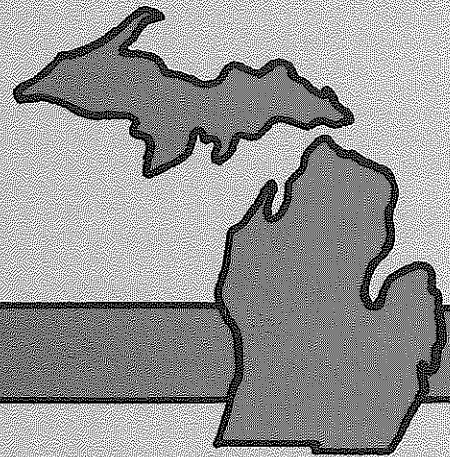


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MICHIGAN DEPARTMENT OF TRANSPORTATION

Forces Affecting Highway Transportation
Revenue & Costs
In Michigan



BUREAU OF TRANSPORTATION PLANNING

Forces Affecting Highway Transportation
Revenue & Costs
In Michigan

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July 7, 1986

ACKNOWLEDGEMENTS

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Executive Summary

Act 51 of the Public Acts of 1951 (as amended), is the current legislation which provides for the distribution and spending priorities of state transportation funds. The fundamental philosophy of Michigan's transportation legislation is based upon the concept of "those who use the system, pay for the system."

Since 1982, use of Michigan's transportation system has risen rapidly, while costs and revenues have risen far more slowly. Revenues, although based on use, have not kept pace with use or inflation.

The fuel tax is the primary source of transportation revenue, comprising about 65 percent of all revenue. The tax is based on the number of gallons sold regardless of price. Since 1975, vehicle travel has increased by about 10 percent, while the amount of fuel purchased has dropped by over 25 percent. This phenomenon is directly attributable to the increased fuel efficiency of today's vehicles.

Revenue from the license tax and the sales tax, which are the two remaining sources of transportation revenue, follow the state's economy. Revenues rise when the economy grows, and fall when it stagnates.

The cost of providing and maintaining transportation facilities and services has followed the rate of inflation. It rose rapidly in the late 70s. Since 1980, maintenance and operation costs have continued to rise, while construction costs eased until 1985 when prices increased sharply. Revenues, however, have not kept pace with inflation.

Should these cost and revenue trends continue, it is possible that, by the end of the decade maintenance, operation, and other associated costs will consume all available revenue, leaving nothing for construction or replacement of facilities and services.

Introduction

Providing Michigan with an effective and cost-efficient transportation system is an important and difficult responsibility, requiring the balancing of revenues and expenditures. We can develop better strategies to deal with these issues by understanding the factors which influence revenues and expenditures. This report examines the forces behind revenue and expenditure patterns for the Michigan Department of Transportation. The sections are as follows:

I. Forces Affecting Transportation Revenue

- Examines the department's revenue from the current tax structure and from outside the tax structure such as direct grants and revenue policy.

II. Forces Affecting Transportation Costs

- Examines the expenditure of funds as governed by various types of costs incurred. These include capital costs as well as administration and operations.

III. Costs Versus Revenue

- Addresses the overriding issue of how revenue compares with the department's cost of doing business. By comparing forecasted future costs and revenue, we can anticipate needed changes in either revenue or operations.

IV. Conclusion

- Provides a summary of facts and comparisons presented in the previous portions of the paper.

Appendix A. Likely Directions in Federal Transportation Legislation

- Provides a summary of some current transportation bills before Congress.

I. Forces Affecting Transportation Revenue

Transportation revenue is derived primarily from user taxes and fees. To understand the generation of transportation revenue, one must understand not only the current tax structure but the forces that act upon it. This section presents an examination of that structure and those forces. It also examines potential changes in federal policy which may affect the current tax structure, revenue policies, and direct grants.

The Current State Tax Structure

The largest transportation fund is The Michigan Transportation Fund (MTF) which is made up of vehicle registration fees and motor fuel taxes. This revenue is then distributed to counties, municipalities and two state transportation funds, The State Trunkline Fund (STF) for highways and The Comprehensive Transportation Fund for non-highway modes. The Aeronautics Fund revenue is supported by aviation fuel taxes and aircraft registration fees.

Fuel Taxes

Motor vehicle fuel taxes are applied to each gallon of fuel sold; thus the revenue is directly related to consumption. More consumption will mean more revenue and less consumption will mean less revenue. The consumption of fuel is in turn related to two basic phenomena: the amount of miles traveled and the fuel efficiency of the vehicles. These phenomena are in turn driven by other forces such as the number of people available to drive and their ability to spend income for transportation.

Motor vehicle travel since 1936 has shown the following characteristics:

- Generally increases each year. Growth approximated 4% annually from 1937 to 1977. Recessions in recent years have interrupted this growth.
- Decreases during bad economic times (1974, 1980) and special situations such as during World War II (1941-1945) and the oil embargo (1974) (see figure 1).
- In the past 10 years travel has not been stable - going down during recessions and back up during recovery.
- The general increase in travel is not due just to increasing population since vehicle miles of travel per capita also has shown increases (see figure 2).

Figures 1 and 2 illustrate these points. One might assume that if travel continues going up that we can expect increasing revenue each year. This may not always be true, for even if travel goes up, revenue can go down due to the increased fuel efficiency of vehicles.

MICHIGAN VEHICLE MILES OF TRAVEL
1936 - 1984

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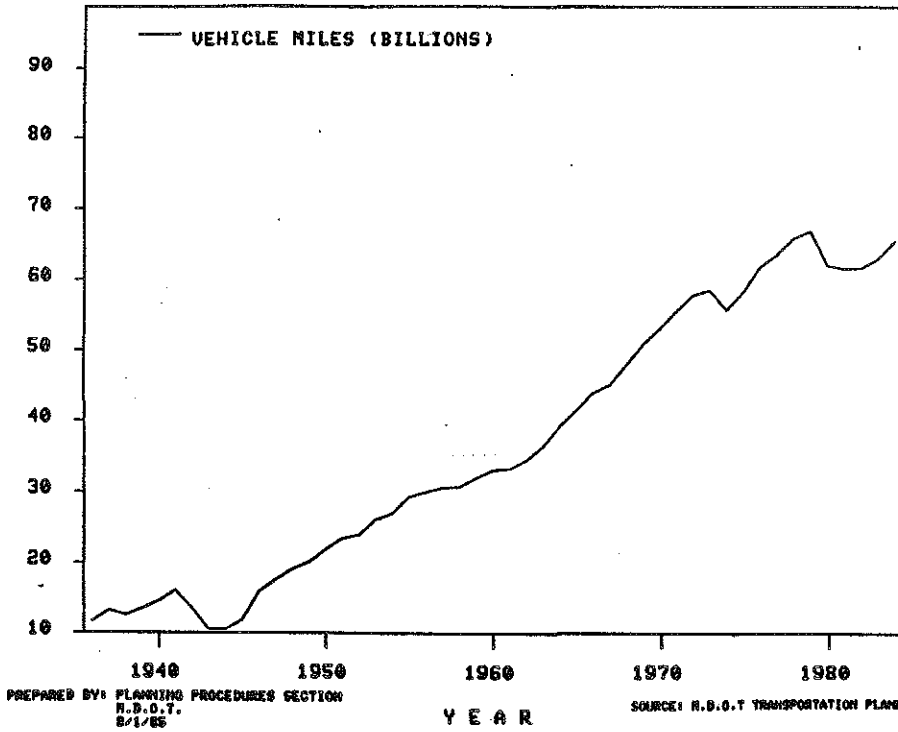


