

Beyond the Gas Tax: Examination of New Revenue Options

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Presentation Outline

- **To discuss the findings of the AASHTO Bottom Line report**
- **To provide legislative recommendations for funding the next authorization bill**
- **To examine various funding options available**
- **To demonstrate the new AASHTO Center for Excellence in Project Finance website**
- **To answer questions about these topics**

Funding v. Financing

Funding

- Different **revenue sources generated at the Federal, state and local levels** used for transportation investment needs
- Includes taxes, fees, user charges, and capturing enhanced property values.

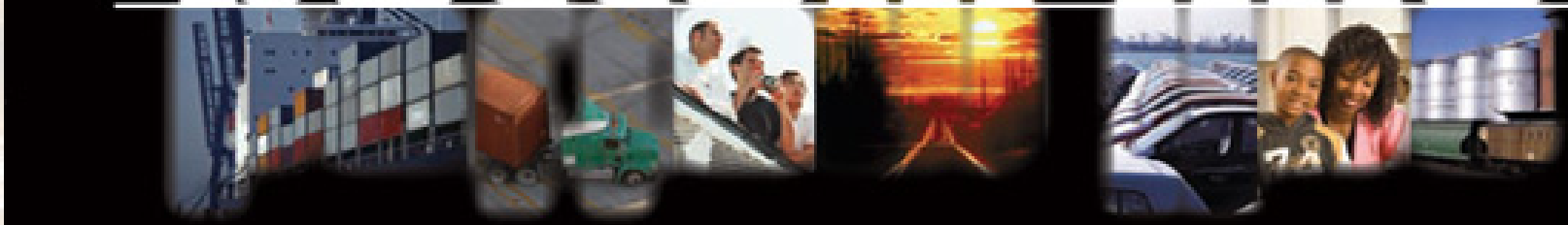
Financing

- Different financial **tools that are used to leverage transportation funding to turn them into viable programs and projects**
- Allows transportation agencies to raise the high up-front costs needed to build projects and expedite the implementation of needed transportation improvements

