HIGHWAY AND BRIDGE NEED VS. RENENUE

West Virginia Department of Transportation's Long Range Multi-modal Transportation Plan 2008 – 2032

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REVENUE

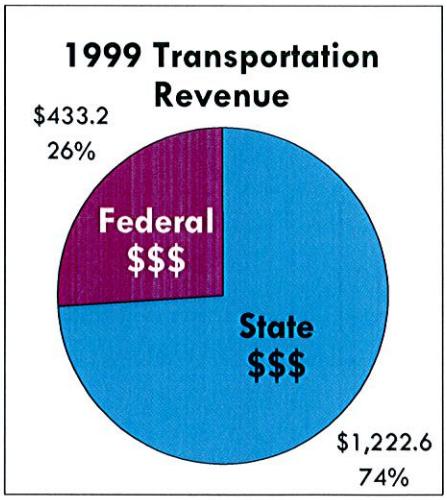
For WVDOT In real terms, revenues have decreased over time due to inflation. Nominally, the revenue available in FY2008 was 6% greater that that available in FY1999. However, when adjusted for inflation and presented ***in constant 2007 dollars, total revenue available in FY2008 was 30% less than what was available 10 years ago.*** It is noted that there was bond revenue included in FY1999 through FY2002.

The decline in DOH state revenue sources tend to be from the fixed rate revenues (i.e., flat per cent gallon gas tax, fixed rates for licenses and registrations, etc.) as opposed to revenues from percentage taxes. All other things being equal, as costs rise, a percentage tax produces additional revenue, but a flat, fixed-rate tax does not. It has only been in recent years with the significant increase in fuel prices that the wholesale component of the fuel tax, which is percentage based, has helped to offset the flat-rate portion of the fuel tax. In constant 2007 dollars, FY2008 state fuel tax revenues were 10% less than in FY1999. Registration fee and privilege tax revenues were 28% and 22% less in FY2008 than in FY1999, respectively.

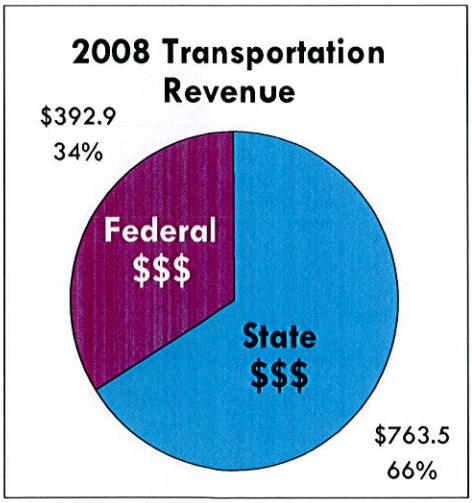
Federal revenue has decreased in real terms 9% over time. In constant 2007 dollars, the value of federal revenue was $433 million in FY1999 compared to $393 million in FY2008. Current economic conditions suggest that federal revenue may not be as much as it has in the past.

WVDOT is facing the same issues that most State DOTs across the nation are facing – having to do more with less. Revenues have not kept pace with costs. Transportation needs continue to increase as vehicle miles of travel increase and there is a greater demand for more alternative transportation. There is a larger transportation system to operate and as costs to maintain this system increase but revenues stay the same or decline, there is less money available for capital improvements.

WVDOT has 30 % less money today to spend available than 10 years ago.



1999 Funds (in 2007$) - $1.66B



2008 Funds (in 2007$) - $1.16B

- The principal sources for transportation revenues are the Federal gas tax, the state gas tax, the WV privilege tax and WV vehicle registration fees.
- Today, less money is available from State Revenue Sources.
- WVDOT can't count on future federal funding levels to remain constant.

NEEDS ASSESSMENT

As part of the long-range plan update, a 25-year highway and bridge needs analysis for the state of West Virginia. This analysis conducted two highway and bridge scenarios to fully assess statewide needs – a constrained scenario (with budget limitations), and an unconstrained scenario (without budgets targets). The unconstrained scenario identified all deficiencies within a given study period, selecting the most economically efficient method of improving/maintaining a roadway system, without any budgetary limits. The constrained scenario identified deficiencies, ranked them according to the benefits to users, and selected the set of improvements that provided the maximum benefit for the available funds.

Highway Needs Analysis Findings

- An unconstrained highway scenario analysis identified 51,108 lane miles for improvements across West Virginia during the 25-year study period (2007 to 2031).
- Modernization improvements totaled 10,014 lane miles (4,811 centerline miles). Modernization efforts include lane widening, road reconstruction, and shoulder improvements.
- Expansion projects totaled 3,402 lane miles (678 centerline miles), which added 1,525 lane miles of capacity to the system.

