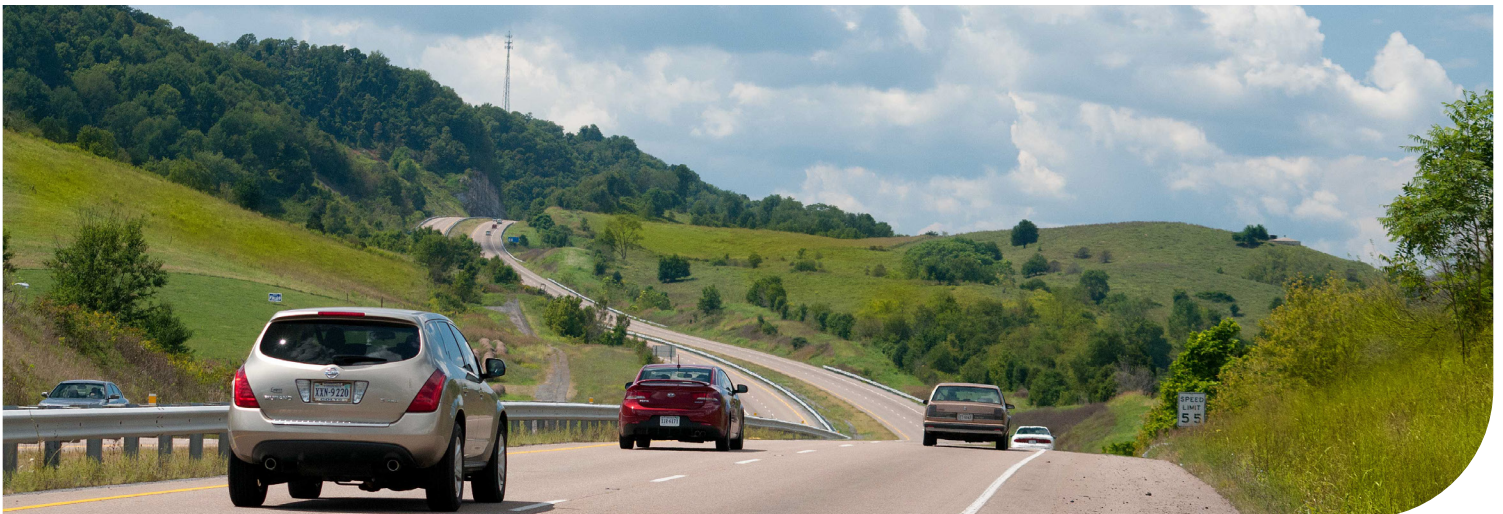




APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

2021 Cost-to-Complete Estimate Report

March 2021



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March 2021

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Acknowledgments

The Appalachian Regional Commission sincerely appreciates the enthusiasm, dedication, and hard work of the personnel in the state departments of transportation and the Federal Highway Administration (FHWA) who prepared the Appalachian Development Highway System (ADHS) 2021 Cost-to-Complete Estimates.

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The Appalachian Transportation Institute (ATI), located at Marshall University, has assisted the Appalachian Regional Commission with the cost-to-complete estimating process. The Appalachian Regional Commission extends its sincere appreciation to ATI for their assistance.

The Appalachian Regional Commission would like to thank Dan Hodge of Hodge Economic Consulting for his support in reviewing and editing this report.

OVERVIEW

Cost to Complete the Appalachian Development Highway System

In cooperation with the Federal Highway Administration and the state departments of transportation (DOTs), the Appalachian Regional Commission (ARC) regularly updates the cost-to-complete estimates for the unfinished Appalachian Development Highway System (ADHS) corridors. The 2021 ADHS cost-to-complete estimate is \$10.3 billion (in 2020 dollars). In addition, state DOTs have expended \$598.7 million in non-federal funds to pre-finance ADHS projects. These pre-finance costs are potentially eligible for federal reimbursement. As of December 31, 2020, \$1.25 billion was available to states for the ADHS. This includes federal funding previously apportioned to the Appalachian states, federal discretionary grants awarded for ADHS projects, and state funds explicitly committed for ADHS projects.

Now, with renewed congressional interest in providing additional dedicated resources for completing the ADHS, this *2021 Cost-to-Complete Estimate Report* can demonstrate the plans and priorities of state DOTs for work on specific corridors.

