

# US 340 ROCK SLIDE REPAIR PROJECT



## Virtual Informational Public Meeting and Availability of the Environmental Assessment

MONDAY,  
NOVEMBER 9, 2021

VIRTUAL PUBLIC MEETING  
4:00 - 7:00 PM



This meeting will be held virtually from 4:00 to 7:00 PM.



During that time, representatives from our project team will be available to answer questions virtually through the meeting website.

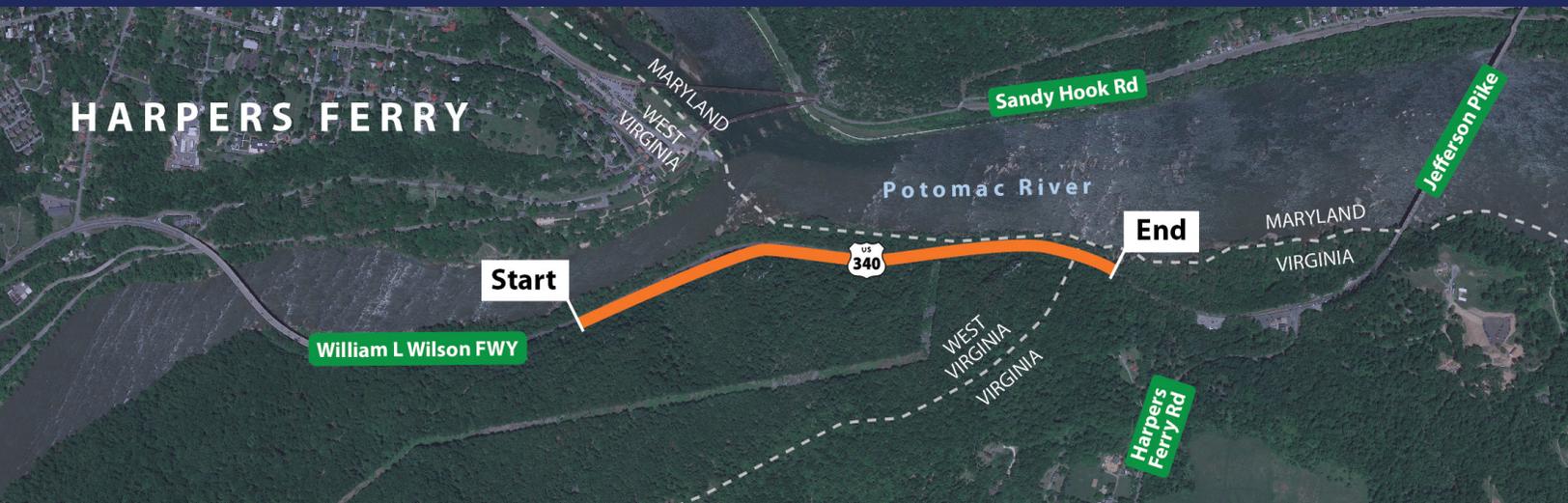


Information on how to submit comments is provided at the end of this handout.

### PURPOSE

The purpose of this virtual public meeting is to provide an update on the project and present the findings of the Environmental Assessment (EA) prepared for the proposed rock slide repairs along US 340. This project includes the implementation of rockfall protection and stabilization measures associated with the existing slopes along US 340 northbound, between Chestnut Hill Road and Harpers Ferry Road. This meeting complies with the public involvement requirements of the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA).

# PURPOSE AND NEED



## PROJECT DESCRIPTION

The project study area is approximately one mile long and is located along the northbound (NB) and southbound (SB) lanes of US 340 in Jefferson County, WV, in the Loudoun Heights region of the Harper's Ferry National Historical Park and west of the West Virginia / Virginia border on the southern bank of the Shenandoah and Potomac Rivers. US 340 is a high-traffic volume corridor serving local, commuter, and truck traffic from West Virginia, Virginia, and Maryland. This corridor also experiences high traffic volume from seasonal tourism due to its recreational and historical significance in the region. The existing cut slopes in the project study area are a product of US 340 construction in the mid-1950s and natural erosion along the Shenandoah River. The cut slopes and the exposed rock of natural slopes vary in height from 150 feet to greater than 300 feet above the roadway. The cut slopes in the project study area exhibit varying degrees of rockfall activity that present potential hazards to the traveling public, and require ongoing maintenance by the West Virginia Division of Highways (WVDOH).



