

South Dakota
Department of Transportation
Office of Research

# SD2007-02 Executive Summary Highway Funding Alternatives for South Dakota

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# STUDY PURPOSE

The 2008 Session of the South Dakota State Legislature commissioned an Interim Study on Highway Needs and Financing to assess funding needs and sources for state and local roads. The scope of the study was initially described in legislation introduced in the 2008 Session:<sup>1</sup>

- projected long term state and local highway needs:
- allocation and distribution of responsibility for all highway segments within the state;
- future state and local highway cost projections compared to projected revenue;
- strategies for creating greater efficiency in financing state and local roads; and
- strategies to promote the development of innovative ideas aimed at reducing highway funding needs.

To support the Interim Study, the Department of Transportation's Office of Research was directed to investigate funding mechanisms currently employed in South Dakota and other mechanisms deserving consideration

# **RESEARCH OBJECTIVES**

The objectives of this investigation, entitled *Highway Funding Alternatives for South Dakota*, were to:

- describe current Federal, state, and local revenue streams for state and local highways;
- examine the value and practicality of current and alternative local, state, and Federal revenue streams.

The investigation did not attempt to recommend specific funding alternatives, but simply to describe important factors affecting alternatives' suitability:

- statutory authority for the funding mechanism;
- current use in South Dakota:

# <sup>1</sup> HB1315, South Dakota State Legislature 2008 Session.

# **Key Findings**

- Funding for both state and local roads has significantly lagged highway cost increases, forcing delay of needed construction and maintenance
- South Dakota's state highway network is highly dependent upon Federal funding
- Future increases in Federal funding may increase the need for state matching funds
- State funding for the state highway network mainly derives from motor fuel and motor vehicle excise taxes
- Funding for local roads and streets derives mainly from vehicle registration fees, county wheel taxes, and property taxes
- Local jurisdictions do not impose all of the taxes allowed by statute for financing roads and streets
- Nationally, motor fuel tax will remain a major component of highway funding, but new usebased mechanisms will emerge over time
- At the state level, significant funding increases can be achieved through a combination of changes to existing funding mechanisms

- rates at which taxes or fees are imposed;
- statutory exemptions;
- the extent to which costs are applied to users in proportion to derived benefits;
- other concerns relating to the equity of the funding mechanism;
- applicability to state and local agencies;
- short- and long-term potential for revenue generation;
- cost and technology needed for administration.

This study did not address potential changes to the allocation of available funding among state and local agencies or designation of specific funding sources to them.

# SOUTH DAKOTA HIGHWAY FINANCING

# **State Highways**

Funding needed to construct, maintain, and operate the State Trunk Highway System—comprising Interstate, US, and South Dakota routes—derives from a combination of state and Federal funding (Figure 1).

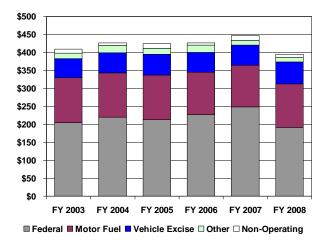


Figure 1: State Highway Revenue FY2003-2008 (\$ million)

Among the fifty states, South Dakota is especially dependent on Federal funding. In recent years more than half of funding for the State Trunk Highway System has originated from Federal sources. In 2005, funding from Federal sources accounted for 54% of the total revenue expended (Figure 2).<sup>2</sup>

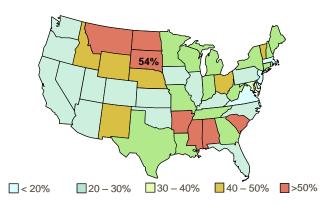


Figure 2: Percent of State Highway Funding from Federal Sources FFY2005

The amount of Federal funding South Dakota receives is approximately twice the amount of

Federal revenue generated within the state<sup>3</sup>. In FFY2007, South Dakota's Federal apportionment was 1.96 times the Highway Trust Fund receipts attributable to the state. South Dakota is currently one of 23 "donee" states that receive a greater share of Federal funding than they generate. Most large states with small populations are donee states.

Federal funding is distributed to states according to formula established in surface transportation acts passed by Congress. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which establishes the Federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009, considers the factors listed in Table 1.

Table 1: Factors Affecting Allocation of Federal Funding to States

Factors Considered
Interstate mileage
Interstate vehicle miles traveled
Contributions from commercial
vehicles to Highway Account of
Highway Trust Fund
Principal arterial lane mileage
Principal arterial vehicle miles traveled
Diesel fuel used
Principal arterial lane miles/person
Federal-aid highway lane mileage
Federal-aid highway vehicle miles
traveled
Total contributions to Highway Account
of Highway Trust Fund
Cost to repair or replace deficient
bridges
Population in non-attainment and
maintenance areas
Non-highway recreational fuel use
Urbanized area population
State population
Public road mileage

Federal regulations and policy have largely limited the use of Federal funding to planning, design, and construction of capital projects and have excluded maintenance activities. Within the past three years, Federal eligibility has expanded slightly to include some infrastructure preservation activities.

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<sup>&</sup>lt;sup>2</sup> Highway Statistics 2006, US Department of Transportation, Federal Highway Administration, Table SF-3, November 2006, http://www.fhwa.dot.gov/policy/ohim/hs05/pdf/sf3.pdf

<sup>&</sup>lt;sup>3</sup> *Highway Statistics 2007*, US Department of Transportation, Federal Highway Administration, Table FE-221, September 2008, <a href="http://www.fhwa.dot.gov/policyinformation/statistics/2007/fe221.cfm">http://www.fhwa.dot.gov/policyinformation/statistics/2007/fe221.cfm</a>

The most significant sources of non-Federal funds for the state highway system are the state motor fuel tax and the state motor vehicle excise tax (Figure 1), which respectively averaged 29% and 14% of total revenues during the period of from 2003 to 2008. State funding provides the critical functions of satisfying match requirements for Federal funding and paying for maintenance and other activities ineligible for Federal funding.

Other funding shown in Figure 1 includes approximately \$3 million from special highway permits and truck tractor registration fees.

While state funding has historically been adequate to fully satisfy Federal match requirements and avoid loss of Federal funding, that situation could change if future surface transportation acts provide substantially more Federal funding to states.

### **Local Roads**

Funding of streets and highways under the jurisdiction of South Dakota's counties, cities, and townships is also accomplished through a variety of funding mechanisms.

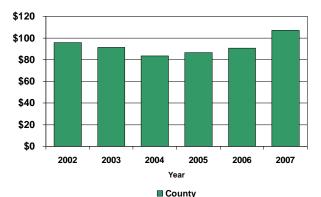
In South Dakota, motor vehicle registration fees are dedicated to local roads (see **Motor Vehicle Registration Fees**, page 9). In FY2007, \$58 million were allocated. Wheel taxes imposed by the counties (see **Wheel Tax**, page 10) provided another \$8 million. \$10 million of state highway funds, generated from state motor fuel and vehicle excise taxes, were transferred to local governments for match to federal grants.

Reporting procedures prevent identification of many local government reporting sources. Counties reported \$5 million of general property taxes used to fund highways, but information available to this study could not identify corresponding amounts for cities and townships. Likewise, amounts generated from other local assessments could not be determined.

Regardless of funding source, the estimated annual expenditures for roads and bridges by South Dakota cities have ranged between \$60 and \$80 million since 2002<sup>4</sup>. Likewise, annual expenditures on county highway systems have ranged between \$80 and \$100 million. Expenditures on township systems are significantly less, between \$13 and \$16 million statewide.