Authorization and Funding of the Appalachian Development Highway System

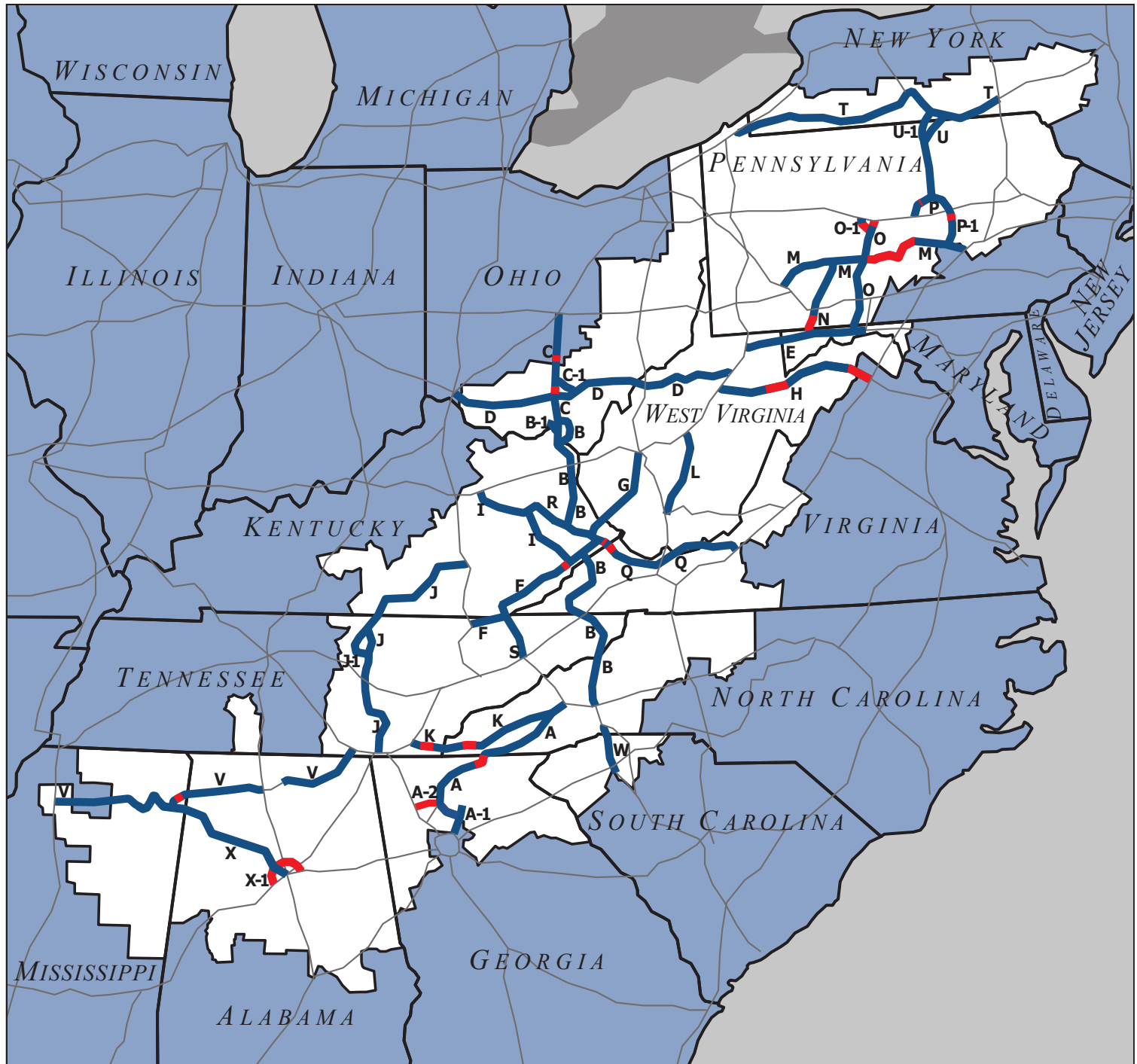
In 1964, the President's Appalachian Regional Commission (PARC) reported to Congress that economic growth in Appalachia would not be possible until the Appalachian Region's isolation had been overcome. Because the cost of building highways through Appalachia's mountainous terrain was high, the Appalachian Region (the Region) had never been served by adequate roads. Its network of narrow, winding, two-lane roads, snaking through narrow stream valleys or over mountaintops, was slow to drive, unsafe, and worn out in many places. The nation's Interstate Highway System had largely bypassed the Region, going through or around the Region's rugged terrain as cost-effectively as possible.

The PARC report and the Appalachian governors placed top priority on a modern highway system as the key to economic development. As a result, Congress authorized the construction of the ADHS in the Appalachian Regional Development Act of 1965. The ADHS was designed to generate economic development in previously isolated areas, supplement the Interstate Highway System, connect Appalachia to the Interstate Highway System, and provide access to areas within the Region as well as to markets in the rest of the nation.

For decades, the ADHS, a 3,090-mile network of highways linking the Region to the Interstate Highway System, has facilitated economic development across Appalachia. The ADHS's 33 corridors provide access to regional and national markets, contributing to growth opportunities and improved access in Appalachia.

