

INTERIM
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FY 1992
MULTI-MODAL PROGRAM

MICHIGAN DEPARTMENT OF TRANSPORTATION

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OCTOBER 1, 1991

PREFACE

The mission of the Michigan Department of Transportation is to provide the highest quality transportation services for all of our customers. This includes supporting Michigan's economy and improving the quality of life for all its citizens.

This Interim 1992 Multi-Modal Program identifies planned expenditures for projects to be undertaken between October 1, 1991 and September 30, 1992 for Aviation, Comprehensive Transportation, and Highway modes. It combines estimated state and federal revenue to accomplish its purpose.

Two significant factors make it necessary to adopt this document as an Interim Multi-Modal program. First, the current authorization for federal transportation programs, this Federal Surface Transportation Act, will expire on October 1, 1991. It is expected that the new federal legislation, currently being developed, will have a substantial impact on the state transportation program. Secondly, this document was developed based on the 1982 State Transportation Plan and the 1988 Transportation Investment Plan. A new state transportation plan and subsequent 10 year investment strategy is currently being developed by the Michigan State Transportation Commission and the Michigan Department of Transportation. Adoption of the new state transportation plan is expected by December of 1991.

The expected changes in the federal law and the development of a new state transportation plan will, in all likelihood, affect the programs and projects listed in this document. These changes may require modifications to the adopted programs, projects and spending plan.

This interim document has eight sections: Section one is an executive summary of the total program. Sections two, three, and four provide detailed information about the highway, comprehensive transportation, and aviation modes, respectively. Section five lists the FY 1992 Highway Program by project while section six lists the Available FY 1992 Substitutes, also by project. Section seven contains comprehensive transportation performance tables and section eight lists the FY 1992 aviation projects.

For further information on this annual process, please contact Ms. Gloria Jeff, Deputy Director, Bureau of Transportation Planning, 517/373-0343, or Ms. Susan Mortel, Administrator, Program Planning Division, 517/335-2962.

The annual Multi-Modal Program is a document required by Act 51 of the Public Acts of 1951. A total of 500 copies are distributed with a total cost of \$917 and a cost per single copy of \$1.83.

The Interim FY 1992 Multi-Modal Program is based on the Michigan State Transportation Plan (STP) priorities approved in 1982 and updated in 1987. The STP is currently being revised. The FY 1993 Multi-Modal Program will reflect new STP policies approved by the Michigan State Transportation Commission.

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ACKNOWLEDGEMENTS

The Interim 1992 Multi-Modal Program was developed through a cooperative effort involving four Bureaus of the Michigan Department of Transportation.

The executive summary and highway sections were written by the Program Planning Division, Bureau of Transportation Planning. Considerable assistance was provided by the Program Administration Division, Bureau of Highways. The Airport Development Division, Bureau of Aeronautics wrote the aviation section. The comprehensive transportation section was written by the Office of Planning and Programming, Bureau of Urban and Public Transportation (UPTRAN). The Data Management Section, Bureau of Transportation Planning provided the highway condition information. Considerable assistance was provided by the word processing unit of the Executive Division, Bureau of Transportation Planning. Maps were provided by the Technical Services Division, Bureau of Administration.

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EXECUTIVE SUMMARY

The Michigan Department of Transportation is dedicated to providing the highest quality transportation services for Michigan motorists. For the last 30 years, the department has been developing a freeway system that ranks with the nation's best. We are proud that the last segment of Michigan's interstate system is due to open to traffic in 1992.

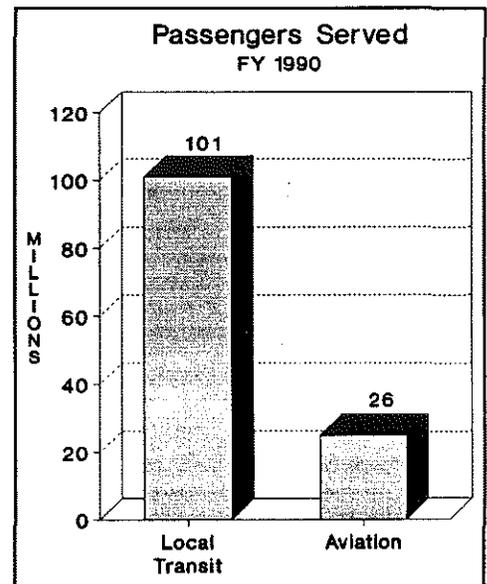
As we achieve this milestone, our attention must now turn towards the maintenance and, where necessary, improvement of the existing state trunkline system. We must now concentrate on the relationship between transportation and Michigan's economic environment and the quality of life of its citizens. We must work toward integrating the modes so that all facets of the transportation system work together including Highway, Aviation, Rail, Public Transportation and Ports. We must concentrate on projects that will improve the economic climate as well as maintain and improve the existing transportation infrastructure.

On average, over 12,500 cars and trucks travel each mile of state trunkline highways every day. This represents a total of 43 billion miles traveled each year on the 9,500 miles of state highways. Many routes have more than 100,000 vehicles rolling over them every day. The greater Detroit metropolitan area, in particular, has a large number of freeway and non-freeway routes with high daily traffic volumes; some exceed 200,000 vehicles per day.

The department provides public transportation services that allow commuters, senior citizens, handicappers, the vacationer, and the business traveler to reach their destinations. In 1990, approximately 101 million passengers traveled by bus, 530,000 passengers traveled by train, and 26 million passengers traveled by airplane.

The department also assists in providing a total transportation system for transporting goods that Michigan makes, imports, or exports. We estimate that trucks carry 52 million tons of goods on our highways each year. Almost 98 million tons roll over Michigan's system of railroads. Over 75 million tons sail into or from Michigan ports, and over 400 million pounds of cargo fly to and from Michigan airports.

These figures show just how important a good transportation system is to the economic growth and quality of life in our state. We must keep the system in good repair and expand the system where the demand for service exceeds current capacity. In this way we can help insure a favorable environment for economic growth as well as making travel more enjoyable for Michigan's citizens.



PROGRAM PROGRESS

HIGHWAYS

Since 1986 we've repaired or upgraded 2,978 miles of roadways and repaired 733 bridges. This is an annual average of 496 miles of roadways and 122 bridges.

In 1989 we completed the I-696 freeway through the suburbs north of Detroit. This route will greatly improve east/west travel through southern Oakland and Macomb counties. Travel is easier, faster, and safer for motorists and long distance traffic, including large trucks which no longer have to use local surface streets.

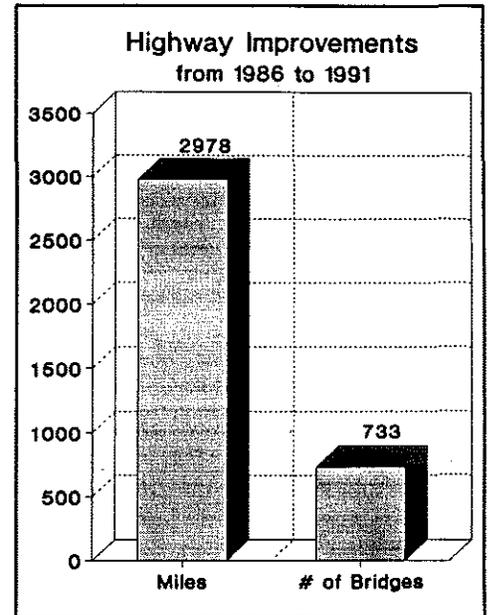
In 1989 we also contracted for the construction of the last segments of I-69 in Shiawassee and Eaton counties. With the I-69 from Lansing to Charlotte section opening to traffic in 1992, Michigan's interstate system will be completed.

In 1990 we contracted and repaired a number of trunklines throughout the state. In the Saginaw-Bay-Midland area, we made pavement improvements to US-10 and I-75. In the Grand Rapids area, we reconstructed M-44 and repaired several large bridges along I-196 and US-131. In the city of Lansing, we completed the widening of I-96BL and opened this segment to traffic. We also began the extensive reconstruction and widening of I-96 in Livingston County which links the Lansing area with Detroit. In the Detroit Metropolitan area, we opened the M-53 bypass around Romeo. We also began the construction of a new interchange on I-75 to serve the Oakland Technology Center, and resurfaced more than seven miles of I-96 (Jeffries Freeway).

Improvements planned for FY 1991 include resurfacing and reconstruction projects in the Upper Peninsula on US-41 in Hancock and M-129 in Mackinac County. In the northern half of the Lower Peninsula, we will continue the work along US-10 and US-31 in Mason County. We will also begin the relocation of M-32 in Montmorency County. In the southern half of the Lower Peninsula, we will continue the widening of M-44 in Kent County and the relocation of US-31 in Berrien County; we will reconstruct I-75 in southern Wayne County; and we will acquire right-of way for the Haggerty Road Connector projects which will improve travel in Oakland County.

PUBLIC TRANSPORTATION

Michigan is recognized nationally as a leader in providing transit services to small communities and rural areas. Our public transportation program has continued this focus. Since 1985, local bus service has been introduced in 21 Michigan communities. Twenty-five transit facilities have been built for transit agencies, with eight more to be completed by fall 1992 and 1,750 buses have been purchased to provide service in local communities.



Since 1985 our intercity passenger programs, designed to preserve intercity service to Michigan communities, have funded the purchase of 35 intercity buses and the construction or renovation of four passenger terminals with five more currently under construction.

Michigan's rail passenger service has benefited from a new generation of "Horizon" passenger and food service rail cars. The new cars complement upgraded tracks, improved grade crossing protection and a new bi-directional, "Push/Pull" operating capability. These improvements allow Michigan Amtrak trains to offer faster speeds, improved on-time reliability and a more attractive onboard travel environment for business and leisure travelers.

Our freight program has contributed technical and financial assistance on several economic development projects: Mazda, Hamtramck rail yard, Louisiana Pacific Sagola service track, Jefferson-Connor industrial revitalization, and Sycamore Creek industrial park. From 1985 through 1990, we have invested approximately \$43 million in rehabilitating state-owned rail facilities, ensuring that Michigan's communities continue to benefit from efficient and effective local and regional rail freight services.

AVIATION

Our airports provide for the rapid movement of materials critical to economic vitality as well as timely movement for our citizens. Efforts to preserve and expand this vital transportation link are important to maintain the level of mobility we now enjoy. The following are some of our efforts to accomplish these goals.

In 1990 we completed the construction of a new runway and taxiway system at Charlotte as well as completing airport rehabilitation projects at Jackson and Bay City. These projects serve and attract corporate aviation.

In 1991 we plan to begin multi-year expansion projects at Detroit Metropolitan and Flint Bishop airports, two of our major air carrier airports. Airport rehabilitation and expansion projects are planned for general aviation airports at Adrian and Cadillac.

We will also continue to work to preserve existing airport sites in the southeastern area of Michigan.

These are some of the transportation needs we have been able to meet. Unfortunately, there are many needs for transportation services that cannot be met.

1989-1998 INVESTMENT PLANS

In 1985, the first investment plan, for highways, was developed to guide the expenditure of the department's resources in accordance with 1984 Needs Study. The investment plans for Aeronautics and Comprehensive Transportation were subsequently developed in 1988. Each mode's investment plan is the method this department uses to allocate expected revenue to broad program categories of Preserve, Improve, and Expand when needs exceed revenues. The three modes have received requests to provide services and projects that would benefit transportation in Michigan, but that are beyond each mode's annual and ten-year expected revenue. Without additional revenue from federal, state, or private sources, there will be a total of more than two billion in unmet needs. The investment plans set the long-range priorities for each mode. This annual program implements the investment plans by assigning funds to specific projects or programs.

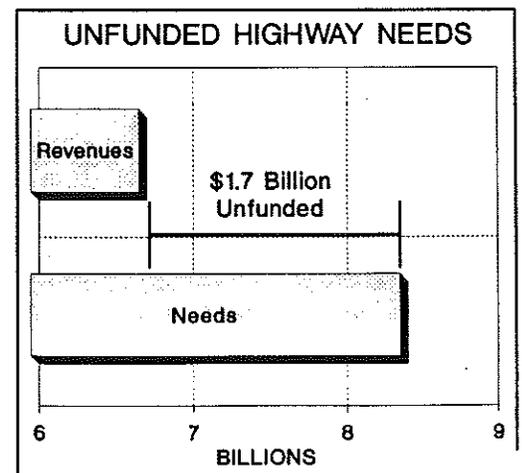
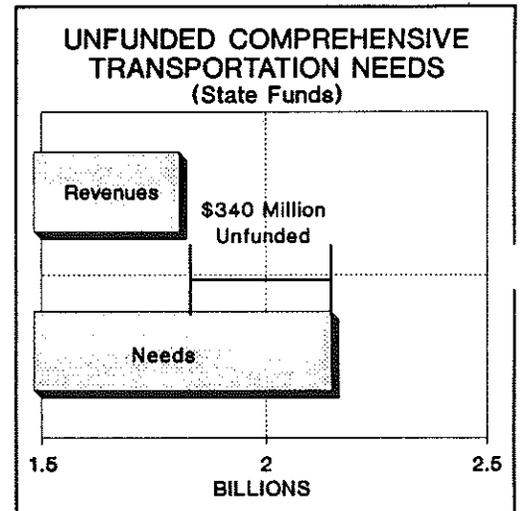
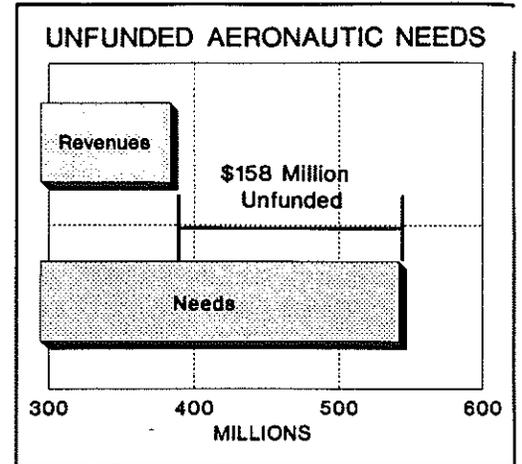
The \$158 million identified as unmet needs in the Aeronautics Investment Plan means that not all needed work will be done at existing airports to serve the business and pleasure traveler, to attract new, more efficient aircraft, and to support local industry.

The \$340 million of state unmet needs in the Comprehensive Transportation Investment Plan means that we will be unable to fund replacement of all transit vehicles meeting replacement criteria, any needed transit facility, new local bus service, expanded bus service in rural counties to connect with intercity bus services, additional marine ferry service, or additional improvements to track conditions along rail routes.

The \$1.7 billion of unmet needs in the Highway Investment Plan means we will be unable to provide additional capacity on widened and new routes, new methods for traffic operation, and additional services to motorists at expanded roadside facilities.

FEDERAL ISSUES

The federal Surface Transportation and Uniform Relocation Assistance Act is due to expire on September 30, 1991. The Bush Administration, the House, and the Senate have introduced proposals that would replace the current transportation legislation. Whereas the expiring Surface Transportation Act focused on the completion of the Interstate system, the current proposals emphasize preserving the existing system. The Michigan Department of Transportation (MDOT) agrees with the general direction of the proposals, however, there are provisions within each that are not favored by the state.



There are a number of issues important to the State of Michigan and MDOT that arise from these bills.

1. **Funding.** All three proposals provide higher funding levels. The expiring law funded federal highway and transit programs at \$89.6 billion for the five-year period ending this September. The Administration, the Senate, and the House proposals would fund the programs at \$105.4 billion, \$124.2 billion, and \$153 billion, respectively, for the five-year period ending September 30, 1996. The increased federal funding is very welcome. However, the proposals also reduce the federal share of individual projects. The proposed reductions (greatest under the Administration bill) will require substantial additional funding from the state and local governments.
2. **Michigan's Donor Status.** Michigan is a "donor state" which means Michigan's citizens contribute more to federal highway revenues than the state receives back in federal aid to highways. The expiring law requires that each state receive at least 85 percent of its contributions. The Administration proposal eliminates the requirement, the Senate proposal maintains it, and the House proposal increases the minimum to 90 percent.
3. **The National Highway System (NHS).** All three proposals would establish a NHS comprised of the Interstate Highway System and other principal arterials of national significance. The purpose is to focus federal attention on those routes that mean the most to the country as a whole. MDOT agrees with the concept of targeting higher levels of federal funding and tighter federal standards to a National Highway System and offering greater flexibility to a system of mainly state and local significance. The Administration and House proposals hold more closely to this concept than does the Senate bill which, rather than establishing a separate program funding for the NHS, only earmarks a small portion of its funding for the system.
4. **Equal Footing For Highway and Transit Projects.** Many of the most congested portions of our transportation network, as well as the most expensive to expand, are on the National Highway System. In this case under the Administration proposal a highway improvement will receive 75 percent federal funding, while a transit improvement along the same route will receive only 60 percent federal funding. The House and Senate proposals would fund highway and transit projects at the same level. MDOT favors this approach to remove the bias toward highway projects.

5. **Operating Assistance To Large Urban Transit Systems.** The Administration proposal would eliminate general fund support for operating assistance for transit systems in large urban areas. This would cause the immediate loss of \$27 million, annually, to the two transit systems in southeastern Michigan (SMART and DDOT). The House and Senate proposals would not eliminate this support.

A federal issue separate from reauthorization of the surface transportation programs is the use of fuel tax exemptions to promote the use of alternative fuels. Since 1979, there has been a tax exemption for gasohol. The Road Information Program (TRIP) estimates that this exemption costs the Highway Trust Fund nearly \$500 million annually. With the passage of the 1990 Clean Air Act, it is likely that use of alternative fuels will be mandated in specific non-attainment areas. If the tax exemption remains in place or is extended to other types of alternative fuels, there is likely to be further reductions in total dollars coming into the trust fund from vehicles using those highways.

Another major issue is the need to release unexpended balances in the Aviation Trust Fund for improvements at Detroit Metropolitan Wayne County Airport (Metro Airport). Because of the importance of Metro Airport to Michigan's economy and citizens, it is a necessity that the airport have state-of-the-art safety and guidance equipment. The Federal Aviation Administration (FAA) needs to give the highest priority to the demonstrated equipment and facility needs at Metro Airport, including Terminal Doppler Weather Radar (TDWR) to maintain capacity during all weather operations, and sophisticated visual guidance systems and surface detection radar to insure safe handling and controlling of aircraft. Because of the ongoing and future expansion of Metro Airport, the U.S. Department of Transportation and the FAA need to commit to the provision of sufficient funds, either from the unexpended balance in the Aviation Trust Fund or any other available funds, in order for Metro Airport to remain the important hub for Michigan and international air travel that it is today.

THE 1992 MULTI MODAL PROGRAM

The 1992 Multi Modal program is an annual element of each Investment Plan. Once again, the department will emphasize preservation of existing programs and services and preservation of our trunkline system.

The 1992 program calls for the repair and maintenance of 499 miles of roadway. Preservation and maintenance projects are scheduled for 478 miles of roadways. Capacity improvements, which increase the number of vehicles a road can carry, are scheduled for 12 miles of highways. Nine miles of expansions to the existing highway system are also included in the 1992 program. The 1992 program also calls for work on 97 bridges. This includes both bridges that are projects in themselves and those bridges that will be worked on in conjunction with other projects. The program also strives to continue public transportation service to over 101 million bus riders annually on 67 transit systems statewide, to 530,000 train riders, and to 25 million airplane passengers.

