
**Miami Urban Area
Transportation Study (MUATS)**

**Model Validation and
Year 2010 Plan Update**

**Technical Memorandum
Financial Resources**

submitted to:



Metro-Dade County
**Metropolitan Planning
Organization**

prepared by:



in association with:

Spillman Boatman and Associates, Inc.
The Urban Analysis Group



SPILLMAN BOATMAN GROUP

8600 N.W. 36TH STREET
MIAMI, FLORIDA 33166-6622
305/592-7275

October 30, 1989

Mr. Jose Luis-Mesa, Director
MPO Secretariat
Metropolitan Dade County
111 NW First Street
Suite 910
Miami, FL 33128

**RE: MIAMI URBAN AREA TRANSPORTATION STUDY
FINANCIAL RESOURCES TECHNICAL MEMORANDUM**

Dear Mr. ^{Jose}Mesa:

Pursuant to our recent conversations, enclosed are six copies of the revised Financial Resources Technical Memorandum. We have incorporated tables and associated text projecting transit capital and operating revenues and costs, based on MDTA's Transit Financial Study for the Base System.

We discussed use of these projections with MDTA (S. Ballard, A.R. Panama), and it was agreed that they are the best long-term financial projections for the existing transit system.

Please let me know if you or others have further comments regarding the memorandum.

Sincerely,

PBS&J/SPILLMAN BOATMAN GROUP


Larry A. Boatman

LAB/
enclosure
cc: Myung-Hak Sung, w/enclosure
01-412.00

**MIAMI URBAN AREA TRANSPORTATION STUDY
MODEL VALIDATION AND YEAR 2010 UPDATE**

**Technical Memorandum
Financial Resources**

Prepared by:

Spillman Boatman & Associates

A Division of Post, Buckley, Schuh & Jernigan, Inc.

Prepared for:

**Gannett Fleming
Engineers and Planners**

September 15, 1989

(Revised October 30, 1989)

**METRO-DADE COUNTY
METROPOLITAN PLANNING ORGANIZATION**

TABLE OF CONTENTS

INTRODUCTION	1
TRANSPORTATION FUNDING SOURCES	2
HIGHWAY FUNDING	2
Federal Gas Tax	2
State Motor Fuel Taxes	2
Local Gas Taxes	5
Motor Vehicle Fees.....	6
Impact Fees	6
Tolls	7
Metropolitan Transportation Authority (MTA) Tax	7
TRANSIT FUNDING	8
Urban Mass Transportation Administration (UMTA).....	8
State of Florida	9
Local Funds.....	9
HISTORICAL FUNDING LEVELS IN DADE COUNTY	10
FORECAST OF FUTURE FINANCIAL RESOURCES.....	14
METHODOLOGY	14
GROWTH METHOD	14
FORMULA METHOD.....	15
TRANSIT CAPITAL AND OPERATING FUNDS.....	15
POTENTIAL NEW SOURCES OF TRANSPORTATION FUNDING	26
CONCLUSIONS.....	29

LIST OF TABLES

TABLE 1 - HIGHWAY AND TRANSIT FUNDING SOURCES.....	3
TABLE 2 - METRO-DADE COUNTY PROGRAMMED TIP EXPENDITURES	12
TABLE 3 - ASSUMPTIONS - GROWTH METHOD	17
TABLE 4 - PROJECTED ANNUAL GAS TAXES	18
TABLE 5 - PROJECTED GAS TAX FUNDS AVAILABLE TO DADE COUNTY.....	19
TABLE 6 - PROJECTED MOTOR VEHICLE FEES AVAILABLE TO DADE COUNTY	20
TABLE 7 - PROJECTED ANNUAL TRANSPORTATION REVENUES.....	20
TABLE 8 - PROJECTED FINANCIAL RESOURCES - FORMULA METHOD	22
TABLE 9 - DADE COUNTY SHARE OF EXISTING TAXES.....	23
TABLE 9-A - TRANSIT OPERATING REVENUES AND COSTS	24
TABLE 9-B - TRANSIT CAPITAL REVENUES AND USES.....	25
TABLE 10 - POTENTIAL TRANSIT FINANCING SOURCES - METRO-DADE TRANSIT FINANCIAL STUDY.....	27
TABLE 11 - POTENTIAL NEW TRANSPORTATION FUNDING SOURCES	28

LIST OF FIGURES

FIGURE 1 - AVERAGE TIP EXPENDITURES FY 80/81 - 88/89	13
FIGURE 2 - PROGRAMMED TIP EXPENDITURES	13

INTRODUCTION

The purpose of this report is to estimate the financial resources which may be available to implement Dade County's Long Range Transportation Plan. The financial analysis is part of the Miami Urban Area Transportation Study designed to identify and document needed highway and transit improvements for the year 2010. The financial analysis will be used to determine the "cost feasibility" of recommended transportation improvements.

The projections contained in this report are based on historical transportation financing trends, data collected from the Florida Department of Transportation, Dade County and other State and local agencies, documented assumptions regarding population growth, automobile ownership, gasoline consumption, fee and tax rates, and statutory methods of revenue distribution. Of particular use in this analysis were projections developed by the State Revenue Estimating Conference, a Transit Financial Study prepared for the Metro-Dade Transit Agency by Deloitte, Haskins and Sells, and data from the Florida Statistical Abstracts.

This report is structured to first provide a review of existing funding sources for highway and transit programs, including a description of current taxes, fees and grant programs, and the legislative basis which governs the use of transportation revenues. Historical funding levels for Dade County's Transportation Improvement Program (TIP) are evaluated for each TIP program year in the 1980's, by source and use of funds.

Next, existing revenue sources are projected to the year 2010, in constant 1989 dollars, using two different projection methodologies to insure the viability of our assumptions and analysis. This information is presented in a series of Lotus 1-2-3 tables.

Third, potential new transportation funding sources are discussed in light of recent legislative proposals, the MDTA Transit Financial Study, and other funding proposals which have been developed by public and private interest groups for consideration by the Florida Legislature. Projections are made for these alternative funding sources.

In the final section, conclusions are presented in terms of projected available financial resources for transportation improvements in the years 2000 and 2010. The financial analysis will be used to evaluate the 2010 Transportation Needs Plan as developed from the MUATS model. Based in part on the financial projections developed in this report, Year 2010 Cost Feasible alternatives will be developed and evaluated, and a final plan recommended to Dade County.

TRANSPORTATION FUNDING SOURCES

Existing transportation funding in Florida is derived from a system of taxes and fees in place at the Federal, State and local levels. Distribution of transportation funds is primarily governed by Federal and State statutory formulas, with the exception of some discretionary Federal grant programs. Table 1 provides an overview of existing Federal, State and local transportation funding sources. The funding sources, segregated into highway and transit categories are described in more detail below.

HIGHWAY FUNDING

The primary source of funding for highways comes from motor fuel taxes, motor vehicle fees and other automobile-related "user fees". Gasoline taxes are collected at the Federal and state level, and the State of Florida collects gasoline taxes on behalf of local governments, either as determined by State legislation, or through optional taxes legislated at the local level.

Federal Gas Tax

Federal excise taxes on motor fuels are currently set at 9 cents/gallon for gasoline and 15 cents/gallon for diesel fuel. With the exception of 1 cent/gallon which is allocated to transit, Federal fuel taxes are deposited in the Federal Highway Trust Fund and distributed by the Federal Highway Administration to the states through a system of formula grants and discretionary allocations. Florida's share of the Federal gas tax is estimated \$450 to \$475 million annually, or about 80 to 85 percent of the State's contribution in highway fuel taxes.

Federal highway funds are distributed by Florida DOT first for interstate highway and bridge construction, with the remainder distributed to the seven DOT districts by formula based on population, gas tax collections in each district and needs-based assessments. District Six, including Dade and Monroe Counties, currently receives about 13 percent of the available formula funding.

State Motor Fuel Taxes

Florida currently collects a total of 9.7 cents/gallon on motor fuels. State fuel taxes can be categorized as "Retained", or those that are collected by the State for State use, and "Shared", or those which are distributed to counties and cities. Shared gas taxes include the Constitutional Gas Tax, the County Gas Tax, and the Municipal Gas Tax. Each element of the overall fuel tax program is described below.

- **State Gas Tax - Retained**

Fuel taxes retained by the State for State use are collected on all highway, off-highway and aviation fuels as a 5 percent sales tax applied at the wholesale

TABLE 1
MIAMI URBAN AREA TRANSPORTATION STUDY
HIGHWAY AND TRANSIT FUNDING SOURCES

Funding Source	Description	Tax Rate	Revenue Estimate	Basis For Projection
FEDERAL				
Highway Trust Fund	Federal fuel and excise taxes distributed by formula and discretionary grants	\$.08/gallon	\$475 million to State of Florida	Projected increases in fuel consumptions. Formula distribution and discretionary programs
Mass Transit Account of Highway Trust Fund	Federal fuel tax distributed by formula and discretionary grants	\$.01/gallon	\$60 million to Dade in Sec 9, Sec 3 (includes Metromover) and Sec 1682	Section 9 funding expected to be flat. Discretionary funds dependent on political process
STATE				
Fuel Sales Tax	State Fuel Tax distributed by formula to counties based on collections and population	\$.057/gallon minimum based on CPI growth for gas prices	Approximately \$45 million to Dade County based on 50% Population/50% Collection	Projected growth in motor fuel consumption and population in Dade County
Constitutional Gas Tax	Collected by State and distributed to Counties for debt service and roadways	\$.02/gallon	About \$15.45 million in Dade based on DOR estimates	Projected growth in motor fuel consumption and population in Dade County
County Gas Tax	Collected by State and distributed to Counties for road improvements	\$.01/gallon	About \$7.7 million in Dade based on DOR Estimates	Projected growth in motor fuel consumption and population in Dade County
Motor Vehicle License Fees	Annual vehicle registration fees based on vehicle weight	Average auto tag fee is about \$26; Trucks and misc revenue is about \$11 per tag	First proceeds (\$70 million) go to education; remainder (\$171 million) goes to Transportation Trust Fund	Projected growth in vehicle registrations in Dade County 1986 collections in Dade were about \$43 million
Tolls	Turnpike tolls to be available for other roadways under recent legislation	Rates set by FDOT on per mile basis	Proposed bonding program to generate \$2-\$3 billion over time; Dade share unknown	Based on Legislative allocation

