NORTH DAKOTA SYMPOSIUM ON TRANSPORTATION FUNDING

Transportation Funding Options

Analysis and Preparation by

North Dakota Department of Transportation (NDDOT)

Upper Great Plains Transportation Institute (UGPTI)

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CONTENTS

Fuel Tax			
Overview	Description	A per gallon tax levied by the state at the point of fuel purchase.	
	Current Use	All states and the federal government collect a fuel tax. Several states recently introduced periodical tax rate adjustments based on inflation or the Consumer Price Index. Other fuel taxes include a nationwide, fixed (18.4¢/gal) federal tax and local fuel taxes collected by selected counties and cities. ND legislation authorizes local fuel taxes, but they have not been adopted by any of the jurisdictions thus far.	
	Peer States	State / Per Gallon / Rank ND $ 0.230 35 MN $ 0.286 20 WI $ 0.329 11 SD $ 0.300 16 NE $ 0.293 19 IA $ 0.305 15 MT $ 0.315 12 ID $ 0.330 10	
	Geographic Scope	Statewide	
Viability	Revenue Potential	+	High: All users are charged. ND currently collects approximately $170 million annually from the fuel tax. A 1¢ increase in the gas tax would yield approximately $8 million in revenue.
	Implementation Complexity	+	Minimal: Fuel tax is already collected by the state. A change to the current rate could be implemented easily from a technical and administrative standpoint.
	Public Awareness (perception)	+	In use: All highway users currently pay fuel tax. The current rates are posted at the pump and are clearly visible to consumers.
Sustainability	Increases in Fuel Economy/Alternative Fuels	-	Reduction in fuel consumption as a result of increased fuel economy and utilization of hybrid/electric vehicles would have a negative impact on fuel tax revenue.
	Fuel Price Volatility	Ø	Higher fuel prices could lower the quantity demanded for fuel, reducing fuel tax revenues. However, scholarly studies show that consumer responsiveness to changes in fuel price are low.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Fuel Sales Tax			
Overview	Description	A percent tax levied by the state at the point of fuel purchase.	
	Current Use	Fuel sales taxes are levied in CA, CT, HI, IL, IN, MI and NY. Rates range from 2% to 9%.	
	Peer States	Fuel sales taxes are not levied in surrounding states.	
	Geographic Scope	Statewide	
Viability	Revenue Potential	+	High: Is a function of the amount of fuel and the price at the time of purchase.
	Implementation Complexity	+	Moderate: Fuel sales tax collection at the point of sale (e.g. Gas Stations) may require additional administrative or resource usage. Non-fuel sales taxes are currently collected.
	Public Awareness (perception)	+	Sales taxes are currently in use for non-fuel purchases, so in that aspect the public is familiar with the process.
Sustainability	Increases in Fuel Economy/Alternative Fuels	-	Higher fuel economy and adoption of electric and electric hybrid vehicles reduces fuel consumption and therefore fuel sales tax revenues.
	Fuel Price Volatility	+	Higher fuel prices could lower the quantity demanded for fuel, but scholarly studies show that consumer responsiveness to changes in fuel price are low. As the tax is based upon fuel price, increases in fuel prices will result in higher tax revenue.

