



Surface Transportation Finance

Transportation Systems Institute

May 19, 2010

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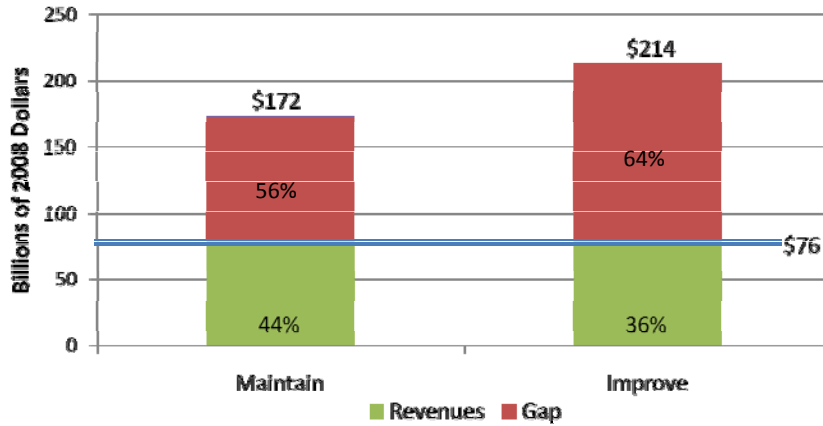
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OVERVIEW OF HIGHWAY FINANCE

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Investment Requirements Highway and Transit Systems

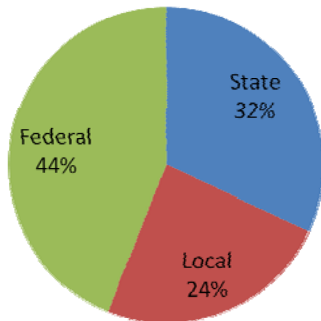
Average Annual Capital Needs and Gap Estimates, All Levels of Government
2008-2035 (in 2008 dollars)



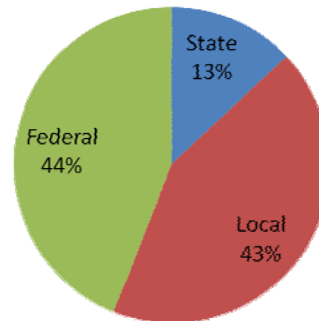
Source: National Surface Transportation Infrastructure Financing Commission 2

Capital Funding by Level of Government

FY 2006 Highway Capital
Funding Sources



FY 2006 Transit Capital
Funding Sources



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Revenue Sources for Investment in Surface Transportation Assets

- Federal-aid highway program
- State funds
 - motor vehicle fuel taxes, license fees, registration fees, sales taxes
- State general fund monies
- Local funds
 - motor vehicle fuel taxes, registration fees, local option sales taxes
- Tolls
- Fare box revenues
- Other
 - value capture, concession/advertising programs, naming rights

"Funding" vs. "Financing"

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FEDERAL-AID HIGHWAY PROGRAM

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Federal-aid Funding

- Apportionments

U.S. FY09	\$35.8 billion
Maine	\$152 M
New Hampshire	\$158 M
Vermont	\$147 M

- Obligation Limitation

U.S. FY09	\$32.7 billion
Maine	\$142 M
New Hampshire	\$146 M
Vermont	\$134 M

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Key Financial Elements of a Grant Program

- Fiscal Constraint
- Obligation
- Expenditure
- Federal Share
- Project Closeout

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STIP Fiscal Constraint

- Four-year Surface Transportation Improvement Program
- Full funding can reasonably be anticipated for all projects in the program

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Obligation

- An amount shall be recorded as an obligation of the U.S. only when supported by documentary evidence of a binding agreement...that is in writing...(31 USC 1501)
- The execution of the project agreement shall be deemed a contractual obligation of the Federal Government for the payment of the Federal share of the cost of the project. (23 USC 106)

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Expenditure

- A State must expend and account for grant funds in accordance with State laws and procedures for expending and accounting for its own funds.
- Applicable OMB cost principles, agency regulations, and the terms of the grant agreement will be followed in determining the allowability of costs. (49 CFR 18)
- Cash Management Improvement Act

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Federal Share

Interstate 90%, Other 80%, Except for:

- Sliding Scale
- Donations
- Toll Credits
- Emergency Relief
- Safety
- Land Management Agency Funds
- Federal Lands Highways Program Funds

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Project Closeout

- Promptly release excess obligations
- Submit final voucher

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Oversight

- Grantees must monitor grant and subgrant supported activities to assure compliance with applicable Federal requirements and that performance goals are being achieved. (49 CFR 18)
- Major Projects
 - \$500M: Financial Plan & Project Management Plan
 - \$100M: Financial Plan
- FIRE – Financial Integrity Review and Evaluation

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Innovative Finance Research

- 23 USC 502
- Test and Evaluation 045
 - Expedite projects, reduce costs, leverage federal funds
- Special Experimental Project 015
 - Increase project management flexibility, improve efficiency, expedite project implementation, develop new revenue streams - PPPs

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Grant Related Financing Tools

- State Infrastructure Banks
- Section 129 Loans
- GARVEE Bonds
- Advance Construction

US Total (as of 4-30-10)	\$46.1 B
Maine	\$186 M
New Hampshire	\$137 M
Vermont	\$160 M

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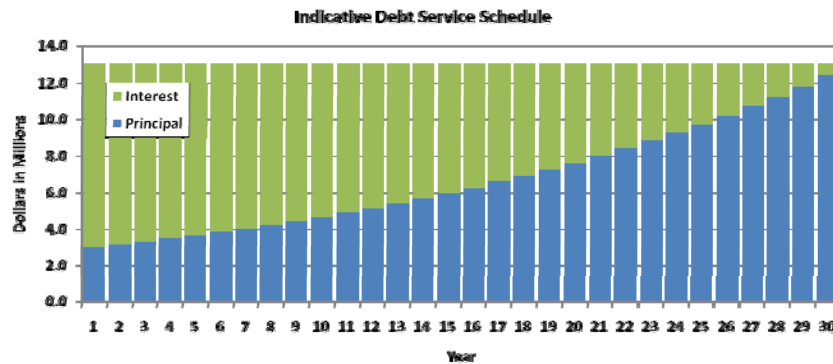
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MUNICIPAL BOND MARKET

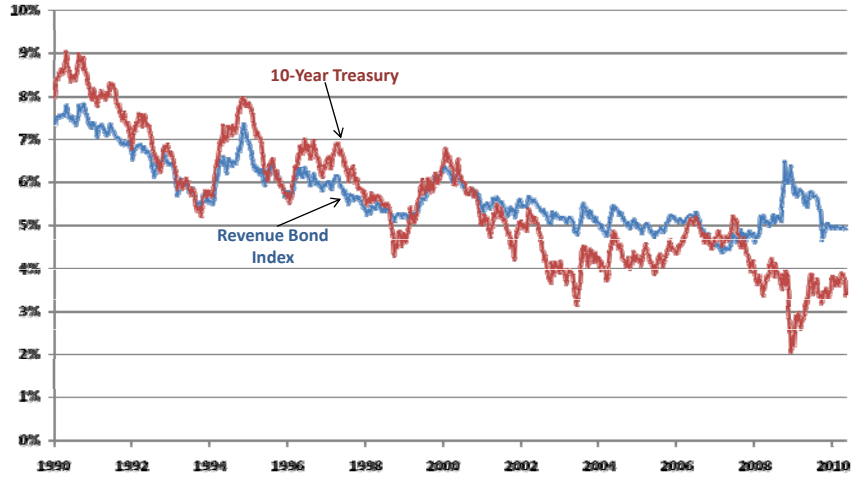
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Tax-Exempt Bond Structure

- Assumptions
 - AA tax-exempt rates
 - 30 year maturity
 - \$200 million par amount
 - Level debt service amortization
- Results
 - \$13 million average annual payment
 - \$190 million total interest
 - \$390 million total debt service