Figure 1

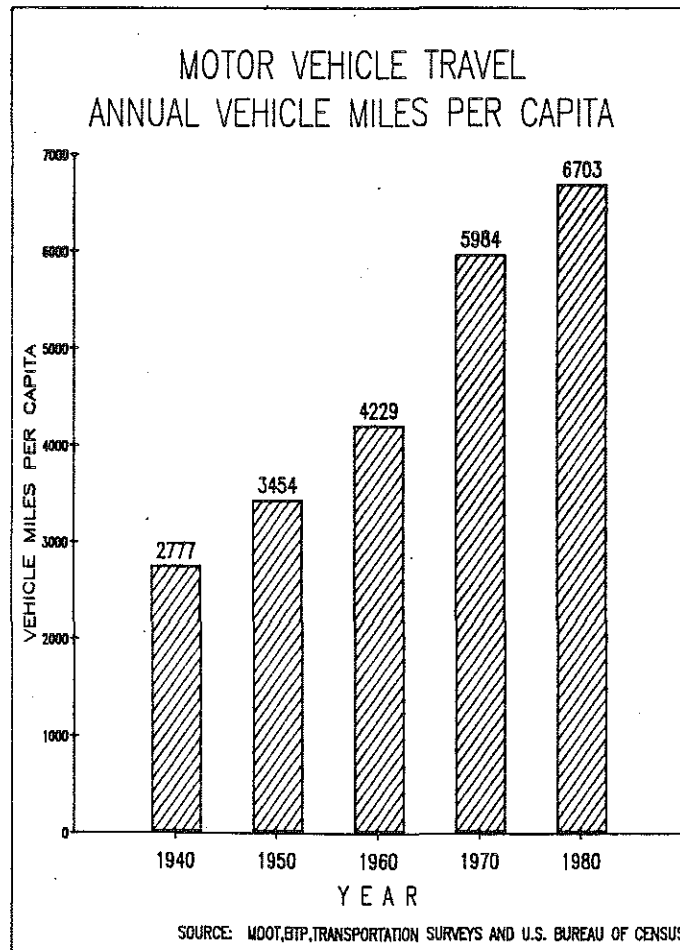
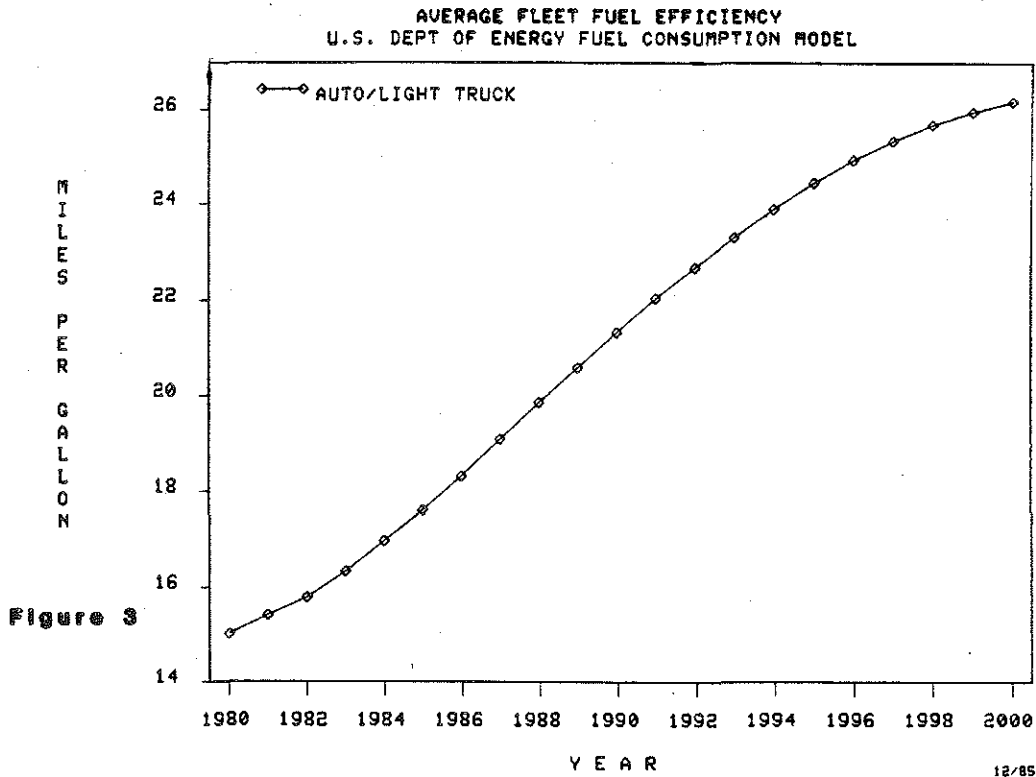


Figure 2

When the average fleet miles-per-gallon (MPG) increases, the number of gallons of fuel consumed decreases and revenue goes down (when travel remains constant). According to the U.S. Department of Energy Fuel Consumption Model the average fleet MPG for auto/light truck is expected to increase each year to the year 2000 (see figure 3). Fuel efficiency increases are also expected in heavy trucks and in airplanes. Therefore, revenue from fuel taxes will decline unless offset by a large enough increase in miles traveled. In Michigan, because of increased MPG, we expect motor fuel tax revenue to begin declining in 1988, in spite of increasing vehicle miles of travel (VMT).



Prior to 1974 fuel efficiency had not been a primary concern. The oil embargo caused the price of gasoline to jump abruptly. Prices increased regularly until they peaked in 1982. Rising prices and the fear of inadequate supplies of gasoline led to more efficient vehicles. Eventually less gasoline was consumed and fuel tax revenues declined. The rebounding economy and a decline in gasoline prices have increased VMT growth and caused a rise in fuel tax revenue for the last several years. Recent large declines in fuel prices could indicate further rises in fuel tax revenue. As previously noted, however, the federally mandated higher MPG requirements for future vehicles will likely cause the revenue to begin to decline again in 1988. This includes an adjustment for recent relaxation of MPG standards. However, increased pressure for waivers of these standards is continuing.

Another force affecting transportation revenue is personal income. Personal income has been found to be related to VMT and, therefore, fuel tax revenue. MDOT has found an excellent statistical correlation between Michigan personal income (in 1972 dollars) and Michigan VMT. Figure 4 shows the statistical estimate of VMT (based on personal income) compared to actual VMT. Michigan personal income is expected to continue increasing.

