



Agency Analysis of Transportation Funding Section 10 (a)

House Transportation Committee

January 21, 2016

Costa Pappis, VTrans Policy and Planning





Analysis of Transportation Funding

Sec. 10. AGENCY ANALYSIS OF TRANSPORTATION FUNDING

(a) The Agency, in consultation with the Joint Fiscal Office, shall identify and evaluate funding sources, other than motor vehicle fuel taxes, that will be sufficient to maintain the State's transportation system, accounting for State and federal policies that have and will continue to reduce motor vehicle fuel consumption.



Analysis of Transportation Funding

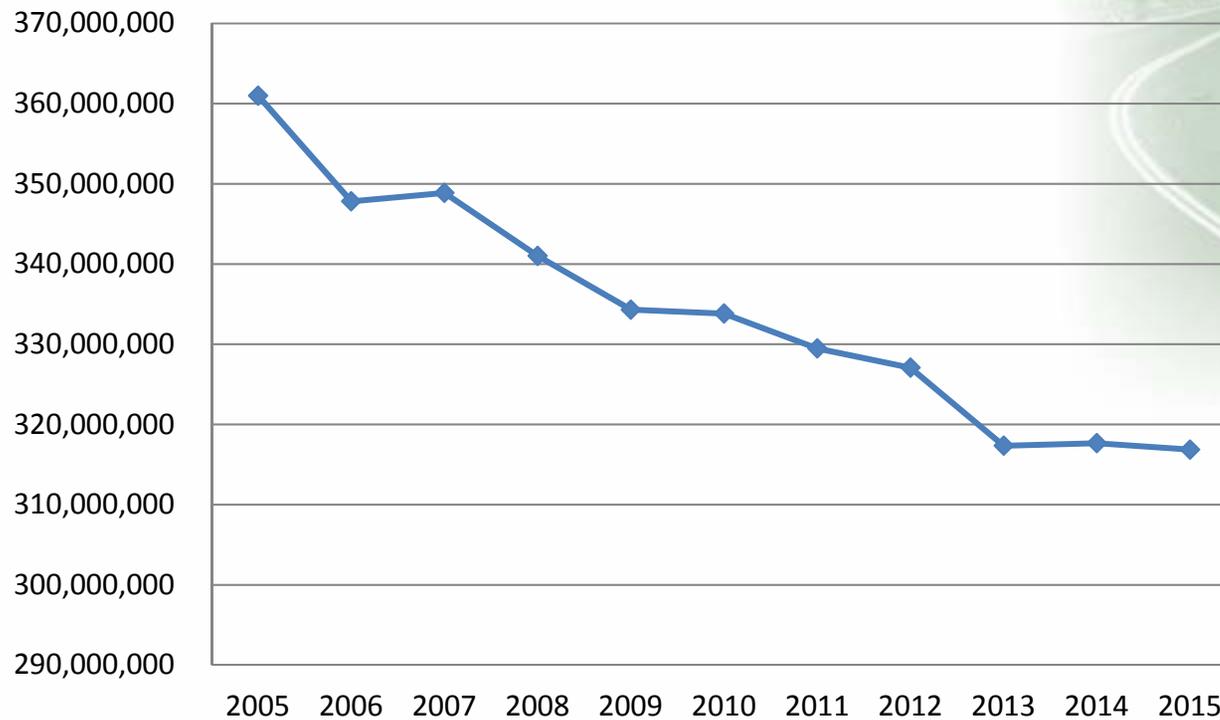
Tasks

- Review current state and federal transportation policies and trends that have and will continue to reduce motor vehicle consumption.
- Review and expand on funding options contained in the Section 40 funding study (Act 153).
- Review actions of other states and provinces in dealing with this issue.



