



Fund
Solvency
Report

A Solvency Study from the
Wisconsin Department of Transportation

December 2016

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY.....	1
2. EFFICIENCIES.....	7
3. TRANSPORTATION REVENUES.....	8
3.1 Historic Revenue Growth.....	11
3.2 Increased Reliance on Transfers and Bonding.....	15
3.3 Ten-Year Revenue Outlook.....	18
4. EXPENDITURES.....	20
5. SCENARIOS.....	27
5.1 Scenario One: Constrained Budget.....	29
5.2 Scenario Two: 2015-17 Biennial Budget.....	40
5.3 Scenario Three: Additional Funding.....	47
6. REVENUE OPTIONS.....	55
6.1 Motor Fuel Tax Options.....	56
6.2 Motor Vehicle and Driver License Fee Options.....	65
6.3 New Funding Mechanisms.....	77

ATTACHMENTS

ATTACHMENT A: BETTER, FASTER, LOWER COST: A Performance Report of the Wisconsin Department of Transportation

ATTACHMENT B: Feasibility of Tolling Wisconsin Interstate Highways (three task reports and four appendices)

This document and all attachments are available for download at www.wisconsin.gov/Pages/projects/solvency.aspx

Costs expended for this study:

To date, the Department contracted with a consulting firm to evaluate the feasibility of tolling Wisconsin Interstate Highways at a cost of \$899,452. The Department also incurred \$1,886 in staff-related costs, primarily for travel, in conducting the study.

1. EXECUTIVE SUMMARY



The Wisconsin Department of Transportation (WisDOT, or the Department) has prepared this report to analyze the solvency of the state's Transportation Fund. This analysis has five main components:

- Results of a previous study of efficiencies achieved by WisDOT
- Description of current revenue sources used for transportation
- Description of current transportation expenditures by program area
- Analysis of scenarios for future expenditures compared to projected revenues
- Potential options for new revenue, including tolling

1.1 Study background

In 2015 Wisconsin Act 55, the 2015-17 biennial budget requires the Department to study methods of improving the solvency of the Transportation Fund. The end product is this report that WisDOT is submitting to the Wisconsin Legislature's Joint Committee on Finance.

Aside from the specific analysis of Transportation Fund solvency, this report relies on two related analyses:

- In December 2016, the Department prepared "*BETTER, FASTER, LOWER COST: A Performance Report of the Wisconsin Department of Transportation.*" This report itemizes numerous initiatives WisDOT has implemented to enhance performance and reduce cost in all of the department's functional areas.

- A 2013 report from the Wisconsin Commission on Transportation Finance & Policy examined new revenue sources. However, the concept of tolling was not evaluated fully in that effort. As part of the Fund Solvency study, WisDOT contracted for a detailed, data-driven analysis of the *“Feasibility of Tolling Wisconsin Interstate Highways.”*

1.2 Existing efficiencies

The Department is committed to getting the most from existing resources by identifying and implementing cost saving opportunities and efficiencies. The *“BETTER, FASTER, LOWER COST”* report documents technology, research and updated policies and best practices which saved approximately \$100 million in 2016 and about \$1.5 billion overall since 2011. A complete copy of the report is included as Attachment A.

1.3 Existing revenue sources

Wisconsin currently funds transportation investments through a combination of state funds, federal funds, bonding (borrowing) and other sources. State funds (not including bonding) account for about 56% of transportation investment sources. Of the state funds, 89% of revenue is comprised of state motor fuel tax and vehicle registration and driver license fees.

The Fund Solvency study identified key trends regarding existing revenue sources:

- From 2006 through 2017 (forecast), state motor fuel tax revenue has risen by 7.2%. This is an annual average increase of 0.65%, but in five of the past eleven years fuel tax revenue has declined compared to the previous year.
- In the same 2006-2017 time period, vehicle registration and driver license revenue has increased 52.7%. However, most of the growth occurred in the early years of the recovery from the nationwide economic recession. Since 2010, vehicle registration / license revenue has only grown 12.4%.
- The combined existing state revenue sources (fuel tax, registration / license fees and miscellaneous other sources) are projected to grow by 3.8% from 2018 through 2027. This is total growth – not average annual growth.

- A major factor impacting the low growth of state revenue is the increasing fuel efficiency of vehicles. Overall fuel efficiency is expected to improve by more than 23% by 2027. This means that if motorists drive the same number of miles but have more efficient vehicles, then the amount of fuel purchased – and fuel taxes paid – would significantly decrease.
- The Department has over time increasingly relied on bonding and transfers from non-transportation state revenue sources to support transportation investment. In 2017, about 19% of transportation expenditures will be to cover debt service, compared to 7% in 2006.
- The Fixing America's Surface Transportation (FAST) Act federal authorization provided a modest increase in federal transportation funding in 2016 and will average about 2% annual growth through 2020.

1.4 Transportation expenditures

The 2015-2017 biennial budget allocates \$6.82 billion in expenditures across all transportation programs. Spending is in four major categories:

- State Highway Programs – about half of all state spending is used on the 11,800 mile State Highway System. Activities include rehabilitation, major highway development, Southwest Wisconsin freeways, traffic management and operations, major bridges and planning and administration. In the 2015-17 biennium, almost \$3.4 billion was allocated to the State Highway Program.
- Local Aid and Assistance Programs – more than one-quarter of funds are spent to support projects at the local government level, including roadways, bicycle / pedestrian facilities, bridges, harbors, railroads, transit and airports. In all, the 2015-17 state budget calls for \$1.96 billion of local aid expenditures.
- State Operations – this category includes department administration and all programs for Motor Vehicles and State Patrol. In 2015-17, expenditures will total about \$482 million, or 7% of the overall budget.
- Debt Service / Reserves – these cost include interest and principal payments on previously issued debt. Reserves are set aside for costs related to disaster

damage aid and staffing that will ultimately be reimbursed. In the current budget, about \$993 million is allocated to debt service and reserves.

1.5 Future scenarios

To analyze the future solvency of the Transportation Fund, the Department projected revenues over the 10 year period from FY 18 to FY 27 and considered three different expenditure scenarios.

- Scenario One calls for spending less than in the current 2015-17 budget. This scenario is patterned along WisDOT's 2017-19 budget proposal as submitted in September 2016.
- Scenario Two assumes spending at the same level as the 2015-17 budget that was passed by the Legislature.
- Scenario Three calls for modest increases in spending above the 2015-17 budget levels.

For each scenario, WisDOT compared the expenditures to the available revenues based on forecasts. The expenditures assumed a certain loss of purchasing power over time due to inflation as it is expected that costs to rehabilitate a highway or improve and airport runway would rise over the ten years. The Department also forecast the resulting condition of the transportation system based on each scenario.

Under all three scenarios, the 10-year forecast of available revenues (using only current sources at current rates) was \$28.09 billion.

The analysis revealed the following:

- Under Scenario One, expenditures were \$28.94 billion, leaving a funding shortfall of \$852 million over the decade. System conditions across all modes would decline and a significant number of state and local projects would go unfunded. The Department would not undertake planning for new highway expansion projects until 2055.
- For Scenario Two, the estimated costs of \$31.11 billion exceed available revenues by \$3.03 billion. System conditions across all modes would decline

although not as severely as under Scenario One. The Department would not undertake planning for new highway expansion projects until 2040.

- In Scenario Three, the estimated costs of \$36.03 billion exceed available revenues by \$7.94 billion. The decline in system conditions would still be only partially mitigated. The Department would not undertake planning for new highway expansion projects until 2034.

1.6 Potential future revenue sources

The Fund Solvency study concludes with consideration of additional revenue sources. There are three key categories of sources identified:

- Increases to existing fuel-based state revenue sources;
- Increases to existing registration and license-based state revenue sources;
- Creation of new revenue mechanisms.

The study explored a variety of taxes based on transportation fuel consumption. The options also considered a variable motor fuel tax with a higher rate for diesel as compared to gasoline and elimination of an allowance that compensates for evaporation of motor fuel. Another option was to apply the existing state sales tax to fuel purchases. Over the 10 year period from 2018-2027, the largest source of potential funds would be the sales tax option on motor fuel, generating up to \$5.65 billion total.

The study examined registration fee increases for all vehicles, late fees, a surcharge for hybrid and electric vehicles and general increases on driver license fees. It also considered allocating state sales taxes on motor vehicles and related parts to the Transportation Fund instead of the General Fund. In the 10-year analysis period, the largest contribution could be from the sales tax transfer, accounting for up to \$6.38 billion in the decade.

Finally, the analysis considered three new revenue sources that do not currently exist in any form in Wisconsin:

- The state could institute a registration fee based on the number of miles a vehicle was driven. Assuming a fee of 1.02 cents per mile, with a 3,000 mile floor and a 20,000 mile ceiling, this new source is forecast to generate \$2.93 billion over ten years even when deducting necessary implementation costs.

- Wisconsin could create a new highway use fee of 2.5% on the price of a new passenger vehicle registered for the first time in the state. This option could generate about \$2.60 billion from 2018-2027.
- The study undertook an extensive, data-driven analysis of the feasibility of implementing tolling on all or portions of the 875-mile Interstate highway system in Wisconsin. This include three major study components:
 - Current and best practices from tolling in more than 30 other states;
 - Legal and policy issues to address for tolling in Wisconsin, including Constitutional issues and a variety of laws and rules that would be needed to implement tolling;
 - Revenue and traffic forecasting for tolling in Wisconsin; including capital costs for tolling infrastructure and operating costs for all aspects. This task also examined potential diversion of traffic by motorists who would seek to avoid tolled routes.

The technical reports from three study components are included as attachments to the Fund Solvency study. The tolling analysis considered a variety of rate structures and highway corridors. However, tolling could not be implemented until at least 2021 assuming authority was granted by the Wisconsin Legislature in mid-2017.

At a base rate of 4-cents per mile on the entire Interstate system, tolling could generate about \$2.07 billion in net revenue after accounting for all capital and operating costs for the first seven years of operation which correspond to the 2018-2027 analysis period. It is important to note that federal restrictions would likely limit the use of tolling revenue to the facility or system from which it was collected.

2. EFFICIENCIES

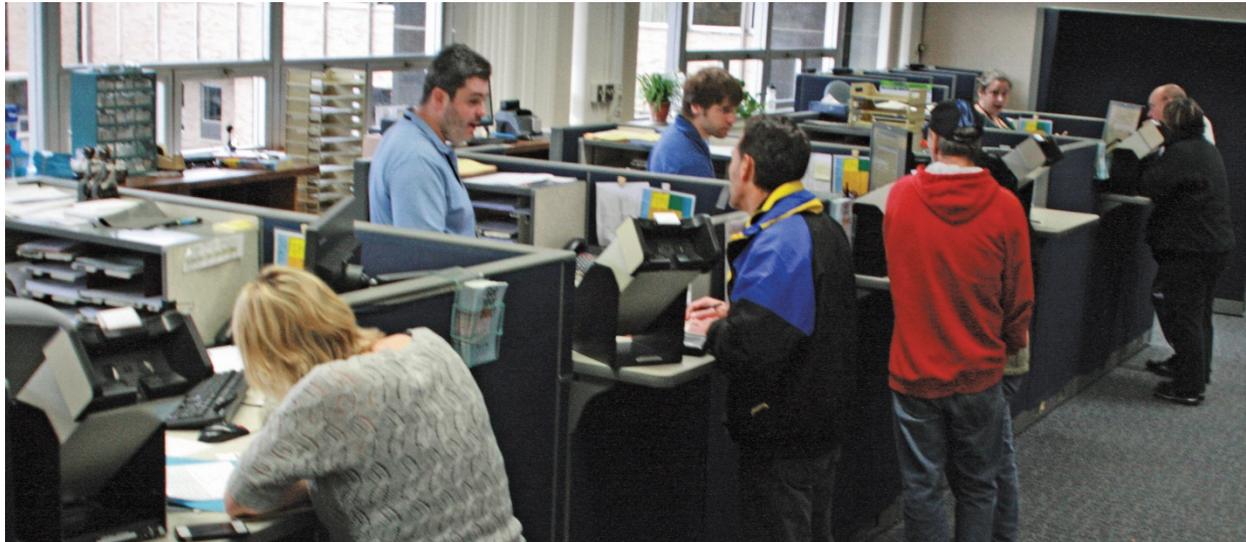


Because traditional transportation revenues have not experienced significant growth while highway projects are becoming increasingly complex, the Department is committed to getting the most from existing resources by identifying cost saving opportunities and efficiencies. The Department implemented new technologies, participated in cutting-edge research and updated department policies and best practices which saved approximately \$100 million in FY 16 alone. This includes:

- Constructing J-Turns when appropriate, which can be the most cost-effective intersection solution. In FY 16 nearly \$11.8 million of costs were avoided by constructing a J-Turn at an intersection.
- Reusing material onsite with cold-in-place recycling, saving an estimated \$1.47 million in FY 16 by reusing 93,450 tons of material.
- Implementing email notifications for motor carrier tax filings and motor fuel tax renewals notices, saving \$18,200 in mailing costs in calendar year 2016.

In December 2016, the Department prepared “BETTER, FASTER, LOWER COST: A Performance Report of the Wisconsin Department of Transportation” that summarizes a number of the activities underway that allow department operations to be done faster and at a lower cost. A complete copy of that report is included as Attachment A.

3. TRANSPORTATION REVENUES



The Transportation Fund is a segregated, unified fund used to pay for all modes of transportation in Wisconsin. The Department uses a variety of revenue sources to pay for transportation-related costs in Wisconsin including federal revenues, local revenues, state funds and bond proceeds. The 2015-17 biennial budget projected that the Department would use or collect \$6.88 billion in revenues or bond proceeds as shown in Table 3.0.1 below. “Other Funds” includes local funding and debt service payments made by the General Fund.

