State Transportation Infrastructure Investment Analysis

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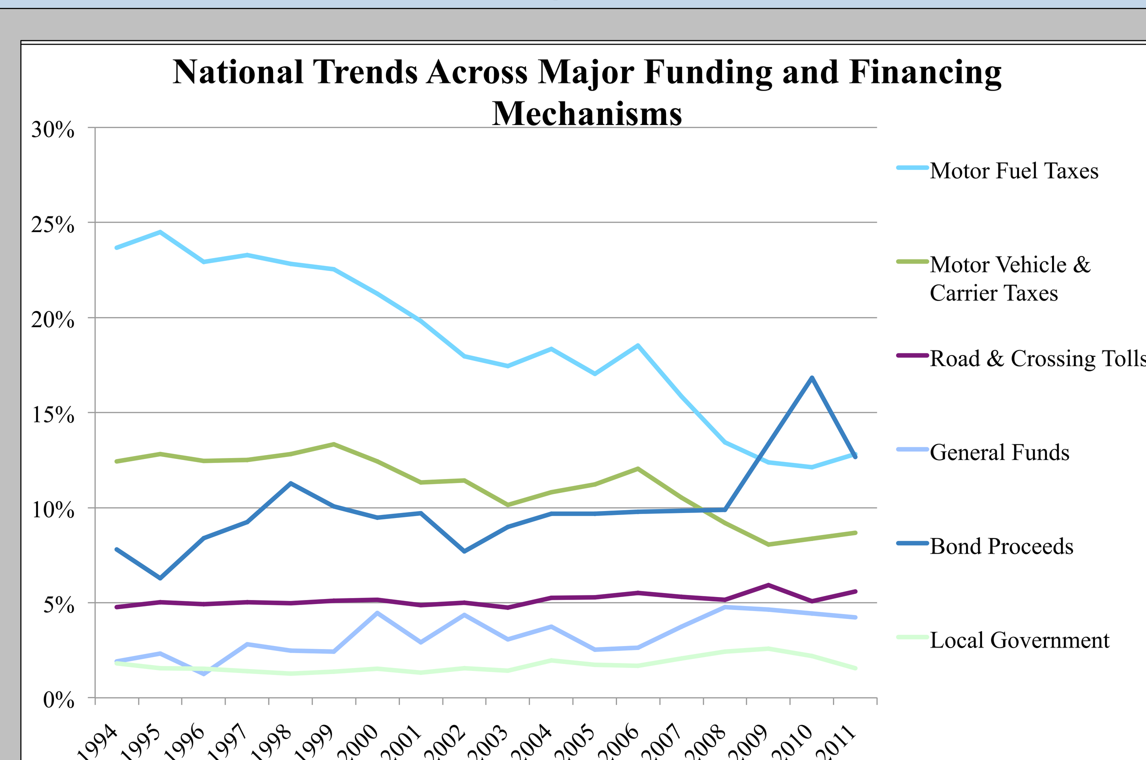
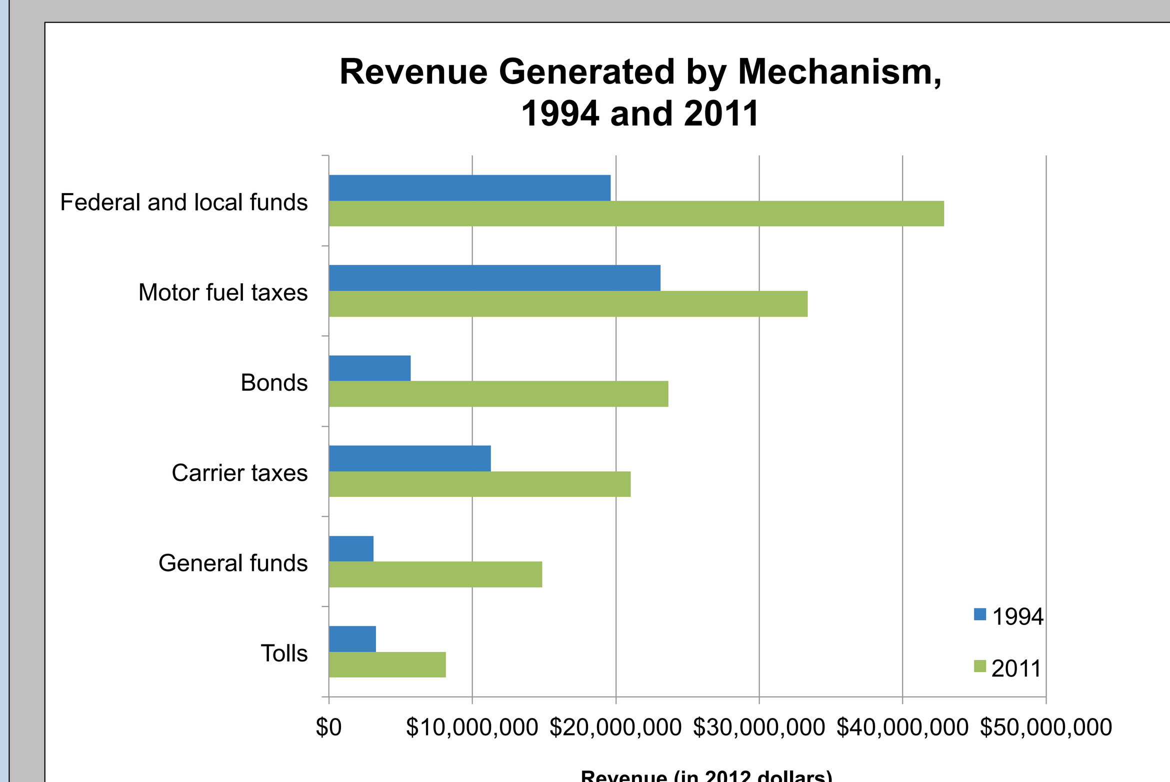
Infrastructure Funding Shortfalls