\$120 \$100 \$80 \$60 \$40 \$20 \$2002 2003 2004 2005 2006 2007

■ Class 1 Cities ■ Class 2 Cities □ Class 3 Cities



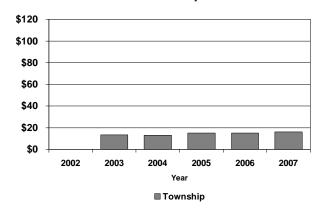


Figure 3: Estimated Expenditures on South Dakota Local Road Systems (\$ million)

# **Purchasing Power**

No highway funding source available to South Dakota state and local government has kept pace with recent increases in highway construction and maintenance costs. Since 1999 the national Highway and Street Producer Price Index<sup>5</sup> has risen nearly 80%, largely as a result of increasing prices of raw materials including asphalt, cement, steel, and fuel (Figure 4).

<sup>&</sup>lt;sup>4</sup> Estimates are derived from expenditures reported annually to the South Dakota Department of Legislative Audit with adjustments made to compensate for missing values.

<sup>&</sup>lt;sup>5</sup> *Producer Price Index Report*, US Department of Labor, Bureau of Labor Statistics, January 2009, <a href="http://data.bls.gov">http://data.bls.gov</a>

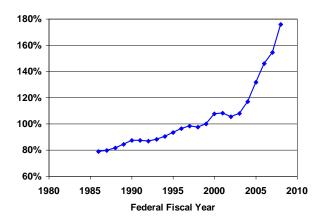


Figure 4: Highway and Street Construction Producer Price Index (1999=100%)

Recent highway revenues have also lagged general economic growth at both the Federal and state level. During the period from 1994 through 2003, Federal funding for highways grew at approximately the same rate as the US Gross Domestic Product and growth in state funding approximately matched growth in South Dakota's Gross Domestic Product (Figure 5). Since 2004, both Federal and state highway funding sources have fallen far behind economic growth.

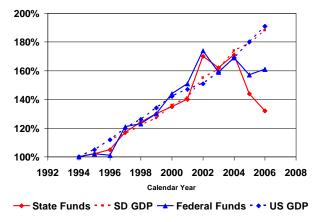


Figure 5: Growth of Highway Revenues & Gross Domestic Product Indexed to 1994 Levels

The combination of cost increases and flat funding levels have forced state and local agencies to defer maintenance and postpone capital improvements on their respective highway systems. The difference between current funding levels and accruing needs is creating a growing investment deficit that will place even greater demands on future funding.

# FEDERAL HIGHWAY FINANCING

Federal funding for highways is administered through the Highway Trust Fund, which was created in 1956 at the inception of the Interstate Highway System. The Highway Trust Fund is intended to be financed by highway user fees rather than general tax revenues.

At its creation, the Highway Trust Fund financed only highways, but since 1983 it has comprised two accounts, the Highway Account and the Mass Transit Account. The largest revenue component—the Federal Motor Fuel Excise Tax—feeds both accounts. The remaining revenue components—the Heavy Vehicle Use Tax and the excise tax on trucks and truck tires—feed only the Highway Account.

Declining growth in fuel consumption due to better vehicle fuel efficiency and, more recently, high fuel costs, coupled with increased expenditures due to inflating highway costs caused the highway trust fund balance to dwindle since 2000 (Figure 6 and Figure 7). In August 2008 Congress was forced to transfer \$8 billion from general funds into the Highway Trust Fund to maintain its solvency.

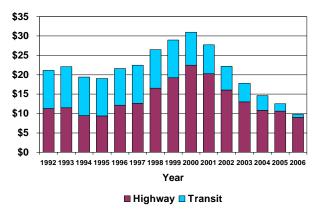


Figure 6: Highway Trust Fund Balance 1992-2006 (\$ billion)

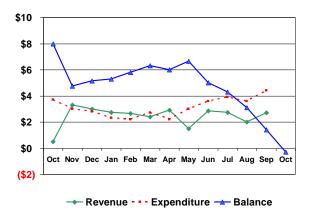


Figure 7: Highway Trust Fund Balance FFY2008 (\$ billion)

The Highway Trust Fund is projected to stay solvent through Federal Fiscal Year 2009 but to become insolvent again in FFY2011 if current

revenue streams are maintained. Its viability will depend upon terms of the next Federal surface transportation authorization act.

### Federal Motor Fuel Excise Tax

The Federal motor fuel tax is the predominant revenue source for the Highway Trust Fund. In FY2007, taxes on gasoline, diesel, and other motor fuels accounted for 87% of Highway Trust Fund revenues.<sup>6</sup> That year approximately \$102 million of Federal motor fuel taxes collected from South Dakota flowed into the Highway Account of the trust fund. Another \$33 million was contributed to the Mass Transit Account.

The first Federal motor fuel tax was established in 1932 (Figure 8). In 1956, the tax was dedicated to the newly created Highway Trust Fund, to be used for Interstate and other nationally significant highways.

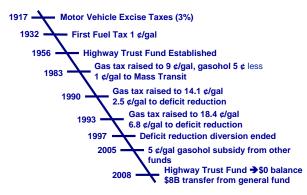


Figure 8: Federal Motor Fuel Excise Tax Key Events

A portion of the tax was allocated to mass transit beginning in 1983, and portions were diverted toward deficit reduction and gasohol subsidy in the 1990's (Table 2). Taxes on gasoline and diesel were raised to their current levels of 18.4¢ and 22.4¢ per gallon in 1993.

The inability of the current Federal fuel tax to keep pace with highway funding needs has led two congressionally appointed commissions recommend substantial increases along with moves to other funding sources.

Table 2: Federal Gasoline Tax Rates (1956-present)

Beginning	Gas Tax	Highways	Mass Transit	Underground Storage Tank Repair	Deficit Reduction
Date	(¢/gal)	(¢/gal)	(¢/gal)	(¢/gal)	(¢/gal)
July 1956	3	3			
October 1959	4	4			
April 1983	9	8	1		
January 1987	9.1	8	1	0.1	
September 1990	9	8	1		
December 1990	14.1	10	1.5	0.1	2.5
October 1993	18.4	10	1.5	0.1	6.8
October 1995	18.4	12	2	0.1	4.3
January 1996	18.3	12	2		4.3
October 1997	18.4	15.54	2.86	0.1	

In late 2007, the National Surface Transportation Policy and Revenue Study Commission recommended that the Federal government should maintain its current share—approximately 40%—of national highway investments. To do so, the commission recommended raising the current Federal motor fuel tax annually by  $5\phi - 8\phi$  per gallon for the next five years, and indexing the tax thereafter.7

In a report expected in late January 2009, the 15member National Commission on Transportation Infrastructure Financing will also call for higher fuel taxes.8 Members say they will urge Congress to raise the gas tax by 10¢ per gallon and the diesel fuel tax by  $12\phi - 15\phi$  per gallon and to tie the fuel tax rates to inflation.

The commission will also recommend that states raise their fuel taxes and make greater use of toll roads and fees for rush-hour driving. Finally, it will recommend long-term adoption of a mileage-based revenue system that uses global positioning satellites and transponders to record how many miles the vehicle has been driven, the type of roads and time of day.

No action is expected on either of the commissions' recommendations until Congress develops the next surface transportation act.