MAJOR PROJECTS

Upper Peninsula

- Reconstruct 9.1 miles of Old M-69 from west of the Calumet Mine to the east Dickinson county line.
- Resurface 23.4 miles of M-94 from Dodge Lake to M-28 in Schoolcraft County.
- Widen and resurface 8 miles of M-134 from I-75 to west of Hessel in Mackinaw County.
- Rehabilitate 6 miles of US-41 from M-28 to Meeske in Marquette County.
- Continued support for ferry service between Neebish, Sugar, and Drummond islands and Chippewa County mainland.
- Continued support for local bus systems.
- Construction of a public bus facility for the City of Sault Ste. Marie.
- Rehabilitation of approximately 20 railroad bridges between Ontonagon and Iron Mountain.
- Perimeter fencing and apron expansion at Delta County Airport in Escanaba.
- Apron expansion and taxiway extension at the Chippewa County International Airport in Sault Ste. Marie.
- A new taxiway at Ford Airport in Iron Mountain/Kingsford.
- Terminal building at the Marquette Airport.

Northern Lower Peninsula

- Resurface 15.5 miles of M-65 from M-32 to the south Alpena county line.
- Rehabilitate 11.2 miles of US-131 from north of M-72 to the north Kalkaska county line.
- Resurface 8.7 miles of M-66 from Remus to north of the south Mecosta county line.
- Continued support for local bus systems.
- Construction of a public bus facility for Oscoda County.
- Runway improvements and lighting at Phelps Collins Airport in Alpena.
- Runway rehabilitation at Wexford County Airport in Cadillac.

Southern Lower Peninsula

- Adding capacity to 6 miles of I-96 from Dorr Road to east of US-23 in Livingston County.
- Relocating US-27 from Wildcat Road to south of Price Road in Clinton County.
- Reconstructing 7.7 miles of I-94 from Shook Road to the west Wayne county line.
- Rehabilitate 6.2 miles of US-23 from north of Thompson Road to I-75 in Genesee County.
- Constructing a new route, the Haggerty Connector, from I-696 to north of 12 Mile Road in Oakland County.
- Continued support for local bus systems.
- Renovation of a public bus facility for Berrien County.
- Continued support of Amtrak passenger service.
- Completion of an Intercity passenger terminal at Lansing.
- Rail rehabilitation of 45 miles of track from Ithaca to Mt. Pleasant and Mt. Pleasant to Farwell.
- Rehabilitation of bridges on right-of-way operated by the Tuscola and Saginaw Bay Railway.
- Construction of a new rail siding to the Coldwater Industrial Park.
- Completion of rail facility construction on the Jefferson-Conner Revitalization project.
- Apron rehabilitation at Tri-City International Airport in Saginaw.
- Runway construction and access road at Metropolitan Airport in Wayne County.
- Apron, taxiway, and runway improvements at Evert Municipal Airport in Evert.

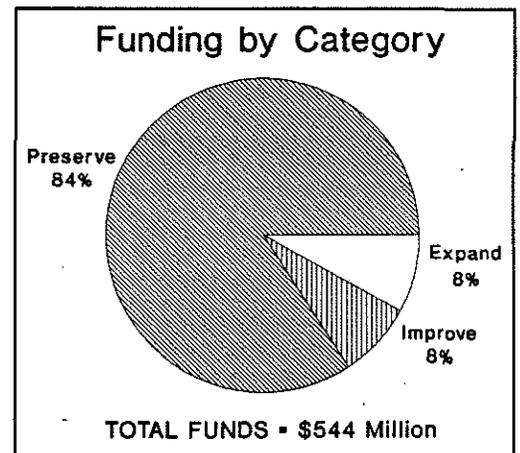
PROGRAM COSTS AND PROJECTED REVENUES

Providing these transportation services: road repairs, maintenance, and improvements; airports maintenance and improvements; and other public transportation services will cost \$544 million.

HIGHWAYS

The highway program will cost \$336 million. Of that total, \$284 million is devoted to our highest priority; preserving the existing state trunkline system. The remaining \$52 million will be spent on system improvements and expansions. Some of the system preservation work is being done in conjunction with road widening or other transportation improvements.

	Highway	CTF	Aviation
Preserve	\$284	\$146	\$27
Improve	7	5	30
Expand	45	0	0
Totals	\$336	\$151	\$57



We anticipate receiving \$336 million for capital improvements. This includes \$267 million in federal aid, \$65 million in state trunkline funds to match federal aid, and \$4 million from the Transportation Economic Development Fund. In addition to the state/federal transportation program, local units of government plan on a \$135 million program, including \$77 million in federal aid.

COMPREHENSIVE TRANSPORTATION

The comprehensive transportation program will cost \$151 million which will be used to help provide local bus, intercity passenger, and freight services: \$146 million to preserve existing public transportation services and \$5 million to improve services.

We expect to receive \$183 million in Comprehensive Transportation Fund revenue. After deducting for debt service and administration costs, \$151 million will remain for program costs. This includes \$131 million in CTF revenue, \$4 million in special funds, and \$16 million in federal funds.

AVIATION

The aviation program will cost \$57 million which will be used to provide much needed improvements to Michigan's system of airports and air services. This breaks down to \$27 million for preservation activities, \$30 million for improvements. There are no expansion projects planned for Michigan airports in FY 1992.

For aviation, we expect to receive an estimated \$57.3 million the 1992 program. This includes \$47.9 million in federal funds, \$1.6 million in state funds, and \$7.8 million in local funds.

THIS DOCUMENT

The remainder of this document details the specific programs for the highway, comprehensive transportation, and aviation modes. Lists of projects to be undertaken during FY 1992 for highways and aviation are included in the appendices.

There are uncertainties involved in developing the Annual Multi-Modal Program. Individual projects are placed in the program on the basis of estimated revenue and cost, and on the ability to complete pre-construction and other preliminary activities. We believe these estimates are accurate; yet, as with any estimate, changes can occur. As a result additions, deletions, and other modifications may occur in all modes as the program is implemented.

HIGHWAYS

MDOT is proud that we are well on our way to achieving one of the objectives of the department's Highway Investment Plan, completion of the Interstate System. The last segment of our interstate system, I-69, is due to be open to traffic in 1992. With the achievement of this milestone, our overwhelming priority is to repair and maintain the 9,500 mile state trunkline system. Thus, the 1992 program is heavily weighted toward preserving existing highways. We will also continue to focus our investments on the Priority Commercial Network (PCN) which is important to Michigan's economy.

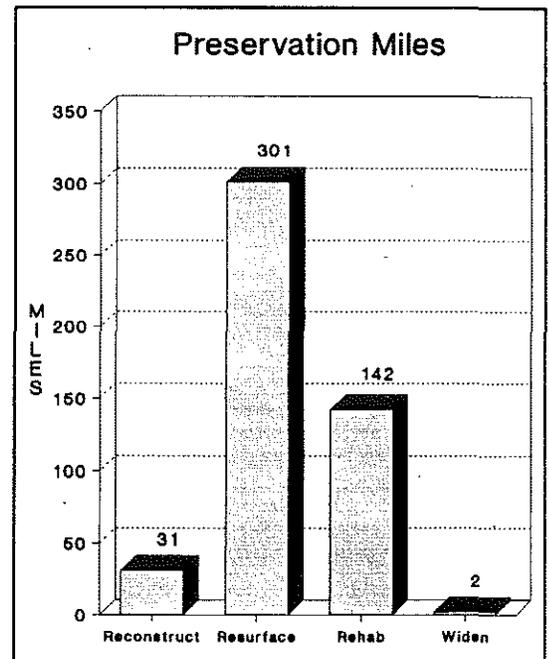
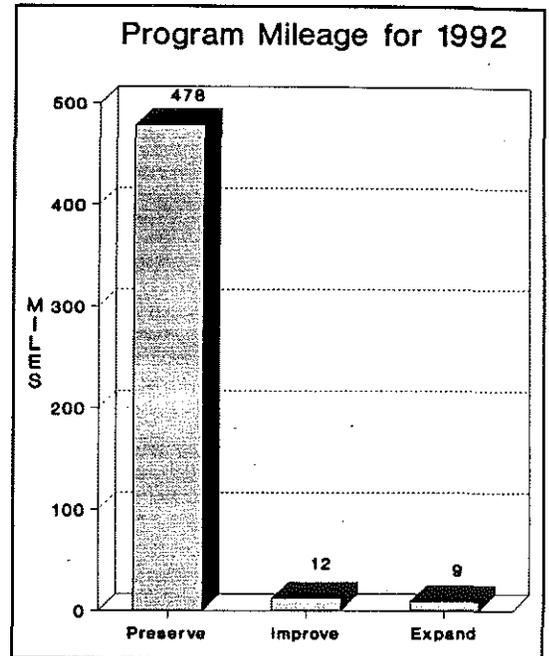
As we move further into the 1990's the department is focusing its attention on planning the orderly revitalization of our freeways, including urban segments which may require additional lanes and modified interchanges. Many of these routes have provided 30 or more years of service, serving many more motorists and vehicles than were envisioned when they were constructed. This revitalization will encompass all components of a freeway: surface, bridges, interchanges, traffic operations, and roadside elements.

PRESERVATION PROJECTS

The 1992 program devotes 96 percent of the miles and 68 percent of the dollars to preserving the existing system. The program reconstructs 31 miles, resurfaces 301 miles, and rehabilitates 142 miles. Minor widenings add 2 miles for a total of 476 miles and \$154 million.

Another \$76 million of preservation expenditures is for projects that promote safety, and repair bridges. The major preserve projects include:

1. **Reconstruction Projects**
 - a. 7.7 miles of I-94 from Shook Road to the west Wayne county line.
 - b. 9.1 miles of Old M-69 from west of the Calumet Mine to the east Dickinson county line.
 - c. 8.7 miles of M-66 from Remus to north of the south Mecosta county line.
 - d. Interchange reconstruction on I-94 at Merriman and Middlebelt Roads in Wayne County.



These roads need extensive reconstruction. Typical problems calling for reconstruction include pavements that have cracked and shifted and are badly deteriorated, a base that is inadequate to support the traffic on the road, and inadequate drainage. The deficiencies associated with these projects require a more extensive treatment than resurfacing or rehabilitating the existing pavement. Interchange reconstructions are required when their designs are not capable of handling the increasing traffic volumes using the interchanges.

2. Resurfacing Projects

- a. 15.5 miles of M-65 from M-32 to the south Alpena county line.
- b. 20 miles of I-94 from US-12 to Stevensville in Berrien County.
- c. 8.7 miles of I-96 from Meridian Road to M-52 in Ingham County.
- d. 23.4 miles of M-94 from Dodge Lake to M-28 in Schoolcraft County.
- e. 16.2 miles of I-69 from east of M-52 to east of M-13 in Shiawassee County.

These projects repair the pavement and provide a smooth ride for the motoring public. Additional or recycled surface material is placed on the existing pavement to improve the ride or strengthen the pavement. There may be some other work done in conjunction with the resurfacing, such as shoulder improvements, pavement patching, minor drainage corrections, crack sealing, or elevation adjustments. Sometimes a roadway will be resurfaced while it is still in fairly good shape to economically extend its life. This treatment may extend the life of the roadway for another ten years before major improvements are required.

3. Restoration & Rehabilitation Projects

- a. 3.8 miles of I-194 from I-94 to Jackson Street in Calhoun County.
- b. 6.2 miles of US-23 from north of Thompson Road to I-75 in Genesee County.

- c. 11.2 miles of US-131 from north of M-72 to the north Kalkaska county line.
- d. 6 miles of US-23 from the State Line to north of US-223 in Monroe County.

These projects rehabilitate pavement that is not in good enough condition for simple resurfacing, or where only spot improvements are needed.

SYSTEM IMPROVEMENTS

In addition to our preservation needs, there continues to be a need to improve services to businesses and to the motoring public. Some roadways are not wide enough to handle traffic that has been steadily increasing over the years. Other areas have developed to the point where new highways are needed. In these instances, the department must improve and expand services. Many of the projects selected in the improve and expand categories are taken from a "core" list of road projects, which is part of the department's 1989-1998 Long-Range Highway Program. Improve projects usually include resurfacing the existing lanes as part of the overall project.

IMPROVE PROJECTS

The FY 1992 program provides \$32 million to add lanes along 12 miles of existing trunkline including resurfacing existing lanes. The major improve projects are:

- a. 6 miles of I-96 from Dorr Road to east of US-23 in Livingston County. This project is a continuation of the widening started in 1991.
- b. 1.0 mile of M-13 from M-84 to Fisher in Bay County.

These improvements will increase the efficiency of the roads and reduce delays experienced by motorists.

EXPAND PROJECTS

The 1992 program provides \$70 million to build 9 miles of new highways. The major expand projects are:

- a. M-59 from west of Hayes Road to east of Romeo Plank Road in Macomb County. This project is the first part of a multi-year commitment to expand the M-59 corridor from Mound Road to I-94.
- b. US-27 Relocation from south of Price Road to Wildcat Road in Clinton County. This project is also the first part of a multi-year commitment to relocate US-27 from I-69 to north of St. Johns.

These projects complement the existing system by expanding state highways so that travel is efficient for all of Michigan's citizens and businesses. Other expand projects are included in the Transportation Economic Development Fund section.

RIGHT OF WAY ACQUISITION

In 1992, the department will be purchasing right-of-way (ROW) for improve and expand projects that will be constructed in future programs. ROW acquisition will begin for M-37 from 76th Street to 32nd Street in Grand Rapids, M-43 from Riverview Street to G Avenue in Kalamazoo, and I-94 BL from Dickman Road to Columbia Road in Battle Creek.

BRIDGE PROGRAM

The bridge program identifies bridges scheduled for capital improvement whether for preservation or improve/expand. This program assures that Michigan's 4500 trunkline bridges will be able to support loads and link the adjacent road pavements together as the state trunkline system. Bridge work is generally done in conjunction with adjacent road work as much as possible to minimize disruption to the traveling public. An estimated 97 bridges will be painted, resurfaced, repaired, widened, or replaced in FY 1992.

Major bridge work scheduled for 1992 includes:

- a. I-75 over Walton Boulevard in Oakland County.
- b. M-46 over the Tittabawassee River in Saginaw County.
- c. I-96 under Evergreen in Wayne County.
- d. I-94 eastbound over Outer Drive in Wayne County.

TRAFFIC OPERATIONS and SAFETY

These programs identify locations to receive sign replacements, pavement markings, signal installations, intersection improvements, and guardrail upgrades. The FY 1992 program provides \$31.6 million for traffic operation and safety improvements.

ROADSIDE PROGRAM

Roadside projects improve the quality of life for residents living adjacent to freeways as well as making travel more enjoyable for the motorist. It is another facet of MDOT providing customer services and includes such items as rest areas and welcome centers, landscape plantings, non-motorized facilities, weigh stations, and noise abatement. Over \$6.5 million will be spent on the roadside projects in FY 1992.

TRANSPORTATION ECONOMIC DEVELOPMENT FUND (TEDF)

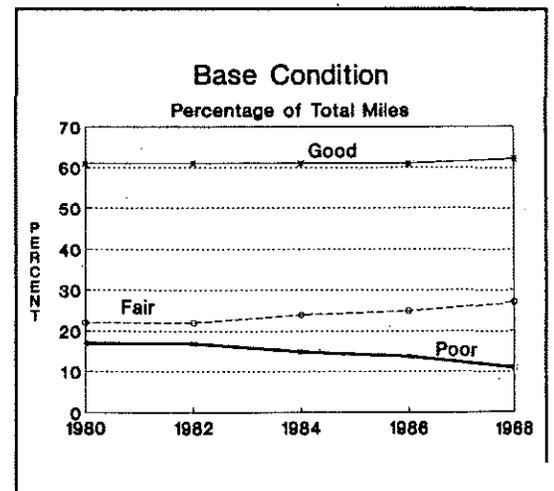
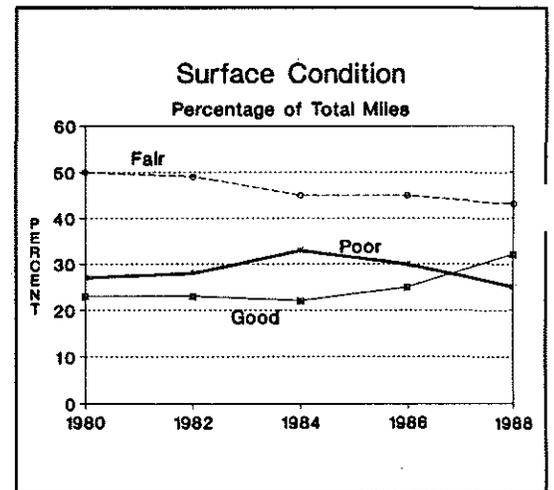
TEDF, created in 1987, provides funding for transportation improvements associated with economic development projects. Vehicle registration and driver license fees provide the funding for these projects. The state must compete with the counties and cities for funding. The 1992 highway program includes \$4 million for transportation improvement projects that help enhance or retain economic development. The TEDF projects this year include:

- a. Right-of-way acquisition for the Haggerty Connector from 12 Mile Road north in Novi.
- b. M-40 for 1.2 miles from south of 48th Street to US-31 in Allegan County.

HIGHWAY CONDITION INFORMATION

The charts in the margin indicate the trend of the general condition of our roadways. This shows that at the same time we have continued to experience declining revenues, we have been able to maintain the overall generally good condition of our roads and highways. Our ability to maintain this condition level is threatened by continued declines in federal funding.

Annually, we review all state-owned roadways to determine their condition. Each roadway is assigned a score on the basis of its surface and base characteristics. Surface ratings measure the adequacy of the roadway surface itself; base ratings measure the soundness of the roadway foundation. Each roadway is then classified as in good, fair, or poor condition for both the surface and base. The percentage of roadway miles in each of these classifications is shown in the margin.



Priority Commercial Network

The Priority Commercial Network is 4,300 miles of state highways that are most important for commerce in the state. Routes on the Priority Commercial Network are ones that are used extensively to haul goods to and from businesses in Michigan, and for tourism. A Priority Commercial Network route is given high priority when projects are considered for inclusion in the program. It is our intent to keep this subsystem of state highways in the best possible condition.

Seventy-eight percent of the dollars and fifty-two percent of the miles in the program are targeted towards the Priority Commercial Network.

Bridge Condition

In addition to highways, bridges are rated and classified as either good or in need of repair. Of the 4,493 bridges on our system, 1,870 need repair, of which 1,199 need painting.

IMPROVEMENTS TO CONDITION

Our major purpose in collecting this condition data is to guide the selection of pavement preservation projects. Projects are selected with the objective of improving the overall condition of the highway system.

Prior to 1991 we had a target of repairing an average of 500 roadway miles annually. This target allowed all roads to be repaired as soon as their condition was rated "poor." In developing the revised Investment Plan, we had to face the fact that our resources would not allow us to achieve this target over the next ten years. As a result, we've concluded that some lower-use, lower-speed roads cannot be repaired until their condition becomes very poor and revised the annual mileage target down to 390. We will still attempt to improve as many miles as possible. In fact, in 1992 we plan on completing 499 miles of improvements. We are above the 390 mile mark because there are more high-mileage, relatively low-cost resurfacing projects in the 1992 program.

REVENUES AND THEIR USES

Funds used to finance highway projects are provided by state and federal taxes on gasoline and automotive related items. Weight taxes also contribute about one third of the state funds. State taxes are returned to the department through the State Trunkline Fund. Federal taxes are returned to the department in the form of federal aid. About 79 percent of the highway construction is financed by federal aid. To maximize the return on state monies, state trunkline funds are first used to match federal aid. Any additional funds are then used to fund additional projects for which federal aid is not available. However, in 1992 all of the available state funds will go to match federal aid.

FUNDING BY SOURCE

Our current estimate for fiscal year 1992 funding for capital improvements is shown below:

Millions

\$267	Federal Aid
65	State Trunkline Funds
<u>4</u>	Transportation Economic Development Fund
\$336	Total

In addition to the federal and state program, each year the state passes federal aid through to local units of government. In 1992, local governments will receive approximately \$77 million for projects on city and county roads and streets. When matched with local funds, the federal/local program will total approximately \$135 million. Local projects are not listed in this document.