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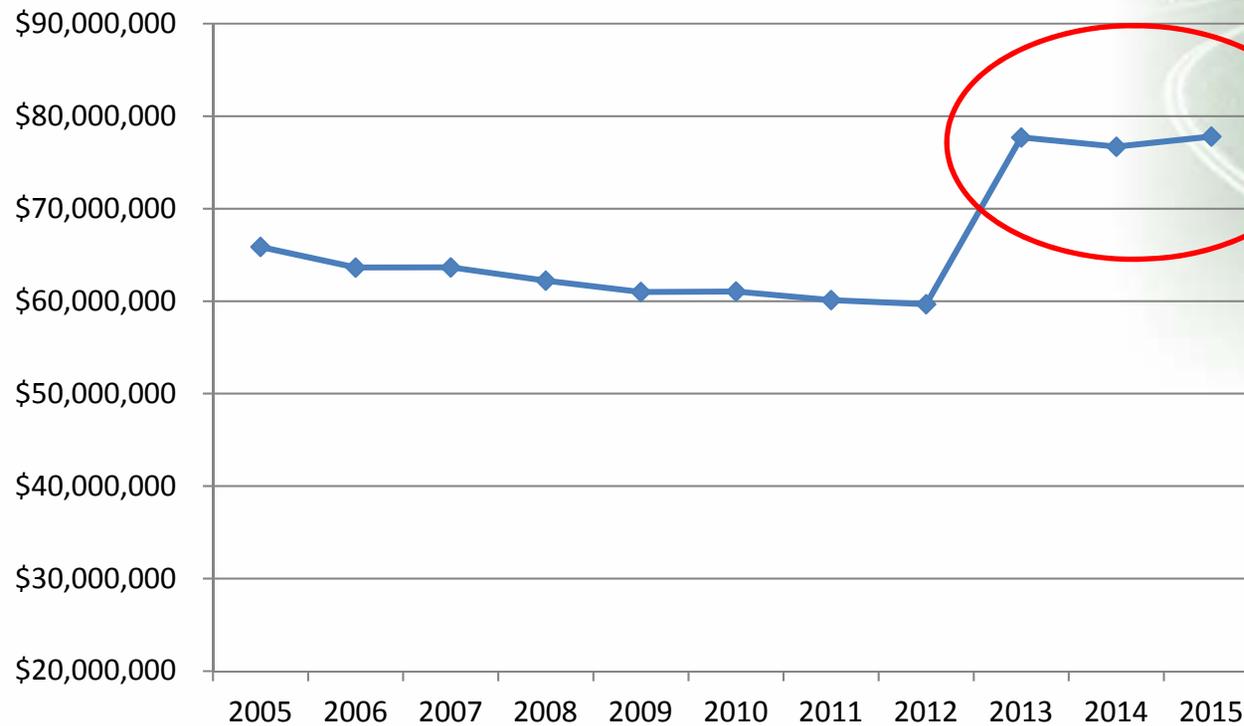
Gasoline Consumption in Vermont (in gallons)





