators who provide these services. The MPO also encourages the use of state-of-the-art technology for paratransit services, funding promising demonstration projects, and promoting regional coordination of ADA and non-ADA paratransit services.

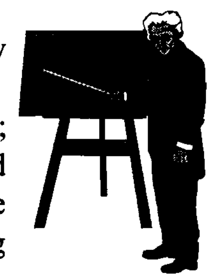
Each transit operator is required to annually update its "Paratransit Service Plan," which estimates necessary levels of service and establishes milestones toward full compliance with ADA by 1997. The MPO is required to review these plans and certify that they conform with the Long Range Plan.

I(C)4. The Public Involvement Process

Under ISTEA the metropolitan transportation planning process must include a public involvement process that meets the following requirements:



- The process shall be proactive rather than reactive;
- Have a minimum public comment period of 45 days prior to the adoption of the proposed public involvement process;
- Provide timely and reasonable access to technical and policy information used in the development of plans;
- Provide adequate public notice of public involvement activities;
- Allow a 30 day comment period for public review and comments of transportation related plans, among them: the Transportation Improvement Program (TIP) and the Long Range Transportation Plan (LRTP);
- Render explicit consideration and response to public input;
- Consider the needs of minorities and low-income people;
- Coordinate with the statewide public involvement process wherever possible or needed; and
- Be consistent with Title VI of the Civil Rights Act of 1964, and the Americans with Disabilities Act (ADA) of 1990, as amended.



The Metro-Dade MPO is meeting its public involvement requirements. In February 1995, the required public involvement process document was published. A copy of the MPO's *Adopted Public Involvement Process* document may be requested of the MPO if more detail is needed. All necessary public input was received and considered in the development of the document. The tenets of the public involvement process document have been followed with reference to the development of the Year 2015 Long Range Transportation Plan Update. Appendix III, Public Involvement, includes the February 20, 1995 advertisement published in the Miami Herald (both English and Spanish) that was published more than 45 days before the first public meeting took place. Plan documentation was available for review on a continual basis.

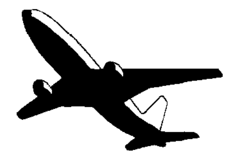
Specific information regarding public meetings/hearings held as part of the Plan Update process and in adherence to the Public Involvement Process document are contained in Appendix III of this report. The public involvement activities table in the appendix details many of the correspondence steps taken as a part of the public involvement efforts. Also included in the appendix are examples of advertisements and articles published in the newspaper, including community meeting announcements.

II. THE LONG RANGE TRANSPORTATION PLAN

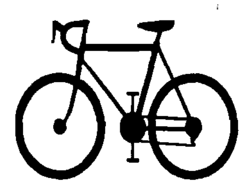
II. THE LONG RANGE TRANSPORTATION PLAN

Section II of this report documents the methodology by which the Long Range Transportation Plan was developed.

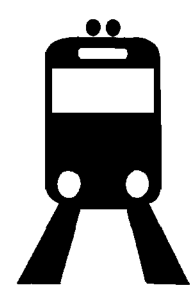
II(A). Goal and Objectives



The Goal and Objectives statements constitute a primary component of the Plan. As such, the Goal and Objectives are intended to guide the development of the Plan, and related transportation planning activities, and must be consistent with community expressed desires regarding transportation issues. In addition, these statements reflect consistency with the 15 factors identified in the Federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.



The Goal and Objectives of the Year 2015 Long Range Transportation Plan Update were adopted by MPO Resolution #8-94 on March 17, 1994. Objective 11, referring to aesthetics, was added to the list at the request of the Transportation Aesthetics Review Committee (TARC). The MPO board unanimously approved the objective at the November 21, 1995 Public Hearing, and it is included herein under the Environmental subheading. The adopted goal and objectives were as follows:



GOAL: Provide for a safe, efficient, economical, attractive and integrated multimodal transportation system that offers convenient, accessible and affordable mobility to all people and for all goods, conserves energy, and protects both the natural and social environment.

OBJECTIVES

MULTIMODAL TRANSPORTATION SYSTEM DEVELOPMENT

Objective 1 Plan for the provision of transportation services and facilities to serve the needs of the population in the metropolitan area, in accordance with the federal and state transportation planning process requirements.

Objective 2 Develop an integrated multimodal transportation system that emphasizes people movement by facilitating the transfer between modes, and the connectivity of the transportation network within and outside the metropolitan area.

Objective 3 Preserve rights-of-way in corridors anticipated to be heavily traveled in the future.

Objective 4 To consider the effect of transportation policies on land use development for both the short and long range.

TRAFFIC FLOW/MOBILITY

Objective 5 Preserve existing highway and transit facilities by improving efficiency and safety.

Objective 6 Achieve the operating levels-of-service standards adopted in the Comprehensive Development Master Plan and in the Florida Intrastate Highway System Plan.

Objective 7 Plan for maximum utilization of existing transportation capacity, relieve congestion and prevent congestion from occurring where it does not yet occur.

SOCIAL

Objective 8 Plan and develop a transportation system that preserves the social integrity of urban communities.

ENVIRONMENTAL

Objective 9 Plan for a transportation system that gives due consideration to air quality and environmentally sensitive areas, and conserves energy and natural resources and that is consistent with applicable federal, state, and local energy conservation program goals and objectives.

Objective 10 Plan for transportation projects that enhance the quality of the environment.

Objective 11 Apply aesthetic principles to planning of transportation projects, utilizing a multidisciplinary collaborative team approach which humanizes these projects through the design process, and helps instill a sense of place and community pride.

ECONOMIC

Objective 12 Define a sound funding base utilizing public and private sources that will assure operation and maintenance of existing facilities and services and timely implementation of new projects and services.

Objective 13 Provide for and enhance the efficient movement of freight.

ISTEA specifies fifteen factors that must be considered in the metropolitan transportation planning process. It was assured that these would be included in the current Plan update effort by integrating the fifteen factors into the above goal and objectives.

These objectives were used to develop a set of evaluation criteria. All of the projects that could *potentially* be included in the ultimate Cost Feasible Plan were ranked by the Steering Committee in terms of these Evaluation Criteria. That way, those projects most reflective of the goal and objectives - which, again, incorporate the fifteen ISTEA factors - were most likely to be included in the ultimate Plan, while those not adhering to the goal and objectives and the tenets of ISTEA, were least likely to be included in the Plan. In addition, further information regarding how the Long Range Plan adheres to the principles of ISTEA can be found in Appendix VII of this document.

Each of the 15 ISTEA factors are listed below along with Metro-Dade Long Range Plan objectives that supports the intent of each objective.

FACTOR 1

System Preservation/Efficiency - Preservation of existing transportation facilities and, where practical, ways to meet transportation needs by using existing transportation facilities more efficiently

Objective 5 - Preserve existing highway and transit facilities by improving efficiency and safety.

FACTOR 2

Energy Conservation - Consistency of transportation planning with applicable Federal, state, and local energy conservation programs, goals and objectives

Objective 1- Plan for the provision of transportation services and facilities to serve the needs of the population in the metropolitan area, in accordance with the federal and state transportation planning process requirements.

FACTOR	OBJECTIVE
FACTOR 3 Congestion Relief - The need to relieve congestion and prevent congestion from occurring where it does not yet occur	Objective 7 - Plan for maximum utilization of existing transportation capacity, relieve congestion and prevent congestion from occurring where it does not yet occur.
FACTOR 4 Land Use - The likely effect of transportation policy decisions on land use and development and the consistency of transportation plans and programs with the provision of all applicable short- and long-term development plans	Objective 4 - To consider the effect of transportation policies on land use development for both the short and long range.
FACTOR 5 Enhancements - The programming of expenditures on transportation enhancement activities as required in Section 133	Objective 1 - Plan for the provision of transportation services and facilities to serve the needs of the population in the metropolitan area, in accordance with the federal and state transportation planning process requirements.
FACTOR 6 Consider All Projects - The effects of all transportation projects to be undertaken within the metropolitan area, without regard to whether such projects are publicly funded	Objective 12 - Define a sound funding base utilizing public and private sources that will assure operation and maintenance of existing facilities and services and timely implementation of new projects and services.

FACTOR 7 Intermodal Access - International boarder crossing and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation areas, monuments and historical sites, and military instillations	Objectives 2 - Develop an integrated multimodal transportation system that emphasizes people movement by facilitating the transfer between modes, and the connectivity of the transportation network within and outside the metropolitan area. And, Objective 10 - Plan for transportation projects that enhance the quality of the environment.
FACTOR 8 Connectivity - The need for connectivity of roads within the metropolitan area with roads outside the metropolitan area	Objective 2 - Develop an integrated multimodal transportation system that emphasizes people movement by facilitating the transfer between modes, and the connectivity of the transportation network within and outside the metropolitan area.
FACTOR 9 Management Systems - The transportation needs identified through use of the management systems required by Section 303 of this title	Objective 6 - Achieve the operating level-of-service standards adopted in the Comprehensive Development Master Plan and in the Florida Intrastate Highway System Plan.

FACTOR 10

Right-of-Way Preservation - Preservation of rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors and identification of those corridors for which action is most needed to prevent destruction or loss.

Objective 3 - Preserve rights-of-way in corridors anticipated to be heavily traveled in the future.

FACTOR 11

Freight Movement - Methods to enhance the efficient movement of freight

Objective 13 - Provide for and enhance the efficient movement of Freight.

FACTOR 12

Life-Cycle Costs - The use of life-cycle costs in the design and engineering of bridges, tunnels, or pavement

Objective 1 - Plan for the provision of transportation services and facilities to serve the needs of the population in the metropolitan area, in accordance with the federal and state transportation planning process requirements.

FACTOR 13

Economic/Environmental Effects - The overall social, economic, energy, and environmental effects of transportation decisions

Objective 7 - Plan for maximum utilization of existing transportation capacity, relieve congestion and prevent congestion from occurring where it does not yet occur. And, Objective 8 - Plan and develop a transportation system that preserves the social integrity of urban communities. And, Objective 9 - Plan for a transportation system that gives due consideration to air quality and environmentally sensitive areas, and conserves energy and natural resources and that is consistent with applicable federal, state, and local energy conservation program goals and objectives.

FACTOR 14

Transit Improvement - Methods to expand and enhance transit services and to increase the use of such services

Objective 2 - Develop an integrated multimodal transportation system that emphasizes people movement by facilitating the transfer between modes, and the connectivity of the transportation network within and outside the metropolitan area.

FACTOR 15

Transit Security - Capital investment that would result in increased security in transit systems

Objective 4 - To consider the effect of transportation policies on land use development for both the short and long range.

II(B). Background

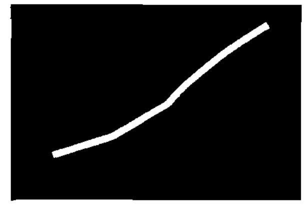
Long Range Transportation Plans have been prepared and updated over the years to reflect the travel characteristics that are associated with changes in the socio-economic conditions of the Miami Urbanized Area. A brief review of the previous Update (to the Year 2010), historic changes between 1980 and 1990, and potential changes that are forecasted to occur through the Year 2015, are described below.

II(B)1. The Previous Plan

The Year 2010 Long Range Transportation Plan was prepared in 1990. The Plan was based upon population and travel demand forecasts through the Year 2010. The following are highlights of those twenty year forecasts and of the 2010 Plan as documented in the Executive Summary:

- Projected increase in travel (1991-2010): 30 to 45%;
- Over 200 major highway capacity improvement projects with an estimated cost of about $4.1 billion were proposed;
- $11.4 billion in transit spending proposed, including over 60 miles of new rail transit in 6 corridors and additional bus and rail rolling stock;
- Projected increase in transit share was from 5% in 1990 to approximately 11% by the Year 2010;
- Revenue shortfalls were projected for highways, with a $400 million deficit projected within just the first 10 year period;
- No funding for transit needs was identified, other than for capital projects for which funding had already been secured - such as the Metromover Extension; and
- Several short-term strategies were identified to mitigate urban traffic congestion.

II(B)2. Demographic Trends



For the preparation of the Transportation Plan Update, the County was subdivided into five Areas of Analysis: North, Northwest, West, Central/Beach, and South. **Figure II-1** presents these Areas of Analysis on the following page. Each analysis area contains a number of smaller units called Traffic Analysis Zones (TAZs). Traffic information and socio-economic data for TAZs were collected and projected. For the community meetings held in May and June of 1995, population, employment and travel characteristics data was aggregated into these areas of analysis and presented to citizens so they could easily focus on the projected socio-economic growth and travel demand in their area.

Demographic, or socio-economic data are the driving force behind the model used in developing the Needs and Cost Feasible Plans. **Table II-1** illustrates the historic (1980 to 1990) and potential (through 2015) changes in socio-economic characteristics for the Miami Urbanized Area.

Figure II-2, Metro-Dade County Population Growth 1990 to 2015, and **Figure II-3**, Metro-Dade County Employment Growth 1990 to 2015, illustrate the demographic trends by area of analysis that will shape the region between 1990 and 2015, the Plan Year.

Table II-1 indicates the population growth of 19% between two census years, 1980 and 1990 . The Year 2015 was projected for $2.6 million or a 37% increase over a 25 year period from 1990. Employment growth for the years between 1980 and 1990 was 12%, and Year 2015 was projected as $1.3 million or 49% over the 25 year period from 1990.

Figure II-1. Areas of Analysis

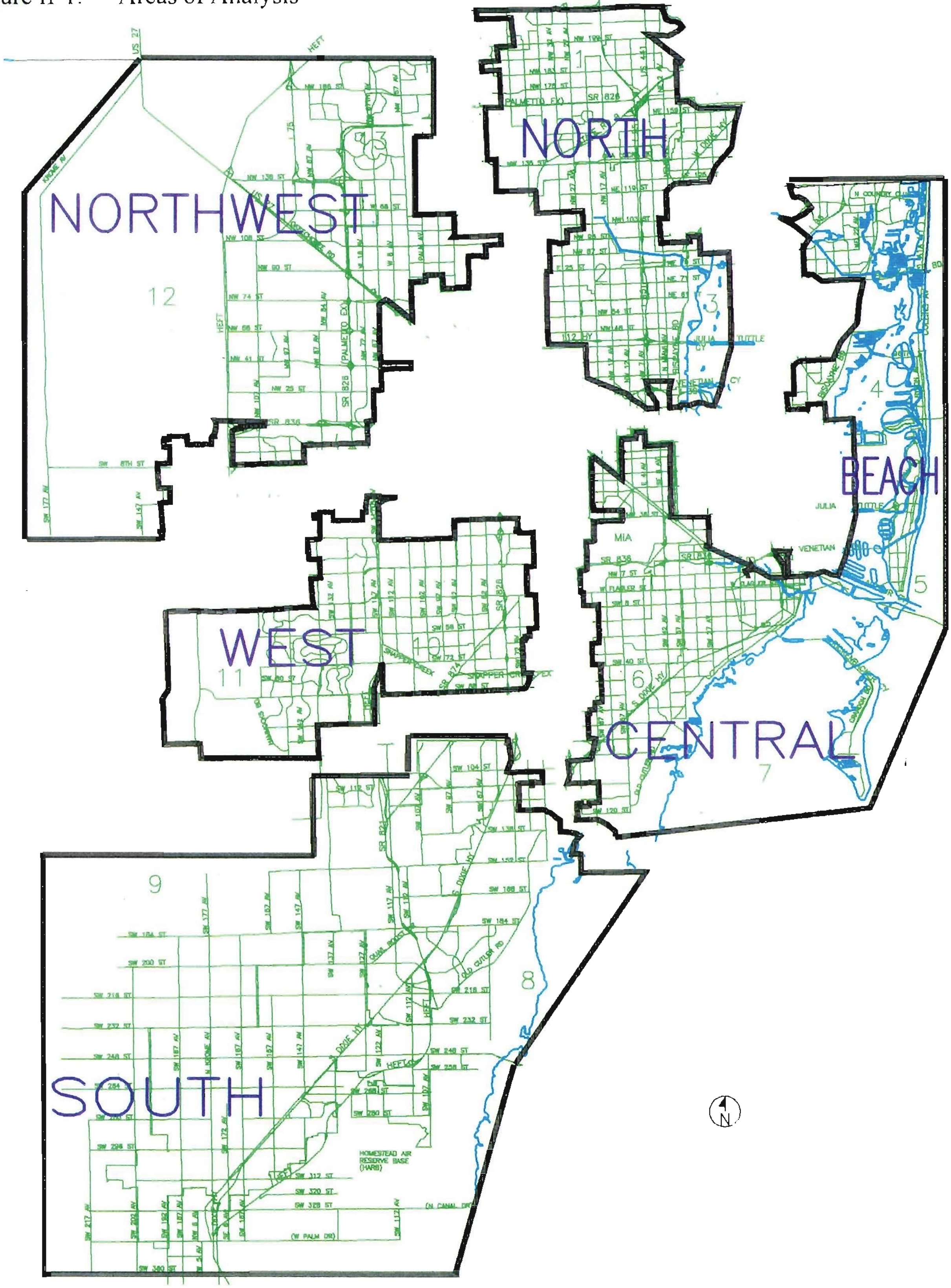


Table II-1. Historic (1980-1990) and Potential Changes (through 2015) in Socio-Economic Characteristics for the Miami Urbanized Area

CHARACTERISTICS	1980 (Census)	1990 (Census)	2015 (Projections)
Population	1,626,000	1,937,000	2,647,000
Employment	743,000	902,000	1,341,000
Occupied Dwelling	609,800	692,400	882,200
School Enrollment	411,100	427,200	695,400
Median household income ($)	15,571	26,909	N/A
Persons/Occupied Dwelling	2.67	2.80	3.00

N/A = Not Available.

Figure II-2. Metro-Dade County Population Growth 1990 to 2015

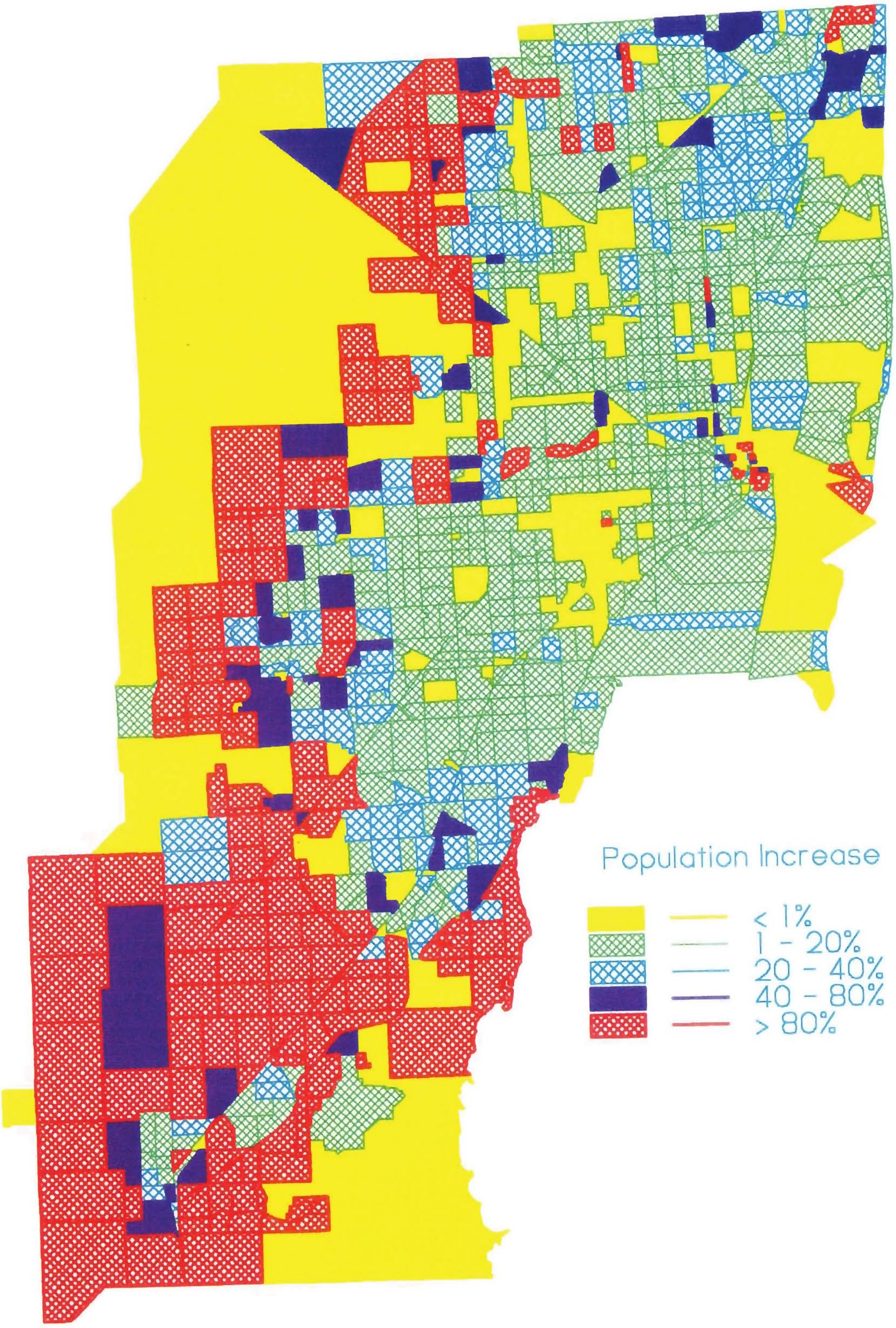
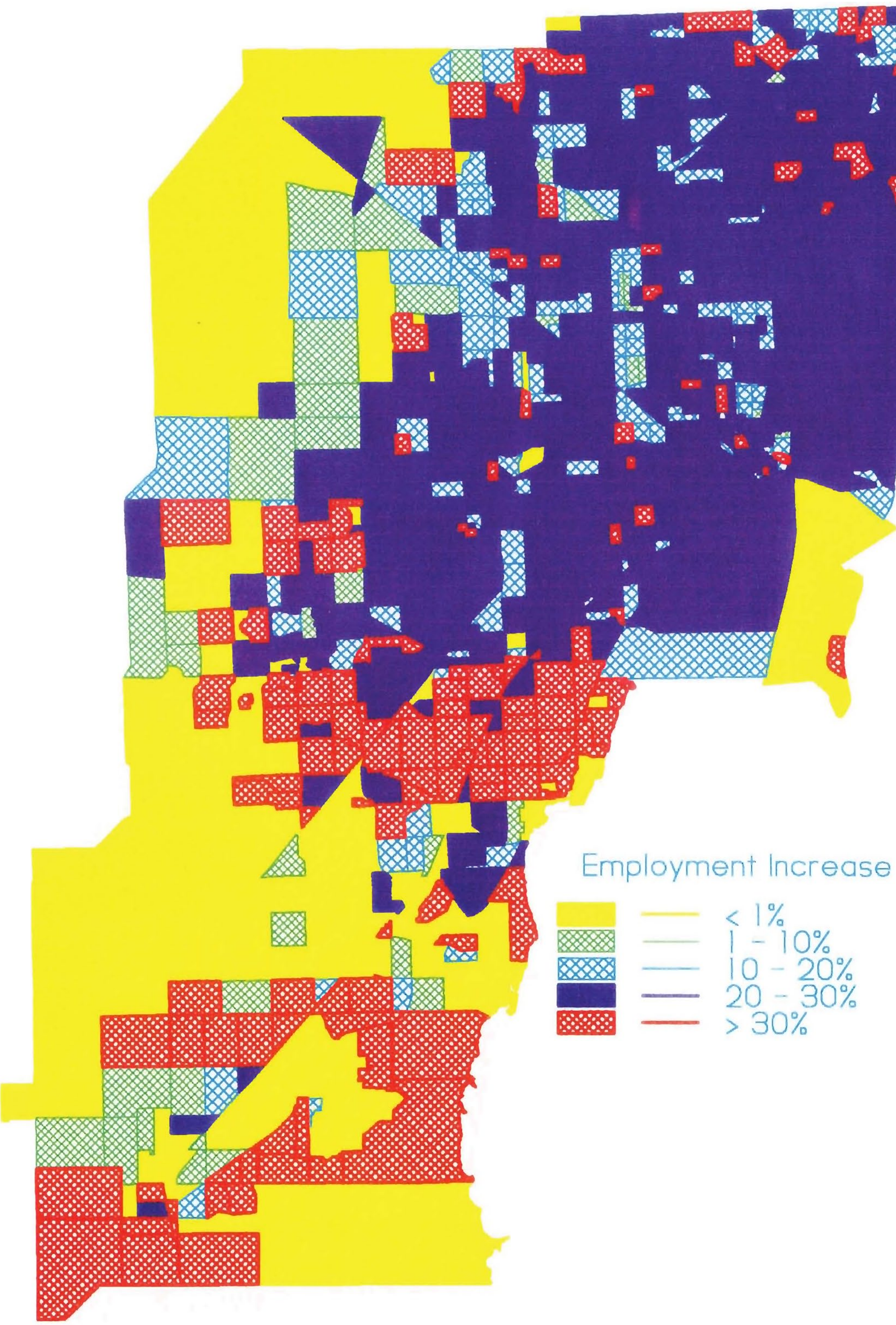


Figure II-3. Metro-Dade County Employment Growth 1990 to 2015



II(C). Long Range Transportation Plan Development

The following sections summarize the steps through which the Long Range Transportation Plan was developed.

As part of Plan development, the Florida Standard Urban Transportation Structure (FSUTMS) model for the area was first validated to replicate base year (1990) conditions. This effort is detailed in *Technical Report #2 - Model Validation.* The reason for validation is the assumption that once the model can be made to replicate conditions for a known year, it can, upon inputting future year socio-economic projections, be assumed to be forecasting future year travel conditions.

After the model is validated, the future year (2015) socio-economic characteristics are input into the model, to examine future population and employment as they relate to the present transportation system. When the 2015 traffic volume and transit ridership projections were modeled for the Miami urbanized area, it was found that, as expected, much of the present transportation system exceeded accepted congestion level standards. This was anticipated because all of the projected population and employment growth, in terms of socio-economic data, was forced to travel on the existing plus committed (i.e., those improvements already funded) transportation system. So, the infrastructure was overburdened.

This situation was remedied by actually adding capacity to the simulated transportation system. Roadways were widened and transit services was added until, to the extent feasible, the system could accommodate the projected travel demand while mitigating congestion. Thus, highway and transit networks were constructed that depicted, major improvements needed to accommodate growth to the Year 2015; these improvements were used as the basis for the Needs Plan.

As the Plan development process was in progress, a Financial Resources Plan was drafted. The purpose of this document was to ascertain all of the sources and amounts of funding that could reasonably be expected to be available to fund the Plan through the Year 2015.

The *Financial Resources Report* document was crucial to the development of the Long Range Plan, as both the ISTEA and the Clean Air Act Amendments of 1991 (CAAA) mandate that the Plan be cost affordable. The *Financial Resources Report* is necessary in determining the amount of funding available for constructing Needs Plan projects.

A goal for the future transportation system and several objectives for reaching the goal were also drafted. From these objectives, evaluation criteria were developed. These criteria served as a means of evaluating the various projects contained within the Needs Plan to ascertain to what extent they furthered the goal and objectives of the Long Range Plan. The Long Range Plan Steering Committee used the evaluation criteria as a basis to rank the Needs Plan Projects.

Finally, based upon the available Financial Resources Report, the Steering Committee ranking per the evaluation criteria, and Public Input, a few subsets of the Needs Plan - or Cost Feasible Scenarios - were developed. These were compared and further evaluated through input from the Steering Committee and the public.

Ultimately, a Cost Feasible Long Range Transportation Plan to the Year 2015 was developed. The Plan consists of those Needs Plan projects whose construction and operations and maintenance were found to (a) meet the goal and objectives of the Long Range Plan and (b) be financially feasible according to the Financial Resources Report.

II(C)1. The Recommended Needs Plan

The development of the Needs Plan is a step toward the development of the Cost Feasible Plan, that will become the final adopted 2015 Long Range Transportation Plan. The Needs Plan builds on the Existing plus Committed (E+C) network. Running the E+C network illustrates transportation facility deficiencies that develop when Year 2015 socio-economic data is used to simulate travel conditions.

The Needs Plan seeks to remedy those deficiencies that become apparent in running the E+C network. In other words, the Needs Plan network provides new or expanded facilities along corridors considered to be deficient in the E+C network.

To begin creating a Needs Plan network, it was decided that the previously adopted 2010 Plan network could be used as a base. A list was made, however, of the 2010 Plan projects that were now policy constrained. This was because during the intervening period between the development of the two Plans, an administrative rule was adopted that said that no new "general use" highway lanes (exclusive of HOV lanes) could be constructed in excess of a six-lane section. Some 2010 Plan projects would now be in violation of that rule, and this situation would have to be rectified in developing the 2015 Plan.

In meeting the needs identified through the E+C model run, it was possible, in some cases, to meet them through either transit or highway improvements. In other cases, improvements to both modes would be necessary. The Steering Committee resolved to discover the optimum way to improve each corridor through the development of several alternative Needs Plan scenarios.

The Committee developed a Maximum Highway/Maximum Transit system network (Maximum System); a Maximum Highway/Minimum Transit system network (Highway Emphasis - HE); and a Minimum Highway/Maximum Transit system network (Transit Emphasis - TE). Using the results of these three simulations, the Committee could discover the optimum way - whether through highway improvements, transit improvements, or a combination thereof- to improve each corridor in an optimum way. Through picking the best solution for each corridor or area, the committee developed a hybrid Needs Plan.

The Recommended Needs Plan was developed to show major transportation improvements that would be needed to the Year 2015. The Needs Plan was developed to identify needs only, regardless of project costs.

Figure II-4 illustrates the Recommended Needs Plan projects. The list of projects shown is in addition to those improvements already approved in the County's five-year Transportation Improvement Program (TIP). Appendix II includes the list of Needs Plan projects.

II(C)2. Evaluation Criteria

A requirement of the MPO's Transportation Plan, as directed by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, is that the Plan be financially-constrained. To comply with this mandate, a Financial Resources Report was produced. The Financial Resources technical memorandum assessed the financial resources which may be available to Dade County for funding transportation improvements during the Plan period. This assessment of resources served as a guide, or "budget" by which projects could be assessed for affordability.

The first step in deriving a Cost Feasible Plan from the Needs Plan involved developing a methodology with which to rank the Needs Plan projects. Once these projects were ranked, their costs would be considered relative to their order, and draft Cost Feasible scenarios could be developed.

The projects were ranked by the Steering Committee members based upon five evaluation criteria (See **Table II-2**). These evaluation criteria were based upon the Goal and Objectives that had been developed for the Year 2015 Long Range Transportation Plan Update; the Goal and Objectives had, in turn, been developed based upon the Intermodal Surface Transportation Efficiency Act (ISTEA) 15 factors. The Goal and Objectives, ISTEA and the 15 factors are discussed further in Section I© of this document.

Figure II-4. Recommended Needs Plan Projects

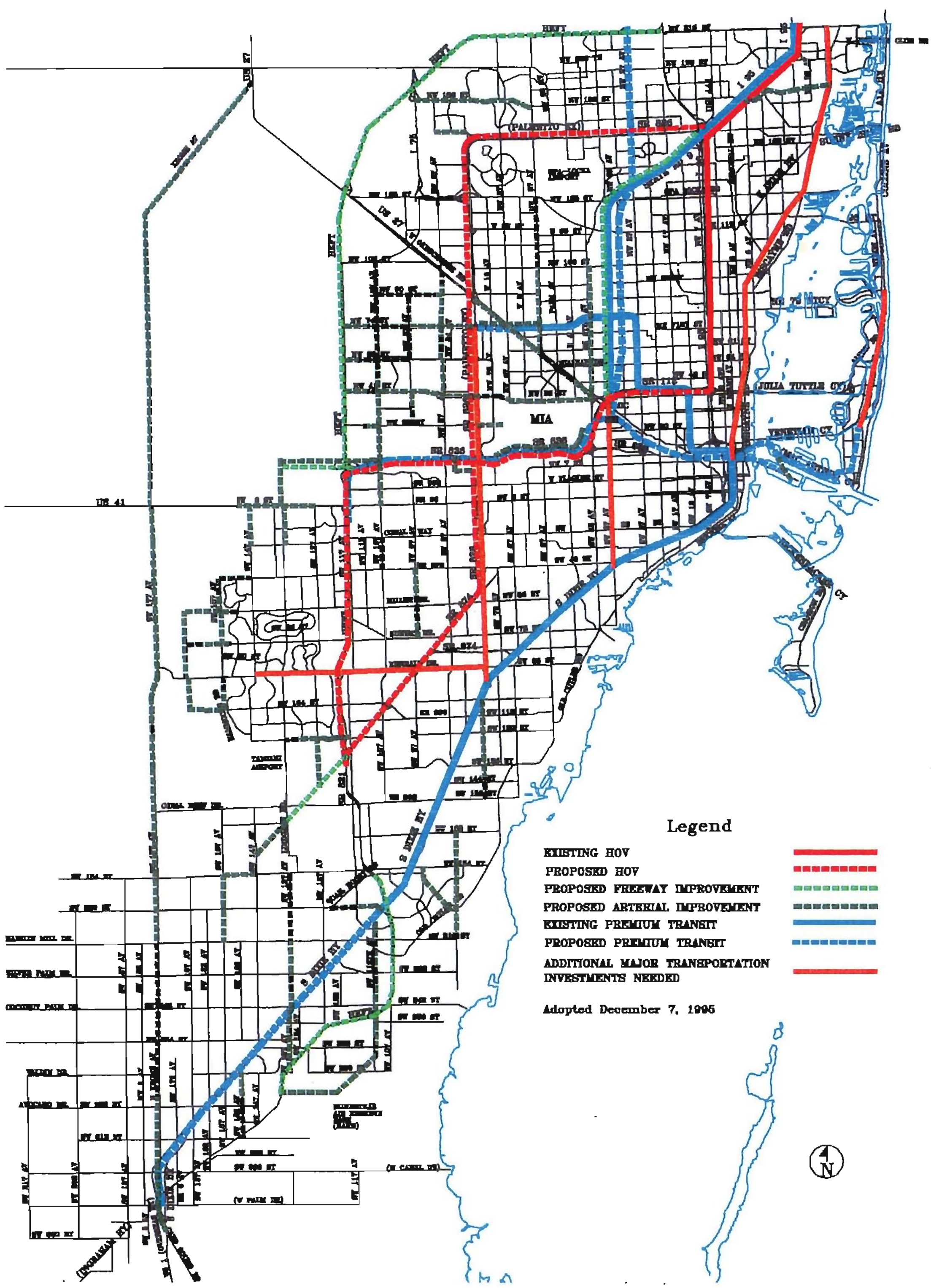


Table II-2. Evaluation Criteria

	Negative Impact	No Impact	Positive Impact	Weight
Promotes Multi-modal Transportation System Development	-10 to -1	0.00	1 to 10	25
Improves Mobility	-10 to -1	0.00	1 to 10	28
Preserves Social Integrity of Communities	-10 to -1	0.00	1 to 10	17
Improves Environmental Quality of Community	-10 to -1	0.00	1 to 10	16
Encourages Economic Development	-10 to -1	0.00	1 to 10	14
Total	---	---	---	100

As **Table II-2** shows, each of the projects was to be ranked within a range of -10 to +10 relative to each criterion. Zero was to represent a neutral score, while -10 represented the worst possible score, and +10, the best. As the table shows, cost was not to be considered at this point in ranking the projects.

Steering Committee members were given some questions to answer for themselves in developing a score for each project. The Committee developed these questions so as not to overlook some important aspect, or impact, of a project during the complex scoring process. These questions were:

- *Is this the type of transportation system improvement we, as a community, want to promote?* Does this project add capacity to an existing highway or transit facility? Is this a new roadway or transit facility? Does this project discourage low occupant vehicles using congested facilities? Does this project promote any intermodal access? Does this project improve access in general?

- *What area is impacted positively and negatively by the project?* Consider site, neighborhood, corridor, city or Countywide impacts. Generally, the larger the geographic area of impact, the greater the impact of the score you assign.

- *Does this project promote the economic development of the community?* Will the project promote the movement of goods and services? Will the project spawn new industries or promote the redevelopment of economically depressed areas?

- *Is the project underway?* If resources have already been allocated to this project, the amount of time and money invested reduces the marginal cost of implementing the project.

Each of these factors was *not* given equal weight. The Steering Committee members were asked to assign a weight to each criterion based upon what they considered to be its relative importance. These weights were averaged, and are depicted in the last column of **Table II-2**.

Using values ranging from -10 to 10, the individual Steering Committee members scored each project relative to each criterion. Then each of the scores for the five criteria was weighted and added together to determine each Committee members' score for each project.

Finally, the members' scores were aggregated in two different ways. First, all of the weighted scores were averaged and arranged in order from those with the highest points to those with the lowest.

The second methodology was to again determine each member's score for each project and place them in rank order. A number - from 1 to 92 - was then assigned to each project to represent its *rank*. Then the *ranks* given by each member - rather than the actual scores - were averaged.

The results of both of these systems were presented to the Steering Committee members, who determined that the latter method was the more accurate. Averaging the member's ranks, rather than their actual scores, was felt to offset relative differences in scoring. (For example, one member who felt construction of a project was favorable might assign it a 10, while another who favored the project to the same magnitude might assign it a 1, just because of personality differences.)

The ranked projects are listed in **Table II-3**. Thus ranked, the Cost Feasible projects still had to be selected from the Needs Plan. The optimal way to do this seemed to be to merely assign the appropriate cost to each of the ranked projects, and then begin subtracting the costs of each project in rank order from the available financial resources until all of the resources were exhausted

II(C)3. Financial Resources Analysis

The costs of transportation maintenance and improvements typically exceed available financial resources or funding. Therefore, to make the best use of available funding, it is necessary to develop a realistic financially-constrained transportation plan. A cost feasible plan also provides the context for strategies to maximize the efficiency of the existing transportation system.

The Metropolitan Planning Rule, published by the U.S. Department of Transportation, outlines the federal requirements for a cost-feasible transportation plan. The Rule states:

Table II-3. Recommended Needs Plan in Steering Committee Priority Order

Project	Proposed Improvement
SR-826: SR-874 to I-75	add one HOV lane (each direction)
SR-836 Corridor: MIC -to -Port	premium transit
So. Dixie Hwy: Cutler Ridge to Homestead	busway extension
SR-836 Corridor: FIU- to- MIC	premium transit
SR-826: NW 158 St to GGI	add one HOV lane (each direction)
US-1/Biscayne Blvd: Downtown to Broward C. L.	premium transit
SR-836 Corridor: SR-826-to- LeJeune	add one HOV lane (each direction)
Kendall Corridor: Dadeland North to SW 147 Ave	premium transit
H.E.F.T.: SR-836 to NW 41 St	4 to 6 lanes
SR-836 Corridor: Downtown -to- Miami Beach	light rail or hybrid
SR-836 Corridor: SR-826-to- HEFT	add one HOV lane (each direction)
H.E.F.T.: SW 40 St to SW 8 St	6 to 8 lanes
North Corridor: County line to MIC	premium transit
SR-874: HEFT to SR-826	4/6 lanes to 8 lanes (3+1HOV each direction.)
H.E.F.T.: SW 88 St to SW 40 St	6 to 8 lanes
SR-826: Dadeland to NW 74 St	premium transit
NW 97 Ave: Fountainbleau (NW 7 St) to NW 25 St	2 to 4 lanes & bridge
MIC/MIA	MIC facility, MIC-MIA "peoplemover"
Perimeter Rd: NW 20 St to NW 72 Ave	2 to 4 lanes
NW 25 St: SR-826 to NW 69 Ave	4 to 6 lanes
H.E.F.T.: SW 137 Ave to Quail Roost Dr	4 to 6 lanes
NW 97 Ave: NW 25 St to NW 41 St	2 to 4 lanes
H.E.F.T.: NW 41 St to I-75	4 to 6 lanes
SW 42/37 Avenue: MIC to Douglas Rd Sta.	premium transit
Interconnector: SR-836 to SR 112	new 4 lane
NW 87 Ave: NW 36 St to NW 58 St	4 to 6 lanes
NW 87 Ave: NW 58 St to Okeechobee Rd	new 4 lane
SR-874: HEFT to SW 137 Ave (SW 147 Ave)	new 6-lane expressway extension with arterial step-down to SW 147 Ave
NW 12 St: NW 110 Ave to NW 107 Ave	new 4 lane
SR-112: I-95 to Okeechobee Rd	add one HOV lane (each direction)
NW 12 St: NW 104 Ave to NW 97 Ave	new 4 lane
Port of Miami Tunnel	construct tunnel
SR-826: NW 74 St to Golden Glades	premium transit
NW 12 St. NW 110 Ave to NW 122nd Ave	2 to 4 lanes
NW 12 St: NW 122 Ave to NW 137Ave	2 to 4 lanes and new 4 lanes
2-lane HOV Interconnector	add one HOV lane (each direction)
SW 137th Ave: SW 8th St to SW 26th St	2 and 4 to 6 lanes
SW 137 Ave: NW 12th St to SW. 8th St	2 and 4 lanes to 6 lanes
SW 8 St: SW 127 Ave to SW 152 Ave	4 to 6 lanes

Table II-3. Recommended Needs Plan in Steering Committee Priority Order

Project	Proposed Improvement
NW 74 St: NW 57 Ave to SR-826	4 to 6 lanes
NW/SW 107 Ave: NW 41 St to SW 8 St	4 to 6 lanes
NW 57 Ave: Okeechobee Rd to NW 138 St	4 to 6 lanes
NW 74 St: SR-826 to HEFT	new 6-lane road, interchange
NW 25 St: NW 107 Ave to NW 112 Ave	2 to 4 lanes
NW 58 St: NW 97 Ave to NW 107 Ave	2 to 4 lanes
NW 97 Ave: NW 58 St to NW 90 St	2 to 4 lanes and new 4-lane road
SW 137 Ave: US-1 to HEFT	2 to 4 lanes
SR-836: HEFT to NW 137 Ave	new 6-lane expressway extension
NW 107 Ave: NW 106 St to NW 41 St.	make 4 lanes
H.E.F.T.: I-75 to FL Turnpike	4 to 6 lanes
SR-826: Golden Glades to A1A	premium transit
SW 117 Ave: US-1 to SW 152 St	2 to 4 lanes
Krome Ave: SW 8 St to US-1	2 to 4 lanes
SW 112 Ave: HARB to HEFT along SW 112 Ave	make 6 lane road
SW 112 Ave: US-1 to Moody Dr	4 to 6 lanes
SW 120 St: SW 137 Ave to SW 117 Ave	4 to 6 lanes
NW 183 St: I-75 to NW 2 Ave (US-441)	4 to 6 lanes
SW 184 St.: SW 157 Ave to SW 127 Ave	2 to 4 lanes
Okeechobee Road: SR-112 to SR-826	make 6-lane arterial
SW 137 Ave: SW 184 St to US-1	make 4 lanes
US-1: SW 344 St to SW 211 St (SW 112 Ave)	4 to 6 lanes
SW 97 Ave: SW 72 St to SW 40 St	2 to 4 lanes
NE 183 St: NE 6 Ave to US-1	4 to 6 lanes
SW 127 Ave: SW 120 St to SW 144 St	new 4 lanes
Franjo Rd: SW 184 St to Old Cutler Rd	2 to 4 lanes
NW 36/41 St.: NW 42 Ave to HEFT	Smart Street Concept
Krome Ave: SW 8 St to Okeechobee Rd	2 to 4 lanes
I-95 Ramps/Distributor: I-95 to Biscayne Blvd	interchange improvements
SW 200 St: US-1 to Quail Roost Dr	2 to 4 lanes
SW 104 St: SW 152 Ave to SW 167 Ave	4-lane road
SW 87 Ave: SW 168 St to SW 216 St	2 to 4 lanes
NW 170 St: NW 77 Ave to NW 87 Ave	2 to 4 lanes
SW 157 Ave: SW 184 St to SW 216 St	new 2 lane
SW 147 Ave: SW 8 St to SW 26 St	new 2 lane
SW 157 Ave: SW 88 St to SW 104 St	2 to 4 lanes
SW 157 Ave: SW 56 St to SW 72 St	new 2 lane
SW 167 Ave: SW 88 St to SW 104 St	new 2 lane
SW 157 Ave: SW 42 St to SW 56 St	new 2 lane
SW 72 St: SW 154 Ave to SW 167 Ave	new 2 lane
SW 42 St: SW 147 Ave to SW 157 Ave	new 2 lane

Table II-3. Recommended Needs Plan in Steering Committee Priority Order

Project	Proposed Improvement
SW 167 Ave: SW 56 St to SW 88 St	new 2 lane
SW 152 Ave: US-1 to SW 312 St	2 to 4 lanes
SW 56 St: SW 57 Ave to SW 67 Ave	new 2 lane
NW 90 St: NW 107 Ave to NW 87 Ave	new 2 lane
SW 107 Ave: SW 40 St to SW 24 St	4 to 6 lanes
SW 56 St: SW 152 Ave to SW 157 Ave	new 2 lane
LeJeune Road: SR-112 to NW 103 St	5 to 6 lanes
SW 77 Ave: SW 104 St to SW 152 St	2 to 4 lanes
NW 27 Ave: NW 103 St to s/o NW 74 St	4 to 6 lanes
NW 82 Ave: NW 7th St to NW 12th St	new 4 lane
NW 7 St: NW 77 Ave to NW 82nd Ave	new 4 lane
Central Parkway: Golden Glades to SR-112	6-lane Parkway (private enterprise)

Total number of projects in Needs Plan = 92

"The Plan shall include a financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue. The financial plan shall compare the estimated revenue from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the period of the plan."

An analysis of transportation financial resources has been performed to determine what funds will be available to implement the 2015 Long Range Transportation Plan. Specifically, transportation revenue has been projected for the years 2001 - 2015. Funding for the years 1996 - 2000 is already programmed as part of state and local work programs, and this funding has been committed to existing projects.

II(C)3(a). Basis of Financial Resource Projections

The projection of Dade County's transportation financial resources for the year 2015 is based on the estimated growth of:

- population;
- gasoline/diesel fuel use;
- vehicle miles traveled;
- gasoline/diesel fuel efficiency;
- motor vehicle registrations; and
- rental car surcharges.

Current fuel taxes and transportation-related fees have been applied to the resulting projections of fuel consumption and vehicle registrations.

II(C)3(b). Program Funding

Transportation programs, and associated funding, can be divided into four categories;

Product. Capacity projects -- highway and public transportation, safety projects, and system preservation (resurfacing and bridge projects).
Product Support. Planning and engineering for all capacity programs.
Operations and Maintenance. Routine activities such as mowing, trash removal, patching of potholes, etc.
Administration. Organizational support for all programs.

The revenue forecast reported herein pertains to financial resources which are projected to be available for capacity-related improvements. This revenue does not include funds set aside for resurfacing and other system preservation efforts. Revenue for these types of efforts are considered part of the overall O&M revenues. The capacity-related improvements include highway, transit, rail and other surface transportation modes.

For the planned capacity projects, sufficient funding has been reserved for Project Support, O&M, and Administration. An adequate amount of funding has been set aside for the safety, preservation, operation and maintenance of the current plus planned transportation system.

II(C)3(c). Categories of Funding

Revenue projections have been made for federal, state and local funding sources. These projections apply to the following categories of funding (and eligible improvements):

- ***Interstate Highway System*** (widening, ramps and interchange improvement projects on the Interstate system);
- ***Florida Turnpike District*** (toll road projects which are an expansion of the Florida Turnpike System);
- ***Florida Intrastate Highway System*** (improvement to the FIHS);
- ***Arterial Roads*** (new roads or multi-laning of State roads and non-State roads which are federal-aid eligible under the Surface Transportation Program);
- ***Transportation Systems Management or TSM*** (traffic operations projects, e.g., intersection improvements);
- ***Transit*** (operating subsidies and capital facilities/equipment for transit service);
- ***Transportation Enhancement Projects*** (non-traditional transportation improvements, e.g., bicycle/pedestrian facilities, landscaping); and
- ***Impact Fees*** (capacity road projects, widening or intersection improvements, which serve new development).

II(C)3(d). Revenue Projections

The revenue projections for the Interstate Highway System, Florida Intrastate Highway System, Arterial Roads and State Transit, as presented herein, were developed by the Florida Department of Transportation. **Table II-4** lists revenue per capacity related improvements for the Years 2001-2015 and **Figure II-5** represents Dade County revenue for capacity improvements projects for the Years 2001-2015.

Funding for Transportation System Management (TSM) projects will be allocated from the total projection for Arterial Roads -- $1.234 billion. No specific percentage has been set-aside, as each project will be judged on a case-by-case basis. The Surface Transportation Program (STP), is the funding source for Transportation Enhancement Projects. It is estimated that approximately 10% of the STP funding will be allocated for these projects from the total funding for Arterial Roads.

Dade County will receive approximately $240 million for Intermodal/Rail projects. The Miami Intermodal Center will be funded with a portion of these funds. Other rail projects affecting the Tri-County Rail system and the Miami Metromover will be eligible for funds from this category.

Local gas tax revenues (county and city) were projected as part of the financial resources analysis. It was determined that 50% (approximately $1.12 billion), of all locally generated gas tax revenues will be required for the maintenance and operation of the existing transportation system.

Impact fees are currently collected by the City of Miami and Dade County Board of County Commissioners. A projection of impact fee revenue was accomplished based on historical trends for fee collections.

Florida Law requires that 14.3% of State transportation revenues be expended on public transportation programs and projects. The forecast includes this requirements and assumes that this will increase to 15% after the Year 2000. Public transportation programs are not required to equal 14.3% of the total State program because the forecast includes federal and turnpike funds, in addition to State funds. It is estimated that the Metro-Dade Transit Agency will receive in excess of the $185.1 million minimum transit requirement. Refer to the document *Technical Memorandum #9, Financial Resources* for a detailed explanation of funding categories.

II(C)4. Cost Analysis

Costs were extracted from existing reports/work programs where available and translated into 1995 dollars. All costs and all revenues were developed in terms of 1995 dollars. Where costs for a project were not yet developed, these were calculated using unit costs derived from the costs for existing, similar facilities.

Table II-4. Revenue for Capacity Related Improvements Years 2001 - 2015

Category	$Millions
Interstate	$241
FIHS	$132
Arterial Roads	$803
State Transit	$185
TMAs	$246
Intermodal/Rail	$240
Impact Fees	$161
Local Taxes	$1,118
TOTAL	**$3,126**

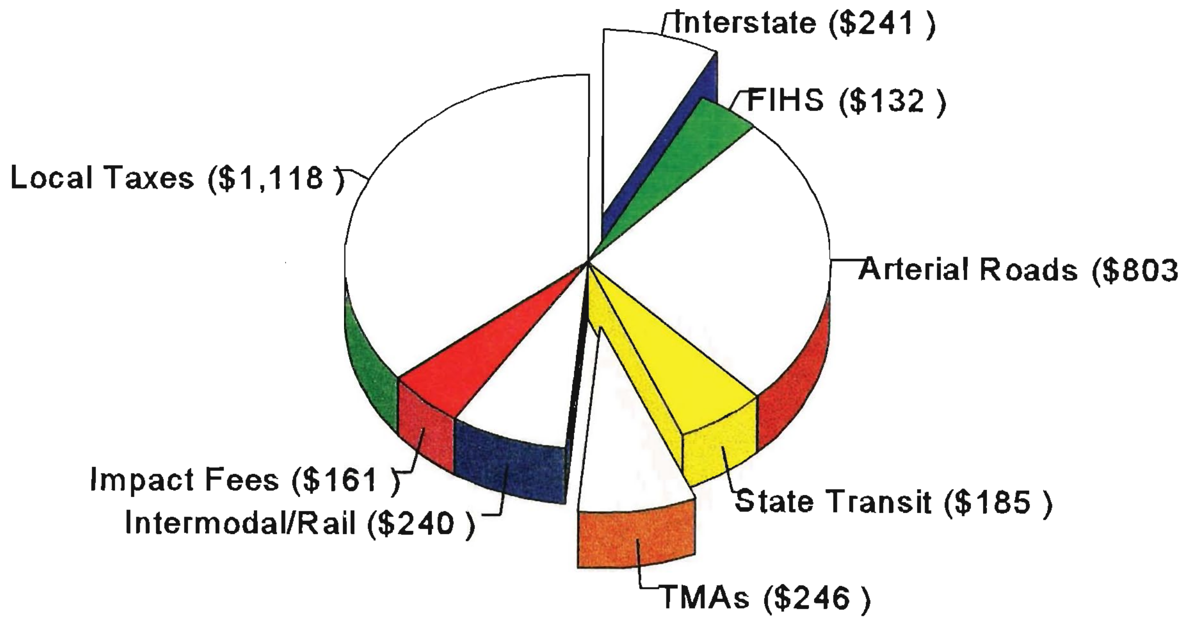


Figure II-5. Dade County Revenue for Capacity Improvement Projects: 2001-2015 (in 1995 Millions)

II(C)4(a). Capital Costs - Transit

New/Replacement Buses: The following methodology was used to approximate the total monies that will be needed to fund capital bus purchases through the Year 2015. Per the model (FSUTMS), it was determined that the Metro-Dade Transit Agency (MDTA) system would need 850 buses including spares in the Year 2015 to operate the Cost Feasible Plan bus transit system.

According to the draft 1995 MDTA Transit Development Program (TDP), there were 643 buses, including spares. Assumptions were made that the average "lifespan" of a bus was twelve years and that new/replacement buses would cost approximately $250,000/each.

<u>Total Buses</u> - The total capital bus funds needed through the Year 2015 is projected to be $351,750,000 (capital cost for bus fleet 1996-2015). This was calculated by combining $284,250,000 (new/replacement buses - 2001-2015) with $67,500,000 (replacement buses programmed in TIP - 1996-2000).

The following transit corridors and facilities are included in the Needs Plan for the Miami-Dade Long Range Transportation Plan Year 2015 Update. Unless otherwise indicated, the corridors were modeled and priced as Heavy Rail (pending Major Investment Studies), relative to the technology for implementing them.

Kendall Corridor: Dadeland north to SW 147 Avenue ($615.5 million) - The source for cost information about this corridor was the "Dade County Transit Corridors Transitional Analysis", developed for the Dade County Metropolitan Planning Organization, March 17, 1993. The Kendall corridor does not appear in any of the various draft Cost Feasible Plan scenarios. However, the Kendell Corridor is currently undergoing additional study for possible inclusion in upcoming Cost Feasible Plan Updates.

The costs given in this document for the 7.5 mile corridor are presented in **Table II-4**.

Table II-5. Kendall Corridor Cost Categories

Category	Estimated Amount (millions)
Engineering:	$ 61.1
Right-of-way:	$ 31.9
Construction:	$381.6
Total	$474.6

The western terminus, per the above referenced report was 137th Avenue, and per the Needs Plan is 147th Avenue. Additional costs to account for this difference were calculated by obtaining a cost per mile for the original segment length of 7.5 miles, and applying them to the new length of 8.4 miles. Additionally, these 1992 costs were converted to 1995 dollars by increasing them by five percent per year, for a final total cost of approximately $615.5 million.

North Corridor: Broward County Line to MIC ($450 million) - A detailed analysis is currently underway for this corridor. Per the analysis, the cost of the North Corridor is projected to be approximately $450 million. The "Cost to the Long Range Plan" for the North Corridor represents 30% of the total project costs. The remaining 70% is assumed to be provided via Section 3 Federal Discretionary funding.

South Dixie Highway Corridor: Cutler Ridge to Homestead ($35.6 million) - Unlike the majority of the transit projects for which costs are being developed, this project is not proposed to be a Heavy Rail project, but a ***busway***. The source for cost information about this corridor was the "Dade County Transit Corridors Transitional Analysis", developed for the Dade County Metropolitan Planning Organization, March 17, 1993.

Table II-6. South Dixie Corridor Cost Categories

Category	Estimated Amount (in millions)
Engineering:	$ 4.3
Right-of-way:	$ 1.0
Construction:	$25.4
Total	$30.7

Additionally, these 1992 costs were converted to 1995 dollars by increasing them by five percent per year, for a final total cost of approximately $ 35.6 million.

SR 826 Corridor: Golden Glades to A1A, and **SR 826 Corridor : NW 74 Street to Golden Glades,** and **SR 826 Corridor: Dadeland to NW 74th Street ($1,384.6 million)** - Total projected costs for these segments of the SR826 corridor are being combined as only a "correct order of magnitude" is needed with regard to these costs. None of the SR826 segments appear in any of the various draft Cost Feasible Plan scenarios.

The source for cost information about this corridor was the "Dade County Transit Corridors Transitional Analysis", developed for the Dade County Metropolitan Planning Organization, March 17, 1993. The costs for the 27 mile corridor are as follows:

Table II-7. SR 826 Corridor Cost Categories

Category	Estimated Amount (in millions)
Engineering:	$ 167.4
Right-of-way:	$ 32.4
Construction:	$ 996.3
Total	$1,198.8

Additionally, these 1992 costs were converted to 1995 dollars by increasing them by five percent per year, for a final total cost of $1,384.6 million. For the SR 826 Corridor, the section of fixed guideway transit from Golden Glades to NW 74 Street was deleted from the Needs Plan towards the end of the Plan development process. The cost was reduced to $526.0M for the remaining segment.

East/West Corridor/SR 836 Corridor ($500 million) - The Major Investment Study/Draft Environmental Impact Statement for the East-West Multi-modal Corridor contains capital cost estimates for several different development scenarios for this corridor. However, Minimal Operating segment (MOS) A - Palmetto to Seaport is the scenario that reflects that portion of the proposed corridor that will probably be developed first, and that is included in the draft Year 2015 Cost Feasible Plan. The additional extensions of the East/West Corridor/SR 836 Corridor, which includes the Beach and FIU extensions, did not get selected for the Cost Feasible Plan. According to the report, the capital cost of MOS A is $1,313 million in 1995 dollars.

As with the Miami Intermodal Center (MIC), the entire cost of the project is *not* expected to be drawn from the sources included in the Financial Resources component of the Long Range Plan. The sum that the MPO and the FDOT (staff to the East-West project) have agreed should be devoted to the project from so-called Long Range Plan Revenues is $500 million in 1995 dollars.

The report proposes that the additional funds not coming from the Long Range Plan Revenues will be available from the following five other sources:

- Federal Transit Administration (FTA) Section 3 discretionary funds,
- Dedicated toll receipts from the Dade County Expressway Authority,
- Capitalization of revenue streams (issuance of revenue-backed bonds),
- Special Airport-Seaport transit fare of $4.25 (for *operating* expenses), and
- ½ SR 836 toll surcharge revenues (operating and capital expenses).

Northwest Corridor: Downtown Miami to NE 199th Street ($803.2 million) - This project is a 13.6-mile fixed guideway corridor. A transit services analysis is now in progress with completion scheduled for December 1995. However, preliminary figures from the Transitional Analysis Report, when adjusted for length and 1995 dollars, indicate an approximate cost of $803.2 million.

MIC ($300 million) - Per the Administrative Draft Major Investment Study/Environmental Impact Statement (MIS/DEIS), July, 1995, page S-40, "For the purposes of the financial analysis, the highest and lowest packages of build options and a mid-range combination have been selected for testing "Adjusting for inflation increases the cost of the high package to $2.26 billion, the low package to $1.66 billion and the mid-range scenario to $1.88 billion in year-of-expenditure dollars". The largest component of the project build packages is the SR 836/SR 112 Interconnector, representing about one-third of the total project cost."

The Administrative Draft Major Investment Study/Environmental Impact Statement (MIS/DEIS), July, 1995 also states that only a percentage of this cost is expected to come from what is being termed "MPO Long Range Revenue." In working with FDOT personnel and consultants for the MIC project to calculate needed MPO Long Range Revenues, and through the translation of the aforementioned "year-of-expenditure dollars" into 1995 dollars, the sum of $300 million was calculated to be the share of MIC funds to be derived from Long Range Plan revenues.

II(C)4(b). O & M - Transit Costs

O&M costs for transit have been calculated for the transit components of both the Needs and Cost Feasible Plans. The projected O&M costs for the various transit corridors have been taken from various sources including the Major Investment Study/Draft Environmental Impact Statement for the East-West Multi-modal Corridor and the Administrative Draft Major Investment Study/Environmental Impact Statement (MIS/DEIS), for the Miami Intermodal Center Study. **Table II-8** includes the transit O&M cost and revenue summary in 1995 dollars. **Table II-9** lists the transit O&M costs per year (2001-2015) for the Needs Plan, and **Table II-10** lists the transit O&M costs per year (2001-2015) for the Cost Feasible Plan.