Since its inception in 1965, the ADHS generally received dedicated annual funding for its construction from Congress. However, in 2012, the Moving Ahead for Progress in the 21st Century (MAP-21) Act and its successor, the Fixing America's Surface Transportation (FAST) Act, no longer provided dedicated ADHS funds to state DOTs. States were subsequently allowed to build and complete ADHS corridors at their own discretion per a larger, more general federal allocation. To encourage states to complete the system, Congress gave states the authority to build ADHS corridors with 100 percent federal funding. As economic developers, ARC works directly with the Federal Highway Administration and state transportation authorities in an advisory role during this process. In 2020, for the first time in a number of years, dedicated funding of \$100 million was allocated to the U.S. Department of Transportation for the purposes of constructing the ADHS. This same level of funding, \$100 million, was provided again in Fiscal Year (FY) 2021 U.S. Department of Transportation appropriations. In FY 2020, the funds were distributed to the states based on each state's relative proportional share of remaining planned ADHS work, which is based on the *2013 ADHS Completion Plan*. In FY 2021, the funds were distributed based on the relative proportional share based on the *2013 ADHS Completion Plan*, with adjustments based on the *2020 ARC Future Outlook Report*.

Appalachian Development Highway System Completion Map (as of September 30, 2020)



- ADHS Miles Open to Traffic
- ADHS Miles Not Open to Traffic
- Interstate Highway System

Status of Completion of the ADHS

As of September 30, 2020, a total of 2,814 miles, or 91.1 percent of the 3,090 miles authorized for the ADHS, were either complete (2,655.4 miles); open to traffic with stage construction remaining or open to traffic and meeting traffic needs (112.7 miles); or under construction (45.9 miles). Another 44.7 miles were in the design and right-of-way acquisition phase, and 231.4 miles were in the location studies phase.

Status of Completion of the ADHS (Miles) (as of September 30, 2020)

State	Total Miles Eligible for ADHS Funding	MILES NOT OPEN TO TRAFFIC			MILES OPEN TO TRAFFIC		
		Location Study Needed or Underway	Design and/or Right-of-Way Under Way	Construction Under Way	Remaining Stage Construction Needed	Partially Complete and Meeting Traffic Needs	Complete
Alabama	295.7	43.3	21.0	3.2	6.4	28.9	192.9
Georgia	132.5	20.5	10.5	0.0	0.0	0.0	101.5
Kentucky	426.3	8.0	0.5	4.2	0.0	0.0	413.6
Maryland	83.2	1.1	0.0	1.4	0.0	3.7	77.0
Mississippi	117.5	0.0	0.0	8.3	0.0	0.0	109.2
New York	222.0	0.0	0.0	0.0	0.0	1.3	220.7
North Carolina	204.3	18.1	0.0	0.0	8.0	0.0	178.2
Ohio	201.5	7.1	0.0	0.0	0.0	0.0	194.4
Pennsylvania	453.1	87.4	8.4	6.1	2.9	0.0	348.3
South Carolina	22.9	0.0	0.0	0.0	0.0	0.0	22.9
Tennessee	329.3	14.0	0.0	0.0	25.0	36.5	253.8
Virginia	192.2	16.6	0.6	11.5	0.0	0.0	163.5
West Virginia	409.6	15.3	3.7	11.2	0.0	0.0	379.4
Total	3,090.1	231.4	44.7	45.9	42.3	70.4	2,655.4

Notes: Totals may not add because of rounding.

2021 ADHS COMPLETION PLAN AND COST-TO-COMPLETE ESTIMATE

2021 Process for ADHS Completion Plan and Cost-to-Complete Estimate

Individual segments within each ADHS corridor are classified according to one of five stages of completion: complete, open to traffic with stage construction work remaining, under construction, design and right-of way acquisition, and location studies under way. The states used this classification data in

preparing their ADHS completion plans. States were also requested to provide a narrative explaining their plans to complete their ADHS corridors.

For the 2021 cost-to-complete estimate, state DOTs were allowed to provide their estimated cost of remaining work through planning-level estimates. ARC allowed states to use their own estimating methodologies for this effort. Planning estimates are usually conceptual in nature and can be based on historic cost averages for projects with similar work scope and location characteristics, such as lane-mile cost averages for roadway work or square-foot cost averages for bridge work. Cost-to-complete estimates are shown in year 2020 dollars, rather than year-of-expenditure dollars. Year 2020 dollars were used to provide a baseline comparison because of the vast variations in completion schedules among the states. These differing schedules would cause inflation to significantly impact the cost-to-complete estimates for corridors projected to be completed more than 10 years out.