## PURPOSE

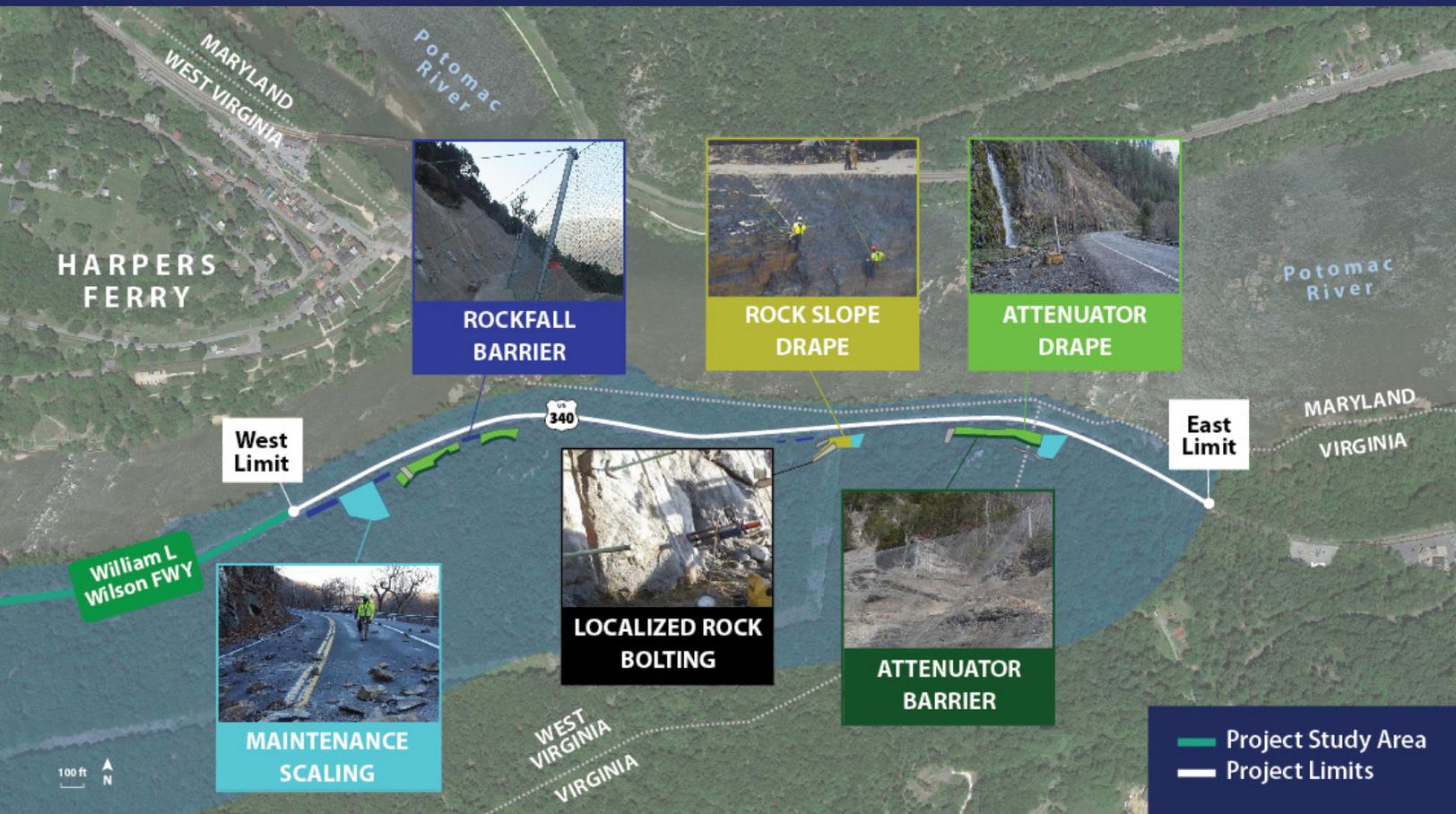
The purpose of this project is to implement rockfall protection and stabilization measures associated with the existing slopes along US 340 NB, while considering local traffic impacts and future development of the US 340 corridor.