Table II-8. Transit O&M Cost and Revenue Summary (millions of 1995 Dollars)

Category	Needs Plan	Cost Feasible Plan
COSTS		
Existing System	$3,135	$3,135
Expansion	2,548	1,056
TOTAL	**5,683**	**4,191**
REVENUES		
Farebox Revenue		
Existing System	915	915
Expansion	1,271	531
Federal Section 9 Operating	0	0
State	133	133
Local	1,597	1,597
Other Sources	200	200
TOTAL	**4,116**	**3,376**
COSTS - REVENUES	**(1,567)**	**(815)**

Table II-9. Transit O&M Costs - Needs Plan (millions of 1995 dollars)

Needs Plan (Transit Components)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Buses: Existing 643 and replacement until the Year 2015	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$1,821.0
Buses: Expansion from 643 to 1250	$7.6	$15.2	$22.8	$30.4	$38.0	$45.6	$53.2	$60.8	$68.4	$76.0	$83.6	$91.2	$98.8	$106.4	$107.7	$905.7
Para-transit Operating and Maintenance	$15.0	$15.1	$15.3	$15.4	$15.6	$15.7	$15.9	$16.0	$16.2	$16.3	$16.5	$16.6	$16.8	$16.9	$17.1	$240.4
S. Dixie Hwy. Busway	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$30.0
Palmetto (Rail) Extension	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$39.0
Metro-mover O&M of existing system through the Year 2015	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$309.0
Miami Intermodal Center (MIC) - Construction complete and O&M costs begin in Year 2003	N/A	N/A	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$46.8
O&M for existing Metrorail thru 2015	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$765.0
North Corridor	N/A	N/A	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$379.6
East/West Corridor (Seaport to Palmetto)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$35.0	$35.0	$35.0	$35.0	$35.0	$35.0	$35.0	$245.0
East/West Corridor (Palmetto to FIU)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$12.1	$12.1	$12.1	$12.1	$12.1	$12.1	$12.1	$84.7
East/West Corridor (Dwntwn to Miami Beach)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$26.5	$26.5	$26.5	$26.5	$26.5	$26.5	$26.5	$185.5
US 1: Dwntwn to Broward CL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$32.3	$32.3	$32.3	$32.3	$32.3	$32.3	$32.3	$226.1
Kendall Corridor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$18.1	$18.1	$18.1	$18.1	$18.1	$18.1	$18.1	$126.7
SR826: Dadeland to NW 74 St	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$27.7	$27.7	$27.7	$27.7	$27.7	$27.7	$27.7	$193.9
SW 42/37 Ave: MIC to Douglas Rd. Sta.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$12.1	$12.1	$12.1	$12.1	$12.1	$12.1	$12.1	$84.7
Total	$200.2	$227.9	$268.5	$276.2	$284.0	$291.7	$299.5	$307.2	$478.8	$486.5	$494.3	$502.0	$509.8	$517.5	$519.0	$5,683.1

Table II-10. Transit O&M Costs - Cost Feasible Plan (millions of 1995 dollars)

Cost Feasible Plan (Transit Components)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Buses: Existing 643 and replacement until the Year 2015	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$121.4	$1,821.0
Buses: Expansion from 643 to 850	$2.6	$5.3	$7.9	$10.6	$13.2	$15.8	$18.5	$21.1	$23.8	$26.4	$29.0	$31.7	$33.3	$37.0	$39.0	$315.2
Para-transit Operating and Maintenance	$15.0	$15.1	$15.3	$15.4	$15.6	$15.7	$15.9	$16.0	$16.2	$16.3	$16.5	$16.6	$16.8	$16.9	$17.1	$240.4
S. Dixie Hwy. Busway	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$2.0	$30.0
Palmetto (Rail) Extension	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$2.6	$39.0
Metromover O&M of existing system through the Year 2015	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$20.6	$309.0
Miami Intermodal Center (MIC) - Construction complete and O&M costs begin in Year 2003	N/A	N/A	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$3.6	$46.8
O&M for existing Metrorail thru 2015	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$51.0	$765.0
North Corridor	N/A	N/A	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$29.2	$379.6
East/West Corridor (Seaport to Palmetto)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$35.0	$35.0	$35.0	$35.0	$35.0	$35.0	$35.0	$245.0
Total	$215.2	$218.0	$253.6	$256.4	$259.2	$261.9	$264.8	$267.5	$305.4	$308.1	$310.9	$313.7	$315.5	$319.3	$321.5	$4,191.0

As indicated in **Table II-8,** a transit operating deficit of approximately $800 million for the Cost Feasible Plan will be expected. This deficit will be incurred as a result of a reduction in Section 9 operating subsidies. It was assumed that State and local subsidies will be increased beyond current level to match the cost for the implementation of the Cost Feasible Plan.

II(C)5. Capital and O&M Costs - Highway

Capital and O&M cost estimates for the proposed highway improvements in the Year 2015 Needs Plan were mainly based upon existing estimates of the projects that are included in the previous Year 2010 plan or other existing documentations. Sources of existing costs used are as follows:

- FDOT's preliminary Cost Estimates for Year 2009 to Year 2020, FTP;
- FDOT's 10-Year "Gaming" Report, Years 1995 through 2003;
- Year 2010 Needs Cost Estimates;
- FDOT's Year 2020 FTP Cost Estimate Documentation File;
- MPO Transportation Improvement Program - Year 1995;
- Miscellaneous Unit Cost Information from MPO and FDOT;
- FDOT's Tentative Five Year Transportation Work Program for District 6, Years 1996-2000;
- FDOT's FIHS 2020 Cost Feasible Plan, November 1994.

Base years used for the existing estimates vary. ENR's First Quarterly Report's Construction Cost Index and FDOT 2010 FIHS Needs Plan Costs Estimates were used to develop adjustment factors to update all construction costs to Year 1995 dollars.

County roadways are in the plan but not in the existing reports, the capital costs were developed with parameters supplied by the County. These are:

- Arterial Roadway cost including ROW, CEI and landscaping: $580,000/lane mile,
- PE to be estimated at 7% of construction cost.

The above parameter was also used to check the adequacy of county roadways costs converted from 1990 dollars. Final capital cost estimate of individual highway projects are included in **Appendix VI.**

Highway O&M cost and revenue were also estimated utilizing the data mentioned above for the existing system and expanded for both Needs Plan and Cost Feasible Plan and these are summarized in **Table II-11**.

II(C)6. The Recommended Cost Feasible Plan

Thus far, the development of the Long Range Transportation Plan has involved 1) developing a list of needed projects, regardless of cost, 2) forecasting available revenues, and 3) identifying costs of the listed needs projects. The final step to constructing the Long Range Transportation Plan required developing a cost feasible plan based on identified costs and projected revenues.

The Steering Committee recognized the importance of funding of all types of projects, including bicycle/pedestrian/greenway projects, so a specific percentage of the overall revenue projection was set aside for these categories. In every Priority phase in the Cost Feasible Plan, see Appendix VI, funding has been allocated for "Bicycle/Pedestrian/Greenways" projects. These funds will finance mainly "stand alone" transportation enhancements activities. One aspect of ISTEA is the need to consider projects that may impact demand in the existing and future transportation system. The *Metro-Dade Long Range Transportation Plan Update to the Year 2015* incorporates demand management through the commitment to fund bicycle/pedestrian/greenway projects and the following policy initiative was developed:

Table II-11. Highway O&M Cost and Revenue Summary (millions of 1995 dollars)

Cost	**Needs Plan**		**Cost Feasible Plan**	
	STATE	*LOCAL*	*STATE*	*LOCAL*
Existing System	$735	$668	$735	$668
Expansion	$155	$312	$118	$226
Total Costs	**$890**	$980	$853	**$894**

Revenue	**Needs Plan**		**Cost Feasible Plan**	
	STATE	*LOCAL*	*STATE*	*LOCAL*
Existing System	$735	$668	$735	$668
Expansion	$155	$312	$118	$226
Total Revenues	**$890**	**$980**	**$853**	**$894**

The 1-1/2 % set-aside for Bicycle/Pedestrian/Greenway Projects is a policy recommendation from the Long Range Transportation Plan Steering Committee. It represents a commitment from this urbanized area toward non-motorized uses, such as bicycle, pedestrian and greenway projects. The set-aside is intended for stand-along projects of this nature, but not for sidewalks or bike racks. Sidewalks and bikelanes should be incorporated into typical sections during preliminary engineering work phases of roadway projects. Sidewalks not a part of a typical section or roadway project can continue to be funded through secondary programs such as the Road Impact Fee program. The set-aside could be used to fund bikelanes that would fill in "missing links" in existing bikelane projects. The set-aside would be derived by taking 1-1/2% of all eligible surface transportation capital expenditures, except Interstate, airport and seaport. This set-aside is separate from, and not to be confused with, the Transportation Enhancements program.

As a first step to adjusting the Needs Plan list, projects prioritized during the development of the Needs Plan were subtracted from the available financial resources in **rank order** until the funds were exhausted. This exercise evolved into Scenario 1. However, some projects that got into Scenario 1 were actually ranked lower than others. This is because if there were not enough remaining funds to finance a project, it was omitted and those funds were expended on the next highest ranked project. This process was continued down the priority list until all financial resources had been exhausted. The computer model representing this alternative was run, and evaluation criteria representative of the goal and objectives were used to compile the results.

A second alternative, Scenario 2, was developed shortly after the development of Scenario 1 to remedy some of the problems with the former, that had quickly become apparent. These problems included: serious traffic congestion; a relatively small number of highway projects; and the division of the East/West group of projects.

Regarding this last problem, neither the Interconnector nor the Interconnector HOV lanes, made it into Scenario 1. All indications from the research undertaken by the East/West Team show that the neither SR836 Corridor Rail projects, nor the Miami Intermodal Center (MIC), work optimally without the Interconnector. The East/West team's assumptions are borne out in analyzing the model output from the various Scenarios. For the considerably higher proportion of revenues spent in Scenario 1 for transit projects, the returns in terms of ridership are not proportionately high in Scenario 1, presumably because of the absence of the Interconnector.

To remedy this situation, a second Scenario was developed, in which the East/West "package" would remain intact. These projects consisted of the SR836 projects (MIC to Port and Palmetto to MIC); the MIC/MIA; and the Interconnector with HOV lanes. The remainder of revenues would be spent on highway facilities. The decision was made to include these projects in Scenario 2 for two reasons:

(1) The Committee members had ranked components of the East/West project very high. The MIC to Port and the Palmetto to MIC segments of the SR836 Corridor were ranked #1 and #4, respectively.

(2) The decision was made to complete the Scenario by adding highway - rather than additional transit - projects in rank order, as additional highway projects were determined to be necessary to combat excessive traffic congestion that could otherwise be expected, based upon the results of the Scenario 1 model run.

Scenario 2 was run, and the model output parameters were assembled. At this point, the results of both scenarios 1 and 2 were presented at the March 23, 1995, meeting of the Steering Committee. Based upon the Committee's analysis, the following observations/recommendations were made.

- Through the comparison between the two scenarios, Scenario 2 appeared more favorable.

- Committee agreement was reached that a third scenario be developed that would also include limited transit projects.

The Steering Committee suggested that the following steps be taken to build a Scenario 3:

- It was suggested that there be some set-aside for bicycle/pedestrian, enhancement and greenways projects. Steering Committee agreement was later reached that 1-1/2% be taken off the top of net revenues for these purposes.

- Redefine the SR 112 Extension project to the "smart-street" concept, and rename it as NW 36/41 Street.

- Delete the SW 56 Street project.

- Delete the Gratigny Parkway/NW 47 Avenue interchange.

- Delete the SW 27 Avenue project.

- Include the East-West Corridor transit project component.

- Possibly include the North Corridor.

- Include the South Dixie Busway extension to Homestead/Florida City, but only if the other, above, changes can be made to the alternative, with enough money left over to finance the South Dixie project.

Since the inclusion of the North Corridor transit project was left as a "possibility" (contingent upon ascertaining whether there would be enough financing for it), it was decided to develop *two* more scenarios. Scenario 3 would include all of the changes enumerated above except the North Corridor. Scenario 4 would include the North Corridor, and would exclude those lowest priority projects that could not be financed once the North Corridor had been allocated its share of the revenues.

A final assumption, based upon recommendations from Metro-Dade Transit Agency (MDTA) Steering Committee members, was that some Section Three (Discretionary) funds could probably be assumed in financing the North Corridor. MDTA staff informed the committee that the old matching formulas were gone, but that the combined State and local shares of the project could be expected to be approximately 30%. Thus, in the development of Scenario 4, revenues in the amount of 30% of the estimated cost of the North Corridor were allocated for this project.

Scenarios 3 and 4 were run, and the results compiled. The results were presented to the Steering Committee at the regular meeting, held on April 18, 1995. The following decisions were made regarding the draft scenarios:

- Through the comparison among the four scenarios, Scenario 4, with North Corridor, appeared more favorable.

- The Steering Committee agreed to remove the Coral Reef Drive widening project from the *Needs Plan.*

- Steering Committee members agreed to delete the SR836/NW 97 Avenue interchange project from both the Needs and Cost Feasible Plans.

- Steering Committee members agreed to retain the Central Parkway project in the Needs Plan and to delete it from the Cost Feasible Alternative scenarios.

- The Committee agreed that many of the small, lower priority projects would be constructed to provide access to developer projects. Developers could therefore be expected to construct, or the finance construction, of many of these projects. The "developer projects" were marked as such on the new list of projects, and the North Corridor was left intact.

- In a (6-2) vote, the Committee agreed to retain the SR874 Extension to SW 137/147 Avenue in the Needs Plan, but not in the Cost Feasible Plan.

- Anticipated new and replacement buses should be included in the list. Funding for these had previously been subtracted from revenues, but the buses had not been ranked, nor shown on the lists, as they were viewed as a "given" component of maintaining bus service.

The aforementioned comments were synthesized into a final Recommended Cost Feasible Plan that is shown on **Figure II-6**. The corresponding list of projects is included in **Appendix VI.**

II(D). Highlights of Technical Efforts

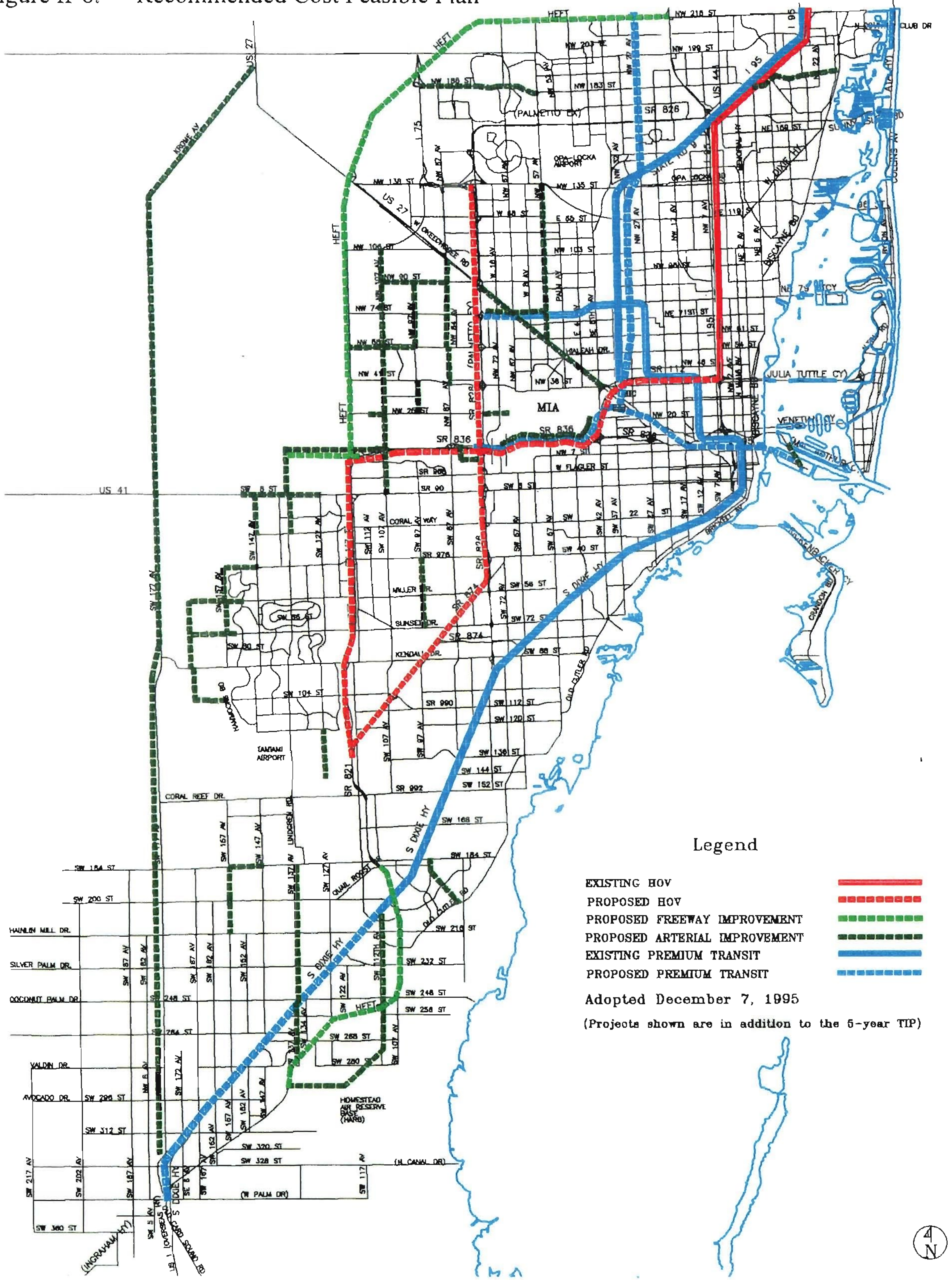
The following sections describe some of the technical efforts of the Metro-Dade Long Range Transportation Plan Update. Significant transportation demand and air quality analysis modeling efforts were devoted for this Update.

II(D)1. Transportation Model Efforts

One key to a successful long range transportation planning effort is the development of a tool with which to forecast travel demand for transportation infrastructure. For this study, one of the earliest tasks was the development of the 1990 Miami Transportation Planning Model (MTPM). The MTPM is a computerized travel demand forecasting model based on the Florida Standard Urban Transportation Model Structure (FSUTMS). FSUTMS is an adaptation of the TRANPLAN travel demand modeling software that is standardized for use throughout Florida. Though FSUTMS provides a standard structure for travel demand models, it maintains flexibility for model enhancements and new data.

The MTPM is based on the 1986 MUATS model, however, several major efforts have been undertaken to enhance the long range transportation planning model based on recent data and studies. First, data became available from the 1990 Census of Population and Housing. These data were the foundation for 1990 base year demographic inventories as well as 2015 projections. The Census Transportation Planning Package data also permitted an evaluation of the models trip generation and trip distribution models for home-based work trips.

Figure II-6. Recommended Cost Feasible Plan



Second, the current studies utilized the nested logit mode choice model to the MTPM. The Miami nested logit model was first developed and adopted for the Transitional Corridors Study. It was later refined for use in the East-West (SR 836) Multimodal Corridor Study and was subsequently adapted for the MTPM. The nested logit model builds on the multi-path, multi-period model originally developed for an earlier MUATS study by replacing the walk access to transit, auto access to transit, and mode choice model with the latest focus in mode choice methodology.

As part of the updated mode choice model, the MTPM is the first long range transportation planning model in the state to consider private transit service in competition with public transit. Separate peak period and off-peak period jitney routes or networks are included in the model. They represent all licensed jitney providers in Dade County.

Another enhancement to the MTPM was the additional ability to forecast the demand for high occupancy vehicle (HOV) expressway facilities. Many of the improvements to the existing expressways in Dade County will be in the form of HOV lanes. As part of this plan update, the MTPM includes the ability to identify daily demand for HOV lanes. Future MTPM development efforts will likely include the ability to forecast HOV lanes demand for peak-periods as well.

The final major enhancement to the model was the replacement of its external trip handling routines. As Dade County and Broward County grow together, it is noted that travel patterns for external travelers become similar to those of travelers who remain in Dade County. The availability of the Southeast Regional Planning Model -2 (SERPM-2) permitted this study to develop and incorporate the intercounty trip movements in a different manner, to the MTPM. The result is that the MTPM now considers external travel demand based not only on the characteristics of Dade County, but also on the characteristics (and growth) of the entire Southeast Florida area.

The result of these efforts is a travel demand forecasting model that is founded on the efforts of earlier long range planning studies, but updated to include the latest enhancement in highway and transit travel demand analysis. As demonstrated in Technical Report #2, Model Validation, the

MTPM is a high quality tool available for this long range transportation planning effort that permits the identification of future transportation infrastructure deficiencies. The model provides planning for demand or deficiency identification of key facilities and to provide information needed to answer policy questions to guide this long range planning process and future planning studies.

Some of the important input data to the model and results of the model are summarized in **Table II-12**, **Table II-13**, and **Figure II-7**. As indicated in **Table II-12**, average highway speed will decrease more than 10 percent between the Years 1990 and 2015 for the Cost Feasible Plan. This is due to dramatic increases in vehicle miles traveled, approximately 52 percent, while lane miles increase by only 19 percent. In contrast, transit and carpool share for the work trip will increase as indicated in **Table II-13**.

II(D)2. Other Efforts

There are two special issues addressed by this Year 2015 Long Range Transportation Plan Update. First, this Long Range Transportation Plan has to be cost feasible. A second requirement is that the Plan has to meet stringent air quality standards.

The Plan's adherence to air quality standards is mandated by the Clean Air Act Amendments (CAAA), and detailed documentation is included in the addendum to this report, the Long Range Transportation Plan to the Year 2015 Air Quality Conformity Determination.

Interestingly, the mandate that the Long Range Plan be cost feasible is a requirement of the CAAA. It is also a requirement of ISTEA. The CAAA requires cost feasibility because the U.S. Environmental Protection Agency (USEPA) wants some assurance when reviewing the report that the planned projects modeled has a high probability of being constructed. The air quality modeling would be relatively meaningless if the included projects were unlikely to be constructed because of revenue shortfalls. So, in order to assure an accurate air quality projections, the CAAA requires that financial resources be forecasted that include only funding sources that are already in place, or are

Table II-12. Highway Miles and Speed

	1980	1985	1990	2015 CFP	2015 NP
Population	1,626,000	1,782,000	1,937,000	2,647,000	2,647,000
Employment	743,000	823,000	902,000	1,341,000	1,341,000
Lane Miles	4,410	4,600	4,790	5,720	5,940
Vehicle Miles Traveled (VMT)	28,614,000	31,567,000	34,520,000	52,334,000	51,670,000
Vehicle Hours Traveled (VHT)	894,000	1,018,000	1,180,000	1,991,000	1,879,000
Average Speed (MPH)	32	31	30	26	28

Table II-13. Mode Share for Journey to Work

Mode	Years			
	1980	1990	2015 CFP	2015 NP
Drive Alone	67.3%	72.4%	60.0%	61.1%
Carpool	19.6%	15.6%	26.0%	26.6%
Public Transportation	6.6%	5.9%	7.9%	6.2%
Walk	3.5%	2.5%	2.5%	2.5%
Other Means	1.8%	1.6%	1.6%	1.6%
Work at Home	1.2%	2.0%	2.0%	2.0%

CFP Cost Feasible Plan
NP Needs Plan

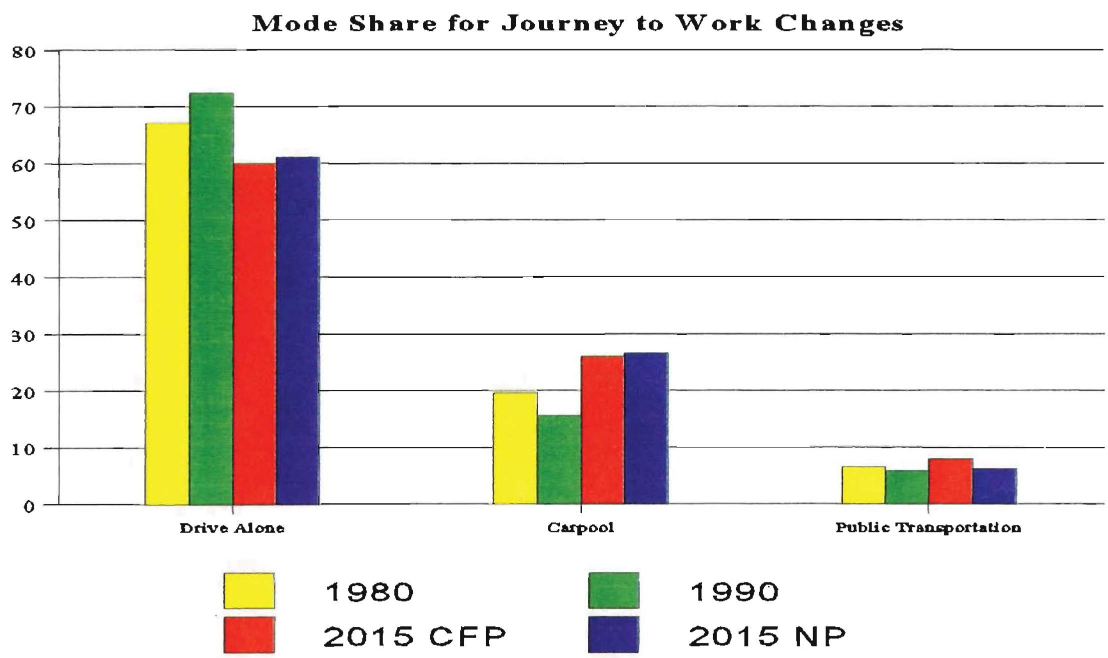
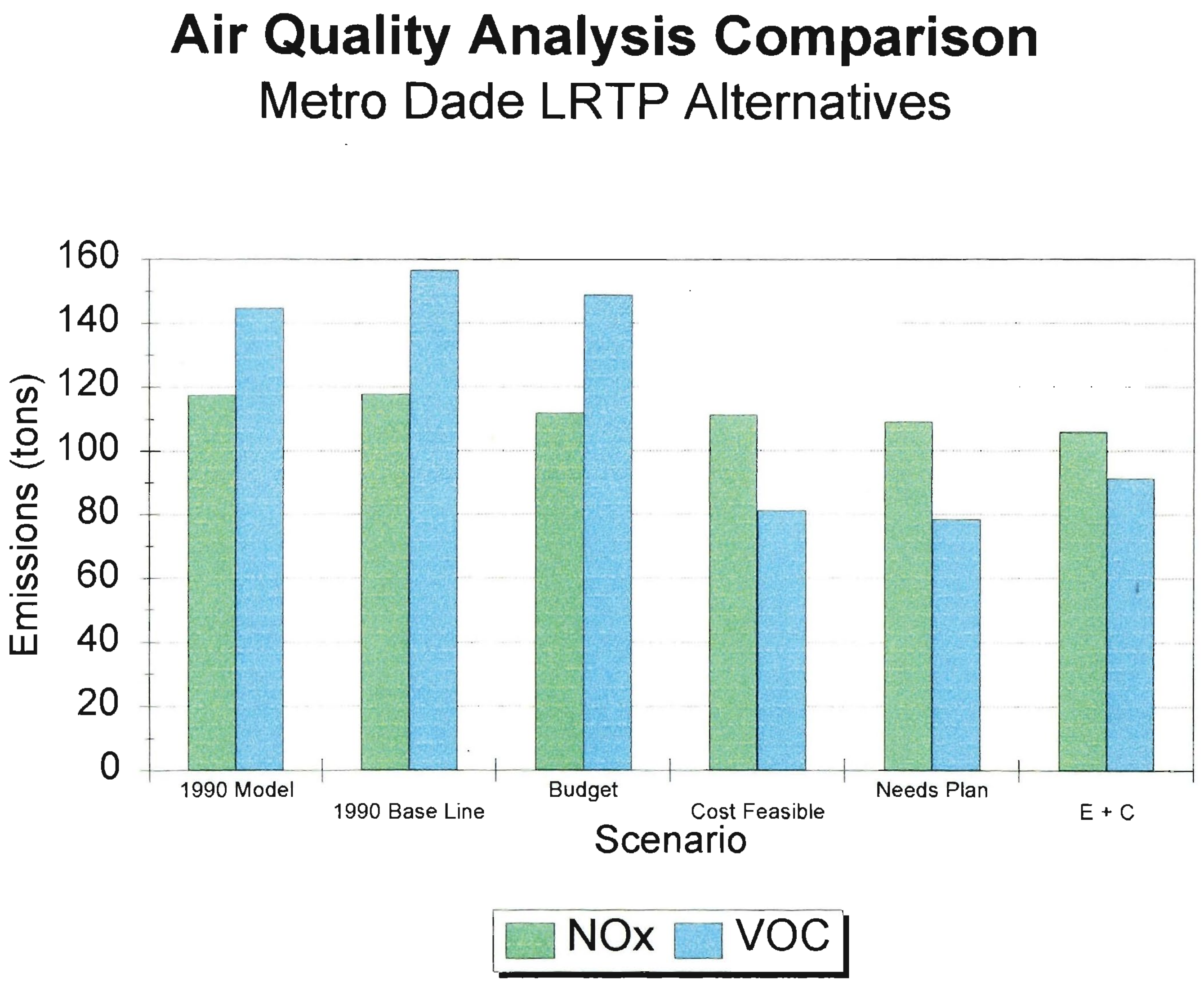


Figure II-7. Mode Share for Journey to Work Comparison very likely to be available. Then, only those projects deemed cost feasible, when their projected costs can be funded based on the funding projections, can be included in the Long Range Transportation Plan.

During this plan development process, various alternatives were tested for air quality conformity. Though growth of projected VMT for the County results in substantial emissions for ozone precursors, NOx and VOC are lower than 1990 values for all scenarios. Due to changes in speeds resulting from congestion, however, various alternatives produce substantially different levels of emissions. **Figure II-8** presents a comparison of emissions from a few of the key alternatives considered. It should be noted that all mobile source emissions were calculated using the U.S. EPA's Mobile5.a model interface to the Long Range Plan's transportation demand estimation model. For a detailed discussion of the air quality conformity determination process, see the Air Quality Conformity Determination Report (Appendix I) produced for the Year 2015 Long Range Plan Update.

Figure II-8. Air Quality Analysis Comparison



III. PROGRAM OF RECOMMENDED PROJECTS

III. PROGRAM OF RECOMMENDED PROJECTS

This section describes, in largely tabular format, the projects which are included in the Long Range Plan. Projects are classified into the following four priorities:

- PRIORITY 1 describes projects to be constructed and opened to service by the Year 2000 or shortly thereafter. These include those projects needed to respond to the most pressing and current urban travel problems. Funds for most of these improvements are already programmed in the MPO's Transportation Improvement Program.

- PRIORITY 2 improvements are development efforts set to commence before 2000, with construction of the project to take place between 2000 and 2005.

- PRIORITY 3 improvements should be completed between the Years 2005 and 2010. Project development activities would need to commence before the Year 2005.

- PRIORITY 4 improvements are those to be made in the latter part of the Plan horizon and completed by the Year 2015. Funding is not available at this time to fund all projects listed as Priority 4, however, all projects in this category are needed and will be funded if additional monies become available.

It should be noted that dates mentioned are for illustration purposes. Actual dates of construction are subject to availability of adequate funding, completion of detailed studies and other relevant considerations and may be advanced or postponed due to these considerations. The construction sequence of projects will nevertheless follow the indicated priority scheme.

Priority I Projects
(Years 1995 to 2000)

(Refer to Appendix II for Priority I projects. The listing is based on items indicated in the current and approved Transportation Improvement Program. Some of the projects listed in the TIP had project development activities commence prior to this Update, but inclusion in the TIP does not necessarily indicate Priority 1 status. Refer to this section for current Priority status.)

MPO METRO-DADE
METROPOLITAN PLANNING ORGANIZATION

Metro-Dade Transportation Plan to the Year 2015

Priority II Projects
(Years 2000 to 2005)

	Project*	Description
North		
N◆	New & Replacement buses (Also in Priorities III, IV)[5]	
N◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities III, IV)[2]	premium transit
N◆	SR112: I-95 to Okeechobee Rd. (6113862)[6]	add one HOV lane (each direction)
N◆	North Corridor Transit[3]	premium transit
N◆	Bicycle/Pedestrian/Greenways (Also in Priorities III, IV)[1]	
N◆	Golden Glades Multimodal Terminal[7]	
N◆	I-95 Intelligent Corridor System[7]	
N◆	I-195 Intelligent Corridor System[7]	
N◆	NW 57 Ave: Okeechobee Rd. to NW 138 St. (6114118)[6]	4 to 6 lanes
Northwest		
NW◆	NW 87 Ave: NW 36 St. to NW 58 St.	4 to 6 lanes
NW◆	New & Replacement buses (Also in Priorities III, IV)[5]	
NW◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities III, IV)[2]	premium transit
NW◆	NW 57 Ave: Okeechobee Rd. to NW 138 St. (6114118)[6]	4 to 6 lanes
NW◆	Bicycle/Pedestrian/Greenways (Also in Priorities III, IV)[1]	
NW◆	NW 74 St: NW 57 Ave. to SR826 (6114162)[6]	4 to 6 lanes
NW◆	SR826: SR874 to I-75 (Also in Priority III and IV)[5]	add one HOV lane (each direction)
NW◆	SW 8 St: SW 127 Ave to SW 152 Ave (6113881)[6]	4 to 6 lanes
NW◆	NW 12 St: NW 110 Ave. to NW 107 Ave.	new 4 lanes
NW◆	NW 25 St: NW 79 Ave to NW 67 Ave (6123194) (study limits are NW 87 to 67 Aves)	4 to 6 lanes (+ interchange improvements)
NW◆	NW 97 Ave: NW 25 St. to NW 41 St.	2 to 4 lanes

* Refer to page III-11 for notes.

Metro-Dade Transportation Plan to the Year 2015

Priority II Projects (Years 2000 to 2005)

	Project*	Description
West		
W◆	New & Replacement buses (Also in Priorities III, IV)[5]	
W◆	SR826: SR874 to I-75 (Also in Priority III and IV)[5]	add one HOV lane (each direction)
W◆	SW 8 St: SW 127 Ave to SW 152 Ave (6113881)[6]	4 to 6 lanes
W◆	Bicycle/Pedestrian/Greenways (Also in Priorities III, IV)[1]	
Central/Beach		
C/B◆	New & Replacement buses (Also in Priorities III, IV)[5]	
C/B◆	NW 57 Ave: Okeechobee Rd. to NW 138 St. (6114118)[6]	4 to 6 lanes
C/B◆	I-195 Intelligent Corridor System[7]	
C/B◆	Bicycle/Pedestrian/Greenways (Also in Priorities III, IV)[1]	
C/B◆	Perimeter Rd: NW 20 St to NW 72 Ave	2 to 4 lanes
C/B◆	I-95 Intelligent Corridor System[7]	
C/B◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities III, IV)[2]	premium transit
C/B◆	NW 74 St: NW 57 Ave. to SR826 (6114162)[6]	4 to 6 lanes
C/B◆	MIC (Also in Priority III)[4]	Miami Intermodal Center
C/B◆	Interconnector: SR 836 to SR112 (Also in Priority III)[4]	new 4 lane & 2 HOV lanes
C/B◆	I-395 Reconstruction, I-95 to MacArthur	reconstruction
South		
S◆	New & Replacement buses (Also in Priorities III, IV)[5]	
S◆	South Dixie busway	premium transit
S◆	Bicycle/Pedestrian/Greenways (Also in Priorities III, IV)[1]	

* Refer to page III-11 for notes.

Metro-Dade Transportation Plan to the Year 2015

Priority III Projects (Years 2005 to 2010)

	Project	Description
North		
N◆	New & Replacement buses (Also in Priorities II, IV)[5] and bus facilities	
N◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, IV)[2]	premium transit
N◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, IV)[1]	
Northwest		
NW◆	NW 25 St: NW 107 Ave. to NW 112 Ave.	2 to 4 lanes
NW◆	New & Replacement buses (Also in Priorities II, IV)[5] and bus facilities	
NW◆	SR826: SR874 to I-75 (Also in Priority II and IV)[5]	Add one HOV lane (each direction)
NW◆	NW 87 Ave: NW 58 St. to Okeechobee Rd.	new 4 lane
NW◆	NW 97 Ave: NW 58 St. to NW 90 St.	2 to 4 lanes and new 4 lane
NW◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, IV)[2]	premium transit
NW◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, IV)[1]	
NW◆	SW 137 Ave: NW 12 St to SW 8 St.	2 to 6 lanes
NW◆	NW 12 St: NW 122 Ave. to NW 137 Ave.	2 to 4 lanes and new 4 lane
NW◆	NW 12 St: NW 110 Ave. to NW 122 Ave.	2 to 4 lanes
NW◆	SR836 Corridor: SR826 to HEFT[2]	add one HOV lane (each direction)

* Refer to page III-11 for notes.

Metro-Dade Transportation Plan to the Year 2015

Priority III Projects (Years 2005 to 2010)

	Project	Description
West		
W◆	SR826: SR874 to I-75 (Also in Priority II and IV)[5]	Add one HOV lane (each direction)
W◆	New & Replacement buses (Also in Priorities II, IV)[5] and bus facilities	
W◆	SR874: HEFT to SR826 (6113823)[6]	4 & 6 lanes to 8 lanes (make 3 + 1 HOV each direction)
W◆	SW 137 Ave: SW 8 St. to SW 26 St.	4 to 6 lanes
W◆	SW 137 Ave: NW 12 St to SW 8 St.	2 to 6 lanes
W◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, IV)[1]	
Central/Beach		
C/B◆	Port Tunnel	new 4 lane divided arterial
C/B◆	MIC (Also in Priority II)[4]	Miami Intermodal Center
C/B◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, IV)[2]	premium transit
C/B◆	I-395 Intelligent Corridor System[7]	
C/B◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, IV)[1]	
C/B◆	Interconnector: SR 836 to SR112 (Also in Priority II)[4]	new 4 lane & 2 HOV lanes
C/B◆	SR836 Corridor: SR826 to LeJeune[2]	add one HOV lane (each direction)
C/B◆	New & Replacement buses (Also in Priorities II, IV)[5] and bus facilities	
South		
S◆	SW 137 Ave: US 1 to HEFT	2 to 4 lanes
S◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, IV)[1]	
S◆	SW 112 Ave: Homestead Air Reserve Base to HEFT along SW 112 Ave.	widen to 6 lanes throughout
S◆	New & Replacement buses (Also in Priorities II, IV)[5] and bus facilities	

* Refer to page III-11 for notes.

Metro-Dade Transportation Plan to the Year 2015

Priority IV Projects
(Years 2010 to 2015)

	Project	Description
North		
N◆	New & Replacement buses (Also in Priorities II, III)[5] and bus facilities	
N◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, III)[2]	premium transit
N◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, III)[1]	
Northwest		
NW◆	New & Replacement buses (Also in Priorities II, III)[5] and bus facilities	
NW◆	Krome Ave: SW 8 St to Okeechobee	2 lanes with access rights protection
NW◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, III)[1]	
NW◆	SR826: SR874 to I-75 (Also in Priority II and III)[5]	Add one HOV lane (each direction)
NW◆	I-75 Intelligent Corridor System[7]	
NW◆	NW 183 St: I-75 to NW 57 Ave	4 to 6 lanes
NW◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, III)[2]	premium transit
NW◆	NW 58 St: NW 97 Ave. to NW 117 Ave.	2 to 4 lanes
NW◆	NW/SW 107 Ave: NW 41 St. to SW 8 St. (6113948)	4 to 6 lanes
NW◆	NW 107 Ave: NW 106 St. to NW 41 St.	widen to 4 lanes
NW◆	SR836: HEFT to NW 137 Ave. (6113860)	new 6 lane expressway extension

* Refer to page III-11 for notes.

Metro-Dade Transportation Plan to the Year 2015

Priority IV Projects (Years 2010 to 2015)

	Project	Description
West		
W◆	New & Replacement buses (Also in Priorities II, III)[5] and bus facilities	
W◆	SR826: SR874 to I-75 (Also in priority II and III)[5]	Add one HOV lane (each direction)
W◆	SW 97 Ave: SW 72 St to SW 40 St	2 to 4 lanes
W◆	NW/SW 107 Ave: NW 41 St. to SW 8 St. (6113948)	4 to 6 lanes
W◆	SW 127 Ave: SW 120 St to SW 144 St	new 4 lanes
W◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, III)[1]	
Central/Beach		
C/B◆	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, III)[2]	premium transit
C/B◆	New & Replacement buses (Also in Priorities II, III)[5] and bus facilities	
C/B◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, III)[1]	
C/B◆	NW 183 St: NE 6 Ave to US 1 (6114260)[6]	4 to 6 lanes
C/B◆	Okeechobee Rd: SR112 to SR826	widen to 6 lanes
South		
S◆	Krome Ave: SW 8 St. to US1 (6113791)[6]	2 lanes with access rights protection
S◆	SW 184 St: SW 157 Ave to SW 147 Ave	2 to 4 lanes
S◆	SW 112 Ave: US 1 to Moody Dr.	4 to 6 lanes
S◆	Franjo Rd: SW 184 St to Old Cutler	2 to 4 lanes
S◆	Bicycle/Pedestrian/Greenways (Also in Priorities II, III)[1]	
S◆	SW 137 Ave: SW 184 St to US1	widen to 4 lanes
S◆	New & Replacement buses (Also in Priorities II, III)[5] and bus facilities	

* Refer to page III-11 for notes.

Metro-Dade Transportation Plan to the Year 2015

Priority IV Projects (Years 2010 to 2015)

	Project	Description
	Unfunded Element of Needs Plan (Priority IV)	
North		
N◆	I-95 Multimodal Master Plan Improvements[7]	
N◆	I-95 Downtown Distributor Ramps[7]	
N◆	US 1: Downtown to Broward County Line	premium transit[8]
N◆	SR826: NW 158 St. to GGI (6113880)[6]	add one HOV lane (each direction)
N◆	LeJeune Rd: SR112 to NW 103 St.	5 to 6 lanes
N◆	Central Parkway	New 6-lane parkway (assumed public sector costs for interchanges)
N◆	SR826	Intelligent Corridor System (ICS)
N◆	SR112	Intelligent Corridor System (ICS)
Northwest		
NW◆	Northwest 74 Street: 826 to HEFT	new 6-lane road
NW◆	Northwest 36/41 Street: NW 42nd to HEFT	Express Street (grade separations, ITS, etc.)
NW◆	SR836	Intelligent Corridor System (ICS)
NW◆	SR836 Corridor: Palmetto to FIU	premium transit
NW◆	SR826	Intelligent Corridor System (ICS)
NW◆	SR826: NW 158 St. to GGI (6113880)[6]	add one HOV lane (each direction)
NW◆	SR826: Dadeland to NW 74 St	premium transit[8]
NW◆	NW 170 St: NW 77 Ave. to NW 87 Ave.	2 to 4 lanes
West		
W◆	SW 77 Ave: SW 104 St. to SW 152 St.	2 to 4 lanes
W◆	Kendall Corridor: Dadeland North to SW 147 Ave	premium transit[8]

* Refer to page III-11 for notes.

Metro-Dade Transportation Plan to the Year 2015

Priority IV Projects (Years 2010 to 2015)

	Project	Description
	Unfunded Element of Needs Plan (Priority IV)	
W◆	SR 985/SW 107 Ave: SW 40 St to SW 24 St (6113770)[6]	4 to 6 lanes
W◆	SW 120 St: SW 137 Ave to SW 117 Ave	4 to 6 lanes
W◆	SR874: HEFT to SW 137 Ave	new 6-lane expressway extension with arterial step-down to SW 147 Ave
W◆	SR836 Corridor: Palmetto to FIU	premium transit
W◆	SW 157 Ave: SW 88 St. to SW 104 St.	2 to 4 lanes
W◆	SR826: Dadeland to NW 74 St	premium transit[8]
W◆	SR874	Intelligent Corridor System (ICS)
W◆	SR826	Intelligent Corridor System (ICS)
Central/Beach		
C/B◆	SR836/I-395/I-95 Major Interchange Improvement	
C/B◆	SR836 Corridor: Downtown to Miami Beach	premium transit[8]
C/B◆	LeJeune Rd: SR112 to NW 103 St.	5 to 6 lanes
C/B◆	SW 42/37 Ave: MIC to Douglas Rd. Sta.	premium transit[8]
C/B◆	SR836	Intelligent Corridor System (ICS)
C/B◆	US 1: Downtown to Broward County Line	premium transit[8]
South		
S◆	SW 152 Ave: US1 to SW 312 St.	2 to 4 lanes
S◆	SW 87 Ave: SW 168 St. to SW 216 St.	2 to 4 lanes
S◆	SW 200 St: US1 to Quail Roost Dr.	2 to 4 lanes

* Refer to page III-11 for notes.

Notes:

[1]The Bicycle/Pedestrian/Greenways funds are estimated to consist of 1.5% of projected non-interstate highway revenues to the plan period. One-third of these funds are programmed in each of the three priority categories (II-IV) in which the Long Range Plan projects are grouped.

[2]The various components of the East/West (SR836) projects are programmed such that the total amount programmed represents the "LRTP funds" requested by the East/West Project Team. Additional revenues from private and other sources are a part of the East-West Project Financial Plan.

[3]The "Cost to the Long Range Plan" for the North Corridor represents 30% of the total project costs. The remaining 70% is assumed to be provided via Section 3 Federal Discretionary funding.

[4]The Interconnector and the Miami Intermodal Center (MIC) are being studied by a project team that published a July 1995 Draft Environmental Impact Statement (DEIS). The MIC Team has requested the equivalent of $300 million (1995 dollars) from "LRTP funds".

[5]One third of the new and replacement buses that are anticipated to be needed are programmed in each of priorities II through IV. Also, for the project on SR826, adding HOV from SR874 to I-75, one-half of the funds are programmed in Priority II and one-half in Priority III.

[6]The "Cost to the Long Range Plan" for these projects is shown less the amounts already programmed in the current TIP.

[7]The interstate project costs are equal to the Interstate funds available through the year 2015 as calculated by FDOT - Central Office. To derive Year 2015 Interstate funding, 75% of the Central Office Year 2020 projections were utilized. Central Office had reported these funds in 1993 dollars. For the purpose of this report, these were inflated to 1995 dollars. Thus, both Interstate capital costs and Interstate funding are approximately equal to $240.7 million.

[8]The highest level of urban transit technology was assumed to develop cost estimates. Future studies will determine the most feasible technology and its cost.

Long Range Transportation Plan Update (to the Year 2015)

Projects on the Turnpike System

(in Dade County, on the Homestead Extension of Florida's Turnpike (HEFT); listed from north to south)

- HEFT: I-75 to Florida Turnpike (mainline) widen from 4 to 6 lanes
- HEFT: NW 41 Street to I-75 widen from 4 to 6 lanes
- HEFT: at NW 74 Street construct interchange
- HEFT: SR-836 to NW 41 Street widen from 4 to 6 lanes
- HEFT: SR-836 to SR-874 add one HOV lane each direction
- HEFT: Quail Roost Drive to Biscayne Drive widen from 4 to 6 lanes

Notes:

1. These projects are listed from north to south for descriptive purposes only. This order does not suggest an implementation schedule. The Turnpike District is continuing a Master Plan and other long range planning efforts to phase projects, including those listed above, on the Turnpike system.

2. These projects are assumed to be funded by the Turnpike, for purposes of developing the Cost Feasible Plan. Costs for these projects have not been subtracted from Dade County's Long Range Transportation Plan revenue stream. While further assessment will be done on this list of projects, they are considered to be needed and funded Priority II projects in this Plan.

3. The Turnpike District has reviewed, and concurs with, this list of project proposals. The Turnpike District has provided additional clarification that these projects will include, wherever possible, the addition of electronic toll traffic management (ETTM) and other high-tech components as Intelligent Transportation System (ITS) elements.

Roadway Projects Assumed to be Funded by Developer/Private Sector

(These projects are assumed to completed using private sector funds, which are not a part of the Cost Feasible Plan revenue stream)

• NW 7 Street: NW 77 Ave. to NW 82 Ave.	new 4 lane road
• SW 42 Street: SW 147 Ave. to SW 157 Ave.	new 2 lane road
• SW 56 Street: SW 152 Ave. to SW 157 Ave.	new 4 lane road
• SW 56 Street: SW 157 Ave. to SW 167 Ave.	new 2 lane road
• SW 72 Street: SW 154 Ave. to SW 167 Ave.	new 2 lane road
• NW 82 Avenue: NW 7 St. to NW 12 St.	new 4 lane road
• NW 90 Street: NW 107 Ave. to NW 87 Ave.	new 2 lane road
• SW 104 Street: SW 152 Ave. to SW 167 Ave.	widen from 2 to 4 lanes and new 4 lane road(new 4 lane from SW 157 to 162 Aves.)
• SW 147 Avenue: SW 8 St. to SW 26 St.	new 4 lane road
• SW 157 Avenue: SW 42 St. to SW 56 St.	new 2 lane road
• SW 157 Avenue: SW 56 St. to SW 72 St.	new 4 lane road
• SW 157 Avenue: SW 184 St. to SW 216 St.	new 2 lane road
• SW 167 Avenue: SW 56 St. to SW 88 St.	new 2 lane road
• SW 167 Avenue: SW 88 St. to SW 104 St.	new 2 lane road

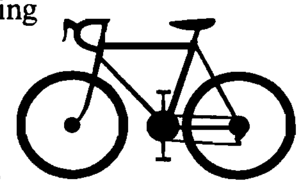
IV. RELATIONSHIP OF THE PLAN TO OTHER STUDIES AND EFFORTS

IV. RELATIONSHIP OF THE PLAN TO OTHER STUDIES AND EFFORTS

The Long Range Plan Update to the Year 2015 is not a Plan that is meant to exist in isolation from the region's other transportation planning efforts. On the contrary, the Long Range Plan and its various compon ents must be integrated with other impacted plans, for any to realize its full potential. The following section highlights other plans, and their relationships to the Long Range Plan.

IV(A). Bicycle/Pedestrian Program and the Facilities Plan

The Metro-Dade Bicycle/Pedestrian Program's goal is to address non-motorized transportation for both commuting and recreation. Among Florida residents cycling/walking rank first as the most popular outdoor recreational activities. In the mid-1960's, Dade County began to establish a bikeway system to assist with mobility, and later hired a full-time Bicycle/Pedestrian Coordinator to implement and oversee an area-wide bicycle/pedestrian program. In addition to initiating/overseeing the development of the Bicycle Facilities Plan the Program includes the following elements:



- Educate citizens and visitors how to safely use non-motorized transportation. Support is provided to the Dade County School Board's Traffic Education Program. Planning and engineering professionals are advised regarding the needs of cyclists and pedestrians.

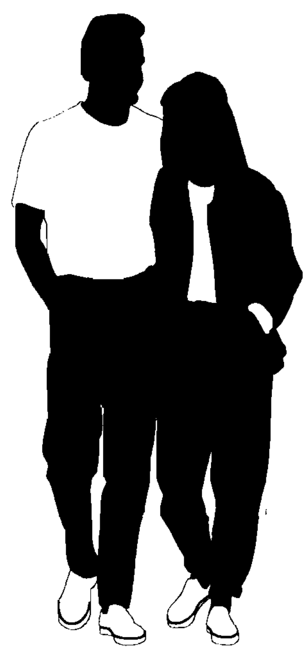
- Encourage the use of non-motorized alternatives for commuting options and links with public transportation through programs such as Bikes-On-Bus, Bikes-On-Trains and bicycle lockers. A map was developed to indicate more suitable roadways for bicycling throughout Dade County.

- Support the enforcement of traffic laws. Staff reviews legislation concerning bicycle laws; proposes programs to enhance law department awareness/adherence; provides information to the general public on applicable traffic laws; as well as takes a role as legal counsel for lawsuits.

- Provides advice for engineering practices and projects to provide necessary bicycle/pedestrian access to businesses, schools and recreation areas throughout Dade County. Projects are also coordinated with the Florida Department of Transportation municipalities and private developers.

The Metro-Dade Bicycle Facilities Plan was developed by the Miami Urbanized Area Metropolitan Planning Organization's Bicycle/Pedestrian Program staff, Enhancement Coordinator, and a consulting team. The purpose of the Bicycle Plan is to promote the bicycle mode as a viable mode of transportation.

The Bicycle Plan and the Long Range Plan are very compatible, in that the long Range Plan has set aside money for the bikeways recommended in the Bicycle Plan (See Section III of this document). Further harmony exists between the two Plans because the fact that both help to satisfy the same pieces of legislation. the Intermodal Surface Transportation Efficiency Act (ISTEA) and the Clean Air Act Amendment (CAAA) are cited in the Executive Summary of the Bicycle Plan as having "...renewed incentive for planning agencies to emphasize bicycling and walking as significant components of the transportation mix." This same emphasis has been called for within the Metro-Dade Comprehensive Plan for many years. With the adoption of Bicycle Facilities Plan, Metro-Dade is on its way to formally incorporating these objectives into the overall planning process.

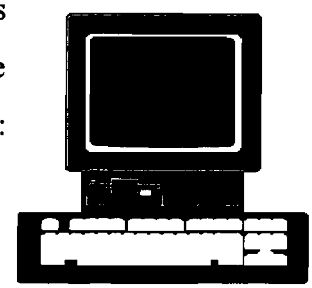


All three Plans also further the area's Congestion Management System (CMS), as the Federal Regulations mandating the CMS call for it to incorporate the encouragement of bicycling facilities. The Long Range Plan's relationship to the area's CMS is discussed in Section IV(B)1, below.

The Bicycle Plan provides for the inclusion of the bicycle mode in the Plans for the Miami Intermodal Center and the East-West transit corridor. Both these nationally recognized projects are included in, and partially financed through, the Long Range Plan.

IV(B). Management Systems

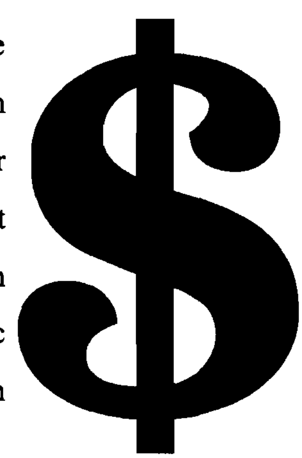
The Intermodal Surface Transportation Efficiency Act (ISTEA) requires each state, in conjunction with the MPOs, to develop and implement the following management systems and a data monitoring system. These are:



- congestion,
- intermodal transportation facilities and systems,
- public transportation facilities and equipment,
- highway pavement,
- bridges,
- highway safety, and
- monitoring system for highways.

These management systems must include information and strategies to improve the performance of the existing and future facilities. They should establish a link between the needs identified through the management systems and the available financing. The results of the six management systems should be integrated into the regional planning and programming processes. The former three systems, those for congestion, intermodal transportation, and public transportation, lend themselves more to integration with the Long Range Plan. While the more operational latter three systems, highway pavement, bridges, and highway safety, will be integrated into the State's shorter term programming functions.

IV(B)1. Congestion Management System



The Intermodal Surface Transportation Efficiency Act calls for the development and implementation of a Congestion Management System (CMS). The purpose of the CMS is to (1) identify candidate corridors for capital and/or management actions and prioritize management improvements, and to (2) identify cost-effective travel demand reduction and operational actions to manage new and existing facilities so that traffic congestion is reduced. The CMS will be utilized as a filter in which corridors, from the LRTP with proposed capital improvements will be analyzed before inclusion in the TIP. This will achieve a systematic process that provides information on transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods.

The Metro-Dade MPO has initiated efforts to develop such a system to address congestion. Currently, the Metro-Dade MPO is in the process of developing a more detailed CMS as required by ISTEA. Although this effort is not complete, the basic conceptual elements of the system have been identified. The CMS will identify candidate corridors from the Long Range Plan for management and highway or transit capital improvement actions. Capital improvement corridors will then be pursued in the long-range planning process. In order to further enhance the CMS compatibility with the LRTP the areas of analysis will be the same. This will provide continuity within the public involvement process. Additionally, management actions will be pursued as part of the CMS activities. Because the Miami region is an air quality maintenance area, management actions also must accompany all capital investment projects, including single occupant vehicle capacity projects.

The tenets of the interim Congestion Management System were employed in the development of the list of projects that would comprise the Needs Plan component of the 2015 Long Range Plan Update. Solutions to congestion were examined through a structured process of identifying existing and projected congestion; assessing the potential travel demand management programs and/or highway efficiency improvements to alleviate the congestion; and finally considering capital improvements.

<u>TMAs as Components of the Congestion Management System</u> - The document, *Investigation of Alternative TMAs*, was prepared in October 1994 for the Metro-Dade MPO. The document was a component of the MPO's Continuing Development of TMAs project., which was, in turn, a component of the County's Congestion Management Plan. The Plan advocated the implementation of TMAs wherever feasible, and this report explored the feasibility of "alternative" TMAs.

Alternative TMAs are those which are not solely employer-based, but are instead based around hospitals, airports, universities, neighborhoods/housing developments, and/or citizen's groups or associations. The report looks at several such alternative TMAs around the country to discern the characteristics of a successful - as opposed to an unsuccessful - alternative TMA.

The successful TMAs were found to be those that possessed some, but not necessarily all of the following characteristics:

1 - MISSION

- There must be definite transportation needs addressable by a TMA.
- The TMA's program must meet those needs.
- The program should need TMA assistance to achieve implementation.
- Several major employers must be located in the TMA service area.

2 - SUPPORT

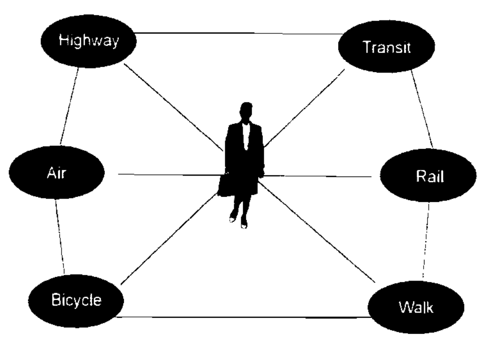
- Employers must adopt and support the TMA's mission.
- The TMA must have credibility with the public sector (transportation).
- The TMA must have both public and private sector support.
- The TMA should represent private sector interests.
- TMA leadership must be entrepreneurial.

3 - ACCOMPLISHMENT

- An annual monitoring program should evaluate TMA accomplishments toward goals.
- TMA should show early trip reduction success.
- Continuation should be dependent on accomplishments.

IV(B)2. Intermodal Management System

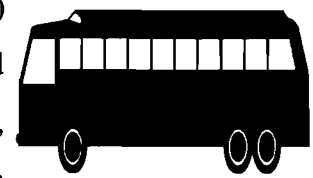
The objectives of the Intermodal Management System (IMS) is to promote the following concepts: integrate transportation facilities and systems; improve coordination in planning and implementation of air and surface transportation systems; identify cost-effective capital and/or management acts and prioritize improvements; assure that connections and transitions between modes for both passenger and freight service are as seamless as possible. An additional objective of the IMS plan is a philosophy which encourages intermodal considerations by the various public and private partners. Planning for interchange facilities involve considerations of both space and time. Separate modal facilities need to be located in close proximity to facilitate the transfers of passengers and goods. Service planning between modes also needs to take into consideration the arrival and departure times of various modes.



Many projects have been adopted into this Plan that incorporate the objectives of the IMS. This Plan considers the intermodal transportation needs by considering projects that: afford convenient and efficient connections among modes, provide opportunities for mode choice, facilitate intermodal connections, and resolve transportation demand by investing in high-quality transportation service by a single or combination of modes. IMS components include the: identification of intermodal facilities, identification of performance measures, system monitoring, system efficiency evaluation, and strategy and action identification.

The Miami Intermodal Center (MIC) is the chief intermodal facility included in the Long Range Plan Update. With a proposed location adjacent to the Miami International Airport, the MIC is slated to facilitate intermodal transfers among air, rail, port, bus, and taxi/jitney patrons. An extension of Miami's Metrorail system, specifically the East/West (SR 836) corridor, is slated to be constructed in such as alignment that it will interface with the facility. A more lengthy discussion of this rail corridor and of the MIC can be found in Section IV.D. East-West Multimodal Corridor Study, below.

IV(B)3. Public Transportation Management System



The purposes of the Public Transit Facilities Management System (PTMS) is to organize information, to facilitate the identification and implementation of strategies to provide public transit services, facilities, equipment, and rolling stock in a cost-effective manner, and to maintain transit assets in a serviceable condition. The PTMS provides system-wide estimates of the effects of investment decisions on the condition of the transportation system.

The PTMS supports statewide and metropolitan planning and programming by identifying transit capital needs. Development of the PTMS is a collaborative effort between FDOT, the Metro-Dade MPO, and transit operators to define system goals and objectives which best meet community needs. The PTMS includes the: identification of condition measures, data collection and system monitoring, identification and evaluation of proposed strategies and projects, and the implementation of strategies and projects.