Since the last estimate published in 2012, several states have found it necessary to scale back proposed work associated with completion of the ADHS. Typically, these modifications have occurred due to (a) the lack of dedicated funding, (b) challenges pertaining to environmental approvals, and/or (c) other competing priorities for funding within a state. States were required to document any adjustments to their completion plan, including changes to the scope and schedule for specific corridors in their submitted narratives.

States prepared their ADHS completion plans based on their respective state transportation priorities and projected funding availability.

States were allowed to submit pre-financed costs on ADHS projects that could be reimbursed with federal (ADHS) funds in the future. These are referred to as unconverted Advance Construction amounts. Advance Construction (AC) allows states to accelerate ADHS projects by using non-federal funds (when federal funds are not available), while maintaining eligibility to be reimbursed with Federal-aid funds at a later date. In the past when dedicated ADHS funding was expected, the cost of pre-financed work was included as an eligible cost in the ADHS estimate. It should be noted that for the estimate, state DOTs have typically planned for the use of other federal-aid funds, and not ADHS funds, as reimbursement for the pre-financed work. However, because AC was an eligible part of the cost-to-complete estimate in past estimates, it is also included in the 2021 Cost-to-Complete Estimate, even though state DOTs did not specify federal ADHS funds for reimbursement.

States were also required to specify all funding available for future ADHS projects. This includes federal funding previously apportioned to the Appalachian states, federal discretionary grants awarded for ADHS projects, and state funds explicitly committed for ADHS projects. States were allowed to exclude any ADHS funds that they have committed to Local Access Road (LAR) projects, including 2021 LAR projects.

Cost to Complete the ADHS and Remaining Needs

The 2021 total cost-to-complete estimate for the ADHS, as of December 31, 2020, is \$10.3 billion (in 2020 dollars). In addition, state DOTs have expended \$598.7 million in non-federal funds to pre-finance ADHS projects. These pre-finance costs are potentially eligible for federal reimbursement. As of December 31, 2020, \$1.25 billion in federal funding (apportioned and discretionary) and exclusively committed state funding was available for the ADHS.

The table below shows the cost to complete each state's ADHS corridors and the remaining funds needed.

Cost to Complete the ADHS, by State

as of December 31, 2020

State	Cost to Complete ADHS Corridors	Pre-Financed (Advance Construction) Amounts	Available Funds	Remaining Funds Needed	Percentage of Total Remaining Funds Needed
Alabama	\$3,531,370,000	\$0	\$60,700,000	\$3,470,670,000	35.87%
Georgia	\$347,800,000	\$0	\$176,308,000	\$171,492,000	1.77%
Kentucky	\$171,900,000	\$0	\$2,220,000	\$169,680,000	1.75%
Maryland	\$207,000,000	\$16,040,000	\$29,370,000	\$193,670,000	2.00%
Mississippi	\$0	\$13,990,000	\$510,000	\$13,480,000	0.14%
New York	\$0	\$0	\$0	\$0	0.00%
North Carolina	\$490,000,000	\$0	\$199,600,000	\$290,400,000	3.00%
Ohio	\$119,500,000	\$407,810,000	\$4,960,000	\$522,350,000	5.40%
Pennsylvania	\$2,999,550,000	\$0	\$140,530,000	\$2,859,020,000	29.55%
South Carolina	\$0	\$0	\$0	\$0	0.00%
Tennessee	\$463,900,000	\$0	\$240,500,000	\$223,400,000	2.31%
Virginia	\$440,520,000	\$64,900,000	\$34,960,000	\$470,460,000	4.86%
West Virginia	\$1,559,100,000	\$96,000,000	\$364,205,000	\$1,290,895,000	13.34%
Total	\$10,330,640,000	\$598,740,000	\$1,253,863,000	\$9,675,517,000	100.00%

Table notes:

- All costs are in 2020 dollars.
- See Appendix for the cost to complete each corridor and remaining funds needed by state.
- “Remaining Funds Needed” is determined by taking the “Cost to Complete ADHS Corridors” estimate, adding “Pre-Financed (Advance Construction) Amounts,” and then subtracting “Available Funds.”
- Projects that have been federally authorized but not yet completed are not included in the cost-to-complete ADHS corridors estimate.

Factors Affecting the Cost of Remaining Work

The estimated cost of completing the ADHS decreased from \$11.4 billion in the ADHS 2012 cost-to-complete estimate to \$10.3 billion in the ADHS 2021 cost-to-complete estimate. Factors affecting the 2021 cost estimate include the following:

- **Inflation.** At a national level, highway construction costs have increased by 35 percent on average since the ADHS 2012 cost-to-complete estimate, where costs were calculated in year

2010 dollars. This increase is based on the FHWA's National Highway Construction Cost Index when comparing the year 2010 construction cost index with the year 2020 construction cost index.