(+) Positive/High (-) Negative/Low (Ø) Neutral

<table>
<tr><th colspan="5">Non-Fuel Sales Tax (Goods and Services)</th></tr>
<tr><td rowspan="4">Overview</td><td>Description</td><td colspan="3">A percent tax charged on goods and services</td></tr>
<tr><td>Current Use</td><td colspan="3">All states, with few exceptions, have a statewide sales tax and additional city, county and local sales taxes. North Dakota currently has a 5% sales tax rate with 1%-2% city or local levies. Many state and local jurisdictions dedicate a portion of sales taxes for specific purposes, though not expressly transportation needs.</td></tr>
<tr><td>Peer States</td><td colspan="3"><table>
<tr><th>State</th><th>State Sales Tax</th><th>Combined State and Local Tax (Average)</th></tr>
<tr><td>ND</td><td>5.0%</td><td>6.78%</td></tr>
<tr><td>MN</td><td>6.875%</td><td>7.3%</td></tr>
<tr><td>WI</td><td>5.0%</td><td>5.42%</td></tr>
<tr><td>SD</td><td>4.5%</td><td>6.39%</td></tr>
<tr><td>NE</td><td>5.5%</td><td>6.89%</td></tr>
<tr><td>IA</td><td>6.0%</td><td>6.8%</td></tr>
<tr><td>MT</td><td>None</td><td>None</td></tr>
<tr><td>ID</td><td>6.0%</td><td>6.03%</td></tr>
</table></td></tr>
<tr><td>Geographic Scope</td><td colspan="3">Statewide or Local</td></tr>
<tr><td rowspan="3">Viability</td><td>Revenue Potential</td><td>+</td><td>High: In 2016, ND collected approximately $1.5 billion from state sales tax. A 0.1% increase dedicated to highway needs could yield up to $30 million in revenue.</td></tr>
<tr><td>Implementation Complexity</td><td>+</td><td>Minimal: Sales taxes are collected at the point of sale. Changes in the percentage rate would require minimal administrative or implementation resources.</td></tr>
<tr><td>Public Awareness (perception)</td><td>+</td><td>In use: Consumers currently pay sales taxes and local increases are often approved at city and local levels if well-justified.</td></tr>
<tr><td rowspan="2">Sustainability</td><td>Increases in Fuel Economy/Alternative Fuels</td><td>Ø</td><td>There is no relationship between fuel economy and sales tax receipts.</td></tr>
<tr><td>Fuel Price Volatility</td><td>Ø</td><td>Higher fuel prices could negatively impact consumer activity, and therefore reduce sales tax revenue. The scale of the impact is unknown.</td></tr>
</table>

(+) Positive/High (-) Negative/Low (Ø) Neutral

<table>
<tr><th colspan="5">Vehicle Sales Excise Tax (State)</th></tr>
<tr><td rowspan="4">Overview</td><td>Description</td><td colspan="3">A percent tax charged on the purchase of a new or used vehicle</td></tr>
<tr><td>Current Use</td><td colspan="3">With a few exceptions, state laws treat vehicle excise tax in the same manner as any other sales tax. Distribution of vehicle excise tax varies from state to state and is either directed to general funds, transportation funding or in varied proportions. In North Dakota, 91.3% of the excise tax is distributed to the general fund and the remainder distributed across local jurisdictions.</td></tr>
<tr><td>Peer States</td><td colspan="3"><table>
<tr><th>State</th><th>Tax Rate</th><th>% to Trans. or Yes/No to Trans.</th></tr>
<tr><td>ND</td><td>5.0%</td><td>No – Not since 1970's & 10% in 2007</td></tr>
<tr><td>MN</td><td>6.5%</td><td>Yes, min. 40% goes to transit, rest to the highway fund</td></tr>
<tr><td>WI</td><td>5.0%</td><td>No</td></tr>
<tr><td>SD</td><td>4.0%</td><td>Yes</td></tr>
<tr><td>NE</td><td>5.5%</td><td>Yes</td></tr>
<tr><td>IA</td><td>5.0%</td><td>Yes</td></tr>
<tr><td>MT</td><td>None</td><td>N/A</td></tr>
<tr><td>ID</td><td>6.0%</td><td>No</td></tr>
</table></td></tr>
<tr><td>Geographic Scope</td><td colspan="3">Statewide</td></tr>
<tr><td rowspan="3">Viability</td><td>Revenue Potential</td><td>+</td><td>High: Total value of vehicle transactions in ND is approximately $2.1 billion per year (2016). A minor increase of the tax could generate substantial revenue.</td></tr>
<tr><td>Implementation Complexity</td><td>+</td><td>Minimal: Vehicle excise tax is already collected at the state level. A simple change in the current tax rate would require minimal administrative or resource requirements. To direct a portion of the distribution to highway improvements, changes to the ND Century Code would be required.</td></tr>
<tr><td>Public Awareness (perception)</td><td>+</td><td>In use: Consumers currently pay vehicle excise tax. However, the excise tax may be obscured through the taxes and fees surrounding vehicle purchase.</td></tr>
<tr><td rowspan="2">Sustainability</td><td>Increases in Fuel Economy/Alternative Fuels</td><td>Ø</td><td>No direct significant relationship.</td></tr>
<tr><td>Fuel Price Volatility</td><td>Ø</td><td>Long term higher fuel prices could result in reduced vehicle ownership, though the impact may be minimal.</td></tr>
</table>

