

**WEST VIRGINIA
HIGHWAY SAFETY IMPROVEMENT PROGRAM
ANNUAL REPORT**



**WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING DIVISION**

SEPTEMBER 2013

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I. Introduction

On July 6, 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law. MAP-21 creates a performance based program, and provides funding for surface transportation programs for fiscal years 2013-2014. With MAP-21, the funding for the Highway Safety Improvement Program (HSIP) was doubled. The High Risk Rural Road Program (HRRRP) no longer has a set aside amount, and was absorbed by the larger HSIP. The Rail-Highway Grade Crossing (HRGX) maintained its separate funding and reporting requirements. Additionally, the MAP-21 legislation increased the amount of flexibility states have to enact unique programs to improve highway safety, and provided increased HSIP eligibility for non-infrastructure safety efforts such as programs to reduce unsafe driver behaviors.

The following report is submitted in accordance with Subchapter J – Highway Safety Section 924.15. This comprehensive report details West Virginia’s Highway Safety Improvement Program for the time period of July 1, 2012 through June 30, 2013. This document includes all projects implemented with HSIP funding including those projects funded with HRRRP and HRGX funding. In addition, the report details projects funded with penalty transfer funds, as required in both SAFETEA-LU and MAP-21. Federal Highway Administration’s Highway Safety Improvement Program Reporting Guidance as transmitted in the February 13, 2013 memo was followed in developing the following report.

II. Program Structure

A. Program Administration

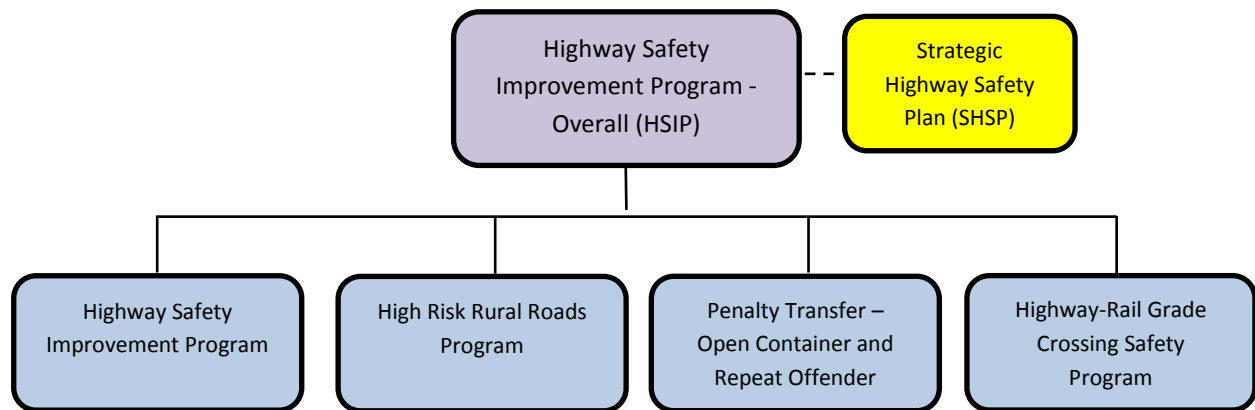
West Virginia’s Highway Safety Improvement Program is coordinated by the Mobility and Safety Section of the WVDOH’s Traffic Engineering Division. The Section is responsible for reviewing and evaluating any project that is a candidate for highway safety funding. The initial review and evaluation of a potential project will include the analysis of crash data for the location, a field review of the site, and the collection of any other information found appropriate to evaluate the proposed project. Once a positive safety benefit is determined to exist for a project, the methodology discussed below is used to select and prioritize projects for the State’s HSIP. Once a project is selected for the HSIP, the Section is responsible for selecting an HSIP funding category for the project and submitting appropriate programming documents where HSIP funds are encumbered and projects are assigned to the State’s Statewide Transportation Improvement Program (STIP). The Mobility and Safety Section remains responsible for monitoring and balancing the use of HSIP funds, and evaluating the effectiveness of a project following its completion.

B. Program Methodology

West Virginia Division of Transportation maintains approximately ninety-five percent (95%) of the roads in the State, including all secondary or county routes. As such, all HSIP funds are typically used for highway safety projects on the State Highway System. Very few of the State's municipalities own city streets. These are typically lower volume and do not have significant numbers of fatal or serious injury crashes occurring on them; however, should a safety concern exist on a municipal street the project would be eligible to compete for available HSIP funds.

The overall purpose of the HSIP is to achieve a significant reduction in traffic fatalities and incapacitating injuries through the implementation of infrastructure-related highway safety improvements. Components of West Virginia's HSIP include the Strategic Highway Safety Program (SHSP), the Highway Safety Improvement Program (HSIP), the High Risk Rural Roads Program (HRRRP), the Railway-Highway Grade Crossing Program (HRGX) and the Penalty Transfer (OCRO), as shown in Figure 1. This annual report contains an evaluation of the overall HSIP, including the HRRRP and the HRGX.

Figure 1 - HSIP Structure



Highway Safety Improvement Program (HSIP):

All projects utilizing federal safety funding must meet one of the following criteria:

- 1. Proactive Measure/ Systemwide Solutions.** West Virginia's current Strategic Highway Safety Plan designates systemic strategies as vital to the reduction of fatalities and disabling injuries in highway crashes. In addition, other systemic strategies may be identified in the future that can be used systemwide to reduce fatalities and disabling injuries. Some examples of

systemic strategies include paved shoulders, rumble strips and sign upgrades.

2. **Reactive Measure: Severe Crash Experience.** Projects meeting this criterion must provide a corrective improvement to a location with disabling injury &/or fatal crash experience (severe crash experience). This severe crash experience may be demonstrated in the reports generated through the State's Crash Records Database or discovered through emerging safety needs with fatal and/or disabling injury crash experiences.
3. **Safety Assessment / Safety Needs Identification.** Safety needs can be identified as a result of a Road Safety Audit, which focuses on specific locations or corridors to identify potential safety issues and countermeasures. A Road Safety Audit can be completed from the analysis of two people or can involve a larger team of safety experts. Innovative and creative safety countermeasures can be implemented to remove or minimize the safety concern (these may or may not have an identified crash reduction factor).

Prior to being included and/or funded as a "highway safety project", the Mobility and Safety Section of Traffic Engineering shall review, approve, and sign off on project programming documents and/or agreements.

Once potential projects have been shown to have a positive safety benefit, projects are prioritized based upon their benefit/cost ratio. The new Safety Management System under development will streamline this process, and a more competitive process for obtaining HSIP funding should result.

High Risk Rural Road Program (HRRRP):

A summary of the HRRRP methodology is presented in Section V of this document.

Highway-Rail-Grade Crossing (HRGX) Program:

A summary of the HRGX methodology is presented in Section VI of this document.

III. PROGRESS IN IMPLEMENTING HSIP PROJECTS

A. HSIP Funds Programmed

In FY 2013, West Virginia received an annual apportionment of \$25,445,237 in HSIP funding. When combined with the unauthorized balance of \$28,202,814 received in previous \$148 apportionments, West Virginia had a total of \$53,648,051 available in \$148 HSIP funding for FY 2013. As a result of previous unauthorized balances of

Hazard Elimination (§152) and Optional Safety funds carried over from both the Transportation Equity Act for the 21st Century (TEA-21) and Intermodal Surface Transportation Efficiency Act (ISTEA), West Virginia also began FY 2013 with \$665,999 additional dollars available for HSIP projects.

As of the end of the 2012 Legislative Session, West Virginia still does not have an Open Container Law. As such, the State is subject to a penalty transfer of highway construction funds to our 402 Program as described in §154. As permitted in §154, West Virginia elects to use a majority of these transferred funds to fund additional projects through the HSIP.

West Virginia’s Repeat Offender Law failed to meet federal requirements until FY 2006. As such, West Virginia was subject to an additional penalty transfer as described in §164. West Virginia’s Governor’s Highway Safety Program has awarded WVDOH, between FY 2001 and FY 2012, **\$58,838,036** under a grant to perform HSIP eligible projects in accordance with the State’s plan for §154/§164 transfer funds.

Under MAP-21, the reporting requirements for these funds have changed. WVDOH will work with FHWA instead of Governor’s Highway Safety Program on tracking projects programmed with §154 funds. During FY 2013, these sanctions resulted in the transfer of an estimated \$9,427,942 of which 60% was dedicated to the HSIP.

The following table details the varying categories of HSIP funds available during FY2013, including the amount of funding programmed and obligated under each category:

Table 1: HSIP Project Funding

| Funding Category | Programmed | Obligated |
|--------------------------------|-------------------|------------------|
| HSIP (§148) | \$19,014,022 | \$9,434,326 |
| Hazard Elimination (§152) | \$2,358,964 | \$48,394 |
| Penalty Transfer (§154 & §164) | \$18,624,044 | \$4,311,762 |
| <i>Total</i> | \$39,997,030 | \$13,794,482 |

B. General Listings of Projects

During FY 2013, \$6,239,229 in HSIP projects were completed in West Virginia. Table 6 in Appendix A of this report lists those projects. For purposes of this table, projects are broken out by phases - project, engineering, right-of-way, and construction

- receiving HSIP funding. Only the specified phase for projects included in the Table was completed during FY 2013. Additional phases of the project, also receiving HSIP funding, may appear on the same table and/or on Table 7, also in Appendix A which list on-going HSIP funded projects.

During FY 2013, West Virginia had \$39,997,030 in HSIP projects underway. Table 7 in Appendix A of this report lists those projects. As with Table 6, projects included in Table 7 are listed by phase receiving HSIP funding. Additional phases, also receiving HSIP funding, of the same project may appear on Table 6 or Table 7 depending upon the status of that phase.

An additional \$36,747,015 in HSIP projects were planned, but not yet authorized, during FY 2013. Table 8 in Appendix A of this report lists those projects. As with Tables 6 and 7, projects included in Table 8 are listed by phase receiving HSIP funding. Additional phases, also receiving HSIP funding, of the same project may appear on Tables 6, 7 or 8 depending upon the status of that phase.

A brief description of each project listed in Table 6, Table 7, and Table 8 which are greater than \$1,000,000 is described below.

FY 2013 Completed Projects

- **WV 127** - Virginia State Line - Paving of the shoulder along WV 127 between WV 29 and the Virginia State Line in Hampshire County.

FY 2013 Ongoing Projects

- **STMC** - The design and construction of the smart transportation management center in Building 5 in Charleston
- **DMS Signing** - Installation of dynamic message signing throughout the state
- **I-70 Roadway Lighting** - Installation of roadway lighting along Interstate 70 between Elm Grove interchange and Dallas Pike interchange
- **Electronic Crash System Development and Implementation** - Implementation of the electronic crash record system in West Virginia
- **911 Integration** - Integration of 911 center in nine counties with the Traffic Management Center in Charleston, WV
- **Statewide Signal Upgrade** - Upgrade existing signal system communications and coordination.

FY 2013 Planned Projects not Obligated by June 30, 2013

- **West Run Road** - Widening CR 67 between CR 59 and CR 67 in Morgantown in Monongalia County. Existing road consists of 2 nine foot lanes.

- **Jerry Dove I/C Lighting** – Installation of lighting at the Jerry Dove interchange (Exit 124) along I-79 in Harrison County
- **WVSP ATMS Integration** – Develop and implement a statewide computer aid dispatch (CAD) system for West Virginia State Police (WVSP) statewide.
- **I-68 Long Life Pavement Markers** – Installation of long life pavement markers along Interstate 68 between I-79 and the Maryland state line.
- **I-68 / I-79 Interchange Lighting** – Installation of street lighting at the I-79 / I-68 interchange in Monongalia County.
- **Jefferson Lighting** – Installation of street lighting on US 60 through Jefferson in Kanawha County
- **Monongahela Blvd TWLTL** – Installation of a two-way left turn lane on US 19 between MP 13.35 and MP 14.19 in Monongalia County
- **Statewide ITS Integration** – Integration of the Intelligence Transportation System statewide.
- **High Mast Tower** – Retrofitting high mast tower with LED fixtures
- **Highway Safety Campaign** – Three year statewide safety campaign including television, radio, billboards, and special events.
- **First Responder Training and Implementation** – Implementation of training program for first responders statewide.

IV. PROGRAM EVALUATION

WVDOH and FHWA staff performed a review of HSIP elements, and developed four recommendations. The following recommendations will be implemented by December 2014:

1. Complete new crash database and Safety Management System.
2. Establish a managed accountable policy that includes a defined process to choose the most appropriate designer for each project as well as standards.
3. Create a roadside safety checklist for designers to complete and include in project file.
4. Develop a process for using the Indefinite Delivery/Indefinite Quantity projects.