- **Cost Refinements.** As highway projects progress through stages of development (location, design/right of way, and construction), earlier estimates are refined and updated to reflect changing specifications and costs for construction, right of way, environmental mitigation measures, and design standards. Estimating costs for highway miles in the location phase is particularly challenging, as final alignments have not yet been determined, and engineering requirements such as fills and number and types of bridges are not known at that stage.

ADHS Unobligated Balances

In order to determine the remaining federal funding needed to complete the ADHS, an inventory was developed of each state's unobligated ADHS funds from all federal sources (TEA-21, SAFETEA-LU, earmarks, and special U.S. DOT appropriations) and state funds committed to ADHS projects. The Federal Highway Administration's Financial Management Information System (FMIS) showed that as of December 31, 2020, a total of \$978 million in ADHS funding was unobligated.

ADHS Unobligated Balances as of December 31, 2020

State	Unobligated Balance
Alabama	\$60,705,906
Georgia	\$176,307,734
Kentucky	\$2,216,085
Maryland	\$47,380,585
Mississippi	\$510,243
New York	\$22,451,599
North Carolina	\$205,603,871
Ohio	\$4,960,212
Pennsylvania	\$140,533,004
South Carolina	\$20,817,886
Tennessee	\$240,486,500
Virginia	\$34,960,495
West Virginia	\$21,204,725
Total	\$978,138,851

When determining the total available funds for ADHS projects, the above ADHS unobligated balances were reduced as necessary to be consistent with decisions by some states to use ADHS funds for LAR projects. In states where all ADHS work has been completed (New York and South Carolina), the unobligated balances were not included in the total available funds for ADHS projects. The total available funds for ADHS projects include federal discretionary grants awarded for ADHS projects and state funds explicitly committed to ADHS projects. These adjustments result in a total amount of \$1.25 billion available for ADHS projects.

Estimated Completion Dates

The ADHS completion plans submitted by the states to ARC included estimated completion dates for all corridor segments the states currently plan to complete. Two states (New York and South Carolina) have completed their corridors. In addition, the completion of Mississippi's Corridor V in 2023 will finish all of Mississippi's corridors. Most states (Alabama, Georgia, Kentucky, Maryland, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia) have indicated that, given limited funding availability, their corridors will not be finished until beyond 2030.

State Completion Plans

State DOTs submitted detailed narratives describing their planned ADHS work and estimated costs. These individual plans, taken together, provide the basis for the cost to complete of the ADHS discussed in the Cost to Complete the ADHS and Remaining Needs section above. Each state's plan for completion and cost is summarized in a matrix. In certain cases, ARC transportation staff possessed additional information that required adjustments to information contained in the state narratives. These adjustments were typically minor in nature and are footnoted as a part of each state's individual cost matrix, shown in the Appendix.

