

Transportation Primer

Joint Appropriations Subcommittee on Transportation
February 9, 2011

Anna Cameron
Fiscal Research Division



FISCAL RESEARCH DIVISION
A Staff Agency of the North Carolina General Assembly

Agenda

- Background
- Transportation Revenues
 - Items for Consideration
- Transportation Spending
 - Transportation Capital Spending
 - Equity Formula
 - Items for Consideration
- Summary

Background

North Carolina's State-Owned Highway System is:

- Large – 79,000 miles, second largest in the country
 - Texas is number one, by a few hundred miles
 - North Carolina secondary roads are state-owned

- Centralized – All dollars flow to Raleigh
 - Transportation project decisions made in Raleigh by Board of Transportation (G.S. 143B-350) and Secretary (Executive Order No. 2) subject to:
 - Statutory formulas
 - Local Input

Background, continued State Owned Roads

OCTOBER 2009 Federal Highway Administration			
STATE	Road Miles Owned by State Agency	Total Road Miles	Percent Owned by State Agency
Florida	12,084	121,387	10%
Georgia	17,997	121,873	15%
North Carolina	79,466	105,104	76%
South Carolina	41,429	66,255	63%
Tennessee	13,881	92,175	15%
Texas	80,067	306,404	26%
Virginia	57,918	73,902	78%
U.S. Total	779,735	4,042,778	19%

- North Carolina owns 76% of the road miles in the state.
- Greater share than Florida, Georgia, or the nation as a whole.
- Local roads usually owned and controlled by local jurisdictions.

Background, continued

1915

- First full fledged State Highway Commission established
 - Provided road building assistance to counties

1921-1929

- NCGA authorizes takeover of 5500 miles of county roads.
- Motor Fuel Tax raised to 5 cents per gallon (equivalent to 63 cents per gallon today)
- \$115 million in highway bonds issued
- North Carolina is the “Good Roads State”

Background, continued

1931

- During the Depression the state assumes responsibility for county roads, giving state responsibility for all roads except city streets.

1951

- Powell Bill
 - State takes over city streets which are part of the state highway system
 - Provides ½ cent per gallon from the motor fuel tax to cities for other city streets; allocated based on statutory formula.

Background, continued

1980's

- Transportation infrastructure and funding mechanisms prove inadequate for the state's growth.
- Highway Study Commission recommends a multibillion dollar highway construction program.

1989

Creation of Highway Trust Fund (HTF)

- Goals are
 - Completion of the Intrastate Highway System, a 3600 mile network of four-lane highways.
 - Construction of seven urban loops.
 - Pave 10,000 miles of state-maintained dirt roads.
 - Increase Powell Bill funding.

Background, continued

2002

- North Carolina Turnpike Authority created as an independent agency to examine the feasibility of tolling roads. The original projects were defined in Statute in 2005.

2003 and 2004

- Project lists for Intrastate System and Urban Loops are amended

2007

- S.L. 2007-428 (SB 1513) authorizes counties to participate in the cost of rights-of-way, construction, reconstruction, improvement, or maintenance of roads on the State Highway System under agreement with the Department of Transportation.

Background, continued

2008

Gap Funding for Turnpike Authority

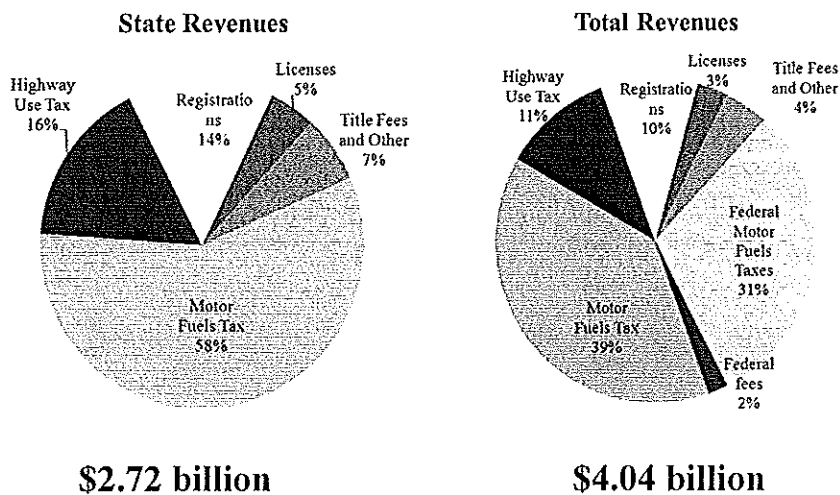
- S.L. 2008-107 begins gap funding for four North Carolina Turnpike Authority toll projects, decreasing the transfer from the Highway Trust Fund to the General Fund.
 - Triangle Expressway
 - Monroe Connector/Bypass
 - Mid-Currituck Bridge
 - Garden Parkway

2010

North Carolina Mobility Fund

- S.L. 2010-31 (SB 897) establishes the North Carolina Mobility Fund.