<sup>&</sup>lt;sup>6</sup> Highway Statistics 2007, US Department of Transportation, Federal Highway Administration, Table FE-9, September 2008, http://www.fhwa.dot.gov/policyinformation/statistics/2007/ fe9.cfm

<sup>&</sup>lt;sup>7</sup> Transportation for Tomorrow: Report of the National Surface Transportation Policy and Revenue Study Commission, December 2007, <a href="http://transportationfortomorrow.org/">http://transportationfortomorrow.org/</a> final\_report/

<sup>8 &</sup>quot;Government Panel Wants Fuel Taxes Hiked To Fund Highways", Joan Lowy, January 1, 2009, http://www.huffingtonpost.com 2009/01/01/government-panelwants-fu n 154647.html

### Federal Motor Vehicle Excise Taxes

The second most significant source of revenue for the Highway Trust Fund is a Federal excise tax on trucks and truck tires. Tax is imposed on tires sold by manufacturers, producers, or importers at the rate of 9.45¢ (4.725¢ in the case of a bias ply or super single tire) for each 10 pounds of maximum rated load capacity over 3,500 pounds. The excise tax for tractors and trucks over 33,000 pounds gross vehicle weight (GVW) and trailers over 26,000 pounds GVW is 12% of retailer's sales price. The tax also applies to parts and accessories sold in connection with the vehicle sale.9

In FY2007, these taxes fed approximately \$4.3 Highway into the Trust Fund. Approximately \$20 million originated from South Dakota.

# **Federal Heavy Vehicle Use Tax**

The final revenue source for the Highway Trust Fund derives from the Heavy Vehicle Use Tax, which is administered by the Internal Revenue Service. The tax is imposed annually on vehicles exceeding 54,000 pounds gross weight. Commercial vehicles traveling less than 5,000 miles and non-commercial vehicles traveling less than 7,500 miles annually are exempt.

The tax rate is \$100 plus \$22 per 1,000 pounds over 55,000 pounds, up to a maximum of \$550 for vehicles 75,000 pounds or heavier. The tax generated approximately \$4.9 million from South Dakota in 2007.

# **Economic Stimulus Funding**

An economic stimulus bill introduced in the House of Representatives<sup>10</sup> proposes \$150 billion for infrastructure spending, including some \$27 billion designated for highways. Presidential signature of the "American Recovery & Reinvestment Act of 2009"is expected by mid-February 2009.

The bill would require states to give priority to projects that can award contracts within 180 days of

<sup>9</sup> Highway Statistics 2007, US Department of Transportation, Federal Highway Administration, Table FE-21B, September 2008, http://www.fhwa.dot.gov/policyinformation/statistics/ 2007/fe21b.cfm

enactment and be completed within three years. Another provision would require states to award at least half of their recovery dollars to contracts within 180 days of enactment. All remaining recovery funds would have to be obligated within one year of enactment. Unused funds would be redistributed to other states that met the requirement. Funding would be eligible for capital improvement and intelligent transportation systems projects. States would not have to provide any matching dollars.

Another provision of the bill designates \$5.5 billion for projects of national significance in all surface transportation modes. Funding would be awarded competitively to projects in the \$20 to \$500 million cost range.

If the proposed legislation passes and \$27 billion of highway funding are distributed among states in the same proportion as apportionments authorized by SAFETEA-LU in FY2008, South Dakota would receive nearly \$180 million in Federal funding. However, the outcome of the proposed legislation is not yet certain (as of February 12, 2009).

Stimulus funding is envisioned as a one-time infusion to promote employment and address infrastructure needs. There is concern that, by relieving some urgent highway funding needs, it could indirectly delay the passage of the next surface transportation act.

# FUEL-BASED FUNDING MECHANISMS

The remainder of this report examines funding mechanisms either currently used or potentially usable by state and local governments in South Dakota.

The first category of funding mechanisms is based upon motor fuel use, which correlates to highway use to the extent that fuel consumption is proportional to miles traveled and generally increases with vehicle size and weight.

### State Motor Fuel Excise Tax

South Dakota has imposed a motor fuel excise tax since 1933 (Table 3). South Dakota's constitution reserves the funding for the construction and maintenance of roads<sup>11</sup>. State statute allocates the revenue to the State Highway Fund<sup>12</sup>.

<sup>&</sup>lt;sup>10</sup> H.R.1 American Recovery and Reinvestment Act of 2009 (Public Print), TITLE XII--TRANSPORTATION AND HOUSING AND URBAN DEVELOPMENT, AND RELATED AGENCIES, http://thomas.loc.gov/cgibin/query/F?c111:7:./temp/~c111HVTzfE:e1265369, February 12, 2009.

<sup>&</sup>lt;sup>11</sup>South Dakota State Constitution, Article 11, Section 8.

<sup>12</sup> SDCL 10-47B-149

Table 3: SD Motor Fuel Excise Tax (1933-present)

Year	Gasoline	Gasohol	E85	Diesel	Gasoline Pump Price
1933	4¢				
1941	Û			4¢	
1951	5¢			5¢	\$0.27
1957	6¢			7¢	\$0.31
1969	7¢			Û	\$0.35
1975	8¢			8¢	\$0.57
1979	9¢	6¢		9¢	\$0.86
1980	Û	8¢		12¢	\$1.19
1981	12¢	Û		13¢	\$1.31
1984	13¢	9¢		Û	\$1.13
1986	Û	11¢		Û	\$0.86
1988	28¢	16¢		18¢	\$0.90
1997	21¢	19¢		21¢	\$1.23
1998	18¢	16¢		18¢	\$1.06
1999	22¢	20¢		22¢	\$1.17
2000	Û	Û	10¢	Û	\$1.51
2005	Û	Û	₽	Û	\$2.30
2007	Û	Û	₽	Û	\$2.80
2008	Û	Û	Û	Û	\$3.60
2009	Û	Û	Û	Û	\$1.70

South Dakota's rate of 22¢ per gallon for gasoline and diesel fuels, which has been in place since 1999, falls midrange among state rates throughout the nation (Figure 9).

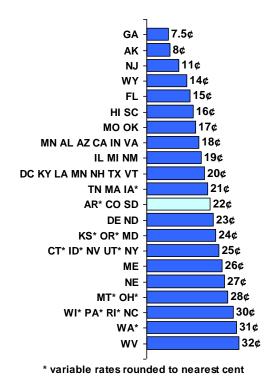


Figure 9: State Motor Fuel Tax Rates per Gallon

Like the Federal motor fuel excise tax, the state tax is limited by its fixed rate per gallon and the flat rate of fuel consumption (Table 4). Revenues have remained essentially constant since 2004.

**Table 4: SD Taxed Fuel Consumption** 

	Gasoline	Gasohol	Diesel	E85	Total	Revenue
Year		(millions o	of gallons	5)		\$ million
FY04	191.6	235.8	169.4		597.0	\$122.8
FY05	184.1	249.9	181.0	0.7	615.7	\$124.1
FY06	163.2	258.5	187.1	3.0	611.9	\$118.3
FY07	186.1	231.5	193.2	3.5	614.4	\$116.2
FY08	136.8	278.2	196.4	4.8	616.2	\$121.0

### **Local Motor Fuel Tax**

State statute permits Class 2 and Class 3 municipalities in South Dakota to impose a non ad valoreum motor fuel tax not to exceed one cent per gallon. 13 The cities can use revenues generated from the tax for road and street improvements.

Although the tax is authorized, it appears to be unused. Because South Dakota's fuel tax is assessed at the rack, collecting a tax for an individual city would require advance knowledge of the ultimate point of sale.

The amount of revenue that could potentially be generated from local motor fuel taxes depends on the volume of fuel sold within Class 2 and 3 cities. In the absence of this information, only a crude estimate is possible. If all taxed fuel sales are assumed to occur in cities and sales are assumed to be in proportion to population, 30% of statewide fuel sales can be estimated to occur in Class 2 and 3 cities. Based upon these assumptions, a 1¢ per gallon tax could have generated \$1.9 million in 2008.