**Table 3.0.1
2015-17 Biennial Budget Revenues (in millions)**

Funding Source	Amount	% of Total
State Funds	\$3,852.6	56.0%
Federal Funds	1,655.0	24.1%
Bond Funds	910.7	13.2%
Other Funds	457.8	6.7%
Totals	\$6,876.1	100.0%

From this revenue, \$53.3 million is allocated to other state agencies for transportation-related activities such as providing the Department of Revenue with funding to administer motor fuel tax collections or transferring funding to the Department of Natural Resources related to off-road use of recreational vehicles.

It is important to note that while \$910.7 million in bonding is allocated to programs in the current biennium, only \$850.2 million in new bonding was authorized. The budget repurposed \$43 million of passenger rail bonds for freight rail and harbors and eliminated \$17.5 million in carryover bond authority for administrative facilities. Bonding for the 2015-17 biennium includes:

Transportation Revenue Bonds

Major Highway Development	\$169,012,200
Administrative Facilities	\$11,880,000

General Obligation Bonds-Transportation Fund Supported

Freight Rail	\$29,800,000
Harbors	\$13,200,000
Southeast Megaprojects	\$300,000,000
Major Interstate Bridge	\$20,000,000
High-Cost State Bridge	\$16,800,000
Contingent Bonding	\$175,000,000

General Obligation Bonds-General Fund Supported

Contingent Bonding	\$175,000,000
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The newly authorized bonding includes up to \$350 million in contingent bond proceeds that must be approved by the Joint Committee on Finance before they may be issued. On November 4, 2015, the Committee approved all \$350 million of the bonding; \$200 million of the bonding was approved for use in FY 16 and up to \$150 million was approved for use in FY 17.

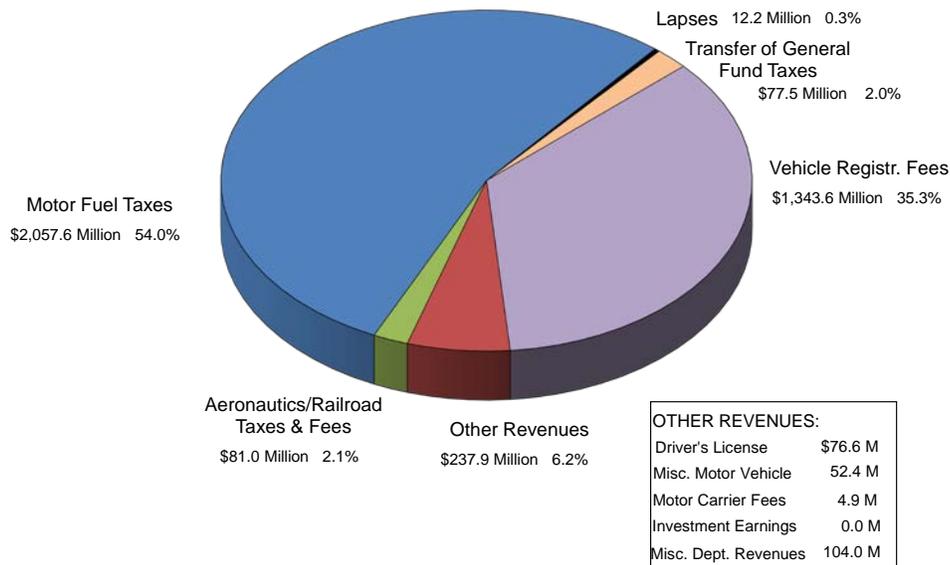
The largest single source of segregated revenue is the motor fuel tax followed by motor vehicle registration fees and driver license fees. As seen in Chart 3.0.1 below, in the 2015-17 biennium, it is estimated that 54 percent of state revenues deposited into the Transportation Fund will be from the motor fuel tax and 35.3 percent will come from vehicle registration fees.

Chart 3.0.1

2015-17 STATE TRANSPORTATION REVENUES

\$3.81 BILLION

2015 Wisconsin Act 55



3.1 Historic Revenue Growth

Traditional Transportation Fund revenues have not experienced significant growth over the past decade. There have been no increases to the motor vehicle fuel tax rate since 2006. Based only on increases in motor fuel consumption, motor vehicle fuel tax revenue is expected to grow less than three percent in the 2015-17 biennium. This follows almost a decade of relatively flat or declining annual tax revenue from motor vehicle fuel. Annual revenue collected from the motor fuel tax is provided below in Table 3.1.1.

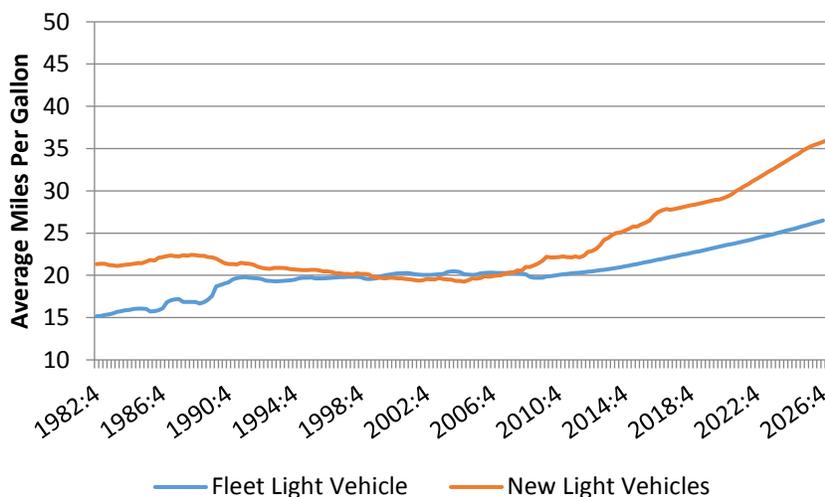
**Table 3.1.1
Motor Fuel Tax Revenue FY 06 to FY 17**

Fiscal Year	Motor Fuel Tax Revenue (in millions)	Percent Change
2006	\$962.8	0.76%
2007	\$1,006.0	4.49%
2008	\$999.9	-0.60%
2009	\$968.8	-3.11%
2010	\$971.8	0.31%
2011	\$988.3	1.70%
2012	\$983.9	-0.45%
2013	\$967.0	-1.71%
2014	\$999.4	3.35%
2015	\$1,013.4	1.40%
2016	\$1,037.7	2.40%
forecast 2017	\$1,032.4	-0.52%

Since 2006, annual revenue from motor fuel tax has grown 7.2 percent with a compound annual growth rate of 0.6 percent.

As fuel efficiency of motor vehicles increases, the Department will collect less motor vehicle fuel tax revenue for the same amount of vehicle miles traveled (VMT). The growing popularity of hybrid and electric power-train vehicles, and increasing federal fuel efficiency standards over the next decade are expected to significantly lift new light vehicle efficiency and in turn, the overall efficiency of Wisconsin’s light vehicle fleet by about 23.6 percent. Chart 3.1.1 shows the change in light vehicle fuel efficiency from 1982 projected to 2026.

**Chart 3.1.1
Estimated Light Vehicle Fuel Efficiency**



This increase in fuel efficiency means that less revenue will be collected from vehicles that consume less fuel.

Revenues from vehicle registration fees are also experiencing minimal growth. Annual vehicle registration rates for automobiles, vans, SUV’s, light and heavy trucks have not been raised since 2008. Titling fees were last increased in 2012. Based on estimated changes in the number of motor vehicle registrations, growth of vehicle registration related fees is expected to be slightly more than four percent in the 2015-17 biennium. This follows five years of declining or low growth of revenue related to motor vehicle registration as seen in Table 3.1.2 below.

**Table 3.1.2
Vehicle Registration Fee Revenue FY 06 to FY 17**

Fiscal Year	Vehicle Registration Fee Revenue (in millions)	Percent Change
2006	\$449.3	6.57%
2007	\$487.8	8.56%
2008	\$538.9	10.49%
2009	\$600.3	11.40%
2010	\$610.3	1.65%
2011	\$602.9	-1.20%
2012	\$634.1	5.17%
2013	\$629.5	-0.72%
2014	\$657.7	4.47%
2015	\$665.1	1.13%
2016	\$690.9	3.88%
forecast 2017	\$686.1	-0.70%

Since 2006 annual revenue from vehicle registration fees has grown 52.7 percent with a compound annual growth rate of 3.9 percent.

Total gross state Transportation Fund revenues have grown 26.0 percent since 2006 with a compound annual growth rate of 2.1 percent. However, state transportation revenues are expected to grow only 0.2 percent in the 2015-17 biennium when compared to the 2013-15 biennium. Total state Transportation Fund revenues collected since FY 06 are shown below in Table 3.1.3.

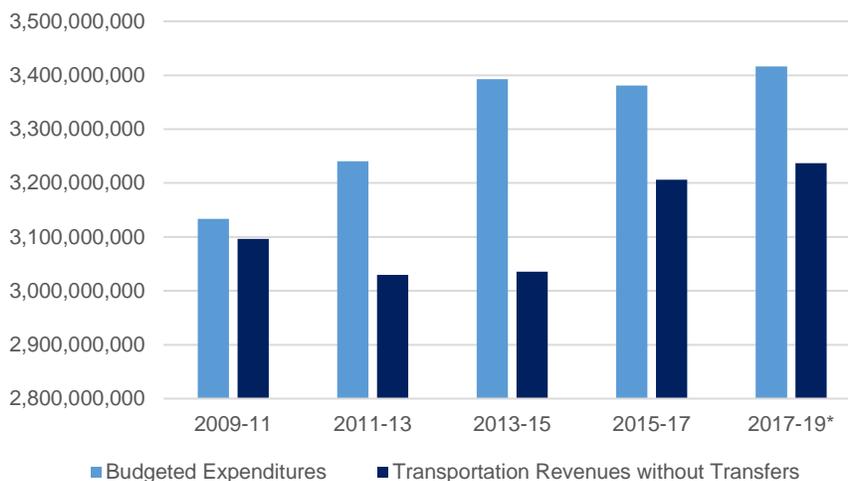
**Table 3.1.3
Gross State Transportation Fund Revenues FY 06 to FY 17**

Fiscal Year	State Transportation Fund Revenues (in millions)	Percent Change
2006	1,523.3	
2007	1,612.9	5.9%
2008	1,681.3	4.2%
2009	1,693.6	0.7%
2010	1,714.2	1.2%
2011	1,739.9	1.5%
2012	1,792.2	3.0%
2013	1,883.7	5.1%
2014	1,842.0	-2.2%
2015	2,001.6	8.7%
2016	1,932.6	-3.4%
forecast 2017	1,919.0	-0.7%

3.2 Increased Reliance on Transfers and Bonding

The Department does not collect sufficient revenue to fund current program demands and the highway projects necessary to improve safety and reduce congestion. The Department continues to rely on transfers from the General Fund and the Petroleum Inspection Fund as well as increased use of bonding to pay for department activities. Chart 3.2.1 below shows the difference between state-funded expenditures and traditional state Transportation Fund revenues as programmed for the last five biennial budgets. Bonding and ongoing and one-time transfers from the Petroleum Inspection Fund and General Fund are excluded. Since the 2009-11 biennium, the Department has relied on transfers from other funds ranging from \$40.3 million to \$249.2 million in order to meet the required level of spending. These amounts are in addition to any bond proceeds issued each biennia. In the 2017-19 biennium, it is anticipated that the Department will need \$130.0 million in transfers beyond what is projected to be collected through existing taxes and fees.

Chart 3.2.1
Comparison of State Expenditures and State Transportation Fund Revenues



*Department's 2017-19 biennial budget request

In an effort to broaden the base of transportation funding, the 2011-13 biennial budget included a provision that required the Department of Administration to transfer from the General Fund to the Transportation Fund an amount equal to 0.25 percent of all funds deposited in the General Fund designated as “taxes” in the General Fund condition statement. To date, that transfer has provided the amounts as shown below in Table 3.2.1:

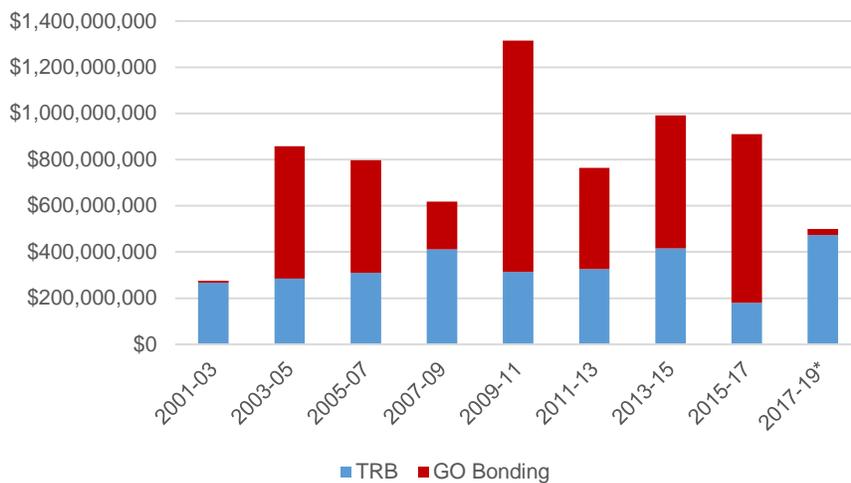
Table 3.2.1
Transfer of 0.25% of General Fund Taxes

Fiscal Year	Transfer (millions)
2013	\$35.1
2014	\$35.1
2015	\$36.3
2016	\$38.0
2017	\$39.5

As traditional transportation revenues remain flat, the Department increasingly relies on bond proceeds to fund both the more complex and routine highway projects. The Department issues two different types of bonds. General Obligation (GO) bonds, which are backed by the full faith and credit of the state, and Transportation Revenue Bonds (TRBs), which are backed by certain transportation revenues that are “pledged” to the trustee for repayment.