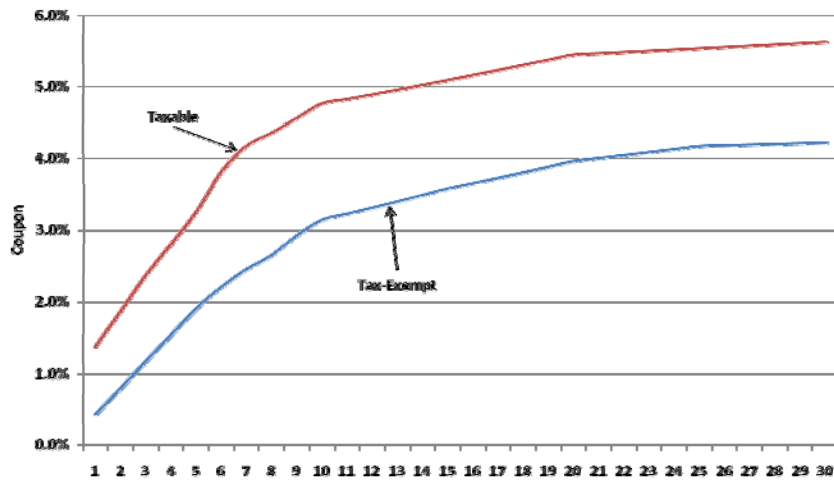
Historical Interest Rates



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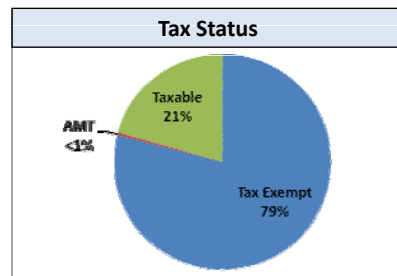
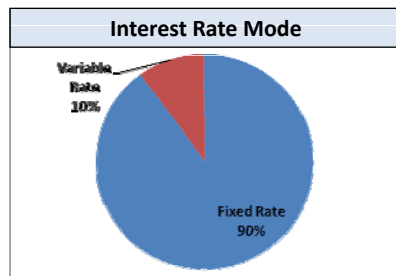
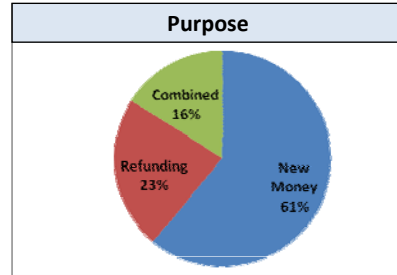
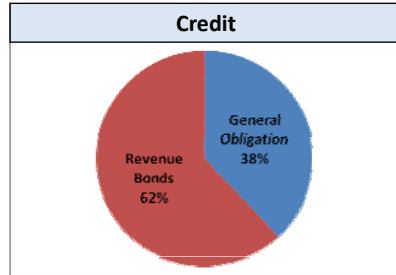
Yield Curves

(Indicative Rates for a AA Municipal Issuer)



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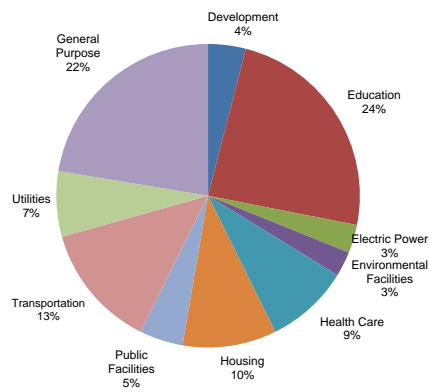
2009 Municipal Market (\$409 Billion)



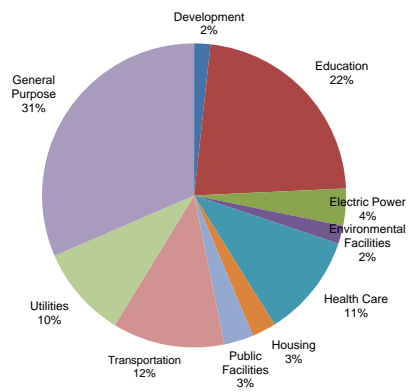
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Municipal Market Sectors

Municipal Market 2000



Municipal Market 2009



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Surface Transportation Financing Tools

- Highway, toll road, and transit revenue bonds
- Grant Anticipation Revenue Vehicles (GARVEE Bonds)
- Build America Bonds (BABs)
- Private Activity Bonds (PABs)
- Transportation Infrastructure Finance and Innovation Act (TIFIA)

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Structuring a Municipal Bond Financing

