



COMMONWEALTH of VIRGINIA

Office of the

SECRETARY of TRANSPORTATION

Highway Safety Improvement Program (HSIP)

Policy Recommendations

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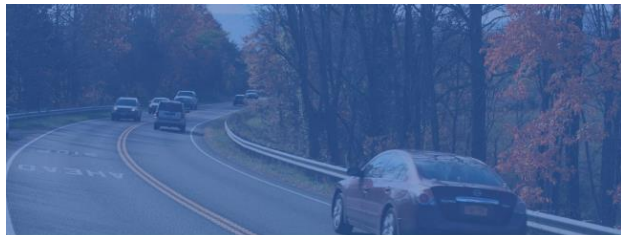
Virginia Department of Rail and Public Transportation



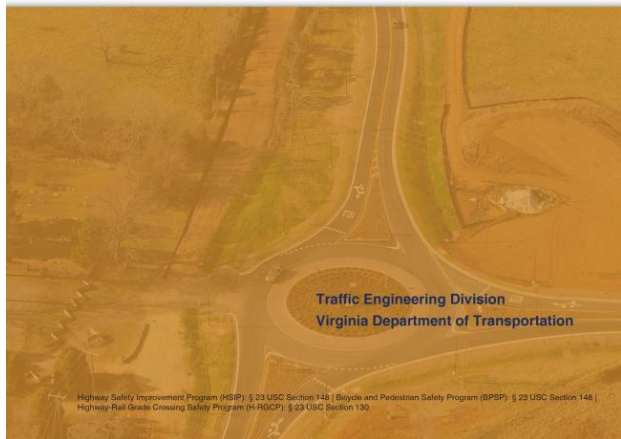
Federal Highway Safety Improvement Program Discussion Items

- **Existing HSIP Program Overview**
 - **Process Overview**
 - **Project Screening and Eligibility**
 - **Project scoring and selection for funding**
- **HSIP Program Challenges**
- **New HSIP Policy Development**
- **Next Steps**

Federal Highway Safety Improvement Program



VDOT Virginia Department of Transportation
Highway Safety Improvement Program
Implementation Guidelines



- **Core FHWA program**
- **Requires Strategic Highway Safety Plan**
- **VDOT has established process for HSIP Implementation**
 - **HSIP Implementation Guidelines**
 - **Variety of crash data and tools**

http://www.virginiadot.org/business/resources/FINAL_VDOT_HSIP_Implementation_Manual.pdf

Existing HSIP Process Overview

- **Fund Several Project Types:**
 - Highway Spot Projects
 - Highway Systemic Projects
 - Pedestrian & Bicycle Projects
- **Annual Process for Project Requests and Funding**
 - Application-based program
 - Process includes
 - Screening and Eligibility
 - Application Review
 - Scoring and Selection

Existing HSIP Process Overview – Screening and Eligibility

- **Must meet an emphasis area included in the Strategic Highway Safety Plan**
- **Must demonstrate Return on Investment > 1 and/or demonstrate risk reduction to transportation users**
 - **Requirement of federal code for the use of funds**
- **Must be ready for deployment**

Existing HSIP Process Overview – Scoring and Selection of Projects

- **Districts and local governments submit projects for consideration**
- **VDOT Safety team scores projects**
 - **Determines benefit cost analysis and return on investment**
 - **Determines risk reduction for targeted types of crashes**
- **Projects selected through collaborative process with Districts and VDOT Central Office**
 - **No requirement to consider highest scoring projects**
 - **No formal role for the Board**

Existing HSIP Process – Challenges

- **Projects selected for funding may not have the greatest return on investment or safety benefits**
- **District/local discretion on project submissions and priorities**
 - **May or may not be top potential safety improvement areas**
- **Limited transparency in project selection process**
- **100% of HSIP funds allocated over six years**

Existing HSIP Process – General Examples

- **Interstate Safety Improvement Projects**
 - Interstate has lowest fatality and serious injury rates
- **Bicycle/Pedestrian safety improvements targeted toward sidewalk and trail projects**
 - Most fatalities and serious injuries occur crossing roadways
- **Eligibility (especially BC ratio) viewed as sufficient to support HSIP purposes**
 - Supported investment in some projects with low BC ratio

