HNI OVERVIEW

1.0 BACKGROUND

The Highway Needs Inventory (HNI) is a technical reference and planning document which identifies highway improvements to serve existing and projected population and economic activity in the State as well as address safety and structural problems that warrant major construction or reconstruction.

The projects identified in this document represent only an acknowledgment of need based on technical analysis and adopted local and regional transportation plans. The **HNI is not a construction program, and inclusion of a project does not represent a commitment to implementation.** The HNI is not financially constrained nor is it based on revenue forecasts.

The HNI may be considered as a compilation of projected major highway deficiencies. It is important to note that only a portion of the projects in this document will be addressed in the future through selective capital improvements. Many of these needs will remain unfulfilled because the Department does not anticipate that the gap between needs and resources can ever be completely closed, even with the infusion of new revenue.

2.0 LEGAL BASIS OF THE HNI

The development of the HNI is required under Transportation Article 8 of the Annotated Code of Maryland. Title 8, section 610 defines the HNI as "…an identification of needs for highway projects, based on latest evaluation of highway conditions and transportation needs…"

Section 611 further requires that "in calendar year 1979 and in each second year following, the Administration, following an assessment of the highway conditions and transportation needs of this State, shall prepare those proposed modifications of the highway needs inventory that it considers necessary."

3.0 SCOPE OF HNI

The HNI is based on a technical evaluation of highway conditions. The general scope and approximate cost of needed highway improvements in this document are based on the application of reasonable design standards. However, this does not preclude further considerations of alternative solutions to the problem, or the "no build" option. Ultimately, more detailed project planning studies would be conducted on potential projects to determine more precise cost estimates and acceptable solutions to the identified need. The HNI lists only major capital construction projects which entail a significant increase in traffic capacity, extensive right-of-way, high cost or major impact.

Low cost capital improvements, otherwise known as "system preservation projects" such as resurfacing, safety and spot improvements, commuter parking, beautification, bridge rehabilitation/reconstruction, drainage improvements, rail crossing elimination, traffic control improvements, and emergency work are not included in the HNI. These projects are included in the annual update of the Department's Consolidated Transportation Program (CTP). Often these relatively low cost improvements serve to correct localized problems and to extend the time before major modernization of the facility becomes necessary. System preservation projects may in some cases result in an indefinite deferral of a major project.

4.0 ROLE OF THE HNI IN THE PLANNING PROCESS

The Maryland Department of Transportation's planning process affects all modes and covers all aspects from policy/system planning and program development through detailed project planning and implementation. The key planning documents developed by the Department to establish the priority of various proposed highway improvements are as follows: (1) State Report on Transportation (SRT); (2) Maryland Transportation Plan (MTP); and (3) the Consolidated Transportation Program (CTP).

The HNI serves as a technical reference and reflection of these planning documents. In addition, the Department participates in the development of local and regional transportation plans which are the responsibility of local and regional planning agencies.

5.0 HNI TERMINOLOGY

There are 31,343 center line miles of roadway in the state of Maryland. Of this total, the Maryland Department of Transportation State Highway Administration (MDOT SHA) maintains 5,206 center line miles (16.6%). Although this represents less than 20 percent of the total miles of roadways in the state, these highways account for approximately 70% of the total vehicle miles of travel in the state. The 5,206 miles of highways maintained by the MDOT SHA are categorized for funding purposes as Primary and Secondary highways.

5.1 Primary System

The State Primary Systems consists of approximately 1,199 miles of state maintained routes or 23 percent of the total State maintained road mileage. The State Primary System was originally adopted in 1972 and revised in 1978 in accordance with provisions of State law. The Primary System serves the state in the same manner as the Interstate System serves the nation. It has been a policy of the Department to develop the Primary System with a maximum practical degree of access control in order to provide safety to the motorist.

5.2 Secondary System

The Secondary System is a network of State routes which serve inter-regional and localized traffic. This network consists of 4,005 miles (77%) of the total state maintained roadways and provides feeder and support functions to the Primary System. It also complements county highway systems.

6.0 IMPROVEMENT TYPES

For projects in the Consolidated Transportation Plan (CTP), the specific improvement type identified is also shown in the HNI. Improvement types shown for other projects in the HNI are categorical rather than specific, pending project planning studies. The project planning studies may lead to the selection of a "no build" option or a different improvement type than shown in the HNI.

