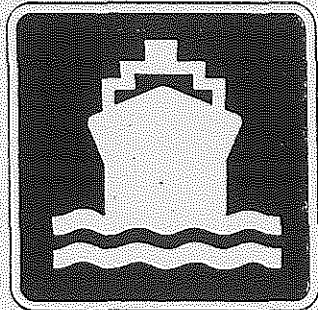
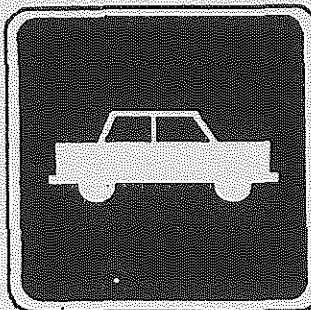
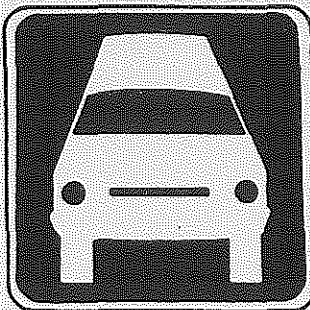
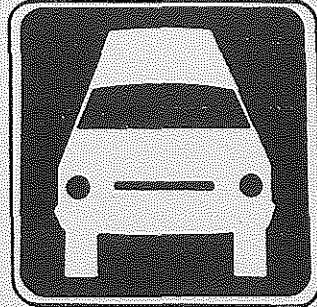
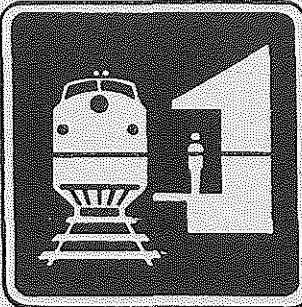
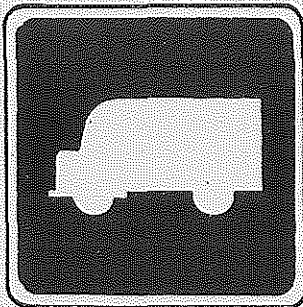


MICHIGAN DEPARTMENT OF TRANSPORTATION

1987-88 Multi-modal PROGRAM



1987-88
MULTI-MODAL
PROGRAM

MICHIGAN DEPARTMENT OF TRANSPORTATION

JAMES P. PITZ, DIRECTOR

MICHIGAN TRANSPORTATION COMMISSION

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MAY 1, 1987

TABLE OF CONTENTS

	<u>Page No.</u>
INTRODUCTION	
Introduction	1
Preserve, improve, and expand	1
Program development	2
 HIGHWAYS	
Highlights	7
System condition information	12
Revenues and their uses	21
Program structure and categories	22
Project summary and listing	26
 COMPREHENSIVE TRANSPORTATION	
Executive summary	43
FY 87-88 CTF program description	47
Local bus operating assistance	47
Non-urban operating/capital	50
New small bus and specialized services	50
Intercity discretionary	59
Intercity air marketing	62
Intercity bus equipment loan program	62
Rail passenger service	63
Marine passenger	66
Transportation service directory	66
Freight preservation and development	67
Freight property management	69
Port assistance	69
Transportation development account	70
 AVIATION	
Highlights	79
Airport system condition	80
Revenue sources	81
Priorities and program categories	84
Project summary and listing	87

INTRODUCTION

INTRODUCTION

Through this 1987-88 program the Michigan Department of Transportation continues its major emphasis on preserving the existing transportation system. This emphasis is in accordance with the goals and policies of the State Transportation Commission, and the direction set forth in the department's comprehensive planning process.

The comprehensive planning process consists of:

1. A needs study which is an inventory and analysis of existing and future needs, and a priority setting tool;
2. A state transportation plan that sets policy goals and objectives;
3. A fiscal analysis that estimates the revenues available to meet our goals and objectives; and
4. An investment plan and long range program that combines all the above information into specific methods of accomplishing the goals and objectives.

A fifth step, and one that completes the programming process, is the selection of the individual projects to be included in the annual program.

PRESERVE, IMPROVE, AND EXPAND

The department has developed preserve, improve, and expand program categories as a guide in allocating our resources and reporting on the projects that are undertaken.

Preserve includes projects which continue existing services, or maintain existing roads and bridges. Resurfacing an existing road is an example of highway preservation activities. An example of a transit preservation activity is replacing worn-out buses.

Projects that increase the traffic carrying capacity, or service level, of a highway or other transportation system are placed in the improve category. Service improvements are usually achieved by adding highway lanes, adding buses to a route, or lengthening an airport runway.

The expand category includes projects that supply new transportation facilities or services. Construction of a new freeway is an example, as is starting a new bus service. This category includes completion of the interstate highway system. By grouping projects in this manner, we ensure that spending is consistent with our overall strategy.

Each mode treats these categories according to their funding requirements and legislation. In the highway mode, a decision is made about the funds to be used in each category before projects are selected. Projects are then selected by category. Funds for public transportation are initially allocated according to a formula contained in Act 51 of the Public Acts of 1951, as amended. The projects are then grouped into the preserve, improve, and expand categories. Aviation funding is first allocated on the basis of a priority rating system that emphasizes safety. The projects are then aggregated in the categories of preserve, improve, and expand.

Exhibit I-1 and I-2 on pages three and four show the division of 1988 funds into these three categories.

PROGRAM DEVELOPMENT

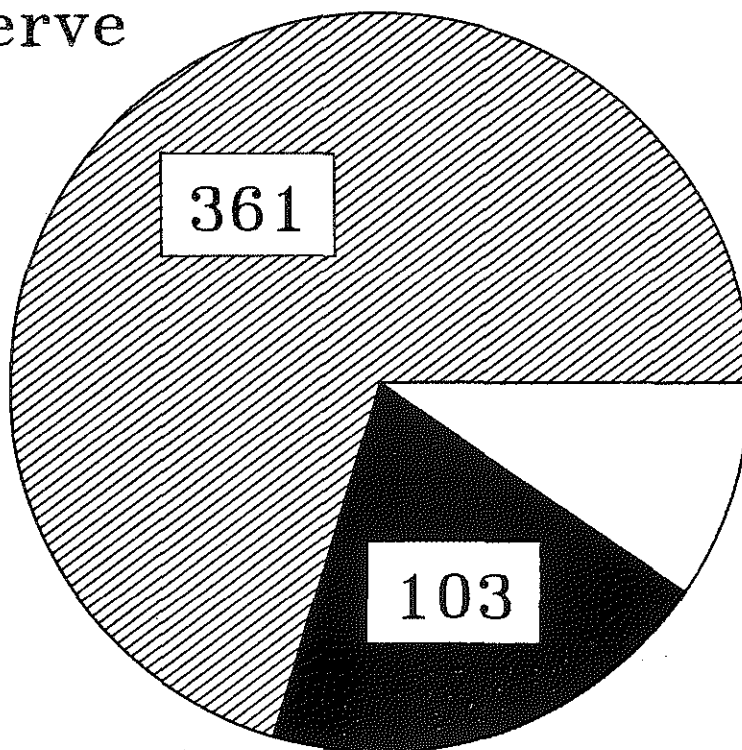
In developing the program, we had to make several assumptions concerning revenues, and several provisions for emergencies and other special situations that may occur throughout the year. One assumption is that our federal funding will be cut by Gramm-Rudman-Hollings legislation.

We've also had to plan the program at a time when federal funding is most uncertain. While federal trust fund balances for both highways and aviation are historically high, Congress has steadily reduced our authority to spend these monies. They are being used as a paper asset to reduce the federal budget deficit. These factors increase the uncertainty of our funding and the reliability of this program.

Other uncertainties are also involved in developing the program. Individual projects are placed in the program on the basis of estimated revenues and cost, and on the ability to complete preconstruction activities. We believe these estimates are accurate; yet, as with any estimate, changes can occur.

1987-88 PROGRAM
ALL MODES

Preserve



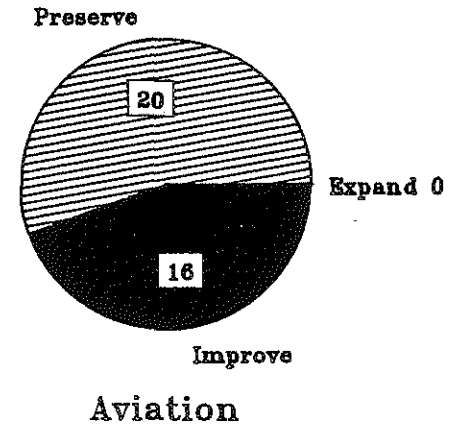
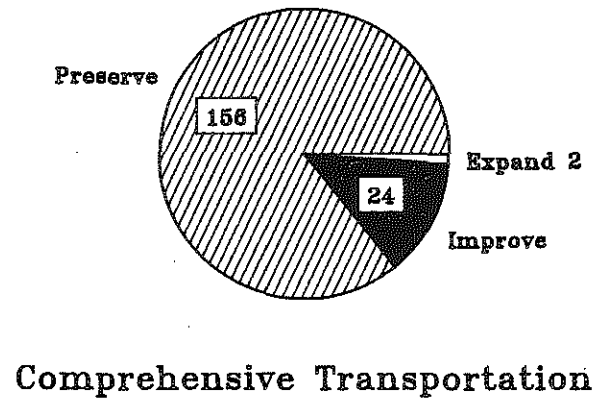
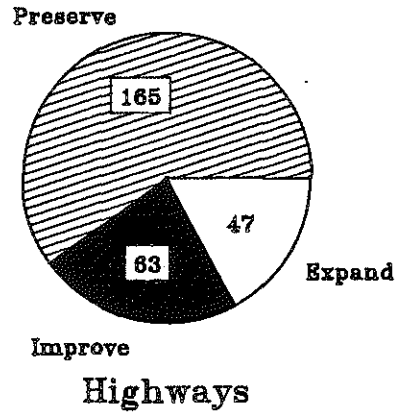
Expand 49

Improve

Funds (millions)

Total = 513 million

1987-88 PROGRAM BY MODE



Thus, some of the projects may be delayed or accelerated in response to changing conditions.

The remaining portions of this report describe the program for each transportation area. These are Highways, Comprehensive Transportation (public transportation), and Aviation.

HIGHWAYS

HIGHLIGHTS

The overwhelming priority for the highway system is to repair and maintain the 9,500 miles over which the department has jurisdiction. This need is acute because of the large backlog created by deferred maintenance prior to 1982. Thus, the program is heavily weighted toward preserving existing highways.

System Preservation

Ninety-two percent of the miles and 63 percent of the dollars in the program are devoted to preserving the existing system. Thirty miles of highways are being completely reconstructed, 327 miles are being resurfaced, 191 miles rehabilitated, and 3 miles are being widened by less than a full lane's width. These minor widening projects are primarily on routes that experience heavy truck use and are related to safety.

The above preservation projects cost a total of \$128 million. The remaining \$59 million of preservation expenditures is for projects that repair shoulders and joints, promote safety, and repair bridges. Eighty-one bridges will be painted, have their road surfaces replaced, or otherwise be repaired or replaced in 1988.

The major preserve projects include:

1. Reconstruction Projects

- a. M-32 for 13 miles from Hall Road to the east county line of Montmorency County. This project makes several major improvements to the route. Curves will be reduced in severity; hills flattened; repairs made to the areas containing poor base; lanes will be widened; and some portions of the road will be realigned to reduce curves and improve vision.
- b. US-41 for 2 miles from M-203 in Hancock to Coburn Town Road in Houghton County. This project makes corrections to the base, eliminating drainage problems; and provides a new pavement. The drainage problems are causing the roadway to shift and crack, and the base to deteriorate.

The deficiencies associated with these projects require a more extensive treatment than resurfacing or rehabilitation of the existing pavement.

2. Resurfacing Projects

- a. US-45 for 13 miles from M-26 northerly to Granite Street in Ontonagon;
- b. I-75BL for 1 mile from I-75 to State Street in St. Ignace;

- c. M-94 for 16 miles from Chatham Corners to M-28 in Alger County;
- d. M-55 for 3 miles from M-115 to US-131 in Wexford County;
- e. US-27 for 4 miles from the south Gratiot County line to M-57;
- f. US-27 for 8 miles from Steel Street in St. Johns to the north Clinton County line;
- g. M-57 for 11 miles from M-66 to Carson City west city limits;
- h. M-13 for 2 miles from M-81 in the City of Saginaw to the I-75 interchange;
- i. M-52 for 7 miles from M-57 to St. Charles in Saginaw County;
- j. US-131 for 5 miles from 129th St. to one-half mile south of 140th Street in Allegan County;
- k. US-131 for 7 miles from US-12 to M-60 (excluding Village of Constantine) in St. Joseph County;
- l. M-60 for 9 miles from Leet Road to M-62 in Cassopolis; and
- m. US-12 for 6 miles from one mile west of Dayton Road to Redbud Trail in Berrien County.

These projects repair the pavement and provide a smooth ride for the motoring public. Additional 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, and elevation adjustments. Sometimes a roadway will be resurfaced while it is still in fairly good shape to extend its life. This treatment extends the life of the roadway for another ten years before major improvements are required.

3. Restoration & Rehabilitation Projects

- a. 10 miles of US-2 from the west Menominee County line to the junction of US-41 in Powers. This project will recycle the existing surface, repair joint cracks, and do some minor reconstruction.
- b. 10 miles of M-33 & M-68 from the junction of M-33 and M-68 to Onoway in Cheboygan County. This project will include an improvement to the intersection of M-33 and M-68, the removal and pulverizing of the existing surface, pavement resurfacing, and the addition of three feet of new shoulders.
- c. 12 miles of I-75SB from the southern state line northerly in Monroe County. This project will recycle the existing pavement. It is

necessary because of the heavy truck traffic and other heavy use of the freeway.

- d. 12 miles of I-94 from I-196 to 62nd Street in Berrien County. Pavement patching is the activity of this project. The heavy use by trucks and automobiles have badly deteriorated the existing pavement.
- e. 4 miles of I-94 from the St. Joseph River to Empire in Berrien County. This project will repair the joints along this section of I-94.
- f. 12 miles of US-127 from College Road to M-36 interchange in Ingham County. This is another joint repair project.

These projects rehabilitate pavement that is not good enough for a simple resurfacing.

System Improvements

In addition to our preservation need, 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.

Improve Projects

Twenty-one percent of the highway dollars (\$63 million) is budgeted to improve 34 miles of existing highways. The major improve projects are:

- a. 3 miles of M-53 from 15 Mile Road to 18 Mile Road in Macomb County. A divided roadway with three lanes on each side will be constructed. This improvement is needed because heavy industrial development in the area has increased traffic beyond the capacity of the existing road.
- b. 3 miles of US-10 from Maybee to Signet roads in Oakland County. We will be making this portion of US-10 a five lane roadway. The existing road cannot adequately handle the traffic using it.
- c. 9 miles of I-696 from I-96 to Lahser Road in Oakland County. The traffic on this freeway requires that we add additional lanes.
- d. 2 miles of US-10 from the junction of existing US-31 to the proposed new US-31 freeway in Mason County. The existing two lane roadway cannot handle the traffic. This project will provide five lanes.
- e. 9 miles of I-75 from Giddings Road to M-15 Oakland County.
- f. Widening of the US-23 bridge under Ellsworth Road in Washtenaw County.

All these roads experience bottle-necks and traffic back-ups because they cannot handle the amount of traffic using them. The improvements will increase the capacities of the roads and reduce delays experienced by motorists.

Expand projects

Forty-seven million dollars are budgeted to build 16 miles of new highways. The major expand projects are:

- a. 1 mile of I-696 from Lathrup to Meadowood in Oakland County. This project is the final segment to be constructed before the I-696 freeway can be completely open to traffic.
- b. 3 miles of the new US-31 freeway from Walton Road to Matthew Road in Berrien County. This freeway will replace existing U-31, which is badly congested.

- c. 8 miles of US-31 from the south county line of Mason County to Heslund Road. This will be a new freeway to replace existing US-31 in this badly congested area.
- d. 1 mile of I-69 east of Stewart Road to west of Nixon Road in Eaton County. This project will continue our efforts to complete the I-69 freeway. Only the segments around the Lansing area need be completed in order to finish our interstate highway system.

These projects are designed to expend our system of highways so that travel is efficient for the citizens and businesses of Michigan.

SYSTEM CONDITION INFORMATION

The following information describes the state highway system and the condition of that system.

Traffic Volumes

Michigan's state highway system includes about 9500 miles of highways. Total traffic on the system averages 10,000 motor vehicles for each mile of highway every day. This represents a total of 33 billion miles traveled each year.

Heavy traffic volumes occur most commonly in the southern half of the lower peninsula. The Detroit metropolitan area, in particular, has a large number of routes with daily traffic volumes of 15,000 or more vehicles. Traffic volumes are important because high volumes subject the roadway to more wear and tear, creating the need for more frequent repair.

Highway Condition

Annually, we review all state-owned roadways to determine their condition. Scores are assigned each roadway 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 foundation the roadway surface sets on.

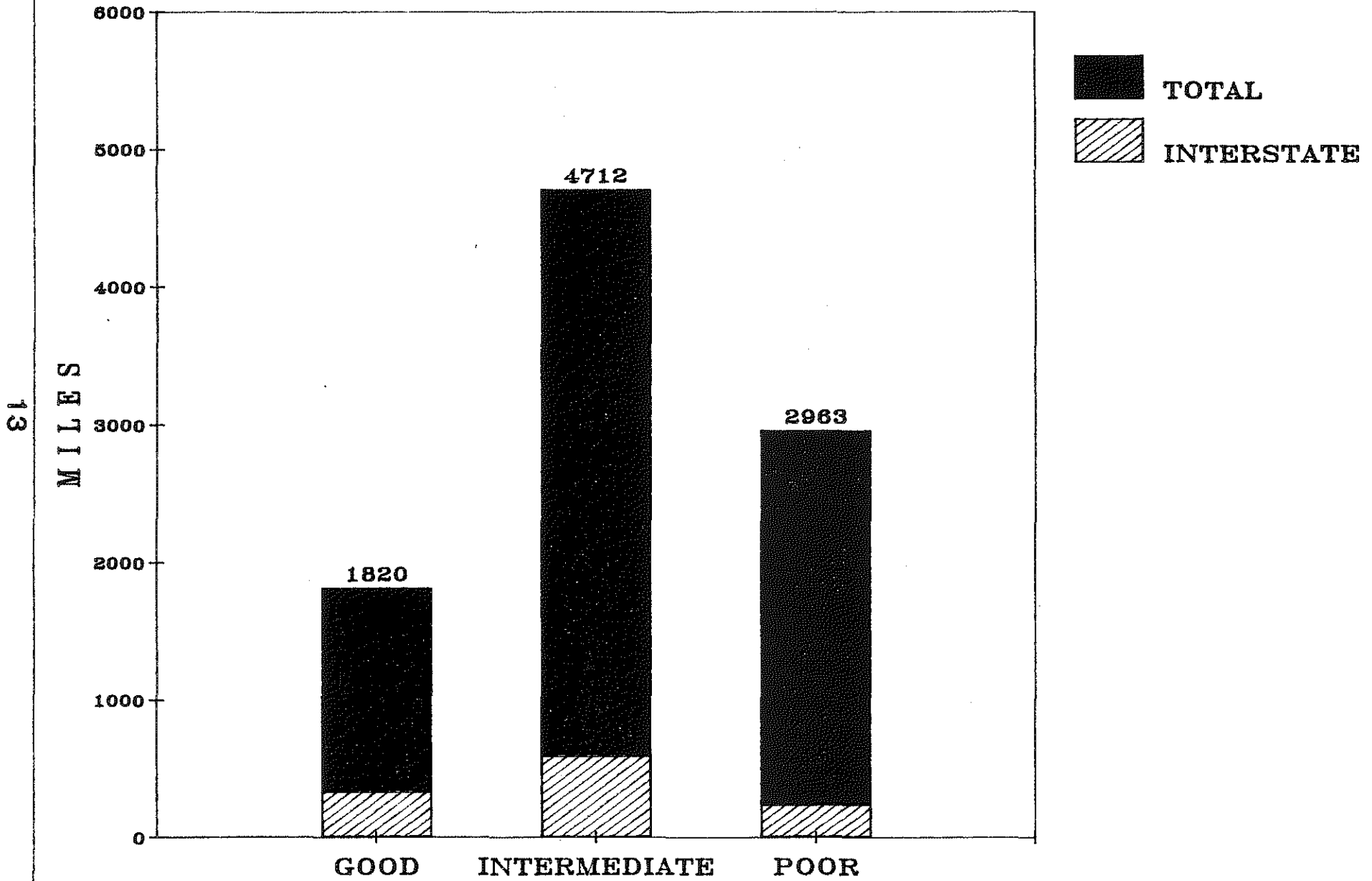
On the basis of the score received in each of the above categories, a roadway is classified as in poor, intermediate, or good condition for both surface and base. The number of miles of roadways in each of these classifications is shown on Exhibits H-1 and H-2 on pages 13 and 14.

Quality of the Ride

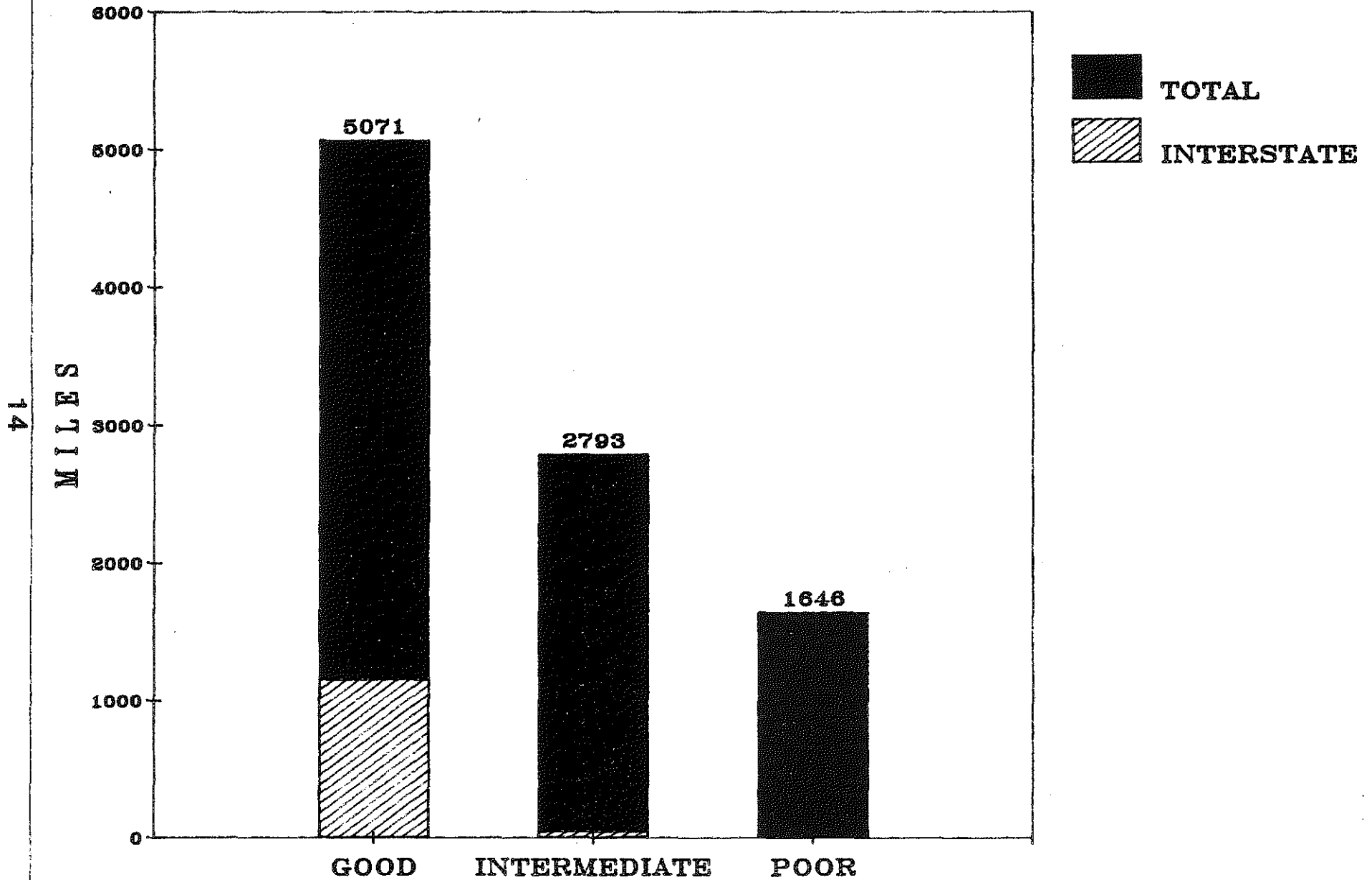
For the first time this year, a rating is given to state roadways that indicate the quality of the ride. This is an indication of the comfort felt by automotive passengers. And it is indicative of the motoring public's perception of our roads.

