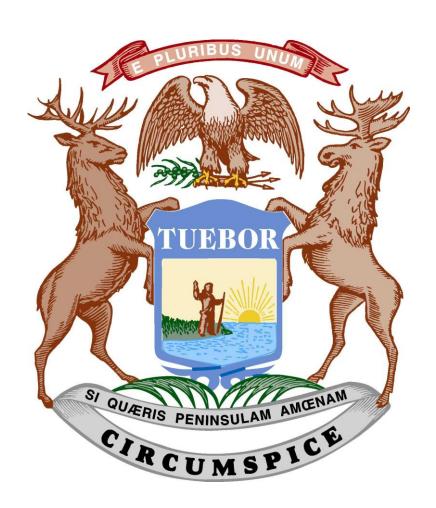
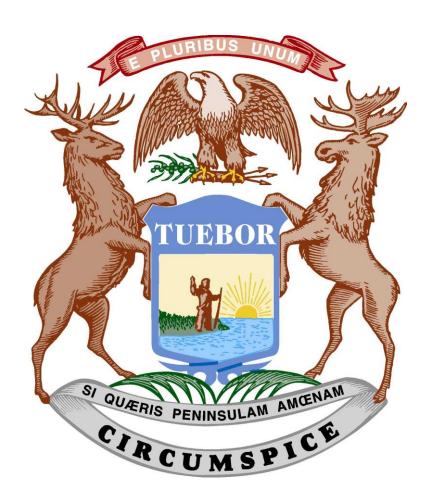
## MICHIGAN'S MOTOR FUEL AND REGISTRATION TAXES FY 2015 - 2016



Office of Revenue and Tax Analysis
Tax Analysis Division
Michigan Department of Treasury
May 2018

### MICHIGAN'S MOTOR FUEL AND REGISTRATION TAXES FY 2015 - 2016



# Office of Revenue and Tax Analysis Tax Analysis Division Michigan Department of Treasury May 2018

This report was prepared by Thomas Patchak-Schuster under the direction of Howard Heideman, Director, Tax Analysis Division, Office of Revenue and Tax Analysis. Denise T. Heidt of the Office of Revenue Tax Analysis provided assistance. Juanita Sarles, Michigan Department of Treasury, Revenue Sharing and Grants, provided data. Kevin Spitzley of the Treasury Department Special Taxes Division and Alicia Morrison of the Michigan Department of Transportation provided data.

#### TABLE OF CONTENTS

	Page
1. INTRODUCTION	2
2. GASOLINE TAX	6
Collections and Tax Rate	6
Fuel Economy and Prices	
Sales Tax	
Michigan Underground Storage Tank Financial Assurance	ce Fund
Comparisons to Other States	
Comparisons to Other Nations	
Comparisons to Other Fluids	
Other Revenue	22
3. DIESEL FUEL TAX	24
Collections and Tax Rate	24
Diesel Fuel Taxation	
International Fuel Tax Agreement (IFTA)	29
4. OTHER FUEL TAXES	30
Liquefied Petroleum Gas	30
Aviation Fuel	
5. MOTOR VEHICLE REGISTRATION TAXES	32
Motor Vehicle Weight and Value Tax	
Licenses and Permits	
6. TRANSPORTATION FUNDS	35
Michigan Transportation Fund	
State Trunkline Fund	
Comprehensive Transportation Fund	
State Aeronautics Funds	
7. 2015 ROAD FUNDING PACKAGE	39
Motor Fuel Taxes	
Sales Tax on Motor Fuels	
Registration Fees	
Michigan Transportation Fund	
Income Tax	43
8. APPENDIX	44

#### LIST OF EXHIBITS

<u>Exhil</u>	<u>bit</u>	<u>Page</u>
1	Available Operating Funds Less Transfers, FY 2015-16	2
2a	FY 2016 Transportation Revenues, Revenue Sources	3
2b	FY 2016 Transportation Revenues, Fund Distribution	3
3	Motor Fuel Tax Revenue Yields FY 2015-16	4
4	Motor Fuel Tax Rates	5
5	Gasoline Tax Revenue	6
6	Michigan Gasoline Statistics Selected Fiscal Years	8
7	Gasoline Taxes as a Percent of Total State Taxes	9
8	Real Gasoline Tax Revenue (Adjusted for Inflation)	10
9a	Average Fuel Economy, U.S. New Car Fleet	11
9b	Average Fuel Economy, U.S. New Light Truck Fleet	11
10	Fuel Efficiency, Total U.S. Passenger Car Fleet	12
11a	Michigan Gasoline Price per Gallon	13
11b	Michigan Gasoline Price per Gallon (Three-Month Average)	13
12	Michigan Underground Storage Tank Financial Assistance (MUSTFA) and Refined Petroleum Fund (RFP) Revenues	16
13a	State Gasoline Tax Rates, September 2016	18
13b	State Gasoline Tax Rates, January 2017	19
14	World Motor Fuel Prices and Taxes	21
15	Comparative Prices for Other Fluids	22
16	States With Highway Toll Roads	23
17	Diesel Fuel Tax Revenue	24
18	Michigan Diesel Fuel Taxation, Diesel Powered Light Vehicles	25
19	Michigan Diesel Fuel Taxation, Michigan Intrastate Motor Carriers	26

Exhil	<u>bit</u>	<u>Page</u>
20	Michigan Diesel Fuel Taxation, Michigan Interstate Motor Carriers Fuel Purchased in Michigan	. 27
21	Michigan Diesel Fuel Taxation, Interstate Motor Carriers Fuel Purchased Outside Michigan	. 28
22	Liquefied Petroleum Gas Tax Revenues	. 30
23	Aviation Fuel Tax Revenues	. 31
24	Motor Vehicle Registration Tax	. 32
25	Motor Vehicle Registration Tax: Amount Charged Under Different Systems	. 33
26	Michigan Transportation, License and Permits, and Miscellaneous Revenue	. 34
27	Michigan Department of Transportation, Expenditures From Certain Funds FY 2015-16	. 36
28	Ending Balances of Major Transportation Funds	. 37
29	Michigan Department of Transportation, Grants Made to Local Governments FY 2015-16	. 38
30	Chronology of Major Changes in Motor Fuel and Registration Taxes	45
31	Gasoline Tax Rankings by State, September 2016	. 56
32	Michigan Motor Fuel Revenue History	. 57
33	Michigan Motor Fuel Tax Rates	. 59
34	Michigan Gasoline Taxes as a Percent of Total Michigan State Taxes	60
35	Michigan Gasoline Tax Revenues Adjusted for Inflation	61
36	State Motor Fuel Tax Rates and Other Transportation-Related Taxes, September 2016	. 63
37	State Motor Fuel Taxes 2016, Per Person and as Percent of Personal Income	. 64
38	State-Administered Toll Roads and Crossing Facilities Revenue, 2015	. 65
39	Michigan Motor Vehicle Registration Taxes	66

## EXECUTIVE SUMMARY Michigan's Motor Fuel and Registration Taxes Fiscal Year 2015-16

Michigan's transportation system receives funding from three major sources: state motor fuel taxes, state motor vehicle registrations and fees, and federal highway fuel taxes. Transportation revenues totaled \$3.5 billion in fiscal year (FY) 2015-16, including proceeds from bond sales.

Federal funds provided \$1,242.9 million for Michigan's transportation system in FY 2015-16.

Gasoline tax collections totaled \$873.0 million in FY 2015-16 -- the highest gas tax revenue since 2007. With a 19 cent per gallon tax, the yield per 1 cent of tax was \$45.9 million. Gasoline tax revenues were up \$6.4 million from the prior fiscal year. Effective January 1, 2017, the motor fuel rate (which applies to both gasoline and diesel fuel) rose to 26.3 cents per gallon. Effective January 1, 2022 and each year thereafter, the motor fuel tax rate will be adjusted for inflation.

Diesel tax collections in FY 2015-16 totaled \$137.6 million. In FY 2016, diesel fuel was taxed at 15 cents per gallon. The yield per 1 cent of tax was \$9.2 million. Effective January 1, 2017, tax on diesel fuel rose to 26.3 cents per gallon.

State motor vehicle registration taxes provided \$1,018.3 million in FY 2015-16. Other license and permit fees and miscellaneous sources of revenue provided an additional \$151.4 million in FY 2015-16.

In September 2016, the U.S. average combined state and federal gasoline tax was about 45 cents per gallon (rounded to the nearest penny). The federal tax is 18.4 cents per gallon and the average state tax is about 26.6 cents per gallon. The combined U.S. tax is considerably lower than other countries. For example, the United Kingdom's tax rate is \$3.80 per gallon and Japan's tax rate is \$2.43 per gallon.

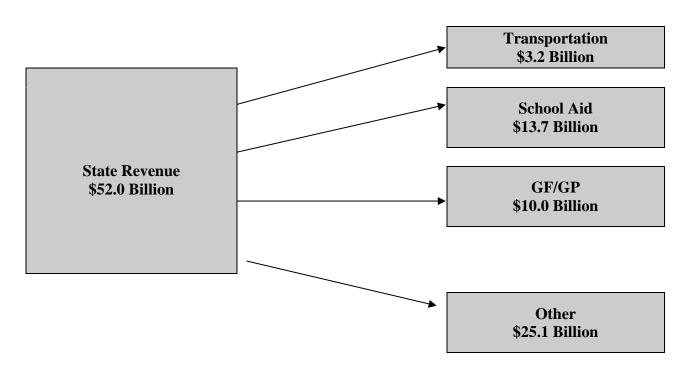
In 2016, local governmental units in nine states levied a local gasoline tax. No local units in Michigan may levy a gasoline tax. Michigan is one of six states that impose a sales tax on gasoline. There are no toll roads in Michigan, while 28 other states collect revenue from toll roads. Michigan currently operates three toll bridges.

Michigan local governments received over \$1.5 billion of Michigan Department of Transportation transfers in FY 2015-16, 44.2 percent of the total.

#### 1. INTRODUCTION

Transportation taxes and fees are an integral part of the State of Michigan revenue system. In FY 2015-16, transportation revenues were \$3.2 billion or 6.3 percent of total state revenue of \$52.0 billion (see Exhibit 1). Revenues from other major taxes are distributed to the School Aid Fund (\$13.7 billion), General Fund/General Purpose (\$10.0 billion) and Other Special Purpose Funds (\$25.1 billion).

Exhibit 1
Available Operating Funds Less Transfers
FY 2015-16



Source: Michigan Executive Budget FY 2018-19, Michigan Department of Technology, Management and Budget.

Transportation revenues are derived primarily from motor fuel taxes, vehicle registrations, licenses and permits, and federal aid. In FY 2015-16, these sources, bond proceeds and trust fund revenues provided \$3.5 billion to Michigan's transportation funds (see Exhibits 2a and 2b). Vehicle registrations and motor fuel taxes each accounted for \$1.0 billion. The yield per penny of the gasoline tax equaled \$45.9 million (see Exhibit 3).

Exhibit 2a FY 2016 Transportation Revenues, Revenue Sources (millions)

Revenue Sources	<b>Amount</b>
Gasoline Tax	\$873.0
Liquified Petroleum Gas (LPG) Tax	0.4
Diesel Fuel Tax and Motor Carrier Fuel Tax	137.6
Aviation Fuel Tax	6.1
Sales Tax	84.5
Vehicle Registrations	1,018.3
License and Permits	55.4
Miscellaneous Including Interest Earnings	105.6
Local Agencies	20.6
Federal Aid	<u>1,242.9</u>
Total	\$3,544.3

Exhibit 2b FY 2016 Transportation Revenues, Fund Distribution (millions)

<b>Fund</b>	<b>Amount</b>
State Aeronautics Fund	\$64.6
State Trunkline Fund	905.8
Michigan Transportation Fund	2,070.9
Comprehensive Transportation Fund	173.9
Combined State Trunkline Bond Proceeds	64.3
Combined Comprehensive Trans. Proceeds	0.1
Transportation Related Trust Funds Revenue	<u>264.7</u>
	\$3,544.4

Source: Michigan Comprehensive Annual Financial Report, Fiscal Year 2015-16.

Transportation taxes are levied to pay for roads, highways, bridges, and public transportation throughout the state. The proceeds from these taxes cover costs associated with the maintenance of existing infrastructure and the construction of new roads and bridges. The typical way to fund transportation systems is to impose a user fee based on road use. User fees are a price paid for a good or service provided by the government. Examples include toll roads and toll bridges. For road use, the user fee could be based on an overall measure of miles driven and damage done to roads from the weight of vehicles. Motor fuel taxes act as proxies for miles driven and weight of the vehicle. In most cases, road use is related to an individual's consumption of motor fuel. Although the relationship is not perfect, because some vehicles are more fuel efficient and some vehicles damage roads to a greater extent, these motor fuel taxes and registration fees remain the most common methods to generate revenues to pay for roads, bridges, and highways.

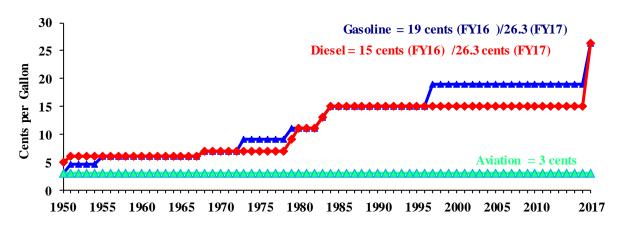
Gasoline is taxed by both an excise tax levied on the total number of gallons purchased and a sales tax levied on its price. Consumption taxes fall into two general categories: ad valorem and unit or excise taxes. Ad valorem taxes charge consumers a specific rate equal to a proportion of the price of a good, e.g., Michigan's six-percent sales tax. An excise or unit tax charges the consumer a fixed amount per unit of commodity sold. Thus, the excise tax liability is independent of the price of the good. Only the quantity purchased determines tax revenues. The 19 cents (26.3 cents beginning January 1, 2017) per gallon gasoline tax in Michigan is an example of an excise tax. Exhibit 4 provides a graphical illustration of changes in all motor fuel excise tax rates from FY 1950 to FY 2017, while Exhibit 33 (in the Appendix) presents a tabular chronological review of the same data.

Exhibit 3 Motor Fuel Tax Revenue Yields FY 2015-16

		Rate	Revenue
<u>Fuel</u>	Revenue	(cents)	Per Penny
Gasoline	\$872,968,895	19	\$45,945,731
Diesel	137,608,536	15	9,173,902
Aviation	6,133,158	3	2,044,386
LPG	401,498	15	26,767

Source: Tax Analysis Division, Office of Revenue and Tax Analysis, Michigan Department of Treasury.

**Exhibit 4 Motor Fuel Tax Rates** 



Note: Tax rates are at end of fiscal year. Source: Michigan Department of Treasury.

#### 2. GASOLINE TAX

#### **Collections and Tax Rate**

Gasoline tax collections totaled \$873.0 million in FY 2015-16 yielding \$45.9 million per one cent of tax levied. Exhibit 5 provides a 57-year history of collections.

Exhibit 5
Gasoline Tax Revenue
(millions)



Note: FY 1975-76 was 15-month fiscal year. Source: Comprehensive Annual Financial Reports.

Gasoline tax revenues grew an average of 1.6 percent per year from FY 1984-85 to FY 1995-96, when the tax rate held constant at 15 cents per gallon<sup>1</sup>. On August 1, 1997, the gasoline tax was raised to 19 cents per gallon. (Exhibit 4 provides a graphical illustration of all motor fuel tax rates from FY 1951 to FY 2016, and Exhibit 33 in the Appendix presents a tabular chronological review of the same data.) Between FY 1997-98 (the first full fiscal year in which the gasoline tax stood at 19 cents) and FY 2016, gasoline tax revenues fell 0.2 percent per year. A sharp rise in gasoline prices played a major role in reducing gasoline consumption and hence lowered the per gallon gasoline tax revenue between FY 1998 and FY 2014. Gasoline prices more than tripled between FY 1998 and FY 2014 – up from \$1.09 per gallon to \$3.53 per gallon. Strong economic growth in Asia, coupled with geopolitical/military conflicts in and around many of the world's major oil

<sup>&</sup>lt;sup>1</sup> The Michigan gasoline tax was enacted in 1925 at 2 cents per gallon. In 1927 the tax rate increased to 3 cents, where it remained until 1951, when it increased to 4.5 cents per gallon. After several increases over the 1951 - 1983 period, the tax rate increased to 15 cents per gallon in 1984, where it remained until 1997. On August 1, 1997, (Public Act 83 of 1997), the gasoline tax rate was increased to 19 cents per gallon. Effective January 1, 2017, the gasoline tax rate was increased to 26.3 cents per gallon.

producing nations, sharply increased oil prices. Between FY 1998 and FY 2014, oil prices more than quintupled -- rising from \$16.20 per barrel to \$99.30 per barrel. In FY 2015, oil prices fell sharply – dropping \$42.81 per barrel (43.1 percent). Oil prices fell an additional \$15.14 per barrel in FY 2016. Consequently, the average price of gasoline in Michigan dropped \$1.39 per gallon between FY 2014 and FY 2016. With the price decline, gasoline consumption rose and gasoline tax revenues increased.

Exhibit 6 compares gallons of gasoline sold in Michigan (as reported to the Federal Highway Agency), gasoline tax revenue, and average price of a gallon of Michigan gasoline for selected fiscal years. Gasoline tax revenues are earmarked to the Michigan Transportation Fund (MTF) and distributed by statutory and constitutional formula to local units of government and state transportation funds. Suppliers are paid a 1.5 percent fee for the cost of remitting the gasoline tax to the state. Suppliers are required to pay one-third of the fee to retailers.

The demand for gasoline is relatively income inelastic as changes in income have only a small effect on the quantity purchased. While Michigan personal income increased 65.0 percent from FY 1998 to FY 2016, gasoline tax revenue *decreased* 3.4 percent from FY 1998 to FY 2016. In part, the decline in gasoline tax revenues is because technological advances have made motor vehicles more fuel efficient.