- Select working group
- Develop preliminary plan of finance
- Draft legal and disclosure documents
- Present proposed credit/financing structure to the rating agencies
- Finalize plan of finance and legal/disclosure documents
- Market the bonds to investors (retail and institutional)
- Price the bonds
- Close the financing

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PROJECT FINANCE STRATEGIES & PUBLIC PRIVATE PARTNERSHIPS (P3)

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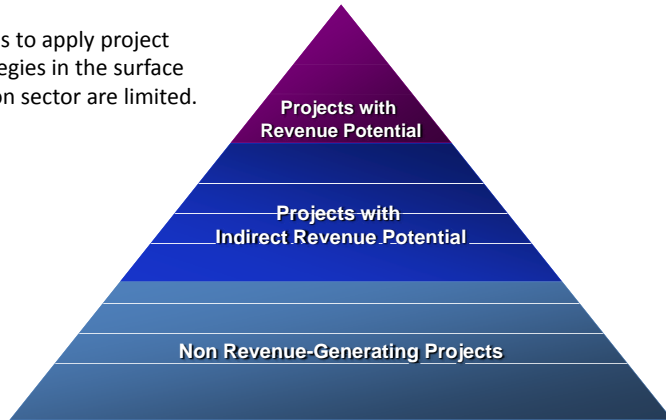
Discussion Outline

- P3 ≠ Project Finance
- Basic Project Finance Strategy
- Evolution of the P3 Market

Project Finance

Project finance refers to the long term financing of infrastructure and industrial projects based upon the projected cash flows of the project rather than the balance sheets of the project sponsors.

Opportunities to apply project finance strategies in the surface transportation sector are limited.



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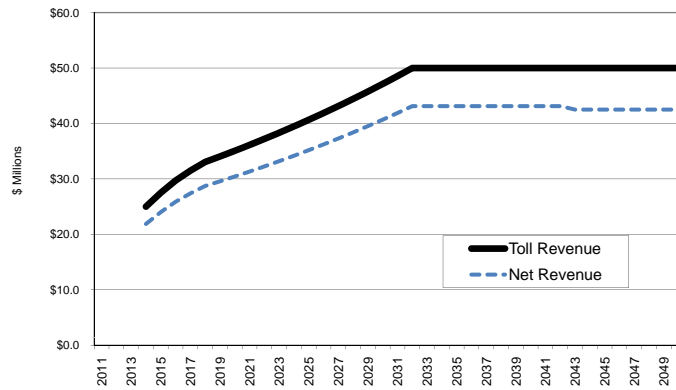
P3 Strategies

Public Private Partnerships (P3) include a variety of arrangements designed to transfer project risk or leverage a revenue stream, but a **P3 is not a source of funding**

Project Activity	Traditional Governmental Delivery	Design-Build with Public Funding	Design-Build with Outsourced Operations or Maintenance	Governmental Tax-Exempt Project Financing	Private Concession Project Financing
Construction	Public	Private	Private	Private	Private
Operation	Public	Public	Public or Private	Public or Private	Private
Financing	Public	Public	Public	Public or Private	Private
Ownership	Public	Public	Public	Public	Private

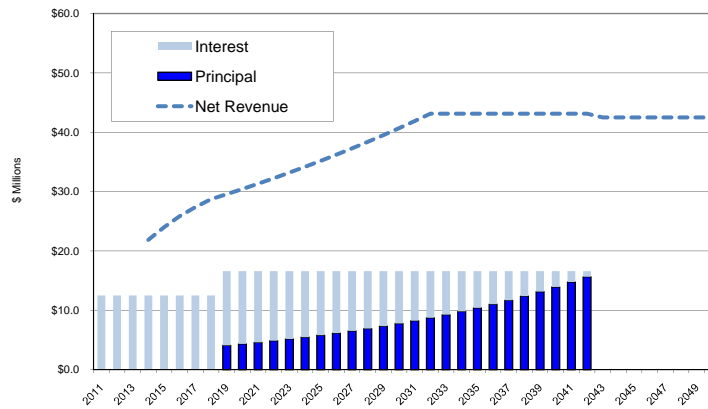
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Basic Project Finance Project Revenue Assumptions



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Basic Project Finance Initial Debt Capacity