### Indexed Fuel Tax

Like ordinary motor fuel excise tax, indexed fuel taxes are assessed on volume of fuel sold. The pergallon tax rate, however, is allowed to raise or fall periodically to track some indicator of highway construction and maintenance costs such as the Consumer Price Index or the Highway & Street Construction Production Price Index. Quarterly or semiannual adjustments are typical.

South Dakota does not employ an indexed tax, but the mechanism is used by Florida, Kentucky, Maine, Nebraska, and North Carolina (Table 5). In each state, only a portion of the total fuel tax is indexed. No special exemptions from the indexed tax are granted.

<sup>13</sup> SDCL 10-52-2.2

Table 5: Indexed Fuel Taxes in US

State	Indexed Portion (¢ per gallon)	Total Fuel Tax (¢ per gallon
Florida	11.6	33.2
Kentucky	10	21.1
Maine	28.4	29.9
Nebraska	13.5	26.0
North Carolina	12.35	29.9

Revenues from an indexed fuel tax tend to offset inflationary costs increases. For example, a fuel tax fully indexed to the Highway & Street Construction Production Price Index would have grown by nearly 80% during the period from 1999 to 2008, a particularly inflationary period for highway costs (Figure 10). In comparison, fixed fuel taxes lost a significant portion of their buying power. Indexed taxes do not, however, address the issue of flat or declining fuel consumption.

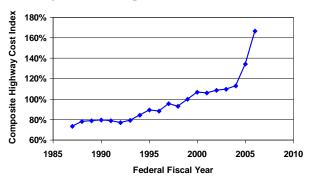


Figure 10: Composite Highway Cost Index

Adopting an indexed motor fuel excise tax in South Dakota would require periodic review and update of tax rates and corresponding modifications to tax administration systems. To minimize inconvenience to fuel suppliers, a semiannual review would be most feasible.

# **Fuel Sales Tax**

Fuel may also be taxed on the basis of purchase cost rather than quantity. South Dakota does not employ a fuel sales tax, but the mechanism is used in combination with conventional fuel tax in California, Georgia, Hawaii, Illinois, Indiana, Michigan, and West Virginia.

Tax rates vary among jurisdictions, with 4% to 8% of sale cost typical for states and 1% to 2% typical for local jurisdictions. The resulting revenue stream has been volatile in recent years, as the price of fuel climbed to nearly \$4 per gallon in 2008 and then fell to less than half that by early 2009.

If adopted in South Dakota, each 1% of sales tax would generate \$22 million annually at the \$3.60 per gallon fuel price prevalent during the fall of 2008, but only \$10 million annually at the \$1.70 per gallon fuel price prevalent in early 2009.

It would be important that the tax be defined as an excise tax (even if the rate is based upon sale price) rather than a sales tax to avoid requirements of the multi-state Streamlined Sales and Use Tax Agreement<sup>14</sup>.

# VEHICLE-BASED FUNDING MECHANISMS

Several existing or potential funding mechanisms are based primarily upon vehicle ownership rather than highway wear or fuel consumption. Although existing vehicle-based fees are not proportional to distance traveled by the vehicle, some fees depend on vehicle type and weight and thus, tie indirectly to highway use.

### **Motor Vehicle Excise Tax**

South Dakota's motor vehicle excise tax is imposed upon the sales of new and used vehicles. Fees are collected upon transfer of the vehicle title and are dedicated to the State Highway Fund by statute<sup>15</sup>.

South Dakota's tax rate—3% of the sale price—is lower than that of neighboring states (Table 6).

 State
 State Motor Vehicle Excise Tax Rate

 Iowa
 5%

 Minnesota
 6.5%

 Nebraska
 5.5% plus local taxes

 North Dakota
 5%

 South Dakota
 3%

 Wyoming
 4% – 6%, depending on vehicle type

**Table 6: Vehicle Excise Tax Rates** 

South Dakota grants numerous exemptions for the tax, including:

- vehicles that are more than 10 years old and less than \$2,200 value;
- title transfers among family members;
- sales to tribal members residing on reservations;
- purchases by vehicle rental companies.

About one-half of the 300,000 annual title transfers are not taxed because of exemptions.

Although the number of vehicles sold annually is relatively flat, the increasing unit cost of new and used vehicles produced an average annual growth

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<sup>14</sup> http://www.streamlinedsalestax.org/DOCUMENTS/ SSTUA/SSUTA%20As%20Amended%209-05-08.pdf

<sup>15</sup> SDCL 32-5B

rate of approximately 7% during the period of 1984 through 2004<sup>16</sup> (Figure 11). Approximately \$58 million were collected in FY2008.

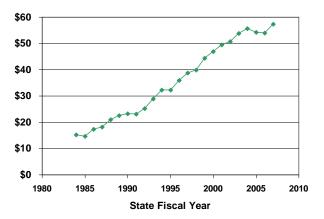


Figure 11: SD Motor Vehicle Excise Tax Revenue (\$million)

Each 1% increase in the excise tax would generate approximately \$19 million annually, assuming current exemptions and vehicle sales. Eliminating the exemption for older vehicles would generate \$2 to \$3 million annually, while applying the excise tax to all title transfers would generate \$4 to \$8 million.

Modifying the motor vehicle excise tax rates or exemptions would require changes to the tax administration system but no special technology.

# **Motor Vehicle Registration Fees**

Motor vehicle registration fees are assessed annually on the basis of vehicle class, weight, age, and use (passenger, non-commercial, commercial). Consideration of vehicle weight does not directly equate to highway wear, because fees do not depend upon distance traveled.

By statute,<sup>17</sup> vehicle registration fees are dedicated to local governments in South Dakota. County offices collect license fees for vehicles that are registered solely in South Dakota. The Department of Revenue & Regulation collects fees for interstate commercial vehicles that are registered in multiple jurisdictions under the International Registration Plan (IRP). These fees are sometimes called "prorate" because fees are prorated among states on the basis of miles traveled.

The Department of Revenue & Regulation retains a portion of vehicle registration fees for

administrative purposes in the State License Plate Revolving Fund and the State Motor Vehicle Fund. Overall, over 96% of registration fees is distributed to counties, cities, and townships (Table 7)<sup>18</sup>.

Table 7: Motor Vehicle Registration Fees (FY2007)

Revenue	Licen	se Fees	Prora	Total	
(\$ million)	\$4	47.9	\$1	\$60.6	
Distributions	State	County	State	County	Total
%	58.5%	41.5%	58.5%	41.5%	TOLAT
(\$ million)	\$28.0	\$19.9	\$ 7.4	\$ 5.2	\$60.6
State License Plate Revolving	\$ 1.2	\$ 0.0	\$ 0.1	\$ 0.0	\$ 1.3
Fund	,	,		,	, -
State Motor Vehicle Fund	\$ 1 ()	\$ 0.0	\$ 0.1	\$ 0.0	\$ 1.1
County Road & Bridge Fund		\$10.8	\$ 5.5	\$ 2.8	\$39.1
Townships	\$ 1.1	\$ 6.7	\$ 0.3	\$ 1.8	\$ 9.9
Cities	\$ 4.8	\$ 2.4	\$ 1.3	\$ 0.6	\$ 9.1

An important distinction exists between the 41.5% of the registration fees distributed by counties and the 58.5% distributed by the state. While the county portion is distributed within the county where the revenue was collected, the state portion is pooled in the Local Road and Bridge Fund and then distributed to individual counties, cities, and county township systems according to formulas fixed in statute since 1987.<sup>19</sup>

South Dakota discounts registration fees for vehicles more than 5 years old. Fees for passenger and non-commercial vehicles are reduced by 30%, <sup>20</sup> while fees for commercial vehicles are reduced by 10%. <sup>21</sup>

Registration fees for commercial and non-commercial heavy vehicles (typically agricultural vehicles) differ significantly (Figure 12). For vehicles with gross weights over 10 tons, commercial fees generally exceed 3 times those of non-commercial vehicles of the same weight. A 28-ton commercial vehicle's registration fee is nearly 6 times that of an equivalent non-commercial vehicle.