Since the mid-1970s, the gasoline tax as a share of total state tax revenues has trended lower. Between FY 1984 and FY 1997, the tax rate remained unchanged at 15 cents per gallon. Further in 1994, School Aid Reform raised many existing state taxes and introduced new state taxes. Between FY 1985 and FY 1993, the gasoline tax's share of state revenues fell from 6.4 percent to 5.1 percent. Then, as tax reforms were enacted, the gasoline tax as a share of total state revenues dropped to 3.7 percent in FY 1996.

The increase in the gasoline tax rate to 19 cents effective August 1997 raised the gasoline tax as a share of total state tax revenues rose to 4.4 percent in FY 1998. After falling to 4.0 percent in FY 2000, the gasoline tax's share of state taxes rebounded to 4.3 percent by 2002. However, the gasoline tax's share of total taxes steadily dropped over the next six years and fell to 3.3 percent in FY 2008. In FY 2009, the gasoline tax's share of state taxes rose to 3.6 percent, where the share remained in FY 2010. However, the gasoline tax as a share of total state tax revenues fell in each of the following two years and dropped to 3.3 percent in FY 2012. The share remained at 3.3 percent in FY 2013. However, in FY 2014, the gasoline tax's share of state taxes fell to 3.2 percent, where it remained in FY 2015. In FY 2016, the gasoline tax's share of state taxes fell to 3.1 percent. Exhibit 7 illustrates the declining share of the gasoline tax as a percent of total state taxes.

Effective January 1, 2017, the motor fuel tax rate (which applies to both gasoline and diesel fuel) increased to 26.3 cents per gallon. Effective January 1, 2022 and each following year, the motor fuel tax rate will increase by the lesser of 5.0 percent or the rate of inflation. If the consumer price index declines, the motor fuel tax rate remains unchanged.

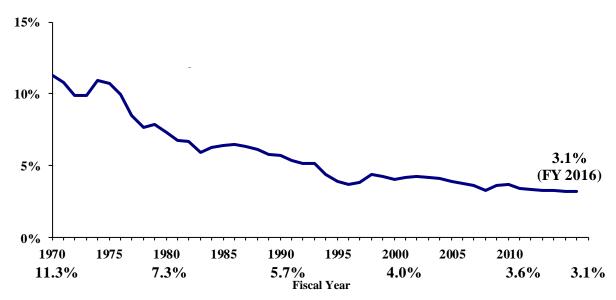
Exhibit 6 Michigan Gasoline Statistics Selected Fiscal Years

Average Price per Gallon of

			per Gallon of
Fiscal Year	<u>Gallons</u>	Tax Revenue	Michigan Gasoline
1985	3,867,627,365	\$569,708,205	\$1.26
1990	4,194,894,390	626,229,262	\$1.12
1991	4,175,788,031	622,513,663	\$1.21
1992	4,202,465,843	631,024,833	\$1.10
1993	4,242,283,180	657,191,544	\$1.08
1994	4,494,366,161	658,877,569	\$1.06
1995	4,510,953,745	681,711,071	\$1.10
1996	4,577,048,759	680,586,256	\$1.17
1997	4,644,262,717	736,316,612	\$1.23
1998	4,766,365,149	903,542,085	\$1.09
1999	4,981,820,560	931,031,120	\$1.08
2000	4,966,525,045	921,991,065	\$1.48
2001	5,045,764,126	933,494,040	\$1.57
2002	5,001,188,590	938,911,784	\$1.31
2003	5,049,665,389	935,671,742	\$1.55
2004	4,993,695,860	932,139,677	\$1.75
2005	4,927,490,936	922,368,211	\$2.16
2006	4,823,929,261	906,220,722	\$2.57
2007	4,750,574,728	883,687,513	\$2.64
2008	4,556,519,571	848,864,067	\$3.47
2009	4,509,410,243	846,013,305	\$2.28
2010	4,482,876,800	841,658,744	\$2.73
2011	4,440,625,631	831,717,538	\$3.47
2012	4,384,833,381	818,797,704	\$3.64
2013	4,443,943,930	821,632,225	\$3.64
2014	4,431,281,328	820,625,646	\$3.53
2015	4,491,367,039	866,609,209	\$2.56
2016	4,686,433,689	872,968,895	\$2.14

Source: Motor Fuel Division and Tax Analysis Division, Michigan Department of Treasury and Michigan Department of Transportation.

Exhibit 7
Gasoline Taxes as a Percent
of Total State Taxes



Note: FY 1975-76 was 15-month fiscal year.

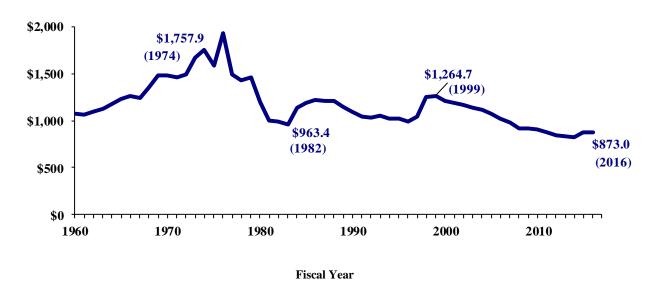
Source: Comprehensive Annual Financial Report, various years.

Even adjusting nominal gasoline tax revenues for inflation (in FY 2016 dollars), real gasoline tax revenues trended upward between FY 1954 and FY 1974 and increased an average of 4.7 percent per year. However, after rising substantially in the 15-month FY 1975-76, real gasoline tax revenues fell in six of the following seven years (1977-83). Between FY 1974 and FY 1983, real gasoline tax revenues fell 6.5 percent per year. Bolstered by an increase in the gasoline tax rate, real gasoline tax revenues rose substantially in FY 1984. Real gasoline tax revenues then rose in each of the following two fiscal years. However, real gasoline tax revenues fell in seven of the following 10 fiscal years (1987-1996) – averaging a 2.0 percent decline per year.

The gasoline tax rate was increased to 19 cents per gallon beginning August 1997. As a result, real gasoline tax revenues rose in both FY 1997 and FY 1998. With a 26.7 percent increase in the gasoline tax rate from 15 cents and 19 cents, fiscal year real gasoline tax revenues rose an average of 12.5 percent per year between FY 1996 and FY 1998. Following a slight rise in FY 1999, real gasoline tax revenues fell in 14 of the next 15 fiscal years. As a result, FY 2014 real gasoline tax revenues were down 35.2 percent compared with FY 1999. In addition, FY 2014 real gasoline tax revenues represented Michigan's lowest inflation-adjusted gasoline tax revenues since 1955. Compared with record high real Michigan gasoline tax revenues (excluding the 15-month FY 1975-76) reached in FY 1974, FY 2014 real gasoline tax revenues were down 53.4 percent. In FY 2015, an increase in nominal gasoline tax revenues coupled with a decline in overall consumer prices pushed real gasoline tax revenues up 6.9 percent. In 2016, real gasoline tax revenues fell slightly (-0.3 percent). Consequently, FY 2016 real gasoline tax revenues are down 14.7 percent from ten years ago and are down 50.3 percent from 1974's record high real gasoline tax revenues.

Gasoline tax revenues have lagged behind inflation for two reasons. First, the tax is an excise tax, not an ad valorem tax. Second, increased fuel efficiency has slowed the growth in consumption. Over the past ten fiscal years, nominal (*not* adjusted for inflation) gasoline taxes have declined an average of 0.4 percent per year.

Exhibit 8
Real Gasoline Tax Revenue
(adjusted for inflation (in FY 2016 millions of dollars))



Note: FY 1975-76 was 15-month fiscal year.

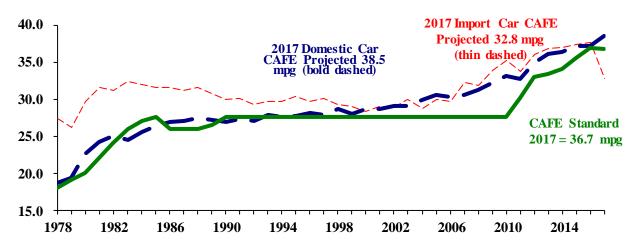
Source: Comprehensive Annual Financial Report, various years and U.S. Bureau of Labor Statistics..

#### **Fuel Economy and Prices**

Improvements in motor vehicle fuel economy have clearly contributed to lower gasoline tax revenues. Possible oil shortages, higher gas prices, federal Corporate Average Fuel Economy (CAFE) standards, and technology advances have all led automakers to manufacture more fuel-efficient vehicles over the years. CAFE standards for new light vehicles have risen from 18.0 miles per gallon for model year 1978 to 33.0 miles per gallon for 2017. For 2017, the domestic new car fleet average fuel economy stood at 37.2 mpg, while the import average was 37.6 mpg. For model year 2017 light trucks, the fleet average fuel economy was 28.0 mpg. See Exhibits 9a and 9b.

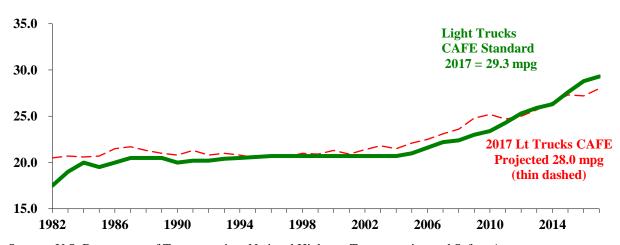
Nationally, the average passenger car's gasoline consumption has decreased since 1970. In 1970, the average passenger car consumed 760 gallons of gasoline per year in contrast to 522 gallons of gasoline consumed in 2016. This represents a 31.3 percent decline in consumption of gasoline per car. Travel per car is up from an average of 9,821 miles in 1970 to 11,507 miles in 2016, a 17.2 percent increase (see Exhibit 10). The fuel efficiency of the *total* fleet increased from 12.9 miles per gallon in 1970 to 22.0 miles per gallon in 2016, a 70.5 percent increase. Thus, with fuel efficiency gains outpacing vehicle miles traveled, overall gasoline consumption per vehicle has decreased, helping to explain slower growth in motor fuel revenues.

#### Exhibit 9a Average Fuel Economy U.S. New Car Fleet



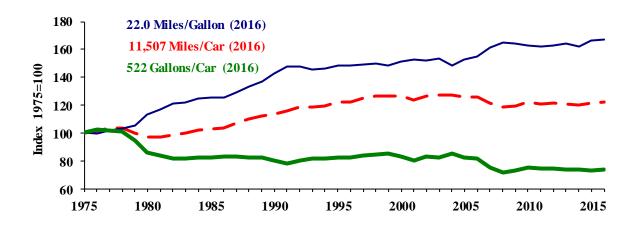
Source: U.S. Department of Transportation, National Highway Traffic Safety Administration. 2017 CAFE standard calculated by weighting 2017 domestic car standard times domestic 2016 car sales share plus 2017 import car standard times import 2016 car sales share (ORTA calculation).

#### Exhibit 9b Average Fuel Economy U.S. New Light Truck Fleet



Source: U.S. Department of Transportation, National Highway Transportation and Safety Agency.

Exhibit 10 Fuel Efficiency Total U.S. Passenger Car Fleet



Source: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics, various years.

From January 1991 to December 1999, average Michigan gasoline prices fluctuated from \$0.92 a gallon to \$1.31 a gallon. In the spring of 2000, a combination of economic forces, system capacity constraints, and environmental regulations pushed the price of Michigan gasoline to \$1.95 a gallon in June 2000. Between 2000 through 2002, Michigan average gasoline prices remained volatile, declining to a \$1.12 low in December 2001 after rising to a \$1.95 per gallon high in June 2000.

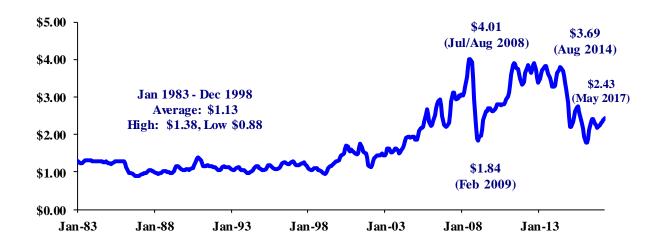
Driven by sharp fluctuations in oil prices, Michigan gasoline prices fluctuated tremendously in 2008. Michigan gasoline prices rose from \$3.00 per gallon in December 2007 to a record high of \$4.10 per gallon in June 2008 but then plummeted to \$1.67 per gallon in December 2008. Oil supply disruptions led to spikes in oil prices, and hence, spikes in gasoline prices. Major disruptions were caused by hurricanes and storms, political events in major oil producing countries, and unplanned outages in U.S. refineries and pipelines. Substantially more severe than anticipated economic and financial declines pushed oil prices, and hence, gasoline prices, sharply lower with gasoline prices falling to \$1.67 per gallon in December 2008. With supply pressures growing and demand slowly strengthening, gasoline prices rose to \$4.03 per gallon in May 2011. Between June 2011 and September 2014, gasoline prices fluctuated between \$3.20 per gallon and \$4.00 per gallon with a median price of \$3.65 per gallon. Gasoline prices plummeted with the price falling below \$2.00 per gallon in January 2015 before rising sharply to \$2.80 per gallon in July 2015. Then, gasoline prices headed downward and fell to \$1.64 per gallon in February 2016 before rising to \$2.60 per gallon in June 2016. Gasoline prices then fell in each of the following five months. As a result, gasoline prices dropped to \$2.10 per gallon in November 2016. Gasoline prices then rose in December 2016 and January 2017 in which gasoline prices rose to \$2.36 per gallon. Over the next four months, gasoline prices fluctuated between \$2.28 per gallon and \$2.51 per gallon. In May 2017, gasoline prices averaged \$2.41 per gallon. Exhibits 11a and 11b show the monthly fluctuations of the price of a gallon of Michigan gasoline between January 1982 and May 2017.

Exhibit 11a Michigan Average Gasoline Price per Gallon



Source: Michigan Department of Transportation.

Exhibit 11b Michigan Gasoline Price per Gallon (Three Month Average)



Source: Michigan Department of Transportation.

#### **Sales Tax**

Michigan levies a six percent sales tax on the pump price of motor fuel, excluding state motor fuel taxes. Six states, including Michigan, levy a sales tax on gasoline. For FY 2016, 27.9 percent of one-cent of all auto-related sales tax collections (including the sales tax on motor fuel) is distributed to the Comprehensive Transportation Fund (CTF).<sup>2</sup> The remaining auto-related sales tax collections go to the School Aid Fund and local government revenue sharing. In FY 2015-16, the CTF sales tax transfer was \$84.5 million.

Beginning October 1, 2016, and the first day of each calendar quarter thereafter, an amount equal to the collections from two quarters immediately preceding the current calendar quarter of the 2 percent sales tax from the retail sale of aviation fuel is to be distributed to the State Aeronautics Fund (35 percent) and the Qualified Airport Fund (65 percent). Similarly, an amount equal to the collections of the 2 percent use tax from the use, storage, or consumption of aviation fuel shall be distributed to the State Aeronautics Fund (35 percent) and the Qualified Airport Fund (65 percent).

Since May 1994, purchasers of gasoline from a refiner, pipeline terminal operator, or marine terminal operator must prepay state sales tax equal to 6 percent of the statewide average retail price of a gallon of self-serve unleaded regular gasoline as determined by the Department of Treasury. Originally, Treasury was required to determine a prepay amount for gasoline every three months. Beginning April 2013, the Department of Treasury is required to determine a prepay amount for diesel fuel as well as gasoline. In addition, beginning April 2013, Treasury is required to determine prepay amounts every month. Succeeding purchasers will pass the prepayment along until reaching the retailer level. A retailer must reconcile any differences in prepaid sales tax on gasoline/diesel and actual sales tax liability on the retailer's sales tax return.

With sharp increases in gasoline prices, the prepay sales tax amount increased substantially. Between the end of 2002 and early 2009, the prepay amount rose steadily from 5.8 cents to 18.5 cents in October 2008, where it remained through February 2009. With gasoline prices falling sharply in early 2009, the prepay amount fell sharply to 11.6 cents in March 2009 and to 9.8 cents in June 2009. In September 2009, the sales tax prepay amount rose to 12.4 cents, where the amount stayed through May 2010. In June 2010, the prepay amount rose to 14.2 cents, where it remained unchanged until rising to 17.6 cents in June 2011.

With high and fluctuating gasoline prices, the sales tax prepay amount ranged between 17.2 cents and 21.3 cents between FY 2012 and FY 2014 with a median prepay amount of 20.5 cents. The prepay amount rose to 21.3 cents in September 2011 and remained unchanged through February 2012. The prepay amount dropped to 17.9 cents in March 2012, but rose to 20.5 cents in June 2012. The prepay amount remained at 20.5 cents through February 2013. While dropping to 18.1 cents in March 2013, the prepay amount rose to 20.4 cents in April 2013 (the first month for which Treasury was required to determine prepay amounts each month – instead of every three months).

<sup>&</sup>lt;sup>2</sup> The state constitution permits up to one-cent of auto-related sales tax collections to be distributed to the CTF, while the Sales Tax Act provided that 27.9 percent of one-cent of auto-related sales tax collections be distributed to the CTF.

Between April 2013 and September 2014, the prepay amount ranged between 17.2 cents and 21.1 cents. The prepay amount stayed just above 20 cents through August 2013 when the amount equaled 21.1 cents. Beginning in September 2013, the prepay amount dropped in each of the next six months with the amount falling to 17.2 cents in February 2014. The prepay amount rose each month between March 2014 and June 2014, inclusive. In June 2014, the prepay amount increased to 20.2 cents, where the amount stayed in July 2014. The prepay amount rose to 21.0 cents in August 2014 and then fell to 19.6 cents in September 2014.

The gasoline prepay amount fell each month between October 2014 and March 2015, when the amount dropped to 10.0 cents. The rate then rose each month between April 2015 and August 2015, when the amount rose to 15.0 cents. The prepay amount fell to 14.6 cents in September 2015.

