II. Revenue Issues

The prospect of increasing revenues for highways raises at least five questions:

(1) What level of government should be responsible for raising additional highway revenues?

(2) What tax sources should be used to raise additional highway revenues, and what tax sources should be available to the different levels of government?

(3) How should any additional tax burden be spread among different classes of taxpayers?

(4) How will increased tax rates affect Michigan's competitiveness relative to other states?

(5) If it is decided to raise revenues primarily from state-levied highway-user taxes, how should the revenues be allocated for use by local governments?

A. Appropriate Funding Among Levels of Government

Because highway construction and maintenance is a state, county, and municipal government program, highway revenues are raised from several different sources at all levels of government. There are two philosophical views on the appropriate means of funding highways. The first view holds that the highway system serves motor-vehicle operators. Highway users derive most of the benefits from the highway system. As such, it is appropriate to expect that the funding necessary to facilitate highway construction and maintenance should come from highway users.

The opposing view is that a strong highway system provides social and economic benefits to the region and state. Given this view, non-highway-user taxes are as appropriate as highway-user taxes for funding highways. A comparison of these approaches illustrates their differences and their appropriateness for state and local governments.

1. Highway-User Taxes

The state trunkline system, serving long-distance travel between population centers, may be viewed as a public utility, similar to electricity or natural gas. Because of the infrastructure costs involved, there is no competition in the form of a parallel highway system. Leaving the trunkline system to travel on alternative routes is possible, but tends to be less efficient. Like public utility customers, everyone is expected to pay in some proportion to the use of the system. While those other than direct highway users benefit from the availability of goods brought to local markets on the highway system, the cost of using the highway system is reflected in the final market price of these goods. As a result, highway-user taxes are the appropriate funding mechanism. Although highway-user taxes do not precisely reflect highway use, they unobtrusively approximate usage better than most other taxes.

2. Non-Highway-User Taxes

The opposing point of view sees highways as a local government service, comparable to police, fire, or sewage. While road systems serve road users, everyone benefits from their provision. Not only do they provide access to properties, roads provide a means for commerce and access to the state highway system.

Public roads also provide public benefits. They enable the provision of government functions, such as police and fire protection, public schools, and other general services, which benefit all communities. Local roads are often used for non-transportation purposes, such as leisure walks, playing street hockey, and providing additional parking to residential property owners. Urban streets often include street lighting, which provides a secondary benefit in the forms of safety and crime prevention. All of these social benefits would suggest that non-highway-user taxes are as appropriate as highway-user taxes.

3. The Michigan Highway Funding System

Funding of the Michigan highway system falls somewhere between these two extremes. The immediate highway user experiences primary benefits, and society, as a whole, experiences secondary benefits from highway provision. Thus, it is appropriate that Michigan relies on a combination of highway-user taxes and non-highway-user taxes, such as property taxes, to fund county and municipal roads.

By definition, functional classification reflects the degree to which each road serves traffic flow or provides access to property. Thus, it is reasonable to expect the roads facilitating traffic flow, those most resembling public utilities, should be funded by highway-user taxes. It also is reasonable that roads providing property access could be funded by other tax source, because they provide the greatest degree of social benefits.

B. Highway-User Tax Revenue Options

While Michigan levies other minor highway-user taxes, motor-fuel taxes and motor-vehicle weight and ad valorem taxes are the primary revenue sources for highways.

1. Motor-Fuel Taxes

Motor-fuel taxes include the gas tax, diesel-fuel tax, and liquid petroleum fuel tax. These taxes are payable by the wholesale fuel distributors. The cost of the tax is passed on to retailers, who in turn pass it on to consumers as part of the cost per gallon of fuel. Tax revenues are deposited in the Michigan Transportation Fund, the primary receiving fund for the tax revenues dedicated to highway funding purposes.

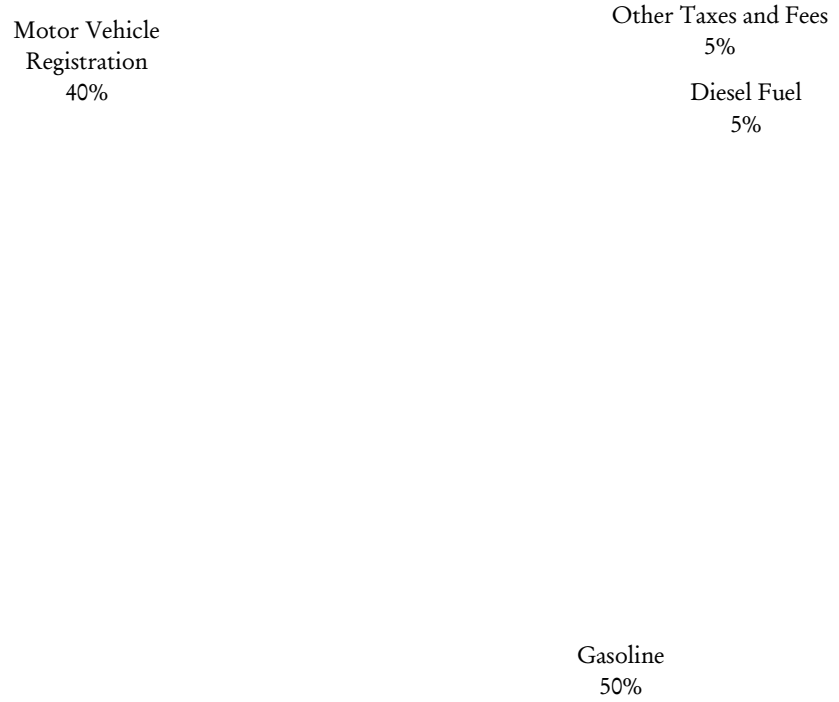
The gas tax is the most significant of the motor-fuel taxes, and the largest revenue source to the Michigan Transportation Fund (See **Chart 7**). The rates of the diesel-fuel and liquid petroleum fuel taxes are based on the gas tax rate. Every one cent per gallon of motor-fuel tax produces about $45 million in state revenues.

a) Interstate Comparison of Motor-Fuel Tax Rates.

There are two ways of comparing the Michigan motor-fuel tax rate to tax rates in other states. Motor fuel consumers are concerned with the total addition to the price of the fuel that is caused by taxes. From the consumer's perspective, any comparisons must reflect the fact that motor fuel sales are included in the base of the sales tax in Michigan. This tax rate, which currently adds six to ten cents to fuel prices, places Michigan eighth among the 15 comparison states and 23rd in the nation (See **Chart 8**).

On the other hand, governmental providers of transportation services are concerned with tax revenues

Chart 7
Major Transportation Revenue Sources in Michigan: FY1996



Source: Michigan Department of Management and Budget.

that actually contribute to highways. The sales tax revenues yielded from motor-fuel sales are used for school aid, unrestricted state revenue sharing, and general fund purposes, with only a minor proportion used for comprehensive transportation purposes. This leaves only the motor-fuel tax, levied at 15 cents per gallon, as a revenue source for highway funding. On this basis, Michigan is tied for 12th among the 15 comparison states and tied for the 44th among the 50 states (See **Chart 8**).

Michigan, like many other states, levies the same tax rate on diesel fuel as is levied on gasoline. Another common practice is to tax diesel fuel at a higher rate than gasoline: 16 states in the nation levy a higher tax rate on diesel fuel than gasoline. Several states levy add-on taxes on motor carrier diesel fuel, including Illinois, Indiana, Kentucky, New York, Ohio, and Pennsylvania among the 15 comparison states. While the Michigan diesel fuel tax rate is 15 cents per gallon, the "Effective Tax Rate" in **Chart 9** is calculated using the Motor Carrier Fuel Tax explained later in this paper, which gives Michigan a 21 cent per gallon tax rate. The 15 cent per gallon tax rate levied as the diesel fuel tax or on in-state fuel purchases taxed under the Motor Carrier Fuel Tax is 11th among the 15 comparison states and is tied for 42nd among the 50 states. The 21 cent per gallon tax rate levied as the effective tax rate, including the sales tax, or on fuel taxed under the Motor Carrier Fuel Tax that is purchased in another state is 10th among the 15 comparison states and is tied for 20th among the 50 states.

b) Motor-Fuel Tax Issues.

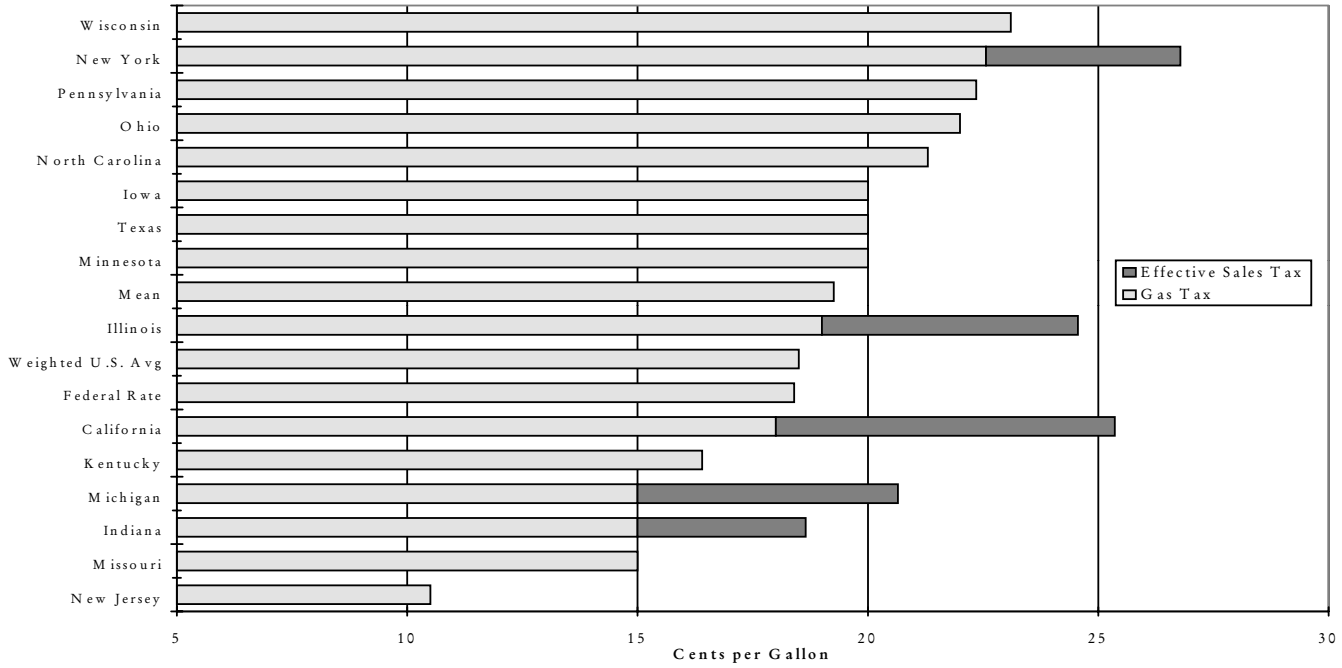
Four issues are of concern relative to motor-fuel taxes:

1. The evaporation allowance provided to fuel wholesalers and retailers,
2. The provision of credits and exemptions to certain classes of motor-fuel purchasers,
3. The levy of the sales tax on automotive-related purchases, and
4. The Motor Carrier Fuel Tax.