The improvement types used in the HNI may entail significant right-or-way acquisition, significant increases in capacity and/or significant environmental impact. The basic improvement types used in the HNI are described as follow:

6.1 Reconstruction

These are improvements where old pavement and appurtenances such as drainage structures are removed and replaced or substantially modified. Such reconstruction may apply to the existing number of lanes or dualization, adding or modifying interchanges or existing highway on the same alignment.

6.2 Construction

These are improvements of a totally new facility and appurtenances, including bridges. A new facility will generally provide a highway where none exits, or an alternate facility to an existing highway that will remain open and continue to serve through traffic.

6.3 Access Control Improvement

Control of access by definition is where the ingress and egress to abutting land, onto and/or across the highway is fully or partially restricted by public authority. Highway access can by controlled as follows:

6.3.1 Full Control

This gives preference to through traffic by providing grade separation interchanges with selected public roads only and by prohibiting intersecting at-grade and direct private driveway connections.

6.3.2 Partial Control

This gives preference to through traffic to a degree that, in addition to or in lieu of interchanges with major public roads, there may be selected at-grade intersections to public streets only.

6.3.3 **Uncontrolled Access**

This allows the number of points of ingress and egress to be limited only by control over the placement and the geometric design of connections as necessary for the safety of the traveling public.

6.4 Lane Definitions

The specific number of lanes is referenced only for two lane highways in the HNI, and any highway improvement needing more than two lanes is generally referred to as "multi-lane". Where the case for a multi-lanes improvement is more firmly established; the following terms may be used:

6.4.1 Divided Highway.

This is a multi-lane highway where opposing roadways are separated by a median or barrier.

6.4.2 Freeway.

This is divided highway, usually serving a principal arterial function, providing for unrestricted through traffic movement and full control of access (called an expressway under current Maryland law).

7.0 COST ESTIMATES

Cost estimates for prospective improvements are approximate, and are based on likely improvement types. The estimates are not detailed engineering estimates nor do they reflect substantive engineering analysis. These cost estimates do not imply fixed decisions, nor do they preclude alternative solutions to the problem. They merely provide the basis for a general appraisal of the total cost of all highway needs, as well as some idea of the distribution of highway needs across the State.


HIGHWAY
NEEDS
INVENTORY
Revised 2021
WASHINGTON
Prepared by:
REGIONAL AND INTERMODAL PLANNING DIVISION
OFFICE OF PLANNING AND PRELIMINARY ENGINEERING
Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
CONTENTS:
PRIMARY
SECONDARY
Garrett
Allegany
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Howard
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Fredericksburg
California
Lancaster
Philadelphia
Wilmington
Chambersburg
Shenandoah National Park
Richmond
Virginia
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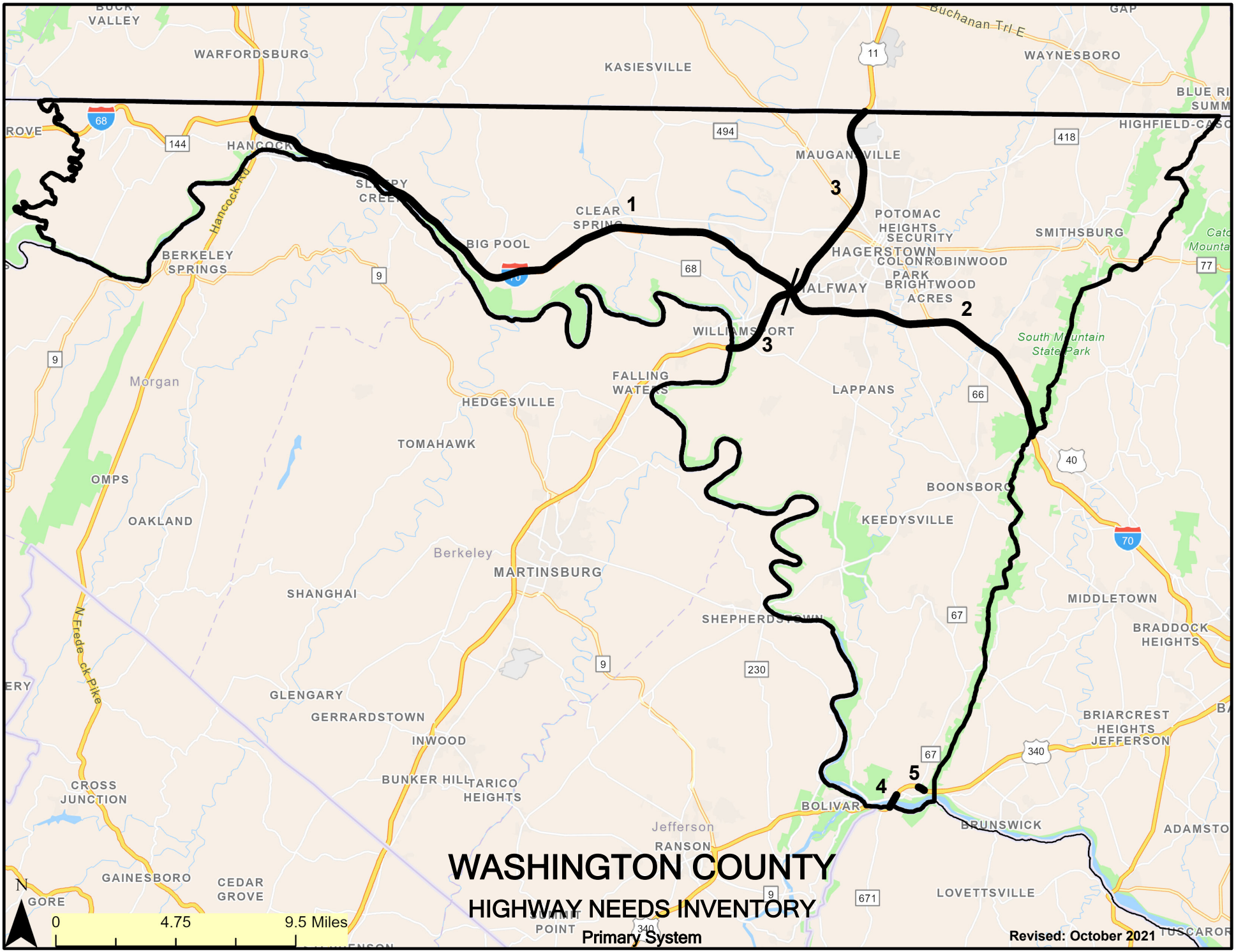
Chesapeake Bay