Exhibit H-3 on page 15 shows the miles of roadway with good, intermediate, and poor quality of ride.

SURFACE RATINGS



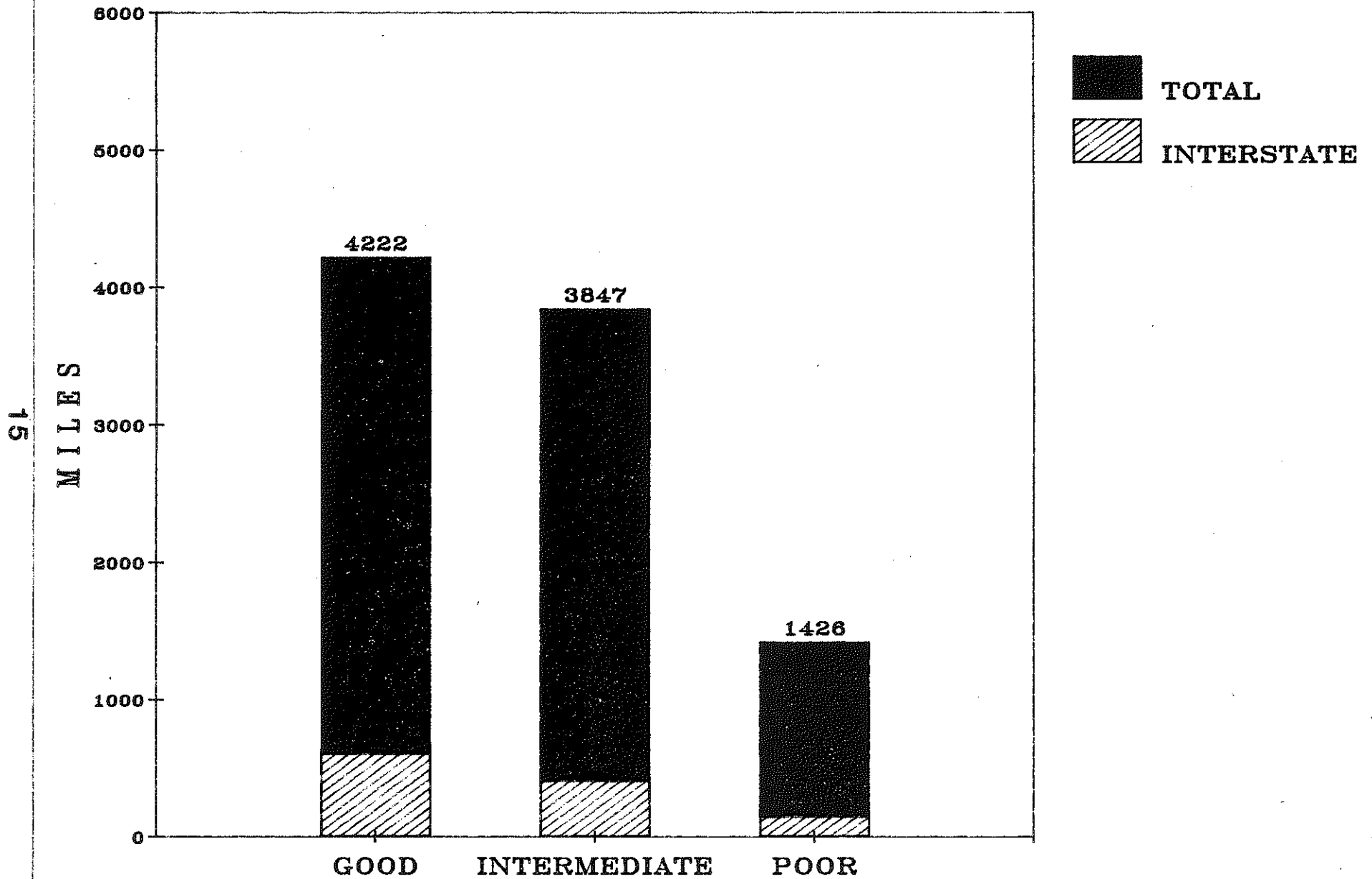
BASE CONDITION



14

MILES

QUALITY OF THE RIDE



Priority Commercial Network

We've identified a subsystem comprised of state highways that are important for commerce in the state. We call this subsystem the Priority Commercial Network. The routes on the Priority Commercial Network are routes that are used extensively to haul goods to and from the 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.

The Priority Commercial Network is shown on page 17, Exhibit H-4. The surface and base condition of the Priority Commercial Network is shown on page 18, Exhibit H-5.

Bridges

In addition to highways, bridges are rated and classified as either good or in need of repair. Exhibit H-6 on page 19 shows the condition of our bridges.

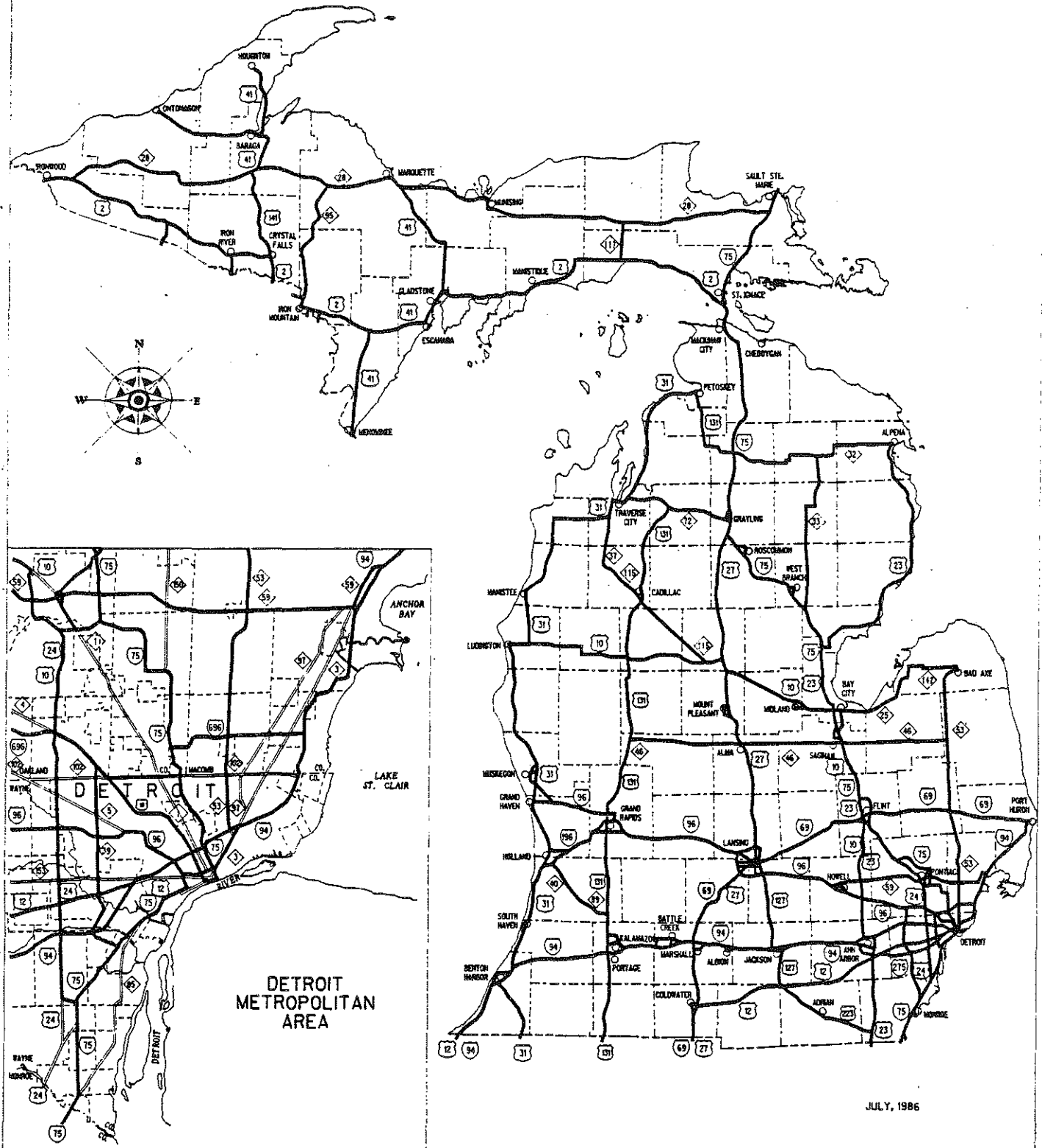
Improvements to Condition

Our major purpose in collecting this condition data is to guide us in selecting projects. Projects are selected with the objective of improving the overall condition of the roads.

Each year we must repair at least 500 miles of roads just to keep pace with deterioration. Any mileage above the 500 mile mark reduces the backlog of resurfacing needs. This year we have 600 miles of improvements in the program.

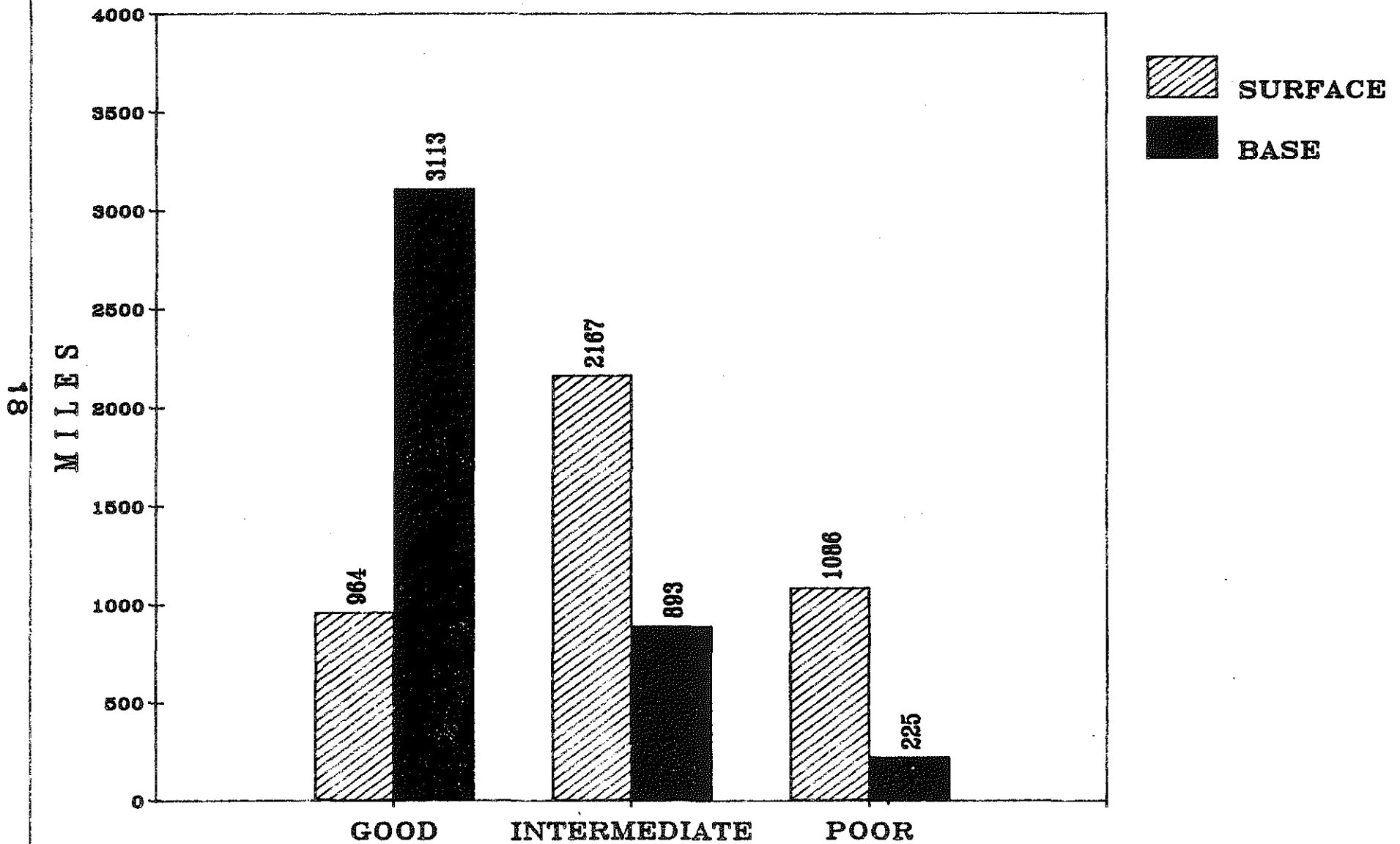
Exhibit H-7 on page 20 presents a summary of the improvements we will be making to the roads in fiscal 1988, and the results it will have on the overall highway condition.

PRIORITY COMMERCIAL NETWORK



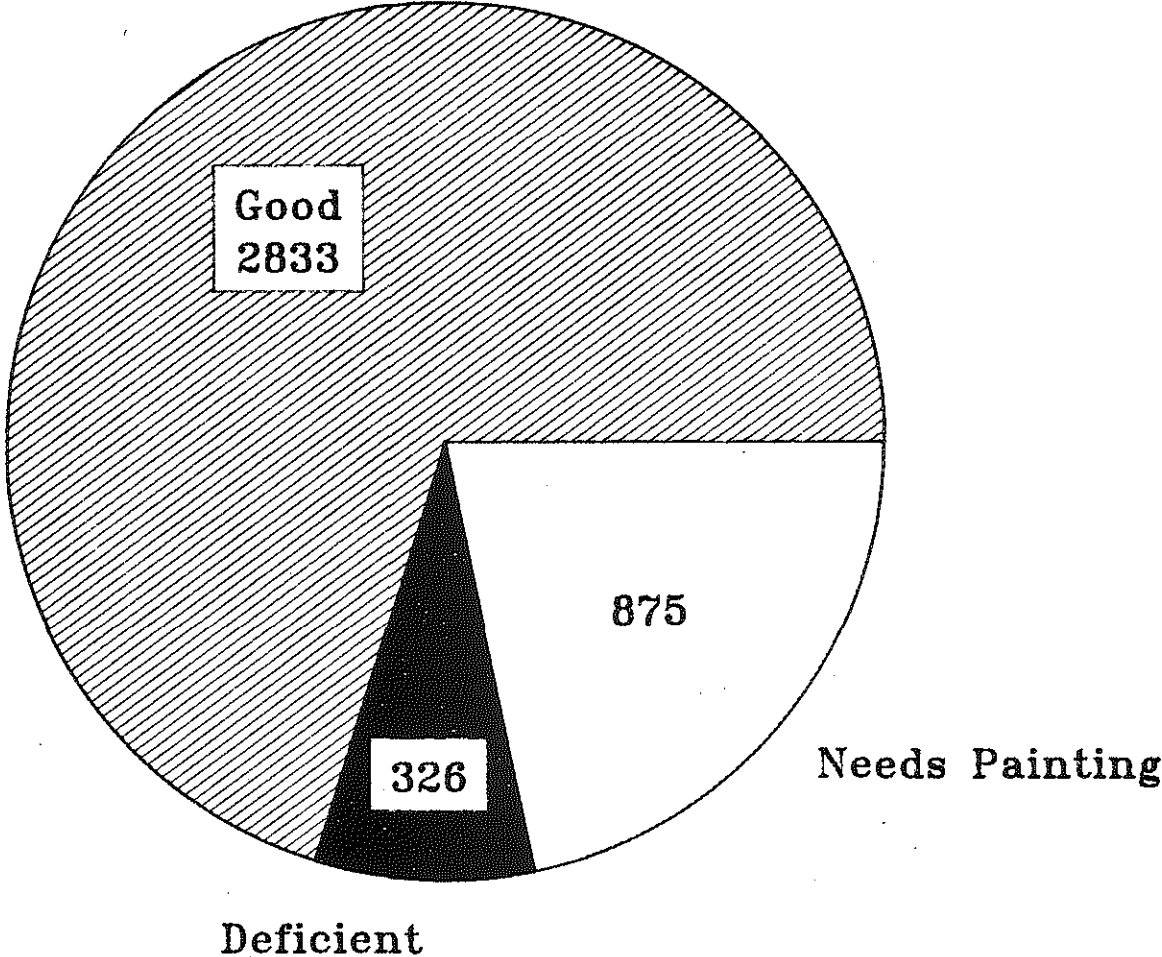
JULY, 1986

PRIORITY COMMERCIAL NETWORK ROADWAY CONDITION



BRIDGE CONDITION

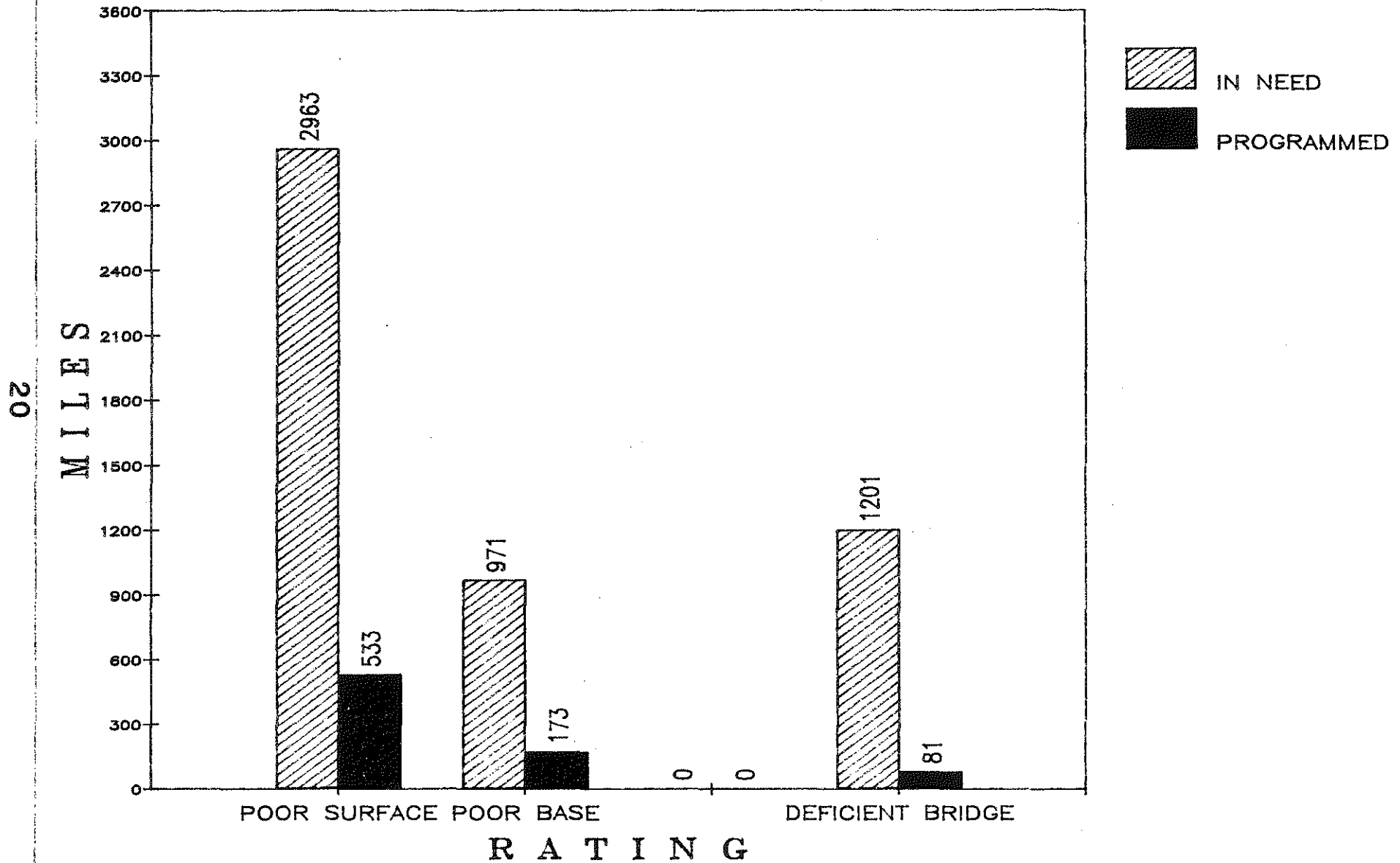
TOTAL = 4034



SUMMARY OF 1987-88 SYSTEM IMPROVEMENTS

--HIGHWAYS--

--BRIDGES--



REVENUES AND THEIR USES

Funds used to finance highway projects are provided by state and federal taxes on gasoline and automotive related items. 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 76 percent of the highway program 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 projects for which federal aid is not available.

Funding Reliability

In 1986 highway funding was needlessly interrupted three times. After considerable changes, Gramm-Rudman cuts amounted to only \$3 million. But the real disruption to our program came from changes in the obligation authority throughout last year. We started 1986 with authority to spend \$306.6 million; in February, that amount was reduced to \$282.2 million; and, in April, it was restored back to \$303 million.

All of this movement makes our funding a difficult item to project. Our best estimate for fiscal year 1987-88 is shown below.

Federal Aid	\$ 223,270,800
State Trunkline Funds	<u>71,714,200</u>
TOTAL FUNDS	\$ 294,985,000
	=====

PROGRAM STRUCTURE AND CATEGORIES

Included in this highway program is a listing of the projects for FY 1987-88. The projects are grouped into the program structure of preserve, improve, and expand, and sub-categories called worktype categories. This structure is described below:

PRESERVE COMPONENT

1. Traffic Operations \$ 13,690,900

This work includes signing, pavement markings, and traffic signals.

2. Safety \$ 8,945,950

The purpose of this work is to enhance safety. It includes intersection revisions, lighting, median barriers, guard rails, railroad crossing improvements, obstacle removal, and improvements that increase the ability of drivers to see approaching and cross road traffic.

3. Bridge Rehabilitation \$ 25,401,700

This category includes all work related to making a bridge safe to use. Typical work includes replacing or resurfacing the deck, replacing the railings, making underwater repairs, painting, and minor widening (less than one lane in width). It does not include replacing a bridge.