(+) Positive/High (-) Negative/Low (Ø) Neutral

<table>
<tr><th colspan="4">Vehicle Sales Excise Tax (Local)</th></tr>
<tr><td rowspan="4">Overview</td><td>Description</td><td colspan="2">A percent tax charged on the purchase of a new or used vehicle</td></tr>
<tr><td>Current Use</td><td colspan="2">Throughout the nation, cities and local jurisdictions may impose vehicle sales taxes, depending on state laws.</td></tr>
<tr><td>Peer States</td><td colspan="2"><table>
<tr><th>State</th><th>City/Local Taxes?</th></tr>
<tr><td>ND</td><td>None</td></tr>
<tr><td>MN</td><td>None</td></tr>
<tr><td>WI</td><td>Yes</td></tr>
<tr><td>SD</td><td>None</td></tr>
<tr><td>NE</td><td>Yes, up to 2.0%</td></tr>
<tr><td>IA</td><td>None</td></tr>
<tr><td>MT</td><td>None</td></tr>
<tr><td>ID</td><td>None</td></tr>
</table></td></tr>
<tr><td>Geographic Scope</td><td colspan="2">City or County Level</td></tr>
<tr><td rowspan="3">Viability</td><td>Revenue Potential</td><td>+</td><td>High: Total value of vehicle transactions in ND is approximately $2.1 billion per year (2016). A minor increase of the tax could generate substantial revenue, depending on the city or county where the purchase occurred.</td></tr>
<tr><td>Implementation Complexity</td><td>+</td><td>Varied: Vehicle excise tax is already collected at the state level. Sales taxes are collected at the state, city and county levels. Additional collection activities would be required to expand vehicle excise taxes for local jurisdictions where they do not currently exist.</td></tr>
<tr><td>Public Awareness (perception)</td><td>+</td><td>In use: Consumers currently pay state vehicle excise tax. Local vehicle sales taxes would be driven by county and city commissions. However, the excise tax may be obscured through the taxes and fees surrounding vehicle purchase.</td></tr>
<tr><td rowspan="2">Sustainability</td><td>Increases in Fuel Economy/Alternative Fuels</td><td>Ø</td><td>No direct significant relationship.</td></tr>
<tr><td>Fuel Price Volatility</td><td>Ø</td><td>Long term higher fuel prices could result in reduced vehicle ownership, though the impact may be minimal.</td></tr>
</table>

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Mill Levies (Property Tax)			
Overview	Description	Mill levies are property taxes collected by state, county, city, local and township jurisdictions. One mill equals 1/1000 of the taxable property value.	
	Current Use	Property taxes are levied by all jurisdictions and vary on a case-by-case basis. They are commonly allocated to local infrastructure projects, transportation improvements, and school districts among other local needs.	
	Peer States	Property taxes are levied in all peer states and vary on a jurisdictional level on a case-by-case basis. State mills are insignificant (as in the case of ND) or do not exist at all. States typically do not collect property tax dedicated to infrastructure at the state level.	
	Geographic Scope	Primarily County or Local	
Viability	Revenue Potential	+	High: Property taxes are paid by all residents and for-profit businesses
	Implementation Complexity	+	Minimal: Jurisdictions that currently collect property taxes would require minimal administrative or implementation resources.
	Public Awareness (perception)	-	In use: Property taxes are currently paid by home and business owners in the state and may represent a substantial portion of household budgets. Recent property tax increases have been met with significant resistance from the citizenry.
Sustainability	Increases in Fuel Economy/Alternative Fuels	Ø	Property tax receipts have no relationship to fuel economy.
	Fuel Price Volatility	Ø	Property tax receipts have no relationship to fuel prices.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Special Tax Assessments			
Overview	Description	Special assessments are additional property taxes, levied to fund a specific public investment.	
	Current Use	All municipalities, counties and townships in North Dakota have the power to make special assessments. Usage and scope of those assessments varies on a case-by-case basis in each jurisdiction. Special assessments are commonly found in new urban developments. Another common example is funding a street repair by assessing residents along the street.	
	Peer States	Special assessments are authorized within all of the peer states. The character of those assessments varies on a case-by-case basis in each local jurisdiction.	
	Geographic Scope	Local	
Viability	Revenue Potential	-	Low: Special assessments are used for specific, local infrastructure projects and not general revenue generation.
	Implementation Complexity	+	Minimal: The administrative procedures already exist, as special assessments are common in ND cities.
	Public Awareness (perception)	-	In use: Home and business owners may currently be subject to special assessments. As with general property taxes, public sentiment is not positive.
Sustainability	Increases in Fuel Economy/Alternative Fuels	-	Property tax receipts have no relationship to fuel economy.
	Fuel Price Volatility	Ø	Property tax receipts have no relationship to fuel prices.