Existing HSIP Process Examples – Interstate 95 Improvements at Route 3

- **Additional lanes and signalization to improve safety**
- **Project Complete January 2019**
- **Estimated Cost of \$23M**
- **B/C Ratio <1**



Alternative Funding Scenarios for \$23M

- **Systemic Safety Improvements of high-visibility backplates, flashing yellow arrows, and pedestrian crossings on VDOT priority pedestrian corridors each cost around \$20M**

New HSIP Policy Development: Key Policy Elements for Consideration

- **Develop Implementation Plans with prioritized categories of systemic and hybrid safety improvements and established goals and schedules for completion for each improvement type**
 - **Edge- and center-line rumble strips on primary system**
 - **Shoulder pavement wedge**
 - **Flashing yellow arrows**
 - **Chevrons**
 - **High-visibility backplates**
 - **Pedestrian crossings**
 - **Unsignalized intersections**
- **Include approach for prioritization and selection of spot improvement projects**
- **Include funding distribution approach/formula**
- **Include approach to implement the policy and advance priorities and goals**
- **Include annual reporting requirements to provide progress updates and, if necessary, course corrections**

HSIP Policy Development: Implementation Plan

Develop Implementation Plan with prioritized categories of systemic and hybrid safety improvements and established goals and schedules for eight improvement types

- **Implementation Plan will result in centralized approach for priorities and schedules to achieve greatest crash reductions**
 - **Achieves objective of advancing priorities and goals**

Recommendations

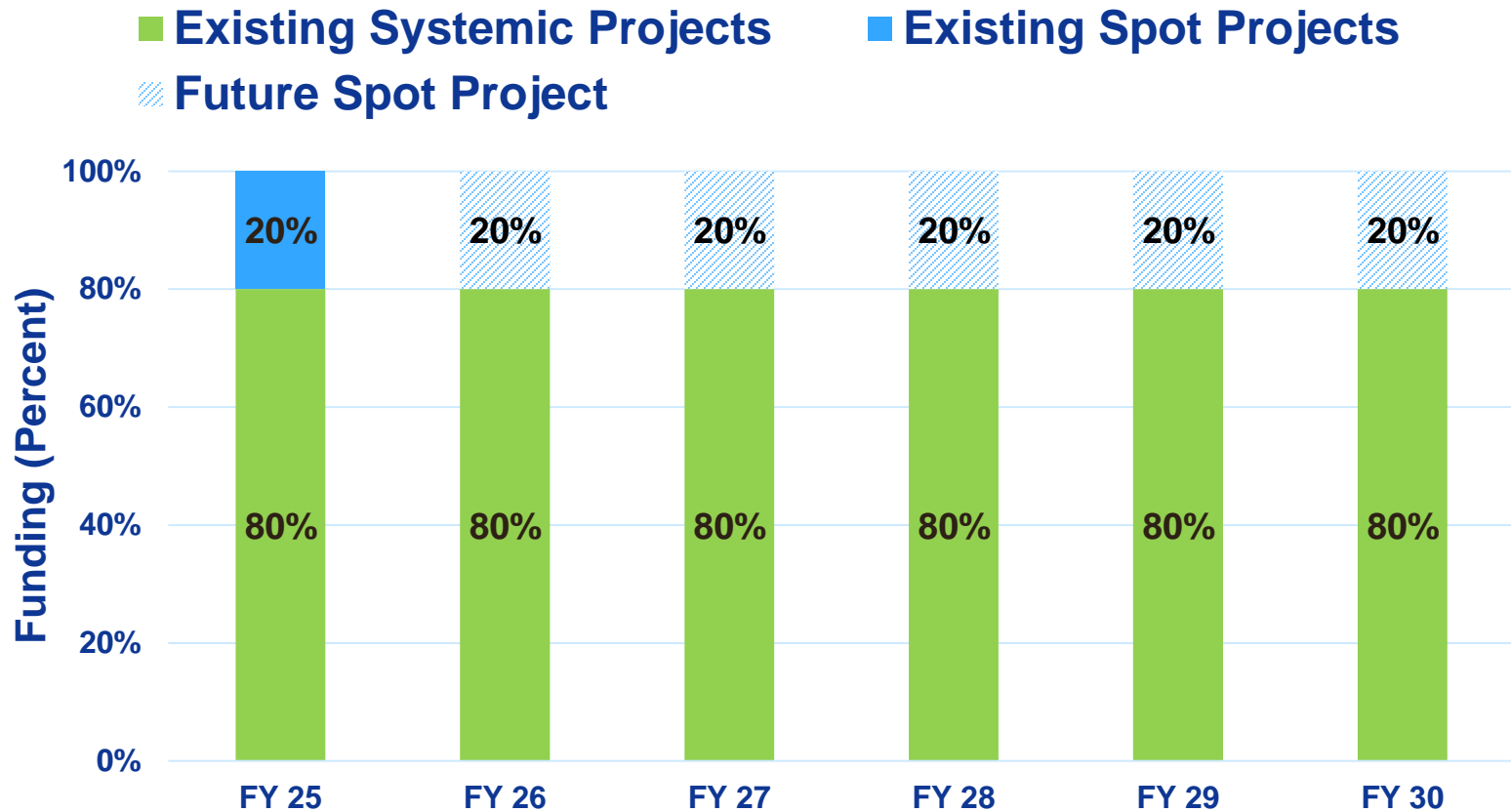
- **Implementation Plans shall**
 - **Be based on an assessment of risk and priority systemic treatments to include the locations, appropriate systemic treatments, cost estimates, and schedules on all public roads**
 - **Be consistent with the Strategic Highway Safety Plan**
 - **Be updated periodically to advance additional systemic treatments (2-3 yrs)**
 - **Include guidelines on program implementation**