TABLE 1 (CON'T)

LOCAL

Local Option Gas Tax	Up to \$.06 per gallon levied by counties and shared by counties and cities	\$.06/gallon in Dade	About \$34 million based on Dade budget and DH&S estimates of net revenue	Projected growth in motor fuel consumption and population in Dade County
Voted Gas Tax	Optional per gallon gas tax which must be approved in countywide referendum; not currently approved in Dade	\$.01/gallon	\$5.6 to \$7.7 million based on DH&S and DOR estimates, respectively	Projected growth in motor fuel consumption and population in Dade County
General Fund Revenues	County general revenues used to fund the majority of transit operating deficit	Primary source is ad valorem taxes on real property; 10 mill cap	1 mill of property tax generates \$60.6 million based on estimates by DH&S	General fund estimates would be based on the projected growth in Dade County property values
Impact Fees	County fee collected on all new development as of July, 1989; based on formula related to traffic impacts	Based on formula	\$ 12 to \$15 million per year, based on County estimates	Rate of growth and new development in Dade County as reflected in model data base
Charter Transit System Surtax	Up to 1 per cent optional sales tax, subject to countywide referendum; not currently approved	Up to 1% of retail transactions less than \$1000	\$130 million at 1%	Historical and projected growth in retail sales in Dade County
Metropolitan Transportation Authority Act	Creates an authority to fund arterial highway and transit improvements; subject to referendum; not currently approved	Up to 1 mill property tax; up to 4 cents/gallon gas tax	1 mill property tax generates \$60.6 million; each cent of gas tax is \$5.6 to \$7.7 million	Property value increases and motor fuel consumption in Dade
Regional Transportation Authority	Creates authority involving two or more jurisdictions to fund capital and operating costs of rail and bus systems; not approved; requires referendum	Up to 3 mill property tax; based on plan submitted to voters	About \$182 million based on 1988 assessment	Property value increases in Dade County

point of distribution against a legislated minimum retail price per gallon. The legislated average price of all motor and special fuel was initially set at \$1.148/gallon, which at a 5 percent tax rate works out to 5.7 cents/gallon. The rate is technically indexed to be adjusted annually based on changes in the gasoline portion of the consumer Price Index. In 1985, however, the State Legislature created a "floor" beneath the tax which prevents it from falling below the initially calculated level of 5.7 cents/gallon, and the tax has remained at this effective rate since.

Figures from the State Revenue Estimating Conference place statewide gas tax collections for FY 88/89 at about \$404 million. About \$41 million is deducted for other uses including a general revenue service charge, aquatic weed control, and miscellaneous refunds, leaving \$363 million for transportation uses and distribution to FDOT districts in the fiscal year.

- **State Gas Tax - Shared**

The remaining 4 cents of the State gas tax is distributed to local governments for road maintenance, right of way acquisition, debt service, etc. Two cents of this tax, called the Constitutional Gas Tax, is distributed to counties. The first call on the proceeds is to meet debt service on local bond issues backed by the tax. The balance is credited to the counties' transportation trust fund and can be used for general county road purposes. The third cent is the County Gas Tax which is distributed by formula to counties and can be used for any legitimate county transportation purpose. The fourth cent is termed the Municipal Gas Tax and is transferred to the Revenue Sharing Trust Fund for Municipalities and distributed, along with other non-transportation funds, for municipal use.

In Dade County, each penny of gas tax currently generates about \$8 million in revenue, and the taxes are subject to the same non-transportation deductions as the State's retained gas tax. Net tax revenues have been estimated at \$7.7 million per penny of the tax by the Department of Revenue, and \$5.6 million per penny by Deloitte, Haskins & Sells.

Local Gas Taxes

The Florida Legislature has authorized a series of locally-based gasoline taxes for use by local governments in meeting their infrastructure needs. These are discussed below.

- **Local Option Gas Tax**

In 1983, the Legislature provided local governments the authority to impose local gasoline taxes which could be levied at the option of the county's governing body, without a voter referendum. A tax of up to 6 cents/gallon may now

be levied for a maximum duration of 30 years. Each penny imposed requires only a simple majority vote of the county commission.

The proceeds of the tax must be shared with municipalities, either in accordance with a negotiated distribution formula, or by statutory formula if local agreements cannot be reached. The tax proceeds may be used to support State bonds issued on behalf of the county, or may be used for general roadway improvements. Counties which have levied at least 4 cents of the tax are eligible to match State funds at a ratio of 80/20 percent for projects related to the State Highway System.

To date 63 of 67 counties have implemented a local option tax, with 40 counties levying the maximum allowed. Dade County has collected the maximum tax since 1985. Current net proceeds to the County are estimated at \$5.6 million per year per penny of the gas tax, or about \$34 million per year for local projects.

- **Voted Gas Tax**

Section 336.021 of the Florida Statutes authorizes counties to levy a one cent voted gas tax for local transportation purposes. The "Voted" gas tax requires approval by voters in a countywide referendum. If approved, the tax has no time limit, and may be shared with cities, but sharing is not required. Presently, 13 counties have implemented the Voted Gas Tax. Dade County has not proposed the tax to its voters as yet.

Motor Vehicle Fees

The State of Florida collects motor vehicle license fees based on weight class. The fees are allocated such that the first proceeds (about \$70 million) go to educational needs. The remaining funds are deposited in the State Transportation Trust Fund for distribution for transportation purposes. Statewide, the transportation portion of these fees is currently about \$241 million.

Impact Fees

In July, 1989, Dade County began collecting impact fees as a method of assessing new development for its proportionate share of road improvement costs based on the impacts created and benefits received. The fees are collected at the time of application for a building permit, and are based on a road impact fee formula related to trip generation and trip length per unit of development. Developers may provide their own computations by independent study, or may make direct roadway improvements in lieu of the impact fees.

For the purposes of impact fee financed improvements, the County is divided into six benefit districts. All impact fees collected in a district can be spent only for off-site

roadway improvements within the district in which the fee was collected. Revenue from the impact fee ordinance is estimated to be about \$12 to \$15 million per year.

Tolls

Florida DOT currently collects tolls on four highway facilities in Dade County - the Florida Turnpike, the Don Shula Expressway (SR 874), the Dolphin Expressway (SR 836) and the Airport Expressway (SR 112). For the most part, tolls have been used to retire bonded debt which financed capital costs, and to maintain and upgrade the existing facilities on which the tolls are collected. Until last year, tolls collected on the Florida Turnpike system were required to be spent in the county in which they were collected and were limited to expenditures on the Turnpike system. Legislation was passed in 1988 expanding the authority of FDOT to use the Florida Turnpike system to build additional toll roads and to improve existing roads which will eventually result in a statewide turnpike system. DOT was also authorized to equalize the toll structure for each vehicle class so tolls paid would be the same per mile across the entire existing system. Toll increases were effected in Dade County in 1989, for the Turnpike and the Don Shula Expressway.

The use of the new toll revenue authorization has to date been hung up in the Legislature. Bills introduced in the 1989 session would have authorized a bonding program of more than \$2 billion for expansions to the Turnpike system, with only a small portion of the funding proposed for Dade County facilities. The legislation was not passed in the session, nor in a subsequent special session, and is expected to be the main topic of a second special session on transportation currently scheduled for November, 1989.

The use of Turnpike toll revenues to fund additional roadway improvements appears to be a potential major new source of transportation financing. However, the allocation of the funds for specific transportation projects is subject to additional legislative debate.

Metropolitan Transportation Authority (MTA) Tax

In 1985, the Legislature enacted the Metropolitan Transportation Authority Act, which provides for the creation of an MTA in any urbanized area with a population of more than 200,000 and in which all affected counties have levied the full 6 cents of the Local Option Gas Tax. An MTA, when enacted is empowered to levy specified taxes to fund arterial highway needs and other transportation improvements within its defined service area. Tax authorization includes a one mill property tax, and up to 4 cents/gallon of additional gas tax. An MTA may be implemented by submitting a detailed plan for expenditures for voter approval in each of the counties included in the MTA service area. Only one urbanized area (Orlando) has attempted to implement an MTA. A referendum held in the three associated counties in 1986 failed passage.

To date, Dade County has not pursued the implementation of an MTA, despite the potential revenue advantages. Potential disadvantages to the authority structure, and the potential of voter disapproval limit the usefulness of the MTA Act.

TRANSIT FUNDING

Funding for transit projects in Florida comes from a variety of Federal, State and local programs. Capital funding for bus and rail projects is primarily financed through Federal and State grants. Operating costs, on the other hand, are supported primarily from local revenue sources. The Federal government provides a small percentage of operating subsidies, but the State has traditionally provided no operating support to transit systems. In 1988, the State provided a minimal level of operating funds as part of the Turnpike legislation. Major sources of existing and potential transit funding are summarized below.

Urban Mass Transportation Administration (UMTA)

Federal funds for transit projects are made available through UMTA under two separate programs.