Transportation Revenues FY 2011



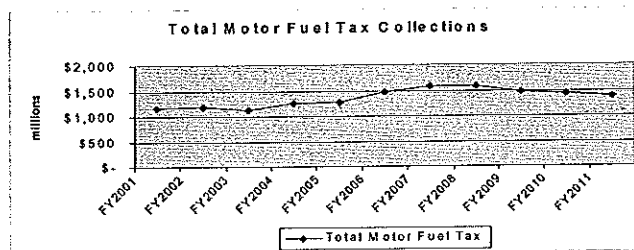
Transportation Revenues Current vs Forecasted

- This is a volatile forecast and represents a consensus between DOT, OSBM, and Fiscal Research.
- Forecast will be redone in April 2011 and any necessary changes will be incorporated in the Final Budget.
- Assumes Motor Fuels Tax rate is not capped.

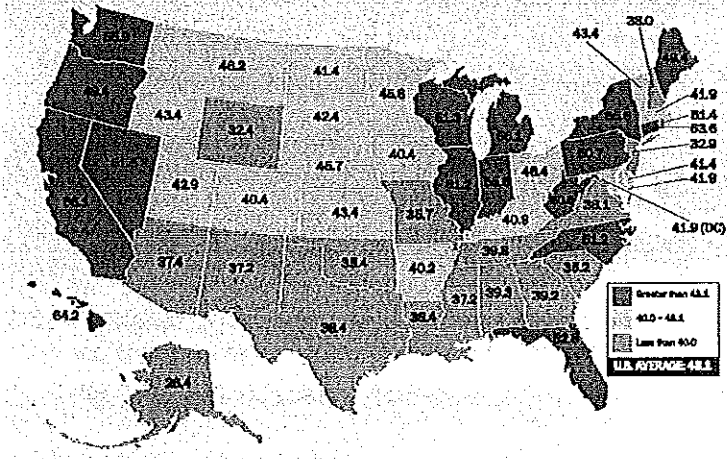
	Certified FY 2011	Forecasted FY 2012	Forecasted FY 2013
Highway Fund	\$1,792,540,000	\$1,898,700,000	\$1,967,460,000
Highway Trust Fund	\$928,730,000	\$928,710,000	\$948,340,000
Average Motor Fuels Tax Rate	32.2 cents per gallon	34.2 cents per gallon	35.4 cents per gallon

Transportation Revenues Motor Fuel Taxes

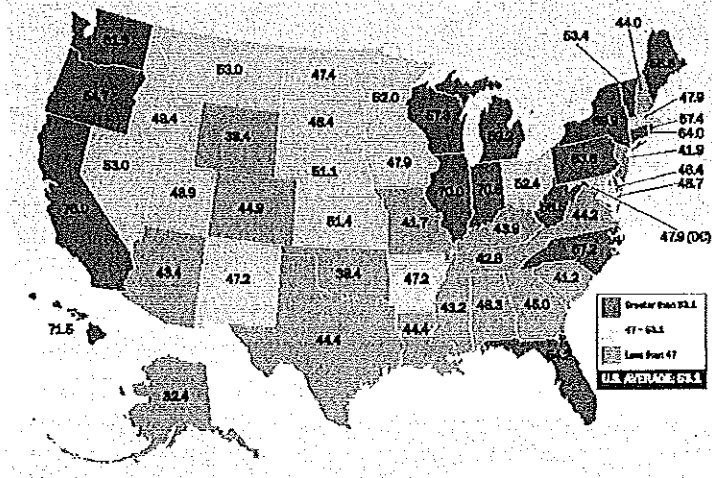
- Rate is 32.5 cents per gallon (cpg) through June 30, 2011.
- 17.5 cpg fixed + variable rate based on wholesale price history.
- One cent tax equals approximately \$50 million in tax revenues.
- Collections down due to recession and higher fuel prices.
- Future growth in consumption may be modest; growth in revenue will depend on higher tax rates.