IV(C). Intelligent Corridor System

In 1994, the Florida Department of Transportation (FDOT), Districts 4 and 6, published the Southeast Florida Intelligent Corridor System (ICS) report. Like the Long Range Plan, this ICS report furthers the tenets of the Intermodal Surface Transportation Efficiency Act (ISTEA), in that it acknowledges the fact that road-building alone will not solve urban transportation problems. The ICS report suggests mitigating congestion through the following measures:

- Manage Traffic on Freeways,
- Manage traffic on Surface Streets,
- Provide Pre-Trip Traveler Information,

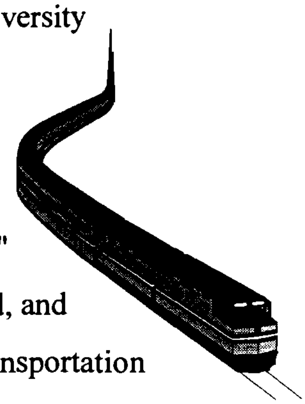
- Provide Enroute Traveler Information,
- Provide Priority Treatment to HOV and Transit Vehicles,
- Encourage Mode Shift, and
- Improve Incident Management.

The Long Range Plan will work in concert with the ICS Plan to accomplish these goals. The first, "Manage Traffic on Freeways," will be partially accomplished with some of the interstate funds planned for ICS projects (on I-95 and I-395). These are included in the Long Range Plan, and are shown in Section III of this report.

The ICS goal of "Providing Priority Treatment to HOV and Transit Vehicles" is furthered by the Long Range Plan. Many of the projects illustrated in Section III of this report entail the addition of HOV (High Occupancy Vehicle) lanes. The goal of "Encouraging Mode Shift" is also fostered by the Long Range Plan, again, Section III of this report shows several new multi-modal projects, including the Miami Intermodal Center (MIC) and the East-West (SR 836) Transit Corridor, as described below in Section IV(D) of this report.

IV(D). East-West Multimodal Corridor Study

The East/West Corridor is defined as beginning at Florida International University (FIU) in West Dade extending along SR 836, through downtown Miami and to the Port of Miami, and terminating at the Miami Beach Convention Center. In July 1995, FDOT and their consultant team published the draft "Major Investment Study/Draft Environmental Impact Statement" (MIS/DEIS) relative to the corridor. This document was fully considered, and incorporated to the greatest extent possible, into the draft Long Range Transportation Plan to the Year 2015.



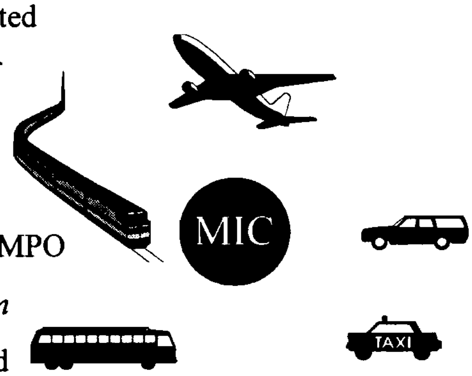
In addition to Purpose and Need statements and Environmental analyses, the document contains chapters on the various Alternatives Considered and on Financial implications of the corridor.

Concepts from the two latter chapters that were adapted and incorporated into the update. Relative to Alternatives Considered, the study found that the Minimum Operable Segment (MOS) was the portion of the corridor extending from the Palmetto Expressway to the Port of Miami via the Miami Intermodal Center (MIC) and the Miami CBD, and including the construction of the Interconnector highway project.

The results of the study were that, with some innovative new financial resources, the construction of the MOS could be funded and O&M expenses could be covered. The study proposed levels of funding for both capital and O&M expenses that could reasonably be expected from the various sources along with the years in which they would be needed. Funds expected from what the study termed the "Long Range Plan Revenues" for both types of expenses were set aside from Long Range Plan funds in the amounts requested, thus rendering the two plans compatible. Detailed information regarding the magnitude of the proposed funding is contained in this report in Sections II (C) 3. Capital - Transit Costs and II (C) 3. O&M - Transit Costs.

IV(E). Miami Intermodal Center

An environmental and conceptual engineering evaluation of the proposed Miami Intermodal Center (MIC) is currently underway as part of a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS). Two previous studies were conducted that ultimately led to the decision to study the feasibility of constructing a multimodal center in Dade County, the *Miami International Airport Transportation Study* (1989) and the *Airport Area Multimodal Access Study* (1992). The MPO conducted the *Miami International Airport Transportation Study* (1989) to identify roadway improvements that could facilitate the circulation of traffic into and around MIA and could accommodate the rapid growth projected for MIA area roadways. The MPO and the FDOT conducted the *Airport Area Multimodal Access Study* (1992) to assess the feasibility of locating a multimodal center in the vicinity of Miami International Airport. The 1992 study concluded with a recommendation to link a multimodal center



with the existing MIA passenger terminal by way of an Automated Guideway Transit (AGT) system and to improve current access to MIA and the proposed multimodal center.

The study area for the MIC is bordered by SR 112 and SR 836 on the north and south, NW 27th Avenue on the east, and the landside terminal area of Miami International Airport on the west to NW 57th Avenue. As of late-1994, the MIC Policy Steering Committee recommended that two alternatives for locating the MIC and for providing access to the MIC by way of a new regional roadway and an AGT system connecting the MIC with MIA be studied further as part of the MIS/DEIS. The MIC would incorporate extensions of existing rail and commuter rail, future High Speed Rail (HSR), Metrobus, and a future East-West Corridor rail line. In conjunction with the development of the MIC, conceptual alternatives for a supporting roadway network, including a SR 836/SR 112 expressway interconnector roadway (SR 836/SR 112 Interconnector) and local access roads, and a MIC to MIA terminal fixed guideway connector (MIC/MIA Connector) are also being considered as part of the proposed alternatives.

As stated in the draft MIS/DEIS the long range transportation goal for the MIC is to provide for a safe, efficient, economical, attractive and integrated multimodal transportation system that offers convenient, accessible, and affordable mobility for all people and for the movement of goods. This goal for the MIC is consistent with the goal and objectives of the Metro-Dade Long Range Transportation Plan.

The draft MIS/DEIS for the MIC describes the funding that would be necessary to finance the capital and O&M costs associated with the facility. The report specifies sources from which various proportions of funding are expected to be derived. A portion of the funding is expected from so-called "Long Range Plan Revenues." The necessary funds for the MIC were allocated as part of the Cost Feasible Plan and are depicted in Appendix VI of this report.

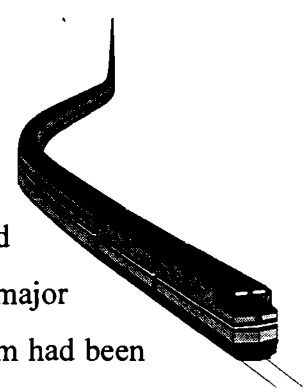
IV(F). Interstate Master Plans

At the time of the completion of the Long Range Transportation Plan Update to the Year 2015, the Southeast Florida Multimodal Transportation Corridor Study was underway, having been initiated earlier in 1995. The Corridor Study encompasses I-95, I-595, I-195, and the South Florida Rail Corridor. The purpose of the study is to develop a phased program of improvements projects for these corridors through the Year 2020. As with the Long Range Plan, the requirements of the CAAA and ISTEA will be incorporated into the Corridor Study.

The Corridor Study, like the Long range Plan, has a multi-modal emphasis. Once the Year 2020 capacity needs are determined for the aforementioned facilities, a series of Conceptual Mobility Enhancement Alternatives (CMEAs) will be developed. These will consider such multi-modal options as HOV lanes, intelligent transportation system technology, ramp metering, increased Tri-Rail service, additional park n' ride lots, improved bus service, and land use modifications - in addition to the more traditional roadway and interchange improvements.

Because transportation improvements must both have MPO Board approval and be a part of the Long Range Plan in order to be included in the FDOT work Program, and subsequently constructed, the final alternatives selected as a result of the Corridor Study will be submitted for MPO Board approval. An extensive public involvement process is also planned.

IV(G). High Speed Rail Plan



In 1995, as the Long Range Plan was being finalized, the FDOT was receiving proposals from private sector entities to finance, build and operate the Florida high speed rail transportation system which will link major Florida Cities. Prior to the letting of bids, the market for such a system had been studied extensively, with various viable scenarios for connecting cities being examined for their viability.

The Florida High Speed and Intercity Rail Market and Ridership Study was finalized in July 1993. It provided ridership projections among various (groups of cities). A Tampa-Orlando-Miami Corridor was generally favored by the report. The principal Miami High Speed Rail station was anticipated to be at the proposed Miami Intermodal Center (MIC) adjacent to the Miami International Airport.

The construction and partial funding of the MIC are included in this Long Range Transportation Plan. The MIC is discussed further in Section IV.(D), above. While the MIC is included in the Long Range Plan, High Speed Rail was not modeled as part of this effort. That is because it would not be especially useful to model High Speed Rail as part of a one county model, as there would be no significant intra-county travel, and the modeling of the inter-county travel has already been accomplished as part of the Florida High Speed and Intercity Rail Market and Ridership Study as described above.

Though High Speed Rail is not modeled, per se, in conjunction with the development of the Long Range Plan, the two Plans are compatible and related. They are related in that both include the MIC, are multimodal in nature, and are compatible in that both further the tenets of the ISTEA.

Included in ISTEA are the National High-Speed Ground Transportation Programs. A magnetic levitation program is authorized at a sum of $725 million under the Act. These funds will be directed toward the development of one prototype project, nationwide. A separate $50 million high speed ground transportation demonstration program will fund selected projects that include new technologies related to high speed rail or maglev projects already under construction or in operation. The funding for High Speed Rail will not be derived from Long Range Transportation Plan revenues, the funding for High Speed Rail is a separate and distinct source.

IV(H). Metro-Dade Marketplace: Destination 2001

The development of the transportation infrastructure is an integral part of the overall economic development of Miami. This is well illustrated in the document *Metro-Miami Marketplace: Destination 2001*, published April 1, 1995 by the Transportation and Strategic Infrastructure Planning and Development Committee of the Metropolitan Dade County Board of County Commissioners.

2001

The document explores Miami's potential as an international trade center, and then outlines a strategy that would help Miami meet this potential. The strategy includes many transportation elements, as the committee felt that the transportation system was vital to Miami's success in competing in the world market. Recommendations of the Select Committee are listed below. Those elements that are also components of the Long Range Plan Update to the Year 2015 are italicized.

RECOMMENDATIONS OF
THE SELECT COMMITTEE OF
METRO-MIAMI MARKETPLACE: DESTINATION 2001

AIRPORT

- Develop a new Miami International Airport strategic plan:
- Based upon a unit-terminal approach which best meets the needs of passengers and future demand requirements, and can be implemented in phases without an appearance of perpetual construction.
- *To integrate terminal development plans with those of the Airport Intermodal Center, providing for "traveler-friendly" links between terminals and the Airport Intermodal Center.*

EAST-WEST RAIL/INTERMODAL CENTER

- *Provide "seamless" service to rail passengers between Florida International University and the downtown, and if feasible to Miami Beach.*
- *Terminate the East-West rail line South of Florida International University, to best serve riders from the County's fastest growing neighborhoods and to minimize development impacts on Florida International University. Route the line to best serve the needs of commuters.*
- *Between the university and the airport, route the East-West rail line in the southern SR 836 right-of-way.*
- Bring the line underground as it enters and travels through the airport. Provide underground station stops at the cargo facilities, other major employment centers and at terminals. *(The Long Range Transportation Plan does not address specific design issues, however, the Plan does provide for East-West/MIC interface.)*
- Elevate the line as it emerges from the airport and travels toward the Airport Intermodal Center.
- Depress the line again after it crosses the Miami River and enters downtown Miami. *(The Long Range Transportation Plan does not address specific design issues.)*
- *Turn the rail north to terminate underground at a "linear" station parallel to Biscayne Boulevard, and approximately between North 6th and 7th Streets.*
- Provide continuous service or a rail link between the downtown, across the MacArthur Causeway and to Miami Beach. *(Needs Plan only.)*
- Run Miami Beach transit North along Washington Avenue, past the convention center, and then further North in a "loop" to serve the middle beach area. *(The Long Range Transportation Plan does not address specific design issues.)*

SEAPORT AND DOWNTOWN

- The planned Maritime Park Expansion is an excellent use of the waterfront. It should be well integrated with the downtown; interconnected plazas and parks are preferable to vast open green spaces.

- The placement of artificial boundaries, such as bridges, elevated transit and highway access ramps, must be rethought as they are "choking" the CBD and preventing profitable expansion into potential growth neighborhoods. *(The Long Range Transportation Plan does not address specific design issues.)*
- Alternatives to movement of cargo by truck must be implemented, including unimpeded 24-hour rail access to the Port, the "trenching" of truck and train access routes and/or shallow draft barge system.
- The Miami River's potential to catalyze a downtown residential zone and to be used as a recreational and urban transport waterway must be realized.

TOURISM

- *The East-West line must address visitors' needs for safety and convenience by providing seamless transport between MIA and the Port* and the Miami Beach Convention Center.
- The results of the Florida Highway Signage study must be implemented, incorporating internationally recognized travel symbols.
- Legislators must pass the second part of a comprehensive ground transportation reform package.
- Legislators must pass a resolution calling for increased Federal funding for additional Customs, Agriculture and Immigration agents at MIA.
- The County, in coordination with the City of Miami Beach, should provide incentives for a second convention center hotel.
- A two-pronged approach to modernizing existing attractions and developing new ones needs to be taken. Public officials must provide financial incentives for private companies to accomplish these improvements.

APPENDIX I

AIR QUALITY CONFORMITY DETERMINATION REPORT

LONG RANGE TRANSPORTATION PLAN TO THE YEAR 2015
AIR QUALITY CONFORMITY DETERMINATION

I. EXECUTIVE SUMMARY

This report documents the conformity determination for the proposed Year 2015 Long Range Transportation Plan (LRTP) in fulfillment of the requirements of the 1990 Federal Clear Air Act Amendments. This Conformity Determination Report documents that implementation of the projects listed in the Dade County 2015 LRTP will contribute to emissions reductions compared to the emissions from the 1990 Base Year network in the analysis years of 1997, 2000, 2005 and 2015.

Furthermore, this report documents that the 2015 LRTP is in conformance with the emissions budgets contained in the State Implementation Plan (SIP) and the requirements of the Clean Air Act Amendment (CAAA). To illustrate this conformity determination, a brief synopsis of results are presented for the Emission Budget Test and the Conformity of the Year 2015 Long Range Transportation Plan.

The Long Range Plan Update to the Year 2015 is tentatively scheduled for adoption at the November 9, 1995, meeting of the MPO Board. The contents of the Plan meet the requirements of Section 51.404 of the transportation conformity regulation. The plan is consistent with the Intermodal Surface Transportation Efficiency Act (ISTEA), in that the "Fifteen Factors" are incorporated into the Goals and Objectives, and hence the Evaluation Criteria, that were used in the project selection process.

The Plan is also consistent with 23 CFR Part 450, Subpart C in that it is financially constrained. The financial resources component of the Plan indicates that $3,125 million can reasonably be expected to be available to fund it; while the implementation of the Plan is projected to cost $3,113 million.

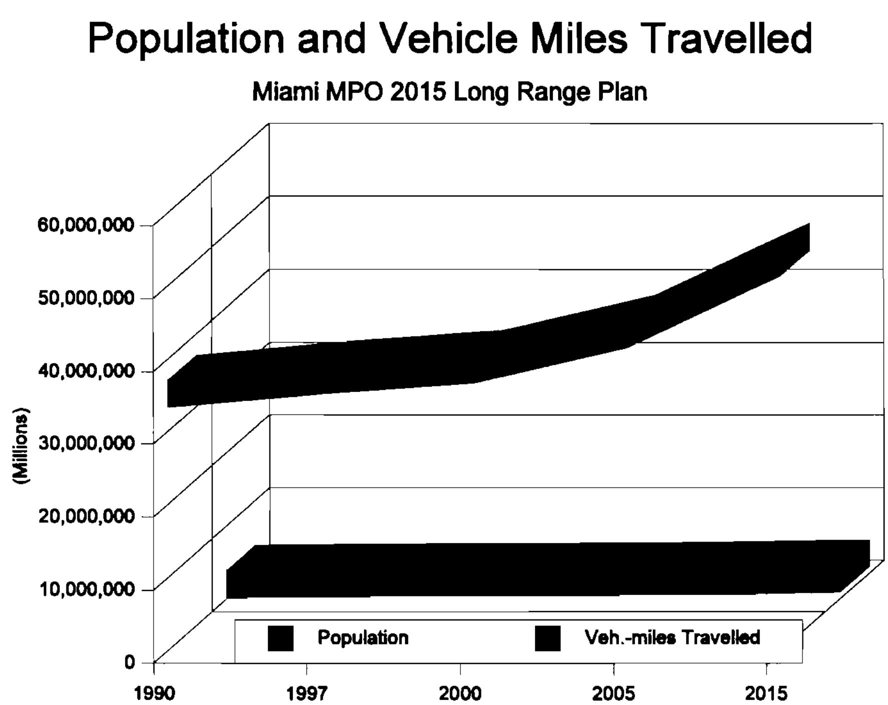
On April 25, 1995, the U.S. Environmental Protection Agency (USEPA) redesignated the Southeast Florida Airshed (consisting of Dade, Broward and Palm Beach Counties) from moderate non-attainment for the pollutant ozone to attainment status. The Florida Department of Environmental Protection (FDEP) submitted the redesignation request and maintenance plan for the SE Florida Airshed on November 8, 1993, as an amendment to the SIP.

Conformity of the Year 2015 Long Range Plan

Emissions resulting from the implementation of the Year 2015 Long Range Plan were compared to the emission budgets established by the redesignation request maintenance plan. Implementation of the 2015 LRTP will result in emissions which fall below the emissions budget set for the analysis years of 1990, 1997, 2000, 2005, and 2015.

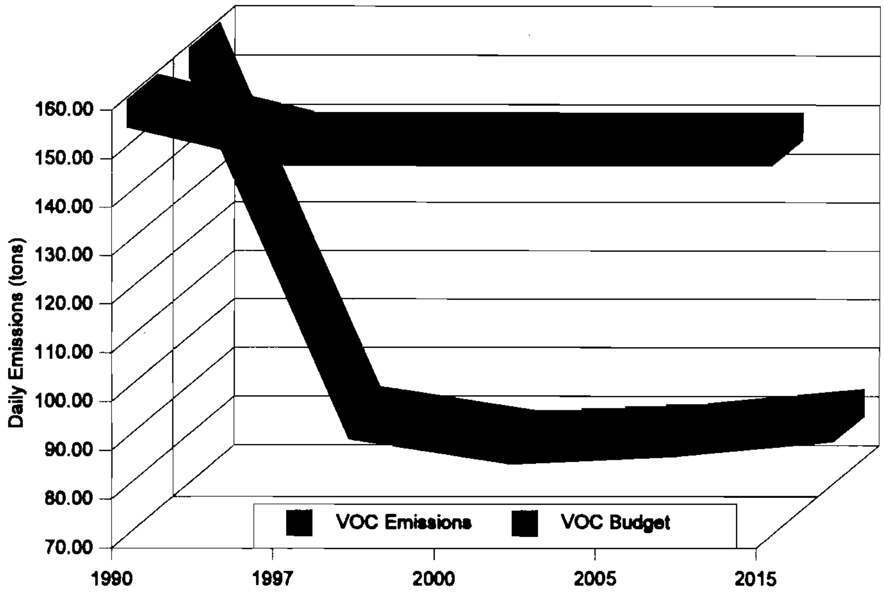
During the Maintenance Period, the emissions expected from the implementation of the long-range plan are consistent with the motor vehicle emissions budgets in the approved maintenance plan (51.428 and 51.430).

2015 Long Range Transportation Plan					
Miami MPO					
	1990	1997	2000	2005	2015
Population	1,999,020	2,201,812	2,289,217	2,414,652	2,772,317
VMT	35,184,440	37,086,800	38,601,736	43,471,896	53,201,133
VOC	156.60	81.89	76.84	78.37	81.81
VOC Budget	156.60	148.77	148.77	148.77	148.77
NOx	117.70	99.11	94.04	99.68	110.98
NOx Budget	117.70	111.82	111.82	111.82	111.82



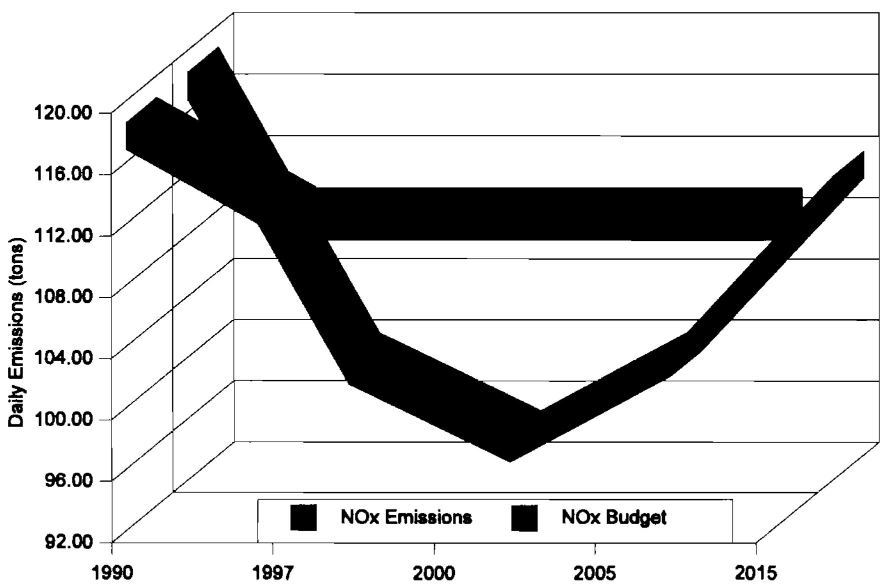
Volatile Organic Compound Emissions

Miami MPO 2015 Long Range Plan



Nitrogen Oxide Emissions

Miami MPO 2015 Long Range Plan



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To establish conformity, the Metropolitan Planning Organization (MPO) has followed the Florida Department of Transportation Directive No. 525-010-014-e "District Review of Conformity Determinations by Metropolitan Planning Organizations in Nonattainment and Maintenance Areas" of October 19, 1995. This directive supplements USEPA's transportation conformity regulation (40 CFR Part 51) and was prepared by the FDOT Office of Policy Planning. The FDOT Directive addresses the transportation and air quality planning methodology to be employed by the State's urban areas using the Florida Standard Urban Transportation Model Structure (FSUTMS) and the Mobile Emissions Series Models to assess the status of air quality compliance efforts.

Table of Contents

II. Background Statements

A. History and Purpose

The Metro-Dade urbanized area was classified by EPA as a maintenance area for ozone and the ozone precursors, volatile organic compounds (VOC) and oxides of nitrogen (NOx), pursuant to the Clean Air Act Amendments of 1990 (CAAA). The area was redesignated to attainment by EPA April 25, 1995; and the conformity period that applies is the "Maintenance Period."

The purpose of this report is to demonstrate compliance with the CAAA and ISTEA by showing that the Long Range Plan conforms to the purpose of the SIP as a result of the analysis of the transportation network and emissions (51.394). The Long Range Plan conforms to the purpose of the SIP by eliminating or reducing the severity and number of violations of NAAQS and achieving expeditious implementation of such standards. FHWA/FTA made a finding of conformity on the previous Long Range Plan and TIP on June 30, 1995, the TIP was subsequently approved by the Secretary of FDOT on August 31, 1995.

The Long Range Plan will not cause or contribute to any new violation of any standard, increase the frequency or severity of any existing violation of any standard, or delay the timely attainment of any standard or any required interim emission reductions or other milestones in the area. The emissions expected from the implementation of the Long Range Plan, during the Maintenance Period, are equal to or less than the motor vehicle emission budgets in the maintenance plan. The 1990 base year emissions inventory was submitted to EPA on November 16, 1992, and is included in the submitted maintenance plan.

EPA's transportation conformity regulation (40 CFR part 51) and FHWA/FTA's metropolitan planning regulation (23 CFR Part 450 Subpart C) have been followed in the preparation of the conformity analysis. The conformity requirements of the CAAA (Subsections 176(c) (1), (2) and (3)) and ISTEA (23 U.S.C. 134) have been met.

The emissions budgets used in the conformity analysis are those contained in the proposed SIP and the conformity analysis meets the requirements of 51.428. The Long Range Plan describes the future transportation system specifically enough to allow a determination of conformity as required by 40 CFR 51.410. The Long Range Plan includes a written commitment that all federally assisted transportation projects that improve air quality committed to in the SIP have been incorporated into the Long Range Plan.

B. Coordination

The MPOs that comprise the Southeast Florida Airshed (Dade, Broward and Palm Beach) have coordinated their air quality improvement activities through the Inter-MPO Air Quality Technical Committee. This committee includes representatives from the MPOs, County Offices of Environmental Management, County Transit Agencies, the Tri-County Commuter Rail Authority and FDOT District Planning Offices. The group meets at least four times per year to discuss on-going work related to air quality. Other relevant interagency efforts per their interlocal agreements are documented in **'Appendix C - Interlocal Agreements'** of this report.

The new conformity determination on the Long Range Plan was reviewed and recommended for approval by the MPO's Technical and Citizens' Advisory Committees on (date) and (date), respectively. The only significant issue raised at TAC meetings from air quality agencies was that at first, the emissions estimates exceeded SIP budget allowances for NOx and VOC. The FDOT and FDEP both realized that the 2005 budget, as originally estimated was too low for both compounds. As a result the FDEP recommended a revision to the SIP budget allowances for the Southeast Florida Airshed, thereby rectifying the problem.

C. Transportation Control Measures (TCMs)

Transportation Control Measures (TCMs) are recommended in the federal statutes as a means of reducing motor vehicle emissions. TCMs are strategies designed to reduce emissions via structural and operational changes to the transportation system. Such measures may include bus and rail transit; high occupancy vehicle (HOV) lanes; Bikeways; Intelligent Corridor Systems (ICSs); and other changes to the system. The projects found in **'Appendix D - Prioritized Project Lists'** are those contained in the Cost Feasible Long Range Transportation Plan to the Year 2015. They include TCMs, such as those discussed above.

D. Congestion Mitigation and Air Quality (CMAQ) Projects

TCM projects such as those listed above are potentially eligible for Congestion Mitigation and Air Quality (CMAQ) funding. The Long Range Plan does not assign particular funding sources to particular projects, as this will occur in the Transportation Improvements Program (TIP) in the appropriate future years.

III. Public Involvement

The MPO developed a detailed Public Involvement Process for use in developing its plans, programs, and projects. This process conforms to the requirements of 23 CFR part 450 Subpart C, section 51.402 (e) of the conformity regulation and was approved by the MPO in March, 1995.

Full documentation of this Public Involvement Process at it applies to the Long Range Plan Update and associated Air Quality Conformity Determination is contained within the Long Range Plan Technical Reports in Technical Report 3 - Section I(C)4. All significant comments received from the public are documented, therein.

The initial analysis of the long range plan yielded NOx emissions that exceeded the SIP budgets for 2005. This was the only significant issue of concern to FDOT and the air agencies. In consultation, the MPO, FDOT, FDEP and the Dade County Department of Environmental Resources Management determined that the original projections for 2005 were much less than the new travel demand model pridicted. FDEP suggested that a SIP revision be submitted that established explicit emissions budgets for the Southeast Florida airshed. Doing so was possible because of the adequate "safety margin" between the SIP's 2005 projections and the 1990 baseline emissions. The SIP revision establishes the new emissions budgets at 95% of the 1990 baseline levels, providing an adequate margin for the predicted growth without exceeding the baseline.

IV. Interagency Consultation

The MPO consulted with FDOT, FDEP, the local air quality program, and local transportation agencies before adopting the Long Range Plan Conformity Determination Report (51.402(a)(2)). The TCC meeting at which the draft Long Range Plan was approved was the October 16, 1995, meeting, with materials for the meeting being sent out October 10, 1995. No decisions materially affecting the conformity determination were made by the MPO subsequent to the TAC meeting, negating the need to re-consult with the TAC.

The Long Range Plan/Conformity Determination Report were presented at the October 16, 1995, meeting of the TCC and the October 26, 1995, meeting of the CAC. All impacted parties will be notified by the MPO when revisions or amendments to the Long Range Plan and TIP or proposed (51.402(c)(1)(vi)).

The initial analysis of the long range plan yielded NOx emissions that exceeded the SIP budgets for 2005. This was the only significant issue of concern to FDOT and the air agencies. In consultation, the MPO, FDOT, FDEP and the Dade County Department of Environmental Resources Management determined that the original projections for 2005 were much less than the new travel demand model pridicted. FDEP suggested that a SIP revision be submitted that established explicit emissions budgets for the Southeast Florida airshed. Doing so was possible because of the adequate "safety margin" between the SIP's 2005 projections and the 1990 baseline emissions. The SIP revision establishes the new emissions budgets at 95% of the 1990 baseline levels, providing an adequate margin for the predicted growth without exceeding the baseline.

The MPO has explained how models to be used in the regional emissions analysis were evaluated and selected during the consultant process (51.402(c)(1)(i)). This explanation is detailed further in **Section V. Analysis Methodology, Part 2.** of this report.

Projects were included in the conformity analysis per the following:

- Minor arterials and other transportation projects were determined through the consultation process to be regionally significant, and, therefore subject to conformity analysis (51.402 (c)(1)(ii));

- Projects that underwent a significant change in design concept and scope from the conforming Long Range Plan were identified through the consultation process (51.402 (c)(1)(ii));

- The Long Range Transportation Plan to the Year 2015 did not contain any "Exempt Projects".

V. Analysis Methodology

This section documents how the conformity analysis for the Long Range Plan was performed and shows the results of the analysis.

A. Emissions Reductions

Air Quality Conformity for Long Range Plan to the Year 2015 (tons per day)

Parameter	1990 Base Year[2]	1997 Emissions Budget[3]	1997 Action Scenario	2000 Emissions Budget[3]	2000 Action Scenario	2005 Emissions Budget[3]	2005 Action Scenario[4]	Action Scenario for the 2015 Long Range Plan
Population	1,999,020	N/A	2,201,812	N/A	2,289,217	N/A	2,414,652	2,772,317
Vehicle miles Traveled (VMT)[1]	35,184,44 0	N/A	37,086,800	N/A	38,601,736	N/A	43,468,202	53,201,133
Total VOC in Tons Per Day[1]	156.60	148.77	81.89	148.77	76.84	148.77	78.50	81.81
Total NOx in Tons Per Day[1]	117.70	111.82	99.11	111.82	94.04	111.82	99.69	110.98

[1]Source: EMIS.OUT
[2]Source: 1990 Emissions Inventory
[3]Source: Submitted Maintenance Plan
[4]Interpolated value.
N/A = not applicable

Emissions resulting from the implementation of the Year 2015 Long Range Plan were compared to the emission budgets established by the redesignation request maintenance plan. Implementation of the 2015 LRTP will result in emissions which fall below the emissions budget set for the analysis years of 1990, 2005, and 2015.

During the Maintenance Period, the emissions expected from the implementation of the long-range plan are consistent with the motor vehicle emissions budgets in the approved maintenance plan (51.428 and 51.430).

B. Use of the MOBILE Model

Mobile 5a, the current USEPA/FHWA accepted MOBILE emissions model, was utilized to calculate the highway emissions impact. The national defaults for vehicle, and for mileage accrual and model year were utilized throughout. Adjustments were made to the model to recognize the Inspection/Maintenance (I/M) and Anti-Tampering Programs implemented in Dade County. These adjustments included the following input values:

1. An I/M program was started in Florida in 1991;
2. There is a 26% stringency level (formerly 23%);
3. 1975 is the first vehicle model year inspected and 2020 is the last model year inspected;
4. There is a 0% waiver rate for Pre-1981 vehicles and 0% for 1981 and later vehicles;
5. There is 80% credit given for the centralized, annual inspection program;
6. The MOBILE 5a default value for tampering rates has been used; and
7. The two types of inspections made are for catalytic converters and missing gas caps.

This analysis was performed for the month of July, which is in the middle of the Peak Ozone Season (June, July and August), utilizing the average low and high temperature (69.3 average low temperature and 91.2 average high temperature) as provided by FDEP and Reid Vapor Pressure (RVP) of 9.2 pounds per square inch (psi) for the 1990 Base Year and 7.8 psi for all years beyond 1992. The RVP for the base year is based on information accepted by EPA during the SIP Emission Inventory development phase. The RVP data for all years beyond 1992 is based on EPA specifications provided in 56 CFR 6694, November 6, 1991 and 56 CFR 64704, December 12, 1991. Assistance in determination of appropriate settings and variables was provided by the FDEP.

EMIS, February 1995 release, is a customized utility program developed by the FDOT, that acts as an interface between FSUTMS and the current USEPA approved emissions model, Mobile 5a. EMIS applies the USEPA approved model output factors to the VMT output from FSUTMS.

The 1990 Emissions Inventory is based on vehicle miles traveled, as reported in the Highway Performance Monitoring System (HPMS), a federally mandated database, consisting of a representative sample of highway links. The reported VMT value for Dade County, for 1990, is 35,184,445, with on-road mobile source emissions of 156.60 and 117.70 tons of VOCs and NOx respectively. An adjustment factor is required to reconcile vehicle miles traveled in 1990 as reported by HPMS with VMTs generated by the travel demand modeled utilized for this analysis. This factor is referred to as the EMISFAC. The methodology utilized to develop this adjustment factor is described in Appendix 6 of the FDOT Directive 525-010-014-E. As illustrated below, the HPMS VMT (35,184,445) was divided by the EMIS VMT (36,733,113) resulting in an adjustment factor of 0.95784.

$$\frac{\text{HPMS VMT}}{\text{EMIS VMT}} = \frac{35{,}184{,}445}{36{,}733{,}133} = 0.95784$$

This factor was then added to the PROFILE.MAS for the subsequent analyses.

The use of the methodology described above, including use of FSUTMS, EMIS and Mobile 5a for the development of the 1995 Conformity Determination for Dade County, was coordinated with the Systems Planning Office of the FDOT with the acceptance and approval of the USEPA, FHWA, and FTA.

C. Planning Assumptions

The draft Metro-Dade Transportation Plan for the Year 2015 has been developed to guide federal, state, and local transportation expenditures through the twenty-year period. The Plan is intended to be comprehensive, including connections to major activity centers, between and among roadways, transit facilities and other means of transportation. Improvements and extensions to the roadways and transit routes throughout the county will be governed by this Plan.

The Plan development process involved months of technical work and public involvement activities. The Plan has developed through the use of a detailed engineering model and other analytical tools, the results of which were evaluated by a Steering Committee made up of representatives of state, regional and local agencies and the citizenry.

The travel demand forecasting model included:

- the current system of roadway and transit facilities;
- current population and employment;
- current traffic and transit ridership;
- future land use, population and employment; and
- future traffic and transit ridership.

The Steering Committee, before making their recommendation, considered:

- the results of the travel demand model;
- historic preservation, right-of-way constraints;
- air quality, environmentally-sensitive areas, and natural resources;
- future, anticipated financial capability; and
- the concerns and desires of the community.

As part of the process of developing this Plan, a draft Needs Plan was first developed. This Plan depicted all of the transportation facility improvements that would be *needed* through the year 2015 to meet all of the metropolitan area's transportation requirements, to the extent possible.

Concurrently, a Financial Resources document was been drafted. The Financial Resources report provided information on how much money is anticipated to be available to fund projects in the Needs Plan through the Year 2015.

Finally, a Cost Feasible Plan was developed. This Plan depicts those *major* capital improvement projects in the Needs Plan that, according to the Financial Resources information, this metropolitan area can reasonably expect to be able to afford to build. Through public information meetings, input from the residents of the metropolitan area was requested, recorded and addressed. In the months following, draft copies of the Plan were developed and made available for comment prior to presentation to the Governing Board of the MPO for adoption in November 1995.

Long Range Plan - Goal and Objectives

Goal:

Provide for a safe, efficient, economical, attractive and integrated multimodal transportation system that offers convenient, accessible and affordable mobility to all people and for all goods, conserves energy, and protects both the natural and social environment.

Objectives

MULTIMODAL TRANSPORTATION SYSTEM DEVELOPMENT
Plan for the provision of transportation services and facilities to serve the needs of the population in the metropolitan area, in accord with federal and state transportation planning process requirements.

Develop an integrated multimodal transportation system that emphasizes people movement by facilitating the transfer between modes, and the connectivity of the transportation network within and outside the metropolitan area.

Preserve rights-of-way in corridors anticipated to be heavily traveled in the future.

To consider the effect of transportation policies on land use development for both the short and longer range.

TRAFFIC FLOW/MOBILITY
Preserve existing highway and transit facilities by improving efficiency and safety.

Achieve the operating level-of-service standards adopted in the Comprehensive Development Master Plan and in the Florida Intrastate Highway System Plan.

Plan for maximum utilization of existing transportation capacity, relieve congestion and prevent congestion from occurring where it does not yet occur.

SOCIAL
Plan and develop a transportation system that preserves the social integrity of urban communities.

ENVIRONMENTAL

Plan for a transportation system that gives due consideration to air quality and environmentally sensitive areas, and conserves energy and natural resources and that is consistent with applicable federal, state and local energy conservation program goals and objectives.

Plan for transportation projects that enhance the quality of the environment.

ECONOMIC

Define a sound funding base utilizing public and private sources that will assure operation and maintenance of existing facilities and services and timely implementation of new projects and services.

Provide for and enhance the efficient movement of freight.

Analysis Areas

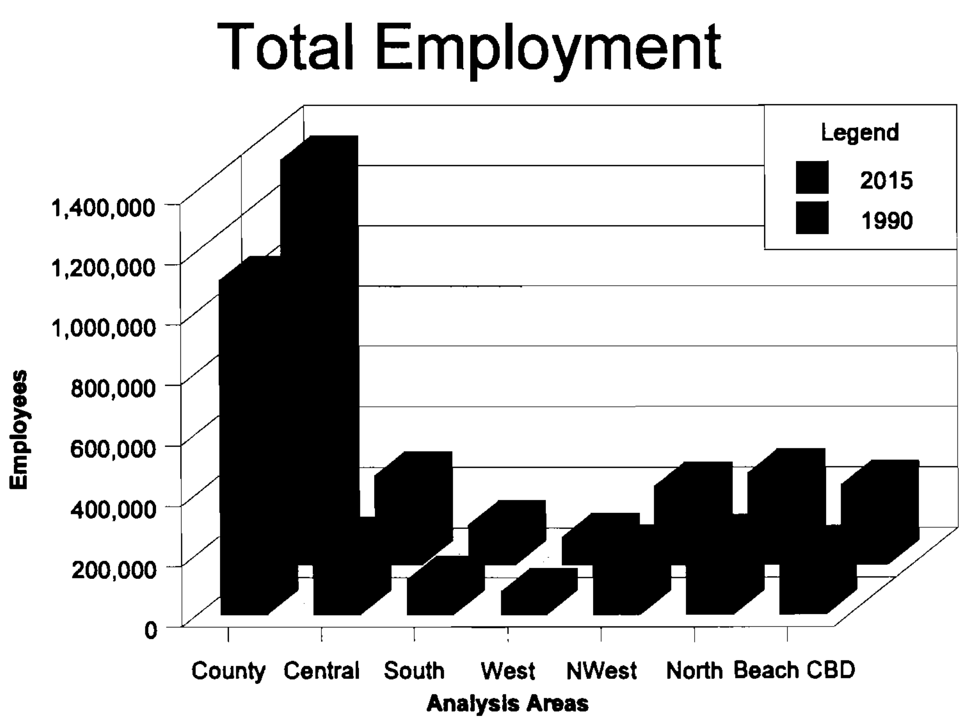
Dade County has been divided into six Areas of Analysis. For each Analysis Area, population, employment and travel characteristics data have been aggregated.

The six Analysis Areas are listed below:

- ◊ Northwest
- ◊ West
- ◊ Beach (and CBD)
- ◊ North
- ◊ Central
- ◊ South

Demographic and Background Information

Demographic, or socio-economic, data are the driving force behind the model used in developing the Needs and Cost Feasible Plans. The charts below depict the demographic trends that will shape the area between 1990, the study's base year, and 2015, the LRTP horizon Year.



Countywide Demographic Information

	1990	2015	Percent Increase
Population	1,901,900	2,646,600	39.2%
Dwelling Units	770,000	984,000	27.8%
Personal Autos	1,069,700	1,430,700	33.7%
Employment	1,104,800	1,340,900	21.4%
Trips	15,231,000	20,592,400	35.2%

D. Base Year

The emissions for each analysis or horizon year of the Long Range Plan are less than the emissions in the SIP's 1990 base year inventory by a non-zero amount.

E. Project Listings

The required project listing is contained in **Appendix D - Prioritized Project Lists**.

F. HPMS Data

The MOBILEIM.15A and MOBILE.15A files are included in **'Appendix E - MOBILEIM.15A and MOBILE.15A FILES'** of this report. No "off-model" assumptions or methodologies were necessary in achieving conformity. **EMIS.OUT** files are included as **Appendix F**.

G. Maintenance Period Analysis

The Long Range Plan has met the conditions of Section (5) of the air quality conformance procedures. No further regional emissions analysis was necessary to demonstrate conformity.

Appendix A - Definitions

Appendix A - Definitions

CONFORMITY means, under Section 176 (c) of the CAAA, "conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards," ensuring that "such activities will not cause or contribute to any new violation of any standard in the area; or increase the frequency or severity of any existing violation of any standard in the area; or delay timely implementation of any standard or any required interim emission reductions or other milestone in any area".

FLORIDA STANDARD URBAN TRANSPORTATION MODEL STRUCTURE (FSUTMS) means the software developed by the Florida Department of Transportation (FDOT) for long range urban area transportation modeling that is used in performing the required analyses to reach a conformity determination.

MOTOR VEHICLE EMISSIONS BUDGET means that portion of the total allowable emissions contained in a revision to the State Implementation Plan (SIP) or in an implementation plan revision submitted to, but not yet approved by, USEPA for the purpose of attainment or maintenance demonstrations for any criteria pollutant or its precursors allocated by the SIP to highway and transit vehicles (See 40 CFR Section 51.392).

OZONE means a compound consisting of three oxygen atoms formed through photochemical reactions in the atmosphere involving volatile organic compounds (VOC) and oxides of nitrogen (NOx).

ACRONYMS:

CAA	Clean Air Act including the Clean Air Act Amendments of 1990	***NAAQS***	National Ambient Air Quality Standards
CFR	Code of Federal Regulations	***NOx***	Oxides of Nitrogen
CMAQ	Congestion Mitigation and Air Quality Improvement Program	***SIP***	State Implementation Plan
		TCM	Transportation Control Measures
FDEP	Florida Department of Environmental Protection		
TIP	Transportation Improvement Program		
USEPA	United States Environmental Protection Agency		
FDOT	Florida Department of Transportation		
FHWA	Federal Highway Administration	***VMT***	Vehicle Miles Traveled
FTA	Federal Transit Administration	***VOC***	Volatile Organic Compounds
LRTP	Long Range Transportation Plan		
MPO	Metropolitan Planning Organization		

Appendix B - Cross Reference Table

Appendix B - Cross Reference Table

Procedure Section	**Conformity Requirement** (40 CFR Part 51 Subpart T Citation)	**CDR Page Number**
(9)(a)	MPO's formal finding of conformity (copy of MPO Board resolution approving long-range plan and making a finding of conformity) is included.	
(9)(b)	Table of Contents included.	3
(9)(b)	MPO included a cross-reference table such as this one.	16
(9)(c)1.	Implementation of the long-range plan will contribute to annual emissions reductions. (51.436)	4
(9)(c)2.	The long-range plan is in conformance with the SIP and CAAA90. (51.394)	1
(9)(c)3.	Date the MPO approved the long-range plan Conformity Determination Report. (51.400)	1
(9)(c)4.	Long-range plan is financially constrained. (51.408)	1
(9)(c)5.	Long-range plan meets the content requirements of subsection 51.404(c).	1
(9)(c)6.	Brief summary of the results of the 'Baseline'/Action' scenarios (*Tampa Bay airshed)* or consistency with the motor vehicle emissions budgets in the approved maintenance plan (*Duval County and Southeast Florida airshed)*. (51.436, 51.438, 51.428, 51.430)	7
(9)(d)1.	Identify classification status (transitional, marginal, or moderate) and pollutants for which the area was classified as nonattainment.	4
(9)(d)2.	The long-range plan conforms to the purpose of the SIP.	4
(9)(d)3.	The purpose of the report is to comply with requirements of the CAAA, ISTEA, and the transportation conformity regulation to demonstrate conformity to the SIP. (51.394)	4
(9)(d)4.	The conformity requirements of the CAAA and ISTEA have been met.	4
(9)(d)5.	The emissions expected from the implementation of long-range plan are equal to, or less than, the emissions budgets (*Maintenance Period)* or emission expected from the 'Action' scenario are less than those of the 'Baseline' scenario for each analysis year (*Phase II of the Interim Period)*.	7
(9)(d)6.	Describe how the USEPA conformity and FHWA/FTA metropolitan planning regulations and other federal guidance have been followed in the conformity determination.	4
(9)(d)7.	Date the area was redesignated to attainment or the date the maintenance plan was submitted.	4
(9)(d)8.	Indicate the conformity period that applies (Phase II of the Interim Period or Maintenance Period).	4

Procedure Section	**Conformity Requirement** (40 CFR Part 51 Subpart T Citation)	**CDR Page Number**
(9)(d)9.	Date that the 1990 Base Year emissions inventory was submitted to EPA on November 16, 1992, and is included in the approved or submitted maintenance plan.	4
(9)(d)10.	List of federally funded TCM-type activities included.	5
(9)(d)11.	Identify CMAQ projects are where they can be located in the TIP.	5
(9)(d)12.	Date of FHWA/FTA conformity finding on the previously conforming long-range plan; the date FHWA/FTA conformity finding on the current TIP and the date the TIP was approved by the FDOT Secretary.	4
(9)(d)13.	Dates of the TCC and CAC reviews of the long-range plan Conformity Determination Report, and the recommendations of each committee.	5
(9)(d)14.	Significant comments of reviewing agencies addressed by the MPO, or a statement that no significant comments were received.	5
(9)(d)15.	Relevant interagency and/or interlocal air quality agreements referenced.	5
(9)(d)16.	Coordination between MPOs in airsheds with more than one MPO documented.	5
(9)(d)17.	*Maintenance Period*: SIP emissions budget comparisons demonstrate conformity.	7
(9)(d)18.	Long-range plan describes the future transportation system specifically enough to allow a conformity determination.	4
(9)(d)19.	Long-range plan includes a written commitment that all federally assisted transportation projects that improve air quality, committed to in the SIP, have been incorporated into the long-range plan.	4
(9)(e)	Public involvement process is fully documented. The conformity determination was developed in consultation with FDOT, FDEP, and local air quality programs; date the draft conformity determination was provided for review.	5
(9)(f)	The MPO has documented that the consultation process of 51.402 of the conformity regulation were followed.	5
(9)(f)1.	FDOT, FDEP and the local air quality program were consulted before the MPO adopted the long-range plan Conformity Determination Report.	6
(9)(f)2.	These agencies were consulted by the MPO following the TCC meeting if decisions materially affecting the conformity determination were to be made.	6
(9)(f)3.	All significant concerns of state and local air quality agencies addressed and documented by the MPO.	6
(9)(f)4.	The evaluation and selection of models through the consultation process documented by the MPO.	6

Procedure Section	**Conformity Requirement** (40 CFR Part 51 Subpart T Citation)	CDR Page Number
(9)(f)5.	Minor arterials were determined through the consultation process to be regionally significant and subject to conformity analysis.	6
(9)(f)6.	Projects having a significant change in design concept and scope identified through the consultation process.	6
(9)(f)7.	Exempt projects evaluated through the consultation process to determine whether such projects should be treated as non-exempt for conformity analysis.	6
(9)(f)8.	Dates all parties notified of revisions to the Long Range Plan that added or deleted exempt projects, if applicable.	6
(9)(h)1.	Long Range Plan contributes emissions equal to, or less than, the emissions budgets in the approved maintenance plan for each horizon year.	7
(9)(h)2.	MOBILE, EMIS, and FSUTMS models were used for the conformity analysis.	8
(9)(h)3.	The latest planning assumptions were used in the conformity analysis and the assumptions and sources of data are clearly stated.	9
(9)(h)4.	Emissions for each analysis or horizon year are less than the 1990 base year inventory by any non-zero amount.	7
(9)(h)5.	Maintenance Period: All Projects in each horizon year (and WPI numbers) are listed.	20
(9)(h)6.	HPMS VMT adjustment explained.	9
(9)(h)7.	Maintenance Period only: the conformity analysis of the Long range Plan meets all requirements of section (5) of this procedure.	14
(5)(a) & (4)(b)	Phase II of the Interim Period: The analysis years are 1997, 2005 and 2015 (Long Range Plan horizon year)	8
(9)(e)1. &2	Phase II of the Interim Period: A summary table similar to Appendix 9 has been included.	7
(9)(e)3.a.	MOBILE input files and EMIS output files are included.	21 and 23
(9)(e)3.b.	Projects exempt from regional emissions analysis indicated.	6
(9)(e)3.c.	Projects not having completed a major step as identified in 51.394(c) of the transportation conformity regulation are indicated.	N/A

Appendix C - Interlocal Agreement

MEMORANDUM OF AGREEMENT
IMPLEMENTING THE CONFORMITY CRITERIA AND CONSULTATION PROCEDURES
REVISION TO THE FLORIDA STATE IMPLEMENTATION PLAN PURSUANT TO THE
CLEAN AIR ACT AMENDMENTS OF 1990

A Memorandum of Agreement (MOA) concerning the criteria and procedures for the determination of the conformity of transportation plans, programs and projects of the Metropolitan Planning Organizations in Florida airsheds designated as nonattainment pursuant to the Clean Air Act Amendments of 1990. The Duval County airshed was designated a transitional nonattainment area, the Tampa Bay airshed, consisting of Hillsborough and Pinellas Counties, was designated a marginal nonattainment area, and the Southeast Florida airshed, consisting of Broward, Dade and Palm Beach Counties, was designated a moderate nonattainment area by the United States Environmental Protection Agency (USEPA) pursuant to the Clean Air Act Amendments of 1990 for the air pollutant ozone and its precursors.

The PARTIES to this MOA shall be: the Broward County Metropolitan Planning Organization; the Hillsborough County Metropolitan Planning Organization; the Metropolitan Planning Organization for the Jacksonville Urbanized Area; the Miami Urbanized Area Metropolitan Planning Organization; the Metropolitan Planning Organization of Palm Beach County; the Pinellas County Metropolitan Planning Organization; the Broward County Board of County Commissioners on behalf of the Broward County Department of Natural Resource Protection; Metropolitan

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Dade County by and through its Department of Environmental Resources Management; the Mayor of the City of Jacksonville on behalf of the City of Jacksonville Department of Regulatory and Environmental Services; the Hillsborough County Environmental Protection Commission; the Palm Beach County Board of County Commissioners on behalf of the Palm Beach County Public Health Unit; the Pinellas County Board of County Commissioners on behalf of the Department of Environmental Management; the Florida Department of Transportation; and the Florida Department of Environmental Protection.

WHEREAS, the Clean Air Act Amendments of 1990 (CAAA) require the State of Florida to submit a revision to its State Implementation Plan (hereinafter the SIP) containing the criteria and procedures for determining the conformity of the plans, programs and projects in areas designated as air quality nonattainment in order to conform to the purpose of the SIP to meet national ambient air quality standards; and

WHEREAS, the CAAA (specifically Sections 121, 174 and 176), 40 Code of Federal Regulations (CFR) Part 51 Subpart T, Title 23 United States Code (U.S.C.) 134, and 23 CFR Part 450 Subpart C, require intergovernmental consultation before findings of conformity for the plans, programs and projects of Metropolitan

Planning Organizations are made, and for the development and submittal of applicable implementation plan revisions; and

WHEREAS, the CAAA in §§110(a)(2)(A) and (E) require SIP revisions to be enforceable under state law, and 40 CFR §51.396(c) requires that, "to be approvable by EPA, the implementation plan revision submitted to EPA and DOT under this section shall address all requirements of this subpart in a manner which gives them full legal effect;" and

WHEREAS, The Broward County Metropolitan Planning Organization, the Hillsborough County Metropolitan Planning Organization, the Metropolitan Planning Organization for the Jacksonville Urbanized Area, the Miami Urbanized Area Metropolitan Planning Organization, the Metropolitan Planning Organization of Palm Beach County, and the Pinellas County Metropolitan Planning Organization have been formed through interlocal agreements and designated by the Governor of the State of Florida as the forum for cooperative decision making to carry out the continuing, cooperative and comprehensive metropolitan transportation planning process required by Title 23 U.S.C. 134; and

WHEREAS, the Florida Department of Transportation has been designated as the state transportation planning agency under

Florida law to carry out the statewide transportation planning process required by Title 23 U.S.C. 135; and

WHEREAS, the Florida Department of Environmental Protection has been designated under Florida law and by USEPA as the certified state air quality planning organization for the State of Florida; and

WHEREAS, the Broward County Department of Natural Resource Protection, the Dade County Department of Environmental Resources Management, the City of Jacksonville Department of Regulatory and Environmental Services, the Hillsborough County Environmental Protection Commission, the Palm Beach County Public Health Unit, and the Pinellas County Board of County Commissioners, through its authorized representative, the Department of Environmental Management, have been designated pursuant to Florida law and interlocal agreements as the state approved local air quality programs for each respective county included in Florida's nonattainment airsheds;

NOW, THEREFORE, it is hereby agreed by the Parties referenced in the above whereas clauses as follows:

The Parties to this MOA shall cooperatively support and implement the conformity criteria and procedures contained herein in order to ensure that the plans, programs and projects adopted by the MPOs that are Parties hereto conform to the purpose of the Florida SIP to meet national ambient air quality standards for ozone and ozone precursors.

It is further agreed and understood by each Party to the MOA that:

1. The conformity of plans, programs and projects funded under Title 23 United States Code and the Federal Transit Act shall be determined pursuant to the CAAA and as provided in 40 CFR Part 51 Subpart T, required sections of which are included verbatim and made part of this MOA, as Exhibit 1 and pursuant to the "Florida Criteria and Interagency Consultation Procedures for the Determination of the Conformity of Metropolitan Planning Organization Plans, Programs and Projects," a copy of which is attached hereto as Exhibit 2.

2. The criteria and procedures for determining such conformity as contained in this MOA shall be legally enforceable under the laws of the State of Florida. The Parties further agree that if any Party hereto fails to comply with any provision(s) of this MOA and the conformity criteria and procedures contained in Exhibit 1 and Exhibit 2 applicable to such party, any other Party to this MOA that is in the same airshed as the Party in noncompliance or FDEP or FDOT shall have the right to: (a) seek mediation of the alleged violation

pursuant to Chapter 44, Florida Statutes, and, in the event mediation does not remedy the conflict, (b) compel compliance with such provision(s) by initiating an action in circuit court for injunctive relief only.

3. This MOA including Exhibits 1 and 2 will constitute the revision to the Florida SIP required by Section 176 of the CAAA and will govern conformity determinations in the State of Florida upon approval by USEPA.

4. Execution of this MOA by each Party shall be by appropriate resolution or signature. Where this MOA is adopted by resolution, a copy thereof shall be appended to and incorporated into this MOA. This MOA shall be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

5. This MOA shall take effect upon approval by USEPA of the revision to the SIP of which this MOA is part, and upon filing of the MOA and any amendments thereto with the clerk of circuit court in each county where a party to the agreement is located.

6. The provisions of this MOA shall be implemented through appropriate procedures, resolutions, or other means, in order to comply with the requirements of all Federal and State laws and

regulations relating to the determination of conformity and the development of applicable implementation plan revisions. This MOA defines and delineates the roles, processes, and responsibilities of each signatory as provided in Exhibit 2, made part of this MOA.

IN WITNESS WHEREOF, the Parties hereto have executed this MOA.

Agreed to this 26 day of August, 1994:

The State of Florida Department of Transportation

Ben G. Watts

Secretary

Approved:

Pamela S. Leslie

General Counsel

Agreed to this 19th day of July, 1994:

The Florida Department of Environmental Protection

Virginia B. Wetherell

Secretary

Approved:

Kenneth J. Plante

General Counsel

THE BROWARD COUNTY METROPOLITAN
PLANNING ORGANIZATION

ATTEST:

Bruce B. Wilson

MPO Administrative Assistant

THE BROWARD COUNTY METROPOLITAN
PLANNING ORGANIZATION

By [signature]

12 day of September 1994.

Approved as to form by
Office of County Attorney
Broward County, Florida
JOHN J. COPELAN, JR.
County Attorney
Governmental Center, Suite 423
115 South Andrews Avenue
Fort Lauderdale, Florida 33301
Telephone: (305) 357-7600
Telecopier: (305) 357-7641

By Sharon L. Cruz
Sharon L. Cruz
MPO Attorney
Deputy County Attorney

Agreed to this 22nd day of September, 1994:

The Miami Urbanized Area Metropolitan Planning Organization

Chairperson

Agreed to this 11th day of August, 1994:

The Metropolitan Planning Organization
for the Jacksonville Urbanized Area

Chairperson

Agreed to this 2nd day of August, 1994:

The Hillsborough County Metropolitan
Planning Organization

Chairperson

Agreed to this 18th day of August, 1994:

ATTEST:

Executive Secretary

The Metropolitan Planning Organization of Palm Beach County

Chairperson

Approved as to Form and Legal Sufficiency

Assistant County Attorney

Agreed to this 22nd day of September, 1994:

Dade County Department of Environmental Resources Management

County Manager

Agreed to this 2 day of August, 1994:

Hillsborough County Environmental
Protection Commission

Jan K. Platt

Chairperson

Agreed to this __________ day of AUG 2 3 1994, 1994:

Board of County Commissioners, on behalf of the Palm Beach County Public Health Unit

Chairperson

APPROVED AS TO FORM & LEGAL SUFFICIENCY:

BY: ______________________
COUNTY ATTORNEY

PALM BEACH COUNTY, FLORIDA
BY ITS BOARD OF COUNTY COMMISSIONERS

DOROTHY H. WILKEN, CLERK

BY: ______________________
~~(CLERK)~~ Deputy Clerk

BOARD OF COUNTY COMMISSIONERS PALM BEACH COUNTY, FLORIDA CLERK

R94 1065D

Agreed to this 23rd day of August, 1994:

Pinellas County Board of County Commissioners, on behalf of the Department of Environmental Management

Chairperson

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY
By
Attorney

BROWARD COUNTY

ATTEST:

County Administrator and Ex-Officio Clerk of the Board of County Commissioners of Broward County, Florida

COUNTY COMMISSIONERS
CREATED OCT. 1ST 1915
BROWARD COUNTY, FLORIDA

BROWARD COUNTY, through its BOARD OF COUNTY COMMISSIONERS

By Sylvia Poitier
Sylvia Poitier, Chair

28 day of Sept., 1994.

Approved as to form by
Office of County Attorney
Broward County, Florida
JOHN J. COPELAN, JR.
County Attorney
Governmental Center, Suite 423
115 South Andrews Avenue
Fort Lauderdale, Florida 33301
Telephone: (305) 357-7600
Telecopier: (305) 357-7641

By Sharon L. Cruz
Sharon L. Cruz
Deputy County Attorney

Agreed to this 10th day of October, 1994:

ATTEST:

CITY OF JACKSONVILLE

Linnie C. Williams

Linnie C. Williams
Corporation Secretary

Ed Austin, Mayor

APPROVED AS TO LEGAL FORM:

Assistant General Counsel

Agreed to this 17th day of August, 1994:

The Pinellas County Metropolitan Planning Organization

Chairperson

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY
By
Attorney

Appendix D - Prioritized Project Lists

Adopted *7-Dec-95*

Metro-Dade Long Range Transportation Plan Update (to the Year 2015)

Needs Plan and
Recommended Cost Feasible Plan

Adopted by the Governing Board
of the MPO

December 7, 1995

Adopted *7-Dec-95*

YEAR 2015 TRANSPORTATION PLAN

DEFINITION OF PRIORITY CATEGORIES

PRIORITY 1 -- Priority projects to be constructed and opened to service by the Year 2000 or shortly thereafter. Includes those projects needed to respond to the most pressing and current urban travel problems. Funds for most of these improvements are already programmed in the MPO's Transportation Improvement Program.

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

PRIORITY 3 -- Improvements to be completed between the Years 2005 and 2010. Project development activities would need to commence before the Year 2005.

PRIORITY 4 -- Improvements to be made in the latter part of the Plan horizon and completed by the Year 2015.