AASHTO Bottom Line Report

transportation

bottom line



AASHTO Bottom Line Report

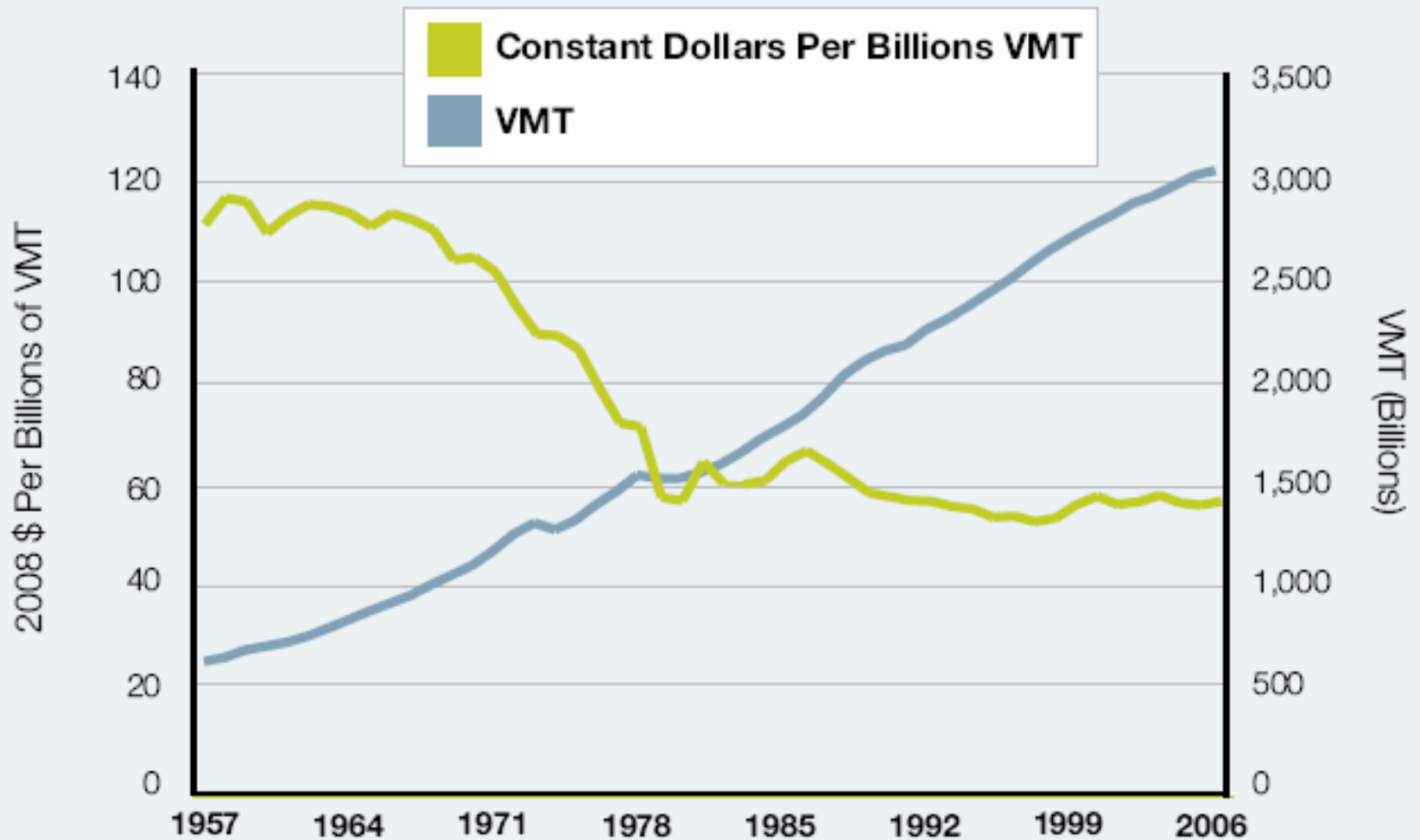
- Trends
 - VMT increase
 - 2.4 trillion miles in 1993
 - 3+ trillion miles in 2007
 - 2.9 trillion miles currently
 - Population increase
 - 305 million in 2005
 - 420+ million 2050
 - Truck freight expected to increase by 100% by 2030

AASHTO Bottom Line Report

- Highway Investment Requirements
 - Passenger vehicle demand parallels population growth (1% per year)
 - Truck freight demand parallels economic growth (2 to 3% per year)
 - Growth in VMT will at least equal population growth
- Current spending is \$78 billion