The United States' infrastructure quality has decreased drastically in recent years, falling from #5 in 2002 to #24 in 2011 in worldwide rankings. This decrease reflects the current inadequacy of transportation funding investments. Although federal transportation funding has nominally increased over the years, its real value has declined by almost 50%. Although federal funds account for a significant portion of transportation investment, states are responsible for almost half of transportation infrastructure revenues. Therefore, states should implement innovative, sustainable, and flexible funding and financing mechanisms to facilitate transportation infrastructure investment.

State Funding Mechanisms

- **Fuel Taxes** are excise taxes on gas, diesel, and alternate fuel sources that account for up to 40% of states' revenues. Fuel efficiency, lack of indexing to inflation, and changes in transportation behaviors cast doubt on their continued viability.
- **Tolls** price road use. Technological advancements enable operators to vary the prices of tolls depending on the time of day and the type of roadway.
- **Vehicle Miles Traveled Fees** charge drivers a tax based on each mile driven. Although this an upcoming and popular mechanism, it is controversial due to privacy concerns.
- **General Revenues** are used to fund transportation infrastructure, generally using a combination of sales taxes, income taxes, property taxes, and other revenue sources.
- **Vehicle Registration, Licensing, and Permitting Fees** are heavily relied on by some states; in fact, thirteen states collect more in these fees than fuel taxes.
- **Freight-related Revenue Mechanisms** include heavy truck and trailer sales tax, truck tire tax, heavy vehicle use tax, weight distance tax, and tonnage tax.





State Financing Mechanisms

- **State Revolving Funds (SRFs)**, including state infrastructure banks (SIBs), are collections of funds dedicated to granting loans to transportation infrastructure projects. These funds are usually generated by grants, general revenue, and funding mechanisms.
- **Public-Private Partnerships (PPPs)** are agreements between public and private sector partners to construct, operate, maintain, and/or manage a facility or system. There are a variety of types of PPPs that reflect the states' preferred risk allocation and desired level of private sector involvement.
- **Bonds** are loans that are repaid with interest at regular intervals. Types of bonds include general obligation, revenue, certificates of participation and lease revenue bonds. They are often used to initially fund SRFs.