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Gasoline Revenue in Vermont



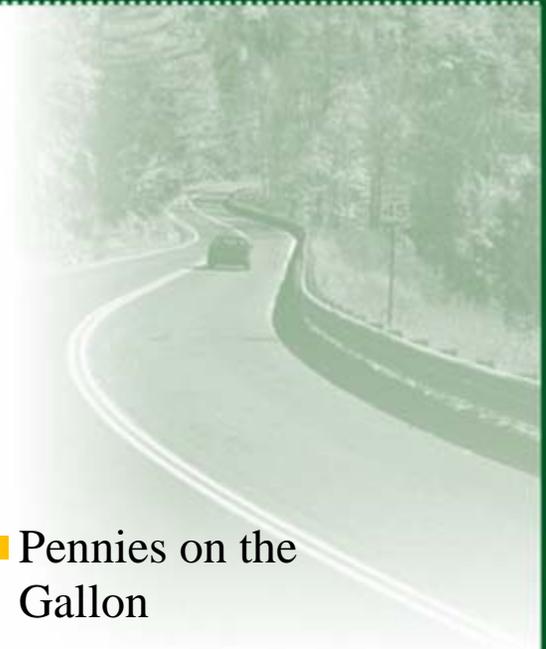
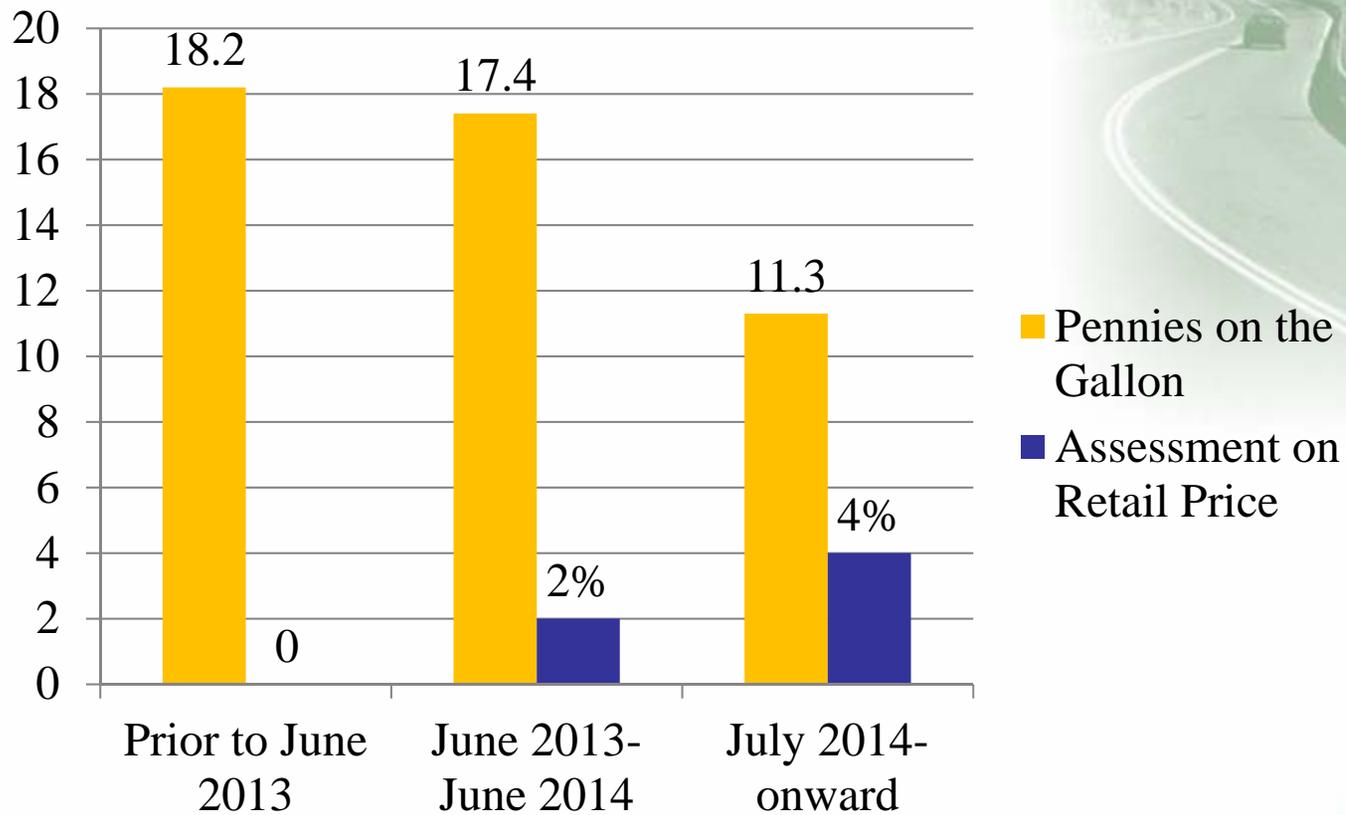
Change to gasoline tax