A. General Highway Safety Trends

Figures 2 through 6 depict various traffic-related rates and trends in West Virginia for 2008 through 2012. As shown in Figure 2, the total number of fatalities increased from 315 in 2010 to 339 in 2012. 2010 was the lowest number of fatalities on record, and though 2011 showed an increase in fatalities it was lower than in 2008 and 2009.

Figure 2 - Fatality Trends

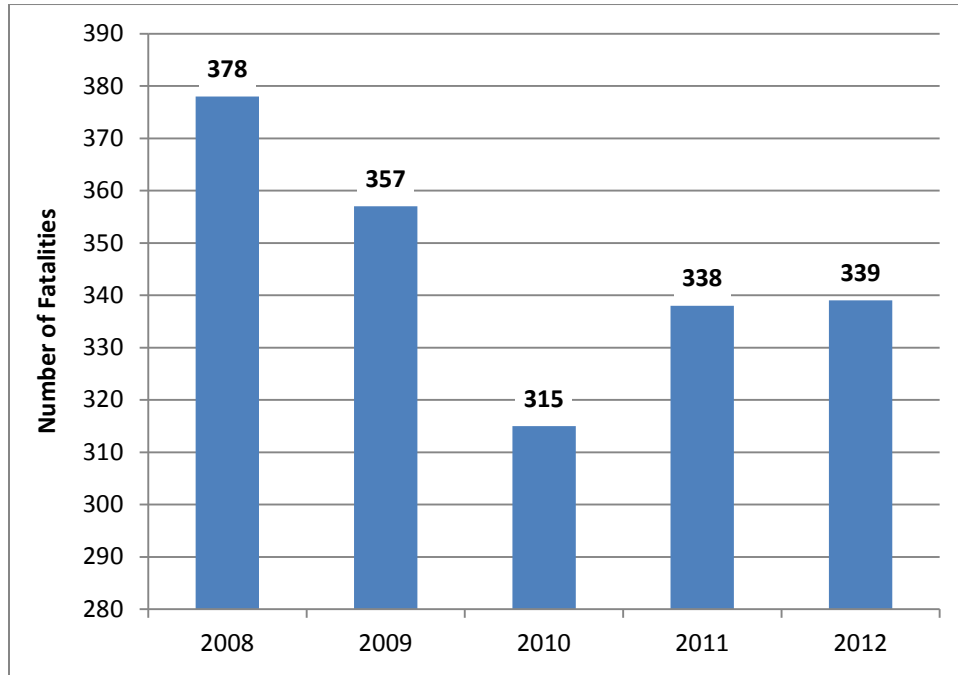
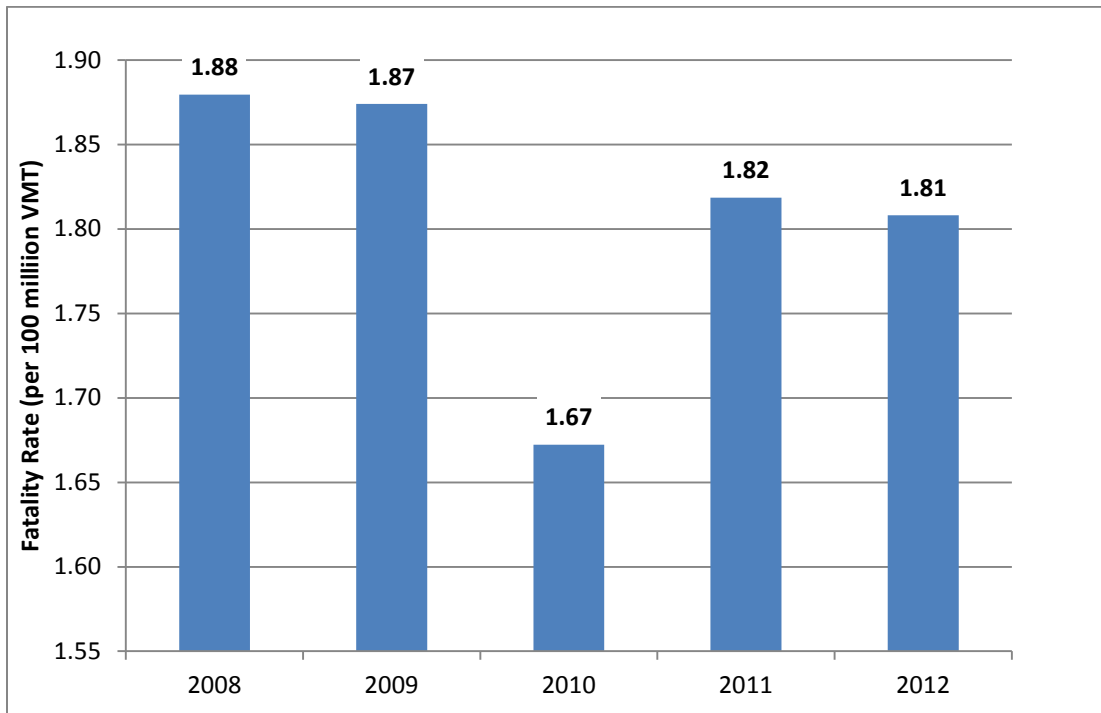


Figure 3 shows the fatality rate per annual vehicle miles traveled (VMT) in West Virginia. The VMT has declined since 2008.

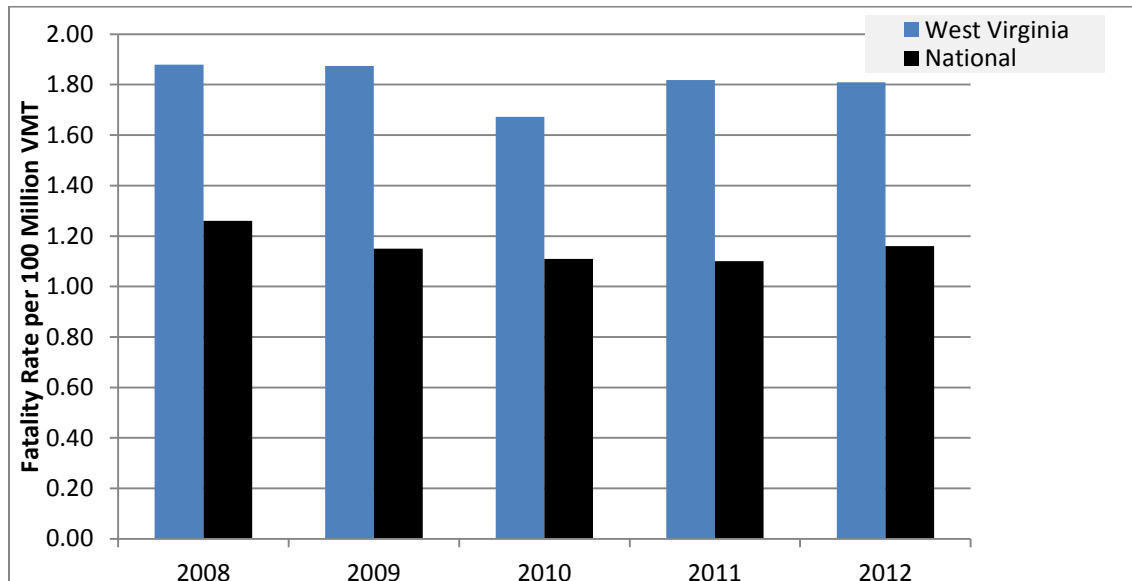
Figure 3 - Fatality Rate Per Annual Vehicle Miles Traveled



B. Overall HSIP Effectiveness

Figure 4 indicates the fatality rate per 100 million vehicle miles traveled for West Virginia and the nation.

Figure 4 - West Virginia vs. National Fatality Rates



Strategic Highway Safety Plan (SHSP):

West Virginia developed its Strategic Highway Safety Plan (SHSP) in-house in 2007, and began updating in 2010. However, staffing levels and involvement in the development of new Safety Management System has not allowed time to conduct the extensive highway safety data analysis, outside agency coordination, public involvement process, and implementation plan required to perform the update in-house. Therefore, Cambridge Systematics was selected to develop an implementation plan for the Highway Safety Manual and update the SHSP. Under Map-21, all state SHSPs must be updated before August 1, 2014.

The draft SHSP sets a goal of “Zero Fatalities...Saving One Life at a Time” and includes the following five (5) emphasis areas:

1. Roadway Departure
2. Proper Use of Occupant Protection
3. Impaired Driving
4. At Risk Driver Age Groups
5. Improving Highway Safety Data

The first four (4) of the five (5) SHSP emphasis areas listed above were selected as they represented highway safety concerns. The last area, Improving Highway Safety Data, was selected as it was believed to be essential to the development and continuation of a productive SHSP. Good highway safety data is the key to understanding what the State's highway safety problems are and determining whether projects and programs are effectively addressing the safety concern.

Emphasis Area: Roadway Departure

Roadway departure crash is defined as a non-intersection crash which occurs after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. Roadway departure crashes account for the largest percentage of fatalities in West Virginia. Figure 5 depicts roadway departure fatal crashes and total fatal crashes in West Virginia. Over the last five years, West Virginia has either been Number One (1) or Two (2) in the United States in fatal roadway departure crashes by percentage. It is for this reason WVDOH has requested on several occasions to be added to FHWA's Focus States for Roadway Departure. FHWA maintains that West Virginia is not eligible because their overall number is too low. West Virginia is a rural state with lower raw numbers due to less population, and would qualify if it was measured by any other tool. FHWA has offered to work with WVDOH, and provide many of the programs available to focus states.

A roadway departure team was established to develop and implement a plan to reduce fatalities and serious injuries caused by roadway departure. The multiagency team is responsible for the Roadway Departure portion of the SHSP. In addition, WVDOH has developed an internal task force to work on policy, specifications, and details pertaining to roadway departure. The Mobility and Safety Engineer serves as leader of both committees to maintain consistency in recommendations. The WVDOH task force is comprised of multiple divisions within the WVDOH, and meet monthly. Some of the programs they have successfully developed and implemented include SafetyEdgeSM, High Friction Surface Treatment (HFST), Thirty-One Inch (31") Guardrail, and new High Tension Cable Guardrail specifications.

Older Driver Special Rule

A new Special Rule for Older Drivers created under MAP-21 requires states to address older driver and pedestrian safety in their SHSP if the rate of fatalities and injuries for older drivers and pedestrians increases during the most recent two year period. Below is data for older driver and pedestrian fatalities and serious injuries from 2005 to 2011 in

West Virginia. It was found that the rate has decreased over the most recent two year period (from 9.9 in 2009 to 9.8 in 2011) in West Virginia meaning the special rule does not apply. However, WVDOH has already identified older and younger driver safety as an emphasis area in their SHSP and plan to keep it as an emphasis in future SHSP updates.