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Wheelage Tax			
Overview	Description	A flat rate fee levied on vehicles registered in a county.	
	Current Use	Widespread use nationwide. Wheelage taxes are assessed at the same time as vehicle registration and the funds are distributed to counties. Vehicles such as motorcycles, motorized bicycles, trailers and mopeds are typically exempt.	
	Peer States	Currently used in 53 of 87 counties in Minnesota. Initial fees were $5, but currently vary from $10 to $20 per vehicle depending on county. South Dakota rates vary from $2-$5 based upon vehicle weight and county with maxmimum wheel taxes specified by county.	
	Geographic Scope	County	
Viability	Revenue Potential	+/-	Potential revenue varies by county. As of December 2015, FHWA estimates roughly 800,000 vehicles privately or commercially owned in the state. A $10 wheelage tax would result in $8 million annually.
	Implementation Complexity	+	Registration fees are already collected by the state. County of registration information is also collected as part of vehicle registration.
	Public Exposure	Ø	Registration fees are currently accepted. The wheelage tax, appropriated to local infrastructure may be deemed acceptable.
Susceptibility	Increases in Fuel Economy/Alternative Fuels	Ø	Flat fee applied consistently regardless of fuel efficiency or technology.
	Fuel Price Volatility	Ø	Flat fee applied consistently regardless of fuel efficiency or technology.

(+) Positive/High (-) Negative/Low (Ø) Neutral

<table>
<tr><th colspan="4">Oil / Energy Tax</th></tr>
<tr><td rowspan="4">Overview</td><td>Description</td><td colspan="2">Tax charged on the value on fossil fuels and minerals extracted and/or processed within the state.</td></tr>
<tr><td>Current Use</td><td colspan="2">39 out of 50 states currently impose some form of tax on extracting natural resources, including oil, natural gas, and coal. In North Dakota, the oil tax accounts for a significant portion of the state’s revenues. The oil tax revenue is used for common state expenditures, including transportation infrastructure.</td></tr>
<tr><td>Peer States</td><td colspan="2"><table>
<tr><td>State</td><td>Tax rates</td></tr>
<tr><td>ND</td><td>5% tax for oil, $.04/1,000 cu. ft. for gas, $0.4/ton for coal.</td></tr>
<tr><td>MN</td><td>$2.56 per ton for iron. No oil tax.</td></tr>
<tr><td>WI</td><td>7% tax for oil, 3-15% tax for metals</td></tr>
<tr><td>SD</td><td>4.5% + 2.4 mills on all minerals</td></tr>
<tr><td>NE</td><td>2-3% tax for oil, 2% tax for uranium</td></tr>
<tr><td>IA</td><td>none</td></tr>
<tr><td>MT</td><td>0.3% tax on oil, 3-15% tax on coal</td></tr>
<tr><td>ID</td><td>5 mills/bbl. of oil and 5 mills/50,000 cu. ft. of gas, additionally 2.5% oil production tax.</td></tr>
</table></td></tr>
<tr><td>Geographic Scope</td><td colspan="2">Statewide</td></tr>
<tr><td rowspan="3">Viability</td><td>Revenue Potential</td><td>+</td><td>Very high. The 2017-19 Biennium budget projects collecting approx. $3 billion in oil tax with the oil price assumed at a conservative level of $48/barrel.</td></tr>
<tr><td>Implementation Complexity</td><td>+</td><td>The oil and coal taxes are already collected by the state. Tax rate increase should be easy to implement from the administrative standpoint.</td></tr>
<tr><td>Public Awareness (perception)</td><td>Ø</td><td>The general public is supposed to support the idea that the state should benefit from its natural resources exploitation. However, any tax increase would be heavily opposed by the oil companies.</td></tr>
<tr><td rowspan="2">Sustainability</td><td>Increases in Fuel Economy/Alternative Fuels</td><td>Ø</td><td>Increase in fuel economy could reduce oil demand. However, oil is also utilized for other purposes, and could be exported to foreign countries with less developed alternative technologies.</td></tr>
<tr><td>Fuel Price Volatility</td><td>+</td><td>Higher fuel prices are caused primarily by higher crude oil prices on the global market. Subsequently, the energy tax revenue should increase along with fuel price.</td></tr>
</table>