The use of bond proceeds as a funding mechanism has increased over the last 10 years from \$275.0 million in the 2001-03 biennium to a peak \$1.3 billion in the 2009-11 biennium. The Department’s 2017-19 budget request includes \$500 million in bond proceeds. Chart 3.2.2 below illustrates both TRB and GO bonds authorized each biennium.

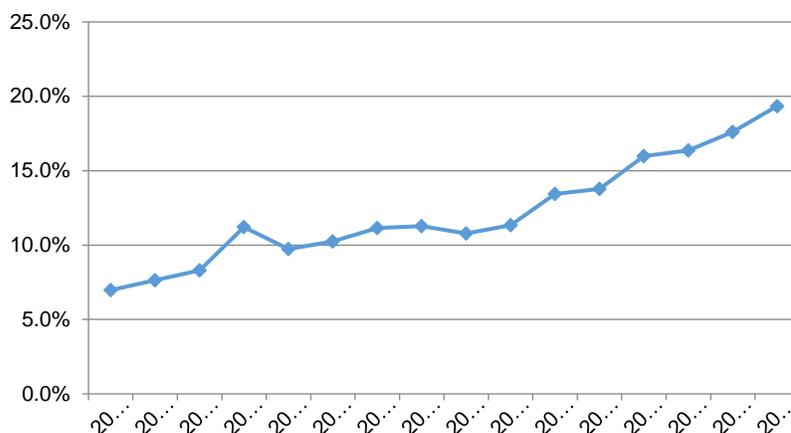
Chart 3.2.2
Transportation Revenue and General Obligation Bonds Issued by Biennium



*Department's 2017-19 biennial budget request

As the Department's reliance on bond proceeds increases, the percent of transportation revenues devoted to pay debt service costs also increases. As more funding is required for debt service payments, the amount of revenue that can be directed to transportation-related purposes decreases. The percent of transportation revenues devoted to debt service is projected to grow from 7.0 percent in FY 02 to just over 19 percent by the end of FY 17. Chart 3.2.3 below provides the percent of Transportation Fund revenues devoted to debt service. It does not include debt service paid for directly by the General Fund.

Chart 3.2.3
Percentage of Transportation Fund Revenues Devoted to Debt Service



3.3 Ten-Year Revenue Outlook

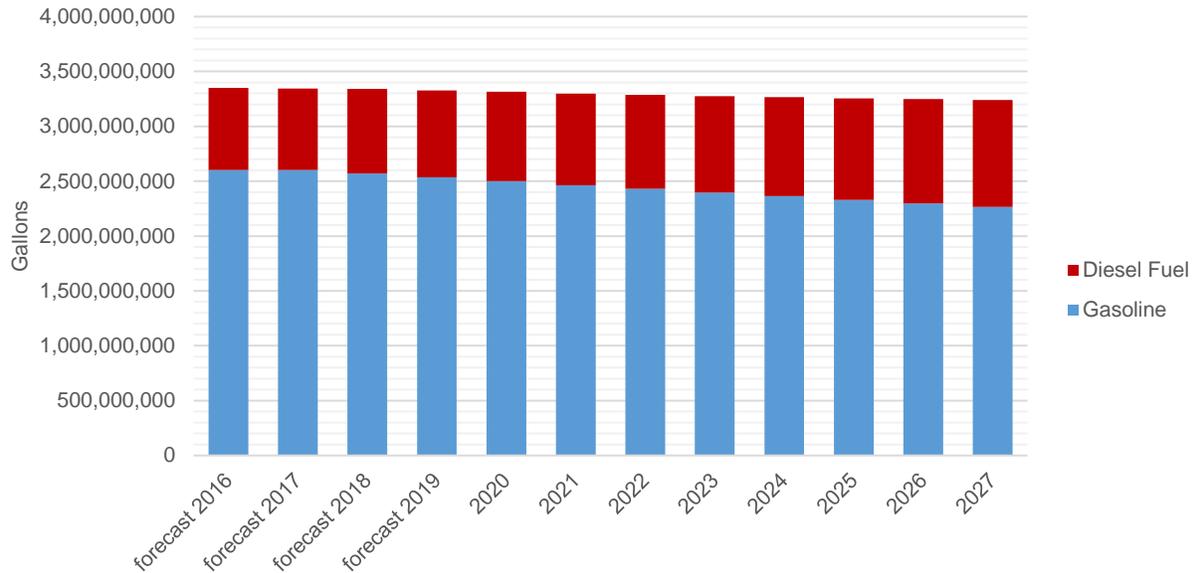
Over the next 10 years, traditional transportation revenues are projected to grow by 3.8 percent over the 10 years as shown in Table 3.3.1. Revenues available to be programmed for transportation activities will be less than stated below as debt service payments for Transportation Revenue Bonds are paid first.

**Table 3.3.1
Ten-Year Transportation Revenue Projection**

Fiscal Year	Motor Fuel Excise Tax	Gross Vehicle Registration Fees	Other Revenues	Total Gross Revenue
2018	\$1,031,376,600	\$705,229,900	\$180,167,700	\$1,916,774,200
2019	\$1,027,576,600	\$706,476,900	\$184,508,500	\$1,918,562,000
2020	\$1,023,176,600	\$725,205,400	\$187,761,000	\$1,936,143,000
2021	\$1,018,476,600	\$726,067,600	\$190,327,000	\$1,934,871,200
2022	\$1,014,976,600	\$744,481,300	\$192,509,500	\$1,951,967,400
2023	\$1,011,376,600	\$745,665,500	\$195,155,200	\$1,952,197,300
2024	\$1,007,221,600	\$764,812,400	\$197,419,200	\$1,969,453,200
2025	\$1,003,083,700	\$766,484,200	\$200,148,800	\$1,969,716,700
2026	\$998,962,800	\$786,133,100	\$202,749,000	\$1,987,844,900
2027	\$994,858,800	\$788,313,600	\$205,817,100	\$1,988,989,500

Revenue from the motor fuel excise tax is projected to decrease as gasoline consumption is forecast to decline. Gasoline consumption is estimated to decrease due to a projected 36.4 percent increase in new vehicle fuel efficiency, increasing gasoline prices and modest increases in disposable income. Chart 3.3.1 below shows projected motor fuel consumption from FY 17 to FY 27.

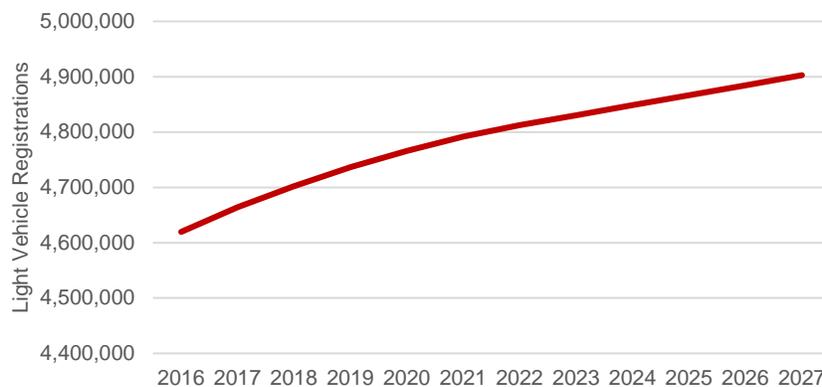
**Chart 3.3.1
Taxable Motor Fuel Consumption**



In FY 16 the Department collected \$1.037 billion in total motor fuel revenues. By FY 27 the Department estimates collecting \$994.9 million in motor fuel revenues.

Vehicle registration fees, the Department’s second largest state revenue source, is projecting only modest growth from \$705.2 million in FY 18 to \$788.3 million in FY 27. The small growth is due in large part to a projected 200,000 increase in the number of light vehicle registrations over the 10 years as seen in Chart 3.3.2 below.

**Chart 3.3.2
Projected Increase in Light Vehicle Registrations**



4. EXPENDITURES



The Department spends transportation revenues in four categories. The 2015-17 budget authorized spending as shown in Table 4.0.1 below.

Table 4.0.1
2015-17 Biennial Budget Spending (in millions)

Use of Funds	Amount	% of Total
State Highway Programs	\$3,387.9	49.7%
Local Aid and Assistance Programs	1,959.8	28.7%
State Operations	482.5	7.1%
Debt Service/Reserves	992.6	14.5%
Totals	\$6,822.8	100.0%

State Highway Programs

State Highway Programs includes the State Highway Rehabilitation Program (SHR), the Major Highway Development Program (Majors), the Southeast Wisconsin Freeway Megaprojects Program (SE Megas), the Highway System Management and Operations programs, Major Bridge programs and Administrative and Planning costs.

The SHR Program includes resurfacing, reconditioning and reconstructing existing highways in addition to the minor addition of lanes, traffic safety improvements and minor roadway realignments. There is also a state bridge component that deals with improvements to bridges on the non-Interstate portion of the state highway system and a “backbone” component which funds projects on the 1,588 miles of freeways and expressways connecting major economic areas of the state.

The Majors Program is composed of generally the most complex, costly, and potentially controversial highway projects. They are long-term solutions to the most serious deficiencies on the highway system. Major highway projects must be enumerated in statute before construction can begin. The Transportation Projects Commission recommends to the Governor and Legislature a list of major highway projects and annual funding level to support the program.

The SE Megas Program includes any project on a southeast Wisconsin freeway having a total cost of more than \$500 million, adjusted for inflation. Like Majors highway projects, SE Mega projects must also be enumerated in statute prior to construction. Ongoing, planned, and potential megaprojects include:

- Zoo Interchange Project (I-94; 124th to 70th and I-894/USH45; Lincoln to Burleigh)*
- I-94 North-South Freeway Project (I-94; Russell Road (IL)* to Mitchell Interchange)
- I-94 East-West Freeway Study/Project (I-94; 70th to 16th)
- I-894 Bypass (I-894; Lincoln Ave to 27th St and I-43; Moorland Rd to IH-894)
- I-41 (USH45), Zoo Interchange to Richfield Interchange
- I-43, Mitchell Interchange to Silver Spring
- I-94, Jefferson County Line to Zoo Interchange (Milwaukee County Line)

*enumerated and ongoing

The Highway System Management and Operations program is responsible for a variety of activities to ensure maintenance, proper functioning and safety of the state’s highways, bridges and roadside facilities. This includes traffic operations activities such as the installation, repair, and maintenance of signs, highway lighting and pavement marking, and the management of the State Traffic Operations Center. Other key functions include bridge inspection and maintenance and oversize vehicle routing and permitting. Routine highway maintenance is primarily carried out through contracts with the state’s 72 counties. County highway departments are reimbursed for plowing and de-icing, crack filling, seal-coating, culvert and drainage repairs, vegetation control and other measures deemed necessary to provide adequate traffic service and state highway maintenance.

The Major Bridge programs includes both the St. Croix and Hoan Bridge reconstructions.

Administration and Planning funds administrative and support activities for portions of the highway program. In the funding scenarios, these expenditures will be included with State Operations.

In the 2015-17 biennium, total funding provided to state highway programs is shown below in Table 4.0.2.

**Table 4.0.2
2015-17 Funding for State Highway Programs**

SHR*	\$1,668,397,800
Majors*	\$685,873,800
SE WI Freeways	\$414,600,000
Highway System Management and Operations	\$545,620,600
Major Bridge Programs	\$36,800,000
Administration and Planning	\$36,599,600
Total State Highway Programs	\$3,387,891,800

*includes contingent bond amounts

Local Aid Programs

The Local Aid Programs includes General Transportation Aids (GTA), transit aids, elderly and disabled aids, and special highway aids.

GTA provides payments to local governments to offset the cost of county, town and municipal road construction, maintenance and traffic operations. GTA payments may be based on local mileage or the actual costs reported by a local government.

State and federal assistance is available to operate transit systems in urban and rural areas of the state. The state is also required to provide paratransit aid to assist eligible urban mass transit operating assistance recipients with meeting federal paratransit service requirements. The state also has three programs to finance the improvement of transportation services for the elderly and disabled: a county grant program; a capital grant program; and a tribal and elderly transportation grant program.

Special highway aids includes aids for connecting highways, expressway policing aids, lift bridge aids, disaster damage aids, and aids provided for behavioral safety programs.

Funding provided in the 2015-17 budget is as provided below in Table 4.0.3.

Table 4.0.3
2015-17 Funding for Local Transportation Aids

General Transportation Aids	\$839,514,900
Transit Aids	\$268,320,600
Elderly and Disabled Aids	\$38,927,400
Special Highway Aids	\$48,298,800
Total Local Transportation Aids	\$1,195,061,700

Local Transportation Assistance Program

The Local Assistance Program includes the local road and local bridge programs, harbor and rail assistance, aeronautics, and other assistance. Other assistance includes

the Transportation Economic Assistance (TEA) Program, the Congestion, Mitigation and Air Quality (CMAQ) Program, and the Transportation Alternatives Program (TAP).

The Local Road Program has two components. The Surface Transportation Program (STP) provides federal funding for up to 80 percent of the cost of improvements to eligible county highways, town roads, and municipal streets with local governments providing the balance. STP is divided into separate urban and rural focused programs based on federally defined urban area boundaries. The Local Roads Improvement Program (LRIP) assists local governments in improving seriously deteriorating county highways, town roads, and municipal streets. LRIP is a reimbursement program which pays up to 50 percent of total eligible costs with local governments providing the balance.

The Local Bridge Improvement Assistance Program (Local Bridge) was established to rehabilitate and replace the most seriously deteriorating existing local bridges. The program provides up to 80 percent of the cost of local design and construction projects with local governments providing the balance.