The gasoline prepay amount fell each month between October 2015 and April 2016, when the prepay amount dropped to 8.1 cents – the lowest gasoline prepay amount since March 2005. The gasoline prepay amount then increased in May 2016 and June 2016, when the amount rose to 10.9 cents per gallon. The gasoline prepay amount rose in each of the next two months with the amount increasing to 13.5 cents per gallon in August 2016. The amount then fell to 11.9 cents per gallon in September 2016. After rising very slightly in October 2016, the amount then fell in each of the next three months – dropping to 10.9 cents per gallon in January 2017. The prepay amount increased in each of next four months with the amount rising to 12.7 cents per gallon in June 2017. In July 2017, the prepay amount fell to 12.2 cents per gallon.

April 2013 marked the first month for which the Department of Treasury was required to determine a prepay amount for diesel fuel. Between April 2013 and September 2014, the prepay amount for diesel fuel ranged narrowly between 21.4 cents and 23.0 cents. With declines in eight of the 12 months in FY 2015, the diesel fuel prepay amount dropped from 21.5 cents in September 2014 to 15.1 cents in September 2015. Sharp drops in the diesel prepay amount in February 2015 and March 2015 accounted for 5.3 cents of the net 6.4 cents decline between the end of FY 2014 and the end of FY 2015. With declines in six of the first seven months of FY 2016, the diesel prepay amount declined a net 4.7 cents between September 2015 and April 2016, when the prepay amount fell to 10.4 cents. With increases over the following four months, the prepay amount rose to 12.9 cents in August 2016. The diesel fuel prepay amount changed little over the following ten months with the amount ranging narrowly between 12.6 cents per gallon and 13.2 cents per gallon. In July 2017, the diesel fuel pre-payment amount stood at 12.9 cents per gallon.

#### Michigan Underground Storage Tank Financial Assurance Fund

A 0.875-cent per gallon fee is levied on petroleum products sold in Michigan. Previously, the fee's revenues were placed in the Michigan Underground Storage Tank Financial Assurance Fund (MUSTFA). The MUSTFA, created by Public Act 518 of 1988, assisted owners of underground storage tank systems in meeting environmental standards mandated by the federal government. As of June 29, 1995, MUSTFA no longer accepted new claims, with unpaid claims to be paid from future fund revenues. (See Exhibit 12.)

Public Act 390 of 2004 created the Refined Petroleum Fund (RPF), transferred the balance of

approximately \$60.0 million from the MUSTFA to the RPF and directed all future revenue from a 0.875-cent per-gallon environmental regulatory fee on refined petroleum products to the new Fund. RPF revenues are used for cleanup projects, debt service on cleanup bonds, administration and program staff costs, and gasoline inspection programs. Only cleanup projects involving petroleum-related contaminants qualify to receive RPF funding; these are usually leaking underground storage tank (LUST) sites. Revenue from the per-gallon fee declined with RPF revenue falling from \$59.7 million in FY 2006 to \$32.7 million in FY 2015. In FY 2016, the RPF revenue rose slightly to \$33.1 million.

Exhibit 12
Michigan Underground Storage Tank Financial Assistance (MUSTFA)
And Refined Petroleum Fund (RPF) Revenues

Fiscal Year	<b>Amount</b>
1989	\$8,946,849
1990	\$52,371,142
1991	\$50,571,962
1992	\$54,266,136
1993	\$51,503,326
1994	\$59,611,312
1995	\$71,756,920
1996	\$72,669,520
1997	\$61,381,557
1998	\$63,448,212
1999	\$68,582,246
2000	\$66,953,391
2001	\$62,727,422
2002	\$64,550,639
2003	\$61,231,905
2004	\$59,583,486
2005	\$117,705,696
2006	\$59,727,401
2007	\$57,398,041
2008	\$53,521,558
2009	\$51,310,053
2010	\$51,111,780
2011	\$51,110,946
2012	\$50,989,999
2013	\$50,953,559
2014	\$54,618,152
2015	\$32,670,083
2016	\$33,103,085
Total	\$1,594,376,378

Note: Effective October 12, 2004, the RPF fund was established and fee revenues formerly distributed into the MUSTFA fund began to be distributed into the RPF fund. Pre-2005 figures represent MUSTFA fund revenue. Post-2004 figures represent RPF revenues. 2005 revenues include MUSTFA fund amounts transferred into the RPF fund.

Source: Executive Budget, Detailed Statement of General and Special Revenue Funds table, various years.

#### **Comparisons to Other States**

End of Fiscal Year 2016

In September 2016, Michigan's gasoline tax rate (19 cents per gallon) was one of the lowest, ranking 37<sup>th</sup> nationally (see Exhibit 13a and Exhibit 31 in the Appendix). Pennsylvania had the highest state gasoline tax rate of 50.3 cents per gallon. Alaska had the lowest gasoline tax rate at 9.0 cents per gallon. The median gasoline tax rate in September 2016 was 23.7 cents per gallon.

Comparing gasoline tax rates among states is complicated because states levy other additional taxes that are based on per gallon consumption of gasoline. For example, New York levies a gasoline tax rate of 8 cents per gallon, and also has a "business petroleum tax" of 17.0 cents per gallon. While technically paid by business, the tax is levied on the consumption of gasoline on a per gallon basis at the retail or wholesale level. Michigan is one of six states that levy sales tax on gasoline. Besides having different sales tax rates, four of these states include the federal gasoline tax in the sales tax base. California also includes the state gasoline tax in the sales tax base but taxes gasoline at a reduced 2.25 percent sales tax rate. In addition, unlike Michigan, local units in nine states currently levy a gasoline tax. Factoring in sales tax and maximum local gasoline taxes, Michigan ranked 19<sup>th</sup> (see Exhibit 31, in the Appendix). In addition, local units in some states, impose a local sales tax on gasoline sales. Michigan does not allow any local unit to impose sales or use taxes on any good or service.

In 2016, comparing all state motor fuel tax collections (gasoline, diesel, LPG, etc.), Michigan ranked among the lowest both in motor fuel taxes per person and in motor fuel taxes as a percent of personal income (see Exhibit 37 in the Appendix). In 2016, Michigan per person motor fuel taxes averaged \$100, ranking 43<sup>rd</sup> in the country. Michigan ranked 40<sup>th</sup> in motor fuel taxes as a percent of personal income at 0.23 percent. Wyoming ranked first in motor fuel taxes per person at \$277 per person in motor fuel taxes, while West Virginia ranked first in motor fuel taxes as a percent of personal income at 0.53 percent. Oklahoma ranked last in motor fuel taxes per capita with motor fuel taxes per person at \$35 and Alaska ranked last in motor fuel taxes as a percent of personal income at 0.07 percent.

Exhibit 13a State Gasoline Tax Rates Effective September 2016 (cents per gallon)

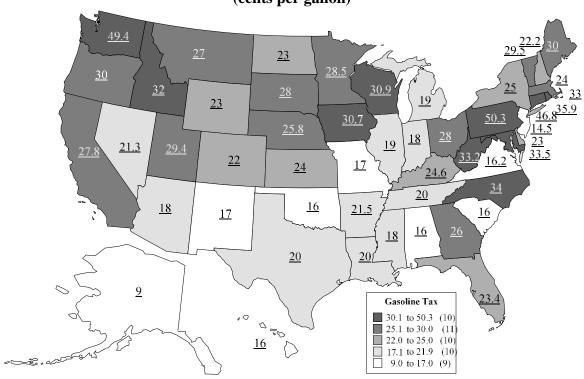
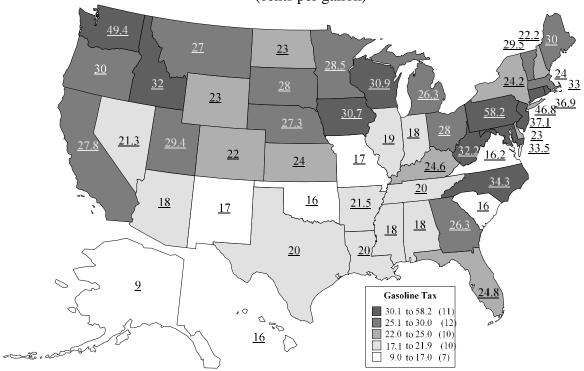


Exhibit 13b State Gasoline Tax Rates Effective January 2017





Notes: This Report's motor fuel tax rates do not include environmental fees, storage fees or inspection fees.

Alaska: Includes a 0.95 cent refined fuel surcharge added to the flat 8.0 cents per gallon (cpg) gasoline tax rate.

Arizona: The gasoline/diesel fuel tax rate equals 18.0 cents per gallon, cpg, for light and exempt vehicles, but is set at 26.0 cpg if used to propel a truck with more than two axles or with a declared gross weight over 26,000 pounds.

California: Effective July 2015 through June 30, 2016, the California gasoline tax rate was 30.0 cpg. Between July 1, 2014 and June 30, 2015, the rate had been 36.0 cpg. On July 1, 2016, the rate decreased to 27.8 cpg.

Connecticut: Includes petroleum products gross receipts earnings tax levied equal to 8.1 percent of the wholesale price of gasoline using the average September 2016 wholesale price. On a cents per gallon basis, the earnings tax equals 10.9 cents. The earnings tax is in addition to Connecticut's flat gasoline excise tax rate equal to 25 cents per gallon.

Florida: The listed gasoline tax rate includes 13.3 cpg "sales tax" imposed under motor fuels tax statute and the 6.1 cpg State Comprehensive Enhanced Transportation System Tax and a 4.0 cpg fixed excise tax.

Georgia: Effective July 1, 2015, the prepaid state gasoline tax component was eliminated and the state gasoline tax rate (diesel tax rate) was set at 26 cpg (29 cpg).

Indiana: Indiana levies an 18.0 cpg excise tax on gasoline. The above does not include Indiana's gasoline use

tax rate (equal to the statewide average pre-tax retail price of gasoline times seven percent). Indiana no longer levies a sales tax on gasoline. The use tax rate is revised monthly using an updated statewide average pre-tax retail price of gasoline. In September 2016, the gasoline use tax rate was 11.3 cents.

Kentucky: Gasoline variable excise tax equals nine percent times the average wholesale price of one gallon of gasoline, rounded to the nearest one-tenth of one cent. For the quarters beginning January 1, 2016, October 1, 2015, July 1, 2015 and April 1, 2015, the tax rate for gasoline is 24.6 cents per gallon. Effective April 1, 2015, the floor price was raised from \$1.786 per gallon to \$2.177 per gallon.

Maryland: Under the state's motor fuel tax statute, Maryland imposes a sales and use tax equivalent rate equal to a specified percentage times the average annual retail price of regular unleaded gasoline, excluding federal and State taxes. The specified percentage increases over time to 5.0 percent. For September 2016, the specified rate was 5.0 percent and the average annual retail price of regular unleaded gasoline was 175.24 cents. Thus, the per-gallon SUTE rate on gasoline in September 2016 equaled 8.80 cents. The sales tax equivalent rate is included in the overall state motor fuel rate in the above map. Beginning July 1, 2013, the excise tax rate on gasoline was indexed to inflation annually. In September 2016, the excise tax rate on gasoline was 24.7 cents per gallon.

Nebraska: The state's motor fuel rate consists of a fixed component and a variable component. The variable component rate is updated every 6 months. In 2016H2, the gasoline tax rate consisted of a fixed rate of 11.5 cents per gallon, a variable rate component of 2.5 cents per gallon and a wholesale tax rate of 11.8 cents per gallon.

Nevada: The state rate for motor fuel tax in Nevada is 21.25 cents per gallon, composed of 17.65 cents per gallon on motor vehicle fuel (NRS 365.175(2)), plus an additional 3.6 cents per gallon tax (NRS 365.180(1). In addition, all counties levy an optional 1.75 cents per gallon tax (NRS 365.190(1)) and a 1.00 cent per gallon mandated county tax (NRS 365.192). Counties adopting a streets and highways plan may levy a tax not to exceed 9 cents per gallon on motor fuel, except for aviation fuel and leaded racing fuel. (NRS 373.030).

New Hampshire: The State "road toll" tax imposed on the sales of motor fuel by distributors is 22.2 cents per gallon (18 cents per gallon prior to July 1, 2014). Effective July 1, 2014, as required by statute, the "road toll" tax rate was adjusted by multiplying the ratio of the annual average CPI-All Urban Consumers for the Boston, Brocton, Nashua; MA-NH-ME-CT area in 2013 divided by the CPI-All Urban Consumers for the Boston, Brocton, Nashua; MA-NH-ME-CT area for 2003. This CPI adjustment provision will be repealed upon completion of the bonding for the widening of Interstate 93. Effective July 1, 2014, the State increased both the gasoline and diesel tax by 4.2 cents per gallon to 22.2 cents per gallon. There have been no further adjustments to the "road toll" tax rate since July 2014. Thus, the rate in September 2015 remained 22.2 cents per gallon.

New Jersey: Includes 4.0 cents per gallon petroleum gross receipts tax. On November 1, 2016, the gross receipts tax was increased to 22.6 cpg plus four cents (26.6 cpg). This is in addition to 10.5 cpg fuel tax rate.

New York: Includes 17.8 cents per gallon business petroleum tax.

North Carolina: Gasoline tax rate consists of a 17.5 cpg flat rate plus a variable wholesale component of 3.5 cpg or seven percent of the average wholesale price of motor fuel during the preceding six-month base period, whichever is greater. For the period between April 1, 2015 and December 31, 2015, the combined rate was 36.0 cents per gallon (down from 37.5 cents in the prior period). Thus, the combined September 2015 gasoline tax rate was 36.0 cents per gallon. Effective January 1, 2016 through June 30, 2016, the combined rate fell to 35.0 cents per gallon. The combined rate fell an additional 1.0 cent per gallon to 34.0 cents per gallon for 2016H2. Effective January 01, 2017, the rate increased from 34.0 cpg to 34.3 cpg.

Pennsylvania: Eliminated its excise tax on motor fuels and replaced the excise tax with a cpg equivalent tax (oil company franchise tax) based on the average wholesale price per gallon. For calendar year 2016 the gasoline tax was 50.3 cents per gallon. For diesel fuel, the rate was 64.0 cpg.

Vermont: In addition to 12.1 cent per gallon excise tax, includes 3.96 cents per gallon motor fuel transportation infrastructure assessment and 13.4 cents per gallon gasoline and motor fuel tax assessment.

Virginia: The gasoline tax rate equals 5.1 percent of the statewide average wholesale pre-tax price of a gallon of unleaded regular gasoline in cents per gallon. For calendar years 2015-2017, the tax rate on gasoline is 16.2 cents per gallon. For the period July 1, 2013 through December 31, 2014, the tax rate was 11.1 cents per gallon.

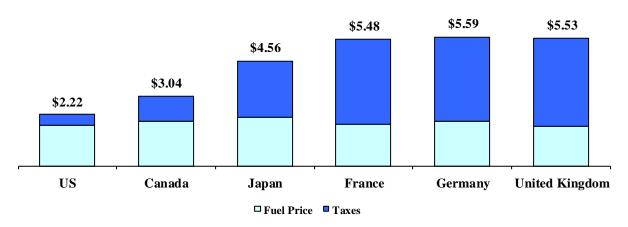
West Virginia: Gasoline tax rate includes a variable rate component equal to five percent of the average wholesale price of gasoline (equal to 12.7 cents per gallon) along with a 20.5 cents per gallon fixes rate.

Sources: Commerce Clearing House, American Petroleum Institute, Federation of Tax Administrators, Federal Highway Administration and various state revenue/treasury/taxation departments.

#### **Comparisons to Other Nations**

Motor fuel tax rates in other countries are much higher than U.S. rates. In September 2016, the average combined federal and state gasoline tax rate in the U.S. was about 45 cents (rounded to the nearest cent). For example, in September 2016, all motor fuel taxes in Japan totaled \$2.43 per gallon while British taxes were \$3.81 per gallon. These higher taxes increased the average price of gasoline per gallon to \$4.56 per gallon in Japan and \$5.53 per gallon in the United Kingdom.

Exhibit 14
World Motor Fuel Prices and Taxes
September 2016
(dollars per gallon)

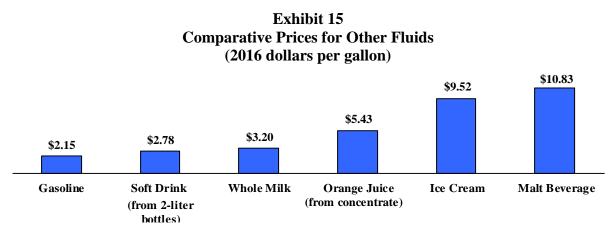


Note: U.S. tax rate is federal rate plus state weighted average. Prices are for premium gasoline except for Canada, Japan, and the United States, which are for regular.

Source: U.S. Department of Energy, Energy Information Administration, International Energy Agency.

#### **Comparisons to Other Fluids**

Motor fuels are a very important part of the economy. Large increases in their prices can cause economic slowdowns, while sustained low prices can spur economic growth. It is useful to keep the price of gasoline in perspective. Some other household items are substantially more expensive on a per-gallon basis as indicated in Exhibit 15.

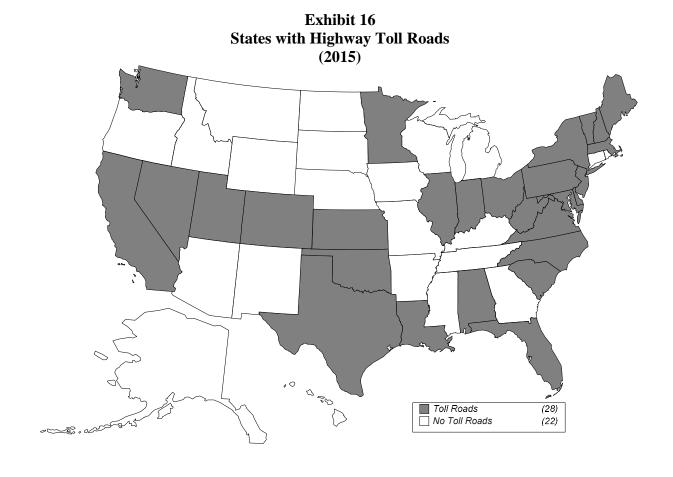


Source: Gasoline price: U.S. Department of Energy, Energy Information Administration, and International Energy Agency. Other prices: U.S. Department of Labor, Bureau of Labor Statistics, 2016 averages.