Table 2: Older Driver Special Rule Data

| Year | Fatal | | Serious Injury | | Population Rate (from FHWA) |
|------|-------|------|----------------|------|-----------------------------|
| | Total | > 65 | Total | > 65 | |
| 2005 | 374 | 56 | 6958 | 1405 | 150 |
| 2006 | 410 | 58 | 6855 | 1300 | 153 |
| 2007 | 432 | 65 | 8037 | 1625 | 155 |
| 2008 | 378 | 69 | 7033 | 1725 | 157 |
| 2009 | 357 | 51 | 6642 | 1275 | 158 |
| 2010 | 315 | 58 | 5860 | 1250 | 161 |
| 2011 | 337 | 62 | 6269 | 1550 | 162 |

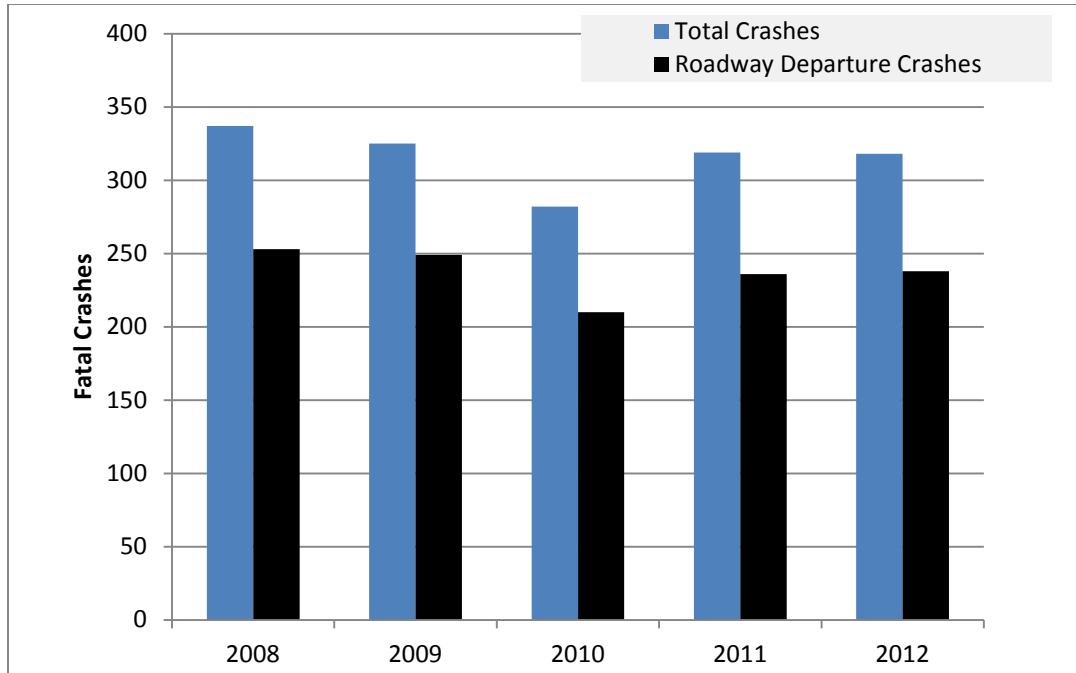
2009 5-year average rate: 9.9

2011 5-year average rate: 9.8

The rates used for the two year comparison were calculated as follows:

- 2009 rate - [(2009 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2009 Population Figure) + (2008 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2008 Population Figure) + (2007 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2007 Population Figure) + (2006 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2006 Population Figure) + (2005 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2005 Population Figure)]/5
- 2011 rate - [(2011 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2011 Population Figure) + (2010 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2010 Population Figure) + (2009 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2009 Population Figure) + (2008 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2008 Population Figure) + (2007 fatalities + serious injuries of Drivers and Pedestrians 65 years of age and older/2007 Population Figure)]/5

Figure 5 - Roadway Departure Fatal Crashes



V. HIGH RISK RURAL ROADS PROGRAM (HRRRP)

In West Virginia, the HRRRP is managed through the Traffic Engineering Division’s Traffic Mobility and Safety Section, as a part of the overall HSIP. Rural collectors or rural local roads generally correlate to the county route highway class and WVDOH maintains all of the State’s more than 28,000 miles in county routes. The State has been able to allocate HSIP funds to the some of the routes; however, as County Routes are the most rural and low-volume of the highway classes they often lose out when competing for funding against projects on routes in higher classifications. The availability of HRRRP funding has provided WVDOH with the ability to combat this problem by utilizing HRRRP funding to implement safety improvements on routes within this system which have fatal and/or serious injury crash rates above the statewide average for county routes.

A. HRRRP Funds Available (Programmed)

A total of \$4,296,007 of HRRRP funding was available to program in FY2013. WVDOH is currently developing projects that should utilize most if not all of the HRRRP funding in FY 2014.

Table 3: HRRRP Project Funding

| Funding Category | Programmed | Obligated |
|-------------------------|-------------------|------------------|
| HRRRP (§148) | \$22,500 | \$30,062 |
| <i>Total</i> | \$22,500 | \$30,062 |

B. Program Methodology

An effort to involve district staff was initiated in FY 2011. The district traffic engineers were provided a list of county routes in their district, which appeared on the Transparency Report for any fiscal year 2006-2012. The district traffic engineers were asked to conduct a field review of each of their routes and to work with the Mobility and Safety Section to develop projects. Road Safety Audits (RSA) were also performed at the district's request. The district traffic engineers were encouraged to include low-cost safety improvements in their project recommendations.

C. HRRRP Projects Initiated

There were three projects completed this year, shown in Table 9 in Appendix B. Table 10 in Appendix B contains a list of projects that have been programmed with HRRRP funding in FY 2013. Additionally Table 11 of Appendix B contains a listing of projects that are planned for HRRRP funding, but were not authorized as of the end of FY 2013.

VI. Highway-Rail Grade Crossing (HRGX) Program

A. Program Description/Funding

23 USC §130(g) requires each State to prepare an annual report on the progress and effectiveness of the State's implementation of a railroad-highway crossings program as also required by §130. 23 USC §148 requires States to submit an annual report that describes how improvements contributed to reducing fatalities and serious injuries at railway-highway crossings.

This section details West Virginia's Highway-Railroad Grade Crossing (HRGX) Program for the time period of July 1, 2012 through June 30, 2013. It includes all projects implemented with HRGX (§130) funding, and is in accordance with FHWA's Railway-Highway Crossings Program Reporting Guidance memo dated February 22, 2013.

In FY 2013, West Virginia received an apportionments of \$990,328 and \$990,328 in Railroad/Highway Grade Crossing Hazard Elimination (HE) funding and Railroad/Highway Grade Crossing Protective Device (PD) funding, respectively. When combined with the unobligated balances of \$3,103,169 in HE funding and \$1,179,084 in PD funding received in previous §130 apportionments and extensions, West Virginia had a total of \$4,093,497 in HE funds and \$2,169,412 in PD funds available in §130 funding for FY 2013. As a result of previous unobligated balances of Railroad/Highway Grade Crossing Hazard Elimination and Railroad/Highway Grade Crossing Protective Device funds carried over from both the Transportation Equity Act for the 21st Century (TEA-21) and Intermodal Surface Transportation Efficiency Act (ISTEA), West Virginia also began FY 2013 with an additional \$1,093,956 in HE funds and \$72,711 in PD funds available for HRGX projects. The tables 3 and 4 detail the varying categories of HRGX funds available for HE and PD projects during FY2013, including the amount of funding programmed and obligated under each category:

Table 4: HRGX Hazard Elimination Project Funding

| Funding Category | Programmed | Obligated |
|-------------------------|-------------------|------------------|
| MAP-21 | \$79,200 | \$79,200 |
| SAFETEA-LU (§130) | \$2,287,345 | \$1,118,175 |
| TEA-21 & ISTEA | \$423,445 | -\$133,312 |
| <i>Total</i> | \$2,789,990 | \$1,064,063 |

Table 5: HRGX Protective Devices Project

| Funding Category | Programmed | Obligated |
|-------------------------|-------------------|------------------|
| MAP-21 | \$1,389,130 | \$689,800 |
| SAFETEA-LU (§130) | \$2,827,294 | \$449,307 |
| TEA-21 & ISTEA | \$809,432 | -\$168,148 |
| <i>Total</i> | \$5,025,856 | \$970,959 |

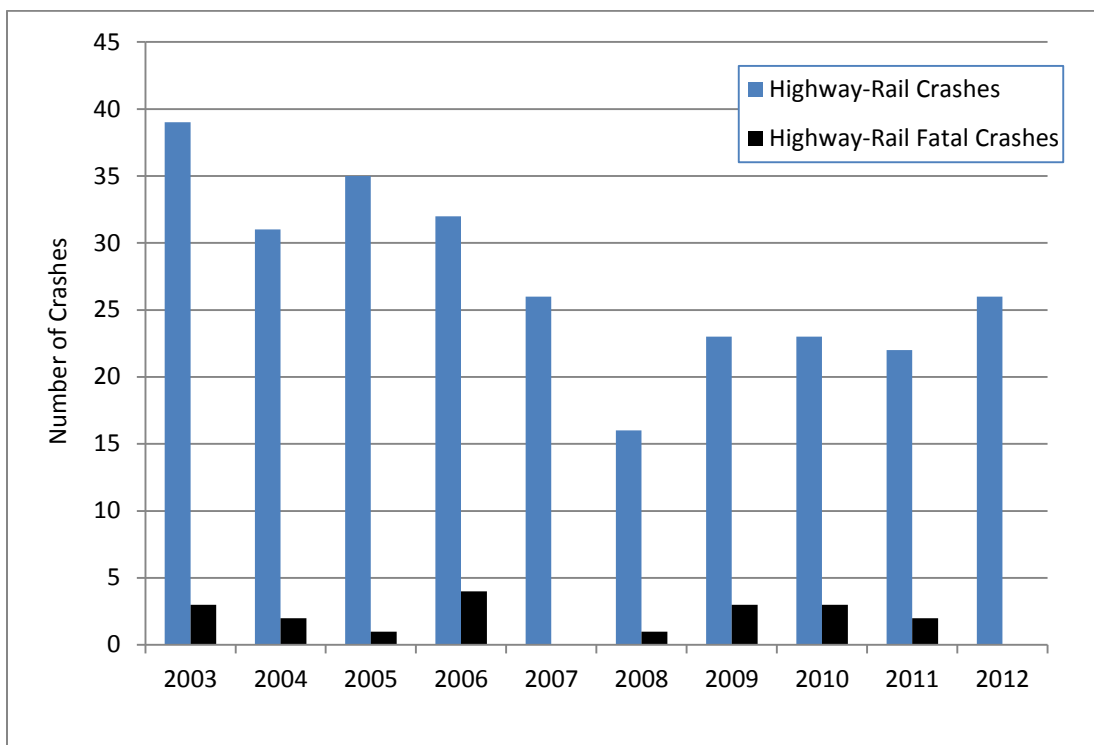
During FY 2013, \$630,000 in HRGX Hazard Elimination projects were completed in West Virginia. During the same period, the State completed \$1,088,342 in HRGX Protective Device projects. Table 12 in the Appendix C of this report lists those projects. For purposes of this table, projects are broken out by phases - engineering, right-of-way, and construction - receiving HRGX funding. Only the specified phase for projects included in the Table was completed during FY 2013. Additional phases of the project, also receiving HRGX funding, may appear on the same table and/or on Table 13, also in the Appendix C which lists on-going HRGX funded projects.

During FY 2013, West Virginia had \$4,926,095 in HRGX Hazard Elimination projects and \$7,590,790 in HRGX Protective Device funded projects underway. Tables 12 and 13 in Appendix C of this report lists projects receiving HRGX funding by phase. Additional phases, also receiving HRGX funding, of the same project may appear on Table 12 or Table 13 depending upon the status of that phase.

B. Rates and Trends (Overall Program Effectiveness)

Figure 10 depicts highway-rail grade crossing crash trends in West Virginia for 2003 through 2012. As shown, relatively few highway-rail fatal crashes occur on a yearly basis. The total number of highway-rail crashes has declined since 2003.

Figure 6 - Highway-Rail Grade Crossing Crash Trends



C. Data Acquisition and Analysis Efforts

West Virginia’s Railroad/Highway Grade Crossing Inventory is updated and maintained by WVDOH’s Program Planning and Administration Division. At the end of FY 2009 efforts to update and modernize the inventory were begun. West Virginia is utilizing the two percent (2%) of their allocated HRGX funding for this purpose. At this

time, the updated inventory is operational. The updated inventory includes GPS locations for all public crossings. A consultant has been hired to put the updated inventory into a database and a collection tool for the database has been developed.

There are a total of 1,422 public railroad-highway grade crossings in West Virginia. The following table summarizes these crossings by the type of safety devices currently installed.

Table 6: Public Railroad/Highway At-Grade Crossings by Safety Device

| Safety Device | Number |
|--|-------------|
| Cross Bucks | 597 |
| Flashing Lights | 453 |
| Gates and Lights | 235 |
| Stop Signs | 38 |
| Special Warnings | 9 |
| Other Features | 6 |
| Highway Traffic Signals/Wig Wags/Bells | 8 |
| No Protective Device | 76 |
| Total Crossings | 1422 |

D. Rail-Highway Crossing Projects

Appendix C summarizes the highway-rail grade crossing safety projects that were identified as part of the FY 2013 HRGX program. Table 12 lists all of the projects that were completed with HRGX funding and Table 13 lists all of the on-going projects with HRGX funding.

E. Project Evaluation

West Virginia’s Highway-Railroad Grade Crossing Program is operated as a component of our overall Highway Safety Improvement Program, which is centrally coordinated by WVDOH’s Traffic Engineering Division. West Virginia has had a very active and effective HRGX Program since the 1970’s. As a result of this program, the State rarely experiences serious (Type A) injury or fatal crashes at any of our nearly 1420 railroad crossings. As such, the emphasis of the State’s HRGX has shifted from identifying and developing projects to address crossings with high occurrences of serious injury or fatal crashes to maintaining the current condition of our crossings to reduce the overall potential of collisions at the State’s public crossings. To accomplish this, each year WVDOH uses both Railroad/Highway Crossing Hazard Elimination

funds and Railroad/Highway Protective Device funds to develop and implement projects to install or replace railroad crossing signals and/or gates, to upgrade and improve crossing surfaces, and to eliminate potential crashes by closing existing railroad crossings.