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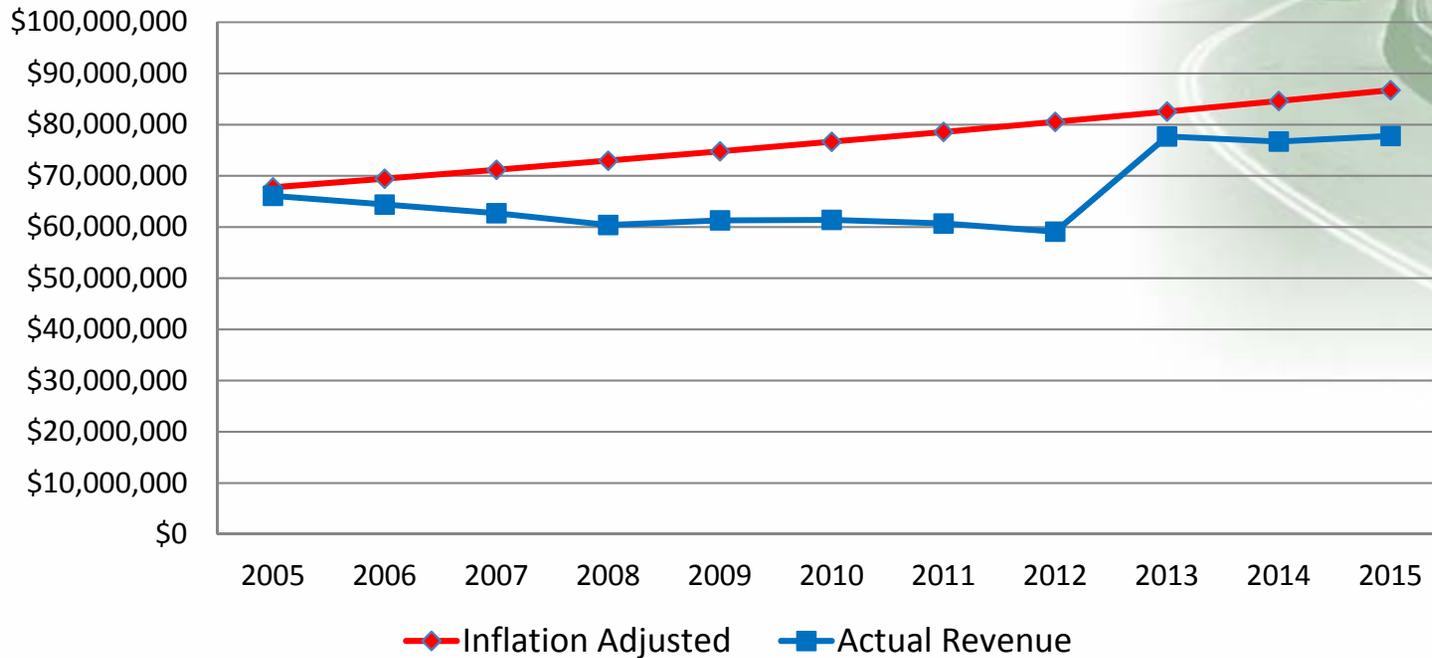
Changes to the Gasoline Tax





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State Gasoline Revenues by State Fiscal Year - Actual and Inflation-Adjusted @ 2.5%





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Causes of Declining Motor Fuel Consumption

- General Economic Conditions
 - Price of Gasoline
 - The State and Nation's Economic Health

- Federal-Level
 - Fuel Economy Standards
 - Tax Credits for Electric Vehicles

- State-Level
 - Greenhouse Gas and Energy Policies
 - Transit, Rail, Bike-Ped, and Park and Ride Investments
 - Community Revitalization Efforts.