#### **Other Revenue**

Michigan does not operate any toll roads unlike 28 other U.S. states (see Exhibit 16). As the map indicates, these toll road states are concentrated in the Northeast and South. While not operating toll roads, Michigan and six other states operate crossing facilities (bridges, tunnels, and ferries) that charge fees. Michigan operates three toll bridges: the Blue Water Bridge, the Mackinac Bridge, and the International Bridge.

State toll and crossing facility revenues vary widely from state to state (see Exhibit 38, located in the Appendix). In 2015, the latest year information on revenues from state toll and crossing facilities is available, Texas ranked first, collecting \$4,152.9 million. New Jersey ranked second with \$3,252.1 million and Pennsylvania placed third at \$3,243.1 million. In comparison, Michigan collected \$60.6 million in bridge toll revenues, while 20 states had no state-administered toll roads or crossing facilities.



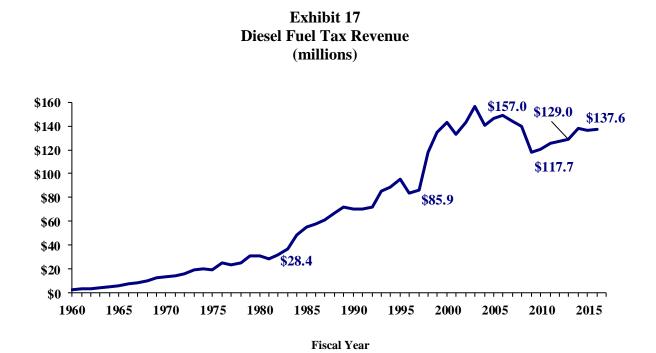
Source: Federal Highway Administration, Table SF-3B and transportation departments in select states.

#### 3. DIESEL FUEL TAX

#### **Collections and Tax Rate**

Michigan diesel fuel revenue collections totaled \$137.6 million in FY 2015-16 with a tax rate of 15 cents per gallon, yielding \$9.2 million per one cent of tax levied. In FY 2016, diesel fuel tax increased 0.6 percent after declining 0.8 percent in FY 2015. (see Exhibit 17).

Public Act 584 of 1996 raised the Motor Carrier Fuel Tax (MCFT) rate from 9 cents per gallon to 21 cents per gallon and allowed motor carriers to claim a credit of 6 cents per gallon for sales tax paid for in-state purchases of fuel. Exhibit 4 provides a graphical illustration of all motor fuel tax rates from FY 1951 to FY 2016, and Exhibit 33 in the Appendix presents a tabular chronological review of the same data.



Notes: 1976 was a 15-month fiscal year. Diesel fuel revenue includes fees and licenses from FY 1980 to FY 2016. Source: Michigan Comprehensive Annual Financial Reports.

#### **Diesel Fuel Taxation**

Prior to April 1, 2003, motor carriers paid diesel fuel tax in three different, complicated ways. Laws passed in 2002<sup>3</sup> simplified the process effective April 1, 2003, and eliminated any tax advantage for purchasing fuel outside of Michigan. For the following examples, it is assumed that the sales and use tax on diesel fuel is 13 cents per gallon (the prepaid sales and use tax rate for September 2016 (12.7 cents) rounded to the nearest whole cent).

The first example shown in Exhibit 18 is very straightforward. (All diesel sales tax amounts are for September 2016). Diesel-powered light vehicles (under 13 tons) pay a 15 cents per gallon diesel fuel tax at the pump and approximately 13 cents per gallon sales tax on each gallon Thus, in September 2016, motorists paid approximately 28 cents total state tax on a gallon of diesel fuel.

#### Exhibit 18 Michigan Diesel Fuel Taxation Diesel Powered Light Vehicles

Pump

15 cents diesel tax

13 cents sales tax

28 cents

The next three examples are for motor carriers. Exhibit 19 shows how diesel fuel is taxed for an intrastate motor carrier. Before April 1, 2003, the intrastate motor carrier would have paid 9 cents per gallon diesel fuel tax at the pump along with the 13 cents per gallon sales tax for a total of 22 cents per gallon. On the intrastate carrier's MCFT return, the MCFT was 21 cents per gallon used. However, a credit of 9 cents was given for the diesel fuel tax already paid, and a credit of 6 cents was given for sales tax paid. Therefore, the intrastate motor carrier remitted 6 cents per gallon of diesel fuel used. In total, the intrastate motor carrier paid a total of 28 cents (9 cents diesel tax, 6 cents MCFT and 13 cents sales tax). Beginning April 1, 2003 (through December 2016), intrastate motor carriers simply paid 15 cents diesel tax and 13 cents sales tax at the pump.

25

<sup>&</sup>lt;sup>3</sup> Public Acts 667 - 669 of 2002.

#### Exhibit 19 Michigan Diesel Fuel Taxation Michigan Intrastate Motor Carriers

Reginning April 1, 2003

Prior to April 1, 2003

11	101 to April 1, 2003	Degining	; April 1, 2003
Pump	9 cents diesel tax  13 cents sales tax  22 cents	Pump	15 cents diesel tax  13 cents sales tax  28 cents
MCFT Return	21 cents MCFT -9 cents credit for diesel tax -6 cents credit for sales tax paid 6 cents	MCFT Return	No longer used
Total Tax	9 cents diesel tax 6 cents motor carrier fuel tax 13 cents sales tax 28 cents	Total Tax	15 cents diesel tax 13 cents sales tax 28 cents

Exhibit 20 gives an example of how an interstate motor carrier remits diesel fuel tax for fuel purchased in Michigan. Prior to April 1, 2003, the interstate motor carrier paid 22 cents at the pump (9 cents diesel fuel tax plus 13 cents sales tax), remitted 12 cents on its International Fuel Tax Agreement (IFTA) return and claimed from the Department of Treasury a 6 cent credit for sales tax paid. If an interstate motor carrier purchased fuel in Michigan but consumed the fuel outside the state, the motor carrier claimed a 22 cent per gallon refund (9 cents diesel fuel tax plus 13 cents for sales tax paid at the pump).

Beginning April 1, 2003, an interstate motor carrier pays 28 cents at the pump (15 cents diesel fuel tax plus 13 cents sales tax), and owes no tax on its IFTA return (15 cents MCFT plus 13 cents use tax less 28 cents credit). If an interstate motor carrier purchases fuel in Michigan but consumes the fuel outside the state, the motor carrier will claim a 28 cent per gallon refund (15 cents diesel fuel plus 13 cents for sales tax paid at the pump).

Exhibit 20 Michigan Diesel Fuel Taxation Michigan Interstate Motor Carriers Fuel Purchased in Michigan

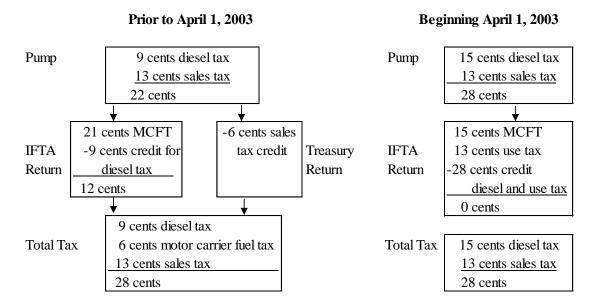


Exhibit 21 shows how an interstate motor carrier remits tax for fuel purchased outside of Michigan but used in Michigan. Since the motor carrier purchased fuel outside of Michigan, before April 1, 2003, the motor carrier was responsible for remitting 21 cents per gallon on their IFTA return for fuel consumed in Michigan. Beginning April 1, 2003, for fuel purchased outside of Michigan, motor carriers will pay 28 cents per gallon. The motor carrier receives no credit for diesel fuel tax or sales tax because the fuel was not purchased in Michigan.

# Exhibit 21 Michigan Diesel Fuel Taxation Interstate Motor Carriers Fuel Purchased Outside Michigan

	Prior to April 1, 2003		Beginning April 1, 2003
Pump	No tax paid in Michigan	Pump	No tax paid in Michigan
IFTA Return	21 cents MCFT 0 cents credit for diesel tax 0 cents credit for sales tax paid 21 cents	IFTA Return	15 cents MCFT 13 cents use tax 0 cents credit for diesel tax 0 cents credit for use tax paid 28 cents
Total Tax	0 cents diesel tax 21 cents motor carrier fuel tax 0 cents sales tax 21 cents	Total Tax	15 cents MCFT 13 cents use tax 0 cents credit for diesel tax 0 cents credit for use tax paid 28 cents

Exhibit 4 provides a graphical illustration of changes in all motor fuel tax rates from FY 1950 to FY 2017, while Exhibit 33 (located in the Appendix) presents a tabular chronological review of the same data. The two longest periods where the tax rate held steady were 1951 to 1968 (6 cents per gallon –17 years) and 1984 to 2016 (15 cents per gallon – 32 years). Effective January 1, 2017, the motor fuel tax rate (which applies to both gasoline and diesel fuel) increased to 26.3 cents per gallon. Effective January 1, 2022 and each following year, the motor fuel tax rate will increase by the lesser of 5.0 percent or the rate of inflation.

Major legislation occurred in 1980 affecting diesel fuel taxpayers (Public Acts 117, 118, and 119 of 1980). The enacted legislation raised the diesel fuel tax rate to 11 cents per gallon but provided a 6 cent discount to commercial motor carriers. To qualify for the discount, motor carriers had to purchase a Michigan motor carrier fuel license fee decal. Decal prices were originally \$92 for Michigan-based carriers and \$12 for out-of-state carriers. Public Act 235 of 1987 raised the out-of-state fee to \$25 per decal.

The 6 cent diesel discount was intended to keep Michigan truck stop pump prices competitive with those in other states and to encourage motor carriers to buy fuel in Michigan. For fuel used in Michigan, the 6 cents not paid at the pump was payable with the quarterly MCFT or IFTA return.

However, the diesel discount provided several opportunities for tax non-compliance. The tax non-compliance could occur for four reasons:

- (1) users not legally entitled to the discount bought fuel at the reduced rate,
- (2) retailers failed to remit the required 6 cents for diesel fuel taxed at 15 cents,

- (3) motor carriers failed to file the required quarterly tax return and failed to pay with the return the additional 6 cents per gallon on fuel used in Michigan either on the IFTA or MCFT return, and
- (4) interstate motor carriers underreported their gallons used in Michigan.

Effective January 1, 2017, interstate motor carriers pay a specific tax on motor fuel (diesel fuel and gasoline) equal to six percent of the statewide average of the statewide average retail price of a gallon of self-serve undyed diesel fuel or self-serve unleaded regular gasoline, as applicable, rounded to the nearest one-tenth of a cent as determined and certified quarterly by the Michigan Department of Treasury. The specific tax is to be paid on the carrier's IFTA return. In addition, interstate motor carriers are entitled to a credit equal to six percent of the price of motor fuel purchased in Michigan used in qualified commercial motor vehicle. The credit is to be claimed on the carrier's IFTA return.

#### **International Fuel Tax Agreement (IFTA)**

On January 1, 1996, Michigan joined the IFTA, a federally mandated fuel tax reporting system. Under IFTA, interstate motor carriers file a single fuel tax report in their home base state for fuel taxes owed to states and provinces belonging to IFTA. The motor carriers pay all motor carrier fuel taxes owed to all IFTA jurisdictions to the carrier's home state; the home state then disburses the taxes owed to each IFTA jurisdiction. In addition, IFTA helps make the administration of MCFT laws uniform for interstate motor carriers, while participation allows jurisdictions to provide mutual assistance in enforcing rules and collecting taxes. By having motor carriers register only in their home state, IFTA simplifies enforcement and administration of motor fuel tax collections. As of September 2016, 48 U.S. states and 10 Canadian provinces belonged to IFTA.

IFTA impacts Michigan motor carriers in different ways. Michigan-based IFTA motor carriers file one combined IFTA report with the State of Michigan, rather than a separate report for each IFTA-member jurisdiction in which the motor carrier operates. Motor carriers that operate in Michigan but are based in other states remit Michigan motor carrier fuel taxes to their home base state; the home base state will then remit these Michigan fuel taxes to Michigan. Before April 1, 2003, these motor carriers had to submit a separate claim to Michigan for their 6 cents per gallon credit for sales tax paid. Beginning April 1, 2003, interstate motor carriers who buy diesel fuel in Michigan claim their 6 percent use tax credit on their IFTA return. IFTA motor carriers based in other states do not have to obtain a Michigan motor carrier decal, but before April 1, 2003, could still purchase discounted diesel fuel in Michigan.

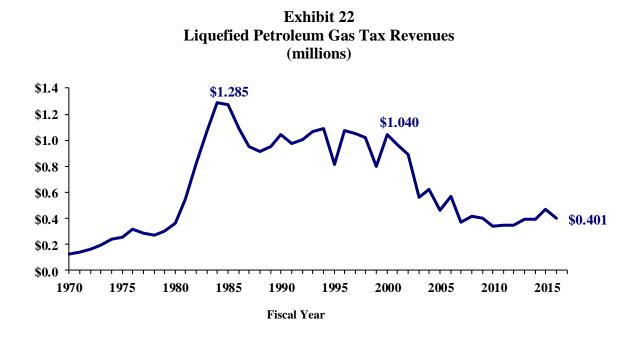
#### 4. OTHER FUEL TAXES

#### **Liquefied Petroleum Gas**

Liquefied petroleum gas (LPG) is an alternative fuel used to propel motor vehicles and is currently taxed at 15 cents per gallon (Public Act 403 of 2000). (Exhibit 4 provides a graphical illustration of all motor fuel tax rates from FY 1951 to FY 2016, and Exhibit 33 in the Appendix presents a tabular chronological review of the same data.) LPG collections have totaled less than \$0.5 million per year since FY 2006-07, inclusive. In FY 2014-15, LPG revenues were \$0.402 million (see Exhibit 22), with a \$0.03 million yield per one cent of tax levied. LPG tax revenue is restricted to the MTF.

LPG, also known as propane, is comprised of a minimum of 90 percent propane, 2.5 percent butane, ethane, and propylene. The most likely vehicles to use LPG as a source of fuel are farm or fleet vehicles whose owners have access to propane refueling stations. LPG lowers maintenance costs and prolongs engine life.

Under the 2015 roads funding package, liquefied petroleum is taxed as an "alternative fuel" and, as such, will be taxed at the motor fuel tax rate effective January 1, 2017. In addition to liquefied petroleum, "alternative fuel" also includes the following fuels when used in a motor vehicle: natural gas, compressed natural gas (CNG), liquefied natural gas, hydrogen CNG and hythame. See Chapter 7 (2015 ROAD FUNDING PACKAGE) for further detail.



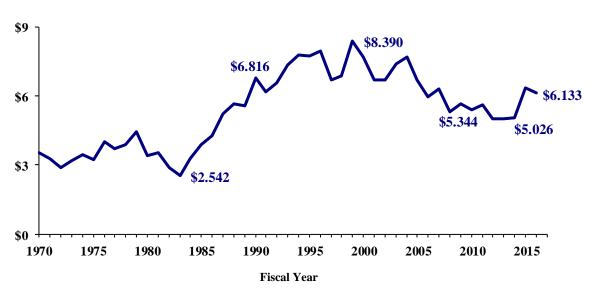
Note: 1976 was a 15-month fiscal year.

Source: Michigan Comprehensive Annual Financial Reports.

#### **Aviation Fuel**

Enacted under Public Act 160 of 1931, aviation fuel is taxed at 3 cents per gallon. (Exhibit 4 provides a graphical illustration of all motor fuel tax rates from FY 1951 to FY 2016, and Exhibit 33 in the Appendix presents a tabular chronological review of the same data.) Airline operators with interstate operations receive a 1.5 cent refund per gallon. In FY 2015-16, aviation fuel tax collections totaled \$6.1 million (see Exhibit 23), with a one cent of tax yield of \$2.0 million after refunds. Aviation fuel tax revenues go to the State Aeronautics Fund.

Exhibit 23 Aviation Fuel Tax Revenues (millions)



Note: 1976 was a 15-month fiscal year.

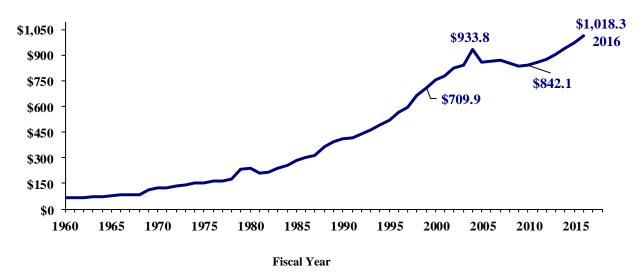
Source: Michigan Comprehensive Annual Financial Reports.

#### 5. MOTOR VEHICLE REGISTRATION TAXES

#### **Motor Vehicle Weight and Value Tax**

The State of Michigan levies an annual motor vehicle registration tax on all vehicles registered for road use in the state. In FY 2015-16, motor vehicle registration taxes totaled \$1,018.3 million with tax revenues distributed to the MTF (see Exhibit 24 and Exhibit 39 in the Appendix for a tabular chronological review of the same data).

Exhibit 24 Motor Vehicle Registration Tax (millions)



Note: 1976 was a 15-month fiscal year.

Source: Michigan Comprehensive Annual Financial Reports.

The state first imposed the registration tax in 1905, at which time motorists paid a one-time \$2 fee per registered automobile. By 1925, the state had moved to an annual registration tax based strictly on vehicle weight. The weight tax remained in place until 1983.

