

Strategic Plan to Complete the Appalachian Development Highway System

October 2019

Developed by the Appalachian Regional Commission in partnership with:

Federal Highway Administration
Alabama Department of Transportation
Georgia Department of Transportation
Kentucky Transportation Cabinet
Maryland State Highway Administration
Mississippi Department of Transportation
New York Department of Transportation
North Carolina Department of Transportation
Ohio Department of Transportation
Pennsylvania Department of Transportation
Tennessee Department of Transportation
South Carolina Department of Transportation
Virginia Department of Transportation
West Virginia Division of Highways

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EXECUTIVE SUMMARY

In 1965, the Appalachian Development Highway System (ADHS) was authorized by Congress with the purpose of stimulating economic development by reducing isolation and improving access for an economically distressed region. The ADHS is a network of 33 distinct highway corridors totaling 3,090 miles and connecting the 13 Appalachian states with the Interstate Highway System and a wide-range of domestic and global markets. Today, the ADHS is nearly 85% complete (about 5% more is open to traffic with other planned enhancements unfinished) and has provided tremendous economic contributions to the Appalachian Region. Unfortunately, dedicated funding to complete the ADHS was halted in 2012 which has significantly slowed progress. The lack of dedicated resources means that many states must now prioritize ADHS construction over other important investments to complete unfinished ADHS segments. Therefore, a number of key routes are unfinished and recent funding challenges have created barriers which require strategic planning and innovative solutions to overcome.

The goal of this Strategic Plan is to establish a detailed status and future outlook of the ADHS, with strategies, priorities and actions to make progress toward overall completion. This plan assumes federal and state transportation legislation and funding levels will remain similar to current levels. Future legislation may result in changes to the priorities, ideas and strategies outlined here.

Definition of ADHS Completion

The overall system will be complete when all 3,090 miles are fully constructed, open to traffic and match the alignment, key design criteria, cross section details, and access control type indicated in the latest Completion Plan (formerly known as the Cost-to-Complete Estimate), or any subsequent updates approved by the Appalachian Regional Commission (ARC).

ADHS Completion Goals

- By 2025, at least 95% of eligible miles (2,935.5) are either complete, under construction, in the final design or right of way acquisition stage, or designated as new [completion category 5c](#).¹
- By 2035, 100% of eligible miles are complete, under construction, in the final design or right of way acquisition stage, or designated as completion category 5c.
- By 2040, 100% of eligible miles are either complete or designated as completion category 5c.

ARC's Completion Priorities Which Guide Activities

ARC generally places higher priority on completing unfinished ADHS corridors with the greatest anticipated economic impact and the highest likelihood of being completed. ARC will generally limit its completion efforts to routine program administration on projects which:

- Are stalled with minimal state interest in making progress towards completion;

¹ Category 5c: Previously completed stage construction work is satisfying needs and no additional work is currently planned; eligible for additional work to fully satisfy completion definition if circumstances change.

- Have limited ADHS funding with little or no state interest in prioritizing or seeking non-ADHS funds; and/or,
- Are in areas with well-connected and robust multi-modal transportation networks to provide access to opportunities, services, resources, and markets.

Key ADHS Completion Strategies and Activities Identified in Plan

Through discussions with the Federal Highway Administration (FHWA) and state departments of transportation (DOTs) to develop this plan, ARC identified a number of key activities and strategies to support the completion of the ADHS. Below is a summary of system-wide strategies to be applied broadly. State-specific completion strategies are discussed starting on [Page 16](#).

- **Maintain Existing Efforts** - Continue with current ADHS completion activities, including various research, technical assistance, information sharing, and advocacy.
- **Support Pursuit of Innovative Funding Sources** – Enhance and support the pursuit of USDOT discretionary grant funding, assuming these programs continue in the future. ARC will provide technical assistance to states preparing applications, including assistance with quantifying project benefits and facilitating state, regional, and national support for ADHS projects.
- **Establish Recurring Strategic Planning Meetings** – Establish regular biennial meetings of state DOT leadership, FHWA and ARC to assess the status and future outlook of the ADHS and to recalibrate completion strategies.
- **Review Status Details and Correct Errors** – Inventory and review status details for all ADHS segments as part of the annual ADHS Status Update process and update any incorrect details.
- **Update ADHS Status Classifications** – Simplify current classification categories and add [new categories](#) to account for projects mostly complete and satisfying desired outcomes and projects in “stage construction” phase with design or right of way acquisition activities underway for the next or final phase of eligible work.
- **Track ADHS Future Outlook Annually** – Add new Electronic-ADHS (EADHS) web portal for states to designate ADHS future outlook on an annual basis using [categories](#) which reflect the likelihood of completion within an established timeframe. Produce annual future outlook map.
- **Reinstitute a Simplified Cost-to-Complete Estimate** – Develop a simplified Cost-to-Complete estimate which will be referred to as the Completion Plan for each Section within each Corridor by January 2020, with recurring updates every five years or at an alternate interval agreed to by the state DOTs, FHWA and ARC. The Completion Plan will focus on route and section alignment, cross section, access control type and estimated cost. Details included in the 2020 Completion Plan will be considered new targets for “completion” status once approved by the Commission.
- **Streamline Process to Modify ADHS Corridors** – Institute a streamlined process to review and approve proposed ADHS corridor modifications outside of the formal Completion Plan update

period, including changes to alignment, route location, mileage designations, cross section, and access control type. See [Figure 5](#) for overview of new streamlined process.