1) Evaporation Allowance.

Not all fuel inventoried in wholesale distributors' tanks is ultimately used to propel motor vehicles. Because of motor fuel's propensity to expand or contract with temperature variations and to evaporate, there

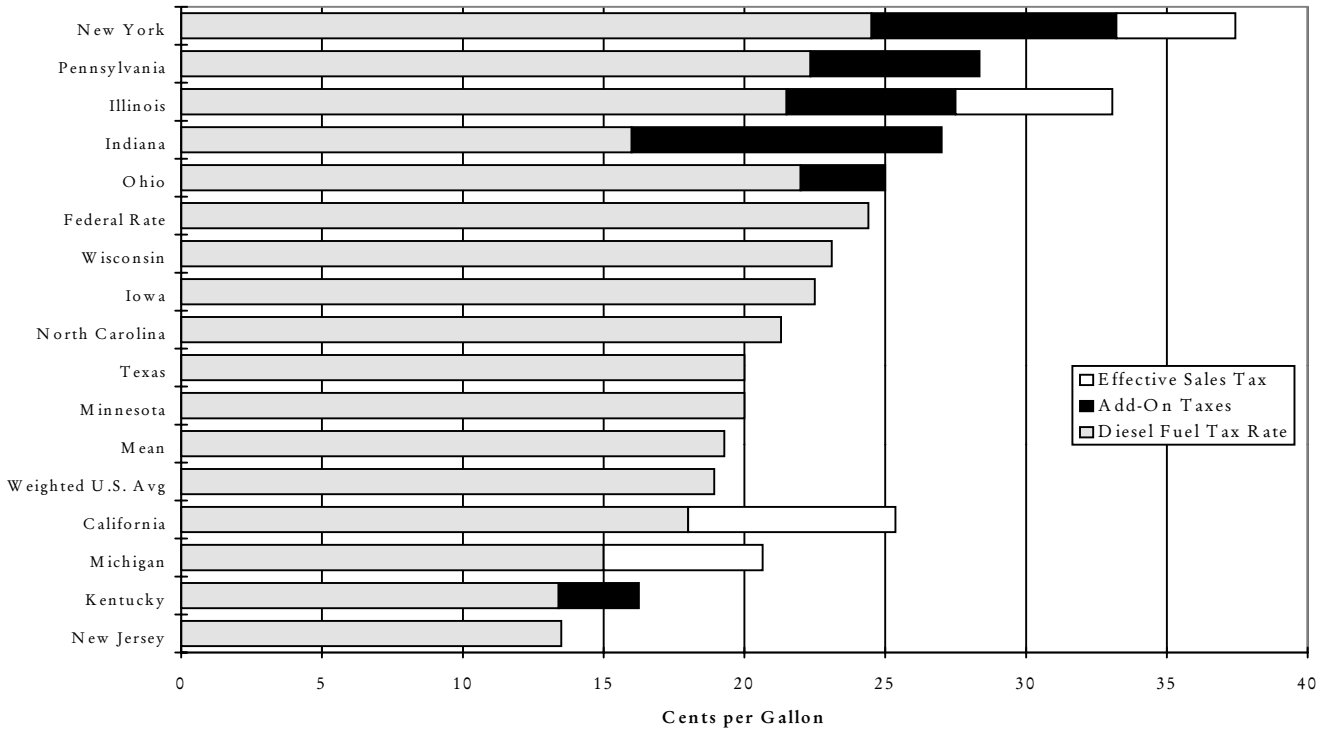
Chart 8
Effective Gas Tax Rates in Michigan and Comparison States -- 1996



"Effective Sales Tax" converts a sales tax rate (percentage) into "cents per gallon" based on an assumed price of fuel.

Source: Senate Fiscal Agency.

Chart 9
Effective Diesel Fuel Tax Rates in Michigan and Comparison States -- 1996



"Effective Sales Tax" converts a sales tax rate (percentage) into "cents per gallon" based on an assumed price of fuel.

Source: Associated Petroleum Industries of Michigan.

was a need to compensate wholesalers and retailers under older methods of storing and transporting motor fuels. Therefore, each wholesale distributor, in computing the tax due to the state, can claim a deduction of two percent of the gasoline received to allow for evaporation. Fuel wholesalers receive two-thirds of the value of this allowance, with retailers receiving the other third. MDOT estimates the loss to the treasury at about $15.9 million due to this allowance.

There is little need for this allowance given its original purpose. When this allowance was crafted, motor fuel was typically loaded and unloaded into and out of tank trucks. Today, most fuel moves through pipelines.

Motor-fuel distributors see this provision as necessary for several different reasons. The petroleum industry argues that this allowance provides compensation for administrative efforts in collecting motor-fuel taxes on behalf of the state and it provides compensation for "uncollectible" prepaid taxes. For example, some gas stations experience "drive offs," which occur when the consumer does not pay for the fuel. Because the tax is paid to the state by distributors before it is shipped to retailers, the distributors and retailers, not the state, lose revenues when taxes are not paid.

If the purpose of this allowance has changed, the name and calculation of the tax should change accordingly. If the state is to reimburse motor-fuel distributors for these claimed expenses, the Motor-Fuel Tax Act should be amended to clearly define these purposes. There should be strong correlation between the costs associated with an activity, administering motor fuel tax collections, and the credits given for that activity.

2) Credits and Exemptions.

The aim of this tax is to tax for the privilege of using of the public highways. But some fuel is purchased for reasons other than consumption on the public highways. This issue is complicated by the fact that motor-fuel taxes are collected from distributors, rather than at the point of final purchase. Since it is not possible to differentiate among the various users of fuel at the point of tax collection, exceptions permit anyone purchasing motor fuel for purposes other

than the operation of motor vehicles on public roads to receive tax credits. Through a certification process, farmers, lumberjacks, and construction companies are excluded from paying motor-fuel taxes for non highway use.

Government vehicles are exempt from paying motor-fuel taxes. Requiring government vehicles to pay motor fuel taxes would simply be a transfer of government funds among agencies or levels of government. However, it should be noted that school buses and garbage trucks are among the heaviest vehicles that drive on many local access roads.

3) Sales Tax Collections on Automotive-Related Sales.

Michigan is one of a few states that levies a sales tax on motor fuels. In Michigan, state and federal motor-fuel taxes form part of the sales tax base.

Transportation officials argue that while the sales tax is levied on automobile-related sales, only a small proportion of these tax revenues is used for transportation purposes. They argue that because sales taxes are levied on motor fuel sales, the state is precluded from levying additional motor-fuel taxes if competitiveness with surrounding states is to be maintained.

(a) How Are Sales Tax Revenues Used?

In Michigan, sales tax revenues are the primary funding source for the state School Aid Fund, the sole funding source for unrestricted state revenue sharing, as well as a significant contributor to the General Fund and the Comprehensive Transportation Fund. In 1978, Article IX, Section 9, of the Michigan Constitution was amended by the voters to limit the amount of sales tax revenues that could be used for comprehensive transportation purposes. Currently, the Comprehensive Transportation Fund receives "not less than" 27.9 percent of the revenues from automotive-related sales not used for school aid or state revenue sharing, including the sale of motor fuels, automobiles, and automotive parts. These funds are used for "the planning and development" of public transportation systems in the state (Public Act 440 of 1982). In FY1995, this was equal to $55.0 million.

(b) Interstate Comparisons of Sales Tax Levies.

Sales taxes are levied by 45 state governments in the nation (and by only local governments in Alaska). They are levied on the sale of motor fuel in 32 of these states. In 21 states, the sales tax is collected only if the fuel is not subject to motor fuel taxes, including Iowa, Kentucky, Minnesota, Ohio, Pennsylvania, Texas, and Wisconsin among the comparison states. Gasoline is exempt in Arkansas, but other motor fuels are taxed. South Carolina and Tennessee levy the tax only on aviation fuel. That leaves eight of the 32 states that levy sales taxes on a regular basis on motor fuel. California, Georgia, New York, and Virginia, among the comparison states, all levy the tax, like Michigan, on the sale price which includes federal and state motor-fuel taxes. Hawaii, Illinois, and Indiana, among the comparison states, levy the tax on the sales price excluding federal and state motor-fuel taxes.

All 45 states levy a sales tax, or a tax in lieu of the sales tax, on motor vehicle purchases and motor vehicle-related parts and supplies. As is the case for the sales tax rate in general, the six percent sales tax rate levied on automobile-related sales in Michigan is about average relative to the several comparison states. A few states have local sales taxes that are levied on automobile-related sales (See **Table 2**).

(c) Exempting Motor Fuel Sales from the Sales Tax Base.

The levy of a six percent tax on the sale of 5.3 billion gallons of fuel taxed at the statewide average retail price of $1.13 in 1995 yielded about $360 million. Exempting motor fuel sales from the base of the sales tax would require an alternate funding source for each of the functions to which sales tax revenues are dedicated.

Beyond the financial issues relative to exempting motor fuels from the sales tax base, there are policy issues. What kind of precedent would be set by exempting the sale of such a commonly purchased item from the sales tax base? Food and drugs were exempted from the sales tax base in 1974 to deal with issues of equity and fairness. Could the same arguments be made in this case? Are there societal gains associated with exempting motor fuel from the tax base?

There is little reason for treating motor fuels differently than other motor vehicle-related sales for purposes of taxation. The sales tax is levied on the retail sale of tangible items in Michigan. Other fluids necessary for the operation of a motor vehicle -- motor oil,

Table 2
Sales Tax Levies on Motor Vehicle-Related Purchases

	State Tax on Motor Fuels	Sales Tax on Purchases	
		State	Local
California	6.00% [B]	7.25%-8.5%	1.25-2.25%
Illinois	6.25% [C]	6.25%	0.25-1.00%
Indiana	5.00% [C]	5.00%	No Tax
Iowa	[A]	5.00%	Tax May Apply
Kentucky	[A]	6.00%	Tax May Apply
Michigan	**6.00%** [B]	**6.00%**	**No Tax**
Minnesota	[A]	Excise Tax in lieu of sales tax	Tax May Apply
Missouri	---	4.225%	Combined city and county 0.375-3.00%
New Jersey	---	7.00%	No Tax
New York	4.00% [B]	4.00%	Counties and Cities 0-4.50%
North Carolina	---	Highway Use Tax in lieu of sales tax	
Ohio	[A]	5.00%	County 0.25-2.00%
Pennsylvania	[A]	6.00%	1.00% Philadelphia
Texas	[A]	6.25%	6.00%
Wisconsin	[A]	5.00%	County 0.50%

[A] -- Applies to fuel uses not taxable under the volume tax laws, such as farmers or construction companies. Levied at a rate of 5% in Iowa, Ohio, and Wisconsin, 6% in Kentucky, Minnesota, and Pennsylvania, and 6.25% in Texas.