4. Resurfacing \$ 75,913,250

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 (discussed below) of the roadway.

5. Restoration and Rehabilitation \$ 32,941,800

The purpose of this type of work 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 major restoration and rehabilitation job is less costly and less extensive than a reconstruction job.

6. Reconstruction \$ 16,683,800

This category of work calls for the removal and replacement of the old pavement. No additional lanes can be 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 restoration and rehabilitation job.

7. Minor Widening \$ 2,096,950

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

8. Roadside Facilities \$ 3,619,250

These projects include constructing sound barriers, rest areas and roadside parks; installing fences; planting trees, flowers, and grass; and other similar activities.

9. Miscellaneous \$ 6,000,000

This category includes projects that do not fall in the other categories. It also include a lump-sum amount for special situations that arise during the year which cannot be foreseen at this time.

IMPROVE COMPONENT

10. Capacity Improvement \$ 61,198,550

Projects in this category add at least one lane to an existing road. When necessary, the old road bed is reconstructed or the pavement resurfaced. Passing lanes of more than one-half mile are included in this category.

11. Bridge Replacement \$ 978,000

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.

12. Bridge Widening \$ 825,000

Projects in this category 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.

EXPAND COMPONENT

13. New Routes \$ 11,824,300

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.

14. Relocation \$ 34,865,600

Under this category, 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, but it is more likely to be turned over to the jurisdiction of the local area governing body.

The distribution of the projects into the above categories is shown by Exhibit H-8 on page 26. The individual projects are listed thereafter.

In addition to the listed projects, we will also select projects during the course of the year for the following items.

<u>Item</u>	<u>Budget</u>
Contingencies	\$ 6,000,000
Traffic Operations	\$ 9,600,000
Safety	\$ 3,500,000
Roadside Facilities	\$ 1,351,250

These amounts are included in Exhibit H-8, but do not show up on the project listings.

Besides the construction projects listed in this program, we will continue preliminary engineering and right-of-way acquisition on a number of projects (US-12BR east of Ypsilanti is an example) that are planned for construction in fiscal 1989 and beyond.

Compliance with Act 51

The program is in compliance with the 90 percent maintenance provision of the Padden Amendment to Act 51.

Priority Commercial Network

Eighty percent of the dollars and 83 percent of the miles in the highway program are on the Priority Commercial Network.

1987-88 HIGHWAY PROGRAM

Summaries By
Interstate and Non-Interstate Classifications

	NON-INTERSTATE		INTERSTATE		TOTAL	
	Amount	Miles	Amount	Miles	Amount	Miles
PRESERVE						
Reconstruction	16,683,800	29.7	0	0.0	16,683,800	29.7
Restoration & Rehab.	16,836,700	160.9	16,105,100	30.3	32,941,800	191.2
Resurface	62,535,050	300.8	13,378,200	25.7	75,913,250	326.5
Minor Widening	2,096,950	2.5	0	0.0	2,096,950	2.5
Traffic opsers/TSM	10,936,650		2,754,250		13,690,900	
Safety	7,615,950		1,330,000		8,945,950	
Bridge Upgrade	16,213,000		9,188,700		25,401,700	
Roadside Facilities	1,837,250		1,782,000		3,619,250	
Miscellaneous	6,000,000				6,000,000	
SUBTOTAL	\$140,755,350	493.9	\$44,538,250	56.0	\$185,293,600	549.9
IMPROVE						
Capacity Improvement	27,630,950	14.8	33,567,600	19.3	61,198,550	34.1
Bridge Replacement	978,000		0	0.0	978,000	
Bridge Widening	825,000		0		825,000	
SUBTOTAL	\$29,433,950	14.8	\$33,567,600	19.3	\$63,001,550	34.1
EXPAND						
New Route	0	0.0	11,824,300	0.6	11,824,300	0.6
Relocation	10,247,600	11.0	24,618,000	4.1	34,865,600	15.1
SUBTOTAL	\$10,247,600	11.0	\$36,442,300	4.7	\$46,689,900	15.7
GRAND TOTAL	\$180,436,900	519.7	\$114,548,150	80.0	\$294,985,050	599.7

Planning File Report by Program Category
FY88
data base as of 03/23/87
03/23/87

Program Category: 1. Preserve

Work Category: 11. Traffic Operations

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
I75	STATE LINE TO I275 (58152)	SIGN UPGRADE	MONROE	20.300	297,000
I275	I75 TO I96 (82291 AND 63191)	SIGN UPGRADE	MONROE	30.300	221,950
I96	US23 TO M102 (47064)	SIGN UPGRADE	OAKLAND	16.400	186,300
M14 TB	AUBURN TO GRAND RIVER AVENUE, DETROIT	LANE MARKING	WAYNE	4.100	69,000
US12	16TH STREET TO WYOMING, DETROIT	SIGNAL MODIFICATION	WAYNE	3.650	694,600
US12	AT 3 LOCATIONS, DETROIT	TRAFFIC SIGNALS	WAYNE	0.000	123,050

SUMMARIES FOR Work Category: 11. Traffic Operations

WORK TYPE COST: 1,591,900
WORK TYPE DISTANCE: 74.750

27

Work Category: 12. Safety

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
M25	FINN ROAD TO EAST COUNTY LINE	CULVERT EXTENSION	BAY	4.200	227,700
M22	AT GRADE 01 MN RR. ELBERTA	RAILROAD APPROACH	BENZIE	0.000	18,400
M22	GRADE 02 AT MN RR, FRANKFORT	RAILROAD CROSSING	BENZIE	0.000	97,000
M22	AT GRADE 02 MN RR, FRANKFORT	RAILROAD APPROACH	BENZIE	0.000	18,400
M22	GRADE 01 AT MN RR. ELBERTA	RAILROAD CROSSING	BENZIE	0.000	58,000
US33	AT DEANS HILL ROAD	SKIDPROOF	BERRIEN	0.000	43,700
US2	GRADE 01 AT C&NW RAILROAD, NORWAY	RAILROAD CROSSING	DICKINSON	0.000	44,000
M56	GRADE 02 AT GTW RR, FLINT	RAILROAD CROSSING	GENESEE	0.000	220,000
M56	AT GRADE 02 GTW RR, FLINT	RAILROAD SIGNALS	GENESEE	0.000	40,000
M203	GRADE 01 SL RR, HANCOCK	CROSSING REMOVAL	HOUGHTON	0.000	103,500
M142	GRADE 04 AT C&O RAILROAD, ELKTON	RAILROAD CROSSING	HURON	0.000	73,000
M142	AT GRADE 04 C&O RAILROAD, ELKTON	RAILROAD APPROACH	HURON	0.000	48,300
M96	GRADE 01 AT CR RAILROAD	RAILROAD CROSSING	KALAMAZOO	0.000	100,000
M96	AT GRADE 01 CR RAILROAD	RAILROAD APPROACH	KALAMAZOO	0.000	74,750
M43	AT RIVERVIEW (SOUTH JUNCTION), KALAMAZOO	GEOMETRIC IMPROVEMENT	KALAMAZOO	0.000	49,450
M43	AT MILL BLAIN, KALAMAZOO	ENLARGE ISLAND	KALAMAZOO	0.000	21,850
US131NB	NORTH OF BURTON STREET NORTH, GRAND RAPIDS	SAFETY BARRIER	KENT	0.400	42,550
US131	SOUTH OF 36TH STREET TO I96	LIGHTING UPGRADE	KENT	8.300	440,000
M155	AT MICHIGAN AVENUE AND MASON ROAD INTERSECTION	INTERSECTION REVISION	LIVINGSTON	0.000	28,750
US41BR	SL RR TO FOURTH STREET, MARQUETTE	UTILITY RELOCATION	MARQUETTE	1.200	330,000
I75	AT M50 INTERCHANGE	TOWER LIGHTING	MONROE	0.000	330,000
M21	ESCOT ROAD TO DURAND ROAD. 3 LOCATIONS #26044	CULVERT EXTENSION	SHIAWASSEE	0.000	281,750
M21	AT CHIPMAN STREET, OWOSSO	INTERSECTION RECONSTRUCTION	SHIAWASSEE	0.000	103,500
M17	AT CARPENTER-HOGBACK ROAD	SKIDPROOF	WASHTENAW	0.000	82,800
M17	AT BALLARD STREET, YPSILANTI	SKIDPROOF	WASHTENAW	0.000	42,550

SUMMARIES FOR Work Category: 12. Safety

WORK TYPE COST: 2,919,950
 WORK TYPE DISTANCE: 14.100

28

Work Category: 13. Bridge Rehabilitation

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
M D WD	VARIOUS PRIMARY STRUCTURES	STRUCTURE REPAIR	*AREA WIDE	0.000	275,000
M89	BRIDGE 02 OVER SCHNABLE RIVER	BRIDGE REPLACEMENT	ALLEGAN	0.000	276,100
M32	BRIDGE 03 OVER SOUTH BRANCH THUNDER BAY RIVER	DECK REPLACEMENT	ALPENA	0.000	500,500
M139	RAIL 01 OVER FOX CREEK AND CONRAIL	SUPER-STRUCTURE REPLACEMENT	BERRIEN	0.000	2,530,000
US33	BRIDGE 01 OVER ST. JOSEPH RIVER, ST. JOSEPH	PAINTING	BERRIEN	0.000	1,045,000
US10EB	STRUCTURE 01 OVER US27NB	CONCRETE OVERLAY	CLARE	0.000	88,550
I75	STRUCTURE 02 UNDER 4 MI ROAD, AND STRUCTURE 03	DECK OVERLAY	CRAWFORD	0.000	258,750
US8	BRIDGE 02 OVER MENOMINEE RIVER	PAINTING	DICKINSON	0.000	57,500
US141	BRIDGE 01 OVER MENOMINEE RIVER	PAINTING	DICKINSON	0.000	115,000
I475	STRUCTURE 30 OVER SELBY AND 3 OTHERS	SCREENING	GENESEE	0.000	115,000
I75	STRUCTURE 09 OVER M121, FLINT	DECK REPLACEMENT	GENESEE	0.000	207,000
I75	BRIDGE 03 OVER SWARTZ CREEK	DECK OVERLAY	GENESEE	0.000	235,750
US2WB	BRIDGE 01 OVER MONTREAL RIVER AND BRIDGE 07	PAINTING	GOGEBIC	0.000	54,050
I96	STRUCTURE 07 OVER US131 AND RAIL 02 AND 03	PAINTING AND OVERLAY	KENT	0.000	1,163,800
I196	STRUCTURE 17 OVER LAFAYETTE STREET	PAINTING	KENT	0.000	87,400
I96	STRUCTURE 03 UNDER CHENEY AVENUE, GRAND RAPIDS	OVERLAY, PINS AND HANGERS	KENT	0.000	297,000
M55	BRIDGE 03 OVER PINE RIVER	DECK REPLACEMENT	MANISTEE	0.000	1,925,000
US31	BRIDGE 01 OVER MANISTEE RIVER	DECK, RAILING, AND PAINTING	MANISTEE	0.000	891,000
I75	STRUCTURE 12 UNDER RAMP TO CHRYSLER AND S19	OVERLAY AND PAINTING	OAKLAND	0.000	533,500
M150	AT RAIL 01 OVER GTW RAILROAD AND CLINTON RIVER	APPROACH AND DECK	OAKLAND	0.000	5,307,500
US31TB	BRIDGE 01 OVER PENTWATER RIVER	PINS AND HANGERS	OCEANA	0.000	430,100
I675	BRIDGE 01 OVER SAGINAW RIVER AND M13, GT&PC RR	DECK OVERLAY AND JOINTS	SAGINAW	0.000	2,455,200
M24	BRIDGE 01 OVER CASS RIVER, CARO	DECK, PAINTING, AND REPAIR	TUSCOLA	0.000	1,100,000
US 23	RO1 OVER CR RR AND HURON RIVER	JOINTS, OVERLAY, PINS & HANGERS	WASHTENAW	0.000	872,300
US23BR	RO1 OVER CR RR AND HURON RIVER	PINS AND HANGERS	WASHTENAW	0.000	745,200
I75	STRUCTURE 23 UNDER CASS AVENUE, DETROIT & S25	OVERLAY AND PAINTING	WAYNE	0.000	999,900
I75	STRUCTURE 11 UNDER M3WB CONNECTION AND 82252	PAINTING	WAYNE	0.000	794,200
I75	STRUCTURE 23 UNDER NEVADA, DETROIT AND S24	PAINTING	WAYNE	0.000	1,043,900
I94	STRUCTURE 22 AT US10SB, DETROIT	PAINTING	WAYNE	0.000	121,900
I75	STRUCTURE 21 UNDER I94 EASTBOUND RAMP, DETROIT	DECK REPLACEMENT	WAYNE	0.000	275,000
I94	STRUCTURE 23 EB OVER OUTER DRIVE AND 6 OTHERS	CONCRETE OVERLAY	WAYNE	0.000	600,600

SUMMARIES FOR Work Category: 13. Bridge Rehabilitation

WORK TYPE COST: 25,401,700
 WORK TYPE DISTANCE: 0.000

Work Category: 14. Resurface

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
M94	CHATHAM CORNERS TO M28	RESURFACE AND SHOULDERS	ALGER	15.600	1,650,000
US131	NORTH OF 129TH STREET TO SOUTH OF 140TH STREET	RESURFACE, JOINTS AND SHOULDERS	ALLEGAN	4.700	1,320,000
M66	LILACKS CREEK TO 8TH STREET, EAST JORDAN	PULVERIZE AND RESURFACE	ANTRIM	5.800	979,000
M38	WEST COUNTY LINE TO WEST CITY LIMIT BARAGA	UPGRADE AND TRUCK LANE	BARAGA	8.700	940,500
M25	PINE ROAD TO EAST CITY LIMIT BAY CITY	RESURFACE 5 LANES	BAY	1.100	341,550
US12	SOUTH CITY LIMIT NORTH BUFFALO TO RED ARROW	RESURFACE AND SHOULDERS	BERRIEN	1.900	841,500
I94BL	WINCHESTER TO SOUTH JUNCTION M63	RESURFACE	BERRIEN	0.420	138,000
I94BL	COLFAX TO 4TH, BENTON HARBOR	MILL AND RESURFACE	BERRIEN	0.300	101,200
US12	WEST OF DAYTON TO RED BUD TRAIL	RESURFACE AND SHOULDERS	BERRIEN	5.500	1,125,300
I94	EMPIRE AVENUE TO EAST OF I196	OVERLAY AND PATCHING	BERRIEN	3.200	1,883,200
US12	I69 TO GRADE 01	RESURFACE AND SHOULDERS	BRANCH	3.600	600,600
M60	LEET ROAD TO M62, CASSOPOLIS	RESURFACE AND SHOULDERS	CASS	8.900	1,630,200
M152	VAN BUREN WEST COUNTY LINE TO M51 (80051)	RESURFACE AND SHOULDERS	CASS	7.700	445,500
M123	S COUNTY LINE TO W COUNTY LINE (17011,81)	INTERMITTENT SURFACE	CHIPPEWA	12.535	1,100,000
I75BR	EASTERDAY TO M129, SAULT ST. MARIE	RESURFACE AND JOINTS	CHIPPEWA	1.050	385,000
M221	VILLAGE OF BRIMLEY	RESURFACE, SHOULDERS AND JOINTS	CHIPPEWA	0.520	86,250
US27	STEEL STREET TO NORTH COUNTY LINE (B01 & B02)	RESURFACE AND SHOULDERS	CLINTON	7.900	2,227,500
M43	CANAL ROAD TO ROSEMARY STREET, LANSING	MILL AND RESURFACE	EATON	3.840	409,200
US31	WEST OF SPRING TO NORTH OF LAKE, PETOSKEY	MILL AND RESURFACE	EMMET	1.200	299,200
M54TB	SOUTH COUNTY LINE TO BALDWIN ROAD	WIDEN AND RESURFACE	GENESEE	1.000	271,400
M54TB	BALDWIN ROAD TO SOUTH CITY LIMIT, GRAND BLANC	WIDEN AND RESURFACE	GENESEE	1.700	442,200
M21	BALLENGER TO COURT, FLINT	WIDEN AND RESURFACE	GENESEE	1.300	1,188,000
M54TB	S CITY LIMIT TO N CITY LIMIT GRAND BLANC	TURNBACK REHABILITATION	GENESEE	1.900	1,530,100
M15	LEXINGTON TO COLONY, DAVISON	MILL AND RESURFACE	GENESEE	1.200	227,700
US27	SOUTH COUNTY LINE TO M57 AND BRIDGE 01	RESURFACE AND SHOULDERS	GRATIOT	4.000	1,777,600
US127	STATE LINE TO SQUAWFIELD ROAD	RESURFACE AND JOINTS	HILLSDALE	7.200	1,004,300
US41	1.0 MILE NORTH OF HANCOCK TO CALUMET	RESURFACE AND JOINTS	HOUGHTON	8.800	580,800
M25	N VILLAGE L UNIONVILLE TO S CITY L SEBEWAING	JOINT REPAIR AND SURFACE	HURON	4.800	647,900
M43EB	PENN AVENUE TO HOWARD STREET, LANSING	MILL AND RESURFACE	INGHAM	1.400	401,500
M43	BOGUE STREET TO PARK LAKE ROAD, EAST LANSING	MILL AND RESURFACE	INGHAM	1.300	536,800
M21	WEST COUNTY LINE TO HAWLEY ROAD	RESURFACE AND SHOULDERS	IONIA	5.100	957,000
M21	HAYNOR ROAD TO EAST CITY LIMIT, IONIA	MILL AND RESURFACE	IONIA	2.600	550,000
M106SB	I94BL TO NORTH OF GANSON	MILL AND RESURFACE	JACKSON	0.370	236,900
M106NB	I94BL TO GANSON, JACKSON	MILL AND RESURFACE	JACKSON	0.470	319,000
I94BL	BROWN TO THIRD, JACKSON	MILL AND RESURFACE	JACKSON	0.800	262,200
M96	MICHIGAN AVENUE TO GRADE 01, GALESBURG	RESURFACE, CURBS AND GUTTERS	KALAMAZOO	0.260	308,000
I94BL	BURDICK TO KALAMAZOO STREET, KALAMAZOO	MILL AND RESURFACE	KALAMAZOO	0.470	89,700
I94BL	M96 TO I94	RESURFACE AND JOINTS	KALAMAZOO	2.500	609,400
I96	WALKER AVENUE TO SOUTHEAST OF M21	PATCHING AND OVERLAY	KENT	10.400	3,270,300
I196BS	BURLINGAME TO CLYDE PARK	WIDEN RESURFACE CURBS AND GUTTERS	KENT	1.100	862,500
M21TB	EAST CITY LIMIT IMLAY CITY TO EAST COUNTY LINE	RESURFACE AND JOINTS	LAPEER	4.100	1,746,800
M90	M53 SOUTH JUNCTION TO BROWN CITY (74023)	RESURFACE AND SHOULDERS	LAPEER	5.100	336,600
M156	NORTH MORENCI ROAD TO M34	RESURFACE	LENAWEE	6.800	418,000
M52	M34 TO CHURCH STREET, ADRIAN	MILL AND RESURFACE	LENAWEE	0.841	805,200
M52	FRONT TO ALBERT, ADRIAN	MILL AND RESURFACE	LENAWEE	0.479	491,700

30

Planning File Report continued

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
US12	TIPTON HIGHWAY TO NORTH COUNTY LINE	RESURFACE	LENAWEE	5.744	1,042,800
US12	EAST OF SPRINGVILLE ROAD	RESURFACE AND SHOULDERS	LENAWEE	0.210	161,000
M155	I96BL TO LIVINGSTON, HOWELL	RESURFACE	LIVINGSTON	0.310	51,750
M134	WEST OF M129 TO DAVISION, DETOUR	SHOULDERS AND RESURFACE	MACKINAC	25.700	1,741,300
I75BL	CITY OF ST IGNACE	RESURFACE, CURBS AND GUTTERS	MACKINAC	0.780	385,000
M19	N CITY LIMIT RICHMOND TO S CITY LIMIT MEMPHIS	RESURFACE AND SHOULDERS	MACOMB	4.420	1,243,000
I94	S OF 9 MILE ROAD TO SOUTH OF I94 CONNECTION	PATCHING AND OVERLAY	MACOMB	12.100	8,224,700
M97	CASS AVENUE, MT. CLEMENS TO M59	RESURFACE AND SHOULDERS	MACOMB	2.500	1,342,000
US131	REST AREA SOUTH OF 13 MILE ROAD	TAR SEAL COAT	MECOSTA	0.000	8,800
US108R	NORTH OF MC GREGOR TO NORTH OF SAGINAW ROAD	MILL AND RESURFACE	MIDLAND	1.400	347,600
M66	SOUTH COUNTY LINE TO EAST LANE MCBAIN	RESURFACE AND SHOULDERS	MISSAUKEE	4.500	801,900
M57	M66 TO CARSON CITY	RESURFACE AND SHOULDERS	MONTCALM	11.000	1,430,000
M120	BARD ROAD TO HOLTON ROAD	RESURFACE AND SHOULDERS	MUSKEGON	8.300	1,045,000
M82	MECHANIC TO STEWART, FREMONT	MILL AND RESURFACE	NEWAYGO	0.400	115,000
M1	BIG BEAVER TO SOUTH CITY LIMIT PONTIAC	WIDEN, RESURFACE, AND JOINTS	OAKLAND	4.400	2,546,500
US45	M26 TO GRANITE, ONTONAGON	PULVERIZE, WIDEN AND RESURFACE	ONTONAGON	13.310	1,369,500
M33	NORTH OF M72 MIQ TO M72, FAIRVIEW	WIDEN, RESURFACE, AND SHOULDERS	OSCODA	8.000	1,100,000
M83	M46 TO M15 AND BRIDGE O3	RESURFACE	SAGINAW	1.700	452,100
M52	SOUTH COUNTY LINE TO SOUTH OF M57	RESURFACE AND SHOULDERS	SAGINAW	3.500	432,300
M52	M57 TO SOUTH VILLAGE LIMIT ST CHARLES	RESURFACE AND SHOULDERS	SAGINAW	7.200	2,305,600
M13	N CITY LIMIT SAGINAW TO I75 AND SERVICE DRIVE	RESURFACE AND JOINTS	SAGINAW	1.800	642,850
M71	EAST CITY LIMIT OWOSSO TO WASHINGTON STREET	WIDEN, RESURFACE, CURBS & GUTTERS	SHIAWASSEE	0.940	955,900
US131	US12 TO SOUTH OF M60 SOUTH JUNCTION	RESURFACE AND SHOULDERS	ST. JOSEPH	7.200	1,168,200
M46	M15 TO KIRK ROAD	RESURFACE	TUSCOLA	5.600	513,700
M81	WAHJAMEGA TO CARO	MILL AND RESURFACE	TUSCOLA	3.100	407,000
M17	HURON STREET TO SUMMIT STREET, YPSILANTI	MILL AND RESURFACE	WASHTENAW	0.521	207,000
M52	OLD US12 TO NORTH CITY LIMIT CHELSEA	MILL AND RESURFACE	WASHTENAW	0.800	287,100
US12	MC COLLUM ROAD TO AUSTIN ROAD	RESURFACE	WASHTENAW	7.870	1,430,000
US12	I94 TO EAST COUNTY LINE	WIDEN, RESURFACE, AND STRUCTURE	WASHTENAW	2.400	1,872,200
M153	0.9 MILE EAST OF M14 TO EAST COUNTY LINE	RESURFACE	WASHTENAW	3.500	473,000
US12	CANTON CENTER ROAD TO LILLEY ROAD	MILL AND RESURFACE	WAYNE	1.600	3,381,400
M14 TB	WEST OF PARKWAY TO AUBURN, DETROIT	UPGRADE AND RESURFACE	WAYNE	1.660	581,900
M55	M115 TO US131, CADILLAC	MILL AND RESURFACE	WEXFORD	3.300	1,344,200
M115	MITCHELL STATTE PARK CANAL TO M55	MILL AND RESURFACE	WEXFORD	0.300	127,650