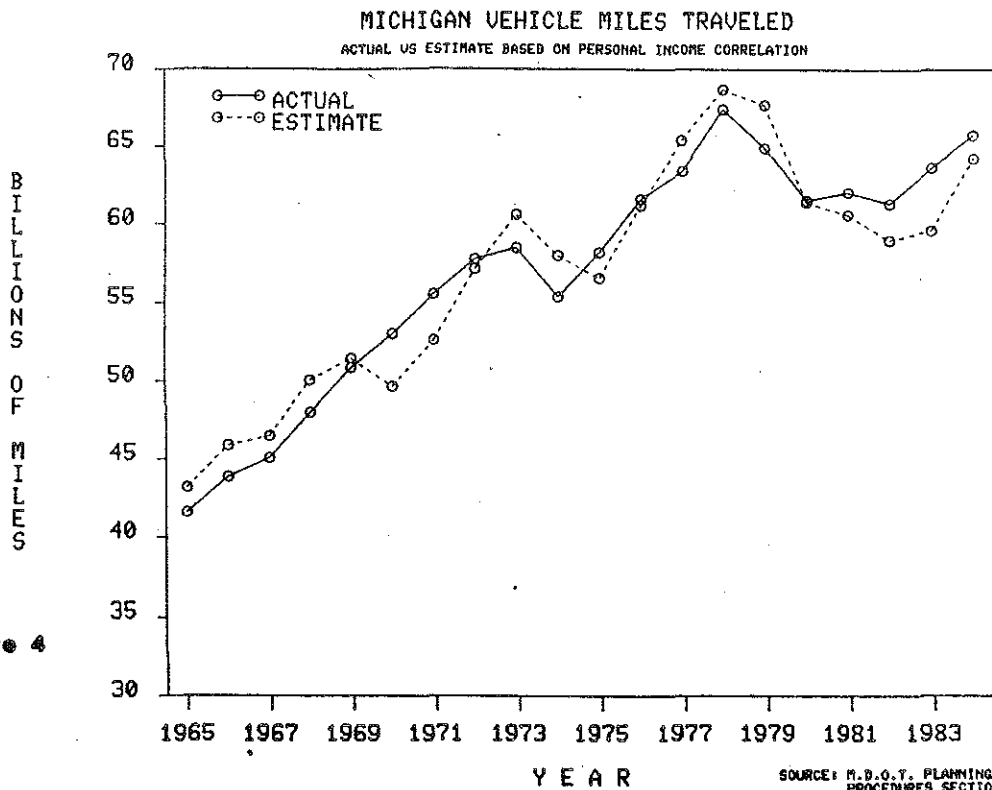


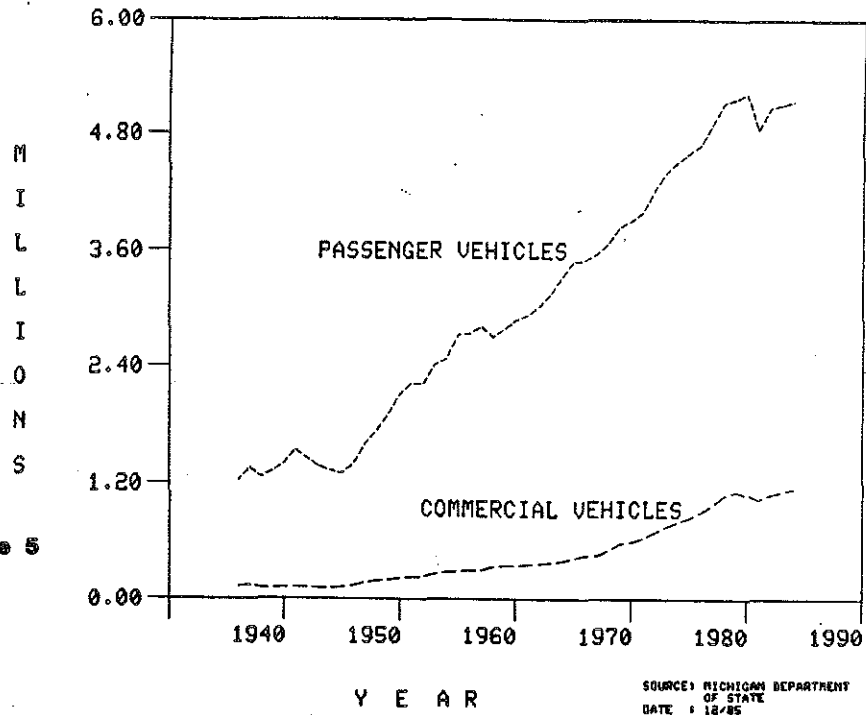
Figure 4

Vehicle Registration Fees

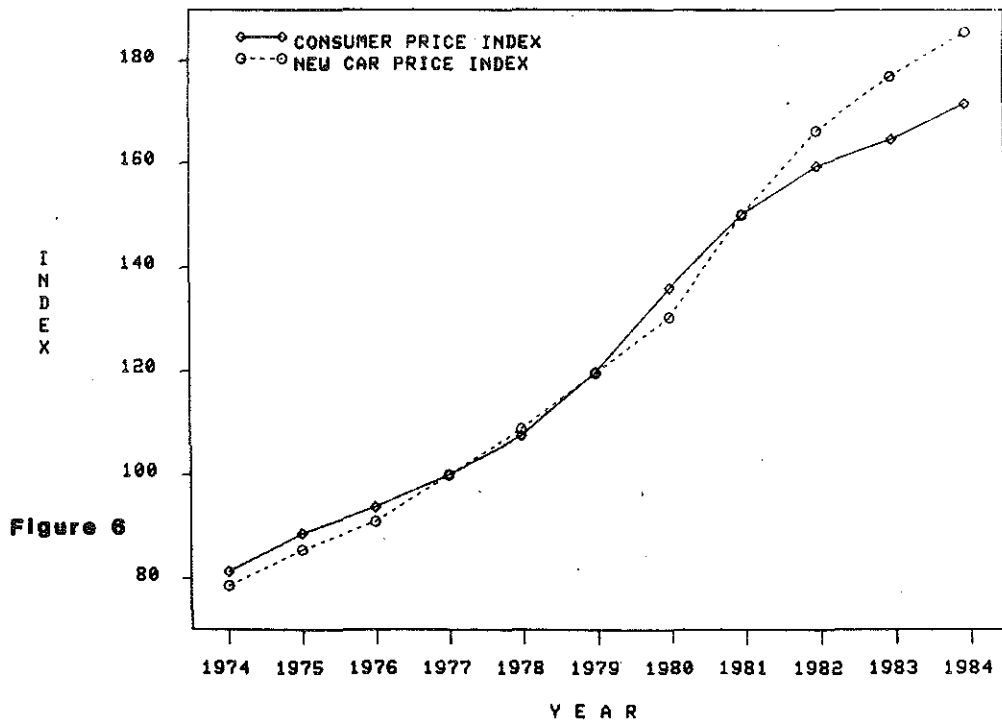
Vehicle registration fees are based on either weight or value of the vehicle. Commercial trucks are taxed by weight. Heavy trucks produce more revenue than light trucks. Prior to a change in the tax laws in 1982, cars were taxed by weight. Older cars (1983 and earlier) continue to be taxed on weight. Newer cars (beginning with 1984) are taxed according to the base price of the vehicle (value tax). For autos, the weight influence will eventually die out since older cars taxed on weight will gradually be eliminated from the fleet as they are scrapped due to old age.

The number of motor vehicles registered each year has generally increased (see figure 5). This would tend to cause revenue to go up each year. However, there are two modifying forces. They are the weight of vehicles and the price of new cars. The weight has declined in recent years, which tends to lower revenue. The price of new cars, however, has been going up which tends to raise revenue. In the past, except for 1981, vehicle registration revenues have generally risen. Because of the 1981 decline in revenue it was not until 1983 that registration revenues were above their 1980 level. The value tax should generally keep up with inflation (as measured by the consumer price index, CPI). Figure 6 shows the new car price index is close to the consumer price index thru 1981. Recently the new car price index has been above the CPI. (These figures have a 1977 base value of 100 and show the relative change from year to year of \$100 worth of goods.)