Dates mentioned are for illustration purposes. Actual dates of construction are subject to availability of adequate funding and other relevant considerations and may be advanced or postponed due to these considerations. The construction sequence of projects will nevertheless follow the indicated priority scheme.

Recommended Cost Feasible Plan
Year 2015 Long Range Transportation Plan

Priority I - (Refer to adopted 1996 TIP for Priority I project listing.)		
Priority II *(Years 2000 to 2005)*		
Project*	**Description**	**Cost to Long Range Plan (millions)**
Bicycle/Pedestrian/Greenways (Also in Priorities III, IV)[1]		$12.9
SR836 Corridor: Seaport to Palmetto (Also in Priorities III, IV)[2]	premium transit	$100.0
North Corridor Transit[3]	premium transit	$135.0
MIC (Also in Priority III)[4]	Miami Intermodal Center	$100.0
Interconnector: SR 836 to SR112 (Also in Priority III)[4]	new 4 lane & 2 HOV lanes	$100.0
South Dixie busway	premium transit	$35.6
New & Replacement buses (Also in Priorities III, IV)[5]		$95.0
SR826: SR874 to I-75 (Also in Priority III and IV)[5]	add one HOV lane (each direction)	$301.3
Perimeter Rd: NW 20 St to NW 72 Ave	2 to 4 lanes	$2.0

* Refer to page 10 for notes.

	NW 25 St: NW 79 Ave to NW 67 Ave (6123194) (study limits are NW 87 to 67 Aves)	4 to 6 lanes (+ interchange improvements)	$20.0
	NW 97 Ave: NW 25 St. to NW 41 St.	2 to 4 lanes	$1.3
	NW 87 Ave: NW 36 St. to NW 58 St.	4 to 6 lanes	$6.2
	NW 12 St: NW 110 Ave. to NW 107 Ave.	new 4 lane	$1.5
	SR112: I-95 to Okeechobee Rd. (6113862)[6]	add one HOV lane (each direction)	$32.0
	SW 8 St: SW 127 Ave to SW 152 Ave (6113881)[6]	4 to 6 lanes	$2.9
	NW 74 St: NW 57 Ave. to SR826 (6114162)[6]	4 to 6 lanes	$7.6
	NW 57 Ave: Okeechobee Rd. to NW 138 St. (6114118)[6]	4 to 6 lanes	$5.8
	I-95 Intelligent Corridor System[7]		$33.0
	I-195 Intelligent Corridor System[7]		$6.3
	I-395 Reconstruction (I-95 to MacArthur)[7]		$110.7
	Golden Glades Multimodal Terminal[7]		$5.2
TOTAL	**Priority II**		**$1,114.3**

Recommended Cost Feasible Plan
Year 2015 Long Range Transportation Plan

Priority III	***(Years 2005 to 2010)***		
Project No.	**Project**	**Description**	**Cost to Long Range Plan (millions)**
	Bicycle/Pedestrian/Greenways (Also in Priorities II, IV)[1]		$12.9
	New & Replacement buses (Also in Priorities II, IV)[5] and bus facilities		$122.8
	SR826: SR874 to I-75 (Also in Priority II and IV)[5]	Add one HOV lane (each direction)	$328.0
	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, IV)[2]	premium transit	$200.0
	MIC (Also in Priority II)[4]	Miami Intermodal Center	$50.0
	Interconnector: SR 836 to SR112 (Also in Priority II)[4]	new 4 lane & 2 HOV lanes	$50.0
	SR836 Corridor: SR826 to LeJeune[2]	add one HOV lane (each direction)	$55.5
	SR836 Corridor: SR826 to HEFT[2]	add one HOV lane (each direction)	$17.8
	NW 12 St: NW 110 Ave. to NW 122 Ave.	2 to 4 lanes	$0.6
	NW 12 St: NW 122 Ave. to NW 137 Ave.	2 to 4 lanes and new 4 lane	$1.0
	SW 137 Ave: NW 12 St to SW 8 St.	2 to 6 lanes	$6.8

* Refer to page 10 for notes.

	SW 137 Ave: SW 8 St. to SW 26 St.	4 to 6 lanes	$3.8
	SR874: HEFT to SR826 (6113823)[6]	4 & 6 lanes to 8 lanes (make 3 + 1 HOV each direction)	$36.1
	NW 87 Ave: NW 58 St. to Okeechobee Rd.	new 4 lane	$7.7
	NW 25 St: NW 107 Ave. to NW 112 Ave.	2 to 4 lanes	$1.3
	SW 112 Ave: Homestead Air Reserve Base to HEFT along SW 112 Ave.	widen to 6 lanes throughout	$5.0
	NW 97 Ave: NW 58 St. to NW 90 St.	2 to 4 lanes and new 4 lane	$5.1
	SW 137 Ave: US 1 to HEFT	2 to 4 lanes	$10.3
	I-395 Intelligent Corridor System[7]		$2.9
	Port Tunnel		$283.0
TOTAL	**Priority III**		**$1,200.6**

* Refer to page 10 for notes.

Recommended Cost Feasible Plan
Year 2015 Long Range Transportation Plan

Priority IV	*(Years 2010 to 2015)*		
Project No.	**Project**	**Description**	**Cost to Long Range Plan (millions)**
	Bicycle/Pedestrian/Greenways (Also in Priorities II, III)[1]		$12.9
	New & Replacement buses (Also in Priorities II, III)[5] and bus facilities		$122.8
	SR826: SR874 to I-75 (Also in priority II and III)[5]	Add one HOV lane (each direction)	$26.7
	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, III)[2]	premium transit	$200.0
	NW 58 St: NW 97 Ave. to NW 117 Ave.	2 to 4 lanes	$3.7
	NW/SW 107 Ave: NW 41 St. to SW 8 St. (6113948)	4 to 6 lanes	$4.0
	SR836: HEFT to NW 137 Ave. (6113860)	new 6 lane expressway extension	$173.8
	Krome Ave: SW 8 St. to US1 (6113791)[6]	2 lanes with access rights protection	$47.2
	NW 183 St: I-75 to NW 57 Ave	4 to 6 lanes	$4.8
	SW 127 Ave: SW 120 St to SW 144 St	new 4 lanes	$3.9
	SW 184 St: SW 157 Ave to SW 147 Ave	2 to 4 lanes	$2.0

* Refer to page 10 for notes

	NW 107 Ave: NW 106 St. to NW 41 St.	widen to 4 lanes	$18.4
	SW 112 Ave: US 1 to Moody Dr.	4 to 6 lanes	$10.7
	I-75 Intelligent Corridor System[7]		$7.3
	Okeechobee Rd: SR112 to SR826	widen to 6 lanes	$36.1
	SW 137 Ave: SW 184 St to US1	widen to 4 lanes	$10.3
	SW 97 Ave: SW 72 St to SW 40 St	2 to 4 lanes	$4.6
	NW 183 St: NE 6 Ave to US 1 (6114260)[6]	4 to 6 lanes	$2.0
	Franjo Rd: SW 184 St to Old Cutler	2 to 4 lanes	$0.4
	Krome Ave: SW 8 St to Okeechobee	2 lanes with access rights protection	$29.2
TOTAL	**Priority IV**	**End of funding for Year 2015 Cost Feasible Plan**	**$720.8**

* Refer to page 10 for notes.

Unfunded Element of Needs Plan (Priority IV)			
	SR 836/I395/I95 Major Interchange Improvement		$30.0
	NW 74 St: SR826 to HEFT	new 6-lane road	$9.7
	NW 36/41 St: NW 42 Ave. to HEFT	Express Street (grade separations, ITS, etc.)	$194.0
	I-95 Multimodal Master Plan Improvements[7]		$108.9
	I-95 Downtown Distributor Ramps[7]		$47.1
	SR826: NW 158 St. to GGI (6113880)[6]	add one HOV lane (each direction)	$65.8
	SR836 Corridor: Palmetto to FIU	premium transit	$265.0
	SR874: HEFT to SW 137 Ave	new 6-lane expressway extension with arterial step-down to SW 147 Ave	$69.7
	SR 985/SW 107 Ave: SW 40 St to SW 24 St (6113770)[6]	4 to 6 lanes	$1.2
	US 1: Downtown to Broward County Line	premium transit[8]	$803.2
	Kendall Corridor: Dadeland North to SW 147 Ave	premium transit[8]	$615.5
	SR836 Corridor: Downtown to Miami Beach	premium transit[8]	$332.0
	SR826: Dadeland to NW 74 St	premium transit[8]	$526.0
	SW 42/37 Ave: MIC to Douglas Rd. Sta.	premium transit[8]	$72.8
	SW 200 St: US1 to Quail Roost Dr.	2 to 4 lanes	$3.3
	SW 87 Ave: SW 168 St. to SW 216 St.	2 to 4 lanes	$6.5
	NW 170 St: NW 77 Ave. to NW 87 Ave.	2 to 4 lanes	$2.2
	SW 157 Ave: SW 88 St. to SW 104 St.	2 to 4 lanes	$1.3
	SW 152 Ave: US1 to SW 312 St.	2 to 4 lanes	$5.9

* Refer to page 10 for notes.

	LeJeune Rd: SR112 to NW 103 St.	5 to 6 lanes	$1.8
	SW 77 Ave: SW 104 St. to SW 152 St.	2 to 4 lanes	$6.7
	Central Parkway	New 6-lane parkway (assumed public sector costs for interchanges)	$75.0
	SW 120 St: SW 137 Ave to SW 117 Ave	4 to 6 lanes	$7.6
	SR836	Intelligent Corridor System (ICS)	$19.3
	SR112	Intelligent Corridor System (ICS)	$7.5
	SR826	Intelligent Corridor System (ICS)	$29.7
	SR874	Intelligent Corridor System (ICS)	$10.9
TOTAL	**Unfunded Needs**		**$3,318.6**

Priority II	**Funded**	**$1,114.3**
Priority III	**Funded**	**$1,200.6**
Priority IV	**Funded**	**$720.8**
	Total of Funded Priorities II, III, and IV*	**$3,035.7**

Unfunded Total of Needs Plan	**$3,318.6**

Total Funded and Unfunded Needs	**$6,354.3**

*The $3 billion does not represent total available and expected funding for the 15 years following the 1996 Transportation Improvement Program. Other funds expected to be available to Dade County include Federal Transit Administration Section 3 Discretionary, toll revenues and private sector contributions.

Notes:

[1]The Bicycle/Pedestrian/Greenways funds are estimated to consist of 1.5% of projected non-interstate highway revenues to the plan period. One-third of these funds are programmed in each of the three priority categories (II-IV) in which the Long Range Plan projects are grouped.

[2]The various components of the East/West (SR836) projects are programmed such that the total amount programmed represents the "LRTP funds" requested by the East/West Project Team. Additional revenues from private and other sources are a part of the East-West Project Financial Plan.

[3]The "Cost to the Long Range Plan" for the North Corridor represents 30% of the total project costs. The remaining 70% is assumed to be provided via Section 3 Federal Discretionary funding.

[4]The Interconnector and the Miami Intermodal Center (MIC) are being studied by a project team that published a July 1995 Draft Environmental Impact Statement (DEIS). The MIC Team has requested the equivalent of $300 million (1995 dollars) from "LRTP funds".

[5]One third of the new and replacement buses that are anticipated to be needed are programmed in each of Priorities II through IV. Per CTAC Resolution 48-95 and the MPO Adoption, $10 million in Priority III and $10 million in Priority IV are earmarked for the upgrade of transit-related facilities in the Kendall and Northeast Corridors. Also, for the project on SR826, adding HOV from SR874 to I-75, one-half of the funds are programmed in Priority II and one-half in Priority III.

[6]The "Cost to the Long Range Plan" for these projects is shown less the amounts already programmed in the current TIP.

[7]The interstate project costs are equal to the Interstate funds available through the year 2015 as calculated by FDOT - Central Office. To derive Year 2015 Interstate funding, 75% of the Central Office Year 2020 projections were utilized. Central Office had reported these funds in 1993 dollars. For the purpose of this report, these were inflated to 1995 dollars. Thus, both Interstate capital costs and Interstate funding are approximately equal to $240.7 million.

[8]The highest level of urban transit technology was assumed to develop these cost estimates. Future studies will determine the most feasible technology and its cost.

Long Range Transportation Plan Update (to the Year 2015)

Projects on the Turnpike System

(in Dade County, on the Homestead Extension of Florida's Turnpike (HEFT); listed from north to south)

HEFT: I-75 to Florida Turnpike (mainline)	widen from 4 to 6 lanes
HEFT: NW 41 Street to I-75	widen from 4 to 6 lanes
HEFT: at NW 74 Street	construct interchange
HEFT: SR-836 to NW 41 Street	widen from 4 to 6 lanes
HEFT: SR-836 to SR-874	add one HOV lane each direction
HEFT: Quail Roost Drive to Biscayne Drive	widen from 4 to 6 lanes

Notes:

1. These projects are listed from north to south for descriptive purposes only. This order does not suggest an implementation schedule. The Turnpike District is continuing Master Plan and other long range planning efforts to phase projects, including those listed above, on the Turnpike system.

2. These projects are assumed to be funded by the Turnpike, for purposes of developing the Cost Feasible Plan. Costs for these projects have not been subtracted from Dade County's Long Range Transportation Plan revenue stream. While further assessment will be done on this list of projects, they are considered to be needed and funded Priority II projects in this Plan.

3. The Turnpike District has reviewed, and concurs with, this list of project proposals. The Turnpike District has provided additional clarification that these projects will include, wherever possible, the addition of electronic toll traffic management (ETTM) and other high-tech components as Intelligent Transportation System (ITS) elements.

Long Range Transportation Plan Update (to the Year 2015)

Roadway Projects Assumed to be Funded by Developer/Private Sector

(costs for these projects have not been subtracted from the Year 2015 Transportation Plan revenue stream)

NW 7 Street: NW 77 Ave. to NW 82 Ave.	new 4 lane road
SW 42 Street: SW 147 Ave. to SW 157 Ave.	new 2 lane road
SW 56 Street: SW 152 Ave. to SW 157 Ave.	new 4 lane road
SW 56 Street: SW 157 Ave. to SW 167 Ave.	new 2 lane road
SW 72 Street: SW 154 Ave. to SW 167 Ave.	new 2 lane road
NW 82 Avenue: NW 7 St. to NW 12 St.	new 4 lane road
NW 90 Street: NW 107 Ave. to NW 87 Ave.	new 2 lane road
SW 104 Street: SW 152 Ave. to SW 167 Ave.	widen from 2 to 4 lanes and new 4 lane road (new 4 lane from SW 157 to 162 Aves.)
SW 147 Avenue: SW 8 St. to SW 26 St.	new 4 lane road
SW 157 Avenue: SW 42 St. to SW 56 St.	new 2 lane road
SW 157 Avenue: SW 56 St. to SW 72 St.	new 4 lane road
SW 157 Avenue: SW 184 St. to SW 216 St.	new 2 lane road
SW 167 Avenue: SW 56 St. to SW 88 St.	new 2 lane road
SW 167 Avenue: SW 88 St. to SW 104 St.	new 2 lane road
Central Parkway	6 lane parkway

Appendix E - MOBILE.90A and MOBILEIM.90A Files

Appendix E - MOBILEIM.90A and MOBILE.90A Files

A. MOBILE.90A

```
1          PROMPT - vertical flag input, no prompting
MOBILE5a FDOT: Dade County - Miami Urban Area Study
1          TAMFLG - default tampering rates
1          SPDFLG - one speed per scenario
1          VMFLAG - default vmt mix
1          MYMRFG - default registration and mileage accrual rates
1          NEWFLG - default exhaust emission rates
1          IMFLAG - with I/M program
1          ALHFLG - no additional correction factor inputs
1          ATPFLG - with anti-tampering program
5          RLFLAG - no refueling losses, treated as stationary source
2          LOCFLG - read in local area parameters as one time
1          TEMFLG - calculate exhaust temperatures
4          OUTFMT - 80 column portrait output format
4          PRTFLG - print exhaust HC, CO and NOx emission factor results
1          IDLFLG - Calculate & print idle emissions results (when available)
3          NMHFLG - print VOCs
3          HCFLAG - print HC components
MIAMI         FL C 69.3 91.2  9.2  7.8 92        LAP record
1 90  3.0 84.  20.6 27.3 20.6  7                 Scenario records
1 90  6.0 84.  20.6 27.3 20.6  7
1 90  9.0 84.  20.6 27.3 20.6  7
1 90 12.0 84.  20.6 27.3 20.6  7
1 90 15.0 84.  20.6 27.3 20.6  7
1 90 18.0 84.  20.6 27.3 20.6  7
1 90 21.0 84.  20.6 27.3 20.6  7
1 90 24.0 84.  20.6 27.3 20.6  7
1 90 27.0 84.  20.6 27.3 20.6  7
1 90 30.0 84.  20.6 27.3 20.6  7
1 90 33.0 84.  20.6 27.3 20.6  7
1 90 36.0 84.  20.6 27.3 20.6  7
1 90 39.0 84.  20.6 27.3 20.6  7
1 90 42.0 84.  20.6 27.3 20.6  7
1 90 45.0 84.  20.6 27.3 20.6  7
1 90 48.0 84.  20.6 27.3 20.6  7
1 90 51.0 84.  20.6 27.3 20.6  7
1 90 54.0 84.  20.6 27.3 20.6  7
1 90 57.0 84.  20.6 27.3 20.6  7
1 90 60.0 84.  20.6 27.3 20.6  7
1 90 63.0 84.  20.6 27.3 20.6  7
1 90 65.0 84.  20.6 27.3 20.6  7
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B. MOBILEIM.90A

```
1           PROMPT - vertical flag input, no prompting
MOBILE5a FDOT: Dade County - Miami Urban Area Study
1           TAMFLG - default tampering rates
1           SPDFLG - one speed per scenario
1           VMFLAG - default vmt mix
1           MYMRFG - default registration and mileage accrual rates
1           NEWFLG - default exhaust emission rates
2           IMFLAG - with I/M program
1           ALHFLG - no additional correction factor inputs
2           ATPFLG - with anti-tampering program
5           RLFLAG - no refueling losses, treated as stationary source
2           LOCFLG - read in local area parameters as one time
1           TEMFLG - calculate exhaust temperatures
4           OUTFMT - 80 column portrait output format
4           PRTFLG - print exhaust HC, CO and NOx emission factor results
1           IDLFLG - Calculate & print idle emissions results (when available)
3           NMHFLG - print VOCs
3           HCFLAG - print HC components
91 26 75 20 00 00 100 1 1 2221 1 11                I&M Program Parameter
91 75 20 2221 11 100. 12111112                     AT Program Parameters
MIAMI         FL C 69.3 91.2  9.2  7.8 92          LAP record
1 90  3.0 84.  20.6 27.3 20.6  7                   Scenario records
1 90  6.0 84.  20.6 27.3 20.6  7
1 90  9.0 84.  20.6 27.3 20.6  7
1 90 12.0 84.  20.6 27.3 20.6  7
1 90 15.0 84.  20.6 27.3 20.6  7
1 90 18.0 84.  20.6 27.3 20.6  7
1 90 21.0 84.  20.6 27.3 20.6  7
1 90 24.0 84.  20.6 27.3 20.6  7
1 90 27.0 84.  20.6 27.3 20.6  7
1 90 30.0 84.  20.6 27.3 20.6  7
1 90 33.0 84.  20.6 27.3 20.6  7
1 90 36.0 84.  20.6 27.3 20.6  7
1 90 39.0 84.  20.6 27.3 20.6  7
1 90 42.0 84.  20.6 27.3 20.6  7
1 90 45.0 84.  20.6 27.3 20.6  7
1 90 48.0 84.  20.6 27.3 20.6  7
1 90 51.0 84.  20.6 27.3 20.6  7
1 90 54.0 84.  20.6 27.3 20.6  7
1 90 57.0 84.  20.6 27.3 20.6  7
1 90 60.0 84.  20.6 27.3 20.6  7
1 90 63.0 84.  20.6 27.3 20.6  7
1 90 65.0 84.  20.6 27.3 20.6  7
```

Appendix F - EMIS.OUT Files

Appendix F - EMIS.OUT Files

A. EMIS.OUT FOR 1990

1MOBILE5a FDOT: Dade County - Miami Urban Area Study
 MOBILE5a (26-Mar-93)
0
-M153 Error:
 Warning: Refueling emissions in grams-per-gallon are only available using the 120 column descriptive output option (OUTFMT = 3 or 5). See MOBILE5 Users
 Guide chapters 2.1.15, 2.1.19 and 2.1.20 for more information.
OMIAMI FL

Minimum Temp: 69. (F) Maximum Temp: 91. (F)
Period 1 RVP: 9.2 Period 2 RVP: 7.8 Period 2 Yr: 1992

OVOC HC emission factors include evaporative HC emission factors.
0

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	23.50	26.94	43.63	32.52	63.60	1.53	2.28	6.96	16.73	25.80
Exhst HC:	12.29	15.51	24.72	18.59	29.10	1.53	2.28	6.96	10.56	13.95
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	10.35	10.31	17.36	12.67	28.96					10.76
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	175.46	221.52	350.27	264.55	548.14	5.15	6.22	41.99	157.44	199.88
Exhst NOX:	2.28	2.54	3.02	2.70	5.10	2.80	3.34	35.62	.84	4.22

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	10.50	12.47	19.40	14.79	35.29	1.32	1.96	5.98	12.43	12.00
Exhst HC:	6.46	8.45	13.25	10.05	22.24	1.32	1.96	5.98	6.25	7.75
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	3.18	2.90	4.60	3.47	7.51					3.16
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	90.37	115.24	180.52	137.06	420.83	4.06	4.89	33.05	85.55	108.05
Exhst NOX:	1.96	2.19	2.70	2.36	5.26	2.47	2.95	31.44	.75	3.71

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	7.30	8.71	13.17	10.20	27.13	1.14	1.69	5.17	10.51	8.47
Exhst HC:	4.43	5.84	8.94	6.87	17.26	1.14	1.69	5.17	4.33	5.43
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	2.01	1.75	2.68	2.06	4.33					1.95
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	60.92	77.38	117.79	90.89	329.55	3.25	3.92	26.44	55.27	74.08
Exhst NOX:	1.84	2.07	2.59	2.24	5.42	2.21	2.64	28.11	.71	3.43

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	5.82	6.98	10.37	8.11	22.40	.99	1.48	4.50	9.53	6.80
Exhst HC:	3.42	4.54	6.80	5.30	13.59	.99	1.48	4.50	3.35	4.22
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	1.55	1.32	2.02	1.55	3.26					1.49
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	46.36	59.01	87.07	68.39	263.23	2.64	3.18	21.50	40.32	56.62
Exhst NOX:	1.78	2.02	2.55	2.20	5.58	2.00	2.39	25.45	.70	3.24

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	15.0	15.0	15.0		15.0	15.0	15.0	15.0	15.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	4.87	5.92	8.69	6.85	19.00	.87	1.30	3.96	8.97	5.73
Exhst HC:	2.82	3.78	5.56	4.38	10.87	.87	1.30	3.96	2.79	3.49
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	1.19	1.01	1.58	1.20	2.59					1.15
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	37.78	48.42	69.43	55.44	214.46	2.18	2.63	17.78	31.91	46.08
Exhst NOX:	1.74	2.01	2.54	2.19	5.74	1.84	2.19	23.34	.72	3.10

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	4.17	5.18	7.57	5.98	16.48	.77	1.15	3.51	8.61	4.96
Exhst HC:	2.42	3.28	4.76	3.77	8.82	.77	1.15	3.51	2.43	2.99
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.90	.77	1.26	.94	2.12					.88
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	32.11	41.45	58.02	46.99	178.22	1.83	2.21	14.94	26.58	38.99
Exhst NOX:	1.72	2.01	2.55	2.19	5.89	1.71	2.04	21.68	.75	3.01

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	21.0	21.0	21.0		21.0	21.0	21.0	21.0	21.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	

0Composite Emission Factors (Gm/Mile)

VOC HC:	3.69	4.66	6.80	5.38	14.59	.69	1.02	3.13	8.36	4.41
Exhst HC:	2.12	2.92	4.20	3.35	7.27	.69	1.02	3.13	2.19	2.62
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.71	.62	1.05	.76	1.79					.71
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	28.13	36.89	50.74	41.52	151.07	1.57	1.89	12.76	22.83	34.07
Exhst NOX:	1.73	2.05	2.59	2.23	6.05	1.60	1.92	20.40	.80	2.96

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.37	4.29	6.22	4.94	13.18	.62	.92	2.82	8.17	4.03
Exhst HC:	1.88	2.62	3.75	3.00	6.08	.62	.92	2.82	1.99	2.32
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.63	.55	.92	.67	1.57					.62
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	25.18	33.40	45.46	37.43	130.61	1.36	1.64	11.08	19.94	30.40
Exhst NOX:	1.75	2.12	2.66	2.30	6.21	1.53	1.83	19.44	.85	2.94

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	27.0	27.0	27.0		27.0	27.0	27.0	27.0	27.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.11	3.98	5.76	4.58	12.09	.56	.84	2.55	8.01	3.73
Exhst HC:	1.69	2.37	3.39	2.71	5.16	.56	.84	2.55	1.83	2.09
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.56	.49	.82	.60	1.39					.55
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	22.81	30.43	41.19	34.02	115.18	1.20	1.45	9.78	17.58	27.45
Exhst NOX:	1.77	2.18	2.72	2.36	6.37	1.48	1.76	18.77	.90	2.94

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	30.0	30.0	30.0		30.0	30.0	30.0	30.0	30.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.89	3.72	5.38	4.28	11.23	.51	.76	2.33	7.87	3.47
Exhst HC:	1.54	2.16	3.09	2.47	4.44	.51	.76	2.33	1.69	1.89
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.49	.44	.73	.54	1.25					.49
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	20.87	27.89	37.66	31.16	103.61	1.08	1.30	8.78	15.60	25.06
Exhst NOX:	1.78	2.23	2.77	2.41	6.53	1.44	1.72	18.35	.94	2.95

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	33.0	33.0	33.0		33.0	33.0	33.0	33.0	33.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	2.71	3.51	5.06	4.02	10.56	.47	.70	2.15	7.75	3.26
Exhst HC:	1.41	1.99	2.84	2.27	3.88	.47	.70	2.15	1.57	1.73
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.44	.40	.67	.49	1.13					.44
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	19.28	25.78	34.73	28.77	95.06	.98	1.19	8.01	13.94	23.11
Exhst NOX:	1.80	2.27	2.82	2.45	6.69	1.43	1.71	18.17	.98	2.96

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	36.0	36.0	36.0		36.0	36.0	36.0	36.0	36.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	2.56	3.33	4.79	3.82	10.02	.44	.65	2.00	7.65	3.08
Exhst HC:	1.31	1.85	2.63	2.11	3.45	.44	.65	2.00	1.47	1.60
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.39	.36	.61	.44	1.03					.40
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	17.96	24.08	32.32	26.83	88.96	.91	1.10	7.42	12.58	21.55
Exhst NOX:	1.82	2.31	2.86	2.49	6.84	1.43	1.71	18.22	1.00	2.99

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	39.0	39.0	39.0		39.0	39.0	39.0	39.0	39.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	2.42	3.18	4.57	3.65	9.59	.41	.61	1.87	7.57	2.94
Exhst HC:	1.22	1.73	2.46	1.97	3.11	.41	.61	1.87	1.39	1.49
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.35	.33	.56	.41	.95					.35
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	16.88	22.78	30.39	25.32	84.92	.86	1.04	7.00	11.50	20.32
Exhst NOX:	1.83	2.34	2.90	2.52	7.00	1.46	1.74	18.51	1.03	3.03

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	42.0	42.0	42.0		42.0	42.0	42.0	42.0	42.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	2.31	3.07	4.39	3.51	9.25	.39	.58	1.76	7.51	2.81
Exhst HC:	1.15	1.64	2.33	1.87	2.84	.39	.58	1.76	1.33	1.40
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.30	.30	.52	.37	.87					.32
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	16.01	21.84	28.89	24.19	82.68	.82	.99	6.70	10.67	19.38
Exhst NOX:	1.85	2.36	2.93	2.55	7.16	1.50	1.79	19.05	1.05	3.08

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.21	2.98	4.25	3.40	8.98	.37	.55	1.68	7.47	2.71
Exhst HC:	1.09	1.58	2.22	1.79	2.64	.37	.55	1.68	1.29	1.33
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.26	.28	.48	.34	.80					.28
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	15.31	21.21	27.74	23.39	82.12	.80	.97	6.53	10.05	18.69
Exhst NOX:	1.87	2.39	2.97	2.58	7.32	1.56	1.86	19.85	1.06	3.15

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	48.0	48.0	48.0		48.0	48.0	48.0	48.0	48.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.12	2.90	4.13	3.31	8.77	.35	.53	1.61	7.45	2.62
Exhst HC:	1.04	1.52	2.13	1.73	2.49	.35	.53	1.61	1.27	1.28
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.23	.25	.44	.32	.74					.25
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	14.73	20.77	26.85	22.80	83.18	.79	.96	6.46	9.58	18.19
Exhst NOX:	1.89	2.42	3.02	2.62	7.48	1.65	1.97	20.95	1.08	3.24

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	51.0	51.0	51.0		51.0	51.0	51.0	51.0	51.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.10	2.87	4.08	3.28	8.58	.34	.51	1.55	7.45	2.58
Exhst HC:	1.04	1.52	2.13	1.73	2.38	.34	.51	1.55	1.27	1.27
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.20	.23	.39	.28	.66					.22
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	14.73	20.77	26.85	22.80	85.95	.80	.96	6.50	9.58	18.28
Exhst NOX:	2.14	2.72	3.41	2.95	7.64	1.76	2.10	22.40	1.19	3.57

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	54.0	54.0	54.0		54.0	54.0	54.0	54.0	54.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	

```
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.08   2.85   4.03   3.25   8.44    .33    .50   1.51   7.45   2.55
 Exhst  HC:  1.04   1.52   2.13   1.73   2.31    .33    .50   1.51   1.27   1.27
 Evap.  HC:   .77   1.04   1.47   1.18   5.40                         5.77   1.00
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .18    .20    .35    .25    .59                                 .20
 Rsting HC:   .09    .08    .08    .08    .14                          .41    .09
 Exhst  CO: 14.73  20.77  26.85  22.80  90.58    .82    .99   6.65   9.58  18.43
 Exhst NOX:  2.39   3.01   3.81   3.28   7.79   1.91   2.28  24.26   1.30   3.92
-------------------------------------------------------------------------------
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 1990           Region: Low           Altitude:  500. Ft.
                     I/M Program: No        Ambient Temp:   86.2 / 86.2 / 86.2 F
                Anti-tam. Program: No      Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____   _____  _____  _____  _____  _____  _____
 Veh. Spd.: 57.0   57.0   57.0           57.0   57.0   57.0   57.0   57.0
   VMT Mix:   .653   .164   .082           .031   .008   .002   .053   .008
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.21   3.06   4.34   3.49   8.34    .33    .49   1.49   7.63   2.69
 Exhst  HC:  1.18   1.75   2.47   1.99   2.27    .33    .49   1.49   1.45   1.43
 Evap.  HC:   .77   1.04   1.47   1.18   5.40                         5.77   1.00
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .16    .18    .32    .23    .53                                 .18
 Rsting HC:   .09    .08    .08    .08    .14                          .41    .09
 Exhst  CO: 20.47  29.93  39.24  33.04  97.37    .85   1.02   6.92  14.19  24.95
 Exhst NOX:  2.65   3.31   4.21   3.61   7.95   2.09   2.50  26.61   1.40   4.29
-------------------------------------------------------------------------------
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 1990           Region: Low           Altitude:  500. Ft.
                     I/M Program: No        Ambient Temp:   86.2 / 86.2 / 86.2 F
                Anti-tam. Program: No      Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____   _____  _____  _____  _____  _____  _____
 Veh. Spd.: 60.0   60.0   60.0           60.0   60.0   60.0   60.0   60.0
   VMT Mix:   .653   .164   .082           .031   .008   .002   .053   .008
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.41   3.38   4.81   3.86   8.29    .32    .48   1.47   7.90   2.92
 Exhst  HC:  1.40   2.10   2.98   2.39   2.28    .32    .48   1.47   1.72   1.67
 Evap.  HC:   .77   1.04   1.47   1.18   5.40                         5.77   1.00
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .15    .16    .29    .21    .48                                 .16
 Rsting HC:   .09    .08    .08    .08    .14                          .41    .09
 Exhst  CO: 29.08  43.67  57.82  48.39 106.77    .90   1.08   7.31  21.11  34.71
 Exhst NOX:  2.90   3.61   4.61   3.94   8.11   2.32   2.78  29.56   1.51   4.70
-------------------------------------------------------------------------------
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 1990           Region: Low           Altitude:  500. Ft.
                     I/M Program: No        Ambient Temp:   86.2 / 86.2 / 86.2 F
                Anti-tam. Program: No      Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____   _____  _____  _____  _____  _____  _____
 Veh. Spd.: 63.0   63.0   63.0           63.0   63.0   63.0   63.0   63.0
   VMT Mix:   .653   .164   .082           .031   .008   .002   .053   .008
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.62   3.71   5.29   4.24   8.28    .32    .48   1.47   8.17   3.15
 Exhst  HC:  1.62   2.44   3.48   2.79   2.31    .32    .48   1.47   1.99   1.91
 Evap.  HC:   .77   1.04   1.47   1.18   5.40                         5.77   1.00
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .13    .15    .26    .19    .43                                 .15
 Rsting HC:   .09    .08    .08    .08    .14                          .41    .09
 Exhst  CO: 37.69  57.41  76.40  63.75 119.41    .96   1.16   7.85  28.03  44.58
 Exhst NOX:  3.15   3.90   5.01   4.27   8.27   2.62   3.12  33.26   1.61   5.15
-------------------------------------------------------------------------------
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 1990           Region: Low           Altitude:  500. Ft.
                     I/M Program: No        Ambient Temp:   86.2 / 86.2 / 86.2 F
                Anti-tam. Program: No      Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
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0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____ _____  _____  _____  _____  _____  _____  _____  _____  _____
 Veh. Spd.: 65.0  65.0   65.0          65.0   65.0   65.0   65.0   65.0
   VMT Mix:   .653   .164   .082          .031   .008   .002   .053   .008
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  2.76   3.93   5.61   4.49   8.30    .32    .48   1.47   8.35   3.31
 Exhst  HC:  1.77   2.67   3.82   3.05   2.35    .32    .48   1.47   2.18   2.08
 Evap.  HC:   .77   1.04   1.47   1.18   5.40                         5.77   1.00
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .13    .14    .24    .18    .41                                 .14
 Rsting HC:   .09    .08    .08    .08    .14                          .41    .09
 Exhst  CO: 43.44  66.57  88.79  73.99 130.08   1.02   1.23   8.31  32.65  51.24
 Exhst NOX:  3.31   4.10   5.28   4.49   8.38   2.85   3.40  36.24   1.68   5.47
________________________________________________________________________________
1MOBILE5a FDOT: Dade County -'Miami Urban Area Study
 MOBILE5a (26-Mar-93)
0
-M153 Error:
 Warning: Refueling emissions in grams-per-gallon are only available using the 120 column descriptive output option
(OUTFMT = 3 or 5). See MOBILE5 Users
 Guide chapters 2.1.15, 2.1.19 and 2.1.20 for more information.
0I/M program selected:

0    Start year (January 1):             1991
     Pre-1981 MYR stringency rate:        26%
     First model year covered:           1975
     Last model year covered:            2020
     Waiver rate (pre-1981):              0.%
     Waiver rate (1981 and newer):        0.%
     Compliance Rate:                   100.%
     Inspection type:                    Test Only
     Inspection frequency                Annual
     Vehicle types covered:              LDGV - Yes
                                        LDGT1 - Yes
                                        LDGT2 - Yes
                                         HDGV - No
     1981 & later MYR test type:         Idle
     Cutpoints, HC:  220.000   CO:    1.200   NOx:  999.000
0Functional Check Program Description:
0Check Start   Model Yrs  Vehicle Classes Covered       Inspection      Comp
       (Jan1)  Covered    LDGV   LDGT1  LDGT2  HDGV    Type      Freq    Rate