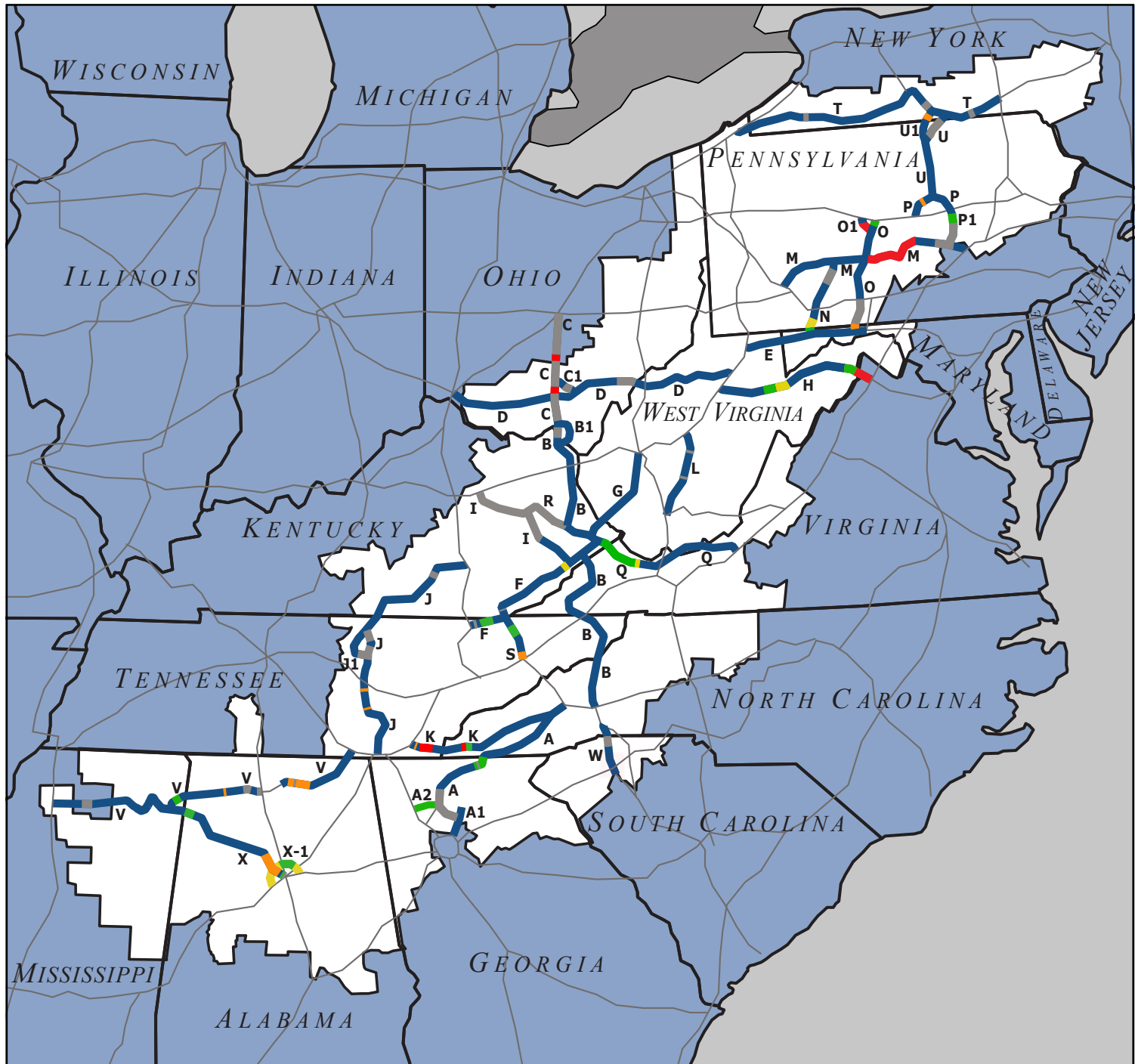
LOOKING AHEAD

Future Outlook

As a way to provide the most current information regarding the plans and priorities of each state DOT for completing the ADHS, ARC has initiated a yearly reporting of each state's future outlook for their corridors. This information was included for the first time in the *FY 2019 Status of the Appalachian Development Highway System*, published in January 2020, and reflected the future outlook as of September 30, 2019. Because of the availability of additional resources for the ADHS in FY 2020, ARC allowed all states to update their future outlook submissions midway through FY 2020.

The **Future Outlook of the Appalachian Development Highway System** Map (updated as of April 30, 2020) provides a visual depiction of the schedules and priorities of the state DOTs regarding their respective corridors.

Future Outlook of the Appalachian Development Highway System (as of September 30, 2020)



- Non-Participating
- Complete
- Partially Complete - Meeting Traffic Needs
- Incomplete - Significant Progress (likely complete within 10 years)
- Incomplete - Some Progress (likely complete in more than 10 years)
- Incomplete - Completion Date Undetermined

Transportation and Economic Benefits of ADHS Completion

The 2017 study, *Economic Analysis of Completing the Appalachian Development Highway System*, estimates the economic outcomes of ADHS work completed to date and forecasts the future economic impacts, benefits, and costs associated with completing the system. Key findings related to the approximately 90 percent of the ADHS completed as of 2017 include the following:

- Increased economic activity associated with the ADHS system has helped create or support over 168,000 jobs across the 13 Appalachian states, with over \$7.2 billion of worker income annually.
- ADHS investments made between 1965 and 2015 generated over \$19.6 billion per year of added business sales in Appalachia, representing over \$9 billion of added gross regional product.
- The ADHS saves 231 million hours of travel time annually, and the value of transportation cost savings and productivity gains associated with the ADHS amounts to \$10.7 billion annually.

Looking ahead, the study also projected the transportation and economic benefits of completing the ADHS by 2045:

- Completion of the ADHS will result in 78 million more hours of travel time saved.
- Transportation cost savings and economic productivity gains of \$2.2 billion per year.
- A return on investment (ROI) estimated at 3.7, meaning that the present value of benefits is estimated to be \$3.70 for every \$1.00 invested in the ADHS.
- An economic impact of 47,000 jobs created and \$4.2 billion in gross regional product (GRP).

These benefits come from completion of a network connecting Appalachia with broader labor markets, truck delivery markets, inland distribution ports, and export gateways. For instance, completion of the ADHS is calculated to bring a 30 percent increase in population market access for businesses located along the affected corridors. Completion of the ADHS network will provide significant travel efficiencies for car and truck movements to, from, and within the Region. For example, ADHS completion is expected to contribute significant benefits to the quality of life for those living, working, and visiting the Region.