(+) Positive/High (-) Negative/Low (Ø) Neutral

<table>
<tr><th colspan="4">Vehicle Registration (Current)</th></tr>
<tr><td rowspan="4">Overview</td><td>Description</td><td colspan="2">Vehicle registration fees are a per-vehicle charge assessed annually on all privately owned vehicles.</td></tr>
<tr><td>Current Use</td><td colspan="2">All states charge a vehicle registration fee. The fees are based upon multiple factors such as: vehicle age, weight, value and type. North Dakota bases vehicle registration based upon weight and age.</td></tr>
<tr><td>Peer States</td><td colspan="2">Due to varying fee formulas across the peer states, comparison was made for three sample vehicles:
<table>
<tr><td>Car</td><td>4-door sedan</td><td>Open-box 2-door pickup</td><td>4-door SUV</td></tr>
<tr><td>Year</td><td>2017</td><td>2012</td><td>2007</td></tr>
<tr><td>Weight</td><td>3199 lb.</td><td>5500 lb.</td><td>6100 lb.</td></tr>
<tr><td>Initial value</td><td>$24,000</td><td>$29,000</td><td>$38,000</td></tr>
<tr><td>Current value</td><td>$20,000</td><td>$12,000</td><td>$10,000</td></tr>
<tr><td>ND</td><td>$73</td><td>$65</td><td>$117</td></tr>
<tr><td>MN</td><td>$236</td><td>$71</td><td>$35</td></tr>
<tr><td>WI</td><td>$75</td><td>$75</td><td>$75</td></tr>
<tr><td>SD</td><td>$72</td><td>$108</td><td>$100</td></tr>
<tr><td>NE</td><td>$342</td><td>$234</td><td>$99</td></tr>
<tr><td>IA</td><td>$252</td><td>$312</td><td>$215</td></tr>
<tr><td>MT</td><td>$217</td><td>$87</td><td>$28</td></tr>
<tr><td>ID</td><td>$69</td><td>$57</td><td>$45</td></tr>
</table></td></tr>
<tr><td>Geographic Scope</td><td colspan="2">Statewide</td></tr>
<tr><td rowspan="3">Viability</td><td>Revenue Potential</td><td>+</td><td>High: All private users are required to pay. Currently approximately $100 million is collected annually in North Dakota.</td></tr>
<tr><td>Implementation Complexity</td><td>+</td><td>Minimal: Changes to the registration fee system based upon current factors (age and weight) would require minimal administrative effort.</td></tr>
<tr><td>Public Awareness (perception)</td><td>+</td><td>In use: All users currently pay vehicle registration. Users may pay registration fees on site or online in reply to mailed vehicle registration.</td></tr>
<tr><td rowspan="2">Sustainability</td><td>Increases in Fuel Economy/Alternative Fuels</td><td>Ø</td><td>Under the current registration formula, vehicle technology and fuel efficiency is not considered, and therefore, better fuel economy wouldn’t affect registration fee revenue</td></tr>
<tr><td>Fuel Price Volatility</td><td>Ø</td><td>Long-term higher fuel prices could result in reduced vehicle ownership, though the impact may be minimal.</td></tr>
</table>

(+) Positive/High (-) Negative/Low (Ø) Neutral

<table>
<tr><th colspan="4">Vehicle Registration (Differs by Technology)</th></tr>
<tr><td rowspan="4">Overview</td><td>Description</td><td colspan="2">Vehicle registration fees are a per-vehicle charge assessed annually on all privately owned vehicles. An additional registration fee is assessed for electric and hybrid electric vehicles to recoup fuel tax revenues lost due to higher fuel efficiency.</td></tr>
<tr><td>Current Use</td><td colspan="2">Some states charge differential registration fees to electric or hybrid electric vehicles.</td></tr>
<tr><td>Peer States</td><td colspan="2"><table>
<tr><th>State</th><th>Hybrid or Electric Surcharge</th></tr>
<tr><td>ND</td><td>None</td></tr>
<tr><td>MN</td><td>$75</td></tr>
<tr><td>WI</td><td>$75 hybrid, $100 electric</td></tr>
<tr><td>SD</td><td>None</td></tr>
<tr><td>NE</td><td>$75</td></tr>
<tr><td>IA</td><td>None, electric vehicles pay a discounted $25 fee</td></tr>
<tr><td>MT</td><td>None</td></tr>
<tr><td>ID</td><td>$75 hybrid, $140 electric</td></tr>
</table></td></tr>
<tr><td>Geographic Scope</td><td colspan="2">Statewide</td></tr>
<tr><td rowspan="3">Viability</td><td>Revenue Potential</td><td>-</td><td>Low: Per the Motor Vehicle Division, in 2017, 1,102 hybrid electric and 112 full electric vehicles were registered in North Dakota.</td></tr>
<tr><td>Implementation Complexity</td><td>Ø</td><td>Minimal: The Motor Vehicle Division collects data as to the technology type of vehicles registered.</td></tr>
<tr><td>Public Awareness (perception)</td><td>+</td><td>Not currently in use: Users may understand that increased fuel efficiency reduces revenue collected via fuel tax.</td></tr>
<tr><td rowspan="2">Sustainability</td><td>Increases in Fuel Economy/Alternative Fuels</td><td>+</td><td>As adoption of electric or hybrid electric vehicles increases, differential registration will directly increase.</td></tr>
<tr><td>Fuel Price Volatility</td><td>+</td><td>Long-term increases in fuel prices may speed the adoption rate of electric and hybrid electric vehicles resulting in higher revenues from differential registration.</td></tr>
</table>