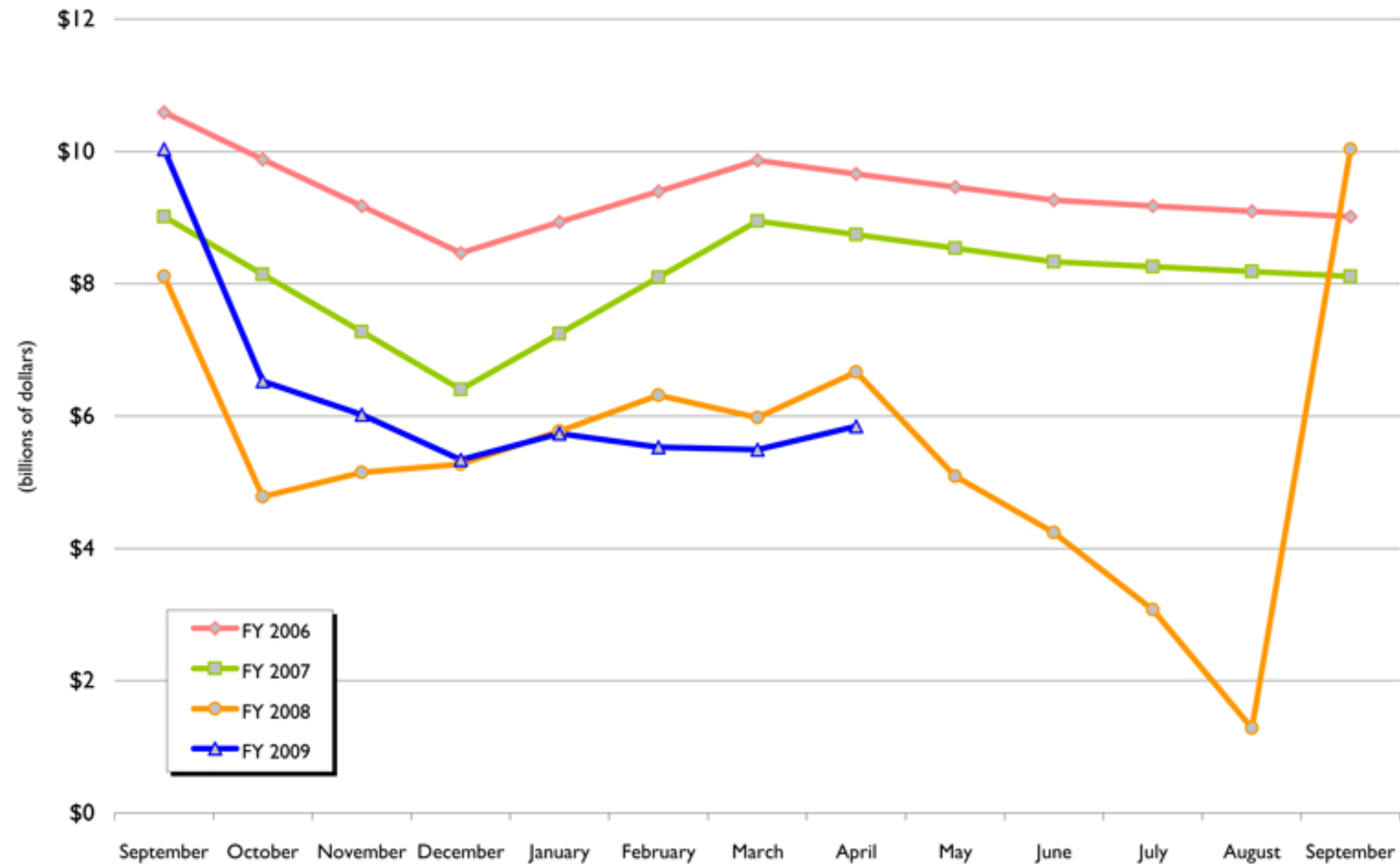
Growth Rate of VMT Per Year	Cost to Improve Highways (2006 Dollars)
1.4 percent	\$166 billion
1.0 percent	\$132 billion

EXHIBIT 2-2: VMT-ADJUSTED HIGHWAY SPENDING, 1957-2006



Source: VMT data are from FHWA Highway Statistics.

Highway Account Balance



Ending balance for FY 2008 includes \$8.017 billion transferred from the General Fund in September 2008 pursuant to Public Law 110-318.

A Restructured Transportation Program



AASHTO Legislative Recommendations

- **Maintain the current federal and state shares** for highway and transit capital programs
- We need to **restore purchasing power** by making sure the impact of inflation on commodities and construction costs must be addressed in setting investment levels
- **Eliminate or drastically limit earmarking** in federal transportation programs
- Develop policies that **support maximum flexibility** to allow for use of both conventional and innovative funding and financing tools

AASHTO Legislative Recommendations

- Strong **accountability measures** must accompany substantially increased funding to ensure resources are spent as efficiently and effectively as possible
- Adopt a long-range approach to funding the surface transportation system that gradually moves away from dependence on the current motor fuels tax to a **distance-based direct user fee** such as a fee on vehicle miles traveled
- Assure that any **climate change** legislation that creates a new revenue source, either through a carbon tax or cap-and-trade, provides substantial funding for transportation

