



WEST VIRGINIA  
BLUE RIBBON COMMISSION ON HIGHWAYS

INVESTING in  
West Virginia's  
FUTURE

PHASE I





# Table of Contents

<u>Section</u>	<u>Page</u>
Executive Summary	6
I. Introduction	12
II. Transportation in West Virginia: A History of Progress, Improvement, and Expansion	14
III. Current Status of the State’s Highway System	16
IV. Transportation and the Economy	20
V. Current Transportation Funding	23
VI. Transportation Solutions in Surrounding States	29
VII. Cost Efficiencies	32
VIII. Committee Findings	36
IX. Final Recommendations	46
X. Future Study Suggested	50

## Appendices

Appendix A – Reports, studies, and other documentation

Appendix B – Editorials

Appendix C – Legislative and Public Outreach Committee report



**Members**

**MARK BALDWIN**

Citizen Member, Second Congressional District, Martinsburg

**SENATOR ROBERT BEACH (D-Monongalia)**

Senate

**SECRETARY KEITH BURDETTE**

West Virginia Department of Commerce

**FRED BURNS, JR.**

West Virginia Trucking Association

**MAYOR DICK CALLAWAY**

West Virginia Municipal League, St. Albans

**CHARLES CLEMENTS**

WV Route 2 & Interstate 68 Authority, New Martinsville

**JOSEPH DENEALT, P.E.**

West Virginians for Better Transportation

**GARY FACEMYER, P.E.**

American Council of Engineering Companies of West Virginia

**CAROL FULKS**

West Virginia Hospitality & Travel Association

**SENATOR MIKE HALL (R-Putnam)**

Senate

**COMMISSIONER RICK HANDLEY**

West Virginia Association of Counties, Mason County

**BRENDA NICHOLS HARPER**

West Virginia Chamber of Commerce

**SECRETARY PAUL A. MATTOX, JR., P.E.**

West Virginia Department of Transportation

**MARC MEACHUM**

Bluefield Chamber of Commerce, Bluefield

**DR. ANDREW NICHOLS**

Marshall University

**ROBERT O. ORDERS, JR.**

Contractors Association of West Virginia



The Honorable Earl Ray Tomblin  
35<sup>th</sup> Governor of West Virginia







**KENNY PERDUE**  
West Virginia AFL-CIO

**SECRETARY JASON PIZATELLA**  
Governor’s Designee & Chairman

**SENATOR ROBERT PLYMALE (D-Wayne)**  
Senate

**KAREN PRICE**  
West Virginia Manufacturers Association

**MARY PRIM**  
Constructors’ Labor Council of West Virginia, Inc.

**DON RIGBY**  
Regional Economic Development Partnership, Wheeling

**DAVID SATTERFIELD**  
Citizen Member, First Congressional District, Morgantown

**DELEGATE MARGARET STAGGERS (D-Fayette)**  
House of Delegates

**DELEGATE DAVID WALKER (D-Clay)**  
House of Delegates

**COMMISSIONER MIKE TAYLOR**  
County Commissioners’ Association of West Virginia, Randolph County

**WALLY THORNHILL**  
Citizen Member, Third Congressional District, Chapmanville

**GARY TILLIS**  
Affiliated Construction Trades Foundation

**JAN VINEYARD**  
West Virginia Business & Industry Council

**DELEGATE RON WALTERS (R-Kanawha)**  
House of Delegates

**DR. TOM WITT**  
West Virginia University, Retired





**Duties**

Governor Tomblin tasked the Commission with studying the condition and needs of the State’s surface transportation system and developing a long-term strategic plan of action. The plan includes funding options for the maintenance, construction, and expansion of the state’s highway system.

The Commission divided the substantial research and discussion into three committees, Infrastructure, Revenue, and Legislative & Public Outreach, that ultimately made final recommendations to the full Commission for consideration.

**Infrastructure**

Joseph Deneault, P.E., Chair

The purpose of the Infrastructure Committee was to analyze the overall structure and long-term needs of the highway system using the established comprehensive plan of the West Virginia Division of Highways for repair, replacement, maintenance and new construction of public highways.

**Committee Members:**

- |                              |                      |                           |
|------------------------------|----------------------|---------------------------|
| Mark Baldwin                 | Senator Robert Beach | Mayor Dick Callaway       |
| Charles Clements             | Gary Facemyer, P. E. | Commissioner Rick Handley |
| Secretary Paul Mattox, P. E. | Gary Tillis          | Marc Meachum              |
| Dr. Andrew Nichols           | Kenny Perdue         | Senator Robert Plymale    |
| Mary Prim, Esq.              | Don Rigby            | Delegate David Walker     |
| Wally Thornhill              |                      |                           |

**Revenue**

Robert O. Orders, Jr., Chair

The purpose of the Revenue Committee was to research and analyze the overall funding mechanisms associated with the highway system in West Virginia.

**Committee Members:**

- |                              |                            |                       |
|------------------------------|----------------------------|-----------------------|
| Senator Mike Hall            | Mayor Dick Callaway        | Charles Clements      |
| Joseph Deneault, P. E.       | Jan Vineyard               | David Satterfield     |
| Commissioner Mike Taylor     | Secretary Jason Pizatella  | Brenda Nichols Harper |
| Secretary Paul Mattox, P. E. | Karen Price                | Senator Bob Plymale   |
| Wally Thornhill              | Delegate Margaret Staggers | Gary Tillis           |
| Delegate Ron Walters         | Carol Fulks                | Dr. Tom Witt          |
| Fred Burns                   |                            |                       |



## **Legislative & Public Outreach**

Jan Vineyard, Chair

The purpose of the Legislative and Public Outreach Committee was to actively involve the public as a full and valued partner by accepting public comments in determining the adequate structure and financing of the present and future needs of the highway system.

### Committee Members:

Secretary Keith Burdette  
Fred Burns, Jr.  
Carol Fulks  
Brenda Nichols Harper  
Marc Meachum  
Kenny Perdue

Secretary Jason Pizatella  
Karen Price  
Mary Prim  
Don Rigby  
David Satterfield  
Commissioner Mike Taylor





## **Executive Summary**

On August 14, 2012, Governor Earl Ray Tomblin issued an Executive Order forming the West Virginia Blue Ribbon Commission on Highways (hereinafter, the “Commission”), a group tasked with studying the condition and needs of the State’s transportation system and developing a long-term strategic plan of action for consideration by our State’s policy makers.

The Commission reaffirmed that West Virginia’s transportation system plays a vital role in the lives of every citizen, as well as the thousands of visitors who come to our State each year. A modern highway system provides safe roads for the traveling public and provides a lifeline for tourism. By efficiently allowing for the flow of people and freight, our transportation system supports job creation, moves products to market, fosters economic growth and saves lives.

The Commission confirmed that the state’s current sources of transportation funding will not provide for the preservation of our current system or make strategic investments in the expansion of corridors that hold the key to job creation and economic growth. Three recurring themes guided the Commission’s work and provided the basis for the Commission’s recommendations:

New Sources of Revenue. The Commission noted that current State Road Fund revenues have not kept pace with inflation and no longer provide the financial resources to maintain the current system.

Innovative Financing Methods. Traditional highway funding mechanisms cannot continue to provide for the future growth of the state’s highway system. The Commission recommends the State pursue finance options outside the normal revenue collection process of the State Road Fund.

Cost Efficiencies. The Commission recognizes that the West Virginia Division of Highways (hereinafter, “WVDOH”) has made substantial strides in reducing costs and increasing economy of scale. It also recognizes that WVDOH cannot simply “cut” its way while at the same time attempting to meet the needs of the future. However, the Commission recommends that WVDOH continue to explore every opportunity to save money and find efficiencies in its operations.

## **Where We Are Today**

Responsibility for West Virginia’s highway system rests, except for streets within municipalities, solely with the WVDOH. Most other states share responsibilities with counties, districts or townships which usually have a fee or tax which helps maintain their roads, bridges and highways. Because West Virginia is only one of four states that is responsible for all roads and bridges in the state, we have the sixth largest state-maintained highway system in the nation.

Funding for the Mountain State’s transportation system is consolidated into the West Virginia State Road Fund, which is the primary mechanism for collecting and distributing highway and maintenance funds. Revenues, and therefore expenditures, have not kept up with inflation. In FY 1999 revenues were \$1.9 billion in constant 2012 dollars compared to \$1.2



billion in FY 2012. Therefore, the value of current revenue is only 62 percent of what it was in FY 1999.

The federal government remains a critical source of funding for West Virginia's roads, highways, and bridges and provides a significant return to West Virginia in road and bridge funding based on the revenue generated in the state by federal motor fuel tax. From 2007 to 2011, the federal government provided \$2.26 for road improvements in West Virginia for every dollar the state paid in federal motor fuel fees. Federal revenues accounted for 34 percent of state spending on West Virginia's roads from 2007 to 2011.

The federal program is mostly funded by the Moving Ahead for Progress in the 21st Century Act ("MAP-21"). MAP-21 expired, however, on September 30, 2014 and Congress enacted a temporary extension which runs until May 2015. It appears Congress will pass another temporary extension, not a five- or six-year reauthorization of the federal highway program that increases federal investments to levels that, at a minimum, will allow states to prevent existing road and bridge conditions from getting worse.

### **Current Road and Bridge Conditions**

The Federal Highway Administration ("FHWA") compiles and maintains data on the nation's transportation system, and the data pertaining to West Virginia is submitted by the WVDOH. The most recent FHWA data compiled by The Road Information Program ("TRIP"), a non-profit research group from Washington, D.C. reports the following:

- More than one-third (36 percent) of West Virginia's major roads are either in poor or mediocre condition. Twelve percent (12%) of the state's pavements are in poor condition while twenty-four percent (24%) of the state's major roads are rated in mediocre condition.
- Roads rated in poor condition may show signs of deterioration, including rutting, cracks, and potholes. In some cases, poor roads can be resurfaced, but often are too deteriorated and must be reconstructed. Roads rated in mediocre condition may show signs of significant wear and may also have some visible pavement distress. Most pavements in mediocre condition can be repaired by resurfacing, but some may need more extensive reconstruction to return them to good condition.
- Driving on rough roads cost West Virginia motorists a total of \$400 million annually in extra vehicle operating costs. Costs include accelerated vehicle depreciation, additional repair costs, and increased fuel consumption and tire wear.
- Driving on rough roads cost the average West Virginia motorist \$333 annually in extra vehicle operating costs.
- There are over 7,000 vehicular bridges on the State Highway System with an average age of nearly 40 years. Bridges typically have a design life of 50 years and frequently require extensive rehabilitation or replacement near the end of the design life.
- In West Virginia, a total of 35 percent of these bridges are in need of repair, improvement or replacement.
- West Virginia has the 19th highest number (13 percent) of rural bridges rated as structurally deficient. A bridge is structurally deficient if there is significant deterioration





of the bridge deck, supports, or other major components. Structurally deficient bridges are often posted for lower weight or closed to traffic, restricting or redirecting large vehicles, including commercial trucks and emergency services.

- Twenty-two percent of West Virginia’s bridges are functionally obsolete. Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances or poor alignment.
- The State’s overall traffic fatality rate of 1.78 fatalities per 100 million vehicle miles of travel in 2011 was the second highest in the nation.

## **Recommendations**

The Commission divided the substantial research and discussion into three committees, Infrastructure, Revenue, and Legislative & Public Outreach, that ultimately made final recommendations to the full Commission for consideration.

The Infrastructure Committee recommended that to improve the highway system from where it stands today, an additional investment of \$750 million per year would be needed. To provide for expansion of the existing system, an additional \$380 million would be required, for a total of \$1.130 billion annually. If the West Virginia Parkway Authority’s operation would be transferred to the WVDOH, an additional \$59 million annually would be required for the preservation and ongoing maintenance of the West Virginia Turnpike.

The Revenue Committee reviewed a number of options, both existing and new sources of revenues that, if adopted, would generate an additional \$419.8 million per year in additional revenue into the State Road Fund.

The Legislative and Public Outreach Committee held nine regional meetings across West Virginia to share information, accept public comments, gather input and provide citizens the opportunity to submit responses to a survey.

At its meeting on September 4, 2013, the Commission approved a number of recommendations to generate additional dollars. These collective recommendations, if adopted, would represent approximately \$141 million of additional funding in the State Road Fund annually. The Commission recognizes that these funds represent less than 10 percent of the funds needed to maintain the desired State Highway System and provide expansion of the current system. The Commission also adopted recommendations concerning the long-term sustainability of the West Virginia Parkways Authority and the West Virginia Turnpike.

### ***New Sources of Revenue***

Establishing continuous, reliable, and sustainable revenue sources is very important in funding infrastructure improvements and maintaining the economic vitality of the state. The funding and revenue source recommendations, as approved by the Commission, are as follows:

- Motor vehicle sales tax. Increase the motor vehicle sales tax from 5% to 6% to match the consumer sales and use tax (estimated to generate approximately \$40 million); this is formerly known as the privilege tax.



- Registration fees. Increase DMV registration and motor vehicle licensing fees and index for inflation, adjusted bi-annually to the Consumer Price Index (estimated to generate approximately \$75 million).
- Alternative fuel vehicle registration fee. Assess an annual registration fee on "Alternate Fuel Vehicles," implementing an annual registration fee of \$200 for alternative fuel vehicles (including hydrogen, natural gas and non-petrochemical vehicles) and a \$100 fee for combination vehicles that use electricity and petrochemicals (estimated to generate approximately \$1 million).
- Other tax revenue. Dedicate the consumer sales and use tax revenue already collected from purchases associated with cars and trucks, e.g. automobile parts, batteries, brakes, services, etc. to the State Road Fund (estimated to generate approximately \$25 million).