- **UMTA Section 3**

Section 3 funds are available for capital projects, including bus and rail programs as well as a variety of other transit improvements. Section 3 is a discretionary program, and limited funds are available for all capital improvements on a competitive basis throughout the country. Congress has earmarked funds for 12 projects which would eventually require about \$6 billion in Federal funds to complete. Other projects in some stage of approval could require an additional \$13 billion. Currently the Section 3 program is funded significantly below the levels required to meet this demand. Competition for funds among cities is intense.

Since 1976, Dade County has received more than \$800 million in Section 3 discretionary funds for its Metrorail and Metromover projects. Other cities in Florida which are pursuing Federal funding for major transit capital investments include Jacksonville, Orlando and Tampa.

In addition, the overall Federal share of project funding for rail programs is decreasing from the traditional 75 to 80 per cent of total project costs. U.S. Secretary of Transportation Samuel Skinner has recently announced a number of proposals to encourage local areas to "overmatch" Federal grant funds (i.e., to provide more than the legally stipulated non-Federal matching share of 25 per cent) for new-start transit projects. Under the current initiative participation by the private sector in raising the non-Federal overmatch dollars is particularly important. For those projects whose Federal participation is 30 per cent or less, as well as those projects seeking relatively small sums of new start assis-

tance thanks to a substantial local overmatch, expedited UMTA review is promised.

- **UMTA Section 9**

Section 9 funds are available for planning, design, construction, and operations and maintenance of transit systems. Section 9 funds are distributed to transit agencies by formula. Dade County currently uses about \$9 million per year in Section 9 funds for operating subsidies for its rail and bus fleets. The 1988/1989 Program Year Transportation Improvements program reflects a total of \$26.8 million in Section 9 funds, with \$8.6 million allocated for operating assistance. In projecting future funding, it must be assumed that the Section 9 Federal funding will remain at or below current levels.

State of Florida

Florida Statutes limit FDOT participation in Federally assisted transit projects to 12.5 per cent of the total project cost, except for transit projects which serve more than one county, and/or transit service development projects which are limited in duration. Funding for capital transit projects is subject to legislative appropriation. The Metrorail and Metromover projects received about \$100 million in State financing.

State participation in transit operating costs is less defined. Until 1988, when a small amount of funding for transit operations was allocated as part of Turnpike legislation, there has been no program for State operating assistance.

Local Funds

Local funds for transit capital and operating costs come from a variety of sources including Dade County's general budget funds, local bond issues, farebox revenues, non-farebox transit revenues, and municipal contributions.

The County, through the Metro-Dade Transit Agency (MDTA), currently covers about 35 per cent of total capital and operating expenditures with farebox revenues, Federal and State grants, and miscellaneous revenues (advertising, joint development, etc.). The remaining 65 per cent of total costs comes from the County's general fund. This subsidy has grown from about \$55 million in 1984 to more than \$80 million in 1988, and is expected to continue to grow even if measured in current dollars.

Capital funding for the local share of the Metrorail project was primarily derived from the Decade of Progress Bond issue, which was authorized by voters in 1972 as part of a massive public works program. Metromover matching funds have included Decade of Progress bonds, a special assessment district in downtown Miami, and contributions from the City of Miami and State.

Dade County currently has no dedicated source of transit funding, though legislation exists which could be used to develop a transit funding base. In 1988, Deloitte, Haskins & Sells, prepared a study for MDTA which evaluated possible new funding sources for their ability to meet the operational needs of the transit system. Two primary options are available to the County, both of which require voter approval for implementation.

- **County Charter Transit System Surtax**

This tax was authorized in 1976 as a means of funding transit programs. It allows a discretionary sales surtax which may be levied at a rate of up to 1 percent of taxable value in charter counties. The tax has no time limit and must be approved by voter referendum. In 1987, the law was modified to allow the proceeds of the sales surtax to be transferred to an expressway or transportation authority to be used to finance the operation and maintenance of a transit system and to maintain roads or pay debt service on bonds issued for that purpose. No county has yet enacted the tax, though Dade County held a referendum in 1976 which was defeated at the polls.

Dade County is currently considering a second referendum vote on the sales tax issue. A 1 percent tax is estimated to generate about \$160 million per year in revenues, which would be more than adequate to meet current operational needs, and to provide a funding base for transit system expansion.

- **Regional Transportation Authority Law**

The Regional Transportation Authority Law (F.S. Chapter 163.5) allows the creation of authority separate from county government in an area which involves two or more political jurisdictions (counties, cities, etc.). The authority would have the ability to levy up to a 3 mill ad valorem tax on real property in the regional transportation area upon approval of the affected voters. These revenues can be used to fund operations, maintenance and capital costs for rail and bus systems.

To date, no efforts have been made to create a regional authority for Dade County, though several have been created around the state. Implementation of a regional transit authority would require a decision by the County Commission to remove the transit system from their jurisdiction, would require interlocal agreements with one or more other governmental jurisdictions, and would require approval of the voters in the proposed service area.

HISTORICAL FUNDING LEVELS IN DADE COUNTY

Historical levels of programmed funding for transportation improvements in Dade County are contained in the five-year Transportation Improvement Program (TIP) published each year by the Metropolitan Planning Organization (MPO). The docu-

ment contains current fiscal year programmed funding for Federal, State and local programs, and estimated future year funding for a four year horizon. Table 2 contains a review of each program year TIP for FY 80/81 through FY 88/89, by category of expenditure. Aviation expenditures are not included, as these funds are not part of the Year 2010 plan.

As shown in the Table, fiscal year funding averaged more than \$300 million for the decade. This level of funding includes the significant Federal and State grant monies used in the construction of the Metrorail and Metromover projects, with transit funding averaging more than \$150 million per year for the decade. Figure 1 compares average transit and roadway funding for the decade, and reflects an almost even split between the categories. Figure 2 diagrams transit versus highway expenditures for each fiscal year. As can be seen, transit expenditures peaked in FY 84/85, and dropped off significantly in the next year, reflecting completion of the major portions of the Phase I Metrorail and Metromover projects. With the establishment of a full funding contract for the Metromover legs, transit funding has again exceeded \$100 million in Fiscal Year 88/89.

It is safe to assume that the Section 3 UMTA grants and matching State monies have added about \$100 million per year in transit dollars to the TIP. In fact, during the past decade, Dade County has received an average of \$80 million per year from Federal sources and \$12 million per year from State sources for transit capital construction. Since transit capital funding is discretionary, and depends on many political factors, it is difficult to estimate the level of funding for future years. Dade County will spend more than \$200 million in UMTA funds for the extension of Metromover to Brickell and Omni over the next five years. Beyond this, however, there are no clearly defined Federal and/or State funding commitments. Projections of future year Federal and State discretionary grant funds are included for the existing transit service later in this report. However, it is also likely that the County can anticipate some level of funding for future expansions to the transit system.

Highway and roadway funding, on the other hand, has received relatively constant funding, because highway programs are funded primarily on the basis of formulas at the Federal and State level. Over the decade, highway funding has averaged almost \$155 million per year, with the lowest level in FY 82/83 (\$78 million), and the highest in FY 85/86 (\$188.5 million). It is assumed that highway funding will remain relatively constant in the future, with funding increases related primarily to growth.

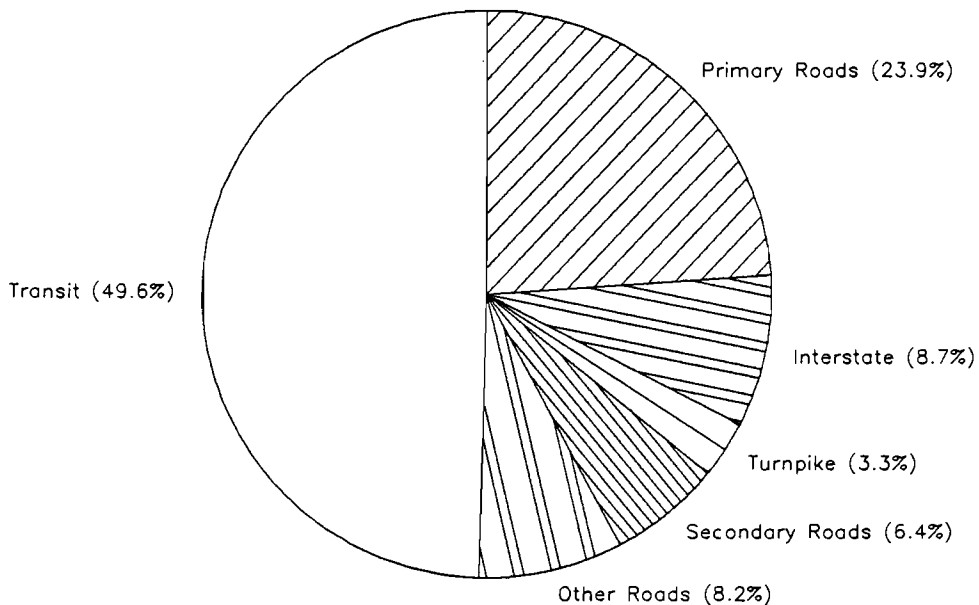
Figure 2 shows a significant increase in highway funding beginning in FY 83/84. This increase reflects the Legislature's authorization of local option gasoline taxes.