Funding Options



Funding Options

- Financing Commission's evaluation criteria
 - Revenue stream considerations
 - Implementation and administration
 - Economic efficiency and impact
 - Equity considerations
- Funding vehicle categories
 - Existing sources
 - New vehicle-related taxes and fees
 - New fuel-related taxes
 - Broad-based taxes
 - Freight-related sources
 - Tolling and pricing mechanisms

Surface Transportation Funding Options Matrix (all revenue estimates in \$millions)

Funding Mechanisms	Mechanism Yield (2010)	Illustrative Rate	Annual Revenues 2010	Average Annual Revenues 2010-2015	Total Revenues 2010-2015
Annual Highway Miles Traveled Fee (Cars Only)	1¢/VMT = \$ 17,298	1.0¢	\$ 17,298	\$ 17,616	\$ 105,696
Annual Highway Miles Traveled Fee (All light duty vehicles)	1¢/VMT = \$ 27,610	1.0¢	\$ 27,610	\$ 28,682	\$ 172,094
Annual Highway User Vehicle Fee	\$1.00 Fee = \$ 263	\$1.00	\$ 263	\$ 275	\$ 1,652
Carbon Tax or Cap And Trade Auction Proceeds	1¢/gal or equiv = \$ 553	30.0¢	\$ 16,594	\$ 17,250	\$ 103,501
Container Tax	\$1 per TEU = \$ 57	\$20.00	\$ 1,137	\$ 1,336	\$ 8,013
Diesel Tax Increase Plus Indexing	1¢/gal = \$ 411	13.0¢	\$ 5,337	\$ 5,976	\$ 35,856
Existing Highway Trust Fund Sources			\$ 40,566	\$ 42,569	\$ 255,413
Gas Tax Increase Plus Indexing	1¢/gal = \$ 1,380	10.0¢	\$ 13,796	\$ 15,082	\$ 90,489
General Fund Support for Intercity Passenger Rail			\$ 3,000	\$ 3,000	\$ 18,000
General Fund Transfers for Transit			\$ 3,167	\$ 3,167	\$ 19,000
Index Existing Highway Trust Fund Sources Beginning in 2010			\$ 791	\$ 3,032	\$ 18,192
Index Heavy Vehicle Use Tax Retroactively to 1997			\$ 411	\$ 536	\$ 3,217
Interest on Highway Trust Fund Balances			\$ 200	\$ 200	\$ 1,200
Motor Fuel Tax Exemption Reimbursement (Retroactive and Future)			\$ 1,057	\$ 1,099	\$ 6,593
Sales Tax on Motor Fuels	1.0% of Sales = \$ 6,136	2.5%	\$ 15,340	\$ 15,658	\$ 93,949
Share of US Customs Revenues	1% of Receipts = \$ 314	5.0%	\$ 1,570	\$ 1,817	\$ 10,904
Tax Credit Bonds for Highways and Transit			\$ 8,333	\$ 8,333	\$ 50,000
Tax Credit Bonds for Intercity Passenger Rail			\$ 4,167	\$ 4,167	\$ 25,000
Ton Freight Charge -- All Modes	1¢/ton = \$ 162	10.0¢	\$ 1,617	\$ 1,801	\$ 10,804
Ton Freight Charge -- Truck Only	1¢/ton = \$ 111	10.0¢	\$ 1,115	\$ 1,242	\$ 7,452
Ton-Mile Freight Charge -- All Modes	1¢/ton-mile = \$ 42,763	0.1¢	\$ 4,276	\$ 4,763	\$ 28,579
Ton-Mile Freight Charge -- Truck Only	1¢/ton-mile = \$ 12,516	0.1¢	\$ 1,252	\$ 1,394	\$ 8,365
US Freight Bill -- All Modes	1% of Sales = \$ 7,708	1.0%	\$ 7,708	\$ 8,585	\$ 51,513
US Freight Bill -- Truck Only	1% of Sales = \$ 6,497	1.0%	\$ 6,497	\$ 7,237	\$ 43,420
Vehicle Sales Tax on New Passenger Cars/Light-duty Trucks	1% of Sales = \$ 4,853	2.0%	\$ 9,707	\$ 10,812	\$ 64,870
Vehicle Sales Tax on New/Used Passenger Cars/Light-duty Trucks	1% of Sales = \$ 9,012	2.0%	\$ 18,024	\$ 20,077	\$ 120,461
Total Revenues			\$ 210,831	\$ 225,705	\$ 1,354,232