These collective recommendations, if adopted, would represent approximately \$141 million dollars of additional funding in the State Road Fund annually.

### ***Innovative Financing Methods***

These recommendations address the Governor's and the Legislature's ability to pursue finance options outside the normal revenue collection process. Some options, such as tolling and Grant Anticipation Revenue Vehicle ("GARVEE") bonds are already in use today, and these recommendations aim to enhance their capabilities in the decision making process. The innovative financing method recommendations are as follows:

- Public-Private Partnerships. Continue use of public-private partnerships (P3 or PPPs) and design-build to construct high priority roads now and finance them over several years.
- Tolling. Continue use and feasibility of tolling and toll roads within the state to address expansion needs and new construction.
- GARVEE. Continue use of GARVEEs subject to existing guidelines from the Federal Highway Administration (FHWA) and increase cap to \$500 million.
- State Infrastructure Bank. A State Infrastructure Bank will allow West Virginia to join 32 other states and territories that have established revolving funds to offer low-cost loans and other credit assistance to help finance highway projects at the local level.
- Community Empowerment Transportation Act. Place a renewed emphasis on local financing of highway projects through W.Va. Code §17-28-1 et seq., the Community Empowerment Transportation Act ("CETA")
- Transportation Infrastructure Finance and Innovation Act ("TIFIA"). Enact enabling legislation to allow West Virginia to participate in the federal TIFIA program.

### ***Cost Efficiencies***

The Commission recommended that the WVDOH continue development of the following efficiencies that are already underway:

- Enterprise Resource Planning. Coordination with state agencies on the implementation of wvOASIS, the State's new enterprise-wide software to improve efficiencies in operations, such as time-keeping, payroll, budget, and human resource management



- Asset management. Develop a plan for key assets (pavements, bridges, buildings) that will allow for better investments in the system preservation program.
- Performance-based specifications for pavement. Provide contractors with requirements for paving projects, which reduces the amount of oversight/inspection needed.

The WVDOH continues to investigate ways to maximize the annual budget to benefit West Virginia in the future but will require further study to determine the feasibility and potential positive impacts within the WVDOH. These potential areas for improvement efficiencies include:

- Routine maintenance. WVDOH would provide some preventative maintenance on the West Virginia Turnpike.
- Fleet conversion. Potential savings converting the WVDOH vehicle fleet to natural gas.
- Electronic design files. Provide electronic Digital Terrain Models to potential bidders.
- District, county and substation relocation. Evaluate travel time savings and improved service.
- Reduction of middle-management. Consider reducing middle managers within the agency.
- Personnel management. Develop a personnel management plan at WVDOH to provide for the recruitment and development of the best available employee for each position, as well as knowledge retention

### ***Leveraging the West Virginia Turnpike***

The West Virginia Parkways Authority (“Parkways”) operates the West Virginia Turnpike, a \$1 billion asset, and is responsible for 88 miles (426 lane miles) of four-lane Interstate highway, along with 116 bridges, 18 interchanges, more than 300,000 square feet of facilities, plus full service travel plazas and welcome centers. The collection of tolls (user fees) provide for maintenance, operations and capital repairs, nearly 74 percent of which comes from non-West Virginia residents.

In 2019, Parkways is scheduled to pay off outstanding bonds, which were last issued in 1989. After that, legislation states that if the Turnpike is in good condition, the Turnpike shall be transferred to the WVDOH and shall thereafter be maintained by the WVDOH free of tolls. Without tolls, the WVDOH would need an additional \$59 million annually to preserve and maintain the roadway, with early focus on roadways and a mounting emphasis on deteriorating bridges when the current bridges begin to reach the end of their design life in 2019.

The Commission recommends that the current structure of Parkways maintain its current structure and that Parkways issue up to \$1 billion in bonds for road projects statewide backed by future increases in toll revenue.



## **Future Study**

The Commission realizes that the above recommendations do not solve all of the problems identified by the Infrastructure Committee nor do they provide the full recommended level of funding. The recommendations also do not take into consideration the effects of the harsh winters of 2014 and 2015 which have placed a further strain on the WVDOH budget for road and bridge maintenance. The Commission’s final recommendations do, however, attempt to provide a minimum amount of new revenue given the State’s current budget shortfalls have restricted the possibility of other “non-traditional” sources of funding being allocated.

The Commission requests continued study to analyze the condition of the State’s transportation infrastructure, including beginning planning now for a transition to more sustainable funding sources that have been enacted in other states.

Finally, the State should engage with our congressional delegation and other federal partners to ensure passage of a long-term transportation funding bill as a successor to MAP-21.





## **I. Introduction**

The State of West Virginia’s transportation system plays a vital role in the lives of all West Virginians. It is the fiber that supports the state’s economy and way of life. A modern transportation system provides safe roads for the traveling public and for tourism. By efficiently allowing the flow of people and freight, the transportation system supports job creation, moves products to market, fosters economic growth and saves lives.

Governor Earl Ray Tomblin issued Executive Order No. 12-12 forming the West Virginia Blue Ribbon Commission on Highways (the “Commission”), a group tasked with studying the condition and needs of the state’s transportation system and developing a long-term strategic plan of action. The plan includes funding options for the maintenance, construction and expansion of the state’s roadway system. Joined by West Virginia Department of Transportation Secretary Paul Mattox, then-House of Delegates Speaker Rick Thompson and then-Senate President Jeff Kessler, the announcement took place near the almost 80-year-old Dick Henderson Memorial Bridge in St. Albans, which recently completed a \$24-million renovation.

“West Virginia maintains the nation’s sixth largest highway system,” Governor Tomblin said. “This new Commission comprised of trade associations, legislators, union leaders, businessmen and women, state and local leaders in transportation and travel industries will develop a long-term plan to help us meet our current and future needs for the safety of the traveling public and the economic development of the state.”

The Commission includes state officials, members from statewide constituency groups, representatives of counties and municipalities, members of the Legislature, as well as citizen members. The West Virginia Department of Transportation provided the necessary staff support. “Our highways are vital lifelines for so many West Virginia communities and businesses, but due to inadequate funding the state Department of Transportation can no longer fulfill general paving and maintenance obligations of the existing system and meet the calls for new highway construction projects,” Secretary of Transportation Paul Mattox said. “I look forward to working with the commission and thank Governor Tomblin for actively working to find a solution to this safety and economic development need.”

As part of its deliberations and study, the Commission held nine regional meetings throughout the state. Nearly 1,400 citizens attended and dozens of separate individuals testified about a host of transportation issues. As the Commission traveled across the state, they learned that the public felt strongly that roads and highways are important to them, help create economic development and provide high paying jobs. They also strongly agreed that it is important for West Virginia to provide safe and efficient roads because they do not think are currently in a state of good repair.

Although it was clear that not every community or region has the same exact challenges, nor was there consensus on how best to address these challenges, three themes were consistently heard as ways to maintain the existing highway system and to have the financial resources to strategically expand the transportation system. These three reoccurring themes that were



identified provided the basis for the Commission’s recommendations for addressing West Virginia’s transportation needs. They are as follows:

New Sources of Revenue. The Commission noted that current State Road Fund revenues have not kept pace with inflation and no longer provide the financial resources to maintain the current system.

Innovative Financing Methods. Traditional highway funding mechanisms cannot continue to provide for the future growth of the state’s highway system. The Commission recommends the State pursue finance options outside the normal revenue collection process of the State Road Fund.

Cost Efficiencies. The Commission recognizes that the WVDOH has made substantial strides in reducing costs and increasing economy of scale. It also recognizes that WVDOH cannot simply “cut” its way while at the same time attempting to meet the needs of the future. However, the Commission recommends that WVDOH continue to explore every opportunity to save money and find efficiencies in its operations.



## II. Transportation in West Virginia: A History of Progress, Improvement and Expansion

Nearly 100 years ago West Virginians adopted the Good Roads Amendment, and this started a transformation of the Mountain State that has helped bring the state into the modern age. No longer would West Virginia be an inaccessible, formidable place to live, to go to school or to operate a business. The state’s distinctive communities, scenic beauty, abundant resources and natural habitat would be opened for all to enjoy.

Since that time, billions of dollars have been invested to expand roads, bridges and highways all across our state. These investments have literally moved mountains so West Virginians can enjoy greater access, mobility, convenience, safety and productivity. Roads were paved, bridges were built and new highways were carved out of the rugged landscape.

A key partner in the growth of the state’s transportation infrastructure has been the federal government. Billions in federal funds have flowed into the Mountain State to construct two major highway systems:

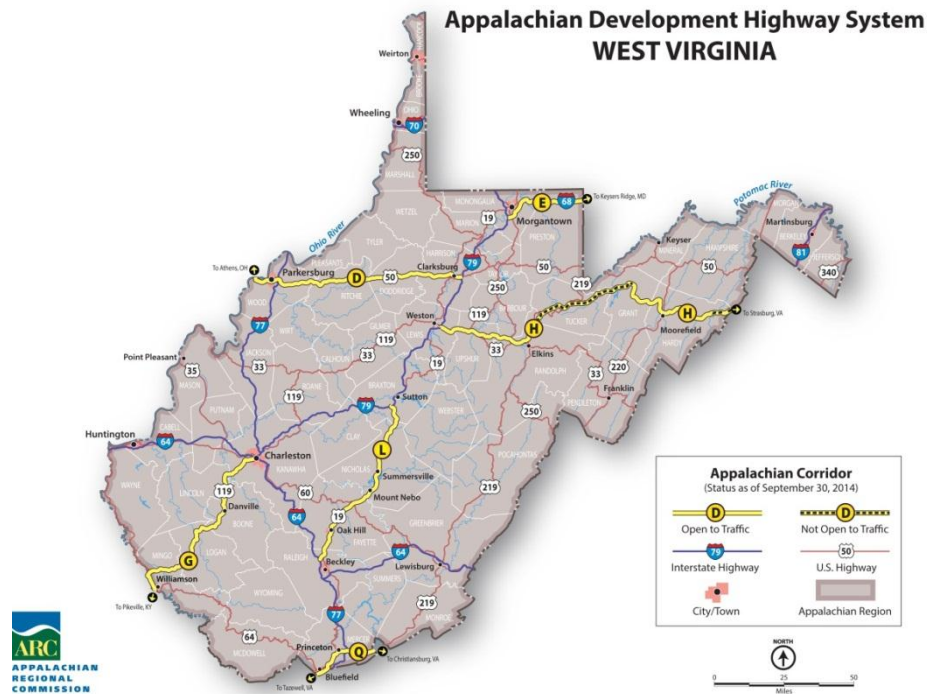
- Interstate Highway System – Interstates 64, 68\*, 70, 77, 79, and 81
  - Appalachian Development Highway System (ADHS) - Corridors D, E, G, H, L, Q
- \*Interstate 68 was formerly ADHS Corridor E

Figure 1 – West Virginia Interstate System





Figure 2 – West Virginia Appalachian Development System Corridors



The creation of this modern transportation system in West Virginia also has provided for widespread business growth and expansion, from the Toyota plant in Putnam County, to the Macy’s distribution facility in the Eastern Panhandle, to new retail shopping complex that includes the Cabela’s store outside Wheeling. Soon, Procter & Gamble will be breaking ground for a major new \$500 million manufacturing plant in Berkeley County.

Today, nearly \$50 billion in goods are shipped from sites in West Virginia and another \$54.1 billion in goods are shipped to sites in West Virginia, mostly by trucks. Sixty-five percent of the goods shipped annually from sites in West Virginia are carried by trucks and another 11 percent are carried by courier services or multiple-mode deliveries, which include trucking.

West Virginia’s transportation system also has facilitated new jobs and opportunities in the state’s tourism industry. Over the past decades we have seen the significant expansion of our ski and whitewater industries, new lodging and resort facilities being built, growth in our state park system and the opening of the \$500 million Boy Scout High-Adventure center in Fayette County. Other tourism attractions that are available due to our transportation system include The Greenbrier, numerous ski resorts, and the Hatfield-McCoy ATV trail system spanning across southern West Virginia. Our roads and highways also open up the state for a steady influx of hunters, fishermen and outdoorsmen.

West Virginia’s transportation system is something to take great pride in, but is also something that requires ongoing investment, upkeep and expansion.



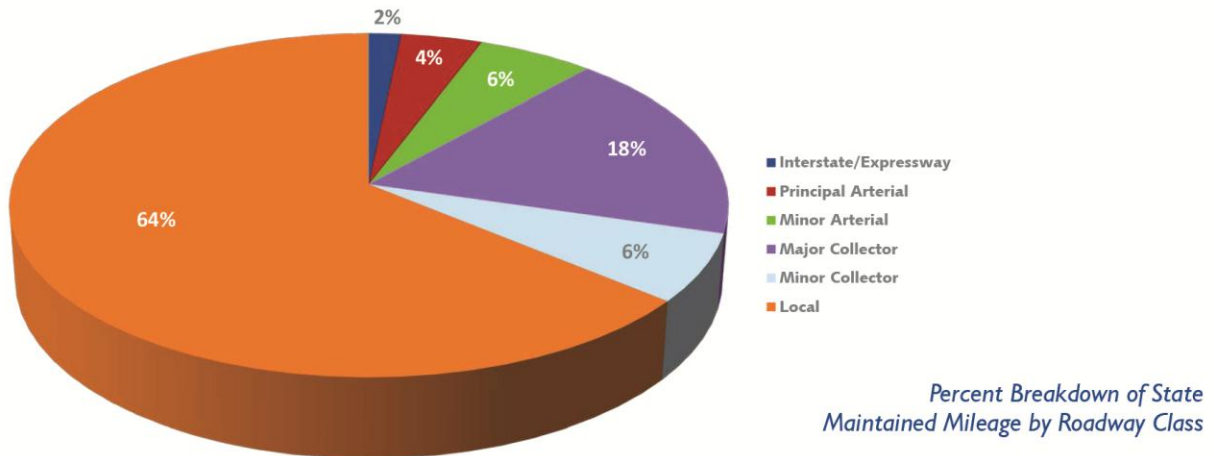


### III. Current Status of the State’s Highway System

West Virginia has a vast, interconnected surface transportation network that spans every corner of the state. Responsibility for West Virginia's system rests, except for streets within municipalities, solely with the WVDOH, with the exceptions being a limited number of National Park and Forest Routes and a limited number of streets under municipal jurisdiction. Most other states share responsibilities with counties, districts or townships which usually impose a fee or tax to help maintain their respective roads, bridges and highways. West Virginia is only one of four states, including Delaware, North Carolina, and Virginia, which are financially responsible for all roads and bridges in the state except for municipalities.