WASHINGTON COUNTY
HIGHWAY NEEDS INVENTORY
Primary System
Revised: October 2021
0
4.75
9.5 Miles
N
1
2
3
4
5
WARFORDSBURG
KASIESVILLE
WAYNESBORO
HANCOCK
BERKELEY SPRINGS
CLEAR SPRING
BIG POOL
MAUGANSVILLE
HAGERSTOWN
POTOMAC HEIGHTS
SECURITY
COLONROBINWOOD PARK
BRIGHTWOOD ACRES
HALFWAY
SMITHSBURG
WILLIAMSPORT
South Mountain State Park
FALLING WATERS
LAPPANS
HEDGESVILLE
TOMAHAWK
BOONSBORO
KEEDYSVILLE
OAKLAND
Berkeley
MARTINSBURG
SHANGHAI
SHEPHERDSTOWN
MIDDLETOWN
BRADDOCK HEIGHTS
GLENGARY
GERRARDSTOWN
INWOOD
BUNKER HILL
TARICO HEIGHTS
BRIARCREST
HEIGHTS
JEFFERSON
CROSS JUNCTION
BOLIVAR
BRUNSWICK
Jefferson
RANSON
GAINESBORO
CEDAR GROVE
GORE
SUMMIT POINT
LOVETTSVILLE
Morgan
OMPS
Hancock Rd
N Frederick Pike