 ATP   1991     1975-2020  Yes    Yes    Yes    No  Test Only    Annual  100.0%
0Air pump system disablements:        No   Catalyst removals:                 Yes
 Fuel inlet restrictor disablements:  No   Tailpipe lead deposit test:         No
 EGR disablement:                     No   Evaporative system disablements:    No
 PCV system disablements:             No   Missing gas caps:                  Yes
0MIAMI         FL
                    Minimum Temp: 69. (F)   Maximum Temp: 91. (F)
                    Period 1 RVP:  9.2      Period 2 RVP:  7.8 Period 2 Yr: 1992
0VOC HC emission factors include evaporative HC emission factors.
0_______________________________________________________________________________
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 1990          Region: Low          Altitude:  500. Ft.
                    I/M Program: Yes      Ambient Temp:  86.2 / 86.2 / 86.2 F
               Anti-tam. Program: Yes    Operating Mode:  20.6 / 27.3 / 20.6
                Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____ _____  _____  _____  _____  _____  _____  _____  _____  _____
 Veh. Spd.:  3.0    3.0    3.0           3.0    3.0    3.0    3.0    3.0
   VMT Mix:   .653   .164   .082          .031   .008   .002   .053   .008
0Composite Emission Factors (Gm/Mile)
 VOC    HC: 23.50  26.94  43.63  32.52  63.60   1.53   2.28   6.96  16.73  25.80
 Exhst  HC: 12.29  15.51  24.72  18.59  29.10   1.53   2.28   6.96  10.56  13.95
 Evap.  HC:   .77   1.04   1.47   1.18   5.40                         5.77   1.00
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC: 10.35  10.31  17.36  12.67  28.96                               10.76
 Rsting HC:   .09    .08    .08    .08    .14                          .41    .09
 Exhst  CO:175.46 221.52 350.27 264.55 548.14   5.15   6.22  41.99 157.44 199.88
 Exhst NOX:  2.28   2.54   3.02   2.70   5.10   2.80   3.34  35.62    .84   4.22
________________________________________________________________________________
0Emission factors are as of  1st of the indicated calendar year.
```

0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	10.50	12.47	19.40	14.79	35.29	1.32	1.96	5.98	12.43	12.00
Exhst HC:	6.46	8.45	13.25	10.05	22.24	1.32	1.96	5.98	6.25	7.75
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	3.18	2.90	4.60	3.47	7.51					3.16
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	90.37	115.24	180.52	137.06	420.83	4.06	4.89	33.05	85.55	108.05
Exhst NOX:	1.96	2.19	2.70	2.36	5.26	2.47	2.95	31.44	.75	3.71

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	7.30	8.71	13.17	10.20	27.13	1.14	1.69	5.17	10.51	8.47
Exhst HC:	4.43	5.84	8.94	6.87	17.26	1.14	1.69	5.17	4.33	5.43
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	2.01	1.75	2.68	2.06	4.33					1.95
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	60.92	77.38	117.79	90.89	329.55	3.25	3.92	26.44	55.27	74.08
Exhst NOX:	1.84	2.07	2.59	2.24	5.42	2.21	2.64	28.11	.71	3.43

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	5.82	6.98	10.37	8.11	22.40	.99	1.48	4.50	9.53	6.80
Exhst HC:	3.42	4.54	6.80	5.30	13.59	.99	1.48	4.50	3.35	4.22
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	1.55	1.32	2.02	1.55	3.26					1.49
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	46.36	59.01	87.07	68.39	263.23	2.64	3.18	21.50	40.32	56.62
Exhst NOX:	1.78	2.02	2.55	2.20	5.58	2.00	2.39	25.45	.70	3.24

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	15.0	15.0	15.0		15.0	15.0	15.0	15.0	15.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	4.87	5.92	8.69	6.85	19.00	.87	1.30	3.96	8.97	5.73
Exhst HC:	2.82	3.78	5.56	4.38	10.87	.87	1.30	3.96	2.79	3.49
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	1.19	1.01	1.58	1.20	2.59					1.15
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	37.78	48.42	69.43	55.44	214.46	2.18	2.63	17.78	31.91	46.08
Exhst NOX:	1.74	2.01	2.54	2.19	5.74	1.84	2.19	23.34	.72	3.10

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	4.17	5.18	7.57	5.98	16.48	.77	1.15	3.51	8.61	4.96
Exhst HC:	2.42	3.28	4.76	3.77	8.82	.77	1.15	3.51	2.43	2.99
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.90	.77	1.26	.94	2.12					.88
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	32.11	41.45	58.02	46.99	178.22	1.83	2.21	14.94	26.58	38.99
Exhst NOX:	1.72	2.01	2.55	2.19	5.89	1.71	2.04	21.68	.75	3.01

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	21.0	21.0	21.0		21.0	21.0	21.0	21.0	21.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.69	4.66	6.80	5.38	14.59	.69	1.02	3.13	8.36	4.41
Exhst HC:	2.12	2.92	4.20	3.35	7.27	.69	1.02	3.13	2.19	2.62
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.71	.62	1.05	.76	1.79					.71
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	28.13	36.89	50.74	41.52	151.07	1.57	1.89	12.76	22.83	34.07
Exhst NOX:	1.73	2.05	2.59	2.23	6.05	1.60	1.92	20.40	.80	2.96

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.37	4.29	6.22	4.94	13.18	.62	.92	2.82	8.17	4.03
Exhst HC:	1.88	2.62	3.75	3.00	6.08	.62	.92	2.82	1.99	2.32
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.63	.55	.92	.67	1.57					.62
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	25.18	33.40	45.46	37.43	130.61	1.36	1.64	11.08	19.94	30.40
Exhst NOX:	1.75	2.12	2.66	2.30	6.21	1.53	1.83	19.44	.85	2.94

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	27.0	27.0	27.0		27.0	27.0	27.0	27.0	27.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.11	3.98	5.76	4.58	12.09	.56	.84	2.55	8.01	3.73
Exhst HC:	1.69	2.37	3.39	2.71	5.16	.56	.84	2.55	1.83	2.09
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.56	.49	.82	.60	1.39					.55
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	22.81	30.43	41.19	34.02	115.18	1.20	1.45	9.78	17.58	27.45
Exhst NOX:	1.77	2.18	2.72	2.36	6.37	1.48	1.76	18.77	.90	2.94

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	30.0	30.0	30.0		30.0	30.0	30.0	30.0	30.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.89	3.72	5.38	4.28	11.23	.51	.76	2.33	7.87	3.47
Exhst HC:	1.54	2.16	3.09	2.47	4.44	.51	.76	2.33	1.69	1.89
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.49	.44	.73	.54	1.25					.49
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	20.87	27.89	37.66	31.16	103.61	1.08	1.30	8.78	15.60	25.06
Exhst NOX:	1.78	2.23	2.77	2.41	6.53	1.44	1.72	18.35	.94	2.95

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	33.0	33.0	33.0		33.0	33.0	33.0	33.0	33.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.71	3.51	5.06	4.02	10.56	.47	.70	2.15	7.75	3.26
Exhst HC:	1.41	1.99	2.84	2.27	3.88	.47	.70	2.15	1.57	1.73
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.44	.40	.67	.49	1.13					.44
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	19.28	25.78	34.73	28.77	95.06	.98	1.19	8.01	13.94	23.11
Exhst NOX:	1.80	2.27	2.82	2.45	6.69	1.43	1.71	18.17	.98	2.96

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	36.0	36.0	36.0		36.0	36.0	36.0	36.0	36.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.56	3.33	4.79	3.82	10.02	.44	.65	2.00	7.65	3.08
Exhst HC:	1.31	1.85	2.63	2.11	3.45	.44	.65	2.00	1.47	1.60
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.39	.36	.61	.44	1.03					.40
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	17.96	24.08	32.32	26.83	88.96	.91	1.10	7.42	12.58	21.55
Exhst NOX:	1.82	2.31	2.86	2.49	6.84	1.43	1.71	18.22	1.00	2.99

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	39.0	39.0	39.0		39.0	39.0	39.0	39.0	39.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.42	3.18	4.57	3.65	9.59	.41	.61	1.87	7.57	2.94
Exhst HC:	1.22	1.73	2.46	1.97	3.11	.41	.61	1.87	1.39	1.49
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.35	.33	.56	.41	.95					.35
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	16.88	22.78	30.39	25.32	84.92	.86	1.04	7.00	11.50	20.32
Exhst NOX:	1.83	2.34	2.90	2.52	7.00	1.46	1.74	18.51	1.03	3.03

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	42.0	42.0	42.0		42.0	42.0	42.0	42.0	42.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.31	3.07	4.39	3.51	9.25	.39	.58	1.76	7.51	2.81
Exhst HC:	1.15	1.64	2.33	1.87	2.84	.39	.58	1.76	1.33	1.40
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.30	.30	.52	.37	.87					.32
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	16.01	21.84	28.89	24.19	82.68	.82	.99	6.70	10.67	19.38
Exhst NOX:	1.85	2.36	2.93	2.55	7.16	1.50	1.79	19.05	1.05	3.08

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.21	2.98	4.25	3.40	8.98	.37	.55	1.68	7.47	2.71
Exhst HC:	1.09	1.58	2.22	1.79	2.64	.37	.55	1.68	1.29	1.33
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.26	.28	.48	.34	.80					.28
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	15.31	21.21	27.74	23.39	82.12	.80	.97	6.53	10.05	18.69
Exhst NOX:	1.87	2.39	2.97	2.58	7.32	1.56	1.86	19.85	1.06	3.15

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	48.0	48.0	48.0		48.0	48.0	48.0	48.0	48.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	

0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.12	2.90	4.13	3.31	8.77	.35	.53	1.61	7.45	2.62
Exhst HC:	1.04	1.52	2.13	1.73	2.49	.35	.53	1.61	1.27	1.28
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.23	.25	.44	.32	.74					.25
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	14.73	20.77	26.85	22.80	83.18	.79	.96	6.46	9.58	18.19
Exhst NOX:	1.89	2.42	3.02	2.62	7.48	1.65	1.97	20.95	1.08	3.24

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	51.0	51.0	51.0		51.0	51.0	51.0	51.0	51.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.10	2.87	4.08	3.28	8.58	.34	.51	1.55	7.45	2.58
Exhst HC:	1.04	1.52	2.13	1.73	2.38	.34	.51	1.55	1.27	1.27
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.20	.23	.39	.28	.66					.22
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	14.73	20.77	26.85	22.80	85.95	.80	.96	6.50	9.58	18.28
Exhst NOX:	2.14	2.72	3.41	2.95	7.64	1.76	2.10	22.40	1.19	3.57

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	54.0	54.0	54.0		54.0	54.0	54.0	54.0	54.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.08	2.85	4.03	3.25	8.44	.33	.50	1.51	7.45	2.55
Exhst HC:	1.04	1.52	2.13	1.73	2.31	.33	.50	1.51	1.27	1.27
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.18	.20	.35	.25	.59					.20
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	14.73	20.77	26.85	22.80	90.58	.82	.99	6.65	9.58	18.43
Exhst NOX:	2.39	3.01	3.81	3.28	7.79	1.91	2.28	24.26	1.30	3.92

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	57.0	57.0	57.0		57.0	57.0	57.0	57.0	57.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.21	3.06	4.34	3.49	8.34	.33	.49	1.49	7.63	2.69
Exhst HC:	1.18	1.75	2.47	1.99	2.27	.33	.49	1.49	1.45	1.43
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.16	.18	.32	.23	.53					.18
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	20.47	29.93	39.24	33.04	97.37	.85	1.02	6.92	14.19	24.95
Exhst NOX:	2.65	3.31	4.21	3.61	7.95	2.09	2.50	26.61	1.40	4.29

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1990 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.41	3.38	4.81	3.86	8.29	.32	.48	1.47	7.90	2.92
Exhst HC:	1.40	2.10	2.98	2.39	2.28	.32	.48	1.47	1.72	1.67
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.15	.16	.29	.21	.48					.16
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	29.08	43.67	57.82	48.39	106.77	.90	1.08	7.31	21.11	34.71
Exhst NOX:	2.90	3.61	4.61	3.94	8.11	2.32	2.78	29.56	1.51	4.70

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1990 Region: Low Altitude: 500. Ft.

I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F

Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6

Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	63.0	63.0	63.0		63.0	63.0	63.0	63.0	63.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.62	3.71	5.29	4.24	8.28	.32	.48	1.47	8.17	3.15
Exhst HC:	1.62	2.44	3.48	2.79	2.31	.32	.48	1.47	1.99	1.91
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.13	.15	.26	.19	.43					.15
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	37.69	57.41	76.40	63.75	119.41	.96	1.16	7.85	28.03	44.58
Exhst NOX:	3.15	3.90	5.01	4.27	8.27	2.62	3.12	33.26	1.61	5.15

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1990 Region: Low Altitude: 500. Ft.

I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F

Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6

Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	65.0	65.0	65.0		65.0	65.0	65.0	65.0	65.0	
VMT Mix:	.653	.164	.082		.031	.008	.002	.053	.008	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.76	3.93	5.61	4.49	8.30	.32	.48	1.47	8.35	3.31
Exhst HC:	1.77	2.67	3.82	3.05	2.35	.32	.48	1.47	2.18	2.08
Evap. HC:	.77	1.04	1.47	1.18	5.40				5.77	1.00
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.13	.14	.24	.18	.41					.14
Rsting HC:	.09	.08	.08	.08	.14				.41	.09
Exhst CO:	43.44	66.57	88.79	73.99	130.08	1.02	1.23	8.31	32.65	51.24
Exhst NOX:	3.31	4.10	5.28	4.49	8.38	2.85	3.40	36.24	1.68	5.47

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:35 30Oct95

INPUT CARD ECHO

INFO all reported values have been adjusted by EMISFAC = .9578

SCENARIO 1 MOBILE.TEM
THE FOLLOWING IS A MATRIX WHICH ASSIGNS A SCENARIO TO EACH FT/AT COMBINATION

AT=>	1	2	3	4	5
FT					
1	1	1	1	1	1
2	1	1	1	1	1
3	1	1	1	1	1
4	1	1	1	1	1
5	1	1	1	1	1
6	1	1	1	1	1
7	1	1	1	1	1
8	1	1	1	1	1
9	1	1	1	1	1

INPUT COORDINATE SCALE(UNITS) FROM PROFILE.MAS IS 5280
INFO ALL REPORT VALUES ARE BEING ADJUSTED BY A FACTOR OF .9578

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:47 30Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

GEOGRAPHIC LOCATION NO 1

FT	AT	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1	119293.	63982.	35866.	0.	16313.	853644.	106624.
1	2	2976106.	1573463.	921312.	0.	398881.	21137298.	2757744.
1	3	19400588.	9879259.	6490666.	0.	2430810.	135923600.	20026876.
1	4	8586017.	4523696.	2700016.	0.	1118784.	60903456.	8124276.
1	5	1812035.	907249.	677184.	0.	168921.	12912348.	2411892.
2	1	175253.	101654.	42264.	0.	27655.	1329657.	124919.
2	2	768362.	443162.	177360.	0.	132095.	5862218.	529085.
2	3	21916298.	12018024.	6175836.	0.	3186485.	159727120.	18355542.
2	4	22428910.	12497742.	5849177.	0.	3567639.	166090864.	17431980.
2	5	629478.	328971.	201874.	0.	80080.	4452742.	611227.
3	1	539391.	324145.	104844.	0.	101140.	4286304.	319224.
3	2	954552.	550840.	223869.	0.	160005.	7265980.	666772.
3	3	14503122.	8124962.	3807156.	0.	2236047.	107701920.	11335818.
3	4	7907577.	4437818.	2060356.	0.	1228285.	58864164.	6142296.
3	5	1286042.	654943.	434814.	0.	155994.	8925382.	1317534.
4	1	181426.	109009.	35034.	0.	34361.	1442009.	106469.
4	2	255704.	148015.	61456.	0.	40793.	1941827.	182009.
4	3	7983921.	4417364.	2184084.	0.	1188508.	58646352.	6487014.
4	4	2814329.	1596937.	696214.	0.	459912.	21237486.	2088087.
4	5	477065.	241927.	162265.	0.	56997.	3299685.	491808.
5	1	202824.	130232.	22454.	0.	48118.	1785018.	78019.
5	2	358742.	226702.	46997.	0.	80813.	3070408.	156727.
5	3	10595116.	6658414.	1440411.	0.	2366665.	89923616.	4757988.
5	4	3937550.	2475090.	534503.	0.	879851.	33430712.	1766256.
5	5	461824.	283266.	75875.	0.	95855.	3762884.	238753.
GL TOTAL		131271328.	72717032.	35161912.	0.	20261008.	974776256.	106614864.
(TONS)		144.57	80.08	38.72	.00	22.31	1073.54	117.42

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:47 30Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

ALL GEOGRAPHIC LOCATIONS

FT	AT	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1	119293.	63982.	35866.	0.	16313.	853644.	106624.
1	2	2976106.	1573463.	921312.	0.	398881.	21137298.	2757744.
1	3	19400588.	9879259.	6490666.	0.	2430810.	135923600.	20026876.
1	4	8586017.	4523696.	2700016.	0.	1118784.	60903456.	8124276.
1	5	1812035.	907249.	677184.	0.	168921.	12912348.	2411892.
2	1	175253.	101654.	42264.	0.	27655.	1329657.	124919.
2	2	768362.	443162.	177360.	0.	132095.	5862218.	529085.
2	3	21916298.	12018024.	6175836.	0.	3186485.	159727120.	18355542.
2	4	22428910.	12497742.	5849177.	0.	3567639.	166090864.	17431980.
2	5	629478.	328971.	201874.	0.	80080.	4452742.	611227.
3	1	539391.	324145.	104844.	0.	101140.	4286304.	319224.
3	2	954552.	550840.	223869.	0.	160005.	7265980.	666772.
3	3	14503122.	8124962.	3807156.	0.	2236047.	107701920.	11335818.
3	4	7907577.	4437818.	2060356.	0.	1228285.	58864164.	6142296.
3	5	1286042.	654943.	434814.	0.	155994.	8925382.	1317534.
4	1	181426.	109009.	35034.	0.	34361.	1442009.	106469.
4	2	255704.	148015.	61456.	0.	40793.	1941827.	182009.
4	3	7983921.	4417364.	2184084.	0.	1188508.	58646352.	6487014.
4	4	2814329.	1596937.	696214.	0.	459912.	21237486.	2088087.
4	5	477065.	241927.	162265.	0.	56997.	3299685.	491808.
5	1	202824.	130232.	22454.	0.	48118.	1785018.	78019.
5	2	358742.	226702.	46997.	0.	80813.	3070408.	156727.
5	3	10595116.	6658414.	1440411.	0.	2366665.	89923616.	4757988.
5	4	3937550.	2475090.	534503.	0.	879851.	33430712.	1766256.
5	5	461824.	283266.	75875.	0.	95855.	3762884.	238753.
SUM		131271328.	72717032.	35161912.	0.	20261008.	974776256.	106614864.
(TONS)		144.57	80.08	38.72	.00	22.31	1073.54	117.42

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
 - RUN TIME: 17:55:47 30Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

FACILITY TYPE	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	32894038.	16947642.	10825046.	0.	4133712.	231730304.	33427416.
2	45918340.	25389568.	12446525.	0.	6993957.	337462624.	37052724.
3	25190730.	14092704.	6631024.	0.	3881475.	187044112.	19781608.
4	11712454.	6513252.	3139048.	0.	1780570.	86567376.	9355374.
5	15556047.	9773701.	2120242.	0.	3471302.	131972600.	6997750.
SUM	131271328.	72717032.	35161912.	0.	20261008.	974776256.	106614864.
(TONS)	144.57	80.08	38.72	.00	22.31	1073.54	117.42

AREA TYPE	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1218186.	729022.	240462.	0.	227587.	9696622.	735254.
2	5313464.	2942181.	1430995.	0.	812587.	39277712.	4292336.
3	74398896.	41098060.	20098142.	0.	11408530.	551921088.	60963296.
4	45674416.	25531288.	11840260.	0.	7254470.	340526592.	35552820.
5	4666446.	2416356.	1552012.	0.	557848.	33353018.	5071212.
SUM	131271328.	72717032.	35161912.	0.	20261008.	974776256.	106614864.
(TONS)	144.57	80.08	38.72	.00	22.31	1073.54	117.42

NUMBER LANES	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	39347424.	23067328.	8230892.	0.	7314017.	309359616.	25355986.
2	46512596.	25434744.	13169670.	0.	6745058.	339609664.	39615844.
3	29545496.	15956630.	8682033.	0.	4130641.	213807472.	26220440.
4	10739712.	5600899.	3458211.	0.	1366372.	75953008.	10531676.
5	5126396.	2657262.	1621087.	0.	704917.	36047004.	4890942.
SUM	131271328.	72717032.	35161912.	0.	20261008.	974776256.	106614864.
(TONS)	144.57	80.08	38.72	.00	22.31	1073.54	117.42

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:47 30Oct95

DAILY VEHICLE MILES

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VMT - GEOGRAPHIC LOCATION NO 1:

FT	AREA TYPES 1	2	3	4	5
1	35866.	921312.	6497764.	2700016.	679137.
2	42264.	181767.	6177447.	5849177.	201874.
3	104844.	228580.	3809814.	2060356.	434910.
4	35034.	61456.	2184084.	696214.	162265.
5	22454.	46997.	1440411.	534503.	75875.
GL TOTAL	240462.	1440113.	20109510.	11840260.	1554061.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:47 30Oct95

DAILY VEHICLE MILES

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VMT - ALL GEOGRAPHIC LOCATIONS

FT	AREA TYPES 1	2	3	4	5
1	35866.	921312.	6497764.	2700016.	679137.
2	42264.	181767.	6177447.	5849177.	201874.
3	104844.	228580.	3809814.	2060356.	434910.
4	35034.	61456.	2184084.	696214.	162265.
5	22454.	46997.	1440411.	534503.	75875.
TOTAL	240462.	1440113.	20109510.	11840260.	1554061.

DAILY VMT FACILITY TYPE	
1	10834097.
2	12452542.
3	6638490.
4	3139048.
5	2120242.
TOTAL	35184440.

DAILY VMT AREA TYPE	
1	240462.
2	1440113.
3	20109510.
4	11840260.
5	1554061.
TOTAL	35184440.

DAILY VMT NUMBER LANES	
1	8237402.
2	13184212.
3	8682033.
4	3459690.
5	1621087.
TOTAL	35184440.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:47 30Oct95

DAILY VEHICLE HOURS

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VHT - GEOGRAPHIC LOCATION NO 1

	AREA TYPES				
FT	1	2	3	4	5
1	1122.	27532.	174641.	78610.	15184.
2	1830.	10966.	215144.	224456.	5695.
3	6079.	12325.	148805.	79987.	11312.
4	2046.	2674.	78850.	29076.	4162.
5	2635.	4475.	130925.	48673.	5420.
GL TOTAL	13712.	57971.	748365.	460803.	41772.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:47 30Oct95

DAILY VEHICLE HOURS

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VHT - ALL GEOGRAPHIC LOCATIONS

FT	AREA TYPES 1	2	3	4	5
1	1122.	27532.	174641.	78610.	15184.
2	1830.	10966.	215144.	224456.	5695.
3	6079.	12325.	148805.	79987.	11312.
4	2046.	2674.	78850.	29076.	4162.
5	2635.	4475.	130925.	48673.	5420.
TOTAL	13712.	57971.	748365.	460803.	41772.

DAILY VHT FACILITY TYPE	
1	297089.
2	458090.
3	258509.
4	116808.
5	192127.
TOTAL	1322620.

DAILY VHT AREA TYPE	
1	13712.
2	57971.
3	748365.
4	460803.
5	41772.
TOTAL	1322620.

DAILY VHT NUMBER LANES	
1	437372.
2	459984.
3	280905.
4	97900.
5	46461.
TOTAL	1322620.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:47 30Oct95

AVERAGE CONGESTED SPEED (mph)

INFO all reported values have been adjusted by EMISFAC = .9578

AVERAGE SPEED - GEOGRAPHIC LOCATION NO 1

FT	AREA TYPES 1	2	3	4	5
1	31.98	33.46	37.21	34.35	44.73
2	23.10	16.58	28.71	26.06	35.45
3	17.25	18.55	25.60	25.76	38.45
4	17.12	22.99	27.70	23.94	38.99
5	8.52	10.50	11.00	10.98	14.00
GL TOTAL	17.54	24.84	26.87	25.69	37.20

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 17:55:47 30Oct95

AVERAGE CONGESTED SPEED (mph)

INFO all reported values have been adjusted by EMISFAC = .9578

AVERAGE SPEED - ALL GEOGRAPHIC LOCATIONS

	AREA TYPES				
FT	1	2	3	4	5
1	31.98	33.46	37.21	34.35	44.73
2	23.10	16.58	28.71	26.06	35.45
3	17.25	18.55	25.60	25.76	38.45
4	17.12	22.99	27.70	23.94	38.99
5	8.52	10.50	11.00	10.98	14.00
TOTAL	17.54	24.84	26.87	25.69	37.20

FACILITY TYPE	AVERAGE SPEED
1	36.47
2	27.18
3	25.68
4	26.87
5	11.04
TOTAL	26.60

AREA TYPE	AVERAGE SPEED
1	17.54
2	24.84
3	26.87
4	25.69
5	37.20
TOTAL	26.60

NUMBER LANES	AVERAGE SPEED
1	18.83
2	28.66
3	30.91
4	35.34
5	34.89
TOTAL	26.60

B. EMIS.OUT FOR 1997

1MOBILE5a FDOT: Dade County - Miami Urban Area Study
MOBILE5a (26-Mar-93)
0
-M153 Error:
Warning: Refueling emissions in grams-per-gallon are only available using the 120 column descriptive output option (OUTFMT = 3 or 5). See MOBILE5 Users
Guide chapters 2.1.15, 2.1.19 and 2.1.20 for more information.
OMIAMI FL
Minimum Temp: 69. (F) Maximum Temp: 91. (F)
Period 1 RVP: 9.2 Period 2 RVP: 7.8 Period 2 Yr: 1992
OVOC HC emission factors include evaporative HC emission factors.
0

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	12.21	14.20	20.32	16.12	27.50	1.57	2.21	5.00	11.76	13.24
Exhst HC:	7.00	9.04	13.40	10.40	14.79	1.57	2.21	5.00	8.72	8.03
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	4.89	4.79	6.47	5.31	10.48					4.82
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	94.44	123.45	187.92	143.68	288.17	5.24	5.98	36.53	155.56	110.16
Exhst NOX:	2.11	2.39	3.12	2.62	4.47	2.63	3.02	21.31	.85	3.55

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	5.64	6.71	9.49	7.58	16.37	1.34	1.90	4.29	8.22	6.42
Exhst HC:	3.79	4.90	7.21	5.62	11.31	1.34	1.90	4.29	5.18	4.55
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	1.54	1.43	1.83	1.55	2.84					1.47
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	50.91	65.62	98.15	75.83	221.24	4.13	4.71	28.75	84.55	61.57
Exhst NOX:	1.75	1.99	2.63	2.19	4.61	2.32	2.66	18.81	.75	3.05

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	4.01	4.75	6.61	5.33	12.68	1.16	1.64	3.71	6.63	4.63
Exhst HC:	2.71	3.48	5.05	3.97	8.77	1.16	1.64	3.71	3.59	3.30
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.99	.89	1.10	.95	1.68					.93
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	36.26	45.95	67.01	52.56	173.25	3.30	3.77	23.00	54.67	44.08
Exhst NOX:	1.64	1.86	2.46	2.05	4.75	2.07	2.38	16.82	.71	2.82

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.25	3.83	5.28	4.28	10.42	1.01	1.43	3.23	5.82	3.76
Exhst HC:	2.17	2.77	3.98	3.15	6.91	1.01	1.43	3.23	2.78	2.65
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.77	.68	.84	.73	1.28					.72
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	28.97	36.23	51.61	41.06	138.38	2.69	3.06	18.71	39.92	34.96
Exhst NOX:	1.58	1.80	2.38	1.98	4.89	1.88	2.16	15.23	.70	2.66

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	15.0	15.0	15.0		15.0	15.0	15.0	15.0	15.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.76	3.25	4.45	3.63	8.76	.89	1.26	2.84	5.36	3.20
Exhst HC:	1.84	2.35	3.34	2.66	5.53	.89	1.26	2.84	2.32	2.24
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.60	.52	.65	.56	1.02					.56
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	24.62	30.48	42.53	34.27	112.75	2.22	2.53	15.47	31.62	29.35
Exhst NOX:	1.54	1.76	2.34	1.94	5.03	1.72	1.98	13.97	.72	2.55

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.40	2.84	3.89	3.17	7.52	.79	1.11	2.51	5.07	2.79
Exhst HC:	1.63	2.07	2.92	2.34	4.48	.79	1.11	2.51	2.03	1.97
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.46	.39	.50	.43	.82					.43
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	21.73	26.67	36.56	29.77	93.69	1.87	2.13	13.00	26.36	25.54
Exhst NOX:	1.52	1.74	2.31	1.92	5.17	1.60	1.84	12.97	.76	2.47

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	21.0	21.0	21.0		21.0	21.0	21.0	21.0	21.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	

0Composite Emission Factors (Gm/Mile)

VOC HC:	2.13	2.54	3.48	2.84	6.60	.70	.99	2.25	4.86	2.48
Exhst HC:	1.45	1.85	2.62	2.09	3.69	.70	.99	2.25	1.82	1.74
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.37	.31	.41	.34	.68					.34
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	19.22	23.78	32.43	26.49	79.42	1.59	1.82	11.10	22.64	22.50
Exhst NOX:	1.52	1.74	2.32	1.93	5.31	1.50	1.73	12.21	.80	2.43

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	

0Composite Emission Factors (Gm/Mile)

VOC HC:	1.93	2.32	3.17	2.59	5.91	.63	.89	2.02	4.70	2.25
Exhst HC:	1.29	1.67	2.36	1.88	3.09	.63	.89	2.02	1.66	1.55
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.32	.27	.36	.30	.60					.30
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	16.96	21.26	29.18	23.75	68.66	1.38	1.58	9.64	19.78	19.89
Exhst NOX:	1.55	1.77	2.37	1.96	5.45	1.43	1.65	11.63	.85	2.42

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	27.0	27.0	27.0		27.0	27.0	27.0	27.0	27.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	

0Composite Emission Factors (Gm/Mile)

VOC HC:	1.77	2.14	2.93	2.39	5.38	.57	.81	1.83	4.57	2.07
Exhst HC:	1.16	1.52	2.15	1.72	2.62	.57	.81	1.83	1.53	1.40
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.29	.24	.32	.27	.53					.27
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	15.18	19.26	26.61	21.57	60.55	1.22	1.39	8.51	17.43	17.86
Exhst NOX:	1.57	1.80	2.40	1.99	5.58	1.38	1.59	11.23	.90	2.42

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	30.0	30.0	30.0		30.0	30.0	30.0	30.0	30.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	

0Composite Emission Factors (Gm/Mile)

VOC HC:	1.63	2.00	2.73	2.23	4.96	.52	.74	1.67	4.45	1.92
Exhst HC:	1.06	1.40	1.98	1.58	2.26	.52	.74	1.67	1.41	1.28
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.26	.22	.29	.24	.48					.24
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	13.76	17.63	24.54	19.80	54.47	1.10	1.25	7.64	15.47	16.23
Exhst NOX:	1.58	1.82	2.43	2.01	5.72	1.35	1.55	10.98	.94	2.42

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	33.0	33.0	33.0		33.0	33.0	33.0	33.0	33.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.52	1.88	2.56	2.09	4.63	.48	.68	1.54	4.35	1.79
Exhst HC:	.98	1.30	1.85	1.47	1.97	.48	.68	1.54	1.31	1.18
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.23	.20	.26	.22	.43					.21
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	12.59	16.29	22.83	18.34	49.98	1.00	1.14	6.97	13.82	14.91
Exhst NOX:	1.59	1.83	2.46	2.03	5.86	1.34	1.54	10.87	.98	2.44

OEmission factors are as of 1st of the indicated calendar year.

OCal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	36.0	36.0	36.0		36.0	36.0	36.0	36.0	36.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.43	1.78	2.43	1.98	4.36	.45	.63	1.43	4.27	1.69
Exhst HC:	.92	1.22	1.73	1.38	1.75	.45	.63	1.43	1.23	1.10
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.20	.18	.24	.20	.39					.19
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	11.62	15.19	21.42	17.14	46.77	.93	1.06	6.46	12.46	13.84
Exhst NOX:	1.60	1.85	2.48	2.05	6.00	1.34	1.54	10.90	1.01	2.45

OEmission factors are as of 1st of the indicated calendar year.

OCal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	39.0	39.0	39.0		39.0	39.0	39.0	39.0	39.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.35	1.69	2.31	1.89	4.16	.42	.59	1.34	4.20	1.60
Exhst HC:	.86	1.15	1.64	1.30	1.58	.42	.59	1.34	1.17	1.03
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.18	.16	.22	.18	.35					.17
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	10.80	14.28	20.25	16.15	44.64	.87	1.00	6.09	11.39	12.97
Exhst NOX:	1.61	1.86	2.49	2.06	6.14	1.37	1.57	11.08	1.03	2.48

OEmission factors are as of 1st of the indicated calendar year.

OCal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	42.0	42.0	42.0		42.0	42.0	42.0	42.0	42.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.28	1.62	2.21	1.81	3.99	.40	.56	1.27	4.15	1.52
Exhst HC:	.81	1.09	1.56	1.24	1.44	.40	.56	1.27	1.12	.98
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.15	.15	.20	.16	.32					.15
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	10.11	13.53	19.28	15.33	43.47	.84	.95	5.83	10.57	12.26
Exhst NOX:	1.62	1.87	2.51	2.07	6.28	1.41	1.61	11.40	1.05	2.51

OEmission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.21	1.56	2.13	1.74	3.85	.38	.53	1.20	4.12	1.45
Exhst HC:	.77	1.05	1.49	1.19	1.34	.38	.53	1.20	1.08	.93
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.13	.13	.18	.15	.29					.13
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	9.52	12.92	18.47	14.66	43.17	.82	.93	5.68	9.96	11.68
Exhst NOX:	1.63	1.88	2.53	2.08	6.42	1.46	1.68	11.88	1.07	2.56

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	48.0	48.0	48.0		48.0	48.0	48.0	48.0	48.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.16	1.51	2.05	1.68	3.75	.36	.51	1.15	4.10	1.39
Exhst HC:	.73	1.01	1.43	1.14	1.26	.36	.51	1.15	1.06	.89
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.11	.12	.16	.13	.26					.11
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	9.01	12.40	17.78	14.09	43.73	.81	.92	5.62	9.50	11.22
Exhst NOX:	1.64	1.89	2.54	2.09	6.56	1.55	1.78	12.54	1.09	2.61

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	51.0	51.0	51.0		51.0	51.0	51.0	51.0	51.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.14	1.49	2.03	1.66	3.67	.35	.49	1.12	4.10	1.38
Exhst HC:	.73	1.01	1.43	1.14	1.21	.35	.49	1.12	1.06	.88
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.10	.10	.14	.12	.23					.10
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	9.01	12.40	17.78	14.09	45.18	.81	.93	5.66	9.50	11.27
Exhst NOX:	1.81	2.12	2.86	2.35	6.70	1.65	1.90	13.40	1.20	2.85

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	54.0	54.0	54.0		54.0	54.0	54.0	54.0	54.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	

0Composite Emission Factors (Gm/Mile)

VOC HC:	1.13	1.48	2.02	1.65	3.61	.34	.48	1.09	4.10	1.37
Exhst HC:	.73	1.01	1.43	1.14	1.17	.34	.48	1.09	1.06	.88
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.09	.09	.13	.11	.21					.09
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	9.01	12.40	17.78	14.09	47.62	.83	.95	5.79	9.50	11.35
Exhst NOX:	1.99	2.34	3.17	2.60	6.83	1.79	2.06	14.51	1.30	3.11

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	57.0	57.0	57.0		57.0	57.0	57.0	57.0	57.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.19	1.58	2.17	1.77	3.57	.33	.47	1.07	4.25	1.43
Exhst HC:	.80	1.11	1.60	1.27	1.16	.33	.47	1.07	1.22	.96
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.08	.09	.12	.10	.19					.08
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	11.43	16.55	24.17	18.94	51.19	.86	.98	6.02	14.07	14.33
Exhst NOX:	2.17	2.57	3.49	2.86	6.97	1.96	2.26	15.92	1.41	3.38

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.29	1.73	2.41	1.95	3.55	.33	.47	1.06	4.48	1.54
Exhst HC:	.90	1.28	1.85	1.46	1.16	.33	.47	1.06	1.44	1.07
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.07	.08	.11	.09	.17					.07
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	15.05	22.76	33.75	26.21	56.13	.91	1.04	6.36	20.93	18.77
Exhst NOX:	2.34	2.80	3.80	3.11	7.11	2.18	2.51	17.69	1.52	3.68

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	63.0	63.0	63.0		63.0	63.0	63.0	63.0	63.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.39	1.89	2.65	2.13	3.55	.33	.47	1.05	4.71	1.65
Exhst HC:	1.00	1.44	2.10	1.65	1.17	.33	.47	1.05	1.67	1.19
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.07	.07	.10	.08	.16					.07
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	18.66	28.98	43.32	33.48	62.77	.98	1.12	6.83	27.79	23.28
Exhst NOX:	2.52	3.02	4.12	3.37	7.25	2.45	2.82	19.90	1.62	4.01

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	65.0	65.0	65.0		65.0	65.0	65.0	65.0	65.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.45	1.99	2.81	2.25	3.56	.33	.47	1.06	4.86	1.73
Exhst HC:	1.07	1.55	2.27	1.77	1.20	.33	.47	1.06	1.82	1.27
Evap. HC:	.24	.31	.39	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.07	.09	.07	.15					.06
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	21.08	33.12	49.71	38.33	68.38	1.04	1.18	7.23	32.36	26.33
Exhst NOX:	2.63	3.17	4.33	3.54	7.34	2.67	3.07	21.68	1.69	4.24

1MOBILE5a FDOT: Dade County - Miami Urban Area Study
MOBILE5a (26-Mar-93)
0
-M153 Error:
Warning: Refueling emissions in grams-per-gallon are only available using the 120 column descriptive output option (OUTFMT = 3 or 5). See MOBILE5 Users
Guide chapters 2.1.15, 2.1.19 and 2.1.20 for more information.
OI/M program selected:

0 Start year (January 1):	1991
Pre-1981 MYR stringency rate:	26%
First model year covered:	1975
Last model year covered:	2020
Waiver rate (pre-1981):	0.%
Waiver rate (1981 and newer):	0.%
Compliance Rate:	100.%
Inspection type:	Test Only
Inspection frequency	Annual
Vehicle types covered:	LDGV - Yes
	LDGT1 - Yes
	LDGT2 - Yes
	HDGV - No
1981 & later MYR test type:	Idle

Cutpoints, HC: 220.000 CO: 1.200 NOx: 999.000
OFunctional Check Program Description:

OCheck	Start (Jan1)	Model Yrs Covered	Vehicle Classes Covered LDGV	LDGT1	LDGT2	HDGV	Inspection Type	Freq	Comp Rate
ATP	1991	1975-2020	Yes	Yes	Yes	No	Test Only	Annual	100.0%

OAir pump system disablements:	No	Catalyst removals:	Yes
Fuel inlet restrictor disablements:	No	Tailpipe lead deposit test:	No
EGR disablement:	No	Evaporative system disablements:	No
PCV system disablements:	No	Missing gas caps:	Yes

OMIAMI FL
Minimum Temp: 69. (F) Maximum Temp: 91. (F)
Period 1 RVP: 9.2 Period 2 RVP: 7.8 Period 2 Yr: 1992
OVOC HC emission factors include evaporative HC emission factors.
0
OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	10.74	11.98	17.19	13.61	27.50	1.57	2.21	5.00	11.76	11.64
Exhst HC:	5.53	6.81	10.27	7.90	14.79	1.57	2.21	5.00	8.72	6.44
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	4.89	4.79	6.47	5.31	10.48					4.82
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	75.07	94.95	139.47	108.92	288.17	5.24	5.98	36.53	155.56	88.66
Exhst NOX:	2.07	2.27	3.00	2.50	4.47	2.63	3.02	21.31	.85	3.49

OEmission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	4.86	5.50	7.82	6.23	16.37	1.34	1.90	4.29	8.22	5.56
Exhst HC:	3.01	3.70	5.54	4.28	11.31	1.34	1.90	4.29	5.18	3.70
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	1.54	1.43	1.83	1.55	2.84					1.47
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	40.62	50.79	73.24	57.84	221.24	4.13	4.71	28.75	84.55	50.28
Exhst NOX:	1.72	1.90	2.53	2.09	4.61	2.32	2.66	18.81	.75	3.01

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.45	3.89	5.44	4.38	12.68	1.16	1.64	3.71	6.63	4.02
Exhst HC:	2.15	2.63	3.88	3.02	8.77	1.16	1.64	3.71	3.59	2.70
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.99	.89	1.10	.95	1.68					.93
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	29.02	35.74	50.29	40.31	173.25	3.30	3.77	23.00	54.67	36.24
Exhst NOX:	1.61	1.77	2.37	1.96	4.75	2.07	2.38	16.82	.71	2.77

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.81	3.15	4.35	3.53	10.42	1.01	1.43	3.23	5.82	3.28
Exhst HC:	1.73	2.10	3.06	2.40	6.91	1.01	1.43	3.23	2.78	2.17
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.77	.68	.84	.73	1.28					.72
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	23.25	28.30	38.92	31.63	138.38	2.69	3.06	18.71	39.92	28.83
Exhst NOX:	1.55	1.71	2.29	1.89	4.89	1.88	2.16	15.23	.70	2.62

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	15.0	15.0	15.0		15.0	15.0	15.0	15.0	15.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	2.38	2.68	3.68	2.99	8.76	.89	1.26	2.84	5.36	2.79
Exhst HC:	1.47	1.78	2.57	2.03	5.53	.89	1.26	2.84	2.32	1.84
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.60	.52	.65	.56	1.02					.56
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	19.80	23.90	32.21	26.51	112.75	2.22	2.53	15.47	31.62	24.24
Exhst NOX:	1.51	1.68	2.25	1.86	5.03	1.72	1.98	13.97	.72	2.51

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.07	2.34	3.21	2.61	7.52	.79	1.11	2.51	5.07	2.43
Exhst HC:	1.30	1.57	2.25	1.78	4.48	.79	1.11	2.51	2.03	1.61
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.46	.39	.50	.43	.82					.43
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	17.51	20.99	27.80	23.12	93.69	1.87	2.13	13.00	26.36	21.11
Exhst NOX:	1.49	1.66	2.22	1.84	5.17	1.60	1.84	12.97	.76	2.43

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	21.0	21.0	21.0		21.0	21.0	21.0	21.0	21.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.84	2.09	2.87	2.34	6.60	.70	.99	2.25	4.86	2.16
Exhst HC:	1.16	1.41	2.01	1.60	3.69	.70	.99	2.25	1.82	1.43
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.37	.31	.41	.34	.68					.34
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	15.49	18.70	24.66	20.57	79.42	1.59	1.82	11.10	22.64	18.57
Exhst NOX:	1.50	1.66	2.23	1.84	5.31	1.50	1.73	12.21	.80	2.39

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.67	1.91	2.62	2.14	5.91	.63	.89	2.02	4.70	1.96
Exhst HC:	1.03	1.26	1.81	1.43	3.09	.63	.89	2.02	1.66	1.27
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.32	.27	.36	.30	.60					.30
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	13.64	16.66	22.15	18.38	68.66	1.38	1.58	9.64	19.78	16.37
Exhst NOX:	1.52	1.69	2.28	1.87	5.45	1.43	1.65	11.63	.85	2.38

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	27.0	27.0	27.0		27.0	27.0	27.0	27.0	27.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.53	1.77	2.42	1.98	5.38	.57	.81	1.83	4.57	1.81
Exhst HC:	.93	1.15	1.65	1.31	2.62	.57	.81	1.83	1.53	1.15
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.29	.24	.32	.27	.53					.27
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	12.19	15.05	20.17	16.65	60.55	1.22	1.39	8.51	17.43	14.66
Exhst NOX:	1.54	1.71	2.31	1.90	5.58	1.38	1.59	11.23	.90	2.38

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	30.0	30.0	30.0		30.0	30.0	30.0	30.0	30.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.42	1.65	2.26	1.84	4.96	.52	.74	1.67	4.45	1.68
Exhst HC:	.85	1.06	1.52	1.20	2.26	.52	.74	1.67	1.41	1.05
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.26	.22	.29	.24	.48					.24
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	11.03	13.74	18.57	15.25	54.47	1.10	1.25	7.64	15.47	13.29
Exhst NOX:	1.55	1.73	2.34	1.92	5.72	1.35	1.55	10.98	.94	2.38

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	33.0	33.0	33.0		33.0	33.0	33.0	33.0	33.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.33	1.56	2.13	1.74	4.63	.48	.68	1.54	4.35	1.57
Exhst HC:	.79	.98	1.41	1.12	1.97	.48	.68	1.54	1.31	.96
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.23	.20	.26	.22	.43					.21
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	10.07	12.66	17.25	14.10	49.98	1.00	1.14	6.97	13.82	12.19
Exhst NOX:	1.57	1.75	2.37	1.94	5.86	1.34	1.54	10.87	.98	2.39

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	36.0	36.0	36.0		36.0	36.0	36.0	36.0	36.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.25	1.48	2.01	1.64	4.36	.45	.63	1.43	4.27	1.48
Exhst HC:	.73	.92	1.32	1.05	1.75	.45	.63	1.43	1.23	.90
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.20	.18	.24	.20	.39					.19
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	9.28	11.77	16.16	13.15	46.77	.93	1.06	6.46	12.46	11.30
Exhst NOX:	1.58	1.76	2.39	1.96	6.00	1.34	1.54	10.90	1.01	2.41

OEmission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	39.0	39.0	39.0		39.0	39.0	39.0	39.0	39.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.18	1.41	1.92	1.57	4.16	.42	.59	1.34	4.20	1.40
Exhst HC:	.69	.87	1.25	.99	1.58	.42	.59	1.34	1.17	.84
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.18	.16	.22	.18	.35					.17
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	8.61	11.03	15.26	12.36	44.64	.87	1.00	6.09	11.39	10.57
Exhst NOX:	1.59	1.77	2.40	1.97	6.14	1.37	1.57	11.08	1.03	2.44

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	42.0	42.0	42.0		42.0	42.0	42.0	42.0	42.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.11	1.35	1.84	1.50	3.99	.40	.56	1.27	4.15	1.34
Exhst HC:	.65	.83	1.19	.94	1.44	.40	.56	1.27	1.12	.79
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.15	.15	.20	.16	.32					.15
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	8.05	10.43	14.50	11.71	43.47	.84	.95	5.83	10.57	9.99
Exhst NOX:	1.59	1.78	2.42	1.98	6.28	1.41	1.61	11.40	1.05	2.47

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.06	1.30	1.77	1.44	3.85	.38	.53	1.20	4.12	1.28
Exhst HC:	.61	.79	1.14	.90	1.34	.38	.53	1.20	1.08	.75
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.13	.13	.18	.15	.29					.13
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	7.57	9.92	13.87	11.16	43.17	.82	.93	5.68	9.96	9.51
Exhst NOX:	1.60	1.79	2.43	1.99	6.42	1.46	1.68	11.88	1.07	2.51

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	48.0	48.0	48.0		48.0	48.0	48.0	48.0	48.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	

0Composite Emission Factors (Gm/Mile)

VOC HC:	1.01	1.25	1.71	1.40	3.75	.36	.51	1.15	4.10	1.23
Exhst HC:	.58	.76	1.09	.86	1.26	.36	.51	1.15	1.06	.72
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.11	.12	.16	.13	.26					.11
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	7.15	9.50	13.33	10.70	43.73	.81	.92	5.62	9.50	9.14
Exhst NOX:	1.61	1.80	2.45	2.01	6.56	1.55	1.78	12.54	1.09	2.57

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	51.0	51.0	51.0		51.0	51.0	51.0	51.0	51.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.00	1.24	1.69	1.38	3.67	.35	.49	1.12	4.10	1.21
Exhst HC:	.58	.76	1.09	.86	1.21	.35	.49	1.12	1.06	.72
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.10	.10	.14	.12	.23					.10
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	7.15	9.50	13.33	10.70	45.18	.81	.93	5.66	9.50	9.19
Exhst NOX:	1.78	2.02	2.75	2.25	6.70	1.65	1.90	13.40	1.20	2.80

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	54.0	54.0	54.0		54.0	54.0	54.0	54.0	54.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.99	1.23	1.67	1.37	3.61	.34	.48	1.09	4.10	1.20
Exhst HC:	.58	.76	1.09	.86	1.17	.34	.48	1.09	1.06	.71
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.09	.09	.13	.11	.21					.09
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	7.15	9.50	13.33	10.70	47.62	.83	.95	5.79	9.50	9.27
Exhst NOX:	1.96	2.24	3.06	2.49	6.83	1.79	2.06	14.51	1.30	3.05

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	57.0	57.0	57.0		57.0	57.0	57.0	57.0	57.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.03	1.30	1.79	1.45	3.57	.33	.47	1.07	4.25	1.25
Exhst HC:	.64	.84	1.22	.96	1.16	.33	.47	1.07	1.22	.77
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.08	.09	.12	.10	.19					.08
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	9.03	12.56	17.98	14.26	51.19	.86	.98	6.02	14.07	11.56
Exhst NOX:	2.13	2.45	3.36	2.74	6.97	1.96	2.26	15.92	1.41	3.32

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 1997 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.10	1.41	1.97	1.58	3.55	.33	.47	1.06	4.48	1.33
Exhst HC:	.72	.96	1.41	1.10	1.16	.33	.47	1.06	1.44	.86
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.07	.08	.11	.09	.17					.07
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	11.84	17.14	24.94	19.59	56.13	.91	1.04	6.36	20.93	14.98
Exhst NOX:	2.30	2.67	3.67	2.98	7.11	2.18	2.51	17.69	1.52	3.62

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1997 Region: Low Altitude: 500. Ft.

I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F

Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6

Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	63.0	63.0	63.0		63.0	63.0	63.0	63.0	63.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.18	1.52	2.15	1.72	3.55	.33	.47	1.05	4.71	1.41
Exhst HC:	.80	1.07	1.60	1.24	1.17	.33	.47	1.05	1.67	.95
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.07	.07	.10	.08	.16					.07
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	14.66	21.73	31.91	24.92	62.77	.98	1.12	6.83	27.79	18.47
Exhst NOX:	2.47	2.88	3.97	3.22	7.25	2.45	2.82	19.90	1.62	3.94

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 1997 Region: Low Altitude: 500. Ft.

I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F

Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6

Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	65.0	65.0	65.0		65.0	65.0	65.0	65.0	65.0	
VMT Mix:	.624	.186	.085		.031	.002	.001	.064	.007	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.23	1.59	2.27	1.81	3.56	.33	.47	1.06	4.86	1.47
Exhst HC:	.85	1.15	1.72	1.33	1.20	.33	.47	1.06	1.82	1.01
Evap. HC:	.24	.30	.38	.33	2.11				2.63	.32
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.07	.09	.07	.15					.06
Rsting HC:	.07	.07	.07	.07	.12				.41	.07
Exhst CO:	16.54	24.78	36.56	28.48	68.38	1.04	1.18	7.23	32.36	20.83
Exhst NOX:	2.59	3.03	4.17	3.39	7.34	2.67	3.07	21.68	1.69	4.17

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FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
 - RUN TIME: 08:44:43  31Oct95

INPUT CARD ECHO

***INFO*** all reported values have been adjusted by EMISFAC =  .9578

SCENARIO  1         MOBILE.TEM
THE FOLLOWING IS A MATRIX WHICH ASSIGNS A SCENARIO TO EACH FT/AT COMBINATION
AT=>     1     2     3     4     5

FT |
 1 |     1     1     1     1     1
 2 |     1     1     1     1     1
 3 |     1     1     1     1     1
 4 |     1     1     1     1     1
 5 |     1     1     1     1     1
 6 |     1     1     1     1     1
 7 |     1     1     1     1     1
 8 |     1     1     1     1     1
 9 |     1     1     1     1     1

INPUT COORDINATE SCALE(UNITS) FROM PROFILE.MAS IS   5280
 ***INFO*** ALL REPORT VALUES ARE BEING ADJUSTED BY A FACTOR OF  .9578
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FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 08:44:55 31Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

GEOGRAPHIC LOCATION NO 1

FT	AT	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1	41977.	27444.	6638.	0.	6443.	352595.	49897.
1	2	1431805.	908042.	263243.	0.	200033.	11538802.	1973146.
1	3	9448052.	5899840.	1843292.	0.	1283404.	74760640.	13890894.
1	4	5041658.	3217892.	919341.	0.	697725.	40942288.	6897622.
1	5	1703061.	1075703.	299454.	0.	260719.	13836564.	2341807.
2	1	112489.	75256.	15005.	0.	18946.	981446.	114176.
2	2	474253.	313239.	60486.	0.	87321.	4093577.	464296.
2	3	13251645.	8569525.	2231398.	0.	1956007.	109518112.	16730014.
2	4	12429919.	8050382.	1977052.	0.	1962314.	103478264.	14898217.
2	5	552639.	345770.	110338.	0.	72110.	4364893.	831533.
3	1	332266.	221040.	35701.	0.	67732.	2917374.	282407.
3	2	412424.	273822.	53827.	0.	73011.	3574025.	412182.
3	3	7948698.	5184589.	1230855.	0.	1263071.	66722924.	9293744.
3	4	4607716.	2997572.	745088.	0.	700517.	38453300.	5603100.
3	5	1121698.	705219.	217204.	0.	149097.	8948033.	1632487.
4	1	114772.	76284.	12255.	0.	23558.	1007454.	96912.
4	2	141896.	94999.	18818.	0.	23962.	1239172.	143522.
4	3	4451064.	2896015.	719325.	0.	678377.	37115424.	5408148.
4	4	1421803.	928819.	222315.	0.	221710.	11947774.	1677804.
4	5	587877.	374855.	103633.	0.	85143.	4797822.	781401.
5	1	85908.	58416.	6264.	0.	19858.	785221.	55152.
5	2	261320.	176875.	22244.	0.	57335.	2358429.	188023.
5	3	5879862.	3970229.	517910.	0.	1278430.	52826260.	4337378.
5	4	2032342.	1372448.	178720.	0.	442078.	18263178.	1497399.
5	5	464564.	311239.	48893.	0.	93737.	4104716.	390650.
GL TOTAL		74351600.	48125520.	11859275.	0.	11722602.	618928512.	89991792.
(TONS)		81.89	53.00	13.06	.00	12.91	681.64	99.11

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 08:44:55 31Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

ALL GEOGRAPHIC LOCATIONS

FT	AT	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1	41977.	27444.	6638.	0.	6443.	352595.	49897.
1	2	1431805.	908042.	263243.	0.	200033.	11538802.	1973146.
1	3	9448052.	5899840.	1843292.	0.	1283404.	74760640.	13890894.
1	4	5041658.	3217892.	919341.	0.	697725.	40942288.	6897622.
1	5	1703061.	1075703.	299454.	0.	260719.	13836564.	2341807.
2	1	112489.	75256.	15005.	0.	18946.	981446.	114176.
2	2	474253.	313239.	60486.	0.	87321.	4093577.	464296.
2	3	13251645.	8569525.	2231398.	0.	1956007.	109518112.	16730014.
2	4	12429919.	8050382.	1977052.	0.	1962314.	103478264.	14898217.
2	5	552639.	345770.	110338.	0.	72110.	4364893.	831533.
3	1	332266.	221040.	35701.	0.	67732.	2917374.	282407.
3	2	412424.	273822.	53827.	0.	73011.	3574025.	412182.
3	3	7948698.	5184589.	1230855.	0.	1263071.	66722924.	9293744.
3	4	4607716.	2997572.	745088.	0.	700517.	38453300.	5603100.
3	5	1121698.	705219.	217204.	0.	149097.	8948033.	1632487.
4	1	114772.	76284.	12255.	0.	23558.	1007454.	96912.
4	2	141896.	94999.	18818.	0.	23962.	1239172.	143522.
4	3	4451064.	2896015.	719325.	0.	678377.	37115424.	5408148.
4	4	1421803.	928819.	222315.	0.	221710.	11947774.	1677804.
4	5	587877.	374855.	103633.	0.	85143.	4797822.	781401.
5	1	85908.	58416.	6264.	0.	19858.	785221.	55152.
5	2	261320.	176875.	22244.	0.	57335.	2358429.	188023.
5	3	5879862.	3970229.	517910.	0.	1278430.	52826260.	4337378.
5	4	2032342.	1372448.	178720.	0.	442078.	18263178.	1497399.
5	5	464564.	311239.	48893.	0.	93737.	4104716.	390650.
SUM		74351600.	48125520.	11859275.	0.	11722602.	618928512.	89991792.
(TONS)		81.89	53.00	13.06	.00	12.91	681.64	99.11

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 08:44:55 31Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

FACILITY TYPE	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	17666566.	11128920.	3331964.	0.	2448324.	141430960.	25153376.
2	26820978.	17354176.	4394277.	0.	4096693.	222436432.	33038262.
3	14422777.	9382245.	2282673.	0.	2253428.	120615800.	17223932.
4	6717422.	4370966.	1076347.	0.	1032751.	56107596.	8107788.
5	8723991.	5889210.	774031.	0.	1891436.	78337736.	6468625.
SUM	74351600.	48125520.	11859275.	0.	11722602.	618928512.	89991792.
(TONS)	81.89	53.00	13.06	.00	12.91	681.64	99.11

AREA TYPE	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	687412.	458440.	75863.	0.	136538.	6044091.	598544.
2	2721698.	1766978.	418618.	0.	441661.	22804018.	3181170.
3	40979236.	26520182.	6542788.	0.	6459290.	340944000.	49660096.
4	25533502.	16567141.	4042514.	0.	4024343.	213084544.	30574160.
5	4429838.	2812785.	779521.	0.	660806.	36052040.	5977879.
SUM	74351600.	48125520.	11859275.	0.	11722602.	618928512.	89991792.
(TONS)	81.89	53.00	13.06	.00	12.91	681.64	99.11

NUMBER LANES	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	20779000.	13738976.	2635124.	0.	3823694.	179515088.	20578550.
2	26075004.	16828674.	4316892.	0.	3971590.	215569664.	32505776.
3	16309518.	10488054.	2819206.	0.	2371062.	134059664.	21207306.
4	8196890.	5188848.	1529308.	0.	1133235.	65916436.	11508360.
5	2991336.	1881028.	558767.	0.	423056.	23867472.	4191905.
SUM	74351600.	48125520.	11859275.	0.	11722602.	618928512.	89991792.
(TONS)	81.89	53.00	13.06	.00	12.91	681.64	99.11

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 08:44:55 31Oct95

DAILY VEHICLE MILES

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VMT - GEOGRAPHIC LOCATION NO 1:

	AREA TYPES				
FT	1	2	3	4	5
1	20744.	822633.	5768742.	2872940.	939794.
2	46889.	189019.	6976025.	6178278.	344886.
3	111566.	173133.	3852475.	2328404.	678846.
4	38298.	58805.	2247890.	694736.	323853.
5	19574.	69513.	1618470.	558502.	152790.
GL TOTAL	237072.	1313103.	20463580.	12632886.	2440172.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 08:44:55 31Oct95

DAILY VEHICLE MILES

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VMT - ALL GEOGRAPHIC LOCATIONS

FT	AREA TYPES 1	2	3	4	5
1	20744.	822633.	5768742.	2872940.	939794.
2	46889.	189019.	6976025.	6178278.	344886.
3	111566.	173133.	3852475.	2328404.	678846.
4	38298.	58805.	2247890.	694736.	323853.
5	19574.	69513.	1618470.	558502.	152790.
TOTAL	237072.	1313103.	20463580.	12632886.	2440172.

DAILY VMT FACILITY TYPE	
1	10424856.
2	13735105.
3	7144423.
4	3363582.
5	2418845.
TOTAL	37086800.

DAILY VMT AREA TYPE	
1	237072.
2	1313103.
3	20463580.
4	12632886.
5	2440172.
TOTAL	37086800.

DAILY VMT NUMBER LANES	
1	8239774.
2	13504782.
3	8813095.
4	4783022.
5	1746146.
TOTAL	37086800.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
 - RUN TIME: 08:44:55 31Oct95

DAILY VEHICLE HOURS

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VHT - GEOGRAPHIC LOCATION NO 1

	AREA TYPES				
FT	1	2	3	4	5
1	866.	27792.	184301.	98331.	37075.
2	2468.	10553.	268917.	257033.	10402.
3	7822.	12370.	169082.	94447.	21351.
4	2714.	3142.	91215.	29653.	11682.
5	2295.	6619.	147115.	50878.	10916.
GL TOTAL	16164.	60475.	860630.	530343.	91426.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 08:44:55 31Oct95

DAILY VEHICLE HOURS

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VHT - ALL GEOGRAPHIC LOCATIONS

	AREA TYPES				
FT	1	2	3	4	5
1	866.	27792.	184301.	98331.	37075.
2	2468.	10553.	268917.	257033.	10402.
3	7822.	12370.	169082.	94447.	21351.
4	2714.	3142.	91215.	29653.	11682.
5	2295.	6619.	147115.	50878.	10916.
TOTAL	16164.	60475.	860630.	530343.	91426.

DAILY VHT FACILITY TYPE	
1	348364.
2	549371.
3	305073.
4	138406.
5	217822.
TOTAL	1559034.

DAILY VHT AREA TYPE	
1	16164.
2	60475.
3	860630.
4	530343.
5	91426.
TOTAL	1559034.

DAILY VHT NUMBER LANES	
1	473163.
2	539285.
3	327740.
4	161337.
5	57513.
TOTAL	1559034.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
 - RUN TIME: 08:44:55 31Oct95

AVERAGE CONGESTED SPEED (mph)

INFO all reported values have been adjusted by EMISFAC = .9578

AVERAGE SPEED - GEOGRAPHIC LOCATION NO 1

	AREA TYPES				
FT	1	2	3	4	5
1	23.96	29.60	31.30	29.22	25.35
2	19.00	17.91	25.94	24.04	33.16
3	14.26	14.00	22.78	24.65	31.79
4	14.11	18.72	24.64	23.43	27.72
5	8.53	10.50	11.00	10.98	14.00
GL TOTAL	14.67	21.71	23.78	23.82	26.69

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 08:44:55 31Oct95

AVERAGE CONGESTED SPEED (mph)

INFO all reported values have been adjusted by EMISFAC = .9578

AVERAGE SPEED - ALL GEOGRAPHIC LOCATIONS

FT	AREA TYPES 1	2	3	4	5
1	23.96	29.60	31.30	29.22	25.35
2	19.00	17.91	25.94	24.04	33.16
3	14.26	14.00	22.78	24.65	31.79
4	14.11	18.72	24.64	23.43	27.72
5	8.53	10.50	11.00	10.98	14.00
TOTAL	14.67	21.71	23.78	23.82	26.69

FACILITY TYPE	AVERAGE SPEED
1	29.93
2	25.00
3	23.42
4	24.30
5	11.10
TOTAL	23.79

AREA TYPE	AVERAGE SPEED
1	14.67
2	21.71
3	23.78
4	23.82
5	26.69
TOTAL	23.79

NUMBER LANES	AVERAGE SPEED
1	17.41
2	25.04
3	26.89
4	29.65
5	30.36
TOTAL	23.79

1MOBILE5a FDOT: Dade County - Miami Urban Area Study
MOBILE5a (26-Mar-93)
0
-M153 Error:
Warning: Refueling emissions in grams-per-gallon are only available using the 120 column descriptive output option (OUTFMT = 3 or 5). See MOBILE5 Users
Guide chapters 2.1.15, 2.1.19 and 2.1.20 for more information.
OMIAMI FL
Minimum Temp: 69. (F) Maximum Temp: 91. (F)
Period 1 RVP: 9.2 Period 2 RVP: 7.8 Period 2 Yr: 1992
OVOC HC emission factors include evaporative HC emission factors.
0

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	10.79	12.40	17.70	14.04	21.65	1.33	1.77	4.68	11.68	11.59
Exhst HC:	6.07	7.68	11.33	8.81	11.09	1.33	1.77	4.68	8.64	6.90
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	4.45	4.41	6.01	4.91	8.80					4.37
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	81.11	98.36	146.60	113.32	198.54	4.82	5.29	35.32	155.56	90.81
Exhst NOX:	1.96	2.28	3.08	2.53	4.17	2.26	2.48	17.53	.85	3.25

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	4.95	5.79	8.19	6.53	12.61	1.14	1.52	4.02	8.17	5.58
Exhst HC:	3.35	4.21	6.16	4.82	8.48	1.14	1.52	4.02	5.13	3.97
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	1.34	1.26	1.66	1.39	2.38					1.28
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	44.90	54.09	79.46	61.95	152.43	3.79	4.17	27.80	84.55	51.94
Exhst NOX:	1.63	1.90	2.57	2.10	4.30	2.00	2.19	15.47	.75	2.79

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LODV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	3.54	4.12	5.75	4.62	9.74	.99	1.31	3.48	6.60	4.04
Exhst HC:	2.44	3.04	4.40	3.46	6.58	.99	1.31	3.48	3.56	2.92
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.85	.77	.99	.84	1.41					.80
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	32.82	39.20	56.46	44.55	119.37	3.03	3.33	22.24	54.67	38.09
Exhst NOX:	1.52	1.77	2.40	1.96	4.43	1.79	1.96	13.83	.71	2.57

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.90	3.35	4.63	3.74	8.01	.86	1.14	3.03	5.80	3.31
Exhst HC:	1.98	2.45	3.52	2.78	5.18	.86	1.14	3.03	2.76	2.38
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.65	.58	.75	.64	1.07					.61
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	26.78	31.82	45.07	35.93	95.34	2.47	2.71	18.09	39.92	30.87
Exhst NOX:	1.46	1.70	2.32	1.89	4.56	1.62	1.77	12.53	.70	2.43

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	15.0	15.0	15.0		15.0	15.0	15.0	15.0	15.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.48	2.86	3.94	3.20	6.75	.76	1.00	2.66	5.34	2.84
Exhst HC:	1.71	2.10	2.99	2.38	4.14	.76	1.00	2.66	2.30	2.03
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.51	.45	.59	.49	.85					.48
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	23.17	27.42	38.33	30.80	77.68	2.04	2.24	14.96	31.62	26.41
Exhst NOX:	1.43	1.67	2.27	1.85	4.69	1.48	1.63	11.49	.72	2.33

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.18	2.52	3.47	2.82	5.80	.67	.89	2.36	5.05	2.50
Exhst HC:	1.52	1.86	2.65	2.11	3.36	.67	.89	2.36	2.01	1.80
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.40	.35	.46	.38	.69					.37
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	20.76	24.49	33.87	27.40	64.55	1.71	1.88	12.57	26.36	23.38
Exhst NOX:	1.40	1.64	2.24	1.83	4.82	1.38	1.51	10.67	.76	2.26

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	21.0	21.0	21.0		21.0	21.0	21.0	21.0	21.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.94	2.27	3.11	2.53	5.09	.60	.79	2.11	4.84	2.23
Exhst HC:	1.36	1.67	2.37	1.89	2.77	.60	.79	2.11	1.81	1.60
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.32	.28	.38	.31	.57					.30
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	18.34	21.87	30.16	24.44	54.72	1.46	1.61	10.74	22.64	20.62
Exhst NOX:	1.41	1.64	2.24	1.82	4.95	1.30	1.42	10.04	.80	2.22

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.75	2.06	2.82	2.30	4.57	.54	.71	1.89	4.69	2.01
Exhst HC:	1.20	1.50	2.13	1.69	2.32	.54	.71	1.89	1.65	1.42
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.28	.25	.33	.27	.50					.27
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	15.90	19.29	26.66	21.57	47.31	1.27	1.40	9.32	19.78	17.98
Exhst NOX:	1.43	1.66	2.26	1.84	5.08	1.24	1.35	9.57	.85	2.21

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	27.0	27.0	27.0		27.0	27.0	27.0	27.0	27.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.60	1.90	2.59	2.11	4.16	.49	.65	1.72	4.55	1.85
Exhst HC:	1.08	1.36	1.94	1.54	1.97	.49	.65	1.72	1.52	1.28
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.25	.22	.30	.24	.45					.24
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	14.00	17.25	23.91	19.32	41.72	1.12	1.23	8.23	17.43	15.93
Exhst NOX:	1.45	1.67	2.28	1.86	5.21	1.19	1.31	9.24	.90	2.21

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	30.0	30.0	30.0		30.0	30.0	30.0	30.0	30.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.48	1.77	2.41	1.97	3.84	.45	.59	1.57	4.44	1.71
Exhst HC:	.99	1.26	1.78	1.42	1.69	.45	.59	1.57	1.40	1.17
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.22	.20	.27	.22	.40					.21
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	12.48	15.60	21.70	17.49	37.53	1.01	1.11	7.38	15.47	14.29
Exhst NOX:	1.46	1.68	2.30	1.87	5.34	1.17	1.28	9.03	.94	2.21

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	33.0	33.0	33.0		33.0	33.0	33.0	33.0	33.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.37	1.66	2.26	1.84	3.59	.41	.55	1.45	4.34	1.59
Exhst HC:	.91	1.17	1.65	1.32	1.48	.41	.55	1.45	1.30	1.08
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.20	.18	.24	.20	.36					.19
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	11.23	14.25	19.89	16.00	34.43	.92	1.01	6.74	13.82	12.96
Exhst NOX:	1.47	1.69	2.31	1.88	5.47	1.15	1.27	8.94	.98	2.22

OEmission factors are as of 1st of the indicated calendar year.

OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	36.0	36.0	36.0		36.0	36.0	36.0	36.0	36.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.29	1.57	2.13	1.74	3.39	.38	.51	1.34	4.26	1.50
Exhst HC:	.84	1.09	1.55	1.23	1.31	.38	.51	1.34	1.22	1.00
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.18	.16	.22	.18	.33					.17
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	10.20	13.13	18.38	14.76	32.22	.85	.94	6.24	12.46	11.86
Exhst NOX:	1.48	1.70	2.32	1.89	5.60	1.16	1.27	8.97	1.01	2.23

OEmission factors are as of 1st of the indicated calendar year.

OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	39.0	39.0	39.0		39.0	39.0	39.0	39.0	39.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.21	1.49	2.02	1.65	3.23	.36	.47	1.26	4.19	1.42
Exhst HC:	.79	1.03	1.46	1.16	1.18	.36	.47	1.26	1.16	.94
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.16	.15	.20	.16	.30					.15
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	9.32	12.20	17.13	13.73	30.76	.80	.88	5.89	11.39	10.96
Exhst NOX:	1.49	1.71	2.33	1.90	5.72	1.18	1.29	9.11	1.03	2.25

OEmission factors are as of 1st of the indicated calendar year.

OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	42.0	42.0	42.0		42.0	42.0	42.0	42.0	42.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.14	1.42	1.93	1.58	3.10	.34	.45	1.19	4.14	1.35
Exhst HC:	.74	.98	1.39	1.10	1.08	.34	.45	1.19	1.11	.89
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.14	.13	.18	.15	.27					.14
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	8.57	11.42	16.07	12.86	29.95	.77	.85	5.64	10.57	10.22
Exhst NOX:	1.50	1.71	2.34	1.91	5.85	1.21	1.33	9.38	1.05	2.28

OEmission factors are as of 1st of the indicated calendar year.

OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.09	1.37	1.85	1.52	3.00	.32	.43	1.13	4.11	1.28
Exhst HC:	.70	.93	1.32	1.05	1.01	.32	.43	1.13	1.07	.84
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.12	.12	.17	.14	.24					.12
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	7.93	10.76	15.17	12.13	29.74	.75	.82	5.49	9.96	9.60
Exhst NOX:	1.50	1.72	2.35	1.92	5.98	1.26	1.38	9.77	1.07	2.32

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	48.0	48.0	48.0		48.0	48.0	48.0	48.0	48.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.03	1.32	1.78	1.46	2.92	.31	.41	1.08	4.09	1.23
Exhst HC:	.67	.89	1.27	1.01	.95	.31	.41	1.08	1.05	.80
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.10	.11	.15	.12	.22					.11
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	7.36	10.19	14.40	11.50	30.13	.74	.81	5.44	9.50	9.08
Exhst NOX:	1.51	1.72	2.36	1.92	6.11	1.33	1.46	10.31	1.09	2.37

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	51.0	51.0	51.0		51.0	51.0	51.0	51.0	51.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.02	1.31	1.76	1.45	2.85	.30	.39	1.05	4.09	1.22
Exhst HC:	.67	.89	1.27	1.01	.91	.30	.39	1.05	1.05	.80
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.09	.10	.14	.11	.20					.09
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	7.36	10.19	14.40	11.50	31.13	.75	.82	5.47	9.50	9.11
Exhst NOX:	1.66	1.93	2.64	2.15	6.24	1.42	1.56	11.03	1.20	2.57

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	54.0	54.0	54.0		54.0	54.0	54.0	54.0	54.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	

0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.01	1.30	1.75	1.44	2.81	.29	.38	1.02	4.09	1.20
Exhst HC:	.67	.89	1.27	1.01	.88	.29	.38	1.02	1.05	.79
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.08	.09	.12	.10	.18					.08
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	7.36	10.19	14.40	11.50	32.81	.76	.84	5.60	9.50	9.18
Exhst NOX:	1.81	2.13	2.92	2.37	6.37	1.54	1.69	11.94	1.30	2.80

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	57.0	57.0	57.0		57.0	57.0	57.0	57.0	57.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.06	1.36	1.85	1.52	2.78	.28	.38	1.00	4.24	1.25
Exhst HC:	.72	.97	1.38	1.10	.87	.28	.38	1.00	1.20	.85
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.08	.08	.11	.09	.16					.08
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	9.07	12.95	18.54	14.69	35.27	.79	.87	5.82	14.07	11.23
Exhst NOX:	1.96	2.33	3.21	2.60	6.50	1.69	1.85	13.10	1.41	3.03

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.13	1.47	2.01	1.64	2.76	.28	.37	.99	4.47	1.33
Exhst HC:	.80	1.09	1.55	1.23	.87	.28	.37	.99	1.43	.94
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.07	.07	.10	.08	.14					.07
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	11.63	17.09	24.76	19.47	38.67	.84	.92	6.15	20.93	14.29
Exhst NOX:	2.10	2.53	3.49	2.83	6.63	1.88	2.06	14.55	1.52	3.29

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	63.0	63.0	63.0		63.0	63.0	63.0	63.0	63.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.21	1.58	2.18	1.77	2.76	.28	.37	.99	4.69	1.42
Exhst HC:	.89	1.20	1.73	1.36	.88	.28	.37	.99	1.66	1.03
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.07	.09	.07	.13					.06
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	14.18	21.22	30.98	24.25	43.25	.90	.99	6.61	27.79	17.41
Exhst NOX:	2.25	2.73	3.77	3.05	6.76	2.11	2.32	16.37	1.62	3.58

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	65.0	65.0	65.0		65.0	65.0	65.0	65.0	65.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	1.26	1.65	2.29	1.85	2.77	.28	.37	.99	4.84	1.47
Exhst HC:	.94	1.28	1.84	1.45	.90	.28	.37	.99	1.81	1.09
Evap. HC:	.20	.26	.30	.27	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.06	.09	.07	.12					.06
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	15.89	23.98	35.12	27.43	47.11	.95	1.05	6.99	32.36	19.51
Exhst NOX:	2.35	2.87	3.96	3.21	6.85	2.30	2.52	17.84	1.69	3.78

```
1MOBILE5a FDOT: Dade County - Miami Urban Area Study
 MOBILE5a (26-Mar-93)
0
-M153 Error:
 Warning: Refueling emissions in grams-per-gallon are only available using the 120 column descriptive output option
(OUTFMT = 3 or 5). See MOBILE5 Users
 Guide chapters 2.1.15, 2.1.19 and 2.1.20 for more information.
0I/M program selected:

0     Start year (January 1):             1991
      Pre-1981 MYR stringency rate:        26%
      First model year covered:           1975
      Last model year covered:            2020
      Waiver rate (pre-1981):              0.%
      Waiver rate (1981 and newer):        0.%
      Compliance Rate:                    100.%
      Inspection type:                    Test Only
      Inspection frequency                Annual
      Vehicle types covered:              LDGV - Yes
                                         LDGT1 - Yes
                                         LDGT2 - Yes
                                          HDGV - No
      1981 & later MYR test type:         Idle
      Cutpoints, HC:  220.000   CO:    1.200    NOx:  999.000
OFunctional Check Program Description:
OCheck Start   Model Yrs  Vehicle Classes Covered       Inspection       Comp
       (Jan1)  Covered    LDGV   LDGT1  LDGT2  HDGV    Type      Freq     Rate

 ATP   1991    1975-2020  Yes    Yes    Yes    No  Test Only    Annual   100.0%
OAir pump system disablements:        No   Catalyst removals:                 Yes
 Fuel inlet restrictor disablements:  No   Tailpipe lead deposit test:        No
 EGR disablement:                     No   Evaporative system disablements:   No
 PCV system disablements:             No   Missing gas caps:                  Yes
OMIAMI        FL
                      Minimum Temp: 69. (F)   Maximum Temp: 91. (F)
                      Period 1 RVP:  9.2      Period 2 RVP:  7.8 Period 2 Yr: 1992
OVOC HC emission factors include evaporative HC emission factors.
0
OEmission factors are as of  1st of the indicated calendar year.
OCal. Year: 2000            Region: Low            Altitude:  500. Ft.
                       I/M Program: Yes        Ambient Temp:   86.2 / 86.2 / 86.2 F
                 Anti-tam. Program: Yes      Operating Mode:   20.6 / 27.3 / 20.6
                  Reformulated Gas: No
```

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	9.53	10.42	14.83	11.79	21.65	1.33	1.77	4.68	11.68	10.19
Exhst HC:	4.81	5.71	8.47	6.56	11.09	1.33	1.77	4.68	8.64	5.50
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	4.45	4.41	6.01	4.91	8.80					4.37
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	64.72	75.34	105.53	84.71	198.54	4.82	5.29	35.32	155.56	72.81
Exhst NOX:	1.93	2.14	2.93	2.39	4.17	2.26	2.48	17.53	.85	3.19

OEmission factors are as of 1st of the indicated calendar year.

0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	4.27	4.70	6.63	5.30	12.61	1.14	1.52	4.02	8.17	4.81
Exhst HC:	2.66	3.13	4.61	3.59	8.48	1.14	1.52	4.02	5.13	3.20
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	1.34	1.26	1.66	1.39	2.38					1.28
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	35.94	41.68	57.61	46.62	152.43	3.79	4.17	27.80	84.55	42.18
Exhst NOX:	1.60	1.78	2.45	1.99	4.30	2.00	2.19	15.47	.75	2.74

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.05	3.34	4.64	3.74	9.74	.99	1.31	3.48	6.60	3.49
Exhst HC:	1.94	2.26	3.29	2.58	6.58	.99	1.31	3.48	3.56	2.38
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.85	.77	.99	.84	1.41					.80
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	26.34	30.38	41.34	33.78	119.37	3.03	3.33	22.24	54.67	31.13
Exhst NOX:	1.49	1.66	2.29	1.85	4.43	1.79	1.96	13.83	.71	2.52

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.50	2.72	3.74	3.04	8.01	.86	1.14	3.03	5.80	2.87
Exhst HC:	1.58	1.83	2.64	2.08	5.18	.86	1.14	3.03	2.76	1.94
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.65	.58	.75	.64	1.07					.61
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	21.54	24.76	33.25	27.40	95.34	2.47	2.71	18.09	39.92	25.29
Exhst NOX:	1.43	1.60	2.21	1.79	4.56	1.62	1.77	12.53	.70	2.39

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	15.0	15.0	15.0		15.0	15.0	15.0	15.0	15.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	2.14	2.33	3.19	2.59	6.75	.76	1.00	2.66	5.34	2.46
Exhst HC:	1.36	1.57	2.25	1.78	4.14	.76	1.00	2.66	2.30	1.66
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.51	.45	.59	.49	.85					.48
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	18.66	21.41	28.45	23.60	77.68	2.04	2.24	14.96	31.62	21.65
Exhst NOX:	1.40	1.57	2.16	1.75	4.69	1.48	1.63	11.49	.72	2.29

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.88	2.05	2.80	2.28	5.80	.67	.89	2.36	5.05	2.16
Exhst HC:	1.22	1.40	1.99	1.58	3.36	.67	.89	2.36	2.01	1.47
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.40	.35	.46	.38	.69					.37
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	16.75	19.18	25.26	21.07	64.55	1.71	1.88	12.57	26.36	19.17
Exhst NOX:	1.38	1.54	2.14	1.73	4.82	1.38	1.51	10.67	.76	2.21

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	21.0	21.0	21.0		21.0	21.0	21.0	21.0	21.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.67	1.84	2.51	2.05	5.09	.60	.79	2.11	4.84	1.93
Exhst HC:	1.09	1.25	1.78	1.41	2.77	.60	.79	2.11	1.81	1.30
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.32	.28	.38	.31	.57					.30
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	14.79	17.12	22.52	18.80	54.72	1.46	1.61	10.74	22.64	16.88
Exhst NOX:	1.38	1.54	2.13	1.72	4.95	1.30	1.42	10.04	.80	2.18

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.51	1.68	2.28	1.86	4.57	.54	.71	1.89	4.69	1.75
Exhst HC:	.96	1.12	1.59	1.27	2.32	.54	.71	1.89	1.65	1.16
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.28	.25	.33	.27	.50					.27
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	12.81	15.06	19.87	16.55	47.31	1.27	1.40	9.32	19.78	14.69
Exhst NOX:	1.40	1.56	2.16	1.74	5.08	1.24	1.35	9.57	.85	2.17

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

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0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV    LDDV    LDDT    HDDV    MC   All Veh
+           ______ ______ ______ ______ ______ ______ ______ ______ ______ ______
 Veh. Spd.: 27.0   27.0   27.0           27.0   27.0   27.0   27.0   27.0
   VMT Mix:   .614   .191   .086           .031   .001   .001   .068   .006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.38   1.55   2.10   1.72   4.16    .49    .65   1.72   4.55   1.60
 Exhst  HC:   .87   1.02   1.45   1.15   1.97    .49    .65   1.72   1.52   1.04
 Evap.  HC:   .20    .25    .30    .26   1.65                         2.63    .27
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .25    .22    .30    .24    .45                                 .24
 Rsting HC:   .06    .06    .06    .06    .10                          .41    .06
 Exhst  CO: 11.26  13.44  17.80  14.79  41.72   1.12   1.23   8.23  17.43  12.99
 Exhst NOX:  1.42   1.57   2.18   1.76   5.21   1.19   1.31   9.24    .90   2.16
___________________________________________________________________________________
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 2000          Region: Low          Altitude:  500. Ft.
                     I/M Program: Yes      Ambient Temp:   86.2 / 86.2 / 86.2 F
                Anti-tam. Program: Yes    Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV    LDDV    LDDT    HDDV    MC   All Veh
+           ______ ______ ______ ______ ______ ______ ______ ______ ______ ______
 Veh. Spd.: 30.0   30.0   30.0           30.0   30.0   30.0   30.0   30.0
   VMT Mix:   .614   .191   .086           .031   .001   .001   .068   .006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.28   1.44   1.95   1.60   3.84    .45    .59   1.57   4.44   1.49
 Exhst  HC:   .79    .94   1.33   1.06   1.69    .45    .59   1.57   1.40    .95
 Evap.  HC:   .20    .25    .30    .26   1.65                         2.63    .27
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .22    .20    .27    .22    .40                                 .21
 Rsting HC:   .06    .06    .06    .06    .10                          .41    .06
 Exhst  CO: 10.03  12.13  16.14  13.37  37.53   1.01   1.11   7.38  15.47  11.64
 Exhst NOX:  1.43   1.58   2.19   1.77   5.34   1.17   1.28   9.03    .94   2.17
___________________________________________________________________________________
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 2000          Region: Low          Altitude:  500. Ft.
                     I/M Program: Yes      Ambient Temp:   86.2 / 86.2 / 86.2 F
                Anti-tam. Program: Yes    Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV    LDDV    LDDT    HDDV    MC   All Veh
+           ______ ______ ______ ______ ______ ______ ______ ______ ______ ______
 Veh. Spd.: 33.0   33.0   33.0           33.0   33.0   33.0   33.0   33.0
   VMT Mix:   .614   .191   .086           .031   .001   .001   .068   .006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.19   1.36   1.83   1.51   3.59    .41    .55   1.45   4.34   1.39
 Exhst  HC:   .73    .87   1.24    .99   1.48    .41    .55   1.45   1.30    .88
 Evap.  HC:   .20    .25    .30    .26   1.65                         2.63    .27
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .20    .18    .24    .20    .36                                 .19
 Rsting HC:   .06    .06    .06    .06    .10                          .41    .06
 Exhst  CO:  9.01  11.06  14.78  12.21  34.43    .92   1.01   6.74  13.82  10.54
 Exhst NOX:  1.44   1.59   2.21   1.78   5.47   1.15   1.27   8.94    .98   2.17
___________________________________________________________________________________
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 2000          Region: Low          Altitude:  500. Ft.
                     I/M Program: Yes      Ambient Temp:   86.2 / 86.2 / 86.2 F
                Anti-tam. Program: Yes    Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT    HDGV    LDDV    LDDT    HDDV    MC   All Veh
+           ______ ______ ______ ______ ______ ______ ______ ______ ______ ______
 Veh. Spd.: 36.0   36.0   36.0           36.0   36.0   36.0   36.0   36.0
   VMT Mix:   .614   .191   .086           .031   .001   .001   .068   .006
0Composite Emission Factors (Gm/Mile)
 VOC    HC:  1.12   1.29   1.73   1.42   3.39    .38    .51   1.34   4.26   1.31
 Exhst  HC:   .68    .82   1.16    .92   1.31    .38    .51   1.34   1.22    .81
 Evap.  HC:   .20    .25    .30    .26   1.65                         2.63    .27
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .18    .16    .22    .18    .33                                 .17
 Rsting HC:   .06    .06    .06    .06    .10                          .41    .06
 Exhst  CO:  8.17  10.17  13.65  11.25  32.22    .85    .94   6.24  12.46   9.65
 Exhst NOX:  1.45   1.60   2.22   1.79   5.60   1.16   1.27   8.97   1.01   2.19
___________________________________________________________________________________
0Emission factors are as of  1st of the indicated calendar year.
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0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	39.0	39.0	39.0		39.0	39.0	39.0	39.0	39.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.05	1.22	1.64	1.35	3.23	.36	.47	1.26	4.19	1.24
Exhst HC:	.63	.77	1.09	.87	1.18	.36	.47	1.26	1.16	.76
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.16	.15	.20	.16	.30					.15
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	7.45	9.43	12.70	10.44	30.76	.80	.88	5.89	11.39	8.91
Exhst NOX:	1.46	1.61	2.23	1.80	5.72	1.18	1.29	9.11	1.03	2.21

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	42.0	42.0	42.0		42.0	42.0	42.0	42.0	42.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.99	1.17	1.57	1.30	3.10	.34	.45	1.19	4.14	1.18
Exhst HC:	.59	.73	1.04	.83	1.08	.34	.45	1.19	1.11	.72
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.14	.13	.18	.15	.27					.14
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	6.85	8.80	11.89	9.76	29.95	.77	.85	5.64	10.57	8.30
Exhst NOX:	1.47	1.61	2.24	1.81	5.85	1.21	1.33	9.38	1.05	2.24

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.94	1.13	1.51	1.24	3.00	.32	.43	1.13	4.11	1.12
Exhst HC:	.56	.70	.99	.79	1.01	.32	.43	1.13	1.07	.68
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.12	.12	.17	.14	.24					.12
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	6.32	8.27	11.20	9.18	29.74	.75	.82	5.49	9.96	7.79
Exhst NOX:	1.48	1.62	2.24	1.81	5.98	1.26	1.38	9.77	1.07	2.27

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	48.0	48.0	48.0		48.0	48.0	48.0	48.0	48.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	.90	1.09	1.45	1.20	2.92	.31	.41	1.08	4.09	1.08
Exhst HC:	.53	.67	.95	.76	.95	.31	.41	1.08	1.05	.65
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.10	.11	.15	.12	.22					.11
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	5.86	7.81	10.61	8.68	30.13	.74	.81	5.44	9.50	7.38
Exhst NOX:	1.48	1.62	2.25	1.82	6.11	1.33	1.46	10.31	1.09	2.32

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	51.0	51.0	51.0		51.0	51.0	51.0	51.0	51.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.89	1.07	1.44	1.19	2.85	.30	.39	1.05	4.09	1.06
Exhst HC:	.53	.67	.95	.76	.91	.30	.39	1.05	1.05	.64
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.09	.10	.14	.11	.20					.09
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	5.86	7.81	10.61	8.68	31.13	.75	.82	5.47	9.50	7.41
Exhst NOX:	1.63	1.81	2.52	2.03	6.24	1.42	1.56	11.03	1.20	2.52

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	54.0	54.0	54.0		54.0	54.0	54.0	54.0	54.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.88	1.06	1.42	1.17	2.81	.29	.38	1.02	4.09	1.05
Exhst HC:	.53	.67	.95	.76	.88	.29	.38	1.02	1.05	.64
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.08	.09	.12	.10	.18					.08
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	5.86	7.81	10.61	8.68	32.81	.76	.84	5.60	9.50	7.47
Exhst NOX:	1.77	2.00	2.79	2.25	6.37	1.54	1.69	11.94	1.30	2.74

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	57.0	57.0	57.0		57.0	57.0	57.0	57.0	57.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.91	1.11	1.49	1.23	2.78	.28	.38	1.00	4.24	1.08
Exhst HC:	.58	.72	1.03	.82	.87	.28	.38	1.00	1.20	.68
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.08	.08	.11	.09	.16					.08
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	7.19	9.82	13.49	10.96	35.27	.79	.87	5.82	14.07	9.04
Exhst NOX:	1.92	2.19	3.06	2.46	6.50	1.69	1.85	13.10	1.41	2.97

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.97	1.19	1.61	1.32	2.76	.28	.37	.99	4.47	1.14
Exhst HC:	.64	.81	1.16	.92	.87	.28	.37	.99	1.43	.75
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.07	.07	.10	.08	.14					.07
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	9.18	12.83	17.82	14.38	38.67	.84	.92	6.15	20.93	11.38
Exhst NOX:	2.07	2.38	3.33	2.68	6.63	1.88	2.06	14.55	1.52	3.23

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	63.0	63.0	63.0		63.0	63.0	63.0	63.0	63.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.03	1.26	1.73	1.41	2.76	.28	.37	.99	4.69	1.21
Exhst HC:	.70	.89	1.28	1.01	.88	.28	.37	.99	1.66	.82
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.07	.09	.07	.13					.06
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	11.17	15.85	22.15	17.80	43.25	.90	.99	6.61	27.79	13.77
Exhst NOX:	2.21	2.57	3.60	2.89	6.76	2.11	2.32	16.37	1.62	3.51

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2000 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	65.0	65.0	65.0		65.0	65.0	65.0	65.0	65.0	
VMT Mix:	.614	.191	.086		.031	.001	.001	.068	.006	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.07	1.31	1.81	1.47	2.77	.28	.37	.99	4.84	1.25
Exhst HC:	.75	.94	1.37	1.08	.90	.28	.37	.99	1.81	.87
Evap. HC:	.20	.25	.30	.26	1.65				2.63	.27
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.06	.09	.07	.12					.06
Rsting HC:	.06	.06	.06	.06	.10				.41	.06
Exhst CO:	12.50	17.86	25.03	20.08	47.11	.95	1.05	6.99	32.36	15.39
Exhst NOX:	2.31	2.70	3.78	3.03	6.85	2.30	2.52	17.84	1.69	3.71