[B] -- Applies to sales price including federal volume tax.

[C] -- Applies to sales price excluding federal volume tax.

Source: Federal Highway Administration, 1994 Highway Statistics, (Washington, D.C.: Government Printing Office, 1995), and Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism, Volume 1, (Washington, D.C., 1994).

brake fluid, anti-freeze, and transmission fluid -- are all subject to the sales tax. Motor fuel, because it is needed in great quantities to operate motor vehicles, is subject to both motor fuel taxes -- as a proxy for highway use -- and the sales tax.

An alternative to exempting motor fuels from the sales tax base is to dedicate resulting revenues to transportation. Either revenues from the taxation of automotive related sales could be completely earmarked for transportation purposes, or these sales could be exempted from the general sales tax and a new tax could be levied on these sales. This would would introduce a blend of different factors, price and the number of gallons consumed, to the determination of tax revenues. This could protect tax revenues from reduced consumption caused by increased prices As can be seen in **Chart 13** on page 26, an ad valorem motor-fuel tax would be more volatile than the current consumption based tax.

Georgia has some experience in relying on both consumption-based and ad valorem motor fuel taxes. In the late 1970s, the Georgia courts ruled that because the state sales tax was levied on motor fuel, the state's constitution required these revenues to be used only for transportation. Revenue from the ad valorem, three percent sales tax on motor fuel is added to the 7.5 cent per gallon consumption-based motor-fuel tax. Both tax rates have not changed since 1971.

Because large portions of the sales tax revenues are

constitutionally dedicated, a vote of the people is required to amend the Constitution to allow sales tax revenue levied on motor fuels to be used solely for transportation purposes.

4) Motor Carrier Fuel Tax.

In 1980, the Motor Carrier Fuel Tax was enacted to provide a substitute means of taxing diesel fuel. At that time, Michigan had a relatively high diesel-fuel tax rate and an additional four percent sales tax was levied on motor-fuel sales. Michigan truck-stop operators and diesel-fuel distributors felt that they were uncompetitive with surrounding states. Motor carriers were able to avoid Michigan or were able to fill their tanks before entering Michigan and travel into and out of the state without buying fuel. A discount was established to encourage the purchase of motor fuel in Michigan, thus benefiting truck-stop operators and diesel-fuel distributors and increasing purchases taxable under the Michigan sales tax.

Table 3
Diesel Fuel Tax Rate in Michigan and Surrounding States
Cents per Gallon

State	1980	1997
Illinois	7.5	21.5
Indiana	8.5	16.0
Michigan	**11.0**	**21.0**
Ohio	7.0	22.0
Wisconsin	9.0	23.7

Source: Senate Fiscal Agency.

(a) Motor Carrier Fuel Tax Rate.

In contrast to motor-fuel taxes charged for every gallon of fuel purchased in Michigan, motor carrier fuel taxes are paid for every mile a motor carrier operates on Michigan highways. This tax provides a credit for taxes paid on diesel fuel purchased within the state but used for operation on another state's highways. Additional taxes may be due for miles traveled on Michigan highways using fuel purchased in another state.

The motor carrier fuel tax rate, as amended by Public Act 584 of 1996, is 21 cents per gallon. This tax affords motor carriers a 6 cent per gallon credit against the motor carrier fuel tax for each gallon of fuel purchased in Michigan. This credit offsets the 6 percent sales tax paid when purchasing diesel fuel in Michigan. The net effect is that motor carriers purchasing diesel fuel in other states, but driving in Michigan, pay the 21 cent tax for miles traveled in Michigan. And motor carriers purchasing fuel in Michigan pay an equal 21 cent tax comprised of a 15-cent per gallon diesel fuel tax (21 cents minus 6-cent credit) and approximately 6 cents per gallon in sales tax. Until it was amended in 1996, the Motor Carrier Fuel Tax required motor carriers to purchase a decal that permitted receipt of the diesel discount. Act 584 eliminated these decals.

(b) Revenue Issues.

In 1996, Michigan joined the International Fuel Tax Agreement (IFTA), a prorationing agreement that allows states to benefit from commercial vehicles driving into their state even though fuel was not purchased in that state. Reciprocity and prorationing agreements allow states to apportion fuel tax and registration fee revenues to participating states in proportion to the total miles traveled in that state.

Membership in IFTA reduces the need for a Motor Carrier Fuel Tax separate from the diesel-fuel tax. Because motor carriers pay fuel taxes to each state according to the distance traveled in that state, Michigan receives revenues for operation in the state regardless of the location that the fuel was purchase. The Motor Carrier Fuel Tax was conceived prior to membership in IFTA, when there were financial incentives for motor carriers to purchase fuel in some states. These incentives no longer exist relative to motor fuel taxes.

However, some feel the Motor Carrier Fuel Tax is still necessary to protect sales tax revenues. Since most other states do not levy a sales tax on motor fuel, levying the sales tax artificially increases the price of fuel in Michigan in a way not common to most other states. The Motor Carrier Fuel Tax, with a credit to offset the cost of the sales tax when fuel is purchased in Michigan, negates any extra costs to encourage the in-state purchase of fuel. As a result, tax revenues resulting from the purchase of diesel fuel are deposited into the School Aid Fund and General Fund rather than the Michigan Transportation Fund.

2. Motor-Vehicle Weight and Ad Valorem Taxes

Motor-vehicle weight and ad valorem (price-based) taxes are the second largest source of state highway-

user tax revenue in Michigan. When the first Michigan motor-vehicle weight tax was enacted -- a $2-per-automobile license plate fee in 1905 -- it was designed to cover only the costs incidental to registration and protection of motor vehicle titles. In the 1920s, the state increased these tax rates to provide revenues for highway construction and maintenance. Weight tax rates have been increased many times since the 1920s, always at rates that have provided revenues above the level needed to cover administrative costs.

a) Automotive Registration Fees.

Until 1983, automobile registration fees were based on the weight and age of the vehicle. These fees were determined using a schedule of fees that required occasional revision to reflect inflation, changing funding needs, and automobile market changes. Automobile registration fees were not a high growth item prior to 1983 (See **Chart 11** on page 24).

Public Act 439 of 1982 changed the basis for collecting automobile registration fees from weight-based to price-based. Individual owners of motor vehicles built since 1984 pay an initial registration fee of 0.5 percent of the list price of the vehicle (the base sticker price) for the first registration, with a minimum fee of $30. The fees decrease by 10 percent for each of the next three years and then remain constant.

Registration fee amounts for owners of used automobiles depend on the model year of the vehicle. Registration fees on automobiles of model years prior to 1984 continue to be based on weight. Registration fees on automobiles of model years 1984 or later are price- and age-based.

Changing registration fees from a weight-based system to a price-based system fairly effectively protects the state from the erosion of revenues experienced as cars became lighter. As the price of automobiles increases, revenues increase to keep pace with inflation.

Because they are based on the vehicle price, motor vehicle ad valorem tax revenues depend on the number of vehicle registrations, the age of the autos, and the price of the vehicles. In 1995, the state collected over $337.4 million from the registration of the 6.0 million passenger vehicles. These revenues are credited to the Michigan Transportation Fund.

b) Truck Registration Fees.

The level of truck fees is a contentious matter in Michigan and nationwide. Critics argue that, in a tax system designed as a measure of the use and wear caused by individual users, trucks are not paying their fair share in transportation taxes relative to the usage and benefits received. Motor carriers argue that the total tax burden should be considered, rather than considering only highway-user taxes, since motor carriers pay business taxes in addition to highway-user taxes. However, it is only the highway-user taxes that affect the ability of the state and local governments to construct and maintain the highway system. Commercial motor carriers in Michigan pay a number of fees to this end: a registration fee; a fee accompanying the permit to receive a diesel fuel discount; and a fee accompanying the permit to operate in Michigan.

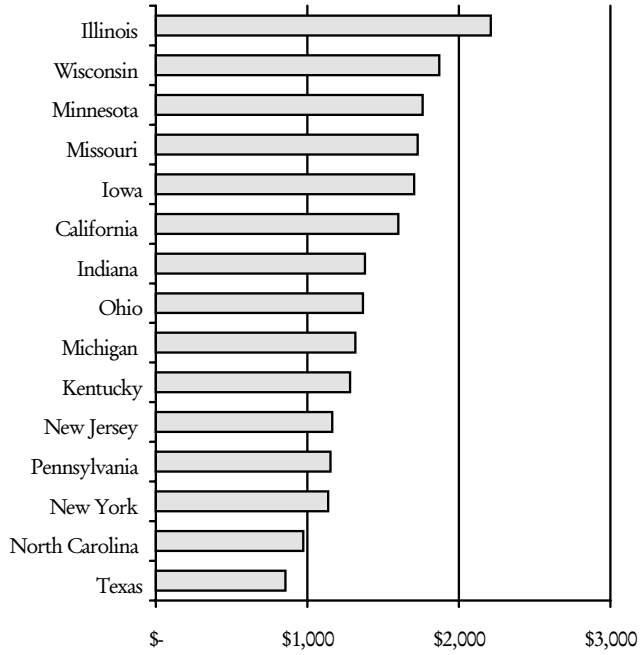
Critics also argue that trucks are not taxed in proportion to the damage they cause to the road and bridge surfaces. Cost-allocation studies, which try to ascribe proportions of costs for road and bridge repair to various classes of vehicles, have found that the average fully loaded truck does as much damage to the road surface as about 9,600 cars.[4] Axle weights, the key determinant of how much stress and deterioration a vehicle imposes upon road pavement, range from 12,000 to 17,000 pounds for the average 80,000 pound truck and from 13,000 to 18,000 pounds for a 154,000 pound truck. Since taxes levied in proportion to the damage caused would not be politically feasible, other highway users subsidize highway use for trucks.

2) Motor-Carrier Sizes, Taxes, and Fees.

The size limits for trucks are similar among most states. Each of the comparison states permits a maximum truck width of 102 inches. A maximum height of 13 feet six inches is permitted in each state except California and Missouri, which allow a maximum height of 14 feet. The common length allowed, with some exceptions, is 40 feet for straight trucks and 53 feet for semi-trailers. Finally, the maximum gross ve-

[4] Statistic based on the AASHTO Road Test at Ottawa, Illinois. Cited in Our Highways: Why Do They Wear Out? Who Pays For Their Upkeep?, American Association of State Highway and Transportation Officials, (Washington, D.C., 1984).

Chart 10
Annual Registration and Weight Taxes on an 80,000 Pound, Five-Axle Tractor-Semi-Trailer



Source: American Trucking Association.

hicle weight allowed without special permits is 80,000 pounds in every state except Michigan, which allows a maximum gross vehicle weight of 164,000 pounds.