HSIP Policy Development: Policy Implementation - Recommendations

Include approach to implement the policy and advance priorities and goals

- **Amend FY2020 SYIP to fund systemic safety improvements included in Initial Implementation Plan**
- **Allocate funds to systemic safety improvements identified in the Implementation Plan over the entire 6-years**
- **Restrict funding new spot improvement projects until FY2026 SYIP**
- **Provide VDOT Commissioner with flexibility to address more immediate spot improvement projects with CTB concurrence**
- **Return project savings to Statewide Account to:**
 - Cover cost increases, if needed
 - Further advance systemic treatments or
 - Fund spot improvement projects

HSIP Policy Development: Future Funding Distribution FY2025 – FY2030 SYIP



- For illustrative purposes, assumes level funding across all six years
- Assumes 5% funds for program development and approximate 80/20 split between systemic and spot improvements

HSIP Policy Development: Funding Distribution/Approach - Recommendations

Include funding distribution approach/formula

- **Funds to be distributed based on proportion of fatalities between VDOT and Locality maintained roads**
- **Funds to be allocated based on the risk-based needs assessment included in the Implementation Plan**
- **Include approach to selection of spot improvement projects (under development)**
- **Safety funds used for High Risk Rural Roads and Railway-Highway Crossings to be exempt**
- **Annual Report to include funding distribution information and recommendations on changes for Board consideration, if needed**

HSIP Policy Development: Annual Reporting Requirements - Recommendations

Include annual reporting requirements to provide progress updates and possible course corrections

- **Report should include**

- **Progress on advancement of systemic treatments**
- **Funding distribution information**
- **Anticipated benefits of investments**
- **Performance of investments**
- **Recommendations for changes to Implementation Plans**
- **Recommendations for changes to HSIP Policy**



HSIP Policy Development: Schedule and Next Steps

- **September CTB Meeting**
 - Present policy recommendations for HSIP prioritization, selection, and funding
 - Present draft initial Implementation Plan
- **Fall Transportation Meetings**
 - Obtain public comment on proposed policy
- **October CTB Meeting**
 - Provide update on public comment, present final proposed policy
- **November/December CTB Meeting**
 - CTB adopt new policy





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Thank you.