Public Act 165 of 1983 replaced the vehicle weight registration tax with the current value registration tax, effective October 1, 1983, for all passenger light vehicles. In a passenger vehicle's first registration year, vehicles with a list price under \$30,000 are subject to a registration tax according to a tax table under which the registration tax equals approximately 0.5 percent of the list price. Passenger vehicles with a list price over \$30,000 are subject to a registration tax equal to 0.5 percent of the list price. The vehicle's second, third, and fourth year registration tax equals 90 percent of the prior year's tax. Thereafter, the registration tax remains the same. All other vehicles subject to the vehicle tax, including passenger light vehicles from model year 1983 and earlier and commercial use vehicles, are taxed based upon vehicle weight.

Public Act 80 of 1997 increased registration fees on commercial vehicles by 30 percent, took commercial pickups and vans off the weight schedule and onto the value system for registrations, and raised fees for overweight trucks.

Effective January 1, 2017, the 2015 roads package increased registration fees by 20 percent and enacted surcharges for hybrid electric vehicles and non-hybrid electric vehicles. The surcharges on electric vehicles will increase based on the amount by which the motor fuel tax rate exceeds 19 cents per gallon.

Exhibit 25 provides a comparison between registration taxes paid by different types of vehicles under the weight system and under the current value registration tax. The switch to the current value system for registration allows Transportation funding to better keep pace with inflation.

Exhibit 25
Motor Vehicle Registration Tax:
Amount Charged Under Different Systems

				<b>Registration Tax</b>		
ConModel	Model	Woight	Retail	Previous Weight	Current Value	
Car Model	Year	Weight	<b>Price</b>	System	System	
Ford Focus SE	2017	2,952	\$17,650	\$29	\$106	
Chevrolet Cruze LS	2017	4,020	\$19,400	\$43	\$118	
Honda Accord EX	2017	3,969	\$26,705	\$37	\$160	
Chevrolet Suburban LS	2017	5,587	\$51,110	\$57	\$310	
Ford F150 XL	2017	4,050	\$28,025	\$43	\$172	

#### Notes:

- . Pickup trucks and vans under 5,000 lb., passenger cars, and motor homes purchased before October 1, 1983 are assessed on the basis of the weight schedule in lieu of value tax.
- . Personal passenger vehicles purchased new, or vehicles of the 1984 model year or later which are subsequently resold as used, are assessed under the value system. The rates are adjusted annually according with the increase in state personal income. During the 2nd, 3rd and 4th years, the tax on such vehicles is reduced by 10 percent from the prior year's level and remains constant thereafter.
- . Calculations by Tax Analysis Division, Office of Revenue and Tax Analysis, Michigan Department of Treasury using Secretary of State calculation tool.

Source: 2017 Ward's Automotive Yearbook and Michigan Secretary of State.

#### **Licenses and Permits**

Michigan transportation revenue is also collected from license and permit fees and miscellaneous sources. In FY 2015-16, these revenue sources totaled \$151.4 million (see Exhibit 26 and Exhibit 39 in the Appendix for a tabular chronological review of the same data). These fees include motor vehicle title fees, motor vehicle transfer fees, and moped registration fees. Approximately 31.5 percent of these monies are deposited into the MTF with the remaining money split among the Aeronautics Fund, State Trunkline Fund (STF), and the Comprehensive Transportation Fund. These revenues do not include motor carrier diesel license fees that have been grouped with diesel fuel tax revenue.

Exhibit 26
Michigan Transportation
License and Permits, and Miscellaneous Revenue
(millions)
Fiscal Year



Source: Michigan Comprehensive Annual Financial Reports.

Note: FY 2011- FY 2016, inclusive, figures include several funds that were reclassified from transportation related to capital funds beginning FY 2011.

#### 6. TRANSPORTATION FUNDS

#### **Michigan Transportation Fund**

Established by Public Act 51 of 1951, the Michigan Transportation Fund (MTF) is the primary means of distributing state revenues for transportation purposes. After distribution of revenue from off-road gasoline use to the Recreation Improvement Fund and after transfers to other departments for transportation-related functions, revenues are distributed by a complicated formula to the State Trunkline Fund, county road commissions, cities and villages, and the Comprehensive Transportation Fund. The MTF received \$2,070.9 million in FY 2015-16 (see Exhibit 2). Of this amount, \$1,238.3 million was distributed by formulas to county road commissions, cities and villages (see Exhibit 29).

#### **State Trunkline Fund**

The State Trunkline Fund (STF) was established by Public Act 51 of 1951, and it provides monies for construction and maintenance of the state highway system. The MTF transfers and federal and local contributions provide most of the revenue for the STF. Any fund balance in the STF not reserved at year-end is used for road and bridge construction projects. The STF also issues bonds to finance construction and maintenance of state highways whose proceeds are accounted for in the STF Bond Proceeds Fund. Each bond issue is accounted for separately. The STF own source revenues were \$905.8 million in FY 2015-16 (see Exhibit 2). In addition, MTF distributions to the STF allowed for total STF expenditures of \$1.8 billion (see Exhibit 27). At the end of FY 2015-16, \$975.4 million remained available to finance future years' projects (see Exhibit 28).

#### **Comprehensive Transportation Fund**

Created by Public Act 327 of 1972, the Comprehensive Transportation Fund (CTF) assists in the planning and development of public transportation systems within Michigan. The CTF's principal use is for operating grants to local transit systems. The CTF also provides grants for intercity freight, intercity passenger, and transit development. CTF revenue sources include transfers from the MTF, a portion of vehicle-related sales tax, and federal and local monies. The CTF also issues bonds to finance construction and acquisition of comprehensive transportation projects whose proceeds are accounted for in the Comprehensive Transportation Bond Proceeds Fund. Each bond issue is accounted for separately. The CTF revenues were \$173.9 million in FY 2015-16 (see Exhibit 2), excluding MTF transfers. The fund's ending balance for FY 2015-16 was \$114.5 million (including bond proceeds). (See Exhibit 28).

#### **State Aeronautics Funds**

Created by Public Act 327 of 1945, the State Aeronautics Fund provides money for capital improvement projects for local airports. Funded primarily by federal monies along with local aid and aviation fuel taxes, the State Aeronautics Fund received \$64.6 million in FY 2015-16 (see Exhibit 2). At the end of FY 2015-16, about \$15.4 million was available to fund future years projects and expenditures (see Exhibit 28).

Exhibit 27 **Michigan Department of Transportation Expenditures From Certain Funds** FY 2015-16 (millions)

	Grants to Local Governments	State <u>Spending</u>	<u>Total</u>
Michigan Transportation Fund			
(Excluding Transfers Out)	\$1,009.7	\$0.0	\$1,009.7
State Trunkline Fund	83.3	1,702.7	1,786.0
Comprehensive Transportation Fund	321.4	123.8	445.2
State Aeronautics Fund	61.2	12.0	73.2
Other Funds	0.0	24.3	24.3
Total	\$1,475.6	\$1,862.8	\$3,338.4
Percentage	44.2%	55.8%	100.0%

- Notes: 1. Grants to local government may not include all federal aid paid to local governments.
  - 2. Grants to local governments do not include payments to counties for maintenance of state trunk lines performed on a contractual basis.
  - 3. State Trunk Line and Comprehensive Transportation Fund expenditures include expenditures from respective bond proceeds fund.

Source: Michigan Department of Transportation and Michigan Comprehensive Annual Financial Reports.

Exhibit 28
Ending Balances of Major Transportation Funds
(millions)

<b>Fund</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	FY 2011	FY 2012	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
State Aeronautics Fund	\$22.6	\$22.0	\$23.0	\$22.4	\$22.2	\$23.0	\$21.7	\$26.3	\$19.6	\$16.0	\$15.4
State Trunkline Fund (1)	\$888.1	\$1,134.8	\$744.4	\$825.5	\$611.5	\$725.3	\$784.9	\$812.9	\$814.8	\$930.6	\$975.4
Comprehensive Transportation Fund (2)	\$146.3	\$145.2	\$119.3	\$127.2	\$114.7	\$129.2	\$127.4	\$132.8	<u>\$138.6</u>	\$123.2	\$114.5
Total	\$1,057.1	\$1,302.0	\$886.7	\$975.1	\$748.3	\$877.6	\$934.1	\$972.0	\$972.9	\$1,069.8	\$1,105.3

lote: 1. Includes balance from the Combined Trunk Line Fund Bond Proceeds Fund.

2. Includes balance from the Combined Comprehensive Transportation Bond Proceeds Fund.

Source: Michigan Comprehensive Annual Financial Reports.

# Exhibit 29 Michigan Department of Transportation Grants Made to Local Governments FY 2015-16 (millions)

Formula Grants to Local Governments	
Michigan Transportation Fund Grants to Counties	\$648.3
Michigan Transportation Fund Grants to Cities and Villages	361.4
Local Program Fund Grants to Counties	21.2
Local Program Fund Grants to Cities and Villages	11.8
Bus Operating Assistance Grants	195.6
Total Formula Grants	\$1,238.3
Project Grants to Local Governments	
Economic Development Fund	\$37.1
Other Comprehensive Transportation Fund Grants	125.8
Other Trunkline Fund Grants	13.2
Airport Development	61.2
Total Project Grants	\$237.3
Total Grants to Local Governments	\$1,475.6

Source: Michigan Department of Transportation.

#### 7. 2015 ROAD FUNDING PACKAGE

In November 2015, the Michigan legislature passed and the Governor signed a seven-bill road funding package. Below is a brief summary of the 2015 road funding package (Public Acts 174-180).

#### **Motor Fuel Taxes**

Effective January 1, 2017, **Public Act 176 of 2015**:

- Increases the motor fuel tax on gasoline from 19 cents per gallon to 26.3 cents per gallon.
- Increases the motor fuel tax rate on diesel fuel from 15 cents per gallon to 26.3 cents per gallon.
- Requires that, beginning 2022, the Department of Treasury must adjust the motor fuel tax rate by the lesser of the inflation rate or five percent rounded to the nearest 0.1 cent. The inflation rate equals the change in the U.S. all urban consumers CPI in the directly prior fiscal year unless the change is negative. If the change is negative, the inflation rate, for purposes of the Act, equals zero.
- The Act increases the initial civil penalty for using dyed diesel fuel on public roads or highways from \$200 to \$1,000 and increases the second violation civil penalty from \$200 to \$5,000. The civil penalty for a third or subsequent violation remains unchanged at \$5,000.
- For commercial users, imposes the motor fuel tax on alternative fuels. (Effective January 1, 2018, the Act imposes the motor fuel tax on alternative fuels on persons other than commercial users or alternative fuel dealers.). The Act:
  - o Defines alternative fuel to include natural gas, compressed natural gas (CNG), liquefied natural gas, liquefied petroleum, hydrogen CNG and hythame.
  - Establishes "gallon equivalent" amounts for alternative fuels. For an alternative fuel, the motor fuel tax equals the motor fuel tax rate times the alternative fuel's gallon equivalent. For example, for compressed natural gas, the gallon equivalent amount is 5.660 pounds or 126.67 cubic feet at 60 degrees Fahrenheit and one atmosphere of pressure.
  - o Repeals the \$50 license fee on liquefied petroleum gas dealers.
  - o Provides for a \$500 alternative fuel dealer license and a \$50 alternative fuel commercial user license.

Effective January 1, 2017, Public Act 178 of 2015 amended the Motor Carrier Fuel Tax Act to:

- Apply the per-gallon or per-gallon- equivalent fuel tax rates under Public Act 176 to motor carrier purchases of alternative fuel, in addition to motor fuel.
- Include gasoline in the definition of "motor fuel" (which meant only diesel fuel prior to 2017).
- Define "alternative fuel" and "alternative fuel dealers" as they are defined in PA 176.

#### **Sales Tax on Motor Fuels**

Public Act 177 of 2015 amends the Streamlined Sales and Use Revenue Equalization Act to:

- Impose a specific tax on motor fuel used in qualified commercial motor vehicles by interstate carriers.
- Provide that the specific tax equals the quarterly statewide average price of a gallon of undyed diesel fuel or self-serve gasoline, as applicable, multiplied by six percent.
- Require the tax on alternative fuel be based on a cents-per-gallon rate or a cents-per-gallon equivalent rate, as applicable.
- Require the Department of Treasury to determine and certify the statewide average price per gallon of unleaded gasoline and undyed diesel fuel on a quarterly basis. If a statewide average is not readily available, the department of treasury may use regional or national average prices per gallon.

#### **Registration Fees**

Effective January 1, 2017, Public Act 174 of 2015:

- Increases registration fees by 20 percent on passenger vehicles based on the vehicle's list price, rounded to the nearest whole dollar amount. Thus, for example, the Act increases the registration fee for a new \$20,000 list price passenger vehicle from \$103 to \$124.
- Raises by 20 percent registration fees on commercial vehicles under the elected gross weight schedule, rounding to the nearest whole dollar amount. Thus, for example, the Act increases the registration for a 26,000 gross weight commercial truck from \$558 to \$670.
- Enacts new surcharges for hybrid electric and non-hybrid electric vehicles
  - o \$30 for hybrid electric vehicles weighing 8,000 pounds or less.

- o \$100 for hybrid vehicles weighing more than 8,000 pounds.
- o \$100 for non-hybrid electric vehicles weighing 8,000 pounds or less.
- o \$200 for non-hybrid vehicles weighing more than 8,000 pounds.
- Provides for increases to the surcharge amounts for hybrid electric and non-hybrid electric vehicles that are tied to the number of whole cents by which the motor fuel tax exceeds 19 cents with a \$2.50 increase per whole cents above 19 cents for hybrid electric vehicles and a \$5.00 increase per whole cents above 19 cents for non-hybrid electric vehicles. With PA 175's 7.3 cents per gallon increase in the motor fuel rate above 19.0 cents per gallon effective January 1, 2017, the road package:
  - o Adds a surcharge amount of \$47.50 on hybrid electric vehicles weighing 8,000 or less pounds (\$30 plus \$2.50\*(seven whole cents)).
  - o Adds a \$117.50 surcharge to the registration tax on hybrid electric vehicles weighing more than 8,000 pounds (\$100 plus \$2.50\*(seven whole cents)).
  - o Adds a surcharge of \$135 to the registration tax on non-hybrid electric vehicles weighing 8,000 or less pounds (\$100 plus \$5.00\*(seven whole cents)).
  - o Adds a \$235 surcharge to the registration tax on non-hybrid electric vehicles weighing more than 8,000 pounds (\$200 plus \$5.00\*(seven whole cents).
- As the motor fuel tax rate is adjusted upward for inflation beginning January 1, 2022 (PA 176), the hybrid electric vehicle and non-hybrid electric vehicle surcharge amounts will increase further above their January 1, 2017 amounts based upon the number of whole cents that the motor fuel tax exceeds 27 cents.

#### **Michigan Transportation Fund**

**Public Act 175 of 2015** enacted the following changes to the Michigan Transportation Fund Statute:

#### Revenue Sources

PA 175 allows the Treasurer to receive into the Michigan Transportation Fund (MTF) monies/assets from any source. Prior to the Act, the State Treasurer was permitted to deposit only motor fuel tax revenue and registration tax revenue into the MTF.

PA 179 amended the Income Tax Act to allocate to the Michigan Transportation Fund from income tax revenue the following amounts:

- \$150.0 million in FY 2019
- \$325.0 million in FY 2020
- \$600.0 million in FY 2021 and all subsequent fiscal years.

PA 179 requires the allocation to be distributed using the MTF distribution formula, after the deduction of specific amounts.

#### Roads Innovation Fund

PA 175 establishes the "Roads Innovation Fund." Beginning in fiscal year 2017, the Act requires that the first \$100.0 million in fuel tax revenue be deposited each fiscal year into the Roads Innovation Fund until the adoption of a one-time concurrent resolution of the Legislature releasing money from the Fund. Monies in the Roads Innovation Fund in the Fund at the end of a fiscal year shall not lapse to the General Fund. Further, all interest and earnings of the Fund's money shall be credited to the Fund.

Once released, the Roads Innovation Fund's monies -- after specified earmarks -- shall be distributed according to the Michigan Transportation Fund formula with 10 percent going to the Comprehensive Transportation Fund. The remaining 90 percent shall be distributed using the Michigan Transportation Fund distribution formula: 39.1 percent to the State Trunkline Fund, 39.1 percent to county road commissions and 21.8 percent to cities and villages.

#### Distribution of Transportation Funds

The Act makes the following changes to the distribution of funds:

- Increases the MTF earmark for debt service from \$43.0 million to \$50.0 million.
- Establishes the Grade Crossing Surface Account within the State Trunkline Fund (STF) and allows that up to \$3.0 million may be appropriated each year to the newly created Account.
- Lowers the maximum percentage of State Trunkline Fund distributions that the Department of Transportation may spend on administrative expenses from 10.0 percent to 8.0 percent.
- For cities in which more than 10.0 million passengers used public transportation in the prior fiscal year, the Act allows that city, with Department of Transportation approval, to use up to 20.0 percent of the money that city receives from the Michigan Transportation Fund for public transit purposes.

#### Other Major Provisions

PA 175 requires the Department of Transportation to establish the Roads Innovation Task Force to evaluate road materials and construction cost that could yield higher quality and longer lasting roads at lower costs over the lifespan of roads. The Act further requires that the Department of Transportation, county road commissions, cities and villages to get warranties for road pavement projects costing more than \$2.0 million and all construction projects undertaken after the Act's enactment.

#### **Income Tax**

Public Act 179 of 2015 made the following changes to homestead property tax credit statute: :

- Increase the maximum amount of a homestead property tax credit from \$1,200 to \$1,500 beginning with tax year 2018 and require annual adjustments for inflation beginning in 2021.
- Require that the homestead credit to be based on property taxes that exceed 3.2 percent (down from 3.5 percent) of total household resources
- Require the credit to be based on 23 percent of gross rent paid (up from 20 percent) beginning tax year 2018.
- Require annual inflation adjustments in the maximum taxable value of a homestead for which the credit may be claimed beginning tax year 2021.
- Raise the minimum total household resources threshold from \$41,000 to \$51,000 effective tax year 2018. Adjust the threshold for inflation beginning with tax year 2021.