EXHIBIT 3–8: REVENUE OPTION EVALUATION SUMMARY*

Strong	Moderate	Weak	Not Applicable/ Seriously Flawed**
Federal Options			
<ul style="list-style-type: none"> • Vehicle miles traveled fee • Automobile tire tax • Motor fuel tax • Carbon tax/cap and trade • Customs duties • Truck/trailer sales tax • Vehicle registration fee • Heavy Vehicle Use Tax • Container fee • Tariff on imported oil • Sales tax on motor fuels • Truck tire tax 	<ul style="list-style-type: none"> • Freight waybill tax • Vehicle sales tax • Harbor maintenance tax • General fund transfer 	<ul style="list-style-type: none"> • Freight ton-mile tax • Driver’s license surcharge • Bicycle tire tax • Dedicated income tax • Auto-related sales tax • Freight ton-based tax • General sales tax 	<ul style="list-style-type: none"> • Vehicle inspection and traffic citation surcharge • Vehicle personal property tax • Windfall profits tax • Petroleum franchise tax • Minerals severance tax • Federal tax on local transit fares • Federal tax on local parking fees
State and Local Options Benefiting from Federal Action			
<ul style="list-style-type: none"> • Facility level tolling and pricing 	<ul style="list-style-type: none"> • Proceeds of asset sales, leases, and concessions 	<ul style="list-style-type: none"> • Cordon area pricing • Passenger facility charges 	<ul style="list-style-type: none"> • Development and impact fees • Tourism-related taxes • Tobacco, alcohol, and gambling taxes

*For revenue options that are dependent upon utilization of a targeted investment fund as a basic premise for feasibility, such a fund is assumed for evaluation purposes (e.g., for all freight-related funding mechanisms and more specifically those more narrowly targeted to intermodal port and harbor-related investment).

Exhibit 5-20. Evaluation of potential transportation revenue sources against generally accepted evaluation criteria

	Revenue Adequacy	Stability/Predictability	Responsiveness to Inflation	Flexibility	Appropriateness of Dedication	Compliance Costs	Administrative Costs	Equity by Vehicle Class	Equity by Income Group	Equity by Geography	Relationship to Economic Efficiency	Point of Taxation and Incidence	Evasion Potential	Ease of Implementation	Average
Fuel Tax															
Indexed Fuel Tax															
Motor Fuel Sales Tax															
Value Added Tax															
Registration Fee															
Personal Property Tax															
Vehicle Sales Tax															
Traditional Tolls															
Tolling New Lanes															
Tolling Existing Lanes															
VMT Fees															
Indexed VMT Fees															
Congestion Pricing															
Local Option Sales Tax															
Impact Fees															
Innovative Finance*															
Public-Private Partnerships*															
Container Fees															
Customs Duties															

* Assumes repayment from tolls

Legend: Excellent Very Good Good Not Good Poor Very Poor

This chart provides a subjective evaluation of a series of alternative revenue sources against a set of criteria.

Source: Commission Staff analysis.