As a result, WVDOH is responsible for the construction and maintenance of approximately 94 percent of the public highway mileage (38,768 miles) of which only 28 percent (10,855 miles) are generally eligible for federal aid. This makes West Virginia the sixth largest state-maintained highway system in the nation.

Figure 3 – Percent Breakdown of State-Maintained Mileage by Roadway Class



Paul Mattox, Jr., P.E., Secretary of the West Virginia Department of Transportation, told Commission members that the effect of declining state and federal revenues, coupled with the fact that the WVDOH is responsible for most all roads in the state, the repaving cycle of state highway pavements is now nearly 30 years instead of the desired 12-year paving cycle.



The FHWA compiles and maintains data on the nation's transportation system, and the data pertaining to West Virginia is submitted by the West Virginia Department of Transportation. In early 2014, the FHWA's data was used by The Road Information Program (TRIP) to highlight the condition of West Virginia's roads, bridges and highways. TRIP is a Washington, D.C. nonprofit organization that researches, evaluates, and distributes economic and technical data on surface transportation issues. Much of the information below comes from the study prepared by TRIP. The report concluded the following:

### **Current Condition of West Virginia's Roads**

- More than one-third (36 percent) of West Virginia's major roads are either in poor or mediocre condition.
- 12 percent have pavements in poor condition while 24 percent of the state's major roads are rated in mediocre condition.
- Roads rated in poor condition may show signs of deterioration, including rutting, cracks and potholes. In some cases, poor roads can be resurfaced, but often are too deteriorated and must be reconstructed. Roads rated in mediocre condition may show signs of significant wear and may also have some visible pavement distress. Most pavements in mediocre condition can be repaired by resurfacing, but some may need more extensive reconstruction to return them to good condition.
- Driving on rough roads cost West Virginia motorists a total of \$400 million annually in extra vehicle operating costs. Costs include accelerated vehicle depreciation, additional repair costs, and increased fuel consumption and tire wear.
- Driving on rough roads cost the average West Virginia motorist \$333 annually in extra vehicle operating costs.
- Another TRIP report, unveiled in July 2014, found that rural roads and bridges in West Virginia continue to have significant deficiencies. The report found that 33 percent of West Virginia's major rural roads were rated in poor condition, the third highest rate nationally. The state was tied with Rhode Island and just behind Connecticut.



## **Conditions of West Virginia's Bridges**

There are more than 7,000 vehicular bridges on the State Highway System with an average age of nearly 40 years. Bridges typically have a design life of 50 years and frequently require extensive rehabilitation or replacement near the end of the design life.

- In West Virginia, a total of 35 percent of these bridges are in need of repair, improvement, or replacement.
- West Virginia has the 19th highest number (13 percent) of rural bridges rated as structurally deficient. A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. Structurally deficient bridges are often posted for lower weight or closed to traffic, restricting, or redirecting large vehicles, including commercial trucks and emergency services.
- Twenty-two percent of West Virginia's bridges are functionally obsolete. Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances, or poor alignment.

## **Transportation Safety in West Virginia**

West Virginia's traffic fatality rate is the second highest in the nation. Improving safety features on West Virginia's roads and highways would likely result in a decrease in the State's traffic fatalities and serious crashes. Roadway features are likely a contributing factor in approximately one-third of all fatal and serious traffic crashes.

- West Virginia's overall traffic fatality rate of 1.78 fatalities per 100 million vehicle miles of travel in 2011 was the second highest nationally, behind only Montana at 1.79. West Virginia's traffic fatality rate was 62 percent higher than the national average of 1.10.
- Between 2007 and 2011 a total of 1,820 people were killed in traffic crashes in West Virginia, an average of 364 fatalities per year.
- The fatality rate on West Virginia's rural non-Interstate roads was 2.54 fatalities per 100 vehicle miles of travel in 2011, more than double the 1.19 fatality rate on all other roads and highways in the state.
- Roadway features that impact safety include the number of lanes, lane widths, lighting, lane markings, rumble strips, shoulders, guard rails, other shielding devices, median barriers and intersection design. The cost of serious crashes includes lost productivity, lost earnings, medical costs and emergency services.
- Several factors are associated with vehicle crashes that result in fatalities, including driver behavior, vehicle characteristics and roadway features. TRIP estimates that roadway features are likely a contributing factor in approximately one-third of fatal traffic crashes.
- Where appropriate, highway improvements can reduce traffic fatalities and crashes while improving traffic flow to help relieve congestion. Such improvements include removing or shielding obstacles; adding or improving medians; improved lighting; adding rumble





strips, wider lanes, wider and paved shoulders; upgrading roads from two lanes to four lanes; and better road markings and traffic signals.

- Investments in rural traffic safety have been found to result in significant reductions in serious traffic crashes. A 2012 report by the Texas Transportation Institute (TTI) found that improvements completed recently by the Texas Department of Transportation that widened lanes, improved shoulders and made other safety improvements on 1,159 miles of rural state roadways resulted in 133 fewer fatalities on these roads in the first three years after the improvements were completed (as compared to the three years prior). TTI estimates that the improvements on these roads are likely to save 880 lives over the next 20 years.

Figure 4 – Traffic fatalities in West Virginia from 2007 – 2011

Year	2007	2008	2009	2010	2011	Total
Fatalities	432	380	356	315	337	1,820

Source: National Highway Traffic Safety Administration





#### **IV. Transportation and the Economy**



As West Virginia looks to build and enhance a thriving, growing and dynamic state, it will be critical to be able to provide a 21st Century network of roads, highways and bridges that can accommodate the mobility demands of a modern society. It was clear from the comments at the Commission’s public meetings that local communities can readily see the positive impacts that results from transportation investments. In general, West Virginia’s transportation system is critical to the state’s tourism, manufacturing, oil and natural gas, ethane, coal, chemical, mining and agriculture sectors.

##### Economic Benefits of Good Transportation System

Information about the economic benefits of a safe, reliable and well maintained transportation system was contained in a January 2014 report of the TRIP – The Road Information Program. This excerpted information is provided below:

“Today’s culture of business demands that an area have well-maintained and efficient roads, highways and bridges if it is to remain economically competitive. Modern national and global communications and the impact of free trade in North America and elsewhere have resulted in a significant increase in freight movement. Consequently, the quality of a region’s transportation system has become a key component in a business’s ability to compete locally, nationally and internationally.

“Businesses have responded to improved communications and the need to cut costs with a variety of innovations including just-in-time delivery, increased small package delivery, demand-side inventory management and Internet



commerce. The result of these changes has been a significant improvement in logistics efficiency as firms move from a push-style distribution system, which relies on large-scale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. These improvements have made mobile inventories the norm, resulting in the nation’s trucks literally becoming rolling warehouses.

“Highways are vitally important to continued economic development in West Virginia, particularly to the state’s tourism, chemical, biotechnology, mining, oil and gas, agriculture and manufacturing sectors. As the economy expands, creating more jobs and increasing consumer confidence, the demand for consumer and business products grows. In turn, manufacturers ship greater quantities of goods to market to meet this demand, a process that adds to truck traffic on the state’s highways and major arterial roads.

“Every year, \$49.8 billion in goods are shipped from sites in West Virginia and another \$54.1 billion in goods are shipped to sites in West Virginia, mostly by trucks. Sixty-five percent of the goods shipped annually from sites in West Virginia are carried by trucks and another 11 percent are carried by courier services or multiple-mode deliveries, which include trucking.

“The cost of road and bridge improvements are more than offset by the reduction of user costs associated with driving on rough roads, the improvement in business productivity, the reduction in delays and the improvement in traffic safety. The Federal Highway Administration estimates that each dollar spent on road, highway and bridge improvements results in an average benefit of \$5.20 in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel consumption, improved safety, reduced road and bridge maintenance costs and reduced emissions as a result of improved traffic flow.

“Local, regional and state economic performance is improved when a region’s surface transportation system is expanded or repaired. This improvement comes as a result of the initial job creation and increased employment created over the long-term because of improved access, reduced transport costs and improved safety.

“And, highway accessibility was ranked the number one site selection factor in a 2011 survey of corporate executives by Area Development Magazine.

“Increasingly, companies are looking at the quality of a region’s transportation system when deciding where to relocate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system.

Finally, increasing investment in the state’s roads, highways and bridges could boost West Virginia’s economy by creating jobs. A 2007 analysis by the Federal Highway Administration found that every \$1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction sector, and approximately 14,000 other jobs induced in non-construction related sectors of the economy.





## V. Current Transportation Funding

Funding for West Virginia’s transportation system is consolidated into the West Virginia State Road Fund, which is the primary mechanism through which dollars for transportation needs and new construction are collected and distributed. The State’s funding situation has not changed significantly in the last few years. Revenues, and therefore expenditures, have not kept up with inflation. In FY 1999, WVDOH revenues were \$1.9 billion in constant 2012 dollars compared to \$1.2 billion in FY 2012. Therefore, the value of current revenue is only 62 percent of what it was in FY 1999.

The motor fuel excise tax has provided the bulk of transportation revenues for the WVDOH. However, the fuel tax will be less reliable in the future than it has been historically. Motor fuel taxes have been stagnant over the past number of years, possibly due to more fuel efficient vehicles and an increase in the use of alternative fuel vehicles.

Figure 5 – DOH Revenue by Type – FY 1999 to FY 2012







## **Funding Sources:**

WVDOH receives revenue from various sources, both appropriated through legislation and obtained through non-appropriated special funds. The revenues are deposited in one or more of several funds identified below.

The State Road Fund (SRF) receives its revenue from dedicated taxes and fees, federal reimbursements, and miscellaneous income such as interest on investment. Taxes and fees include:

- Motor Fuel Excise Tax
- Motor Carrier Road Tax
- Registration Fees
- Privilege Tax
- Highway Litter Control Fee

West Virginia's motor fuel excise tax (MFET) is the largest source of State transportation revenue and accounted for 29 percent of all SRF revenue over the 14-year period. The effective composite rate of 34.7 cents per gallon as of April 1, 2013, is made up of a flat-rate component that is levied at the gas pump that does not change with inflation (20.5 cents per gallon) and a variable component that is based on wholesale price which is adjusted annually and can rise with inflation (currently 14.2 cents per gallon). Factors like newer vehicles getting more miles per gallon of fuel, decreases in the average annual vehicle miles traveled and increases in the number of alternate fueled vehicles have contributed to the decrease in revenues from this source.

The motor vehicle sales tax (formerly the privilege tax) is currently set at 5 percent of the purchase price of a vehicle. Over the six-year period between FY1999 to FY2004, privilege tax receipts remained steady above \$240 million. In FY2006 this number dropped to \$202 million, reaching a low of \$144 million in FY2010 due to the recession. Since then the state's privilege tax has rebounded to \$194 million in FY2014.

License and registration fees as well as other fees such as litter control fees. The registration fee is set at \$30 per vehicle. Vehicles heavier than 8,000 pounds are subject to incrementally higher fees and "special vehicles," such as taxis, are subject to different fees. West Virginia charges \$2.60 annual for license renewal. FY2010 marked the low point in license and registration fee receipts over the 14-year period, at \$84.9 million. These fees are not automatically adjusted for inflation and many have not been increased for several decades.



There are also a number of special revenue funds. These are divided between appropriated and non-appropriated categories. The following are the revenue sources, the agency receiving the funds, and the designated category (non-appropriated or appropriated):

- Motorcycle Safety – miscellaneous fees to Division of Motor Vehicles (DMV), non-appropriated.
- Motor Vehicle Fees Fund – miscellaneous fees to DMV, appropriated.
- Dealer Recovery – annual automobile dealership license fee to DMV, appropriated.
- Aircraft Fuel Tax – tax on wholesale aviation fuel to Aeronautics Commission, non-appropriated.
- A. James Manchin Fund — title fee to DOH, appropriated.
- Coal Resource Transportation System (CRTS) Fund – permit and tonnage fees to DOH, non-appropriated.
- Industrial Access Road (IAR) Fund – transfer of funds from SRF to IAR Fund, non-appropriated.
- Enterprise Fund – revenue from freight-related operations and a percentage of passenger excursion train revenues to State Rail Authority, non-appropriated.

Federal funds are typically handled by two methods within WVDOH:

- Federal funds received by WVDOH as reimbursements for construction and reconstruction projects are deposited directly into either the State Road Fund or the Coal Resource Transportation System Fund.
- All other federal funds received by other WVDOH agencies are placed in legislatively appropriated federal accounts.