<sup>&</sup>lt;sup>16</sup> South Dakota Department of Revenue & Regulation, Division of Motor Vehicles

<sup>&</sup>lt;sup>17</sup> SDCL 32-5

<sup>&</sup>lt;sup>18</sup> South Dakota Department of Revenue & Regulation, Division of Motor Vehicles

<sup>&</sup>lt;sup>19</sup> SDCL 32-11-5

<sup>&</sup>lt;sup>20</sup> SDCL 32-5-30

<sup>&</sup>lt;sup>21</sup> SDCL 32-9-15

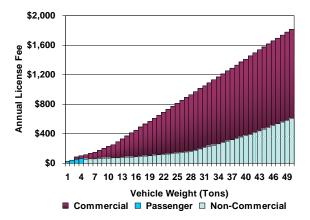


Figure 12: SD Annual Vehicle Registration Fees

Since 1997, revenue from state motor vehicle registrations have increased at an average annual rate of 5½% per year, while prorate revenues grew at about 1% per year. In FY2007, total revenues were slightly over \$60 million.

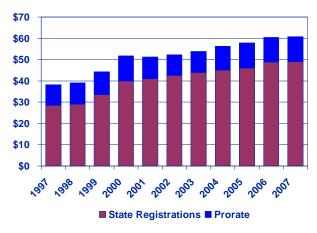


Figure 13: SD Motor Vehicle Registration Revenue (\$ million)

Several changes to vehicle registration fees could potentially increase revenues. Eliminating discounts in registration fees for older non-commercial vehicles would generate approximately \$11 million annually. Similarly eliminating discounts for older commercial vehicles would generate an additional \$2 million.

Requiring commercial registration for trucks exceeding 27 tons gross weight<sup>22</sup> would generate approximately \$9 million per year, while requiring commercial registration for all vehicles exceeding 13 tons would generate around \$15 million.

Changing motor vehicle registration fees or exemptions would require no special technology.

Changes could be accommodated within the current vehicle registration system.

### Wheel Tax

South Dakota statute authorizes counties to impose a wheel tax<sup>23</sup>. The tax, which is paid at the time of vehicle registration, is capped at a maximum of \$4 per wheel and 4 wheels per vehicle and prorated for vehicles used for only a portion of the year.

In 2008, 38 of the state's 66 counties imposed a wheel tax (Figure 14). Some imposed \$4 per wheel tax, but an equal number imposed just \$2 per wheel. A few counties imposed \$3 per wheel or a mix of rates depending on vehicle type.

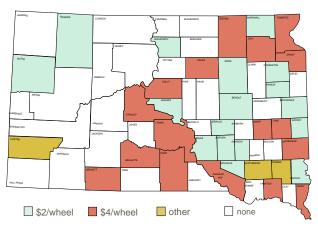


Figure 14: Wheel Taxes in South Dakota Counties

Statewide, approximately 90% of wheel tax revenue is retained by counties, while the remainder is distributed approximately equally between cities and townships<sup>24</sup> (Figure 15). Since FY2005, total wheel taxes have averaged about \$8 million annually.

Wheel tax revenues could be increased several ways. If all counties imposed the maximum wheel tax allowed by current statute, the tax would generate an additional \$4½ million annually. Increasing the maximum allowable tax by \$1 per wheel in counties that currently impose a wheel tax would generate \$2 to \$3 million per year. Removing the cap of 4 wheels per vehicle would increase revenue by an undetermined amount, and would also tie the tax rate more closely to vehicle size and weight (and indirectly to highway wear).

<sup>&</sup>lt;sup>22</sup> 54,000 pounds is the gross vehicle weight threshold beyond which the Federal government imposes the Heavy Vehicle Use Tax.

<sup>&</sup>lt;sup>23</sup> SDCL 32-5A

<sup>&</sup>lt;sup>24</sup> South Dakota Department of Transportation, Division of Finance & Management, September 2008.

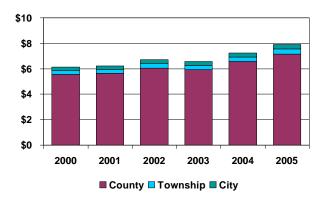


Figure 15: Wheel Tax Distribution FY2000-2005 (\$million)

Changes to wheel taxes would require not only legislation, but also adoption at the county level. Several counties have tried unsuccessfully to establish or raise wheel taxes, which are sometimes perceived as a rural/urban issue because revenue is generated from both rural and city residents but is mainly expended on rural roads. Another objection to wheel taxes is that they apply only to county residents and not to other users of the county's roads.

# PROPERTY- & SALES-BASED FUNDING MECHANISMS

Units of local government in South Dakota may also use taxes and fees associated with property and sales of goods and services to finance road and street improvements.

# **General Property Tax Assessments**

County, municipal, and townships in South Dakota are authorized to collect general property taxes and to use a portion of collected taxes to build and maintain roads and bridges.<sup>25</sup> The tax collected is included in the jurisdiction's overall mill levy cap.

Annual reports submitted by counties indicate that slightly over \$5 million of general property tax revenue is dedicated to highways annually.<sup>26</sup> Reports available for cities and townships do not specifically identify the amount of property taxes allocated to roads and streets.

Competition from the broad range of services funded by property taxes—many of which, such as law enforcement, have also experienced significant

<sup>26</sup> South Dakota Department of Legislative Audit Annual

South Dakota Department of Legislative Audit Annual Financial Report Search, <a href="http://apps.sd.gov/applications/DLASearches/countymenu.aspx">http://apps.sd.gov/applications/DLASearches/countymenu.aspx</a>

cost increases in recent years—and the freeze on property tax limit the potential for growth of this revenue source for highways.

### **Front-Foot Assessments**

Local governments in South Dakota are authorized to assess taxes in proportion to property frontage adjacent to local roads. By statute, cities may assess up to 40¢ and townships 80¢, and county road districts 75¢ per foot per year.<sup>27</sup> The city of Sioux Falls, which governs under Home Rule Charter, currently assesses \$1.00 per foot per year and anticipates annual increases.

The number of local agencies that choose to impose front-foot assessments and the amount of revenue generated could not be determined in this study. Clearly, the amount of revenue actually generated falls far short of the amount theoretically possible. Assuming that 50% of roadway mileage adjoins taxable frontage, cities could generate up to \$17 million annually, while \$191 million per year could be assessed for township and county secondary roads.

Front-foot assessments involve both technical and political challenges. Although the tax could be collected along with property tax, an accurate record of landowners' taxable frontage would be needed. Because the tax applies only to owners of property immediately adjacent to the roadway, it can be perceived as a discriminatory property tax rather than a fee that applies equitably to all road users.

### **County Road Districts**

South Dakota statute allows any area outside the boundary of any municipality to be incorporated by its landowners as a road district for the purpose of constructing and maintaining roads.<sup>28</sup> Over 180 road districts have been incorporated<sup>29</sup> (Table 8). In total, they currently expend approximately \$1.6 million annually.

Road districts assume responsibility for only the roads administered by the district, not those administered by counties or townships. A growing concern is that counties will be asked to assume responsibility for district roads as use expands to users from outside the district, traffic levels increase, and maintenance costs rise.