The Department manages two freight service programs that support local shipping needs by preserving and improving Wisconsin's freight rail system. The Freight Rail Preservation Program (FRPP) preserves and improves freight railroad service on abandoned lines, on publicly owned lines, and on abandoned railroad corridors when service is not immediately continued. The freight rail infrastructure improvement program (FRIIP) provides low- or no-interest loans from a revolving fund to railroads, shippers, or local governments to perform a variety of capital improvements related to freight rail service.

The Harbor Assistance Program (HAP) provides financial assistance to the state's harbor communities and private entities along the Great Lakes and Mississippi River for projects that maintain or improve waterborne commerce. Port projects typically include dock reconstruction, mooring structure replacement, dredging, the construction of facilities to dispose of dredged material, and facilities to accommodate cruise vessels and ferries.

The state's Airport Improvement Program (AIP) provides funding from state and federal sources for various types of airport projects at commercial and general aviation airports in the state. Project selection, design and management for AIP projects is done by the Department through the Bureau of Aeronautics.

The TEA program provides grants for road, rail, harbor and airport projects that help attract employers to Wisconsin or encourage business and industry to remain and

expand. CMAQ encourages transportation projects that improve air quality and includes efforts to enhance public transit, ridesharing, and technologies that improve traffic flow and vehicle emissions. TAP is a federally-funded program that provides for a variety of alternative transportation projects.

Funding in the 2015-17 biennium is as follows in Table 4.0.4.

Table 4.0.4
2015-17 Funding for Local Transportation Assistance

Local Road Assistance	\$278,333,000
Local Bridge Assistance	\$83,315,400
Harbor and Rail Assistance	\$89,189,600
Aeronautics Assistance	\$254,142,800
Other	\$59,802,400
Total Local Transportation Assistance	\$764,783,200

State Operations

State operations includes the Division of Motor Vehicles, the Division of State Patrol, and funding for general department operations, which includes the Division of Business Management, the Executive Offices, and portions of the Division of Transportation Investment Management. Funding in the 2015-17 biennium is provided below in Table 4.0.5.

Table 4.0.5
2015-17 Funding for State Operations

Departmental Operations	\$176,985,200
Motor Vehicles	\$152,725,500
State Patrol	\$152,816,800
Total State Operations	\$482,527,500

Debt Service/Reserves

Debt service includes debt service on TRBs, Transportation Fund-supported GO bonds and General Fund-supported GO bonds. Reserves is funding set aside for additional employee costs or disaster damage aid costs that will ultimately be reimbursed. Funding for debt service and reserves for the 2015-17 biennium is provided in Table 4.0.6 below.

Table 4.0.6
2015-17 Funding for Debt Service and Reserves

Transportation Fund Debt Service	
GO Bonds	\$277,382,600
TRBs	\$458,884,200
General Fund Debt Service	\$229,959,700
Reserves	\$26,368,400
Total Debt Service and Reserves	\$992,594,900

5. SCENARIOS



The Department estimated total system condition under three different funding scenarios. Available local funding was assumed constant under each using the FY 17 amounts projected in the 2015-17 biennial budget. TRB proceeds issued under each scenario are constant at \$72.6 million annually which is the FY 17 base. No additional GO bonds are assumed to be authorized after FY 17. Federal revenues are based on information currently available through the Fixing America’s Surface Transportation (FAST) Act. Any funding from program revenue or other funds are not included. Available projected revenues from FY 18 to FY 27 are provided in Table 5.0.1 below.

**Table 5.0.1
Total Transportation Fund Revenues from FY 18 to FY 27**

Gross Segregated Revenues	\$19,526,519,400
Transportation Revenue Bond Debt Service	-\$2,278,636,800
Transportation Revenue Bonds	\$725,890,000
GO Bonds	\$0
Federal Revenues	\$9,032,916,500
Local Revenues	<u>\$1,078,861,000</u>
Total Available Revenue	\$28,085,550,100

Under each scenario, Department administrative costs, including administration and planning costs listed under the highway program, are inflated at two percent annually beginning in FY 18. General obligation bond debt service and funding provided to other agencies, which is used for transportation-related functions like motor fuel tax collection at the Department of Revenue, are also included in each scenario.

No increases to maintain purchasing power are provided in any scenario. That means that even under a constant amount of funding over the 10 year period the amount of work that can be completed will be reduced as purchasing power will not keep pace with projected inflation.

Funding for Elderly and Disabled Aids as well as several smaller aid categories was assumed constant at the levels established in the 2015-17 biennial budget. These categories are not included in the scenarios.

Several program areas have the same impact under each scenario. In this instance, the impact is described under Scenario One and referenced in the other scenarios. The impact to specialized aid programs and the non-modal program areas are not included.

5.1 Scenario One: Constrained Budget

Table 5.1.1 illustrates the funding provided under Scenario One. Scenario One provides reduced funding to the highway improvement program, harbor, and freight rail programs as compared to the 2015-17 biennial budget. Additional maintenance and traffic operations funding is provided to address backlogged activity.

**Table 5.1.1
Scenario One Funding Allocation**

	2015-17 Act 55 Biennial Funding*	Scenario One Biennial Funding
SHR	\$1,668,397,800	\$1,544,200,000
Majors	\$685,873,800	\$445,000,000
SE Megs	\$414,600,000	\$350,000,000
Highway System Management and Operations	\$539,573,800	\$582,346,800
GTA	\$839,514,900	\$839,321,400
Transit Aids	\$268,320,600	\$268,320,600
Local Road Programs	\$278,333,000	\$278,333,000
Local Bridge Program	\$83,315,400	\$83,315,400
Rail	\$74,688,000	\$39,688,000
Harbor	\$14,501,600	\$1,301,600
Aeronautics	\$254,142,800	\$254,142,800
TEA	\$13,982,600	\$13,982,600
CMAQ	\$27,687,400	\$27,687,400
CMAQ	\$18,123,200	\$18,123,200

*Includes contingent bonding

Under this scenario, there would be an \$852.0 million gap between available revenues and total funding over 10 years as seen in Table 5.1.2.

**Table 5.1.2
Scenario One Funding Gap Over Ten Years**

Total Available Revenues	\$28,085,550,100
Scenario One Total Cost	\$28,937,513,000
Highway Program	\$14,607,734,000
Local Aids and Assistance Program	\$9,557,945,000
Administrative	\$2,814,279,800
General Obligation Bond Debt Service	\$1,689,646,500
Other Agencies	\$267,907,700
Scenario One Funding Gap	-\$851,962,900

Scenario One Impacts:

SHR

At this funding level, system miles rated in poor and below condition will increase by 109 percent from 21 percent at the start of FY 18 to 44 percent by the end of FY 27. The number of miles rated at fair and above will decrease by 29 percent from 79 percent at the start of FY 18 to 56 percent by the end of FY 27.

Estimates indicate that the SE Mega Program will need \$450 million over the next 10 years for critical structure and pavement replacement needs. In the situation of an ongoing severely constrained SE Mega Program, an additional \$200 million in costs would need to be absorbed by SHR to address needs that would otherwise would have been addressed by SE Mega projects. This will result in an additional 450 miles of pavement that will be in poor condition by the end of FY 27, with 47 percent of system miles rated at poor and below and 53 percent of miles fair and above at the end of FY 27. Chart 5.1.1 shows the change in miles rated fair and above over the 10 years while Chart 5.1.2 shows the change in miles rated poor and below.

Chart 5.1.1
Scenario One
State Highway Miles Rated Fair and Above

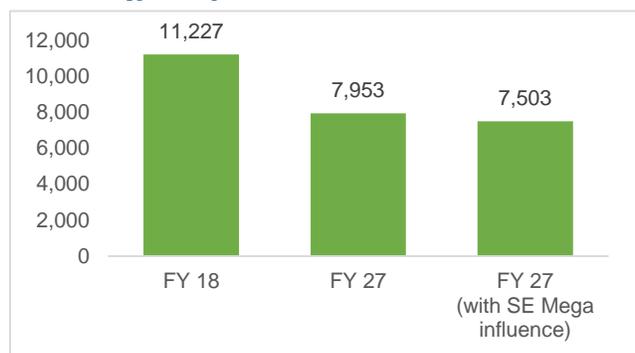
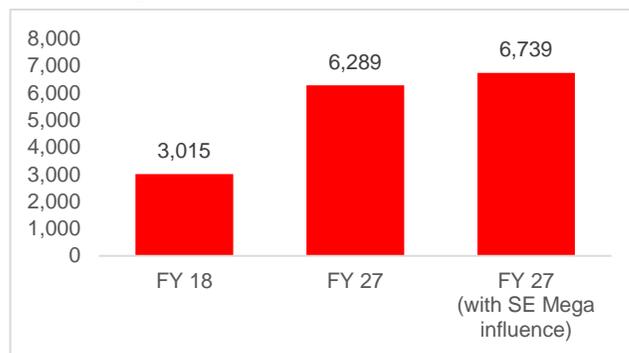


Chart 5.1.2
Scenario One
State Highway Miles Rated Poor or Below



Majors Program

At this funding level, there would be the following delays compared to the schedule reported in the August 2016 TPC report as seen in Table 5.1.3.

**Table 5.1.3
Major Highway Project Delays**

Major Highway Project	Years of Delay
US 10/441	2
STH 15	1
US 18/151 Verona Road	1
STH 23	1
I39/90	3

The Beltline Interchange construction would be funded in FY 25 through FY 27 at the completion of the mainline I-39/90 project. Because the I-39/90 project would have a three-year delay, the Department would likely have to forfeit a \$40 million federal FASTLANE Transportation Infrastructure Grant.

The Majors Program would be at capacity through FY 26, completing only existing Major projects. No new Environmental Study Projects would be needed until CY 2055, resulting in congestion and safety projects idled for 30 years. The first new project enumeration would not take place until FY 24:

- I-43 Milwaukee and Ozaukee Counties
- I-94 St. Croix County

The second set of project enumerations would take place in FY 26:

- USH 51 Dane County- Beltline Northerly to STH 19
- USH 51 Dane County; Stoughton to McFarland (High Cost Rehabilitation Major)

A third set of enumerations would take place in FY 30:

- I-39/90 Madison to Wisconsin Dells
- USH 12 Beltline

SE Mega Projects

At this funding level, the schedule for the SE Mega projects would be as follows in Table 5.1.4.

**Table 5.1.4
SE Mega Project Impacts**

SE Mega Project	Construction Start	Construction Complete	Duration (Years)
Zoo Interchange	2013	2020	8.0
I-94 North-South Freeway	2010	2025	15.5
I-94 East-West Freeway (Milwaukee)	2021	2029	8.84
I-894/43 Bypass	2029	2037	8.33
I-94 East-West Freeway (Waukesha)	2031	2043	12.25
I-43 Howard Ave to Silver Spring Drive	2040	2051	11.83
I-41 Burleigh Street to Richfield IC	2046	2057	11.33

Highway System Management and Operations

At this level of funding and no increases to maintain purchasing power there will be an annual \$60 million gap between program needs and available funding at the end of FY 27. The following program cuts in Table 5.1.5 would be necessary.

**Table 5.1.5
Highway System Management and Operations Program Reductions**

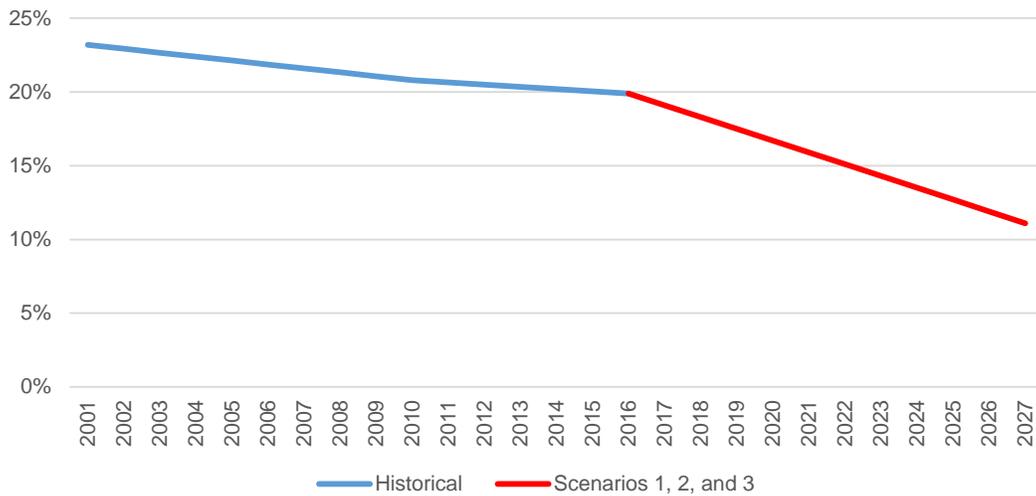
Program Item	Amount of Reduction (in millions)	Fiscal Year the Program is Reduced or Eliminated
Performance Based Maintenance Program (targets specific backlogs and promote innovation, best practices and efficiency)	\$17	2021
Lighting LED Replacement	\$2.5	2018
Roadside Vegetation Management	\$13	2022
Miscellaneous (highway condition patrol surveillance, hazardous debris removal, work zone traffic control)	\$9	2022
Roadsides and Waysides	\$14	2023
Pavement Marking	\$4.5	2023

In this scenario the Performance Based Maintenance program would be eliminated. The Roadside program would retain \$5 million for critical roadside safety mowing and vegetation management. All patrol surveillance would be reduced, making county highway departments more reactive to emergency maintenance situations as they would be reliant on notifications from the traveling public. This level of funding also eliminates 75 percent of the Roadside and Waysides program and reduces pavement marking efforts.