Included in Appendix A is a listing of the state trunkline projects for 1992. These projects are grouped into the program structure of preserve, improve, and expand. Improve and Expand projects may include the preservation of an existing road along with the improve/expand work element. The categories for Appendix A are described on the following pages, along with the funding for each work-type subcategory.

Included in Appendix B is a listing of available highway substitutes for FY 1992. These projects are also grouped into the preserve, improve, and expand program structure. If any of the projects listed in Appendix A are not able to be let during the fiscal year, a project will be substituted from Appendix B.

The table on the following page summarizes both Appendix A, the FY 1992 Highway Program, and Appendix B, the Available FY 1992 Substitutes.

FY 1992 Highway Program

(\$1,000)

	<u>FY 1992 Highway Program</u>						<u>Available FY 1992 Substitutes</u>	
	NON-INTERSTATE		INTERSTATE		TOTAL		<u>Amount</u>	<u>Miles</u>
	<u>Amount</u>	<u>Miles</u>	<u>Amount</u>	<u>Miles</u>	<u>Amount</u>	<u>Miles</u>		
PRESERVE								
Reconstruction	\$ 7,865	20.9	\$ 25,336	10.4	\$ 33,201	31.3	\$ 12,969	27.9
Restoration & Rehabilitation	28,317	85.8	11,833	56.2	40,150	142.0	42,858	79.5
Resurface	41,363	224.9	37,276	75.9	78,639	300.8	62,091	211.3
Minor Widening	2,146	2.0			2,146	2.0	5,786	7.2
Traffic Operations	14,000		1,400		15,400			
Safety	12,500	2.3	3,700		16,200	2.3		
Bridge Rehabilitation	22,931		13,633		36,564		28,506	
Roadside Facilities	880		3,065		3,945		1,920	
Miscellaneous	3,500		500		4,000			
SUBTOTAL	\$133,502	335.9	\$ 96,743	142.5	\$230,245	478.4	\$154,130	325.9
IMPROVE								
Capacity Improvement	10,087	6.3	17,124	6.0	27,211	12.3	34,019	18.6
Bridge Replacement			1,438		1,438		463	
Bridge Widening			1,100		1,100		1,371	
Roadside Facilities	1,668		713		2,381		3,339	
SUBTOTAL	\$ 11,755	6.3	\$ 20,375	6.0	\$ 32,130	12.3	\$ 39,192	18.6
EXPAND								
New Routes	34,279	1.1	2,266		36,545	1.1	6,134	5.9
Relocation	33,153	7.6			33,153	7.6	3,303	0.6
Roadside Facilities			161		161		2,046	
SUBTOTAL	\$ 67,432	8.7	\$ 2,427		\$ 69,859	8.7	\$ 11,483	6.5
TRANSPORTATION ECONOMIC DEVELOPMENT FUND					\$ 4,000			
FEDERAL\STATE TOTAL	\$212,689	350.9	\$119,545	148.5	\$336,234	499.4		
FEDERAL\LOCAL TOTAL					\$135,000			
GRAND TOTAL					\$471,234			

Note: The FY 1992 Highway Program and Available FY 1992 Substitutes lists are from the Project Planning File (PPF) Data Base. Amounts for Traffic Operations, Safety, and Miscellaneous categories are lump sum estimates. The Improve and Expand classifications include EDF projects, Interstate Completion and projects that are part preserve, part improve/expand. The Transportation Economic Development Fund reflects the EDF projects not already included in the Improve and Expand classifications.

PRESERVE COMPONENT

Traffic Operations **\$15,400,000**

This work includes items such as signing, pavement markings, and traffic signals. A lump sum budget amount is placed in this work-type for projects that will be developed throughout the year.

Safety **\$16,200,000**

Safety work includes intersection revisions, lighting, median barriers, guardrails, railroad crossing improvements, obstacle removal, and improvements that increase the ability of drivers to see approaching and crossroad traffic. This work-type also has a lump sum budget amount for future projects.

Bridge Rehabilitation **\$36,564,000**

This work-type includes all work related to extending the life of a bridge. Typical work includes replacing or resurfacing the deck, replacing the railings, making underwater repairs, painting, and minor widening (less than one lane in width).

Resurfacing **\$78,639,000**

This work involves putting a new surface on the highway. Often other work is done in addition to the new surface. This includes improvements to the road edges or shoulders, repair of cracks in the pavement, correction of drainage problems, and minor repairs to the roadway base. In general, a resurfacing project is less extensive and less costly than a full restoration of the roadway.

Restoration and Rehabilitation **\$40,150,000**

The purpose of this work-type is to make extensive repairs to a roadway. Old pavement may be removed, the roadway base and drainage improved, and a new or reconditioned surface put down. Safety improvements and other incidental work may also be included. The following are examples of typical work:

- Recycling existing pavement
- Adding three feet of paved shoulders
- Minor drainage and base improvements
- Joint repairs and pavement patching

A restoration and rehabilitation project is expensive, but less costly and less extensive than a reconstruction project.

Reconstruction **\$33,201,000**

This work-type calls for the removal and replacement of the old pavement. No additional lanes are added. It may include major changes to the elevation, drainage, and the roadway base. In general, this is an extensive reconstruction of the road and is more expensive than either a resurfacing or a restoration and rehabilitation project.

Minor Widening **\$2,146,000**

This work-type calls for widening an existing road without adding additional lanes. It includes adding turn lanes that are less than one-half mile in length.

Roadside Facilities **\$3,945,000**

These projects include renovations of rest areas, roadside parks and welcome centers; installing fences; planting trees, flowers, and grass; and other similar activities.

Miscellaneous **\$4,000,000**

This is a special amount for situations that arise during the year which cannot be foreseen at this time.

IMPROVE COMPONENT

Capacity Improvement **\$27,211,000**

Projects in this work-type add at least one lane, more than one-half mile long, to an existing road. When necessary, the old roadbed is reconstructed or the pavement resurfaced.

Bridge Replacement **\$1,438,000**

A completely new bridge is constructed in the place of an inadequate old one. Incidental work to the road on either side of the bridge for an adequate approach may also be included.

Bridge Widening **\$1,100,000**

Projects in this work-type add lanes to an existing bridge. Other repairs to the bridge may also be included as well as work to the approach road on both sides of the bridge.

Roadside Facilities **\$2,381,000**

These projects include constructing sound barriers, new rest areas and welcome centers, installing fences, planting trees and flowers, and other similar activities.

EXPAND COMPONENT

New Routes **\$36,545,000**

This is the construction of a new road. The prime example is the construction of a new freeway, though the route need not be a freeway.

Relocation**\$33,153,000**

Under this work-type, a new road is constructed near, but not in the same place as, an existing road. The new road will take traffic off the old road, but the old road may remain to service neighborhood traffic. The old road may be retained under state jurisdiction or be turned over to the local area governing body.

Roadside Facilities**\$161,000**

These projects include constructing sound barriers, rest areas, installing fences, planting trees and flowers, and other similar activities on new roads.

ACT 51 COMPLIANCE

This program is in compliance with the 90 percent maintenance provision of Act 51, of the Public Acts of 1951, as amended.

COMPREHENSIVE TRANSPORTATION

The Comprehensive Transportation Fund (CTF) supports local transit services, local bus new services, specialized services for seniors and handicappers, intercity passenger services, and freight services--helping keep public transportation "there" for everyone who needs it.

Local buses are there for people who need access to jobs, medical care, education, shopping, and leisure activities. Buses allow seniors to be more mobile and self-sufficient. Buses with lifts are there for handicappers, helping them lead more independent lives.

Intercity buses are there for business and leisure travel. Amtrak passenger trains are there, too, for business and recreational travelers from Michigan and all over the country.

And, when business depends on freight deliveries, Michigan's rail freight network is available to serve these needs.

The FY 1992 program will describe these services in more detail. It is based on estimated CTF revenue of \$163.5 million, special funds of \$4 million, and federal funds of \$15.9 million as shown in Table C-1.

The FY 1992 program is consistent with the CTF Investment Plan, which was recently developed to provide a framework for sound financial decisions. Estimated needs exceed estimated revenue in FY 1992 by more than \$51 million. Priority has been given to maintaining essential transportation service.

**TABLE C-1
CTF Revenue Estimates**

Gas & Registration	\$ 105,980,500
Sales Tax	48,570,000
Miscellaneous	<u>8,930,000</u>
CTF Subtotal	\$ 163,480,500
Intercity Bus Equip. Fund	2,000,000
Rail Freight Fund	<u>2,000,000</u>
Special Funds Subtotal	\$ 4,000,000
UMTA	\$ 15,350,000
FRA	<u>500,000</u>
Federal Funds Subtotal	\$ 15,850,000
Total Approp. Funds	\$ 183,330,500

TABLE C-2

FY 1992 COMPREHENSIVE TRANSPORTATION FUND PROGRAM

By Source of Funds
March 7, 1991

<u>Description</u>	<u>CTF</u>	<u>Special Funds</u>	<u>Federal</u>	<u>Totals</u>
Local Bus Operating Assistance - 70%	\$ 91,873,300	\$ 0	\$ 0	\$ 91,873,300
Section 18 Nonurban Assistance	<u>0</u>	<u>0</u>	<u>3,500,000</u>	<u>3,500,000</u>
	\$ 91,873,300	\$ 0	\$ 3,500,000	\$ 95,373,300
Intercity Passenger & Freight - 10%				
Intercity Service Development	\$ 950,000	\$ 0	\$ 0	\$ 950,000
Intercity Terminals	650,000	0	0	650,000
Intercity Bus Equipment	0	2,000,000		2,000,000
Rail Passenger Service	1,750,000	0	0	1,750,000
Marine Passenger Service	1,000,000	0	0	1,000,000
Freight Preservation/Development	4,200,000	2,000,000	500,000	6,700,000
Freight Property Management	2,600,000	0	0	2,600,000
Port Development	301,900	0	0	301,900
Discretionary	<u>1,672,900</u>	<u>0</u>	<u>0</u>	<u>1,672,900</u>
	\$ 13,124,800	\$4,000,000	\$ 500,000	\$ 17,624,800
Public Transportation Development - 20%				
Specialized Services	\$ 2,572,300 ✓	\$ 0	\$ 0	\$ 2,572,300
Local Share Bonus	1,000,000 ✓	0	0	1,000,000
Effective Service Bonus	1,000,000 ✓	0	0	1,000,000
Municipal Credit Program	1,000,000 ✓	0	0	1,000,000
Bus Transit Capital	2,600,000	0	11,000,000	13,600,000
Bus Property Management	225,000	0	0	225,000
Technical Studies	35,000	0	600,000	635,000
Planning Grants	50,000	0		50,000
Ridesharing	262,500	0	0	262,000
Vanpooling	125,000	0	0	125,000
Service Develop./New Technology	1,000,000	0	250,000	1,250,000
Discretionary	<u>16,379,700</u>	<u>0</u>	<u>0</u>	<u>16,379,700</u>
	\$ 26,249,500	\$ 0	\$ 11,850,000	\$ 38,099,500
PROGRAM TOTALS	\$131,247,600	\$4,000,000	\$ 15,850,000	\$151,097,600
DEBT SERVICE/ADMINISTRATION	32,232,900	0	0	32,232,900
TOTAL	\$163,480,500	\$4,000,000	\$ 15,850,000	\$183,330,500

TABLE C-3

FY 1992 COMPREHENSIVE TRANSPORTATION FUND PROGRAM

By Categories of Preserve, Improve, or Expand

<u>Description</u>	<u>Preserve</u>	<u>Improve</u>	<u>Expand</u>	<u>Totals</u>
Local Bus Operating Assistance	\$ 95,373,300	\$ 0	\$ 0	\$ 95,373,300
Intercity Passenger & Freight	\$13,624,800	\$ 4,000,000	\$ 0	\$ 17,624,800
Public Transportation Development	\$ <u>36,849,500</u>	\$ <u>1,250,000</u>	\$ <u>0</u>	\$ <u>38,099,500</u>
PROGRAM TOTALS	\$145,847,600	\$ 5,250,000	\$ 0	\$151,097,600
	<u>Preserve</u>	<u>Improve</u>	<u>Expand</u>	
	97%	3%		

LOCAL BUS OPERATING ASSISTANCE-70%

\$91,873,300 CTF

This program provides public bus transportation service to the general public, senior citizens, and handicappers of our state. Each year local transit systems participating in this program serve a ridership of approximately 100 million passengers, providing access to jobs, medical care, education, shopping, recreation, and other needed service. Funds are distributed to eligible systems based on a percentage of eligible operating expenses, limited by a growth cap. The growth cap for FY 1992 is approximately a negative 11.35 percent. The funding for this program is significantly less than that provided in previous years. Plans for FY 1992 include supplementing this program with funds from the Public Transportation Development (PTD) Discretionary account in order to maintain the same total level of assistance that the state provided in FY 1991.

It is anticipated that there will be 15 urbanized (over 50,000 population) and 52 nonurbanized (under 50,000 population) transit systems serving communities throughout Michigan in FY 1992. Six urbanized systems also provide service in nonurbanized areas, as shown by the asterisks in the listing to the left. Map C-1 on the facing page shows the locations of these services across the state.

Performance data for FY 1990 (the most recently completed fiscal year) for urban and nonurban transit systems are shown on Tables C-4 and C-5 in Appendix C.

NONURBAN OPERATING/CAPITAL

\$3,500,000 UMTA (Estimated)

This program, complementary to the Local Bus Operating Assistance program, provides federal operating assistance for public transportation in the nonurbanized areas of the state (under 50,000 population). Nonurbanized area transit systems and the nonurbanized portion of combined transit systems are eligible to receive these federal Section 18 funds. Effective 1987, this federal program also provides funding under the Rural Transit Assistance Program.

Urban Transit Systems - 15

Ann Arbor*	Kalamazoo
Battle Creek	Lansing*
Bay County*	Muskegon
Benton Harbor	Niles*
Detroit	Port Huron
Flint	Saginaw
Grand Rapids	SMART*
Jackson*	

* Combined urban and nonurbanized

Nonurban Systems - Countywide - 32

Alger County	Kalamazoo County
Antrim County	Kalkaska County
Barry County	Lenawee County
Bay Area	Manistee County
Berrien County	Marquette County
Branch County	Mecosta County
Charlevoix County	Ogemaw County
Clare County	Ontonagon County
Crawford County	Osceola County
Eaton County	Oscoda County
EUPTA	Otsego County
Gladwin County	Roscommon County
Gogebic County	Sanilac County
Huron County	Schoolcraft County
Iosco County	Van Buren County
Isabella County	Wexford County

Nonurban Systems - Noncountywide - 20

Adrian	Holland
Alma	Houghton
Alpena	Ironia
Beiding	Lapeer Area
Big Rapids	Ludington Area
Caro	Marshall
Dowagiac	Midland
Grand Haven	Saugatuck
Greenville	Sault Ste. Marie
Hillsdale	Yates Township

INTERCITY PASSENGER AND FREIGHT TRANSPORTATION-10%

INTERCITY BUS SERVICE DEVELOPMENT

\$950,000 CTF

This program focuses on continuing the availability of intercity bus passenger services to smaller communities. Prior to deregulation in 1982, 13 major carriers provided intercity bus service to more than 550 Michigan communities. Today, there are only four carriers, and more than 100 communities have lost service. Service development efforts seek to prevent community isolation and support tourism and economic development.

"Service development efforts seek to prevent community isolation."

- **Intercity bus operations assistance** is considered only if all other efforts, including marketing and the bus equipment program, have failed to maintain essential service. This program provides financial assistance to continue or reinstate service where termination would cause isolation to an area not designated as part of the core network. Other program elements provide for one-year demonstration projects for new service, capital support for regular route enhancement, and other initiatives to encourage or support tourism by motorcoach.

Services started in FY 1991 between Grand Rapids-Traverse City and Bay City-Alpena are targeted to receive continuation funding in FY 1992.

TERMINAL DEVELOPMENT

\$650,000 CTF

The intercity passenger terminal program provides funding for passenger facilities to serve communities throughout Michigan. Locations are reviewed on a case-by-case basis to achieve the best response to transportation industry needs, coordination, and economic development. Scheduled for completion in FY 1991, were passenger terminals in Detroit, Lapeer, Bay City, Muskegon, Holland and Grand Haven. Facilities that were under construction in FY 1991, were Cadillac (new larger facility) and Benton Harbor. In FY 1992, the design stage of the Lansing Terminal is scheduled for completion, and construction is expected to begin.

INTERCITY BUS EQUIPMENT PROGRAM

\$2,000,000 Equipment Fund

This program provides modern vehicles to serve intercity travelers throughout Michigan. Carriers that have operated under a certificate of authority for two years may lease a maximum of five units a year for up to six years each. A local match of two like buses owned by the carrier for every one bus requested is required. The lease rate is \$1 per year per bus. Carriers provide a security deposit of 2 percent of the vehicle purchase price and provide all necessary maintenance and operating costs. Use of the equipment is restricted to scheduled regular-route services that originate at, or are destined to, points in Michigan. This program enhances the operating safety and attractiveness of such service through provision of new equipment. The allocation is based on estimated repayments to the Intercity Bus Equipment Fund.

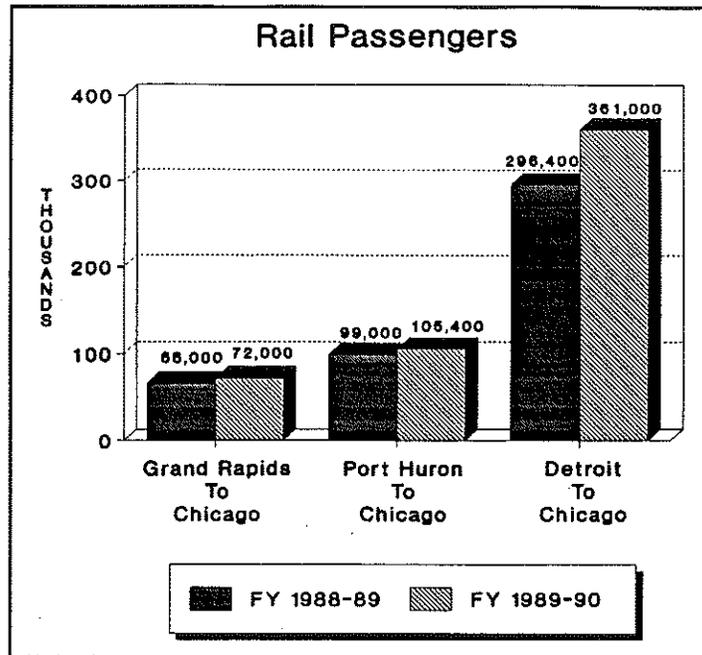
RAIL PASSENGER SERVICE

\$1,750,000 CTF

Rail passenger service provides an increasingly attractive mode of travel serving 20 communities along three primary Michigan routes. The "International" route links Port Huron, Flint, Lansing/East Lansing, and other central and eastern Michigan cities with Chicago and Toronto. The "Pere Marquette" service links Grand Rapids and other southwestern lower Michigan cities with Chicago. Amtrak's Detroit-Chicago route provides daily corridor service to Dearborn, Ann Arbor, Jackson, Albion, Battle Creek, Kalamazoo, Dowagiac, and Niles. These three routes served 538,000 rail passengers in FY 1990, an increase of 17 percent over 1989 levels, as shown on Table C-6 on the following page.