While registration fees for trucks in every state are based on the weight of the truck, different weight systems are used. Michigan is one of 40 states that base registration fees on the "gross vehicle weight" of the vehicle. The other comparison states that use some form of gross vehicle weight include Indiana, Illinois, Missouri, New Jersey, New York, North Carolina, Pennsylvania, Texas, and Wisconsin. Minnesota is one of three states that base registration fees on a combination of the gross vehicle weight and age. California, Ohio, and four other states base registration fees on the "empty weight" of the vehicle.

According to the American Trucking Association, truck registration and weight taxes in Michigan are low relative to the comparison states (See **Chart 10**). Michigan does not collect weight-distance taxes, gross receipt taxes, certificate of convenience fees, or any form of property taxes on the trucks. Additionally, revenues collected from state diesel fuel taxes, local motor fuel taxes, or taxes added on as a percent of diesel fuel sales are relatively low in Michigan. Registration and weight taxes on an 80,000-pound vehicle in Michigan were the 9th highest among the 15 states and 23rd highest among all 50 states.

3) Reciprocity and Prorationing.

In 1985, Michigan entered into the International Registration Plan. This agreement allows vehicles permitted to operate in one state to operate in another without purchasing additional permits or licenses. It also allows states to share registration fee revenues based on the miles operated in each state. This agreement is designed to promote commerce and interstate trade by lessening the financial and administrative burdens placed on interstate motor carriers. In the absence of this agreement, motor-carrier operators would be required to obtain a full-year license or, in the case of states such as Michigan, one-week permits for each state in which they operate. Given the cost of these licenses or permits, many motor-carrier operators might choose not to report their operations in states outside their residence. States benefit from reduced administrative costs associated with registration fees and from increased compliance by motor carriers in reporting operations between states, both resulting in an increase to net revenues. Membership in this agreement has resulted in increased revenues relative to the period prior to membership.

4) Truck Revenues.

In 1995, $197.7 million was collected from commercial plate, trailer plate, and International Registration Plan Plate fees on 1.6 million commercial trucks and almost one million trailers. These funds were deposited into the Michigan Transportation Fund.

3. Other Highway-User Revenue Sources

State taxes on highway users also include certificate of title fees, license fees, and taxes levied in lieu of common highway-user taxes in other states.

a) Certification of Title.

Public Act 300 of 1949, as amended by Public Act 492 of 1978, established a $10.50 certificate of title fee. The Michigan Transportation Fund is credited with $10.00 of this fee and $0.50 is credited to the Scrap Tire Regulatory Fund. In 1995, over $36.6 million was received from fees accompanying the issuance of

1.4 million certificates of title and the processing of 1.7 million title transfers.

b) License Fees.

The fees that accompany a driver's license application are set by Public Act 300 of 1949, as amended by Public Act 232 of 1987, as follows:

$12 -- for a four-year operator's license,
$20 -- for a four-year chauffeur's license, and
$5 -- for a four-year restricted minor's license.

In 1995, the issuance or renewal of almost 2.3 million licenses of various classes produced fee revenues totaling over $40.4 million. Only the proportion of the driver's license fee revenues credited to the Transportation Economic Development Fund are actually used for highway funding purposes.

c) Interstate Comparison of Other Taxes and Fees.

Table 4 provides an interstate comparison of registration fees, certificate of title fees, operator's license fees, property taxes, and other fees.

The method of levying motor-vehicle registration fees varies from state to state. Most states levy a flat fee. Nine states, including New Jersey and Texas among the comparison states, base the registration fee on the weight of the vehicle. Finally, Michigan, like Louisiana and Minnesota, bases the fee on the value and age of the vehicle.

Several states levy property taxes on the value of the mo-

Table 4
Automobile Taxes and Fees -- 1994

State	Registration Fees	Other Fees	Certificate of Title	Operator's License	Property Tax
California	$27.00	Annual license fee, 2% of market value	$10.00	$12.00 (4 yrs.)	License fee in lieu of property tax
Illinois	$48.00	---	$13.00	$10.00 (4 yrs.)	Exempt
Indiana	$13.00	Annual vehicle excise tax Annual county surtax	$5.00	$6.00 (4 yrs.)	Excise tax in lieu of property tax
Iowa	$20.00	---	$10.00	$8.00 (2 yrs.)	Exempt
Kentucky	$12.00	$2 clerks fee for registration	$6.00	$8.00 (4 yrs.)	State and local
Michigan	**price based**	**---**	**$11.00**	**$12.00 (4 yrs.)**	**Exempt**
Minnesota	$10+1.25% of base value	---	$2.00	$22.50 (4 yrs.)	Exempt
Missouri	$18.00-$51.00	---	$8.50	$7.50 (3 yrs.)	Local
New Jersey	$16.50-$53.50 by weight and age	Temporary additional registration fee	$5.00	$17.50 (4 yrs.)	Exempt
New York	86 cents per 100 lbs. up to 3,500; $1.25 per each additional 100 lbs.	$15 additional for New York City Residents	$5.00	$10.00 (4 yrs.)	Exempt
North Carolina	$20.00	Annual highway use tax	$35.00	$15.00 (4 yrs.)	No tax
Ohio	$22.75	---	$5.00	$9.75 (4 yrs.)	No tax
Pennsylvania	$24.00	---	$15.00	$27.00 (4 yrs.)	Exempt
Texas	$40.50-$58.50 by weight and age	$0.30 reflectorize fee	$13.00	$16.00 (4 yrs.)	Local
Wisconsin	$40.00	---	$12.50	$15.00 (4 yrs.)	Exempt

Source: Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism, Volume 1, (Washington, D.C., 1994).

tor vehicle. Motor vehicle owners pay property taxes to the state government in three states, to the local governments in 12 states, including Missouri and Texas among the comparison state, and to both the state and local governments in four states, including Kentucky. Eight states, including California and Indiana, collect a fee or tax in lieu of the property tax. Motor vehicles are exempt from property taxes in 20 states, including Illinois, Iowa, Michigan, Minnesota, New Jersey, New York, Pennsylvania, and Wisconsin. The levy of these taxes does not guarantee that the revenues will be used for highway purposes.

Charging $10.50 for a certificate of title puts Michigan in line with the comparison states. These states range from a low of $2.00 in Minnesota to a high of $35.00 in North Carolina.

Additionally, the $12.00 fee for an operator's license in Michigan is about average compared to the other states. The fees in these states range from $6.00 in Indiana to $27.00 in Pennsylvania for a four-year license.

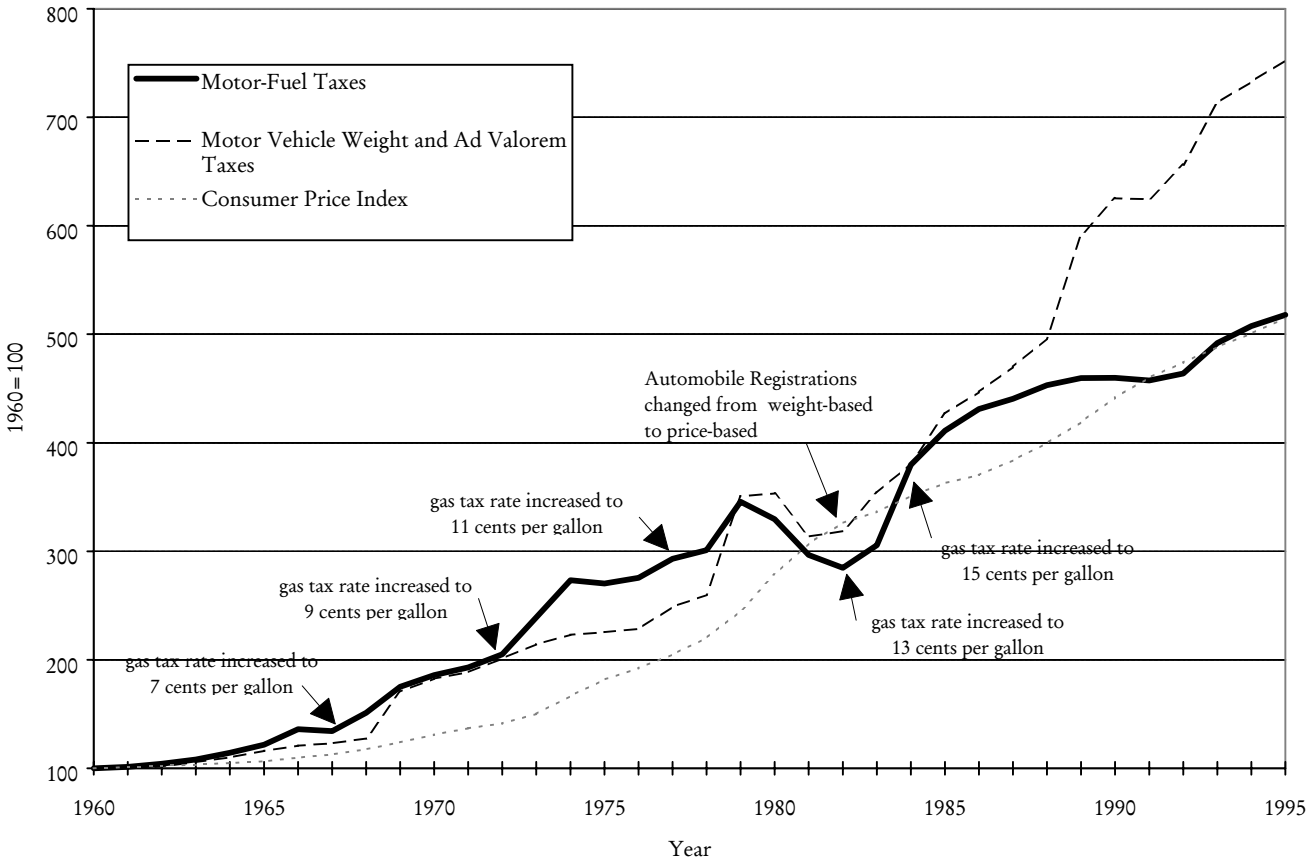
4. Highway-User Taxes as a Revenue Source

Highway-user taxes have proven to be a reliable source of revenues in Michigan. As a result of several tax rate increases and changing the base of automobile registration taxes, highway-user taxes have grown at or above the rate of inflation since 1960. Motor vehicle weight and ad valorem tax revenues have experienced greater growth than motor fuel tax revenues since the registration tax base was changed in 1982.

a) Automotive Registration Tax Revenues.

The last time action was taken to account for the lack of growth in highway-user tax revenues, efforts were made to allow the tax revenues to grow with changes

Chart 11
Index of Change in Michigan Highway-User Tax Revenues: 1960-95



Source: Annual Report of the State Treasurer, Michigan Department of Treasury, Annual and Public and Local Acts, Michigan Department of Management and Budget, Annual.