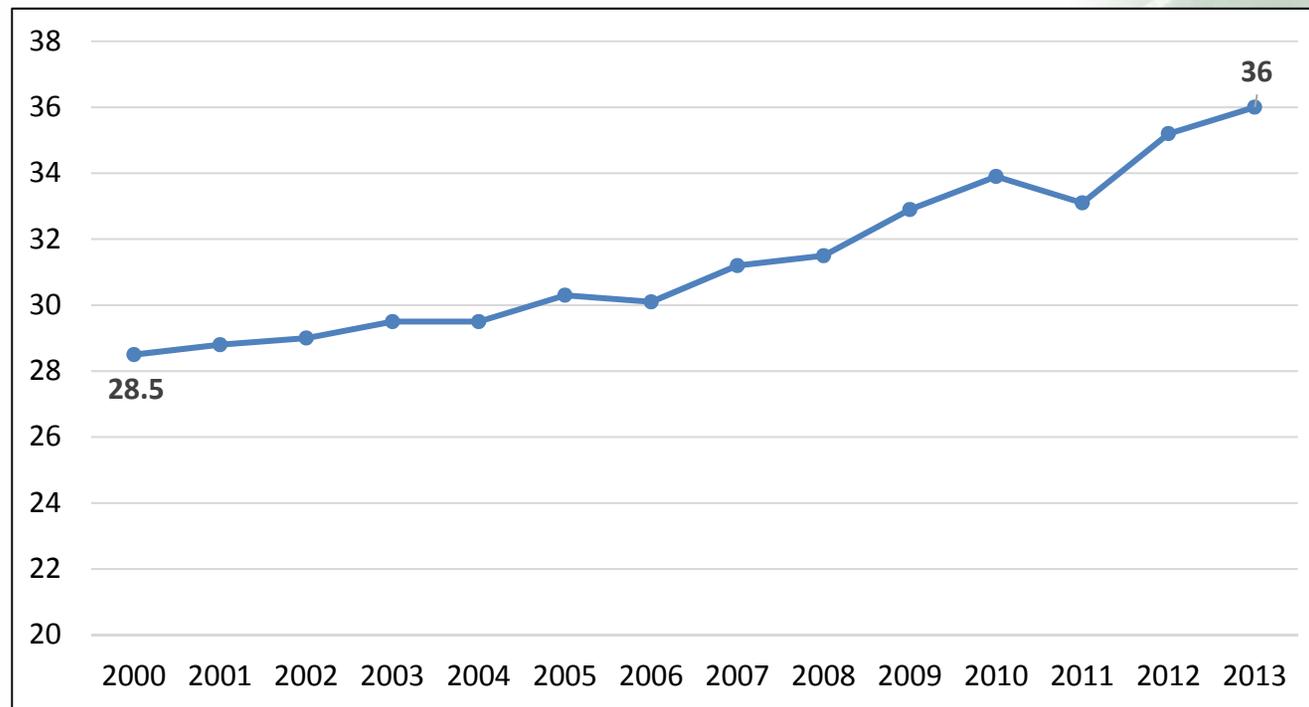




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Federal-Level

Average Fuel Economy for Light-Duty Passenger Vehicles – MPG by Model Year



Source: U.S Bureau of Transportation Statistics 9





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Federal-Level

Corporate Average Fuel Economy (CAFE) Standards

Year	CAFE Standards	Annual Improvement in Fuel Efficiency of New Vehicles	
2012	25 mpg	Not Applicable	
2016	35.5 mpg	9.2%	2012 to 2016
2025	54.5 mpg	4.9%	2017 to 2025





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Federal-Level

- Tax Credits for Electric Vehicles.
 - \$2,500 for cars with 4 kWh battery packs
 - \$7,500 for cars with 16 kWh battery packs





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State-Level – CO2 and Energy Goals

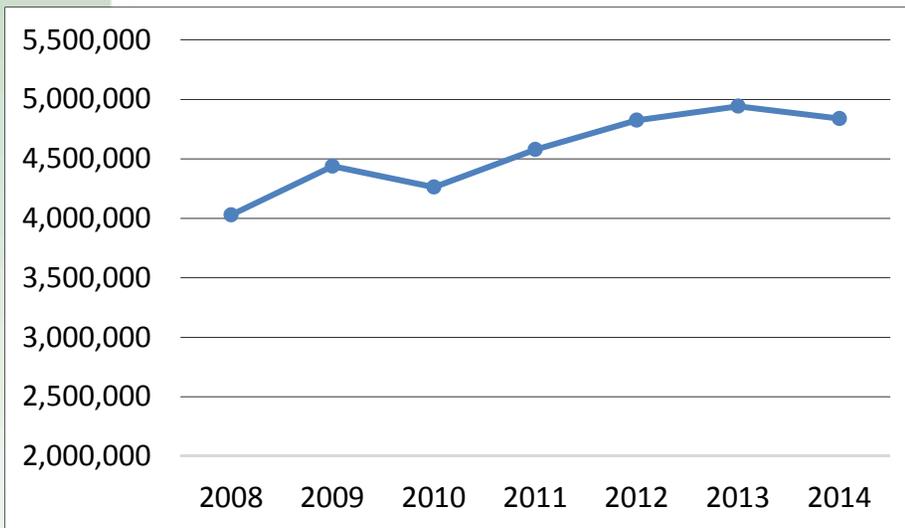
- Greenhouse gas reduction goals, set forth in 10 V.S.A. § 578(a) - a 50% reduction of greenhouse gas emissions from 1990 levels by 2028 and, if practicable using reasonable efforts, a 75% reduction by 2050.
- Comprehensive Energy Plan – 90% renewable energy by 2050.
- Zero Emission Vehicle Memorandum of Understanding (3.3 million ZEVs by 2025).