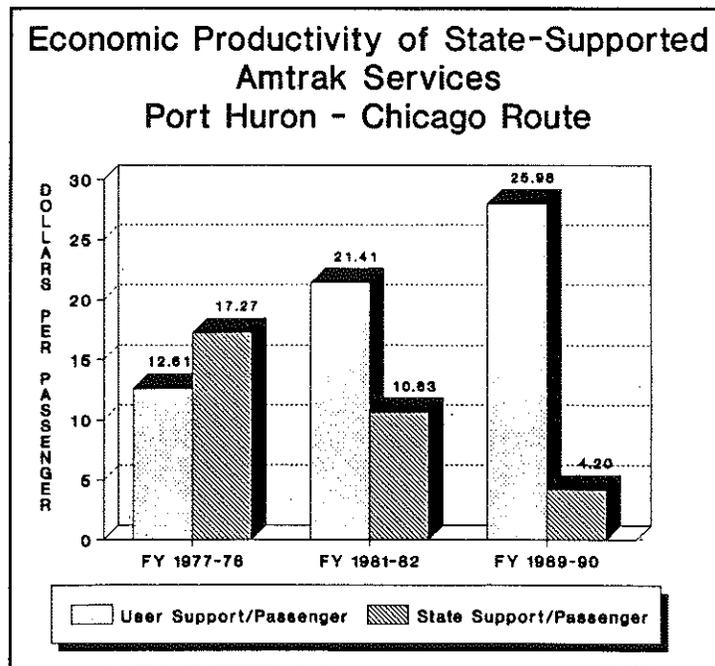
"Modern vehicles to serve intercity travelers throughout Michigan."

TABLE C-6



Rail passenger capital investments focus on passenger stations, track and signal improvements, equipment upgrading, and grade crossings to achieve improved service availability, attractiveness, safety, and performance. Table C-7 shows economic performance trends impacting state assisted rail passenger services. From FY 1978 to 1990, user support increased from \$12.61 to \$25.98 per passenger, while state support was reduced by 76 percent, from \$17.14 to \$4.20 per passenger.

TABLE C-7

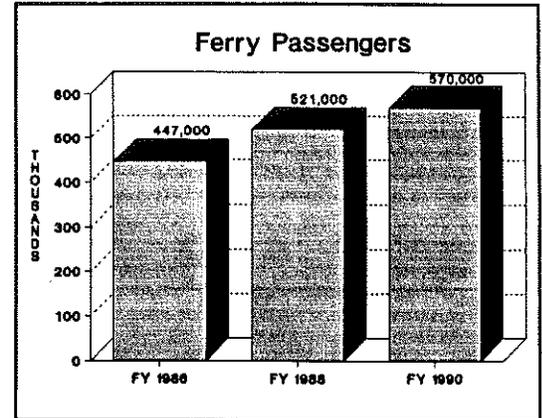


MARINE PASSENGER

\$1,000,000 CTF

The state provides operating and capital support to designated water ferry service linking Drummond, Neebish, and Sugar Islands with the Chippewa County mainland. These services are administered by the Eastern Upper Peninsula Transportation Authority. Residents of the islands are dependent upon these services for access to fuel and other basic supplies and services, as well as school and work transportation. Annual system passenger levels have increased by nearly 28 percent since 1986, as shown on Table C-8.

TABLE C-8



FREIGHT PRESERVATION AND DEVELOPMENT

\$2,000,000 Rail Freight Fund
500,000 FRA (Estimated)
4,200,000 CTF
\$6,700,000

The freight transportation program helps assure that essential rail facilities are maintained for the movement of goods. Program policies include:

- Improvements to state-owned rail facilities will be prioritized according to available funds and relative importance of the project. Facility rehabilitation projects will be engineered based on concern for safety, traffic volume/tonnage, time sensitivity of commodities, function of segment in a corridor, and cost of operations.
- The state will consider purchase of a new line only where the proposed line is directly connected to a currently operating state-owned line, and the proposed line generates an annual minimum of 20 carloadings per mile. Acquisition of other lines may occur as a last resort to preserve service when a documented need exists and when other sources provide 50 percent of acquisition costs.
- Privately owned railroad companies may receive capital loans up to 30 percent of the total project cost to improve or expand the privately owned infrastructure.
- Non-transportation companies or local units of government may receive assistance for economic development purposes in the form of loans and/or grants up to 50 percent of the total cost of the rail freight portion of the project.

"The statewide rail freight network plays a significant role in supporting economic development."

Michigan's rail freight network is operated by eight Class I railroad companies and various short line, regional, and terminal companies. In 1990, an estimated 1,375,000 carloads were generated from Michigan stations. Michigan's investment in rail freight over the last four years is represented in Table C-9 below.

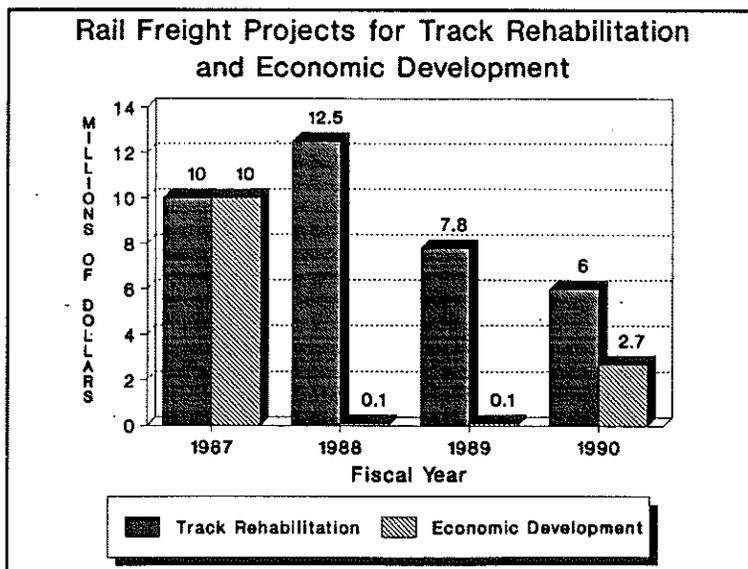
Freight construction projects carried out in FY 1990 on state-owned property included rail rehabilitation from Kalkaska to Mancelona and from Owosso to Ithaca, the lowering of Childs Creek Culverts near Shepherd, and the replacement of Mill Race Bridge in Mt. Pleasant. In addition, a structural assessment of the 236 state-owned railroad bridges was completed in 1990.

MDOT also helped improve and expand Michigan's privately-owned rail infrastructure by means of public-private partnership ventures. Through a partial loan, we assisted Wisconsin Central Ltd. in its improvement of 21 miles of Upper Peninsula trackage from Eustis to Gladstone. In partnership with Kent Feeds and Vevay Township, we participated in financing construction of a rail siding to serve the new Sycamore Creek Industrial Park in Ingham County. We also helped finance construction of a new rail siding to serve Coldwater Industrial Park; this partnership is with the City of Coldwater, the Michigan Department of Commerce, and Coldwater Rendering.

"Technical and financial assistance for Michigan's commercial rail network."

The FY 1991 program plans include rail rehabilitation between Ithaca and Mt. Pleasant and between Mt. Pleasant and Farwell. In addition, numerous state-owned railroad bridges are targeted for rehabilitation. The FY 1992 program plans will continue improvements to state-owned rail facilities, including the continuation of a program of bridge repair or replacement. The CTF funds allocated to freight have been supplemented from the PTD Discretionary Account in previous fiscal years.

TABLE C-9



FREIGHT PROPERTY MANAGEMENT

\$2,600,000 CTF

Effective property management is essential to protect the state's sizable investment in 872 miles of railroad rights-of-way, track structure, adjacent real estate parcels, and several buildings. Examples of expenses funded under this category are those arising from leases, taxes, inventory control, maintenance and repair, insurance, security, appraisals, and environmental clean-ups.

INTERCITY PASSENGER AND FREIGHT DISCRETIONARY

\$1,672,900 CTF

The purpose of this program is to provide flexibility in responding to changing situations. Examples include environmental clean-up, bridge repair, unanticipated track repair, terminal projects, and efforts to respond to abandoned intercity services. Needs will be evaluated on an ongoing basis. Programming of these funds is provided in quarterly reports to the House and Senate appropriation committees.

PORT ASSISTANCE

\$301,900 CTF

The purpose of this program is to partially fund the operating budgets of eligible port authorities as set forth in statute. Upon city, county, and state approval of an eligible port authority budget, 50 percent of the cost is to be funded by the state and 25 percent each from the city and the county. The Detroit/Wayne County Port Authority is the only authority currently eligible for this state assistance.

PUBLIC TRANSPORTATION DEVELOPMENT-20%

Public Transportation Development Program Summary (including federal funds)	
Specialized Services	\$ 2,572,300
Local Share Bonus	1,000,000
Effective Service Bonus	1,000,000
Municipal Credit Program	1,000,000
Bus Transit Capital	13,600,000
Bus Property Management	225,000
Technical Studies	635,000
Planning Grants	50,000
Ridesharing	262,500
Vanpooling	125,000
Service Dev/New Tech	1,250,000
Discretionary	16,379,700
	\$ 38,099,500

"Preserving essential services, generating technical improvements and encouraging economic development."

Sources

\$26,249,500 CTF
11,850,000 UMTA (Estimated)
\$38,099,500

PROGRAM HIGHLIGHTS

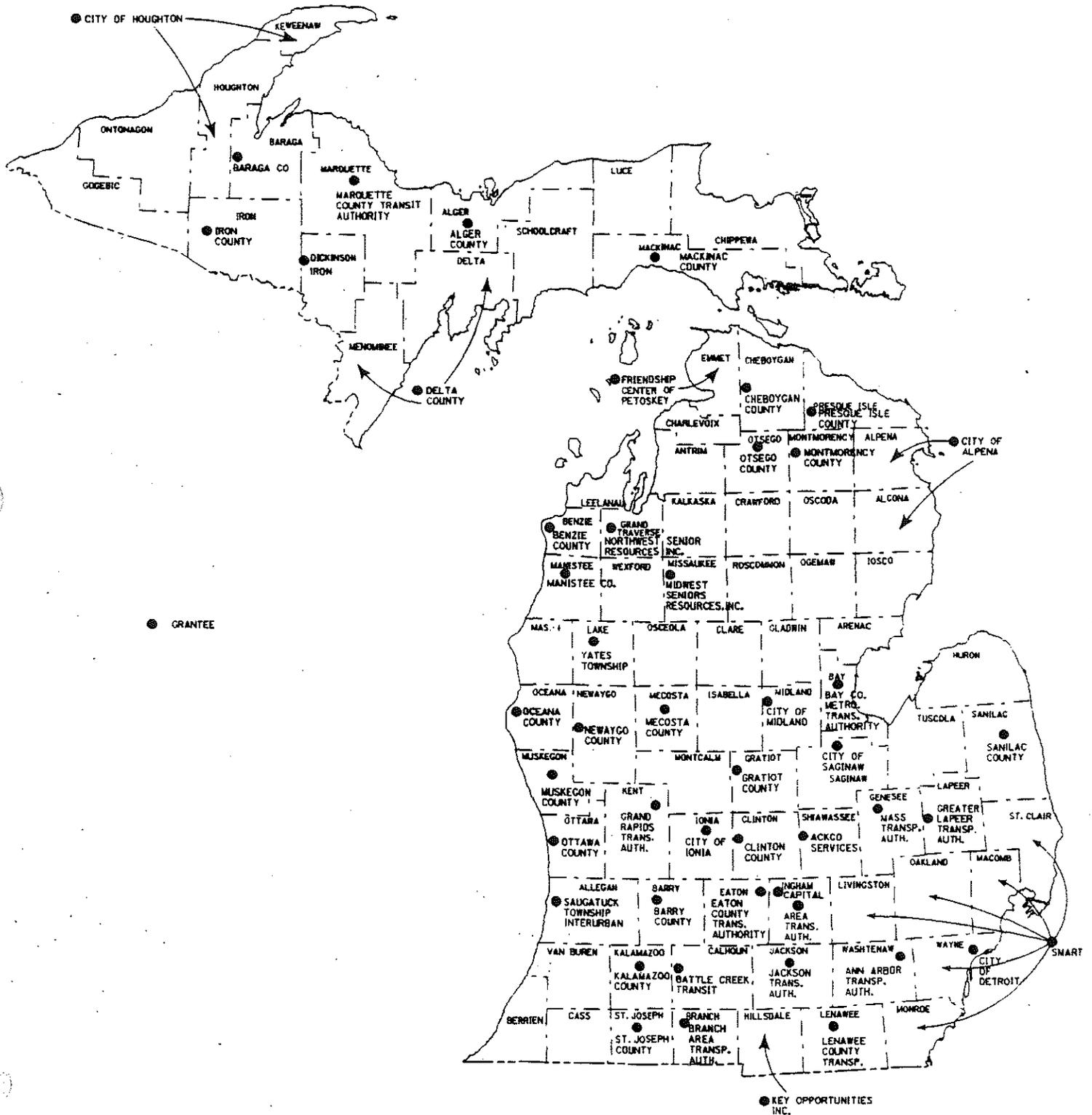
Public Transportation Development supports sub-programs and projects that contribute to a balanced statewide network of public transportation services. Projects are selected based on statewide goals related to preserving basic services, generating technical improvements, and encouraging economic development. The first four programs are mandated by Act 51 of 1951. Each subprogram is described below:

1. Specialized Services

\$2,572,300 CTF

Many of Michigan's senior citizens and handicappers look to specialized services as a primary means of transportation. Act 51, as amended in 1987, provides that not less than \$2,000,000 shall be distributed as grants for specialized services. This program receives an annual increase as limited by the same growth cap governing local transit operating assistance. Map C-2 shows the locations of these services across the state.

MAP C-2 SPECIALIZED SERVICES SYSTEMS As of January 1991



Performance data for those agencies receiving specialized services operating assistance in FY 1990 are provided on Table C-10 in Appendix C.

"Many Michigan seniors and handi-cappers look to specialized service as a primary means of transportation."

2. Local Share Bonus

\$1,000,000 CTF

Act 51 provides that not less than \$1,000,000 shall be distributed to local transit agencies as a local share bonus. These bonus funds will be distributed based on percentage of transit system local revenue, weighted by population.

3. Effective Service Bonus

\$1,000,000 CTF

Act 51 provides that not less than \$1,000,000 shall be distributed to local transit agencies as an effective service bonus. These bonus funds will be distributed based on percentage of transit system farebox revenue, weighted by vehicle miles.

4. Municipal Credit Program

\$1,000,000 CTF

Act 51 provides that not more than \$1,000,000 from the 20 percent allocation shall be distributed as part of the Municipal Credit Program for service in Southeastern Michigan. This program, requested by the Regional Transit Coordinating Council in southeast Michigan, assists local communities within the council's district in funding public transportation service.

"Assisting communities in funding local transit services."

5. Bus Capital

\$ 2,600,000 CTF
11,000,000 UMTA (Estimated)
\$13,600,000

This program is designed to meet capital needs of local transit systems, including replacement and rehabilitation of transit vehicles and equipment, and construction or improvement of transit facilities. State funds are used to the extent possible to match funds from UMTA's Section 9, Section 3, and Section 16(b)(2) programs. However, federal funding is not generally available in nonurban areas. In the past, 100 percent state funding has been used to meet rural area capital needs. The CTF funds shown here can be supplemented from the PTD discretionary account. However, the combination of increased capital needs and declining revenues for the CTF mean that there will be insufficient funds in FY 1992 to meet the capital needs. It is expected that there will be a shortfall for capital needs of over \$36 million in state funds. This means that only the highest priority needs will be funded. Priority will be given to matching federal funds and purchasing replacement buses. In addition, urban systems have, in the past, relied on federal funding which may not be available in FY 1992. If this federal funding is not available, urban transit systems will have significant unmet needs. State funds, which are already insufficient, will not be available to replace these federal funds.

"There is a need for replacement vehicles and equipment."

6. Bus Property Management

\$225,000 CTF

This program funds operating costs for the central facility operated by Bus Transit Division. This facility, conveniently located near Dimondale, is used for inspecting vehicles, holding auctions for state vehicle disposals, conducting vehicle maintenance training, and vehicle storage. This account also funds insurance and bus rehabilitation costs for the state loaner fleet which is used to meet emergency or special needs of local transit systems.

"The state loaner fleet meets emergency and special needs."

7. Technical Studies

\$ 35,000 CTF
600,000 UMTA (Estimated)
\$635,000

These Section 8 Technical Studies focus on operational and technical problems of local transit agencies. Activities can include operational manuals, technical assistance, and program management. Specific projects are selected by the department's Technical Studies Committee after funding guidance is received from UMTA. In-kind services are used to the extent possible to capture maximum federal funds.

Providing technical assistance to local transit agencies.

8. Planning Grants

\$50,000 CTF

With the concurrence of local transit agencies, several state metropolitan planning organizations utilize UMTA Section 9 funds for planning tasks directly related to the area's transit program. This program provides matching funds on an 80 percent UMTA, 10 percent state, 10 percent local basis. The federal funds are granted directly to local transit agencies.

9. Ridesharing

\$262,500 CTF

Ridesharing programs assist in finding alternative transportation services. Ridesharing for the work trip reduces energy consumption, traffic congestion, air pollution, and parking problems. Carpooling and vanpooling are essential components in solving the reverse commute problem. This program provides grants to local agencies for ridesharing marketing, organizational, promotional, and demonstration efforts. Most of the costs are associated with the continued support of local ridesharing offices. Continuation grants are based on evaluation of effectiveness. Table C-11 in Appendix C, provides performance data for ridesharing and vanpooling programs.

Ridesharing can reduce traffic congestion, energy consumption, air pollution, and parking problems

10. Vanpooling

\$125,000 CTF

This program funds the continuation of MichiVan vanpool services to qualified community groups of seven or more persons throughout the state. Self-supporting except for marketing and administrative costs, MichiVan is an energy-efficient form of transportation that contributes to the relief of traffic congestion and air pollution. A handicapper accessible vehicle has been introduced to assist the physically challenged in their work-commute trip. Vanpooling is an essential component in solving the reverse commute problem. This program, which has accelerated the expansion of vanpooling in Michigan, continues to meet transportation demands where public transportation is unavailable or is unsuited to commuter travel needs.

"MichiVan is an energy-efficient form of transportation."

11. Service Development and New Technology

\$1,000,000 CTF

250,000 UMTA (Estimated)

\$1,250,000

This program is designed to assist public transportation providers to optimize present operations and to carry out research and development. Examples of major activities include development of computer hardware and software systems, improvements to communications equipment, assistance with vehicle maintenance schedules and vehicle purchases, development of a marketing program to promote greater awareness of public transit and to increase ridership, driver training programs, and technical assistance in accounting and financial management.

"Assisting public transportation providers to optimize operations."

12. Public Transportation Development Discretionary

\$16,379,700 CTF

This discretionary account provides the department the ability to respond to emerging issues and to adjust resources for projects where funding requirements vary during the year. For example, this could fund essential transit services and critical needs in the Bus Capital program, especially for transit vehicles. It could also fund investments on state-owned rail trackage, rail freight facilities to support newly announced economic development projects or technical improvements, or continuation of the terminal security program. Programming to specific projects is provided in quarterly reports to the House and Senate Appropriations Committees. Plans for funding from this account include:

- Local New Bus Services, providing capital and operating assistance for new service projects. This program has a 95 percent success rate with the vast majority of communities opting to continue local funding after the initial three-year demonstration period.

Continuation systems for FY 1992 under the Local Bus New Service program, shown on Map C-8, are anticipated to require \$2.7 million. Performance data for systems operating in FY 1990 are shown on Table C-12 in Appendix C. Those services that are in operation as of September 30, 1991, will receive first priority to be funded. Funding is not sufficient to introduce any new services in FY 1992.