Figure 1
Highway Maintenance and Operations Cost (HMOC) Index in Michigan

$$\left(\left(\frac{\text{Gallonage 1980}}{\text{Latest Year Gallonage}}\right) \times \left(\frac{\text{Latest Year OMI}}{\text{OMI 1980}}\right)\right) \times 12 \text{ cents} = \text{Present Year Michigan Motor Fuel Tax Rate}$$

in the economy. **Chart 11** is an index of revenue growth for these taxes since 1960. This chart shows that motor-vehicle weight tax revenues, with several increases to the fee schedules, kept pace with inflation in the years prior to 1982. Since the tax base was changed, these revenues have experienced growth relative to inflation. At a time when automobiles were becoming lighter but more expensive, the change from a weight to a price-based tax maintained registration fee revenues without needing to resort to periodic increases in the fee schedule.

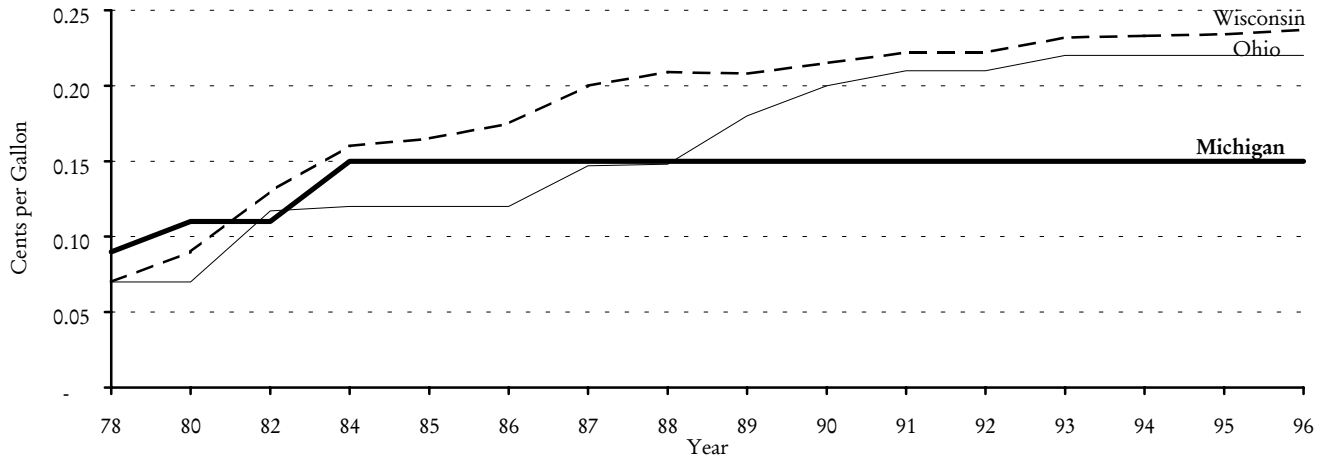
b) Motor-Fuel Tax Rate Indexing.

Because motor-fuel taxes are levied as cents per gallon, the tax yield is determined solely by consumption levels. Substantial price increases and improvements to fuel efficiency have resulted in reduced consumption levels over the years. As a result, occasional tax rate increases have been necessary (See **Chart 10**).

Instead of changing the tax base, as was done for automotive registration taxes, the motor-fuel tax rate was indexed in 1982 using the HMOC index. This index is the product of two indexes that calculate changes in maintenance prices and fuel consumption since the base year, 1980. One index calculates the changes in taxable fuel consumption (gallonage in **Figure 1**). The other index calculates the changes in maintenance costs using the national highway operations and maintenance index (OMI in **Figure 1**), which is based on the cost information in government highway maintenance and traffic service contracts. The product of these indexes is multiplied by the 12 cent base motor fuel tax. This index was constructed so that any decreases in the number of taxable gallons consumed or any increases in the cost of highway maintenance would increase the tax rate and avoid the erosion of motor fuel tax revenues.

However, the index was only permitted to affect the tax rate one time. Public Act 437 of 1982, the act that indexed the tax rate, also capped the tax at the rate effective December 31, 1984. The tax has remained at 15 cents per gallon since that time. If the cap had not been placed on the gas tax, the gas tax rate in 1996 would likely be about 19 cents per gallon, increasing state motor-fuel tax revenue by at least $180 million per year. Act 437 limited any tax rate increases to a

Chart 12
Comparison of State Motor Fuel Tax Rate Experiences With HMOC



Source: Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism -- 1994, Volume 12, June 1994.

rate no more than "2 cents greater than the tax rate imposed for the previous 12-month period." Thus, simply removing the cap today would only increase the gas tax rate to 17 cents per gallon in the first year, increasing revenues by approximately $90 million.

The danger with an index automatically determining the gas tax rate, is the potential creation of a continuous upward cycle. The gas tax rate increases to affect the tax yield. The additional tax revenues are invested in increased construction, improvement, or maintenance. This increased investment creates a greater demand for the units of production, including labor, equipment, and supplies. Increased demand may increase the cost of obtaining them. If it does increase the cost, this would cause an increase in the index, which would cause the motor-fuel tax rates to increase. And the cycle continues indefinitely.

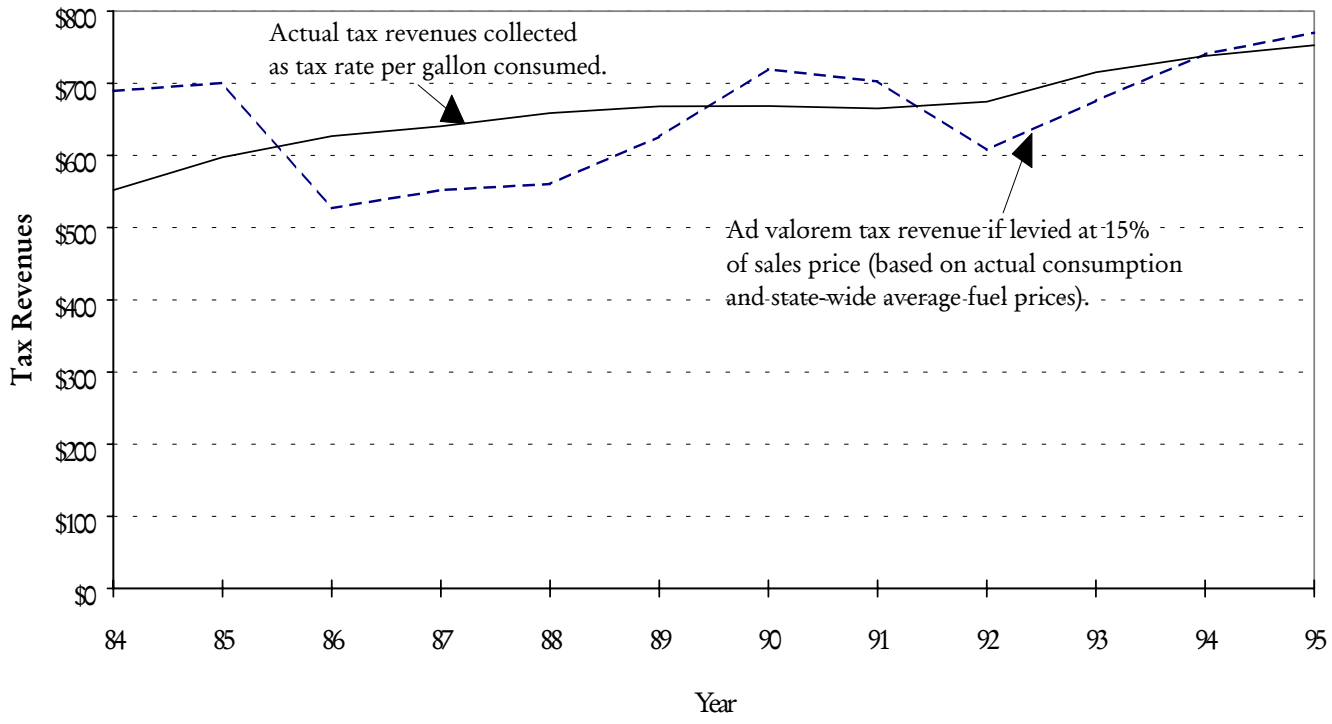
While it is possible to retrospectively estimate what the motor-fuel tax rate would have been had it not been capped, such an estimation is based on years of under investment in Michigan roads. Increased investment would affect the operations and maintenance index component, which measures the cost of the units of production. Because the HMOC index is not based on highway needs, an index such as this has great potential to end up costing the taxpayers more in the long run than would ultimately be necessary under ideal revenue raising conditions.

Ohio was the first state to use the federal highway maintenance and operations cost (HMOC) index to determine their motor-fuel tax rate. Michigan modeled its index after that used in Ohio. Wisconsin also adopted this formula. The motor-fuel tax rate in Ohio is currently 22 cents per gallon. The motor-fuel tax rate in Wisconsin is 23.4 cents per gallon. **Chart 12** illustrates the experience of motor-fuel tax rates in these two neighboring states. Other states have adopted different methods of indexing their tax rates.

c) Changing the Motor-Fuel Tax Base.

An often mentioned alternative to motor-fuel tax indexing is an ad valorem motor-fuel tax. The hope with such an alternative would be to emulate what

Chart 13
Motor Fuel Tax Revenues: Consumption Based v. Ad Valorem Taxation
(millions of dollars)



Source: Michigan Department of Transportation; CRC Calculations.

was successfully accomplished with the automotive registration taxes. An ad valorem tax would change the tax base so that increasing fuel prices would result in greater tax revenues.

As can be seen in **Chart 13**, the problem with ad valorem motor-fuel taxes is that the tax base also decreases with reduced fuel prices. Motor fuel prices have proven to be fairly volatile in recent years. This chart compares a hypothetical, 15 percent ad valorem tax to actual motor-fuel tax revenues from 1984 to 1995. While the total revenue yield of the ad valorem taxes would have been $85 million less than was actually collected, the real problems arise in year to year collections and the planning necessary in highway construction and maintenance.

5. Federal Funding

Funding through the Federal Highway Trust Fund is available to every state for construction, improvement, or enhancement projects. Receipt of these federal funds requires a matching amount from state or local revenue sources. In Michigan, about 75 percent of the federal funds received are used for state trunkline purposes and 25 percent is passed on to local governments. This allocation is statutorily determined.

a) The Diversion of Federal Motor Fuel Taxes.

In recent years, the federal government has regularly held large amounts of federally collected motor-fuel tax revenues as surplus in the Federal Highway Trust Fund. The federal government's unified budget is constructed in such a way that surplus trust funds, even though inaccessible for general spending, are considered to reduce the amount by which the budget is in deficit. As of September 30, 1995, over $19 billion collected for highway construction and maintenance was held in the trust fund to offset the federal budget deficit.