AMERICAN PETROLEUM INSTITUTE
GASOLINE TAXES
 COMBINED LOCAL, STATE AND FEDERAL (CENTS PER GALLON)
 JANUARY 2011

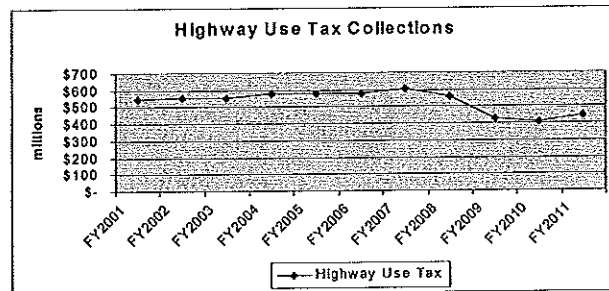


AMERICAN PETROLEUM INSTITUTE
DIESEL TAXES
 COMBINED LOCAL, STATE AND FEDERAL (CENTS PER GALLON)
 JANUARY 2011



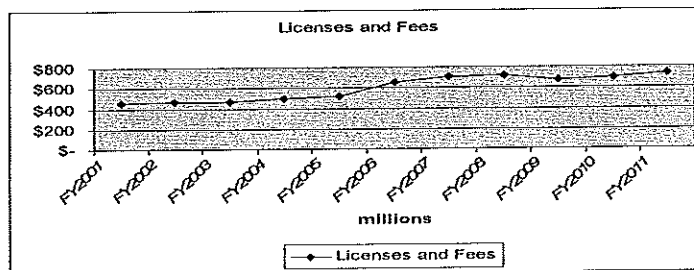
Transportation Revenues Highway Use Tax

- Highway Use Tax is 3% of value of vehicle net of trade.
- North Carolina tax is lower than Georgia, Virginia, and South Carolina.
- Revenues off about one-third to about \$450 million from peak of \$600 million due to recession.



Transportation Revenues Licenses and Fees

- Driver licenses, vehicle registration fees, truck licenses, titles...
- Generally driven by demographics.
- General Assembly increased these fees by about 20% in 2005 to account for inflation in the years since they had been set.
- Overall, these fees are similar to surrounding states.



Transportation Revenues Federal Aid

- In recent years federal aid has averaged about \$925 million.
- Federal stimulus package has provided \$1.4 billion in additional funding since 2009.
 - \$735 million for highway and bridge improvements
 - \$545 million for rail improvements
 - \$103 million for public transportation plus an additional \$5.1 million for transit for two MPOs
 - \$10 million for Yadkin River Bridge Phase 1
- Congress is several years late in rewriting the overall multi-year transportation funding bill.
- Potential to lose federal Highway Trust Fund monies.

Transportation Revenues - Tolls North Carolina Turnpike Authority

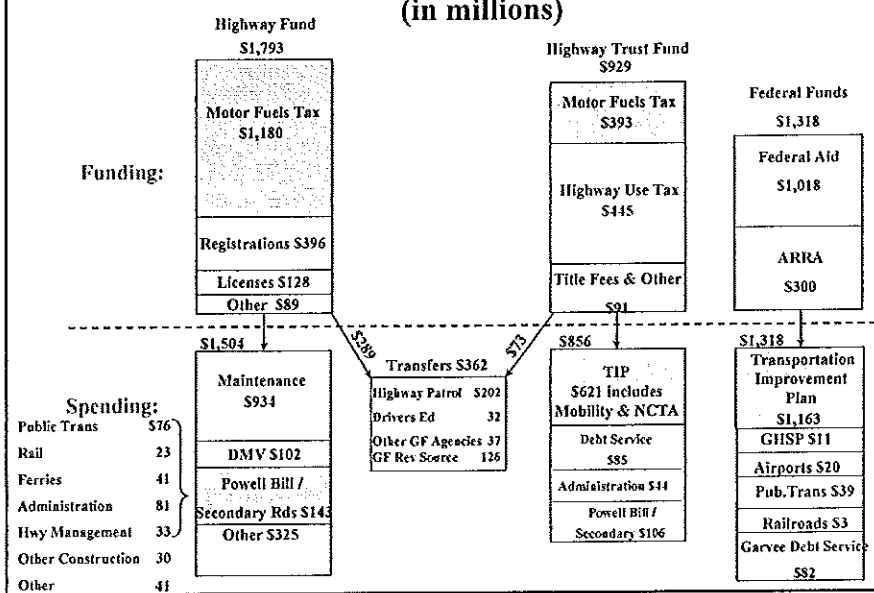
Annual gross toll revenues are projected to surpass \$100 million by 2018.