APPENDIX A

APPENDIX A

Table 7: FY 2013 Completed Projects with HSIP Funding

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|--------------------------|--------------|------------------------|-----------|----------------|----------------------|---------|----------------|--------------------|
| HSIP0119222D | Engineering | D3 Sign Inv & Replace | 11 | 60.24 miles | \$42,147 | LS30 | 1 | \$43,946 |
| HSIP0119223D | Engineering | D4 Sign Inv & Replace | 11 | 55.60 miles | \$39,115 | LS30 | 1 | \$40,926 |
| HSIP0230002D | Engineering | D5 Sign Inv & Replace | 11 | 225.55 miles | \$166,000 | LS30 | 1 | \$266,000 |
| HSIP0007216D | Engineering | D6 Sign Inv & Replace | 11 | 33.68 miles | \$24,211 | LS30 | 1 | \$24,696 |
| HSIP0612006D | Engineering | D9 Sign Inv & Replace | 11 | 123.56 miles | \$88,500 | LS30 | 1 | \$90,073 |
| HSIP2007049E | Construction | APD Cor Striping | 11 | 592 miles | \$703,825 | LS30 | 1 | \$727,724 |
| HSIP0219314D | Construction | HFST D9 | 4 | 0.03 miles | \$282,700 | LS30 | 1 | \$314,100 |
| HSIP0002505D | Construction | Wellsburg Turn Lane | 1 | 1.08 miles | \$987,100 | LS30 | All | \$1,096,800 |
| HSIP0083052D | Construction | Paint Creek | 17 | 13.37 miles | \$399,514 | LS30 | All | \$443,905 |
| HSIP0048045D | Construction | Corridor H / WV 55 Con | 4 | 0.50 miles | \$531,800 | LS30 | 1 | \$594,700 |
| HSIP2010053D | Construction | US 50 HFST | 4 | 0.30 miles | \$170,400 | LS30 | 1 | \$189,300 |
| HSIP0014139D | Construction | WV 14 HFST | 4 | 0.52 miles | \$270,700 | LS30 | 1 | \$300,700 |
| HSIP0219315D | Construction | US 219 Guardrail | 17 | 10.00 miles | \$34,650 | LS30 | 1 | \$38,500 |
| HSIP0127011D | Construction | WV 127 - Va State Line | 2 | 7.57 miles | \$1,177,961 | LS30 | 1 | \$1,354,629 |
| HSIP0127012D | Construction | WV 127 Guardrail & Sig | 11 | 7.57 miles | \$22,500 | LS30 | All | \$25,000 |
| HSIP0792180D | Construction | Stonewall Jackson | 4 | 0.10 miles | \$192,800 | LS30 | 1 | \$214,200 |
| HSIP0061078D | Construction | Montgomery - Chelyan | 17 | 8.98 miles | \$115,700 | LS30 | All | \$128,600 |
| TOTAL §148 (LS30) | | | | | \$5,249,623 | | | \$5,893,799 |
| OCRO2009032 | Engineering | Safety Vests | 16 | 32 Vests | \$1,200 | OCRO | P | \$1,200 |

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|--|--------------|-------------------------------------|-----------|----------------|----------------------|---------|----------------|--------------------|
| OCRO0026043 | Construction | Albright-Bruceton Mills | 4 | 0.99 miles | \$70,000 | OCRO | 1 | \$70,000 |
| OCRO2010056D | Construction | East Mall Road | 1 | 1 intersection | \$136,565 | OCRO | All | \$137,275 |
| OCRO0003521 | Construction | WV 2 Guardrail | 17 | 3.93 miles | \$170,000 | OCRO | 1 | \$170,000 |
| OCRO2012551 | Construction | Various Routes | 17 | 5000 lf | \$100,000 | OCRO | 1 | \$100,000 |
| OCRO2011095D | Construction | 10 th St. @ Myers Avenue | 1 | 1 intersection | \$32,600 | OCRO | All | \$33,900 |
| OCRO2011094 | Construction | WV 10 @ 119 Ramps | 1 | 1 intersection | \$46,500 | OCRO | All | \$46,500 |
| OCRO0094169 | Construction | Hernshaw-Marmet | 4 | 0.14 miles | \$123,400 | OCRO | 1 | \$123,400 |
| OCRO0033359 | Construction | US 33 Shoulders | 2 | 5.31 miles | \$149,341 | OCRO | All | \$149,341 |
| OCRO2012551 | Construction | Install Guardrail (King Coal) | 17 | 5000 LF | \$50,000 | OCRO | All | \$50,000 |
| OCRO2012556 | Construction | District 3 2012 RPM | 3 | 40.43 miles | \$65,000 | OCRO | All | \$65,000 |
| OCRO0508001 | Construction | Upshur CR 5/8 Guardrail | 17 | 0.94 miles | \$20,000 | OCRO | 1 | \$20,000 |
| OCRO0021399 | Construction | Leatherwood Road Sight Imp | 1 | 1 intersection | \$7,000 | OCRO | All | \$7,000 |
| OCRO0019387 | Construction | US 19 Delineator Replace. | 3 | 58.09 miles | \$18,000 | OCRO | All | \$18,000 |
| TOTAL \$154/\$164 (OCRO) | | | | | \$989,606 | | | \$991,616 |
| TOTAL COMPLETED PROJECTS - ALL FUNDING CATEGORIES | | | | | \$6,239,229 | | | \$6,885,415 |

* Refer to page 7 of this report for a listing of West Virginia's SHSP Emphasis Areas.

¹ P = Emphasis area from previous SHSP.

APPENDIX A

Table 8: FY 2013 Ongoing Projects with HSIP Funding

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|--|--------------|----------------------------------|-----------|--------------------|----------------------|---------|----------------|--------------------|
| STP2004019E | Engineering | Highway Safety Management Coord. | 14 | Task Force | \$90,000 | 33A | All | \$106,734 |
| STPG2000015E | Construction | RR Xing Surface Upgrade | 7 | 88 crossing | \$398,964 | H21 | P ¹ | \$398,964 |
| STPG0060228E | Engineering | Chas Signal System | 1 | 58 intersections | \$200,000 | H21 | P | \$386,318 |
| STPG2006018D | Engineering | Signing Guide | 11 | Program Management | \$7,155 | H21 | P | \$7,155 |
| STPG2000015E | Construction | RR Xing Surface Upgrade | 7 | 88 crossing | \$800,000 | Q21 | P | \$800,000 |
| STPG2006018D | Engineering | Signing Guide | 11 | Program Management | \$142,845 | Q21 | P | \$142,845 |
| STP2004022E | Engineering | Safety Studies | 14 | Program Management | \$720,000 | Q28 | 1 | \$800,000 |
| TOTAL ISTE A & TEA-21 (33A, Q21, H21, Q28, H28) | | | | | \$2,358,964 | | | \$2,642,016 |
| HSIP0219292D | Engineering | D8 Sign Inv & Rep | 11 | 121.64 miles | \$310,000 | LS30 | 1 | \$423,000 |
| HSIP2008047D | Engineering | Lane Departure D2/D3 | 13 | 160.1 miles | \$67,758 | LS30 | 1 | \$78,284 |
| HSIP2008048 | Engineering | Lane Departure D4/D7 | 13 | 100.7 miles | \$56,761 | LS30 | 1 | \$63,068 |
| HSIP2007067D | Construction | STMC | 15 | 1 TMC | \$1,710,001 | LS30 | P | \$2,150,000 |
| HSIP2007064D | Construction | CCTV Cameras | 15 | 40 Cameras | \$795,600 | LS30 | P | \$884,000 |
| HSIP2008044 | Construction | DMS Signing | 11 | 10 DMS | \$1,719,588 | LS30 | P | \$2,034,106 |
| HSIP2008034D | Construction | RWIS Install Sec 2 | 15 | 7 stations | \$381,867 | LS30 | P | \$433,849 |
| HSIP2008036D | Construction | RWIS Install Sec 4 | 15 | 7 stations | \$528,733 | LS30 | P | \$617,990 |
| HSIP2008038D | Construction | RWIS Install Sec 5 | 15 | 7 stations | \$616,500 | LS30 | P | \$685,000 |
| HSIP2010040D | Engineering | Skid Testing | 22 | Program Management | \$162,441 | LS30 | 1 | \$250,417 |
| HSIP0671001D | Engineering | West Run Road | 2 | 1.86 miles | \$22,500 | LS30 | 1 | \$25,000 |

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|-------------------|--------------|--|-----------|--------------------|----------------------|---------|----------------|--------------------|
| HSIP0070160D | Construction | I-70 Roadway Lighting | 11 | 5.28 miles | \$2,900,000 | LS30 | All | \$3,222,200 |
| HSIP0050298D | Construction | US 50 / WV 98 | 17 | 1 intersection | \$18,000 | LS30 | All | \$20,000 |
| HSIP0019357D | Construction | Pennsylvania Ave Align | 2 | 0.15 miles | \$479,300 | LS30 | All | \$532,600 |
| HSIP0070159D | Engineering | I-70 Roadway Lighting | 11 | 5.28 miles | \$308,000 | LS30 | All | \$360,000 |
| HSIP0793232D | Engineering | Jerry Dove I/C Lighting | 11 | 0.50 miles | \$90,000 | LS30 | All | \$100,000 |
| HSIP0035198D | Construction | Silver Memorial Bridge | 17 | 0.36 miles | \$335,600 | LS30 | All | \$4,186,300 |
| HSIP0642151D | Engineering | I-64 Drainage | 4 | 5.94 miles | \$45,000 | LS30 | 1 | \$50,000 |
| HSIP2012040D | Engineering | APD Conduct Turning Movements | 14 | 1 study | \$126,000 | LS30 | 5 | \$140,000 |
| HSIP2011077D | Engineering | Dev & Implement HSIP | 15 | Program Management | \$607,500 | LS30 | 5 | \$700,000 |
| HSIP0002516D | Construction | Washington St Lighting | 11 | 0.27 miles | \$712,000 | LS30 | All | \$890,000 |
| HSIP0062846D | Construction | WV 62 Guardrail | 17 | 39.37 miles | \$812,200 | LS30 | All | \$902,400 |
| HSIP0062847D | Construction | Charleston Road | 11 | 39.37 miles | \$60,000 | LS30 | All | \$75,000 |
| HSIP0022061D | Construction | US 22 HFST | 4 | 0.50 miles | \$479,100 | LS30 | 1 | \$532,400 |
| HSIP0021406D | Construction | School St Signal Ren | 1 | 1 intersection | \$93,173 | LS30 | All | \$103,525 |
| HSIP0011137D | Construction | Triplett Ridge Guardrail | 17 | 7.42 miles | \$317,100 | LS30 | All | \$352,400 |
| HSIP0060283D | Engineering | Jefferson Lighting | 11 | 1.73 miles | \$90,000 | LS30 | All | \$100,000 |
| HSIP2012558D | Engineering | Incident Management | 14 | Program Management | \$225,000 | LS30 | 5 | \$250,000 |
| HSIP2011083D | Engineering | Statewide Crash Records Implementation | 15 | Program Management | \$855,000 | LS30 | 5 | \$950,000 |
| HSIP2011082D | Engineering | Road Safety Audits | 22 | Program Management | \$45,000 | LS30 | 5 | \$50,000 |
| HSIP2011084D | Engineering | Strategic Highway Safety Plan Implementation | 15 | Program Management | \$315,000 | LS30 | 5 | \$400,000 |
| HSIP0019393D | Construction | Allens Fork Guardrail | 17 | 2.60 miles | \$109,900 | LS30 | 1 | \$122,100 |
| HSIP0046045D | Construction | South Poplar Fork Guardrail | 17 | 3.75 miles | \$150,100 | LS30 | 1 | \$166,800 |