**Public Act 180 of 2015** amended the Income Tax Act to reduce the individual income tax rate for a tax year beginning on and after January 1, 2023, if the percentage increase in General Fund/General Purpose revenue from the prior fiscal year exceeded a positive inflation rate for the same period, according to a formula prescribed by the Act.

#### 8. APPENDIX

### **Exhibit 30 Chronology of Major Changes in Motor Fuel and Registration Taxes**

1905	Michigan motor vehicle registration fee established by Public Act 196 of 1905. A \$2 license plate fee was charged per vehicle.
1925	Michigan gasoline tax enacted under Public Act 2 of 1925. The gasoline tax was levied at 2 cents per gallon on usage by motor vehicles.
1927	Public Act 150 of 1927 raised the gasoline tax to 3 cents per gallon.
1931	Michigan aviation fuel tax enacted under Public Act 160 of 1931. The aviation fuel tax was levied at 3 cents per gallon.
1947	Michigan diesel fuel tax enacted under Public Act 319 of 1947. The diesel fuel tax was levied at 5 cents per gallon.
1951	Public Act 54 of 1951 increased the gasoline tax to 4.5 cents per gallon and the diesel fuel tax to 6 cents per gallon.
1953	Michigan liquefied petroleum gasoline (LPG) tax enacted under Public Act 147 of 1953. The LPG tax was levied at 4.5 cents per gallon.
1955	Public Act 87 of 1955 increased the gasoline and LPG tax to 6 cents per gallon.
1967	Public Act 5 of Extra Session of 1967 increased the gasoline tax, diesel fuel tax and LPG tax to 7 cents per gallon.
1972	Public Act 326 of 1972 increased the gasoline and LPG taxes to 9 cents per gallon.
1978	Public Act 426 of 1978 increased the gasoline tax to 11 cents per gallon and the diesel fuel tax to 9 cents per gallon effective January 1, 1979.
1980	Public Acts 117, 118, and 119 of 1980 changed tax rates and fees for the diesel fuel tax. The diesel fuel tax was increased to 11 cents per gallon. Motor carriers may receive a 6 cents per gallon discount by purchasing a license. The license fee was \$92 for a Michigan-based carrier and \$12 for a nonresident motor carrier. Motor carriers not purchasing a permit must report and pay a road tax equal to the 5 cents per gallon paid by carriers registered in the state.
1982	Public Act 437 of 1982 increased fuel tax rates. The formula developed to calculate the tax rate raised the gasoline tax, diesel fuel tax and LPG tax to 13 cents per gallon on January 1, 1983, and raised the tax to 15 cents on January 1, 1983 Public Act 165 of 1983 replaced the vehicle registration tax with the value registration tax for vehicles first registered after September 30, 1983.

- 1987 Public Act 235 of 1987 increased the nonresident motor carrier license fee to \$25.
- 1992 Public Act 225 of 1992 changed collection point on taxes for gasoline from wholesalers to refiners/importers and for the first 9 cents of tax on diesel fuel from retailers to refiners/importers.
- Public Act 584 of 1996 increased the MCFT on diesel fuel from 9 cents per gallon to 21 cents per gallon. A credit of 6 cents per gallon was provided for the amount of sales tax paid per gallon for in-state fuel purchases. Also, due to the International Fuel Tax Agreement (IFTA), Michigan can no longer require that out-of-state truckers purchase a decal to receive the diesel discount.
- Public Act 83 of 1997 increased the gasoline tax from 15 cents per gallon to 19 cents per gallon effective August 1, 1997. Public Act 80 of 1997 increased registration fees on commercial vehicles by 30 percent, took commercial pickups and vans off the weight schedule and onto the value system for registrations and raised fees for overweight trucks.
- 2000 Public Act 403 of 2000 repealed and recodified the Motor Fuel Tax Act. The Act implemented a dyed diesel fuel program along with other measures to prevent tax evasion. It also minimized unnecessary regulatory burden on industry while providing the information needed to effectively administer and enforce the motor fuel tax.
- Public Acts 667 669 of 2002 repealed the motor carrier 6 cent diesel discount; reduced the motor carrier fuel tax rate from 21 cents per gallon to 15 cents per gallon eliminating the 6 cent sales tax credit; and imposed a 6 percent use tax on diesel fuel used by interstate motor carriers, allowing a credit for fuel purchased in Michigan.
- Public Act 139 of 2003 amended the General Sales Tax Act to change the statutory distribution of motor vehicle-related sales tax credited to the Comprehensive Transportation Fund (CTF). Effective FY 2004 and FY 2005 only, the sales tax earmark for the CTR was reduced from 27.9 percent of 25 percent sales tax collected at 4 percent on motor fuels, motor vehicles, and motor vehicle-related sales, to 24 percent of 25 percent sales tax collected at 4 percent on motor fuels, motor vehicles, and motor vehicle-related sales.

Public Acts 151 and 152 of 2003 amended the Michigan Vehicle Code (PA 300 of 1949) to increase, and/or redistribute, effective October 1, 2003, a number of fees currently provided under the driver license fees, vehicle title and registration service fees, and automobile dealer license fees. The bill also created three new state-restricted funds (the Transportation Administration Collection Fund (TACF), the Traffic Law Enforcement and Safety Fund, and the Trooper Recruit School Fund); provided for a new regulatory fee for the purpose of regulating highway

safety; and provided for the allocation of current and increased fee revenue.

2004

Under the Michigan Transportation Fund Act, a city or village could not spend MTF funds for the construction of local streets unless the money was matched by local revenues. Also, funds designated for the major street system could be used for the local street system, but the money had to be matched equally by local revenue expenditures on the major street system or State trunk line highways. Public Act 9 of 2004 amended the Michigan Transportation Fund Act to provide that surplus money returned from the MTF for expenditure on the major street system may be spent on preservation of the local street system, without regard to the amount of local revenue spent, until January 1, 2009.

Public Act 163 of 2004 amended the Michigan Vehicle Code to provide that, effective February 1, 2005, a vehicle registration that was issued by the Secretary of State for a motorcycle would expire on the owner's birthday, rather than on March 31 under current law. The bill also deleted a provision requiring a tax on one-half the rate otherwise imposed by the Code to be collected for all motorcycles registered after September 30 for the period ending on March 31.

Public Act 172 and 175 of 2004 authorized the state's participation in the Streamlined Sales Tax Project, a multi-state effort to simplify and modernize sales and use tax collection and administration as a means of reducing the burden of collecting these taxes on sellers. Public Act 172 amended the Use Tax Act to make complementary changes for the state to be in compliance with the agreement, and Public Act 175 created the Streamlined Sales and Use Tax Revenue Equalization Act. Under the new law, the 6 percent credit in the use tax act that replaced the 6 cent sales tax credit in the motor carrier fuel tax, and a 6 percent use tax on diesel fuel purchased by interstate motor carriers were moved to the new streamlined sales and use tax revenue equalization act. With the change, the revenue from the 6 percent tax is deposited in the MTF.

Public Act 384 of 2004 amended the Michigan Transportation Fund Act (PA 51 of 1951) to establish a Local Bridge Fund, which effective October 1, 2004 replaced the Critical Bridge Fund/Program. The newly created fund will receive an annual \$5 million earmark from the MTF, plus an earmark of certain revenue from the Motor Fuel Tax Act: a quarter cent of the gasoline excise tax in TY 2005, and a half-cent of the gasoline excise tax in subsequent fiscal years.

Public Act 390 of 2004 amended Part 215 (Underground Storage Tank Financial Assurance) of the Natural Resources and Environmental Protection Act by creating the Refined Petroleum Fund, and a new sunset date for the 7/8 cent per gallon regulatory fee on refined petroleum products. Under the new law, the MUSTFA fee will be collected until December 31, 2010. Those revenues will be deposited into the newly created fund, and used to finance debt service on Clean Michigan Initiative Bonds, environmental cleanup programs in the Department of

Environmental Quality, and consumer protection programs in the Department of Agriculture.

2005

Public Act 5 of 2005 amended the Michigan Transportation Fund Act to lower the population threshold at which a township and a county road commission may enter into a contract for the preservation of the county local road system within the township (from a township population of at least 40,000 to 15,000, and eliminated the county population requirement of at least 500,000); and increase the amount that a contracting road commission may pay to a contracting township for local road preservation.

Public Act 141 of 2005 amended the Michigan Vehicle Code to redirect the \$5.00 expedited service fee and the \$8.00 transfer fee currently deposited in to the MTF to the Transportation Administration Collection Fund (TACF) for fiscal year 2005, and 2005 and 2006, respectively.

Public Acts 172 through 174 of 2005 amend PA 222 of 1972 (an act which provides for a state personal identification card), the Michigan Vehicle Code, and the Natural Resources and Environmental Protection Act, to direct revenue from commercial look-up fees to the TACF.

2006

Public Act 82 of 2006 amended the Michigan Transportation Fund law to specify that the funds required to be spent for non-motorized transportation services and facilities would have to be used for construction, improvement, or preservation of those services and facilities

Public Act 268 of 2006 amended the Motor Fuel Tax Act to do the following (1) Reduce the tax on certain gasoline that is at least 70 percent ethanol from 19 cents per gallon to 12 cents per gallon for 10 years or less and similarly reduce the diesel tax on fuel that is at least five percent biodiesel from 15 cents per gallon to 12 cents per gallon. (2) Require an annual determination of the difference between the amount of revenue collected under the bill and the amount that would have been collected under the regular tax rates. (3) Require the Legislature to appropriate the amount of the difference to the Michigan Transportation Fund (MTF). Public Act 346 of 2006 made parallel amendments the Motor Carrier Fuel Tax Act for motor fuel containing at least five percent biodiesel that is consumed in qualified commercial motor vehicles on the public roads or highways within Michigan – lowering the road tax rate on this alternative fuel from 15 cents per gallon to 12 cents per gallon.

Public Act 277 of 2006 amended the Motor Fuel Tax Act to exclude leaded racing fuel from the terms "gasoline" and "motor fuel", and to define "leaded racing fuel" as a fuel other than diesel fuel that is leaded and at least 100 octane and is used in vehicles on a racetrack and thus exempt leaded racing fuel from the gasoline/diesel tax.

Public Act 82 of 2006 amended the Michigan Transportation Fund law to specify

that the funds required to be spent for non-motorized transportation services and facilities would have to be used for construction, improvement, or preservation of those services and facilities

Public Act 338 of 2006 amended Public Act 51 of 1951, the Michigan Transportation Fund (MTF) law to increase from 25% to 50% the maximum amount that a city or village may transfer from its annual major street funding for the local street system (unless it is following an asset management process).

Public Act 82 of 2006 amended the Michigan Transportation Fund law to specify that the funds required to be spent for non-motorized transportation services and facilities would have to be used for construction, improvement, or preservation of those services and facilities

Public Acts 25 and 26 of 2008 amended the Aeronautics Code and the Motor Fuel Tax Act, respectively, to exempt aviation fuel that was purchased to formulate leaded racing fuel (LRF) from the aviation fuel tax and the motor fuel tax.

2008

Public Act 399 of 2008 amended the Natural Resources and Environmental Protection Act to do the following, for fees paid on or after July 1, 2009: (a) Increase snowmobile registration and renewal fees from \$22 to \$30. (b) Allocate the amount of the fee increase to the Permanent Snowmobile Trail Easement Subaccount. (c) Dedicate \$19, rather than \$14, of each registration fee to law enforcement for snowmobile programs and (d) Discontinue the allocation of \$5 from each fee to the Recreational Snowmobile Trail Improvement Subaccount.

Public Act 400 of 2008 increased the snowmobile trail permit sticker fee from \$25 to \$35 for fiscal years 2009-10 and 2010-2011 and to \$45 for the next five fiscal years, and then requires the fee to be adjusted every five years to reflect changes in the consumer price index. The Act also created the Permanent Snowmobile Trail Easement Subaccount and requires proceeds from the sale of land or the termination of easements or agreements under the bill to be deposited into the Trail Easement Subaccount.

Public Act 487 of 2008 amended the MTF law to require that, for fiscal year 2009-10 and each subsequent fiscal year, the Governor and the State Budget Director include in the annual budget an appropriation from a fund or funds, other than the Comprehensive Transportation Fund, to a street railway equal to the difference between its annual operating expenses and revenue, but not more than 8.0 percent of the total private investment in the street railway.

Public 584 of 2008 implemented the Unified Carrier Registration Agreement, the motor carrier regulation plan developed pursuant to the Unified Carrier Registration Act of 2005. In doing so, the Act

- Requires that money received under the Motor Carrier Act be appropriated to the Public Service Commission and the Department of State Police in a manner consistent with a requirement of the UCR Act.
- Deletes a requirement that at least 90 percent of the fees collected in excess of \$1.4 million annually be deposited in the Truck Safety Fund; and requires, instead, at least \$750,000 or 10 percent of the collected fees, whichever was greater, to be deposited in the Fund.
- Limits to intrastate motor vehicles provisions assessing an annual administrative fee against motor carriers, and delete requirements that a motor carrier licensed in Michigan pay an annual fee for each vehicle it operates that is registered in Michigan and operating entirely in interstate commerce.
- Deletes provisions establishing an annual fee for each interstate or foreign motor carrier vehicle operated in Michigan and licensed in another state or Canadian province, and allowing the PSC to enter into a reciprocal agreement with a state or province that does not charge vehicles licensed in Michigan economic regulatory fees or taxes
- Public Act 143 of 2010 increased from 30 percent to 50 percent, the share of a county road commission's Michigan Transportation Fund primary road system funds that may be used on the county *local* road system, as opposed to the county *primary* road system. Primary roads are those that are selected on the basis of greatest general importance to the county; local road system constitute the remaining roads.

Public Act 261 of 2010 amends the Michigan Transportation Fund (MTF) law, to allow funds returned to cities and villages to be used for certain transportation-related capital outlay projects by adding these projects a fifth priority after the four priorities present in the law before PA 261's enactment.

Public Act 119 of 2011 removed the stipulation that no monies raised from a county's general real or personal property taxes may be diverted under the Act that allows that county's board of commissioners to transfer a part of the county's general fund surplus to the county road fund.

Public Act 159 of 2011 made numerous amendments to the Michigan Vehicle Code including:

- Delay from October 1, 2011 to October 1, 2015, the sunset on the requirements that various fees be deposited in the Transportation Administration Collection Fund (TACF) and the sunset on specific fees related to vehicle registration and certification of title applications
- Delay from December 31, 2012 until October 1, 2015, the sunset on a tire disposal surcharge.

• Increase the fee for a vehicle group designation from \$25 to \$35 as of January 31, 2012, and require the additional \$10 to be used to defray the cost of compliance with federal regulations.

Public 225 of 2012 allocates 18 percent of fiscal year 2013 General Sales Tax revenue going to the General Fund ("4 percent sales tax") on motor fuel to the State Trunkline Fund (STF). The 4 percent sales tax revenue newly allocated to the STF will be spent for Federal highway fund matching purposes, subject to a \$100 million limit; and then to county road commissions, cities, and villages for highway, road, and street projects and related purposes. The Act also requires a deposit to the CTF of at least 27.9% of the 4% sales tax on sales of motor fuel, motor vehicles, and vehicle parts and accessories (rather than at least 27.9% of the balance remaining after the distributions to the school aid fund (SAF) and revenue sharing).

Public Acts 387 through 391 amend Michigan Statute to provide for a Regional Transit Authority. Public Act 387 created a new act (the Regional Transit Authority (RTA) Act). The new act establishes a new Regional Transit Authority within "a public transit region." Initially the Regional Transit Authority created by the bill would be composed of the counties of Wayne, Oakland, Macomb, and Washtenaw; however, other adjacent counties could join the authority under a process provided in the legislation. Public Act 388 amends the Michigan Vehicle Code by adding new section 801j that allows a Regional Transit Authority to charge an additional "vehicle registration fee" of not more than \$1.20 for each \$1,000 of the vehicle's list price as used in calculating the "fee." The RTA fee would require the approval of the voters in the public transit region. PA 388 also authorizes the Secretary of State to collect the RTA registration fee authorized for credit to the Regional Transit Authority. Public Act 389 amended the Michigan Zoning Enabling Act to make the act subject to the Regional Transit Authority Act. Public Act 390 authorized the Michigan Department of Transportation or a local road agency to enter into an operating license agreement with a regional transit authority. Public Act 391 amends several sections of the Comprehensive Transportation Fund dealing with the distribution of money from the Fund.

Based on a 2009 Michigan Department of Transportation cost study, Public Act 421 of 2012 increases the amounts that road agencies are obligated to pay annually to railroads under Section 315 of the Railroad Code of 1993 for the maintenance of rail grade crossings.

Beginning September 30, 2014, Public Acts 466, 506 and 507 of 2012 establish new requirements for certain counties, county road commissions, and other local road agencies (cities and villages) to obtain any Michigan Transportation Fund (MTF) monies. For new employees/plans, the Acts establish upper limits on employer contributions (as percent of base salary) to defined contribution retirement plans and on defined benefit pension multipliers. The Acts set lower limits on the number of years of service used to calculate defined benefit plan payments and on the share of health insurance premiums paid by employees.

Effective April 2013, Public Act 509 expands the requirement for prepayment for a portion of the sales tax (already required for gasoline) to diesel fuel. In addition, the previous requirement that Treasury determine the prepayment rate on a quarterly basis was replaced by a requirement that Treasury determine the prepayment rate on a *monthly* basis – for both gasoline and diesel fuel.