- Statutory maximums of 40 percent of eligible operating expenses for urban transit systems and 50 percent for nonurban systems, limited by a growth cap. The 70 percent allocation of CTF program funds provides \$91.9 million for this purpose. It is estimated that an additional \$12.5 million will be required for Supplemental Operating Assistance in order to maintain the same total level of financial assistance that the state provided in FY 1990-91.

Local Bus New Service Continuation Systems

Ann Arbor
Bay Area (Traverse City area)
Benton Harbor
Cass County
Delta County
Flint
Ionia
Isabella County
Lansing
Milan
Muskegon
Saginaw
SMART/DDOT

AVIATION

HIGHLIGHTS

Michigan's aviation program has entered the decade of the 90's with continued emphasis on preserving airport facilities, funding aviation programs and retaining air carrier service to our communities. In working to promote the safe movement of people and goods, the Michigan Department of Transportation (MDOT) oversees a statewide system of airports. The Michigan Aviation System is composed of 236 airports and flying fields located throughout the state. Commercial airline service is available at 20 air carrier airports statewide.

Approximately half of Michigan's airports are publicly owned. Typically, airports are owned by cities, counties or semi-independent authorities formed by these jurisdictions. Through the years, a spirit of cooperation between these jurisdictions and state and federal agencies has assured that Michigan is able to sustain a quality system of airports and air service.

With an emphasis on maintaining the aviation infrastructure the airport development program focuses on preservation and capacity improvements at publicly-owned facilities across the state. Some of the major preservation and capacity projects include rehabilitations at Flint, Pontiac, Port Huron and Charlevoix. Capacity related development is planned at Detroit Metro. A complete listing of the 1991-92 Aviation projects appears as Appendix D.

Several programs are continuing which are designed to enhance air service options for the citizens and businesses of the state. Access Michigan is a state and local cooperative venture designed to offer short-term incentives to achieve increased airline service to designated communities. The program is currently operating successfully in Traverse City. Enhanced services for additional Michigan communities are presently under study.

A marketing campaign, "Fly From Nearby" will continue to offer grants to eligible airports to help them increase public knowledge of scheduled air services available locally. The program requires local matching funds and is designed to increase airport use, thereby securing air service improvements and, in some cases, increasing federal funds for airport facility improvements.

AIRPORT SYSTEM

Michigan citizens are afforded access to the national air transportation system using airports located throughout the state. These airports are typically classified as either commercial service airports or general aviation airports.

Commercial service airports are defined as airports having 2,500 or more annual boarding passengers (enplanements). There are currently 20 commercial service airports in Michigan. Primary commercial service airports are defined as having 10,000 or more yearly enplanements. There are currently 14 primary airports among the 20 commercial service airports in Michigan. Michigan has five additional airports with scheduled passenger service, which enplaned fewer than 2,500 people in 1990.

General aviation airports accommodate all other activity from crop dusting to passenger and cargo charters. Medical transport, business and executive flying, air-taxi, flight training, personal transportation, and many other business and recreational uses are accommodated at general aviation facilities. There are currently 218 general aviation airports in Michigan. Of them, 102 are publicly-owned and operated. One hundred sixteen are privately-owned and open to the public. These airports do not receive public funds but are widely used for business and utility purposes. Some of these airports are being squeezed out by competing land uses and increasing insurance and liability costs.

Reliever airports are general aviation airports which serve to reduce capacity problems at the larger commercial service airports. Michigan's reliever system centers around the greater Detroit metropolitan area. Currently, six primary relievers are Willow Run, Oakland-Pontiac, Gross Ile, Port Huron, Monroe, and Howell. The Federal Aviation Administration's (FAA) funding program provides that 10 percent of federal funds at the national level be reserved for these airports.

NAVIGATION SYSTEM IMPROVEMENTS

This year, the department will continue the first major overhaul of our state's air navigation system in 18 years. The first phase of this program will replace 4 VOR/DME navigation systems. Ultimately, working jointly with the Federal Aviation Administration, all seven state-owned VOR/DME systems will be upgraded to current generation systems. There are many reasons why this upgrade is necessary:

1. Due to the age of some of this equipment, factory support and availability of some replacement parts is either non-existent or extremely limited. If a major part were to fail, we would be unable to return the equipment to service for an extended period of time, if at all. This would be a serious detriment to all-weather flight operations enroute and landing at the communities served by the VOR/DME facility.
2. Upgrading our facilities would promote the State of Michigan as a leader in the aviation industry.

3. Maintaining safe, reliable, quality equipment enhances the accessibility of the airport, which in turn enhances the commerce of the community and surrounding area which the navaid serves.

Our second project is to complete the installation of on-site Remote Monitoring Maintenance equipment (RMM), at all state-owned radio navigation facilities. This will allow us to monitor our equipment from our shop in Lansing, through the use of computers and modems.

1. The main purpose of this project is to decrease the out of service (down) time of those navaid facilities. This results in the increase of aviation safety, accessibility, and commerce throughout the state. The reports to our Lansing shop by the on-site computer equipment will allow technicians to pinpoint potential trouble areas before an out of tolerance condition exists.
2. It allows for preventive maintenance. Should an out of tolerance condition exist, which results in automatic shutdown at an existing radio navigation facility, we will be able to determine exact cause prior to leaving the shop.
3. In many instances, it will save the time and expense of sending a technician into the field.

REVENUE SOURCES

Funding for aviation projects comes from federal grants, a state tax on airplane fuel, and local taxes. The bulk of the federal funds are provided through the federal tax on airline tickets. The chief source of income for state funds is the aviation fuel tax.

Federal grants are appropriated through the Airport and Airways Trust Fund. These grants fund airport projects that are on the National Plan of Integrated Airport System (NPIAS). To be placed on the NPIAS listing, an airport must serve a minimum number of aircraft, must not duplicate existing service of another facility in the same general service area, and must be included in the Michigan Aviation System Plan (MASP). Justification for improvements, such as runway extensions, must be substantiated before funds are made available. There are currently 93 Michigan airports on the NPIAS.

Prior to any allocation of state or federal funds for a project, local revenue must be budgeted for the local match. State and local funds are used to provide the required 10% federal match on a 50/50 basis. If the state is unable to participate, projects are funded on a 90 percent federal and 10 percent local basis. Projects not receiving federal aid are typically funded on a 50/50 basis by state and local sources as funds allow.

The estimated revenues by source that are available for development projects for 1992 are shown below.

	<u>A List</u>	<u>B List</u>	<u>Total</u>
Federal Funds	\$41,619,000	\$6,290,000	\$47,909,000
State Funds	1,368,000	251,000	1,619,000
Local Funds	<u>7,256,000</u>	<u>555,000</u>	<u>7,811,000</u>
Total	\$50,243,000	\$7,096,000	\$57,339,000

The "A" List contains sufficient projects to use the expected funding levels for 1991. The "B" List adds projects to bring the levels up to the maximum funding should additional funds become available.

Included in the figures of the "A" list is \$24 million for capacity development at Detroit Metro Airport. FAA has issued a Letter of Intent (LOI) to Wayne County which authorized federal spending of \$180 million over the 10-year period from 1991 to 2001. Under this provision Detroit Metro will proceed with the project. Federal reimbursement will be made according to a given schedule, as funds become available. The annual reimbursement of funds includes \$12 million of entitlement dollars and additional \$6 million of discretionary dollars from federal sources with the balance, \$6 million, coming from state and local sources.

PRIORITIES

In 1989, the State Aeronautics Commission and the State Transportation Commission adopted the first Aeronautics Investment Plan. This plan estimates revenue for the years 1989-1998 and identifies priorities for the aeronautics program to guide program development in future years. The investment plan targets 74 percent of the expected revenue for capital improvement toward projects that will preserve the existing aviation system and 26 percent of the expected revenue toward improvement and expansion of the system over the next ten years.

Preservation projects are those which serve to maintain existing services, equipment and facilities. These would involve development directed at safety and security requirements; bringing an airport up to standards for that particular classification of airport (as described in the Michigan Aviation System Plan); projects required to preserve, repair or restore the functional integrity of the landing area, including electrical and navigational systems.

Improve/Expand projects are those which serve to develop an airport beyond its current classification, institute a new service or construct special economic development projects. These would involve development enabling an airport to handle larger aircraft; increase its capacity, development of the facility beyond

the standards of its current classification and; economic development projects significant to the utilization of a particular facility.

Within the framework of the investment plan, state aviation funds are allocated to projects on the basis of the following priorities:

1. Safety - lighting, approach clearing and runway surfaces.
2. Primary airside - primary runways, taxiways, aprons, and associated land.
3. Secondary airside - secondary runways, taxiways, aprons and related development.
4. Primary landside - terminal buildings, access roads, tie downs and T-hanger taxiways.
5. Secondary landside - fencing, storage buildings and service roads.

Projects which involve state aviation funds are allocated to one of two areas of development: Preservation or Improve/Expand.

The categories and expenditures of preserve and improve/expand for the 1992 "A" list are as follows:

PRESERVE

Special Programs/Safety **\$3,971,000**

This includes projects which are necessary to meet safety and security requirements.

Reconstruction **\$14,189,000**

This includes projects required to preserve, repair or restore the functional integrity of the airside facilities.

Standards **\$4,303,000**

This includes projects which bring existing facilities up to recommended standards established for the current classification of the airport.

Equipment and Buildings **\$730,000**

This includes maintenance equipment and support facilities, including terminals.

IMPROVE/EXPAND

Upgrading Airport Role **\$980,000**

This includes projects that will expand an airport's capability to handle large aircraft and longer, nonstop routes.

Capacity Development **\$26,070,000**

This includes projects intended to develop increased capacity at an existing airport.

New Airports - Capacity **\$0**

This includes projects intended to increase the overall system wide capacity within a given area (i.e. new reliever or commercial service airports). There is no expenditure in this category for 1991.

New Airports - Community **\$0**

This includes construction of a new airport to serve an existing community. There is no expenditure in this category for 1991.

This year's program indicates a larger percent from the improve/expand category as compared to the preserve category, which is opposite to what is outlined in the 1989-1998 Aeronautics Investment Plan. This is due to the large and costly capacity projects at Detroit Metro Airport. The department still intends to meet the allocation targets over the ten-year investment plan time frame.

The funding for 1992 by category including both A and B projects are shown below.

AVIATION PROJECTS SUMMARY

Priority A & B Lists

	<u>Total</u>	<u>Federal</u>	<u>State</u>	<u>Local</u>
<u>Preserve</u>				
Safety	\$ 4,291,000	\$ 3,766,000	\$ 133,000	\$ 392,000
Reconstruction	17,535,000	15,782,000	866,000	887,000
Standards	4,303,000	3,873,000	198,000	232,000
Building & Equipment	<u>1,065,000</u>	<u>959,000</u>	<u>-0-</u>	<u>106,000</u>
Subtotal	\$27,194,000	\$24,380,000	\$1,197,000	\$1,617,000
<u>Improve/Expand</u>				
Upgrade	\$ 3,680,000	\$ 3,312,000	\$ 49,000	\$ 319,000
Capacity Development	26,465,000*	20,219,000	373,000	5,873,000
New Airports - Capacity	-0-	-0-	-0-	-0-
New Airports - Community	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>
Subtotal	\$30,145,000	\$23,531,000	\$ 422,000	\$6,192,000
TOTALS	\$57,339,000	\$47,911,000	\$1,619,000	\$7,809,000

*Includes LOI for Detroit Metro (\$24,000,000)

APPENDIX A: HIGHWAY PROJECTS

HIGHWAY PROJECTS by PROGRAM CATEGORY FY 1992

data base as of 03/21/91

PRESERVE Category

TRAFFIC OPERATIONS

TOTAL COST

TOTALS FOR WORK TYPE: TRAFFIC OPERATIONS

\$ 15,400,000

SAFETY

TOTAL COST

TOTALS FOR WORK TYPE: SAFETY

\$ 16,200,000

BRIDGE REHABILITATION

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
I196	UNDER M63	BERRIEN	OVERLAY,RAILING,PAINTING	\$ 334,000	0.0
US12BR	OVER ST JOSEPH RIVER	BERRIEN	BRIDGE RECONSTRUCT	1,210,000	0.0
US12	OVER HOG CREEK	BRANCH	BRIDGE REPLACEMENT	473,000	0.0
I94	UNDER OLD US27	CALHOUN	DECK REPLACEMENT	1,001,000	0.0
US31	OVER ISLAND LAKE OUTLET	CHARLEVOIX	PAINTING	622,000	0.0
I75	OVER D&M RAILROAD	CHEBOYGAN	OVERLAY,JOINTS,PAINTING	517,000	0.0
M68	OVER STURGEON RIVER	CHEBOYGAN	SUPERSTRUCTURE REPLACEMENT	275,000	0.0
US27BR	OVER TOBACCO RIVER	CLARE	WIDEN,DECK,PAINT	575,000	0.0
M72/93	OVER AUSABLE RIVER	CRAWFORD	WIDEN,DECK,PAINT	394,000	0.0
US41	OVER TACOOSH RIVER	DELTA	BRIDGE REPLACEMENT	419,000	0.0
I496	OVER CSX & GTW RAILROADS	INGHAM	REPLACE PINS/HANGERS,PAINTING	946,000	0.0
I196	OVER GRAND RIVER & MOUND	KENT	GUARDRAILS	1,542,000	0.0
I196	OVER CSX RAILROAD	KENT	OVERLAY,RAILING,PAINTING	693,000	0.0
I96	UNDER M59	LIVINGSTON	OVERLAY,PAINTING,PINS/HANGERS	345,000	0.0
I96	OVER GRAND RIVER AVE	LIVINGSTON	PAINTING,WIDEN,JOINTS	886,000	0.0
I96	UNDER FLINT RD	LIVINGSTON	STRUCTURAL REPAIR,PAINTING	160,000	0.0
US2	OVER HOG ISLAND & DAVENPORT CK	MACKINAC	SUPERSTRUCTURE REPLACEMENT	213,000	0.0
US2	OVER CUT RIVER	MACKINAC	PAINTING & JOINTS	1,166,000	0.0
M134	@ MCKAY'S CREEK	MACKINAC	BRIDGE REPLACEMENT	294,000	0.0
I75	UNDER US2/123 & OVER SOO LN RR	MACKINAC	JOINT REPAIR,PAINTING	534,000	0.0
I94	OVER 14 MILE RD	MACOMB	PAINTING,PIER REPAIR	286,000	0.0
M53	UNDER 26 MILE RD	MACOMB	OVERLAY,RAILING,PATCHING	616,000	0.0
M28	OVER LS&I RAILROAD	MARQUETTE	BRIDGE REMOVAL	748,000	0.0
US131TB	OVER MUSKEGON RIVER	MECOSTA	BRIDGE REPLACEMENT	1,485,000	0.0
US131	OVER LITTLE MUSKEGON RIVER	MECOSTA	BRIDGE REPLACEMENT	803,000	0.0
US41	OVER MENOMINEE RIVER	MENOMINEE	PAINTING	627,000	0.0
US24	OVER T&S RAILROAD	MONROE	SUPERSTRUCTURE REPAIR	792,000	0.5
US24	OVER LITTLE SWAN CREEK	MONROE	WIDEN,OVERLAY,PAINTING	660,000	0.0
M55	OVER RIFLE RIVER	OGEMAW	WIDEN,DECK,PAINT	632,000	0.0
M28	OVER M BRIDGE	ONTONAGON	DECK REPLACEMENT,RAILING	943,000	0.0

US23	OVER OCQUEOC RIVER	PRESQUE ISLE	DECK REPAIR,PAINTING	402,000	0.0
M46	OVER TITTABAWASSEE RIVER	SAGINAW	SUPERSTRUCTURE REPLACEMENT	3,740,000	0.0
M25	OVER CHERRY CREEK	SANILAC	SUPERSTRUCTURE REPLACEMENT	484,000	0.0
I94	I94 EB RAMP TO I94 WB RAMP	ST. CLAIR	JOINTS, PINS & HANGERS	319,000	0.0
US131	OVER WHITE PIGEON RIVER	ST. JOSEPH	BRIDGE REPLACEMENT	539,000	0.0
I94	UNDER 32ND & 28TH STREETS	VAN BUREN	OVERLAY,RAILING REPLACEMENT	418,000	0.0
I94	EASTBOUND OVER OUTER DR	WAYNE	WIDEN,OVERLAY,PINS & HANGERS	3,916,000	0.0
I96	@ M39	WAYNE	PAINTING	1,115,000	0.0
I96	UNDER SCOTTEN AVE	WAYNE	OVERLAY,SUBSTRUCTURE REPAIR	440,000	0.0
I96	@ CSX RR UNDER EVERGREEN	WAYNE	APPROACH	3,740,000	0.0
M39OLD	@ FORD PLANT	WAYNE	DECK REPLACEMENT,PAINTING	1,210,000	0.0
I94	OVER GTW RAILROAD	WAYNE	STUDY	50,000	0.0
TOTALS FOR WORK TYPE:			BRIDGE REHABILITATION	\$ 36,564,000	0.5