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|---------------------------|--------------|--|-----------|-----------------------|----------------------|---------|----------------|---------------------|
| HSIP0100153D | Right of Way | WV 100 and Dents Run Improvement | 1 | 1 intersection | \$70,000 | LS30 | All | \$77,800 |
| HSIP0250218D | Engineering | US 250 TWLTL | 2 | 0.56 miles | \$22,500 | LS30 | All | \$25,000 |
| HSIP0045061D | Engineering | CR 45/5 Left Turn Lanes | 1 | 1 intersection | \$15,000 | LS30 | All | \$15,000 |
| HSIP2012565D | Construction | Advance Intersection | 1 | Statewide | \$720,000 | LS30 | All | \$800,000 |
| HSIP0068152D | Construction | I-68 Long Life Pave Markers | 11 | 32.06 miles | \$2,407,800 | LS30 | All | \$2,407,800 |
| HSIP0050329D | Engineering | Hampshire Co HS Intersection | 1 | 1 intersection | \$9,000 | LS30 | All | \$10,000 |
| HSIP0033361D | Engineering | Glenville Intersection Improvement | 1 | 1 intersection | \$225,000 | LS30 | All | \$250,000 |
| TOTAL \$148 (LS30) | | | | | \$19,014,022 | | | \$25,436,039 |
| OCRO0340052 | Engineering | Charles Town Bypass | 1 | 2 intersections | \$106,000 | OCRO | P | \$106,000 |
| OCRO2006030 | Engineering | Electronic Crash System Development and Implementation | 15 | Program Management | \$1,300,000 | OCRO | 5 | \$1,300,000 |
| OCRO2008051 | Engineering | Crash Location & Rec | 15 | Salaries | \$373,002 | OCRO | P | \$373,002 |
| OCRO2009084 | Engineering | Radio Safety Statewide 2009 | 15 | 1 Campaign | \$712,000 | OCRO | All | \$712,000 |
| OCRO2009089 | Engineering | Radio Safety Statewide 2010 | 15 | 1 Campaign | \$875,000 | OCRO | All | \$875,000 |
| OCRO2009123 | Engineering | Radio Safety Work Zone | 16 | 1 Campaign | \$637,000 | OCRO | P | \$637,000 |
| OCRO2008052D | Engineering | Traffic Safety Management | 14 | Program Management | \$318,000 | OCRO | All | \$318,000 |
| OCRO0033328 | Engineering | US 33 Safety Project | 3 | 4.71 miles | \$75,580 | OCRO | 1 | \$79,501 |
| OCRO0219305 | Engineering | Portable Message Board | 11 | 1 Portable Message Bd | \$18,895 | OCRO | All | \$18,895 |
| OCRO2009221 | Engineering | Standard Detail Book | 15 | Purchase | \$300,000 | OCRO | 5 | \$300,000 |
| OCRO2010037 | Engineering | State Police Reconstruction Training | 16 | Statewide Training | \$9,018 | OCRO | 5 | \$9,018 |
| OCRO2009220 | Engineering | Radio Ads SRIC | 15 | 1 Campaign | \$365,000 | OCRO | All | \$365,000 |

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|-------------------|--------------|---|-----------|---------------------------|----------------------|---------|----------------|--------------------|
| OCRO2009131 | Engineering | Statewide Highway Safety Campaign | 16 | 1 Campaign | \$2,236 | OCRO | P | \$2,342 |
| OCRO2010039 | Engineering | Road Safety Audit Training | 22 | Statewide Training | \$35,000 | OCRO | P | \$35,000 |
| OCRO2010034 | Engineering | Statewide Expressway Speed Study | 16 | Program Management | \$35,000 | OCRO | All | \$35,000 |
| OCRO2009128 | Engineering | Traffic Data Equipment | 15 | Purchase | \$24,000 | OCRO | 5 | \$24,000 |
| OCRO2010036 | Engineering | Turnpike Incident Management Procedure Manual Development | 14 | Procedure Manual | \$165,000 | OCRO | All | \$165,000 |
| OCRO0060256 | Engineering | US 60 Left Turn Lane | 1 | 0.14 miles | \$5,000 | OCRO | 1 | \$5,000 |
| OCRO0060277 | Right of Way | US 60 Left Turn Lane | 1 | 0.14 miles | \$10,000 | OCRO | 1 | \$10,000 |
| OCRO0050293 | Construction | Rt 18 Warning Signs | 1 | 2 signs | \$20,000 | OCRO | 1 | \$20,000 |
| OCRO2009129 | Construction | School Zone Flashing Beacon Program | 19 | 50 Flashing Beacons | \$850,000 | OCRO | All | \$850,000 |
| OCRO2010052 | Engineering | Skid Steer | 17 | 1 Skid Steer | \$40,000 | OCRO | 1 | \$40,000 |
| OCRO2010046 | Engineering | ITS Conference National | 15 | Conference | \$11,691 | OCRO | All | \$11,935 |
| OCRO2011063 | Construction | Bigley Avenue I/C WB | 11 | 1.00 mile | \$130,000 | OCRO | All | \$130,000 |
| OCRO2011076 | Engineering | Crash Records Database | 15 | Database | \$440,000 | OCRO | 5 | \$440,000 |
| OCRO0250201 | Construction | US 250 SB Connector | 17 | 0.10 miles | \$30,000 | OCRO | All | \$30,000 |
| OCRO2011078D | Construction | Signalized I/S Detection | 1 | Statewide | \$600,000 | OCRO | All | \$600,000 |
| OCRO2011079 | Construction | Message Boards | 11 | 12 Portable Message Bds. | \$253,000 | OCRO | All | \$253,000 |
| OCRO2011075D | Construction | 911 Integration | 16 | Int. of 911 Ctrs with TMC | \$1,500,000 | OCRO | All | \$1,500,000 |
| OCRO2011090D | Construction | I/S WV 705 & CR 67 Traffic Signal | 1 | 1 intersection | \$10,000 | OCRO | All | \$10,000 |
| OCRO2012536 | Construction | 511 Sign Supports | 11 | Statewide | \$500,000 | OCRO | P | \$500,000 |
| OCRO2011091D | Project | I/S US 119 & CR 119/20 | 1 | 1 intersection | \$5,000 | OCRO | P | \$5,000 |

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|-------------------|--------------|--|-----------|--------------------|----------------------|---------|----------------|--------------------|
| OCRO2012044D | Project | Adaptive Control System | 1 | Statewide | \$450,000 | OCRO | P | \$450,000 |
| OCRO2012052 | Project | ATSSA Annual Conv. | 4 | 1 Conference | \$2,800 | OCRO | P | \$2,800 |
| OCRO2011087 | Project | Evaluate Roadside Safety | 10 | Training | \$50,000 | OCRO | P | \$50,000 |
| OCRO2011088 | Project | Highway Safety Manual - HSIP | 10 | Training | \$80,000 | OCRO | All | \$80,000 |
| OCRO2012549 | Project | Highway Capacity Software | 15 | Program Management | \$15,000 | OCRO | All | \$15,000 |
| OCRO2011089 | Project | Low Cost Safety Improvement | 10 | 1 Campaign | \$90,000 | OCRO | All | \$90,000 |
| OCRO2011097D | Project | Reflectometer Purchase | 11 | 5 Reflectometers | \$120,000 | OCRO | All | \$120,000 |
| OCRO2012053 | Construction | Power Backup System | 1 | Statewide | \$750,000 | OCRO | All | \$750,000 |
| OCRO2012045D | Project | Teen Driving Campaign | 15 | 1 Campaign | \$125,000 | OCRO | 4 | \$125,000 |
| OCRO2012045D | Project | First Response Training | 16 | Training | \$250,000 | OCRO | All | \$250,000 |
| OCRO2012051 | Project | WZ Traffic Control | 16 | Training | \$250,000 | OCRO | All | \$250,000 |
| OCRO2012048 | Engineering | Bunker Hill I/S Improv. | 1 | 1 intersection | \$25,000 | OCRO | All | \$25,000 |
| OCRO2012049 | Right-of-Way | Bunker Hill I/S Improvement | 1 | 1 intersection | \$100,000 | OCRO | All | \$100,000 |
| OCRO2012041D | Project | Weathering Stl. Sign | 11 | Statewide | \$375,000 | OCRO | All | \$375,000 |
| OCRO0034069 | Construction | Teays Valley Sig ACS | 1 | 3 Signals | \$300,000 | OCRO | All | \$300,000 |
| OCRO2012535 | Construction | Upgrade Advance Flasher Light Assemblies | 1 | Statewide | \$500,000 | OCRO | All | \$500,000 |
| OCRO2012548D | Project | Auditory Component 511 | 15 | Program Management | \$385,000 | OCRO | All | \$385,000 |
| OCRO0460049D | Project | Survey Work along US 460 | 15 | 0.38 miles | \$5,000 | OCRO | All | \$5,000 |
| OCRO2012550D | Project | Red Light Running Campaign | 16 | 1 campaign | \$30,000 | OCRO | P | \$30,000 |
| OCRO2012544D | Project | Don't Text and Drive Campaign | 16 | 1 campaign | \$500,000 | OCRO | P | \$500,000 |

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|-------------------|--------------|---------------------------------|-----------|----------------|----------------------|---------|----------------|--------------------|
| OCRO00006044D | Construction | Berkeley CR 6 Guardrail | 17 | 0.50 miles | \$50,000 | OCRO | 1 | \$50,000 |
| OCRO0022062 | Construction | US 22 Guardrail | 17 | 0.46 miles | \$233,200 | OCRO | 1 | \$233,200 |
| OCRO2012541 | Construction | Cor H Ref Markers | 15 | 44.13 miles | \$40,000 | OCRO | 5 | \$40,000 |
| OCRO0098070 | Construction | VA Medical Center Signal | 1 | 1 intersection | \$151,218 | OCRO | All | \$151,218 |
| OCRO0119366 | Construction | Upper Crawley Creek Lighting | 11 | 1 intersection | \$184,400 | OCRO | All | \$184,400 |
| OCRO0014145 | Construction | I/S Fifth and Green St | 1 | 1 intersection | \$24,300 | OCRO | All | \$24,300 |
| OCRO0062847 | Construction | Charleston Road | 11 | 39.37 miles | \$75,000 | OCRO | All | \$75,000 |
| OCRO0219001 | Construction | Brooklyn Heights Road | 1 | 1 intersection | \$50,000 | OCRO | All | \$50,000 |
| OCRO0219330 | Construction | US 219 Delineation | 11 | 10.00 miles | \$17,000 | OCRO | All | \$17,000 |
| OCRO2010047 | Project | Safety Edge Demo | 2 | Training | \$3,204 | OCRO | All | \$3,204 |
| OCRO0033354 | Construction | Calhoun CR 33 / CR 18 Guardrail | 17 | 6.27 miles | \$85,000 | OCRO | 1 | \$85,000 |
| OCRO2012557 | Project | Mobile RWIS | 15 | 3 MRWIS | \$260,000 | OCRO | All | \$260,000 |
| OCRO2013039 | Construction | Training Publications | 14 | Training | \$25,000 | OCRO | All | \$25,000 |
| OCRO0219330D | Construction | Utility Pole Delineator | 11 | 1 project | \$17,000 | OCRO | All | \$17,000 |
| OCRO0045060 | Project | WV 45 Corridor Study | 15 | Study | \$200,000 | OCRO | All | \$200,000 |
| OCRO0023044 | Construction | Pleasant Co. CR 2/3 | 17 | 0.07 mile | \$11,500 | OCRO | All | \$11,500 |
| OCRO0773440 | Project | Interstate Medians | 15 | 71.49 miles | \$49,000 | OCRO | 5 | \$49,000 |
| OCRO2012569 | Project | Video Conferencing | 15 | 10 counties | \$425,000 | OCRO | 5 | \$425,000 |
| OCRO2012567 | Project | 911 County Integration | 16 | 9 counties | \$700,000 | OCRO | All | \$700,000 |
| OCRO2013034 | Project | In State Training | 14 | Training | \$50,000 | OCRO | All | \$50,000 |
| OCRO2012559 | Construction | Statewide Signal Upgrade | 1 | 102 Signals | \$1,000,000 | OCRO | All | \$1,000,000 |
| OCRO2012045D | Construction | I-64 Drainage | 4 | 0.12 miles | \$70,000 | OCRO | 1 | \$70,000 |
| OCRO2012045D | Project | First Response Training | 16 | Training | \$250,000 | OCRO | 5 | \$250,000 |
| OCRO2012555 | Project | DUI Checkpoints | 16 | Statewide | \$10,000 | OCRO | 5 | \$10,000 |
| OCRO2013035 | Project | Out of State Training | 14 | Training | \$50,000 | OCRO | 5 | \$50,000 |

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Cost |
|--|--------------|----------------------------------|-----------|----------------|----------------------|---------|----------------|---------------------|
| OCRO0030040 | Construction | US 30 Crash Cushion | 17 | 1 intersection | \$50,000 | OCRO | All | \$50,000 |
| OCRO0250215 | Right of Way | US 250, Glendale 7 th | 2 | 0.19 mile | \$100,000 | OCRO | All | \$100,000 |
| OCRO0773438 | Engineering | Williamstown-Marietta Lighting | 11 | 0.44 miles | \$150,000 | OCRO | All | \$150,000 |
| OCRO0048046 | Construction | Dry Ridge Road | 10 | 0.02 mile | \$28,000 | OCRO | All | \$28,000 |
| OCRO2013049 | Project | Install or Replace Guardrail | 17 | 500 LF | \$40,000 | OCRO | 1 | \$40,000 |
| OCRO0219330 | Construction | US 219 Delineation | 11 | 10.00 miles | \$17,000 | OCRO | All | \$17,000 |
| OCRO2197001 | Construction | Brooklyn Heights Road | 1 | 1 intersection | \$50,000 | OCRO | All | \$50,000 |
| TOTAL §154/§164 (OCRO) | | | | | \$18,624,044 | | | \$18,628,315 |
| TOTAL ONGOING PROJECTS - ALL FUNDING CATEGORIES | | | | | \$39,997,030 | | | \$46,706,370 |

* Refer to page 7 of this report for a listing of West Virginia's SHSP Emphasis Areas. ¹ P = Emphasis area from previous SHSP.