The federal government remains a critical source of funding for West Virginia's roads, highways and bridges and provides a significant return to West Virginia in road and bridge funding based on the revenue generated in the state by the federal motor fuel tax. From 2007 to 2011, the federal government provided \$2.26 for road improvements in West Virginia for every dollar the state paid in federal motor fuel fees. Federal revenues accounted for 34 percent of state spending on West Virginia's roads, highways and bridges from 2007 to 2011.

The federal government provides funding for the state's transportation system largely as part of MAP-21. The current federal surface transportation program expired on September 30, 2014. In the summer of 2014, the U.S. Congress enacted a temporary extension, which will run



until May 2015. MAP-21 funds surface transportation programs in West Virginia at approximately \$424 million annually for fiscal years 2013 and 2014.

MAP-21 also greatly increased funding flexibility for states and streamlined project approval processes to improve the efficiency of state and local transportation agencies in providing needed transportation improvements in the state. Federal reimbursements to the WVDOH under the MAP-21, 2005 Safe, Accountable, Flexible Efficient Transportation Equity Act (“SAFETEA-LU”) and its predecessor, the Transportation Equity Act for the 21st Century (“TEA-21”), accounted for 39.2 percent of total SRF revenues over the 14-year period. Annual revenues rose to a peak of \$504 million nominal dollars in FY2011 due to \$86.4 million in federal stimulus money that year. All states receive federal funds pooled from motor fuel taxes collected nationally.

### Historic Trends in Highway Funding

**Figure 6** presents a 14-year summary of West Virginia highway revenue levels, in constant 2012 dollars. Between FY1999 and FY2012, WVDOH’s revenue averaged \$1.4 billion annually. A significant decrease within the 14-year period occurred in 2005, however, when a period of general obligation bond issuances came to an end. Between FY 1999 and FY2004, revenues averaged \$1.5 billion, while during the subsequent eight years, revenues averaged \$1.3 billion, aided in part by additional bonding and federal stimulus money.

*Figure 6 – Revenue and Expenditures of the DOH – FY 1999 to FY 2012*

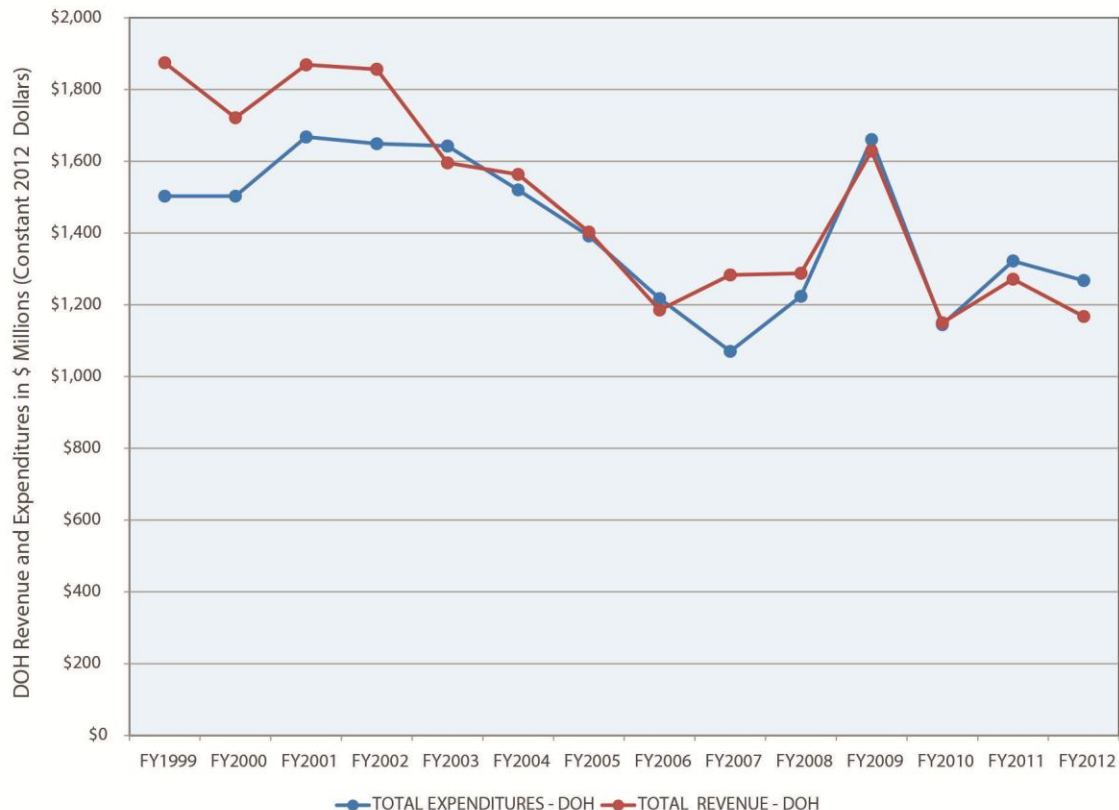
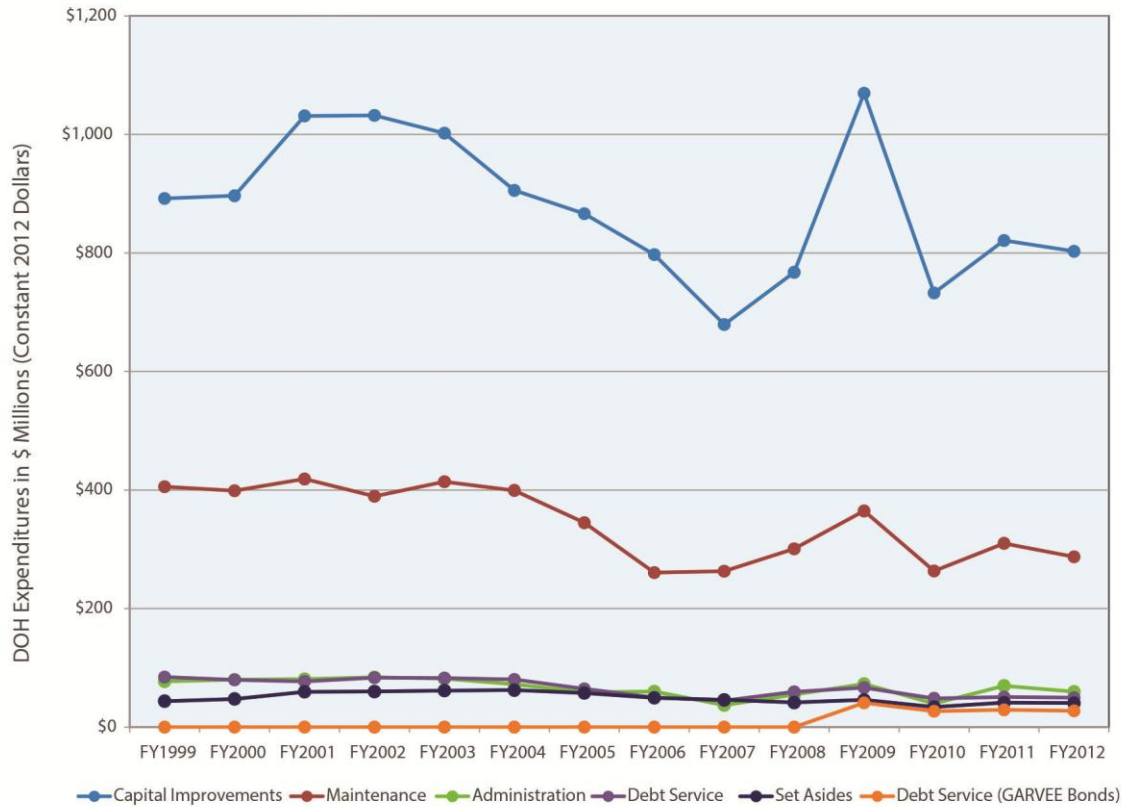




Figure 7 – DOH Expenditures by Type – FY 1999 to FY 2012



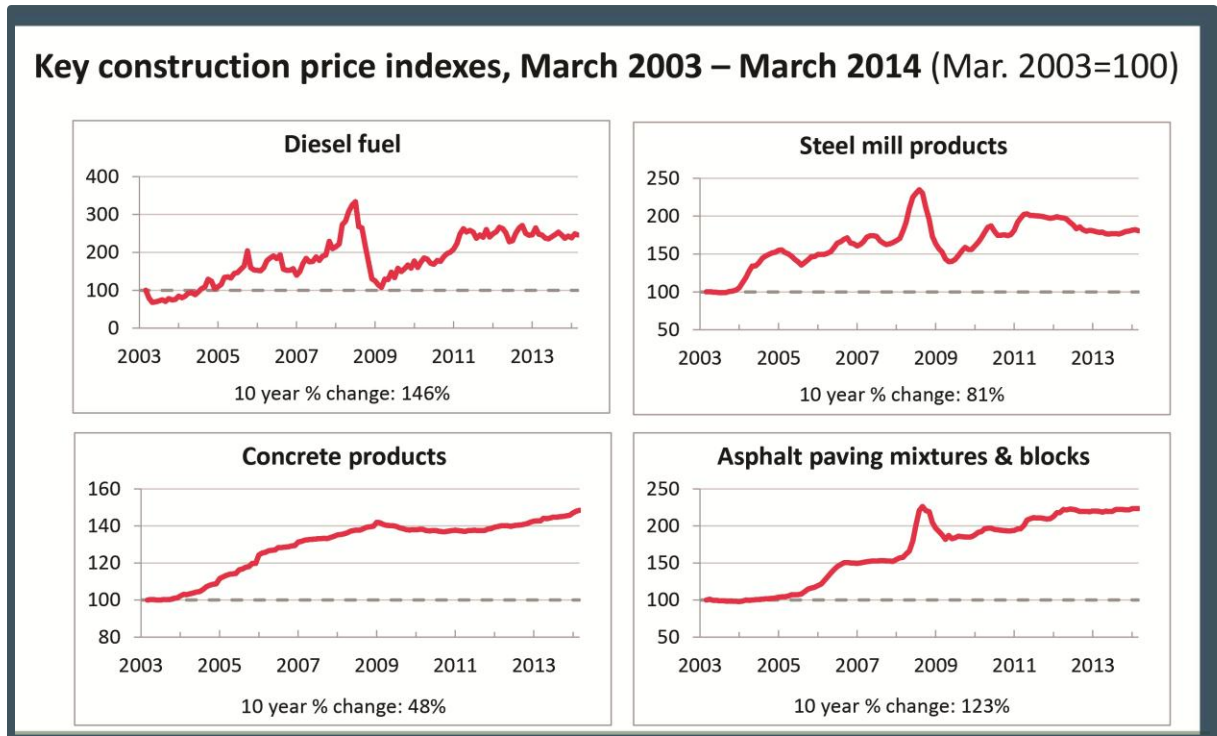
### Inflationary Impact

While revenue has been stagnant, transportation costs have not. After WVDOH pays debt service on current bonds, salaries and benefits, supplies, materials and equipment, and other operating expenses, the remaining dollars go into its construction and maintenance program. The costs of the materials that are vital to building and maintaining highways and bridges have risen. Key construction prices indexes (shown in Figure 8) from March 2003 to March 2014 show steel products have increased 81 percent, concrete products 48 percent, asphalt paving mixtures 123 percent, diesel fuel 146 percent and employment costs 30 percent.





Figure 8 – Key Construction Price Indexes – March 2003 – March 2014



Source: U.S. Bureau of Labor Statistics for Producer Price Indexes (PPIs) and Employment Cost Index (ECI); Federal Highway Administration for NHCCI

Both state and federal sources of funding for highways in West Virginia have seen limited growth and, when adjusted for inflation, have declined significantly.



## **VI. Transportation Solutions in Surrounding States**

West Virginia, as well as most states, has relied on federal highway allocations to fund new construction projects and to maintain the state's federal highway and bridge system. However, Congress has not passed a multi-year highway reauthorization bill and the short-term extension expires in May 2015. Many individual states are trying to compensate for the lack of congressional action on long-term funding by taking steps to raise additional transportation revenue of their own.

Surveys conducted by the National Conference of State Legislatures, the American Association of State Highway and Transportation Officials' Center for Excellence in Project Finance and the American Road and Transportation Builders Association have identified more than 30 states that have passed transportation-related fiscal initiatives in the past several years. A number of states have increased local fuel taxes (GA, IA, ID, MA, MD, NH, SD, VT, WY). Others have introduced fuel taxes at the wholesale level (e.g. PA, VA), floated toll revenue bonds (e.g. OH) or raised highway tolls (e.g. DE, FL). Still others have enacted or contemplate enacting dedicated sales taxes for transportation. Some of the solutions developed in neighboring states are as follows:

### **Maryland**

The Maryland General Assembly enacted a major transportation package that will generate an added \$800 million annually (at full implementation) and an estimated \$4.4 billion for new projects over the next six years. The package contains these changes:

- Implemented a new sales tax on the price of motor fuels. The tax amount is determined based on the average retail price of the lowest grade of gasoline after subtracting out state and federal taxes. The sales tax rate on motor fuels will:
  - Start at 1% on July 1, 2013
  - Increase to 2% on January 1, 2015
  - Increase to 3% on July 1, 2015
- The traditional per gallon state excise tax on motor fuels (23.5 cents/gallon on gasoline and 24.25 cents/gallon on diesel fuel) will also remain in place. This excise tax, aka "the gas tax", will rise every year automatically on July 1<sup>st</sup> based on the Consumer Price Index. This inflation adjustment began on July 1, 2013. The tax cannot go up more than 8 percent in a single year.
- If Congress passes legislation to allow for states to collect sales tax from internet purchases, Maryland's state sales tax will stay at 3 percent. If Congress fails to take such action the sales tax rate on motor fuels will:



- Increase to 4% on January 1, 2016
- Increase to 5% on July 1, 2016

## **Ohio**

For nearly 60 years, the Ohio Turnpike Commission had operated and maintained the Turnpike using primarily toll revenues. On July 1, 2013, the Ohio Turnpike Commission (OTC) officially became the Ohio Turnpike and Infrastructure Commission (OTIC). The Commission’s mission now officially encompasses both: 1/Funding, operating and maintaining the Ohio Turnpike at its current standards; and 2/ Funding “Infrastructure Projects” with a “nexus” to the Turnpike in partnership with the Ohio Department of Transportation.