(+) Positive/High (-) Negative/Low (Ø) Neutral

Driver's License Fees			
Overview	Description	A periodic fee imposed on licensed drivers when obtaining or renewing a driver's license.	
	Current Use	All states charge fees for driver's licenses. Fee revenues are used to offset the physical identification card and processing. Additional fees are charged for permits and testing.	
	Peer States	State / License Fee / Duration of License / Annual Average Fee ND / $15 / 4-6 years / $2.50-$3.75 MN / $25.25 / 4 years / $6.31 WI / $34.00 / 8 years / $4.25 SD / $28.00 / 5 years / $5.60 NE / $21.50 / 4 years / $5.38 IA / $4/year / 5-8 years / $4.00 MT / $40.50 / 8 years / $5.06 ID / $30.00 / 4 years / $7.50	
	Geographic Scope	Statewide	
Viability	Revenue Potential	Ø	Low: As of 2016, there were 555,935 licensed drivers in North Dakota
	Implementation Complexity	+	Minimal: Driver's license fees are currently collected by the state. A change to the current rate could be implemented easily from a technical and administrative standpoint.
	Public Awareness (perception)	+	In use: All drivers pay license fees.
Sustainability	Increases in Fuel Economy/Alternative Fuels	-	Fuel efficiency and vehicle technology have no direct relationship with driver's license fees.
	Fuel Price Volatility	Ø	Fuel prices have no direct relationship with driver's license fees.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Per-mile Tax (VMT Fee)			
Overview	Description	A per-mile tax levied by the state. Studies are underway to determine efficient collection methods.	
	Current Use	A VMT tax is being investigated in western states (OR, CO and CA) through pilot programs, but no state has implemented it on a statewide scale.	
	Peer States	None of the peer states has implemented a VMT tax, although MN has been studying possible scenarios for such a tax.	
	Geographic Scope	Statewide	
Viability	Revenue Potential	+	High: A VMT tax would vary with the level of travel and would be collected on a per-mile basis, and could exceed current fuel tax revenue.
	Implementation Complexity	-	High: Collection of individual vehicle mileages would require significant resources and/or technological investment. The payment of the tax would occur at the point of odometer reading or transmission.
	Public Awareness (perception)	-	Low: Although it would likely be understood as an equitable method of taxation due to the usage/tax relationship, reporting requirement difficulties and privacy concerns due to vehicle tracking may cause difficulty in implementation.
Sustainability	Increases in Fuel Economy/Alternative Fuels	-	No direct significant relationship. Roadway utilization would be uncoupled from fuel economy thereby taxation levels are based simply upon usage.
	Fuel Price Volatility	Ø	Higher fuel prices could lower the quantity demanded for fuel, reducing fuel tax revenues. However, scholarly studies show that consumer responsiveness to changes in fuel price are low.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Transportation Utility Fees			
Overview	Description	Fixed rate utility prices based upon number of residents, property type or property size.	
	Current Use	Utility fees are commonly charged for garbage, water and sewer services at the municipal level. Minor transportation-related maintenance expenses such as streetlights or traffic lights may be assessed a utility fee. Very few jurisdictions assess a transportation utility fee to fund major transportation investments or needs. Hillsboro, OR is one example where this is currently in use.	
	Peer States	The majority of cities across the peer states charge utility fees for streetlights and other minor maintenance expenses. No peer states collect utility fees for transportation infrastructure investments.	
	Geographic Scope	Local	
Viability	Revenue Potential	+	Moderate: All residents would directly or indirectly pay a utility fee.
	Implementation Complexity	+	Minimal: Jurisdictions that currently charge and bill residents have the administrative and resources in place to charge such a fee.
	Public Awareness (perception)	-	This type of fee is currently assessed at the local level. Flat rate fees are not related to highway use or household income.
Sustainability	Increases in Fuel Economy/Alternative Fuels	Ø	There is no relationship between utility revenue and fuel economy.
	Fuel Price Volatility	Ø	There is no relationship between utility revenue and fuel price.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Overweight Fee Increase			
Overview	Description	Overweight / oversize fees are collected from freight vehicles exceeding certain dimensional and/or weight limits.	