TABLE 2
 METRO-DADE COUNTY PROGRAMMED TIP EXPENDITURES (\$1,000'S)
 FY 80/81 - FY 88/89

PROGRAM CATEGORY	FY 80-81	FY 81-82	FY 82-83	FY 83-84	FY 84-85	FY 85-86	FY 86-87	FY 87-88	FY 88-89	AVERAGE
PRIMARY ROADS	\$47,902	\$41,476	\$33,480	\$93,437	\$68,833	\$86,035	\$47,348	\$92,799	\$150,349	\$73,518
INTERSTATE	\$13,579	\$1,754	\$1,909	\$63,686	\$48,896	\$44,646	\$37,119	\$4,215	\$23,988	\$26,644
TURNPIKE	\$835	\$0	\$545	\$3,738	\$2,370	\$10,136	\$41,827	\$18,251	\$12,432	\$10,015
SECONDARY	\$26,202	\$17,160	\$17,350	\$18,580	\$23,275	\$17,050	\$17,340	\$18,245	\$20,980	\$19,576
REVENUE BONDS	\$0	\$0	\$1,000	\$8,617	\$16,738	\$10,781	\$0	\$0	\$0	\$4,126
DECADE OF PROGRESS	\$27,671	\$30,759	\$21,936	\$25,714	\$18,743	\$16,895	\$11,176	\$7,332	\$3,640	\$18,207
COMM. DEVELOPMENT	\$4,880	\$4,452	\$1,970	\$3,992	\$4,318	\$2,983	\$800	\$1,691	\$1,050	\$2,904
MULTIMODAL TRANSIT	\$276,849	\$170,911	\$221,403	\$127,698	\$265,972	\$40,295	\$55,796	\$92,219	\$120,365	\$152,390
ANNUAL TOTAL	\$397,918	\$266,512	\$299,593	\$345,462	\$449,145	\$228,821	\$211,406	\$234,752	\$332,804	\$307,379
ANNUAL HIGHWAY	\$121,069	\$95,601	\$78,190	\$217,764	\$183,173	\$188,526	\$155,610	\$142,533	\$212,439	\$154,989

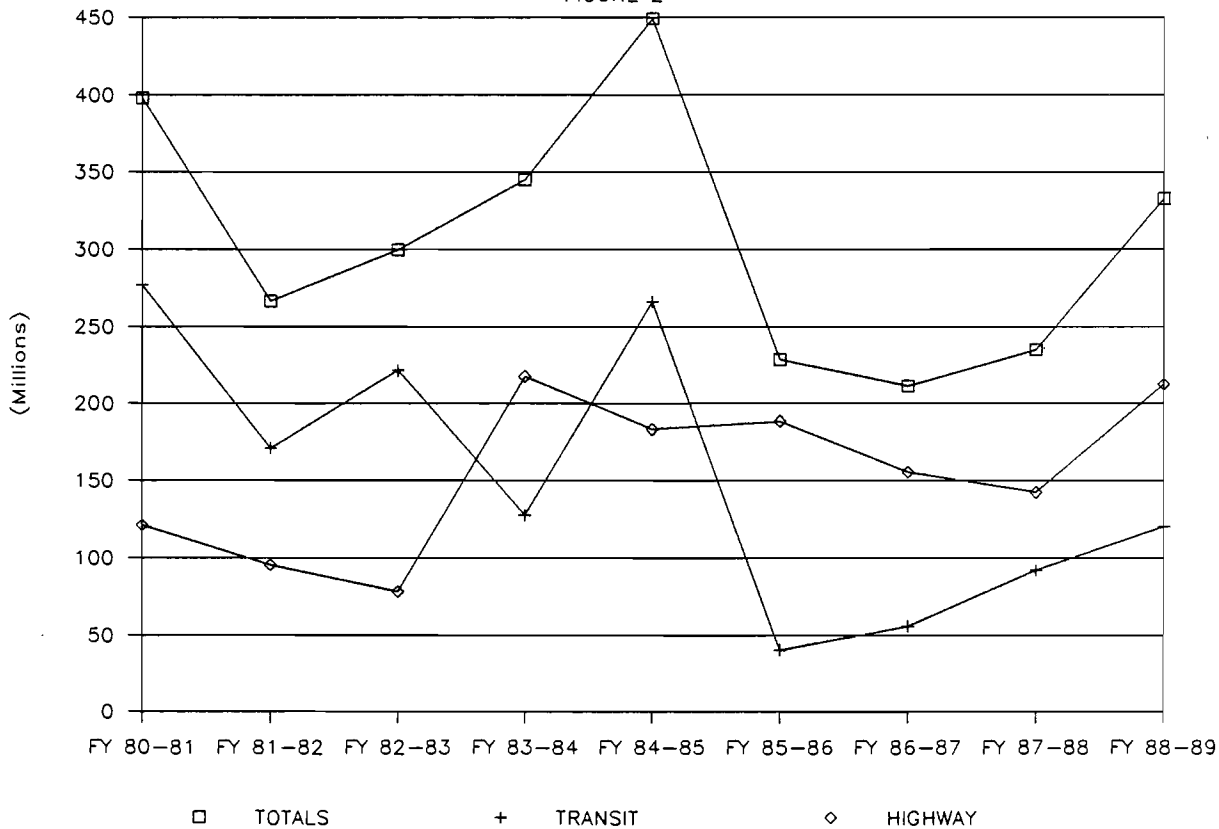
AVERAGE EXPENDITURES FY 80/81 - 88/89

FIGURE 1



PROGRAMMED TIP EXPENDITURES

FIGURE 2



FORECAST OF FUTURE FINANCIAL RESOURCES

This section develops and presents future year forecasts of the existing transportation funding sources previously described. The projections are based on growth rates for gasoline consumption, population, motor vehicle registrations and other pertinent factors. All projections are for current year dollars, and are derived from base year statistics as indicated in the assumptions.

METHODOLOGY

Two methods have been used to forecast future year revenues. The first method is based on constant annual growth rates derived from various sources, and assumes a constant rate of return on funds to the local level. The forecast model simply applies the constant growth rate over time from the base year assumption. As such, the projection curve is a straight line, and assumes that transportation funding in Florida remains constant over the analysis period.

The second method uses the State constitutional formula for funding distribution, where funding is allocated to the local level based 50 percent on population and 50 percent on tax collections in the local jurisdiction. To derive this projection, statistics on population and gas consumption at the State and Dade County level were obtained for 1985, 1990, 2000, 2005 and 2010. Dade County's percentage of the total was calculated and applied to the overall level of funding available through Federal and State sources to obtain local funding levels from these programs.

Projections for transit capital and operating revenues and costs were taken directly from MDTA's Transit Financial Study.

GROWTH METHOD

Table 3 presents the assumptions used in the Growth Method projections. Data on highway and off-highway motor fuels consumption was developed from Department of Revenue and the State Revenue Estimating Conference sources. Motor vehicle statistics were derived from the Florida Statistical Abstracts. Growth rates for fuel consumption and vehicle registrations come from Deloitte, Haskins & Sells financial report for MDTA. Revenue return rates were calculated from a variety of sources including the State DOR for State funds and the Metro-Dade budget for local option taxes.

Table 4 provides estimates of the gross level of gas tax collections at the Federal, State and local level, for all sources, including the 1 cent transit gas tax at the Federal level. Table 5 allocates the gross level gas taxes to Dade County based on the return rates previously developed. Based on this approach, the County would average \$165 million per year in gas tax dollars between 1988 and 2010. Totals for the 20 year period 1991 to 2010 would approximate \$3.3 billion.

Table 6 presents projected motor vehicle fees available to Dade County. The projections indicate an average of \$39.5 million over the period and a 20-year total of more than \$800 million.

Table 7 includes projections of all existing sources including local impact fees. Based on this table, average annual revenues for transportation would be almost \$220 million, and almost \$4.5 billion would be available for transportation purposes between 1991 and 2010.

FORMULA METHOD

Table 8 presents the basis for formula method projections. Dade County's population and fuel consumption is derived as a percentage of the State as a whole, consistent with the existing constitutional formula. Assumptions and sources of statistics are documented in the table. The table shows that Dade's percentage of the total state is diminishing as other urban areas out pace the County's growth rate.

The results of the formula method are shown in Table 9. Dade County's share of existing taxes is projected by applying the derived percentage from Table 8 to projected levels of gas tax and motor vehicle fee collections. Local option gas taxes and impact fees are then added. The totals for this method are consistent with the Growth Method described above, providing a "sanity check" to the projection methodology.

Under this method, Dade County would average \$222 million per year in transportation revenues and total almost \$4.5 billion for the 20-year period.

The revenue projections derived from the Growth and Formula Methods are consistent with the historical funding trends for the County as derived from the program year TIP documents. If the almost \$100 million per year in discretionary Federal and State fund for Metrorail and Metromover are subtracted, the levels of annual funding are consistent with the projections presented above, when adjusted for growth. The missing puzzle piece relates to the level of discretionary funding the County can obtain for transit capital purposes in the future. With the exception of the Dade County's share of the 1 cent Federal gas tax for transit, potential transit capital grants are not included in the projections.

TRANSIT CAPITAL AND OPERATING FUNDS

Tables 9-A and 9-B present projections for transit capital and operating revenues and costs from the MDTA Transit Financial Study for the years 1990, 2000, 2005 and 2007. These projections were taken directly from the report which was prepared by Deloitte, Haskins & Sells. Projections are for the Base Scenario which most closely resembles the present MDTA system. The Scenario assumes annual growth in the bus system of 1 to 2 percent, opening the Metromover legs in 1993 and no expansion of Metrorail to the year 2007. The Federal Section 9 funds for operating are fixed in 1990 at \$7.6 million and for capital at 80 percent of replacement and rehabilitation

costs. Minimal State operating funds are assumed, since there is currently no legislatively approved operating assistance program. The remaining operating funds come from operating revenues and contributions from the County's General Fund, appropriated annually by the Board of County Commissioners. The growth in the funding deficit is due to increases in services.

Capital funding for bus system expansions and service increases are projected, based on 50 percent Federal participation in expansion costs, primarily related to the bus system. The match for Federal funds used in the capital program are shared equally between the State and County. Federal, State and local participation in MetroMover expansion is already set and is reflected in the projections to 1993 when the Brickell and Omni legs are completed.