RESURFACE

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M65	S CO L TO M32	ALPENA	RESURFACE	\$ 2,420,000	15.5
M88	US131 TO W LIMITS RD	ANTRIM	RESURFACE	230,000	0.6
M28	US141 TO US41	BARAGA	MILL & RESURFACE	947,000	4.2
M79	5.4 MI E OF M37 TO W OF M66	BARRY	BITUM. AGGREGATE	639,000	3.9
I94	US12 TO STEVENSVILLE	BERRIEN	MILL & RESURFACE	1,624,000	20.0
US12	THREE OAKS EVL TO E OF GALIEN	BERRIEN	RESURFACE	1,239,000	7.4
I94WB	STATE LINE E TO N OF BRIDGEMAN	BERRIEN	RESURFACE	3,184,000	13.2
I94	W OF I94BL TO E OF 11 MILE	CALHOUN	JOINT REPAIR & RESURFACE	1,878,000	1.2
M37	M89 TO CREEK VIEW DR	CALHOUN	MILL & RESURFACE	392,000	1.6
M66	N OF JACKSON TO VAN BUREN	CALHOUN	MILL & RESURFACE	125,000	0.3
M60	WEST AND EAST OF VANDALIA	CASS	WIDEN & RESURFACE	595,000	0.9
M183	3.0 N OF GARDEN TO US2	DELTA	RESURFACE	932,000	5.6
M35	S OF FORD RV TO ESCANABA SCL	DELTA	MILL & RESURFACE	972,000	3.9
M35	ESCANABA SCL TO LAKE SHORE DR	DELTA	RELOCATE & RESURFACE	691,000	1.0
US31	W CO L TO M37	GD. TRAVERSE	MILL & RESURFACE	2,424,000	8.2
US31	SILVER LK RD TO GRANDVIEW PKWY	GD. TRAVERSE	RESURFACE	258,000	1.2
US31	US31 N TO S AIRPORT RD	GD. TRAVERSE	RESURFACE	506,000	3.7
M203	ANTHONY AVE TO SCALLON	HOUGHTON	RESURFACE	735,000	1.2
M28	LANDFILL RD TO E CO L	HOUGHTON	RESURFACE	732,000	5.7
M26	S CO L TO S OF TOIVOLA	HOUGHTON	PULVERIZE & RESURFACE	1,980,000	10.6
I96	MERIDIAN RD TO M52	INGHAM	OVERLAY	6,103,000	8.7
I496	N OF I-96 TO TROWBRIDGE RD	INGHAM	PATCHING, SHOULDERS	2,442,000	2.8
M189	S OF US2 TO US2	IRON	MILL & RESURFACE	497,000	1.1
I94BL	W OF ROBINSON RD TO BROWN	JACKSON	RESURFACE	786,000	1.5
I94	W OF 9TH ST TO W OF OAKLAND DR	KALAMAZOO	BITUM RESURFACE	3,844,000	3.2
M66	N OF MANISTEE RIVER TO M72	KALKASKA	SHOULDER,SEAL CRACKS	800,000	12.7
M57	US131 TO RAMSDALL	KENT	PULVERIZE & RESURFACE	858,000	7.3
M37	I96 TO COVENTRY DR	KENT	MILL & RESURFACE	63,000	0.2
M44	W RIVER DR TO BELDING AVE	KENT	RESURFACE	924,000	2.2
M134	I75 E TO W OF HESSEL	MACKINAC	WIDEN & RESURFACE	794,000	8.3
M3	11 MI RD TO 14 MILE RD	MACOMB	RESURFACE	2,944,000	3.7
M97	M102 TO N OF HAYES RD	MACOMB	MILL & RESURFACE	1,760,000	3.7
US131	S CO L TO 8 MI RD	MECOSTA	RESURFACE	1,485,000	8.2
M55	N JCT M66 TO E CO L	MISSAUKEE	RESURFACE	358,000	17.9
M50	M125 TO I75	MONROE	RESURFACE	546,000	2.5
I96	US31 SE TO S CO L	MUSKEGON	RESURFACE	1,650,000	5.4
US24BR	@ GTW RAILROAD	OAKLAND	RECONSTRUCT SIGNS	48,000	0.0
M55	HENDERSON LK RD TO E OF E CO L	OGEMAW	PULVERIZE & RESURFACE	1,210,000	6.5
M66	M115 TO N OF N CO L	OSCEOLA	SEAL CRACKS	181,000	9.5
M115	NUMBER 45 RD TO OLD M61	OSCEOLA	RESURFACE	2,487,000	8.2
M94	DODGE LAKE TO M28	SCHOOLCRAFT	RESURFACE	1,815,000	23.4
I69	E OF M52 TO E OF M13	SHIAWASSEE	OVERLAY,SHOULDERS	10,880,000	16.2
M29	SMITH ST TO CHARTIER	ST. CLAIR	WIDEN & RESURFACE	2,802,000	6.6
M29	CHARTIER TO MARINE CITY SCL	ST. CLAIR	NON-MOTOR. SHOULDER RESURFACE	25,000	0.9
M60	THREE RIVERS TO MENDON WV L	ST. JOSEPH	RESURFACE	1,842,000	11.1
M60	W CO L TO US131	ST. JOSEPH	RESURFACE	1,156,000	6.1
M60	MENDON EVL TO M66	ST. JOSEPH	RESURFACE	344,000	1.8
US131	N OF CANARIS TO B01	ST. JOSEPH	RESURFACE	433,000	0.7
M43	RANDOLPH & CASS TO CO RD 215	VAN BUREN	RESURFACE	355,000	1.8
I94	W OF WYOMING TO E OF I96	WAYNE	RESURFACE	4,884,000	3.7
US131	N OF S CO L TO CADILLAC SCL	WEXFORD	MILL & RESURFACE	1,820,000	5.0
TOTALS FOR WORK TYPE:			RESURFACE	\$ 78,639,000	300.8

RESTORATION & REHABILITATION

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M28	E OF CHRISTMAS TO BROOKS	ALGER	PAVEMENT REPAIR	\$ 110,000	4.6
US131	M88 NORTH 0.14 MILE	ANTRIM	REPLACE CURB & GUTTER	13,000	0.1
US12	ALBERS ST TO WAYNE ST	BRANCH	CRACKING & SURFACING	1,018,000	1.1
I194	I94 TO JACKSON ST	CALHOUN	JOINTS & PATCHING	1,173,000	3.8
M60	E OF G01, CASSOPOLIS	CASS	SEWER OUTLET	147,000	0.1
M51	@ FRONT & DIVISION	CASS	DRAINAGE CORRECTION	22,000	0.0
M21	E OF US27 TO W OF MAIN ST	CLINTON	BITUM SHOULDERS & JOINTS	578,000	8.6
M119	HOYT AVE W OF ZOLL ST	EMMET	DRAIN REPLACEMENT	230,000	0.2
US23	S CO L TO N OF THOMPSON RD	GENESEE	MILL,RUBBELIZE,BITUM. OVERLAY	7,191,000	6.2
I75	MT MORRIS RD TO N OF M54/83	GENESEE	PAVEMENT REPAIR	95,000	9.6
M66	M50 TO PORTLAND RD	IONIA	4FT BITUM SHOULDERS	434,000	8.1
US131	N OF M72 TO KALKASKA, N CO L	KALKASKA	PAVEMENT REHABILITATION	1,810,000	11.2
US131	M57 TO M46	KENT	PAVEMENT REPAIR	671,000	18.5
M53	DRYDEN RD TO I69	LAPEER	BITUM SHOULDERS	200,000	3.6
I96	W CO L TO M59	LIVINGSTON	SHOULDERS,GRADE,JOINTS	2,216,000	8.7
US41	M28 HARVEY TO MEESKE	MARQUETTE	CONCRETE PAVEMENT	336,000	5.9
US23	STATE LINE TO N OF US223	MONROE	CONCRETE OVERLAY	7,227,000	6.0
M32	W CO L TO E OF KINNEY RD	MONTMORENCY	BITUM SHOULDERS	456,000	9.4
M32	E OF KINNEY RD E&W OF M33 JCT	MONTMORENCY	BITUM SHOULDERS	247,000	4.9
M10	BECK RD TO M102 IN SOUTHFIELD	OAKLAND	CONCRETE PATCHING	3,242,000	5.2
I196	96TH AVE EAST TO 64TH AVE	OTTAWA	PAVEMENT REPAIR	2,175,000	4.8
M55	TOWNLINE RD TO M18	ROSCOMMON	BITUM RECYCLING	911,000	4.8
M46	0.5 MI W TO 1 MI E OF HEMLOCK	SAGINAW	DRAINAGE & RESURFACE	1,150,000	1.5
I75	N OF M54/83 TO S OF M13	SAGINAW	PAVEMENT REPAIR	166,000	16.9
M19	S CO L TO N JCT M90	SANILAC	PAVEMENT PATCHING	1,396,000	6.8
M53	M46 TO DECKERVILLE	SANILAC	BITUM SHOULDERS	330,000	7.0
M19	CSX RR TO YALE NCL	ST. CLAIR	RESURFACE,SS,CURB & GUTTER	598,000	0.4
I94	E OF M39 TO SCHAEFFER	WAYNE	JOINT REPAIRS	1,650,000	3.6
I275SB	I94 TO S OF VAN BORN RD	WAYNE	CONCRETE OVERLAY	2,200,000	3.3
I75	N OF I94 TO M102	WAYNE	CONCRETE PATCHING	2,158,000	5.5
TOTALS FOR WORK TYPE:			RESTORATION & REHABILITATION	\$ 40,150,000	170.4

RECONSTRUCTION

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
I94EB	NEW BUFFALO WEIGH STATION	BERRIEN	DYNAMIC SCALE	\$ 212,000	0.0
I94EB	NEW BUFFALO WEIGH STATION	BERRIEN	DYNAMIC SCALE	222,000	0.0
I94EB	NEW BUFFALO WEIGH STATION	BERRIEN	DYNAMIC SCALE	213,000	0.0
M68	N & S OF JCT OF OLD US27	CHEBOYGAN	RECONSTRUCT,CURB & GUTTER	864,000	1.5
M69OLD	W OF CLMT MINE RD TO E CO L	DICKINSON	RECONSTRUCT,CURB & GUTTER	2,472,000	9.1
M119	US31 TO PETOSKEY ST PARK	EMMET	RECONSTRUCT	678,000	1.6
M66	N OF S CO L TO REMUS	MECOSTA	UPGRADE EXISTING FACILITY	3,850,000	8.7
DAVISON	M10 EAST TO OAKLAND	WAYNE	RECONSTRUCT SERVICE ROADS	3,300,000	1.3
I94	@ MERRIMAN & MIDDLEBELT ROADS	WAYNE	RECONSTRUCT INTERCHANGE	10,830,000	1.4
I94EB	WAYNE W CO L TO W OF SHOOK RD	WAYNE	RECONSTRUCT,WIDEN	10,560,000	7.7
TOTALS FOR WORK TYPE:			RECONSTRUCTION	\$ 33,201,000	31.3

MINOR WIDENING

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M66	@ M79	BARRY	LEFT TURN LANE	\$ 136,000	0.2
M60	M62 TO E OF GTW RAILROAD	CASS	WIDEN & RECONSTRUCT	923,000	0.7
US223	E OF WOERNER TO W OF ROME	LENAWEE	WIDEN & RESURFACE	1,087,000	1.3
TOTALS FOR WORK TYPE:			MINOR WIDENING	\$ 2,146,000	2.2

ROADSIDE FACILITIES

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
I94EB	REST AREA W OF WATERVLIT	BERRIEN	RECONSTRUCT LAGOON	\$ 69,000	0.0
I75NB	REST AREA S OF GRAYLING	CRAWFORD	RECONSTRUCT REST AREA	880,000	0.0
I75NB	REST AREA S OF GRAYLING	CRAWFORD	MODERNIZE BUILDING	825,000	0.0
US27NB	REST AREA N OF ITHACA	GRATIOT	REPLACE BUILDING	880,000	0.0
I96EB	REST AREA W OF M66	IONIA	SANITARY SEWER	660,000	0.0
I96	BLISS RD E OF CUTLER	IONIA	REPLACE FENCE	51,000	2.7
I96	MORSE LAKE RD TO BELL RD	KENT	REPLACE FENCE	51,000	0.0
I94	LIPKE AVE TO TO M25	MACOMB	INTERMITTANT FENCING	184,000	3.4
I75	17 MI RD TO COOLIDGE RD	OAKLAND	INTERMITTANT FENCING	224,000	3.1
I275	PORTIONS OF I275 BIKE PATH	WAYNE	RESURFACE, REPAIR	121,000	0.0
TOTALS FOR WORK TYPE:			ROADSIDE FACILITIES	\$ 3,945,000	9.2

MISCELLANEOUS

TOTALS FOR WORK TYPE:	MISCELLANEOUS	TOTAL COST
		\$ 4,000,000

IMPROVE Category

CAPACITY IMPROVEMENT

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M40	S OF 48TH ST TO US31	ALLEGAN	WIDEN 2-5 LANES	\$ 2,266,000	1.2
M13	M84 TO FISHER	BAY	WIDEN & RECONSTRUCT	1,692,000	1.0
M121	I69 TO I75	GENESEE	ROADWAY RELOCATION	2,574,000	2.1
I96	DORR RD TO E OF US23 INT	LIVINGSTON	RECONSTRUCT & WIDEN	17,124,000	6.0
M59	CHRISMAN DRN E OF CLINTON RD	MACOMB	ENCLOSE SEWER	1,430,000	1.2
M59OLD	SQUIRREL RD TO ADAMS	OAKLAND	WIDEN 5 LANES	1,811,000	0.8
M59OLD	@ GTW RAILROAD	OAKLAND	REMOVE & RELOCATE CROSSING	314,000	0.0
TOTALS FOR WORK TYPE:			CAPACITY IMPROVEMENT	\$ 27,211,000	12.3

BRIDGE REPLACEMENT

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
I75	@ WALTON BLVD	OAKLAND	APPROACH & REPLACEMENT	\$ 1,438,000	0.0
TOTALS FOR WORK TYPE:			BRIDGE REPLACEMENT	\$ 1,438,000	0.0

BRIDGE WIDENING

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
I96BL	OVER CSX RAILROAD	CLINTON	DECK REPLACEMENT,WIDEN	\$ 1,100,000	0.0
TOTALS FOR WORK TYPE:			BRIDGE WIDENING	\$ 1,100,000	0.0

ROADSIDE FACILITIES

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
I75NB	BETWEEN FLINT & M57	GENESEE	RR & SITE WORK	\$ 935,000	0.0
M3	EIGHT MILE TO 13 MILE	MACOMB	LANDSCAPING	286,000	3.0
I96	NOVI ROAD INTERCHANGE	OAKLAND	LANDSCAPING	330,000	0.8
I75NB	DAVISBURG REST AREA	OAKLAND	LANDSCAPING	144,000	0.0
I75	8 1/2 MILE TO 9 1/2 MILE	OAKLAND	LANDSCAPING	144,000	1.0
US31SB	HART REST AREA	OCEANA	LANDSCAPING	69,000	0.0
M55	CO RD 305 E TO OWNS DR	ROSCOMMON	NON-MOTORIZED PATH	172,000	3.3
M55	CO RD 304 E TO CO RD 305	ROSCOMMON	NON-MOTORIZED PATH	68,000	1.1
I69WB	CAPAC REST AREA	ST. CLAIR	REST AREA LANDSCAPING	115,000	0.0
US23BR	STADIUM TO ARBORLAND	WASHTENAW	NON-MOTORIZED PATH	118,000	2.0
TOTALS FOR WORK TYPE:			ROADSIDE FACILITIES	\$ 2,381,000	11.2

EXPAND Category

NEW ROUTES

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
MHC	I696 TO 12 MILE ROAD	OAKLAND	6 LANES & RELOCATE	\$ 20,192,000	0.5
MHC	12 MILE ROAD NORTH	OAKLAND	NEW 6 LANE FACILITY	14,087,000	0.6
I94	UNDER ELLSWORTH ROAD	WASHTENAW	NEW STRUCTURE	2,266,000	0.0
TOTALS FOR WORK TYPE:			NEW ROUTES	\$ 36,545,000	1.1

RELOCATION

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
US27REL	S OF PRICE RD TO WILDCAT RD	CLINTON	2@24 DIVIDED	\$ 18,853,000	5.5
M59	W OF HAYES TO E OF ROMEO PLANK	MACOMB	IMPROVE FACILITY	14,300,000	2.1
TOTALS FOR WORK TYPE:			RELOCATION	\$ 33,153,000	7.6

ROADSIDE FACILITIES

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
I75SB	WEIGH STATION N OF ALLEN	MONROE	INSPECTION BUILDING	\$ 161,000	0.0
TOTALS FOR WORK TYPE:			ROADSIDE FACILITIES	\$ 161,000	0.0

APPENDIX B: SUBSTITUTE HIGHWAY PROJECTS

SUBSTITUTE HIGHWAY PROJECTS by PROGRAM CATEGORY FY 1992

PRESERVE Category

BRIDGE REHABILITATION

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M89	OVER KALAMAZOO RIVER	ALLEGAN	SUPERSTRUCTURE REPLACEMENT	880,000	0.0
M40	OVER KALAMAZOO RIVER	ALLEGAN	SUPERSTRUCTURE REPLACEMENT	715,000	0.0
M63	OVER ST JOSEPH RIVER	BERRIEN	PILE CLUSTER	89,000	0.0
I196	UNDER OLD US12	BERRIEN	OVERLAY, PAINTING	352,000	0.0
I69	UNDER F DR S	CALHOUN	OVERLAY, PAINTING	374,000	0.0
I94	UNDER M66	CALHOUN	SUPERSTRUCTURE REPLACEMENT	2,200,000	0.0
I94	UNDER F DR	CALHOUN	OVERLAY, PAINTING	737,000	0.0
M99	ASH ST, ALBION & I94BL	CALHOUN	RECONSTRUCT	1,281,000	0.4
I75	UNDER M48 & OVER PINE RIVER	CHIPPEWA	PAINTING, JOINTS	319,000	0.0
US27NB	UNDER MOSTETLER RD	CLARE	BEAM REPLACEMENT, RAILING	69,000	0.0
M35	OVER FORD RIVER	DELTA	SUPERSTRUCTURE REPLACEMENT	690,000	0.0
I75	OVER PINE RUN CREEK N OF M57	GENESEE	CONCRETE OVERLAY	253,000	0.0
M57	@ FLINT RIVER	GENESEE	SUPERSTRUCTURE REPLACEMENT	1,618,000	0.0
I496	OVER CSX RAILROAD	INGHAM	OVERLAY, PAINTING	690,000	0.0
I96	UNDER JORDAN LAKE RD	IONIA	CONCRETE OVERLAY	149,000	0.0
I96	UNDER CUTLER RD	IONIA	CONCRETE OVERLAY	195,000	0.0
I96	OVER GRAND RIVER & MARKET RD	IONIA	PAINTING, JOINTS	437,000	0.0
I96	UNDER M44 CONNECTOR	KENT	OVERLAY, PAINTING	935,000	0.0
I96	UNDER M44 & OTHERS	KENT	PAINTING, PINS & HANGERS	1,144,000	0.0
I196	UNDER EASTERN AVE	KENT	PAINTING	149,000	0.0
I196	OVER CSX RAILROAD	KENT	OVERLAY, PAINTING	693,000	0.0
M34	OVER S BRANCH RAISIN RIVER	LENAWEE	BRIDGE REPLACEMENT	23,000	0.0
US223BR	OVER S BRANCH RAISIN RIVER	LENAWEE	SUPERSTRUCTURE REPLACEMENT	374,000	0.0
M120	OVER CEDAR CREEK	MUSKEGON	BRIDGE REPLACEMENT	2,603,000	0.0
I96	OVER NORRIS CREEK	MUSKEGON	CONCRETE OVERLAY	368,000	0.0
I696	OVER I696EB	OAKLAND	PAINTING	169,000	0.0
I75	OVER BIG BEAVER CREEK	OAKLAND	PAINTING	246,000	0.0
I75	UNDER JOHN R NB TURNBACK RAMP	OAKLAND	PAINTING	115,000	0.0
I196	OVER CSX RAILROAD	VAN BUREN	BRIDGE REMOVAL	605,000	0.0
I196	OVER CSX RAILROAD & BLACK RIVER	VAN BUREN	SUPERSTRUCTURE REPLACEMENT	2,079,000	0.0
M153EB	OVER ROUGE RIVER	WAYNE	DECK REPAIR, OVERLAY	297,000	0.0
I96	UNDER UNDERWOOD	WAYNE	PAINTING, PINS HANGERS	1,748,000	0.0
I96	UNDER FULLERTON	WAYNE	OVERLAY, JOINTS, PAINTING	1,100,000	0.0
I96	UNDER BUCHANAN	WAYNE	OVERLAY, PAINTING, PINS & HANGERS	2,081,000	0.0
I75	@ KINGS RD	WAYNE	BRIDGE REPAIR	227,000	0.0
I275	I94 OVER I275	WAYNE	OVERLAY, PAINTING	2,035,000	0.0
I275	OVER MICHIGAN AVE	WAYNE	REPAIR, PINS HANGER, JOINTS	244,000	0.0
M115	OVER T&S RAILROAD	WEXFORD	BRIDGE REPLACEMENT	223,000	0.0
TOTALS FOR WORK TYPE: BRIDGE REHABILITATION				\$ 28,506,000	0.4