	Current Use	NDDOT currently issues a wide array of permits, for various types of overweight/oversized loads, and for various time periods (single trip, multi-trip, annual). Fees are collected by the ND Highway Patrol and allocated to the State Highway Fund.	
	Peer States	Specific fee assessment regulations and fee schedules vary substantially by state and make them difficult to compare. As a rule of a thumb, all states offer a standard annual overweight permit for a fee in the $150-$500 range.	
	Geographic Scope	Statewide	
Viability	Revenue Potential	Ø	Moderate. Current revenue is approx. $11.4 million per year.
	Implementation Complexity	+	The permit system has been functioning for many years. A simple fee increase could be implemented at minimal administrative costs.
	Public Awareness (perception)	Ø	The general public is indifferent about the fees, while freight carriers would likely oppose any substantial fee increase.
Sustainability	Increases in Fuel Economy/Alternative Fuels	Ø	No relationship
	Fuel Price Volatility	-	Higher fuel prices could induce a modal switch for certain loads from road to rail.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Impact fee			
Overview	Description	Impact fee is charged to a future real estate development, which would be benefiting from the adjacent public infrastructure improvement. The philosophy behind impact fees is similar to special assessments and mill levies.	
	Current Use	Currently, impact fees are not collected by any of the N.D. jurisdictions. There is no legislation which would explicitly authorize impact fees.	
	Peer States	Wisconsin is the only peer state to explicitly authorize impact fees. The legal environment for impact fees in North Dakota and other peer states is unclear.	
	Geographic Scope	Local	
Viability	Revenue Potential	Ø	Moderate, could be used for local improvements.
	Implementation Complexity	-	Severe. It is likely that state legislature would need to authorize impact fees.
	Public Awareness (perception)	-	The public might be opposed to impact fees, as a new, previously unknown form of taxation. Impact fees could be also perceived as a barrier to cities' growth and development.
Sustainability	Increases in Fuel Economy/Alternative Fuels	Ø	No relationship.
	Fuel Price Volatility	Ø	No relationship.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Tolling			
Overview	Description	A usage fee for usage of a segment of transportation infrastructure. Tolls are typically found on bridges, segments of roads or on turnpikes. It may be assessed by a single use or on a per-mile basis.	
	Current Use	Pre-Interstate system turnpikes, bridges or new interstate lanes may be tolled. The majority of existing tollways are equipped with staffed toll booths, but there are an increasing number of all electronic toll facilities. One recent example is the 12th Avenue North toll bridge in Fargo which recently was returned to city jurisdiction.	
	Peer States	None of the surrounding states operate any type of tolled facility except for express/high-occupancy vehicle lanes in the Minneapolis-St. Paul area.	
	Geographic Scope	Regional or local, depending on facility type	
Viability	Revenue Potential	+	Variable: Revenue potential depends on the volume over the facility, geographic scope of the facility and co-occurring network redundancy.
	Implementation Complexity	-	There are currently no tolled facilities in North Dakota. Introduction of tolled facilities would require collection and enforcement infrastructure and staffing. Research indicates that the administrative costs of toll collection might consume even 20% of the revenue.
	Public Awareness (perception)	-	With the exception of the 12th Avenue North bridge in Fargo, residents have not been exposed to tolled facilities.
Sustainability	Increases in Fuel Economy/Alternative Fuels	Ø	No evidence for a direct relationship. However, lower fuel expenses would reduce the overall transportation costs, diminishing the burden of tolls for household budgets.
	Fuel Price Volatility	Ø	Higher fuel prices could lower the quantity demanded for fuel, reducing fuel tax revenues. However, scholarly studies show that consumer responsiveness to changes in fuel price are low. The resulting decrease in travel could reduce toll collections.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Public-Private Partnerships (PPPs, P3s)			
Overview	Description	Infrastructure investment is paid for by a private entity in exchange for a guaranteed revenue paid over a specified amount of time by the government or users or guaranteed services provided by the investment.	