	Improvement Cost ($M)			Lane Miles Improved		
	Federal Aid	Local	State Total	Federal Aid	Local	State Total
Expansion	$ 7,944	$ -	$ 7,944	3,402	-	$3,402.00
Modernization	$ 13,010	$ 1,956	$ 14,966	8,583	1,431	$10,014.00
Preservation	$ 11,565	$ 2,276	$ 13,840	27,926	9,766	$37,692.00
	$ 32,518	$ 4,232	$ 36,750	39,911	11,197	$51,108.00

Bridge Needs Analysis Findings

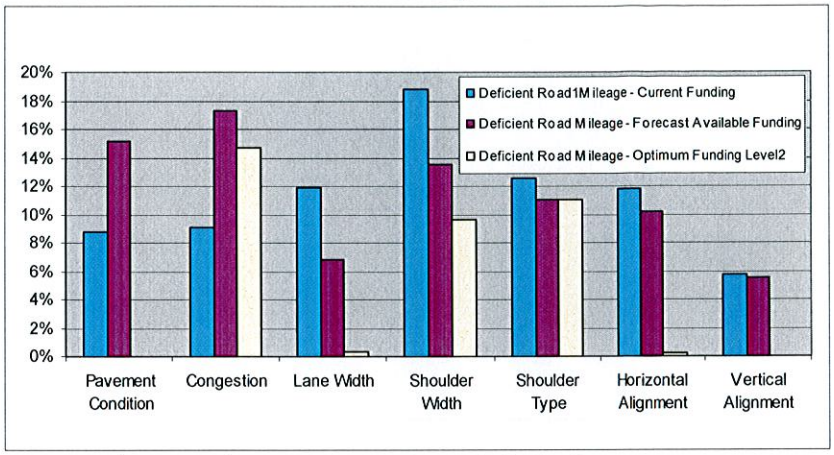
- There are 6,243 state owned bridges in West Virginia.
- Approximately 12 percent (740) of the total number of state bridges are located in urban areas. Most structures are located in rural areas and carry traffic on local roads (43%) and major collectors (23%) across the state.
- Bridges within West Virginia are divided into two categories: those that conform to standard AASHTO design standards, and those that conform to Coal Resource Transportation System (CRTS) road standards, which exceed AASHTO design standards for load capacity.
- Based on the statewide bridge analysis, West Virginia bridges needs totaled $2.5 billion over 25 year planning period. This included, 814 bridges replaced, 577 widened, 8 strengthened, and 1 raised.

	Improvement Cost ($ M)			Bridges Improved		
	Non-CRTS	CRTS	State Total	Non-CRTS	CRTS	State Total
Replacement	$ 1,240.9	$ 155.0	$ 1,395.9	727	87	814
Raising	$ 1.1	$ -	$ 1.1	1	-	1
Widening	$ 116.5	$ 14.2	$ 130.7	522	55	577
Strengthening	$ 6.7	$ -	$ 6.7	8	-	8
	$ 1,365.2	$ 169.2	$ 1,534.4	1,258	142	1,400
Maintenance	$ 812.8	$ 133.9	$ 946.7			
	$ 2,220.3	$ 260.8	$ 2,481.1			

THE NEEDS ANALYSIS FOR HIGHWAYS AND BRIDGES RESULTED IN A TOTAL COST OF $39.2B OVER THE NEXT 25-YEARS OR $1.57B PER YEAR.

HIGHWAY NEEDS VS. REVENUE:

Forecast Available Funds and Roadways in "Excellent Working Order"



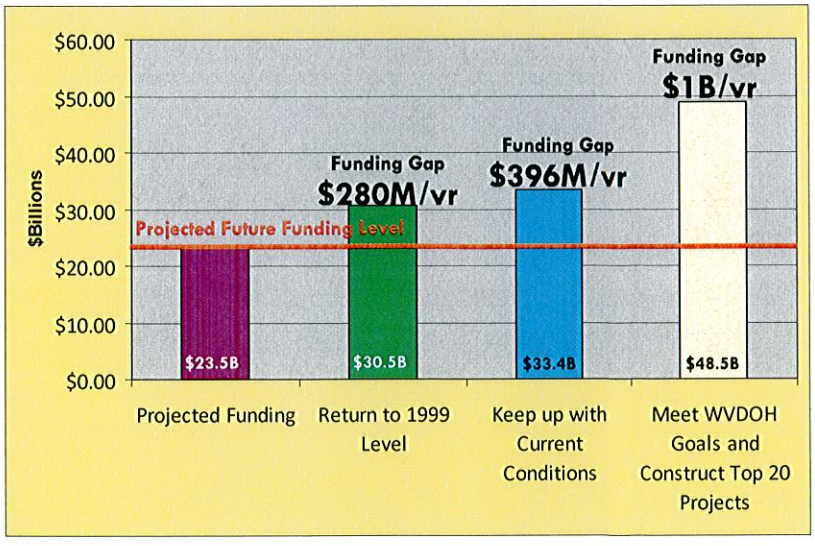
1 Deficient Road - Doesn't Meet WVDOH's Standards for Smoothness, Capacity , Shoulder Type, Etc.
2 Optimum Funding Level - Level of Funding Required to Minimize Travel Time Cost, Safety Cost, and Vehicle Operating Cost Without Revenue Constraints