MICHIGAN VEHICLE REGISTRATIONS 1936-1984



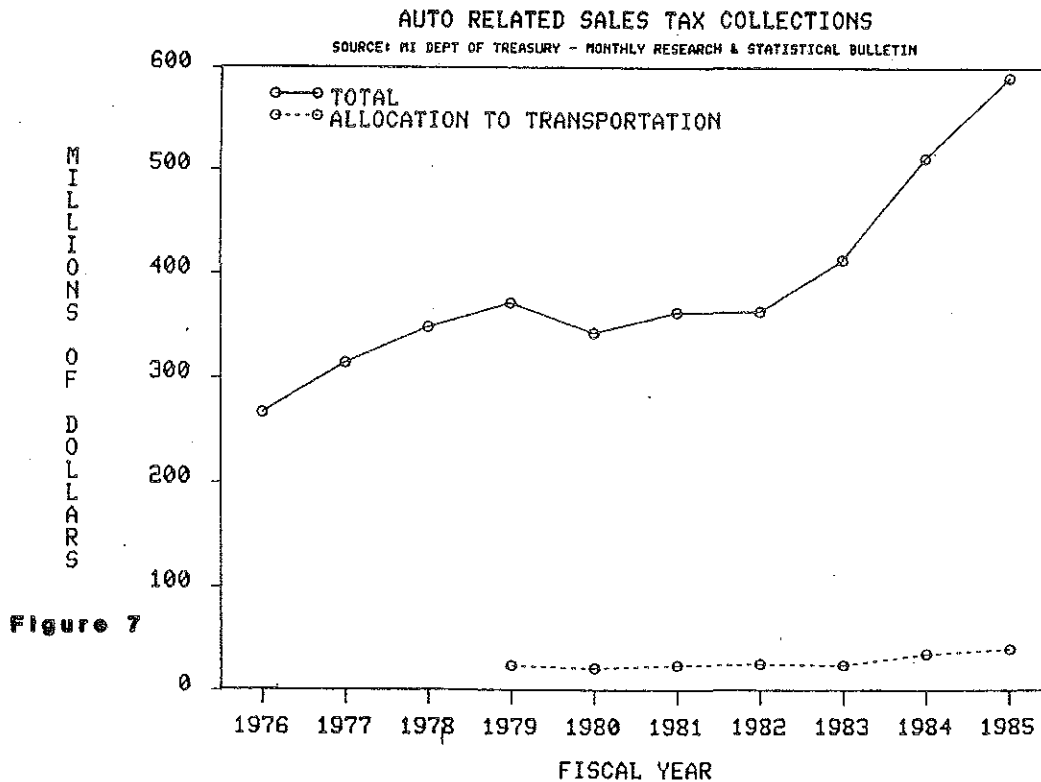
NEW CAR PRICE INDEX VS CONSUMER PRICE INDEX
SOURCE: CHASE ECONOMETRICS



Sales Tax

The last major tax mechanism is the sales tax on certain items such as motor vehicles, gasoline, vehicle parts, and accessories. For the fiscal year ending September 30, 1985, \$590.7 million was generated from these sources. Existing legislation allows only a portion of this for transportation. Most of the revenue (60%) goes to the school aid fund. Local governments receive 15% in the form of revenue sharing and 18% goes to the state General Fund. Although the constitution would allow a maximum of 25% to transportation, in 1985 only \$41 million (about 7%) went to the Comprehensive Transportation Fund. Transportation did not receive a portion of the sales tax revenue prior to 1979.

Generally retail sales will increase during good economic times and decrease during bad economic times. Figure 7 shows a decline in 1980-82 for all auto-related sales tax.



Changes Most Affecting State Transportation Tax Revenues

Fuel taxes account for 67% of the revenue going to the Michigan Transportation Fund (in fiscal year 1984). The tax on gasoline accounts for 92% of the fuel tax revenue. Diesel fuel taxes and liquified petroleum gas taxes make up the balance. Based on the significant increases in fuel efficiency forecasts there will be a delicate balancing act between increasing MPG which will tend to lower revenue and increasing travel which will tend to raise revenue.

Fuel tax revenue is expected to increase until 1988 when the increasing fuel efficiency of vehicles will cause a gradual decline in fuel tax revenue.

According to MDOT's latest long term forecast Michigan can expect an increase in travel of 62%, but a decrease in fuel consumed of over 5% during the period 1980-2000. The diesel portion of Michigan fuel consumed is expected to increase. Other states expect similar results. For example, the Wisconsin State Highway Plan's "most likely" forecast projects a 1980-2000 increase in total state travel of 55%, but a 7% decrease in fuel consumption. Wisconsin also expects diesel consumption to increase.

Vehicle registration taxes and fees account for about 30% of the revenue to the Michigan Transportation Fund. The main forces affecting this revenue are the number of autos registered and the base price of new cars. Revenues from the commercial weight taxes are only about 36% of all the vehicle registration revenues.

As noted in figure 8, the total revenue will still increase slightly each year due to the vehicle registration portion of the revenue, which will offset the declines in fuel tax revenue.

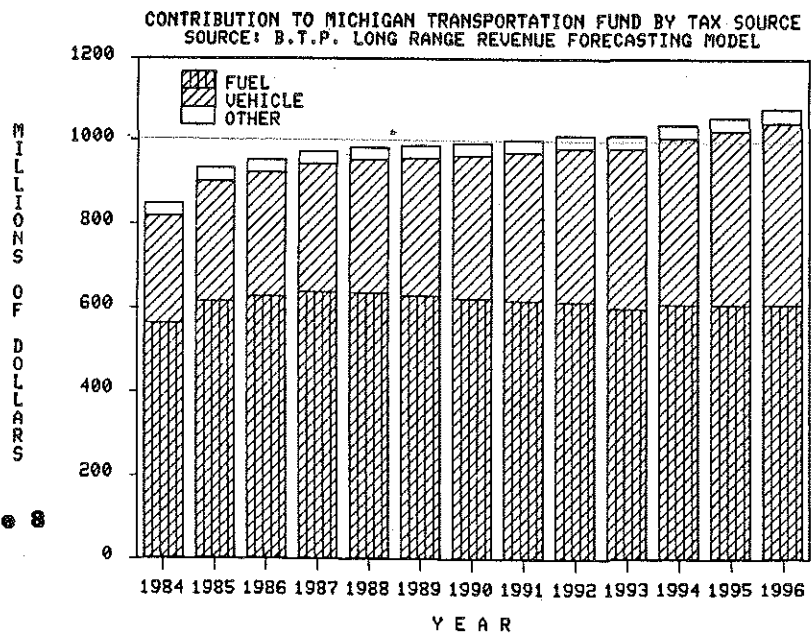


Figure 8

Federal-Aid Highway Program

The Federal-Aid Highway Program is made up of categorical programs for which federal funds may be used in the construction, reconstruction and improvement of designated routes and safety programs. Highway user taxes are the major sources of funds for federal highway programs. These funds are distributed to state-administered programs from revenue collected and placed in the Federal Highway Trust Fund (FHTF).

The Federal-Aid Highway Program is a reimbursement program. This means that initially states must pay for all of the project. Later states can be reimbursed for the 77% to 90% share paid for by FHWA. Most state highway projects in Michigan are funded this way in order to take advantage of all available federal aid. Of critical concern to Michigan is our ability to secure an estimated \$3.5 billion in federal highway funds between 1983 and 1994. Those funds allocated to Michigan that remain unmatched are retained by the federal government and distributed to other states.

However, it is not always desirable for a project to be funded with federal funds due to construction standards tied to the use of the funds. Most of the time the federal standards are appropriate in Michigan. There are some low-volume roads, such as scenic highways, for which federal standards would impose higher construction costs than are necessary. By using state funds and thereby not being obligated to comply with federal standards, more of the scenic quality of a road can be preserved. Less clearing of trees and fewer changes in road elevation would be required. This is more desirable from an environmental viewpoint. Thus, a road like M-119 from Harbor Springs to Cross Village can be upgraded for less cost, cause little environmental disruption, and preserve the scenic tourist quality of the road.