As previously indicated, Dade County has averaged almost \$100 million per year in UMTA and State transit grants for the Metrorail and Metromover systems. Since UMTA's Section 3 capital program is totally discretionary, projections of future funding for rail systems expansions cannot be accurately made. State funding is tied to the Federal grant and is set by legislation at 12.5 percent of the Federal share. Current UMTA guidelines assume that no more than 50 percent of transit capital projects will be funded through the Federal program, and it is safe to assume that this level of funding can be achieved given the appropriate local financing capability and need. Dade County can likely be expected to average \$40 to \$50 million per year in State and Federal capital funds for rail system expansion, if a dedicated source of local matching dollars is put in place.

TABLE 3
 MIAMI URBAN AREA TRANSPORTATION STUDY
 PROJECTED FINANCIAL RESOURCES
 ASSUMPTIONS - GROWTH METHOD

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EXISTING GAS TAX RATES (PER GALLON SOLD)

FEDERAL =	\$0.090	(All Highway Fuels)
STATE =	\$0.057	(Highway, Off-Highway and Aviation fuels)
CONSTITUTIONAL =	\$0.020	(All highway Fuels)
COUNTY =	\$0.010	(All highway Fuels)
VOTED OPTION =	\$0.010	(All highway Fuels)
LOCAL OPTION =	\$0.060	(All highway Fuels)

FRACTION OF REVENUE RETURNED TO COUNTY

FEDERAL =	0.80	(Data from Floridians for Better Transportation)
STATE =	0.80	(Calculated from DOR estimates)
CONSTITUTIONAL =	0.75	(Calculated from DOR estimates)
COUNTY =	0.75	(Calculated from Metro-Dade Budget)
VOTED OPTION =	0.75	(Calculated from Metro-Dade Budget)
LOCAL OPTION =	0.75	(Calculated from Metro-Dade Budget)

BASE YEAR (FY 87-88) =	\$7.7 M = 770 M Gal. (Hwy) 31 M Gal.(Off-Hwy) 85 M Gal.(Aviation)	(DOR Estimate) (4% of Highway Fuels, based on statewide figures) (11% of Highway Fuels, based on statewide figures)
GROWTH RATE =	0.01 /Year through 2010	(Deloitte, Haskins & Sells)

MOTOR VEHICLE FEES

BASE YEAR (85-86) =	1.609 M Vehicle Tags	(Florida Statistical Abstracts)
GROWTH RATE =	0.02 /Year through 2010	(Deloitte, Haskins & Sells)
AVERAGE FEE PER TAG =	\$26.91 /Tag Registration	(Florida Statistical Abstracts)
REVENUE TO COUNTY =	0.70 of Total Collections	(Calculated from FDOT/DOR statewide estimate)

IMPACT FEES

BASE YEAR (88-89) =	\$15 M Annual Fees	(Dade County)
GROWTH RATE =	None Assume constant dev.	(Base Assumption)

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TABLE 4
MIAMI URBAN AREA TRANSPORTATION STUDY
PROJECTED ANNUAL GAS TAXES

YEAR	GALLONS OF HIGHWAY FUEL	GALLONS OF OFF-HWY & AVIATION	FEDERAL GAS TAXES (\$.09)	STATE GAS TAXES (\$.057)	CONSTITUTIONAL TAXES (\$.02)	COUNTY GAS TAX	LOCAL OPTION TAXES (\$.06)	VOTED GAS TAXES (\$.00)	TOTAL ALL GAS TAXES
1988	770,000,000	115,500,000	\$69,300,000	\$50,473,500	\$15,400,000	\$7,700,000	\$46,200,000	\$0	\$189,073,500
1989	777,700,000	116,655,000	\$69,993,000	\$50,978,235	\$15,554,000	\$7,777,000	\$46,662,000	\$0	\$190,964,235
1990	785,477,000	117,821,550	\$70,692,930	\$51,488,017	\$15,709,540	\$7,854,770	\$47,128,620	\$0	\$192,873,877
1991	793,331,770	118,999,766	\$71,399,859	\$52,002,898	\$15,866,635	\$7,933,318	\$47,599,906	\$0	\$194,802,616
1992	801,265,088	120,189,763	\$72,113,858	\$52,522,926	\$16,025,302	\$8,012,651	\$48,075,905	\$0	\$196,750,642
1993	809,277,739	121,391,661	\$72,834,996	\$53,048,156	\$16,185,555	\$8,092,777	\$48,556,664	\$0	\$198,718,149
1994	817,370,516	122,605,577	\$73,563,346	\$53,578,637	\$16,347,410	\$8,173,705	\$49,042,231	\$0	\$200,705,330
1995	825,544,221	123,831,633	\$74,298,980	\$54,114,424	\$16,510,884	\$8,255,442	\$49,532,653	\$0	\$202,712,383
1996	833,799,663	125,069,950	\$75,041,970	\$54,655,568	\$16,675,993	\$8,337,997	\$50,027,980	\$0	\$204,739,507
1997	842,137,660	126,320,649	\$75,792,389	\$55,202,124	\$16,842,753	\$8,421,377	\$50,528,260	\$0	\$206,786,902
1998	850,559,037	127,583,855	\$76,550,313	\$55,754,145	\$17,011,181	\$8,505,590	\$51,033,542	\$0	\$208,854,771
1999	859,064,627	128,859,694	\$77,315,816	\$56,311,686	\$17,181,293	\$8,590,646	\$51,543,878	\$0	\$210,943,319
2000	867,655,273	130,148,291	\$78,088,975	\$56,874,803	\$17,353,105	\$8,676,553	\$52,059,316	\$0	\$213,052,752
2001	876,331,826	131,449,774	\$78,869,864	\$57,443,551	\$17,526,637	\$8,763,318	\$52,579,910	\$0	\$215,183,280
2002	885,095,144	132,764,272	\$79,658,563	\$58,017,987	\$17,701,903	\$8,850,951	\$53,105,709	\$0	\$217,335,113
2003	893,946,096	134,091,914	\$80,455,149	\$58,598,167	\$17,878,922	\$8,939,461	\$53,636,766	\$0	\$219,508,464
2004	902,885,557	135,432,833	\$81,259,700	\$59,184,148	\$18,057,711	\$9,028,856	\$54,173,133	\$0	\$221,703,548
2005	911,914,412	136,787,162	\$82,072,297	\$59,775,990	\$18,238,288	\$9,119,144	\$54,714,865	\$0	\$223,920,584
2006	921,033,556	138,155,033	\$82,893,020	\$60,373,750	\$18,420,671	\$9,210,336	\$55,262,013	\$0	\$226,159,790
2007	930,243,892	139,536,584	\$83,721,950	\$60,977,487	\$18,604,878	\$9,302,439	\$55,814,634	\$0	\$228,421,388
2008	939,546,331	140,931,950	\$84,559,170	\$61,587,262	\$18,790,927	\$9,395,463	\$56,372,780	\$0	\$230,705,602
2009	948,941,794	142,341,269	\$85,404,761	\$62,203,135	\$18,978,836	\$9,489,418	\$56,936,508	\$0	\$233,012,658
2010	958,431,212	143,764,682	\$86,258,809	\$62,825,166	\$19,168,624	\$9,584,312	\$57,505,873	\$0	\$235,342,784
AVERAGE	860,937,061	129,140,559	\$77,484,336	\$56,434,424	\$17,218,741	\$8,609,371	\$51,656,224	\$0	\$211,403,095
TOTAL 88-2010	19,801,552,413	2,970,232,862	\$1,782,139,717	\$1,297,991,761	\$396,031,048	\$198,015,524	\$1,188,093,145	\$0	\$4,862,271,195
20 YEAR									
TOTAL 91-2010	17,468,375,413	2,620,256,312	\$1,572,153,787	\$1,145,052,008	\$349,367,508	\$174,683,754	\$1,048,102,525	\$0	\$4,289,359,583