Next Steps

- Given the huge amount of needs, all funding options must be considered
- Similarly, funding stream should be diversified to minimize volatility
- A judicious mix of politically feasible funding options are necessary
- Continue to examine VMT fee
 - Oregon DOT
 - University of Iowa
 - NCHRP 20-24(69): *Near-Term-Implementable Mechanisms for Collecting Road Use Charges Based on Vehicle-Miles Traveled*

Next Steps

- **AASHTO Board of Directors**
 - Congress should set a timetable to complete development of a new system as soon as it is practical
 - Fund research and development efforts to identify options for system design and technology
 - **Fund a proof of concept tests of a VMT-based funding approach at \$50 million per year for 2010 through 2012 with a report to Congress by 2013**
- **New Resource**
 - AASHTO Center for Excellence in Project Finance
 - <http://www.transportation-finance.org>

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Katy Freeway Reconstruction

BART San Francisco Airport Extension

A \$1.48 billion project financed with New Starts funding and airport authority, state and local monies.



[Full project profile »](#)

LYNX Blue Line (CATS)

A \$463 million financing including New Starts grant, state money, and bonds from a local sales tax.



[Full project profile »](#)

Chesapeake Expressway

A \$117 million toll financing involving state and municipal bonds and the Virginia Toll Facilities Revolving Account.



[Full project profile »](#)



Center Overview

Established in the 2005 SAFETEA-LU transportation authorization act, the mission of the AASHTO Center for Excellence in Project Finance (the Center) is to provide support to State Departments of Transportation in the development of finance plans and project oversight tools and to develop and offer training and state-of-the-art finance methods to advance transportation projects and leverage funding.

The Center provides four primary services:

- Professional Education
- Research Services
- Technical Assistance
- Information Dissemination

In addition to providing information about all of the Center's services and events, this website is the Center's primary vehicle for information dissemination, providing comprehensive information on aspects of project finance for transportation improvements.

[More about the Center »](#)

Center Events



Wharton Seminary July 27-29, 2009
 AASHTO has joined forces with the Wharton School to offer the first ever Wharton Transportation Executive Program (WTEP).



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Legislation & Regulations

State Infrastructure Banks

Overview

BACKGROUND

SAFETEA-LU established a new State Infrastructure Bank (SIB) program under which all states, Puerto Rico, the District of Columbia, American Samoa, Guam, the Virgin Islands, and the Commonwealth of the Northern Mariana Islands are authorized to enter into cooperative agreements with the Secretary of Transportation to establish infrastructure revolving funds eligible to be capitalized with Federal transportation funds authorized for fiscal years 2005-2009. The SIB program gives states the capacity to increase the efficiency of their transportation investment and significantly leverage Federal resources by attracting non-Federal public and private investment. A SIB, much like a private bank, can offer a range of loans and credit assistance enhancement products to public and private sponsors of Title 23 highway construction projects or Title 49 transit capital projects.

SIBs were initially authorized under the 1995 NHS Act. Under the initial pilot program, 10 states were selected for participation to use a portion of their Federal-aid funds as "seed" money, matched with non-Federal funds. The 1997 USDOT appropriations act provided \$150 million in Federal general revenue funds for SIB capitalization, and the SIB pilot program was expanded to 39 states (including Puerto Rico), 33 of which were actually established.

In 1998, TEA-21 established a new SIB pilot program, continuing to fund four of the 39 states' SIBs through FY 2003. The remaining 35 states were allowed to continue their SIBs with funds capitalized with FY 1996 and FY 1997 appropriations. States that established SIBs authorized by the NHS Act and TEA-21 are allowed to continue to operate those SIBs under SAFETEA-LU.