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Basic Project Finance

Initial Debt Capacity

SOURCES OF FUNDS	
Senior Current Interest Bonds	\$208,285,000
Investment Earnings	6,935,822
<i>Total Sources</i>	<i>\$215,220,822</i>
USES OF FUNDS	
Project Costs	\$300,000,000
Pre-Development Costs	3,000,000
Issuance Costs	5,207,125
Capitalized Interest	37,491,300
Debt Service Reserve Fund	20,828,500
Contingency / (Shortfall)	(151,306,103)
<i>Total Uses</i>	<i>\$215,220,822</i>

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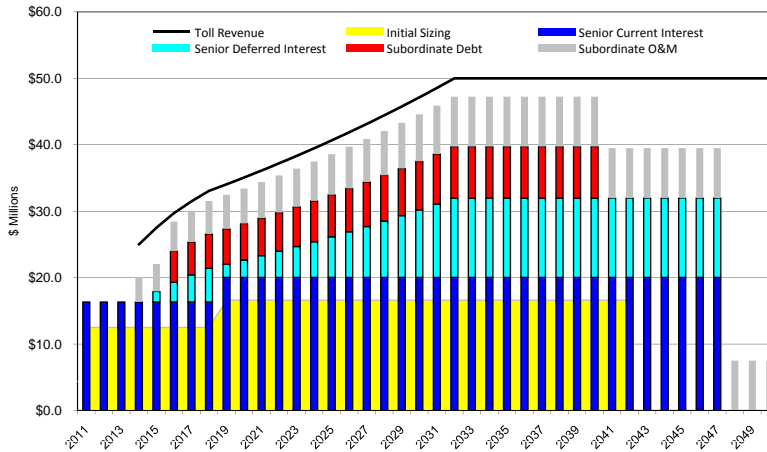
Basic Project Finance

Strategies for Closing Funding Gaps

- Subordinate All or Portion of O&M Expenses
- Lower Debt Service Coverage and/or Credit Ratings
- Extend Maturity of the Debt
- Add Subordinate Debt
- Optimize Revenue (*change alignment, toll schedule, value pricing*)
- Modify Project Scope (*value engineering, phasing*)
- Third-Party Credit Enhancement

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Basic Project Finance Revised Finance Plan



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Basic Project Finance Revised Finance Plan

SOURCES OF FUNDS	
Senior Current Interest Bonds	\$272,310,000
Senior CABs	69,956,262
State / Local Investment	-
Subordinated Debt	50,537,231
Investment Earnings	8,766,830
Total Sources	\$401,570,323
USES OF FUNDS	
Project Costs	\$300,000,000
Pre-Development Costs	3,000,000
Issuance Costs	10,267,988
Capitalized Interest	49,015,800
Debt Service Reserve Fund	39,280,349
Contingency / (Shortfall)	6,186
Total Uses	\$401,570,323

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Evolution of the P3 Market

1991	1992	1993	1994	1995	1996	1997
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- Teodoro Moscoso Bridge
- Mid-Bay Bridge, FL
- San Joaquin Hills Toll Road, CA
- E-470 Toll Road Segment 1, CO
- Dulles Greenway Toll Road, VA
- CPTC 91X, CA
- Foothill Eastern Toll Road, CA
- E-470 Toll Road Segments 2 & 3, CO
- I-15 Reconstruction, UT
- JFK Terminal 4, NY
- Atlantic City-Brigantine Tunnel, NJ
- Hudson-Bergen Light Rail, NJ

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Evolution of the P3 Market

1998	1999	2000	2001	2002	2003	2004
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- Alameda Corridor, CA
- Foothill South, CA
- Southern Connector, SC
- Pocahontas Parkway, VA
- Route 3 North, MA
- Las Vegas Monorail, NV
- Camino Colombia Bypass, TX
- SH-130 Segment 1-4, TX
- Northwest Parkway, CO
- Tacoma Narrows Bridge, WA
- Cooper River Bridge, SC
- SR-125, CA
- Reno ReTRAC, NV
- JFK Airtrain, NY
- Portland Airport Max Rail, OR