TABLE 5
MIAMI URBAN AREA TRANSPORTATION STUDY
PROJECTED GAS TAX FUNDS AVAILABLE TO DADE COUNTY

YEAR	GALLONS OF HIGHWAY FUEL	GALLONS OF OFF-HWY & AVIATION	FEDERAL GAS TAXES (80%)	STATE GAS TAXES (80%)	CONSTITUTIONAL TAXES (75%)	COUNTY GAS TAXES (75%)	LOCAL OPTION TAXES (75%)	VOTED GAS TAXES (75%)	TOTAL ALL GAS TAXES
1988	770,000,000	115,500,000	\$55,440,000	\$40,378,800	\$11,550,000	\$5,775,000	\$34,650,000	\$0	\$147,793,800
1989	777,700,000	116,655,000	\$55,994,400	\$40,782,588	\$11,665,500	\$5,832,750	\$34,996,500	\$0	\$149,271,738
1990	785,477,000	117,821,550	\$56,554,344	\$41,190,414	\$11,782,155	\$5,891,078	\$35,346,465	\$0	\$150,764,455
1991	793,331,770	118,999,766	\$57,119,887	\$41,602,318	\$11,899,977	\$5,949,988	\$35,699,930	\$0	\$152,272,100
1992	801,265,088	120,189,763	\$57,691,086	\$42,018,341	\$12,018,976	\$6,009,488	\$36,056,929	\$0	\$153,794,821
1993	809,277,739	121,391,661	\$58,267,997	\$42,438,525	\$12,139,166	\$6,069,583	\$36,417,498	\$0	\$155,332,769
1994	817,370,516	122,605,577	\$58,850,677	\$42,862,910	\$12,260,558	\$6,130,279	\$36,781,673	\$0	\$156,886,097
1995	825,544,221	123,831,633	\$59,439,184	\$43,291,539	\$12,383,163	\$6,191,582	\$37,149,490	\$0	\$158,454,958
1996	833,799,663	125,069,950	\$60,033,576	\$43,724,454	\$12,506,995	\$6,253,497	\$37,520,985	\$0	\$160,039,507
1997	842,137,660	126,320,649	\$60,633,912	\$44,161,699	\$12,632,065	\$6,316,032	\$37,896,195	\$0	\$161,639,902
1998	850,559,037	127,583,855	\$61,240,251	\$44,603,316	\$12,758,386	\$6,379,193	\$38,275,157	\$0	\$163,256,301
1999	859,064,627	128,859,694	\$61,852,653	\$45,049,349	\$12,885,969	\$6,442,985	\$38,657,908	\$0	\$164,888,864
2000	867,655,273	130,148,291	\$62,471,180	\$45,499,843	\$13,014,829	\$6,507,415	\$39,044,487	\$0	\$166,537,753
2001	876,331,826	131,449,774	\$63,095,891	\$45,954,841	\$13,144,977	\$6,572,489	\$39,434,932	\$0	\$168,203,131
2002	885,095,144	132,764,272	\$63,726,850	\$46,414,389	\$13,276,427	\$6,638,214	\$39,829,281	\$0	\$169,885,162
2003	893,946,096	134,091,914	\$64,364,119	\$46,878,533	\$13,409,191	\$6,704,596	\$40,227,574	\$0	\$171,584,014
2004	902,885,557	135,432,833	\$65,007,760	\$47,347,319	\$13,543,283	\$6,771,642	\$40,629,850	\$0	\$173,299,854
2005	911,914,412	136,787,162	\$65,657,838	\$47,820,792	\$13,678,716	\$6,839,358	\$41,036,149	\$0	\$175,032,852
2006	921,033,556	138,155,033	\$66,314,416	\$48,299,000	\$13,815,503	\$6,907,752	\$41,446,510	\$0	\$176,783,181
2007	930,243,892	139,536,584	\$66,977,560	\$48,781,990	\$13,953,658	\$6,976,829	\$41,860,975	\$0	\$178,551,013
2008	939,546,331	140,931,950	\$67,647,336	\$49,269,810	\$14,093,195	\$7,046,597	\$42,279,585	\$0	\$180,336,523
2009	948,941,794	142,341,269	\$68,323,809	\$49,762,508	\$14,234,127	\$7,117,063	\$42,702,381	\$0	\$182,139,888
2010	958,431,212	143,764,682	\$69,007,047	\$50,260,133	\$14,376,468	\$7,188,234	\$43,129,405	\$0	\$183,961,287
AVERAGE	860,937,061	129,140,559	\$61,987,468	\$45,147,540	\$12,914,056	\$6,457,028	\$38,742,168	\$0	\$165,248,260
TOTAL 88-2010	19,801,552,413	2,970,232,862	\$1,425,711,774	\$1,038,393,409	\$297,023,286	\$148,511,643	\$891,069,859	\$0	\$3,800,709,970
20 YEAR									
TOTAL 91-2010	17,468,375,413	2,620,256,312	\$1,257,723,030	\$916,041,607	\$262,025,631	\$131,012,816	\$786,076,894	\$0	\$3,352,879,977

TABLE 6
 MIAMI URBAN AREA TRANSPORTATION STUDY
 PROJECTED MOTOR VEHICLE FEES AVAILABLE TO DADE COUNTY

YEAR	NUMBER OF TAGS SOLD	ANNUAL TAG REVENUES	POTENTIAL REVENUE TO DADE COUNTY
1988	1,674,004	\$45,047,448	\$31,533,213
1989	1,707,484	\$45,948,397	\$32,163,878
1990	1,741,634	\$46,867,365	\$32,807,155
1991	1,776,466	\$47,804,712	\$33,463,298
1992	1,811,996	\$48,760,806	\$34,132,564
1993	1,848,236	\$49,736,022	\$34,815,216
1994	1,885,200	\$50,730,743	\$35,511,520
1995	1,922,904	\$51,745,357	\$36,221,750
1996	1,961,362	\$52,780,265	\$36,946,185
1997	2,000,590	\$53,835,870	\$37,685,109
1998	2,040,602	\$54,912,587	\$38,438,811
1999	2,081,414	\$56,010,839	\$39,207,587
2000	2,123,042	\$57,131,056	\$39,991,739
2001	2,165,503	\$58,273,677	\$40,791,574
2002	2,208,813	\$59,439,150	\$41,607,405
2003	2,252,989	\$60,627,934	\$42,439,553
2004	2,298,049	\$61,840,492	\$43,288,345
2005	2,344,010	\$63,077,302	\$44,154,111
2006	2,390,890	\$64,338,848	\$45,037,194
2007	2,438,708	\$65,625,625	\$45,937,938
2008	2,487,482	\$66,938,138	\$46,856,696
2009	2,537,232	\$68,276,900	\$47,793,830
2010	2,587,976	\$69,642,438	\$48,749,707
AVERAGE ANNUAL	2,099,417	\$56,495,303	\$39,546,712
TOTAL 1988-2010	48,286,584	\$1,299,391,970	\$909,574,379
20 YEAR			
TOTAL 1991-2010	43,163,462	\$1,161,528,761	\$813,070,133

TABLE 7
MIAMI URBAN AREA TRANSPORTATION STUDY
PROJECTED ANNUAL TRANSPORTATION REVENUES
ALL EXISTING SOURCES

YEAR	FEDERAL GAS TAXES	STATE GAS TAXES	LOCAL GAS TAXES	ANNUAL TAG REVENUE	ANNUAL IMPACT FEES	TOTAL ALL SOURCES
1988	\$55,440,000	\$57,703,800	\$34,650,000	\$31,533,213	\$15,000,000	\$194,327,013
1989	\$55,994,400	\$58,280,838	\$34,996,500	\$32,163,877	\$15,000,000	\$196,435,615
1990	\$56,554,344	\$58,863,646	\$35,346,465	\$32,807,155	\$15,000,000	\$198,571,610
1991	\$57,119,887	\$59,452,283	\$35,699,930	\$33,463,298	\$15,000,000	\$200,735,398
1992	\$57,691,086	\$60,046,806	\$36,056,929	\$34,132,564	\$15,000,000	\$202,927,385
1993	\$58,267,997	\$60,647,274	\$36,417,498	\$34,815,215	\$15,000,000	\$205,147,984
1994	\$58,850,677	\$61,253,746	\$36,781,673	\$35,511,519	\$15,000,000	\$207,397,616
1995	\$59,439,184	\$61,866,284	\$37,149,490	\$36,221,750	\$15,000,000	\$209,676,708
1996	\$60,033,576	\$62,484,947	\$37,520,985	\$36,946,185	\$15,000,000	\$211,985,692
1997	\$60,633,912	\$63,109,796	\$37,896,195	\$37,685,109	\$15,000,000	\$214,325,011
1998	\$61,240,251	\$63,740,894	\$38,275,157	\$38,438,811	\$15,000,000	\$216,695,112
1999	\$61,852,653	\$64,378,303	\$38,657,908	\$39,207,587	\$15,000,000	\$219,096,451
2000	\$62,471,180	\$65,022,086	\$39,044,487	\$39,991,739	\$15,000,000	\$221,529,492
2001	\$63,095,891	\$65,672,307	\$39,434,932	\$40,791,573	\$15,000,000	\$223,994,704
2002	\$63,726,850	\$66,329,030	\$39,829,281	\$41,607,405	\$15,000,000	\$226,492,567
2003	\$64,364,119	\$66,992,320	\$40,227,574	\$42,439,553	\$15,000,000	\$229,023,567
2004	\$65,007,760	\$67,662,244	\$40,629,850	\$43,288,344	\$15,000,000	\$231,588,198
2005	\$65,657,838	\$68,338,866	\$41,036,149	\$44,154,111	\$15,000,000	\$234,186,963
2006	\$66,314,416	\$69,022,255	\$41,446,510	\$45,037,193	\$15,000,000	\$236,820,374
2007	\$66,977,560	\$69,712,477	\$41,860,975	\$45,937,937	\$15,000,000	\$239,488,950
2008	\$67,647,336	\$70,409,602	\$42,279,585	\$46,856,696	\$15,000,000	\$242,193,218
2009	\$68,323,809	\$71,113,698	\$42,702,381	\$47,793,830	\$15,000,000	\$244,933,718
2010	\$69,007,047	\$71,824,835	\$43,129,405	\$48,749,706	\$15,000,000	\$247,710,993
AVG ANNUAL	\$61,987,468	\$64,518,623	\$38,742,168	\$39,546,712	\$15,000,000	\$219,794,971
TOTAL 1988-2010	\$1,425,711,774	\$1,483,928,338	\$891,069,859	\$909,574,369	\$345,000,000	\$5,055,284,339
20 YEAR						
TOTAL 1991-2010	\$1,257,723,030	\$1,309,080,053	\$786,076,894	\$813,070,124	\$300,000,000	\$4,465,950,101

TABLE 8
MIAMI URBAN AREA TRANSPORTATION STUDY
PROJECTED FINANCIAL RESOURCES
FORMULA METHOD

		1985	1990	2000	2005	2010
POPULATION (1000'S)	FLORIDA	11,288	12,895	15,231	16,282	17,301
	DADE COUNTY	1,767	1,878	2,172	2,309	2,332
	DADE'S % OF TOTAL	15.65%	14.56%	14.26%	14.18%	13.48%
GAS CONSUMPTION (MILLIONS OF GALLONS)	FLORIDA TOTAL	7,490	8,344	9,205	9,674	10,168
	Highway Fuels	6425	7260	7952	8357	8784
	Off-Highway Fuels	296	258	282	296	311
	Aviation Fuels	769	846	971	1021	1073
	DADE COUNTY TOTAL	871	903	998	1049	1102
	Highway Fuels	758	786	868	912	958
	Off-Highway Fuels	30	31	35	37	38
	Aviation Fuels	83	86	95	100	106
	DADE'S % OF TOTAL	11.63%	10.82%	10.84%	10.84%	10.84%
MOTOR VEHICLE FEES(\$1,000'S)	FLORIDA	\$221,400	\$269,900	\$325,800	\$359,700	\$397,200
	DADE COUNTY	\$42,398	\$46,867	\$57,131	\$63,077	\$69,642
IMPACT FEES (\$1000'S)	DADE COUNTY	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
FORMULA BASIS (50% POPULATION, 50% COLLECTIONS)		13.64%	12.69%	12.55%	12.51%	12.16%