```
FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
 -  RUN TIME: 11:54:06  31Oct95

INPUT CARD ECHO

***INFO*** all reported values have been adjusted by EMISFAC =  .9578

SCENARIO  1        MOBILE.TEM
THE FOLLOWING IS A MATRIX WHICH ASSIGNS A SCENARIO TO EACH FT/AT COMBINATION
AT=>     1     2     3     4     5
```

FT	1	2	3	4	5
1	1	1	1	1	1
2	1	1	1	1	1
3	1	1	1	1	1
4	1	1	1	1	1
5	1	1	1	1	1
6	1	1	1	1	1
7	1	1	1	1	1
8	1	1	1	1	1
9	1	1	1	1	1

```
INPUT COORDINATE SCALE(UNITS) FROM PROFILE.MAS IS   5280
 ***INFO*** ALL REPORT VALUES ARE BEING ADJUSTED BY A FACTOR OF  .9578
```

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 11:54:12 31Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

GEOGRAPHIC LOCATION NO 1

FT	AT	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1	39271.	26251.	5828.	0.	6029.	332286.	47355.
1	2	1346606.	877196.	231894.	0.	190709.	10782865.	1875634.
1	3	8819427.	5649696.	1612562.	0.	1222951.	68385480.	13095002.
1	4	4754913.	3120006.	798820.	0.	673777.	38623328.	6472294.
1	5	1579959.	1016305.	268503.	0.	239172.	12308870.	2253377.
2	1	104171.	71297.	13090.	0.	17117.	924210.	107599.
2	2	444867.	298294.	52350.	0.	83964.	3853883.	435587.
2	3	12591915.	8337560.	1970432.	0.	1885180.	104596296.	15972601.
2	4	11684525.	7746637.	1726039.	0.	1866789.	97735864.	14068267.
2	5	512806.	327485.	97337.	0.	67302.	3941494.	790300.
3	1	301874.	204818.	30541.	0.	60394.	2668043.	262106.
3	2	394447.	267263.	47518.	0.	70302.	3452823.	395014.
3	3	7394332.	4924918.	1072738.	0.	1180045.	62359256.	8755011.
3	4	4340386.	2892171.	653301.	0.	664222.	36490016.	5310216.
3	5	1028697.	663098.	189173.	0.	137685.	8035946.	1532736.
4	1	109326.	73843.	10806.	0.	22520.	962711.	92988.
4	2	131692.	90087.	16329.	0.	22007.	1165926.	134917.
4	3	4291187.	2854826.	641546.	0.	664836.	36020252.	5223816.
4	4	1357619.	906421.	197210.	0.	214185.	11480363.	1609984.
4	5	605404.	398556.	98725.	0.	88805.	4938118.	803109.
5	1	76750.	52832.	5435.	0.	17615.	691184.	51624.
5	2	235498.	162263.	19389.	0.	50614.	2115512.	177004.
5	3	5315522.	3657192.	452306.	0.	1127831.	47649524.	4092997.
5	4	1821397.	1253266.	154701.	0.	386743.	16329399.	1400594.
5	5	491892.	335884.	49547.	0.	96064.	4381157.	428206.
GL TOTAL		69774552.	46208184.	10416124.	0.	11056870.	580225088.	85388344.
(TONS)		76.84	50.89	11.47	.00	12.18	639.01	94.04

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 11:54:12 31Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

ALL GEOGRAPHIC LOCATIONS

FT	AT	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1	39271.	26251.	5828.	0.	6029.	332286.	47355.
1	2	1346606.	877196.	231894.	0.	190709.	10782865.	1875634.
1	3	8819427.	5649696.	1612562.	0.	1222951.	68385480.	13095002.
1	4	4754913.	3120006.	798820.	0.	673777.	38623328.	6472294.
1	5	1579959.	1016305.	268503.	0.	239172.	12308870.	2253377.
2	1	104171.	71297.	13090.	0.	17117.	924210.	107599.
2	2	444867.	298294.	52350.	0.	83964.	3853883.	435587.
2	3	12591915.	8337560.	1970432.	0.	1885180.	104596296.	15972601.
2	4	11684525.	7746637.	1726039.	0.	1866789.	97735864.	14068267.
2	5	512806.	327485.	97337.	0.	67302.	3941494.	790300.
3	1	301874.	204818.	30541.	0.	60394.	2668043.	262106.
3	2	394447.	267263.	47518.	0.	70302.	3452823.	395014.
3	3	7394332.	4924918.	1072738.	0.	1180045.	62359256.	8755011.
3	4	4340386.	2892171.	653301.	0.	664222.	36490016.	5310216.
3	5	1028697.	663098.	189173.	0.	137685.	8035946.	1532736.
4	1	109326.	73843.	10806.	0.	22520.	962711.	92988.
4	2	131692.	90087.	16329.	0.	22007.	1165926.	134917.
4	3	4291187.	2854826.	641546.	0.	664836.	36020252.	5223816.
4	4	1357619.	906421.	197210.	0.	214185.	11480363.	1609984.
4	5	605404.	398556.	98725.	0.	88805.	4938118.	803109.
5	1	76750.	52832.	5435.	0.	17615.	691184.	51624.
5	2	235498.	162263.	19389.	0.	50614.	2115512.	177004.
5	3	5315522.	3657192.	452306.	0.	1127831.	47649524.	4092997.
5	4	1821397.	1253266.	154701.	0.	386743.	16329399.	1400594.
5	5	491892.	335884.	49547.	0.	96064.	4381157.	428206.
SUM		69774552.	46208184.	10416124.	0.	11056870.	580225088.	85388344.
(TONS)		76.84	50.89	11.47	.00	12.18	639.01	94.04

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 11:54:12 31Oct95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

FACILITY TYPE	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	16540179.	10689443.	2917607.	0.	2332639.	130432840.	23743670.
2	25338246.	16781282.	3859248.	0.	3920357.	211051920.	31374310.
3	13459734.	8952275.	1993273.	0.	2112644.	113006216.	16255081.
4	6495223.	4323729.	964616.	0.	1012354.	54567356.	7864806.
5	7941056.	5461430.	681379.	0.	1678864.	71166736.	6150427.
SUM	69774552.	46208184.	10416124.	0.	11056870.	580225088.	85388344.
(TONS)	76.84	50.89	11.47	.00	12.18	639.01	94.04

AREA TYPE	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	631391.	429040.	65701.	0.	123675.	5578434.	561672.
2	2553111.	1695104.	367480.	0.	417597.	21371008.	3018157.
3	38412356.	25424188.	5749586.	0.	6080852.	319011776.	47139432.
4	23958864.	15918495.	3530072.	0.	3805720.	200658784.	28861352.
5	4218756.	2741328.	703284.	0.	629030.	33605592.	5807720.
SUM	69774552.	46208184.	10416124.	0.	11056870.	580225088.	85388344.
(TONS)	76.84	50.89	11.47	.00	12.18	639.01	94.04

NUMBER LANES	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	19363558.	13055830.	2320271.	0.	3538300.	167177376.	19592128.
2	24625916.	16273564.	3797466.	0.	3787892.	204112160.	30902288.
3	15425518.	10168845.	2483207.	0.	2269370.	126771904.	20176940.
4	7623466.	4945694.	1333678.	0.	1069914.	60607432.	10821511.
5	2736010.	1764254.	481497.	0.	391394.	21555888.	3895411.
SUM	69774552.	46208184.	10416124.	0.	11056870.	580225088.	85388344.
(TONS)	76.84	50.89	11.47	.00	12.18	639.01	94.04

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 11:54:12 31Oct95

DAILY VEHICLE MILES

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VMT - GEOGRAPHIC LOCATION NO 1:

	AREA TYPES				
FT	1	2	3	4	5
1	21585.	858867.	5978997.	2958593.	998574.
2	48483.	193888.	7300951.	6392736.	360670.
3	113566.	181046.	3977116.	2419634.	700732.
4	40023.	60477.	2376096.	730408.	365648.
5	20131.	71810.	1675208.	572966.	183507.
GL TOTAL	243789.	1366089.	21308384.	13074348.	2609130.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 11:54:12 31Oct95

DAILY VEHICLE MILES

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VMT - ALL GEOGRAPHIC LOCATIONS

FT	AREA TYPES 1	2	3	4	5
1	21585.	858867.	5978997.	2958593.	998574.
2	48483.	193888.	7300951.	6392736.	360670.
3	113566.	181046.	3977116.	2419634.	700732.
4	40023.	60477.	2376096.	730408.	365648.
5	20131.	71810.	1675208.	572966.	183507.
TOTAL	243789.	1366089.	21308384.	13074348.	2609130.

DAILY VMT FACILITY TYPE	
1	10816621.
2	14296724.
3	7392092.
4	3572653.
5	2523626.
TOTAL	38601736.

DAILY VMT AREA TYPE	
1	243789.
2	1366089.
3	21308384.
4	13074348.
5	2609130.
TOTAL	38601736.

DAILY VMT NUMBER LANES	
1	8596637.
2	14080015.
3	9200505.
4	4941237.
5	1783323.
TOTAL	38601736.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
 - RUN TIME: 11:54:12 31Oct95

DAILY VEHICLE HOURS

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VHT - GEOGRAPHIC LOCATION NO 1

FT	AREA TYPES 1	2	3	4	5
1	915.	29730.	193761.	105687.	38761.
2	2563.	11214.	291081.	275518.	10919.
3	8265.	13721.	178090.	101126.	22038.
4	2962.	3294.	100477.	32179.	13698.
5	2360.	6837.	152273.	52216.	13111.
GL TOTAL	17065.	64797.	915684.	566725.	98527.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 11:54:12 31Oct95

DAILY VEHICLE HOURS

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VHT - ALL GEOGRAPHIC LOCATIONS

	AREA TYPES				
FT	1	2	3	4	5
1	915.	29730.	193761.	105687.	38761.
2	2563.	11214.	291081.	275518.	10919.
3	8265.	13721.	178090.	101126.	22038.
4	2962.	3294.	100477.	32179.	13698.
5	2360.	6837.	152273.	52216.	13111.
TOTAL	17065.	64797.	915684.	566725.	98527.

DAILY VHT FACILITY TYPE	
1	368854.
2	591295.
3	323241.
4	152611.
5	226797.
TOTAL	1662797.

DAILY VHT AREA TYPE	
1	17065.
2	64797.
3	915684.
4	566725.
5	98527.
TOTAL	1662797.

DAILY VHT NUMBER LANES	
1	501753.
2	580694.
3	352000.
4	168721.
5	59631.
TOTAL	1662797.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 11:54:12 31Oct95

AVERAGE CONGESTED SPEED (mph)

INFO all reported values have been adjusted by EMISFAC = .9578

AVERAGE SPEED - GEOGRAPHIC LOCATION NO 1

	AREA TYPES				
FT	1	2	3	4	5
1	23.59	28.89	30.86	27.99	25.76
2	18.92	17.29	25.08	23.20	33.03
3	13.74	13.19	22.33	23.93	31.80
4	13.51	18.36	23.65	22.70	26.69
5	8.53	10.50	11.00	10.97	14.00
GL TOTAL	14.29	21.08	23.27	23.07	26.48

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 11:54:12 31Oct95

AVERAGE CONGESTED SPEED (mph)

INFO all reported values have been adjusted by EMISFAC = .9578

AVERAGE SPEED - ALL GEOGRAPHIC LOCATIONS

	AREA TYPES				
FT	1	2	3	4	5
1	23.59	28.89	30.86	27.99	25.76
2	18.92	17.29	25.08	23.20	33.03
3	13.74	13.19	22.33	23.93	31.80
4	13.51	18.36	23.65	22.70	26.69
5	8.53	10.50	11.00	10.97	14.00
TOTAL	14.29	21.08	23.27	23.07	26.48

FACILITY TYPE	AVERAGE SPEED
1	29.32
2	24.18
3	22.87
4	23.41
5	11.13
TOTAL	23.21

AREA TYPE	AVERAGE SPEED
1	14.29
2	21.08
3	23.27
4	23.07
5	26.48
TOTAL	23.21

NUMBER LANES	AVERAGE SPEED
1	17.13
2	24.25
3	26.14
4	29.29
5	29.91
TOTAL	23.21

D. EMIS.OUT FOR 2015 Interim Cost Feasible Network

1MOBILE5a FDOT: Dade County - COST FEASIBLE w/ NO Inspection in Place
MOBILE5a (26-Mar-93)
0
-M153 Error:
Warning: Refueling emissions in grams-per-gallon are only available using the 120 column descriptive output option (OUTFMT = 3 or 5). See MOBILE5 Users Guide chapters 2.1.15, 2.1.19 and 2.1.20 for more information.
0MIAMI FL
Minimum Temp: 69. (F) Maximum Temp: 91. (F)
Period 1 RVP: 9.2 Period 2 RVP: 7.8 Period 2 Yr: 1992
0VOC HC emission factors include evaporative HC emission factors.
0

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	8.40	9.90	13.88	11.11	13.24	1.10	1.49	4.43	11.68	8.99
Exhst HC:	5.09	6.39	9.18	7.24	6.76	1.10	1.49	4.43	8.64	5.71
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	3.14	3.32	4.50	3.68	5.57					3.08
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	71.28	76.01	105.39	84.91	70.32	4.40	4.87	34.21	155.56	72.16
Exhst NOX:	1.78	2.09	2.91	2.34	3.36	1.85	2.08	11.22	.85	2.77

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.90	4.63	6.48	5.19	7.54	.94	1.28	3.80	8.17	4.39
Exhst HC:	2.88	3.56	5.11	4.03	5.17	.94	1.28	3.80	5.13	3.37
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.86	.88	1.17	.97	1.47					.83
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	40.64	44.14	61.20	49.31	53.99	3.47	3.83	26.93	84.55	42.46
Exhst NOX:	1.47	1.73	2.41	1.94	3.46	1.63	1.84	9.91	.75	2.37

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.81	3.32	4.63	3.71	5.77	.81	1.11	3.29	6.60	3.22
Exhst HC:	2.14	2.61	3.75	2.95	4.01	.81	1.11	3.29	3.56	2.53
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.51	.52	.68	.57	.85					.49
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	30.43	33.52	46.47	37.44	42.28	2.77	3.07	21.55	54.67	32.08
Exhst NOX:	1.37	1.61	2.25	1.80	3.56	1.46	1.64	8.86	.71	2.18

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.32	2.72	3.78	3.04	4.71	.71	.97	2.87	5.80	2.66
Exhst HC:	1.77	2.14	3.07	2.42	3.16	.71	.97	2.87	2.76	2.10
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.39	.39	.51	.43	.65					.37
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	25.32	28.21	39.11	31.51	33.77	2.25	2.49	17.52	39.92	26.69
Exhst NOX:	1.32	1.55	2.16	1.74	3.67	1.32	1.49	8.02	.70	2.07

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	15.0	15.0	15.0		15.0	15.0	15.0	15.0	15.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.02	2.35	3.27	2.63	3.94	.62	.85	2.52	5.34	2.31
Exhst HC:	1.55	1.85	2.66	2.10	2.53	.62	.85	2.52	2.30	1.82
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.31	.31	.40	.34	.51					.29
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	22.26	25.02	34.69	27.95	27.51	1.86	2.06	14.49	31.62	23.37
Exhst NOX:	1.29	1.51	2.11	1.69	3.77	1.21	1.36	7.36	.72	1.99

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.81	2.10	2.92	2.35	3.37	.55	.75	2.23	5.05	2.06
Exhst HC:	1.40	1.66	2.39	1.88	2.05	.55	.75	2.23	2.01	1.63
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.25	.25	.33	.27	.42					.24
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	20.22	22.90	31.75	25.58	22.87	1.57	1.73	12.17	26.36	21.12
Exhst NOX:	1.27	1.49	2.08	1.67	3.88	1.12	1.27	6.83	.76	1.93

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	21.0	21.0	21.0		21.0	21.0	21.0	21.0	21.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.62	1.88	2.61	2.10	2.94	.49	.67	1.99	4.84	1.84
Exhst HC:	1.25	1.49	2.14	1.68	1.69	.49	.67	1.99	1.81	1.45
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.21	.21	.28	.23	.35					.20
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	17.78	20.35	28.22	22.73	19.38	1.34	1.48	10.40	22.64	18.59
Exhst NOX:	1.27	1.48	2.06	1.65	3.98	1.06	1.19	6.43	.80	1.90

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.44	1.70	2.35	1.90	2.62	.44	.60	1.79	4.69	1.65
Exhst HC:	1.10	1.33	1.91	1.50	1.41	.44	.60	1.79	1.65	1.28
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.18	.18	.24	.20	.31					.17
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	15.09	17.50	24.27	19.55	16.76	1.16	1.29	9.03	19.78	15.89
Exhst NOX:	1.29	1.48	2.06	1.66	4.08	1.01	1.14	6.13	.85	1.89

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	27.0	27.0	27.0		27.0	27.0	27.0	27.0	27.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.31	1.55	2.14	1.73	2.38	.40	.55	1.63	4.55	1.50
Exhst HC:	.98	1.20	1.73	1.36	1.20	.40	.55	1.63	1.52	1.15
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.16	.16	.22	.18	.27					.15
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	13.01	15.29	21.20	17.08	14.78	1.03	1.13	7.97	17.43	13.79
Exhst NOX:	1.31	1.48	2.07	1.66	4.19	.97	1.10	5.91	.90	1.88

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	30.0	30.0	30.0		30.0	30.0	30.0	30.0	30.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.20	1.44	1.98	1.60	2.18	.37	.50	1.49	4.44	1.38
Exhst HC:	.89	1.10	1.58	1.25	1.03	.37	.50	1.49	1.40	1.05
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.14	.14	.19	.16	.25					.14
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	11.34	13.52	18.74	15.10	13.29	.92	1.02	7.15	15.47	12.11
Exhst NOX:	1.32	1.49	2.07	1.66	4.29	.95	1.07	5.78	.94	1.88

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	33.0	33.0	33.0		33.0	33.0	33.0	33.0	33.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.11	1.34	1.84	1.49	2.03	.34	.46	1.37	4.34	1.28
Exhst HC:	.81	1.02	1.47	1.16	.90	.34	.46	1.37	1.30	.96
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.13	.13	.18	.14	.22					.12
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	9.97	12.07	16.73	13.48	12.20	.84	.93	6.52	13.82	10.75
Exhst NOX:	1.33	1.49	2.08	1.67	4.40	.94	1.06	5.73	.98	1.89

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	36.0	36.0	36.0		36.0	36.0	36.0	36.0	36.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.03	1.26	1.73	1.40	1.91	.31	.43	1.27	4.26	1.20
Exhst HC:	.75	.95	1.37	1.08	.80	.31	.43	1.27	1.22	.89
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.12	.12	.16	.13	.20					.11
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	8.84	10.86	15.06	12.13	11.41	.78	.86	6.05	12.46	9.62
Exhst NOX:	1.34	1.49	2.08	1.67	4.50	.94	1.07	5.74	1.01	1.90

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	39.0	39.0	39.0		39.0	39.0	39.0	39.0	39.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.97	1.20	1.64	1.33	1.81	.29	.40	1.19	4.19	1.13
Exhst HC:	.70	.90	1.29	1.01	.72	.29	.40	1.19	1.16	.83
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.11	.11	.15	.12	.19					.10
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	7.87	9.84	13.64	10.99	10.90	.73	.81	5.70	11.39	8.68
Exhst NOX:	1.35	1.49	2.08	1.67	4.61	.96	1.08	5.83	1.03	1.92

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	42.0	42.0	42.0		42.0	42.0	42.0	42.0	42.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	.91	1.14	1.55	1.26	1.73	.28	.38	1.12	4.14	1.07
Exhst HC:	.65	.85	1.22	.96	.66	.28	.38	1.12	1.11	.78
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.10	.10	.14	.11	.17					.09
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	7.05	8.96	12.43	10.01	10.61	.70	.78	5.46	10.57	7.88
Exhst NOX:	1.35	1.49	2.08	1.67	4.71	.99	1.11	6.00	1.05	1.94

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.86	1.09	1.48	1.21	1.67	.26	.36	1.07	4.11	1.02
Exhst HC:	.61	.80	1.15	.91	.61	.26	.36	1.07	1.07	.74
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.09	.09	.13	.10	.16					.09
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	6.33	8.20	11.38	9.17	10.54	.68	.76	5.32	9.96	7.20
Exhst NOX:	1.36	1.49	2.08	1.67	4.81	1.03	1.16	6.26	1.07	1.97

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	48.0	48.0	48.0		48.0	48.0	48.0	48.0	48.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.82	1.04	1.42	1.16	1.62	.25	.34	1.02	4.09	.97
Exhst HC:	.58	.77	1.10	.87	.58	.25	.34	1.02	1.05	.70
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.08	.09	.12	.09	.14					.08
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	5.71	7.54	10.45	8.42	10.67	.68	.75	5.27	9.50	6.62
Exhst NOX:	1.36	1.49	2.09	1.67	4.92	1.09	1.22	6.60	1.09	2.00

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	51.0	51.0	51.0		51.0	51.0	51.0	51.0	51.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.81	1.03	1.41	1.15	1.58	.24	.33	.99	4.09	.96
Exhst HC:	.58	.77	1.10	.87	.55	.24	.33	.99	1.05	.70
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.07	.08	.10	.08	.13					.07
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	5.71	7.54	10.45	8.42	11.03	.68	.75	5.30	9.50	6.63
Exhst NOX:	1.48	1.66	2.32	1.86	5.02	1.16	1.31	7.06	1.20	2.17

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	54.0	54.0	54.0		54.0	54.0	54.0	54.0	54.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	.80	1.02	1.40	1.14	1.55	.24	.32	.96	4.09	.95
Exhst HC:	.58	.77	1.10	.87	.54	.24	.32	.96	1.05	.69
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.07	.09	.08	.11					.06
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	5.71	7.54	10.45	8.42	11.62	.70	.77	5.42	9.50	6.66
Exhst NOX:	1.60	1.83	2.55	2.05	5.13	1.26	1.42	7.65	1.30	2.34

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	57.0	57.0	57.0		57.0	57.0	57.0	57.0	57.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	.84	1.06	1.45	1.18	1.53	.23	.32	.95	4.24	.98
Exhst HC:	.62	.81	1.16	.92	.53	.23	.32	.95	1.20	.73
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.06	.08	.07	.10					.06
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	6.75	8.76	12.14	9.78	12.49	.73	.80	5.64	14.07	7.73
Exhst NOX:	1.71	1.99	2.78	2.23	5.23	1.38	1.56	8.39	1.41	2.53

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
OComposite Emission Factors (Gm/Mile)										
VOC HC:	.89	1.12	1.53	1.24	1.52	.23	.32	.94	4.47	1.03
Exhst HC:	.68	.87	1.25	.99	.53	.23	.32	.94	1.43	.79
Evap. HC:	.14	.17	.18	.17	.87				2.63	.18
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.05	.06	.08	.06	.09					.05
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	8.32	10.59	14.68	11.83	13.70	.77	.85	5.96	20.93	9.34
Exhst NOX:	1.83	2.16	3.01	2.42	5.33	1.53	1.73	9.32	1.52	2.73

OEmission factors are as of 1st of the indicated calendar year.
OCal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: No Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: No Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	63.0	63.0	63.0		63.0	63.0	63.0	63.0	63.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	

```
0Composite Emission Factors (Gm/Mile)
 VOC    HC:   .95   1.18   1.61   1.31   1.52    .23    .31    .93   4.69   1.09
 Exhst  HC:   .74    .94   1.35   1.06    .54    .23    .31    .93   1.66    .85
 Evap.  HC:   .14    .17    .18    .17    .87                         2.63    .18
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .05    .05    .07    .06    .08                                 .05
 Rsting HC:   .02    .02    .02    .02    .03                          .41    .02
 Exhst  CO:  9.89  12.41  17.21  13.87  15.32    .82    .91   6.40  27.79  10.97
 Exhst NOX:  1.95   2.33   3.24   2.60   5.44   1.72   1.94  10.48   1.62   2.96
 ____________________________________________________________________________________
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 2015          Region: Low         Altitude:  500. Ft.
                      I/M Program: No       Ambient Temp:   86.2 / 86.2 / 86.2 F
                Anti-tam. Program: No     Operating Mode:   20.6 / 27.3 / 20.6
                 Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____  _____  _____  _____  _____  _____  ______
 Veh. Spd.: 65.0   65.0   65.0           65.0   65.0   65.0   65.0   65.0
   VMT Mix:  .581   .204   .089           .033   .002   .004   .083   .005
0Composite Emission Factors (Gm/Mile)
 VOC    HC:   .99   1.22   1.67   1.35   1.53    .23    .32    .94   4.84   1.12
 Exhst  HC:   .78    .98   1.41   1.11    .55    .23    .32    .94   1.81    .89
 Evap.  HC:   .14    .17    .18    .17    .87                         2.63    .18
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .04    .05    .06    .05    .08                                 .04
 Rsting HC:   .02    .02    .02    .02    .03                          .41    .02
 Exhst  CO: 10.93  13.63  18.90  15.23  16.69    .87    .96   6.77  32.36  12.07
 Exhst NOX:  2.03   2.44   3.40   2.73   5.51   1.88   2.12  11.42   1.69   3.12
 ____________________________________________________________________________________
1MOBILE5a FDOT: Dade County - 2015 COST FEASIBLE W/Inspection in Place
 MOBILE5a (26-Mar-93)
0
-M153 Error:
 Warning: Refueling emissions in grams-per-gallon are only available using the 120 column descriptive output option
 (OUTFMT = 3 or 5). See MOBILE5 Users
 Guide chapters 2.1.15, 2.1.19 and 2.1.20 for more information.
0I/M program selected:

0     Start year (January 1):           1991
      Pre-1981 MYR stringency rate:      26%
      First model year covered:         1975
      Last model year covered:          2020
      Waiver rate (pre-1981):            0.%
      Waiver rate (1981 and newer):      0.%
      Compliance Rate:                 100.%
      Inspection type:                  Test Only
      Inspection frequency              Annual
      Vehicle types covered:            LDGV - Yes
                                       LDGT1 - Yes
                                       LDGT2 - Yes
                                        HDGV - No
      1981 & later MYR test type:       Idle
      Cutpoints, HC:  220.000   CO:    1.200   NOx:  999.000
0Functional Check Program Description:
0Check Start   Model Yrs  Vehicle Classes Covered       Inspection        Comp
       (Jan1)  Covered    LDGV  LDGT1  LDGT2  HDGV    Type      Freq       Rate

 ATP   1991    1975-2020  Yes    Yes    Yes    No  Test Only    Annual   100.0%
0Air pump system disablements:       No    Catalyst removals:                 Yes
 Fuel inlet restrictor disablements: No    Tailpipe lead deposit test:        No
 EGR disablement:                    No    Evaporative system disablements:   No
 PCV system disablements:            No    Missing gas caps:                  Yes
0MIAMI        FL
                    Minimum Temp: 69. (F)   Maximum Temp: 91. (F)
                    Period 1 RVP:  9.2      Period 2 RVP:  7.8 Period 2 Yr: 1992
0VOC HC emission factors include evaporative HC emission factors.
0____________________________________________________________________________________
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0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	7.41	8.40	11.64	9.38	13.24	1.10	1.49	4.43	11.68	7.91
Exhst HC:	4.10	4.90	6.95	5.52	6.76	1.10	1.49	4.43	8.64	4.64
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	3.14	3.32	4.50	3.68	5.57					3.08
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	58.54	61.77	83.71	68.41	70.32	4.40	4.87	34.21	155.56	59.93
Exhst NOX:	1.74	1.93	2.75	2.18	3.36	1.85	2.08	11.22	.85	2.70

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	3.34	3.79	5.23	4.23	7.54	.94	1.28	3.80	8.17	3.78
Exhst HC:	2.32	2.73	3.87	3.07	5.17	.94	1.28	3.80	5.13	2.76
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.86	.88	1.17	.97	1.47					.83
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	33.38	35.87	48.61	39.73	53.99	3.47	3.83	26.93	84.55	35.44
Exhst NOX:	1.44	1.60	2.28	1.81	3.46	1.63	1.84	9.91	.75	2.31

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	2.40	2.70	3.71	3.00	5.77	.81	1.11	3.29	6.60	2.77
Exhst HC:	1.72	2.00	2.84	2.25	4.01	.81	1.11	3.29	3.56	2.09
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.51	.52	.68	.57	.85					.49
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	24.99	27.24	36.91	30.17	42.28	2.77	3.07	21.55	54.67	26.79
Exhst NOX:	1.34	1.49	2.12	1.68	3.56	1.46	1.64	8.86	.71	2.13

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.98	2.21	3.03	2.46	4.71	.71	.97	2.87	5.80	2.29
Exhst HC:	1.43	1.64	2.32	1.85	3.16	.71	.97	2.87	2.76	1.73
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.39	.39	.51	.43	.65					.37
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	20.79	22.92	31.06	25.39	33.77	2.25	2.49	17.52	39.92	22.27
Exhst NOX:	1.29	1.44	2.04	1.62	3.67	1.32	1.49	8.02	.70	2.02

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	15.0	15.0	15.0		15.0	15.0	15.0	15.0	15.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.72	1.91	2.61	2.12	3.94	.62	.85	2.52	5.34	1.99
Exhst HC:	1.25	1.42	2.01	1.60	2.53	.62	.85	2.52	2.30	1.50
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.31	.31	.40	.34	.51					.29
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	18.28	20.33	27.55	22.52	27.51	1.86	2.06	14.49	31.62	19.47
Exhst NOX:	1.26	1.40	1.99	1.58	3.77	1.21	1.36	7.36	.72	1.94

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	18.0	18.0	18.0		18.0	18.0	18.0	18.0	18.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.54	1.70	2.33	1.89	3.37	.55	.75	2.23	5.05	1.77
Exhst HC:	1.13	1.28	1.81	1.44	2.05	.55	.75	2.23	2.01	1.34
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.25	.25	.33	.27	.42					.24
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	16.60	18.61	25.22	20.61	22.87	1.57	1.73	12.17	26.36	17.57
Exhst NOX:	1.24	1.38	1.96	1.56	3.88	1.12	1.27	6.83	.76	1.88

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
Veh. Spd.:	21.0	21.0	21.0		21.0	21.0	21.0	21.0	21.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	1.37	1.53	2.08	1.70	2.94	.49	.67	1.99	4.84	1.58
Exhst HC:	1.01	1.14	1.62	1.28	1.69	.49	.67	1.99	1.81	1.19
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.21	.21	.28	.23	.35					.20
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	14.60	16.54	22.41	18.32	19.38	1.34	1.48	10.40	22.64	15.45
Exhst NOX:	1.25	1.37	1.94	1.54	3.98	1.06	1.19	6.43	.80	1.85

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	24.0	24.0	24.0		24.0	24.0	24.0	24.0	24.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.23	1.38	1.88	1.53	2.62	.44	.60	1.79	4.69	1.42
Exhst HC:	.89	1.02	1.44	1.15	1.41	.44	.60	1.79	1.65	1.06
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.18	.18	.24	.20	.31					.17
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	12.39	14.22	19.28	15.76	16.76	1.16	1.29	9.03	19.78	13.21
Exhst NOX:	1.27	1.37	1.95	1.55	4.08	1.01	1.14	6.13	.85	1.84

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	27.0	27.0	27.0		27.0	27.0	27.0	27.0	27.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.12	1.26	1.71	1.40	2.38	.40	.55	1.63	4.55	1.29
Exhst HC:	.79	.92	1.31	1.04	1.20	.40	.55	1.63	1.52	.95
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.16	.16	.22	.18	.27					.15
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	10.68	12.43	16.84	13.76	14.78	1.03	1.13	7.97	17.43	11.47
Exhst NOX:	1.28	1.37	1.95	1.55	4.19	.97	1.10	5.91	.90	1.84

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	30.0	30.0	30.0		30.0	30.0	30.0	30.0	30.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	1.02	1.17	1.58	1.30	2.18	.37	.50	1.49	4.44	1.19
Exhst HC:	.72	.85	1.20	.95	1.03	.37	.50	1.49	1.40	.86
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.14	.14	.19	.16	.25					.14
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	9.31	10.99	14.89	12.17	13.29	.92	1.02	7.15	15.47	10.08
Exhst NOX:	1.30	1.38	1.96	1.55	4.29	.95	1.07	5.78	.94	1.84

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	33.0	33.0	33.0		33.0	33.0	33.0	33.0	33.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	

0Composite Emission Factors (Gm/Mile)

	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
VOC HC:	.95	1.10	1.48	1.21	2.03	.34	.46	1.37	4.34	1.11
Exhst HC:	.66	.78	1.11	.88	.90	.34	.46	1.37	1.30	.79
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.13	.13	.18	.14	.22					.12
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	8.19	9.81	13.29	10.86	12.20	.84	.93	6.52	13.82	8.95
Exhst NOX:	1.31	1.38	1.96	1.55	4.40	.94	1.06	5.73	.98	1.84

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	36.0	36.0	36.0		36.0	36.0	36.0	36.0	36.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.88	1.03	1.39	1.14	1.91	.31	.43	1.27	4.26	1.04
Exhst HC:	.60	.73	1.04	.82	.80	.31	.43	1.27	1.22	.73
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.12	.12	.16	.13	.20					.11
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	7.26	8.83	11.96	9.78	11.41	.78	.86	6.05	12.46	8.02
Exhst NOX:	1.31	1.38	1.96	1.56	4.50	.94	1.07	5.74	1.01	1.85

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	39.0	39.0	39.0		39.0	39.0	39.0	39.0	39.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.83	.98	1.31	1.08	1.81	.29	.40	1.19	4.19	.98
Exhst HC:	.56	.69	.97	.77	.72	.29	.40	1.19	1.16	.68
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.11	.11	.15	.12	.19					.10
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	6.46	8.00	10.84	8.86	10.90	.73	.81	5.70	11.39	7.24
Exhst NOX:	1.32	1.38	1.96	1.56	4.61	.96	1.08	5.83	1.03	1.87

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	42.0	42.0	42.0		42.0	42.0	42.0	42.0	42.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.78	.93	1.25	1.03	1.73	.28	.38	1.12	4.14	.93
Exhst HC:	.52	.65	.92	.73	.66	.28	.38	1.12	1.11	.64
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.10	.10	.14	.11	.17					.09
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	5.79	7.28	9.87	8.07	10.61	.70	.78	5.46	10.57	6.58
Exhst NOX:	1.33	1.38	1.97	1.56	4.71	.99	1.11	6.00	1.05	1.89

```
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 2015          Region: Low           Altitude:  500. Ft.
                     I/M Program: Yes        Ambient Temp:    86.2 / 86.2 / 86.2 F
                 Anti-tam. Program: Yes     Operating Mode:   20.6 / 27.3 / 20.6
                  Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____  _____  _____  _____  _____  _____  ______
 Veh. Spd.: 45.0   45.0   45.0           45.0   45.0   45.0   45.0   45.0
   VMT Mix:   .581   .204   .089          .033   .002   .004   .083   .005
0Composite Emission Factors (Gm/Mile)
 VOC    HC:   .74    .89   1.19    .98   1.67    .26    .36   1.07   4.11    .88
 Exhst  HC:   .49    .62    .87    .69    .61    .26    .36   1.07   1.07    .60
 Evap.  HC:   .14    .16    .17    .16    .87                         2.63    .17
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .09    .09    .13    .10    .16                                 .09
 Rsting HC:   .02    .02    .02    .02    .03                          .41    .02
 Exhst  CO:  5.20   6.67   9.04   7.38  10.54    .68    .76   5.32   9.96   6.02
 Exhst NOX:  1.33   1.38   1.97   1.56   4.81   1.03   1.16   6.26   1.07   1.92
```

```
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 2015          Region: Low           Altitude:  500. Ft.
                     I/M Program: Yes        Ambient Temp:    86.2 / 86.2 / 86.2 F
                 Anti-tam. Program: Yes     Operating Mode:   20.6 / 27.3 / 20.6
                  Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____  _____  _____  _____  _____  _____  ______
 Veh. Spd.: 48.0   48.0   48.0           48.0   48.0   48.0   48.0   48.0
   VMT Mix:   .581   .204   .089          .033   .002   .004   .083   .005
0Composite Emission Factors (Gm/Mile)
 VOC    HC:   .71    .85   1.14    .94   1.62    .25    .34   1.02   4.09    .85
 Exhst  HC:   .46    .59    .83    .66    .58    .25    .34   1.02   1.05    .57
 Evap.  HC:   .14    .16    .17    .16    .87                         2.63    .17
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .08    .09    .12    .09    .14                                 .08
 Rsting HC:   .02    .02    .02    .02    .03                          .41    .02
 Exhst  CO:  4.69   6.13   8.30   6.79  10.67    .68    .75   5.27   9.50   5.54
 Exhst NOX:  1.34   1.38   1.97   1.56   4.92   1.09   1.22   6.60   1.09   1.95
```

```
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 2015          Region: Low           Altitude:  500. Ft.
                     I/M Program: Yes        Ambient Temp:    86.2 / 86.2 / 86.2 F
                 Anti-tam. Program: Yes     Operating Mode:   20.6 / 27.3 / 20.6
                  Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____  _____  _____  _____  _____  _____  ______
 Veh. Spd.: 51.0   51.0   51.0           51.0   51.0   51.0   51.0   51.0
   VMT Mix:   .581   .204   .089          .033   .002   .004   .083   .005
0Composite Emission Factors (Gm/Mile)
 VOC    HC:   .70    .85   1.13    .93   1.58    .24    .33    .99   4.09    .83
 Exhst  HC:   .46    .59    .83    .66    .55    .24    .33    .99   1.05    .57
 Evap.  HC:   .14    .16    .17    .16    .87                         2.63    .17
 Refuel HC:   .00    .00    .00    .00    .00                                 .00
 Runing HC:   .07    .08    .10    .08    .13                                 .07
 Rsting HC:   .02    .02    .02    .02    .03                          .41    .02
 Exhst  CO:  4.69   6.13   8.30   6.79  11.03    .68    .75   5.30   9.50   5.56
 Exhst NOX:  1.45   1.54   2.19   1.73   5.02   1.16   1.31   7.06   1.20   2.11
```

```
0Emission factors are as of  1st of the indicated calendar year.
0Cal. Year: 2015          Region: Low           Altitude:  500. Ft.
                     I/M Program: Yes        Ambient Temp:    86.2 / 86.2 / 86.2 F
                 Anti-tam. Program: Yes     Operating Mode:   20.6 / 27.3 / 20.6
                  Reformulated Gas: No
0Veh. Type:  LDGV  LDGT1  LDGT2   LDGT   HDGV   LDDV   LDDT   HDDV    MC   All Veh
+           _____  _____  _____  _____  _____  _____  _____  _____  _____  ______
 Veh. Spd.: 54.0   54.0   54.0           54.0   54.0   54.0   54.0   54.0
   VMT Mix:   .581   .204   .089          .033   .002   .004   .083   .005
```

0Composite Emission Factors (Gm/Mile)

VOC HC:	.69	.84	1.12	.92	1.55	.24	.32	.96	4.09	.82
Exhst HC:	.46	.59	.83	.66	.54	.24	.32	.96	1.05	.57
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.07	.09	.08	.11					.06
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	4.69	6.13	8.30	6.79	11.62	.70	.77	5.42	9.50	5.59
Exhst NOX:	1.57	1.69	2.41	1.91	5.13	1.26	1.42	7.65	1.30	2.28

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	57.0	57.0	57.0		57.0	57.0	57.0	57.0	57.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.72	.86	1.15	.95	1.53	.23	.32	.95	4.24	.85
Exhst HC:	.50	.62	.88	.70	.53	.23	.32	.95	1.20	.60
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.06	.06	.08	.07	.10					.06
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	5.54	7.12	9.65	7.88	12.49	.73	.80	5.64	14.07	6.48
Exhst NOX:	1.68	1.85	2.63	2.08	5.23	1.38	1.56	8.39	1.41	2.47

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.76	.91	1.22	1.00	1.52	.23	.32	.94	4.47	.89
Exhst HC:	.55	.67	.95	.75	.53	.23	.32	.94	1.43	.64
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.05	.06	.08	.06	.09					.05
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	6.83	8.60	11.66	9.53	13.70	.77	.85	5.96	20.93	7.80
Exhst NOX:	1.80	2.00	2.84	2.26	5.33	1.53	1.73	9.32	1.52	2.67

0Emission factors are as of 1st of the indicated calendar year.
0Cal. Year: 2015 Region: Low Altitude: 500. Ft.
I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F
Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6
Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	63.0	63.0	63.0		63.0	63.0	63.0	63.0	63.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.81	.95	1.28	1.05	1.52	.23	.31	.93	4.69	.93
Exhst HC:	.60	.72	1.02	.81	.54	.23	.31	.93	1.66	.69
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.05	.05	.07	.06	.08					.05
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	8.12	10.09	13.67	11.17	15.32	.82	.91	6.40	27.79	9.15
Exhst NOX:	1.91	2.15	3.06	2.43	5.44	1.72	1.94	10.48	1.62	2.89

0Emission factors are as of 1st of the indicated calendar year.

0Cal. Year: 2015 Region: Low Altitude: 500. Ft.

I/M Program: Yes Ambient Temp: 86.2 / 86.2 / 86.2 F

Anti-tam. Program: Yes Operating Mode: 20.6 / 27.3 / 20.6

Reformulated Gas: No

0Veh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
+										
Veh. Spd.:	65.0	65.0	65.0		65.0	65.0	65.0	65.0	65.0	
VMT Mix:	.581	.204	.089		.033	.002	.004	.083	.005	
0Composite Emission Factors (Gm/Mile)										
VOC HC:	.84	.98	1.32	1.08	1.53	.23	.32	.94	4.84	.96
Exhst HC:	.63	.75	1.06	.85	.55	.23	.32	.94	1.81	.72
Evap. HC:	.14	.16	.17	.16	.87				2.63	.17
Refuel HC:	.00	.00	.00	.00	.00					.00
Runing HC:	.04	.05	.06	.05	.08					.04
Rsting HC:	.02	.02	.02	.02	.03				.41	.02
Exhst CO:	8.98	11.08	15.01	12.27	16.69	.87	.96	6.77	32.36	10.07
Exhst NOX:	1.99	2.26	3.21	2.55	5.51	1.88	2.12	11.42	1.69	3.05

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:37:54 10Dec95

INPUT CARD ECHO

INFO all reported values have been adjusted by EMISFAC = .9578

SCENARIO 1 MOBILE.TEM
THE FOLLOWING IS A MATRIX WHICH ASSIGNS A SCENARIO TO EACH FT/AT COMBINATION

FT \ AT=>	1	2	3	4	5
1	1	1	1	1	1
2	1	1	1	1	1
3	1	1	1	1	1
4	1	1	1	1	1
5	1	1	1	1	1
6	1	1	1	1	1
7	1	1	1	1	1
8	1	1	1	1	1
9	1	1	1	1	1

INPUT COORDINATE SCALE(UNITS) FROM PROFILE.MAS IS 5280
INFO ALL REPORT VALUES ARE BEING ADJUSTED BY A FACTOR OF .9578

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

GEOGRAPHIC LOCATION NO 1

FT	AT	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1	34421.	25341.	4444.	0.	3938.	303508.	48657.
1	2	1183202.	854778.	172676.	0.	127659.	9743899.	1891340.
1	3	9324015.	6635509.	1427787.	0.	1044754.	73468872.	15844901.
1	4	4321170.	3147287.	602291.	0.	478584.	36603048.	6620250.
1	5	1754422.	1228765.	325052.	0.	151278.	12464373.	4000882.
2	1	98473.	74892.	9523.	0.	12783.	967021.	105840.
2	2	382843.	288855.	37621.	0.	51268.	3669521.	420091.
2	3	13933771.	10280406.	1728450.	0.	1671947.	124011696.	18960790.
2	4	11862736.	8812656.	1392907.	0.	1457300.	107984392.	15335889.
2	5	1026876.	736923.	154495.	0.	109473.	8267326.	1706876.
3	1	299284.	223331.	22703.	0.	50212.	2874147.	264996.
3	2	405472.	299348.	35793.	0.	65323.	3812346.	405348.
3	3	7598706.	5591371.	847227.	0.	1039131.	68519424.	9388612.
3	4	4261793.	3154848.	461627.	0.	580206.	38814148.	5142414.
3	5	1437744.	1034509.	209919.	0.	158461.	11654180.	2324343.
4	1	98607.	74645.	7772.	0.	15107.	962715.	90194.
4	2	122282.	91713.	11911.	0.	16976.	1164986.	132969.
4	3	4027790.	2981082.	490278.	0.	486681.	36110632.	5384592.
4	4	1377801.	1022903.	150734.	0.	182606.	12549372.	1679712.
4	5	568356.	411501.	81829.	0.	61514.	4731740.	899701.
5	1	74685.	56567.	4199.	0.	13426.	722836.	53554.
5	2	220135.	167843.	14340.	0.	36265.	2150758.	175871.
5	3	4954104.	3777664.	333345.	0.	803872.	48462644.	4052358.
5	4	1749018.	1333671.	117350.	0.	284190.	17107598.	1427680.
5	5	674496.	513705.	53240.	0.	99204.	6645712.	619077.
8	2	14309.	10073.	2407.	0.	1411.	106724.	26647.
8	3	1392210.	1015025.	194380.	0.	154445.	11811039.	2155022.
8	4	970353.	712398.	124699.	0.	114244.	8454100.	1396417.
8	5	117395.	83790.	19005.	0.	11813.	912127.	217514.
GL TOTAL		74286616.	54641456.	9038028.	0.	9284076.	655050688.	100772784.
(TONS)		81.81	60.18	9.95	.00	10.22	721.42	110.98

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

ALL GEOGRAPHIC LOCATIONS

FT	AT	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	1	34421.	25341.	4444.	0.	3938.	303508.	48657.
1	2	1183202.	854778.	172676.	0.	127659.	9743899.	1891340.
1	3	9324015.	6635509.	1427787.	0.	1044754.	73468872.	15844901.
1	4	4321170.	3147287.	602291.	0.	478584.	36603048.	6620250.
1	5	1754422.	1228765.	325052.	0.	151278.	12464373.	4000882.
2	1	98473.	74892.	9523.	0.	12783.	967021.	105840.
2	2	382843.	288855.	37621.	0.	51268.	3669521.	420091.
2	3	13933771.	10280406.	1728450.	0.	1671947.	124011696.	18960790.
2	4	11862736.	8812656.	1392907.	0.	1457300.	107984392.	15335889.
2	5	1026876.	736923.	154495.	0.	109473.	8267326.	1706876.
3	1	299284.	223331.	22703.	0.	50212.	2874147.	264996.
3	2	405472.	299348.	35793.	0.	65323.	3812346.	405348.
3	3	7598706.	5591371.	847227.	0.	1039131.	68519424.	9388612.
3	4	4261793.	3154848.	461627.	0.	580206.	38814148.	5142414.
3	5	1437744.	1034509.	209919.	0.	158461.	11654180.	2324343.
4	1	98607.	74645.	7772.	0.	15107.	962715.	90194.
4	2	122282.	91713.	11911.	0.	16976.	1164986.	132969.
4	3	4027790.	2981082.	490278.	0.	486681.	36110632.	5384592.
4	4	1377801.	1022903.	150734.	0.	182606.	12549372.	1679712.
4	5	568356.	411501.	81829.	0.	61514.	4731740.	899701.
5	1	74685.	56567.	4199.	0.	13426.	722836.	53554.
5	2	220135.	167843.	14340.	0.	36265.	2150758.	175871.
5	3	4954104.	3777664.	333345.	0.	803872.	48462644.	4052358.
5	4	1749018.	1333671.	117350.	0.	284190.	17107598.	1427680.
5	5	674496.	513705.	53240.	0.	99204.	6645712.	619077.
8	2	14309.	10073.	2407.	0.	1411.	106724.	26647.
8	3	1392210.	1015025.	194380.	0.	154445.	11811039.	2155022.
8	4	970353.	712398.	124699.	0.	114244.	8454100.	1396417.
8	5	117395.	83790.	19005.	0.	11813.	912127.	217514.
SUM		74286616.	54641456.	9038028.	0.	9284076.	655050688.	100772784.
(TONS)		81.81	60.18	9.95	.00	10.22	721.42	110.98

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

EMISSIONS IN GRAMS PER DAY

INFO all reported values have been adjusted by EMISFAC = .9578

FACILITY TYPE	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	16617214.	11891674.	2532250.	0.	1806215.	132583776.	28406014.
2	27304636.	20193770.	3322996.	0.	3302772.	244899936.	36529528.
3	14002996.	10303413.	1577270.	0.	1893332.	125674376.	17525726.
4	6194827.	4581843.	742525.	0.	762884.	55519372.	8187166.
5	7672441.	5849454.	522474.	0.	1236958.	75089496.	6328539.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	2494266.	1821287.	340490.	0.	281913.	21283994.	3795597.
SUM	74286616.	54641456.	9038028.	0.	9284076.	655050688.	100772784.
(TONS)	81.81	60.18	9.95	.00	10.22	721.42	110.98

AREA TYPE	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	605470.	454775.	48641.	0.	95466.	5830224.	563241.
2	2328242.	1712610.	274748.	0.	298903.	20648240.	3052266.
3	41230524.	30281116.	5021465.	0.	5200836.	362383744.	55786192.
4	24542860.	18183784.	2849609.	0.	3097127.	221513072.	31602406.
5	5579290.	4009192.	843539.	0.	591742.	44675456.	9768390.
SUM	74286616.	54641456.	9038028.	0.	9284076.	655050688.	100772784.
(TONS)	81.81	60.18	9.95	.00	10.22	721.42	110.98

NUMBER LANES	TOTAL VOC	EXHAUST HC	EVAPORATE HC	REFUELING HC	RUN LOSS HC	EXHAUST CO	EXHAUST NOx
1	20360078.	15121315.	2009230.	0.	2947935.	186865040.	22904990.
2	23426486.	17307410.	2848005.	0.	2856506.	209096672.	31457790.
3	24204740.	17686146.	3250235.	0.	2783752.	207870976.	36159612.
4	6086382.	4378104.	897551.	0.	674400.	49584008.	9889389.
5	2343.	1696.	340.	0.	254.	19434.	3705.
6	206375.	146748.	32637.	0.	21231.	1614721.	357135.
SUM	74286616.	54641456.	9038028.	0.	9284076.	655050688.	100772784.
(TONS)	81.81	60.18	9.95	.00	10.22	721.42	110.98

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

DAILY VEHICLE MILES

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VMT - GEOGRAPHIC LOCATION NO 1:

	AREA TYPES				
FT	1	2	3	4	5
1	26143.	1015743.	8406652.	3542890.	1921946.
2	56015.	221300.	10171041.	8193560.	908797.
3	133672.	211145.	4994910.	2715458.	1235046.
4	46363.	70066.	2883990.	888789.	481346.
5	24698.	84353.	1960852.	690294.	313177.
6	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.
8	0.	14156.	1143412.	733524.	111793.
GL TOTAL	286891.	1616764.	29560838.	16764534.	4972106.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

DAILY VEHICLE MILES

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VMT - ALL GEOGRAPHIC LOCATIONS

	AREA TYPES				
FT	1	2	3	4	5
1	26143.	1015743.	8406652.	3542890.	1921946.
2	56015.	221300.	10171041.	8193560.	908797.
3	133672.	211145.	4994910.	2715458.	1235046.
4	46363.	70066.	2883990.	888789.	481346.
5	24698.	84353.	1960852.	690294.	313177.
6	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.
8	0.	14156.	1143412.	733524.	111793.
TOTAL	286891.	1616764.	29560838.	16764534.	4972106.

FACILITY TYPE	DAILY VMT
1	14913370.
2	19550680.
3	9290227.
4	4370551.
5	3073373.
6	0.
7	0.
8	2002886.
TOTAL	53201244.

AREA TYPE	DAILY VMT
1	286891.
2	1616764.
3	29560838.
4	16764534.
5	4972106.
TOTAL	53201244.

NUMBER LANES	DAILY VMT
1	11836924.
2	16754531.
3	19136000.
4	5279712.
5	2003.
6	191980.
TOTAL	53201244.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

DAILY VEHICLE HOURS

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VHT - GEOGRAPHIC LOCATION NO 1

	AREA TYPES				
FT	1	2	3	4	5
1	959.	31749.	251797.	117467.	49008.
2	2979.	11757.	398190.	342965.	27247.
3	10167.	13301.	231231.	129028.	39566.
4	3675.	3752.	115533.	43071.	15262.
5	2896.	8032.	178244.	63009.	22376.
6	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.
8	0.	363.	37856.	27508.	2993.
GL TOTAL	20676.	68954.	1212851.	723050.	156451.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

DAILY VEHICLE HOURS

INFO all reported values have been adjusted by EMISFAC = .9578

DAILY VHT - ALL GEOGRAPHIC LOCATIONS

FT	AREA TYPES 1	2	3	4	5
1	959.	31749.	251797.	117467.	49008.
2	2979.	11757.	398190.	342965.	27247.
3	10167.	13301.	231231.	129028.	39566.
4	3675.	3752.	115533.	43071.	15262.
5	2896.	8032.	178244.	63009.	22376.
6	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.
8	0.	363.	37856.	27508.	2993.
TOTAL	20676.	68954.	1212851.	723050.	156451.

DAILY VHT FACILITY TYPE	
1	450980.
2	783137.
3	423292.
4	181293.
5	274557.
6	0.
7	0.
8	68720.
TOTAL	2181980.

DAILY VHT AREA TYPE	
1	20676.
2	68954.
3	1212851.
4	723050.
5	156451.
TOTAL	2181980.

DAILY VHT NUMBER LANES	
1	655943.
2	677203.
3	680571.
4	162839.
5	63.
6	5361.
TOTAL	2181980.