<sup>&</sup>lt;sup>25</sup> SDCL 10-12-9, SDCL 31-13-10

<sup>&</sup>lt;sup>27</sup> SDCL 9-45-38, 31-13-51, 31-13-17

<sup>&</sup>lt;sup>28</sup> SDCL 31-12A

<sup>&</sup>lt;sup>29</sup> South Dakota Department of Revenue & Regulation

**Table 8: County Road Districts** 

County	<b>Road Districts</b>
Charles Mix	5
Custer	numerous
Fall River	4
Hughes	4
Lake	5
Lawrence	27
Lincoln	12
Meade	25
Pennington	89
Yankton	2

# **Special Assessments**

City and county governments in South Dakota may make special assessments to recover a portion of the cost of new or replacement infrastructure. The agency publishes a list of affected property owners and their assessments, which must not exceed the private benefit resulting from the infrastructure improvement.

Although the mechanism does not generate a revenue stream for general funding of road and street improvements, it can be used to offset costs of specific projects. For new improvements, nearly complete recovery of costs is often possible because benefits can be directly associated with property owners. For replacement infrastructure, cost recovery is typically lower.

Special assessments can equitably allocate costs if the agency has a credible process for estimating private benefit, adding administrative cost. If assessments are large, property owners may find them difficult to pay and may require time to save or borrow money for payment. Developers may object to special assessments because they add to the development cost of their properties. Both classes of owners may naturally prefer that general assessments, which are paid by all, be used instead.

# **Developer Fees**

Another method of financing road and street improvements is to assess fees from developers who directly benefit. Fees can be set by ordinance or negotiated on a case-by-case basis.

Local agencies can use this mechanism broadly within their jurisdictions. For example, the City of Sioux Falls amended its ordinances in September 2008 to add an arterial street platting fee to help

finance expansion of the arterial street system.<sup>31</sup> The action of the City Council established per-acre fees for various zoning classifications, including residential, commercial, and industrial.

To be equitable, fees imposed must be commensurate with realized benefits. For example, the Sioux Falls ordinance states that fees imposed on property should not exceed a proportionate share of the costs of expanding the Arterial Street System.

The greatest potential for using developer fees to finance road improvements lies with local agencies, but state agencies could employ the mechanism for specific improvement projects if laws, policies, and procedures were developed. Projects that significantly enhance property values, such as freeway interchange additions, would be most feasible.

# **Tax Incremental Financing**

South Dakota law<sup>32</sup> authorizes municipalities and counties to create tax incremental districts to finance public improvements with anticipated tax resulting from increased property evaluation. The agency may initially finance the cost of the improvement by bonds, general revenues, or other ordinary funds.

During the finite duration of the district's existence, the municipality receives the entire portion of property tax revenues resulting from increased property evaluation within the district to offset the original expenditures. Other normal uses of those revenues are not allowed. The district is dissolved when the municipality's improvement costs have been retired.

Tax incremental districts are quite applicable at the local level. Over 180 districts have been created in South Dakota and some have already dissolved.<sup>33</sup> Although a few districts have been created to fund road and street improvements, the vast majority have been for business development.

In the long term, tax revenue may be enhanced as property values appreciate because of the financed improvements. Property appreciation is normally greater for new infrastructure than for replacement infrastructure.

<sup>&</sup>lt;sup>30</sup> SDCL 9-43, SDCL 9-45

<sup>&</sup>lt;sup>31</sup> City of Sioux Falls Council Meeting Minutes, Item 14, September 15, 2008.

<sup>&</sup>lt;sup>32</sup> SDCL 11-9

<sup>&</sup>lt;sup>33</sup> South Dakota Department of Revenue & Regulation

In the short term, tax incremental financing can limit revenues available for other governmental functions, including construction and maintenance of streets and roads. Because the portion of tax revenue attributed to enhanced property value is dedicated solely to repaying the cost of the improvement, other public purposes do not benefit.

Tax incremental financing provides an opportunity to recover public funding spent to support private development. However, creation of districts to finance improvements that would have occurred anyway unnecessarily consumes public funding. Furthermore, districts that are too large can unfairly divert tax revenues from property that has not directly benefited from the improvement. Finally, the districts can be perceived as unfair by competing businesses that have not received similar benefit.

Although state government has no authority to create a district, it could collaborate with a city or county to form one to finance a mutually beneficial project.

# **Municipal Retail Sales & Use Tax**

Any municipality in South Dakota may impose a non *ad valoreum* tax on the sale of goods and services except for the sale of motor fuels.<sup>34</sup> Local sales and use taxes must conform to the state tax except for the rate and may not exceed 2%.

Sales and use tax can be applied to road and street projects in two ways. First, the revenues can be budgeted for road and street use (although some municipalities restrict the use of the second percent of tax). Second, cities may designate a portion of the sales tax specifically. For example, the City of Sioux Falls in September 2008 added a 0.08% tax to fund the city's arterial street system.<sup>35</sup>

The tie between sales and use tax and road user benefit is indirect and economic, as street improvements improve accessibility for businesses generating the tax.

### **USE-BASED FUNDING MECHANISMS**

Another class of highway financing mechanisms attempts to directly allocate costs of providing capacity for traffic volume and weight to those who create the demand. Unlike motor fuel taxes, usebased mechanisms can maintain revenue levels in

<sup>35</sup> City of Sioux Falls Council Meeting Minutes, Item 14, September 15, 2008.

spite of increased vehicle fuel efficiency or switches to untaxed alternative fuels.

### Vehicle-Miles-Traveled Fees

In a concept receiving nationwide consideration, fees would be assessed in proportion to a vehicle's miles traveled (VMT) annually. The amount assessed per mile of travel could vary by vehicle class and, depending on the method employed to report mileage, by location and time of day or week.

The simplest implementation of a VMT fee would compare the vehicle's odometer reading at the time of registration to the reading recorded at the previous registration, and assess a fee for net miles traveled. Although different fees could be assessed for different vehicle classes (light or heavy), the rate for each class would remain constant during the entire reporting period.

A more complex system, which relies on electronic reporting of miles traveled, has been demonstrated in an Oregon pilot project<sup>36</sup> involving 285 passenger vehicles and 2 gas stations. Each vehicle used Global Positioning System (GPS) technology (Figure 16) to track the number of miles traveled within defined use zones and congestion time periods.



Figure 16: GPS Antenna on Oregon Vehicle

Fees of  $1.2\phi$  per mile for normal travel and  $10.0\phi$  per mile for rush-hour periods in metropolitan Portland were assessed at specially equipped fuel pumps in lieu of normal fuel taxes. Based on the results of the pilot project, the governor of Oregon

<sup>34</sup> SDCL 10-52-2

<sup>&</sup>lt;sup>36</sup> Oregon's Mileage Fee Concept and Road User Fee Pilot Program, Final Report, Oregon Department of Transportation, November 2007.

in December 2008 announced his intent to seek adoption of the fee<sup>37</sup>.

The revenue generation potential of a VMT fee in South Dakota would depend upon the per-mile fees established for passenger and other vehicles. At current levels of travel for all vehicles combined, each cent per mile imposed in South Dakota would generate approximately \$92 million per year. If all vehicles were assessed the  $1.2\varphi$  per mile fee now proposed for adoption in Oregon, \$110 million would be generated annually.

Several concerns surround VMT fees:

- mechanical and electronic vehicle odometers can be altered to under-report miles traveled;
- personal privacy is a concern with GPS-aided reporting, even though actual times and locations of travel are not retained by the recording units;
- initial deployment costs for automated reporting are estimated at \$100 per vehicle and \$200 per gas pump, plus the cost of modifications to pump billing systems;
- operation and administrative costs for automated systems can be significant (\$1.6 million per year estimated in Oregon);
- the need to tax out-of-state vehicles and the long periods needed to retire vehicle fleets will require maintenance of conventional fuel taxes long after adoption of VMT fees.