## NEED

Due to the high volume of traffic (approximately 24,500 vehicles per day), and that US 340 is the main route through this area, rockfalls pose a threat to public safety. Not only from the rockfall itself, but from road closures that result from rockfalls, and the potential impact to emergency vehicle response times. Based on the analysis in a design study prepared in April 2018, there is a high potential for rockfall in the area and an established public safety need to implement rockfall protection and stabilization mitigation measures for the priority slopes.

# PRELIMINARY SLOPE REMEDIATION PLAN



## SLOPE REMEDIATION TECHNIQUES

For this project, several types of slope treatments are proposed to address specific issues. These were selected based on the geology and types of slides which are occurring on the hillside.

- **Maintenance scaling** involves removing loose or potentially unstable material by means of pry bars, pneumatic air bags or rams.
- **Rockfall barriers** are fences, typically along the roadside, which are constructed of materials capable of withstanding the energies of a rockfall event deep enough so that the grouted bars tie the existing slope together and prevents large scale, rock fall events.

## THERE ARE SEVERAL TYPES OF PROPOSED SLOPE TREATMENTS

- The **slope drape** and **attenuator drape** consist of an engineered wire mesh or cable netting that helps in controlling or directing rockfall to a safe location away from local traffic.
- The **attenuator barrier**, typically associated with a rock slope drape, acts similar to the rockfall barrier, but instead of at the roadway level, these are constructed on the slope to control rockfall and guide it to a safe area.
- **Rock bolting** helps secure the rock to the hillside by drilling and grouting in steel bars. These are deep enough so that the grouted bars tie the existing slope together and prevents large scale, rock fall events.

# ENVIRONMENTAL STUDIES AND TEMPORARY TRAFFIC CONTROL OPTIONS

## ENVIRONMENTAL ASSESSMENT

An EA was prepared to identify the natural, cultural, and socioeconomic resources within the study area. This evaluation also assessed the impact to these resources as a result of the proposed slope remediation. In addition, we evaluated the temporary impacts to the drivers and community during construction. The temporary traffic control for this project will require closure of US 340 for an extended period of time. This is due to the type of repairs and treatments along the rock face and the need to keep both motorists and the contractor safe at all times. As part of this meeting, we need your input on the two traffic control options that are under consideration:

### **OPTION A** Full Detour

All work completed while US 340 is closed

 **90 Days**    **\$ \$6.5M**

### **OPTION B** Staged Construction/Detour

#### Phase 1 (65 days)

- Full detour
- US 340 is closed while high reach slope remediation work is completed

#### Phase 2 (65 days)

- Maintain two lane traffic on US 340 to construct widening and slope remediation along corridor
- Reduced work zone speed limit

 **130 Days**    **\$ \$7.4M**



Environmental Assessment prepared to identify natural, cultural, and socioeconomic resources within the study area and assess the impact to these resources associated with the proposed slope remediation.