ASSUMPTIONS:

1. Florida population figures based on data presented in Florida Statistical Abstracts from the University of Florida, Bureau of Economic and Business Research Population Program. Medium level projections were used.
2. Dade population projections for 1985, 1990 and 2010 are from Dade County. Figures for 2000 and 2005 were extrapolated.
3. Gas consumption totals for the State are based on projections by the Revenue Estimating Conference through FY 96-97. Remaining figures are escalated at an average rate of 1% per year.
4. Dade County gas consumption is estimated based on 1% annual growth in highway fuels plus a percentage based on Revenue Estimating Conference totals for off-highway and aviation fuels.
5. Revenues from motor vehicle fees based on Revenue Estimating Conference figures. Totals beyond 1997 horizon were escalated at 2% per year growth rate.
6. MVF estimates for Dade County based on study prepared by Deloitte, Haskins & Sells for MDTA, and data from the Florida Statistical Abstracts.
7. Dade County impact fees assumed to be collected at a constant rate based on projected growth rate of about 1.3% per year. Since fees are collected only on new development, collections should be stable.

TABLE 9
 MIAMI URBAN AREA TRANSPORTATION STUDY
 PROJECTED FINANCIAL RESOURCES
 DADE COUNTY SHARE OF EXISTING TAXES (1,000'S)

YEAR	GALLONS OF HIGHWAY FUEL	GALLONS OF OFF-HWY FUELS	FEDERAL GAS TAXES	STATE GAS TAXES	STATE SHARED GAS TAXES	STATE MOTOR VEHICLE FEES	DADE FORMULA SHARE OF TAXES	LOCAL OPTION GAS TAXES	IMPACT FEES	DADE COUNTY TOTALS
1985	6,425,000	1,065,000	\$462,600	\$341,544	\$154,200	\$121,120	\$147,239	\$34,110	\$15,000	\$196,349
1990	7,260,000	1,104,000	\$522,720	\$381,398	\$174,240	\$159,920	\$157,138	\$35,370	\$15,000	\$207,508
2000	7,952,000	1,253,000	\$572,544	\$419,748	\$190,848	\$204,640	\$172,082	\$39,060	\$15,000	\$226,142
2005	8,357,000	1,317,000	\$601,704	\$441,134	\$200,568	\$231,760	\$181,250	\$41,040	\$15,000	\$237,290
2010	8,784,000	1,384,000	\$632,448	\$463,661	\$210,816	\$261,760	\$186,304	\$43,110	\$15,000	\$244,414
AVERAGE	7,755,600	1,224,600	\$558,403	\$409,497	\$186,134	\$195,840	\$168,803	\$38,538	\$15,000	\$222,341
20 YEAR TOTALS										
BASED ON AVERAGE	155,112,000	24,492,000	\$11,168,064	\$8,189,942	\$3,722,688	\$3,916,800	\$3,376,050	\$770,760	\$300,000	\$4,446,810

ASSUMPTIONS:

1. Federal gas tax revenues assume 80% of Florida collections are returned to State.
2. State gas tax revenues assume 80% of collections are available for distribution to counties.
3. State shared gas tax includes \$.02 Constitutional and \$.01 County tax and assumes 80% of collections for distribution.
4. MVF revenues are less \$70,000,000 for education and assume 80% of remaining collections are available for distribution.
5. Local option gas tax revenues assume 75% of collections available to Dade County.

TABLE 9-A
MIAMI URBAN AREA TRANSPORTATION STUDY
TRANSIT OPERATING REVENUES AND COSTS
BASE SCENARIO

(Constant 1986 Dollars)

	1988	1990	1995	2000	2005	2007	TOTALS 1988-2007
OPERATING REVENUE:							
Passenger Fares	\$38,915,770	\$39,861,834	\$50,026,382	\$53,980,492	\$58,270,732	\$60,137,943	\$1,017,039,495
Other Operating Revenues	1,333,229	1,451,530	1,451,530	1,451,530	1,451,530	1,451,530	28,496,785
TOTAL OPERATING REVENUE	40,248,999	41,313,364	51,477,912	55,432,022	59,722,262	61,589,473	1,045,536,280
OPERATING EXPENSES:							
Labor and Fringe Benefits	89,697,385	91,739,662	104,887,850	111,407,213	118,502,434	121,513,041	2,137,528,667
Materials and Supplies	10,627,713	11,457,936	19,180,567	20,819,715	22,611,793	23,374,599	374,349,668
Outside Contractual Services	9,503,195	10,787,478	13,981,482	13,981,482	13,981,482	13,981,482	264,504,674
Utilities	5,568,023	5,874,033	6,292,749	6,292,749	6,292,749	6,292,749	123,734,533
Casualty and Liability	6,003,849	4,828,360	6,248,857	6,676,894	7,146,146	7,346,374	126,558,250
Purchased Transportation	6,472,041	2,921,146	2,350,000	2,350,000	2,350,000	2,350,000	53,025,860
Miscellaneous	6,682,504	7,055,101	5,961,754	6,305,715	6,680,366	6,839,429	77,067,266
TOTAL EXPENSE	134,554,710	134,663,716	158,903,259	167,833,768	177,564,970	181,697,674	3,208,556,296
EXCESS OF OPERATING EXPENSES OVER OPERATING REVENUES (NOT INCLUDING DEPRECIATION)	(94,305,711)	(93,350,352)	(107,425,347)	(112,401,746)	(117,842,708)	(120,108,201)	(2,163,020,016)
NON-OPERATING REVENUE (EXPENSES)							
Transfer From General Funds	81,644,032	80,779,294	96,738,585	101,714,984	107,155,946	109,421,439	1,947,709,356
State Operating Assistance	960,827	1,771,158	1,771,158	1,771,158	1,771,158	1,771,158	34,926,121
Federal Operating Assistance	10,767,936	7,647,822	7,647,822	7,647,822	7,647,822	7,647,822	156,076,554
Interest and Other	1,352,198	1,267,782	1,267,782	1,267,782	1,267,782	1,267,782	24,307,985
TOTAL NON-OPERATING REVENUES	94,724,993	91,466,056	107,425,347	112,401,746	117,842,708	120,108,201	2,163,020,016
EXCESS OF REVENUES OVER EXPENSES (EXPENSES OVER REVENUES) (NOT INCLUDING DEPRECIATION)	\$419,282	(\$1,884,296)	\$0	\$0	\$0	\$0	\$0

SOURCE: MDTA Transit Financial Study, Deloitte, Haskins & Sells, July, 1988

TABLE 9-B
MIAMI URBAN AREA TRANSPORTATION STUDY
TRANSIT CAPITAL REVENUES AND USES
BASE SCENARIO

(Constant 1986 Dollars)

	1988	1990	1995	2000	2005	2007	TOTALS 1988-2007
CAPITAL CONTRIBUTIONS:							
Federal Section 3	\$6,904,111	\$42,276,000	\$1,012,500	\$1,125,000	\$1,237,500	\$1,237,500	\$175,100,611
Federal Section 9	4,999,169	9,537,266	14,553,527	2,194,063	8,634,502	1,009,284	141,498,390
State	1,392,233	11,113,512	3,145,680	461,758	1,852,368	332,411	58,148,844
Transfer From General Fund	21,290,340	36,943,403	15,519,523	886,016	8,197,924	623,571	197,924,674
Other	72,836	6,877,249	0	0	0	0	24,636,835
TOTAL SOURCES OF CAPITAL FUNDING	34,658,689	106,747,430	34,231,230	4,666,837	19,922,294	3,202,766	597,309,354
USES OF CAPITAL:							
Cost of Renewal and Replacement							
MetroBus	9,956,689	39,902,818	500,000	2,742,579	4,552,576	1,261,605	190,147,993
MetroRail	0	772,300	23,730,700	0	8,908,600	0	86,114,100
MetroMover	0	0	5,538,600	0	3,000,000	0	20,933,200
Subtotal Renewal and Replacement	9,956,689	40,675,118	29,769,300	2,742,579	16,461,176	1,261,605	297,195,293
Cost of Capital Expansion							
MetroBus	3,450,000	1,350,000	1,350,000	1,500,000	1,650,000	1,650,000	31,200,000
MetroRail	7,392,000	0	0	0	0	0	7,392,000
MetroMover	13,860,000	55,018,000	0	0	0	0	210,372,000
Subtotal Capital Expansion	24,702,000	56,368,000	1,350,000	1,500,000	1,650,000	1,650,000	248,964,000
Capital Reserve Fund	0	9,704,312	3,111,930	424,258	1,811,118	291,161	51,150,060
TOTAL USES OF CAPITAL	34,658,689	106,747,430	34,231,230	4,666,837	19,922,294	3,202,766	597,309,353

SOURCE: MDTA Transit Financial Study, Deloitte, Haskins & Sells, July, 1988

POTENTIAL NEW SOURCES OF TRANSPORTATION FUNDING

Transportation funding to meet the needs of Florida's tremendous growth rate, and Dade County's local requirements has received considerable attention at both the State and local levels. Dade County is evaluating a number of ways to raise additional funds for transit operations and future expansion, including the possibility of a local election for a Charter County Transit System 1 Cent Sales Surtax. At the State level, numerous proposals for increased transportation funding have been put forth, including gas tax increases, additional motor vehicle fees, bonding of Turnpike toll revenues, "new wheels on the road" taxes and surcharges on rental cars. These and other proposals will be addressed by the Legislature in a special session to be held in November, 1989.