General Transportation Aids

Continuation of the current funding allotment would result in a \$97.5 million loss in purchasing power by of FY 27. The cumulative loss in purchasing power is estimated at \$797.7 million over the 10 year period. From FY 00 to FY 09 costs reported by local governments grew by 37.7 percent. If local costs grow at a similar rate from FY 17 through FY 27, GTA funding will account for only 11.1 percent of local costs by FY 27. Chart 5.1.3 shows the trend of GTA as a percentage of reported local costs.

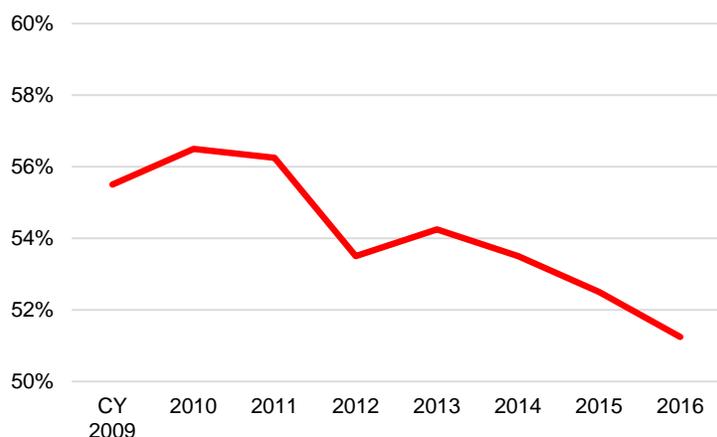
Chart 5.1.3
GTA as a Percentage of Reported Local Costs



Transit Aids

Across Wisconsin transit operating costs have increased and the share of state aids for operating support has already declined. Chart 5.1.4 below shows the declining percentage of combined state and federal aid for operating expenses provided to transit systems. In CY 16 federal and state aid will provide for only 51 percent of operating expenses.

Chart 5.1.4
State and Federal Share as a Percent of Operating Expenses-All Systems



Under the identified level of funding, the cumulative funding gap for each tier over the 10 year period is estimated below in Table 5.1.6.

Table 5.1.6
Cumulative Transit Funding Gap

Transit Tier	Cumulative Funding Gap Through CY 2026
A1 (Milwaukee)	97.0
A2 (Madison)	24.8
B (Small Urban)	36.0
C (Rural)	7.6
Total	165.4

In order to maintain current levels of service, transit systems will be required to increase their local share, raise fares, or cut service. Increasing operational expenses and fixed support from federal and state sources requires local communities to make up the difference. If local budgets cannot absorb the funding gap transit systems may be required to raise passenger fares. An increased local share could potentially result in the reduction of transit service, including the elimination of routes, removal of service from certain areas, reduction in operation hours or a decline in service frequency. Additionally, transit systems may be required to defer maintenance. This could reduce system reliability and increase costs as maintaining older assets typically costs more. Reduced service levels and increasing fares will have a direct impact on access to jobs, medical appointments and education.

Although the unmet need for capital funding continues to grow, there is insufficient funding for a capital investment program for transit systems. New bus purchases or facility renovations must be paid for with federal grants and through local budgets. Under this funding scenario there will be no ability to fund a capital investment program for transit.

Local Road Programs

Surface Transportation Program

Continuation of current funding will result in the loss of \$15.6 million in purchasing power in FY 27 for a cumulative loss of \$93.5 million over the 10 year period. This would reduce the number of miles improved by approximately 96 miles. If increased local spending does not offset the reduction in purchasing power it is likely that the number of road miles rated below fair at the end of FY 27 will increase.

Local Roads Improvement Program

Under the identified level of funding, it is estimated that there would be a \$6.5 million loss in purchasing power in FY 27 and a \$53.3 million cumulative loss in purchasing power over 10 years. This would reduce the number of miles improved by 357. If increased local spending does not offset the reduction in purchasing power it is likely that the number of road miles rated below fair at the end of FY 27 will increase.

Local Bridge Program

Under the identified level of funding, there would be a \$7.6 million loss of purchasing power by FY 27 with a cumulative loss of \$45.7 million over the ten year period. This

would provide funding to 83 less bridges, a reduction of 23 percent. It is likely that the number of local bridges rate below fair would increase.

Rail

Freight Rail Preservation Program (FRPP)

There is no identified funding for FRPP. This would halt any improvement on state-owned track and bridges and eventually lead to a degradation in track and bridge conditions leading to reduced train speeds and carload capacity in many locations. The risk and incidents of track breakages, bridge failures, derailments and stoppages would increase. There is no funding available for acquisition.

Passenger Rail

The loss in purchasing power would increase the costs borne by the railroads for operating and maintaining active warning devices at railroad crossings, limit the number of crossings the Department could work with railroads to fix and reduce the number of grade crossings that could be improved.

Railroad Crossing

The loss in purchasing power will impact the operational support of the Hiawatha Service. This will lead to either an increase in fares or decrease in the number of daily train frequencies.

Harbors

Ports submit an annual statement of intentions to apply for HAP funding. For 2015-2017, ports identified \$33.38 million in total projects and \$15.05 million in first-priority ranked projects. Under the identified level of funding, the program would be able to meet 1.68 percent of overall needs for infrastructure maintenance and improvement. As the average HAP grant is \$1.2 million, the program would only be able to fund one average project every-other year. The program would also be unable to respond to emergency or unforeseen conditions.

Aeronautics

The loss in purchasing power will reduce the Department's ability to leverage federal grants. There would be a reduction in the State Aid program, impacting Wisconsin's 15 largest airports. This would reduce the economic boost provided by state's airports.

Necessary land acquisition and approach clearing for the next generation of air traffic control and instrument flight procedures will be deferred in favor of pavement maintenance. Pavement expansion projects, like ramp expansions, would be deferred and the funding used to preserve existing pavement.

TEA

With the identified level of funding the purchasing power loss is projected to be \$4,049,300 over the 10 year period, resulting in a reduction of 14 grants being issued. This reduction creates a potential reduction in capital-investment leveraging of \$489,959,600 assuming that the capital investment would not otherwise occur. In addition, 1,582 jobs would not be created.

CMAQ

Continuation of the funding provided in Act 55 would result in the loss of \$2.35 million in purchasing power as of FY 27 and \$18.64 million total over the 10 year period. This cumulative loss of funding would need to be offset by additional local spending or by postponing or abandoning potential projects.

TAP

Continuation of the current level of funding would result in the loss of \$1.67 million in purchasing power as of FY 27. The cumulative loss of purchasing power over the 10 year period is estimated at \$13.56 million. This cumulative loss of funding would need to be offset by additional local spending or by postponing or abandoning potential projects.

5.2 Scenario Two: 2015-17 Biennial Budget Continued

Table 5.2.1 below shows the funding allocated in Scenario Two. Scenario Two provides funding consistent with that provided in the 2015-17 biennial budget. It includes \$2.2 billion in additional expenditures over ten years from the expenditure level provided in Scenario One.

**Table 5.2.1
Scenario Two Funding Allocation**

	2015-17 Act 55 Biennial Funding*	Scenario Two Biennial Funding
SHR	\$1,668,397,800	\$1,668,397,800
Majors	\$685,873,800	\$685,873,800
SE Megas	\$414,600,000	\$414,600,000
Highway System Management and Operations	\$539,573,800	\$539,573,800
GTA	\$839,514,900	\$839,514,900
Transit Aids	\$268,320,600	\$268,320,600
Local Road Programs	\$278,333,000	\$278,333,000
Local Bridge	\$83,315,400	\$83,315,400
Rail	\$74,688,000	\$74,688,000
Harbor	\$14,501,600	\$14,501,600
Aeronautics	\$254,142,800	\$254,142,800
TEA	\$13,982,600	\$13,982,600
CMAQ	\$27,687,400	\$27,687,400
TAP	\$18,123,200	\$18,123,200

*Includes contingent bonding

Under this scenario, there will be a \$3.0 billion gap between available revenues and total program funding over 10 years as seen in Table 5.2.2 below.

Table 5.2.2
Scenario Two Funding Gap Over Ten Years

Total Available Revenues	\$28,085,550,100
Total Cost	\$31,112,992,000
Highway Program	\$16,542,227,000
Local Aids and Assistance Program	\$9,798,931,000
Administrative	\$2,814,279,800
General Obligation Bond Debt Service	\$1,689,646,500
Other Agencies	\$267,907,700
Scenario Two Funding Gap	-\$3,027,441,900

Scenario Two Impacts:

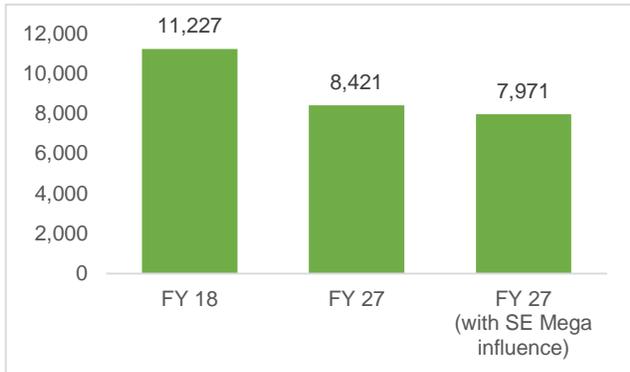
SHR

At this funding level, system miles rated in poor and below condition will increase by 93 percent by the end of FY 27. The number of miles rated at fair and above will decrease by 25 percent by the end of FY 27.

Estimates indicate that the SE Mega Program will need \$450 million over the next 10 years for critical structure and pavement replacement needs. In the situation of a significantly constrained SE Mega Program, as much as an additional \$200 million in these costs would need to be addressed in the SHR Program. This could result in an additional 450 miles of pavement in poor condition by the end of FY 27, with 44 percent of system miles rated at poor and below and 56 percent of miles rated fair and above at the end of FY 27. Chart 5.2.1 shows the change in miles rated fair and above over the 10 years while Chart 5.2.2 shows the change in miles rated poor and below.

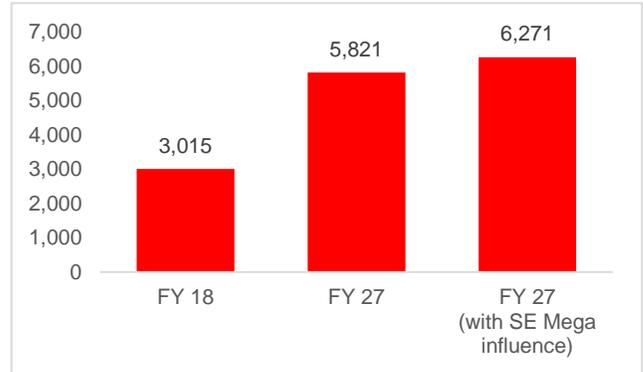
**Chart 5.2.1
Scenario Two**

State Highway Miles Rated Fair and Above



**Chart 5.2.2
Scenario Two**

State Highway Miles Rated Poor and Below



Majors Program

At this funding level, there would be the following delays in Table 5.2.3 compared to the schedule reported in the August 2016 Transportation Projects Commission (TPC) report:

**Table 5.2.3
Major Highway Project Delays**

Major Highway Project	Years of Delay
US 10/441	0
STH 15	0
18/151 Verona Road	0
STH 23	1
I39/90	0

The Beltline Interchange construction would be funded in FY 22 through FY 24 at the completion of the mainline I-39/90 project.

The Majors Program would be at capacity for six years through FY 23, completing only existing Major projects. No new environmental study projects would be needed CY 2040, resulting in critical congestion and safety projects idled for 25 years. The first set of project enumerations would take place in FY20:

- I-43 Milwaukee and Ozaukee Counties
- I-94 St. Croix County
- USH 51 Dane County-Beltline Northerly to STH19
- USH 51 Dane County, Stoughton to McFarland (Highway Cost Rehabilitation Major)

A second set of enumerations would take place in FY 26:

- I-39/90 Madison to Wisconsin Dells
- USH 12 Beltline

SE Mega Projects

At this funding level, the schedule for the SE Mega projects would be as follows in Table 5.2.4.

**Table 5.2.4
SE Meg Project Impacts**

SE Mega Project	Construction Start	Construction Complete	Duration (Years)
Zoo Interchange	2013	2020	8.0
I-94 North-South Freeway	2010	2024	14.5
I-94 East-West Freeway (Milwaukee)	2021	2027	6.83
I-894/43 Bypass	2027	2033	6.84
I-94 East-West Freeway (Waukesha)	2029	2039	10.0
I-43 Howard Ave to Silver Spring Drive	2038	2045	7.84
I-41 Burleigh Street to Richfield IC	2040	2049	9.83

Highway System Management and Operations

At this level of funding there will be an immediate deficit which is projected to grow to \$76 million gap by FY 27. The following program cuts in Table 5.2.5 would be necessary.

Table 5.2.5
Highway System Management and Operations Program Reductions

Program Item	Amount of Reduction (in millions)	Fiscal Year of Program Reduction or Elimination
Performance Based Maintenance (targets specific backlogs and promote innovation, best practices and efficiency)	\$17	2017
Lighting LED Replacement	\$2.5	2017
Miscellaneous (highway condition patrol surveillance, hazardous debris removal, work zone traffic control)	\$9	2019
Roadside Vegetation Management	\$13	2021
Pavement Marking	\$5.5	2022
Sign Program	\$3	2022
Roadsides and Waysides	\$18	2025
Program Reductions (OIS, Compass and other IT and data support contracts)	\$1.63	2025
Winter Services and Salt Purchases	\$9.4	2027

In this scenario the Performance Based Maintenance program would be eliminated. The LED lighting program would be reduced. All patrol surveillance would also be reduced, making highway departments more reactive to emergency maintenance situations as they will be reliant on notifications from the traveling public. The Roadside program

would retain \$5 million for critical roadside safety mowing and vegetation management. The annual pavement marking program would be reduced by \$5.5 million, doubling the replacement time and reducing overall visibility and pavement functionality. A 60 percent reduction to the sign replacement program would also be necessary, resulting in signs with reduced visibility and retro-reflectivity.