## DETAILED STUDIES TO SUPPORT ENVIRONMENTAL ASSESSMENT INCLUDE:



### **BAT PORTAL ASSESSMENT**

Not Present/No Impacts



### **WETLANDS**

Not Present/No Impacts



### **SECTION 4(F)**

Temporary Occupancy



### **SECTION 106**

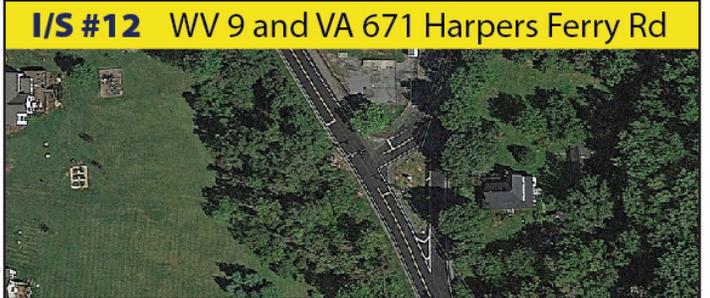
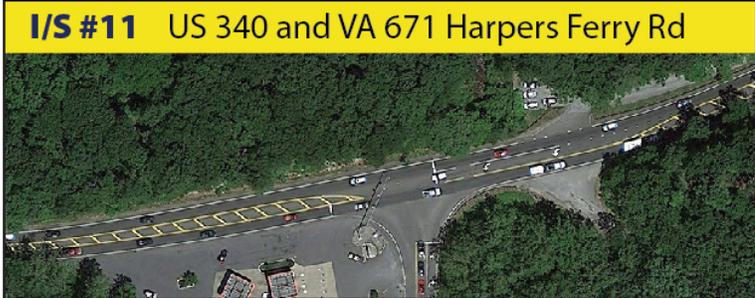
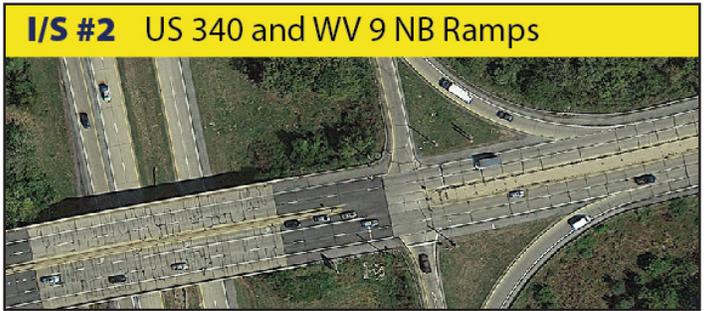
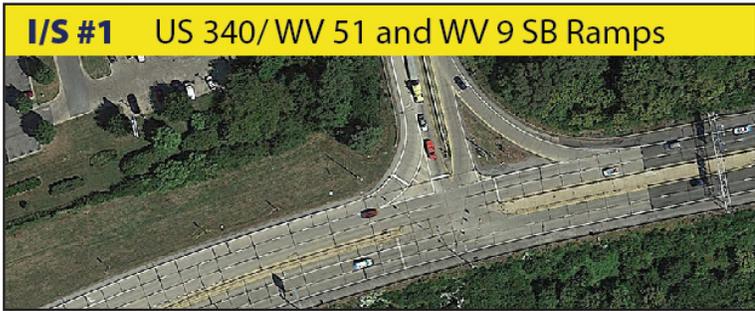
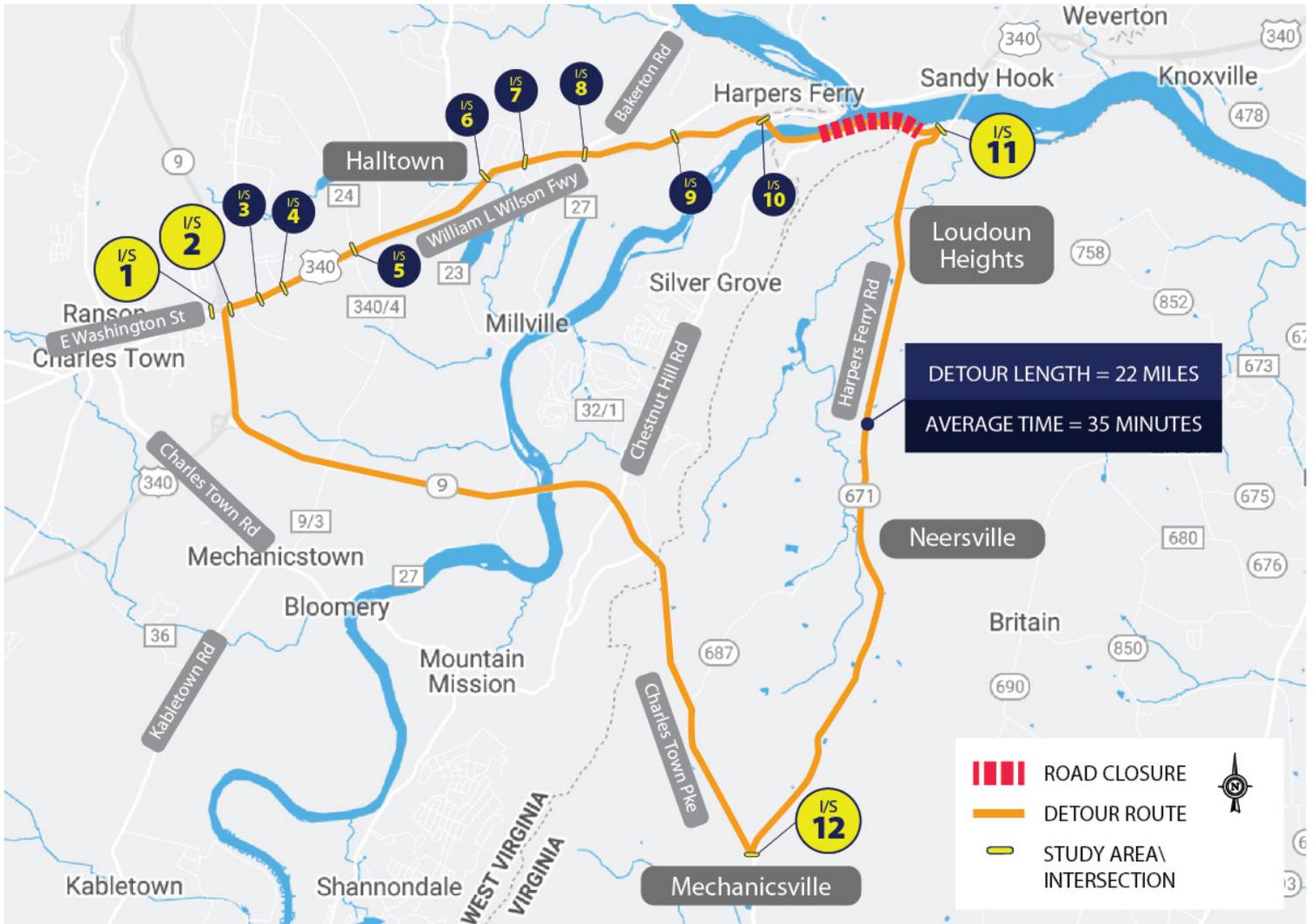
No Adverse Effect



### **VISUAL IMPACT ASSESSMENT**

No Adverse Effect

# PROPOSED DETOUR ROUTE



# WHY SHOULD YOU BE INVOLVED IN THE PROJECT?



Each comment and suggestion provided will help the involved agencies hear directly from the public. Your input is important and will be used to guide the project team as the project moves forward.

Please send written comments on or before **December 9, 2021** to:



Mr. Travis Long, Director  
Technical Support Division  
West Virginia Division of Highways  
1334 Smith Street  
Charleston, West Virginia 25301



Project Information and  
Comment Sheets can be found online at:  
**[www.US340HarpersFerry.com](http://www.US340HarpersFerry.com)**

Click on **“Comment on Engineering Project”**,  
and then click on **“US 340 Slide Repair”**

## US 340 ROCK SLIDE REPAIR PROJECT

STATE PROJECT: S319-340-15.78.00  
FEDERAL PROJECT: NHPP-0340(063)D US



U.S. Department  
of Transportation  
**Federal Highway  
Administration**