SUMMARIES FOR Work Category: 14. Resurface

WORK TYPE COST: 75,913,250
 WORK TYPE DISTANCE: 326.520

Work Category: 15. Restoration and Rehabilitation

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
US23	WEST CITY LIMIT AUGRES TO AUGRES RIVER	STORM DRAIN	ARENAC	1.300	256,450
I94	EAST OF I196 TO 62ND STREET	PAVEMENT PATCHING	BERRIEN	12.100	1,479,500
I94	ST JOSEPH RIVER TO EMPIRE AVENUE	JOINT REPAIR	BERRIEN	3.700	1,387,100
US12	WEST VILLAGE LIMIT BRONSON TO WAYNE STREET	DRAINAGE AND JOINTS	BRANCH	1.000	184,000
M60	DIVIDED TO EAST COUNTY LINE	BITUMINOUS SHOULDERS	CALHOUN	3.200	165,000
M33/68	WEST JUNCTION M33 AND M68 TO ONAWAY	RESURFACE AND SHOULDERS	CHEBOYGAN	10.300	1,786,400
M35	NORTH OF S COUNTY LINE TO SOUTH OF FORD RIVER	JOINT REPAIR	DELTA	9.000	275,000
US2&41	COUNTY ROAD 426 TO M35, GLADSTONE	RESURFACE, SHOULDERS AND JOINTS	DELTA	5.200	440,000
M99	US12 TO NORTH VILLAGE LIMIT JONESVILLE	MILL AND RESURFACE	HILLSDALE	0.849	180,550
US127	SOUTH COUNTY LINE TO M36 (33032)	JOINT REPAIR	INGHAM	11.837	1,161,600
I69 TMP	HAGADORN TO CLINTON EAST COUNTY LINE	JOINT REPAIR	INGHAM	6.300	547,800
M43	WEST CITY LIMIT WILLIAMSTON TO CEDAR STREET	CURBS AND GUTTERS	INGHAM	1.100	319,000
M106	SOUTH OF GANSON TO I94, JACKSON	MILL AND RESURFACE	JACKSON	1.144	517,000
M72	WEST COUNTY LINE TO US131	8 FOOT SHOULDERS	KALKASKA	8.700	532,400
M50	NORTH COUNTY LINE TO ONSTED AND N TO M52	BITUMINOUS SHOULDERS	LENAWEE	8.200	277,200
US223	MONROE TO DEPOT, BLISSFIELD	REPAIR AND DRAINAGE	LENAWEE	0.585	139,150
M115	EAST COUNTY LINE TO NORTH COUNTY LINE	BITUMINOUS SHOULDERS	MANISTEE	9.770	388,300
M35	LITTLE LAKE TO COUNTY ROAD 553	UPGRADE 3R	MARQUETTE	2.800	462,000
US41	NORTH LAKE ROAD TO 1.0 MILE WEST OF M95	JOINTS AND RECONSTRUCTION	MARQUETTE	10.900	906,400
US2	WEST COUNTY LINE TO US41, POWERS	RECYCLE AND RECONSTRUCT	MENOMINEE	10.200	3,381,400
I75SB	STATE LINE TO 3.5 MILE SOUTH OF M50	PAVEMENT RECYCLE	MONROE	11.700	9,909,900
M46	EAST OF M91 TO WEST OF M66 WEST JUNCTION	RECYCLE AND SAFETY	MONTCALM	5.000	836,000
M66	M46 TO NORTH COUNTY LINE	UPGRADE EXISTING	MONTCALM	2.800	1,441,000
US31BR	SOUTH OF NORTH JUNCTION US31, PENTWATER	BITUMINOUS SHOULDERS	OCEANA	6.900	330,000
M66	US10 TO M115	BITUMINOUS SHOULDERS	OSCEOLA	9.035	234,600
US10	M66 TO EAST COUNTY LINE	BITUMINOUS SHOULDERS	OSCEOLA	3.409	88,550
M46	TOWERLINE ROAD TO M15	FLARE AND SHOULDERS	SAGINAW	10.500	764,500
I75	C&O RR TO NORTH OF KOCHVILLE ROAD	PAVEMENT REMOVAL	SAGINAW	2.800	2,723,600
M46	M53 TO DAWSON STREET, SANDUSKY	SHOULDERS AND BASE	SANILAC	12.400	911,900
I94	US12 TO EAST OF BRADLEY (GROVE)	CURBS AND GUTTERS	WASHTENAW	0.000	80,500
US23	SOUTH COUNTY LINE TO US12	GRIND, PATCH	WASHTENAW	8.500	230,000
I94	AT M39 (NEAR BRIDGE OF 82192)	CULVERT	WAYNE	0.000	605,000

SUMMARIES FOR Work Category: 15. Restoration and Rehabilitation

WORK TYPE COST: 32,941,800
 WORK TYPE DISTANCE: 191.229

32

Work Category: 16. Reconstruction

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
M28	WEST OF M221 TO M221	CRACK AND RESURFACE	CHIPPEWA	3.550	567,600
US41	M203-HANCOCK TO COBURN TOWN ROAD	WIDEN AND RECONSTRUCT	HOUGHTON	2.200	2,382,600
US131BR	IONIA TO DIVISION, GRAND RAPIDS	MINOR RECONSTRUCTION	KENT	0.000	230,000
I75BL	STATE TO MARQUETTE, ST IGNACE	RECONSTRUCTION AND SEWERS	MACKINAC	0.920	302,500
M66	SOUTH COUNTY LINE TO REMUS	UPGRADE EXISTING FACILITY	MECOSTA	9.000	3,850,000
US24	SMITH/LAVOY ROAD TO CRABB ROAD	WIDEN AND RECONSTRUCT 5 LANES	MONROE	0.200	297,000
M32	HALL ROAD TO EAST COUNTY LINE	RECONSTRUCTION AND RELOCATION	MONTMORENCY	12.900	7,404,100
US12	LILLEY ROAD TO WEST OF LOTZ ROAD	2 LANES AT 24 FEET, BOULEVARD	WAYNE	0.900	1,650,000

SUMMARIES FOR Work Category: 16. Reconstruction

WORK TYPE COST: 16,683,800
 WORK TYPE DISTANCE: 29.670

Work Category: 17. Minor Widening

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
M89	FROM BRIDGE 01 TO OAK COURT, ALLEGAN	WIDEN AND SEWER	ALLEGAN	0.610	432,300
M68	AT SOUTH JUNCTION OLD US27	TURN LANES	CHEBOYGAN	0.300	201,250
M21	FLINT WEST CITY LIMIT TO BALLENGER ROAD	WIDEN 5 LANES	GENESEE	0.400	212,750
US12	EAST STREET TO CONCORD ROAD, JONESVILLE	WIDEN, RESURFACE, CURBS & GUTTERS	HILLSDALE	0.500	517,000
I96BS	I96 TO CHARLOTTE ROAD, PORTLAND	WIDEN, RESURFACE, CURBS & GUTTERS	IONIA	0.300	330,000
M104	FROM BRIDGE 01 TO SCHOOL, SPRING LAKE	WIDEN, RESURFACE, NON-MOTORIZED	OTTAWA	0.400	230,000
M83	AT GENESEE STREET, FRANKENMUTH	CENTER LANE LEFT TURN	SAGINAW	0.000	93,150
US23BR	AT DEPOT STREET, ANN ARBOR	LEFT TURN LANE	WASHTENAW	0.000	80,500

SUMMARIES FOR Work Category: 17. Minor Widening

WORK TYPE COST: 2,096,950
 WORK TYPE DISTANCE: 2.510

Work Category: 18. Roadside Facilities

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
M88	SCHOOL, MANCELONA NORTHWEST	NON-MOTORIZED PATH	ANTRIM	1.200	49,450
US31-33	BERRIEN SPRINGS TO ANDREWS UNIVERSITY	NON-MOTORIZED PATH	BERRIEN	1.100	63,250
I94EB	TRAVEL INFORMATION CENTER, NORTH BUFFALO	UPGRADE PARKING	BERRIEN	0.000	293,700
US2	NORTHEAST QUADRANT AT US2 AND M183	CARPOOL PARKING LOT	DELTA	0.000	17,250
I69	AT I69BL, CHARLOTTE (CARPOOL LOT)	RELOCATE LOT	EATON	0.000	86,250
US23	AT SILVER LAKE ROAD (CARPOOL)	LOT RESURFACE	GENESEE	0.000	35,650
M24	NORTH OF BARNES LAKE ROAD (CARPOOL)	PARKING LOT SURFACE	LAPEER	0.000	35,650
M21EB	REST AREA EAST OF FIVE LAKES ROAD	REST AREA LANDSCAPING	LAPEER	0.000	34,500
I696	I75 TO I94 (50062 AND 63103)	SLOPE REPAIR	MACOMB	10.800	232,300
US131	REST AREA SOUTH OF 13 MILE ROAD	REST AREA BUILDING AND UTILITIES	MECOSTA	0.000	962,500
I75	CROOKS ROAD TO SQUARE LAKE CONNECTION	INTERMITTENT FENCING	OAKLAND	3.300	161,000
I75	SQUARE LAKE ROAD TO M59 AND WEIGH STATION	INTERMITTENT FENCING	OAKLAND	2.000	161,000
US12	SOUTHWEST CITY LIMIT SALINE TO CURTISS	NON-MOTORIZED PATH	WASHTENAW	0.300	17,250
I94	AT BRIDGE 01 HURON RIVER, YPSILANTI	NON-MOTORIZED PATH	WASHTENAW	0.100	63,250

SUMMARIES FOR Work Category: 18. Roadside Facilities

WORK TYPE COST: 2,213,000
 WORK TYPE DISTANCE: 18.800

SUMMARIES FOR Program Category: 1. Preserve

CATEGORY COSTS: 159,762,351
 CATEGORY DISTANCE: 657.579

Program Category: 2. Improve

Work Category: 21. Capacity Improvement

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
US2	W OF W COUNTY LINE TO E OF W COUNTY LINE 75021	RELIEF LANES	DELTA	1.300	569,800
I96	I496 TO SOUTH OF MOUNT HOPE HIGHWAY	WIDEN 2 LANES AT 36 FEET	EATON	0.800	770,000
I96	SOUTH OF MOUNT HOPE HIGHWAY TO I69	WIDEN 2 LANES AT 36 FEET	EATON	1.000	1,155,000
M54TB	NORTH CITY LIMIT GRAND BLANC TO DORT HIGHWAY	TURNBACK REHABILITATION	GENESEE	0.800	766,700
M24	DRYDEN ROAD TO PRATT ROAD	WIDEN 3 LANES	LAPEER	0.800	220,800
M53	17 MILE ROAD TO 18 MILE ROAD, STERLING HEIGHTS	2 LANES AT 36 FEET, BOULEVARD	MACOMB	1.000	5,445,000
M53	15 MILE ROAD TO 17 MILE ROAD, STIRLING HEIGHTS	2 LANES AT 36 FEET, BOULEVARD	MACOMB	2.000	9,295,000
US10&31	WEST JUNCTION US31 TO PROPOSED US31 FREFWAY	WIDEN 5 LANES	MASON	1.800	2,161,500
M125 TB	ALBAIN ROAD TO SOUTH CITY LIMIT MONROE	WIDEN 5 LANES	MONROE	2.100	2,127,500
US10	MAYBEE ROAD TO SIGNET ROAD	WIDEN 5 LANES	OAKLAND	3.000	4,459,400
I75	WEST OF GIDDINGS ROAD TO M15	WIDEN 2 LANES AT 36 FEET	OAKLAND	9.000	8,306,100
I696	FRANKLIN ROAD TO LAHSEY ROAD	ADD LANES	OAKLAND	2.100	5,406,500
I696	I96/275 TO FRANKLIN ROAD	ADD LANES	OAKLAND	6.400	17,930,000
M33/72	AU SABLE RIVER SOUTH	WIDEN 4 LANES	OSCODA	0.300	368,000
M46	EAST OF FROST TO WEST OF CENTER	WIDEN 5 LANES	SAGINAW	0.400	270,250
M24EXT	EXISTING M24 TO M81, CARO	RECONSTRUCTION	TUSCOLA	0.700	1,265,000
M24 EXT	SOUTH OF AINSWORTH ROAD TO M25	WIDEN 4 LANES, CURBS AND GUTTERS	TUSCOLA	0.600	682,000

SUMMARIES FOR Work Category: 21. Capacity Improvement

WORK TYPE COST: 61,198,550
 WORK TYPE DISTANCE: 34.100

36

Work Category: 22. Bridge Replacement

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
M89	CULVERT 01 AT SAND CREEK	CULVERT REPLACEMENT	ALLEGAN	0.000	103,500
M26	AT BRIDGE 03 OVER EAGLE RIVER AND BRIDGE 05	APPROACH AND STRUCTURES	KEEWENAW	0.000	874,500

SUMMARIES FOR Work Category: 22. Bridge Replacement

WORK TYPE COST: 978,000
 WORK TYPE DISTANCE: 0.000

Work Category: 23. Bridge Widening

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
US23	STRUCTURE 07 UNDER ELLSWORTH ROAD	BRIDGE WIDEN	WASHTENAW	0.000	825,000

SUMMARIES FOR Work Category: 23. Bridge Widening

WORK TYPE COST: 825,000
WORK TYPE DISTANCE: 0.000

SUMMARIES FOR Program Category: 2. Improve

CATEGORY COSTS: 63,001,550
CATEGORY DISTANCE: 34.100

Program Category: 3. Expand

Work Category: 31. New Routes

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
I696	LAHSER TO MOHAWK, GAP RIDGE TO MAIN	FREEWAY LIGHTING	OAKLAND	0.000	2,750,000
I696	LAHSER ROAD TO I75 INTERCHANGE	FREEWAY SIGNS	OAKLAND	10.600	385,000
I696	WEST OF SOUTHFIELD TO MEADOWD, SOUTHFIELD	FREEWAY AND STRUCTURES	OAKLAND	0.600	8,654,800
I696	AT WOODWARD AND WELLESLEY, PARK AND RIDE	PARKING LOT	OAKLAND	0.000	34,500

SUMMARIES FOR Work Category: 31. New Routes

WORK TYPE COST: 11,824,300
 WORK TYPE DISTANCE: 11.200

Work Category: 32. Relocation

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
US31	WALTON ROAD TO MATTHEW ROAD	FREEWAY CONSTRUCTION	BERRIEN	2.500	3,740,000
I69	EAST OF STEWART TO WEST OF NIXON ROAD	FREEWAY AND STRUCTURES	EATON	4.100	16,966,400
M50	COOPER TO OTSEGO, JACKSON	RELOCATE 4 LANES	JACKSON	0.300	759,000
US31	SOUTH OF S COUNTY LINE TO SOUTH OF HAWLEY ROAD	FREEWAY PAVING	MASON	4.600	3,161,400
US31	SOUTH OF HAWLEY ROAD TO NORTH OF HESLUND ROAD	FREEWAY PAVING	MASON	3.600	2,587,200
I75	AT OAK TECH CENTER	INTERCHANGE CONSTRUCTION	OAKLAND	0.000	7,651,600

SUMMARIES FOR Work Category: 32. Relocation

WORK TYPE COST: 34,865,600
 WORK TYPE DISTANCE: 15.100

Planning File Report continued

Work Category: 33. Roadside Facilities

ROUTE	LOCATION DESCRIPTION	TYPE OF WORK	COUNTY	MILES	COST W/CE
I696	AT BEACON SQUARE SUBDIVISION	LANDSCAPE WALL	OAKLAND	0.000	55,000

SUMMARIES FOR Work Category: 33. Roadside Facilities

WORK TYPE COST: 55,000
 WORK TYPE DISTANCE: 0.000

SUMMARIES FOR Program Category: 3. Expand

CATEGORY COSTS: 46,744,900
 CATEGORY DISTANCE: 26.300

SUMMARIES FOR FINAL

TOTAL COSTS: 269,508,801
 TOTAL DISTANCE: 717.979

COMPREHENSIVE TRANSPORTATION

EXECUTIVE SUMMARY

The Comprehensive Transportation Fund (CTF) supports local transit services, new small bus and specialized services, intercity passenger services, freight services, and the Transportation Development Account. This financial support, and the technical assistance provided by MDOT, helps 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 recreation. Buses with lifts are there for handicappers, helping them lead more independent lives. Buses make seniors more mobile and self-sufficient--whenever they need a ride, buses are there!

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, if your business depends on freight deliveries--Michigan's freight companies are on the job for you.

This proposed FY 1987-88 Program describes these services in more detail. It is based on estimated CTF revenue of \$197.5 million, loan funds of \$6.5 million and federal funds of \$9.9 million as shown on Table C-1.

Table C-1
CTF Revenue Estimates

Gasoline and Weight Tax	\$ 92,537,000
Sales Tax	47,500,000
Miscellaneous, including formula unobligated funds	34,032,500
Nonformula unobligated funds	<u>23,400,000</u>
CTF Subtotal	\$197,469,500
Intercity Bus Loan Fund	3,000,000
Rail Loan Fund	<u>3,500,000</u>
Loan Funds Subtotal	\$ 6,500,000
UMTA	8,025,000
FRA	<u>1,850,000</u>
Federal Funds Subtotal	\$ 9,875,000
Total Appropriated Funds	\$213,844,500

After deducting funds for debt service and administrative costs, the CTF formula amount available for public transportation programs in FY 1988 is \$142.7 million. This is allocated according to Section 10 of Act 51 of 1951, as follows:

Table C-2
Act 51 CTF Program Allocations

<u>Percent</u>	<u>(\$000)</u>	<u>Program</u>
65%	\$ 92,761.4	Local bus operating assistance
5	7,135.5	New small bus and specialized services
8	11,416.8	Intercity passenger transportation
5	7,135.5	Freight transportation
<u>17</u>	<u>24,260.6</u>	Transportation Development Account
100%	\$142,709.8	

An additional \$23.4 million from CTF pre-formula lapsed funds is included in the public transportation program planned for FY 1987-88. These funds are identified separately in the project descriptions that follow.

Table C-3 presents the proposed FY 1987-88 CTF Program by source of funds (CTF, loan, or federal). Table C-4 presents the proposed program by the categories of:

- Preserve - To maintain existing transportation service levels, equipment, and facilities.
- Improve - To increase the capacity or service level of existing transportation services, equipment, and facilities.
- Expand - To provide a new service or facility or to extend service to a new area.

These amounts by classification are estimates based on overall needs analysis. Project selection and implementation may result in changes in these estimated amounts.

Table C-3

FY1987-1988 COMPREHENSIVE TRANSPORTATION FUND PROGRAM REQUEST
 By Source of Funds
 May 28, 1987

Description	CTF	Loan	Federal	FY88 Totals
ACT 51 FORMULA ALLOCATIONS:				
Local Bus Optg Asst	\$92,761,400	\$0	\$0	\$92,761,400
Section 18	\$0	\$0	\$4,000,000	\$4,000,000
New Small Bus	\$6,285,500	\$0	\$0	\$6,285,500
Specialized Serv	850,000	0	0	850,000
	<u>\$7,135,500</u>	<u>\$0</u>	<u>\$0</u>	<u>\$7,135,500</u>
Intercity Discrtry	\$5,948,200	\$0	\$0	\$5,948,200
Intercity Air Mktg	918,600	0	0	918,600
Intercity Bus Loan	0	3,000,000	0	3,000,000
Maps and Directories	50,000	0	0	50,000
Rail Passenger	3,500,000	0	0	3,500,000
Water Passenger	1,000,000	0	0	1,000,000
	<u>\$11,416,800</u>	<u>\$3,000,000</u>	<u>\$0</u>	<u>\$14,416,800</u>
Freight Prop Mgmt	\$1,000,000	\$0	\$0	\$1,000,000
Freight Presv/Devel	5,833,600	3,500,000	1,850,000	11,183,600
Port Development	301,900	0	0	301,900
	<u>\$7,135,500</u>	<u>\$3,500,000</u>	<u>\$1,850,000</u>	<u>\$12,485,500</u>
TDA:				
Bus Transit Cap	\$9,800,000	\$0	\$3,400,000	\$13,200,000
Bus Property Mgmt	100,000	0	0	100,000
LETS GO	1,000,000	0	0	1,000,000
Specialized Services	0	0	0	0
Technical Studies	35,000	0	500,000	535,000
Planning Grants	50,000	0	0	50,000
Ridesharing	250,000	0	0	250,000
Vanpooling	110,000	0	0	110,000
Freight Pres/Devel	3,000,000	0	0	3,000,000
Service Devl/New Tech	1,400,000	0	125,000	1,525,000
Rail Psgr Imprmts	1,952,000	0	0	1,952,000
Discretionary	6,563,600	0	0	6,563,600
	<u>\$24,260,600</u>	<u>\$0</u>	<u>\$4,025,000</u>	<u>\$28,285,600</u>
NONFORMULA REQUEST:				
Local Bus Optg Asst	\$3,000,000	\$0	\$0	\$3,000,000
Rail Freight	9,500,000	0	0	9,500,000
Rail Grade Crossings	6,000,000	0	0	6,000,000
Rail Psgr Imprvmts	2,600,000	0	0	2,600,000
Intercity Air Mktg	2,300,000	0	0	2,300,000
	<u>\$23,400,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$23,400,000</u>
PROGRAM TOTALS	\$166,109,800	\$6,500,000	\$9,875,000	\$182,484,800
DEBT SERVICE/ADMIN	\$31,359,700	\$0	\$0	\$31,359,700
TOTAL	\$197,469,500	\$6,500,000	\$9,875,000	\$213,844,500

Table C-4

FY1987-1988 COMPREHENSIVE TRANSPORTATION FUND PROGRAM REQUEST
 By Classifications of Preserve, Improve or Expand
 May 28, 1987

DescriptionCTF, FEDERAL AND LOAN FUNDS COMBINED.....			FY88 Totals
	Preserve	Improve	Expand	
ACT 51 FORMULA ALLOCATIONS;				
Local Bus Optg Asst	\$92,761,400	\$0	\$0	\$92,761,400
Section 18	\$4,000,000	\$0	\$0	\$4,000,000
New Small Bus	\$4,035,500	\$0	\$2,250,000	\$6,285,500
Specialized Serv	850,000	0	0	850,000
	<u>\$4,885,500</u>	<u>\$0</u>	<u>\$2,250,000</u>	<u>\$7,135,500</u>
Intercity Discrtry	\$2,948,200	\$3,000,000	\$0	\$5,948,200
Intercity Air Mktg	0	918,600	0	918,600
Intercity Bus Loan	0	3,000,000	0	3,000,000
Maps and Directories	50,000	0	0	50,000
Rail Passenger	2,500,000	1,000,000	0	3,500,000
Water Passenger	1,000,000	0	0	1,000,000
	<u>\$6,498,200</u>	<u>\$7,918,600</u>	<u>\$0</u>	<u>\$14,416,800</u>
Freight Prop Mgmt	\$1,000,000	\$0	\$0	\$1,000,000
Freight Presv/Devel	10,333,600	850,000	0	11,183,600
Port Development	301,900	0	0	301,900
	<u>\$11,635,500</u>	<u>\$850,000</u>	<u>\$0</u>	<u>\$12,485,500</u>
TDA:				
Bus Transit Cap	\$13,200,000	\$0	\$0	\$13,200,000
Bus Property Mgmt	100,000	0	0	100,000
LETS GO	500,000	500,000	0	1,000,000
Technical Studies	0	535,000	0	535,000
Planning Grants	0	50,000	0	50,000
Ridesharing	250,000	0	0	250,000
Vanpooling	110,000	0	0	110,000
Freight Pres/Devel	3,000,000	0	0	3,000,000
Service Devl/New Tech	0	1,525,000	0	1,525,000
Rail Psgr Imprvmts	0	1,952,000	0	1,952,000
Discretionary	3,563,600	3,000,000	0	6,563,600
	<u>\$20,723,600</u>	<u>\$7,562,000</u>	<u>\$0</u>	<u>\$28,285,600</u>
NONFORMULA REQUEST:				
Local Bus Optg Asst	\$3,000,000	\$0	\$0	\$3,000,000
Rail Freight	9,500,000	0	0	9,500,000
Rail Grade Crossings	3,000,000	3,000,000	0	6,000,000
Rail Psgr Imprvmts	0	2,600,000	0	2,600,000
Intercity Air Mktg	0	2,300,000	0	2,300,000
	<u>\$15,500,000</u>	<u>\$7,900,000</u>	<u>\$0</u>	<u>\$23,400,000</u>
Total	\$156,004,200	\$23,466,100	\$2,250,000	\$182,484,800
	***** Preserve 86%	***** Improve 13%	***** Expand 1%	*****

FY 1987-88 CTF PROGRAM DESCRIPTION

LOCAL BUS OPERATING ASSISTANCE

Preserve

\$92,761,400	CTF
<u>3,000,000</u>	Nonformula CTF
\$95,761,400	

This program provides public bus transportation service to the general public, senior citizens, and handicappers of our state. Each year local transit systems serve approximately 100 million passengers, providing access to jobs, medical care, education, shopping, recreation, and other needed services. Funds are distributed to eligible systems based on percent of nonfederal share of eligible operating expenses.