Potential Changes In Federal Policy

The FHTF was established in 1956 to help finance the Interstate Highway System and provide funding to other federal-aid highways. The Interstate Highway System should be completed by 1991. With the completion date drawing near, the major concern has shifted from construction to preservation and reconstruction. Providing the needed revenue to fulfill this goal will be of utmost importance to all levels of government.

The U.S. Treasury Department and Congressional Budget Office (CBO) projects lower FHTF receipts, resulting in less funds available for highway programs. The decrease in FHTF receipts are due to the more fuel-efficient cars and the federal tax exemptions for gasohol. The fuel tax exemption for gasohol has made a significant impact on highway user revenues at the federal level. The 5-cent gasohol exemption in 1983 cost the FHTF an estimated \$220 million in revenue. The current 6-cent gasohol exemption will result in an even larger cost to the fund; some highway officials predict \$500-800 million lost annually in revenue. The administration has estimated that revenue collected and deposited in the FHTF will average about \$13 billion annually for the next 4 years. It is their proposal to limit funding for programs supported by FHTF to the average amount of user fee receipts. However, since there is a current fund balance of over \$9 billion, this leaves an untapped source of revenue.

Transportation revenues available to states are subject to continually changing governmental policies. Shifts in legislative policy may alter federal funds necessary to ensure an adequate level of service at the state

and local level. The Gramm-Rudman-Hollings law, signed by the President in December of 1985, is one such policy. The law sets a strict timetable for achieving a balanced budget by 1991. Under the budget law, legislative deficit cannot exceed the Congressional Budget Office (CBO) and the Office of Management and Budget (OMB) estimates of the national debt for that budgetary year. If Congress budgetary legislation exceeds the estimated deficit, the General Accounting Office (GAO) will prepare its own automatic across-the-board cuts to domestic and non-domestic programs. The reductions are applied to all federal programs not previously exempted from spending cuts. The automatic cuts outlined by GAO will take effect if Congress and the President cannot meet the estimated deficit target.

The law has already required cuts in spending of up to \$11.7 billion in the 1986 national budget. Most domestic and non-domestic programs will have to be cut by 4.3 percent. Because of these cuts a lower obligational authority was imposed on MDOT on March 1, 1986. Obligational authority refers to the current limit for which construction contracts can be let. Apportionments refer to each state's share (according to a formula) of the FHTF revenue for a given year. In recent years states have been allowed to use (obligate) an amount less than the apportionment formula amount. The obligational limit has been about 85% of the apportionment.

The whipsaw effect of changing policies on a once-stable program should not be underestimated. Michigan's original 1986 federal apportionments, for example totaled \$356 million with an obligational authority of \$306 million. The original obligational authority was later lowered to \$294 million. The Gramm-Rudman-Hollings law would have decreased Michigan's obligation authority an additional \$13.3 million, creating a total program reduction of \$25.3 million. However, the Omnibus Budget Reconciliation Bill then increased the amount to \$311.7 million. Such frequent changes make the formulation of a stable program extremely difficult.

Funding for certain modes are tied to the amount of money available from the federal government. Any reduction in federal aid will cause either an increased burden on state and local governments or a reduced level of service provided. Appendix A shows the current provisions of various bills in Congress which reauthorize federal aid transportation programs.

Another bill in Congress, the National Infrastructure Act might be one of many needed solutions to the growing infrastructure problem. The bill would create a national infrastructure fund which would distribute \$3 billion annually for 10 years to states, based on their population as a percentage of the total population. This bill requires that at least 30 percent of the grants be used to make interest-free loans to local governments. This would be approximately \$115 million in interest-free investment capital each year for Michigan. The fund would provide interest-free loans for construction and improvement of highways, bridges, water supply and distribution system, mass transportation facilities and equipment, and wastewater treatment plants.

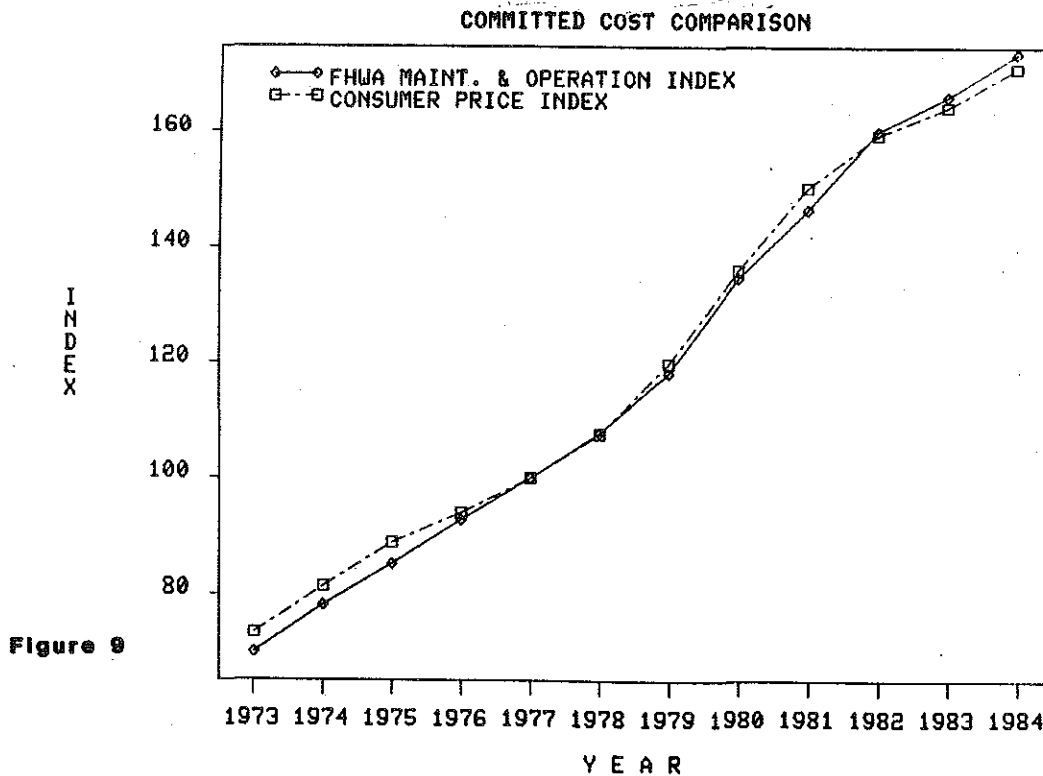
II. Forces Affecting Transportation Costs

A discussion of revenue alone is not enough to address the management of Michigan's transportation needs. The amount of revenue needed depends, of course, on the costs of providing for transportation facilities and service. There are several important cost areas affecting transportation.

Committed Costs

By law, certain costs, which will be referred to as committed costs, must be paid first. The most important of these items, in order of legal priority, are debt service, administration and operations (which includes tort liability), and routine maintenance.

A major force affecting committed costs has been the increase in the cost of labor and materials. As an example of past trends in committed costs we can look at figures from the Federal Highway Administration (FHWA) for highway maintenance and operations of all states. These are compared with the consumer price index in figure 9. The average for all states has increased about the same as the consumer price index. Actual expenditures for STF committed costs in Michigan have increased less than prices due to slower revenue growth which in turn limited committed-cost expenditures (as well as capital expenditures). Committed-cost expenditures were slowed by reducing staff levels 21% since 1979 and decreasing desirable but lower priority types of maintenance such as weed cutting. Many private businesses have been able to increase prices (as indicated by the consumer price index). As shown by figure 10, STF revenue has been unable to match inflation.