- **Update ARC Code** – Reflect new procedures, priorities, and guidance in updates to Chapter 9 of the ARC Code. See Appendix D for approved changes to Chapter 9 of the ARC Code.

Approval of ADHS Corridor Changes Going Forward

Given that dedicated ADHS funding is no longer provided to each state, and ARC state apportionments are no longer tied in any way to ADHS funding or completion status, changes made by a particular state to their ADHS routes generally have no financial impact on other states in the Region. Therefore, full Commission approval should only be needed if a proposed ADHS change is regionally significant (e.g., impacting multiple states), politically sensitive, precedent setting, or otherwise deemed by the Executive Director or Federal Co-Chair to be significant enough that the full Commission should be aware of the change and given the opportunity to weigh in. Most changes, such as cross section modifications and minor alignment shifts, can be approved by the ARC Executive Director or at the ARC staff level.

Per the strategies outlined in this document, state DOTs will submit a Completion Plan in 2020, then subsequently every five years or at an alternate interval agreed to between the state DOTs, FHWA and ARC. Each state's Completion Plan will formally define "completion" for each section of each Corridor in terms of alignment, termini, key design criteria (e.g. design speed, number of lanes) and access control type. Each state's Completion Plan will be reviewed and approved by ARC, then states may propose changes at any time. See [Figure 5](#) for an overview of the new streamlined process to approve changes outside of the recurring Completion Plan update cycle.

Key Next Steps and Milestones

- Present Strategic Plan recommendations and proposed changes to ARC Code at Commission Policy Meeting in **Summer 2019**.
- Commission consideration of resolution to approve ARC Code changes and concepts outlined in ADHS Strategic Plan in **Fall 2019**.
- Create EADHS portal for future outlook designations by **October 2019** and populate with initial information by each state.
- Develop future outlook map with categories provided by each state by **January 2020**.
- Through FY 19 ADHS Status Update process, inventory all ADHS segments and correct incorrect mileage designations by **January 2020**. States to update status classifications to new categories.
- Develop Completion Plan by **Summer 2020** which updates the 2012 Cost-to-Complete Estimate. Approve Completion Plan details by **Fall 2020** for use as completion targets moving forward.
- Host next ADHS Conference with FHWA and state DOT representatives in **Spring 2020**.

INTRODUCTION

The goal of the Appalachian Development Highway System (ADHS) Strategic Plan is to establish a detailed status and future outlook of the ADHS, with strategies, priorities and actions to make progress toward overall completion. This document will serve as a reference point for local, state, regional and national leaders to understand the status and future outlook of the ADHS, resulting in critical ideas and action to address ADHS completion challenges.

The Appalachian Regional Commission (ARC) coordinated closely with the Federal Highway Administration (FHWA) and each of the state DOTs in the Appalachian Region to develop the ADHS Strategic Plan. Discussions started in June 2018 at the ADHS Workshop in Huntington, West Virginia in which over 50 representatives from ARC, state DOTs and FHWA attended to discuss the current status and future outlook of the ADHS. Participants brainstormed ADHS completion strategies and ultimately agreed to develop a joint Strategic Plan outlining completion strategies, goals, and next steps.

In October 2018, state DOTs responded to a survey developed by ARC to inventory the status and future outlook of all remaining unfinished ADHS Corridors. ARC then facilitated meetings with each state DOT and FHWA to discuss each state's survey responses, corridor-specific completion strategies, and broad region-wide completion strategies. The results of the surveys and follow-up discussions were used to develop a draft Strategic Plan which was shared in December 2018 with FHWA, the state DOTs, and ARC leadership for review and comment. This version of the Strategic Plan accounts for edits made based on feedback from those reviews.