RESURFACE

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M67&M94	US41 TO NE OF M94	ALGER	RESURFACE, SHOULDERS	1,144,000	12.4
M40	FROM M222 NORTH	ALLEGAN	RESURFACE, WIDEN	385,000	0.5
US131	N OF M222 TO S OF 135TH ST	ALLEGAN	RESURFACE	3,640,000	7.7
US12BR	E OF MAPLE TO E OF REUM	BERRIEN	RESURFACE, SHOULDERS	305,000	1.5
US31	MINORS RD TO ST JOE RIVER	BERRIEN	RESURFACE, SHOULDERS	225,000	0.8
US31	RED BUD TRAIL TO JASPER DAIRY	BERRIEN	RESURFACE, SHOULDERS	603,000	3.2
M60	M66 TO NE OF N CO L	BRANCH	RESURFACE & MILL	1,504,000	5.0
M62	US12 N TO CASSOPOLIS SVL	CASS	RESURFACE, SHOULDERS	1,001,000	8.0
US12	M60 E TO BEEBE RD	CASS	RESURFACE	394,000	4.3
US27	CLARK RD N TO TOWNSEND RD	CLINTON	RESURFACE, SHOULDERS	4,152,000	12.0
M37	US31 TO MATHISON RD	GD. TRAVERSE	UPGRADE NON-MOTORIZED	1,253,000	2.2
US12	CONCORD RD TO WEST ST	HILLSDALE	RESURFACE	1,017,000	8.6
M26	CO RD EM26 TO KEARSAGE ST	HOUGHTON	PULVERIZE & RESURFACE	1,812,000	12.4
US41	N OF DENTON RD TO PEARL ST	HOUGHTON	MILL & RESURFACE	639,000	3.3
US41	6TH ST TO N OF DENTON RD	HOUGHTON	MILL & RESURFACE	1,108,000	4.6
M142	CASEVILLE RD TO PIGEON SVL	HURON	MILL & OVERLAY	455,000	0.8
M142	PIGEON SVL TO ELKTON WV	HURON	MILL & OVERLAY	1,053,000	4.5
M25	HELENA RD TO HARBOR BEACH SCL	HURON	MILL & RESURFACE	1,079,000	4.5
M43EB	STANLEY TO WASHINGTON	INGHAM	MILL & RESURFACE	1,226,000	2.2
M52	E OF S JCT M106 TO WOOD	INGHAM	MILL & RESURFACE	589,000	0.8
US23	TOWNLIN RD N TO TAWAS CITY	IOSCO	RESURFACE, JOINTS	284,000	1.0
M52	CHURCH TO FRONT	LENAWEE	MILL & RESURFACE	625,000	1.0
I96BL	E OF HOWELL TO I96	LIVINGSTON	RESURFACE & WIDEN	880,000	1.8
M134	E/INT@PCKFRD&W/PT BRULEE	MACKINAC	RESURFACE, SHOULDERS	722,000	9.4
M3	MT CLEMENS NCL TO 23 MI RD	MACOMB	RESURFACE, CURB & GUTTER	3,745,000	4.6
M20	MAIN TO INDIAN	MIDLAND	MILL & RESURFACE	81,000	0.3
M20	JEROME TO HALEY	MIDLAND	RESURFACE, CURB & GUTTERS	564,000	0.7
M50	M125 TO I75	MONROE	RESURFACE, SHOULDERS	546,000	2.5
M24	LAKE ORION NCL TO OXFORD NVL	OAKLAND	BITUM. OVERLAY	1,779,000	3.1
M24	OXFORD NVL TO N CO L	OAKLAND	BITUM. OVERLAY	2,410,000	4.2
M150	N OF ROCHESTER TO TIENKEN RD	OAKLAND	MILL & RESURFACE	345,000	0.2
M66	S CO L TO US 10	OSCEOLA	PULVERIZE & RESURFACE	553,000	6.0
I75	S OF VANDERBILT N TO N CO L	OTSEGO	RESURFACE	2,266,000	5.3
M32	W OF MURNER RD TO I75 SB	OTSEGO	MILL & RESURFACE	363,000	0.8
M11	8TH AVE CONN TO WILSON AVE	OTTAWA	WIDEN & RESURFACE	528,000	1.8
M53	DECKERVILLE RD TO M81	SANILAC	MILL & RESURFACE	1,630,000	6.0
M46	STOUTENBERG RD TO RUTH RD	SANILAC	RESURFACE, SHOULDERS	1,195,000	4.5
M25	LEXINGTON SVL TO NVL	SANILAC	MILL & RESURFACE	880,000	1.1
M25	LEXINGTON NVL-PT SANILAC SVL	SANILAC	MILL & RESURFACE	3,080,000	10.3
I69	E OF M52 TO E OF M13	SHIAWASSEE	OVERLAY, SHOULDERS	11,265,000	16.5
I69	E OF M52 TO E OF M13	SHIAWASSEE	LANDSCAPING	35,000	17.2
US12	E OF MANN RD E TO US131	ST. JOSEPH	RESURFACE & WIDEN	1,100,000	4.0
M52	N OF ROEPKE RD TO M106 S JCT	WASHTENAW	RESURFACE	1,265,000	6.8
I94BL	HURON TO UNIVERSITY	WASHTENAW	MILL & RESURFACE	182,000	0.4
US12	LIVERNOS TO ROSA PARKS BLVD	WAYNE	RESURFACE, CURB & GUTTER	2,184,000	2.5
TOTALS FOR WORK TYPE:			RESURFACE	\$ 62,091,000	211.3

RESTORATION & REHABILITATION

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M32	W OF BAGLEY TO THIRD	ALPENA	PAVEMENT REHABILITATION	759,000	2.5
I94	W OF BL E TO ST JOSEPH	BERRIEN	REPLACE PAVEMENT	13,899,000	4.5
M75	@ BOYNE RIVER W OF US131	CHARLEVOIX	CONSTRUCT CULVERT	137,000	0.0
I96	NCL TO W OF US27BR	EATON	RECONSTRUCT SHOULDER	651,000	6.1
US23	N OF THOMPSON RD N TO I75	GENESEE	CONCRETE PAVEMENT	11,546,000	6.2
M54BR	FIRST TO RUSSELL	GENESEE	PAVEMENT RECYCLE	3,572,000	3.5
M113	M37 TO M186	GD. TRAVERSE	RESURFACE, SHOULDERS	1,320,000	12.4
US12	WEST ST TO MOSCOW RD	HILLSDALE	RESURFACE, CULVERT	259,000	0.1
US27	N OF US27BR TO M20 INT	ISABELLA	RESURFACE	2,200,000	2.8

M53	S OF I69 @ PICKERAL DRAIN	LAPEER	RECONSTRUCT	393,000	0.3
M22	OVER BELANGER'S CREEK	LEELANAU	CULVERT, APPROACH	173,000	0.0
I75	MACKINAC BRIDGE N TO N CO L	MACKINAC	BITUM. SHOULDERS	1,925,000	25.0
US131OLD	M46 TO N CO L	MONTCALM	TURNBACK REHABILITATION	203,000	2.6
M46	E OF M66 TO EDMORE WWL	MONTCALM	PAVEMENT REPAIR	167,000	1.5
M81	INDIANTOWN RD TO E CO L	SAGINAW	JOINTS & SHOULDERS	3,858,000	8.8
I75	WESTERVELT RD TO ADAMS EXT	SAGINAW	EXCAVATE EMBANKMENT	385,000	0.0
I196OLD	M140 TO N SHORE DR	VAN BUREN	PAVEMENT REHABILITATION	1,349,000	3.2
M39	NEAR US12 IN DEARBORN	WAYNE	PUMPS	62,000	0.0

TOTALS FOR WORK TYPE: RESTORATION & REHABILITATION \$ 42,858,000 79.5

RECONSTRUCTION

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
US23	S OF M72 TO S OF LAKESHORE DR	ALCONA	RECONSTRUCT, CURB & GUTTER	1,507,000	2.6
I94WB	NEW BUFFALO WEIGH STATION	BERRIEN	SIGNING & LIGHTING	219,000	0.0
I94WB	NEW BUFFALO WEIGH STATION	BERRIEN	DYNAMIC SCALE	172,000	0.0
I94WB	NEW BUFFALO WEIGH STATION	BERRIEN	INSPECT BUILDING	173,000	0.0
I94EB	NEW BUFFALO WEIGH STATION	BERRIEN	INSPECT BUILDING	161,000	0.0
M37NB	KENDALL TO WASHINGTON	CALHOUN	RECONSTRUCT	364,000	0.4
MFF16	TEPEE LAKE N TO WALTON CREEK	IRON	UPGRADE ROADWAY	1,178,000	4.3
US31	N OF FOUNTAIN RD	MASON	MILL & RESURFACE	3,760,000	5.2
US31	N OF FOUNTAIN RD TO N CO L	MASON	RESURFACE, SHOULDERS	3,984,000	9.9
M115	M61 TO MUSKEGON RIVER	OSCEOLA	RECONSTRUCT	1,451,000	5.5

TOTALS FOR WORK TYPE: RECONSTRUCTION \$ 12,969,000 27.9

MINOR WIDENING

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M40	N OF US31 TO S OF 32ND ST	ALLEGAN	WIDEN	454,000	0.4
US23	ISLAND DR TO N OF WAYNE RD	ALPENA	WIDEN TO 5 LANES	545,000	0.4
M84	I75 TO DELTA RD	BAY	CENTER LEFT TURN LANE	330,000	0.5
M63	@ HOLLYWOOD	BERRIEN	CENTER LEFT TURN LANE	201,000	0.1
M20	E OF US27 TO E OF SUMMERTOWN	ISABELLA	WIDEN TO 5 LANES	650,000	0.4
M106	ROSEHILL RD TO PORTAGE RIVER	JACKSON	WIDEN & RESURFACE	495,000	2.5
M53	N OF NEWARK TO 2ND & N TO 3RD	LAPEER	WIDEN TO 5 LANES	1,485,000	1.2
M22	M 109 TO E LIMITS	LEELANAU	WIDEN 2 TO 4 LANES	440,000	0.3
I96BL	@ LATSON RD	LIVINGSTON	INTERSECTION IMPROVEMENTS	230,000	0.2
US31	@ M55	MANISTEE	WIDEN TO 5 LANES	201,000	0.1
M18	S OF CO RD 100	ROSCOMMON	WIDEN & RESURFACE	594,000	1.0
US131BR	@ ENTERPRISE DR	ST. JOSEPH	FLARE INTERSECTION TO 3 LANES	161,000	0.1

TOTALS FOR WORK TYPE: MINOR WIDENING \$ 5,786,000 7.2

ROADSIDE FACILITIES

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
I69NB	COLDWATER WELCOME CENTER	BRANCH	RESTROOM, CURB & GUTTER	477,000	0.0
I96	IONIA WEIGH STATION	IONIA	CONVERT SCALE	330,000	0.0
I94EB	@ GRASS LAKE WEIGH STATION	JACKSON	INSPECT LIGHTING	29,000	0.0
I94WB	@ GRASS LAKE WEIGH STATION	JACKSON	INSPECT LIGHTING	29,000	0.0
US131SB	@ ROCKFORD REST AREA	KENT	RECONSTRUCT SANITARY SYSTEM	69,000	0.0
M50	M50/US23 INTERSECTION	MONROE	PARKING LOT	46,000	0.0
I275	ROCKWOOD RD TO N OF NEWBURG	MONROE	SLOPE WORK, BIKE PATH	368,000	1.6
I94EB	@ ADAIR REST AREA	ST. CLAIR	ROOF & FRAMING	58,000	0.0
I94	PORT HURON TRAVEL INFO CENTER	ST. CLAIR	BUILDING EXPANSION	220,000	0.0
I94	M25 TO RANGE RD	ST. CLAIR	INTERMITTANT FENCING	294,000	3.2

TOTALS FOR WORK TYPE: ROADSIDE FACILITIES \$ 1,920,000 4.8

IMPROVE Category

CAPACITY IMPROVEMENT

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M37REL	I94BL N TO M89 & M37	CALHOUN	WIDEN INTERCHANGE	\$ 141,000	1.9
US131	S OF LEARS TO HILLCREST	EMMET	ADD LANE, CURB & GUTTER	616,000	1.2
US31	N OF RESORT ENT TO N OF ACME	GD. TRAVERSE	WIDEN 2 TO 4 LANES	880,000	1.6
M28	M117 TO M123	LUCE	WIDEN, RAILING, GRADE	3,047,000	3.3
M59	@ VAN DYKE	MACOMB	WIDEN & RELOCATE	330,000	0.1
US31	@ STERNBERG RD	MUSKEGON	INTERCHANGE CONSTRUCTION	5,595,000	0.0
I96	@ MILFORD RD INTERCHANGE	OAKLAND	INTERCHANGE CONSTRUCTION	5,236,000	0.0
M59	W OF OPDYKE RD E TO CROOKS	OAKLAND	WIDEN	7,452,000	4.0
M15	US24 TO PARAMUS	OAKLAND	WIDEN TO 5 LANES	1,018,000	0.4
M25	SVL TO S OF NVL OF PT SANILAC	SANILAC	WIDEN & RESURFACE	1,540,000	1.0
M29	W OF DANA DR TO SMITH ST	ST. CLAIR	RECONSTRUCT TO 5 LANES	3,019,000	1.5
US12BR	HARRIS RD TO E CO L	WASHTENAW	WIDEN & RESURFACE	3,330,000	2.2
M85	OUTER DR TO I75	WAYNE	MILL & RESURFACE	1,815,000	1.4
TOTALS FOR WORK TYPE:			CAPACITY IMPROVEMENT	\$ 34,019,000	18.6

BRIDGE REPLACEMENT

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M150	@ PAINT CREEK	OAKLAND	BRIDGE RECONSTRUCTION	\$ 463,000	0.0
TOTALS FOR WORK TYPE:			BRIDGE REPLACEMENT	\$ 463,000	0.0

BRIDGE WIDENING

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
US27BR	OVER TOBACCO RIVER	CLARE	SUPERSTRUCTURE REPLACEMENT	\$ 546,000	0.0
US23	UNDER ELLSWORTH RD	WASHTENAW	BRIDGE WIDEN	825,000	0.0
TOTALS FOR WORK TYPE:			BRIDGE WIDENING	\$ 1,371,000	0.0

ROADSIDE FACILITIES

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
US10&75	FLAJOLE RD E TO KASEMEYER ST	BAY	FENCING UPGRADE	\$ 138,000	11.2
I94WB	REST AREA E OF WATERVLIT	BERRIEN	PARKING	577,000	0.0
I94WB	REST AREA E OF WATERVLIT	BERRIEN	REST AREA BUILDING	690,000	0.0
US31	BEAR CREEK TO PETOSKEY ECL	EMMET	NON-MOTORIZED PATH	81,000	1.4
US31	PETOSKEY WCL TO JACKSON ST	EMMET	NON-MOTORIZED PATH	98,000	1.1
US31	3 MI RD TO BUNKER HILL RD	GD. TRAVERSE	NON-MOTORIZED PATH	259,000	3.4
US31	BUNKER HILL RD TO M72	GD. TRAVERSE	NON-MOTORIZED PATH	86,000	1.4
M15	US24 TO PARAMUS	OAKLAND	PLANTING	9,000	0.0
MHC	I696 TO 12MI RD	OAKLAND	LANDSCAPING	385,000	0.5
M29	ALGONAC WCL TO CITY PARK	ST. CLAIR	NON-MOTORIZED PATH	90,000	0.8
I75	@ BAGLEY ST	WAYNE	PEDESTRIAN BRIDGE	926,000	0.0
TOTALS FOR WORK TYPE:			ROADSIDE FACILITIES	\$ 3,339,000	19.8

EXPAND Category

NEW ROUTES

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
1696	GARDNER TO LONGFELLOW	OAKLAND	LANDSCAPING	\$ 369,000	2.9
1696	@ WOODWARD & WELLESLEY	OAKLAND	PARKING LOT	86,000	0.0
1696	S OF FAIRFAX & E OF LINCOLN DR	OAKLAND	LANDSCAPING	312,000	0.0
1696	@ WOODWARD AVE	OAKLAND	NEW PEDESTRIAN BRIDGE	330,000	0.0
MHC	@ 196/1696 TO 1275 INT & M102	OAKLAND	RAMP, WIDEN, GRADE	3,277,000	3.0
MHC	1696 TO 12MI RD	OAKLAND	INTERCHANGE LIGHTING	1,760,000	0.0
TOTALS FOR WORK TYPE:			NEW ROUTES	\$ 6,134,000	5.9

RELOCATION

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
M LOGAN	S OF LENAWEЕ TO N OF IONIA	INGHAM	RECONSTRUCT BLVD	\$ 3,303,000	0.6
TOTALS FOR WORK TYPE:			RELOCATION	\$ 3,303,000	0.6

ROADSIDE FACILITIES

ROUTE	LOCATION	COUNTY	WORK TYPE	TOTAL COST	LENGTH
1696	WB HAVERHILL TO MERIDETH & M53	MACOMB	NOISE WALL	\$ 1,650,000	0.0
175NB	E OF M 15 INT	OAKLAND	SOUND BARRIER	396,000	0.3
TOTALS FOR WORK TYPE:			ROADSIDE FACILITIES	\$ 2,046,000	0.3

APPENDIX C: COMPREHENSIVE TRANSPORTATION

TABLE C-4
URBAN TRANSIT SYSTEMS
FY 1990 Performance Data

<u>Location</u>	<u>Vehicles</u>		<u>Passengers</u>	<u>Percent Seniors</u>	<u>Percent Handicappers</u>
	<u>Regular</u>	<u>Lift-Equipped</u>			
Ann Arbor	4	70	3,919,417	10	4
Battle Creek	11	15	769,819	18	12
Bay County	0	35	526,462	20	25
Benton Harbor	9	6	144,045	29	1
Flint	31	55	3,132,884	6	4
Grand Rapids	68	10	3,926,958	8	5
Jackson	3	31	509,065	33	9
Kalamazoo	0	40	1,504,487	7	8
Lansing	2	58	4,196,771	1	8
Muskegon	0	19	564,593	NA	NA
Niles	7	3	90,135	36	18
Saginaw	5	44	1,465,171	4	2
SMART	194	206	9,802,590	NA	NA
DDOT	<u>223</u>	<u>351</u>	<u>62,854,162</u>	11	0
TOTALS	557	943	93,406,559		

NONURBAN TRANSIT SYSTEMS
FY 1990 Performance Data

<u>Noncounty Systems</u>	<u>Vehicles</u>		<u>Passengers</u>	<u>Percent Seniors</u>	<u>Percent Handicappers *</u>
	<u>Regular</u>	<u>Lift-Equipped</u>			
Adrian	3	3	110,652	36	24
Alma	3	4	74,172	29	14
Alpena	3	4	92,177	34	26
Belding	1	2	57,928	18	1
Big Rapids	4	3	73,894	26	18
Caro (Village)	2	4	57,833	31	29
Dowagiac	0	2	38,932	27	10
Greenville	2	2	47,381	35	7
Grand Haven	7	7	176,690	17	27
Hillsdale	5	2	105,780	25	16

Holland	7	5	126,439	28	30
Houghton	4	5	58,990	33	38
Ionia	4	2	85,841	15	7
Lapeer	4	5	63,936	29	37
Ludington	6	5	171,151	25	15
Marshall	1	3	63,262	22	4
Midland	5	7	122,765	14	39
Niles (Buchanan)	0	2	12,834	51	19
Saline	0	2	3,623	11	14
Saugatuck Twp.	1	3	32,549	47	11
S.S. Marie	2	3	44,082	24	12
Yates Twp.	<u>2</u>	<u>2</u>	<u>30,449</u>	15	22
Subtotals	66	77	1,651,360		

<u>County Systems</u>	<u>Vehicles</u>		<u>Passengers</u>	<u>Percent Seniors</u>	<u>Percent Handicappers*</u>
	<u>Regular</u>	<u>Lift-Equipped</u>			
Alger Co.	5	4	45,955	15	31
Antrim Co.	4	10	76,355	17	23
Barry Co.	0	6	73,761	12	6
Bay Area (Gd. Traverse & Leelanau Cos.)	14	8	311,055	17	33
Bay Co.	3	21	140,536	13	33
Berrien Co.	5	9	177,147	11	48
Branch Co.	2	7	91,621	17	48
Charlevoix Co.	3	8	82,194	18	47
Clare Co.	4	5	62,111	18	48
Crawford Co.	3	8	100,940	18	10
Eastern U. P.	4	8	88,374	3	51
Eaton Co.	1	14	156,972	16	22
Gladwin Co.	3	10	114,648	18	30
Gogebic Co.	3	2	30,494	47	25
Huron Co.	11	8	162,245	8	38
Ingham Co. (CATA)	2	6	41,972	17	29
Iosco Co.	1	7	43,471	28	36
Isabella Co.	7	15	311,172	13	58
Jackson Co.	0	14	50,392	9	88
Kalamazoo Co.	2	13	103,009	20	77
Kalkaska Co.	2	8	74,917	21	35
Lenawee Co.	7	5	92,500	12	74
Manistee Co.	11	11	251,108	22	20
Marquette Co.	12	12	297,482	11	16
Mecosta Co.	2	6	60,826	8	75
Ogemaw Co.	1	5	59,347	37	20
Ontonagon Co.	3	3	34,986	23	28
Osceola Co.	1	5	49,920	19	67
Oscoda Co.	3	2	31,160	47	10
Otsego Co.	6	4	93,418	26	26
Roscommon Co.	6	7	152,045	17	9