Adopting VMT fees in South Dakota could require creation of entirely new collection mechanisms. While fees derived from odometer readings would be relatively easy to add to the current vehicle registration process, automated collection would require a substantial investment in technology.

### **Weight-Distance Fees**

Several states assess weight-distance fees for heavy vehicles (Figure 17). Like VMT fees, weight-distance fees are assessed on the basis of distance traveled, but also depend upon registered vehicle weight and, in some instances, commodity hauled. Light trucks are sometimes exempted (Table 9). Fees are assessed in addition to applicable fuel taxes.

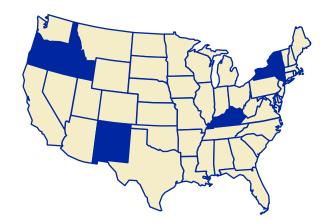


Figure 17: States with Weight-Distance Fees
Table 9: Weight-Distance Fee Rates & Exemptions

State	Rates	Exemptions
Idaho	2-17¢ per mile	Raw commodities exempt
Kentucky	2.85¢ per mile	<60,000 pounds exempt
New Mexico	1-4¢ per mile	<26,000 pounds exempt
New York	1-6¢ per mile	<18,000 pounds exempt
Oregon	4-13¢ per mile	2-axle trucks exempt

South Dakota does not impose weight-distance fees, but at current traffic levels  $1\phi$  per mile traveled by all heavy trucks would generate about \$6.5 million annually. If rates varied by vehicle weight, the amount generated would depend upon the specific rate schedule adopted.

Because freight traffic is expected to continue growing in the foreseeable future, a weight-distance fee could be expected to provide a stable or increasing revenue stream. However, rate adjustments to offset inflation would require legislation or administrative rule changes.

Adopting weight-distance fees would require little technology if owners self-reported mileage at the time of vehicle registration. Such reporting is already done by interstate carriers, and could be extended to intrastate haulers. Electronically monitoring truck traffic would require extensive roadside hardware at an estimated cost of \$100,000 per location.

Nationally, the trucking industry has vigorously opposed weight-distance fees.

# **Overweight Vehicle Penalties**

Under South Dakota statute<sup>38</sup> violators of vehicle weight laws are assessed fines and civil penalties. To deter overweight hauling, the civil penalty schedule targets severely overweight vehicles

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<sup>&</sup>lt;sup>37</sup> "Kulongoski to Pursue Mileage Tax", Albany Democrat-Herald, December 12, 2008. <u>http://www.dhonline.com/</u> <u>articles/2008/12/28/news/local/1aaa02\_road.txt</u>

<sup>38</sup> SDCL 32-22

(Table 10). The civil penalty is imposed for all pounds in excess of legal weight; for example, a vehicle overweight by 6,000 pounds is assessed  $37.5\phi$  per pound for all 6,000 pounds.

**Table 10: Civil Penalties for Overweight Vehicles** 

Pounds Overweight	Civil Penalty
1,001 – 3,000	5 ¢ per pound
3,001 – 4,000	15 ¢ per pound
4,001 - 5,000	22.5 ¢ per pound
5,001 – 10,000	37.5 ¢ per pound
Over 10,000	75 ¢ per pound

In South Dakota, fines and civil penalties for overweight vehicles flow to the school district in which the violation occurred. Revenue thus concentrates at school districts in which ports of entry and other weight enforcement facilities exist, and revenues do not offset the cost of infrastructure damage due to overweight loads.

Dedicating revenue from fines and penalties to state or local highway departments would generate about \$1 million annually at current levels of violation and enforcement activity. Future revenues would depend on trends in violation rates and enforcement intensity.

Enforcement costs include staffing and the purchase and maintenance of enforcement scales. The value of deterring overweight vehicles and resulting road damage exceeds the direct value of revenue generation from fines and civil penalties.

### Tolls

Tolls involve the direct charge for use of discreet highway segments. Tolls can be collected manually at toll booths or electronically by reading vehiclemounted transponders. Toll levels can vary by vehicle class, time of day or week, and user type to correspond to user benefits or agency costs. Preferential pricing can be granted for high-occupancy vehicles or off-peak travel. Toll rates for rural highways in the United States typically vary from  $2\phi$  to  $12\phi$  per mile for passenger vehicles to  $5\phi$  to  $50\phi$  per mile for 5-axle trucks.

Tolls are most feasible on highways with high traffic volumes and controlled roadway access, but traffic levels prevalent in South Dakota limit their applicability. For example, traffic levels range between 4,000 and 12,000 vehicles per day on most of Interstate 29 and exceed 20,000 only in the immediate Sioux Falls area, compared to 30,000 to 65,000 on the Pennsylvania Turnpike, a well-known toll facility. If traffic levels continue to increase,

and if automated toll collection technology becomes more economical, tolling on some sections of South Dakota's Interstate system could become economically feasible within ten to fifteen years. A toll of at least  $7\phi$  per mile per vehicle would be needed to offset the cost of highway use and toll collection on even the most favorable segments.

No statutory authority exists for tolling in South Dakota, except for local bridges at state borders. In other states, significant opposition has arisen to tolls out of concern that the public "pays twice" for highways through taxes and tolls. Tolls and congestion pricing can be perceived as regressive, in that less affluent are less able to pay for essential travel. A final concern is that tolls can divert traffic to parallel routes that are less able to carry heavy traffic or loads.

# FINANCIAL MANAGEMENT MECHANISMS

In addition to revenue-generating mechanisms, several means exist to efficiently manage available funding for highway purposes.

# **Bonds**

Bonding involves the borrowing of funds to finance highway improvements. Several types are available:

- General Obligation Bonds guarantee repayment from any legally available resources, including tax revenues.
- Revenue Bonds guarantee repayment through a contract with a specified revenue-generating entity like a tolling authority or public-private partnership.
- Grant Anticipation Revenue Vehicle (GARVEE) Bonds, also called Grant Anticipation Notes, guarantee repayment from future Federal aid. They do not, however, constitute a legal obligation by the Federal government to repay.
- The *Transportation Infrastructure Finance & Innovation Act of 1998 (TIFIA)* established a Federal credit program for eligible transportation projects of national or regional significance that could generate their own revenue streams (for example, through tolling). Three forms of credit assistance—secured loans, loan guarantees, and standby credit lines—were authorized. The goals of the program are to leverage Federal funding by attracting private and other investment in critical transportation improvements. Loan rates are based on the investment grade rating of the

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<sup>&</sup>lt;sup>39</sup> SDCL 31-15

recipient, which may be a state transportation department, local government, transit operator, special authority, or private entity.

While not a true funding source, bonding can provide funds for immediate use under appropriate financial conditions. If the cost of interest and bond administration is less than the rate of inflation in highway construction costs, bonding can be economically advantageous. Because bonds must be repaid, their use tends to be reserved for economically viable investments. Sound benefit-cost ratio for the project being financed, positive return on investment, and reliable revenue streams for repayment are of utmost importance to successful bonding.

Bonding also involves several risks and potential disadvantages:

- interest and bond administration costs consume a portion of available financial resources;
- unexpected cost escalations can jeopardize project delivery;
- investment risk depends on the ability to accurately forecast inflation and revenue streams, which can be vulnerable to national and global influences;
- excess reliance on bonding can over-commit future budgets, limiting flexibility and capacity to address ongoing needs;
- bonding imposes a debt burden on future highway owners and users;
- defaults on repayment damage agency credit ratings.