The legislation creating OTIC allowed the issuance of up to \$1.5 billion in bonds backed by future toll revenue and use that money to build critical transportation projects. It was anticipated the bonds would generate another \$1.5 billion in matching local and federal funding for a total of \$3 billion for major highway construction projects in Ohio.

## **Pennsylvania**

The Pennsylvania Legislature approved the Comprehensive Transportation Funding Plan (Act 89) in November 2013. It will provide an additional \$2.3 billion for Pennsylvania transportation projects. The plan eliminated the state’s flat gas tax, effective January 1, 2013, rolling it into the Oil Company Franchise Tax (OCFT), charged at the wholesale level. It removed the artificial cap on the OCFT in thirds over five years. In 2013, Pennsylvania spent about \$1.6 billion annually on its transportation construction and maintenance program. Through Act 89, the 2014 expenditures increased to \$2.6 billion. Investment in Pennsylvania’s transportation system will continue to grow over the five-year implementation of the plan.

The plan provided counties the option to assess a \$5 vehicle registration fee to generate additional revenue for their highway and bridge needs. Beginning in July 2015, vehicle registration and drivers’ licenses will be indexed to inflation.

The plan also gave PennDOT authority to bond up to \$500 million. Repayment will be from the Motor License Fund and bond money may only be used for projects specifically itemized in a capital budget itemization bill.

## **Virginia**

The Commonwealth of Virginia enacted a major transportation funding program that made significant changes in how the state’s program is funded. The program, which is expected to raise about \$5.9 billion in new transportation revenue over the next five years, contains two key funding sources:



- 1) Replaced the state’s 17.5 cents-per-gallon gasoline tax with a 3.5 percent wholesale gas tax and 6 percent wholesale diesel tax, and
- 2) Increased the state’s Sales Tax by three-tenths of a percentage point, which would be dedicated to transportation funding. (There is also a 0.7 percent local sales tax increase for Northern Virginia and Hampton Roads, bringing the sales tax in those locations to 6 percent.)
- 3) Since Congress has failed to pass legislation to allow states to collect sales tax from internet purchases, Virginia lawmakers November 10, 2014 approved an additional 1.6 percent increase in the state sales tax on gasoline and transferred \$50 million in sales tax revenue from the General Fund back to the state’s transportation fund







## **VII. Cost Efficiencies**

In addition to focusing on needs and revenues associated with transportation, the members of the Commission sought information and ideas on how efficiencies and improvements can be made to the WVDOH and the Division of Motor Vehicles. Provided below are those reports and findings.

### Division of Highways

Efficiencies undertaken and achieved by WVDOH in recent years have provided additional funds for construction efforts in the transportation network. Fifteen total improvements have been implemented. It is estimated that \$180 million has been saved due to the implementation of the efficiency programs since 2005. The following list shows some the major actions that have been undertaken. A complete list and discussion of these efficiencies can be found in the recent Public Resources Advisory Group report for the state of West Virginia.

- Statewide Transportation Improvement Program – Significant savings in consultant design fees with the implementation of a 6-year financially constrained program, allowing the consulting, contracting industries and WVDOH to better manage resources.
- Equipment Fleet – Surplus equipment that was used on an infrequent basis was auctioned to reduce the cost of equipment idle time.
- GPS Fleet Management – Equipping vehicles with GPS has lowered insurance costs and has routed vehicles more efficiently during snow removal and ice control operations.
- Intelligent Transportation Initiatives – To notify travelers of weather and traffic delays and to save time and fuel, invested in Dynamic Message Boards, Roadway Weather Information System and Remote Traffic Monitoring of high-volume intersections.
- Pavement Preservation Program – Implementation of strategies, which emphasize earlier/less expensive treatments, decreased long-term costs of maintenance.
- Reduced Cash Reserves – WVDOH is better managing its cash reserves to meet current needs and is not operating with a large reserve balance, which could be utilized in other areas.

With these and other improvements, it is estimated millions have been placed directly into construction and maintenance projects, without an increase in the overall budget to the WVDOH. Secretary Mattox explained to the Commission that one of the biggest efficiencies employed by the WVDOH was the implementation of a constrained financial program, the Statewide Transportation Improvement Program, which identified major projects and scheduled



their funding and construction schedule. This program has completed, in whole or in part, projects like Route 35 in Mason and Putnam counties, Route 9 in the eastern panhandle, the Mon/Fayette Expressway in Morgantown, Gateway Connector, in Fairmont, just to name a few.

The Secretary explained that another great saving to the agency was the reduction in the amount of idle equipment. The agency began and currently sells idle and/or underutilized equipment.

The WVDOH core maintenance program is another example of cost savings. By dictating and simplifying the WVDOH county maintenance functions, setting a detailed weekly maintenance schedule, ditching everywhere on a 2- to 3-year basis, implementing and training employees on squaring pothole patches and mowing, at least to further preserve pavements, have streamlined the county functions and saved tens of millions of dollars since 2005.

The resources required to deliver that were based on the equipment, manpower, and materials a county needed for snow removal and ice control in winter months. Trucks were also fitted with GPS systems to monitor and track vehicle usage.

The WVDOH now employs a nearly-paperless bidding system, which it worked with the construction industry to implement. The WVDOH recently-implemented CORS system, a surveying and mapping (including aerial photography) function that helps surveyors gather information more quickly and speeds up the delivery of projects, saving time and money. CORS locations are set up statewide.

Finally, the Secretary mentioned the extension of the design/build pilot program. The Secretary stressed that this has been a good program and a good tool to have in the funding toolbox and it is something the FHWA is pursuing as part of their Every Day Counts initiative and is something the Secretary expects to see more of in the future. About 6 percent of the WVDOH budget is spent on design/build projects.

The implementation of a 511 system also has allowed the WVDOH simultaneously save money while better informing the public of road conditions, weather events, and natural disasters, etc.

Employing pavement preservation strategies have extended the life of existing pavements. DOH spent approximately \$30 million on pavement preservation in 2012. The WVDOH's Secondary Road Renovation Program has also allowed the agency to address/upgrade roads that wouldn't otherwise be paved.

Computers and other electronic monitoring devices on trucks and spreaders in the WVDOH snow removal and ice control operations have allowed the agency to monitor the number of miles driven, routes drive, materials used, etc., and allows the agency to monitor the application rate of materials and make adjustments to ensure the operation runs as efficiently as possible. The estimated cost savings is approximately \$3 million per year.



The WVDOH Programming Division is continually and actively purging the system of inactive projects, through inactive project management, to free up money previously held in old authorizations so it can be put to active or new projects.

Since 2005, the WVDOH has been reducing the agency's cash reserve. Prior to 2005, as much as \$250 million sat untouched. That money was not put toward any project, construction, or maintenance. It sat idle in the State Road Fund. The amount in reserve has been reduced to a level that requires the WVDOH budget staff to monitor the balance on a day-to-day basis, with a goal of maintaining a \$30-\$50 million dollar level, which the Secretary feels is the optimum level of performance.

Flexible work hours, such as four ten-hour shifts, have allowed the WVDOH to maximize working hours, especially in summer months, and complete work more quickly. Other cost efficiencies being studied are the concept of the WVDOH taking over maintenance operations along the West Virginia Turnpike, the conversion of the WVDOH fleet to natural gas, relocation of WVDOH district, county and county substation offices, and reduction of WVDOH middle management.

#### Division of Motor Vehicles

The Division of Motor Vehicles ("DMV") provides driver information and education through 24 regional offices. The DMV collects fees associated with driver licenses and vehicle registration and the 5 percent tax on vehicles. The annual budget for the DMV is approximately \$41 million. Operational expenses for the DMV are paid for out of the State Road Fund.

An audit by the Legislative Auditor's Office indicated that the DMV should begin offering online registration renewals as a way to save the state money and make the service more convenient. The audit, in 2002 dollars, noted that estimated cost of online renewals per transaction would be about \$2.37, less than half the cost of in-person renewals at \$4.96 per transaction.

The DMV has made great strides in making it possible for West Virginians to conduct business with the division without having to stand in line at their local regional office. Recent upgrades to online tax records now make it possible for DMV customers to renew their vehicle registrations online. In fact, 94 percent of DMV customers are eligible to renew online. In addition to registration renewals, West Virginians may also access their driver's license status and view a quick snapshot of their driving record, as well as pay driver's license reinstatement fees.

Other services that have been added by the DMV include allowing customers to apply for a duplicate vehicle registration card, duplicate license plate, duplicate registration decal, or change of address, all online. A 2014 law makes changes to the upcoming electronic insurance verification process and removes the outdated paper reporting requirement of cancellation notices by insurance companies.



According to former DMV Commissioner Steve Dale, recent statistics show that customers are taking advantage of DMV’s online services portal at [dmv.wv.gov](http://dmv.wv.gov). This online availability will eventually lead to less transactions being performed at DMV offices and more savings of time and gas money for DMV customers.

The Center for Digital Government recently presented the West Virginia DMV with the 2014 Digital Government Award in the “Government to Citizen” State Government category in October 2014. This is the DMV’s second Digital Government Achievement Award since 2010.







## **VIII. Committee Findings**

### **Infrastructure**

The Infrastructure Committee was tasked with meeting to discuss the long-term needs of the State Highway System and to determine the appropriate level of additional investment needed to provide a safe, efficient, and properly maintained highway system meeting the needs of our citizens and economy now and in the future. The Committee gathered information from recognized experts in highway transportation including national engineering consultants, representatives from WVDOH, and the West Virginia Parkways Authority.

The Committee looked at two broad areas of need for the state highway system. First is the area of properly providing for the renovation, restoration, replacement and modernizing of the existing state highway system. Second, is to provide for the expansion of the system. This may be to add capacity where necessary due to population growth or shifts, increased economic activity, or to promote development when the current system no longer meets the needs of the area. Expansion is also needed to meet the needs of areas of the State that are currently underserved by a safe, efficient highway system.

The Committee first considered the status of the current State Highway System:

#### ***Pavement Status***

To compensate for stagnant state and federal revenues, the WVDOH has increased the overall paving cycle to nearly 30 years when a 12-year paving cycle is desired. This means that on average a road paved today will not be repaved for 30 years. However, because WVDOH, rightly, considers those roads with the most use to be the highest priority, many lower volume local service roads may never get repaved and might have to become unpaved gravel roads.

#### ***Bridge Status***

There are over 7,000 vehicular bridges on the State Highway System with an average age of nearly 40 years. Bridges typically have a design life of 50 years and frequently require extensive rehabilitation or replacement near the end of the design life. Nearly 35 percent of these bridges are structurally deficient or functionally obsolete. Meaning that today, approximately 2,500 of West Virginia's bridges need to be replaced or have extensive rehabilitation. Current funding levels only allow a small portion of these needs to be met. Those bridges on the higher travelled roads generally have the highest priority meaning that the huge number of bridges on the local service roads are in the worst condition and are most likely to have load limitations placed on them and closed when their condition reaches the point that they are unsafe for any vehicular loads.



## **Annual Level of Preservation and Restoration Work Needed**

The second major aspect of the Infrastructure Committee’s deliberations was to fulfill its charge in furtherance of Executive Order No. 12-12 with determining the level of funding needed for a highway system that provides West Virginia’s residents, visitors, and businesses with a high degree of mobility, enhances the safety of drivers and passengers and furthers the commercial interests of its citizens. Also, in an effort to build a thriving, growing, and dynamic state, West Virginia must modernize its extensive network of roads, highways, and bridges to accommodate the mobility demands, employment, and commerce of a modern society.

The Committee met on December 13, 2012 and completed its work in its second and final meeting on January 9, 2013. In the course of its meetings the Committee was provided presentations and information on a wide variety of topics related to past, current and future funding options, highway system needs, issues related to the West Virginia Turnpike, and information related to enacted and potential efficiencies in the operation of the West Virginia Division of Highways.

### ***Funding Needs***

The Committee decided it would first determine the level of funding needed to be provided for preservation of the existing highway system. Preservation consists of activities that are needed to rehabilitate or maintain an existing asset. Examples of these activities are the resurfacing of existing highways, re-painting bridge girders, replacing a bridge or pipe, adding stone to existing stone-based roads, and similar activities. The second level of funding considered was for expansion of the highway system. Expansion projects are those projects that create a capital asset. In this category are items like building a new road where none existed before, expanding a highway from two lanes to four lanes, or adding an additional interchange on an existing highway.

### ***Preservation***

The bulk of the information used to arrive at a recommendation on the funding gap for preservation of the highway system between projected revenues from current sources and those needed for various levels of quality of the highway system came from a summary document entitled “HIGHWAY AND BRIDGE NEED VS. REVENUE” authored by CDM Smith based on their work “West Virginia Department of Transportation’s Long Range Multi-Modal Transportation Plan 2008-2032.”