	Total Project Cost	Annual Gap Funding from HTF (start date)	Open to Traffic	Projected Tolls
Triangle Expressway	\$1 billion	\$25 million (FY 2009)	Triangle Parkway opens 12/11; Western Wake opens 12/12	\$7m (FY13) \$18m (FY14) \$25m (FY15)
Monroe Connector/Bypass	\$808 million	\$24 million (FY11)	FY2014	\$7m (FY15) \$19m (FY16) \$25m (FY17)
Mid-Currituck Bridge	\$580 - \$670 million	\$15 million (FY11); \$28 million (FY14)	FY2014	\$7m (FY13) \$10m (FY14) 14m (FY15)
Garden Parkway	\$930 million	\$20 million (FY11); \$35 million (FY12)	FY2015	\$3m (FY15) \$19m (FY16) \$20m (FY17)

Transportation Revenues Potential Items to Consider

- Should the motor fuels tax be modernized to reflect changes in consumer behavior and technological advancements?
- Should other revenue options be considered?
 - Increased tolling
 - Sponsorships
 - Vehicle miles travelled
 - Public private partnerships
- Should exemptions in the Highway Use Tax continue?
- Should fees be indexed for inflation?
- Others?

Flow of Funds (in millions)

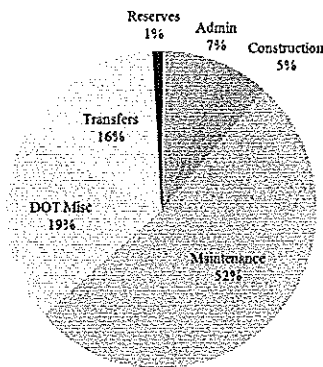


Transportation Spending Highway Fund and Highway Trust Fund

	Highway Fund	Highway Trust Fund
Allocation Method	Appropriation, but Secondary Road Construction, Aid to Municipalities and Leaking Underground Storage Tank Fund by statutory formula	Statutory Formula (G.S. 136-176)
Budget FY 2010-2011	\$1,792,540,000	\$928,730,000
Major Sources of Funds	Motor Fuels Tax DMV Licenses and Fees	Highway Use Tax Motor Fuels Tax
Major Programs	Maintenance (52%) State Highway Patrol DMV Secondary road construction Aid to Municipalities Public Transportation, Rail, Ferry, Aviation Driver Education Other	State Share of Federal Aid Match: 20% Administration: \$44 million Transfer to General Fund: \$84 million NC Turnpike Authority Gap Funding: \$35 million Mobility Fund: \$15 million Construction (of remaining funds) •Intrastate 61.95% •Urban Loops 25.05% •Secondary Roads 6.5% •Aid to Municipalities 6.5%

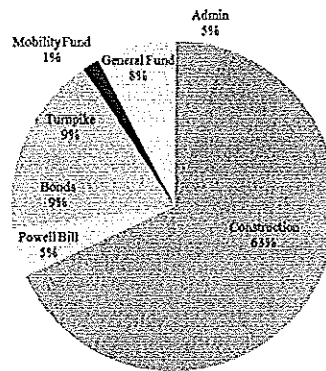
Transportation Spending Highway Fund and Highway Trust Fund FY 2011

Highway Fund



\$1.79 billion

Highway Trust Fund



\$928 million

**Transportation Spending
Mobility Fund (S.L. 2010-31)**

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
\$39 million	\$31 million	\$45 million	\$58 million	\$58 million

- First project in statute: Yadkin River Bridge Phase 2
 - Total project cost = \$75 million

Criteria	Weight
Mobility/Congestion – measured by the estimated travel time savings the project will provide.	60%
Multimodal – measured by whether the project provides an improvement to more than one mode of transportation and thus improves the efficiency of the overall transportation system.	20%
Congestion and Intermodal Fund – measured by whether the project meets the requirements cited in the Mobility Fund legislation.	20%

**Transportation Spending
Highway Trust Fund Status at June 30, 2010**

	Intrastate System	% of System
Total miles complete	2845	77%
Remaining miles to complete	835 (Total miles: 3680)	23%
Estimated remaining costs	\$8.4 billion	
Projected cost per mile	\$10.1 million	

**Transportation Spending
Shortfall Examples: Maintenance and Urban Loops**

- 2010 Maintenance Condition Assessment Report Projections:

Projected Shortfall FY 2012	Projected Shortfall FY 2013	Projected Shortfall FY 2014	Projected Shortfall FY 2015	Projected Shortfall FY 2016
\$330 m	\$385 m	\$444 m	\$505 m	\$569 m

- Urban Loops named in G.S. 136-180

	Projects Needing Funding	Average Annual Funding	Total Funds Needed for Completion	Estimated Completion Date
Loops	25	\$150 million	\$8 billion (assumes no inflation)	2062 (assumes no inflation)

Transportation Capital Spending FY 2011

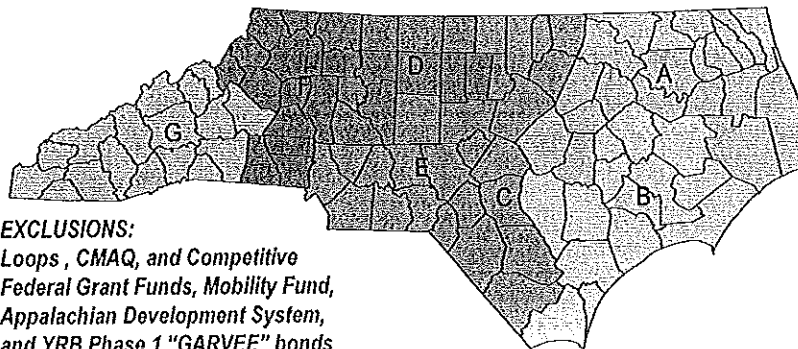
Program	Reference	Amount (Yearly, unless specified)	Funding Source	Uses	Distribution
State Transportation Improvement Program	G.S. 143B-350 (f)(4), G.S. 136-17.2A	\$22.4 billion in draft STIP 2012-2018 (STIP finalized this summer)	Highway Trust Fund (HTF), federal aid	2700 projects listed including highway, rail, PT, aviation, ferry, future Turnpike projects, bike/ped	Equity formula (with exemptions)
Maintenance		\$933 million	Highway Fund (HF)	Maintenance, resurfacing, system preservation	Formulas based on mileage, pavement condition, and population
Secondary Road Construction	G.S. 136-44.2A, G.S. 136-44.5, G.S. 136-182	\$116 million	HF and HTF	Construction, modernization	Formula based on secondary road mileage
Powell Bill (Aid to Municipalities)	G.S. 136-41.1 through G.S. 136-41.3	\$131 million	HF and HTF	Construction, maintenance of local streets	75% population 25% mileage

Transportation Capital Spending, continued

Program	Reference	Amount (yearly, unless specified)	Funding Source	Uses	Distribution
Small Urban Construction	SL 2007-323 Sec. 27.5	\$7 million	HF	Small construction projects	Statewide; divided equally among divisions
Discretionary	SL 2007-323 Sec. 27.5	\$12 million	HF	Rural or small urban projects	Statewide
Spot Safety		\$9.1 million	HF	Small projects	

Transportation Spending 1989 Equity Formula

50% POPULATION OF REGION AS PERCENT OF STATE	25% REMAINING INTRASTATE SYSTEM MILES	25% EQUAL SHARE
--	---	-----------------------



EXCLUSIONS:
 Loops, CMAQ, and Competitive
 Federal Grant Funds, Mobility Fund,
 Appalachian Development System,
 and YRB Phase 1 "GARVEE" bonds

**Transportation Spending
Potential Items for Consideration**

- What are the transportation funding priorities?
- Are there areas where funds can be reprogrammed for other purposes and there areas where efficiencies can be made?
- Should transfers made to other State agencies be examined?
- Can cost savings be achieve through greater privatization or outsourcing?
- Should the prioritization process be applied to areas in which projects are currently selected by the General Assembly, such as Turnpike projects, Intrastate Systems, and Urban Loops?

**Transportation Spending
Potential Items for Consideration**

- Should funding be tied to divisions? Should urban areas be split into multiple divisions?
- Should the Mobility Fund and its project selection criteria be re-examined?
- Should existing Turnpike Projects be re-examined?
- Should tolls be used outside of Turnpike projects?
- Others?

Summary

- North Carolina has a large, centralized highway system with state, not county, responsibility for secondary roads.
- The Highway Trust Fund was established in 1989 and, with federal aid, is the state's construction fund.
- The condition of the state's roads will deteriorate without additional funding for maintenance and preservation.
- Revenues will grow slowly under the current transportation tax structure while construction costs will rise.
- Expected population growth will put additional demands on new construction.

Questions?