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Evolution of the P3 Market

2005	2006	2007	2008	2009	2010
<ul style="list-style-type: none"> ■ Chicago Skyway, IL <i>(99-year lease)</i> 	<ul style="list-style-type: none"> ■ Indiana Toll Road, IN <i>(75-year lease)</i> ■ Pocahontas Parkway <i>(99-year lease)</i> 	<ul style="list-style-type: none"> ■ Northwest Parkway <i>(99-year lease)</i> 	<ul style="list-style-type: none"> ■ Intercounty Connector, MD ■ I-95 Widening, FL ■ IROX I-75, FL FL 	<ul style="list-style-type: none"> ■ Dulles Metrorail Project, VA ■ I-595 Manages Lanes, FL ■ North Tarrant Express, TX ■ Capital Beltway HOT Lanes, VA ■ Port of Miami Tunnel, FL ■ SH-130, Segments 5-6, TX 	<ul style="list-style-type: none"> ■ 95 Express Lanes,

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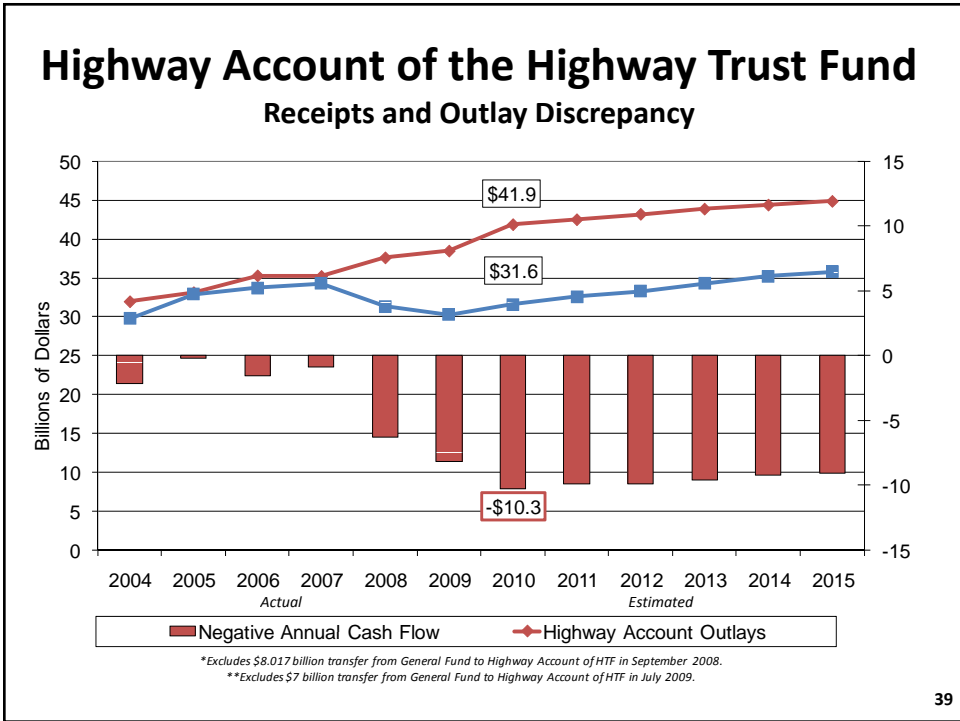
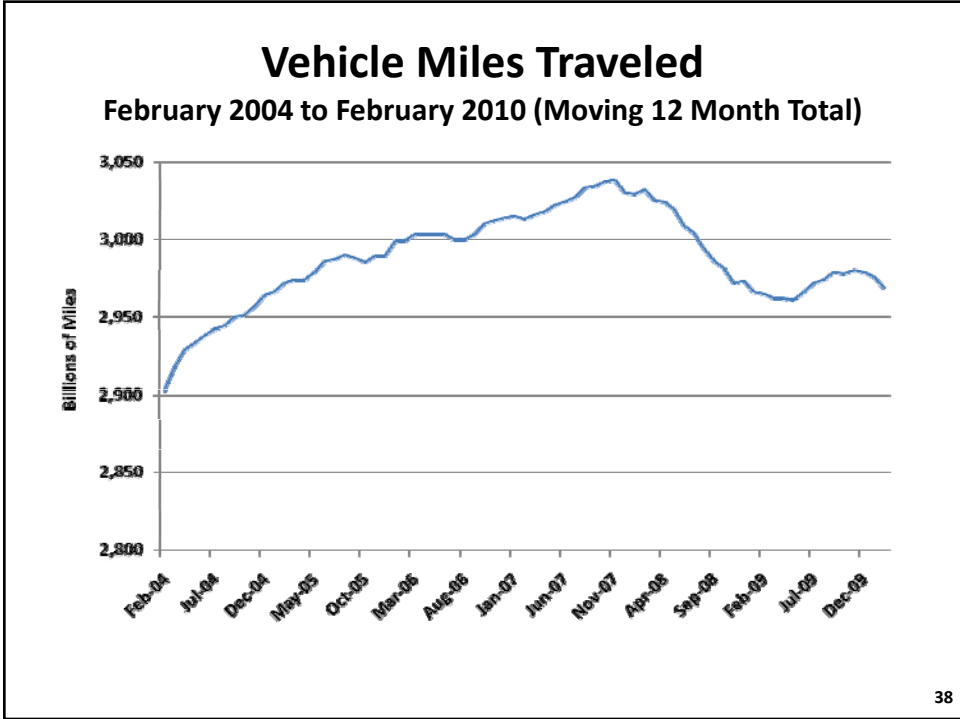