It is anticipated that there will be 13 urbanized and 53 nonurbanized transit systems serving communities throughout Michigan in FY 1988. Five urbanized systems also provide service in nonurbanized areas, as shown by the asterisks in the listing below. Maps C-1 and C-2 show the locations of these services across the state.

Urbanized Areas

Ann Arbor
Battle Creek
Bay County*
Benton Harbor
Flint

Grand Rapids
Jackson*
Kalamazoo
Lansing*

Muskegon
Niles*
Saginaw
SEMTA*

*Combined urbanized and nonurbanized system.

Nonurbanized Areas - Countywide

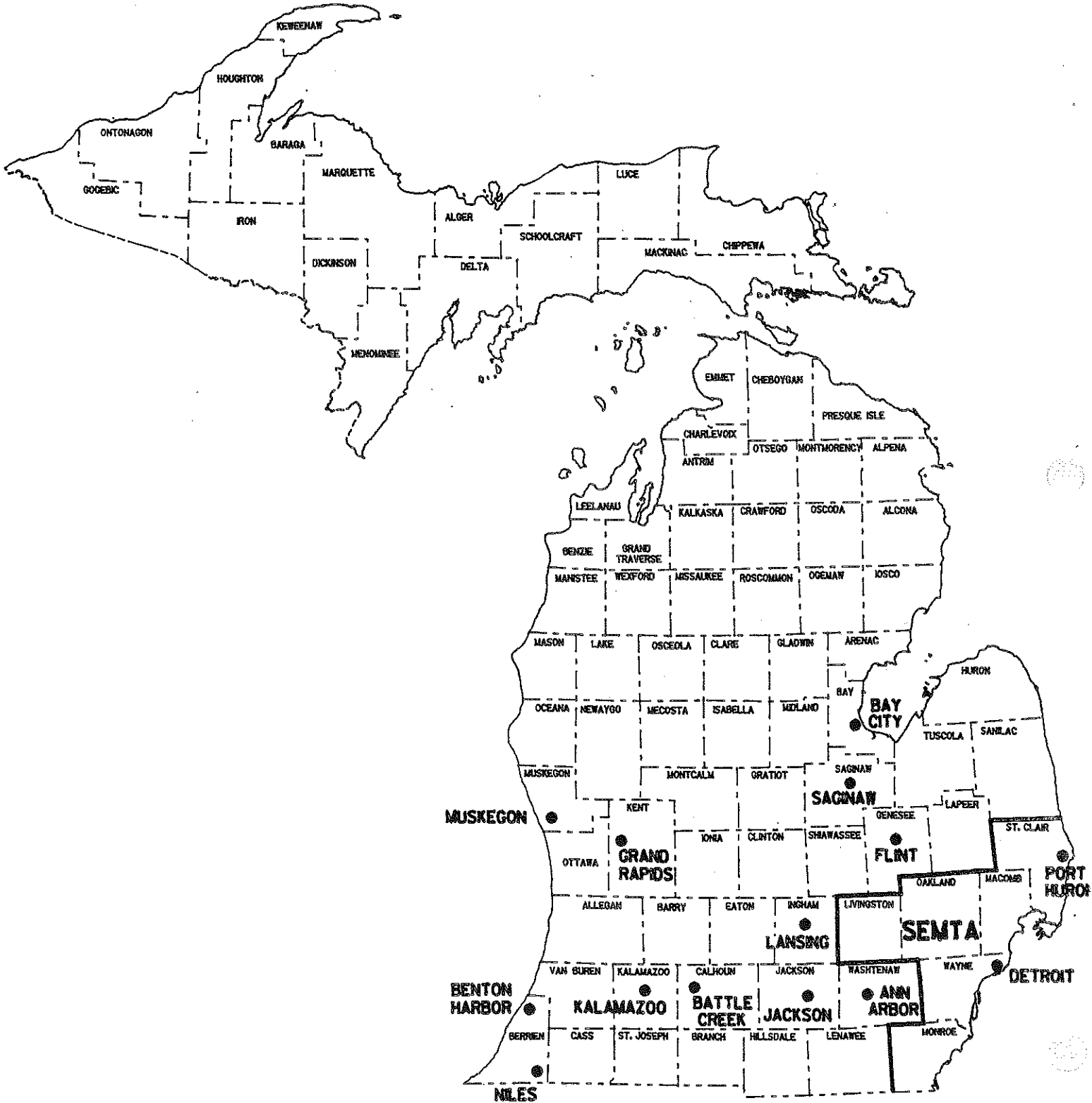
Alger County
Antrim County
Barry County
Bay Area
Berrien County
Branch County
Charlevoix County
Clare County
Crawford County
Eaton County
EUPTA

Gladwin County
Gogebic County
Huron County
Iosco County
Isabella County
Kalamazoo County
Kalkaska County
Keweenaw Bay
Lenawee County
Manistee County
Marquette County

Mecosta County
Ogemaw County
Ontonagon County
Osceola County
Oscoda County
Otsego County
Roscommon County
Sanilac County
Schoolcraft County
Van Buren County
Wexford County

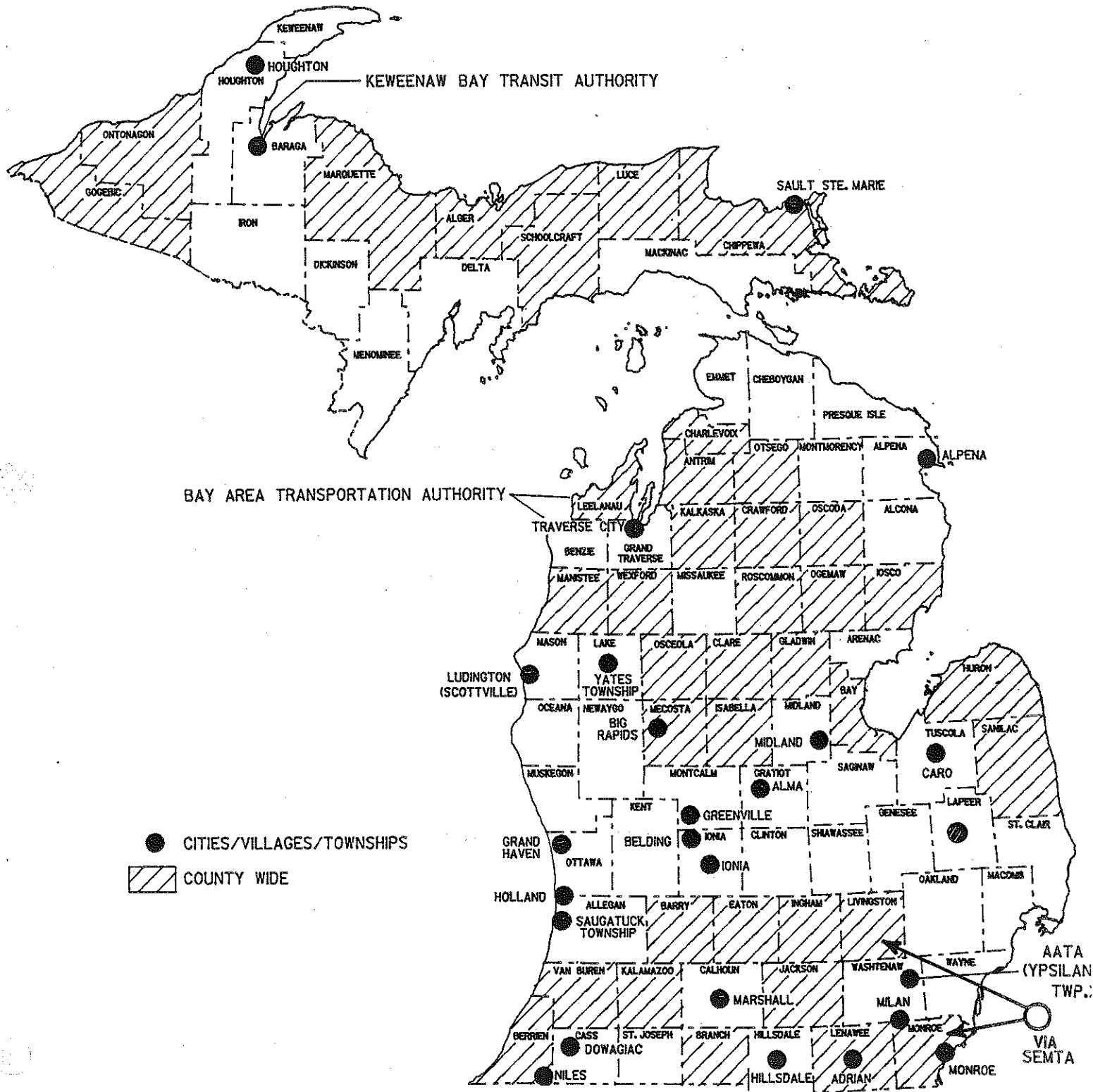
URBAN TRANSIT SYSTEMS

PROPOSED FY 1988



NON-URBAN TRANSIT SYSTEMS

PROPOSED FY 1987-88



Nonurbanized Areas - Noncountywide

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

Performance data for FY 1985-86 (the most recent completed fiscal year) for urban transit systems is shown on Table C-5. Table C-6 shows performance data for nonurban systems.

NONURBAN OPERATING/CAPITAL

Preserve

\$4,000,000 UMTA

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, which are listed under the Local Transit Operating Program, are eligible to receive these federal Section 18 funds. The federal program provides that a state's allocated funds may be used for either operating or capital.

NEW SMALL BUS AND SPECIALIZED SERVICES

	<u>Preserve</u>	<u>Expand</u>	<u>Total</u>
1. New Small Bus	\$4,035,500	\$2,250,000	\$6,285,500 CTF

This program provides capital and operating assistance for new small bus service projects in their first three years of operation. This allows communities the opportunity to develop ridership and then decide whether to provide continued local funding. This program has a 95 percent success rate with the vast majority having chosen to continue local funding, either through a millage or through an appropriation. The continuation systems for FY 1988, as listed below, are shown on Map C-3. New starts are not known at this time. Applications are accepted on an ongoing basis from interested communities.

Table C-5
FY 1986 Performance Data
Urban Transit Services

<u>Location</u>	<u>Lift- Equip. Buses</u>	<u>Regular Buses</u>	<u>Passengers</u>	<u>% Seniors and Handicappers</u>
Ann Arbor	45	14	3,598,169	13
Battle Creek	10	15	763,407	30
Bay County	42	12	949,644	33
Benton Harbor	5	10	156,937	37
Flint	18	49	3,639,048	16
Grand Rapids	11	68	3,939,170	15
Jackson	25	8	542,658	38
Kalamazoo	45	15	1,969,486	12
Lansing	35	34	4,091,192	10
Muskegon	15	5	693,437	N/A
Niles	3	4	75,011	55
Saginaw	36	7	1,315,997	20
SEMTA	<u>406</u>	<u>557</u>	<u>70,517,398</u>	N/A
Urban Totals	696	798	92,251,554	

Table C-6
FY 1986 Performance Data
Nonurban Transit Services

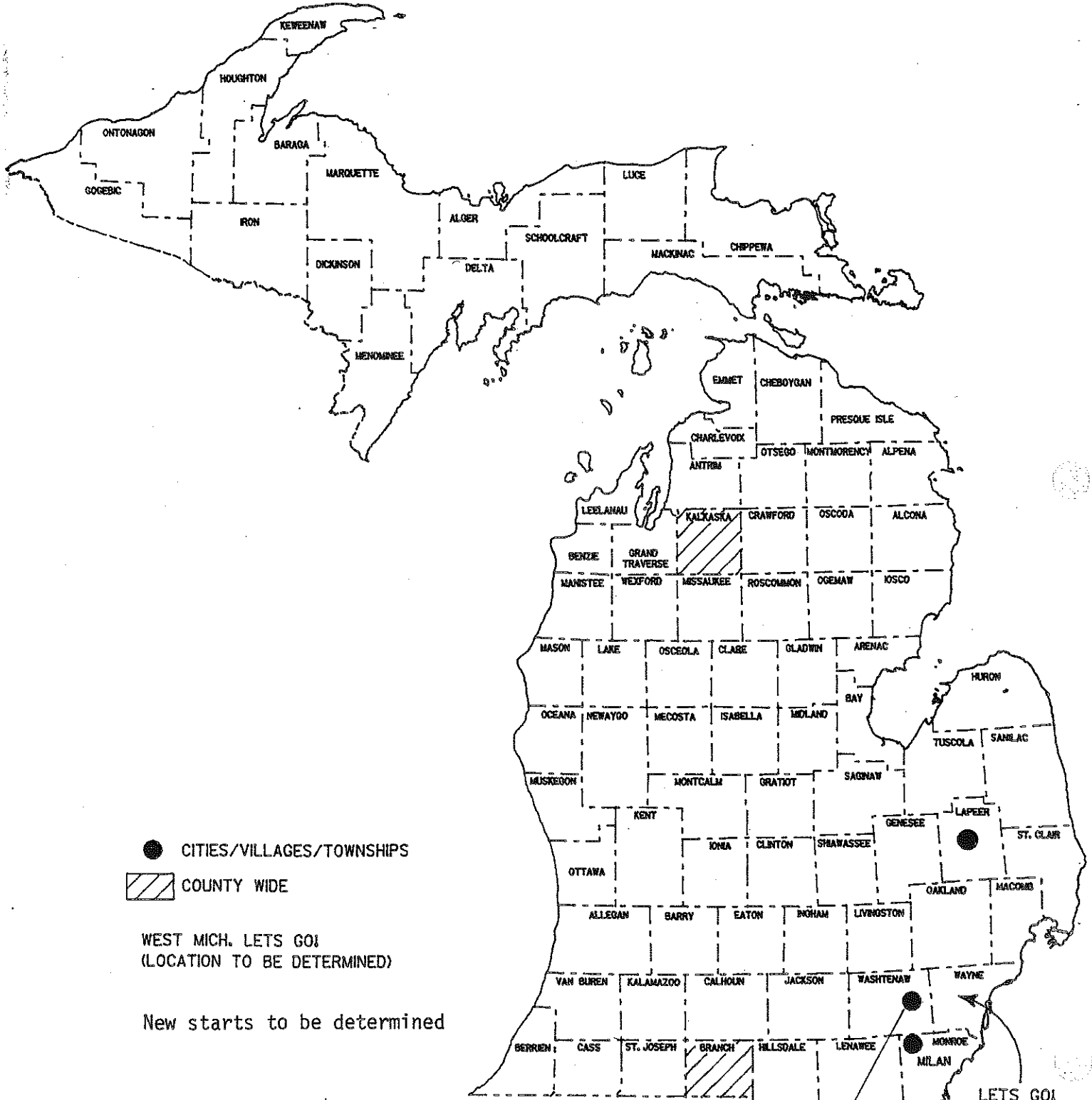
<u>Location</u>	<u>Lift- Equip. Buses</u>	<u>Regular Buses</u>	<u>Passengers</u>	<u>% Seniors and Handicappers</u>
NONCOUNTY SYSTEMS:				
Adrian	2	4	96,505	53
Alma	2	4	74,045	31
Alpena	3	3	91,255	64
Belding	2	1	43,896	27
Big Rapids	3	5	104,634	32
Buchanan	2	0	11,767	59
Dowagiac	3	0	24,193	45
Greenville	2	3	64,743	33
Grand Haven	6	7	140,596	51
Hillsdale	2	4	80,932	49
Holland	3	7	120,453	55
Houghton	5	6	85,493	49
Ionia	2	2	51,073	37
Ludington	1	10	125,629	51
Marshall	3	1	65,986	24
Midland	5	7	104,293	61
Saugatuck Twp.	2	1	38,003	50
S. S. Marie	2	3	45,215	43
Yates Twp.	<u>3</u>	<u>2</u>	<u>38,777</u>	43
Total	53	70	1,407,488	
COUNTY SYSTEMS:				
Alger	4	8	40,776	30
Antrim Co.	8	6	88,919	47
Barry Co.	6	0	52,571	28
Bay Area	7	19	222,425	47
Bay Co.	4	7	167,128	55
Charlevoix Co.	6	3	73,644	67
Clare Co.	3	3	7,404	69
Crawford Co.	5	6	122,870	22
Eastern U.P.	10	7	76,125	70
Eaton Co.	9	7	147,170	35
Gladwin Co.	6	5	99,216	47
Gogebic Co.	3	2	33,354	58
Huron Co.	5	9	132,753	48
Ingham Co.	5	4	33,941	39
Iosco Co.	7	1	40,519	63
Isabella Co.	10	17	230,127	73
Jackson Co.	6	3	41,324	98
Lenawee Co.	4	10	75,554	86

Table C-6 Continued

<u>Location</u>	<u>Lift- Equip. Buses</u>	<u>Regular Buses</u>	<u>Passengers</u>	<u>% Seniors and Handicappers</u>
Manistee Co.	11	9	133,208	44
Marquette Co.	10	11	276,203	23
Mecosta Co.	4	6	52,332	77
Ogemaw Co.	4	1	40,902	50
Ontonagon Co.	3	3	36,487	43
Oscoda Co.	3	2	31,193	45
Otsego Co.	4	3	77,993	52
Roscommon Co.	5	5	107,150	25
Sanilac Co.	6	1	54,289	99
Schoolcraft Co.	2	3	27,481	82
Van Buren Co.	4	3	48,814	96
Wexford Co.	<u>7</u>	<u>7</u>	<u>129,547</u>	54
Total	171	171	2,701,419	
SEMTA NONURBAN:				
SEMTA Small Bus	<u>34</u>	<u>0</u>	<u>339,019</u>	
Total	34	0	339,019	
NONURBAN TOTALS	258	241	4,447,926	

NEW SERVICE SYSTEMS

PROPOSED FY 1987-88



● CITIES/VILLAGES/TOWNSHIPS
▨ COUNTY WIDE

WEST MICH. LETS GO!
(LOCATION TO BE DETERMINED)

New starts to be determined

ANN ARBOR TRANSPORTATION AUTHORITY
54 (YPSILANTI TWP.)

LETS GO!
COALITION
CAUSE
ROYAL OAK
MENTAL HEALTH

Continuation Systems

Branch County
Kalkaska County
Lapeer
Milan
Ypsilanti

Performance data for the new small bus systems that were in operation in FY 1986 is presented on Table C-7.

	<u>Preserve</u>
2. Specialized Services	\$850,000

Act 51 provides that not more than \$850,000 per fiscal year under this program shall be distributed as operating assistance grants for specialized services. In FY 1986, this program provided operating assistance for 98 vehicles operated by local nonprofit agencies to serve seniors and handicappers. The systems eligible for this assistance under existing commission policy is shown on Map C-4. Performance data for those agencies is provided on Table C-8. Commission policy on eligibility for specialized services operating assistance and the related capital program funded through the UMTA 16(b)(2) program is under review.