Although local governments may issue bonds in South Dakota, the state constitution restricts bonding for state highways. The South Dakota Supreme Court held that a 1977<sup>40</sup> law to create a bonding authority for highway bridge repair was unconstitutional because using highway funds for interest payments and bond administration is not allowed under the Article 11, Section 8 of the constitution. Because the constitution requires that vehicle and fuel taxes be used exclusively for the maintenance, construction, and supervision of highways and bridges, bonding costs are not an appropriate use of highway funds. Such costs

<sup>40</sup> Opinion of the Supreme Court, 257 NW2d 442 (SD 1977) Relative to the Constitutionality of Chapter 239, Session Laws of 1977 (SDCL 31-4A).[257 NW2d 442], South Dakota Supreme Court Original Proceeding #12304, August 26, 1977. would presumably have to be paid with other funding sources.

# **Public Private Partnerships**

An emerging concept for financing highway facilities is public-private partnership, in which government agency leases a highway facility to a private builder or operator. In return for lease payment the private entity is granted the authority to toll the facility and the responsibility to maintain and operate it over the life of the lease. During the past two years, officials of the US Department of Transportation have promoted public-private partnerships as an alternative to fuel tax increases.

This concept has not been employed in South Dakota, but it has been adopted or considered in other locations throughout the United States. The Chicago Skyway Bridge, a 7.8-mile toll road built in 1958 to connect the Dan Ryan Expressway to the Indiana Toll Road, was leased for a period of 99 years beginning in 2005 to a consortium of Cintra of Spain and Macquarie of Australia for \$1.8 billion. The same consortium paid Indiana \$3.8 billion for a 75-year lease of the 157-mile Indiana Tollway carrying Interstate 80.

Government agencies may choose to use lease payments to finance other transportation projects or (as in the case of the Chicago Skyway) use the revenue for entirely different purposes.

Public-private partnerships have been controversial where they have been adopted. Public concerns have included the potential for significant toll increases, the quality of highway maintenance during the lease period, and the resulting condition of the facility at the end of the lease period. In some instances, government agencies have had to agree to "non-compete" clauses that constrain their ability to improve capacity on parallel non-tolled routes.

The potential for public-private partnerships in South Dakota is and will remain limited due to low traffic volumes and attendant revenue streams.

### **SUMMARY AND CONCLUSIONS**

Funding state and local highways in South Dakota is accomplished through a combination of Federal, state, and local funding mechanisms. Revenues for state highways derive heavily from the Federal Highway Trust Fund, which is based primarily on the Federal Motor Fuel Excise Tax. The state motor fuel excise tax and motor vehicle excise tax generate funding required to match federal funds

Table 11: Summary of State & Local Funding Alternatives

		Sta	ite	Loc	cal		
Basis	Alternative	Allowed	Used	Allowed		Potential Change	Estimated Revenue
	Motor Fuel Excise Tax	✓	✓			Raise current per gallon rate	\$5.7 million per ¢ per gallon
Fuel	Indexed Fuel Tax					Index tax to highway cost index	\$5.7 million per ¢ per gallon
ruei	Fuel Sales Tax					Impose state fuel sales tax	\$22 million per % tax
	Local Motor Fuel Tax			✓		Apply in Class 1 & Class 2 cities	\$2 million per ¢ per gallon
						Raise current excise tax	\$19 million per % tax
	Vehicle Excise Tax	✓	$\checkmark$			Remove old vehicle exemption	\$2-3 million
						Remove title transfer exemptions	\$4-8 million
						Increase registration fee	\$1 million per \$1 increase
						Remove old vehicle exemption	\$13 million
Vehicle	Vehicle Registration			✓	✓	Require commercial licensing for vehicles >54,000 lbs.	\$9 million
						Require commercial licensing for vehicles >26,000 lbs.	\$15 million
						Expand \$4 per wheel to all counties	\$4.5 million
	Wheel Tax			✓	$\checkmark$	Increase per-wheel tax	\$2 million per \$1 increase
						Impose tax on all vehicle wheels	(not quantified)
	General Property Tax			✓	✓	Allocate property tax revenues for road maintenance & improvements	(not quantified)
	Front Footage			✓	✓	Assess adjacent landowners for road maintenance & improvements	\$200 million
Property	Road Districts			✓	✓	Establish road districts to finance newly developed roads	(not quantified)
	Special Assessments			✓	✓	Assess property owners benefiting from road improvements	(not quantified)
	Tax Incremental Financing			✓	✓		(not quantified)
	Developer Fees			✓	✓	Establish fees to finance roads	(not quantified)
Sales	Municipal Sales & Use Tax			✓	✓	Dedicate portion of tax for road and street use	(not quantified)
	Vehicle Miles Traveled					Establish vehicle miles traveled fee	\$92 million per ¢ per mile traveled
Highway Use	Truck Weight-Distance					Establish truck miles traveled fee	\$6 million per ¢ per mile traveled
	Overweight Penalties					Use penalties to offset road damage	\$1 million
	Tolls					Impose tolls on highway segments	(not quantified)
	Bonds			✓	✓	Finance road improvements	(not quantified)
Finance	Public-Private Partnerships					Lease highway segments to private operators	(not quantified)

and to pay for maintenance and other activities ineligible for federal funding.

Local roads in South Dakota are funded primarily by motor vehicle registration fees, county wheel taxes, property taxes, and some grants provided by the state transportation department. Although state statute authorizes other assessments for road purposes, local agencies often lack the support to impose them.

At both the state and local level, revenue streams have been flat or declining in recent years. A major concern is the declining use of motor fuel and the resulting decline in state and Federal motor fuel excise taxes that fund state highways. At the same time, costs of highway construction and

maintenance have risen dramatically since 2003. The combination of flat or declining revenues and higher costs has forced state and local agencies to postpone essential highway construction and maintenance activities.

At the Federal level, the most likely short-term solution for funding highways will be an increase in the Federal Motor Fuel Excise Tax. In the longer term, fees that are more directly related to road use (such as mileage fees or tolls) may emerge, depending on public acceptance and the development of technology.

At the state and local level, additional funding could potentially be realized though a combination of changes—such as rate increases and reduced exemptions—to existing funding mechanisms. One mechanism receiving attention recently is the imposition of developer fees that offset the cost of providing access to commercial, residential, and commercial developments.

Table 11 summarizes all of the state and local funding mechanisms—existing and alternative—evaluated in this study. The table groups the mechanisms by basis (fuel, vehicle, property, highway use, etc.) and lists whether each mechanism is currently used for state and local roads. Finally, the table lists possible changes to each mechanism and, where possible, estimates the resulting revenue.

### **ACKNOWLEDGEMENTS**

This work was performed under the direction of a project panel of representatives of the South Dakota Department of Transportation and other state and Federal agencies (Table 12).

**Table 12: Project Technical Panel** 

Panel Member	Organization
Kellie Beck	SDDOT Division of Finance & Management
Jon Becker	SDDOT Research
Darin Bergquist	SDDOT Office of the Secretary
Dale Bertsch	Office of the Governor
Tim Bjorneberg	SDDOT Project Development
Debra Hillmer	SD Department of Revenue & Regulation
Rocky Hook	SDDOT Transportation Inventory Management
Bruce Hunt	Federal Highway Administration
Ben Orsbon	SDDOT Office of the Secretary
Chris Ott	SDDOT Division of Finance & Management
Hal Rumpca	SDDOT Research
Kevin Tveidt	SDDOT Office of the Secretary
Steve Willard	Highway Users Group

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