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

AVERAGE CONGESTED SPEED (mph)

INFO all reported values have been adjusted by EMISFAC = .9578

AVERAGE SPEED - GEOGRAPHIC LOCATION NO 1

FT	AREA TYPES 1	2	3	4	5
1	27.27	31.99	33.39	30.16	39.22
2	18.80	18.82	25.54	23.89	33.35
3	13.15	15.87	21.60	21.05	31.21
4	12.62	18.68	24.96	20.64	31.54
5	8.53	10.50	11.00	10.96	14.00
6	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00
8	.00	39.00	30.20	26.67	37.35
GL TOTAL	13.88	23.45	24.37	23.19	31.78

FLORIDA STANDARD URBAN TRANSPORTATION MODELING STRUCTURE --
EMISSION MODEL FOR MOBILE 5.a -- PROGRAM DATE: 26MAR93
- RUN TIME: 18:38:00 10Dec95

AVERAGE CONGESTED SPEED (mph)

INFO all reported values have been adjusted by EMISFAC = .9578

AVERAGE SPEED - ALL GEOGRAPHIC LOCATIONS

FT	AREA TYPES 1	2	3	4	5
1	27.27	31.99	33.39	30.16	39.22
2	18.80	18.82	25.54	23.89	33.35
3	13.15	15.87	21.60	21.05	31.21
4	12.62	18.68	24.96	20.64	31.54
5	8.53	10.50	11.00	10.96	14.00
6	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00
8	.00	39.00	30.20	26.67	37.35
TOTAL	13.88	23.45	24.37	23.19	31.78

FACILITY TYPE	AVERAGE SPEED
1	33.07
2	24.96
3	21.95
4	24.11
5	11.19
6	.00
7	.00
8	29.15
TOTAL	24.38

AREA TYPE	AVERAGE SPEED
1	13.88
2	23.45
3	24.37
4	23.19
5	31.78
TOTAL	24.38

NUMBER LANES	AVERAGE SPEED
1	18.05
2	24.74
3	28.12
4	32.42
5	32.00
6	35.81
TOTAL	24.38

FLORIDA DEPARTMENT OF TRANSPORTATION
LAWTON CHILES
GOVERNOR
605 Suwannee Street, Tallahassee, Florida 32399-0450
BEN G. WATTS
SECRETARY

October 26, 1995

Dear Transportation Conformity Partner:

The enclosed procedure ("District Review of Conformity Determinations by Metropolitan Planning Organizations in Nonattainment and Maintenance Areas" Procedure, Topic No. 525-010-014-e) was adopted by the Department's Executive Committee and signed by Secretary Watts effective October 19, 1995. The procedure reflects several changes from our previous guidance:

- No further annual regional emissions analysis is required if the Transportation Improvement Program (TIP), as a subset of the long-range plan, meets certain requirements;
- The TIP Conformity Determination Report requirements have been streamlined;
- Guidance is provided for the redetermination of the conformity of the current TIP within six months of the adoption of a new long-range plan by the MPO;
- Conformity requirements for the Tampa Bay airshed and the two maintenance airsheds are clarified;
- The date for new TIP submittal to the district has been changed from April 15 to June 1 annually to align TIP adoption with approval of the State Transportation Improvement Program;
- The use of off-model methodologies in the conformity analysis process is expanded; and
- The maintenance plans' 1994 budget year does not have to be included in the conformity analysis.

We appreciate your assistance in developing this procedure and look forward to your continued participation in the transportation conformity consultation process. If you need further information regarding the procedure, please contact F. R. Ritter at (904) 488-8006 or Suncom 278-8006.

Sincerely,

for Robert P. Romig, Director
Office of Policy Planning

RPR/Rr

cc: F. R. Ritter

Enclosure

OCT 30 1995

RECYCLED PAPER

APPENDIX II

ADOPTED 1996 TIP PROJECTS
(PRIORITY I PROJECTS)

Approved 1996
Transportation Improvement Program Projects*
(over $500,000)

1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
54	6112815	SW 8 ST/ SR90/ US-41	FROM SR 826/ PALMETTO EXPY TO SW 57 AVE	P.D.&E. STUDY
54	6113187	SW 8 ST/ SR90/ US-41	FROM SW 57 AVE TO SW 42 AVE	P.D.&E. STUDY
54	6113188	SW 8 ST/ SR90/ US-41	FROM SW 42 AVE TO SW 27 AVE	P.D.&E. STUDY
54	6113212	PALMETTO EXPY/ AUX LN	FROM N OF SUNSET DR SW 72 TO SW 32 ST	MULTI-LANE RECONSTRUCTION(8 LANES)
54	6113289	SR 826/ PALMETTO EXPY	FROM 2000FT S. OF NW 25 ST TO 2000FT OF NW 25 ST	INTERCHANGE (MAJOR)
54	6113290	SR 826/ PLAMETTO EXPY	SO OF NW 103 ST TO SOUTH OF NW 122 ST	MULTI-LANE RECONSTRUCTION (8 LANES)
55	6113371	SR 5/ US-1/ BISC. BLVD.	FROM NE 163 ST TO MIAMI GARDENS DRIVE	MULTI-LANE RECONSTRUCTION (8 LANES)
55	6113372	SR 5/ US-1/ BISC. BLVD.	FROM SR 860/MIAMI GARDENS DR TO SR 856/ WM LEHMAN CSWY	MULTI-LANE RECONSTRUCTION (8 LANES)
55	6113533	SR 5/ US-1	FROM N OF CO. LINE, MP 0.076 TO S OF STR S-18 RD, MP6	MULTI-LANE NEW CONSTRUCTION (4 LANES)
55	6113666	SR 25/ NW 36 ST	FROM NORTH RIVER DRIVE TO NW 17 AVE	MULTI-LANE NEW CONSTRUCTION (5 LANES)
56	6113712	SR 874/ DON SHULA EXPY	FROM SW 137 AVE TO SR 821/ H.E.F.T.	MULTI-LANE NEW CONSTRUCTION (6 LANES)
56	6113758	SR 826	FROM SW 2 ST TO S OF NW 25 ST (INCL SR 836 INTERCHANGE)	MULTI-LANE RECONSTRUCTION (10 LANES)
56	6113770	SR 985/ SW 107 AVE	FROM SW 40 ST TO SW 24 ST	P.D.&E. STUDY

*Some of the projects listed in the TIP had project development activities commence prior to this Update, but inclusion in the TIP does not necessarily indicate Priority 1 status. Refer to Section III for current priority status.

Approved 1996
Transportation Improvement Program Projects*
(over $500,000)

1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
56	6113791	SR 997/ KROME AVE	FROM US-1 (FLORIDA CITY) TO SR 90/ TAMIAMI TRAIL	CORRIDOR IMPROVEMENT
56	6113792	SR 997/ KROME AVE	FROM SR 90/ TAMIAMI TRAIL TO US-27/ OKEECHOBEE RD	CORRIDOR IMPROVEMENT
57	6113823	SR 874/ SO. DADE EXPY	FROM SW 112 ST TO SR 826/ PALMETTO EXPY	ADD THRU LANES (6 LANES)
57	6113825	SR 826/ PALMETTO EXPY	FROM SW 32 ST TO SW 16 ST	MULTI-LANE RECONSTRUCTION (10 LANES)
57	6113826	SR 826/ PALMETTO EXPY	FROM SW 16 ST TO SW 2 ST	MULTI-LANE RECONSTRUCTION (10 LANES)
57	6113827	SR 826/ PALMETTO EXPY	FROM NORTH OF NW 25 ST TO NW 47 ST	MULTI-LANE RECONSTRUCTION (10 LANES)
57	6113828	SR 826/ PALMETTO EXPY	FROM NW 47 ST TO NW 62 ST	MULTI-LANE RECONSTRUCTION (10 LANES)
58	6113829	SR 826/ PALMETTO EXPY	FROM NW 62 ST TO N OF FEC RAILROAD	MULTI-LANE RECONSTRUCTION (10 LANES)
58	6113830	SR 826/ PALMETTO EXPY	FROM N. OF FEC. RAILROAD TO S. OF NW 103 ST	MULTI-LANE RECONSTRUCTION (10 LANES)
58	6113862	SR 112/ AIRPORT EXPY.	FROM OKEECHOBEE ROAD TO SR 9A/ I-95	P.D.& E. STUDY (8 LANES)
58	6113863	SR 5/ US-1	FROM SW 344 ST TO SW 112 AVE	PRELIMINARY ENGINEERING (6 LANES)
58	6113864	SR A1A/ COLLINS AVE	FROM 5 ST/ US-41 TO 26 ST	PRELIMINARY ENGINEERING (6 LANES)
59	6113880	SR 826/ PALMETTO EXPY	FROM NW 154 ST TO GOLDEN GLADES	PRELIMINARY ENGINEERING (8 LANES)
59	6113881	SR 90/ SW 8 ST/ US-41	FROM SW 127 AVE TO 152 AVE	P.D.&E. STUDY

*Some of the projects listed in the TIP had project development activities commence prior to this Update, but inclusion in the TIP does not necessarily indicate Priority 1 status. Refer to Section III for current priority status.

Approved 1996
Transportation Improvement Program Projects*

(over $500,000)

1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
59	6113888	CITY OF MIAMI BEACH	FROM SR AIA CONNECTOR TO BETWEEN 42 AND 43 ST	MULTI-LANE RECONSTRUCTION
60	6113948	NW/SW 107 AVE	FROM SR 836 TO SW 8 ST	MULTI-LANE RECONSTRUCTION
60	6113949	SR 847/ NW 47 AVE	FROM NW 183 ST TO BROWARD COUNTY LINE	ADD LANES & RECONSTRUCTION (4 LANES)
60	6113959	US-1/ SO. DIXIE HWY	FROM FLORIDA CITY TO S. DADELAND METRORAIL STATION	CORRIDOR IMPROVEMENT
61	6114016	SR 25/ OKEECHOBEE RD.	FROM SR 826/ PALMETTO EXPY TO SR 112/ AIRPORT EXPY	MAJOR FEDERAL (EIS) (6 LANES)
61	6114017	US-1/ SR 5/ BISCAYNE BLVD.	FROM SR 856/ NE 192 ST TO NE 209 ST.	MULTI-LANE RECONSTRUCTION (8 LANES)
62	6114033	SR 5/ US-1	FROM S OF STR S-18, MP 6. TO CARD SND RD, MP.13.78	NEW ROAD CONSTRUCTION - 2 LANES (4 LANES)
63	6114064	SR 860/ MIAMI GARDENS DR	FROM NW 57 AVE TO NW 2 AVE	MULTI-LANE RECONSTRUCTION
64	6114088	SR 907/ ALTON ROAD	FROM 8 ST TO MICHIGAN AVE	MULTI-LANE RECONSTRUCTION
65	6114094	MULTI-MODAL CORRIDOR	FROM FLA. INTERNAT'L UNIVERSITY TO PORT OF MIAMI	P.D.& E. STUDY
65	6114114	MIAMI INTERMODAL	CENTER	P.D. & E. STUDY
65	6114117	SR A1A/ INDIAN CREEK	FROM 59 ST TO 62 ABBOTT AVE	REPLACE GRADE SEPARATION-CONC.
65	6114118	SR 823/ NW 57 AVE	FROM SR 25/ OKEECHOBEE RD TO NW 138 ST	P.D.& E. STUDY (6 LANES)
66	6114153	SR 916/ 138 ST	FROM NW 67 AVE TO 57 AVE	ADD LANES & RECONSTRUCT

*Some of the projects listed in the TIP had project development activities commence prior to this Update, but inclusion in the TIP does not necessarily indicate Priority 1 status. Refer to Section III for current priority status.

Approved 1996
Transportation Improvement Program Projects*
(over $500,000)

1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
66	6114162	SR 934/ NW 74 ST	FROM SR 823 TO SR 826/ PALMETTO EXPY	P.D.& E. STUDY
66	6114164	SR 9A/ I-95	FROM SR 836/ DOLPHIN EXPY TO SR 90/ SW 8 ST	P.D.& E. STUDY
68	6114260	SR 860/ MIAMI GARDENS DR.	FROM SR 9A/ I-95 TO SR 5/BISCAYNE BLVD.	P.D. & E. STUDY
68	6114264	SR 836 /DOLPHIN EXPY	LE JEUNE RD INTERCHANGE (NB TO WB RAMP)	HWY-TRAFFIC OPS IMPROVEMENT
68	6114265	SR 836 /DOLPHIN EXPY	LE JEUNE RD INTERCHANGE (EB TO NB RAMP)	HWY-TRAFFIC OPS IMPROVEMENT
68	6114266	SR 836 /DOLPHIN EXPY	LE JEUNE RD INTERCHANGE (EB RAMP)	HWY-TRAFFIC OPS IMPROVEMENT
69	6114267	SR 836 /DOLPHIN EXPY	LE JEUNE RD INTERCHANGE (WB EXIT RMP TO LEJ)	HWY-TRAFFIC OPS IMPROVEMENT
69	6114268	SR 836 /DOLPHIN EXPY	NW 27 AVE INTERCHANGE	HWY-TRAFFIC OPS IMPROVEMENT
69	6114269	SR 836 /DOLPHIN EXPY	NW 87 AVE INTERCHANGE	HWY-TRAFFIC OPS IMPROVEMENT
69	6114272	SR A1A /MACARTHUR CSWY	EAST BRIDGE #870077	HWY-TRAFFIC OPS IMPROVEMENT
70	6114274	SR 985 /SW 107 AVE	FROM SW 70 ST TO SW 80 TR (INDIAN HAMMCKS PRK)	BIKE PATH
70	6123165	PORT OF MIAMI TUNNEL	FROM PORT OF MIAMI TO SR 836/ I-395	MISCELLANEOUS STRUCTURE
71	6123194	NW 25 ST	FROM SR 826/ PALMETTO EXPY TO AIRPORT	MISC. RECONSTRUCTION
73	6123249	SW 137 AVE	FROM SR 821/ HEFT TO SW 336 ST	ADD LANES & RECONSTRUCTION (4 LANES)

*Some of the projects listed in the TIP had project development activities commence prior to this Update, but inclusion in the TIP does not necessarily indicate Priority 1 status. Refer to Section III for current priority status.

Approved 1996
Transportation Improvement Program Projects*
(over $500,000)

1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
73	6123258	VA GARDENS MIAMI SPRING BIKEWAY SYSTEM	LUDLAM CANAL PATH	BIKE PATH
73	6123259	CITY OF MIAMI BEACH BICYCLE NETWORK		BIKE PATH
73	6123260	CITY OF MIAMI BEACH	DADE BLVD. BIKE/ PED IMPROVEMENTS	BIKE PATH
74	6123274	BISCAYNE- EVERGLADES	GREENWAYS TRAIL	
75	6141828	I-95/ SR 9A	FROM US-1/ SR 9A TO BROWARD COUNTY LINE	CORRIDOR IMPROVEMENT
75	6141902	I-395/ SR 836/ I-95	FROM NW 17 AVE TO MACARTHUR CSWY BR.	CORRIDOR IMPROVEMENT
75	6141908	I-195	FROM NW 2 AVE TO SR 5/ BISCAYNE BLVD.	WIDEN BRIDGE
109	6151882	HEFT	FROM TAMIAMI TO TOLL PLAZA	RELOCATION, RECONSTRUCTION, AND EXPANSION
109	6151891	HEFT	FROM QUAIL ROOST TO SR-874	ADD AUXILIARY LANES
112	6114199	SR 5/ US-1	FROM CARD SOUND ROAD TO SW 304 ST	MULTI-LANE RECONSTRUCTION
112	6113684	SR 826/ PALMETTO EXWY	FROM US-1/ SO. DIXIE HWAY TO N OF SW 72 ST SUNSET	ADD 2 LANES TO EXISTING 4 LANES
112	6113371	SR 5/ US1/ BISCAYNE BLVD	FROM NE 163 ST TO MIAMI GARDENS DRIVE	MULTI-LANE RECONSTRUCTION (8 LANES)
113	6114236	SR 836 /DOLPHIN EXPY	FROM NW 57 AVE TO NW 45 AVE	HIGHWAY-TRAFFIC OPS IMPROVEMENT
193	6123258	CITIES OF MIAMI SPRINGS /VIRGINIA GARDENS	ALONG LUDLAM CANAL	BIKE PATH
117	662279	NW 7 ST	FROM NW 60 COURT TO NW 57 AVE	WIDEN TO 5 LANES
117	662214	NW 12 ST	FROM NW 97 AVE TO NW 87 AVE	ADD 2 LANES AND 4 LANES RAILROAD CROSSING

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Approved 1996
Transportation Improvement Program Projects*
(over $500,000)

1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
117	662250	NW 17 AVE	FROM NW 79 ST TO NW 103 ST	WIDEN TO 5 LANES
117	610023	NW 17 AVE	FROM NW 103 ST TO NW 119 ST	WIDEN TO 5 LANES
118	662320	SW 24 ST/ CORAL WAY	FROM SW 87 AVE TO SW 77 AVE	ADD 1 LANE EB & WB, WIDEN BRIDGE
118		SW 24 ST	FROM SW 107 AVE TO SW 87 AVE	4 TO 6 LANES
118		SW 24 ST	FROM SW 117 AVE TO SW 107 AVE	PE, 4 TO 6 LANES
118		NW 42 AVE	FROM NW 156 ST TO NW 167 ST	RECONSTRUCT 2 LANE DIVIDED ROADWAY
118		NW 62 ST	FROM OKEECHOBEE ROAD TO NW 37 AVE	R/W RECONSTRUCT 4 LANES
119		SW 67 AVE	FROM SW 40 ST TO SW 56 ST	INTERSECTION IMPROVEMENTS AND DRAINAGE
119	662347	NW 72 AVE	FROM NW 74 AVE TO OKEECHOBEE ROAD	R/W 4 LANES AND BRIDGE
119	662358	NW 95 ST	FROM NW 27 AVE TO NW 7 AVE	RECONSTRUCT 4 LANES, ADD TURN LANE
119		SW 97 AVE	FROM SW 72 ST TO SW 40 ST	PE, 2 TO 4 LANES
119		SW 107 AVE	FROM QUAILROOST DRIVE TO SW 160 ST	PE, R/W, 2 TO 4 LANES
119	662410	SW 117 AVE	FROM SW 152 ST TO SW 184 ST	PE, R/W, 2 TO 4 LANES
120	662360	SW 127 AVE	FROM SW 120 ST TO SW 88 ST	R/W, WIDEN TO 5 LANES
120	662211	SW 127 AVE	FROM SW 42 ST TO SW 26 ST	WIDEN TO 5 LANES
120	662283	SW 152 ST	FROM SW 137 AVE TO ZOO ENTRANCE	2 TO 6 LANES, DIVIDED
120	662257	SW 184 ST	FROM US-1 TO FRANJO ROAD	WIDEN TO 5 LANES

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Transportation Improvement Program Projects*

(over $500,000)

1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
120	662257	FRANJO ROAD	FROM SW 184 ST TO US-1	PE, WIDEN TO 3 LANES
120	662311	MIAMI LAKES DRIVE	FROM SR 826 TO NW 57 AVE	2 TO 4 LANES (DIVIDED)
121	662285	MIAMI AVE	FROM N 103 ST TO N 167 ST	PE, 2 TO 5 LANES
127	671104	NW 36/ 41 ST	FROM NW 87 AVE TO NW 77 AVE	4 TO 6 LANES
127	671105	SW 107 AVE	OVER TAMIAMI CANAL	WIDEN BRIDGE/ ADD TURN LANES
127	610023	SW 72 AVE	FROM SW 40 ST TO SW 48 ST	WIDEN TO 4 LANES
127	610023	SW 72 AVE	FROM SW 48 ST TO SE 56 ST	WIDEN TO 3 LANES
128		SW 109 AVE	FROM TAMIAMI CANAL TO W FLAGLER ST	WIDEN TO 3 LANES
129		SW 117 AVE	FROM SW 40 ST TO SW 8 ST	2 TO 4 LANES
129		NW 97 AVE	BRIDGE OVER SR 836	CONSTRUCT 4-LANE BRIDGE AND APPROACHES
130	671265	SW 40 ST	FROM US-1 TO SW 27 AVE	WIDEN TO 3 LANES AND RESURFACE
130	671204	NW 20 ST	FROM NW 2 AVE TO NE 2 AVE	WIDEN EXISTING 4 LANES AND RESURFACE
130		NE 10 AVE	FROM NE 79 ST TO NE 81 ST	WIDEN 2 TO 4 LANES
130		NE 10 AVE	FROM NE 81 ST TO NE 87 ST	WIDEN TO 3 LANES
131	671203	NW 14 ST	FROM NW 10 AVE TO I-95	WIDEN AND RESURFACE
131	671267	NW 17 AVE	FROM NW 103 ST TO NW 119 ST	2 TO 4 LANES WITH STRIPED MEDIAN
131		SW 47 AVE	FROM SW 8 ST TO FLAGLER ST	WIDEN TO 3 LANES AND RESURFACE

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Approved 1996
Transportation Improvement Program Projects*
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1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
131		TAMIAMI CANAL DR AND TAMIAMI BLVD	FROM SW 8 ST TO FLAGLER ST	WIDEN TO 3 LANES AND RESURFACE
132		E 2 AVE	FROM NE 5 ST TO NE 79 ST	PAVING, WIDENING, DRAINAGE, AND STRIPING
132		W 2 AVE	FROM NW 6 ST TO NW 22 ST	PAVING, WIDENING, DRAINAGE, AND STRIPING
132		W 2 AVE	FROM NW 36 ST TO NW 54 ST	PAVING, WIDENING, DRAINAGE, AND STRIPING
132		W 2 AVE	FROM NW 61 ST TO NW 79 ST	PAVING, WIDENING, DRAINAGE, AND STRIPING
132		MIAMI AVENUE	FROM N 6 ST TO N 36 ST	PAVING, WIDENING, DRAINAGE, AND STRIPING
132		NE 107 ST	FROM BISCAYNE BLVD TO NE 6 AVE	PAVING, WIDENING, DRAINAGE, AND STRIPING
132		NW 62 ST	FROM NW 37 AVE TO BISCAYNE BLVD.	PAVING, WIDENING, DRAINAGE, AND STRIPING
133	671308	NW 17 AVE	FROM NW 119 ST TO OPA LOCKA BLVD.	WIDEN TO 5 LANES
134	671311	NW 87 AVE	FROM NW 138 ST TO NW 154 ST	BRIDGE OVER I-75 AND APPROACHES
134	671310	NW 87 AVE	FROM NW 154 ST TO NW 186 ST	2 TO 4 LANES
134		GRIFFING BOULEVARD	FROM NW 125 ST TO BISCAYNE BLVD	RESURFACING, WIDENING AND DRAINAGE
134		GRIFFING BOULEVARD	FROM NW 125 ST TO NW 167 ST	RESURFACING, WIDENING AND DRAINAGE
135		NE 12 AVE	FROM NE 151 ST TO NE 167 ST	WIDEN TO 3 LANES
135	371306	NE 15 AVE	FROM NE 159 ST TO MIAMI GARDENS DR	WIDEN TO 3 LANES
135		MIAMI GARDENS DR CONNECTOR	FROM US-1 TO WILLIAM LEHMAN CAUSEWAY	NEW 4-LANE
135	671022	NE 123 ST	FROM WEST DIXIE HIGHWAY TO NE 6 AVE	WIDEN TO 4 LANES AND CLOSURE OF WEST DIXIE HIGHWAY

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1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
137	671404	NW 12 ST	FROM NW 127 AVE TO NW 122 AVE	CONSTRUCT 2 LANES
137	671401	SW 26 ST	FROM SW 147 AVE TO SW 137 AVE	CONSTRUCT 2 TO 4 LANES
137	671403	NW 41 ST	FROM NW 142 AVE TO NW 117 AVE	RESURFACE AND RESTRIPE
137	671402	SW 127 AVE	FROM SW 42 ST TO SW 26 ST	CONSTRUCT 2 TO 4 LANES WITH STRIPED MEDIAN
137	671401	SW 147 AVE	FROM SW 26 ST TO SW 34 ST	CONSTRUCT 2 LANES
139	671508	SW 104 ST	FROM HAMMOCKS BLVD S (SW 154 AVE) TO SW 137 AVE	4 TO 6 LANES
139	671503	SW 127 AVE	FROM SW 88 ST TO SW 42 ST	2 TO 4 LANES WITH STRIPED MEDIAN
139	671509	SW 137 AVE	FROM SW 88 ST TO SW 42 ST	4 TO 6 LANES
139	671510	SW 137 AVE	FROM SW 184 ST TO SW 152 ST	2 TO 6 LANES
139	662274	SW 117 AVE	FROM SW 152 ST TO SW 104 ST	2 TO 4 LANES
140		SW 152 ST	FROM ZOO ENTRANCE TO HEFT	4 TO 6 LANES
140	671511	SW 147 AVE	FROM SW 184 ST TO SW 152 ST	ADD 2 LANES AND RESURFACE
140		SW 184 AVE	FROM SW 147 AVE TO SW 120 AVE	2 TO 4 LANES
140		SW 142 AVE	FROM SW 104 ST TO SW 120 ST	2 TO 4 LANES
142	671601	SW 312 ST	FROM SW 187 AVE TO SW 177 AVE	WIDEN TO 3 LANES
142		SW 312 ST	FROM SW 187 AVE TO SW 177 AVE	WIDEN TO 5 LANES
142		SW 320 ST	FROM SW 187 AVE TO US-1	WIDEN TO 3 LANES

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1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
143	671305	SW 328 ST	FROM US-1 TO SW 162 AVE	WIDEN TO 3 LANES
143		SW 328 ST	FROM SW 162 AVE TO SW 152 AVE	WIDEN TO 3 LANES
143	671603	SW 182 AVE	FROM SW 344 ST TO SW 312 ST	WIDEN TO 3 LANES
143		SW 137 AVE	FROM SW 344 ST TO SW 336 ST	2 TO 4 LANES
145	671701	SW 42 AVE BRIDGE	OVER CORAL GABLES CANAL	ADD RIGHT TURN LANE AND BICYCLE LANE
149	671901	NW 87 AVE	FROM NW 122 ST TO NW 138 ST	2 TO 5 LANES
149	671916	NW 62 AVE	FROM NW 91 ST TO NW 105 ST	2 TO 5 LANES
149	671909	NW 62 AVE	FROM NW 105 ST TO NW 138 ST	2 TO 5 LANES
149	671907	NW 72 AVE	FROM OKEECHOBEE ROAD TO NW 106 ST	ADD TURN LANE AND RESURFACE
149		NW 72 AVE	FROM NW 106 ST TO NW 122 ST	ADD TURN LANE, RESURFACE, DRAINAGE, AND WIDEN TO 5 LANES
149		NW 72 AVE	FROM NW 122 ST TO NW 138 ST	WIDEN TO 5 LANES
150	671914	W 60 ST	FROM W 28 AVE TO W 12 AVE	WIDEN TO 4 LANES WITH PALMETTO EXPRESSWAY CROSSING
150	671915	NW 138 ST	FROM NW 97 AVE TO NW 107 AVE	2 TO 5 LANES
150	671915	NW 107 AVE	FROM OKEECHOBEE ROAD TO NW 138 ST	2 TO 5 LANES
150		NW 122 ST	FROM NW 87 AVE TO OKEECHOBEE ROAD	2 TO 5 LANES
156	671401	SW 26 ST	FROM SW 147 AVE TO SW 137 AVE	NEW 4 LANES
156	671401	SW 147 AVE	FROM SW 34 ST TO SW 26 ST	NEW 2 LANES

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(over $500,000)

1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
156	671503	SW 127 AVE	FROM SW 88 ST TO SW 42 ST	2 TO 5 LANES
156		W 127 AVE	FROM SW 8 ST TO NW 12 ST	2 TO 4 LANES
156	610022	SW 80 ST	FROM SW 72 AVE TO US-1	2 TO 5 LANES
156	310040	SW 97 AVE	FROM SW 40 ST TO SW 8 ST	2 TO 5 LANES
156	610021	SW 122 AVE	FROM SW 42 ST TO SW 26 ST	2 TO 4 LANES
156		NW 37 AVE	FROM SR 826 TO COUNTY LINE ROAD	2 TO 5 LANES
157	662281	NW 47 AVE	FROM SR 826 TO NW 183 ST	2 TO 5 LANES
157		NW 72 AVE	FROM NW 105 ST TO NW 138 ST	2 TO 5 LANES
157		NW 87 AVE	FROM NW 138 ST TO NW 154 ST	2 TO 4 LANES AND BRIDGE CROSSING I-75
157		NW 122 ST	FROM NW 97 AVE TO NW 87 AVE	2 TO 5 LANES
157		NW 7 ST	FROM NW 60 COURT TO NW 57 AVE	WIDEN TO 5 LANES
157		NW 17 AVE	FROM NW 79 ST TO NW 103 ST	WIDEN TO 5 LANES
158		SW 152 ST	FROM SW 137 AVE TO ZOO ENTRANCE	WIDEN TO 6 LANES
158		MIAMI LAKES DR	FROM SR 826 TO NW 57 AVE	WIDEN TO 4 LANES
158		SW 344 ST	FROM SW 152 AVE TO SW 132 AVE	ADD 2 LANES AND RECONSTRUCT 2 LANES
158		SW 344 ST	FROM SW 172 AVE TO SW 167 AVE	ADD 2 LANES AND RECONSTRUCT 2 LANES
158		NW 97 AVE	OVER SR 836	CONSTRUCT 4 LANE BRIDGE AND APPROACHES

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1996 TIP Pg. No.	WPI	FACILITY	LIMITS	IMPROVEMENT
158		SOUTHDADE GREENWAYS NETWORK - EVERGLADES TRAIL		BIKEWAYS
159		SOUTHDADE GREENWAYS NETWORK - CARD SOUND ROAD		BIKEWAYS
159		FLAGLER ST	FROM BISCAYNE BLVD TO NW 2 AVE	CONVERT FROM ONE-WAY TO TWO-WAY
182		North Corridor- Fixed Guideway Extension	From Martin Luther King Station to Broward County	Elevated extension of existing Metrorail System
182		East-West Corridor and Multimodal Facility	From Airport to Seaport; from Airport to FIU; from Airport to Miami Beach	Fixed Guideway System
183		Palmetto Extension of Metrorail	Okeechobee Station to Palmetto	Extension of existing Metrorail
184		Replacement of Buses and Purchases of Articulated Buses		Per Fleet Replacement Plan
190		Tri-County Commuter Rail	Station Improvements	
193		Dade Blvd.	Bike Lane	City of Miami Beach Bicycle Network
193	Metromover - Bayside	Promenade		Pedestrian Promenade
194	South Dade Greenways			
	Phase I	Bike Path		
	Phase II	Bike Path		

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APPENDIX III

PUBLIC PARTICIPATION ACTIVITIES

Public Participation Activities

Public involvement in the development of the Long Range Element of the Year 2015 Transportation Plan was ensured in the following ways:

The Citizens Transportation Advisory Committee (CTAC) of the MPO was involved from the kick-off of the Plan Update project. Members of the CTAC were invited to the monthly meetings of the Plan Steering Committee. Moreover, the Chairman of the CTAC was appointed as a voting member of the Steering Committee, and was an active participant in the development of the draft Plan. Additionally, the CTAC was kept informed of the status of the Plan and issues related to the Plan and its development over the two years was a routine information item on the CTAC subcommittee and full committee monthly agendas.

Interaction with the media ensured more exposure of the Plan and its development with the general public. Notices on the development of the Plan and of public informational meetings as well as the public hearing for the adoption of the Plan were published in three local newspapers, in English and Spanish, as appropriate. In addition, interviews were conducted by one news radio station, one local television station, and one local newspaper.

Public informational materials were professionally prepared and distributed to neighborhood associations, other agencies and transportation planning committees, as well as the CTAC. During May and June of 1995, public informational meetings were conducted to solicit input on the draft Plan from the general public. Presentation boards, promotional brochures and descriptive information booklets were prepared and distributed so that citizens may browse and follow along with the information as it was presented. Forms were available for citizens to register their comments on the draft Plan, and citizens were encouraged to take the materials and forms home and mail or fax their comments to the MPO. CTAC members actually hosted the community meetings, which were conducted at various locations throughout the county. After the advertised, regularly-scheduled community meetings were concluded, the MPO responded to some special requests from homeowner associations, etc. by conducting customized presentations for their area.

Dade County MPO

Project Schedule for the
PUBLIC INVOLVEMENT ACTIVITIES
associated with the Year 2015 Transportation Plan

Date: November 21, 1995

#	Date Out	Sent to:	Comm. In:	Remarks:	Mailed	Faxed	Presented	Picked Up
		COMMITTEES						
1	various	CTAC (33 members)			X		X	
2	various	BPAC (22 members)			X		X	
3	various	TARC (9 members)			X		X	
4	various	TPTAC (13 members)			X		X	
5	various	TPC (18 members)			X		X	
6	various	MPO (13 members)			X		X	
		CITIES						
1	3-10-94 and various subsequent dates	City of North Bay Village			X			
2	"	Town of Medley			X			
3	"	City of Sweetwater			X			
4	"	Indian Creek Village			X			
5	"	City of South Miami			X			
6	"	City of Miami Springs			X			
7	"	City of Miami			X			

#	Date Out	Sent to:	Comm. In:	Remarks:	Mailed	Faxed	Presented	Picked Up
8	"	City of North Miami			X			
9	"	Village of El Portal			X			
10	"	City of Homestead			X			
11	"	Village of Biscayne Park			X			
12	"	Village of Key Biscayne			X			
13	"	City of Miami Beach			X			
14	"	Village of Virginia Gardens			X			
15	"	City of Hialeah Gardens			X			
16	"	Village of Miami Shores			X			
17	"	City of Opa-Locka			X			
18	"	City of Hialeah			X			
		CITIES						
19	3-10-94 and various subsequent dates	City of North Miami Beach			X			
20	"	Town of Golden Beach			X			
21	"	Town of Surfside			X			
22	"	City of West Miami			X			
23	"	Bal Harbour Village			X			
24	"	Town of Bay Harbour Islands			X			

#	Date Out	Sent to:	Comm. In:	Remarks:	Mailed	Faxed	Presented	Picked Up
25	"	City of Coral Gables			X			
26	"	City of Florida City			X			
		COUNTY AGENCIES						
1	various	various		review by county agencies conducted in TPTAC forum				
		STATE AGENCIES						
		FDOT:						
1	various	various		review by FDOT offices conducted in TPTAC forum	X			
		FEDERAL ENTITIES						
		FHWA:						
1	3-23-95	Victoria Bernreuter			X		X	
2	various							
		FTA:						
	various	various			X		X	
		MPOs						
1	various	Broward			X			X
		ORGANIZATIONS						
1	various	Greater Miami Cham. of Comm.			X			X
2		Dade Federation of Women			X			
3		NMB Cham. of Comm.			X			
4		Kendall Fed. of Homeowners			X			
5		Redland Citizens Assoc.			X			

#	Date Out	Sent to:	Comm. In:	Remarks:	Mailed	Faxed	Presented	Picked Up
6		West Dade Fed. of Homeowners			X			
7	4-4-95	MDTA Paratransit Operations			X			
8	"	MDTA Transit Mobility Planning			X			
9	"	Dade Co. Board of Education			X			
10	"	CHARLEE of Dade Co., Inc.			X			
11	"	Assoc. for Retarded Citizens			X			
12	"	Mount Sinai Medical Center			X			
13	"	Community Council for Jewish Elderly			X			
14	"	Easter Seal Society of Dade			X			
15	"	Action Community Center			X			
16	"	MACtown, Inc.			X			
17	"	North Shore Medical Center			X			
18	"	Federation Gardens			X			
19	"	Sunrise Community, Inc.			X			
20	"	Little Havana Activities & Nutrition Centers of Dade Co.			X			
21	"	Metro-Dade Department of Human Resources			X			
22	"	Southwest Social Services Program			X			
23	"	James E. Scott Community Association, Inc.			X			
24	"	Miami Jewish Home and Hospital for the Aged			X			
25	"	Goodwill Industries of South Florida, Inc.			X			
26	"	Lutheran Services for the Elderly, Inc.			X			
27	"	North Miami Foundation for Senior Citizens Services, Inc.			X			
28	"	Villa Maria Nursing Center			X			
29	"	Concept House, Inc.			X			

#	Date Out	Sent to:	Comm. In:	Remarks:	Mailed	Faxed	Presented	Picked Up
30	"	The Village South, Inc.			X			
31	"	National Parkinson Foundation			X			
32	"	Hope Center, Inc.			X			
34	"	The Haven Center, Inc.			X			
35	"	Mangowood Estates Citizens Assoc.			X			
		GENERAL PUBLIC						
1	3-24-95	Veronica Byrd					Mailed	
2	6-8-95	Ramon Maury					Faxed, Mailed	
3	3-22-95	JoAnn Quarrier					Mailed	
4	5-23-95	Luisa Yanez, reporter Sun Sentinel					Mailed, Tele. Interview	
5	5-25-95	Miami Herald					Mailed, Tele. Interview	
6	5-25-95	WIOD					Radio Interview	
7	4-23-95	Miami Herald, Neighbors					Advertisement	
8	5-16-95	Community Meeting - NW		Presentation				
9	5-17-95	Community Meeting - Beach		Presentation				
10	5-18-95	Community Meeting - North		Presentation				
11	5-22-95	Community Meeting - Central		Presentation				
12	5-23-95	Community Meeting - SW		Presentation				
13	5-25-95	Community Meeting - West		Presentation				
14	6-10-95	Special Meeting - KFHA		Presentation				
15	6-8-95	Special Meeting - Miami Shores		Presentation				

PUBLIC INFORMATION MEETINGS

METRO-DADE

METRO-DADE TRANSPORTATION PLAN TO THE YEAR 2015
THE FUTURE IS IN YOUR HANDS...

The Metropolitan Planning Organization's Citizens Advisory Committee (CTAC) is sponsoring six (6) public information meetings throughout the Metropolitan area to gather points of view from a broad cross section of area citizens in the planning and updating of the urban transportation system. The key to achieving a good transportation system is the development of a comprehensive and thorough transportation plan.

Citizens are invited to attend area meetings to review proposed improvements, and share ideas regarding transportation needs in Dade County over the next 20 years. We'd like to know what you think about streets and highways, high speed rail, commuter rail, transit systems, bicycle and pedestrian paths and any other ideas that will make travel easier in Dade County. Comments from citizens will be considered in completing the final plan. The adopted plan will become the guide for future transportation system improvements.

The dates and locations of the meetings are as follows:

Meeting Date	Meeting Time	Area of Analysis Commission Districts	Location
Tuesday 5/16/95	7:00 - 8.30 p.m.	Northwest Districts 12 & 13	Hialeah City Hall
Wednesday 5/17/95	7:00 - 8.30 p.m.	Central Business and Beach Districts 4 & 5	North Bay Village City Hall 7903 E. Drive
Thursday 5/18/95	7:00 - 8.30 p.m.	North Districts 1, 2 & 3	Jackson North Maternity Center 14701 N.W. 27th Ave.
Monday 5/22/95	7:00 - 8.30 p.m.	Central Districts 6 & 7	South Miami City Hall 6130 Sunset Drive
Tuesday 5/23/95	7:00 - 8.30 p.m.	Southwest Districts 8 & 9	South Dade Government 10750 SW 211 Street
Thursday 5/25/95	7:00 - 8.30 p.m.	West Districts 10 & 11	Dade County Youth Fair-grounds & Exposition Center 10901 Coral Way

- **Highway Congestion:** Congestion exists on our highways and will continue to increase.

By the year 2015:

- ***The population*** of Dade County will be approximately 2.7 million people from 1.9 million in 1990.
- ***The number of vehicles*** will increase to 3 million from 1.8 million in 1990.
- ***The number of daily person trips*** will rise to approximately 9 million from 6.7 million in 1990.

METRO-DADE

Metro Dade Transportation Plan Update to the Year 2015

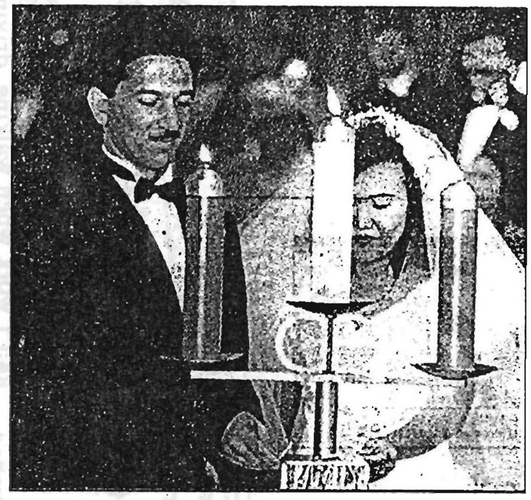
The Metropolitan Planning Organization for the Miami Urbanized Area has initiated work on the update of the current urban area transportation plan as required by federal law.

The Plan under preparation is intended to be comprehensive and will specify all needed transportation improvements for the 1995-2015 period. Also included in the plan will be an analysis of the costs of the proposed improvements and the revenues that are expected to be available during the plan period for implementation of the identified projects, along with the proposed priorities for the projects. Improvements to be identified in the Plan include surface transportation projects, i.e. highways, mass transit, bicycle/pedestrian facilities as well as intermodal connections and terminals, strategies for traffic congestion management and proposals for deployment of intelligent (electronic) transportation technologies. Of special concern in the plan is the analysis of issues related to the provision of adequate ground access to Miami International Airport and to the Port of Miami.

Monthly meetings of the technical committees of the MPO transportation planning process have been initiated and a series of public meetings will be scheduled beginning in the spring of 1995 to consider additional public input to the Plan. Continuing public participation is being secured through the Dade County Citizens Transportation Advisory Committee and other formal committees and task forces of the MPO transportation planning process.

For further information contact Mr. Michael T. Moore at:

Office of the MPO Secretariat
Stephen P. Clark Center
111 N.W. First Street, Suite #910
Miami, Florida 33128
(305) 375-4507
(305) 375-4950 (FAX)



MIKE STOCKER / Herald Staff

SPECIAL CEREMONY: Michael Dreichler and Jaime Kellogg light candles during their wedding in a Pompano Beach church.

:n full of opportunities. I · life would have turned Korea.'

JAIME KELLOGG

in 1991.

Since then, she has studied floral design and now works in the bakery at a Publix supermarket. She also helps her mother escort children from foreign countries to their new American adoptive parents.

"My life here has been full of opportunities," Jaime said. "I am not sure how my life would have turned out had I stayed in Korea."

And chances are she would not have met her new husband, Dreichler, 35, a manager-trainee at Publix.

"The circumstances that brought Jaime here just make her all the more special," he said.

The two were married at St. Coleman Catholic Church at noon. Jaime's sisters — Tarabeth, Jillian Kathryn and Sara Patricia — were in the wedding party wearing fuchsia, tea-length dresses.

The Rev. Thomas Foudy officiated the ceremony. His words — few but powerful — seemed to speak to both the marriage of Michael and Jaime, and her long-awaited adoption, about 19 years ago.

"Love is calm," Foudy said softly. "Love is patient."

Group seeks ideas about transportation

Residents are invited to a public meeting tonight to share ideas about what does and doesn't work when walking, driving, riding and cycling in Dade.

The meeting will be from 7 to 8:30 tonight at Dade County Youth Fairgrounds, 10901 Coral Way.

The Metropolitan Planning Organization's Citizen's Advisory Committee will use the comments in completing an update of Dade's Master Transportation Plan for the year 2015. The plan will be a guide for future transportation improvements.

By the year 2015, county planners say the Dade population will be at 2.7 million, up from 1.9 million in 1990 and the number of daily trips will rise from 6.7 million in 1990 to 9 million.

FINAL EDITION

The Miami Herald

THURSDAY, NOVEMBER 9, 1995

35 CENTS

Powell's 'no' boosts Clinton, Dole

He also rules out role as VP

■ FLORIDA NOW 'WIDE OPEN,' 8A

By STEVEN THOMMA
Herald Washington Bureau

ALEXANDRIA, Va. — With a polite "No, thank you" to a presidential candidacy, Colin Powell on Wednesday boosted the prospects of Republican Bob Dole, brought a sigh of relief at the Clinton White House and disappointed millions of Americans intrigued by the prospect of a Powell campaign.

The retired general's decision was reached after weeks of what he called anguishing deliberations with his family, friends and advisers.

In the end, Powell told a hotel

'Such a life requires a calling that I do not yet hear. . .'

COLIN POWELL

ballroom crammed with reporters, he decided that he did not have the personal fire for a presidential campaign.

"To offer myself as a candidate for president requires . . . a passion and commitment that despite my every effort I do not have for political life, because such a life requires a calling that I do not yet hear . . .

"Therefore, I cannot go forward. I will not be a candidate for president or for any other elective office in 1996."

With his wife, Alma, by his side, the 58-year-old Powell said that "the welfare of my family had to be uppermost in my mind," but that ultimately he had to look deep into his own soul to make the decision.

He ruled out a vice-presidential nomination, though his name is certain to remain at the top of most Republican candidates' lists.

For the first time, he identified himself as a Republican, saying

PLEASE SEE POWELL, 7A

KRT Photo

OUT OF THE FRAY: Powell, with his wife, Alma, said he searched his soul in deciding whether to run.

Dade in 2015 could be grim for solo drivers

Plan calls for buses, rail — and few new highways

By ALFONSO CHARDY
Herald Staff Writer

Until recently, Dade transportation planners had focused mainly on building new expressways to accommodate ever-increasing traffic. But a new Dade transportation plan emphasizes public transportation over expressways.

The 2015 Metro-Dade Transportation Plan would use the bulk of its $3 billion proposed price tag on buses, car-pool lanes and rail rather than expressways.

It includes money for some new highways, but all road projects are extensions of existing expressways. It is a plan that rewards commuters who share rides and penalizes those who drive alone.

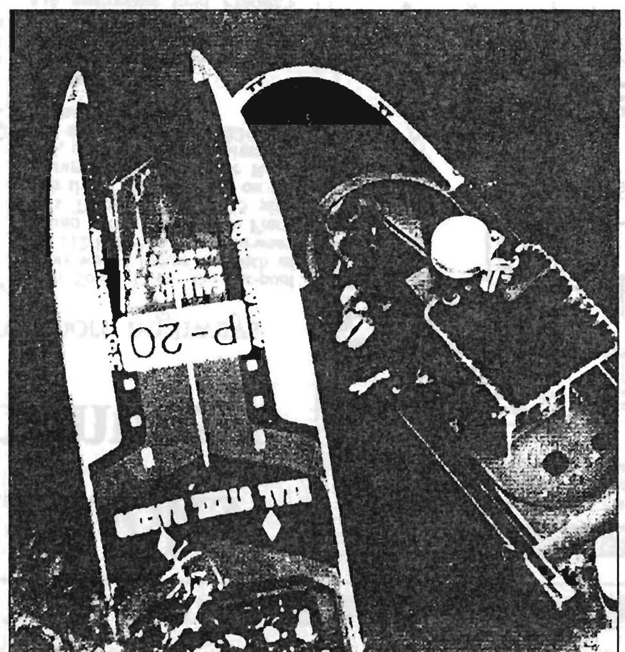
"We can no longer afford to build new highways," said Jose Mesa, staff director of the Metropolitan Planning Organization, which assembled the 2015 plan.

The strategy was prepared on the premise that Dade's population of people and vehicles will increase dramatically by 2015, from 1.9 million to 2.6 million people, and from 1.3 million to 2.2 million vehicles.

The plan was scheduled to be considered today at a regular meeting of the Metropolitan Planning

PLEASE SEE TRANSPORTATION, [illegible]

TRAGIC DAY FOR POWERBOAT RACERS



Israel widens crackdown on suspects

Arrests fuel suspicions of a right-wing plot

By MARTIN MERZER
Herald Senior Writer

JERUSALEM — Fortifying suspicions that a right-wing cabal conspired to assassinate Prime Minister Yitzhak Rabin, police announced Wednesday the arrest of another suspect in the slaying — the leader of a radical anti-Arab group.

Israel Radio reported the arrest of two other suspects late Wednesday — bringing to five the number of people implicated in the worst crime in Israeli history — but those arrests were not immediately confirmed by

Three more reported arrests bring to five the number of people implicated in Rabin's assassination.

Yigal Amir, the student who admitted killing the prime minister Saturday night, is an avowed member of Eyal. An offshoot of the Kach group founded by American Rabbi Meir Kahane

Dade in year 2015 looks grim for solo commuters

Planners tout public transportation over more highways

TRANSPORTATION, FROM 1A

Organization governing board, which includes Metro commissioners. But that discussion will be postponed, Metro Commission Chairman Arthur Teele said Wednesday night. A new date for the hearing has not been set.

Once the plan is adopted, it doesn't mean the next day workers will start tearing up roads or building new rail lines. That's still years down the road. The plan would go next to Washington and Tallahassee for review by federal and state transportation managers who ultimately disburse the bulk of the money for the projects. Mesa says the state Department of Transportation can secure most or all of the funding.

In addition, each major project will receive more public scrutiny later, both in the Metro Commission and the Metropolitan Planning Organization itself.

Corridor, bullet train

The 2015 strategy includes elements of two other huge plans: the East-West Corridor and a bullet train from Miami to Orlando and Tampa.

A public workshop on the proposed high-speed rail service is scheduled for Nov. 14 in Miami, where bidders plan to outline proposals they presented Oct. 31 to the Florida Department of Transportation.

Public hearings on the East-West project — which includes a rail line from West Dade to the Port of Miami and Miami Beach, a rail transfer station near Miami International Airport and new car-pool lanes on State Road 836 — are scheduled for Dec. 5-6 in Miami.

At those meetings, planners will present exhibits and discuss a draft environmental impact statement and preliminary design concepts released in the last few days.

They show possible alternative rail routes from West Dade to Miami Beach and potential sites for the rail transfer station known as the Miami Intermodal Center. [illegible]posed [illegible]eed train would leave from the center.

> *'We can no longer afford to build new highways.'*
>
> **JOSE MESA,** of Metropolitan Planning Organization

As envisioned in the 2015 plan and preliminary East-West designs, the center would serve as Dade's transportation hub — a place to which all major roads and rails lead.

The proposed site would be in the so-called Iron Triangle just east of Miami International Airport, off Le Jeune Road.

If built, automatic trains would connect the airport to the Intermodal Center, where passengers would board rail to Miami Beach, Tri-Rail to West Palm Beach or rail to Orlando and Tampa.

But they also will be able to rent cars and drive right onto a new, six-lane mini-expressway connecting the Intermodal Center to State Road 836, the Dolphin Expressway, to the south, or State Road 112, the Airport Expressway, to the north.

That connector would contain two general-use lanes and one High Occupancy Vehicle or car-pool lane in each direction.

Linking car-pool lanes

The HOV lanes would connect with additional car-pool lanes planned for 836 and 112. The 112 car-pool lanes would also link up with the existing HOV lane on Interstate 95 that runs 51 miles to the south Palm Beach County community of Delray Beach.

Along the way, the I-95 car-pool lane would lead to a proposed mini-Intermodal Center at the Golden Glades Interchange park and ride lot in north Dade.

The 2015 plan contemplates an expanded rail and bus transfer station there that would also include snack bars, restrooms and an air-conditioned terminal [illegible]ses, T[illegible] and, p[illegible] high-speed rail.

In South Dade, the car-pool lanes would follow the path of the 112-836 connector onto westbound 836, all the way to Florida's Turnpike. The 2015 plan also shows car-pool lanes on the Turnpike south to State Road 874, the Don Shula Expressway and along State Road 826, the Palmetto Expressway.

Extending 836

Besides the 112-836 connector, two other mini-expressways are contemplated: an extension of 836 westbound from Florida's Turnpike to Northwest 137th Avenue, and an extension of 874 from the Turnpike to Southwest 137th Avenue.

The extensions are designed to absorb traffic that ties up surface roads in residential areas that grew after the original expressways were built.

Beyond these extensions, the rest of the projects are geared toward mass transportation: moving large amounts of people in as few vehicles as possible.

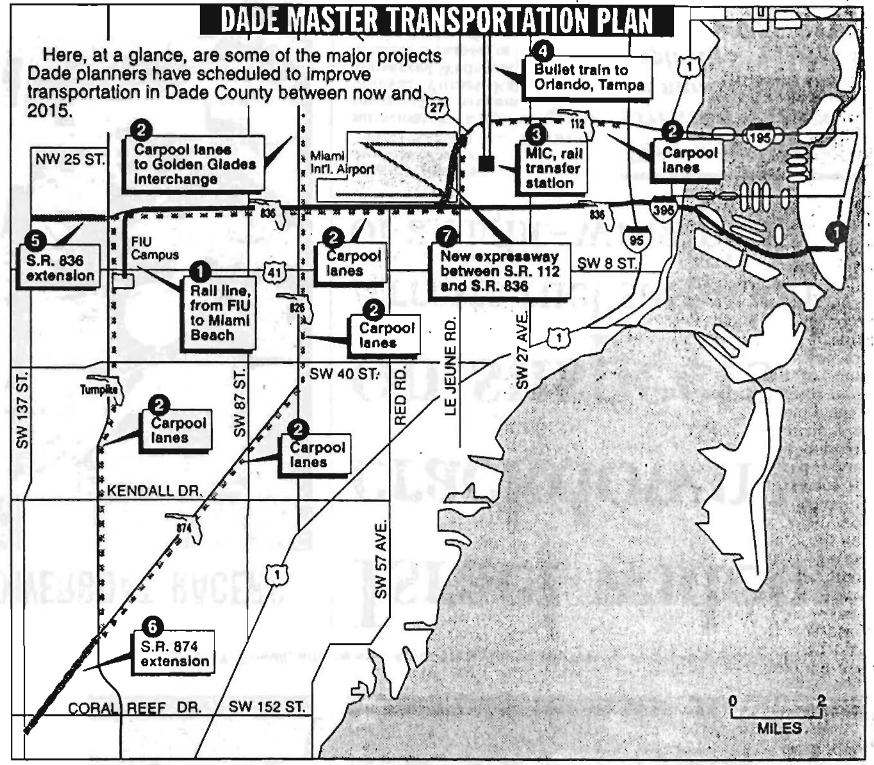
The plan includes proposals to buy new buses, build new bicycle and pedestrian paths, and develop so-called intelligent corridor systems — under-the-pavement sensors, electronic and video devices along expressways for remote traffic management. Intelligent corridors are planned for I-95, I-395 and Interstate 75.

Also mentioned is a possible extension of the existing Metrorail system along Northwest 27th Avenue to the Broward County line and construction of a tunnel under Biscayne Bay from Watson island to the Port of Miami.

The tunnel would attract truck traffic that now meanders through streets in downtown Miami to get to the port after it leaves I-95.

Alongside mass transportation projects, the plan also includes many lane additions on surface roads all over the county.

They range from Krome Avenue in South Dade — from two to four lanes between U.S. 1 and Southwest Eighth Street — to Northwest 74th Street in north Dade, from four to six lanes betw[illegible] [illegible]rthwe[illegible] Aven[illegible] and State Road 82[illegible].



RICK BROWNLEE / Herald Staff

Dade's transit future at crossroads

Hearings, meeting set for large-scale projects

■ HEARING SCHEDULE, 2B

By ELAINE DE VALLE
Herald Staff Writer

This week, three public hearings, one vote and a public meeting will help shape Dade County transportation over the next 20 years.

Hearings Tuesday and Wednesday will address what is probably Dade's biggest traffic relief project ever: the proposed East-West Multimodal Corridor. It includes a rail line from Florida International University in West Dade through the Port of Miami to the Miami Beach Convention Center, a huge transfer station near the airport and new car-pool lanes on State Road 836, the Dolphin Expressway.

Planners will show possible rail

SEE TRANSPORTATION, 2B

Dade's transportation projects at crossroads

TRANSPORTATION, *FROM 1B*

alignments from West Dade to the Beach and discuss costs, impact and preliminary design concepts. Dozens of homes and businesses along the path could be razed.

The rail line, for example, could be built along Florida's Turnpike from FIU to State Road 836 and then east along 836, affecting portions of Sweetwater, the Fontainebleau Park area, the Orange Bowl area, Wynwood, Little Havana and Overtown, where — paired with other projects — it has already sown concern.

Don Benjamin, president of the Overtown Advisory Board, said Sunday that he will attend the meeting Tuesday to support the route that goes across the CXS Railroad right-of-way over Interstate 95 through Wynwood, then south along the Florida East Coast Railway east around the Miami Arena and on to the port.

"We think it's cheaper and it's least destructive," Benjamin said.

Homes and businesses could also be demolished for the proposed path of an interconnector road linking 836 with State Road 112, the Airport Expressway.

One of three options could affect properties from Northwest 12th Drive to 112 on LeJeune and from LeJeune to 32nd Avenue along 112.

A second alternative would veer off LeJeune around Northwest 25th Street and affect businesses and residents just east of

Crews were to begin demolishing the north side of Venetian Causeway Nov. 27, but new signs say work begins today.

LeJeune from Northwest 25th to Northwest South River Drive and from Northwest 38th to 32nd avenues from around 36th through 41st streets.

The third would take the interconnector from 836 along Northwest 42nd Court to Northwest 21st Street and then swing east, possibly affecting properties on Northwest 22nd through 28th streets just east of LeJeune, on North River Drive and Northwest 36th Street at 38th Avenue and just south of 112 from 35th to 38th avenues.

Some homes and businesses may also be affected to make way for the rail transfer station or transportation hub: a meeting place for passengers of trains, planes and automobiles known as the Miami Intermodal Center.

The center would house several rental car agencies (and be accessible by auto from the interconnector), and link several trains — including one from the airport and a proposed bullet train to Tampa and Orlando.

Four original sites for the center have been narrowed to two. Both are between Northwest 22nd and 24th streets on 37th Avenue. One goes west to 39th Avenue and the other east to 35th Avenue.

Plans for the causeway

Also on Wednesday night, a meeting of the Venetian Islands Homeowners Association will look into the restoration plans for the 69-year-old historic Venetian Causeway.

Originally, crews were scheduled to begin demolishing the north side of the causeway Nov. 27, but new signs along the causeway say the work begins today from east to west. It includes removal of concrete side railings and low-level bridge work.

When the north side is completed, demolition of the south side will begin. Two smaller lanes of traffic will be maintained during this phase of bridge rehabilitation, expected to be completed by March. By then, the east bridge is scheduled to be closed for months as workers make their way westward.

2015 plan on agenda

Thursday will bring another event connected to the future of transportation: a public hearing and vote on the 2015 Metro-Dade Transportation Plan.

This is a blueprint that emphasizes public transportation, not roads.

One of its controversial items is a proposed tunnel under Biscayne Bay from Watson Island to the port, designed to deflect truck traffic from downtown Miami.

Nobody knows, however, where the $250 million needed to build the tunnel would come from. Some commissioners and planners may favor killing other projects to finance the tunnel.

SCHEDULE

These public hearings and meetings are planned this week to discuss the future of transportation in Dade:

Tuesday:

■ 5 p.m. — Florida Department of Transportation hearing on the proposed East-West Multimodal Corridor from Florida International University to the Miami Beach Convention Center. Sheraton Biscayne Bay Hotel, 495 Brickell Ave.

Wednesday:

■ 5 p.m. — Second DOT hearing on the East-West project. Radisson Mart Plaza Hotel, 711 NW 72nd Ave.

■ 7 p.m. — Venetian Islands Homeowners Association meeting to discuss the restoration projects along the Venetian Causeway. Miami Beach police station, first-floor community room, 1100 Washington Ave.

Thursday:

■ 1 p.m. — Metropolitan Planning Organization public hearing and vote on the 2015 Transportation Plan. Dade County Commission Chambers, 111 NW First St.