STATE TRUNKLINE FUND
REVENUE VS. INFLATION

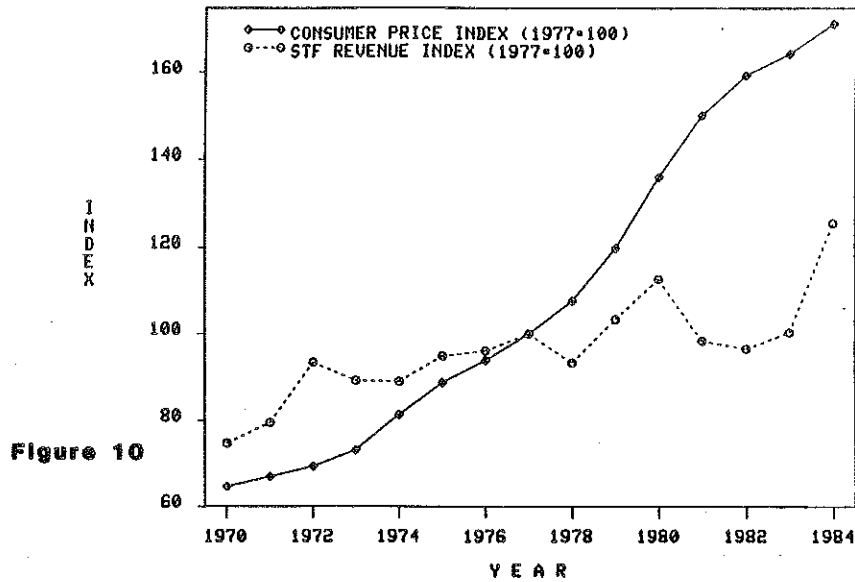


Figure 10

Tort liability deserves a special note since there has been such a dramatic increase in this cost in the past few years. Ironically, in the past five years, through an aggressive safety program, total accidents on state trunklines have decreased 23% and injuries have decreased 30%. Despite this record, the number of negligence litigation cases against the department has increased 103% during the same period. The dollar amount of payouts is even more dramatic. Figure 11 shows that 1983 and 1984 payouts were up 435% and 330% respectively from 1982. Because MDOT has larger revenue resources than individuals, MDOT often has to pay negligence claims which are much larger than its share of fault. This can happen when liability is shared by the state and an individual. This shared liability is called "joint and several" liability and means shared responsibility to pay claims. However, if either party does not have the resources to pay their share of the claim then the other party can be forced to pay the remainder of that share.

JUDGEMENTS AND SETTLEMENTS PAID
MICHIGAN DEPARTMENT OF TRANSPORTATION

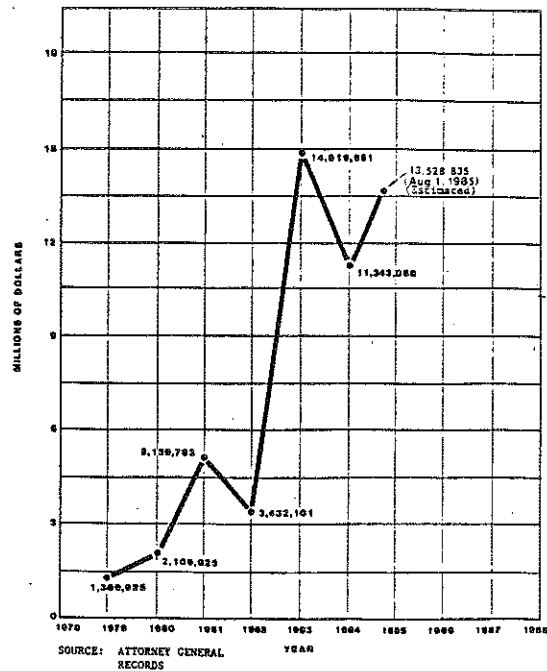


Figure 11

Capital Costs

After committed costs are paid for, the remaining revenue can be applied to major capital improvements. Capital improvements are major construction projects such as a new bridge, a new roadway on a new location or replacement of an existing roadbed and surface. In recent years the major emphasis has been on the rehabilitation of existing facilities.

The FHWA maintains a cost index for all highway construction projects in the nation receiving federal aid. Michigan construction costs have been below the national average in recent years. Figure 12 shows that inflationary times, such as the late 1970's, place an extreme burden on the cost of construction. While the consumer price index was increasing over 10% a year, the federal construction price index was increasing over 30% a year. During the early 80's construction prices actually declined, however, prices have once again rebounded sharply. These swings in prices are due to the industry's efforts to react to good or bad economic times and the large or small amount of construction work available.

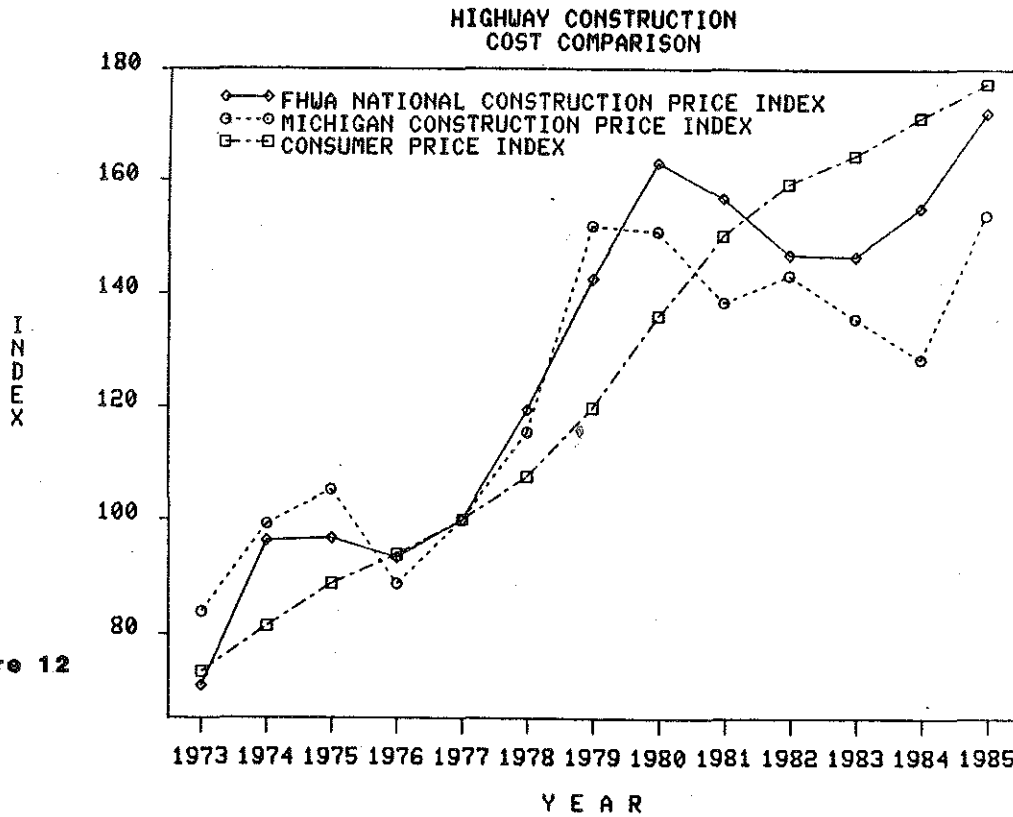


Figure 12

III. Cost Versus Revenue

In the final analysis, MDOT's concern is continued superior service. While no one can predict the future with certainty, likely trends can be forecasted for a variety of the forces which determine transportation revenue and costs. Thus, costs and revenues can be projected and compared. To help deal with unexpected changes, the not-so-likely trends in these forces can also be evaluated.