APPENDIX A

Table 9: Planned Projects with HSIP Funding, Not Authorized in FY 2013

| Federal Project # | Phase | Project Name | Imp. Cat | Project Output | Federal Project Cost | Funding | Emphasis Area* | Total Project Costs |
|-------------------|--------------|------------------------------|----------|--------------------|----------------------|---------|----------------|---------------------|
| HSIP0671005D | Right of Way | West Run Road | 2 | 1.86 miles | \$90,000 | LS30 | 1 | \$100,000 |
| HSIP0671006D | Construction | West Run Road | 2 | 1.86 miles | \$1,080,000 | LS30 | 1 | \$1,200,000 |
| HSIP0793233D | Construction | Jerry Dove I/C Light | 11 | 0.50 miles | \$2,429,200 | LS30 | All | \$2,699,100 |
| HSIP0642152D | Construction | High Friction Surface Treat. | 4 | 5.94 miles | \$900,000 | LS30 | 1 | \$1,000,000 |
| HSIP2012540D | Engineering | WVSP ATMS Integration | 16 | Program Management | \$1,700,000 | LS30 | All | \$2,125,000 |
| HSIP0028078D | Construction | WV 28 / WV 956 | 1 | 1 intersection | \$472,500 | LS30 | All | \$525,000 |
| HSIP0524001D | Construction | Wayne CR 52/4 | 17 | 1.51 miles | \$121,300 | LS30 | 1 | \$134,800 |

| | | | | | | | | |
|---------------------------|--------------|--|----|-----------------|---------------------|------|-----|---------------------|
| HSIG0050327D | Engineering | WV 50 / WV 18 Traffic Light | 1 | 1 intersection | \$20,000 | LS30 | All | \$20,000 |
| HSIP0012050D | Construction | Kanawha Turnpike Signal | 1 | 1 intersection | \$200,000 | LS30 | All | \$222,222 |
| HSIP0002539D | Engineering | Wood WV 2 TWLTL | 2 | 0.16 miles | \$18,000 | LS30 | All | \$20,000 |
| HSIP0002540D | Right of Way | Wood WV 2 TWLTL | 2 | 0.16 miles | \$540,000 | LS30 | All | \$600,000 |
| HSIP2014054D | Engineering | East Huntington Signal System | 1 | 8 intersection | \$90,000 | LS30 | All | \$100,000 |
| HSIP0250219D | Construction | US 250 TWLTL | 2 | 0.56 miles | \$990,000 | LS30 | All | \$1,100,000 |
| HSIP0045063D | Construction | CR 45/5 Left Turn Lane | 1 | 1 intersection | \$315,000 | LS30 | All | \$350,000 |
| HSIP0068153D | Construction | I-68/I-79 Interchange Lighting | 11 | 1 interchange | \$1,350,000 | LS30 | All | \$1,500,000 |
| HSIP0050324D | Construction | Hampshire Co HS Intersection | 1 | 1 intersection | \$180,000 | LS30 | All | \$200,000 |
| HSIP0033356D | Construction | Glenville Intersection Imp. | 1 | 1 intersection | \$450,000 | LS30 | All | \$500,000 |
| HSIP0033360D | Construction | US 33 / WV 92 Traffic Signal | 1 | 1 intersection | \$240,000 | LS30 | All | \$240,000 |
| HSIG0050328D | Construction | US 50 / WV 18 Traffic Signal | 1 | 1 intersection | \$540,000 | LS30 | All | \$540,000 |
| HSIP0060284D | Construction | Jefferson Lighting | 11 | 1.73 miles | \$1,350,000 | LS30 | All | \$1,500,000 |
| HSIP0100152D | Construction | WV 100 and Dents Run Imp | 1 | 1 intersection | \$135,000 | LS30 | All | \$150,000 |
| HSIP0045062D | Right of Way | CR 45/5 Left Turn Lane | 1 | 1 intersection | \$135,000 | LS30 | All | \$150,000 |
| HSIP0002541D | Construction | Wood WV 2 TWLTL | 2 | 0.16 miles | \$810,000 | LS30 | All | \$900,000 |
| HSIP0014151D | Construction | 5 th and 13 th I/S Improvement | 1 | 2 intersections | \$189,000 | LS30 | All | \$210,000 |
| HSIP0250214D | Construction | US 250 / WV 7 HFST | 4 | 0.30 miles | \$196,200 | LS30 | 1 | \$218,000 |
| HSIP0023043D | Construction | Ohio CR 23 Guardrail | 17 | 5.63 miles | \$73,350 | LS30 | 1 | \$81,500 |
| HSIP0033362D | Right of Way | Glenville Intersection Improvement | 1 | 1 intersection | \$135,000 | LS30 | All | \$150,000 |
| HSIP2013060D | Construction | ADA Traffic Signal Upgrade | 1 | Statewide | \$315,000 | LS30 | All | \$350,000 |
| HSIP2014054D | Construction | East Huntington Signal System | 1 | 8 intersections | \$960,000 | LS30 | All | \$1,200,000 |
| HSIP2014055D | Construction | Cheyman Bridge Signals | 1 | 3 intersections | \$405,000 | LS30 | All | \$450,000 |
| HSIP2015039D | Construction | ADA Traffic Signal Upgrade | 1 | Statewide | \$315,000 | LS30 | All | \$350,000 |
| HSIP0007248D | Construction | WV 7 / CR 857 Intersection | 1 | 1 intersection | \$800,000 | LS30 | All | \$1,000,000 |
| HSIP2016037D | Construction | ADA Traffic Signal Upgrade | 1 | Statewide | \$315,000 | LS30 | All | \$350,000 |
| HSIP2017036D | Construction | ADA Traffic Signal Upgrade | 1 | Statewide | \$315,000 | LS30 | All | \$350,000 |
| TOTAL \$148 (LS30) | | | | | \$18,174,550 | | | \$20,585,622 |

| | | | | | | | | |
|--------------|--------------|--|----|-----------------|-------------|------|-----|-------------|
| | Project | Statewide Safety Campaign | 16 | 1 Campaign | \$4,656,765 | OCRO | All | \$4,656,765 |
| | Project | Traffic Incident Management Training & Materials | 16 | 55 Counties | \$1,000,000 | OCRO | 5 | \$1,000,000 |
| OCRO0340053 | Construction | Charles Town Bypass Sig | 1 | 2 intersection | \$650,000 | OCRO | P | \$650,000 |
| OCRO0507007 | Construction | Weirton Traffic Signal | 1 | 1 intersection | \$250,000 | OCRO | P | \$250,000 |
| OCRO0060257 | Construction | US 60 Left Turn Lane | 1 | 0.14 miles | \$300,000 | OCRO | 1 | \$300,000 |
| OCRO2010043 | Construction | ITS Integration | 16 | Statewide | \$2,820,000 | OCRO | All | \$2,820,000 |
| OCRO0213001 | Construction | Quaker St Road Xing | 7 | 0.05 miles | \$25,000 | OCRO | All | \$25,000 |
| OCRO2011062 | Construction | Boyers Avenue | 1 | 1 intersection | \$5,000 | OCRO | All | \$5,000 |
| OCRO0641350D | Construction | I-64 Drainage | 10 | 0.12 miles | \$70,000 | OCRO | All | \$70,000 |
| OCRO2012047D | Construction | Bolivar/Harpers Ferry Signal | 1 | 1 intersection | \$172,000 | OCRO | All | \$172,000 |
| OCRO0010232D | Construction | WV 10 @ US 119 Signal | 1 | 1 intersection | \$225,000 | OCRO | All | \$225,000 |
| OCRO2012547D | Construction | TMC CAD Integration | 16 | CAD Integration | \$100,000 | OCRO | All | \$100,000 |
| OCRO2012534 | Construction | Power Backup System | 1 | Statewide | \$750,000 | OCRO | All | \$750,000 |
| OCRO2012050 | Construction | Bunker Hill I/S Improvement | 1 | 1 intersection | \$425,000 | OCRO | All | \$425,000 |
| OCRO0522034D | Construction | Centerline Rumble Strips | 3 | 15.95 miles | \$45,000 | OCRO | 1 | \$45,000 |
| OCRO0340059D | Construction | US 340 / WV 9 Reference | 15 | 31.60 miles | \$30,000 | OCRO | 5 | \$30,000 |
| OCRO2012546D | Construction | WV Turnpike Detour Signs | 16 | Statewide | \$12,000 | OCRO | All | \$12,000 |
| OCRO0038021 | Construction | Berkeley CR 38 Guardrail | 17 | 0.28 miles | \$21,000 | OCRO | 1 | \$21,000 |
| OCRO0460051 | Construction | HFST US 460 | 4 | 0.04 miles | \$260,000 | OCRO | 1 | \$260,000 |
| OCRO0019392 | Construction | Right Turn Lane | 1 | 1 intersection | \$46,000 | OCRO | All | \$46,000 |
| OCRO0460052 | Construction | Advance Warning Flashers | 11 | 3 sites | \$85,000 | OCRO | All | \$85,000 |
| OCRO0020297 | Construction | CR 20 - Guardrail | 17 | 50 LF | \$2,000 | OCRO | 1 | \$2,000 |
| OCRO0009215 | Construction | Guardrail Cacapon Mountain | 17 | 0.60 miles | \$298,000 | OCRO | 1 | \$298,000 |
| OCRO2012572 | Construction | District 8 Delineators | 11 | District wide | \$30,000 | OCRO | All | \$30,000 |
| OCRO3701001 | Construction | Wayne CR 37/1 | 17 | 3.94 miles | \$10,000 | OCRO | 1 | \$10,000 |
| OCRO2012050D | Construction | Bunker Hill I/S Improvement | 1 | 1 intersection | \$425,000 | OCRO | All | \$425,000 |
| OCRO2013040 | Construction | RPM 2013 | 11 | 4 districts | \$326,000 | OCRO | All | \$326,000 |
| OCRO2012574 | Construction | High Mast Tower | 11 | 1 project | \$1,500,000 | OCRO | All | \$1,500,000 |
| OCRO6032001 | Construction | Cabell CR 60/32 Drainage | 10 | 0.01 mile | \$90,000 | OCRO | All | \$90,000 |
| OCRO0250216 | Construction | US 250, Glendale 7 th Street | 2 | 0.19 mile | \$953,400 | OCRO | All | \$953,400 |
| OCRO2013043 | Construction | District 5 Signs | 11 | District 5 | \$82,000 | OCRO | All | \$82,000 |
| OCRO2013044 | Construction | US 250 Guardrail | 17 | 0.74 miles | \$86,300 | OCRO | 1 | \$86,300 |

| | | | | | | | | |
|--|--------------|----------------------------------|----|------------------|---------------------|------|-----|---------------------|
| OCRO0081024 | Construction | I-81 Lens Replacement | 11 | 7.90 miles | \$17,000 | OCRO | All | \$17,000 |
| OCRO0250220 | Construction | US 250 / WV 88 Signs | 11 | District 6 | \$30,000 | OCRO | All | \$30,000 |
| OCRO2013047 | Project | Continuum of Care Server | 15 | 1 Server | \$70,000 | OCRO | 5 | \$70,000 |
| OCRO0501016 | Construction | Kanawha WV 501 Signs | 11 | District 1 | \$10,000 | OCRO | All | \$10,000 |
| OCRO2013054 | Construction | District 3 Signs | 11 | District 3 | \$18,000 | OCRO | All | \$18,000 |
| OCRO2013057 | Construction | Tucker WV 38 Signs | 11 | District 8 | \$25,000 | OCRO | All | \$25,000 |
| OCRO2013056 | Construction | District 4 Signs | 11 | District 4 | \$61,000 | OCRO | All | \$61,000 |
| OCRO2013058 | Engineering | US 33 Feasibility Study | 15 | Study | \$50,000 | OCRO | All | \$50,000 |
| OCRO0811114 | Construction | I-81 North Martinsburg - Marlowe | 14 | Traffic Director | \$81,000 | OCRO | All | \$81,000 |
| OCRO2014049 | Project | Video Analytics / Detection | 15 | Statewide | \$300,000 | OCRO | All | \$300,000 |
| OCRO2013063 | Construction | US 35 Spur No Turn on Red | 1 | 1 intersection | \$10,000 | OCRO | All | \$10,000 |
| OCRO2014046 | Project | RPM 2014 | 11 | 3 districts | \$450,000 | OCRO | All | \$450,000 |
| OCRO0773439 | Construction | Williamstown-Marietta Lighting | 11 | 0.44 miles | \$800,000 | OCRO | All | \$800,000 |
| OCRO0060257 | Construction | US 60 Left Turn Lane | 1 | 1 intersection | \$300,000 | OCRO | All | \$300,000 |
| OCRO0009218 | Construction | WV 9 / WV 115 / CR 32 Int | 1 | 1 intersection | \$150,000 | OCRO | All | \$150,000 |
| OCRO2015037 | Project | RPM 2015 | 11 | 3 districts | \$450,000 | OCRO | All | \$450,000 |
| TOTAL §154/§164 | | | | | \$18,572,465 | | | \$18,572,465 |
| TOTAL PLANNED PROJECTS - ALL FUNDING CATEGORIES | | | | | \$36,747,015 | | | \$39,158,087 |

* Refer to page 7 of this report for a listing of West Virginia's SHSP Emphasis Areas.