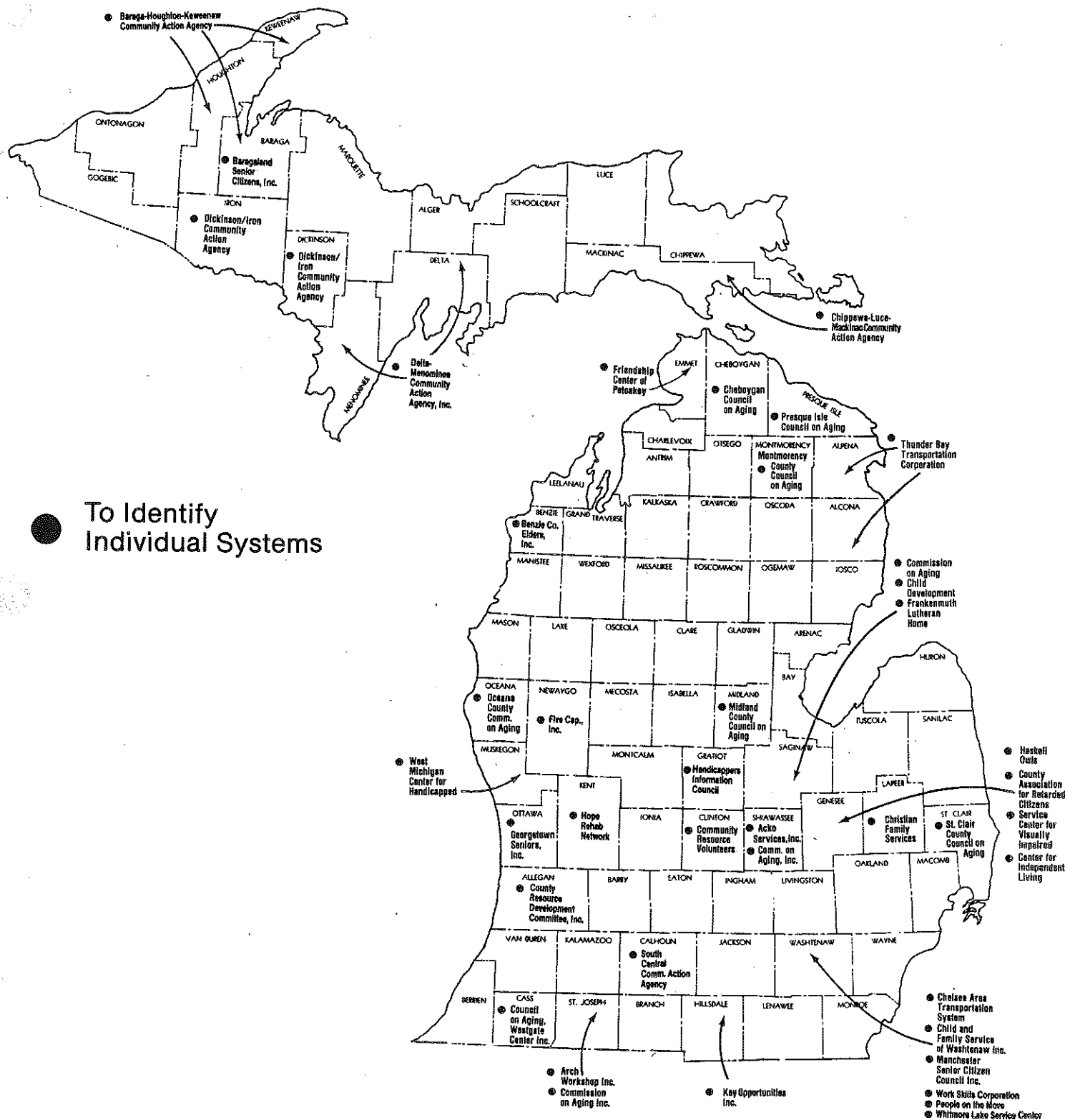
Table C-7
FY 1986 Performance Data
New Small Bus Services

<u>Location</u>	<u>Lift- Equip. Buses</u>	<u>Regular Buses</u>	<u>Passengers</u>	<u>% Seniors and Handicappers</u>
Bay Area Transit	2	3	45,302	47
Berrien Co.	5	14	131,063	71
Branch Co.	4	3	91,420	66
Caro (Village of)	4	2	54,674	
	59			
Clare Co.	3	3	55,115	63
Kalamazoo Co.	12	0	87,309	94
Kalkaska Co.	6	1	68,381	49
Keweenaw Bay	2	3	51,155	33
Lapeer Co.*	3	4	41,487	50
Milan**	3	0	738	9
Osceola Co.	3	3	53,697	66
Scottville/ Hamlin	1	1	8,996	39
Ypsilanti Twp.	<u>2</u>	<u>0</u>	<u>5,738</u>	20
New Service Totals	50	37	695,075	

*Terminated service July 1986.

**Initiated service September 1986.

SPECIALIZED SERVICES SYSTEM



Note:
 Services provided essentially for seniors and handicappers, but general public is served if capacity permits.

Table C-8
FY 1986 Performance Data
Specialized Services for Seniors and Handicappers

<u>Location</u>	<u>Operator</u>	<u>Equip. Buses</u>	<u>Regular Buses</u>	<u>Passengers</u>
Allegan Co.	Res. Dev. Comm.	2	0	110,749
Alpena/Cheboygan	Thunder Bay Trans. Corp.	10	0	30,571
Presque Isles	N.E. Michigan Rehab.	2	0	8,316
Cos.	Cheboygan COA	2	1	7,075
	Presque Isle COA	2	0	5,731
Baraga Co.	Baragaland SCC	1	0	886
Baraga/Houghton/ Keweenaw	CAA	2	0	3,566
Benzie Co.	COA	2	0	5,795
Calhoun Co.	CAA of S. Central Mi.	1	0	11,036
Cass Co.	Westgate Ctr. for Hndcp.	3	0	10,037
	COA	2	0	2,861
Delta/Menominee	CAA	7	0	36,981
Dickinson/Iron				
Cos.	CAA	9	0	45,336
Genesee Co.	Assoc. for Retarded Cit.	7	2	63,493
	Serv Ctr. for Vis. Imp.	2	0	2,522
	Center for Ind. Living	1	0	6,316
	Haskell OWLS	1	0	1,298
Gratiot Co.	Handicapper Info. Coun.	2	0	718
Hillsdale Co.	Key Opportunity	4	1	27,233
Kent Co.	Hope Rehab. Network	3	1	5,954
Lapeer Co.	Christian and Fam. Serv.	1	0	3,217
Mackinac Co.	CAA	2	0	6,068
Midland Co.	COA	1	0	3,050
Montmorency Co.	COA	1	0	1,322
Muskegon Co.	W. Mich. Ctr. for Hndcp.	3	0	26,106
Newaygo Co.	Five Cap, Inc.	1	0	4,016
Oceana Co.	COA	1	0	3,248
Ottawa Co.	Georgetown Seniors	1	0	951
City of Petoskey	Friendship Center	3	0	17,514
Saginaw Co.	COA	2	0	11,220
	Child Dev. Ctr.	3	0	9,072
	Frankenmuth Luth. Home	1	0	753
Shiawassee Co.	COA	1	1	10,340
	ACKCO Services	2	0	16,988
St. Clair Co.	COA	2	3	25,745
St. Johns	Community Res. Vol.	2	0	11,441
St. Joseph Co.	COA and Arch Workshop	4	2	34,299
Washtenaw Co.	Chelsea Area Trans.	0	2	7,574
	Child and Fam. Serv.	2	0	6,229
	Manchester Senior Cit.	2	0	1,307
	People on the Move	3	0	7,286
Total		103	13	594,220

INTERCITY DISCRETIONARY

<u>Preserve</u>	<u>Improve</u>	<u>Total</u>	
\$2,948,200	\$3,000,000	\$5,948,200	CTF

This program helps provide the citizens of Michigan access to a network of intercity bus passenger services to link Michigan's small urban and rural communities to major population centers. In 1986, this network served more than 240 communities and included 2,650 regular route miles, as shown on Map C-5. Of the more than 100 certified intercity carriers, 19 offer regularly scheduled intercity services. The range of services also includes charters, tours, sightseeing, worker-commuter trips, and school routes.

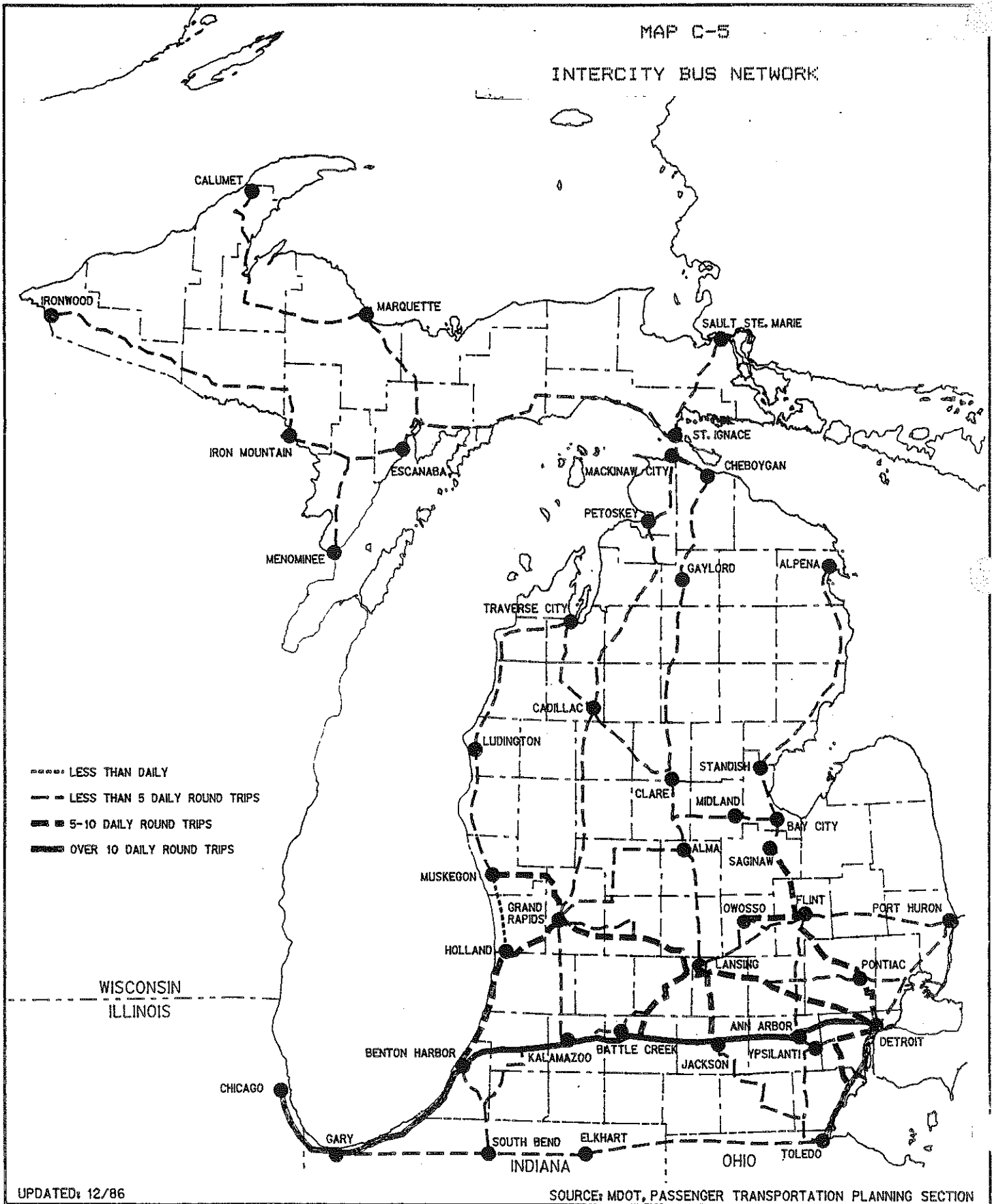
In past years, assistance has been provided to support promotional efforts aimed at improving intercity bus tour and charter companies. These efforts spotlighted existing intercity bus regular route services as a convenient, economical, and easily accessible mode of intercity transportation, whether for business, personal, or leisure travel. Assistance for economic development and tourism purposes showcased promotional efforts to encourage group travel by intercity bus. Special projects for colleges, worker/commuters, and other traffic generators were considered on a case-by-case basis.

The intercity facility development program has focused on meeting community needs for passenger terminals that provide convenient access for the traveling public. This program has provided funding for facilities in communities throughout the state, development of terminals along major travel corridors, and marketing all terminal facilities completed under this program. The ten facilities constructed or developed as of FY 1986 are shown on Map C-6.

The intercity bus industry is in transition due to deregulation at the state and federal levels. Added to the effects of deregulation is a complex market situation as a result of our peninsular geography. Because of these complexities, the intercity and facility development programs are undergoing a reevaluation with the consultant's report due June 1987.

MAP C-5

INTERCITY BUS NETWORK



UPDATED: 12/86

SOURCE: MDOT, PASSENGER TRANSPORTATION PLANNING SECTION

MAP C-6

INTERMODAL PASSENGER FACILITIES



INTERMODAL TERMINALS /
TRANSPORTATION CENTERS

★ OPERATING

INTERCITY AIR MARKETING

Improve

\$ 918,600	CTF
<u>2,300,000</u>	Nonformula CTF
3,218,600	

Deregulation of airline services at the federal level has resulted in loss of service by major carriers at airports serving smaller communities throughout Michigan. Convenient, reliable air service is not only a vital factor in selection of industrial and commercial sites but also benefits Michigan's important tourism industry. This project would fund a comprehensive air marketing effort, in conjunction with the private airline industry and airport authorities, for areas not presently receiving jet air transportation services.

INTERCITY BUS EQUIPMENT LOAN PROGRAM

Improve

\$3,000,000 LOAN

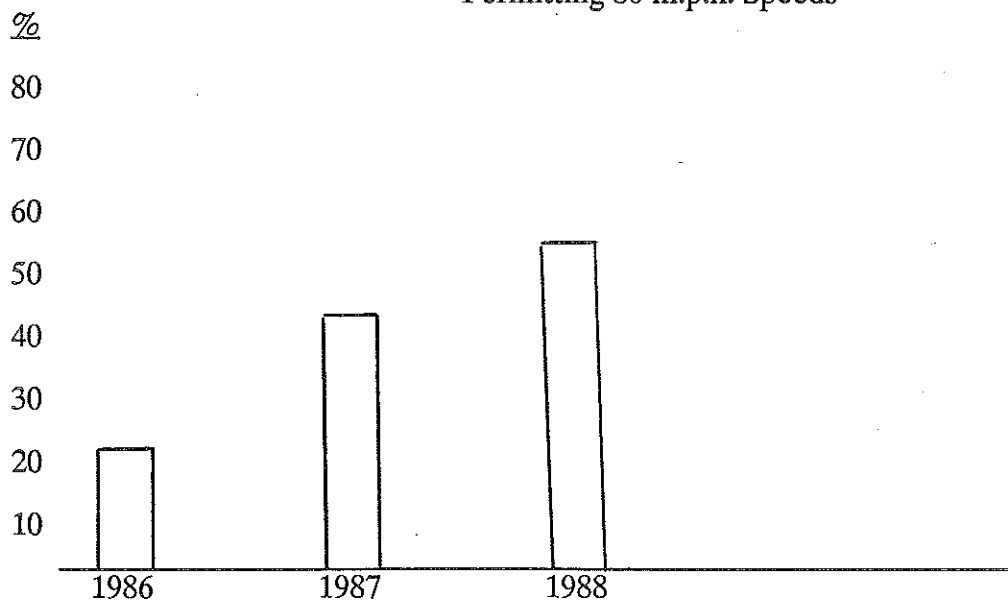
This program, complementary to the intercity service and facility development program, provides for state purchase of intercity buses which are then made available to certified carriers. The carrier repays the state for the cost of the equipment plus interest, with loans repaid within six or eight years. All private intercity bus carriers who operate regular routes under a certificate of authority to operate as a motor common carrier of passengers and who meet program guidelines are eligible to apply under the Intercity Bus Loan Program. The intercity bus equipment loan program is included in the reevaluation report due June 1987.

RAIL PASSENGER SERVICE

	<u>Preserve</u>	<u>Improve</u>	<u>Total</u>
International	\$1,175,000	\$ -0-	\$1,175,000
Pere Marquette	875,000	-0-	875,000
Operating Assistance	-0-	100,000	100,000
Rail Terminal/Service Development	<u>450,000</u>	<u>900,000</u>	<u>1,350,000</u>
	\$2,500,000	\$1,000,000	\$3,500,000 CTF

Rail passenger service provides an increasingly attractive mode of travel serving 20 communities along three primary Michigan routes. The "International Limited" 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 more than 523,000 rail passengers in FY 1986. Capital investments focus on passenger stations, track and signal improvements, equipment upgrading, and grade crossings to achieve improved service availability, attractiveness, safety, and performance. Map C-7 shows the rail passenger network in Michigan. Table C-9 provides information on the percentage of total route miles that are able to support operations at the maximum speed of 80 m.p.h. Table C-10 shows trends impacting state assisted rail passenger services.

Table C-9
High Performance Passenger Train Operations
Percent of Total Route Miles
Permitting 80 m.p.h. Speeds



Map C-7

RAIL PASSENGER NETWORK

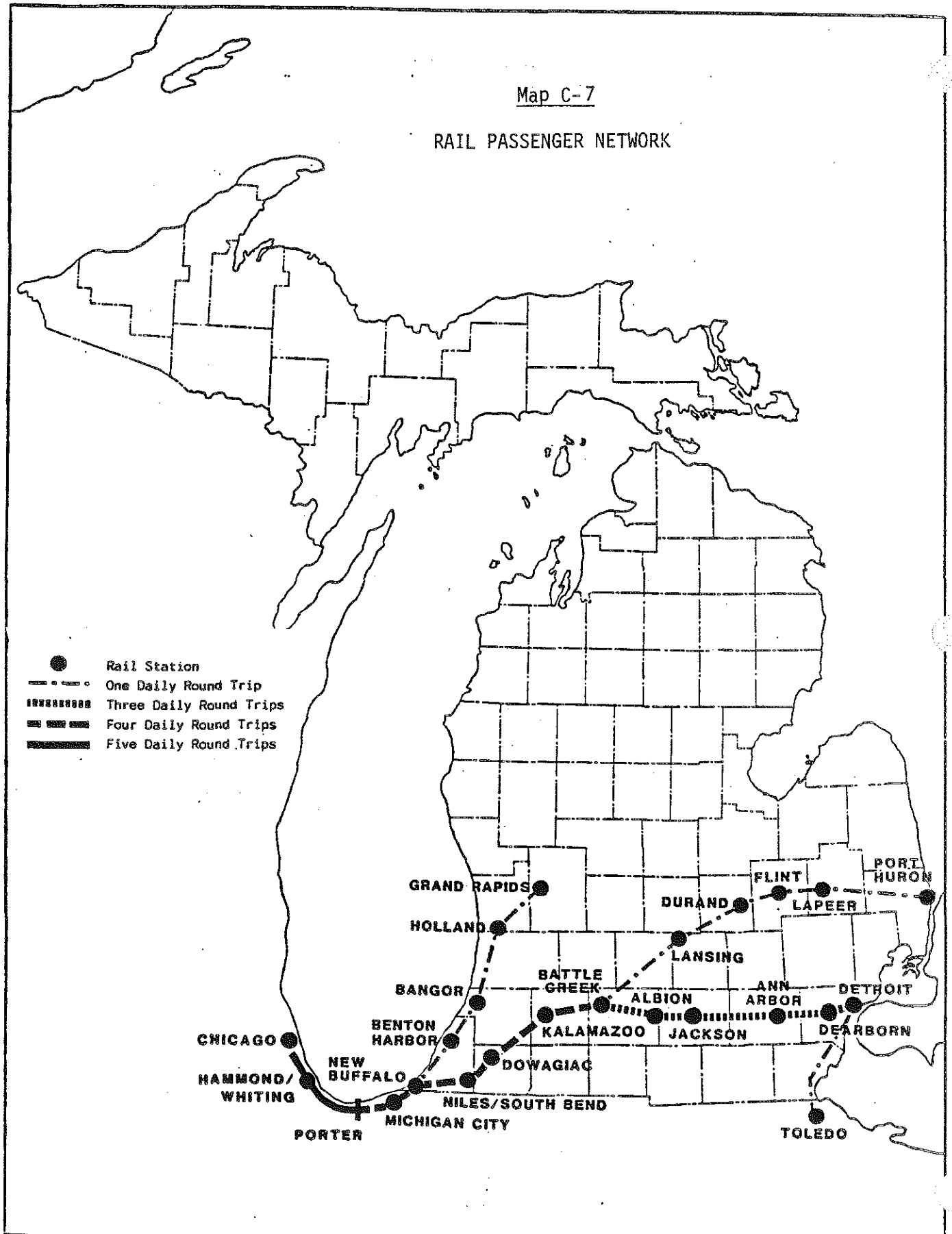
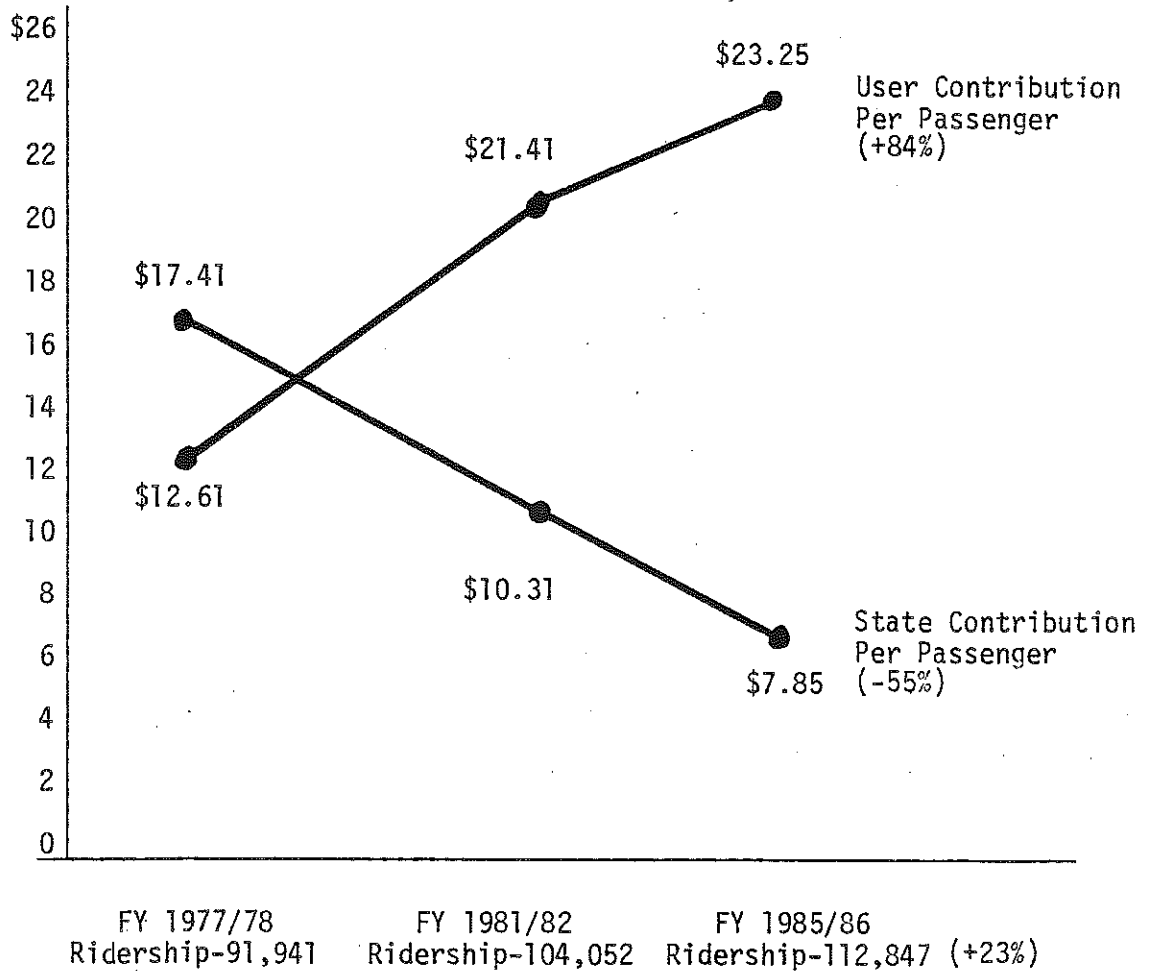


Table C-10

FINANCIAL PERFORMANCE
TRENDS IMPACTING STATE ASSISTED
RAIL PASSENGER SERVICE*



*Port Huron - Chicago route

MARINE PASSENGER

Preserve

\$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 school and work transportation, as well as access to fuel and other basic supplies and services. The ferry services also promote tourism opportunities essential to Michigan's economy.

TRANSPORTATION SERVICES DIRECTORY

Preserve

\$50,000 CTF

The Michigan Public Transportation Map and Directory is a helpful passenger services guide. The map, divided into geographic sections, shows all intercity bus, rail, airline and ferry routes, and identifies communities with local bus service. The directory lists by community the available transportation services by mode, with phone numbers and addresses. These directories are used by the tourism industry, the public transportation industry, and the traveling public. This pocket-sized directory highlights tourism by promoting the state's tourist information phone numbers.