	Highways (Millions)	Bridges (Millions)	Total (Millions)
Forecast Available	$463.1	$101.6	$564.7
Optimum Funding Level	$1,470.0	$101.6	$1,571.6

- Forecast Revenues are insufficient to maintain all roadways at current conditions.
- However conditions on most heavily travelled roads can be maintained near current conditions.

Needs vs Revenue Findings the Next 25-years:

- WVDOT has a Funding Gap
- The state is not keeping up with resurfacing and capacity needs.
- Full needs for the existing highway system over the next 25 years are estimated to be $36.7 Billion.
- Full needs for the existing bridge system over the next 25 years are estimated to be $2.4 Billion.
- This does not include new construction project.



POTENTIAL GAP CLOSING FUNDING SCENARIOS

The analysis highlights the need to close the funding gap in order to keep up with transportation needs. ***The current tax and fee structure cost the average state resident approximately $413 dollars per year.*** The state needs more revenue. This can only be done by raising fees and taxes related to transportation (WV does not allow local financing of highway construction and maintenance through income, sales and/or property tax). A few options for generation revenue were reviewed and are shown below along with the yearly increase to the average citizen. These are primarily for discussion and look at the methods that the department uses now to generate revenue. There are other options or combinations that could be considered along with other types of taxes or fees that could be considered as well. Additionally, a table that shows tax and fee increase amounts and corresponding yearly monetary change is given below.

Scenario 1 – $100M/yr, Modest Improvement to System

- Total Cost to Average Citizen = $482.80 ($69/yr increase)
- Maintain system at somewhat tolerable level
- Fund some facilities
- Provide for new program, ex. Bike/Pedestrian

	CURRENT COST	NEW COST
State Fuel Tax (cents per gallon)	32	34*
Registration Fee	$30.00	$35.00
License Fee	$2.60	$5.00
Privilege Tax	5.0%	6.2%

* 8 states have fuel tax higher than 34 cents/gallon

Scenario 2 – 25% Increase to all Taxes and Fees = $270M/Yr

- Total Cost to Average Citizen = $515.50 ($102/yr increase)
- Sufficient to exceed current maintenance conditions
- Would provide some funding for new facilities

	CURRENT COST	NEW COST
State Fuel Tax (cents per gallon)	32	40*
Registration Fee	$30.00	$37.25
License Fee	$2.60	$3.25
Privilege Tax	5.0%	6.25%

* 4 states have fuel tax higher than 39 cents/gallon

Scenario 3 – $300M, Funding Level Returned to 1999

- Total Cost to Average Citizen = $557.40 ($143.8/yr increase)
- Sufficient to exceed current maintenance conditions
- Would provide some funding for new facilities

	CURRENT COST	NEW COST
State Fuel Tax (cents per gallon)	32	40*
Registration Fee	$30.00	$40.00
License Fee	$2.60	$5.00
Privilege Tax	5.0%	7.1%

* 4 states have fuel tax higher than 39 cents/gallon

Scenario 4 – $400M, exceed current conditions

- Total Cost to Average Citizen = $620.00 ($207/yr increase)
- Exceed current bridge and pavement conditions
- Fund highway expansion beyond current level
- More money for modal programs

	CURRENT COST	NEW COST
State Fuel Tax (cents per gallon)	32	42*
Registration Fee	$30.00	$50.00
License Fee	$2.60	$8.5
Privilege Tax	5.0%	8%

* 3 states have fuel tax higher than 42 cents/gallon, HI (44.4), NY (44.8) and CA (47.4)

RULE OF THUMB REVENUE INCREASES

SOURCE	INCREASE AMOUNT	POTENTIAL INCREASE ($/YR)
State Fuel Tax	5 cents	$60,000,000
Registration Fee	$10	$18,000,000
License Fee	$10	$500,000
Privilege Tax	5%	$60,000,000