The first level was called “Continued 2012 Budget” which took the average of the past four years of expenditures for system preservation and restoration which was \$709.2 million. The second level was the level of preservation and restoration needed to “Maintain the System” in its current condition and this level was determined to be an average of \$1.38 billion, or an increase of \$672.6 million over the current budget. The third level was level of preservation and restoration needed to bring the highway system to a level where all highways meet the design



standards of WVDOH and this level was determined to be an average of \$1.55 billion, or an increase of \$847.76 million over the current budget.

The study looked ahead 25 years under each of these funding levels and predicted some key measures of system performance, percent of deficient pavement and percent of bridges determined to rate poor or worse. Under the Continued 2012 Budget it was predicted that 38.7 percent of the pavement would be deficient and 82.4 percent of the bridges would be rated poor or worse. Under the “maintain current conditions,” there would be 1.4 percent deficient pavements and 8.7 percent of the bridges would rate poor or worse. Under the third level, it was predicted that none of the system’s pavement would be deficient and 5.5 percent of the bridges would be rated poor or worse.

Based on the information provided, the Committee came up with the following conclusions:

- If no increase in funding is provided the quality level of the highway system will continue to deteriorate at an alarming rate and lead quickly to a very unsatisfactory level of service.
- If \$400 million per year of additional funding (adjusted for inflation) is provided the quality of the highway system can be kept at current level, which the Committee felt was not satisfactory to meet the envisioned system.
- If \$1.0 billion per year (adjusted for inflation) is provided in increased funding for system maintenance and preservation, the highway system would display little or no deficiencies and those that did exist would be on lower volume roads.

In the Committee’s deliberation it was apparent that there was no support for maintaining funding for preservation at the current level and allowing the system to continue to rapidly deteriorate. At the \$400 million additional funding level at which the system remains in its current condition, there was little to no support. The Committee broadly felt that the existing highway system should be preserved in such a way that, over time, it would improve and have fewer deficiencies than currently. While there was increased support for a level of \$1.0 billion, which would have provided in time a highway system relatively free of deficiencies, it was not a majority of the Committee.

After considerable discussion, the Committee settled at the level of \$750 million per year adjusted for inflation of additional funding. The vote was nine in favor versus three against. Of those voting against this level of funding one wished to provide more funding and two wanted less.

## **Expansion**

In looking at the funds needed for expansion of the State Highway System, the Committee was provided a list similar to Appendix A in the West Virginia Multi-Model Statewide Transportation Plan except that it was limited to those expansion projects which provide at least as much benefit to the State as it costs. The total cost of those projects was \$9.4 billion. For sake of discussion, this total was divided by 25, which meant that the list of projects would be completed over a twenty-five year time period. The result was that \$378 million per



year of funding adjusted for inflation was required. The Transportation Plan has an assumption that \$60 million will be provided for expansion under current funding. Therefore, \$318 million of additional funding adjusted for inflation would be needed. After considerable discussion, the Committee determined that this level of funding and associated time required to complete the project list of twenty-five years was not satisfactory and unanimously voted to recommend an additional funding level of \$380 million per year adjusted for inflation. This would allow all needed projects to be funded in a little less than 23 and ½ years.

Throughout the Committee’s discussions, the term “adjusted for inflation” has been used. The Committee wants to make sure that any reader of this report recognizes the need to increase over time the inflow of revenues to account for the inflation in the costs of construction materials, labor, and equipment.

During the work of this Committee, it became aware that under existing law the tolls on the West Virginia Turnpike will cease after the final pay-off of the existing bond obligations currently scheduled for 2019 and the responsibility for the highway turned over to the Division of Highways. This will increase the preservation needs of the Division of Highways by \$59 million per year adjusted for inflation beginning in 2019. Additionally, costs for the State Police Detachment, which patrols the Turnpike, and the operation of Tamarack will fall to the General Revenue Fund instead of the West Virginia Turnpike as it does now.

In summary the Infrastructure Committee recommended:

<b>Increased Preservation funding</b>	<b>\$750 million/year plus \$59 million/year beginning 2019 if WV Turnpike Tolls removed</b>
<b>Increased Expansion Funding</b>	<b>\$380 million/year</b>

**Revenue**

As part of its charge, the Revenue Committee was tasked with researching and analyzing the overall funding mechanisms associated with the State Highway System. During their meetings, this committee reviewed existing revenue sources, looked at options for enhancing these sources, and potential new opportunities for funding. Some of these recommendations may be non-traditional sources. The Committee held four meetings beginning on January 10, 2013 and concluded on March 21, 2013. The members received a report from and studied the funding needs as presented by the Infrastructure Committee. Reports on existing revenue sources were presented to the Committee by:

- CDM Smith on the Statewide Transportation Plan
- HNTB on Toll Facilities
- WVDOH & WV Parkways Authority
- Department of Revenue
- Division of Motor Vehicles





From these sources and others, numerous documents were received and reviewed by committee members. The gathered information provided the members with an overview of current funding sources and trends as well as revenue sources used by or being considered by other states with similar transportation funding problems

The individual members submitted a total of 61 proposals for new or increased revenue to be considered by the full committee. After much discussion, the committee adopted 14 proposals. Nine of these proposals were estimated to produce an additional \$419.8 million in annual revenue, and five proposals were of an unknown income level. Although the Revenue Committee did not produce ideas for funding that would meet the total needs as adopted by the Infrastructure Committee, it was generally agreed that the adopted proposals offered a direction to begin to solve the revenue shortfall.

In summary, the Revenue Committee recommended:

**Increases Current Revenue Levels by: \$419.8 Million/year**

**Revenue Proposals - Considered and Recommended**

<u>Proposal</u>	<u>Revenue Amount</u>
Raise DMV license and registration fees. All licenses and fees to be adjusted annually and rounded to the nearest \$0.25 (see the attached table)	\$69,400,000
Increase the diesel fuel excise tax from \$0.205 to \$0.255 and convert to a percentage of the wholesale price (similar to the calculation now used on the variable wholesale tax) with a floor of \$0.205 and an annual limit on increases of 10%.	\$14,500,000
Increase the motor vehicle sales tax from 5% to 6% to match the Consumer Sales Tax	\$37,200,000
Set a new rate for registration of alternative fuel vehicles of \$200 per year	\$1,100,000
Increase the Consumer Sales Tax from 6% to 7% and dedicate the 1% increase to the State Road Fund	\$200,000,000
Cut 7.5% from the WVDOH Administration budget (note that all or part of this may have already been accomplished)	\$5,600,000
Cut 5% for 3 years (total of 15%) from the budget of the DMV	\$5,000,000
Leverage the WV Parkways tolls to create a WV Transportation fund. Capitalize the fund with increased tolls and internal efficiencies	\$50,000,000
Sell Road Bonds through the WV Parkways Authority to fund new roads with a dedicated revenue stream	Unknown
Raise the cigarette tax by \$0.50 and dedicate the revenue to the State Road Fund	\$37,000,000
Dedicate any Natural Gas Severance Tax revenue above the average of the last 3 fiscal years to the State Road Fund	Unknown
Make transfers from the General Revenue to the State Road Fund as required	Unknown
Continue a moratorium of the adoption of orphan roads into the State Road System	Unknown
<b>Total</b>	<b>\$419,800,000</b>



Figure 9 – Historic Funding Levels in Highway Program (Millions, \$ FY2012)

Fund	Revenue Source	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Special Revenue (Appropriated)	A. James Manchin Fund	\$ -	\$ -	\$ 5.68	\$ 5.57	\$ 5.49	\$ 5.33	\$ 4.58	\$ 3.89	\$ 3.75	\$ 4.01	\$ 4.41	\$ 3.21	\$ 3.49	\$ 3.30
	Title Fees	\$ -	\$ -	\$ 5.68	\$ 5.57	\$ 5.49	\$ 5.33	\$ 4.58	\$ 3.89	\$ 3.75	\$ 4.01	\$ 4.41	\$ 3.21	\$ 3.49	\$ 3.30
State Road Fund	Gasoline & Motor Fuel Tax (Excise) Tax	\$ 414.62	\$ 385.59	\$ 386.34	\$ 388.65	\$ 368.39	\$ 439.97	\$ 432.14	\$ 378.43	\$ 394.72	\$ 487.74	\$ 514.28	\$ 379.70	\$ 420.75	\$ 387.00
	Wholesale Fuel Tax	\$ 125.58	\$ 119.79	\$ 122.68	\$ 123.67	\$ 112.90	\$ 59.63	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Subtotal Fuel Taxes	\$ 540.21	\$ 505.38	\$ 509.02	\$ 512.32	\$ 481.29	\$ 499.61	\$ 432.14	\$ 378.43	\$ 394.72	\$ 487.74	\$ 514.28	\$ 379.70	\$ 420.75	\$ 387.00
	Registration Fees	\$ 145.69	\$ 150.42	\$ 133.31	\$ 145.11	\$ 143.53	\$ 134.30	\$ 122.14	\$ 102.62	\$ 98.41	\$ 104.25	\$ 119.58	\$ 84.90	\$ 96.49	\$ 90.70
	Privilege Tax	\$ 262.03	\$ 267.54	\$ 265.74	\$ 291.26	\$ 279.15	\$ 285.40	\$ 244.75	\$ 202.31	\$ 195.91	\$ 204.48	\$ 201.70	\$ 144.05	\$ 182.50	\$ 186.30
	Highway Litter Control Fee	\$ 2.87	\$ 2.72	\$ 2.55	\$ 2.95	\$ 2.65	\$ 2.55	\$ 2.57	\$ 2.00	\$ 1.75	\$ 2.27	\$ 2.27	\$ 1.46	\$ 2.01	\$ 1.60
	Miscellaneous Income	\$ 19.67	\$ 17.87	\$ 20.26	\$ 13.18	\$ 10.75	\$ 9.25	\$ 18.32	\$ 28.99	\$ 14.27	\$ 46.37	\$ 58.32	\$ 52.94	\$ 28.78	\$ 45.80
	Less Industrial Access Road Fund	\$ (0.40)	\$ (2.69)	\$ (7.48)	\$ (5.93)	\$ (3.82)	\$ (4.76)	\$ (3.36)	\$ (3.55)	\$ (3.43)	\$ (4.04)	\$ (4.01)	\$ (2.91)	\$ (3.17)	\$ (3.00)
	<b>Total State Sources</b>	<b>\$ 970.07</b>	<b>\$ 941.24</b>	<b>\$ 923.41</b>	<b>\$ 958.89</b>	<b>\$ 913.56</b>	<b>\$ 926.34</b>	<b>\$ 816.56</b>	<b>\$ 710.80</b>	<b>\$ 701.64</b>	<b>\$ 841.06</b>	<b>\$ 892.13</b>	<b>\$ 660.13</b>	<b>\$ 727.35</b>	<b>\$ 708.40</b>
	Federal Sources	Interstate	\$ 101.20	\$ 129.05	\$ 86.28	\$ 93.62	\$ 77.22	\$ 83.22	\$ 81.88	\$ 68.96	\$ 55.42	\$ 90.36	\$ 166.79	\$ 78.29	\$ 105.80
Other Federal Aid		\$ 278.63	\$ 253.86	\$ 351.66	\$ 284.40	\$ 297.27	\$ 289.96	\$ 340.27	\$ 279.61	\$ 278.50	\$ 249.66	\$ 327.96	\$ 229.14	\$ 271.16	\$ 264.30
Appalachian		\$ 99.73	\$ 135.14	\$ 224.47	\$ 278.62	\$ 285.64	\$ 198.74	\$ 150.83	\$ 114.88	\$ 106.55	\$ 90.93	\$ 113.29	\$ 76.64	\$ 64.64	\$ 65.30
Stimulus		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Federal Sources</b>		<b>\$ 479.6</b>	<b>\$ 518.1</b>	<b>\$ 662.4</b>	<b>\$ 656.6</b>	<b>\$ 660.1</b>	<b>\$ 571.9</b>	<b>\$ 573.0</b>	<b>\$ 463.5</b>	<b>\$ 440.5</b>	<b>\$ 430.9</b>	<b>\$ 614.8</b>	<b>\$ 481.1</b>	<b>\$ 537.3</b>	<b>\$ 449.1</b>
Other Special Revenue (Non-appropriated)	Industrial Access Road Fund	\$ 424.9	\$ 261.9	\$ 277.1	\$ 235.1	\$ 16.3	\$ 59.6	\$ 8.6	\$ 7.5	\$ 137.3	\$ 11.8	\$ 117.2	\$ 57	\$ 7.3	\$ 6.7
	Transfer from SHF	\$ (0.40)	\$ (2.69)	\$ (7.48)	\$ (5.93)	\$ (3.82)	\$ (4.76)	\$ (3.36)	\$ (3.55)	\$ (3.43)	\$ (4.04)	\$ (2.91)	\$ (3.17)	\$ (3.00)	
Coal Resource	\$ 0.05 per ton of coal shipped	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1.34	\$ 5.21	\$ 3.93	\$ 4.55	\$ 4.85	\$ 4.59	\$ 2.70	\$ 4.12	\$ 3.69
	Transportation Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonds (Road Bonds & GARVEE)	FY07-FY09 are garvee revenue	\$ 424.52	\$ 259.18	\$ 269.62	\$ 229.13	\$ 12.46	\$ 53.55	\$ -	\$ -	\$ 129.36	\$ 2.88	\$ 108.63	\$ 0.04	\$ -	\$ -
	<b>TOTAL REVENUE -DOH</b>	<b>\$ 1,874.6</b>	<b>\$ 1,721.2</b>	<b>\$ 1,868.6</b>	<b>\$ 1,856.2</b>	<b>\$ 1,595.5</b>	<b>\$ 1,563.2</b>	<b>\$ 1,402.7</b>	<b>\$ 1,185.6</b>	<b>\$ 1,283.2</b>	<b>\$ 1,287.8</b>	<b>\$ 1,628.6</b>	<b>\$ 1,150.1</b>	<b>\$ 1,271.1</b>	<b>\$ 1,167.5</b>