Additionally, the basis of funding highways through the benefit principle has been violated in recent years. This principle suggests that highway users should contribute to its enhancement, and the money collected from their use should be used only for highway purposes. The last two increases of the federal motor-fuel tax rate -- a temporary 2.5 cent per gallon levy in 1990 and the 4.3 cent per gallon increase in 1993 -- have been for deficit reduction. From 1990 to 1996,

Table 5

Michigan Contributions to, and Returns from Federal Highway Trust Fund and Contributions to Deficit Reduction
(millions of dollars)

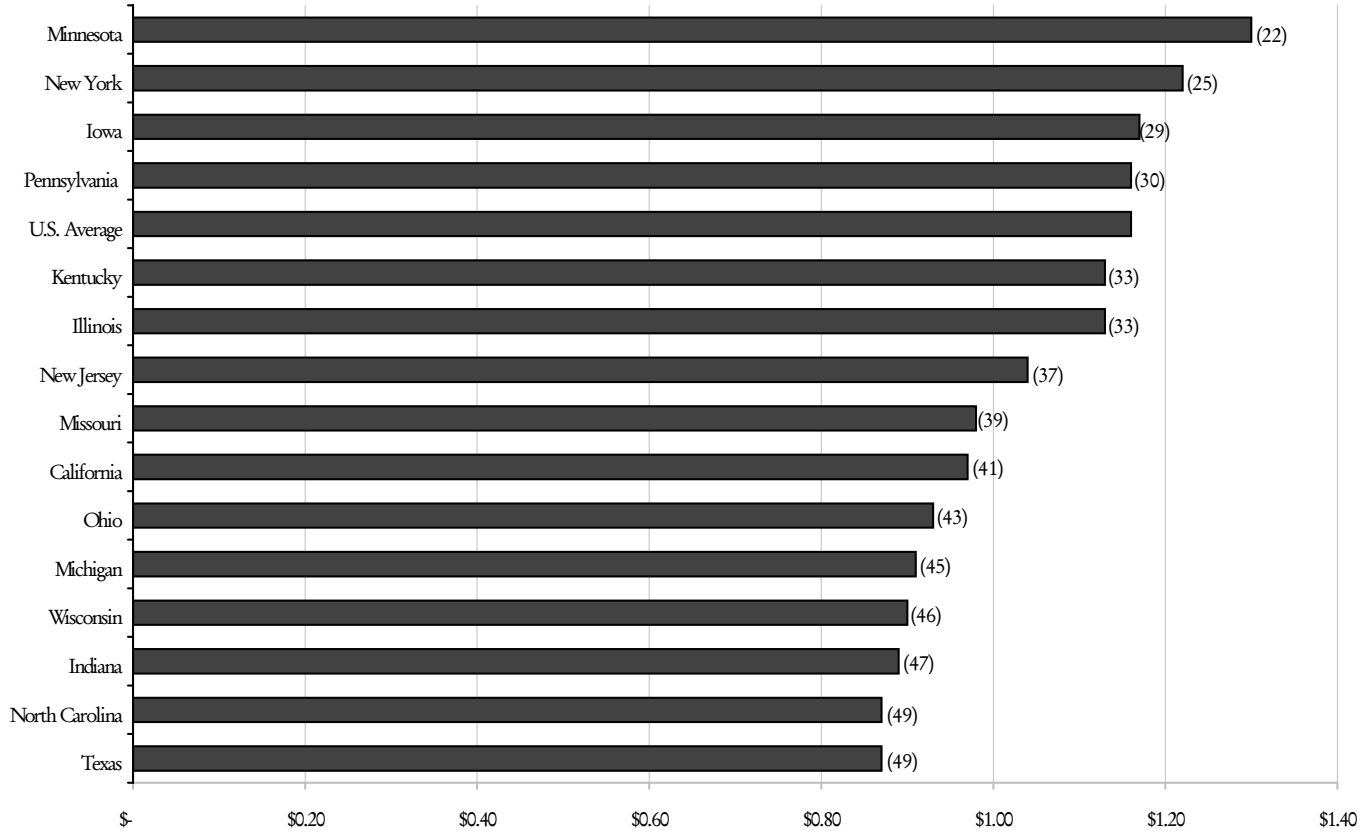
Fiscal Year	Payments to Highway & Transit Accounts	Returns	Net Loss or Gain	Tax Revenue Lost as Payments for Deficit Reduction	Net Diversion to Other States or Deficit Reduction
1990	$ 449.0	$ 376.7	($ 72.3)	($ 91.7)	($ 164.0)
1991	558.7	469.9	(88.8)	(117.4)	(206.2)
1992	562.2	563.7	1.6	(118.8)	(117.2)
1993	610.9	520.1	(90.8)	(122.8)	(213.6)
1994*	592.5	624.4	32.0	(359.8)	(327.8)
1995	766.7	724.1	(42.6)	(358.1)	(400.7)
1996**	760.2	569.1	(191.0)	(243.4)	(434.4)
Total***	$ 4,300.2	$ 3,848.0	($451.9)	($1,412.0)	($1,864.1)

In addition to funds lost, Michigan has approximately $200.4 million in highway funds being withheld because of congressional spending limits (as of October 1, 1996).

* Some 1994 payments to Michigan were credited to 1995.
** Authorizations were cut across the board.
*** Total may not add due to rounding.

Source: Michigan Department of Transportation.

Chart 14
Comparison of Federal Highway Trust Fund Receipts Attributable to the States and Federal-Aid Apportionments and Allocations to the States from 1957 to 1994 with National Ranking (in quotes)



Source: Federal Highway Administration, 1994 Highway Statistics, (Washington, D.C.: Government Printing Office, 1995).

fuel purchasers in Michigan paid over $1.4 billion in motor fuel taxes for deficit reduction.

b) Donor State Issue.

Since the Federal Highway Trust Fund was created in 1956, Michigan has received 91 cents of every dollar of federal tax paid into this fund. Fuel purchasers in Michigan have paid in 3.7 percent of all receipts, while Michigan state and local governments have received 2.9 percent of all apportionments or allocations.

As can be seen in **Chart 14**, the other leading industrial states and states in the Midwest also have not fared well in achieving a return on the dollars sent to Washington. Minnesota is the only state in the top 25 states in the national ranking of the ratio of receipts to apportionments and allocations. Several of the states surrounding Michigan have faired no better than Michigan over the life of the Federal Highway Trust Fund. Indiana has received 89 cents for every dollar paid into the trust fund; Wisconsin received 90 cents; and Ohio received 93 cents.

c) Research And Development.

The lack of Federal Highway Trust Fund dollars coming to Michigan also reflects the lack of research and development being undertaken within MDOT. Grants for research into intelligent vehicles, traffic flow solutions, cold-weather highways, and highway construction methods are going to other states. Research and development has become less of a priority. Other functions, such as the actual construction and maintenance of highways, were deemed more important.

C. Non-Highway-User Tax Revenue Sources

In addition to state and federal highway-user tax revenues, revenues from other tax sources can be used for highways. This is true at both the state and local levels of government.

1. State Government

State tax revenues in Michigan are above average relative to the other states (See CRC Report #317, 1996 Michigan Tax Climate). However, because highway-user taxes are not deposited into the General Fund, and highways do not compete with other state functions for financing, only a few tax levels matter relative to highways. The result is a skewed way of analyzing highway funding: If highway funding levels are not sufficient, it is because the gas tax is too low, not because of any legislative or executive branch budgeting decisions.

The 1908 Michigan Constitution was amended in 1938 to place restrictions on the use of gas and weight tax revenues for highway purposes. (This provision was continued in the 1963 Michigan Constitution.) This provision, often referred to as the "anti-diversion amendment," was brought about because of the use of moneys derived from gasoline and weight taxes for other than highway purposes by the state Legislature, particularly during the depression years in the early 1930s. This provision specifies that gas and weight taxes cannot be used for anything other than highways. It does not specify that only gas and weight taxes can be used for highways. Instead of making difficult policy decisions prioritizing how all state resources should be divided among highways and other state functions, policymakers are left with equally difficult political decisions relative to supporting a gas tax increase in the face of an already high tax burden.

As will be explored later in this report, a number of factors are creating an increased need for highway funding. Current transportation revenues are not adequate to meet these increased needs. The typical response to a revenue source that has not grown at a rate sufficient to keep pace with increased needs is either to increase the tax rate or to supplement the tax revenues with General Fund revenues. Michigan has done neither, except that recent proposals would allow some non-highway revenues to be used for roads.

2. Local Government

Local governments are required to contribute revenues from their own sources for highway funding. Property taxes are the primary revenue source for local governments. While 22 cities levy a local income tax under Public Act 284 of 1964, the Uniform City Income Tax Act, counties, villages, and townships are not authorized to levy local income taxes. Local sales taxes are not authorized in Michigan. Additionally, local motor vehicle registration taxes or motor fuel taxes currently are not authorized. That leaves property taxes as the primary revenue source for local highway funding.

a) Property Taxes.

Prior to the Great Depression, property taxes were the most common means of funding local highway construction and maintenance. The Great Depression resulted in a decline in the assessed valuation of taxable property, the adoption of the 15-mill property tax rate limitation in 1932, and a large volume of property tax delinquencies. The Horton Act was adopted to ease the road funding burden on the property tax. As a result of the Horton Act, allocations from state motor vehicle taxes replaced township and county property taxes for road improvement, maintenance, or debt service, which were practically eliminated (See **Chart 18** on page 64).

Property taxes are used as a revenue source for transportation by counties, cities, villages, and townships. The ability to levy property taxes for road improvement purposes is diminished by the use of property tax levies for school operating purposes, as well as other local government purposes. Some local governments levy property taxes specifically for highway funding. Others use general fund revenues resulting from the regular operating millage. Money from property taxes and special assessments specifically authorized for road improvements comprised about 10 percent of money in county road funds and about 15 percent of locally raised funds in municipalities in 1994 (see **Tables 6 and 7**).

Five counties in Michigan have dedicated millages for road purposes, as do numerous cities, villages, and townships.

1) County Property Taxes.

County road commissions do not have taxing authority. They are dependent upon the county commissioners and townships to raise revenues for transportation purposes on their behalf. The county board of commissioners may set a tax rate based on a recommendation of the county road commission. If the board of commissioners sets a tax rate other than that recommended by the road commission, it may also allow or reject any or all of the projects for the sections of roads submitted for consideration.

Article VII, Section 16, of the 1963 Constitution states that, ". . . the ad-valorem property tax imposed for road purposes by any county shall not exceed in any year one-half of one percent of the assessed valuation for the preceding year" (a maximum of five mills).

County highway taxes are subject to the 15 and 50 mill property tax limitations provided for in the Michigan Constitution. Unless otherwise agreed to by the townships, cities, and villages, these taxes are disbursed among the cities, villages, and county based on a formula that takes into account property valuations and the street mileage within each governmental unit.

2) Township Property Tax Levies.

Over 70 percent of the county road system is local access roads. These were township roads until the 1931 McNitt Act merged them into the county road systems. While the care for these roads is provided by county road commissions, townships are still expected to contribute to the funding of this effort.

Over 1,000 of the 1,242 townships in Michigan levied property tax millage for road purposes in 1994 (See **Table 8**). These levies yielded over $52.6 million, the third largest revenue source for county road commissions. Note that information from some fairly major counties in **Table 8** were not available.