APPENDIX B

APPENDIX B

Table 10: FY 2013 Completed HRRRP Projects

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Project Cost | Funding | Emphasis Area* | Total Project Cost |
|--|--------------|---------------------------|------------------|-----------------------|---------------------|----------------|-----------------------|---------------------------|
| HSIP0007239D | Construction | Installation of Guardrail | 17 | 2.39 miles | \$137,200 | LS20 | 1 | \$152,500 |
| HSIP2012541D | Construction | Upgrade Guardrail | 17 | 126.64 miles | \$79,500 | LS20 | 1 | \$88,746 |
| HSIP0219316D | Construction | Lewisburg Pedestrian Sign | 5 | 1 intersection | \$41,200 | LS20 | P | \$45,800 |
| TOTAL §148 (LS20) | | | | | \$257,900 | | | \$287,046 |
| HSIP2012541D | Construction | Upgrade Guardrail | 17 | 126.64 miles | \$1,709,400 | LS30 | 1 | \$1,898,954 |
| TOTAL §148 (LS30) | | | | | \$1,709,400 | | | \$1,898,954 |
| TOTAL COMPLETED HRRRP PROJECTS - ALL FUNDING CATEGORIES | | | | | \$1,967,300 | | | \$2,186,000 |

* Refer to page 7 of this report for a listing of West Virginia’s SHSP Emphasis Areas.

APPENDIX B

Table 11: FY 2013 Programmed HRRRP Projects

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Project Cost | Funding | Emphasis Area* | Total Project Cost |
|---|-------------|--------------------------------|-----------|--------------------|-----------------|---------|----------------|--------------------|
| HSIP2011077D | Engineering | Development and Implement HSIP | 15 | Program Management | \$22,500 | LS20 | 5 | \$25,000 |
| TOTAL §148 (LS20) | | | | | \$22,500 | | | \$25,000 |
| TOTAL PROGRAMMED HRRRP PROJECTS - ALL FUNDING CATEGORIES | | | | | \$22,500 | | | \$25,000 |

* Refer to page 7 of this report for a listing of West Virginia's SHSP Emphasis Areas.

APPENDIX B

Table 12: Planned HRRRP Projects, Not Authorized in FY 2013

| Federal Project # | Phase | Project Name | Imp. Cat. | Project Output | Project Cost | Funding | Emphasis Area* | Total Project Cost |
|---|--------------|--------------------------|-----------|----------------|--------------------|---------|----------------|--------------------|
| HSIP2012564D | Construction | D2 and D3 Lane Departure | 3 | Various routes | \$1,440,000 | LS20 | 1 | \$1,600,000 |
| TOTAL §148 (LS20) | | | | | \$1,440,000 | | | \$1,600,000 |
| TOTAL PLANNED, HRRRP PROJECTS - ALL FUNDING CATEGORIES | | | | | \$1,440,000 | | | \$1,600,000 |

* Refer to page 7 of this report for a listing of West Virginia's SHSP Emphasis Areas P = Emphasis area from previous SHSP.

APPENDIX C

APPENDIX C

Table 13: FY 2013 Completed Projects with HRGX Funding

| Federal Project # | Phase | Project Name | Location (County & Rt or St) | Crossing Number | FHWA Roadway Function | Project Type* | Crossing Protection (Active/Passive) | Crossing Type | Federal Project Cost | Funding | Total Project Cost | Accidents Prior |
|---|--------------|---------------------------|------------------------------|-----------------|-----------------------|---------------|--------------------------------------|---------------|----------------------|---------|--------------------|-----------------|
| STPG0Q39001E | Construction | Fairview Street | Kanawha Co. CR 60/36 | 517-208V | Urban Local | 3 | Active | Vehicle | \$151,783 | Q27 | \$155,601 | 0 |
| TOTAL HAZARD ELIMINATION ISTE A & TEA-21 (33N, H27, Q27) | | | | | | | | | \$151,783 | | \$155,601 | |
| RHPD0025118D | Construction | Westmoreland Drive RR | Kanawha Co. WV 25 | 517-150P | Urban Minor Art. | 3 | Active | Vehicle | \$212,400 | LS40 | \$236,000 | 0 |
| RHCH0002513D | Construction | Ashton RR Xing | Mason Co. WV 2 | 147-906R | Rural Prin. Art. | 3 | Active | Vehicle | \$169,200 | LS40 | \$188,000 | 0 |
| RHCH0002512D | Construction | Gallipolis Ferry Crossing | Mason Co. WV 2 | 147-873F | Urban Prin. Art. | 3 | Active | Vehicle | \$171,100 | LS40 | \$19,000 | 0 |
| RHCH0062844D | Construction | Viand St Railroad Xing | Mason Co. WV 62 | 147-850Y | Urban Minor Art. | 3 | Active | Vehicle | \$168,300 | LS40 | \$187,000 | 0 |
| TOTAL HAZARD ELIMINATION §130 (LS40) | | | | | | | | | \$567,000 | | \$630,000 | |
| TOTAL HAZARD ELIMINATION | | | | | | | | | \$718,783 | | \$785,601 | |
| RHCH0024030D | Construction | Virginia Avenue Crossing | Harrison Co. CR 24 | 146-372X | Urban Minor Art. | 3 | Active | Vehicle | \$262,600 | H26 | \$327,000 | 0 |
| STP0172004D | Construction | Henry White Road | Cabell Co. CR 17/2 | 225-627K | Urban Local | 1 | Active | Vehicle | \$11,178 | H26 | \$64,048 | 0 |
| TOTAL PROTECTIVE DEVICES ISTE A & TEA-21 (33M, H26) | | | | | | | | | \$273,778 | | \$391,048 | |
| RHPG2009210D | Construction | John Street Crossing | Berkeley Co. Martinsburg | 517-907V | Urban Local | 2 | Active | Vehicle | \$139,491 | LS50 | \$142,321 | 0 |
| ACRH2009211D | Construction | Low Gap Crossing | Boone Co. Low Gap | 226-342E | Rural Local | 3 | Active | Vehicle | \$320,000 | LS50 | \$330,821 | 0 |
| RHPD0005117D | Construction | Birch Street Crossing | Brooke Co. CR 507/2 | 510-492R | Urban Local | 3 | Active | Vehicle | \$114,300 | LS50 | \$127,000 | 0 |
| RHPD0027039D | Construction | Packs Birch Road #1 | Fayette Co. CR 27 | 932-567D | Rural Major Collector | 3 | Active | Vehicle | \$163,800 | LS50 | \$182,000 | 0 |

| | | | | | | | | | | | | |
|---|--------------|----------------------------|----------------------|----------|--------------------------|---|--------|---------|--------------------|------|--------------------|---|
| RHPD0027038D | Construction | Packs Birch Road #2 | Fayette Co. CR 27 | 932-567D | Rural Major Collector | 3 | Active | Vehicle | \$114,480 | LS50 | \$127,200 | 0 |
| RHPD2012538D | Construction | Chestnut Street RR Xing | Kanawha Co. CR 16 | 225-509H | Urban Collector | 3 | Active | Vehicle | \$161,100 | LS50 | \$179,000 | 0 |
| TOTAL PROTECTIVE DEVICES §130 (LS50) | | | | | | | | | \$1,013,171 | | \$1,088,342 | |
| TOTAL PROTECTIVE DEVICES | | | | | | | | | \$1,286,949 | | \$1,479,390 | |
| TOTAL §130 COMPLETED PROJECTS | | | | | | | | | \$2,005,732 | | \$2,264,991 | |

* Refer to the list below Table 5 for a description of project types.

Table 14: FY 2013 On-Going Projects with HRGX Funding

| Federal Project # | Phase | Project Name | Location (County & Rt or St) | Crossing Number | FHWA Roadway Function | Project Type* | Crossing Protection (Active/Passive) | Crossing Type | Federal Project Cost | Funding | Total Project Cost | Accidents Prior |
|---|--------------|--------------------------------|------------------------------|----------------------|-----------------------|---------------|--------------------------------------|---------------|----------------------|---------|--------------------|-----------------|
| STP0096035EQ | Engineering | Evaluate RRX Surfaces | Various Statewide | | Various | 1 | | Vehicle | \$129,845 | 33N | \$149,244 | |
| STP0172005D | Construction | Henry White Road | Cabell Co. CR 17/2 | 225-627K | Urban Local | 3 | Active | Vehicle | \$283,600 | H27 | \$354,500 | 0 |
| STPG0Q27001D | Construction | Hale Street Crossing | Putnam Co. Hurricane | 225-594A | Urban Local | 6 | Active | Vehicle | \$10,000 | Q27 | \$10,000 | 0 |
| TOTAL HAZARD ELIMINATION ISTE A & TEA-21 (33N, H27, Q27) | | | | | | | | | \$423,445 | | \$513,744 | |
| RHCH2010042D | Engineering | Highway RR Grade Xing | Various Statewide | | Various | 7 | | Vehicle | \$93,160 | LS40 | \$191,288 | |
| STPG2000015E | Construction | RR Xing Surface Upgrade | Various Statewide | | Various | 2 | Active | Vehicle | \$400,125 | LS40 | \$2,136,358 | |
| RHCH0099100D | Construction | RR Xing Upgrade | Various Statewide | | Various | 2 | Active | Vehicle | \$680,760 | LS40 | \$762,705 | |
| RHCH5219005D | Construction | Central Ave. RR Xing | McDowell Co CR 52/19 | 471-044Y | Rural Minor Collector | 3 | Active | Vehicle | \$183,600 | LS40 | \$204,000 | 0 |
| RHCH0020284D | Construction | Bank Street | Wetzel Co. Pine Grove | 146-194N | Rural Local | 3 | Active | Vehicle | \$163,800 | LS40 | \$182,000 | 0 |
| RHCH0014144D | Construction | Green and Avery Street RR Xing | Wood Co. WV 14 | 146-688H 146-689P | Urban Collector | 3 | Active | Vehicle | \$445,500 | LS40 | \$495,000 | 0 |
| RHCH2012545D | Engineering | Survey Existing RR Xing | Various Statewide | | Various | 1 | | Vehicle | \$22,500 | LS40 | \$25,000 | |
| RHCH1122001D | Construction | True Apple Road Crossing | Berkeley Co. CR 11/22 | 517-889A | Urban Collector | 3 | Active | Vehicle | \$9,000 | LS40 | \$10,000 | 0 |
| STPG0Q38001E | Construction | Oral Lake Road Crossing | Harrison Co. CR 17 | 146-369P | Rural Local | 3 | Active | Vehicle | \$27,000 | LS40 | \$27,000 | 0 |
| RHCH2011093D | Construction | Davis Avenue RR Xing | Randolph Co. Elkins | 832-702T | Urban Local | 3 | Active | Vehicle | \$175,000 | LS40 | \$195,000 | 0 |