The economic competitiveness improvements due to ADHS completion will support more inward investment to the Region, more exports, and ultimately more business growth. These economic impacts will occur most dominantly within Appalachia, with additional growth occurring in non-Appalachia areas of the 13 Appalachian states.

Safety Benefits of ADHS Completion

A recent ARC-funded report, *Traffic Safety in Appalachia*, dated February 2021, stated that the ADHS appears to show significant safety benefits when its new alignments are compared to old alignments with an overall positive impact on traffic safety. The report's evaluation of a sample of crash data indicated that the ADHS system significantly reduces both total crashes and injury crashes.

If state DOTs upgrade their facilities, they may see total crash reductions ranging from 10.9 percent to 36.3 percent and injury crash reductions ranging from 15.1 percent to 44.5 percent. The average possible reductions based on local traffic conditions are 23.6 percent and 29.8 percent. These effects are primarily based on the ADHS designation being applied to new alignment rather than to upgraded alignment, and the predicted number of crashes may change as traffic volumes grow.

Completing the ADHS

The ADHS is a vital part of the Appalachian Region's transportation resources, providing residents with safe and reliable access to jobs, education, health care, and social services. It also plays a vital role in giving the Region access to domestic and international markets. In today's global marketplace, a modern system of highways is essential for economic growth and for enabling Appalachia to become a net contributor to the national economy.

As stated in a "Sense of the Senate" provision in the MAP-21 Act, "the timely completion of the Appalachian Development Highway System is a transportation priority in the national interest."

Appendix: Cost-to-Complete Estimates for each ADHS corridor and remaining funds needed by state

Each state's plan for completion and cost is summarized in the following cost matrices. In certain cases, the ARC Transportation staff had other information that required adjustments to information contained in the state narratives. These adjustments were typically minor in nature and are footnoted as a part of each states individual cost matrix.

ALABAMA (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
V	16.4	State Route 2 - Upgrade lanes and new interchange	No	\$155.00	\$0.00			More than 10 years (Beyond 2030)
X	21.4	Interstate 22 - Upgrade to 8 lane section and Welcome Center	No	\$235.20	\$0.00			Staged - final completion more than 10 years (Beyond 2030)
X-1	65.0	State Route 959/Birmingham Northern Beltline - Upgrade to 8 lane section	No	\$3,141.17	\$0.00			Staged - final completion more than 10 years (Beyond 2030)
ALABAMA TOTALS	102.8			\$3,531.37	\$0.00	\$60.70	\$3,470.67	

Note: AC and Available Funding reflect ARC's December 31, 2020 FMIS numbers.

GEORGIA (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
A	10.5	State Route 515 - Upgrade to 4 lane section with a 2 lane rural bypass at Young Harris and 3 lane urban section with bike lanes in Young Harris	No	\$105.30	\$0.00			2025
A-2	16.7	State Route 20 - Widening to 4 lane section and interchanges	No	\$242.50	\$0.00			2030
GEORGIA TOTALS	27.2			\$347.80	\$0.00	\$176.31	\$171.49	

Notes: AC and Available Funding reflect ARC's December 31, 2020 FMIS numbers.

Corridor A-2: The submitted mileage of 20.5 miles was adjusted to 16.7 miles, which is the eligible mileage in the EADHS.

KENTUCKY (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
F	2.2	US 119 - 2 lane section on new alignment	Yes	\$65.00	\$0.00			More than 10 years (Beyond 2030)
Q	4.7	SR 80 - New bridges and new paving on 4 lane section	No	\$106.90	\$0.00			2025
KENTUCKY TOTALS	6.9			\$171.90	\$0.00	\$2.22	\$169.68	

Note: AC and Available Funding reflect ARC's December 31, 2020 FMIS numbers.

MARYLAND (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
N (I-68/US 40 to Old Salisbury Road)	1.4	US 219 - Under construction. 4 lane section on new alignment	No	\$0.00	\$16.04			2021
N (Old Salisbury Road to PA line)	1.1	US 219 - 4 lane section on new alignment	No	\$64.00	\$0.00			More than 10 years (Beyond 2030)
O	3.7	US 220 - Upgrade to 4 lane section and interchange	No	\$143.00	\$0.00			More than 10 years (Beyond 2030)
MARYLAND TOTALS	6.2			\$207.00	\$16.04	\$29.37	\$193.67	

Note: AC and Available funding reflect ARC's December 31, 2020 FMIS numbers and a prior commitments of \$18 million to MD's Local Access Program, including 2021.

MISSISSIPPI (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
V State Route 76 From SR 25 to SR 23	8.3	State Route 76 - Under Construction - 4 lane section on new alignment	No	\$0.00	\$5.98			2023
V	0.0	Mississippi Route 6 - Complete - Unconverted AC	No	\$0.00	\$8.01			Complete
MISSISSIPPI TOTALS	8.3			\$0.00	\$13.99	\$0.51	\$13.48	

Note: AC reflects December 31, 2020 FMIS numbers.