By FY 2025 it would be necessary to eliminate the Adopt-a-Highway program as well as the Operation Information System (OIS) IT consulting services which provide invoicing and system functionality for the county Level of Service Model. The IT and data support services for the Compass program would be eliminated and other consultant support reduced. This level of funding would also require the Department to eliminate maintenance of all roadsides and waysides around the State, saving \$18 million. Finally, it would be necessary to begin reductions of winter maintenance services including salt purchases.

GTA

Impacts are the same as Scenario One.

Transit

Impacts are the same as Scenario One.

Local Road Program

Surface Transportation Program

Impacts are the same as Scenario One.

Local Roads Improvement Program

Impacts are the same as Scenario One.

Local Bridge

Impacts are the same as Scenario One.

Rail

Freight Rail Preservation Program (FRPP)

Under this funding scenario, rehabilitation of state-owned track and bridges could continue, gradually improving track to Class 2 and improving and stabilizing bridges at 286,000 pound carload capacity. Reconstruction of the Merrimac Bridge could proceed and the rail replacement program could continue to replace old rail with 115 pound continuous welded rail which will improve service reliability by reducing the incidence of rail breakage and risk of derailment.

Passenger Rail

Impacts are the same as Scenario One.

Railroad Crossing

Impacts are the same as Scenario One.

Harbors

Under this funding scenario, HAP would be able to meet 21.45 percent of overall needs for infrastructure maintenance and improvement. The program would be able to fund almost six projects per year.

Aeronautics

Impacts are the same as Scenario One.

TEA

Impacts are the same as Scenario One.

CMAQ

Impacts are the same as Scenario One.

TAP

Impacts are the same as Scenario One.

5.3 Scenario Three: Additional Funding

Table 5.3.1 provides the funding allocated under Scenario Three. Scenario Three provides for a modest increase in funding for many programs over the amounts provided in the 2015-17 budget. Under this scenario, the Department would expend \$4.9 billion more than Scenario Two and \$7.1 billion more than Scenario One over 10 years.

**Table 5.3.1
Scenario Three Funding Allocation**

	2015-17 Act 55 Biennial Funding*	Scenario Three Biennial Funding
SHR	\$1,668,397,800	\$1,845,052,600
Majors	\$685,873,800	\$836,058,800
SE Megas	\$414,600,000	\$791,700,000
Highway System Management and Operations	\$539,573,800	\$660,542,400
GTA	\$839,514,900	\$839,321,400
Transit Aids	\$268,320,600	\$352,647,900
Local Road Programs	\$278,333,000	\$308,458,100
Local Bridge	\$83,315,400	\$93,190,300
Rail	\$74,688,000	\$99,688,000
Harbor	\$14,501,600	\$17,201,600
Aeronautics	\$254,142,800	\$254,142,800
TEA	\$13,982,600	\$17,982,600
CMAQ	\$27,687,400	\$27,687,400
TAP	\$18,123,200	\$20,123,200

*Includes contingent bonding

Under this scenario there will be a \$7.9 billion gap between available revenues and total program funding over 10 years as seen in Table 5.3.2 below.

**Table 5.3.2
Scenario Three Funding Gap Over Ten Years**

Total Available Revenues	\$28,085,550,100
Total Cost	\$36,026,703,000
Highway Program	\$20,666,769,000
Local Aids and Assistance Program	\$10,588,100,000
Administrative	\$2,814,279,800
General Obligation Bond Debt Service	\$1,689,646,500
Other Agencies	\$267,907,700
Scenario Three Funding Gap	-\$7,941,152,900

Scenario Three Impacts:

SHR

At this funding level, system miles rated in poor and below condition will increase by 72 percent by the end of FY 27. The number of miles rated at “fair and above” will decrease by 19 percent by the end of FY 27. Chart 5.3.1 shows the change in miles rated fair and above over the 10 years while Chart 5.3.2 shows the change in miles rated poor and below.

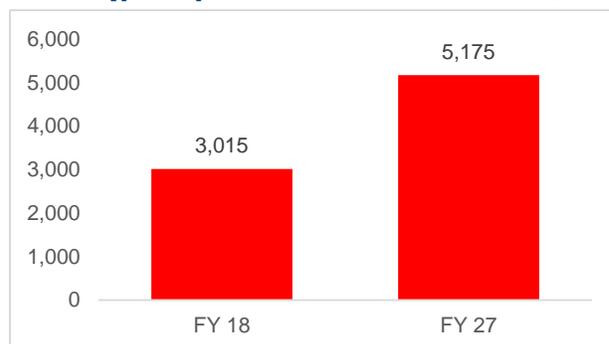
**Chart 5.3.1
Scenario Three**

State Highway Miles Rated Fair and Above



**Chart 5.3.2
Scenario Three**

State Highway Miles Rated Poor and Below



Majors Program

At this funding level, there would be the following changes as shown in Table 5.3.3 compared to the schedule reported in the August 2016 Transportation Projects Commission (TPC) report:

**Table 5.3.3
Major Highway Project Delays**

Major Highway Project	Years Ahead of Schedule
US 10/441	1
STH 15	1
US 18/151 Verona Road	1
I39/90	0

The Beltline Interchange construction will be funded FY 21 through FY 23 at the completion of the mainline I-39/90 project.

No new environmental study projects would be needed until calendar year 2034 resulting in critical congestion and safety projects idled for 18 years. The first set of enumerated projects would begin in FY 18:

- I-43 Milwaukee and Ozaukee Counties
- I-94 St. Croix Counties

A second set of project enumerations would begin in FY 20:

- USH 51 Dane County-Beltline Northerly to STH 19
- USH 51 Dane County, Stoughton to McFarland (High Cost Rehabilitation Major)

A third set of project enumerations would take place in FY 22:

- I-39/90 Madison to Wisconsin Dells
- USH 12 Beltline

SE Mega Projects

At this funding level, the schedule for the SE Mega projects would be as follows in Table 5.3.4.

**Table 5.3.4
SE Mega Project Impacts**

SE Mega Project	Construction Start	Construction Complete	Duration (Years)
Zoo Interchange	2013	2020	8.0
I-94 North-South Freeway	2010	2022	12.5
I-94 East-West Freeway (Milwaukee)	2019	2023	4.5
I-894/43 Bypass	2023	2027	4.84
I-94 East-West Freeway (Waukesha)	2023	2029	6.84
I-43 Howard Ave to Silver Spring Drive	2026	2031	5.25
I-41 Burleigh Street to Richfield IC	2029	2033	4.25

Highway System Management and Operations

Although additional funding is provided in this scenario, difficult decisions would still need to be made to deal with projected budget deficits toward the end of the ten years. At this level of funding it is estimated that there will be a budget shortfall by FY 20, with an annual deficit of \$47 million by FY 27. In FY 18 and FY 19 the additional funding will provide the opportunity to accelerate preventative and routine maintenance activities on high priority components of the state highway system. Later in the ten year period, the following program cuts as shown in Table 5.3.5 would be necessary.

**Table 5.3.5
Highway System Management and Operations Program Reductions**

Program Item	Amount of Reduction (in millions)	Fiscal Year the Program is Reduced or Eliminated
Performance Based Maintenance (targets specific backlogs and promote innovation, best practices and efficiency)	\$17	2023
Lighting LED Replacement	\$2.5	2020
Roadside Vegetation Management	\$13	2025
Miscellaneous (highway condition patrol surveillance, hazardous debris removal, work zone traffic control)	\$9	2025
Roadsides and Waysides	\$4	2025
Pavement Marking	\$1.5	2025

In this scenario the Performance Based Maintenance program would be eliminated. The Roadside program would retain \$5 million for critical safety mowing and vegetation management. All patrol surveillance would also be reduced, making highway departments more reactive to emergency maintenance situations as they will be reliant on notifications from the traveling public. Partial reductions would be made in roadside and wayside facility maintenance (\$4 million) and in pavement marking (\$1.5 million).

GTA

Impacts are the same as Scenario One.

Transit

This scenario provides additional transit authority. The additional authority could be applied to operating costs to offset any increase to the local share. The additional funding could also be used to address unmet capital needs. There is an estimated annual capital need of \$54 million. Approximately \$12 million of this need could be addressed with federal funds and the corresponding local match. The remaining \$42 million of unmet needs could be addressed with the additional funding. Additionally, the funding could be applied to an investment in compressed natural gas (CNG) facilities. Transit systems across the county are exploring the use of alternative fuels as a method to manage costs, improve passenger comfort and increase performance. However, without the funding to help with the initial investment, CNG has yet to see substantial implementation among Wisconsin's transit agencies.

Local Road Program

Surface Transportation Program

Under the identified level of funding, there would be an estimated \$20.6 million loss in purchasing power at the end of FY 27 with a cumulative loss of \$123.1 million over the 10 year period. Funding would allow the improvement of an additional 209 miles when compared to scenarios one and two and would allow for an additional 113 miles compared to the current budget without deflation. It is likely that the number of road miles rated fair or higher would increase.

Local Road Improvement Program

Under the identified level of funding, there would be an estimated \$8.6 million loss of purchasing power as of FY 27 and a cumulative loss of \$70.1 million over the 10 years. The level of funding would allow for the improvement of an additional 781 miles compared to scenarios one and two. It is likely that the number of road miles rated fair or higher would increase.

Local Bridge Program

Under this funding scenario, there would be an estimated \$9.9 million loss in purchasing power in FY 27 for a cumulative loss of \$59.4 million over the 10 year period. The funding would allow for the improvement of 172 additional bridges when compared to scenarios one and two. It is likely that the number of bridges rated fair or higher would increase if local investment is maintained or increased.

Rail

Freight Rail Preservation Program (FRPP)

Under this funding scenario, rehabilitation of state-owned track and bridges could be accelerated, improving track to Class 2 and improving and stabilizing bridges at 286,000 pound carload capacity. Reconstruction of the Merrimac Bridge could proceed. The rail replacement program could be accelerated with the replacement of old rail with 115 pound continuous welded rail which will improve service reliability by reducing the incidence of rail breakage and risk of derailment. This scenario would also permit line acquisition.

Passenger Rail

Impacts are the same as Scenario One.

Railroad Crossing

Impacts are the same as Scenario One.

Harbors

Under the proposed level of funding, the program would be able to meet 25.50 percent of overall needs for infrastructure maintenance and improvement. Nearly seven HAP grants could be issued per year with some flexibility to respond to emergency or unforeseen conditions.

Aeronautics

Impacts are the same as Scenario One.

TEA

Under the identified level of funding, 17 additional grants will be issued, leveraging an additional \$579,889,800 and facilitating the creation or retention of 1,921 jobs.

CMAQ

Impacts are the same as Scenario One.

TAP

Impacts are the same as Scenario One

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6. REVENUE OPTIONS



Several options can be considered to increase state transportation revenues including:

- Increasing or modifying the motor fuel tax
- Increasing or modifying motor vehicle or driver license fees
- Implementing new funding mechanisms

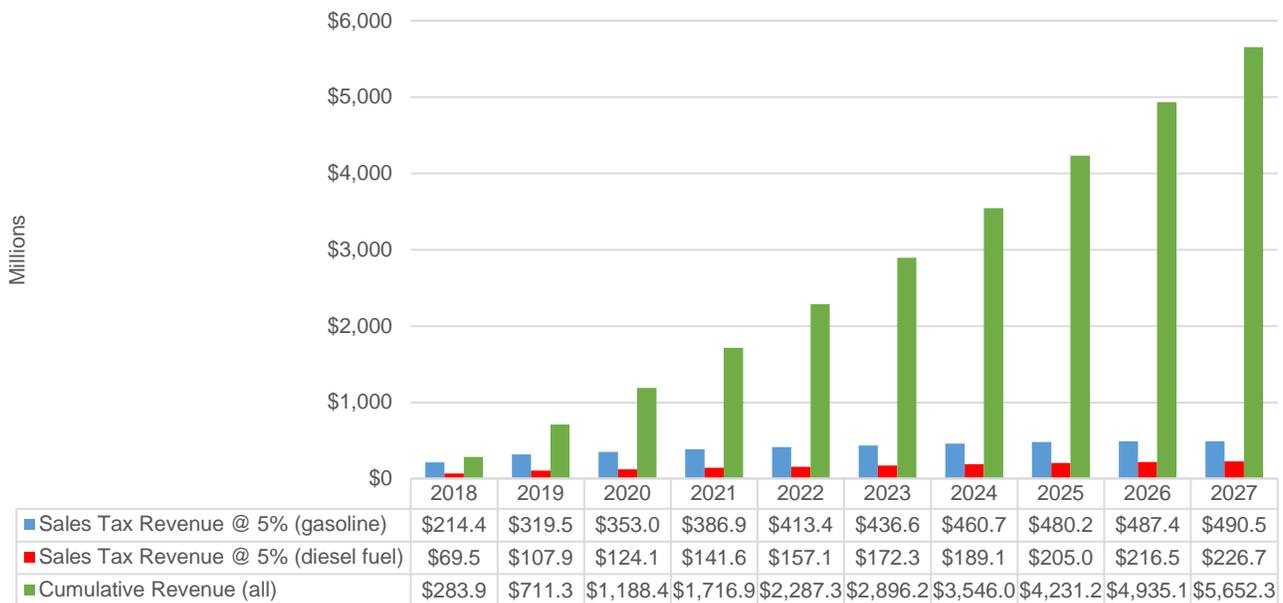
Each option has advantages and disadvantages to consider. For example, equitability for both Wisconsin residents and out-of-state drivers, relationship to highway use, and ease of implementation. Various options along with the annual revenue generated are provided below. For increases to existing taxes and fees a three month implementation period is required. More complicated modifications to fees or implementing new fees may require over a year before the full revenue potential is realized. Implementation costs are not included except for mileage based registration fees and tolling.