FREIGHT PRESERVATION AND DEVELOPMENT

<u>Preserve</u>	<u>Improve</u>	<u>Total</u>	
\$5,833,600	\$ -0-	\$ 5,833,600	CTF
3,500,000	-0-	3,500,000	Loan
<u>1,000,000</u>	<u>850,000</u>	<u>1,850,000</u>	FRA
\$10,333,600	\$850,000	\$11,183,600	

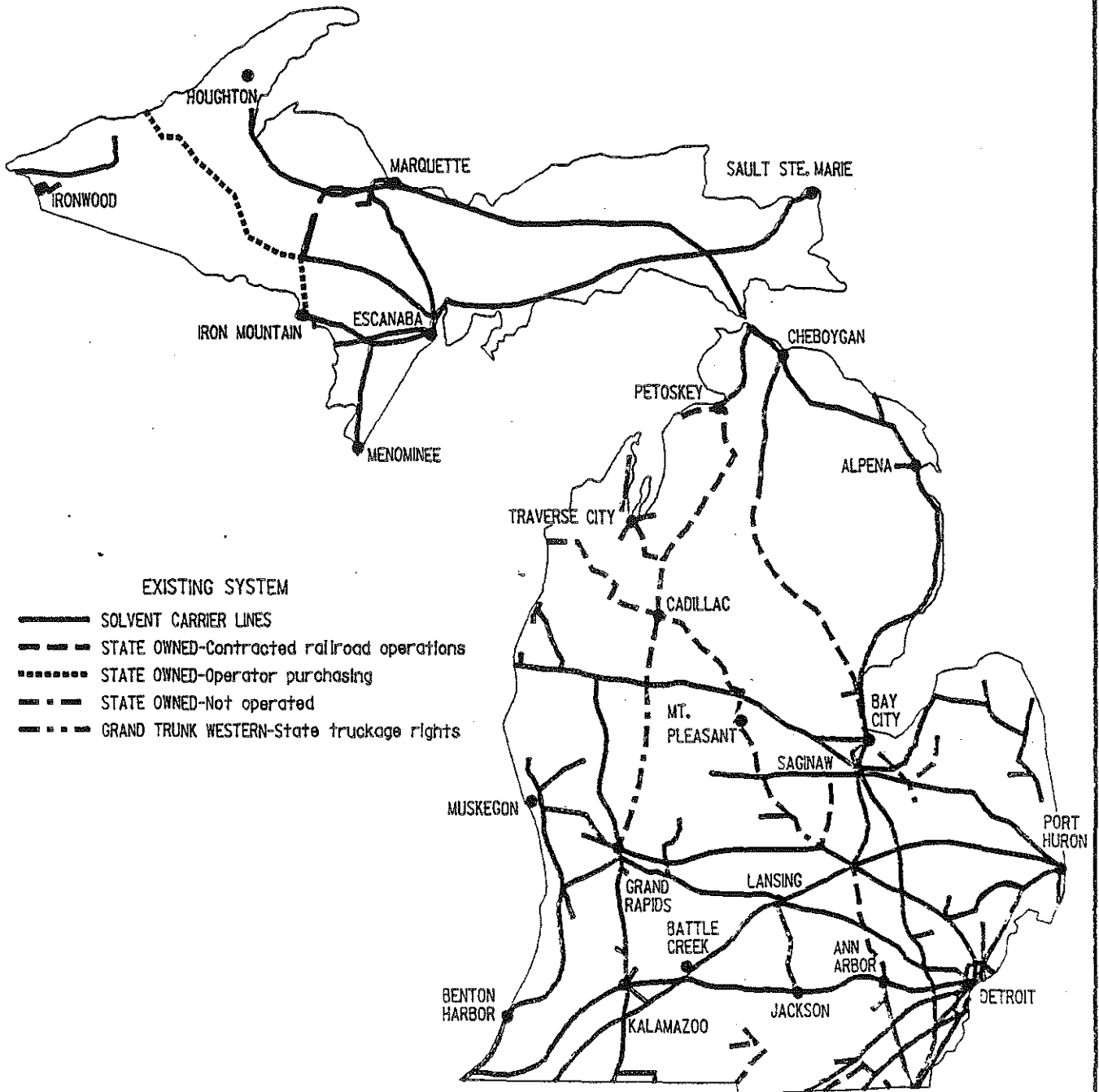
The purpose of this program is to preserve and develop Michigan's freight transportation infrastructure which plays a significant role in supporting economic development in our state. Michigan's rail freight network of approximately 4,700 route miles is shown on Map C-8. This network is operated by six major or Class I railroad companies and numerous short line and terminal companies. In 1985, the latest year for complete data, approximately 1,375,000 carloads were generated from Michigan stations. The number of rail system miles in Michigan has decreased in recent years, and deregulation carries the possibility of further changes in the railroad system.

Investments are made through this program to continue the safe and efficient operation of state-owned properties, to acquire other essential properties and facilities, and to construct new freight facilities where public investment is necessary to support Michigan's economic development.

Subprograms to be carried out with these funds include bridge, grade crossing, track, and freight support facility construction and rehabilitation; and intermodal facility development. Projects are developed in partnership with local governmental units, other state agencies, freight companies, and/or shippers via negotiated loans, grants, leases, or lease/purchase agreements. Michigan's commitment to strengthen its economy is of priority importance to this program. Hence, when development opportunities are contingent in part on freight service and facilities, the program responds through joint ventures with other project partners. Emphasis is placed upon those target industries identified for coordinated state government initiatives.

Examples of construction projects carried out in FY 1986 include a yard office and roadways at a new automotive plant at Hamtramck, and a rail yard at a new automotive plant at Flat Rock. Track rehabilitation projects carried out in FY 1986 include improvements to 20 miles of badly deteriorated track between Durand and Howell.

MICHIGAN'S RAILROAD NETWORK



FREIGHT PROPERTY MANAGEMENT

Preserve

\$1,000,000 CTF

Effective property management is essential to protect the state's sizable investment in 825 miles of railroad rights-of-way, track structure, several parcels of real estate adjacent to the rights-of-way, various pieces of rolling stock, one vessel, and several buildings. Examples of expenses funded under this category are those arising from leases, taxes, inventory control, maintenance and repair, insurance, security, and appraisals.

PORT ASSISTANCE

Preserve

\$301,900 CTF

The purpose of this program is to partially fund the operating budgets of eligible port authorities. By statute, upon city, county, and state approvals of a port authority budget, 50 percent 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.

TRANSPORTATION DEVELOPMENT ACCOUNT

<u>Project Summary</u>	<u>Preserve</u>	<u>Improve</u>	<u>Total</u>
Bus Transit Capital	\$13,200,000	\$ -0-	\$13,200,000
Bus Property Management	100,000	-0-	100,000
LETS GO	500,000	500,000	1,000,000
Technical Studies	-0-	535,000	535,000
Planning Grants	-0-	50,000	50,000
Ridesharing	250,000	-0-	250,000
Vanpooling	110,000	-0-	110,000
Freight Preservation/ Development	3,000,000	-0-	3,000,000
Service Development/ New Technology	-0-	1,525,000	1,525,000
Rail Passenger Improvements	-0-	1,952,000	1,952,000
Discretionary	<u>3,563,600</u>	<u>3,000,000</u>	<u>6,563,600</u>
	\$20,723,600	\$7,562,000	\$28,285,600

Sources

\$24,260,600	CTF
4,025,000	UMTA

<u>Nonformula Projects</u>	<u>Preserve</u>	<u>Improve</u>	<u>Total</u>
Rail Freight	\$ 9,500,000	\$ -0-	\$ 9,500,000
Rail Grade Crossing	3,000,000	3,000,000	6,000,000
Rail Passenger Improvements	<u>-0-</u>	<u>2,600,000</u>	<u>2,600,000</u>
	\$12,500,000	\$5,600,000	\$18,100,000

PROGRAM HIGHLIGHTS

The Transportation Development Account (TDA) supports subprograms and projects that contribute to a balanced statewide network of public transportation services. TDA projects are selected based on applications from local transit systems and intercity carriers, priorities of UMTA or other federal granting agencies, and statewide goals related to preserving basic services, generating technical improvements, and encouraging economic development. Each subprogram is described below. Projects funded from nonformula CTF funds are included here for easier reference.

1. Bus Capital

<u>Preserve</u>	
\$9,800,000	CTF
<u>3,400,000</u>	UMTA
\$13,200,000	

This subprogram is designed to meet capital needs of local transit systems and specialized services systems. Michigan's urbanized transit systems typically receive capital apportionments of from \$12 million to \$18 million from UMTA's Section 9 program. To capture these funds, a local match of from \$3 million to \$4.5 million is required. Federal grants for local transit systems may also become available from UMTA's discretionary program (Section 3), from UMTA's Section 18 program for transportation projects in nonurbanized areas, and from UMTA's Section 16(b)(2) program for private nonprofit agencies that primarily serve elderly and handicapped citizens. In addition, there is a need for replacement vehicles and equipment in nonurban systems, rehabilitation of transit vehicles, and construction of transit facilities, for which no federal funds are anticipated.

2. Bus Property Management

<u>Preserve</u>	
\$100,000	CTF

This subprogram is to provide for expenditures related to maintaining the central facility operated by Bus Transit Division. This facility, conveniently located near Potterville, will be used for inspecting vehicles, conducting vehicle maintenance training, and vehicle storage.

3. LETS GO!

<u>Preserve</u>	<u>Improve</u>	<u>Total</u>
\$500,000	\$500,000	\$1,000,000 CTF

This acronym stands for Local Efforts in Transportation Service. Many localities in Michigan have a wide array of community and human service agencies that provide essential support services to local citizens. Examples are centers for handicapper affairs, sheltered workshops, community mental health centers, offices of services to the aging, and senior citizen centers. The availability of transportation is key to these human service agencies in providing these support services.

This subprogram is to complete selected demonstration projects to meet the mobility needs of these citizens. In cooperation with local transit agencies, assistance is provided for planning, technical services, and coordination. Eligible costs include vehicle purchase/rehabilitation, start-up costs and operating expenses, as determined by community need. Local financial participation is required.

4. Technical Studies

<u>Improve</u>
\$ 35,000 CTF
<u>500,000</u> UMTA
\$535,000

Activities eligible under this subprogram include studies of operational and funding problems, preparation and dissemination of information such as operations 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 the maximum federal funds.

5. Planning Grants

<u>Improve</u>
\$ 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 subprogram 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.

6. Ridesharing

Preserve

\$250,000 CTF

Ridesharing programs assist persons in finding alternative transportation services. Ridesharing for the work trip offers potential for reducing energy consumption, traffic congestion, and air pollution. This subprogram 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. Map C-9 shows ridesharing and vanpooling activity throughout Michigan. Table C-11 provides performance data for FY 1986.

7. Vanpooling

Preserve

\$110,000 CTF

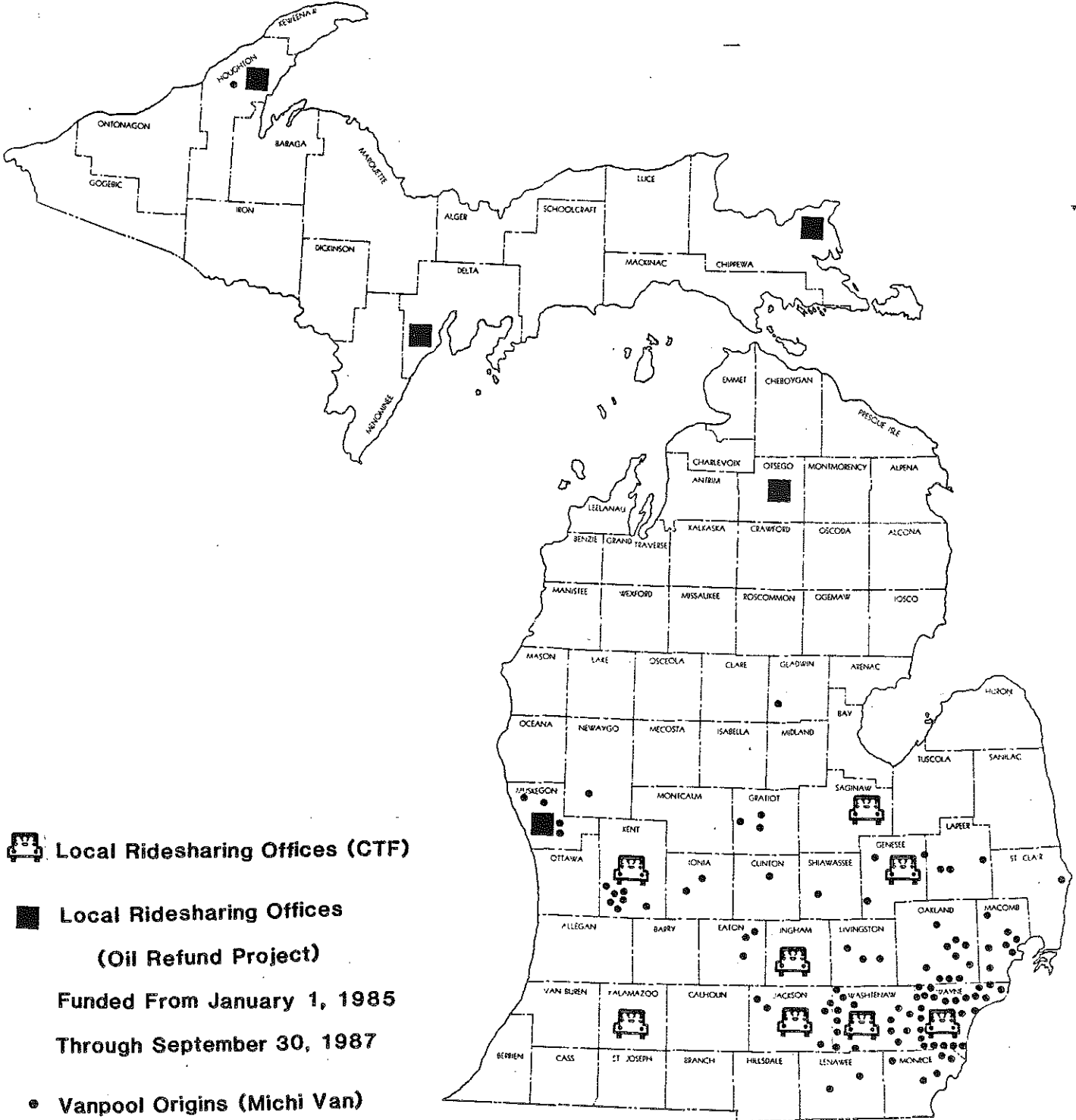
This subprogram funds the continuation of "MichiVan" vanpool services to qualified community groups of nine or more persons throughout the state. Self-supporting except for marketing and administrative costs, MichiVan is an energy-efficient form of transportation that contributes to the relief of traffic congestion and air pollution. This subprogram, 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. This funding maintains FY 1986 administrative levels and include funds for marketing to increase the success of the vanpool efforts.

Table C-11
FY 1986 PERFORMANCE DATA
RIDESHARING AND VANPOOL PROGRAMS

	<u>Ridesharing</u>	<u>Vanpooling</u>
Number of Carpools/Vans	712	35
Number of Carpoolers/Vanpoolers	1,993	455
Reduction in No. of Vehicles on Road	819	344
Vehicle Trips Saved	409,318	172,025
Gallons of Gas Conserved	338,844	160,475

STATEWIDE RIDESHARING PROGRAM

Map C-9



8. Freight Preservation and Development

Preserve

\$ 3,000,000	CTF
<u>9,500,000</u>	Nonfederal CTF

\$12,500,000

This subprogram supplements federal and other state funds available to preserve and develop the freight infrastructure in Michigan. It assists in protecting the state's sizable investment in that infrastructure and in responding to new growth opportunities, both of which are essential to Michigan's economic development initiatives. Projects are developed in partnership with local governmental units, other state agencies, freight companies, and/or shippers via negotiated loans, grants, leases, or lease/purchase agreements.

At its May 29, 1987, meeting, the State Transportation Commission adopted the following language regarding the nonformula funds designated for this project:

"None of the monies currently contained in the lapse account and proposed by the department to be demarcated for rail freight shall be committed or expended unless these four things occur:

1. MDOT shall continue its rail rationalization efforts and proceed with due diligence to complete the next phase of rail rationalization.
2. Any applicant for rail freight capital or operating funds shall have signed commitments or other evidence satisfactory to the Commission in hand that is demonstrative of user commitments to the proposed rail freight line.
3. Such commitments or other evidence acceptable to the Commission shall, before any monies are committed or expended, be submitted to a consultant selected by the Michigan Transportation Commission. Said consultant shall then advise the Commission on whether such projected rail operations are viable based on the commitments in hand.
4. All requirements previously promulgated by the Commission and its rail freight subcommittee as they relate to financial participation from the municipality and the carrier shall remain in full force and effect.

Funds shall lapse within three years."

9. Service Development and New Technology

Improve

\$1,400,000	CTF
<u>125,000</u>	UMTA
\$1,525,000	

This subprogram is designed to assist public transportation providers as they strive for more effective service delivery mechanisms. 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, conducting driver training programs, technical assistance in accounting and financial management, and undertaking outreach efforts to improve and coordinate specialized services to seniors and handicappers.

10. Rail Passenger Improvements

Improve

\$1,952,000	CTF
<u>2,600,000</u>	Nonformula CTF
\$4,552,000	

This initiative represents a comprehensive program to significantly improve the quality, availability, attractiveness, and efficiency of rail passenger service along Michigan's heavily traveled Detroit-Chicago corridor. The effort takes full advantage of and effectively builds upon \$10 million of already completed local, state, and Amtrak improvements to en route stations. It also benefits from nearly \$60 million of recent Conrail and Amtrak investments in 80 m.p.h. main line track upgrading. Investment activities will include improvements related to the operational flexibility, efficiency, and attractiveness of train equipment. In addition, track and signal improvements will be initiated to further streamline train operations. Further, improvements will be made to station facilities. The combined investments will mean improved service to the traveling public.

11. Discretionary

<u>Preserve</u>	<u>Improve</u>	<u>Total</u>
\$3,563,600	\$3,000,000	\$6,563,600 CTF

This subprogram provides the bureau the ability to respond to emerging issues and to direct resources to areas of greatest need. For example, this could fund critical needs for transit vehicles, rail facilities to support economic development projects, or technical improvements.

12. Rail Grade Crossings

<u>Preserve</u>	<u>Improve</u>	<u>Total</u>
\$3,000,000	\$3,000,000	\$6,000,000 Nonformula CTF

The state is pursuing a comprehensive program to improve the availability, attractiveness, and efficiency of rail passenger service along the Detroit-Chicago corridor. In support of this initiative, improvements to grade crossing protection along this and other passenger rail routes will reinforce the safety of these services to both auto and train travelers. These improvements will also positively impact rail freight services which share these routes with Amtrak passenger service. In addition, the state owns over 825 miles of railroad right-of-way used for freight train only service. Improvement to grade crossing protection along these rights-of-way will upgrade the safety of motorists at locations throughout the state.

AVIATION

HIGHLIGHTS

The citizens and businesses of Michigan enjoy a good system of airports and air service. The system of 243 airports and flying fields is the result of many years of cooperation between state, local, and federal agencies. This program emphasizes preservation of the publicly owned facilities across the state. Fifty-five percent of the \$36 million aeronautics program is targeted at preserving existing facilities. The remainder of the program is devoted to increasing the capacity at existing airports. There are no new facilities programmed for 1988.

Thirty-two airports have projects that either bring them up to recommended standards or preserve the pavement condition. Age and weather combine to cause pavements to deteriorate. To maintain a high level of service, we must devote the majority of the aviation budget to preserving the surface condition of existing runways and taxiways, and to maintaining existing facilities.

Some of the major projects aimed at preservation include:

- *Grand Rapids - paving runway shoulders for \$983,000.
- *Detroit Metro - rehabilitating runway for \$4,000,000.
- *Ironwood - rehabilitating taxiway for \$611,200.
- *Jackson County - reconstructing runway for \$580,000

There are six projects that will improve the facility by constructing new runways, aprons or terminal expansions. These improvements are needed to meet increased demand that exceeds the existing design of the airport.

Some of the major improve projects for 1988 are:

- *Marquette - terminal expansion for \$1,520,000.
- *Flint Bishop Airport - construction of a new apron at \$3,800,000.

AIRPORT SYSTEM CONDITION

Michigan citizens and travellers are afforded access to the national air transportation system through the 243 airports and flying fields located throughout the state. There are air carrier airports for commercial service, and general aviation airports for non-scheduled service.

The 22 commercial airports are all publicly-owned, and can accommodate commercial aircraft of various sizes.

The number of airports and sizes are distributed as follows:

Number	Aircraft Size
5	100 or more passengers
13	50-100 passengers
2	less than 50 passengers
2	less than 10 passengers

General aviation airports are categorized in three primary ways: transport, general utility, and basic utility, depending upon critical aircraft using the airport. The 22 transport airports are publicly-owned and provide service to non-scheduled passengers and cargo. The 76 utility airports are also publicly owned; a variety of aircraft use these airports.

In addition, there are 122 privately-owned airports that are open to the public. These airports do not receive any public funds, but are widely used for corporate and utility purposes. These private airports help to round out air service in Michigan, because over 30% of the registered aircraft are located at these airports. Private airports are being squeezed out by competing land uses and increasing costs for insurance liability.

Airport Condition

An in-house review of 58 airports to determine the physical condition of the runways, taxiways and aprons was conducted in 1985. All of the state's air carrier airports, the major general aviation airports, plus airports scheduled for improvement in 1986 or 1987 were also included in the review. Since that time, no update has been conducted on this review. The data is, however, helpful in understanding airport conditions.

The survey results are presented in the following graphs. Figures A-1 and A-2 show the runway and lighting condition for the 58 airports. A pavement surface rating of closed or poor is considered deficient. A runway lighting rating of poor is considered deficient. Figures A-3 and A-4 show the pavement surface condition for the taxiways and aprons. At each airport the taxiways and aprons are aggregated, then rated.

REVENUE SOURCES

Funding for aviation projects comes from federal grants, the state tax on airplane fuel, and from local taxes. Airline passenger ticket tax accounts for 83% of federal funds. The chief source of income for state funds is the aviation fuel tax, which accounts for 72% of the revenues. Federal grants are appropriated through the Airport and Airways Trust Fund. There are two main types of programs:

- 1) Federal/State/Local funded on a 90/5/5 basis.
- 2) State/Local funded on a 50/50 basis.

In either instance local airport authorities must raise the money needed to match federal or state funds.

The federal government funds 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 of aircraft, must not duplicate existing service from another facility in the same general service area, and must be included on the Michigan State Aviation System Plan (MASP). Justification for improvements, such as runway extensions, must be substantiated before funds are made available. Prior to any allocation of state or federal funds for a project, local revenue must be budgeted for the local match.

The Airline Deregulation Act of 1978 significantly changed Michigan's air service. Subsidies were phased out to the point where only four airports in the state are subsidized today. In 1978, the state received \$8.6 million in subsidies, and that amount dropped to \$1 million in 1986. Federal subsidies for air service are due to terminate in October of 1988 with the expiration of the act. In the event that the essential air service program does expire, alternative measures need to be explored to assure quality air service to small- and medium-sized communities in the state.