HIGHWAY NEEDS INVENTORY
WASHINGTON COUNTY – PRIMARY ROUTES
REVISED 2021

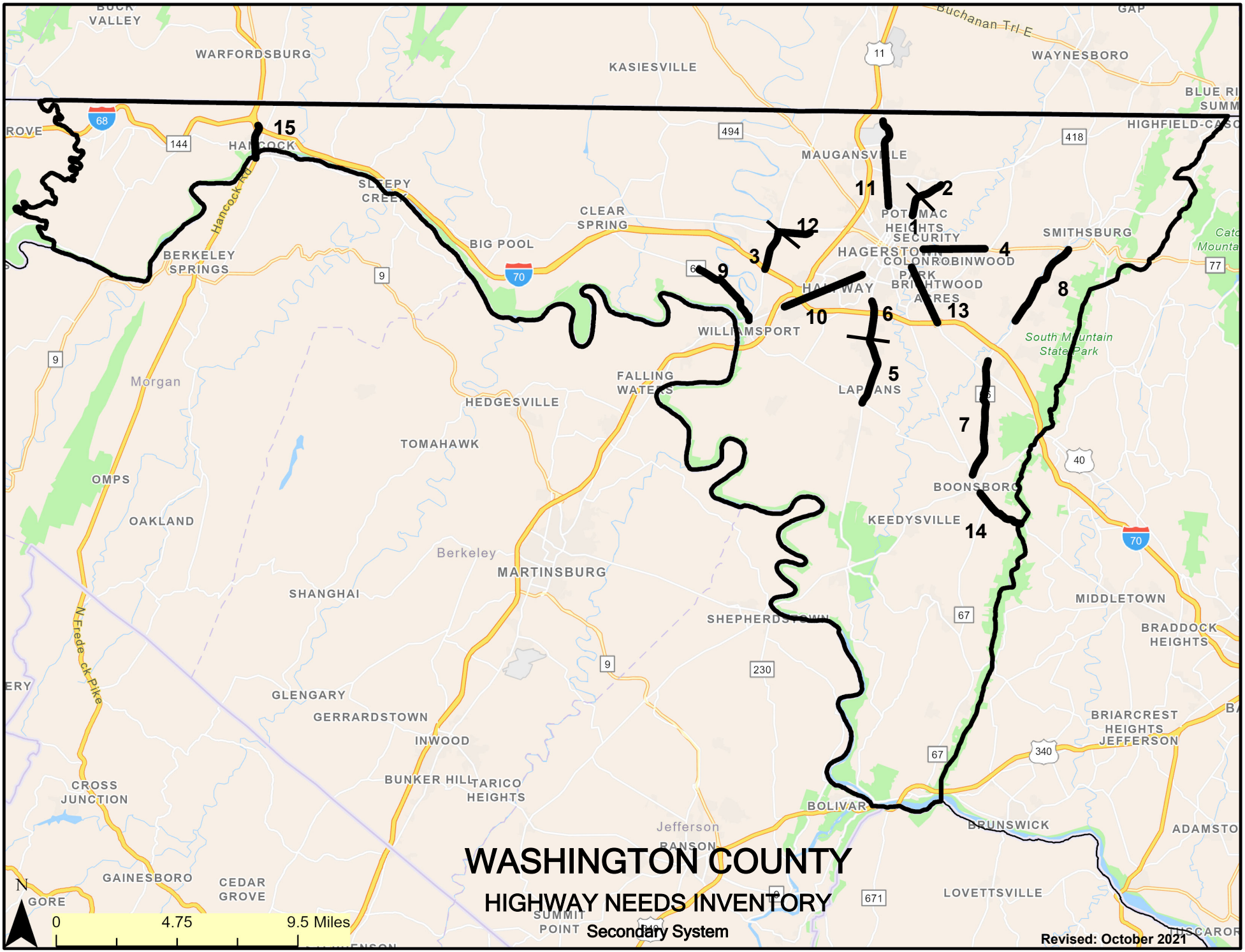
Map Reference 1, IS 70, Eisenhower Memorial Highway from IS 68 to IS 81, 24.7 miles in length, to be reconstructed as a freeway at a cost of $1,271,300,000.

Map Reference 2, IS 70, Eisenhower Memorial Highway from IS 81 to the Frederick County line, 12.6 miles in length, to be reconstructed as a freeway at a cost of $835,900,000.

Map Reference 3, IS 81, Maryland Veterans Memorial Highway from the West Virginia State line to the Pennsylvania State line, 12.1 miles in length, to be reconstructed as a freeway at a cost of $399,200,000.

Map Reference 4, US Route 340, Jefferson Pike from the Virginia State line to west of Keep Tryst Road (west junction), 0.6 miles in length, to be reconstructed as a divided highway including the Potomac River Bridge at a cost of $61,900,000.

Map Reference 5, US Route 340, Jefferson Pike from MD 67 to Keep Tryst Road (east junction), 0.3 miles in length, to be reconstructed as a divided highway including an interchange at a cost of $85,500,000.


