PERFORMANCE PORTFOLIO





Focus on highway safety and reliability needs, including behavioral and systemic safety improvements and operations and capacity strategies.







#### **GUIDING PRINCIPLES**

- Maximize the statewide awareness of traffic safety programs through education and outreach and the role of law enforcement and high-quality safety data
- Leverage the focus on improving driver behavior through deploying countermeasures to address critical issues and enhancing highway design practice
- Optimize the use of existing and new technologies to actively manage traffic in high-travel corridors and monitor travel conditions across the state
- Strategically address existing and future system bottlenecks through proven and innovative design and infrastructure

#### **PORTFOLIO STRATEGIES**

Traffic Safety
Awareness

Geometric
Design

Countermeasures

ITS
Infrastructure

Corridors &
Design

These 5 strategies will help prevent fatal crashes, improve travel times, address federal and state performance measures, and enable safe, efficient transportation across West Virginia.

PERFORMANCE STRATEGIES





**Expand safety awareness campaigns** which target changes to driving behavior, decision making and strengthen state, local law enforcement initiatives.



### **LRTP ALIGNMENT**

Advances two of the five LRTP Goals:

- Safety and Security for All Users
- Livable and Healthy Communities

### **PERFORMANCE**

Enhances awareness through multi-faceted communication tools, social media, educational toolkits and other approaches. Utilizes technology to allow law enforcement to submit citations electronically to streamline traffic record reviews and assist future planning efforts.

Low

High

High

High



## **READINESS**

Supports preventative initiatives cited as recurring emphasis areas in the Strategic Highway Safety Plan (SHSP) and strengthens existing efforts of Governors Highway Safety Program (GHSP) staff, Regional Traffic Safety Coordinators (RTSC), and local law enforcement programs.

Low



Low

## **RESILIENCY**

Provides more resources for targeted, frequent Public Service Announcements (PSAs), educational campaigns at statewide festivals and events. Supports measures to track effectiveness of "Click It or Ticket", "Drive Sober of Get Pulled Over" campaigns and other alcohol/drug programs for future planning.

Low

I High

#### **CURRENT STATE OF STRATEGY IN WV**

- WV Governor's Highway Safety Program supports statewide efforts to increase visibility, awareness of dangerous driving behaviors and decisions
- House Bill 4464 (2020) deters dangerous driving behaviors

## **ACTIONS**

Expand marketing and education efforts to improve safe behavior for all road users and streamline traffic records and data analysis

PERFORMANCE STRATEGIES





**Deploy more countermeasures** in the form of rumble strips, guardrails, retroreflective pavement markings and other roadway features which mitigate and prevent fatalities.



## **LRTP ALIGNMENT**

Advances three of the five LRTP Goals:

- Safety and Security for All Users
- Livable and Healthy Communities
- System Condition, Efficiency, and Fiscal Sustainability

Low I

High



### **PERFORMANCE**

Focuses on more dedicated research and analysis of effective technology-driven countermeasure programs such as RFID embedded signs, lane marking materials, guardrail construction, fixed object removal, and brighter lighting.

High



## **READINESS**

Supports WVDOH Districts to regularly recommend countermeasure locations eligible for highway safety improvement program (HSIP) funding, and biannual GHSP roundtable reviews of crash trends and countermeasure implementation placing an emphasis on new, evidence-based tools and techniques.

Low

High



Low

## **RESILIENCY**

Facilitates greater use and targeted applications of highest effective countermeasures suitable for mountainous and rural terrain. Supports more safeguards and preventative measures against run off the road and distracted driving fatalities and injuries which are on the rise nationally.

Low

High

#### **CURRENT STATE OF STRATEGY IN WV**

- Roadway departure accounts for 65 percent of all fatalities in West Virginia and 56% of serious injuries
- The SHSP, HSIP, and HSP have adopted a series of goals, strategies and performance targets to reduce fatalities in half by 2030

## **ACTIONS**

Expand use and diversity of countermeasures and apply new technologies and solutions to enhance safety

PERFORMANCE STRATEGIES





Deploy localized roadway design improvements and enhancements which facilitate safer driving conditions.



## **LRTP ALIGNMENT**

Advances two of the five LRTP Goals:

- Safety and Security for All Users
- System Condition, Efficiency and Fiscal Sustainability

Low

High



### **PERFORMANCE**

Directs traffic operational and safety improvements to priority high-crash locations from a combination of statewide crash analysis, corridor plans, and regional plans. Reduces number of blind curves, acute intersections and other roadway deficiencies which contribute to preventable serious injuries and fatalities.