This section discusses some of the funding proposals and provides projections of various new sources of transportation revenue.

In 1987, Dade County retained Deloitte, Haskins & Sells to conduct a Transit Financial Study aimed at projecting long term funding needs for the existing and expanded transit system and identifying potential sources of funding for transit operations. The study reviewed a number of funding mechanisms and identified three primary alternatives for considerations by Dade County: 1) a retail sales tax; 2) transit authority funds; and 3) property tax. The study also identified a number of secondary sources which could be more easily implemented, but would not generate the levels of revenue required by the County. Table 10 summarizes the results of the DH&S study and the projected revenues by source for 1988, 1990, 2000, 2005 and 2010.

Table 11 provides projections of potential new revenues which could come from the proposals being put forth for the November legislative session. These include proposals which are supported by business organizations, local and State chambers of commerce and a number of State legislators. Gas tax increases are projected at three different levels -- 12, 10 and 5 cents per gallon. An increase in motor vehicle fees of \$15 per vehicle is projected. A \$1.00 surcharge on car rentals and a one-time, \$100 dollar new car registration fee are included. Projections of fuel consumption and vehicle registrations are consistent with the tables and assumptions previously presented. Dade's share of the new revenue is based on distribution under the 50 percent population, 50 percent collections formula.

The new revenue sources range from an average of more than \$100 million per year (12 cent gas tax) to a low of \$5 million a year (rental car surcharge) for Dade County. The feasibility of any of the revenues becoming available to Dade County will be determined in the November legislative session.

TABLE 10
 MIAMI URBAN AREA TRANSPORTATION STUDY
 POTENTIAL TRANSIT FINANCING SOURCES
 METRO-DADE TRANSIT FINANCIAL STUDY

(1,000'S)

YEAR	PRIMARY SOURCES			SECONDARY SOURCES								
	CHARTER TRANSIT SYS. SALES TAX	ONE MILL PROPERTY TAX	REGIONAL TRANS. AUTHORITY	LOCAL VOTED \$.01 GAS TAX	\$5 MOTOR VEHICLE FEE	PER SPACE PARKING FEE	STATE LOTTERY FUNDS	SPECIAL BENEFIT ASSESSMENT	TAX INCREMENT FINANCING	TRANSIT IMPACT FEES	JOINT DEVELOPMENT REVENUES	ADVERTISING AND CONCESSIONS
1988	\$130,500	\$60,600	\$181,800	\$5,600	\$8,700	\$2,300	\$3,600	\$2,000	\$0	\$1,000	\$0	\$1,100
1990	\$144,700	\$65,500	\$196,500	\$5,800	\$9,000	\$3,100	\$3,900	\$2,000	\$0	\$1,100	\$500	\$1,200
1995	\$287,300	\$79,700	\$239,100	\$6,000	\$10,000	\$3,400	\$4,900	\$2,100	\$1,200	\$1,400	\$1,000	\$1,500
2000	\$296,800	\$97,000	\$291,000	\$6,300	\$11,000	\$3,400	\$6,900	\$2,300	\$1,600	\$1,800	\$1,000	\$2,000
2005	\$289,000	\$118,000	\$354,000	\$6,700	\$12,100	\$3,700	\$8,900	\$2,400	\$2,100	\$2,500	\$1,000	\$2,700
2010*	\$374,100	\$143,500	\$430,700	\$7,000	\$13,400	\$4,000	\$10,900	\$2,500	\$2,600	\$2,800	\$1,000	\$3,000
AVERAGE	\$253,733	\$94,050	\$282,183	\$6,233	\$10,700	\$3,317	\$6,517	\$2,217	\$1,250	\$1,767	\$750	\$1,917
20 YEAR TOTALS	\$5,074,667	\$1,881,000	\$5,643,667	\$124,667	\$214,000	\$66,333	\$130,333	\$44,333	\$25,000	\$35,333	\$15,000	\$38,333

SOURCE: Metro-Dade Transit Agency Transit Financial Study, Deloitte, Haskins & Sells, 8/7/87

NOTES:

1. Year 2010 projections by SBA, based on DH&S methodology.
2. Regional Transit Authority estimates based on 3 mill property tax.
3. 20 year totals based on averages.

TABLE 11
 MIAMI URBAN AREA TRANSPORTATION STUDY
 PROJECTED FINANCIAL RESOURCES
 POTENTIAL NEW TRANSPORTATION FUNDING SOURCES (\$1,000'S)

YEAR	GALLONS OF MOTOR FUEL	\$.12 STATE GAS TAX		\$.10 STATE GAS TAX		\$.05 STATE GAS TAX		\$15 INCREASE VEHICLE FEES		\$1.00 RENTAL CAR CHARGE		\$100 NEW CAR REGISTER FEE	
		STATEWIDE	DADE CO.	STATEWIDE	DADE CO.	STATEWIDE	DADE CO.	STATEWIDE	DADE CO.	STATEWIDE	DADE CO.	STATEWIDE	DADE CO.
1985	7,490,000	\$719,040	\$98,077	\$599,200	\$81,731	\$299,600	\$40,865	\$163,740	\$22,334	\$29,520	\$4,027	\$33,072	\$4,511
1990	8,364,000	\$802,944	\$101,894	\$669,120	\$84,911	\$334,560	\$42,456	\$180,780	\$22,941	\$32,640	\$4,142	\$38,336	\$4,865
2000	9,205,000	\$883,680	\$110,902	\$736,400	\$92,418	\$368,200	\$46,209	\$220,368	\$27,656	\$39,760	\$4,990	\$51,520	\$6,466
2005	9,674,000	\$928,704	\$116,181	\$773,920	\$96,817	\$386,960	\$48,409	\$243,300	\$30,437	\$43,920	\$5,494	\$59,728	\$7,472
2010	10,168,000	\$976,128	\$118,697	\$813,440	\$98,914	\$406,720	\$49,457	\$268,620	\$32,664	\$48,480	\$5,895	\$69,240	\$8,420
AVERAGE	8,980,200	\$862,099	\$109,150	\$718,416	\$90,958	\$359,208	\$45,479	\$215,362	\$27,206	\$38,864	\$4,910	\$50,379	\$6,347
20 YEAR													
TOTALS	179,604,000	\$17,241,984	\$2,183,002	\$14,368,320	\$1,819,168	\$7,184,160	\$909,584	\$4,307,232	\$544,129	\$777,280	\$98,192	\$1,007,583	\$126,933

ASSUMPTIONS:

1. Gas Consumption totals are based on projections by the Revenue Estimating Conference through FY 96-97. Remaining figures are escalated at an average rate of 1% per year.
2. State gas tax collections assume 80% of collections are available for distribution to counties.
3. Dade County share of state total based on 50% population, 50% collection formula.
4. MVF revenues assume 80% of collections are available for distribution to counties.
5. Rental car revenues are based on estimates prepared by Floridians for Better Transportation, and are escalated at 2% per year. 80% of collections are assumed to be available for distribution.
6. New vehicle registrations are based on 1985 data from the Florida Statistical Abstracts, and escalated at 3% per year.

CONCLUSIONS

Based on the analysis presented in this report, funding for the long range transportation plan will come from a mix of existing and new revenue sources. Transportation financing is a critical policy issue for both State and local governments. It appears likely that new funding sources will be developed in the near term.

Existing funding sources in Florida are relatively stable and should remain fairly constant over the long range. Continued growth in population and vehicle ownership will ensure some level of increase in the current funding sources, though these increases will likely not keep up with demand, nor inflation.

The following key points should be considered in developing the final needs plan and the resultant cost-feasible transportation plan for Dade County.

- Funding for Federal and State highways, and for local roadways will likely average about \$200 million per year over the 20 year period. This level of funding is consistent with historical funding levels, when adjusted for growth.
- Funding for transit capital and operating purposes is a function of the Federal and local political process. Dade County has fared extremely well in the competition for Federal discretionary funds in the past, and has enjoyed consistent State support with matching monies. The crucial element now for the County is to develop a dedicated source of local funding to meet operating needs and to match potential future grants. The Transit Financial Study identified a number of implementable local funding sources, the most likely of which is the Charter County Transit System Surtax. The County is currently considering a special election which would ask voters to approve a 1 cent sales surtax to fund transit capital and operating needs. If approved, this tax would raise about \$160 million per year for transit. The transit operating deficit will continue to be met through a mix of Federal, State and local funds, but new sources of local money will be required to more effectively operate and expand the system.
- With a stable source of local funding, the County could likely average \$40 to \$50 million per year in Federal and State discretionary grants.
- The potential for funding related to the Turnpike and other toll roads remains unclear until the legislative session in November. It is safe to assume that any plan improvements related to the Turnpike or existing toll roads in Dade County can be funded out of the toll booth. However, the level of funding for new facilities as a result of bonding Turnpike tolls is subject to the legislative process. Dade County should strive to maintain its share of Turnpike toll revenue at least at the levels of its percentage of the State gas tax. This level

would represent about \$250 to \$400 million out of a bond program designed to raise \$2 to \$3 billion statewide.

- There appears to be broad support for an increase in transportation funding at the State level, through an increase in the gas tax. For purposes of long range financial planning, the County could assume an increase of 3 to 5 cents a gallon which would net an additional \$25 to \$50 million per year on the average over the 20 year period.
- Additional alternative funding sources may also be possible in the short term. However, the overall significance of these with regard to their impact on transportation funding is minor.