EXHIBIT A-1

RUNWAY SURFACE CONDITION

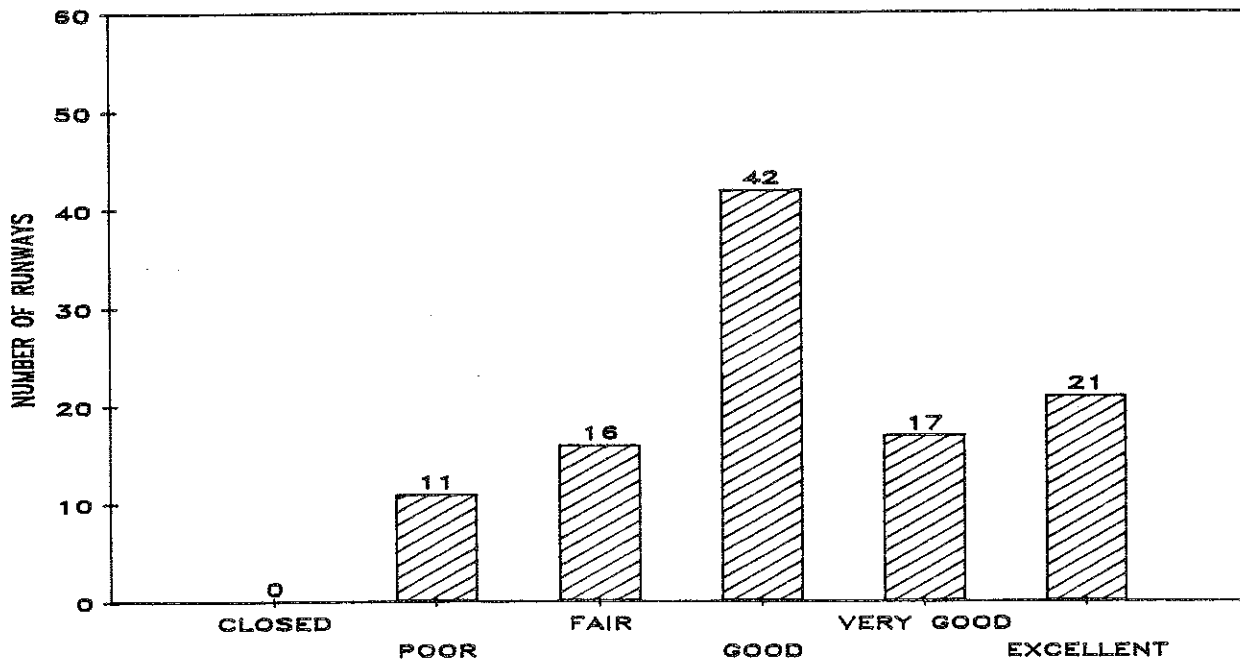


EXHIBIT A-2

RUNWAY LIGHTING CONDITION

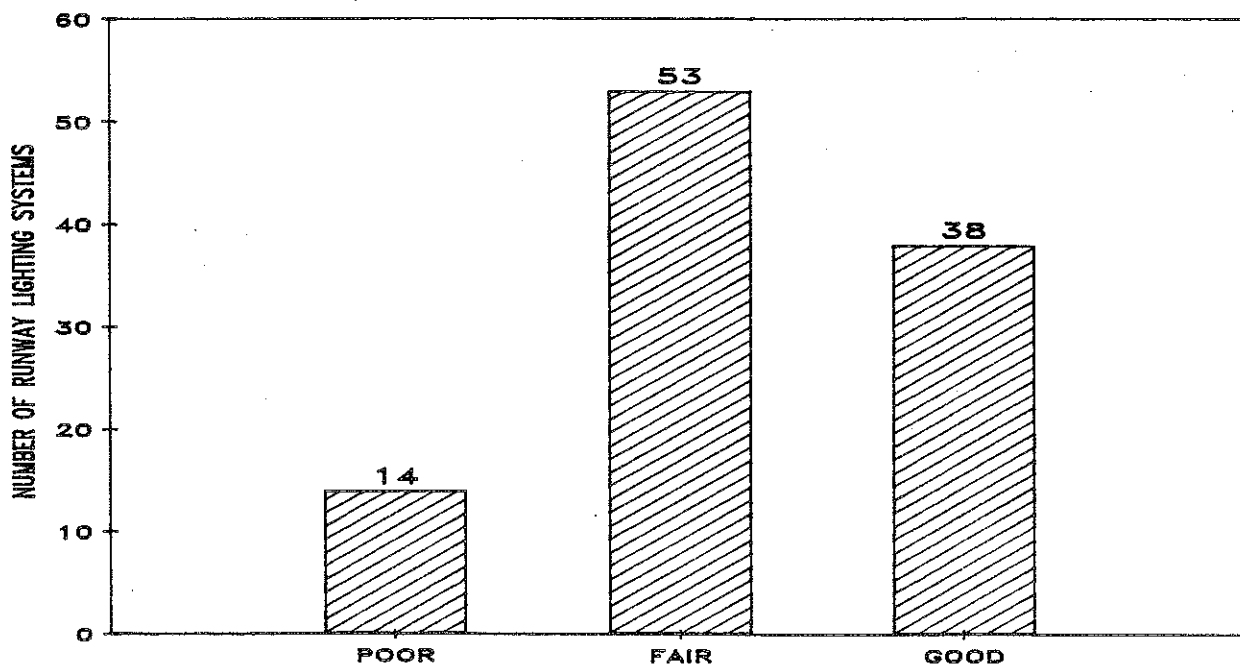


EXHIBIT A-3

TAXIWAY SURFACE CONDITION

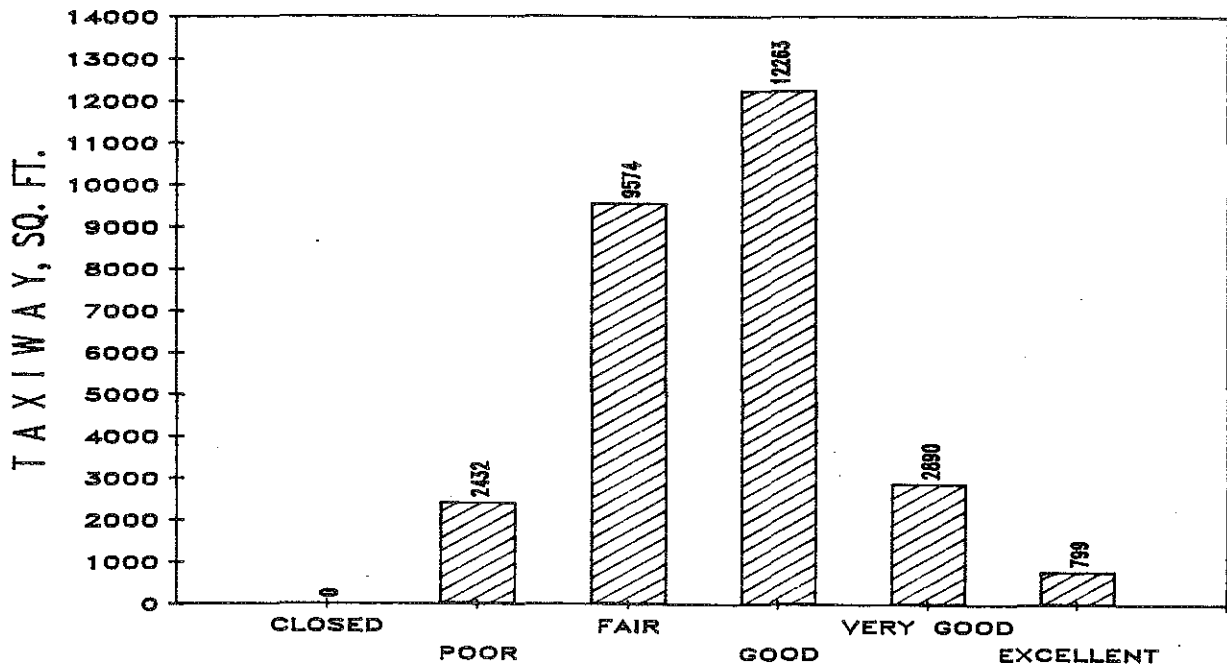
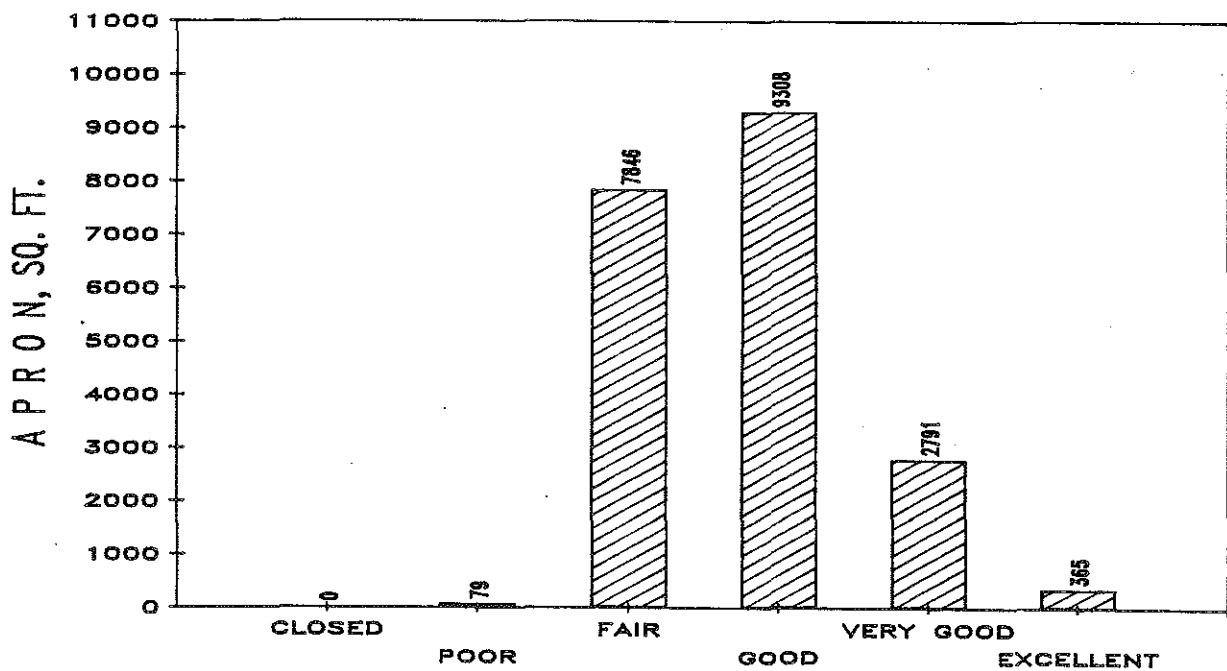


EXHIBIT A-4

APRON SURFACE CONDITION



Also due to the Gramm-Rudman-Hollings legislation, and shifting budget priorities within the Federal Aviation Administration, revenue estimates are lower this year than in previous years. The estimated revenues by source that are available for construction projects for 1988 are shown below.

	<u>A List</u>	<u>B List</u>	<u>Total</u>
Federal Aid	\$19,585,190	\$10,185,750	\$29,770,940
State Funds	1,041,405	132,450	1,173,855
Local Funds	<u>3,458,505</u>	<u>1,210,300</u>	<u>4,668,805</u>
TOTALS	\$24,085,100	\$11,528,500	\$35,613,600

The A List contains sufficient projects to use the minimum expected funding. The B List adds sufficient projects to bring their cost up to the maximum funding we can expect.

As with highways, there is a large balance in the federal account for aviation projects. If the balance were returned to the states, we could go much farther in making needed improvement to our airports and the service they provide to Michigan's citizens.

PRIORITIES AND PROGRAM CATEGORIES

State 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.

All of the projects in the first priority are funded before any succeeding priorities are funded. State funding is sufficient to allow the state to participate in projects into priority four. The remaining projects are funded without state participation on a 90 percent federal and 10 percent local basis.

Program categories are used to group and identify similar types of projects. A category may contain projects from all of the priorities discussed above. The eight categories and their total funding are:

1. Special Programs/Safety \$ 2,423,100

This category includes projects which respond to federal safety and security requirements. It also includes economic development projects of special significance.

2. Reconstruction \$ 11,849,100

Projects that are required to preserve, repair or restore the functional integrity of the landing area are included in this category. Typical projects are rehabilitation of pavements, replacement or rehabilitation of lighting systems. Routine maintenance, such as crack sealing, is excluded.

3. Standards \$ 4,537,000

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

4. Upgrading the Airport Role (Upgrade) \$ 693,000

Projects in this category are designed to enable an airport to handle larger aircraft and longer non-stop routes. For example, extending or strengthening a runway to accommodate larger aircraft is an upgrade.

5. Capacity Development (Capacity) \$ 15,391,700

This category is oriented towards development of increased airport capacity beyond its present use. Typical development includes new runways, apron, and terminal expansion.

6. New Airports - Capacity \$ -0-

These projects are constructed to increase metropolitan system capacity. The category includes all new reliever airports and new commercial service airports.

7. New Airports - Community \$ -0-

This category is used for any new airport which will be the sole airport serving a community. It will normally be a general aviation airport. A small number of commercial service (new or replacement) airports outside of the large metropolitan areas may also be included.

8. Equipment and Buildings \$ 719,000

This category includes maintenance equipment and buildings, including the airport terminal.

Each of the eight categories has been grouped into the broader preserve-improve-expand designations. In relation to aviation, preserve is defined as maintaining existing air service, equipment, and facilities. Improve increases the capacity or service of existing airports. Expand provides a new service or facility. Increasing service to an existing airport would also be an expansion.

The funding for 1987-88 by the program categories and by preserve, improve, and expand are shown in Exhibit A-5 on the following page.

EXHIBIT A-5

**AVIATION PROJECTS SUMMARY
Priority A and B Lists**

<u>PRESERVE</u>	<u>TOTAL</u>	<u>FEDERAL</u>	<u>STATE</u>	<u>LOCAL</u>
Safety/Special Projects	\$2,423,100	\$2,144,790	\$58,455	\$219,855
Reconstruction	11,849,100	10,127,790	548,055	1,173,255
Standards	4,537,000	3,585,600	248,450	702,950
Building & Equipment	719,000	603,900	5,000	110,100
Subtotal	\$19,528,200	\$16,462,080	\$859,960	\$2,206,160
<u>IMPROVE</u>				
Upgrade Role	693,700	624,330	14,685	54,685
Capacity Development	15,391,700	12,684,530	299,210	2,407,960
Subtotal	\$16,085,400	\$13,308,860	\$313,895	\$2,462,645
<u>EXPAND</u>				
Special Projects	0	0	0	0
New Airports-Capacity	0	0	0	0
New Airports-Community	0	0	0	0
Subtotal	\$0	\$0	\$0	\$0
TOTALS	\$35,613,600	\$29,770,940	\$1,173,855	\$4,668,805

1988 AVIATION CAPITAL
OUTLAY PROGRAM

PRIORITY A PROJECTS

CATEGORY 1 - SPECIAL PROGRAMS/SAFETY

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
BIG RAPIDS	ROBEN-HOOD	AIRPORT BEACON	\$ 22,550
		WINDCONE	10,000
DETROIT	DETROIT CITY	SURFACE MONITORING SYSTEM	80,000
GRAND RAPIDS	KENT CO. INTL	PAVE RUNWAY SHOULDERS	983,000
GROSSE ILE	GROSSE ILE	APRON LIGHTING	56,000
	MUNICIPAL	WINDCONE	12,000
		AIRPORT BEACON	12,000
MASON	MASON JEWETT FIELD	PERIMETER FENCING	40,000
MUSKEGON	MUSKEGON CO.	TAXIWAY SIGNS	50,000
PELLSTON	EMMET CO.	SECURITY FENCING	160,000
PORT HURON	ST. CLAIR CO. INTL	MEDIUM INTENSITY RWY LTG	130,000
		AIRPORT BEACON	5,600
SAGINAW	HARRY W. BROWNE	PAPI	30,000
STURGIS	KIRSCH MUNI	APRON FLOOD LIGHTING	15,000
		CATEGORY TOTAL	\$1,606,100

CATEGORY 2 - RECONSTRUCTION

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
BIG RAPIDS	ROBEN-HOOD	PRIMARY RWY CONSTRUCTION	\$1,213,200
		NEW TAXIWAY	25,000
		NEW TAXIWAY	16,200
DETROIT	DETROIT METRO WAYNE CO.	RUNWAY REHABILITATION	4,000,000
<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
GROSSE ILE	GROSSE ILE	APRON REHABILITATION	\$ 900,000
	MUNICIPAL	TAXIWAY REHABILITATION	626,000
IRON MTN/	FORD	RECONSTRUCT APRON	50,000

KINGSFORD

IRONWOOD	GOGEBIC CO.	TAXIWAY REHABILITATION	411,200
		TAXIWAY REHABILITATION	200,000
JACKSON	JACKSON CO./ REYNOLDS FIELD	RECONSTRUCT RUNWAY	580,000
KALAMAZOO	KALAMAZOO CO. AIRPORT	RUNWAY REHABILITATION	585,000
LUDINGTON	MASON CO.	RUNWAY REHABILITATION	230,000
		TAXIWAY REHABILITATION	86,000
MUSKEGON	MUSKEGON CO.	TAXIWAY REHABILITATION	93,800
ROSCOMMON	ROSCOMMON CONSERVATION	SEAL RUNWAY	60,000
SAGINAW	HARRY W. BROWNE	RUNWAY REHABILITATION	417,000
STURGIS	KIRSCH MUNI	RUNWAY REHABILITATION	218,700
TRAVERSE CITY	SHERRY CAPITAL	RUNWAY REHABILITATION	504,000
TROY	TROY-OAKLAND	SEAL RUNWAY	250,000
		RUNWAY DRAINAGE	75,000
CATEGORY TOTAL			\$10,541,100

CATEGORY 3 - STANDARDS

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
CADILLAC	WEXFORD CO.	LAND FOR EXISTING AIRPORT	\$ 300,000
DETROIT	DETROIT METRO/ WAYNE CO.	LAND FOR EXISTING AIRPORT	200,000
DETROIT	WILLOW RUN	LAND FOR EXISTING AIRPORT	750,000
<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
HASTINGS	HASTINGS MUNI	CONSTRUCT NEW APRON NEW TAXIWAY	\$ 50,000 60,000
KALAMAZOO	KALAMAZOO CO. AIRPORT	LAND FOR EXISTING AIRPORT	100,000
LANSING	CAPITAL CITY	WIDEN TAXIWAY LAND FOR EXISTING AIRPORT	34,000 700,000

MASON	MASON JEWETT FIELD	LENGTHEN EXISTING RUNWAY	433,000
MONROE	MONROE CUSTER	LAND FOR EXISTING AIRPORT	1,150,000
SAGINAW	HARRY W. BROWNE	LAND REIMBURSEMENT	70,000
TROY	TROY/OAKLAND	TIE-DOWN AREA	120,000
		CATEGORY TOTAL	\$3,967,000

CATEGORY 4 - UPGRADING AIRPORT ROLE (UPGRADE)

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
HOWELL	LIVINGSTON CO.	LAND FOR EXISTING AIRPORT	\$ 400,000
STURGIS	KIRSCH MUNI	RWY STRENGTHENING OVERLAY	293,700
		CATEGORY TOTAL	\$ 693,700

CATEGORY 5 - CAPACITY DEVELOPMENT (CAPACITY)

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
FLINT	BISHOP INTL	CONSTRUCT NEW APRON	\$3,800,000
LANSING	CAPITAL CITY	APRON EXPANSION	462,000
MARQUETTE	MARQUETTE CO.	TERMINAL BUILDING	1,520,000
MONROE	MONROE CUSTER	NEW TAXIWAY	550,000
<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
MUSKEGON	MUSKEGON CO.	APRON EXPANSION	245,000
STURGIS	KIRSCH MUNI	APRON EXPANSION	131,200
		CATEGORY TOTAL	\$6,708,200

CATEGORY 8 - EQUIPMENT AND BUILDINGS

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT LOCATION</u>	<u>TOTAL COST</u>
DETROIT	DETROIT CITY	CFR BUILDING MOD	\$ 300,000
		SRE TRUCK PLOW/BLADE (2)	200,000
MARQUETTE	MARQUETTE CO.	CFR EQUIPMENT	21,000

MASON	MASON JEWETT	ACCESS ROAD	38,000
	FIELD	UTILITY RELOCATION	10,000
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		CATEGORY TOTAL	\$ 569,000

GRAND TOTAL \$24,085,100

1988 AVIATION CAPITAL
OUTLAY PROGRAM

PRIORITY B PROJECTS

CATEGORY 1 - SPECIAL PROGRAMS/SAFETY

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
DETROIT	WILLOW RUN	PERIMETER FENCING	\$ 75,000
ESCANABA	DELTA CO.	PERIMETER FENCING	320,000
HOWELL	LIVINGSTON CO.	PERIMETER FENCING	60,000
LUDINGTON	MASON CO.	PERIMETER FENCING AIRPORT BEACON	105,000 8,000
MANISTEE	MANISTEE CO./ BLACKER	PERIMETER FENCING	144,000
OWOSSO	OWOSSO CITY	AIRPORT BEACON TAXIWAY LIGHTING REIL APRON FLOOD LIGHTING	20,000 40,000 15,000 30,000
CATEGORY TOTAL			\$ 817,000

CATEGORY 2 - RECONSTRUCTION

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
BELLAIRE	ANTRIM CO.	SEAL TAXIWAY SEAL APRON SEAL TAXIWAY SEAL TAXIWAY	\$ 90,000 70,000 30,000 30,000
BIG RAPIDS	ROBEN-HOOD	CONSTRUCT NEW APRON TERMINAL BUILDING	341,000 200,000
DETROIT	DETROIT CITY	RWY STRENGTHENING OVERLAY	340,000
HASTINGS	HASTINGS MUNI	RUNWAY REHABILITATION	175,000
PONTIAC	OAKLAND/ PONTIAC	TAXISTREET CONSTR	32,000
CATEGORY TOTAL			\$1,308,000

CATEGORY 3 - STANDARDS

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
CADILLAC	WEXFORD CO.	PAVE EXISTING RUNWAY	\$ 300,000

HASTINGS	HASTINGS MUNI	NEW TAXIWAY	70,000
		NEW TAXIWAY	75,000
IRON MTN/ KINGSFORD	FORD	EXTEND TAXIWAY	50,000
OWOSSO	OWOSSO CITY	LAND FOR EXISTING AIRPORT	75,000
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CATEGORY TOTAL			\$ 570,000

CATEGORY 5 - CAPACITY DEVELOPMENT (CAPACITY)

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
DETROIT	DETROIT METRO/ WAYNE CO.	CONSTRUCT NEW APRON	\$4,000,000
IRONWOOD	GOGEBIC CO.	APRON EXPANSION	200,000
JACKSON	JACKSON CO./ REYNOLDS FILED	CONSTRUCT NEW APRON NEW TAXIWAY	50,000 216,000
LUDINGTON	MASON CO.	APRON EXPANSION	180,000
OWOSSO	OWOSSO CITY	APRON EXPANSION NEW TAXIWAY	150,000 37,500
PONTIAC	OAKLAND/ PONTIAC	LAND FOR EXISTING AIRPORT	3,850,000
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CATEGORY TOTAL			\$8,683,500

CATEGORY 8 - EQUIPMENT AND BUILDINGS

<u>LOCATION</u>	<u>AIRPORT</u>	<u>PROJECT DESCRIPTION</u>	<u>TOTAL COST</u>
JACKSON	JACKSON CO.	SRE SWEEPER	\$ 150,000
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CATEGORY TOTAL			\$ 150,000

GRAND TOTAL \$11,528,500