As previously indicated in figure 8, the MTF revenue is expected to increase each year but more slowly after 1988. These forecasts assume no major recession and modest inflation. Increasing vehicle registrations (but at a slower rate than in the past) and increasing vehicle prices will help the vehicle fees portion of the revenue keep up with inflation. The fuel tax revenue, however, will only increase modestly for a few years. The eventual decrease in fuel tax revenue will happen even with increasing vehicle miles of travel due to the increasing MPG. MPG assumptions for autos are slightly lower than the U.S. Department of Energy values previously noted in figure 3.

For a specific example of revenue vs. cost let us examine the STF, which derives most of its revenue from the MTF. Figure 13 shows STF revenue plotted with three different sets of committed costs. These assume that routine maintenance and administration/operations costs rise by 0%, 4%, or 7% per year. Tort liability is included and assumed to be \$15 million per year. A basic \$10 million per year state-only program is assumed for emergencies and projects not eligible to receive federal-aid.

STATE TRUNKLINE FUND REVENUE VS COMMITTED COSTS

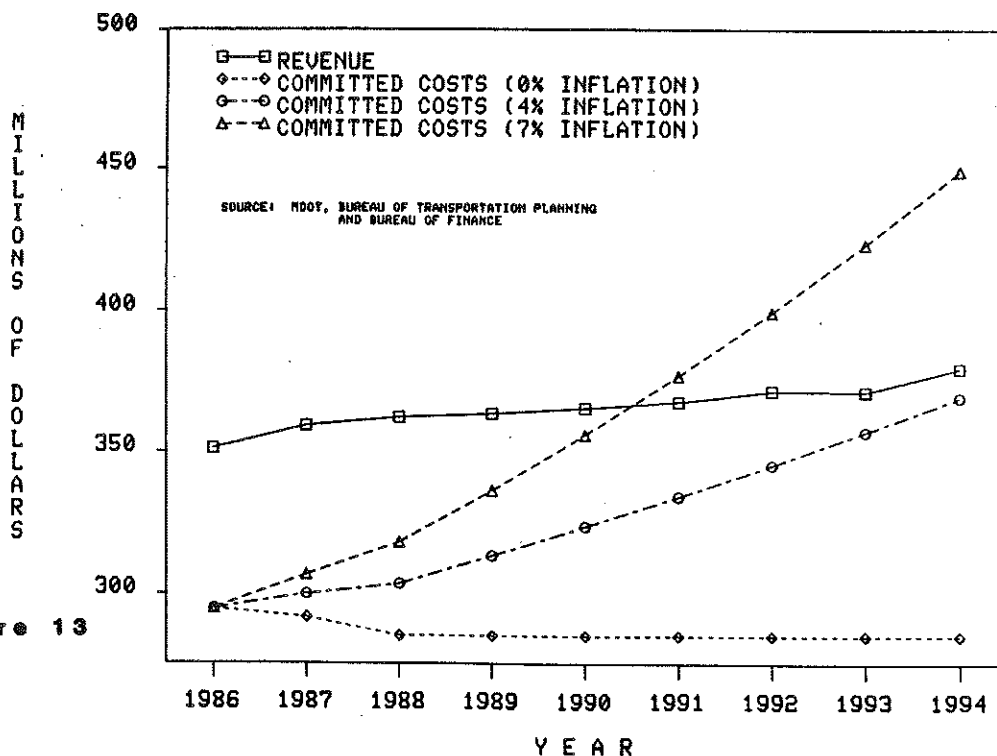


Figure 13

According to figure 13, committed costs consume all revenue by 1991 under 7% inflation. With low inflation, revenue could stay above committed costs for quite sometime. It is important to realize that having enough revenue for committed costs is not sufficient, since we can capture a large amount of federal funds with a relatively small amount of state revenue. As long as revenue remains above committed costs, the difference can be applied toward matching federal funds. Figure 14 shows what happens when we add in the amount of state money required to match federal funds expected to be available for capital projects and assume 4% committed cost inflation. This now shows an earlier problem in 1990 when we will begin to lose some federal aid. By 1994 most federal aid would be lost.

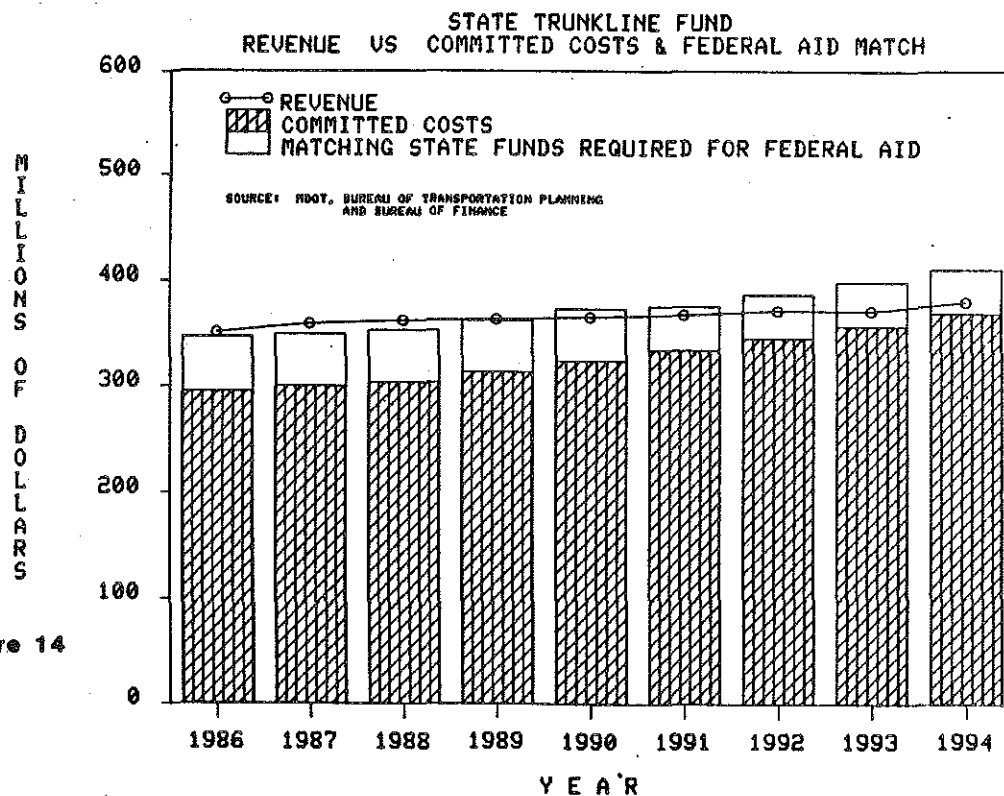


Figure 14

IV. Conclusion

State transportation revenue is raised from fuel taxes, vehicle taxes, and the sales tax on auto-related items.

State transportation revenue is expected to increase only slightly each year while costs are expected to rise faster so that by 1989 (under 4% inflation) we could begin to lose federal aid for highway construction projects. New cost-saving methods or alternate financing methods will be required to retain our current quality of service.

Fuel taxes, which account for most of the revenues, are not expected to perform well in raising revenue. Even though travel is expected to increase, the increasing fuel efficiency of vehicles is expected to decrease total consumption of fuel and, therefore, decrease revenues. One possible development to reverse this trend would be increased pressure to relax the fuel efficiency of vehicles and increase travel because of declining fuel prices and greater availability of oil. It will be important to monitor this development for revisions in projections of fuel tax revenues.