FUNDING SOURCES

States participating in the current SIB program may capitalize the account(s) in their SIBs with Federal surface transportation funds for each of fiscal years 2005-2009 as follows:

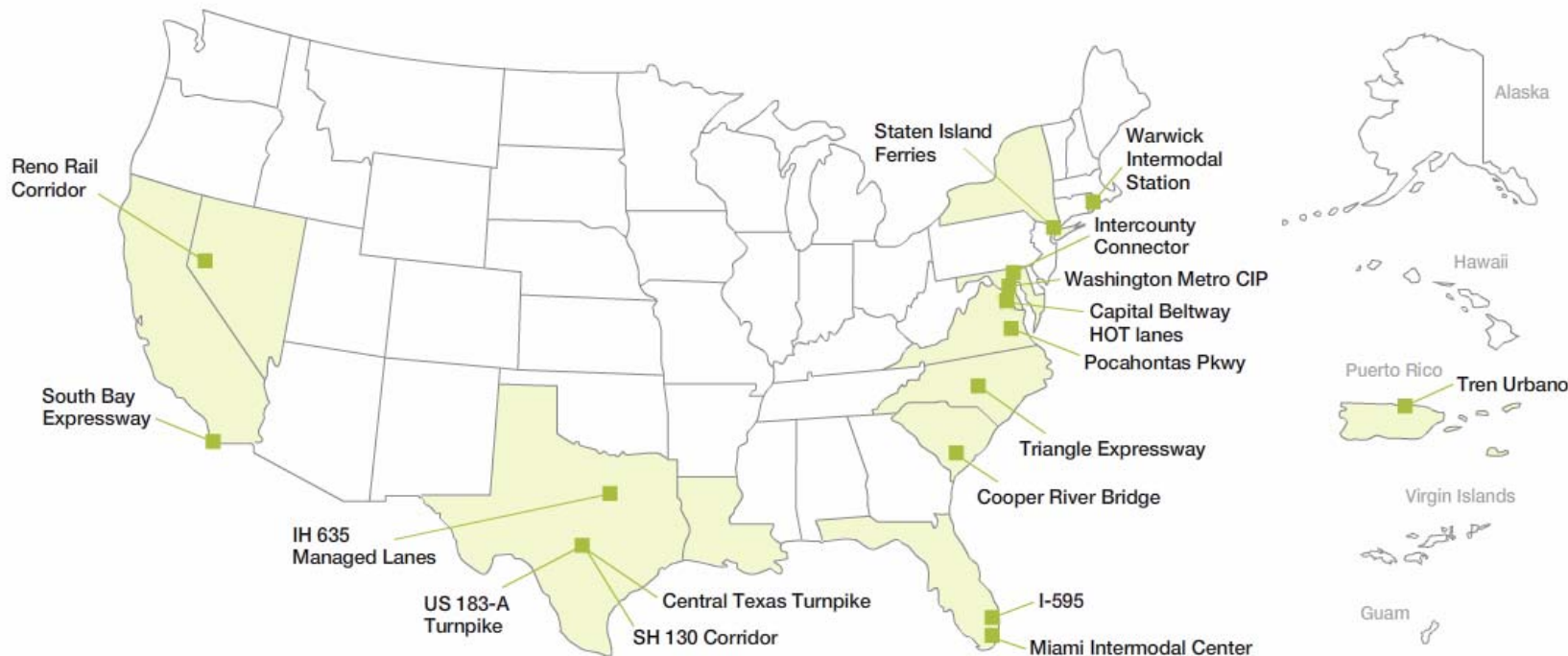
- **Highway account** - up to 10 percent of the funds apportioned to the state for the National Highway System Program, the Surface Transportation Program, the Highway Bridge Program, and the Equity Bonus
- **Transit account** - up to 10 percent of funds made available for capital projects under Urbanized Area Formula Grants, Capital Investment Grants, and Formula Grants for Other Than Urbanized Areas
- **Rail account** - funds made available for capital projects under subtitle V (Rail Programs) of Title 49



Use this interactive map to see which U.S. States and territory use the different project finance tools and authorities listed in the navigation buttons above the map. Select a tool or authority, and a customized map will appear illustrating where these project finance mechanisms have been used or approved.