- Public Acts 159 amended the General Sales Tax Act so that sales tax would be sales tax would be charged on the difference between the price of a new or used motor vehicle, recreational vehicle, or titled watercraft and the agreed-upon value of any trade-in ("sales tax on the difference"). Beginning December 15, 2013, the amount that may be exempted from the sales tax base is the lesser of \$2,000 or the agreed-upon value of the trade-in. The Act phases in the percent of the difference that may be exempted from the net sales tax base starting with allowing 10 percent of the difference to be exempted in FY 2014 and then rising to 20 percent in FY 2015, 35 percent in FY 2016, 50 percent in FY 2017, 75 percent in FY 2018 and 100 percent after FY 2018.
- Proposal 15-1 was approved by more than two-thirds of the Senate and the House of Representatives and thus the Proposal was sent to Michigan voters in May 2015. If approved, the Proposal would have amended the Michigan Constitution as follows:
  - Eliminated sales/use taxes on gasoline/diesel fuel for vehicles on public roads.
  - Increased portion of use tax dedicated to School Aid Fund (SAF).
  - Expanded use of SAF to community colleges and career/technical education, and prohibit use for 4-year colleges/universities

In addition, if approved, the Proposal would have:

- Increased sales/use tax to 7%, as authorized by constitutional amendment.
- Increased gasoline/diesel fuel tax and adjust annually for inflation, increase vehicle registration fees, and dedicate revenue for roads and other transportation purposes.
- Expanded competitive bidding and warranties for road projects.
- Increased earned income tax credit.

Note: At the special May 2015 election, voters rejected Proposal 15-1.

Public Act 78 of 2015 extended, from September 30, 2015 to September 30, 2019, the expiration of the regulatory fee levied on various trucks, tractors, and other specified vehicles utilized for commercial or organizational purposes. PA 78 also delayed expiration of various fees administered by the Department of State that are deposited into the Transportation Administration Collection Fund (TACF). Fees deposited into the TACF are used to defray administrative costs for the Department of State.

Beginning January 01, 2017, **Public Act 174 of 2015** increased registration fees by 20 percent on passenger vehicles based on the vehicle's list price. PA 174 also raised by 20 percent registration fees on commercial vehicles under the elected gross weight schedule. In addition, PA 174 also provided for additional registration taxes for hybrid electric and non-hybrid electric vehicles. The Act imposed registration tax surcharge of \$30 for hybrid electric vehicles weighing 8,000 pounds or less and a surcharge of \$100 for hybrid vehicles weighing more than 8,000 pounds. In addition to the \$30/\$100 surcharge base amount, the surcharge on hybrid electric vehicles are increased an additional \$2.50 for each one cent that the motor fuel tax rate is above 19.0 cents per gallon.

The Act imposed a registration tax surcharge of \$100 for non-hybrid electric vehicles weighing 8,000 pounds or less and imposes a surcharge of \$200 for non-hybrid vehicles weighing more than 8,000 pounds. In addition to the \$100/\$200, the registration tax base surcharge on non-hybrid electric vehicles was increased an additional \$5.00 for each one cent that the motor fuel tax rate is above 19.0 cents per gallon.

As the motor fuel tax rate is adjusted upward for inflation beginning January 1, 2022 (see PA 176 below), the amount added to the registration taxes on hybrid and non-hybrid will increase based on the amount of whole cents that the motor fuel rate is above 19 cents.

Public Act 175 of 2015 amends Public Act 51 of 1951 (Michigan Transportation Fund (MTF) Statute). Prior to PA 175's enactment, the State Treasurer was permitted to deposit only motor fuel tax and registration tax revenue into the MTF. PA 175 established the Roads Innovation Fund. Beginning in FY 2017, the Act requires that the first \$100.0 million in fuel tax revenue be deposited each fiscal year into the Roads Innovation Fund until the adoption of a one-time concurrent resolution of the Legislature releasing money from the Fund. Once released, the Fund's monies -- after specified earmarks-- shall be distributed according to the Michigan Transportation Fund formula with 10 percent going to the Comprehensive Transportation Fund. The remaining 90 percent shall be distributed using the Michigan Transportation Fund distribution formula: 39.1 percent to the State Trunkline Fund, 39.1 percent to county road commissions and 21.8 percent to cities and villages. The Act increases the earmark for debt service from \$43.0 million to \$50.0 million. The Act also lowers the maximum percentage of Trunkline Fund distributions that the Department of Transportation may spend on administrative expenses from 10.0 percent to 8.0 percent. Further, the Act establishes the Grade Crossing Surface Account within the State Trunkline Fund which may receive up to \$3.0 million per year. For cities in which more than 10.0 million passengers used public transportation in the prior fiscal year, the Act allows that city, with Department of Transportation approval, to use up to 20.0 percent of the money that city receives from the Michigan Transportation Fund for public transit purposes.

PA 175 requires the Department of Transportation to establish the Roads Innovation Task Force to evaluate road materials and construction cost that could yield higher quality and longer lasting roads at lower costs over the lifespan of roads. The Act further requires that the Department of Transportation, county road commissions, cities and villages to get warranties for road pavement projects costing more than \$2.0 million and all construction projects undertaken after the Act's enactment.

**Public Act 176 of 2015** increases the motor fuel tax on gasoline from 19 cents per gallon to 26.3 cents per gallon. The Act also increases the motor fuel tax rate on diesel fuel from 15 cents per gallon to 26.3 cents per gallon. Beginning 2022, the Department of Treasury must adjust the motor fuel tax rate by the lesser of the inflation rate and five percent and round to the nearest 0.1 cent. The inflation rate equals the change in the U.S. all urban consumers in the directly prior fiscal year unless the change is negative. If the change is negative, the inflation rate equals zero.

The Act increases the initial civil penalty for using dyed diesel fuel on public roads or highways from \$200 to \$1,000 and increases the second violation civil penalty from \$200 to \$5,000. The civil penalty for a third or subsequent violation remains unchanged at \$5,000.

Effective January 1, 2017, the Act imposes the motor fuel tax on alternative fuels for alternative fuel dealers and alternative fuel commercial users. Effective January 1, 2018, the Act imposes the motor fuel tax on alternative fuels for persons who are neither an alternative fuel dealer nor commercial user. As defined by the Act, alternative fuel includes natural gas, compressed natural gas (CNG), liquefied natural gas, liquefied petroleum, hydrogen CNG and hythame. The Act establishes "gallon equivalent" amounts for alternative fuels. For an alternative fuel, the motor fuel tax equals the motor fuel tax rate times the alternative fuel's gallon equivalent. For example, for compressed natural gas, the gallon equivalent amount is 5.660 pounds or 126.67 cubic feet at 60 degrees Fahrenheit and one atmosphere of pressure.

The Act provides for a \$500 alternative fuel dealer license and a \$50 alternative commercial user license. The Act also repeals the \$50 license fee for LPG.

**Public Act 177 of 2015** amends the Streamlined Sales and Use Revenue Equalization Act to impose a specific tax on motor fuel used in qualified

commercial motor vehicles by interstate carriers, and require the tax on alternative fuel to be based on a per-gallon equivalent to motor fuel. The specific tax equals the quarterly statewide average price of a gallon of undyed diesel fuel or self-serve gasoline, as applicable, multiplied by six percent. The department of treasury is required to determine and certify the statewide average price per gallon of unleaded gasoline and undyed diesel fuel on a quarterly basis. If a statewide average is not readily available, the department of treasury may use regional or national average prices per gallon.

**Public Act 178 of 2015** applies the per-gallon or per-gallon-equivalent fuel tax rates under Public Act 176 to motor carrier purchases of alternative fuel, in addition to motor fuel, beginning January 1, 2017. Includes gasoline in the definition of "motor fuel" (which meant only diesel fuel prior to 2017). Defines "alternative fuel" and "alternative fuel dealers" as they are defined in PA 176.

**Public Act 179 of 2015** amends the Income Tax Act to: Allocate to the Michigan Transportation Fund from income tax revenue: \$150.0 million in FY 2019; \$325.0 million in FY 2020; and \$600.0 million in FY 2021 and all subsequent fiscal years. Require the allocation to be distributed as provided in Public Act 51 of 1951 for the distribution of the balance of the MTF after the deduction of specific amounts.

Public Act 317 of 2016 amends the Motor Fuel Tax Act to say notwithstanding anything to the contrary, an alternative fuel commercial user could report and pay the tax imposed under Section 152 on compressed natural gas based on a gallon equivalent equal to 6.38 pounds or 142.8 cubic feet at 60 degrees Fahrenheit and 1 atmosphere of pressure, if the fuel was placed in the commercial user's vehicle at an alternative fuel filling station that is owned or leased by that commercial user located at the user's place of business and that is unavailable for public use. This was applied beginning January 1, 2017.

**Public Act 465 of 2016** amends the Michigan Natural Resources and Environmental Protection Act to eliminate an annual \$100 registration or renewal fee for each underground storage tank.

**Public Act 466 of 2016** amends the Motor Fuels Quality Act to eliminate certain motor fuel distributor and retail dealer license fees assessed under the Act.

**Public Act 467 of 2016** amends the Michigan Natural Resources and Environmental Protection Act to increase the environmental protection regulatory fee from 7/8 cents per gallon to one cent per gallon. The Act also amends provisions governing use of the Refined Petroleum Fund.

**Public Act 468 of 2016** amends the Fire Protection Code to exempt above-ground storage tanks that are subject to an environmental protection regulatory fee from certain installation application fees.

Exhibit 31
Gasoline Tax Rankings by State
September 2016
(cents per gallon)

State Gasoline Tax with Sales Tax State State Gasoline and Maximum Local Rank Gasoline Tax Rank Tax with Sales Tax Rank Gasoline Taxes Alabama 16.0 45 16.0 46 24.0 30 Alaska 9.0 50 9.0 50 9.0 50 18.0 39 18.0 18.0 44 Arizona 41 Arkansas 21.5 32 21.5 36 21.5 38 California 18 5 9 27.8 33.8 33.8 37 Colorado 22.0 31 22.0 35 22.0 35.9 3 35.9 3 35.9 7 Connecticut 27 31 23.0 33 Delaware 23.0 23.0 Florida 23.4 26 23.4 30 36.7 6 20 24 27 Georgia 26.0 26.0 26.0 16.0 45 25.5 26 48.5 3 Hawaii 14 8 10 32.0 Idaho 32.0 32.0 37 5 Illinois 19.0 31.6 11 42.6 Indiana 18.0 39 29.3 19 29.3 22 13 17 Iowa 30.7 10 30.7 30.7 24.0 24 24.0 28 24.0 30 Kansas 23 24.6 27 24.6 29 Kentucky 24.6 40 Louisiana 20.0 34 20.0 38 20.0 Maine 30.0 11 30.0 14 18 30.0 Maryland 33.5 5 33.5 6 33.5 10 Massachusetts 24.0 24 24.0 28 24.0 30 Michigan 19.0 37 29.5 16 29.5 19 Minnesota 28.5 15 28.5 20 28.5 23 Mississippi 18.0 39 18.0 41 21.0 39 Missouri 17.0 42 17.0 43 17.0 45 Montana 27.0 19 27.0 23 27.0 26 25.8 25 28 Nebraska 25.8 21 25.8 Nevada 21.3 33 21.3 37 31.3 15 New Hampshire 22.2 30 22.2 34 22.2 36 49 49 New Jersey 14.5 49 14.5 14.5 42 43 45 New Mexico 17.0 17.0 17.0

33.1

34.0

23.0

28.0

16.0

30.0

50.3

33.0

16.0

28.0

20.0

20.0

29.4

29.5

16.2

49.4

33.2

30.9

23.0

8

4

31

21

46

14

1

9

46

21

38

38

18

17

45

2

7

12

31

33.1

34.0

23.0

28.0

16.0

43.0

50.3

33.0

16.0

28.0

20.0

20.0

29.4

29.5

19.2

50.4

33.2

30.9

23.0

12

8

33

24 47

4

2

13

47

24

40

40

21

20

43

1

11

16

33

Sources: Sources: Commerce Clearing House, Federation of Tax Administrators, Federal Highway Administration, American Petroleum Institute and revenue/taxation departments in various states.

22

4

27

16

45

11

1

7

45

16

34

34

14

13

44

2

6

9

27

25.0

34.0

23.0

28.0

16.0

30.0

50.3

33.0

16.0

28.0

20.0

20.0

29.4

29.5

16.2

49.4

33.2

30.9

23.0

New York

Oklahoma

Oregon

Ohio

North Carolina

North Dakota

Pennsylvania

Rhode Island

South Carolina

South Dakota

Tennessee

Texas

Utah

Vermont

Virginia

Washington

Wisconsin

Wyoming

West Virginia

Exhibit 32 Michigan Motor Fuel Revenue History

Fiscal Year	Gasoline Tax Revenue	Diesel Fuel Revenue*	Liquefied Petroleum Revenue	Aviation Fuel Revenue
1956	\$130,961,671	\$1,249,857	\$67,853	\$571,402
1957	133,407,898	1,426,389	67,131	761,679
1958	133,818,382	1,588,005	77,951	849,111
1959	135,496,651	1,941,655	72,620	880,685
1960	142,789,451	2,510,539	69,612	962,448
1961	144,426,700	2,828,688	70,330	982,406
1962	148,103,666	3,340,036	79,430	1,109,821
1963	153,087,531	3,949,215	86,258	1,195,797
1964	161,406,978	4,729,550	86,335	1,032,144
1965	170,747,556	5,860,153	96,022	1,338,337
1966	181,660,659	7,087,586	106,287	1,646,505
1967	187,235,437	7,983,849	107,041	2,136,185
1968	209,989,524	9,648,641	120,654	2,486,798
1969	242,556,482	11,953,982	125,286	3,213,298
1970	256,858,580	13,173,736	129,001	3,556,796
1971	266,473,195	13,944,833	142,748	3,261,618
1972	281,878,162	15,877,405	162,813	2,879,953
1973	328,716,356	18,686,540	194,846	3,176,143
1974 1975	377,584,888 373,818,635	19,542,204 18,680,365	236,919 255,532	3,465,785
1975 1976	486,325,904	24,842,248	313,544	3,258,367 4,001,229
1970 1977	402,755,827	22,959,514	282,813	3,705,705
1977	413,188,311	24,696,828	274,235	3,873,510
1979	472,280,488	30,417,938	297,822	4,462,639
1980	448,192,599	30,861,342	358,859	3,431,017
1981	417,491,808	28,358,625	543,443	3,543,699
1982	430,961,796	31,673,186	825,249	2,911,342
1983	433,052,572	36,531,879	1,072,670	2,542,207
1984	527,680,752	48,596,242	1,285,380	3,277,720
1985	569,708,205	54,763,729	1,273,922	3,896,310
1986	595,729,891	57,469,568	1,088,072	4,271,737
1987	604,479,419	60,881,145	950,226	5,219,748
1988	628,520,349	67,251,468	912,318	5,659,592
1989	624,951,721	71,479,395	954,007	5,605,366
1990	626,229,262	69,945,463	1,044,455	6,815,683
1991	622,513,663	69,884,933	971,290	6,184,456
1992	631,024,833	71,930,644	1,002,404	6,566,513
1993	657,191,544	84,876,025	1,068,636	7,360,801
1994	658,877,569	88,963,786	1,089,271	7,809,245
1995	681,711,071	95,047,310	816,254	7,772,204
1996	680,586,256	83,674,911	1,076,765	7,974,804
1997	736,316,612	85,912,538	1,051,127	6,698,560
1998	903,542,085	118,242,235	1,017,898	6,867,759
1999	931,031,120	134,545,842	798,258	8,389,628

Exhibit 32 cont. Michigan Motor Fuel Revenue History

			Liquefied	
Fiscal	Gasoline Tax	Diesel Fuel	Petroleum	<b>Aviation Fuel</b>
Year	Revenue	Revenue*	Revenue	Revenue
2000	\$921,991,065	\$143,461,574	\$1,039,944	\$7,732,150
2001	933,494,040	133,184,171	966,056	6,705,528
2002	938,911,784	142,977,457	891,352	6,698,836
2003	935,671,742	156,952,935	560,752	7,401,938
2004	932,139,677	140,515,681	623,861	7,721,014
2005	922,368,211	146,335,499	463,887	6,718,713
2006	906,220,722	148,599,481	571,586	5,974,483
2007	883,687,513	143,806,436	367,880	6,334,663
2008	848,864,067	140,095,617	415,034	5,344,254
2009	846,013,305	117,671,767	398,560	5,691,549
2010	841,658,744	120,121,889	337,918	5,421,677
2011	831,717,538	125,639,800	346,151	5,621,413
2012	818,797,704	126,821,282	350,457	5,026,508
2013	821,632,225	128,970,822	395,001	5,026,431
2014	820,625,646	137,854,345	392,999	5,056,196
2015	866,609,209	136,749,318	469,687	6,386,372
2016	872,968,895	137,608,536	401,498	6,133,158

Source: Michigan Department of Treasury

<sup>\*</sup> From FY 1980 to 2016, diesel fuel revenue includes diesel fuel tax, motor carrier diesel fuel tax and motor carrier diesel license fees.

<sup>\*\* 1976</sup> was a 15-month fiscal year.