Recommendations

State Funding Mechanisms

States should diversify funding sources to stabilize their revenue streams, focus on user fee based mechanisms, and accompany implementation efforts with educational initiatives. Specifically, states should:

- Increase and index fuel taxes to preserve their purchasing power; construction cost indexing may better account for changes in states' transportation funds purchasing power. Alternatives include indexing to the CPI or wholesale and retail prices of fuels;
- Work towards implementing VMT fees, which are even more effective if they also account for weight or number of axles;
- Institute electronic tolling to optimize collection of revenues and to adjust for congestion;
- Apply, or establish, sales taxes on fuel and transportation-related sales, such as tires, vehicles, and vehicle repair parts;
- Raise registration, licensing, titling and permitting fees; and
- If necessary, dedicate general funds to transportation projects.

State Financing Mechanisms

States should diversify investment means by using all available financing mechanisms. Otherwise, reliance on any one financing mechanism may reduce the long-term sustainability of available funds. States should implement the following recommendations:

- SRFs and SIBs must be properly managed. States should maintain interest rates above the level of inflation to allow the capital base to grow. States also must define project selection criteria that includes a risk assessment of how likely an applicant is to pay back the loan.
- For PPPs, states should strive to maximize upfront payments, ensure a consistent stream of revenue during the lifetime of the asset, and create a regular selection process in order to choose the best projects rather than the ones first offered to the state. Many of the risks of PPPs can be avoided with a savvy attorney who is familiar with these types of projects.
- Bonds are a less risky finance option; nevertheless, states should use them responsibly by not overselling bonds to the point where the state is overstretched to pay back its debts.

State Highway Investment Mechanisms

	Funding					Financing		
State	General funds	Fuel taxes	Sales taxes on fuel	Vehicle registration fees	Tolls	Bonds	State Revolving Funds	PPPs authorized
AL	✓	✓		✓		✓		✓
AK	✓	✓		✓	✓	✓	✓	✓
AZ	✓	✓		✓		✓	✓	✓
AR	✓	✓		✓		✓	✓	✓
CA	✓	✓	✓	✓	✓	✓	✓	✓
CO	✓	✓		✓	✓	✓	✓	✓
CT	✓	✓	✓	✓		✓		✓
DE	✓	✓		✓	✓	✓	✓	✓
FL		✓	✓	✓	✓	✓	✓	✓
GA	✓	✓	✓	✓	✓	✓	✓	✓
HI		✓	✓	✓		✓		
ID		✓		✓		✓		
IL	✓	✓	✓	✓	✓	✓		✓
IN		✓	✓	✓	✓	✓	✓	✓
IA		✓		✓		✓	✓	
KS	✓	✓		✓	✓	✓	✓	
KY	✓	✓		✓		✓		
LA	✓	✓		✓	✓	✓		✓
ME		✓		✓	✓	✓	✓	✓
MD		✓		✓	✓	✓		✓
MA	✓	✓		✓	✓	✓		✓
MI		✓	✓	✓	✓	✓	✓	
MN	✓	✓		✓	✓	✓	✓	✓
MS		✓		✓		✓	✓	✓
MO	✓	✓		✓		✓		✓
MT		✓		✓		✓		
NE	✓	✓		✓		✓	✓	
NV	✓	✓		✓		✓		✓
NH	✓	✓		✓	✓	✓		
NJ	✓	✓		✓	✓	✓		
NM		✓		✓	✓	✓	✓	
NY	✓	✓	✓	✓	✓	✓	✓	
NC		✓		✓	✓	✓	✓	✓
ND	✓	✓		✓		✓	✓	✓
OH	✓	✓		✓	✓	✓	✓	✓
OK	✓	✓		✓	✓	✓	✓	
OR	✓	✓		✓		✓	✓	✓
PA	✓	✓		✓	✓	✓	✓	✓
RI	✓	✓		✓	✓	✓	✓	
SC	✓	✓		✓	✓	✓	✓	✓
SD	✓	✓		✓			✓	
TN		✓	✓	✓			✓	✓
TX	✓	✓		✓	✓	✓	✓	✓
UT	✓	✓		✓	✓	✓	✓	✓
VT	✓	✓	✓	✓		✓	✓	
VA		✓	✓	✓	✓	✓	✓	✓
WA		✓		✓	✓	✓	✓	✓
WV	✓	✓	✓	✓	✓	✓		✓
WI	✓	✓		✓		✓	✓	✓
WY	✓	✓		✓			✓	