3) City and Village Property Taxes.

Municipal revenues reported strictly as property tax revenues tend to reflect dedicated millages for streets. For cities, villages, and townships, the procedures and laws affecting the use of property taxes for transportation purposes are the same as for most other purposes.

Table 6
County Road Commission Revenue Sources for Highway Funding in Michigan -- 1994
(thousands of dollars)

Revenues & Transfers	Amount	Percent
Transfers from an Outside Unit:		
Michigan Transportation Fund (Act 51)	$ 445,258.3	65.3%
Transportation Economic Development Fund	33,671.5	4.9%
State Critical Bridge	10,598.2	1.6%
Federal Aid	88,365.5	13.0%
Taxes, Licenses, & Permits		
County Wide Millage	6,883.9	1.0%
Other	30.6	0.0%
Licenses & Permits	4,824.8	0.7%
Contributions from Local Units		
County Appropriation	3,065.5	0.4%
Township Contribution	53,605.1	7.9%
City & Village	11,526.5	1.7%
Other	3,842.7	0.6%
Other Revenues:		
Special Assessments	3,707.9	0.5%
Interest	6,364.8	0.9%
Bond & Note Proceeds	9,954.0	1.5%
Other	30,400.0	4.3%
TOTAL REVENUES	$ 712,099.3	

Source: Michigan Department of Transportation, Statements of Receipts of County Road Funds as submitted by the County Road Commissions; CRC Calculations.

Table 7
City and Village Revenue Sources for Highway Funding in Michigan -- 1994
(thousands of dollars)

Revenues & Transfers	Amount	Percent
Transfers from an Outside Unit:		
Michigan Transportation Fund (Act 51)	$247,115.9	55.3%
Transportation Economic Development Fund	3,242.2	0.7%
State Funds -- Other	2,482.8	0.6%
Federal Aid	30,894.5	6.9%
Grants from Counties	1,257.9	0.3%
Contributions from Adjacent Municipalities	253.1	0.1%
Funds for Maintenance of Roads of Another Unit:		
State Trunkline Maintenance	8,878.7	2.0%
Maintenance of County Road	549.0	0.1%
Maintenance in Adjacent Municipalities	253.0	0.1%
Internal Transfers:		
General Fund	30,109.5	6.7%
Municipal Street Fund	7,900.4	1.8%
Capital Improvement Fund	37,272.1	8.3%
Other Revenues:		
Tax Levies	12,115.4	2.7%
Special Assessments	1,703.7	0.4%
Excess Debt Retirement	115.7	0.0%
Interest	7,666.3	1.7%
Bond Construction Fund	20,783.0	4.6%
Miscellaneous & Other	34,393.0	7.7%
TOTAL REVENUES	$446,986.1	

Source: Michigan Department of Transportation, 1994 Cities and Villages Summary Report of Revenues and Expenditures: CRC Calculations.

4) Property Tax Problems.

Prior to 1994, property taxes were heavily depended on to finance many functions of local government. Proposal A of 1994 and the legislative changes that became effective with its passage changed the school financing system from a local to a state funded system. The process that resulted in Proposal A was initiated as an effort to provide property tax relief.

The resulting changes provide greater ability to use property taxes for government functions other than schools. Among these functions is road improvement. However, many people assumed that approving Proposal A would not result in replacing school operating millages with millages for other purposes, at the same time state taxes are increased to fund schools.

Additionally, some counties do not have an extensive tax base to benefit from property taxes. The agricultural nature of parts of Michigan means that much of the property tax burden for roads would fall on a few property owners. This problem is compounded by large portions of some counties in the upper Lower Peninsula and in the Upper Peninsula being owned by the state and federal governments. With these properties removed from the tax base, a larger burden falls on those parts of these counties that are privately owned.

b) Special Assessments.

Special assessments are a means of financing construction and maintenance projects commonly used by local governments. Creation of a special assessment district allows a governmental body to apportion the costs of road improvements among the benefiting property owners. This includes properties that are either adjacent to or in close proximity to the improved road and will derive direct benefits from the road improvement.

Special assessments are levied on the basis of proportionate front footage or land area of the properties, as opposed to the value of the property used for

Table 8
Township Contributions To County Road Funds -- 1994

County	Number of Townships	Number Contributing to Road Funding	Total Township Contributions	MTF Revenue	Township Percent
Alcona	11	4	$316,259	$1,748,409	18.1%
Alger	8	4	25,506	1,488,692	1.7%
Allegan	24	24	3,068,321	5,538,411	55.4%
Alpena	8	8	152,291	2,374,045	6.4%
Antrim	15	7	311,672	2,305,978	13.5%
Arenac	12	11	126,378	1,760,794	7.2%
Baraga	5	4	62,364	1,470,764	4.2%
Barry	16	16	758,686	3,245,764	23.4%
Bay	14	14	797,060	5,895,590	13.5%
Benzie	12	12	67,861	1,698,148	4.0%
Berrien	22	22	532,778	7,862,135	6.8%
Branch	16	16	437,592	2,997,310	14.6%
Calhoun	19	7	6,673	6,212,589	0.1%
Cass	15	15	579,240	3,192,561	18.1%
Charlevoix	15	5	154,886	2,119,173	7.3%
Cheboygan	19	16	421,473	2,656,057	15.9%
Chippewa	16	14	592,477	3,147,879	18.8%
Clare	16	7	449,517	2,575,681	17.5%
Clinton	16	16	856,825	3,965,702	21.6%
Crawford	6	2	23,084	1,728,800	1.3%
Delta	14	10	128,485	2,840,724	4.5%
Dickinson	7	5	189,465	2,023,542	9.4%
Eaton	16	16	1,648,332	5,768,852	28.6%
Emmet	16	12	269,439	2,454,173	11.0%
Genesee	17	17	2,460,581	17,122,358	14.4%
Gladwin	15	15	803,347	2,248,869	35.7%
Gogebic	6	6	152,587	1,823,425	8.4%
Grand Traverse	13	8	341,673	4,339,210	7.9%
Gratiot	16	16	564,588	3,113,936	18.1%
Hillsdale	18	18	389,202	3,169,711	12.3%
Houghton	14	10	326,441	2,723,788	12.0%
Huron	28	27	2,099,421	3,561,555	58.9%
Ingham	16	16	653,170	10,165,840	6.4%
Ionia	16	16	810,821	3,339,194	24.3%
Iosco	11	9	205,826	2,591,448	7.9%
Iron	7	6	151,376	1,651,609	9.2%
Isabella	16	16	336,865	3,488,534	9.7%
Jackson	19	16	437,525	7,881,400	5.6%
Kalamazoo	15	14	979,775	9,267,671	10.6%
Kalkaska	12	4	155,064	2,321,654	6.7%
Kent	21	21	$1,332,092	$20,435,015	6.5%
Keweenaw	5	1	10,506	839,896	1.3%
Lake	15	15	136,609	1,957,104	7.0%
Lapeer	18	18	2,222,243	4,570,116	48.6%
Leelanau	11	8	93,028	1,900,709	4.9%
Lenawee	22	22	1,720,713	5,113,429	33.7%
Livingston	16	10	105,907	6,887,140	1.5%
Luce	4	3	173,814	1,257,318	13.8%
Mackinac	11	10	237,398	1,639,829	14.5%
Macomb	12	N/A	N/A	25,263,286	N/A
Manistee	14	8	189,674	2,577,614	7.4%
Marquette	19	15	378,357	4,215,867	9.0%
Mason	15	14	318,146	2,505,143	12.7%
Mecosta	16	13	337,930	2,796,787	12.1%
Menominee	14	14	149,660	2,586,460	5.8%
Midland	16	16	204,289	3,816,011	5.4%
Missaukee	15	11	438,925	2,016,013	21.8%
Monroe	15	N/A	1,596,206	6,989,027	22.8%
Montcalm	20	20	1,064,137	3,838,780	27.7%
Montmorency	8	7	68,222	1,598,835	4.3%
Muskegon	16	14	323,960	6,573,379	4.9%
Newaygo	24	16	349,720	3,449,298	10.1%
Oakland	21	N/A	1,256,509	42,023,062	3.0%
Oceana	16	16	477,123	2,593,586	18.4%
Ogemaw	14	14	422,763	2,137,411	19.8%
Ontonagon	11	8	72,972	1,635,854	4.5%
Osceola	16	11	185,571	2,411,982	7.7%
Oscoda	6	3	21,792	1,638,852	1.3%
Otsego	9	8	221,139	2,317,950	9.5%
Ottawa	17	17	3,095,308	9,873,533	31.3%
Presque Isle	14	12	142,750	1,910,839	7.5%
Roscommon	11	8	208,055	2,246,355	9.3%
Saginaw	27	26	1,067,186	9,995,533	10.7%
St. Clair	26	26	863,085	3,876,026	22.3%
St. Joseph	8	4	308,721	1,336,301	23.1%
Sanilac	16	16	1,377,171	3,881,203	35.5%
Schoolcraft	23	23	1,808,435	7,321,146	24.7%
Shiawassee	16	11	457,120	3,402,511	13.4%
Tuscola	23	22	1,622,847	4,044,561	40.1%
Van Buren	18	18	1,671,450	3,950,632	42.3%
Washtenaw	20	20	2,681,933	10,968,319	24.5%
Wayne	10	N/A	277,343	53,069,899	0.5%
Wexford	16	3	29,935	2,643,349	1.1%
Total	1,242	1,003	$52,565,670	$441,987,935	11.9%

MTF is the Michigan Transportation Fund
N/A -- indicates that the information was not available.

Source: Michigan Township Association, in-house survey.

property taxes. Special assessments are levied only upon land and premises, as opposed to property taxes which also tax real property. They may be initiated by petition of the affected property owners or by the local unit of government. Special assessments are not subject to the constitutional tax limitations on general ad valorem property taxes. Once approved, road improvements can be expedited by selling tax anticipation bonds repayable from future special assessment collections.

D. Additional Highway Revenue Options

Three additional revenue options for highway funding have been discussed recently. One option would affect state trunkline roads -- toll roads -- and two options would provide local option highway-user taxes for local governments to raise local revenues -- local registration taxes and local gas taxes.

1. Toll Roads

Theoretically, toll roads could be authorized in Michigan. It would be unrealistic to expect that they would solve the state's transportation revenue problems. Toll roads are most viable where exclusion is possible -- such as interstates. (Although federal restrictions would make it difficult to turn existing interstates into toll roads.) Interstates, freeways, and expressways comprise only six percent of the Michigan highway system, and not all of this mileage would be well suited for toll roads.

Toll roads tend to be attractive to highway-users because they provide the most direct access to certain locations with smaller traffic volumes. An unintended consequence of toll roads can be greater wear and tear on roads running parallel to toll roads. These roads usually end up with greater traffic volumes because some highway users will not wish to pay the tolls. Thus, while it is possible that toll road revenues could free up additional funding for local government allocation, it is unlikely that these additional revenues will be enough to solve the existing and new problems experienced on the rest of the highway system.