NEW YORK (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
100% Complete		N/A	N/A	\$0.00	\$0.00			N/A
NEW YORK TOTALS	0.0			\$0.00	\$0.00	\$0.00	\$0.00	

NORTH CAROLINA (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
A	3.9	NC 69 - Upgrade to a 4 lane section	No	\$50.00	\$0.00			More than 10 years (Beyond 2030)
K	18.1	US 129, NC 143, NC 28, US 74 - Upgrade existing 2 lane section with added passing and climbing lanes	Yes	\$440.00	\$0.00			2027
NORTH CAROLINA TOTALS	22.0			\$490.00	\$0.00	\$199.60	\$290.40	

Note: Available ADHS funding based on December 31, 2020 FMIS numbers and prior commitments of \$6 million to NC's Local Access Program, including 2021.

OHIO (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
B	0.0	Portsmouth Bypass - Complete - Future Availability Payments	No	\$0.00	\$407.81			Complete
C	3.9	US 23 - 4 lane section on new alignment around Waverly (Waverly Bypass)	No	\$73.10	\$0.00			More than 10 years (Beyond 2030)
C	3.2	US 23 - 4 lane section on new alignment around South Bloomfield (Bloomfield Bypass)	No	\$46.40	\$0.00			More than 10 years (Beyond 2030)
OHIO TOTALS	7.1			\$119.50	\$407.81	\$4.96	\$522.35	

Note: AC Amount for Corridor B is based on estimated outstanding Availability Payment reimbursement.

PENNSYLVANIA (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
M	59.8	US 22, US 322 - 4 lane section	No	\$1,985.00	\$0.00			More than 10 years (Beyond 2030)
N	7.0	US 219 - 4 lane section	No	\$250.00	\$0.00			More than 10 years (Beyond 2030)
O	2.0	US 220/I-99 - Upgrade interchanges	No	\$175.00	\$0.00			2023
O1	11.2	US 322 - 4 lane section on new alignment	No	\$222.07	\$0.00			More than 10 years (Beyond 2030)
P	9.3	US 220 - 4 lane section	No	\$317.39	\$0.00			More than 10 years (Beyond 2030)
P1	12.5	Central Susquehanna Thruway Project (CSVT) - 4 lane section	No	\$50.10	\$0.00			2027
PENNSYLVANIA TOTALS	101.8			\$2,999.55	\$0.00	\$140.53	\$2,859.02	

Notes: Available ADHS funding based on December 31, 2020 FMIS numbers.

Cost to Complete estimates for O1 and P1 have been limited to the ADHS legislative caps.

SOUTH CAROLINA (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
100% complete		N/A	N/A	\$0.00	\$0.00			N/A
SOUTH CAROLINA TOTALS	0.0			\$0.00	\$0.00	\$0.00	\$0.00	

TENNESSEE (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
F	10.6	State Route 63 - Upgrade to a 5 lane section	No	\$50.00	\$0.00			2024
S	0.4	State Route 32 (US 25E) - Intersection	Yes	\$6.00	\$0.00			2025
K	17.0	State Route 40 (US 64/US 74) - Tunnels and multiple operational improvements	Yes	\$407.90	\$0.00			More than 10 years (Beyond 2030)
TENNESSEE TOTALS	28.0			\$463.90	\$0.00	\$240.50	\$223.40	

Note: Cost to Complete for Corridor K was revised by e-mail to reflect current year dollars.

VIRGINIA (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
Q	13.4	Upgrade to 4-lane section	Yes	\$267.64	\$64.90			Staged - final completion more than 10 years (Beyond 2030)
H	14.4	Upgrade to 4-lane section	No	\$172.88	\$0.00			More than 10 years (Beyond 2030)
VIRGINIA TOTALS	27.8			\$440.52	\$64.90	\$34.96	\$470.46	

WEST VIRGINIA (Costs are in millions of year 2020 dollars)

Corridor	Miles	Scope	Scope Approval Required	Cost to Complete	Pre-financed (Advance Construction) Amount	Available ADHS funding	Remaining Funds Needed	Schedule
H	30.2	US 48 - 4-lane section on new alignment	No	\$1,559.10	\$96.00			More than 10 years (Beyond 2030)
WEST VIRGINIA TOTALS	30.2			\$1,559.10	\$96.00	\$364.21	\$1,290.90	

Notes: AC and available ADHS funding based on December 31, 2020 FMIS numbers.

Available ADHS funding includes committed State Funds (\$211 million), committed Federal Discretionary Grant Funds (\$20 million BUILD, \$12 million INFRA and \$100 million NSFLTP), and \$21.205 million of ADHS funds.