	Current Use	Nationwide, PPP's exist on an improvement specific basis. In North Dakota one such PPP has been entered into between NDDOT and Brigham Oil & Gas on ND 1806. Brigham Oil & Gas added a six-inch overlay to ND 1806 in agreement for 8 ton/axle, 105,500 GVW weight limits. PPPs are often found in construction of new freeways or rapid transit investments in large metropolitan areas. The President's proposed infrastructure packages highlight PPPs as a primary funding source.	
	Peer States	Similar to North Dakota, peer states' collaboration with private partners have included interchanges and traffic signals as well as the pavement overlay described above. The 2017 North Dakota Legislative session streamlined the process for entering into such agreements in the future. Examples of large-scale PPP highway projects can be found in other parts of the country, such as Texas Hwy 130.	
	Geographic Scope	Local or Regional	
Viability	Revenue Potential	+	PPPs would likely be limited to local projects where private and public entities would both receive benefits from transportation investment. Private investment likelihood is heavily determined by potential private benefit.
	Implementation Complexity	-	Significant: PPPs generally require a detailed evaluation of potential options in the terms of the private and public partners' responsibilities. Moreover, in the event of a private failure, the public partner may end up assuming some investment risk.
	Public Awareness (perception)	+	PPPs are an alternative to direct user fees, and thereby may be accepted by the public. There is a common belief that a PPP transfers the financial burden from taxpayers to private investors.
Sustainability	Increases in Fuel Economy/Alternative Fuels	Ø	There is no relationship between PPPs and fuel economy.
	Fuel Price Volatility	Ø	Depending on the funding mechanism, a toll-supported PPP may be sensitive to travel demand which could be lower if significant fuel prices occur.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Transit Fares			
Overview	Description	Transit fares are paid by transit riders when using the service. Fares can be charged per ride and paid upon boarding, or transit agencies can sell passes (such as monthly or weekly passes) or multi-ride tickets.	
	Current Use	All transit agencies in North Dakota collect fares. The three urban fixed-route systems in Fargo-West Fargo, Bismarck-Mandan, and Grand Forks all charge a base fare of $1.50 per ride one-way, and paratransit service is $3.00 per ride one-way. Monthly passes for the fixed-route service cost $40 in Fargo-West Fargo, $36 in Bismarck-Mandan, and $35 in Grand Forks. Rural transit agencies typically charge different fare levels based on the trip distance. According to data collected in 2014 for rural agencies, the median fare was $1.50 one-way for in-town trips. For out-of-town trips, median one-way fares ranged from $2.75 for trips up to 15 miles and $12.50 for trips more than 100 miles.	
	Peer States	Fare levels in North Dakota are similar to those charged by peer agencies in neighboring states. Small urban systems in neighboring states charge $1.25 to $2.00 per ride or $28 to $47 for monthly passes.	
	Geographic Scope	Individual transit agency	
Viability	Revenue Potential	Ø	Fare revenues cover about 10-15% of operating expenses for the three urban transit agencies. These farebox recovery ratios are similar to those of peer agencies in neighboring states. For rural agencies in the state, fare revenues cover about 8-10% of operating expenses, which is similar to the national average of 9% for rural systems. Because of the inelastic nature of transit demand, higher fares will produce increased fare revenues. However, the total revenue potential is limited. Current farebox recovery ratios are similar to those of peer agencies, and while greater farebox recovery is possible, the overall impact on revenues would be relatively small.
	Implementation Complexity	+	Simple. Established fare collection systems already exist.
	Public Awareness (perception)	+	Transit riders are accustomed to paying fares. Transit agencies periodically increase fares to account for increased costs, though they try to limit fare increases and avoid significant increases.
Sustainability	Increases in Fuel Economy/Alternative Fuels	Ø	Increases in fuel economy make automobile travel relatively less expensive, which could have a small negative impact on transit use and fare revenues.
	Fuel Price Volatility	+	Increases in gas prices have been shown to have a small positive impact on transit ridership, thereby increasing fare revenues.

(+) Positive/High (-) Negative/Low (Ø) Neutral

Comparison of funding options: revenue potential and geographic scope