Finance Tools

TIFIA
GARVEE
SIB
OTHER DEBT FINANCING
PPP
TOLL FACILITIES



- TIFIA project
- Received TIFIA Assistance

Transportation Infrastructure Finance and Innovation Act (TIFIA)

The TIFIA of 1998 is a Federal program through which USDOT provides credit assistance in the form of direct loans, loan guarantees, and credit assistance to major surface transportation projects with dedicated revenue streams. TIFIA has provided credit assistance to state departments of transportation, transit operators, special authorities, local governments, and private entities undertaking highway, transit, rail and intermodal improvements. The program is designed to fill market gaps and leverage limited Federal resources and substantial co-investment by providing projects with supplemental or subordinate debt rather than grants. This map identifies the states and individual projects that have received TIFIA credit enhancements. As of March 2009 the TIFIA program has provided \$5.8 billion in credit assistance leveraging projects with a construction value of \$21.8 billion.

[Get more information about TIFIA](#)

Projects 

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[Woodrow Wilson Bridge](#)



LYNX Blue Line (Charlotte Area Transit System)



Location	Charlotte, North Carolina
Project Sponsor	Charlotte Area Transit System (CATS)
Mode	Light Rail
Description	The first phase of Charlotte's LYNX rapid transit system opened in late 2007. It is a 9.6-mile, 15-station light rail transit (LRT) line extending from Uptown Charlotte (the city's central business district) to Interstate 485 in south Mecklenburg County near the South Carolina State line. A 3.7-mile portion of the system operates on a former portion of Norfolk Southern and North Carolina Railroad right-of-way purchased by the City of Charlotte, with the remaining 5.9 miles operating on separate tracks paralleling the remaining Norfolk Southern right-of-way. Seven of the stations include park-and-ride lots with a total of approximately 3,300 spaces. The Blue line is the first of many planned extensions.
Cost	\$462.7 million
Funding Sources	<p>Federal funds</p> <p>FTA New Starts Full Funding Grant Agreement - \$192.9 million</p> <p>FTA Section 5307 Formula Funds - \$6.4 million</p> <p>State funds</p> <p>State Full Funding Grant Agreement Funds - \$115.7 million</p> <p>Local funds</p> <p>Sales Tax Revenue - \$147.7 million (<i>1/4-cent voter approved transit tax, partially funded through Certificates of Participation</i>)</p>
Project Delivery/ Contract Method	Design/Bid/Build
Private Partner	None
Project Advisors	Parsons Transportation Group Archer Western Contractors

Glossary

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Center Glossary of Key Terms

The glossary includes terms that facilitate comprehension of innovative financing. The glossary is listed alphabetically under each alphabet letter and include a brief definition. Click on each letter to display entries starting with that letter.

[A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [I](#) | [J](#) | [K](#) | [L](#) | [M](#) | [N](#) | [O](#) | [P](#) | [Q](#) | [R](#) | [S](#) | [T](#) | [U](#) | [V](#) | [W](#) | [X](#) | [Y](#) | [Z](#)

A

Account Servicing

Monitoring the status of accounts of indebtedness, monitoring records of current payments, collecting amounts due, handling debtor correspondence, performing follow-up on delinquent accounts, and accurate reporting of debt portfolios.

Accrue

Process of increasing account value, usually associated with interest or other charges that increase the account value.

Administrative Costs/Charges

Additional costs incurred in processing and handling a debt because it has become delinquent. Costs should be based on actual costs incurred or cost analyses which estimate the average of actual additional costs incurred for particular types of debt at similar stages of delinquency. Administrative costs should be accrued and assessed from the date of delinquency. (See "Delinquency.")

Administrative Offset

Withholding money payable by the federal government to a person or held by the government for a person or entity in order to satisfy a debt that the person or entity owes the government.

Advance Construction

States or local governments independently raise up front capital required for a federally approved project and preserve eligibility for future federal-aid reimbursement for that project. At a later date, the state can obligate federal-aid highway funds for reimbursement of the federal share. This tool allows states to take advantage of access to a variety of capital sources, including its own funds, local funds, anticipation notes, revenue bonds,

Thank You

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