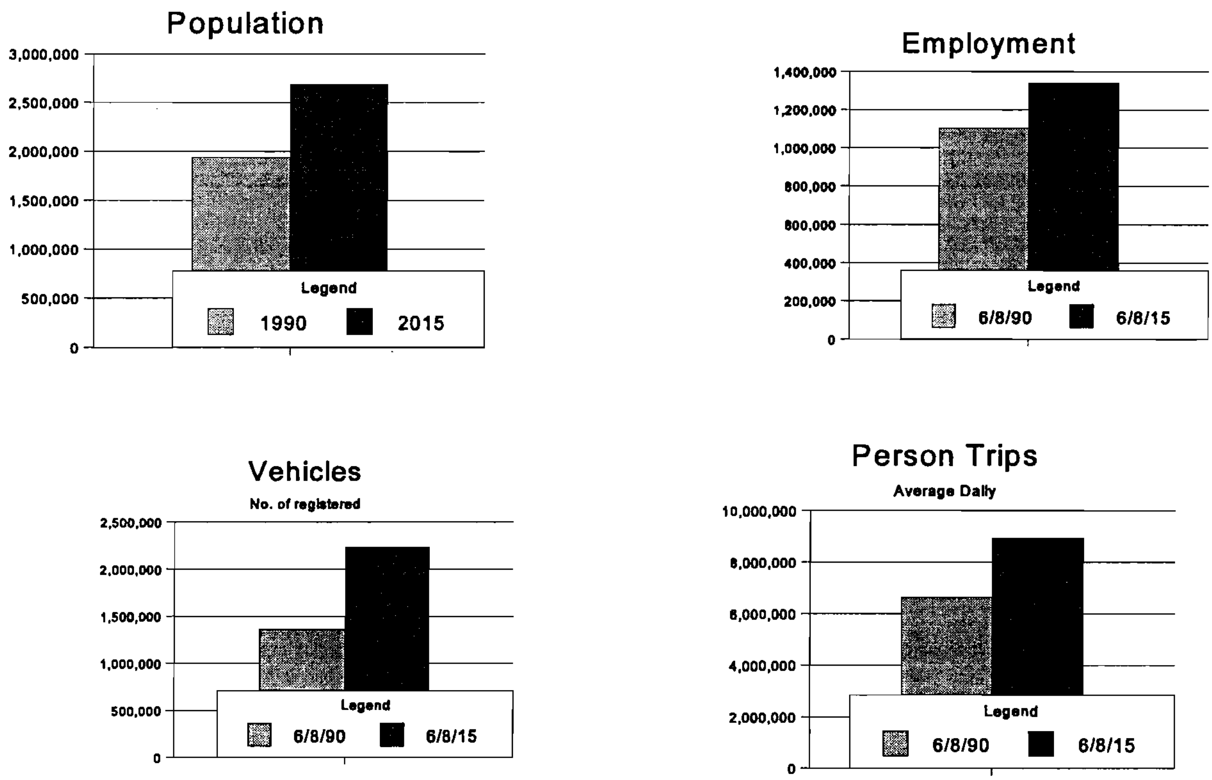
THE HERALD 12/4/95

APPENDIX IV

PLAN BACKGROUND INFORMATION

Figure 1

Projected Growth



Background Conditions and Forecasts

Figure 1 illustrates the increases in population, employment, number of registered vehicles and average number of daily person-trips expected to occur in the County between the study base-year of 1990 and the Plan forecast year of 2015. All future socio-economic trends and urban travel levels reflect land-use growth forecasts established for the County's Comprehensive Development Master Plan (CDMP).

The population of the County is expected to increase by 39% during the study period, while the number of registered automobiles will increase by 63% and employment is projected to grow by 21%. Based on these trends, urban trips taken by residents and others in the County is predicted to increase by 35% and the number of daily vehicle miles traveled in the urban area will grow by 36%.

These trends and forecasts point to mounting pressure on the transportation system to handle increasing loads of traffic and personal travel.

Financial Considerations

A major task was undertaken to assess the fiscal implications of the Long Range Element. The twenty-year proposals identify over one hundred major capacity improvements with a price tag of approximately $6.1 billion. An assessment of the ability of the urban area to build the proposed projects identifies a shortage of approximately half the needed capital funds over the Plan period ($3 billion), assuming that most revenues for capital improvements will be generated in the future at current levels. Operating and maintaining the transportation system during the Plan period is estimated to cost an additional $7.4 billion for a total estimated "Needs" Plan cost of $13.5 billion. In addition, projected funds for the operations and maintenance of the transportation system during the Plan period will not be sufficient to support the improvements identified in the "Needs" Plan. A gap of approximately $1.7 billion has also been identified in this regard.

A cost feasible plan, estimated to cost $8.8 billion has been developed to implement the projects identified as priorities in the Plan. these priorities address service demands of major traffic generators and important economic centers in the County such as the Miami International Airport and the Port of Miami. Also, the mobility needs of the many communities in the metropolitan area are addressed.

Transportation funding in Florida is arrived at through a system of taxes and fees at Federal, State and local levels. Distribution of these funds is driven mainly by federal and state statutory formulas, with the exception of some discretionary federal grant programs.

Most highway funding comes from gasoline taxes, motor fees, and other automobile-related "user-fees". Major sources of existing and potential highway funding sources include: Federal Gas Tax, State Motor Fuel Tax, Local Option Gas Tax, Voter Gas Tax, Motor Vehicle Fees, Impact Fees and Tolls.

Transit funding is derived from a host of Federal, State and local programs. For rail and bus projects, funding is mostly sought though Federal and State grants. Transit operating costs are supported largely through local revenue sources.

Major sources of existing and potential transit funding include: FTA Section 3, FTA Section 9, State participation and local funds.

A cost feasibility assessment of the proposed projects identifies revenue shortfalls in all areas, assuming that revenue will be generated in the future at current levels. For highways, in addition to an overall shortage, a deficit of over $900 million is predicted during the outer years of the Plan period following the implementation of Projects in the higher priority categories.

In the case of transit, the proposed Needs Plan can be partially funded. Since the last major update of the Transportation Plan, segments of three major transit corridors have progressed through preliminary planning stages and have capital monies identified in the Cost Feasible Plan. In addition to the amount of Federal and State funds that may be allocated for these rapid transit improvements, substantial local funds will need to be raised, as well, to support the operations and maintenance of these projects. In the case of many airport and seaport-related ground transportation improvements, as well as the East-West Multimodal Corridor Improvements and the Miami Intermodal Center, contributions from airport and seaport revenue streams are being proposed.

A new commitment to non-motorized modes of transportation (bicycling, pedestrian) and to projects that enhance the aesthetics of the urban landscape is proposed in the Plan through the reservation of one and one-half percent of all eligible surface transportation capital funds for these types of projects.

Full funding for this Transportation Plan will have to originate from a blend of existing and new revenue sources. Funding sources in place today may not necessarily be available in the future.

Operations and Maintenance

Slightly over 40% of all estimated highway-related costs within the twenty-year Plan period correspond to non-capacity improvements, such as maintenance and safety and other operations-related work. These activities are performed on the existing system to maintain it in good condition. A significant portion of the future travel demand will continue to be served by existing facilities.

The following two tables summarize the operations and maintenance costs and revenue totals for the transit system and highway network.

Highway maintenance costs include ordinary/routine maintenance work such as patching, landscape maintenance, traffic signs and signals maintenance, and bridge maintenance. Highway operations and safety costs include exceptional work such as resurfacing, traffic control devices, safety lighting and signals, guardrails and pavement markings. For the most part, it can be said that highway-related operations and maintenance costs can be covered by anticipated revenues for those purposes.

For the transit system, the same cannot be said. Although the Plan is capital-cost-feasible, the operations and maintenance costs for the transit system will require increases in existing sources and implementation of new, innovative sources. Examples of such sources are being included in the East-West Multimodal Corridor financing strategy. These potential new sources include: toll surcharges, airport-seaport contributions, highway congestion pricing, and private sector participation.

METRO-DADE LONG RANGE TRANSPORTATION PLAN UPDATE
YEARS 2001-2015

TRANSIT OPERATING AND MAINTENANCE COST AND REVENUE SUMMARY
(MILLIONS OF 1995 DOLLARS)

	Needs Plan	Cost Feasible Plan
COSTS		
Existing System	$3,135	$3,135
Expansion	2,548	1,034
TOTAL	**5,683**	**4,169**
REVENUES		
Farebox Revenue		
Existing System	915	915
Expansion	1,271	531
Federal Section 9 Operating	0	0
State	133	133
Local	1,597	1,597
Other Sources	200	200
TOTAL	**4,116**	**3,376**
COSTS - REVENUES	(1,567)	(793)

METRO-DADE LONG RANGE TRANSPORTATION PLAN UPDATE
YEARS 2001-2015

HIGHWAY OPERATING AND MAINTENANCE
COST AND REVENUE SUMMARY
(millions of dollars)

Costs	**Needs Plan**		**Cost Feasible Plan**	
	STATE	*LOCAL*	*STATE*	*LOCAL*
Existing System	$735M	$668M	$735M	$668M
Expansion	$155M	$312M	$118M	$226M
Total Costs	**$890M**	**$980M**	**$853M**	**$894M**

Revenues	**Needs Plan**		**Cost Feasible Plan**	
	STATE	*LOCAL*	*STATE*	*LOCAL*
Existing System	$735M	$668M	$735M	$668M
Expansion	$155M	$312M	$118M	$226M
Total Revenues	**$890M**	**$980M**	**$853M**	**$894M**

APPENDIX V

SUPPORT DOCUMENTATION

YEAR 2015

METRO-DADE TRANSPORTATION PLAN

S U P P O R T D O C U M E N T A T I O N

These technical support documents are available through the Metro-Dade MPO.

Technical Reports:

- Data Compilation and Review
- Model Validation
- Financial Resources Study

Technical Memoranda:

- Financial Resources Study
- Development of External Trips
- Trip Generation Model
- Trip Distribution Model
- Validation of Mode Choice and Auto Occupancy Model
- Validation of the Traffic Assignment Model
- Model Validation Process
- Countywide and Individual Summaries
- Metro-Dade Transportation Plan Update (to the Year 2015)
- Metro-Dade Transportation Plan Update (to the Year 2015): Adoption Document

APPENDIX VI

NEEDS PLAN AND RECOMMENDED COST-FEASIBLE PLAN

Adopted *7-Dec-95*

Metro-Dade Long Range Transportation Plan Update (to the Year 2015)

Needs Plan and
Recommended Cost Feasible Plan

Adopted by the Governing Board
of the MPO

December 7, 1995

Adopted *7-Dec-95*

YEAR 2015 TRANSPORTATION PLAN

DEFINITION OF PRIORITY CATEGORIES

PRIORITY 1 -- Priority projects to be constructed and opened to service by the Year 2000 or shortly thereafter. Includes those projects needed to respond to the most pressing and current urban travel problems. Funds for most of these improvements are already programmed in the MPO's Transportation Improvement Program.

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

PRIORITY 3 -- Improvements to be completed between the Years 2005 and 2010. Project development activities would need to commence before the Year 2005.

PRIORITY 4 -- Improvements to be made in the latter part of the Plan horizon and completed by the Year 2015.

Dates mentioned are for illustration purposes. Actual dates of construction are subject to availability of adequate funding and other relevant considerations and may be advanced or postponed due to these considerations. The construction sequence of projects will nevertheless follow the indicated priority scheme.

Adopted *7-Dec-95*

Recommended Cost Feasible Plan
Year 2015 Long-Range Transportation Plan

Priority I - (Refer to adopted 1996 TIP for Priority I project listing.)			
Priority II	*(Years 2000 to 2005)*		
	Project*	**Description**	**Cost to Long Range Plan (millions)**
	Bicycle/Pedestrian/Greenways (Also in Priorities III, IV)[1]		$12.9
	SR836 Corridor: Seaport to Palmetto (Also in Priorities III, IV)[2]	premium transit	$100.0
	North Corridor Transit[3]	premium transit	$135.0
	MIC (Also in Priority III)[4]	Miami Intermodal Center	$100.0
	Interconnector: SR 836 to SR112 (Also in Priority III)[4]	new 4 lane & 2 HOV lanes	$100.0
	South Dixie busway	premium transit	$35.6
	New & Replacement buses (Also in Priorities III, IV)[5]		$95.0
	SR826: SR874 to I-75 (Also in Priority III and IV)[5]	add one HOV lane (each direction)	$301.3
	Perimeter Rd: NW 20 St to NW 72 Ave	2 to 4 lanes	$2.0

* Refer to page 10 for notes.

	NW 25 St: NW 79 Ave to NW 67 Ave (6123194) (study limits are NW 87 to 67 Aves)	4 to 6 lanes (+ interchange improvements)	$20.0
	NW 97 Ave: NW 25 St. to NW 41 St.	2 to 4 lanes	$1.3
	NW 87 Ave: NW 36 St. to NW 58 St.	4 to 6 lanes	$6.2
	NW 12 St: NW 110 Ave. to NW 107 Ave.	new 4 lane	$1.5
	SR112: I-95 to Okeechobee Rd. (6113862)[6]	add one HOV lane (each direction)	$32.0
	SW 8 St: SW 127 Ave to SW 152 Ave (6113881)[6]	4 to 6 lanes	$2.9
	NW 74 St: NW 57 Ave. to SR826 (6114162)[6]	4 to 6 lanes	$7.6
	NW 57 Ave: Okeechobee Rd. to NW 138 St. (6114118)[6]	4 to 6 lanes	$5.8
	I-95 Intelligent Corridor System[7]		$33.0
	I-195 Intelligent Corridor System[7]		$6.3
	I-395 Reconstruction (I-95 to MacArthur)[7]		$110.7
	Golden Glades Multimodal Terminal[7]		$5.2
TOTAL	**Priority II**		**$1,114.3**

* Refer to page 10 for notes.

Recommended Cost Feasible Plan
Year 2015 Long Range Transportation Plan

Priority III	*(Years 2005 to 2010)*		
Project No.	**Project**	**Description**	**Cost to Long Range Plan (millions)**
	Bicycle/Pedestrian/Greenways (Also in Priorities II, IV)[1]		$12.9
	New & Replacement buses (Also in Priorities II, IV)[5] and bus facilities		$122.8
	SR826: SR874 to I-75 (Also in Priority II and IV)[5]	Add one HOV lane (each direction)	$328.0
	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, IV)[2]	premium transit	$200.0
	MIC (Also in Priority II)[4]	Miami Intermodal Center	$50.0
	Interconnector: SR 836 to SR112 (Also in Priority II)[4]	new 4 lane & 2 HOV lanes	$50.0
	SR836 Corridor: SR826 to LeJeune[2]	add one HOV lane (each direction)	$55.5
	SR836 Corridor: SR826 to HEFT[2]	add one HOV lane (each direction)	$17.8
	NW 12 St: NW 110 Ave. to NW 122 Ave.	2 to 4 lanes	$0.6
	NW 12 St: NW 122 Ave. to NW 137 Ave.	2 to 4 lanes and new 4 lane	$1.0
	SW 137 Ave: NW 12 St to SW 8 St.	2 to 6 lanes	$6.8

* Refer to page 10 for notes.

	SW 137 Ave: SW 8 St. to SW 26 St.	4 to 6 lanes	$3.8
	SR874: HEFT to SR826 (6113823)[6]	4 & 6 lanes to 8 lanes (make 3 + 1 HOV each direction)	$36.1
	NW 87 Ave: NW 58 St. to Okeechobee Rd.	new 4 lane	$7.7
	NW 25 St: NW 107 Ave. to NW 112 Ave.	2 to 4 lanes	$1.3
	SW 112 Ave: Homestead Air Reserve Base to HEFT along SW 112 Ave.	widen to 6 lanes throughout	$5.0
	NW 97 Ave: NW 58 St. to NW 90 St.	2 to 4 lanes and new 4 lane	$5.1
	SW 137 Ave: US 1 to HEFT	2 to 4 lanes	$10.3
	I-395 Intelligent Corridor System[7]		$2.9
	Port Tunnel		$283.0
TOTAL	**Priority III**		**$1,200.6**

* Refer to page 10 for notes.

Adopted *7-Dec-95*

Recommended Cost Feasible Plan
Year 2015 Long Range Transportation Plan

Priority IV	***(Years 2010 to 2015)***		
Project No.	**Project**	**Description**	**Cost to Long Range Plan (millions)**
	Bicycle/Pedestrian/Greenways (Also in Priorities II, III)[1]		$12.9
	New & Replacement buses (Also in Priorities II, III)[5] and bus facilities		$122.8
	SR826: SR874 to I-75 (Also in priority II and III)[5]	Add one HOV lane (each direction)	$26.7
	SR836 Corridor: Seaport to Palmetto (Also in Priorities II, III)[2]	premium transit	$200.0
	NW 58 St: NW 97 Ave. to NW 117 Ave.	2 to 4 lanes	$3.7
	NW/SW 107 Ave: NW 41 St. to SW 8 St. (6113948)	4 to 6 lanes	$4.0
	SR836: HEFT to NW 137 Ave. (6113860)	new 6 lane expressway extension	$173.8
	Krome Ave: SW 8 St. to US1 (6113791)[6]	2 lanes with access rights protection	$47.2
	NW 183 St: I-75 to NW 57 Ave	4 to 6 lanes	$4.8
	SW 127 Ave: SW 120 St to SW 144 St	new 4 lanes	$3.9
	SW 184 St: SW 157 Ave to SW 147 Ave	2 to 4 lanes	$2.0

	NW 107 Ave: NW 106 St. to NW 41 St.	widen to 4 lanes	$18.4
	SW 112 Ave: US 1 to Moody Dr.	4 to 6 lanes	$10.7
	I-75 Intelligent Corridor System[7]		$7.3
	Okeechobee Rd: SR112 to SR826	widen to 6 lanes	$36.1
	SW 137 Ave: SW 184 St to US1	widen to 4 lanes	$10.3
	SW 97 Ave: SW 72 St to SW 40 St	2 to 4 lanes	$4.6
	NW 183 St: NE 6 Ave to US 1 (6114260)[6]	4 to 6 lanes	$2.0
	Franjo Rd: SW 184 St to Old Cutler	2 to 4 lanes	$0.4
	Krome Ave: SW 8 St to Okeechobee	2 lanes with access rights protection	$29.2
TOTAL	**Priority IV**	**End of funding for Year 2015 Cost Feasible Plan**	**$720.8**

* Refer to page 10 for notes.

Adopted *7-Dec-95*

Unfunded Element of Needs Plan (Priority IV)			
	SR 836/I395/I95 Major Interchange Improvement		$30.0
	NW 74 St: SR826 to HEFT	new 6-lane road	$9.7
	NW 36/41 St: NW 42 Ave. to HEFT	Express Street (grade separations, ITS, etc.)	$194.0
	I-95 Multimodal Master Plan Improvements[7]		$108.9
	I-95 Downtown Distributor Ramps[7]		$47.1
	SR826: NW 158 St. to GGI (6113880)[6]	add one HOV lane (each direction)	$65.8
	SR836 Corridor: Palmetto to FIU	premium transit	$265.0
	SR874: HEFT to SW 137 Ave	new 6-lane expressway extension with arterial step-down to SW 147 Ave	$69.7
	SR 985/SW 107 Ave: SW 40 St to SW 24 St (6113770)[6]	4 to 6 lanes	$1.2
	US 1: Downtown to Broward County Line	premium transit[8]	$803.2
	Kendall Corridor: Dadeland North to SW 147 Ave	premium transit[8]	$615.5
	SR836 Corridor: Downtown to Miami Beach	premium transit[8]	$332.0
	SR826: Dadeland to NW 74 St	premium transit[8]	$526.0
	SW 42/37 Ave: MIC to Douglas Rd. Sta.	premium transit[8]	$72.8
	SW 200 St: US1 to Quail Roost Dr.	2 to 4 lanes	$3.3
	SW 87 Ave: SW 168 St. to SW 216 St.	2 to 4 lanes	$6.5
	NW 170 St: NW 77 Ave. to NW 87 Ave.	2 to 4 lanes	$2.2
	SW 157 Ave: SW 88 St. to SW 104 St.	2 to 4 lanes	$1.3
	SW 152 Ave: US1 to SW 312 St.	2 to 4 lanes	$5.9

	LeJeune Rd: SR112 to NW 103 St.	5 to 6 lanes	$1.8
	SW 77 Ave: SW 104 St. to SW 152 St.	2 to 4 lanes	$6.7
	Central Parkway	New 6-lane parkway (assumed public sector costs for interchanges)	$75.0
	SW 120 St: SW 137 Ave to SW 117 Ave	4 to 6 lanes	$7.6
	SR836	Intelligent Corridor System (ICS)	$19.3
	SR112	Intelligent Corridor System (ICS)	$7.5
	SR826	Intelligent Corridor System (ICS)	$29.7
	SR874	Intelligent Corridor System (ICS)	$10.9
TOTAL	**Unfunded Needs**		**$3,318.6**

Priority II	**Funded**	**$1,114.3**
Priority III	**Funded**	**$1,200.6**
Priority IV	**Funded**	**$720.8**
	Total of Funded Priorities II, III, and IV*	**$3,035.7**

Unfunded Total of Needs Plan	**$3,318.6**

Total Funded and Unfunded Needs	**$6,354.3**

*The $3 billion does not represent total available and expected funding for the 15 years following the 1996 Transportation Improvement Program. Other funds expected to be available to Dade County include Federal Transit Administration Section 3 Discretionary, toll revenues and private sector contributions.

Notes:

[1]The Bicycle/Pedestrian/Greenways funds are estimated to consist of 1.5% of projected non-interstate highway revenues to the plan period. One-third of these funds are programmed in each of the three priority categories (II-IV) in which the Long Range Plan projects are grouped.

[2]The various components of the East/West (SR836) projects are programmed such that the total amount programmed represents the "LRTP funds" requested by the East/West Project Team. Additional revenues from private and other sources are a part of the East-West Project Financial Plan.

[3]The "Cost to the Long Range Plan" for the North Corridor represents 30% of the total project costs. The remaining 70% is assumed to be provided via Section 3 Federal Discretionary funding.

[4]The Interconnector and the Miami Intermodal Center (MIC) are being studied by a project team that published a July 1995 Draft Environmental Impact Statement (DEIS). The MIC Team has requested the equivalent of $300 million (1995 dollars) from "LRTP funds".

[5]One third of the new and replacement buses that are anticipated to be needed are programmed in each of Priorities II through IV. Per CTAC Resolution 48-95 and the MPO Adoption, $10 million in Priority III and $10 million in Priority IV are earmarked for the upgrade of transit-related facilities in the Kendall and Northeast Corridors. Also, for the project on SR826, adding HOV from SR874 to I-75, one-half of the funds are programmed in Priority II and one-half in Priority III.

[6]The "Cost to the Long Range Plan" for these projects is shown less the amounts already programmed in the current TIP.

[7]The interstate project costs are equal to the Interstate funds available through the year 2015 as calculated by FDOT - Central Office. To derive Year 2015 Interstate funding, 75% of the Central Office Year 2020 projections were utilized. Central Office had reported these funds in 1993 dollars. For the purpose of this report, these were inflated to 1995 dollars. Thus, both Interstate capital costs and Interstate funding are approximately equal to $240.7 million.

[8]The highest level of urban transit technology was assumed to develop these cost estimates. Future studies will determine the most feasible technology and its cost.

Long Range Transportation Plan Update (to the Year 2015)

Projects on the Turnpike System

(in Dade County, on the Homestead Extension of Florida's Turnpike (HEFT); listed from north to south)

HEFT: I-75 to Florida Turnpike (mainline)	widen from 4 to 6 lanes
HEFT: NW 41 Street to I-75	widen from 4 to 6 lanes
HEFT: at NW 74 Street	construct interchange
HEFT: SR-836 to NW 41 Street	widen from 4 to 6 lanes
HEFT: SR-836 to SR-874	add one HOV lane each direction
HEFT: Quail Roost Drive to Biscayne Drive	widen from 4 to 6 lanes

<u>Notes</u>:

1. These projects are listed from north to south for descriptive purposes only. This order does not suggest an implementation schedule. The Turnpike District is continuing Master Plan and other long range planning efforts to phase projects, including those listed above, on the Turnpike system.

2. These projects are assumed to be funded by the Turnpike, for purposes of developing the Cost Feasible Plan. Costs for these projects have not been subtracted from Dade County's Long Range Transportation Plan revenue stream. While further assessment will be done on this list of projects, they are considered to be needed and funded Priority II projects in this Plan.

3. The Turnpike District has reviewed, and concurs with, this list of project proposals. The Turnpike District has provided additional clarification that these projects will include, wherever possible, the addition of electronic toll traffic management (ETTM) and other high-tech components as Intelligent Transportation System (ITS) elements.

Long Range Transportation Plan Update (to the Year 2015)

Roadway Projects Assumed to be Funded by Developer/Private Sector

(costs for these projects have not been subtracted from the Year 2015 Transportation Plan revenue stream)

NW 7 Street: NW 77 Ave. to NW 82 Ave.	new 4 lane road
SW 42 Street: SW 147 Ave. to SW 157 Ave.	new 2 lane road
SW 56 Street: SW 152 Ave. to SW 157 Ave.	new 4 lane road
SW 56 Street: SW 157 Ave. to SW 167 Ave.	new 2 lane road
SW 72 Street: SW 154 Ave. to SW 167 Ave.	new 2 lane road
NW 82 Avenue: NW 7 St. to NW 12 St.	new 4 lane road
NW 90 Street: NW 107 Ave. to NW 87 Ave.	new 2 lane road
SW 104 Street: SW 152 Ave. to SW 167 Ave.	widen from 2 to 4 lanes and new 4 lane road (new 4 lane from SW 157 to 162 Aves.)
SW 147 Avenue: SW 8 St. to SW 26 St.	new 4 lane road
SW 157 Avenue: SW 42 St. to SW 56 St.	new 2 lane road
SW 157 Avenue: SW 56 St. to SW 72 St.	new 4 lane road
SW 157 Avenue: SW 184 St. to SW 216 St.	new 2 lane road
SW 167 Avenue: SW 56 St. to SW 88 St.	new 2 lane road
SW 167 Avenue: SW 88 St. to SW 104 St.	new 2 lane road
Central Parkway	6 lane parkway

<u>APPENDIX VII</u>

FHWA/FDOT LETTER AND RESPONSE

U.S. Department of Transportation
Federal Highway Administration

Florida Division Office

227 N. Bronough St.
Room 2015
Tallahassee, Florida 32301

October 31, 1995

IN REPLY REFER TO: HPR-FL

RECEIVED
NOV 02 1995
Ans'd............

Ms. Ysela Llort
State Transportation Planner
Florida Department of Transportation
Tallahassee, Florida

Dear Ms. Llort:

Subject: Florida - Long-Range Transportation Plan (LRTP) Updates

As the December 18, 1995 due date for metropolitan LRTPs approaches, the following is provided to assist in the completion of this initial series of LRTP updates.

1. <u>Content of the LRTPs:</u> It is expected that the format, components (narrative, maps, charts, tables, etc.), and specific areas of focus contained in the LRTPs will vary among each of the twenty-five Metropolitan Planning Organizations (MPOs). Enclosed is a brief summary of the general emphasis areas which will form the basis for this office's review and comment on the initial LRTP updates, concentrating on: (a) consideration of the fifteen metropolitan transportation planning factors; (b) project design concept and scope; (c) major transportation investments; (d) financial constraint; (e) public involvement; and (f) transportation conformity.

2. <u>Transmittal of the LRTPs:</u> Upon receipt of the completed and approved LRTPs, please provide this office with three copies for the non-attainment and maintenance area MPOs, and two copies for all other MPOs. In turn, this office will provide a copy of each LRTP to the Regional Offices of ETA (and EPA for non-attainment and maintenance areas) for their concurrent review and comment. Each set of LRTPs should include all applicable information that comprises the overall LRTP (written narrative and documentation, maps, technical appendices, charts and tables, etc.). In addition, for each of the non-attainment and maintenance area MPOs, the LRTP submittal must include three copies of the respective LRTP Conformity Determination Reports.

-more-

3. "Reconciliation" of Planning Process Products: Once metropolitan LRTPs are updated, a "reconciliation process" must occur, which will ensure consistency of the newly-updated LRTP with the existing MPO TIP and STIP, as well as with the Statewide transportation plan.

As a reminder, after December 18, 1995, the lack of a quantitatively updated, financially constrained, conforming (if applicable), and MPO-approved LRTP will result in direct consequences to the MPO's TIP. Specifically, new TIPs or TIP amendments approved by the MPO and the Governor after December 18, 1995, must be based on an updated LRTP. Without an updated LRTP, only TIPs and TIP amendments consisting entirely of grandfathered and/or minor projects of the types specified in 23 CFR 450.324(i) may be approved by the MPO.

Therefore, it is imperative that the MPOs and the Department continue to cooperatively work in maintaining the established completion schedules. Please provide this office with a revised schedule of anticipated LRTP completion dates by **November 15, 1995**.

If you have any questions, please do not hesitate to contact this office.

Sincerely yours,

Larry D. Anderson

for J. R. Skinner
Division Administrator

Enclosure

cc: Mr. Norman Feder, FDOT, District 1, w/encl
Mr. Aage Schroeder, FDOT, District 2, w/enl
Mr. Marvin Stukey, FDOT, District 3, w/encl
Mr. Joseph Yesbeck, FDOT, District 4, w/encl
Ms. Lennon Moore, FDOT, District 5, w/encl
Mr. Servando Parapar, FDOT, District 6, w/encl
Mr. David Twiddy, FDOT, District 7, w/encl
Mr. Howard Glassman, MPOAC, w/encl
Mr. Leon Larson, HPP-04, w/encl
Ms. Susan Schruth, FTA - Region 4, w/encl

GENERAL CONTENT OF METROPOLITAN LONG-RANGE TRANSPORTATION PLANS (LRTPs) FOR DECEMBER 18, 1995 DUE DATE

October 1995

1. **Metropolitan Transportation Planning Factors:**

Consideration of the fifteen metropolitan transportation planning factors, including (but not limited to):

- As appropriate, identification of adopted congestion management strategies such as: traffic operations; ridesharing; pedestrian and bicycle facilities; alternative work schedules; freight movement options; high occupancy vehicle treatments; telecommuting; and public transportation improvements (e.g., regulatory, pricing, management, and operational options).

- Assessment of the capital investment and other measures necessary to preserve the existing transportation system. From a roadway perspective (both existing and future), this pertains to operational improvements, resurfacing, restoration, and rehabilitation. For existing and future transit facilities, this also includes operations, maintenance, modernization, and rehabilitation.

- As appropriate, consideration of: (1) the area's comprehensive long-range land use plan and metropolitan development objectives; (2) national, State, and local housing goals and strategies, community development and employment plans and strategies, and environmental resource plans; (3) local, State and national goals and objectives such as linking low-income households with employment opportunities; and (4) the area's overall social, economic, environmental, and energy conservation goals and objectives.

- As appropriate, identification of proposed transportation enhancement activities as defined in 23 U.S.C. 101(a).

- In accordance with the July 20, 1995 FHWA/FTA policy memorandum on development and implementation of the ISTEA management systems, the LRTP needs to give appropriate consideration to the results of the management systems. In Transportation Management Areas (TMAs) that are non-attainment areas for carbon monoxide or ozone, this LRTP update must include identification of single-occupant vehicle (SOV) projects resulting from an interim Congestion Management System.

2. **Project Design Concept and Scope:**

The LRTP should include design concept and scope descriptions of all existing and proposed transportation facilities in sufficient detail (regardless of funding source) to assist in developing cost estimates and performing conformity determinations in non-attainment and maintenance areas.

3. **Major Transportation Investments:**

For major transportation investments for which analyses are not yet complete, the LRTP should indicate that the design concept and scope (mode and alignment) have not been fully determined and will require further analysis. In such an instance, the LRTP should identify these corridors/subareas. Furthermore, in non-attainment and maintenance areas, the set of assumed alternatives must be in sufficient detail to permit LRTP conformity determinations under 40 CFR Parts 51 and 93.

4. **Financial Plan:**

The LRTP must include a financial plan that demonstrates the consistency of proposed transportation investments with both "currently available" and "reasonably available" funding sources. In addition, the financial plan must include the estimated costs of constructing, maintaining, and operating the total (existing plus planned) transportation system over the duration of the LRTP. The estimated revenue by existing source (Federal, State, local, and private) must be determined and any shortfalls identified, including strategies for ensuring their availability for proposed investments. Likewise, proposed new revenues and/or revenue sources to cover shortfalls are to be identified, including strategies for ensuring their availability for proposed investments. Existing and proposed revenues must cover all forecasted capital, operating, and maintenance costs.

Although the financial plan may assume the future existence of new revenue sources that either do not currently exist or that require legal, executive, or legislative steps, specific commitments and strategies that ensure the availability of such funding sources must be specified in the financial plan. Simply identifying new funding sources without identifying strategies for ensuring their availability is not acceptable.

Past experience (including historical data) with obtaining "new" types of funding (e.g., success in obtaining legislative and/or voter approval for new bond issues, tax increases, special appropriations of funds, etc.) should be included. Where efforts are already underway to obtain a new revenue source, information such as the amount of support (and/or opposition) for the measure(s) by the public, elected officials, business community, and special interests should be provided.

Additionally, for "innovative financing" techniques, the financial plan should identify the specific actions necessary to secure funds through these techniques, including the responsible parties, steps to be taken (including the timetable), and extent of commitment by the responsible parties.

The following are examples in which new funding sources typically would not be considered "reasonably available": (1) past efforts to enact new revenue sources generally have not been successful; (2) the extent of current support by the public, elected officials, business community and/or special interests indicates that passage of a pending funding measure is doubtful; or (3) no specific plan of action for securing the funding source is available.

5. **Public Involvement:**

Prior to MPO approval, the LRTP document must contain an assurance that during the development of the LRTP, adequate public involvement opportunities were provided to public officials (including elected officials) and the general public, utilizing the MPO's adopted public involvement process pursuant to 23 CFR 450.316(b)(1).

6. **Transportation Conformity:**

In non-attainment and maintenance areas for transportation-related pollutants, FHWA and FTA (in coordination with EPA), as well as the MPO, must make a conformity determination on any new/revised LRTP in accordance with 40 CFR Parts 51 and 93.

REQUIRED CONSIDERATION OF FEDERAL PLANNING FACTORS AND HOW THEY ARE REFLECTED IN DADE COUNTY'S YEAR 2015 TRANSPORTATION PLAN

In general, many of the ISTEA factors and considerations were taken into account throughout the entire plan development process through the virtue of the composition of the Steering Committee and Technical and Policy Committee structure. The Steering Committee represented a cross-section of planning professionals from aviation, land use, environmental and transportation departments and agencies, as well as representatives of the citizenry. The Plan was reviewed a major milestones by the MPO's technical review committee, the Transportation Planning Technical Advisory Committee (TPTAC), and endorsed by the Transportation Planning Council (TPC) and the Citizens' Transportation Advisory Committee (CTAC).

It is through this combination of (a) the perspectives of a diverse array of professionals in developing the Plan and (b) a comprehensive review and endorsement by the range of departments and interests represented on the policy and citizens' committees that leads one to conclude that the Year 2015 Transportation Plan has followed the policy direction of ISTEA.

The Year 2015 Transportation Plan has exercised the benefits of ISTEA through its:

- emphasis on a systems approach, in particular on alternative modes, environmental protection, regional and intermodal connectivity, and overall mobility of persons and goods;

- emphasis on a holistic approach to planning, which expanded concepts used in previous updates to include equity, reliability and environmental and societal impacts, and made cooperative planing between state and local entities an integral part of the Plan development;

- emphasis on flexibility in allocating funds among modes (roadways, transit, HOV, intermodal, bicycle/pedestrian/greenway) further demonstrating that funding decisions were clearly wide-ranging;

- emphasis on aesthetics, with both its planning objectives and funding set-asides for scenic byways and similar enhancements to the urban landscape, as well as the policy decision to include the consideration of aesthetic issues as a part of the planning process for all projects; and its

- emphasis on public involvement, reaching out and moving the diverse communities in Dade County toward the transportation decision-making process, and otherwise keeping an informed citizenry as key participants in the transportation visioning of the County.

Clearly, the Year 2015 Transportation Plan for Dade County has been a major departure from previous efforts and has taken every opportunity from ISTEA's potential and turned them into workable strategies and commitments through its goal, objectives, policy recommendations, and project funding decisions. Table VII-1 lists the 15 factors that must be addressed through ISTEA; Table VII-2 provides a cross-reference of plan objectives with the 15 ISTEA factors.

I. Metropolitan Transportation Planning Factors

- *Identification of adopted congestion management strategies (such as traffic operations; ridesharing; pedestrian and bicycle facilities; alternative work schedules; freight movement options; high occupancy vehicle treatments; telecommuting; public transportation improvements, (e.g., regulatory, pricing, management, and operational options).*

Table VII-1
15 ISTEA FACTORS

1. The preservation of existing transportation facilities and, where practical, ways to meet transportation more efficiently;

2. The consistency of transportation planning with applicable federal, state, and local energy conservation programs, goals, and objectives;

3. The need to relieve congestion and prevent congestion from occurring where it does not yet occur;

4. The likely effect of transportation policy decisions on land use and development and the consistency of transportation plans and programs with provisions of all applicable short-term and long-term landuse and development plans;

5. The programming of expenditures on transportation enhancements activities as required by federal law;

6. The effects of all transportation projects to be undertaken within the metropolitan area, without regard to whether such project are publicly funded;

7. Any international border crossing and access to ports, airports, intermodal transportation facilities; major freight distribution routes, national parks, recreation areas, monuments and historic sites and military installations;

8. The need for connectivity of roads within the metropolitan area with roads outside the metropolitan area;

9. The transportation needs identified through use of the management systems required under the Act;

10. The preservation of rights-of-way for construction of future transportation projects, including the identification of unused rights-of-way which may be needed for future transportation corridors and identification of those corridors for which action is most needed to prevent destruction or loss;

11. Any available methods to enhance the efficient movement of freight;

12. The use of life-cycle costs in the design and engineering of bridges, tunnels, or pavement;

13. The overall social, economic, energy, and environmental effects of transportation decisions;

14. Methods to expand and enhance transit services and to increase the use of such services; and;

15. Capital investments that would result in increased security in transit systems.

Table VII-2
Cross Reference of Plan Objectives with ISTEA Planning Factors

MULTIMODAL TRANSPORTATION SYSTEM DEVELOPMENT

1. Plan for the provision of transportation services and facilities to serve the needs of the population in the metropolitan planning areas, in accord with federal and state transportation planning process requirements.
2. Develop an integrated multimodal transportation system that emphasizes people movement by facilitating the transfer between modes, and the connectivity of the transportation network within and outside the metropolitan area.
3. Preserve rights-of -way in corridors anticipated to be heavily traveled in the future.
4. Consider the effect of transportation policies on land use development for both the short and longer range.

TRAFFIC FLOW/MOBILITY

5. Preserve existing highway and transit facilities by improving efficiency and safety.
6. Achieve the operating level-of-service standards adopted in the Comprehensive Development Master Plan and in the Florida Intrastate Highway System Plan.
7. Plan for maximum utilization of existing transportation capacity, relieve congestion and prevent congestion from occurring where it does not yet occur.

SOCIAL

8. Plan and develop a transportation system that preserves the social integrity of urban communities.

ENVIRONMENTAL

9. Plan for a transportation system that gives due consideration to air quality and environmentally sensitive areas, and conserves energy and natural resources and that is consistent with applicable federal, state and local energy conservation program goals and objectives.
10. Plan for transportation projects that enhance the quality of the environment.

ECONOMIC

11. Define a sound funding base utilizing public and private sources that will assure operation and maintenance of existing facilities and services and timely implementation of new projects and services.
12. Provide for and enhance the efficient movement of freight.

Table VII-2 (Continued)
2015 Metro-Dade Transportation Plan
Cross Reference of Plan Objectives with ISTEA Planning Factors

Plan Objectives	**ISTEA PLANNING FACTORS**														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	X	X		X		X		X		X			X		
2			X	X	X	X	X	X	X	X				X	X
3	X	X		X		X				X					
4				X									X		
5		X					X			X		X		X	X
6	X	X	X						X						
7			X						X					X	X
8	X	X	X												
9		X		X					X			X			
10	X	X	X	X		X							X		
11		X		X	X					X		X		X	
12							X				X				

Funds have been allocated in the Long Range Transportaion Plan for the continuation of programs already included in the Transportation Improvements Program (TIP) and Unified Planning Work Program (UPWP). These programs implement those strategies described above - such as, a ridesharing program and a program that works with employers to provide alternative work schedules. In the current TIP, funding allocations are made to Gold Coast Commuter Services for their provision of rideshare-matching services.

Another aspect of ISTEA is the need to address intermodalism within the Plan. As part of the Plan Update process several potential intermodal linkage locations were identified and are shown on Table VII-3.

These site locations were observed during the LRTP Update process as having potential for offering convenient transfer between travel modes due to their proximity to highway, transit, and non-motorized corridors. These locations are recommended for further study. These are in addition to the Miami Intermodal Center (MIC) at MIA currently in PD&E Study and the Golden Glades Multimodal Facility already through Feasibility Study phase and in the Unfunded Section of the 1996 TIP.

- *Assessment of capital investment and other measures to preserve existing system (from a roadway perspective (both existing and future, this pertains to operational improvements, resurfacing, restoration and and rehabilitation; for existing and future transit, this also includes operations, maintenance modernization and rehabilitation))*

For the first time, this Long Range Plan was required to consider the **lifecycle costs** of projects. This was required under the CAAA and ISTEA, so that rather than only determining the affordability of a proposed project based upon the capital costs of the project, the operations and maintenence (O&M) costs over the life of the project now had to be considered. The O&M costs of the various cost feasible projects are discussed in Section II(C)2. of this report.

Table VII-3. Potential Intermodal Linkage Locations

- All Existing Metrorail Stations

• Okeechobee	• Allapattah	• Vizcaya
• Hialeah	• Santa Clara	• Coconut Grove
• Tri-Rail	• Civic Center	• Douglas Road
• Northside	• Culmer	• University
• Dr. Martin Luther King Jr.	• Overtown/Arena	• South Miami
• Brownsville	• Government Center	• Dadeland North
• Earlington Heights	• Brickell	• Dadeland South

- PalTrans (the Palmetto Expressway/NW 74 Street Interchange/Palmetto Metrorail Station Area).
- Town and Country Mall
- South Dade Greenways Network
- 163 Street Mall
- The "juncture" of Tri-Rail, North Corridor, NW 27 Avenue in Opa-Locka
- Metro Zoo
- Downtown Terminal
- Busway Station at Cutler Ridge
- Port of Miami
- Busway Station at perrine/136 Street
- Dade County Park and Ride Lots
- Buena Vista Yards
- FEC and CSX Rail Yards
- Joe Robbie Stadium
- Miami International Airport (MIA)
- Freedom Tower Area
- All General Aviation Airports
- FIU University Park Campus Area
- Omni and Brickell Metromover Stations
- The "juncture" at HEFT, US-1, Palm Drive, Krome Avenue, and Card Sound Road in Florida City
- Aventura Mall
- Miami Beach Convention Center & Lincoln Road
- Cutler Ridge Mall
- Alton Road/5th Street Area

Toward that end, the Intelligent Corridor System (ICS) projects depicted in Appendix VI of this report also help to preserve the existing system, in part through their maximization of the efficiency of previously constructed facilities.

- *Consideration of the area's long range land use plan (including housing goals, community development, employment plans and strategies, linking low-income households with employment strategies and the area's overall social, economic, environmental, and energy conservation goals and objectives)*

The Metro-Dade Transportation Plan (to the Year 2015) considers Dade County's Comprehensive Development Master Plan (CDMP) through the goals and objectives adopted in both Plans, through coordination between the Plans and through the data used in developing the Transportation Plan.

The Land Use Element of Dade County's Comprehensive Development Master Plan establishes the growth policy that includes, among other intents, that physical expansion of the urban area should be managed to occur (1) at a rate commensurate with projected population and economic growth, (2) in a contiguous pattern centered around a network of high-intensity activity centers well connected by multimodal intra-urban transportation facilities, and (3) in locations which optimize efficiency in public service delivery and conservation of valuable natural resources. Specifically, as the Land Use and Housing elements of the CDMP reflect existing urban service capacities and constraints, those elements also establish locations where future service improvements will have to follow. In this manner, the CDMP provides (a) a preview of where travel demand may be expected to increase, and (b) another benchmark from which to analyze the output from the travel demand model.

The CDMP Amendments adopted in April and October of every year also reflect the MPO's updated Metro-Dade Transportation Plan. MPO's must be consistent with federal and state requirements and each urbanized area must have in place a continuing, cooperative and coordinated (3-C) process consistent with the planned development of the urbanized area. In Dade County's case, this would mean consistency with the County's future growth and land use patterns as reflected in the CDMP Land Use Element and Land Use Plan map.

The transportation needs identified in the Traffic Circulation and Mass Transit elements are intended to be met in a 6-year period and included as a part of the Capital Improvement Element. The Traffic Circulation, Mass Transit and Capital Improvement elements all draw upon the various existing mechanisms (both the Transportation Plan and the TIP) for determining those transportation investment decisions and priorities.

The Data Used in Developing the Plan

The Long Range Transportation Plan travel analysis is based on the Dade County demographic projections, which reflect local policies for land use in the region. As required by ISTEA, these planning assumptions represent the most realistic assumptions for forecasting travel in the region.

Population estimates and projections are an important part of the comprehensive planing nature of developing the Transportation Plan in the ISTEA climate, as well as being an important component of the growth management responsibilities of the County. The changing pace and growth of urban development in Dade County requires that the population figures (both countywide and subarea) be updated from time to time, as new information becomes available. Prior to the kick-off of each Transportation Plan Update, a major effort begins in the Research Division of the Planning Department to overhaul all relevant datasets for use in the travel demand model, including the creation of new population and employment projections, as well as the other variables.

The adoption of the population projections at the subarea level (in the Comprehensive Plan) by the Board of County Commissioners results in the data becoming an official expression of public policy and to the extent that these policies succeed in guiding future urban development, the projections are an important fact in the shaping of urban development and travel patterns. Doubtless, these patterns, as they evolve over time, will differ from the projections done for previous LRTP Updates.

Nonetheless, the regular articulation of projections facilitates a coordinated land use/transportation planning process while fostering the orderly urban development of the County.

As the travel demand model uses the socio-economic projections as input, and the resultant high-demand vectors-of-travel are identified, the Long Range Plan Steering Committee analyses the results and tests various forms of "treatment" to alleviate the congestion (through the Transit-Emphasis and Highway-Emphasis phases of Needs Plan development) which ultimately form the LRTP's ""program of projects". Three major points must be highlighted in this regard: (1) After the population and employment projections are "fed" into the model, the resulting levels-of-service pinpoint areas around the County which are anticipated to violate the County's Level-of-Service standards, per the CDMP, and (2) the Steering Committee develops Needs Plan improvement proposals which are specifically defined to address adopted CDMP transportation level-of-service standards, and (3) the Steering Committee analyzes any particular congestion treatment proposal (roadway widening, transit corridor) for potential conflict with the CDMP and for compatibility with the ISTEA Planning Factors.

- *identification of proposed transportation enhancement activities*

In every Priority phase in the Cost Feasible Plan (See Appendix VI) funding has been allocated for "Bicycle/Pedestrian/Greenways" projects. These funds will finance mainly "stand alone" transportation enhancements activities. The 1-1/2% set-aside for Bicycle/Pedestrian/Greenway Projects policy recommendation from the Long Range Transportation Plan Steering Committee is explained below:

> **The 1-1/2% set-aside for Bicycle/Pedestrian/Greenway Projects is a policy recommendation from the Long Range Transportation Plan Steering Committee. It represents a commitment form this urbanized area toward non-motorized uses, such as bicycle, pedestrian and greenway projects. The set-aside is intended for stand-along projects of this nature, but not for sidewalks or bike racks. Sidewalks and bikelanes should be incorporated into typical sections during preliminary engineering work phases of roadway projects. Sidewalks not a part of a typical section or roadway project can continue to be funded through secondary programs such as the Road Impact Fee program. The set-aside could be used to fund bikelanes that would fill in "missing links"**

in existing bikelane projects. The set-aside would be derived by taking 1-1/2% of all eligible surface transportation capital expenditures, except Interstate, airport and seaport. This set-aside is separate from, and not to be confused with, the Transportation Enhancements program.

Other transportation enhancements activites will be integrated into larger roadway, and transit cosntruction projects. Metro-Dade's Transportation Aesthetics Review Committee (TARC) is becoming involved in all phases of project development and design to incorporated enhancements. Toward that end, the TARC drafted - and the MPO board adopted -a new Long Range Transportation Plan Objective to address these activites. This is Objective 11, which states:

Apply aesthetic principals to planning of transportation projects, utuilizing a multidisciplinary collaborative team approach which humanizes these projects through the design process, and helps instill a sense of place and community pride.

- *appropriate consideration to the results of the management systems (in TMAs that are non-attainment for carbon monoxide or ozone, this LRTP update must include identification of SOV projects resulting from an interim CMS).*

The urbanized area encompassed by the Metro-Dade Metroplolitan Planning Organization (MPO) has been redesignated as a maintenace area for ozone, effective April 25, 1995. As such, emissions resulting from the implementation of the Year 2015 Long Range Plan were compared to the emission budgets established by the redesignation request maintenance plan. It was calculated that implementation of the 2015 LRTP will result in emissions which fall below the emissions budget set for the analysis years of 1990, 2005, and 2015.

Thus, during the Maintenance Period, the emissions expected from the implementation of the Long Range Plan are consistent with the motor vehicle emissions budgets in the approved maintenance plan, per 51.428 and 51.430.

2. Project Design and Scope

In most instances, projects included in the Needs and Cost Feasible Plans were not new proposals. Even prior to ISTEA, Dade County's MPO was guided by principals of multimodalism. The MPO recognized the improtance of a multimodal transporation system capable of serving the needs of a diverse community. The result is that many of the projects considered have been examined through previous studies that had well defined scopes, alternatives analysis, and projected cost estimates. Many of the projects, such as the East/West Multimodal Corridor Study and the Miami Intermodal Center Study, reflect the ongoing committment to intermodal systems development in Dade County.

For projects that were new to the Long Range Planning process many sources were researched to provide insight into appropariate size, scope, and design standards. The FDOT Work Program, the 2020 Florida Transportation Plan, the Program of Interested projects and even the TIP were then used to idtntify reasonable costs for these projects. Additionally, the requirements of the CAAA have promoted the development of reliable data describing most of the projects in the LRTP. The result is a reliable, well researched and documented scope, design concept (where appropriate) and cost estimate for each project included in the LRTP.

3. Major Transportation Investments

(LRTP should include design concept and scope descriptions in sufficient detail to assist in developing cost estimates and performing air quality conformity determinations).

(the LRTP should indicate that the design concept and scope (mode and alignment) have not been fully determined and will require further analysis in certain corridors; the set of assumed alternatives must be in sufficient detail to permit LRTP air quality conformity determinations).

A substantial amount of detail regarding the proposed design concepts and scopes associated with the various major transit project proposals was available from the Transitional Study. This study, and the data excerpted from it for use in the development of the Long Range Plan, are detailed in Section II (C)2. of this report.

Additional, even more in depth, details were available for the developement of the Long Range Plan as it pertains to the proposed East/West (SR836) Transit Corridor and the Miami Intermodal Center, as draft MIS/DEISs for these projects were available prior to the completion of the Long Range Plan. Comonents of these draft reports were incorporated into the Long Range Plan. Important componenets of the reports that were included in the Plan include (1) the costs - directly translated into the project costs for the Plan, and are discussed in Section II(C)2. of this report, and the design concept and scope (alignment, stop locations,etc.) that were actually included in the model, to maximize the accuracy of the forecasts.

It is, of course, important to understand that the design concepts and scopes for the projects that comprise the Long Range Transportation Update to the year 2015 have not yet been finalized, and that Major Investment Studies will be needed to be performed in major corridors for this to occur. But, assumed modes, alignments, etc. are currently available in sufficient detail to allow for a reasonable air quality conformity determination (as is contained in Appendix I of this document).

4. Financial Plan

(LRTP must demonstrate the consistency of proposed transportation investments with both "currently available" and "reasonable available" funding sources; must include the estimated costs of constructing, maintaining and operating the total (E+C) system over the duration of the Plan; the estimated revenue by existing source must be identified and any strategies for any shortfalls included; proposed new revenues and/or strategies to cover revenue shortfalls should be identified; existing and proposed revenues must cover all forecasted capital, operating and maintenance costs; specific commitments and strategies to ensure availability of new revenue sources must be identified; past experience with obtaining new funding should be included; for "innovative financing" techniques, specific

actions, responsible parties steps to be taken, timetable and extent of commitment should be identified).

Individual project *costs* for the projects included in the Cost Feasible Plan are described in Section II(C)2. of this report, and are depicted in Appendix VI. An in-depth Financial Resources Plan for the Long Range Plan Update to the Year 2015 can be found under separate cover as Technical Report No. 9. The following is a synopsis of that Technical Report:

The costs of transportation maintenance and improvements typically exceed available financial resources or funding. Therefore, to make the best use of available funding, it is necessary to develop a realistic financially-constrained transportation plan. A cost-feasible plan also provides the context for strategies to maximize the efficiency of the existing transportation system.

The Metropolitan Planning Rule, published by the U.S. Department of Transportation, outlines the federal requirements for a cost-feasible transportation plan. An excerpt is provided below:

Metropolitan Planning Rule:

"The Plan shall include a financial plan that demonstrates the consistency of proposed transportation investments with already available and projected sources of revenue. The financial plan shall compare the estimated revenue from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the period of the plan."

An analysis of transportation financial resources has been performed to determine what funds will be available to implement the 2015 Long Range Transportation Plan. Specifically, transportation revenue has been projected for the years 2001 - 2015. Funding for the years 1995 - 2000 is already programmed as part of state and local work programs, and this funding has been committed to existing projects.

Basis of Financial Resource Projections

The projection of Dade County's transportation financial resources for the year 2015 is based on the estimated growth of:

- population;
- gasoline/diesel fuel use;
- vehicle miles traveled;
- gasoline/diesel fuel efficiency;
- motor vehicle registrations; and
- rental car surcharges.

Current fuel taxes and transportation-related fees have been applied to the resulting projections of fuel consumption and vehicle registrations.

Program Funding

Transportation programs, and associated funding, can be divided into four categories;

<u>Product</u>. Capacity projects -- highway and public transportation, safety projects, and system preservation (resurfacing and bridge projects).
<u>Product Support</u>. Planning and engineering for all capacity programs.
<u>Operations and Maintenance</u>. Routine activities such as mowing, trash removal, patching of potholes, etc.
<u>Administration</u>. Organizational support for all programs.

The revenue forecast reported herein pertains to financial resources which are projected to be available for capacity-related improvements (Product). This revenue does into include funds set aside for resurfacing -- system preservation. The capacity-related improvements include highway, transit, rail and transportation systems management projects.

For the planned capacity projects, sufficient funding has been reserved for Product Support, Operations and Maintenance, and Administration. An adequate amount of funding has been set aside for the safety, preservation, operation and maintenance of the current plus planned transportation system.

Categories of Funding

Revenue projections have been made for federal, state and local funding sources. These projections apply to the following categories of funding (and eligible improvements):

- ***Interstate Highway System*** (widening, ramps and interchange improvement projects on the Interstate system);
- ***Florida Turnpike District*** (toll road projects which are an expansion of the Florida Turnpike System);
- ***Florida Intrastate Highway System*** (improvement to the FIHS);
- ***Arterial Roads*** (new roads or multi-laning of State roads and non-State roads which are federal-aid eligible under the Surface Transportation Program);
- ***Transportation Systems Management or TSM*** (traffic operations projects, e.g., intersection improvements);
- ***Transit*** (operating subsidies and capital facilities/equipment for transit service);
- ***Transportation Enhancement Projects*** (non-traditional transportation improvements, e.g., bicycle/pedestrian facilities, landscaping); and
- ***Impact Fees*** (capacity road projects, widening or intersection improvements, which serve new development).

Revenue Projections

The revenue projections for the Interstate Highway System, Florida Intrastate Highway System, Arterial Roads and State Transit, as presented herein, were developed by the Florida Department of Transportation and shown in Table VII-2 and Figure VII-1.

Funding for Transportation System Management (TSM) projects will be allocated from the total projection for Arterial Roads -- $1.234 billion. No specific percentage has been set-aside, as each project will be judged on a case-by-case basis. The Surface Transportation Program (STP), is the funding source for Transportation Enhancement Projects. It is estimated that approximately 10% of the STP funding will be allocated for these projects form the total funding for Arterial Roads.

Dade County will receive approximately $240 million for Intermodal/Rail projects. The Miami Intermodal Center will be funded with a portion of these funds. Other rail projects affecting the Tri-County Rail system and the Miami Metro-mover will be eligible for funds from this category.

Local gas tax revenues (county and city) were projected as part of the financial resources analysis. It was determined that 50% (approximately $1.12 billion), of all locally generated gas tax revenues will be required for the maintenance and operation of the existing transportation system.

Impact fees are currently collected by the City of Miami and Dade County Board of County Commissioners. A projection of impact fee revenue was accomplished based on historical trends for fee collections.

Legislation requires that at a minimum, 15% of STP funds be dedicated to transit. It is estimated that the Metro-Dade Transit Agency will receive in excess of the $185.1 million minimum transit requirement.

5. Public Involvement

(LRTP must contain an assurance that adequate public involvement opportunities were provided to public officials and to the general public, per the MPO's adopted public involvement process).

The MPO has an adopted Public Involvement Process document that is available under separate cover. Basically, the document ensures full, meaningful public involvement in the development of the Long Range Element of the Year 2015 Transportation Plan in several ways.

First, the Citizens Transportation Advisory Committee (CTAC) of the MPO was involved from the kick-off of the Plan Update project. Members of the CTAC were invited to the monthly meetings of the Plan Steering Committee. Moreover, the Chairman of the CTAC was appointed as a voting member of the Steering Committee, and was an active participant in the development of the draft Plan. Additionally, the CTAC was kept informed of the status of the Plan and issues related to the Plan and its development over the two years was a routine information item on the CTAC subcommittee and full committee monthly agendas.

Interaction with the media ensured more exposure of the Plan and its development with the general public. Notices on the development of the Plan and of public informational meetings as well as the public hearing for the adoption of the Plan were published in three local newspapers, in English and Spanish, as appropriate. In addition, interviews were conducted by one news radio station, one local television station, and one local newspaper.

Table VII-4. Revenue for Capacity Related Improvements Years 2001 - 2015

Category	$Millions
Interstate	$241
FIHS	$132
Arterial Roads	$803
State Transit	$185
TMAs	$246
Intermodal/Rail	$240
Impact Fees	$161
Local Taxes	$1,118
TOTAL	**$3,126**

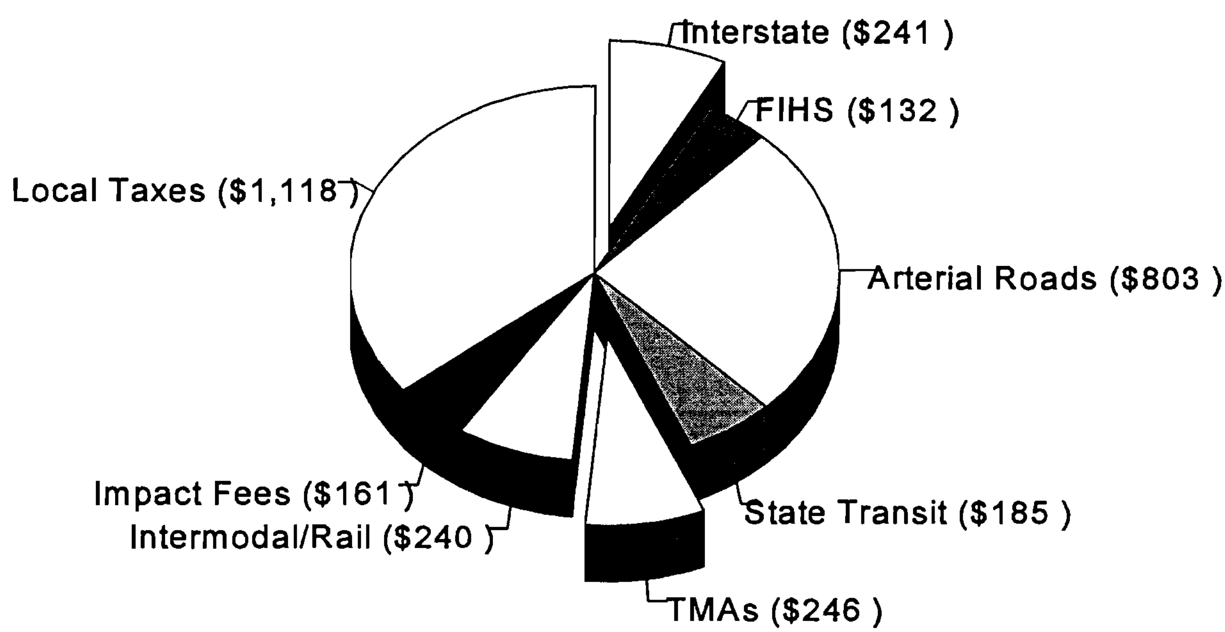


Figure VII-1. Dade County Revenue for Capacity Improvement Projects: 2001-2015 (in 1995 Millions)

Public informational materials were professionally prepared and distributed to neighborhood associations, other agencies and transportation planning committees, as well as the CTAC. During May and June of 1995, public informational meetings were conducted to solicit input on the draft Plan from the general public. Presentation boards, promotional brochures and descriptive information booklets were prepared and distributed so that citizens may browse and follow along with the information as it was presented. Forms were available for citizens to register their comments on the draft Plan, and citizens were encouraged to take the materials and forms home and mail or fax their comments to the MPO. CTAC members actually hosted the community meetings, which were conducted at various locations throughout the county. After the advertised, regularly-scheduled community meetings were concluded, the MPO responded to some special requests from homeowner associations, etc. by conducting customized presentations for their area.

Tables depicting Public Involvement Activities are depicted in Appendix III of this document, which also further describes the process.

6. **Transportation Conformity** - The Long Range Transportation Plan to the Year 2015 does meet the requirements for Air Quality Conformity. The Conformity Report, in its entirety, can be found in Appendix I of this document.