Summary of Historic Funding Levels in Highway Program (Millions, \$ 2012)



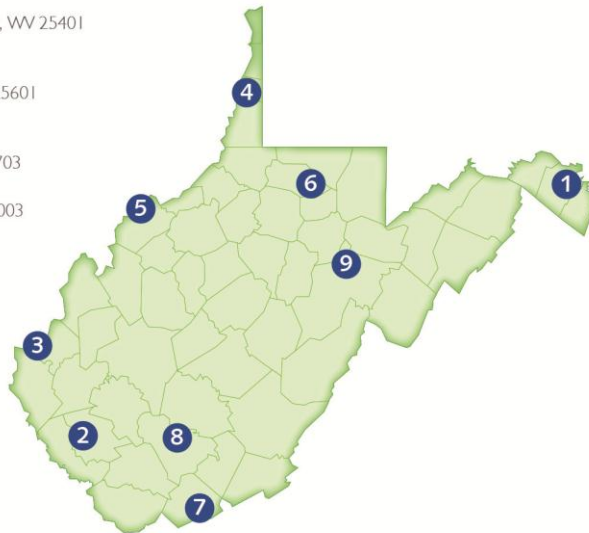
## Legislative & Public Outreach

Nine public meetings were held across the State between July 11, 2013 and August 25, 2013 to garner public opinion and receive ideas on the condition and funding of highways. During these meetings a survey was provided so the attendees and the public could provide answers on how to create cost efficiencies, generate revenue and develop innovative ideas for raising funds for continued maintenance and expansion.

Following the initial public meeting in Martinsburg, and based on public comments, three questions were added to include innovative funding mechanisms to the survey prior to the subsequent meeting in Logan. The public meetings took place in the following locations, dates, and times:

*Figure 10 – Public Outreach Meetings*

- 1 Martinsburg/Kearneysville: July 11, 2013 4 pm-7pm  
Location: Comfort Suites, 1937 Short Road, Martinsburg, WV 25401
- 2 Logan: July 16, 2013 4 pm-7 pm  
Location: Chief Logan Hotel and Conference Center  
1000 Conference Center Drive, Logan, WV 25601
- 3 Huntington: July 18, 2013 4 pm-7 pm  
Location: Marshall University Alumni Hall  
519 John Marshall Drive, Huntington, WV 25703
- 4 Wheeling: July 30, 2013 4 pm-7 pm  
Location: Oglebay, 465 Lodge Drive, Wheeling, WV 26003
- 5 Parkersburg: August 1, 2013 4 pm-7 pm  
Location: Comfort Suites (Mineral Wells)  
167 Elizabeth Pike, Mineral Wells, WV 26150
- 6 Fairmont: August 8, 2013 4 pm-7 pm  
Location: Mollohan Technology Center  
1000 Galliker Drive, Fairmont, WV 26554
- 7 Princeton: August 12, 2013 10 am-1 pm  
Location: Days Inn, 347 Meadowfield Lane  
Princeton, WV 24740
- 8 Beckley: August 12, 2013 4 pm-7 pm  
Location: Country Inn and Suites  
2120 Harper Road, Beckley, WV 25801
- 9 Elkins: August 15, 2013 4 pm-7 pm  
Location: Days Inn & Suites  
1200 Harrison Avenue, Elkins, WV 26241



Initially, fourteen questions were developed for the survey. Those questions were given at the first public meeting in Martinsburg, W.Va., utilizing both automated [Automated Response System (ARS)] and paper surveys. Based on public comments, three questions were added to include innovative funding mechanisms to the survey prior to the subsequent meeting in Logan.

A total of 1,397 responses to the survey were recorded across all the available methods open to the public. As shown in Figure 11, the most favorable response came from questions 1, 3, and 4. The favorable responses to these questions showed that respondents felt strongly that roads and highways were important to them, for helping create economic development, and high-paying jobs. They also strongly agreed that it is important for West Virginia to fund safe and efficient roads which they do not think are currently in a state of good repair.



Figure 11 – Response Percentage by Questions (all sources and all locations)

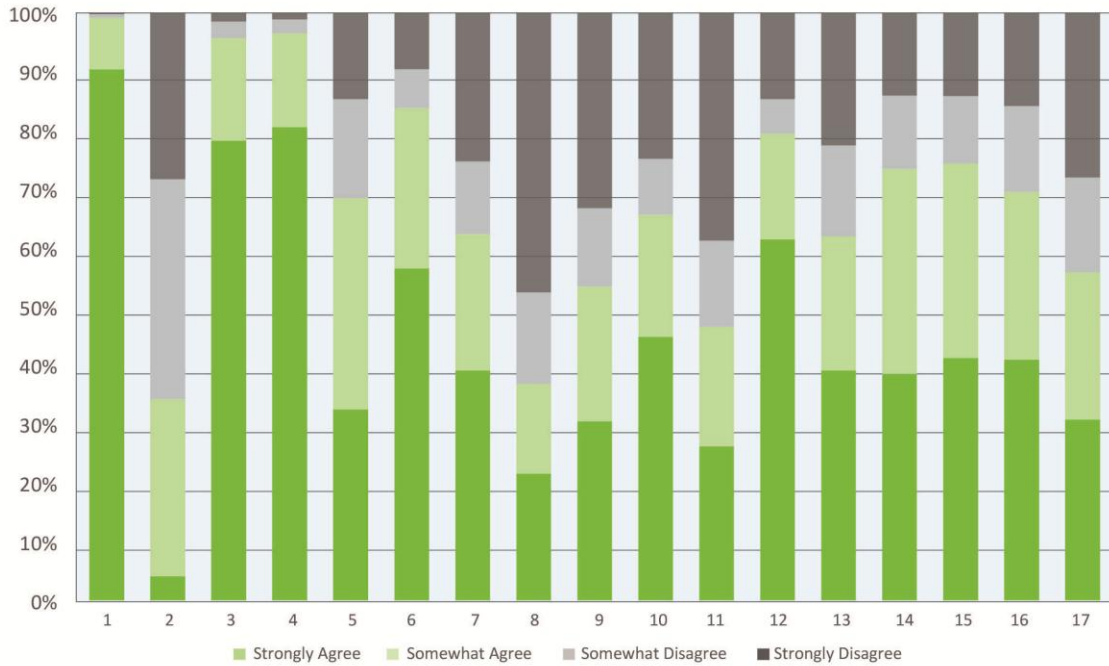
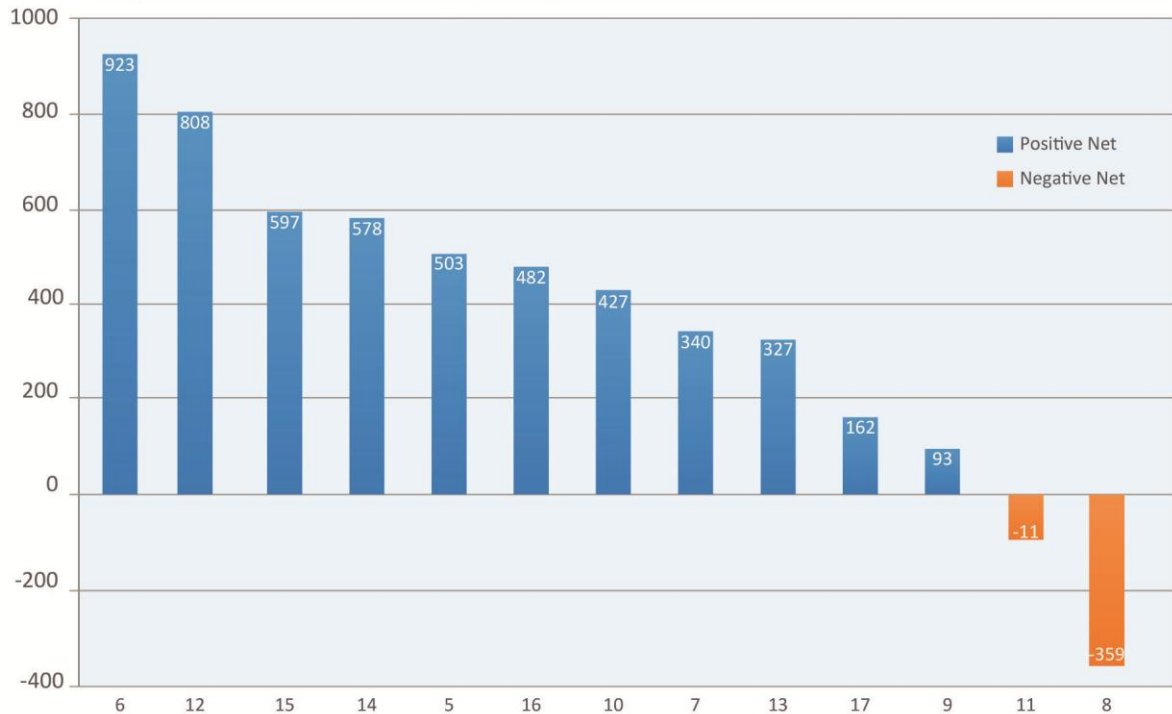


Figure 12 – Net Agreement Ranked by Questions (All sources and all locations)







**The most favorable options (shown in Figure 12) for providing funding for the future of West Virginia’s highway system, based on net agreement (total agreement—total disagreement) were:**

**QUESTION 6:** I would support dedicating sales tax receipts on motor vehicle repairs, parts and services to the State Road Fund.

**QUESTION 7:** I would support a continuation of the tolls on the West Virginia Turnpike to help pay for new projects.

**QUESTION 14:** I would support the development of a State Infrastructure Bank to provide loans to public and private entities to help finance highway projects.

**QUESTION 15:** I would support further development of private-public partnerships to aid the construction and maintenance of highway projects.

**The most unfavorable options based on net agreement (Figure 12) were:**

**QUESTION 8:** I would support increases to gasoline and/or diesel motor fuel taxes.

**QUESTION 9:** I would support increases to the vehicle tax (previously known as the privilege tax).

**QUESTION 11:** I would support increases to the consumer sales tax with the proceeds going to the State Road Fund.

**QUESTION 17:** I would support allowing localities more flexibility to implement user fees or local sales taxes to help fund road projects.

**The most favorable option for cost efficiency (shown in Figure 12) was:**

**QUESTION 6:** I would support dedicating sales tax receipts on motor vehicle repairs, parts and services to the State Road Fund.

**The most favorable options for revenue generators (Figure 12) were:**

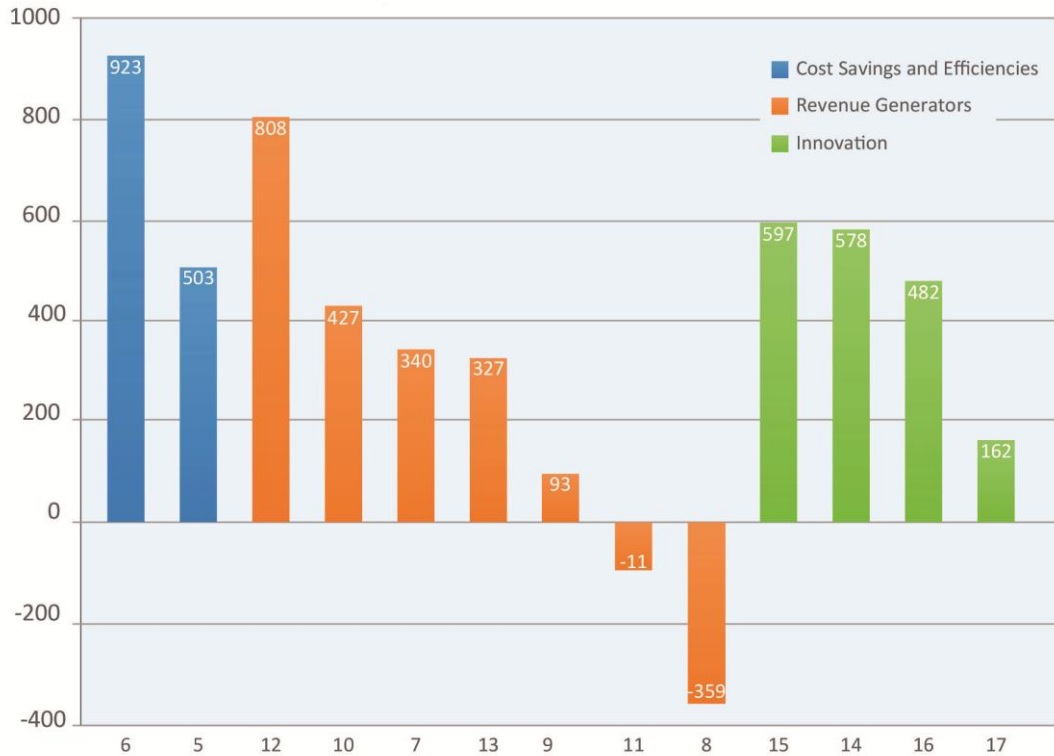
**QUESTION 12:** I would support a continuation of tolls on the West Virginia Turnpike to help pay for new projects.