Sanilac Co.	0	10	66,196	4	91
Schoolcraft Co.	4	2	33,661	18	35
SMART	10	34	437,571	17**	5**
Van Buren Co.	3	7	63,700	19	69
Wexford Co.	<u>4</u>	<u>8</u>	<u>112,458</u>	24	27
Subtotals	142	312	4,175,719		
NONURBAN TOTALS	208	389	5,827,079		

* = Includes Senior Handicappers
 ** = Estimated

TABLE C-10
 FY 1990 PERFORMANCE DATA
 Specialized Services for Seniors and Handicappers

<u>County</u>	<u>Operator</u>	Vehicles		<u>Passengers</u>
		<u>Regular</u>	<u>Lift-Equipped</u>	
Allegan	Allegan County Resource Development Committee, Inc.	0	2	76,708
	Community Mental Health	0	4	6,172
Alger	Altran Transit Authority	0	1	1,678
Alpena	Thunder Bay Transportation Corporation	0	14	66,671
	Baragaland Senior Citizen, Inc.	0	1	654
Baraga	Barry County Transit	0	5	3,260
Barry	Bay-Arenac ISD	0	1	64,790
Bay	Bay County Taxi Cab Company	0	1	15,454
Benzie	Benzie County Elders, Inc.	0	3	9,248
Branch	Branch Area Transportation Authority	0	1	5,920
Calhoun	Community Action Agency of South Central Michigan, Inc.	0	2	9,255
	Cheboygan County Council on Aging	0	5	11,595
Cheybogan	Community Resource Volunteers	0	5	28,246
Clinton	Menominee/Delta/Schoolcraft Community Action Agency	0	9	17,252
Delta/Menominee	Capital Area Community Services	0	1	637
	Association for Retarded Citizens	0	1	77,908
Eaton	Visually Impaired Center, Inc.	2	0	810
	Center for Gerontology	0	2	10,205
Genesee	Haskell OWLS, Inc.	0	1	1,842
	Montrose Community Center Advisory Council	0	1	3,903
	Carman-Ainsworth Senior Citizens	0	1	2,798
	Genesee County Department of Social Services	0	1	1,195
	Community Mental Health	0	1	4,236
	Genesee Council of the Blind	0	1	2,202
	Jewish Social Services	0	1	1,576
	Total Therapy Management	0	1	4,561
	Mt. Morris Twp./Krapohl Center	0	1	1,938

Gratiot	Handicappers Information Council and Patient Equipment Locker, Inc.	0	3	6,142
Hillsdale	Key Opportunities, Inc.	0	8	45,792
Houghton	Copper Co. Workshop	0	2	6,254
	Baraga/Houghton/Keweenaw CAA	0	1	3,411
Ingham	Capital Area Transportation Authority	0	1	54,721
Ionia	Ionia County Council on Aging	0	1	1,896
Iron	TRICO, Inc.	0	4	20,095
	Dickinson/Iron Community Services Agency	0	8	19,225
Jackson	City of Jackson Transportation Authority	0	0	2,984
Kalamazoo	Care-A-Van	0	2	30,763
Kent	Hope Rehabilitation, Inc.	42	11	69,484
	Senior Neighbors	0	2	12,013
	Red Cross	0	1	1,893
	Area Community Services	0	1	2,723
	Rockford Community Service Center	0	1	9,193
Lapeer	Christian Family Services	0	2	6,941
	Lapeer County Council on Aging	0	1	938
	Lapeer Teamwork, Inc.	0	1	8,102
Lenawee	Lenawee Transportation Corporation	0	1	2,436
Manistee	Manistee County Council on Aging	0	3	1,313**
Mackinac	Chippewa/Luce/Mackinac Counties CAA	0	2	8,478
Marquette	Marquette Community Mental Health	0	1	4,407
	Marquette County Transit Authority	0	1	2,478
Mecosta	Mecosta County Council on Aging	0	1	1,324
Midland	Midland County Community Action Agency	0	1	3,214
Missaukee	Northwest Senior Resources, Inc.	0	1	49*
Montmorency	Montmorency County Council on Aging	0	1	772
Muskegon	Western Michigan Center for Handicapped	0	2	22,850
	Red Cross	0	2	794
Newago	Five CAP, Inc.	0	1	3,800
	Newago County Association for Retarded Citizens, Inc.	0	1	5,275
Oceana	Oceana County Council on Aging	0	1	4,683
Otsego	Otsego County Public Transit	0	2	3,192
Ottawa	Georgetown Seniors, Inc.	0	4	1,215
	Holland DART	0	1	1,709
	Grand Haven Transit	0	1	825
	Grand Rapids Area Transit Authority	0	1	240
City of Petoskey	Friendship Center of Petoskey and Emmet County	0	6	23,764
Presque Isle	Presque Isle County Council on Aging	0	4	5,304
Saginaw	Saginaw County Council on Aging	0	2	11,917
	Saginaw County Child Development	0	3	6,669
	Lutheran Home of Frankenmuth	0	1	454
Sanilac	Sanilac Transportation Corporation	0	5	318
Shiawassee	Shiawassee County Council on Aging	1	2	13,076
	ACKCO Services Inc.	1	2	10,027
St. Clair	St. Clair Co. Council on Aging	3	6	29,522
St. Joseph	Council On Aging	0	2	17,216
	Arch Workshop, Inc.	0	7	39,064

SMART	Charter Township of Brandon	0	1	1,089	
	Macomb County Community Service Agency	0	1	3,047	
	Child and Family Services of Washtenaw	0	1	3,638	
	Troy Medigo	0	1	2,314	
	City of Warren	0	5	17,388	
	Older Persons Commission-Rochester	0	1	15,819	
	City of Livonia Consortium	0	1	490	
	Area Agency on Aging 1-B	0	1	5,176	
	Livingston Association for Retarded Citizens	0	3	1,570	
	Monroe County Opportunity Program	0	1	1,365	
	Hartland Senior Center & Schools	0	1	469	
	Highland-Milford Townships	0	1	2,556	
	Holly Area Schools	0	1	7,209	
	Pontiac Community and Human Resources	0	1	645	
	Pontiac Schools-SCAMP	0	1	2,064	
	S.T.A.R. Transportation	0	1	2,997	
	Bedford Public Schools	0	1	831	
	City of Farmington Hills	0	1	2,079	
	City of Ferndale	0	1	3,580	
	Independence Township	0	1	1,898	
	City of Gibraltar	0	1	978	
	Brighton Community Education Department	0	1	1,398	
	Livingston County Mental Health	0	1	NA	
	Monroe County Community Mental Health	0	1	3,324	
	SMART	Catholic Social Services of Macomb County	0	3	16,377
	DDOT	Catholic Social Services of Wayne County	0	3	22,048
		Latin Americans for Social and Economic Development (LASED)	0	1	5,680
		Virginia Park Citizens Service Corp.	0	1	4,280
		Community Resource and Assistance Center	0	1	15,542
		Walter P. Reuther Senior Center	0	1	2,252
		Detroit Area Agency on Aging	0	1	7,662
		CAUSE	0	1	163
	Washtenaw	Chelsea Are Transportation System	0	1	11,678
	Child and Family Services of Washtenaw, Inc.	0	2	8,682	
	Manchester Senior Citizen Council, Inc.	0	1	2,373	
	Work Skills Corporation	0	1	4,411	
	Whitmore Lake Community Service Center	0	1	3,124	
	Ann Arbor Transportation Authority	0	1	6,130	
Milan	Milan Public Transit	0	1	2,531	
Yates Twp.	Yates Dial-A-Ride	0	1	128**	
TOTALS		49	243	1,154,654	

*One quarter only.

**Two quarters only.

TABLE C-11
PERFORMANCE DATA
Ridesharing and Vanpool Programs

	<u>Ridesharing</u>	<u>Vanpooling</u>
Number of Carpools/Vans	2,803	94
Number of Carpoolers/Vanpoolers	7,837	1,222
Reduction in No. of Vehicles on Road	3,224	924
Vehicle Trips Saved	1,611,949	466,925
Gallons of Gas Conserved	1,334,282	430,990
Tons of Pollutants Conserved	1,373	615

TABLE C-12
FY 1990 PERFORMANCE DATA
Local Bus New Services

<u>Location</u>	<u>Vehicles</u>		<u>Passengers</u>	<u>% Seniors and Handicappers</u>
	<u>Regular</u>	<u>Lift-Equipped</u>		
Ann Arbor	0	4	66,086	NA
Bay Area (Traverse City area)	3	1	25,425	54
Benton Harbor ¹	7	3	31,558	23
Cass County	5	4	54,341	62
Delta County	3	6	116,699	69
Flint	9	5	40,079	68
Ionia	2	1	6,368	24
Isabella County	13	7	14,929	35
Lansing	2	0	58,503	NA
Milan	3	3	49,331	8
Muskegon County	0	2	4,681	99
Saginaw County	1	2	29,020	NA
SMART/DDOT	<u>9</u>	<u>18</u>	<u>128,617</u>	NA
Totals	57	59	625,637	

APPENDIX D: AVIATION PROJECTS

BUREAU OF AERONAUTICS FY 1992 CAPITAL OUTLAY PROGRAM PRIORITY A PROJECTS

<u>LOCATION/AIRPORT</u>	<u>PROJECT ITEM DESCRIPTION</u>	<u>TOTAL COST</u>
<u>CATEGORY 1 - SPECIAL PROGRAMS/SAFETY</u>		
ALPENA ALPENA CO. REG. AIRPORT	REIL	\$ 25,000
CHARLEVOIX CHARLEVOIX MUNICIPAL	LAND-EASEMENT	\$ 175,000
DETROIT WILLOW RUN	SECURITY FENCING REMOVE AIRPORT HAZARDS	\$ 170,000 130,000
GRAND RAPIDS KENT COUNTY INTL	LAND ACQUISITION	\$ 2,060,000
GROSSE ILE GROSSE ILE MUNI	LAND-ACQUISITION PERIMETER FENCING	\$ 250,000 150,000
LANSING CAPITAL CITY	OBSTRUCTION REMOVAL UTILITY RELOCATION	\$ 168,176 29,402
LUDINGTON MASON COUNTY	PERIMETER FENCING LAND FOR EXISTING AIRPORT REIL PAPI	\$ 75,000 111,111 44,000 44,000
MANISTEE MANISTEE CO. BLACKER	PERIMETER FENCING CLEARING	\$ 135,000 33,000
SAULT STE MARIE CHIPPEWA CO. INTL	INSTALL PAPI/REIL	\$ 64,000
TRAVERSE CITY CHERRY CAPITAL	SECURITY ACCESS SYSTEM	\$ <u>306,837</u>
	CATEGORY TOTAL	\$ 3,970,526

<u>LOCATION/AIRPORT</u>	<u>PROJECT ITEM DESCRIPTION</u>	<u>TOTAL COST</u>
<u>CATEGORY 2 - RECONSTRUCTION</u>		
ALPENA ALPENA CO. REG AIRPORT	MEDIUM INTENSITY RWY LTG RUNWAY REHABILITATION	\$ 150,000 850,000
BATTLE CREEK W.K. KELLOGG REGIONAL	TAXIWAY OVERLAY	\$ 446,300
CHARLEVOIX CHARLEVOIX MUNICIPAL	RUNWAY REHABILITATION	\$ 560,000
FLINT BISHOP INTERNATIONAL	APRON CONSTR (PHASE II)	3 3,000,000
GROSSE ILE GROSSE ILE MUNICIPAL	REHAB ENTRANCE ROAD	\$ 150,000
IRONWOOD GOGEBIC COUNTY	RUNWAY REHABILITATION	\$ 750,000
LANSING CAPITAL CITY	NEW TAXIWAY APRON REHABILITATION	\$ 225,000 329,000
LUDINGTON MASON COUNTY	REHABILITATE MIRL RUNWAY PFC	\$ 44,000 250,000
MANISTEE MANISTEE CO. BLACKER	REHABILITATE RWY LTG SEAL APRON PFC/RST (SECONDARY) PFC/RST (PRIMARY)	\$ 55,000 20,000 120,000 215,000
PELLSTON EMMET COUNTY	REHABILITATE RWY LTG	\$ 150,000
PONTIAC OAKLAND-PONTIAC	TAXIWAY REHABILITATION APRON REHABILITATION	\$ 700,000 \$ 1,415,300
PORT HURON ST. CLAIR COUNTY INTL	RAMP REHABILITATION	\$ 1,240,000
SAGINAW TRI-CITY INTERNATIONAL	APRON REHABILITATION	\$ 1,097,500

<u>LOCATION/AIRPORT</u>	<u>PROJECT ITEM DESCRIPTION</u>	<u>TOTAL COST</u>
SAULT STE MARIE CHIPPEWA CO. INTERNATL	TAXIWAY/APRON CONSTRUC. RUNWAY LIGHTING	\$ 225,000 94,000
SOUTH HAVEN SOUTH HAVEN AREA REGIONAL	CONSTRUCT BEW APRON	\$ 237,000
THREE RIVERS THREE RIVERS MUNI DR HAIN	RUNWAY REHABILITATION TAXIWAY/APRON CONSTR	\$ 590,000 500,000
TRAVERSE CITY CHERRY CAPITAL	RUNWAY REHABILITATION TAXIWAY REHABILITATION APRON EXPANSION	\$ 276,000 460,000 40,000
	CATEGORY TOTAL	\$ 14,189,100

CATEGORY 3 -STANDARDS

CHARLEVOIX CHARLEVOIX MUNICIPAL	APRON REHABILITATION	\$ 144,000
HOWELL LIVINGSTON COUNTY	TAXIWAY/APRON CONSTR NEW TAXIWAY	\$ 500,000 \$ 710,000
MARQUETTE MARQUETTE COUNTY	LENGTHEN EXISTING RWY	\$ 2,000,000
MT PLEASANT MT PLEASANT MUNI	EXTEND TAXIWAY	\$ 400,000
MUSKEGON MUSKEGON COUNTY	LAND FOR EXISTING AIRPT	\$ 344,217
TRAVERSE CITY CHERRY CAPITAL	TWY STRENGTHENING OVERLAY	\$ <u>205,000</u>
	CATEGORY TOTAL	\$ 4,303,217

<u>LOCATION/AIRPORT</u>	<u>PROJECT ITEM DESCRIPTION</u>	<u>TOTAL COST</u>
<u>CATEGORY 4 - UPGRADING AIRPORT ROLE</u>		
GREENVILLE GREENVILLE MUNI	LENGTHEN EXISTING RUNWAY	\$ 300,000
LUDINGTON MASON COUNTY	LENGTHEN EXISTING RUNWAY	\$ 250,000
SOUTH HAVEN SOUTH HAVEN AREA REG	NEW TAXIWAY	\$ 215,000
	LENGTHEN EXISTING RUNWAY	\$ <u>215,000</u>
CATEGORY TOTAL		\$ 980,000

CATEGORY 5 - CAPACITY DEVELOPMENT

DETROIT DETROIT METRO WAYNE CO	LETTER OF INTENT	\$ 24,000,000
HOLLAND TULIP CITY	CONSTRUCT NEW APRON	\$ 750,000
KALAMAZOO KALAMAZOO CO AIRPORT	TAXIWAY/APRON CONSTR	\$ 500,000
	CONSTRUCT NEW APRON	300,000
MT PLEASANT MT PLEASANT MUNICIPAL	APRON EXPANSION	\$ 200,000
PELLSTON EMMET COUNTY	APRON EXPANSION	\$ 200,000
SOUTH HAVEN SOUTH HAVEN AREA REG	TAXISTREET CONSTR	\$ <u>120,000</u>
CATEGORY TOTAL		\$ 26,070,000

CATEGORY 8 - EQUIPMENT AND BUILDINGS

ALPENA ALPENA CO REG AIRPORT	SRE ROLLOVER PLOW	\$ 20,000
	RADIO CONTROL	\$ 10,000
ESCANABA DELTA COUNTY	ARFF EQUIPMENT	\$ 330,000
HANCOCK HOUGHTON COUNTY MEMORIAL	SRE SNOWBLOWER/TRUCK	\$ 170,000
TRAVERSE CITY	SRE TRUCK PLOW/BLADE	\$ <u>200,000</u>
SRE = Snow Removal Equipment	CATEGORY TOTAL	\$ 730,000

GRAND TOTAL \$42,242,843

**BUREAU OF AERONAUTICS
 FY 1992 CAPITAL OUTLAY PROGRAM
 PRIORITY B PROJECTS**

<u>LOCATION/AIRPORT</u>	<u>PROJECT ITEM DESCRIPTION</u>	<u>TOTAL COST</u>
<u>CATEGORY 1 - SPECIAL PROGRAMS/SAFETY</u>		
MARQUETTE MARQUETTE COUNTY	UTILITY RELOCATION	\$ 240,000
SAULT STE MARIE CHIPPEWA COUNTY INTL	PERIMETER FENCING	\$ <u>80,000</u>
	CATEGORY TOTAL	\$ 320,000
 <u>CATEGORY 2 - RECONSTRUCTION</u>		
FLINT BISHOP INTERNATIONAL	APRON CONSTR (PHASE I)	\$ 1,000,000
IRON MOUNTAIN/KINGSFORD FORD	NEW TAXIWAY	\$ 1,600,000
MARQUETTE MARQUETTE COUNTY	SEAL AIRPORT PAVEMENTS	\$ 306,000
MUSKEGON MUSKEGON COUNTY	PFC/RST (SECONDARY)	\$ 140,000
ONTONAGON ONTONAGON COUNTY	RUNWAY REHABILITATION	\$ <u>300,000</u>
	CATEGORY TOTAL	\$3,346,000
 <u>CATEGORY 4 - UPGRADING AIRPORT ROLE</u>		
HOWELL LIVINGSTON COUNTY	LAND-ACQUISITION	\$ 2,700,000
	CATEGORY TOTAL	\$2,700,000

<u>LOCATION/AIRPORT</u>	<u>PROJECT ITEM DESCRIPTION</u>	<u>TOTAL COST</u>
<u>CATEGORY 5 - CAPACITY DEVELOPMENT</u>		
MONROE MONROE CUSTER	CONSTRUCT HANGAR AREA	\$ 325,000
MUSKEGON MUSKEGON COUNTY	TAXISTREET CONSTR	\$ <u>70,000</u>
	CATEGORY TOTAL	\$ 395,000
<u>CATEGORY 8 - EQUIPMENT AND BUILDINGS</u>		
BENTON HARBOR ROSS FIELD	SRE FRONT END LOADER (2)	\$ 120,000
IRONWOOD GOGEBIC COUNTY	SRE FRONT END LOADER	\$ 80,000
SAULT STE MARIE	TERMINAL BUILDING	\$ <u>135,000</u>
SRE = Snow Removal Equipment	CATEGORY TOTAL	\$ 335,000
	GRAND TOTAL	\$7,096,000