Exhibit 33 Michigan Motor Fuel Tax Rates (cents per gallon)

Fisca	al Fiscal				
<u>Yea</u>	r Year	Gasoline	<b>Diesel</b>	LPG	<b>Aviation</b>
1925	5 1925-1926	2	na	na	na
1927		3	na	na	na
1931	1 1931-1946	3	na	na	3
1947	7 1947-1950	3	5	na	3
1951	1 1951-1953	4.5	6	na	3
1954	1954	4.5	6	4.5	3
1955		4.5/6	6	4.5/6	3
1956		6	6	6	3
1968		6/7	6/7	6/7	3
1969		7	7	7	3
1973		7/9	7	7/9	3
1974	1974-1978	9	7	9	3
1979	9 1979	9/11	7/9	9/11	3
1980	1980	11	9/11	11	3
1981	1 1981-1982	11	11	11	3
1983	3 1983	11/13	11/13	11/13	3
1984	1984	13/15	13/15	13/15	3
1985	5 1985-1996	15	15	15	3
1997	7 1997	15/19	15	15	3
1998	3 1998-2016	19	15	15	3
2017	7 2017	26.3	26.3	26.3	3

Source: Michigan Department of Treasury

Exhibit 34
Michigan Gasoline Taxes as a
Percent of Total Michigan State Taxes

Fiscal Year	Michigan Gasoline Tax	Total Michigan State Tax Revenue	Gasoline Tax as a Percent of State Taxes
1970	\$256,858,580	\$2,282,917,000	11.3 %
1971	266,473,195	2,476,286,000	10.8
1972	281,878,162	2,847,471,000	9.9
1973	328,716,356	3,323,894,000	9.9
1974	377,584,888	3,467,770,000	10.9
1975	373,818,635	3,488,331,000	10.7
1976	486,325,904	4,907,922,000	9.9
1977	402,755,827	4,760,007,000	8.5
1978	413,188,311	5,389,620,000	7.7
1979	472,280,488	6,044,023,000	7.8
1980	448,192,599	6,126,400,000	7.3
1981	417,491,808	6,195,020,000	6.7
1982	430,961,796	6,500,591,000	6.6
1983	433,052,572	7,333,424,000	5.9
1984	527,680,752	8,471,626,000	6.2
1985	569,708,205	8,910,956,000	6.4
1986	595,729,891	9,270,804,000	6.4
1987	604,479,419	9,597,215,000	6.3
1988	628,520,349	10,285,539,000	6.1
1989	624,951,721	10,850,896,000	5.8
1990	626,229,262	11,062,400,000	5.7
1991	622,513,663	11,722,260,000	5.3
1992	631,024,833	12,232,193,000	5.2
1993	657,191,544	12,866,305,000	5.1
1994	658,877,569	15,082,510,000	4.4
1995	681,711,071	17,468,714,000	3.9
1996	680,586,256	18,520,076,000	3.7
1997	736,316,612	19,440,316,000	3.8
1998	903,542,085	20,626,025,000	4.4
1999	931,031,120	21,958,875,000	4.2
2000	921,991,065	22,865,496,000	4.0
2001	933,494,040	22,405,023,000	4.2
2002	938,911,784	22,070,408,000	4.3
2003	935,671,742	22,425,957,000	4.2
2004	932,139,677	22,799,928,000	4.1
2005	922,368,211	23,936,964,000	3.9
2006	906,220,722	24,198,924,000	3.7
2007	883,687,513	24,370,884,000	3.6
2008	848,864,067	26,075,135,000	3.3
2009	846,013,305	23,348,354,000	3.6
2010	841,658,744	23,174,824,000	3.6
2011	831,717,538	24,686,336,000	3.4
2012	818,797,704	24,764,916,000	3.3
2013	821,632,225	25,239,720,000	3.3
2014	820,625,646	25,335,788,000	3.2
2015 2016	866,609,209 872,968,895	27,176,341,000 27,804,517,000	3.2 3.1
2010	012,700,073	41,004,317,000	5.1

<sup>\*</sup> FY 1976 was 15-month fiscal year.

Sources: Comprehensive Annual Financial Report and GA-24 Accounting Reports.

Exhibit 35 Michigan Gasoline Tax Revenues Adjusted for Inflation

		Nominal	Real	
<b>Fiscal</b>	Rate	<b>Gas oline Tax</b>	GasolineTax	Percent
<b>Year</b>	(Cents)	Revenue	Revenue*	<b>Change</b>
1960	6	\$142,789,451	1,070,373,926	
1961	6	144,426,700	1,068,163,450	-0.2%
1962	6	148,103,666	1,099,033,570	2.9%
1963	6	153,087,531	1,128,443,911	2.7%
1964	6	161,406,978	1,177,988,610	4.4%
1965	6	170,747,556	1,229,921,899	4.4%
1966	6	181,660,659	1,263,267,080	2.7%
1967	6	187,235,437	1,247,129,001	-1.3%
1968	6/7	209,989,524	1,357,791,034	8.9%
1969	7	242,556,482	1,485,823,068	9.4%
1970	7	256,858,580	1,479,191,037	-0.4%
1971	7	266,473,195	1,462,210,494	-1.1%
1972	7	281,878,162	1,494,812,736	2.2%
1973	7/9	328,716,356	1,671,065,490	11.8%
1974	9	377,584,888	1,757,852,408	5.2%
1975	9	373,818,635	1,583,623,209	-9.9%
1976	9	486,325,904	1,930,783,688	21.9%
1977	9	402,755,827	1,491,862,903	-22.7%
1978	9	413,188,311	1,432,150,839	-4.0%
1979	9/11	472,280,488	1,466,835,538	2.4%
1980	11	448,192,599	1,204,276,631	-17.9%
1981	11	417,491,808	1,002,420,043	-16.8%
1982	11	430,961,796	994,797,481	-0.8%
1983	11/13	433,052,572	963,419,986	-3.2%
1984	13/15	527,680,752	1,139,548,227	18.3%
1985	15	569,708,205	1,190,770,920	4.5%
1986	15	595,729,891	1,218,667,168	2.3%
1987	15	604,479,419	1,207,522,722	-0.9%
1988	15	628,520,349	1,210,706,484	0.3%
1989	15	624,951,721	1,144,987,148	-5.4%
1990	15	626,229,262	1,092,132,968	-4.6%
1991	15	622,513,663	1,039,734,169	-4.8%
1992	15	631,024,833	1,032,886,296	-0.7%
1993	15	657,191,544	1,048,552,428	1.5%
1994	15	658,877,569	1,019,609,580	-2.8%
1995	15	681,711,071	1,022,044,346	0.2%
1996	15	680,586,256	993,417,841	-2.8%
1997	15/19	736,316,612	1,047,791,806	5.5%
1998	19	903,542,085	1,257,436,036	20.0%
1999	19	931,031,120	1,264,652,511	0.6%

#### Exhibit 35 (continued) Michigan Gasoline Tax Revenues Adjusted for Inflation

	D 4	Nominal	Real	<b>D</b> 4
Fiscal	Rate	GasolineTax	GasolineTax	Percent
<u>Year</u>	(Cents)	<u>Revenue</u>	Revenue*	<u>Change</u>
2000	19	\$921,991,065	1,211,445,859	-4.2%
2001	19	\$933,494,040	1,187,744,945	-2.0%
2002	19	\$938,911,784	1,169,735,973	-1.5%
2003	19	\$935,671,742	1,136,877,154	-2.8%
2004	19	\$932,139,677	1,117,844,749	-1.7%
2005	19	\$922,368,211	1,079,204,969	-3.5%
2006	19	\$906,220,722	1,022,965,451	-5.2%
2007	19	\$883,687,513	981,989,978	-4.0%
2008	19	\$848,864,067	917,492,293	-6.6%
2009	19	\$846,013,305	922,613,730	0.6%
2010	19	\$841,658,744	909,335,543	-1.4%
2011	19	\$831,717,538	875,901,369	-3.7%
2012	19	\$818,797,704	841,965,980	-3.9%
2013	19	\$821,632,225	829,354,318	-1.5%
2014	19	\$820,625,646	819,232,702	-1.2%
2015	19	\$866,609,209	875,493,326	6.9%
2016	19	\$872,968,895	872,968,895	-0.3%

<sup>\*</sup> Adjusted by Detroit Consumer Price Index to 2016 dollars. Source: Michigan Department of Treasury and U.S. Department of Labor.

Exhibit 36 State Motor Fuel Tax Rates and Other Transportation-Related Taxes, September 2016 (cents)

IFTÁ

State	Gasoline Tax Rate	Diesel Tax Rate		tor Carrier Fax Rate	Local Gasoline Tax	State Sales Tax on Gasoline	Highway Toll Roads
Alabama	16.0	19.0		19.0	Yes		Yes
Alaska	9.0	9.0	•	#N/A	103		103
Arizona	18.0	18.0		26.0			
Arkansas	21.5	22.5		22.5			
California	27.8	16.0		40.0		Yes	Yes
Colorado	22.0	20.5		20.5		105	Yes
Connecticut	35.9	41.7		41.7			105
Delaware	23.0	22.0		22.0			Yes
Florida	23.4	24.7		33.8	Yes		Yes
Georgia	26.0	29.0		29.0	105		100
Hawaii	16.0	16.0	•	#N/A	Yes	Yes	
Idaho	32.0	32.0		32.0	105	100	
Illinois	19.0	21.5		35.6	Yes	Yes	Yes
Indiana	18.0	16.0		27.0	105	Yes	Yes
Iowa	30.7	32.5		32.5		100	100
Kansas	24.0	26.0		26.0			Yes
Kentucky	24.6	21.6		31.8			105
Louisiana	20.0	20.0		20.0			Yes
Maine	30.0	31.2		31.2			Yes
Maryland	33.5	34.3		34.3			Yes
Massachusetts	24.0	24.0		24.0			Yes
Michigan	19.0	15.0		27.5		Yes	1
Minnesota	28.5	28.5		28.5			Yes
Mississippi	18.0	18.0		18.0	Yes		
Missouri	17.0	17.0		17.0			
Montana	27.0	27.8		27.8			
Nebraska	25.8	25.8		25.8			
Nevada	21.3	27.0		27.0	Yes		Yes
New Hampshire	22.2	22.2		22.2			Yes
New Jersey	14.5	17.5		17.5			Yes
New Mexico	17.0	21.0		21.0			
New York	25.0	23.3		37.8		Yes	Yes
North Carolina	34.0	34.0		34.0			Yes
North Dakota	23.0	23.0		23.0			
Ohio	28.0	28.0		28.0			Yes
Oklahoma	16.0	13.0		13.0			Yes
Oregon	30.0	30.0	•	#N/A	Yes		
Pennsylvania	50.3	64.0		64.0			Yes
Rhode Island	33.0	33.0		33.0			
South Carolina	16.0	16.0		16.0			Yes
South Dakota	28.0	28.0		28.0			
Tennessee	20.0	17.0		17.0			
Texas	20.0	20.0		20.0			Yes
Utah	29.4	29.4		29.4			Yes
Vermont	29.5	31.0		31.0			Yes
Virginia	16.2	20.2		23.7	Yes		Yes
Washington	49.4	49.4		49.4	Yes		Yes
West Virginia	33.2	33.2		33.2			Yes
Wisconsin	30.9	30.9		32.9			
Wyoming	23.0	23.0		24.0			

Sources: Commerce Clearing House, Federation of Tax Administrators, Federal Highway Administration, American Petroleum Institute and revenue/taxation departments in various states. Virginia has a local option sales tax on motor fuel.

## Exhibit 37 State Motor Fuel Taxes 2016 Per Person and as Percent of Personal Income Motor Fuel Taxes Motor Fuel Taxes

	<b>Motor Fuel Taxes</b>		Motor Fuel Taxes as a	
<u>State</u>	Per Person	Rank	Percent of Personal Income	Rank
Alabama	\$138	28	0.35%	22
Alaska	\$40	49	0.07%	50
Arizona	\$99	44	0.25%	39
Arkansas	\$163	20	0.41%	13
California	\$123	37	0.22%	42
Colorado	\$117	39	0.23%	41
Connecticut	\$209	7	0.30%	30
Delaware	\$131	33	0.27%	35
Florida	\$125	35	0.27%	34
Georgia	\$156	23	0.37%	17
Hawaii	\$59	48	0.12%	47
Idaho	\$184	13	0.47%	7
Illinois	\$98	45	0.19%	44
Indiana	\$126	34	0.29%	31
Iowa	\$209	6	0.46%	8
Kansas	\$156	22	0.33%	25
Kentucky	\$169	17	0.43%	11
Louisiana	\$132	32	0.31%	28
Maine	\$183	14	0.42%	12
Maryland	\$166	18	0.29%	32
Massachusetts	\$112	41	0.18%	45
Michigan	\$100	43	0.23%	40
Minnesota	\$165	19	0.32%	26
Mississippi	\$145	25	0.41%	14
Missouri	\$115	40	0.27%	37
Montana	\$200	8	0.47%	6
Nebraska	\$183	15	0.37%	18
Nevada	\$212	5	0.49%	4
New Hampshire	\$138	27	0.25%	38
New Jersey	\$63	47	0.10%	48
New Mexico	\$137	30	0.36%	20
New York	\$83	46	0.14%	46
North Carolina	\$190	11	0.45%	10
North Dakota	\$258	3	0.47%	5
Ohio	\$158	21	0.35%	21
Oklahoma	\$35	50	0.08%	49
Oregon	\$152	24	0.33%	24
Pennsylvania	\$262	2	0.52%	2
Rhode Island	\$143	26	0.28%	33
South Carolina	\$120	38	0.30%	29
South Dakota	\$216	4	0.45%	9
Tennessee	\$135	31	0.31%	27
Texas	\$125	36	0.27%	36
Utah	\$137	29		23
Vermont	\$187	12	_	16
Virginia	\$106	42	-	43
Washington	\$195	10		19
West Virginia	\$196	9		1
Wisconsin	\$176	16		15
Wyoming	\$277	1	0.50%	3
U.S. Average	\$137		0.28%	

Sources: 2016 Highway Statistics, Federal Highway Administration, Table MF-1. Bureau of Economic Analysis and Bureau of the Census, U.S. Department of Commerce.

Exhibit 38 State-Administered Toll Roads and Crossing Facilities Revenue, 2015

<u>State</u>	Toll Revenue	<u>Rank</u>
Texas	\$4,152,874	1
New Jersey	\$3,252,021	2
Pennsylvania	\$3,243,076	3
New York	\$2,592,901	4
Florida	\$2,538,101	5
Illinois	\$2,140,649	6
California	\$1,375,648	7
M ary land	\$1,162,477	8
Washington	\$906,959	9
Delaware	\$627,432	10
Massachusetts	\$526,337	11
Ohio	\$313,107	12
Oklahoma	\$312,610	13
Alaska	\$275,329	14
Indiana	\$273,329	15
New Hampshire		
•	\$179,371	16
Maine	\$163,400	17
Georgia	\$134,918	18
Kansas	\$109,395	19
Rhode Island	\$100,223	20
West Virginia	\$96,119	21
Virginia	\$74,256	22
Michigan	\$60,614	23
North Carolina	\$41,519	24
Louisiana	\$26,919	25
South Carolina	\$17,128	26
Connecticut	\$1,422	27
Tennessee	\$1,185	28
Nevada	\$1,165	29
Utah	\$951	30
Alabama	\$0	31
Arizona	\$0	31
Arkansas	\$0	31
Colorado	\$0	31
Hawaii	\$0	31
Idaho	\$0	31
Iowa	\$0	31
Kentucky	\$0	31
Minnesota	\$0	31
Mississippi	\$0	31
Missouri	\$0	31
Montana	\$0	31
Nebraska	\$0	31
New Mexico	\$0	31
North Dakota	\$0	31
Oregon	\$0	31
South Dakota	\$0	31
Vermont	\$0	31
Wisconsin	\$0	31
Wyoming	\$0	31
, ,	7 ~	

Note: Figures are in thousands of dollars. Total revenue includes tolls, concessions and rentals, bond proceeds, net income from investments and miscellaneous revenue.

Source: 2015 Highway Statistics Federal Highway Administration

Exhibit 39 Michigan Motor Vehicle Registration Taxes

Fiscal	Motor Vehicle Registration	Licenses, Permits and
<u>Year</u>	Taxes	Miscellaneous
1956	\$63,386,404	\$7,164,232
1957	66,107,708	6,071,121
1958	63,096,982	7,053,765
1959	64,483,983	12,394,776
1960	67,143,071	6,019,279
1961	67,137,714	5,768,690
1962	68,272,798	7,981,511
1963	70,931,922	3,821,461
1964	73,953,110	9,046,524
1965	77,911,496	10,304,000
1966	81,190,953	11,717,000
1967	82,640,929	14,812,000
1968	85,653,690	9,847,000
1969	114,545,531	11,508,000
1970	122,655,292	13,196,000
1971	126,664,196	11,822,000
1972	134,973,154	23,532,000
1973	143,877,500	24,085,000
1974	149,741,376	33,615,000
1975	151,426,516	18,678,000
1976	163,485,628	38,310,000
1977	166,993,061	30,403,000
1978	173,363,943	39,606,000
1979	235,343,000	53,941,000
1980	236,249,529	77,731,000
1981	211,009,832	83,859,000
1982	213,531,008	68,913,000
1983	237,724,622	51,390,000
1984	255,862,631	64,520,000
1985	286,683,713	74,401,000
1986	299,980,206	69,994,000
1987	315,941,648	64,487,000
1988	363,183,844	102,788,000
1989	397,038,510	124,929,000
1990	409,819,989	128,753,000
1991	420,162,272	121,552,000
1992	441,775,914	99,909,000
1993	462,458,099	117,348,000
1994	494,250,965	127,211,000
1995	521,156,108	160,008,000
1996	564,416,538	146,038,000
1997	596,452,461	126,256,000
1998	664,781,693	149,650,000
1999	709,869,374	143,460,000

Source: Michigan Department of Treasury (continued on next page).

Exhibit 39 (continued) Michigan Motor Vehicle Registration Taxes

	Motor Vehicle	Licenses,	
Fiscal	Registration	Permits and	
Year	Taxes	Miscellaneous	
2000	\$755,096,882	\$144,770,000	
2001	777,903,036	141,863,000	
2002	827,347,381	139,015,000	
2003	844,695,019	141,550,000	
2004	933,822,335	129,592,000	
2005	863,366,561	141,870,000	
2006	867,663,304	152,312,000	
2007	871,726,279	142,249,000	
2008	855,035,864	207,830,000	
2009	839,653,571	94,418,000	
2010	842,106,016	98,553,000	
2011	859,674,914	113,326,000	
2012	876,064,203	107,548,000	
2013	906,529,973	115,640,000	
2014	940,556,338	109,285,000	
2015	978,145,533	113,197,000	
2016	1,018,323,961	151,355,000	

Source: Michigan Department of Treasury.