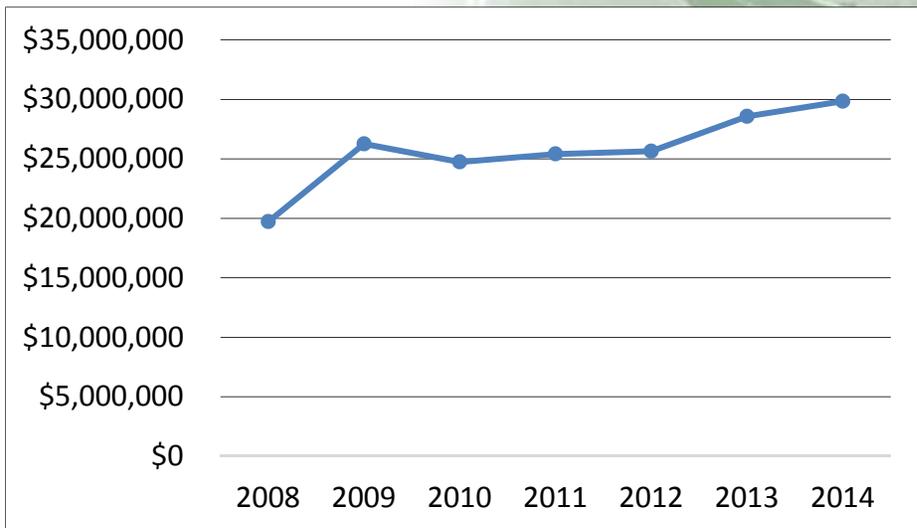
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State-Level: Public Transit

Vermont Transit Ridership 2008-2014



AOT Public Transit Budget 2008-2014

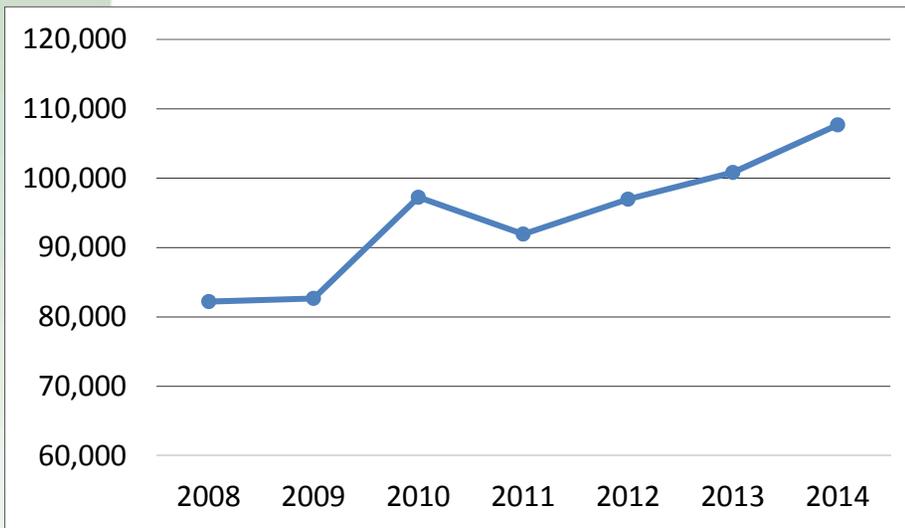




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State-Level: Public Transit

Vermont Rail Ridership 2008-2014



AOT Rail Budget 2008-2014





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State-Level: Community Revitalization Projects





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What Other States Are Doing?

- Raised Gas Taxes (Pennies per Gallon) – Nebraska
- Raised Gas Taxes and Fees – Michigan, Washington State, Idaho, South Dakota, Iowa
- Eliminated Per Pennies on the Gallon and Replaced with Retail Assessment - Virginia
- Raised Gas Taxes and Shifted a Portion to a Retail Assessment – Utah, Kentucky, North Carolina
- Indexed Gas Taxes to Inflation – Michigan, Georgia



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What Other States Are Doing?

- Issued Bonds – Connecticut, North Dakota, Mississippi, New Mexico
- Dedicated Sales Tax to Transportation - Virginia
- Transferred from the General Fund – North Carolina (eliminated transfer to General Fund)
- Increased Motor Vehicle Fees - Delaware



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Funding Options - Methodology

- Researched other states, stakeholder outreach, section 40 report
- Use of existing data from DMV, JFO, and National Sources
- No elasticities assumed
- Presents menu of options – no rank or recommendations



Analysis of Transportation Funding

Funding Options – Evaluation Criteria

Revenue Stream Considerations

- Revenue Potential - the extent to which the option generates significant revenue. Revenue estimates are order of magnitude and do not account for price elasticity or other complex economic feedback effects. For example, a simple calculation indicates that a ten-dollar increase in vanity plates would generate \$275,000 in revenue. However, increasing the cost of may result in less sales which would reduce the actual revenue generated to less than \$275,000 million.
- Sustainability - the extent to which the option self-adjusts or can be adjusted easily from year to year in order to provide a stable, reliable source of revenue.
- Flexibility - the extent to which the mechanism is appropriate for a wide range of investments (and different transportation modes) and can be redirected to meet changing needs.