6.1 Motor Fuel Tax Options

Sales Tax on Motor Fuel

Under current law, motor vehicle fuel for on-road use purchased in Wisconsin is exempt from the state sales tax. The exemption on motor fuel could be lifted and 100 percent of these revenues could be directed toward the Transportation Fund. Based on current estimates, this would raise \$5.7 billion over 10 years as shown in Chart 6.1.1.

Chart 6.1.1
Revenue Generated from a Sales Tax on Motor Fuel



Motor Fuel Excise Tax Increase

The state excise tax on motor fuel was created in 1925 at a rate of \$0.02 per gallon. The current motor fuel tax rate is \$0.309 per gallon. A one-cent-per-gallon increase in the motor fuel excise tax would generate over \$33 million in the first full year of implementation (a three month implementation period would be required in FY 18) and \$319.7 million over 10 years as seen in Table 6.1.1.

Table 6.1.1
Revenue Generated from a One Cent-Per-Gallon Increase
on the Motor Fuel Excise Tax (in millions)

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$24.6	\$24.6
2019	\$33.3	\$57.9
2020	\$33.1	\$91.0
2021	\$33.0	\$124.0
2022	\$32.9	\$156.9
2023	\$32.8	\$189.6
2024	\$32.6	\$222.3
2025	\$32.6	\$254.8
2026	\$32.5	\$287.3
2027	\$32.4	\$319.7

Motor Fuel Excise Tax Indexing

Beginning in 1985, the Legislature created an annual fuel tax indexing adjustment as a means to maintain purchasing power. The motor fuel excise tax was annually adjusted to reflect changes in consumption and/or the Consumer Price Index (CPI). In 2005, annual indexing was repealed by 2005 Wisconsin Act 85. If indexing were reinstated, based on current inflation estimates the Department estimates the motor fuel tax rate would increase to \$.316 per gallon in FY 2018 and raise nearly \$1.3 billion in revenue over 10 years as seen in Table 6.1.2.

Table 6.1.2
Revenue Increase with Tax Indexing Adjustment

Fiscal Year	Adjusted Excise Tax Rate as of April 1	Annual Revenue Increase (in millions)	Cumulative Revenue Increase (in millions)
2018	\$0.316	\$6.0	\$6.0
2019	\$0.324	\$30.1	\$36.1
2020	\$0.332	\$56.5	\$92.5
2021	\$0.341	\$83.4	\$176.0
2022	\$0.350	\$112.7	\$288.7
2023	\$0.359	\$141.8	\$430.5
2024	\$0.368	\$170.7	\$601.3
2025	\$0.377	\$199.5	\$800.8
2026	\$0.386	\$228.2	\$1,029.0
2027	\$0.395	\$256.8	\$1,285.8

Motor Fuel Excise Tax; Indexing Catch-Up Provision

If the motor fuel excise tax was adjusted one time to reflect the indexing adjustments that would have taken place since 2006, the adjusted excise tax rate would increase to \$0.38 per gallon effective October 1, 2017. This would generate nearly \$2.3 billion in additional revenue over 10 years as seen in Table 6.1.3.

Table 6.1.3
Revenue Increase with Indexing Catch-Up Adjustment (in millions)

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$174.4	\$174.4
2019	\$236.3	\$410.7
2020	\$235.3	\$646.0
2021	\$234.2	\$880.2
2022	\$233.4	\$1,113.6
2023	\$232.6	\$1,346.2
2024	\$231.8	\$1,578.0
2025	\$231.1	\$1,809.1
2026	\$230.5	\$2,039.6
2027	\$230.0	\$2,269.6

Motor Fuel Excise Tax; Indexing and Catch-Up Provision

Additionally, if the indexing adjustment were to then be restored beginning April 1, 2018 nearly \$3.9 billion in revenue could be generated over 10 years as seen in Table 6.1.4.

Table 6.1.4
Revenue Increase with Indexing Restored and a Catch-Up Adjustment

Fiscal Year	Adjusted Excise Tax Rate as of April 1	Annual Revenue Increase (in millions)	Cumulative Revenue Increase (in millions)
2018	\$0.389	\$182.1	\$182.1
2019	\$0.399	\$274.8	\$456.9
2020	\$0.409	\$306.7	\$763.6
2021	\$0.420	\$339.1	\$1,102.7
2022	\$0.431	\$374.1	\$1,476.8
2023	\$0.442	\$408.8	\$1,885.6
2024	\$0.453	\$443.4	\$2,329.0
2025	\$0.464	\$477.9	\$2,806.9
2026	\$0.475	\$512.3	\$3,319.2
2027	\$0.486	\$546.7	\$3,865.9

Alternative Fuel Excise Tax Increases

State excise taxes are also collected on liquefied propane gas, compressed natural gas and liquefied natural gas. A one-cent-per-gallon increase on these fuels would raise close to \$125,000 annually after full implementation as seen in Table 6.1.5.

Table 6.1.5
Revenue Increase from a One-Cent-Per-Gallon increase on Alternative Fuels

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$93,900	\$93,900
2019	\$124,300	\$218,200
2020	\$124,300	\$342,500
2021	\$124,300	\$466,800
2022	\$124,300	\$591,100
2023	\$124,300	\$715,400
2024	\$124,300	\$839,700
2025	\$124,300	\$964,000
2026	\$124,300	\$1,088,300
2027	\$124,300	\$1,212,600

General Aviation Fuel Excise Tax Increase

State excise tax is also collected on general aviation fuel. An increase of one-cent-per-gallon on this fuel would raise \$2 million over 10 years as seen in Table 6.1.6.

Table 6.1.6
Revenue Increase from a One-Cent-Per-Gallon increase on Aviation Fuel

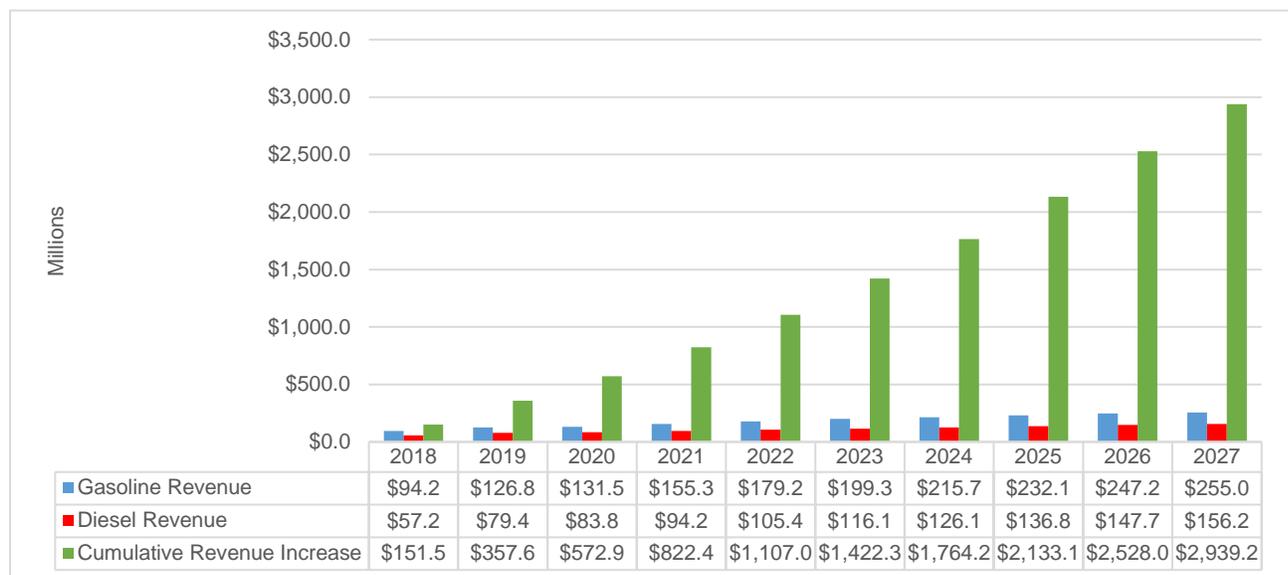
Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$153,700	\$153,700
2019	\$205,800	\$359,500
2020	\$206,700	\$566,200
2021	\$207,500	\$773,700
2022	\$208,400	\$982,100
2023	\$209,300	\$1,191,400
2024	\$210,200	\$1,401,600
2025	\$211,100	\$1,612,700
2026	\$212,000	\$1,824,700
2027	\$212,900	\$2,037,600

Variable Motor Fuel Tax

Currently, the motor fuel excise tax is a flat-rate excise tax on gasoline used to power motor vehicles and diesel fuel intended for highway use. The motor fuel tax could be restructured to include a variable component. Several other states impose both a fixed-rate excise tax along with a variable-rate tax on motor fuel.

Under this proposal, the existing state excise tax for gasoline and diesel fuel consumed for highway use would be \$0.262 for all grades of gasoline and \$0.316 for diesel fuel intended for highway use. A new variable component based on wholesale price would be added. Assuming the price of gasoline and diesel increases over time, the variable component of the tax rate will provide for additional revenue. For purposes of calculating a new 8 percent variable tax component of the excise tax, a permanent minimum wholesale price of \$1.164 per gallon for diesel fuel and \$1.21 per gallon for all grades of gasoline would be established. A floor tax rate would be established of \$0.409 per gallon for diesel fuel and \$0.359 per gallon for gasoline. Over 10 years an additional \$2.9 billion in revenues could be generated as seen in Chart 6.1.2.

Chart 6.1.2
Revenue Generated from a Variable Motor Fuel Tax



Eliminate Motor Fuel Tax Loss Allowance

Motor fuel suppliers are given a 1.35 percent allowance under current law as compensation for evaporation and other losses on motor fuel. Additionally, current law allows for operators of service stations to claim a refund of one-half of one percent of Wisconsin motor vehicle tax paid on gasoline received into their retail storage facility for shrinkage and evaporation. Eliminating these amounts would generate an additional \$126.3 million over the 10 years as seen in Table 6.1.7.

Table 6.1.7
Value of Administrative Allowance and
Evaporation/Shrinkage Refund (in millions)

Fiscal Year	Annual Value of Allowance/Refund	Cumulative Value of Allowance/Refund
2018	\$10.9	\$10.9
2019	\$13.4	\$24.3
2020	\$13.3	\$37.5
2021	\$13.1	\$50.6
2022	\$13.0	\$63.6
2023	\$12.8	\$76.4
2024	\$12.7	\$89.1
2025	\$12.5	\$101.6
2026	\$12.4	\$114.0
2027	\$12.3	\$126.3

6.2 Motor Vehicle and Driver License Fee Options

Registration Fee Increase for Passenger Vehicles and Light Trucks

The annual registration fee for passenger vehicles and light trucks with a gross weight under 8,000 pounds was increased last in January 2008. A \$1.00 increase in registration fees will raise nearly \$5 million annually once fully implemented as seen in Table 6.2.1.

**Table 6.2.1
Revenue from \$1.00 Registration Fee Increase**

Fiscal Year	Annual Revenue Increase (in millions)	Cumulative Revenue Increase (in millions)
2018	\$3.5	\$3.5
2019	\$4.7	\$8.3
2020	\$4.8	\$13.0
2021	\$4.8	\$17.8
2022	\$4.8	\$22.6
2023	\$4.8	\$27.5
2024	\$4.9	\$32.3
2025	\$4.9	\$37.2
2026	\$4.9	\$42.1
2027	\$4.9	\$47.1

Registration Fee Increase for Weight-Based Vehicles

Heavy trucks pay annual registration fees based on gross vehicle weight. The annual fee schedule for heavy trucks with a gross weight over 8,000 pounds was last modified in January 2008. For every one percent increase in the weight-based fee schedule, an additional \$13.4 million can be generated over 10 years as seen in Table 6.2.2.

Table 6.2.2
Revenue from a One Percent Increase in the Weight-Based Fee Schedule

Fiscal Year	Annual Revenue Increase (in millions)	Cumulative Revenue Increase (in millions)
2018	\$0.9	\$0.9
2019	\$1.2	\$2.1
2020	\$1.3	\$3.3
2021	\$1.3	\$4.6
2022	\$1.3	\$6.0
2023	\$1.4	\$7.4
2024	\$1.4	\$8.8
2025	\$1.5	\$10.3
2026	\$1.5	\$11.8
2027	\$1.6	\$13.4

Registration Fees Indexed to Inflation

Existing vehicle registration fees for autos, vans, sport utility vehicles and light and heavy trucks could be adjusted annually to forecast changes in CPI. This would generate over \$700 million in additional revenue over 10 years as seen in Table 6.2.3. Over a 10-year period annual vehicle registration fees for most autos, vans and sport utility vehicles would increase from \$75 to over \$95.

Table 6.2.3
Revenue from Registration Fees Indexed to Inflation

Fiscal Year	Annual Revenue Increase (in millions)	Cumulative Revenue Increase (in millions)
2018	\$6.0	\$6.0
2019	\$20.2	\$26.2
2020	\$33.8	\$60.0
2021	\$47.8	\$107.8
2022	\$62.7	\$170.5
2023	\$78.3	\$248.8
2024	\$94.3	\$343.1
2025	\$111.1	\$454.1
2026	\$128.2	\$582.4
2027	\$145.3	\$727.7

Value-Based Registration Fees

Wisconsin currently assesses a flat passenger vehicle registration fee. Wisconsin could implement a registration fee based on vehicle value. If a value-based registration fee based on Michigan’s fee model applied to only new model year passenger vehicles were to be implemented, nearly \$700 million in additional revenue could be collected as seen in Table 6.2.4.