Toll road revenues play a minor role in highway funding in states with toll roads. For example, New Jersey, which relies fairly heavily on toll road revenues, receives only 17 percent of its revenues for state administered highways from tolls. When toll roads are instituted, it is expected that those roads will become self supporting. It is not expected that the toll roads will become a revenue source, subsidizing other roads.

2. Local Registration Fees

Public Act 237 of 1987, the Local Road Improvement and Operations Revenue Act, granted counties authority to impose local registration fees up to $25, upon approval of a majority of the electors voting on the issue. (See Oakland County Vehicle Registration Fee Ballot Issue, *Council Comments No. 975*). This law was repealed by sunset in 1992. No county was able to gain voter authorization to collect local registration fees. Voters in six counties -- Alpena, Eaton, Monroe, Montcalm, Oakland, and Tuscola -- defeated proposals to impose annual $25 registration fees. No county requested voter authority to impose a local registration fee of less than $25 per year.

Local registration taxes, especially when they are levied at a flat rate for all types of vehicles, do not reflect highway use, the damage done to the road surface, or the fact that highway users from throughout the state travel on that community's roads.

3. Local Motor-Fuel Taxes

Local motor-fuel taxes are a potential revenue source that would alleviate pressures on state-collected taxes, and would allow local governments, or regions of the state, to raise revenues from highway users. A major advantage of such a system is that revenue yield would be highly correlated with use of the roads and the needs of the communities. However, there are potential problems that would have to be overcome if local motor-fuel taxes are authorized.

a) Collection Problems.

One problem is that motor-fuel taxes currently are collected from motor fuel distributors. The cost of the tax is passed on to gas stations, who in turn pass it on to customers. This system was established to create administrative efficiencies in tax collections and to reduce the potential for tax evasion. Local motor-fuel taxes would either have to be collected at the gas sta-

tions or new reporting requirements would have to be placed on distributors. Any system with local collection and reporting, and therefore a larger number of taxpayers, increases the potential for tax evasion.

b) Voter Approval Requirements for Local Taxes.

If local highway-user taxes are authorized, local governments would need voter approval before levying a new tax. Article IX, Section 31, of the Michigan Constitution requires voter approval for local governments to impose new taxes or to increase the rate of an existing tax.

c) Who Wants To Go First?

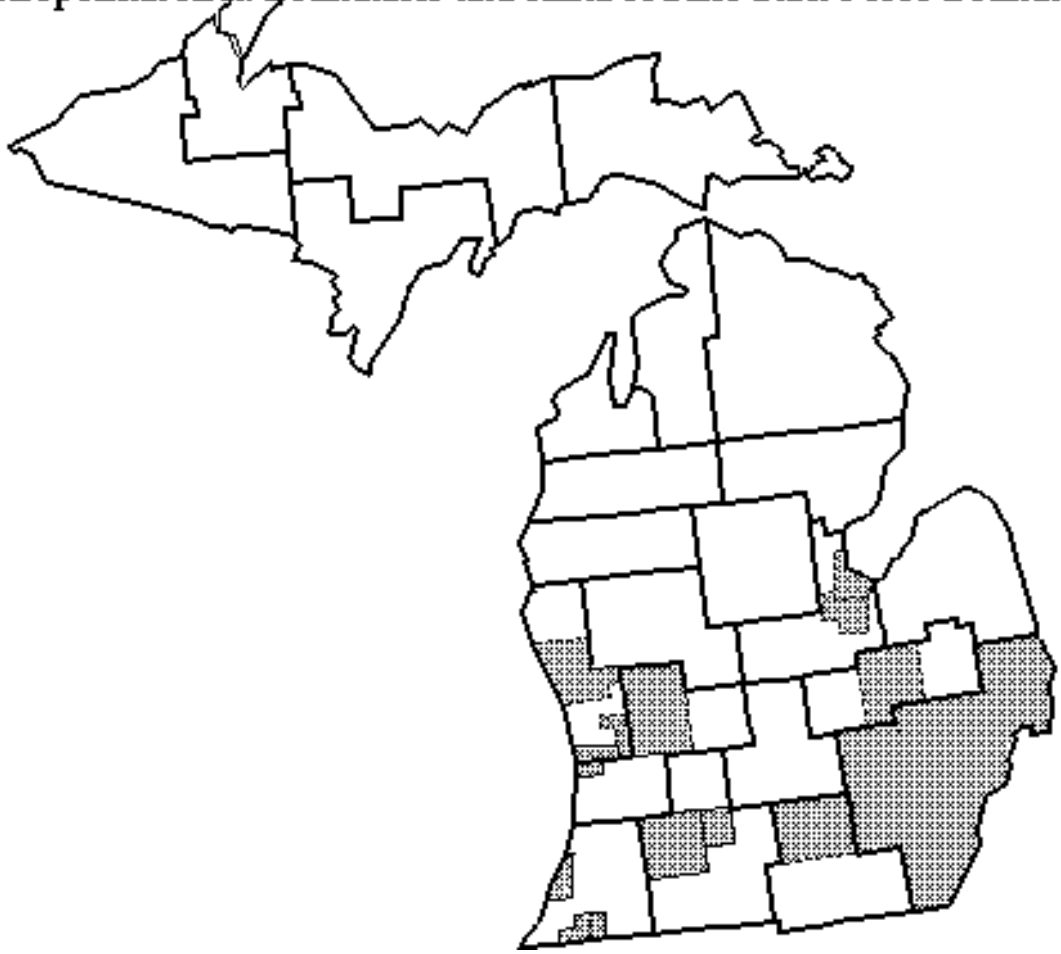
If these taxes were authorized at the city and village level, it is possible that few municipalities would willingly be the first to levy these higher taxes, unless they thought neighboring communities would also be receptive to these higher taxes. Some fear that creating a tax differential in the price of fuel would lead consumers to travel to those communities without these additional taxes to purchase fuel. The potential exists that local motor-fuel taxes, levied only in one community, could adversely affect gas stations in that community.

d) An Alternative -- A Regional Tax.

One alternative that might overcome these potential problems is to allow local taxes to be levied on a regional basis. Regions as small as a county or as large as multi-county areas could be authorized to levy these taxes. One method of defining a multi-county area could be to use the federally-defined metropolitan planning areas or transportation management areas in urban parts of the state, and the Rural ISTEA Task Force areas in rural parts of the state (See Figure 2).

Figure 2

Michigan Metropolitan Area Boundaries and Rural ISTEA Task Force Boundaries



The characteristics of the local governments and the roads in these areas are generally similar enough that a common objective could be served if these governmental units united to levy local motor-fuel taxes. Levying taxes on a regional basis, rather than within each municipality, would reduce disparities in the tax base, create economies of scale in administering and collecting the tax, and reduce the potential for consumers to shop by community in search of lower tax rates. Additionally, local motor-fuel taxes would alleviate some of the disparities in allocation of the Michigan Transportation Fund.

E. Conclusions: Taxes

1. State Taxes

A strong case can be made that additional revenues are needed for highways. Motor-fuel taxes or motor-vehicle registration taxes are the only state tax sources available that raise revenues sufficient to meet current highway needs. Motor-vehicle registration taxes bear much less relationship to highway use. Therefore, motor-fuel taxes should continue as the primary state-collected highway funding source. Additionally, policymakers should not feel precluded from using non-highway-user taxes for highway purposes.

2. Local Taxes

Local government needs and government accountability are met to a greater degree when local revenues play a significant role in funding local roads. The taxes that could raise significant revenues to meet local highway needs are property taxes, special assessments, and regional motor-fuel taxes. While these taxes have their problems, they have the greatest connection to highway use and the benefits derived from a strong highway system. These local taxes should be explored to provide more local highway revenues.

Should state policymakers decide not to grant authorization for local highway-user taxes, Michigan must move forward with state-collected highway-user taxes allocated to local governments to fund some proportion of the cost of local road construction and maintenance.

III. Are Additional Revenues the Entire Answer?

It is clear that increased revenues could be put to productive use in the Michigan highway system. Accordingly, much of the debate on this issue has concerned not whether revenues should be increased, but instead, 1) the magnitude of any increase in state revenues, and 2) the allocation of that increase to either the state or its local units.

Equally important, however, are the questions of whether increased revenues would be efficiently spent and whether the current local responsibility for funding road construction and maintenance is adequate. Unless the system is restructured both financially and administratively, it is very likely that any additional dollars will be inefficiently allocated and will purchase a lower level of highway services than they should.

The remainder of this report will concentrate on five areas in which changes could be made in order to make the most of transportation revenues:

1. *Jurisdictional Control.* The jurisdictional responsibilities for roads in Michigan were initially determined in or before the 1930s and have received little alteration since then. Roads that were once links in interstate travel may now serve largely local purposes, yet they continue to be maintained by the state, which may not be receptive to local wishes regarding their future disposition. Proper alignment of jurisdictional control and road functions would help to assure greater accountability in the construction and maintenance of roads in Michigan.

2. *Priority Determinations.* State law calls for a highway needs assessment every four years. The last needs assessment was carried out in 1983. As a consequence, the state has no systematic structure for prioritizing construction or maintenance projects or determining how needs relate to jurisdictional control. If projects are carried out that should be of lower priority than some that are not, inefficiency will occur.

3. *Physical Structure.* The climate and soil structure in Michigan are conducive to premature break-up of the road structures. Moreover, highways constructed and maintained elsewhere (such as Germany and Japan) have been built to higher standards and have been found to last much longer. It is argued that Michigan taxpayers would be unwilling to pay the up-front costs of constructing highways that would last significantly longer and be cheaper in the long run. This is an unanalyzed assumption and a serious examination of the possibilities of constructing roads to higher standards should be undertaken before significant rebuilding of the current system takes place.

In addition, incentives built into highway finance over the years have resulted in a lower level of maintenance than is desirable to retard the deterioration of roads and bridges. Because new highway construction in Michigan is much less significant than it once was, maintenance can now receive greater emphasis.

4. *Administrative Efficiency.* Although some privatization and intergovernmental cooperation have taken place, there are opportunities to achieve greater efficiency and to reduce overlap and duplication through further pursuit of these approaches.

5. *Highway Funding Allocation.* State distribution of highway revenues to local governments is based primarily on motor vehicle registrations and highway mileage. The result is that a little-used road in a rural area counts just as much as a heavily used urban road in determining the allocation of highway dollars. Unless the formula is changed to reflect highway usage, dollars will continue to be maldistributed and result in unnecessarily high expenditures statewide in order to meet the needs of heavily used roads.

While some level of increase in highway revenues can be defended, it is certainly less easy than it would be if these five issues were adequately addressed. Their magnitude provides a strong justification for a phase-in of any tax increase and a means of reassessing that increase in light of future restructuring of the administration and finance of highway construction and maintenance in Michigan.