**QUESTION 10:** I would support additional registration fees or increased vehicle taxes on alternative fuel vehicles.

**QUESTION 7:** I would support increases in motor vehicle license and registration fees.



Figure 13 – Net Agreement by Category (All sources and all locations)



**The most favorable options for innovations (shown in Figure 13) were:**

**QUESTION 15:** I would support further development of public-private partnerships to aid the construction and maintenance of highway projects.

**QUESTION 14:** I would support the development of a State Infrastructure Bank to provide loans to public and private entities to help finance highway projects.

A report on this section is provided in Appendix D.



## **IX. Final Recommendations**

At the Commission meeting on September 4, 2013, the Commission approved a number of recommendations. The recommendations are grouped into three primary categories: realizing cost efficiencies, innovative financing methods, and creating new revenue sources. A separate recommendation also involves the West Virginia Parkways Authority, the current tolling mechanism, and future bonding potential.

### ***Realizing Efficiencies***

The WVDOH has identified future efficiencies that are under development:

- Enterprise Resource Planning – Coordination with state agencies on enterprise-wide software to improve efficiencies in operations, such as payroll, financials, and human resources.
- Asset Management – Developing a plan for key assets (pavements, bridges, buildings) that will allow for better investments in the system preservation program.
- Performance Based Specification for Pavements – Provides the contracting industry with requirements for paving projects, which reduces the amount of oversight/inspection needed.

The WVDOH continues to investigate ways to maximize the annual budget to benefit West Virginia in the future, but will require further study to determine the feasibility and potential positive impacts within the WVDOH. These potential areas for improvement efficiencies include:

- Parkways Authority Routine Maintenance – WVDOH would provide preventative maintenance.
- Fleet Conversion – Potential savings converting to natural gas.
- Electronic Design Files – Provide electronic Digital Terrain Models to potential bidders.
- District, County and Substation Relocation – Evaluate travel time savings and improved service.
- Reduction of Middle Management – Consider reducing middle managers within the agency.

### ***Innovative Financing Methods***

This section deals with the Governor’s and State Legislature’s ability to pursue finance options outside the normal revenue collection process. Some options, such as tolling and Grant Anticipated Revenue Vehicle (“GARVEE”) bonds are in use today, and these recommendations aim to enhance their capabilities in the decision-making process. Others, such as the Transportation Infrastructure Finance and Innovation Act (“TIFIA”) and the State Infrastructure Bank, are focused on new sources and are intended to finance projects in the future. Some of these sources are currently used in other states or are federal initiatives.



The innovative financing method recommendations, as approved, are as follows:

- Continue use of public-private partnerships (P3 or PPPs) and design-build to construct high priority roads now and finance them over several years.
- Continue use and feasibility of tolling and toll roads within the state to address expansion needs and new construction.
- Continue use of GARVEEs subject to existing guidelines from the FHWA and increase cap to \$500 million.
- The State Infrastructure Bank will allow West Virginia to join 32 other states and territories that have established revolving funds to offer low-cost loans and other credit assistance to help finance highway projects at the local level.
- Place a renewed emphasis on local finance of highway projects through the existing Community Empowerment Transportation Act (“CETA” in W.Va. Code §17-28-1 et seq.) leaving the option for local municipalities to create user fees and taxes to assist in the financing of highway projects.
- Enact enabling legislation to allow West Virginia to participate in the federal TIFIA.

### *Creating New Revenue Sources*

Establishing a continuous revenue source into the future is very important in funding infrastructure improvements and maintaining the economic vitality of the state. This section focuses on new and enhanced revenue streams that are specific to West Virginia, such as the increase in DMV registration and licensing, which was discussed in Section 8. Others are an endorsement of continued practice and no revision to the sustainability of the existing revenue source that has been or is anticipated to change in the future, e.g. diesel and motor fuel excise tax. As automobile efficiency increases and alternative fuel sources are introduced to the market, the Commission decided to place less emphasis on this source.

The funding and revenue source recommendations, as approved by the Commission, are as follows:

- Motor vehicle sales tax. Increase the motor vehicle sales tax from 5% to 6% to match the consumer sales and use tax (estimated to generate approximately \$40 million); this is formerly known as the privilege tax.
- Registration fees. Increase DMV registration and motor vehicle licensing fees and index for inflation, adjusted bi-annually to the Consumer Price Index (estimated to generate approximately \$75 million).
- Alternative fuel vehicle registration fee. Assess an annual registration fee on “Alternate Fuel Vehicles”, implementing an annual registration fee of \$200 for alternative fuel vehicles (including hydrogen, natural gas and non-petrochemical vehicles) and a \$100 fee for combination vehicles that use electricity and petrochemicals (estimated to generate approximately \$1 million).





- Other tax revenue. Dedicate the consumer sales and use tax revenue already collected from purchases associated with cars and trucks, e.g. automobile parts, batteries, brakes, services, etc. to the State Road Fund (estimated to general approximately \$25 million).

These collective recommendations, if adopted, would represent approximately \$141 million dollars of additional revenue in the State Road Fund annually.

### *Leveraging the West Virginia Parkways Authority*

The West Virginia Parkways Authority (“Parkways”) operates the West Virginia Turnpike, a \$1 billion asset, and is responsible for 88 miles (426 lane miles) of Interstate highway within West Virginia. There are also 116 bridges, 18 interchanges, more than 300,000 square feet of facilities, three full-service travel plazas, two rest areas, one welcome center, and other transportation assets maintained by Parkways. The Turnpike receives no funding from the State or the Federal government for maintenance, operation, or capital repairs of these assets. The collection of tolls (user fees) provides the funds for maintenance, operations, and capital repairs and free-up tax dollars to be used by WVDOH for all of the other highways and bridges in the State. In addition, the toll revenue sustains 360 full and part-time Parkways employees and 31 State Police officers, all with State employment benefits.

In 2019, the Parkways Authority is scheduled to pay off its outstanding bonds, which were issued in 1989. After that, legislation states that if the Turnpike is in good condition and repair to the satisfaction of the Commissioner of the State Division of Highways, the Turnpike shall be transferred to the DOH and shall thereafter be maintained by the DOH free of tolls.

Without tolls, it is estimated the annual needs for preservation of the Turnpike infrastructure will be \$59 million, with early focus on roadways and a mounting emphasis on deteriorating bridges after 2019. With no identified revenue to supplement the existing WVDOH budget with this potential addition of 88 miles of Interstate, along with projected unfunded needs of \$1.13 billion annually in statewide transportation needs, and other capital impacts due to the removal of tolls, the Commission adopted the following recommendations with respect to the Turnpike:

- Maintain the structure of the Parkways as it is current constituted (§17-16A-1 et seq.) for administration, membership, and toll collection until at least July 1, 2019.
- The maintenance, engineering, and operations of the Turnpike will continue to be the responsibility of the Parkways in order to satisfy the requirements of the bond covenants and trust indenture.
- There will be continued efforts to seek efficiencies and economies of scale between the Parkways and DOH.
- Expand and increase the authority of Parkways to increase revenue bonds in W.Va. Code §17-16A-11 from an amount not to exceed \$200 million to an amount not to exceed \$1.5 billion.



- Parkways to issue up to \$1 billion in bonds for road projects statewide backed by future increased toll revenue.
- Effective July 1, 2016, there will be a toll increase ranging from 10 percent to 25 percent depending upon the amount of bonds that are sold and thereafter occurring bi-annually on July 1, on a set schedule for at least ten (10) years, there will be an automatic increase in toll rates (with the exception of the provisions below), capped at inflation, with a minimum floor to cover debt service payments.
- Freeze toll rates for West Virginia Parkways EZPass account holders (passenger vehicles only) for five (5) years.
- Enact legislation to provide for the enforcement of electronic toll collection by July 1, 2019
- Amend the enabling legislation to allow Parkways to transfer up to \$1 billion in bond proceeds to DOH to fund transportation capital projects across the state which would then be backed by future toll revenue provided that at least 25 percent (25%) of bond proceeds be spent on projects in the four counties where the existing Turnpike travels and independent of the work on the Turnpike itself.
- Repeal W.Va. Code §17-16A-18 providing for the cessation of tolls.
- Repeal W.Va. Code §17-16A-30 providing for coordination with county commissioners, appointment of an advisory committee, approval of county commissions by resolution, and public hearings.
- Other substantive and/or technical changes recommended by bond counsel, counsel to Parkways and DOH, and other third-party professionals.

There are some important points and assumptions that need to be noted for these recommendations:

- The Turnpike will not be leased.
- The Parkways Authority remains independent.
- The Parkways Authority generates additional revenue and a broader role in funding highway construction and maintenance.
- The State will be able to construct road projects now that would otherwise not be completed for at least twenty years under current funding scenarios.
- A certain percentage (at least 25 percent) of bond proceeds goes to the four counties that encompass the Turnpike.
- Toll rates for West Virginia EZPass holders (passenger vehicles only) are frozen for five (5) years and toll increases for others capped at inflation.



## **X. Future Study Suggested**

In addition to the recommendations adopted above, the Commission requests continued study, in cooperation with the State Legislature, to analyze the condition of the State's transportation infrastructure, particularly in light of our recent harsh winters. The future study should include the concept and feasibility of a vehicle miles traveled (VMT) tax. VMT is the total amount of miles traveled by an automobile over a set time period, usually a year. A VMT tax would apply to vehicles registered within West Virginia but may be applied, through the use of an onboard device (through GPS or other technology), to capture the distance driven by a vehicle on specific roadways thus also capturing out-of-state travel.

Moreover, there should be further study of the future of the motor fuel and diesel excise taxes with emphasis on possible repeal of excise taxes and replacement with a broad-based sales tax on the cost of motor fuel and diesel. This would be similar to the approach adopted by the Commonwealth of Virginia in 2013. The Commission supports, and is pleased the Governor signed into law, House Bill 2008 enacted during the 2015 Regular Session of the Legislature that called for a performance audit of WVDOH by the Joint Committee on Government and Finance.

Finally, the State should engage with our congressional delegation and other federal partners to ensure passage of a long-term transportation funding bill as a successor to MAP-21.

The Commission wishes to thank the Office of Governor Earl Ray Tomblin, the West Virginia Department of Transportation, and the West Virginia Department of Revenue for the staff support provided throughout the Commission's work, especially Rob Pennington, P.E., Mark Muchow, Manda Bickoff, and Karen Zamow. We also wish to thank the professionals and staff at CDM Smith, the West Virginia University Bureau of Business and Economic Research, the Marshall University Center for Business and Economic Research, and the Nick J. Rahall, II Appalachian Transportation Institute.





# Appendix A





For a comprehensive list of reports, studies, and other documentation provided to the Commission, see the following link below:

<http://www.transportation.wv.gov/highways/highwayscommission/Pages/default.aspx>



# Appendix B



Provided are editorials from various West Virginia media outlets that focus on the challenges and issues facing the State's transportation system:

**Editorial: Delayed highways report could outline answers**

Charleston Daily Mail, May 18, 2015

**End Delay On Road Funding**

The Intelligencer / Wheeling News-Register, April 26, 2015

**Editorial: State leaders have rough roads to hoe — literally**

The Clarksburg Exponent Telegram, April 5, 2015

**Editorial: Address Highway Funding Challenge**

The Intelligencer / Wheeling News-Register, March 21, 2015

**Editorial: Infrastructure needs go begging for action**

The Herald-Dispatch, Feb. 24, 2015

**Editorial: Road Funding Solution Needed**

The Intelligencer / Wheeling News-Register, December 29, 2014

**Editorial: Good news/bad news with West Virginia fuel tax**

Charleston Daily Mail, December 2, 2104

**Editorial: Road Funding Changes Vital**

The Intelligencer / Wheeling News-Register, November 25, 2014

**Jared Hunt column: Highway bill could boost W.Va. economy**

Charleston Daily Mail, October 15, 2014

**Will We Ever Get There?**

**Forthcoming Release of Report Must Herald Willingness To Pay For Plan**

The Dominion Post, August 11, 2014

**Editorial: States need long-term funding plan for highways**

Charleston Daily Mail, July 30, 2014

**Can we be realistic on roads?**

The State Journal, July 17, 2014

**Editorial: What next? Quit fixing roads?**

Charleston Gazette, July 8, 2014



**Editorial: Infrastructure programs need focus, and reasonable costs**

Charleston Daily Mail, May 21, 2014

**Corridor H work needs to be accelerated**

Martinsburg Journal, May 19, 2014

**Editorial: Do Something About Roads**

The Intelligencer/Wheeling New-Register, May 18, 2014

**Editorial: Taxes, tolls and cuts need consideration**

Charleston Daily Mail, May 12, 104

**Interstate highway tolls: Pay now... or later.**

MetroNews, May 8, 2014

**No Easy Way Road funding woes in need of a solution**

Parkersburg News and Sentinel, January 24, 2014

**Editorial: State needs to find a way to improve roads**

The Herald-Dispatch, January 13, 2014

**Road Work: Tomblin needs to act on highway issues**

Martinsburg Journal, January 6, 2014

**Finding Money For W.Va. Roads**

The Intelligencer / Wheeling News-Register, December 29, 2013

**Structurally deficient: Aging bridges a serious concern**

Bluefield Daily Telegraph, September 18, 2013

**State needs to find ways to bridge gap on road funds**

Clarksburg Exponent-Telegram, September 14, 2013

**States looking for answers on rising road costs**

Clarksburg Exponent-Telegram, September 13, 2013

**Put report in gear. Proposal for road bonds can help steer improvement**

The Dominion Post, September 8, 2013



# Appendix C