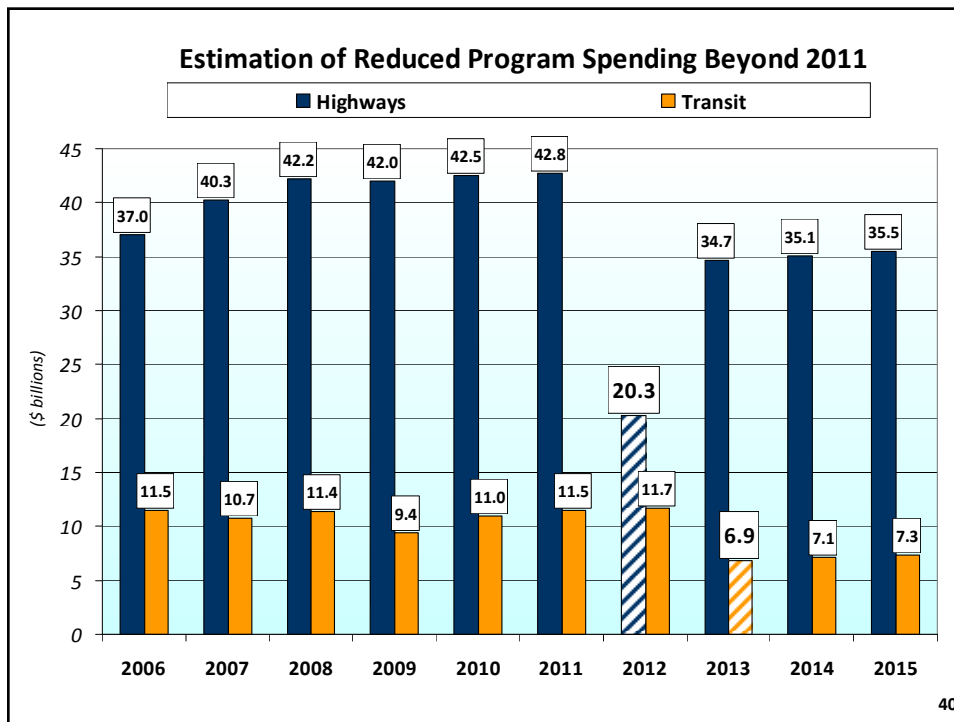
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REAUTHORIZING THE SURFACE TRANSPORTATION PROGRAM

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Surface Transportation Authorization Act of 2009

Funding

- Total funding \$450 billion; \$500 billion with High Speed Rail (6 years)
- \$337.4 billion in Highway investment
 - \$100 billion for Capital Asset Improvement (NHS, IM, Bridge)
 - \$50 billion for Metropolitan Mobility and Access (MMA)
 - \$25 billion for Projects of National Significance
 - \$162.4 billion for other FHWA-administered programs (e.g. Highway Safety Improvement, Surface Transportation, CMAQ, Freight, etc)
- \$99.8 billion transit
 - \$87.6 billion from Highway Trust Fund
 - HTF share was 15.2% in SAFETEA-LU; it is increased to 19.5% in STAA
 - \$12.2 billion from General Fund
- \$50 billion high speed rail corridors
- \$12.6 billion Motor Carrier Safety