Low

High



## **READINESS**

Can occur as a new, unique initiative where safety is the primary project focus or in conjunction with STIP improvements to ensure roadway deficiencies are addressed within planned projects. Operationalized through more coordinated reviews of highest deficient roadways segments, intersections, interchanges through WVDOH Districts.

OW

High



## **RESILIENCY**

Raises geometric design standards for long term local and statewide safe travel and accident prevention. Supports safe access to more communities and markets and enhanced maneuverability for commercial vehicles.

Low

I High

#### **CURRENT STATE OF STRATEGY IN WV**

- WV MPOs cited fatalities and serious injuries prevention as the most important goal in recent stakeholder survey
- Motor vehicle crashes contribute an estimated
   \$1.4 billion in annual economic cost to West Virginia

## **ACTIONS**

Conduct gap analysis of high priority, high crash, design challenged locations to prioritize investments and enhance performance

PERFORMANCE STRATEGIES





Expand statewide coverage of Dynamic Message Signs (DMS), Closed Circuit Television Cameras (CCTV), Road Weather Information Systems (RWIS) along Interstates, ADHS, and other multilane, high-priority WV routes



### **LRTP ALIGNMENT**

Advances three of the five LRTP Goals:

- Safety and Security for All Users
- System Condition, Efficiency and Fiscal Sustainability
- Economic Vitality and Freight Movement



## **PERFORMANCE**

Broadens incident awareness for travelers and incident management response, proactively maintains high level of system wide reliability, and supports an effective Traffic System Management and Operation (TSMO) program, particularly in high-travel Interstate and National Highway System corridors.

Low High

**READINESS** 



Low

# RESILIENCY

High

I High

Occurs in conjunction with installation or renovation of other lighting, signing or signal infrastructure.

Supports current WVDOH review to add devices at strategic locations and on priority routes (Interstate, ADHS highways) and current DOH plans to renovate RWIS sites and provide increased public interaction through 511.

Provides low capital cost, high benefits solutions.

Subject to technology changes which may require increasing software/hardware upgrade investment and skilled workforce to manage. Increasingly competes with more travel time information through in vehicle navigation systems and mobile devices. Can help facilitate and manage emergency response.

OW



### **CURRENT STATE OF STRATEGY IN WV**

- West Virginia has 80+ DMS, 100+ CCTVs, 50+ RWIS and 900+ Guide Sign structures statewide
- WVDOTs 511 "Know Before You Go" service provides real-time traffic information and location of existing and planned events
- Listed as 3<sup>rd</sup> highest priority from stakeholder survey

## **ACTIONS**

Deploy more roadway technologies to monitor travel conditions, respond to events, and coordinate interagency communications

PERFORMANCE STRATEGIES





Enhance operational, design, and access management features of high priority statewide and regional WV routes to overcome bottlenecks and optimize highway travel efficiency.



## **LRTP ALIGNMENT**

Advances three of the five LRTP Goals:

- Safety and Security for All Users
- System Condition, Efficiency and Fiscal Sustainability
- Economic Vitality and Freight Movement



### **PERFORMANCE**

Targeted at specific operational and safety need locations from system plans and MPO LRTPs and truck freight bottlenecks and designated freight corridors from the Statewide Freight Plan. Builds an expectation for enhanced travel reliability beyond National Highway System routes.

Low

High

High



## **READINESS**

Occurs in conjunction with planned highway improvement projects to address reliability challenges in high-travel corridors. Requires review of optimal regional priority routes and corridors best suited for additional operational, design, access management solutions. Enhances WVDOH statewide signal timing management.

OW



Low

## **RESILIENCY**

Provides low capital cost, high benefit solutions effective in the near-term such as turn lanes and signal synchronization. Supports greater travel reliability to and from emerging localized markets and transportation sites like ports, transit hubs and distribution centers.

Low

Hiah

#### **CURRENT STATE OF STRATEGY IN WV**

- Supported by the Innovative Project Delivery Program
- West Virginia has 1,400 Traffic Signals and over 50,000 roadway signs
- 42 railroad grade crossings improved from 2014-2019 through FRA's Railway-Highway Crossings Program
- Bottlenecks cited as highest concern in 2018
   Statewide Freight Plan

## **ACTIONS**

Focus planning and engineering resources on addressing key bottleneck locations, particularly on priority truck corridors