Implementation and Administration Considerations

- Appropriateness for State Use - the appropriateness of statewide implementation, including consideration of the impact on local governments (i.e. introducing certain fees).
- Ease/Cost of Implementation, Administration and Enforcement - the ease and cost to implement, administer, and enforce relative to the revenue-raising potential.



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Funding Options – Evaluation Criteria

Economic Efficiency and Impact Considerations

- Promotion of Efficient Use and Investment - the extent to which the mechanism provides incentives for efficient use of the system by influencing travel choices and behavior.
- Consistency with State Goals and Policies – the extent to which the mechanism is consistent with State Goals and Policies.

Equity Considerations

- User and Beneficiary Equity - the extent to which the mechanism can be structured to charge those who directly use or otherwise benefit from the funded investment.
- Equity Across Income Groups - the extent to which the mechanism limits costs for those who face the most difficulty in paying.
- Geographic Equity - the extent to which the cost allocation and impact of the mechanism can be structured to match the geographic distribution of the benefit.



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Funding Options

- Existing Taxes and Fees
- New Taxes and Fees – User Fees
- New Taxes and Fees – Broad-Based



Analysis Sample

Vehicle Inspection Fee Evaluation

Revenue Stream Considerations	
Revenue Potential	Moderate revenue generation potential. Every \$1 dollar increase in the price of inspection stickers will generate an additional \$723,269 in revenue.
Sustainability	Will require periodic adjustment to keep pace with inflation.
Flexibility	Revenue generated can be used without restrictions.
Implementation & Administration	
Appropriateness for State Use	Fee is currently in place.
Ease/Cost of Implementation & Administration	Currently administered.
Economic Efficiency & Impact	
Promotion of Efficient Use & Investment	No effect.
Consistency with State Goals & Policies	No effect.
Equity Considerations	
User & Beneficiary Equity	Direct link to system users, but does not reflect system usage
Income Equity	Limited costs relative to other fees/taxes.
Geographic Equity	Burden consistent for all geographies



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Funding Options – Existing Taxes & Fees

Revenue Option	Existing	Revenue Potential
Vehicle Inspection Fees	\$5 per inspection	\$723,269 for every \$1 increase
Vehicle Rental Tax	9% (6% for transportation)	\$318,737 for every 1% increase
DMV Fees	\$80.1 million	\$800,110 for each 1% increase
Heavy Vehicle Registration Fees	\$1,441-\$4,375	\$5,072 for every \$1 increase
Truck Gross Vehicle Weight Registration Fees	Varies with weight	\$3.5 million annually
Light-Duty Diesel-Gasoline Registration Fee Parity	\$70 (gas), \$27 (diesel)	\$378,701 for parity
Vanity Plate fees	\$45	\$12,414 for every \$1 increase
Safety Violation Fees	variable	\$39,496 for every 1% increase
Purchase & Use Tax	6% (2% to Education Fund, 4% to T-Fund)	\$16.2 million for 1% increase (from 6% to 7%, assuming all of the increase is dedicated to the transportation fund)
Reduction in P&U Allocation to Ed. Fund	\$32.4 million	\$324,000 for every 1% reduction
Reduction in Allocation to Dept. of Public Safety	\$22.7 million	\$227,000 for every 1% reduction





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Funding Options – New Taxes & Fees (User-Based)

Revenue Option	Existing	Revenue Potential
Vehicle Lease Fee	None	\$38,050 for every \$1 charged
Ad Valorem Fees	None	\$66.9 million above current registration fees
Auto Parts Allocation to T-Fund	None	\$4.85 million if allocated
Auto insurance Allocation to T-Fund	None	\$2.5 million for every 1% allocated
Bicycle Registration Fees	None	\$24,800 for each \$1 charged
Electric Vehicle Fees	None	\$1,046 for each \$1 charged
VMT Fees	None	\$63.5 million for every 1 cent above revenue neutral figure





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Funding Options – New Taxes & Fees (Broad-Based)

Revenue Option	Existing	Revenue Potential
General Fund Allocation to T-Fund	None	\$13.7 million for every 1% allocated
Sales Tax Allocation to T-Fund	None	\$2.3 million for every 1% allocated



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Questions / Comments?