Vehicle taxes for passenger vehicles before model year 1984 are based on weight and provide less revenue-per-vehicle than the current tax for all later vehicles which is based on the value of the vehicle. The value based tax is better able to help us keep up with inflation.

The auto-related sales tax, although potentially significant, is small compared to fuel and vehicle taxes since, only 7% of these revenues went to MDOT even though, constitutionally, MDOT could have received 25%. During 1985 the sales tax revenue received by MDOT was about 8.5% of the fuel and vehicle tax revenue received by the State Trunkline Fund and the Comprehensive Transportation Fund.

Looking at costs, we find that MDOT has done exceptionally well in managing the costs of providing transportation facilities and services. Costs can be divided into two main categories, capital costs and committed costs. When comparing the Federal Highway Administration's cost indices for both of these categories we find Michigan has done better than the national average in controlling these costs. The number of employees (FTE) at MDOT has declined since 1979 by 21%.

Because forecasts of revenue and cost are not certain, we must understand the forces and trends behind these items. This is helpful for two reasons:

- 1) We can monitor the appropriate activities in society to alert us to possible changes in our ability to meet expected costs.
- 2) Better decisions can be made when suggesting ways in which to change future revenues and/or costs to bring expected revenues and costs into agreement.

Understanding the forces behind transportation revenues and costs provides a frame-work for evaluation and action in providing for Michigan's transportation facilities and services.

Appendix A

Likely Directions in Federal Transportation Legislation

LIKELY DIRECTIONS IN FEDERAL TRANSPORTATION LEGISLATION

While it is never possible to predict the actions of the Congress and the Administration, it is likely that there will soon be significant change to transportation finance. Bills have been introduced that would drastically change the size of the federal-aid highway system, eliminate aid to most mass-transit programs, alter the balance of apportionments among states, and otherwise change long-established bases for transportation finance. Although inertia and groups interested in the present arrangement will work against change, the chances appear greater than at any time since the 1950's for change to transportation law.

Administration Budget and Reauthorization Proposals

Proposals by USDOT for the transportation part of the Fiscal 1987 budget call for massive change to the federal-aid highway program. These proposals have been reflected in legislation introduced in both houses (the Surface Transportation Reauthorization Act, H. R. 4144 and S. 2187).

The federal gas tax and apportionment formulae would remain the same, but existing programs would be combined. Total obligation ceilings would be kept low, below what can be sustained by contributions to the Highway Trust Fund, and the interest on it.

Interstate Construction, Interstate 4R, and Primary apportionments would be combined into a new Interstate/Primary System. Because apportionment formulae would not be changed, Michigan's share would be unchanged.

Federal-aid Urban, Secondary, and Bridge-replacement programs would be combined with both mass-transit operating and capital-assistance grants from the general fund, and with the transit discretionary-grant program funded from the one-cent gas tax. These programs would form the new Ground Transportation Block Grant Program. Apportionment would be according to the present formulae, but support from the general fund for transit would end, reducing the total amount available nationwide by \$1.63 billion. This will cause some transit services to quit operating, and will cause divisive competition for funds at the state and local levels.

The Administration proposes to end funding for Amtrak, which would end service in Michigan.

The 3-C Planning process would no longer be required for cities of less than 200,000 population.

Other Highway Reauthorization Bills

The federal-aid highway program must be reauthorized for another four years by

September 30, 1986. Several competing reauthorization bills have been introduced, differing in their impacts on the whole program and on Michigan's share. There is as yet no indication of what the final bill will be like, but it may be a combination of some of these bills and the Administration's proposals, as well as of other bills yet to be introduced.

Below are the reauthorization bills introduced to date, with their most important provisions. Features of the present program not mentioned should be assumed to remain unchanged.

Substitute H.R. 3129 - Surface Transportation and Uniform Relocation Assistance Act of 1985

Introduced by Glenn Anderson (D-Ca.) and forty co-sponsors, the major change proposed by this bill is to the Interstate 4R formula, which would cost Michigan nothing in the short term, but a considerable amount relative to other states over time. The new formula would be based 50 per cent on Interstate V.M.T., and 25 per cent each on gasoline and Diesel fuel use. A \$200 million I-4R discretionary set-aside would be created. Other formulae would remain the same as at present.

The Interstate completion deadline would be extended until 1992. Obligational authority would be limited to \$12.6 billion in each year.

The bill preserves some objectionable features of the present system. Approval of the ICE is for only two years, and the bill does not provide for administrative approval. Obligation ceilings of 35 percent in the first quarter for each state and 25 percent nationwide would remain.

The 85-per-cent floor would remain. A billion dollars' worth of "demonstration projects" are included, including three in Michigan.

A change is proposed to the 55-m.p.h. speed limit monitoring formula that would probably make it easier for Michigan to comply with the law.

The limits on amounts payable for relocation expenses would be increased.

S. 1488 - Federal-Aid Highway Act of 1985

This is an alternative reauthorization bill introduced by Lawton Chiles (D-Fla.). It would keep the Interstate Completion program largely the same as at present. The Interstate 4R, Primary, and bridges on those systems would be combined into a new program, with a new apportionment formula based equally on population, lane-mileage, and fuel consumption, annually updated. This formula would cost Michigan about \$6,000,000/year over the current formula in the first year.

Other programs would remain unchanged. Tolls would be permitted as local match, and states would be permitted to use greater-than-standard percentages of state funds.

H. R. 3473 - Federal-Aid Highway Reform Act of 1985

This was introduced by Rep. Rowland (D-Georgia). It would consolidate Interstate and Interstate 4R into a new National Strategic Highway System and would allow some expansion of the system into areas not now served. Less-than-90-per-cent federal funding would be permitted. The Primary system would be continued as the National Economic Highway Program, and would include funding for bridges on the Secondary and Urban systems. Formulae for the Primary system would remain largely the same. The discretionary bridge program would be continued.

The State and Local Highway Program would include the Secondary and Urban systems, and off-system bridge, safety, and transit programs. Formula distribution would be 50 per cent each the current Urban and Secondary formulae, with the 85-per-cent floor remaining in effect. Funds would be provided as a block grant.

This bill would increase Michigan's FY 1987 apportionment by \$91,000,000 over the present FY 1986 apportionment.

S. 2405 - Federal-Aid Highway Act of 1986

This bill came out of the Senate Committee on Environment and Public Works. Like the Administration proposal, it combines Interstate construction, Interstate 4R and Primary programs. Federal-aid Secondary and Urban programs are unchanged; there is no block-grant provision. Apportionment formulae all remain unchanged. The 1/2% minimum Interstate apportionment remains, but need not be spent on the Interstate system. The ICE can be administratively adjusted. The 85% minimum allocation is made permanent, but would be based on total allocations.

The obligation limitation would be \$12.35 billion in each of the four years between Fiscal 1987-90.

An 85% minimum allocation would be made from the Mass Transit Account; this money would be available for use on highway projects.

Pennsylvania Interstate-completion Proposal

The Pennsylvania DOT has proposed that a simplified method for completing the Interstate System be included in the reauthorization bill. There would be one final legislated ICE and Substitute ICE. Interstate apportionments would remain available until expended, putting an end to lapses and discretionary allocations. The Interstate Transfer program would be extended, as would the 1/2 per cent minimum allocation. Pennsylvania is seeking the support of other states' delegations for this proposal.

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