| Federal Project # | Phase | Project Name | Location (County & Rt or St) | Crossing Number | FHWA Roadway Function | Project Type* | Crossing Protection (Active/Passive) | Crossing Type | Federal Project Cost | Funding | Total Project Cost | Accidents Prior |
|--|--------------|--------------------------------------|------------------------------|-----------------|-----------------------|---------------|--------------------------------------|---------------|----------------------|---------|--------------------|-----------------|
| RHCH0060286D | Construction | Adams Avenue Railroad Crossing | Cabell Co. US 60 | 225-702U | Urban Principal Art | 3 | Active | Vehicle | \$86,400 | LS40 | \$96,000 | 0 |
| TOTAL HAZARD ELIMINATION §130 (LS40) | | | | | | | | | \$2,287,345 | | \$4,324,351 | |
| RHCH2014056D | Construction | Raleigh County Railroad Xing Upgrade | Raleigh Co. Various | | Various | 3 | Active | Vehicle | \$79,200 | MS40 | \$88,000 | |
| TOTAL HAZARD ELIMINATION MAP-21 (MS40) | | | | | | | | | \$79,200 | | \$88,000 | |
| TOTAL HAZARD ELIMINATION | | | | | | | | | \$2,789,990 | | \$4,926,095 | |
| STP0103002D | Construction | Thorpe Crossing | McDowell Co WV 103 | 470-938H | Rural Major Collector | 3 | Active | Vehicle | \$8,000 | H26 | \$205,000 | 0 |
| STP0103003D | Construction | Jarrett Hollow Crossing | McDowell Co WV 103 | 470-941R | Rural Major Collector | 3 | Active | Vehicle | \$8,000 | H26 | \$305,000 | 0 |
| RHCH2009207D | Construction | Godby Street Crossing | Logan Co Logan | 226-597Y | Urban Local | 3 | Active | Vehicle | \$177,539 | H26 | \$182,325 | 0 |
| RHCH2009208D | Construction | Dingess Street Crossing | Logan Co. Logan | 226-598F | Urban Local | 3 | Active | Vehicle | \$182,400 | H26 | \$238,000 | 0 |
| RHCH2009203D | Construction | Charles Street Crossing | Logan Co. Logan | 226-603A | Urban Local | 3 | Active | Vehicle | \$240,000 | H26 | \$240,000 | 0 |
| RHCH2009202D | Construction | Pine/Wilson St Crossing | Logan Co. Logan | 226-605N | Urban Local | 3 | Active | Vehicle | \$183,493 | H26 | \$190,616 | 0 |
| STPG0235005D | Construction | YMCA Kennedy Ctr | Cabell Co. CR 2/35 | 147-942L | Urban Local | 3 | Active | Vehicle | \$10,000 | H26 | \$245,000 | 0 |
| TOTAL PROTECTIVE DEVICES ISTE A & TEA-21 (33M, H26) | | | | | | | | | \$809,432 | | \$1,605,941 | |
| STP103001D | Construction | Jarrett Hollow Crossing | McDowell Co WV 103 | 470-941R | Rural Major Collector | 3 | Active | Vehicle | \$236,000 | LS50 | \$305,000 | 0 |
| RHPD0002471D | Construction | Cove Road | Hancock Co. CR 507 | 510-492R | Urban Local | 3 | Active | Vehicle | \$217,494 | LS50 | \$254,220 | 0 |

| Federal Project # | Phase | Project Name | Location (County & Rt or St) | Crossing Number | FHWA Roadway Function | Project Type* | Crossing Protection (Active/Passive) | Crossing Type | Federal Project Cost | Funding | Total Project Cost | Accidents Prior |
|-------------------|--------------|-------------------------|------------------------------|-----------------|-----------------------|---------------|--------------------------------------|---------------|----------------------|---------|--------------------|-----------------|
| RHCH2009203D | Construction | Charles Street Crossing | Logan Co. Logan | 226-603A | Urban Local | 3 | Active | Vehicle | \$10,000 | LS50 | \$240,000 | 0 |
| RHCH2009204D | Construction | Cole Street Crossing | Logan Co. Logan | 226-600E | Urban Local | 3 | Active | Vehicle | \$10,000 | LS50 | \$306,000 | 0 |
| RHCH2009208D | Construction | Dingess Street Crossing | Logan Co. Logan | 226-598F | Urban Local | 3 | Active | Vehicle | \$9,000 | LS50 | \$238,000 | 0 |
| RHCH2009207D | Construction | Godby Street Crossing | Logan Co. Logan | 226-597Y | Urban Local | 3 | Active | Vehicle | \$9,000 | LS50 | \$182,325 | 0 |
| RHCH2009205D | Construction | Hudgins Street Crossing | Logan Co. Logan | 226-601L | Urban Local | 3 | Active | Vehicle | \$55,000 | LS50 | \$55,000 | 0 |
| RHCH2009202D | Construction | Pine/Wilson St Crossing | Logan Co. Logan | 226-605N | Urban Local | 3 | Active | Vehicle | \$10,000 | LS50 | \$190,616 | 0 |
| RHCH2009206D | Construction | White Street Crossing | Logan Co. Logan | 226-599M | Urban Local | 3 | Active | Vehicle | \$55,000 | LS50 | \$55,000 | 0 |
| RHCH1192049D | Construction | Stollings Truck Bypass | Logan Co. CR 119/20 | 226-606V | Urban Local | 3 | Active | Vehicle | \$322,000 | LS50 | \$322,000 | 0 |
| ARCH0019348D | Construction | Dakota Crossing | Marion Co. US 19 | 146-002U | Urban Minor Arterial | 3 | Active | Vehicle | \$380,000 | LS50 | \$380,000 | 0 |
| RHPD0076014D | Construction | Louise Street | Brooke Co. CR 7/6 | 472-891W | Rural Local | 3 | Active | Vehicle | \$153,900 | LS50 | \$171,000 | 0 |
| RHPD0002514D | Construction | Guyandotte Xing | Cabell Co. WV 2 | 147-948C | Urban Principal Art | 3 | Active | Vehicle | \$123,300 | LS50 | \$137,000 | 0 |
| RHPD0042131D | Construction | Martha Road Xing | Cabell Co. CR 42 | 226-498B | Rural Major Collector | 3 | Active | Vehicle | \$183,600 | LS50 | \$204,000 | 0 |
| RHPD2012538D | Engineering | Evaluate RRX Surfaces | Various Statewide | | Various | 1 | | Vehicle | \$45,000 | LS50 | \$50,000 | |
| RHCH2010042D | Engineering | Highway RR Grade Xing | Various Statewide | | Various | 7 | | Vehicle | \$79,000 | LS50 | \$191,288 | |

| Federal Project # | Phase | Project Name | Location (County & Rt or St) | Crossing Number | FHWA Roadway Function | Project Type* | Crossing Protection (Active/Passive) | Crossing Type | Federal Project Cost | Funding | Total Project Cost | Accidents Prior |
|---|--------------|-----------------------------------|------------------------------|-----------------|-----------------------|---------------|--------------------------------------|---------------|----------------------|---------|--------------------|-----------------|
| RHCH1122001D | Construction | True Apple Road Xing | Harrison Co. US 50 | 146-371R | Urban Minor Arterial | 3 | Active | Vehicle | \$9,000 | LS50 | \$10,000 | 0 |
| RHPD0045064D | Construction | WV 45 Railroad Xing | Berkeley Co. WV 45 | 517-905G | Urban Minor Arterial | 3 | Active | Vehicle | \$56,800 | LS50 | \$71,000 | 0 |
| RHPD0051036D | Construction | WV 51 Railroad Xing | Berkeley Co. WV 51 | 517-890U | Rural Major Collector | 3 | Active | Vehicle | \$100,000 | LS50 | \$125,000 | 0 |
| RHPD0026045D | Construction | CR 26 Railroad Crossing | Berkeley Co. CR 26 | 517-885X | Urban Collector | 3 | Active | Vehicle | \$78,400 | LS50 | \$98,000 | 0 |
| RHPD0515002D | Construction | CR 51/5 Railroad Crossing | Berkeley Co. CR 51/5 | 517-886E | Urban Local | 3 | Active | Vehicle | \$93,600 | LS50 | \$117,000 | 0 |
| RHPD0028080D | Construction | CR 28 Railroad Crossing | Berkeley Co. CR 28 | 517-879U | Urban Collector | 3 | Active | Vehicle | \$78,400 | LS50 | \$98,000 | 0 |
| RHPD0510002D | Construction | Braxton CR 5/10 Railroad Crossing | Braxton Co. CR 5/10 | 146-937L | Rural Local | 3 | Active | Vehicle | \$161,600 | LS50 | \$202,000 | 0 |
| RHPD0011138D | Construction | Upshur CR 11 Railroad Crossing | Upshur Co. CR 11 | 146-890T | Rural Major Collector | 3 | Active | Vehicle | \$161,600 | LS50 | \$202,000 | 0 |
| RHPD0020298D | Construction | Upshur WV 20 Railroad Crossing | Upshur Co. WV 20 | 146-818C | Urban Minor Arterial | 3 | Active | Vehicle | \$189,600 | LS50 | \$237,000 | 0 |
| TOTAL PROTECTIVE DEVICES §130 (LS50) | | | | | | | | | \$2,827,294 | | \$4,441,449 | |
| RHPD0019400D | Construction | Lewis US 19 Railroad Xing | Lewis Co. US 19 | 146-901D | Rural Major Collector | 3 | Active | Vehicle | \$181,260 | MS50 | \$201,400 | 0 |
| RHPD0013062D | Construction | Braxton CR 1/3 Railroad Xing | Braxton Co. CR 1/3 | 146-928M | Rural Local | 3 | Active | Vehicle | \$181,800 | MS50 | \$202,000 | 0 |
| RHPD0001256D | Construction | CR 1 Railroad Crossing | Braxton Co. CR 1 | 146-930N | Rural Major Collector | 3 | Active | Vehicle | \$181,800 | MS50 | \$202,000 | 0 |
| RHPD0005133D | Construction | Braxton WV 5 Railroad Xing | Braxton Co. WV 5 | 147-088J | Rural Major Collector | 3 | Active | Vehicle | \$213,300 | MS50 | \$237,000 | 0 |

| Federal Project # | Phase | Project Name | Location (County & Rt or St) | Crossing Number | FHWA Roadway Function | Project Type* | Crossing Protection (Active/Passive) | Crossing Type | Federal Project Cost | Funding | Total Project Cost | Accidents Prior |
|---|--------------|---------------------------------|------------------------------|-----------------|-----------------------|---------------|--------------------------------------|---------------|----------------------|---------|---------------------|-----------------|
| RHCH0112016D | Construction | CR 11/2 Railroad Xing | Upshur Co. CR 11/2 | 146-892G | Rural Local | 3 | Active | Vehicle | \$181,800 | MS50 | \$202,000 | 0 |
| RHCH201309D | Construction | RJ Corman Railroad | Fayette Co. Various | | Various | 3 | Active | Vehicle | \$110,770 | MS50 | \$123,000 | 0 |
| RHPD0255001D | Construction | CR 25/5 Glen Jean Railroad Xing | Fayette Co. CR 25/5 | 225-792V | Urban Local | 3 | Active | Vehicle | \$108,000 | MS50 | \$120,000 | 0 |
| RHPD1913002D | Construction | CR 19/13 Red Star Railroad Xing | Fayette Co. CR 19/13 | 225-790G | Urban Local | 3 | Active | Vehicle | \$117,000 | MS50 | \$130,000 | 0 |
| RHPD2013062D | Construction | Mount Hope Railroad Xing | Fayette Co. Stadium Dr | 225-802Y | Rural Local | 3 | Active | Vehicle | \$113,400 | MS50 | \$126,000 | 0 |
| TOTAL PROTECTIVE DEVICES MAP-21 (MS50) | | | | | | | | | \$1,389,130 | | \$1,543,400 | |
| TOTAL PROTECTIVE DEVICES | | | | | | | | | \$5,025,856 | | \$7,590,790 | |
| TOTAL §130 ON-GOING PROJECTS | | | | | | | | | \$7,815,846 | | \$12,516,885 | |

* Refer to the list below for a description of project types.

HRGX Project Types:

Crossing Approach Improvement

1. Crossing Warning Sign & Pavement Marking Improvements
2. Active Grade Crossing Equipment Installation/Upgrade
3. Visibility Improvements
4. Roadway Geometry Improvements
5. Grade Crossing Elimination
6. Crossing Inventory Update