Table 6.2.4
Additional Revenue from a Value-Based Registration Fee

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	0	\$0
2019	\$12,992,800	\$12,992,800
2020	\$32,318,800	\$45,311,600
2021	\$49,167,800	\$94,479,400
2022	\$63,365,800	\$157,845,200
2023	\$78,059,500	\$235,904,700
2024	\$91,868,800	\$327,773,500
2025	\$105,515,000	\$433,288,500
2026	\$118,597,300	\$551,885,800
2027	\$135,896,600	\$687,782,400

Biennial Registration Fee Increase for Farm Vehicles, Motorcycles and Mopeds

Farm trucks with a gross vehicle weight under 12,000 pounds, motorcycles and mopeds are registered on a biennial basis. For every \$1 increase in registration fees for farm trucks, an additional \$60,000 would be generated in the first full year after implementation as seen in Table 6.2.5.

Table 6.2.5
Additional Revenue from \$1.00 Increase to Farm Vehicle Registration

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$44,600	\$44,600
2020	\$59,400	\$104,000
2022	\$59,400	\$163,400
2024	\$59,400	\$222,800
2026	\$59,400	\$282,200

For every \$1.00 increase in registration fees for motorcycles and mopeds, an additional \$307,800 would be generated annually as seen in Table 6.2.6.

Table 6.2.6
Additional Revenue from \$1.00 Increase to Motorcycle/Moped Registration Fee

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$230,900	\$230,900
2020	\$307,800	\$538,700
2022	\$307,800	\$846,500
2024	\$307,800	\$1,154,300
2026	\$307,800	\$1,462,100

Registration Late Fee

Currently, residents who renew a license plate for autos, light trucks, motorcycles and mopeds after the expiration date are subject to a \$10.00 late fee. A \$1.00 increase to the registration late fee would generate nearly \$8 million over 10 years as seen in Table 6.2.7.

Table 6.2.7
Revenue from \$1.00 Increase to Registration Late Fee

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$512,300	\$512,300
2019	\$707,900	\$1,220,200
2020	\$733,600	\$1,953,800
2021	\$760,300	\$2,714,100
2022	\$787,900	\$3,502,000
2023	\$816,500	\$4,318,500
2024	\$846,100	\$5,164,600
2025	\$876,800	\$6,041,400
2026	\$908,600	\$6,950,000
2027	\$941,600	\$7,891,600

Hybrid and Electric Registration Fee Surcharge

The Department collects an annual fee to register vehicles in Wisconsin regardless of the fuel type. An additional \$75.00 fee could be collected at the time of annual vehicle registration of all passenger vehicles powered by hybrid-electric, hybrid-electric plug-in engines and all-electric plug-in passenger vehicles designed for highway use. This fee would generate over \$141 million in additional revenues over a 10 year period as seen in Table 6.2.8.

Table 6.2.8
Revenue from a \$75.00 Hybrid and Electric Registration Fee Surcharge

Fiscal Year	Estimated Electric/Hybrid Vehicles	Annual Surcharge Revenue (in millions)	Cumulative Surcharge Revenue (in millions)
2018	85,000	\$3.2	\$3.2
2019	99,800	\$7.5	\$10.7
2020	116,900	\$8.8	\$19.4
2021	137,000	\$10.3	\$29.7
2022	160,500	\$12.0	\$41.8
2023	188,100	\$14.1	\$55.9
2024	220,400	\$16.5	\$72.4
2025	258,300	\$19.4	\$91.8
2026	302,700	\$22.7	\$114.5
2027	354,700	\$26.6	\$141.1

Title Fee Increase

A certificate of title is evidence of vehicle ownership. The fee for filing an application for the original title or title transfer is \$69.50 for most passenger vehicles. A \$1.00 increase to the title fee would generate around \$1.5 million in additional revenue annually in the first full year of implementation as seen in Table 6.2.9.

Table 6.2.9
Additional Revenue from \$1.00 Increase to Title Fee (in millions)

FY	Annual Revenue Increase	Cumulate Revenue Increase
2018	\$1.1	\$1.1
2019	\$1.4	\$2.5
2020	\$1.4	\$3.9
2021	\$1.4	\$5.4
2022	\$1.5	\$6.8
2023	\$1.5	\$8.3
2024	\$1.5	\$9.8
2025	\$1.5	\$11.3
2026	\$1.5	\$12.8
2027	\$1.5	\$14.3

Driver License Fee Increase

A driver license provides the authority to operate a motor vehicle. A regular, eight-year license is issued after completion of any applicable probationary period or upon renewal. A \$1.00 increase in the original or renewal driver license fee would generate \$7.5 million over 10 years as shown in Table 6.2.10.

Table 6.2.10
Additional Revenue from \$1.00 Driver License Fee Increase (in millions)

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$0.6	\$0.6
2019	\$0.8	\$1.4
2020	\$0.8	\$2.1
2021	\$0.8	\$2.9
2022	\$0.8	\$3.7
2023	\$0.8	\$4.5
2024	\$0.8	\$5.2
2025	\$0.8	\$6.0
2026	\$0.8	\$6.8
2027	\$0.8	\$7.5

Driver License Issuance Fee Increase

The driver license issuance fee of \$10 was created to provide the necessary funding to create and maintain a secure credentialing system. A \$1.00 increase to the driver license issuance fee would provide an additional \$9.2 million over revenue over 10 years as shown in Table 6.2.11.

Table 6.2.11
Additional Revenue from \$1.00 Increase to Issuance Fee (in millions)

Fiscal Year	Annual Revenue Increase	Cumulative Revenue Increase
2018	\$0.7	\$0.7
2019	\$0.9	\$1.7
2020	\$0.9	\$2.6
2021	\$0.9	\$3.6
2022	\$0.9	\$4.5
2023	\$0.9	\$5.5
2024	\$0.9	\$6.4
2025	\$0.9	\$7.3
2026	\$0.9	\$8.3
2027	\$0.9	\$9.2

Sales Tax on Motor Vehicles, Parts and Accessories

The State sales tax is charged on the sale of new and used motor vehicles and auto-related parts and accessories. Tax receipts are deposited into the General Fund. These revenues could instead be deposited into the Transportation Fund. Under the current five percent Wisconsin state sales tax rate, it is estimated that this could provide \$608 million of additional revenue in the first full year of implementation as seen in Table 6.2.12.

Table 6.2.12
Increased Revenue from Sales Tax on Motor Vehicles, Parts and Accessories

Calendar Year*	Additional Annual Revenue	Cumulative Revenue Increase
2018	\$447.3	\$447.3
2019	\$608.3	\$1,055.6
2020	\$620.5	\$1,676.0
2021	\$632.9	\$2,308.9
2022	\$645.5	\$2,954.5
2023	\$658.4	\$3,612.9
2024	\$671.6	\$4,284.5
2025	\$685.0	\$4,969.6
2026	\$698.7	\$5,668.3
2027	\$712.7	\$6,381.0

*Historic data used to estimate revenues provided in calendar year.

Repeal of Motor Vehicle Trade-In Sales Tax Exemption

Currently, sales tax is charged on the sale price of a motor vehicle less any vehicle trade-in allowance. The sales tax exemption on the trade-in allowance could be eliminated and the additional revenue deposited into the Transportation Fund. Under the current five percent Wisconsin state sales tax rate, this would provide \$953 million over 10 years as shown in Table 6.2.13.

Table 6.2.13
Additional Revenue from Eliminating Trade-In Allowance (in millions)

Fiscal Year	Additional Annual Revenue	Cumulative Revenue Increase
2018	\$60.3	\$60.3
2019	\$83.7	\$144.0
2020	\$87.2	\$231.2
2021	\$90.9	\$322.0
2022	\$94.7	\$416.7
2023	\$98.6	\$515.3
2024	\$102.8	\$618.1
2025	\$107.1	\$725.2
2026	\$111.6	\$836.7
2027	\$116.2	\$953.0

6.3 New Funding Mechanisms

Mileage-Based Registration-Self Reporting Odometer Reading

A 1.02 cent per mile fee (indexed using the CPI beginning in FY 19) could be charged for the annual number of miles driven on each Wisconsin-registered light vehicle (passenger vehicles and light trucks). Wisconsin drivers would self-report the number of miles driven; a 15 percent evasion factor is assumed. The fee would be applied to miles driven by all registered light vehicles but would not apply to the first 3,000 miles driven or any mileage above 20,000 miles driven annually. There would be a number of implementation costs including IT system development, fee processing, communication and enforcement. This would provide \$2.9 billion in revenue over the 10 year period as shown in Table 6.3.1 below.

**Table 6.3.1
Mileage-Based Registration Fee Revenue**

Fiscal Year	Annual Net Revenue Generated	Cumulative Net Revenue Generated
2018	-\$4,407,400*	-\$4,407,400
2019	-\$5,471,200*	-\$9,878,600
2020	\$326,794,100	\$316,915,500
2021	\$338,457,900	\$655,373,300
2022	\$349,127,800	\$1,004,501,200
2023	\$359,891,400	\$1,364,392,500
2024	\$371,024,600	\$1,735,417,100
2025	\$382,694,200	\$2,118,111,300
2026	\$394,467,600	\$2,512,578,900
2027	\$413,706,900	\$2,926,285,800

*implementation costs

Highway Use Fee

A highway use fee for new passenger vehicles (automobiles, vans, sport utility vehicles, light trucks, motorcycles) could be created. This fee would be collected at the time of initial vehicle registration and would be calculated at 2.5 percent of the manufacturer’s suggested base retail price, exclusive of destination charges. This fee would only be applied to the value of new vehicles registered for the first time in Wisconsin. After 10 years, nearly \$2.6 billion in revenues could be realized from this fee as seen in Table 6.3.2.

**Table 6.3.2
Highway Use Fee Revenue (in millions)**

Fiscal Year	Annual Highway Use Fee Revenue	Cumulative Highway Use Fee Revenue
2018	\$173.8	\$173.8
2019	\$241.1	\$414.9
2020	\$249.5	\$664.4
2021	\$256.4	\$920.8
2022	\$262.8	\$1,183.6
2023	\$269.3	\$1,453.0
2024	\$275.6	\$1,728.6
2025	\$282.4	\$2,011.0
2026	\$290.0	\$2,301.0
2027	\$297.3	\$2,598.4

Tolling

A toll is a fee that is charged for the use of a highway, bridge or tunnel. It is a form of road pricing typically implemented to help recover the cost of road construction and maintenance.

The Department contracted with HNTB to provide a preliminary study of the feasibility of tolling Wisconsin's Interstate highways. The tolling study includes a General Tolling Resources Document, a Policy Report, and a Tolling Revenue Summary Document.

General Tolling Resource Document:

The General Tolling Resource Document provides an overview of fundamental tolling concepts and conveys the historical context and current applications of tolling for a cross-section of agencies. This document includes:

- A discussion of the feasibility for state-sponsored tolling by describing the history and progression of tolling in the United States.
- Information addressing toll operations, including the advantages of newer collection methods and the challenges introduced by those methods.
- An overview of typical design approaches and technology.
- A brief overview of considerations that toll authorities encounter when communicating with key stakeholders, the media and the general public.
- A summary of existing toll authorities and examples of toll implementation methods utilized by these agencies.

Policy Report:

The Policy Report discusses the legal and policy issues that Wisconsin would need to address should a decision be made to toll the Interstate highway system. Implementing a tolling system without considerations of these issues could potentially result in legal challenges that may lead to costly project delays or adverse legal judgements. This report includes:

- An analysis of state and federal legislative considerations that may impact how tolling could be implemented and what actions that State may take when tolling.

- The major policy and operational considerations that would need to be addressed during the development of tolling legislation and during implementation.
- A summary of the policy and operational considerations and a Policy Decision Matrix to assist Wisconsin in addressing these issues.
- Examples of common statutory components from other states and tolling authorities.

Tolling Revenue Summary Document

The Tolling Revenue Summary Document provides information related to the estimation of traffic and revenue for tolling Wisconsin's Interstates. The study modeled Wisconsin's entire 875-mile Interstate system estimating traffic and tolling revenue from 2020 to 2050. The traffic and revenue analysis for this study represents an initial Level 1 type of study for the entire State, which provides an order of magnitude analysis comparing multiple interstate corridors. Traffic and revenue estimates presented in this report should not be construed to represent a detailed Level 2 evaluation or a comprehensive, Level 3 investment grade toll study. Actual toll implementation would require these more detailed investment grade analyses.

At four cents-per-mile, the net operating revenue from tolling Wisconsin's interstate highways could be just over \$2 billion as seen in Table 6.3.3.

Attachment B to this document is comprised of three task reports and four appendices from the tolling feasibility study.

The technical reports on tolling and all related appendices are available for download at www.wisconsin.gov/Pages/projects/solvency.aspx

Table 6.3.3
Tolling revenue estimates at 4-cents per mile on Wisconsin Interstate system¹

Fiscal Year	Net operating revenue²
2018 ³	-
2019 ³	-
2020 ³	-
2021	\$296.2
2022	\$320.7
2023	\$346.1
2024	\$354.7
2025	\$363.5
2026	\$372.3
2027	\$381.1
Capital costs ⁴	-\$366.0
TOTAL⁵	\$2,068.5

¹ Does not include I-535 between Superior and Duluth

² Net operating revenue includes all revenues minus costs such as transponder operations, mail-back collection, customer service and administration.

³ Tolling could not be implemented until at least 2021, pending Wisconsin legislative authorization in 2017.

⁴ Capital costs include installation of infrastructure including tolling gantries, in pavement sensors and back office equipment. Costs would be incurred upfront but could be repaid over time.

⁵ Total may not add exactly due to rounding.