WASHINGTON COUNTY
HIGHWAY NEEDS INVENTORY
Secondary System
Revised: October 2021
0
4.75
9.5 Miles
N
15
11
2
1
12
3
4
9
8
10
6
13
5
7
14
WARFORDSBURG
KASIESVILLE
WAYNESBORO
HANCOCK
SLEEPY CREEK
CLEAR SPRING
BIG POOL
BERKELEY SPRINGS
MAUGANSVILLE
POTOMAC HEIGHTS
SECURITY
HAGERSTOWN
COLONIAL PARK
ROBINWOOD
BRIGHTWOOD ACRES
SMITHSBURG
HALFWAY
WILLIAMSPORT
South Mountain State Park
FALLING WATERS
LAPPANS
HEDGESVILLE
TOMAHAWK
Morgan
OMPS
OAKLAND
BOONSBORO
KEEDYSVILLE
Berkeley
MARTINSBURG
SHANGHAI
SHEPHERDSTOWN
MIDDLETOWN
BRADDOCK HEIGHTS
GLENGARY
GERRARDSTOWN
INWOOD
BUNKER HILL
TARICO HEIGHTS
BRIARCREST HEIGHTS
JEFFERSON
CROSS JUNCTION
BOLIVAR
BRUNSWICK
Jefferson
RANSON
GAINESBORO
CEDAR GROVE
GORE
SUMMIT POINT
LOVETTSVILLE
HIGHFIELD-CASCADE
BLUE RIDGE SUMMIT
GAP
Buchanan Trl E
N Frederick Pike
Hancock Rd

HIGHWAY NEEDS INVENTORY
WASHINGTON COUNTY – SECONDARY ROUTES
REVISED 2021

Map Reference 1, MD Route 60, Potomac Avenue from Northern Avenue to Marsh Pike, 0.7 miles in length, to undergo multi-lane urban reconstruction at a cost of $19,600,000.

Map Reference 2, MD Route 60, Leitersburg Pike from Marsh Pike to Longmeadow Road, 1.1 miles in length, to undergo multi-lane reconstruction at a cost of $16,000,000.

Map Reference 3, MD Route 63, Greencastle Pike from IS 70 to US 40, 1.6 miles in length, to undergo multi-lane reconstruction at a cost of $68,200,000.

Map Reference 4, MD Route 64, Jefferson Boulevard from Eastern Boulevard to Little Antietam Road in Chewsville, 2.4 miles in length, to undergo multi-lane reconstruction at a cost of $71,400,000.

Map Reference 5, MD Route 65, Sharpsburg Pike from MD 68 to Poffenberger Road, 3.2 miles in length, to undergo multi-lane reconstruction at a cost of $46,400,000.

Map Reference 6, MD Route 65, Sharpsburg Pike from Poffenberger Road to the Hagerstown south limit, 1.2 miles in length, to undergo multi-lane urban reconstruction at a cost of $97,800,000.

Map Reference 7, MD Route 66, Mapleville Road from US 40 Alternate to Braeburn Drive, 4.7 miles in length, to be reconstructed as a 2-lane roadway at a cost of $58,700,000.

Map Reference 8, MD Route 66, Mapleville Road from south of Mount Aetna Road to MD 64, 3.9 miles in length, to be reconstructed as a 2-lane roadway at a cost of $51,900,000.

Map Reference 9, MD Route 68, Clearspring Road from Pinesburg Road to US 11, 3.0 miles in length, to be reconstructed as a 2-lane roadway at a cost of $39,900,000.

Map Reference 10, US Route 11, Virginia Avenue from 0.5 miles north of IS 81 to 0.1 miles south of Wilson Boulevard, 3.3 miles in length, to undergo multi-lane urban reconstruction at a cost of $69,400,000.

Map Reference 11, US Route 11, Middleburg Pike from the Hagerstown north limit to Industry Drive, 3.4 miles in length, to undergo multi-lane urban reconstruction at a cost of $68,400,000.

Map Reference 12, US Route 40, National Pike from MD 63 to MD 144 WA, 1.2 miles in length, to undergo multi-lane reconstruction at a cost of $18,400,000.

Map Reference 13, US Route 40, Dual Highway from Eastern Boulevard to IS 70, 2.4 miles in length, to undergo divided highway reconstruction at a cost of $242,700,000.

Map Reference 14, US Route 40 Alternate, Boonsboro Pike from 0.5 miles west of MD 67 to the Frederick County line, 2.2 miles in length, to be reconstructed as a 2-lane roadway at a cost of $31,500,000.

Map Reference 15, US Route 522, Warfordsburg Road from the West Virginia State line to IS 70, 1.3 miles in length, to undergo multi-lane reconstruction including the Potomac River Bridge at a cost of $100,000,000.