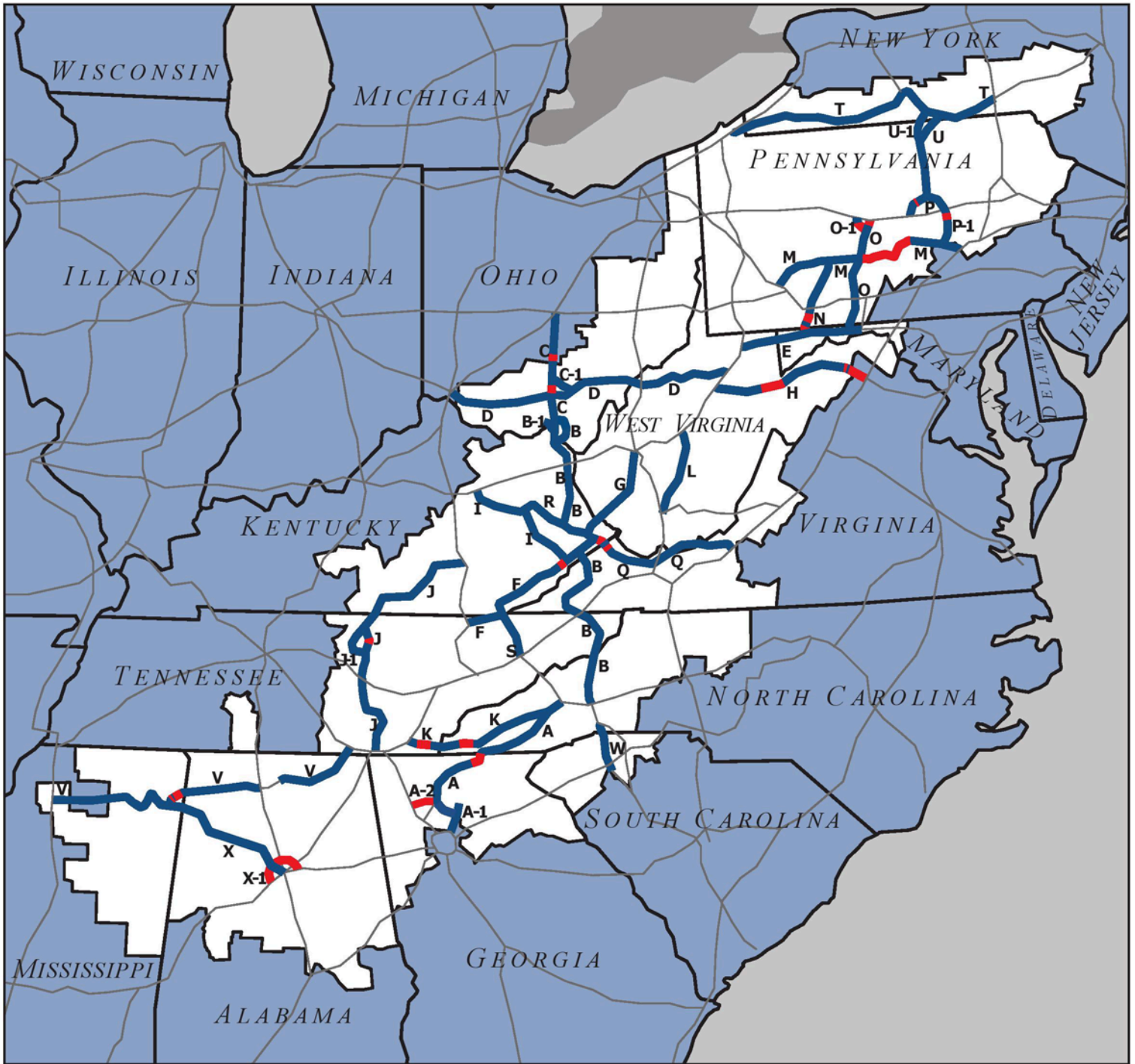
Note that this plan assumes federal and state transportation legislation, programs and funding levels will remain similar to current levels and that ADHS projects will not receive dedicated funding in the future. Future legislation may result in changes to the priorities, ideas and strategies outlined here.

ADHS BACKGROUND

In 1965, the Appalachian Development Highway System (ADHS) was authorized by Congress with the purpose of stimulating economic development by reducing isolation and improving access for an economically distressed region. It designated a network of highway corridors totaling over 3,500 miles (3,090 miles eligible for funding) and connecting the 13 Appalachian states with the Interstate Highway System. Figure 1 shows a map of the ADHS, with distinction between miles open to traffic (blue) and not open to traffic (red). Table 1 shows the current status of the ADHS by state and completion category. Figure 2 shows the overall status by completion category.

Although nearly 85% of the ADHS is complete, and over 90% is open to traffic or under construction, finishing the remainder is very challenging. This is partly due to environmental and topographical complexities in some areas, but also stems from two interrelated factors: a) the elimination of dedicated Federal funding to complete the ADHS; and b) the nature of the performance metrics adopted by Appalachian states as they move toward performance-based project prioritization.

**Figure 1 – Appalachian Development Highway System
as of December 31, 2018**

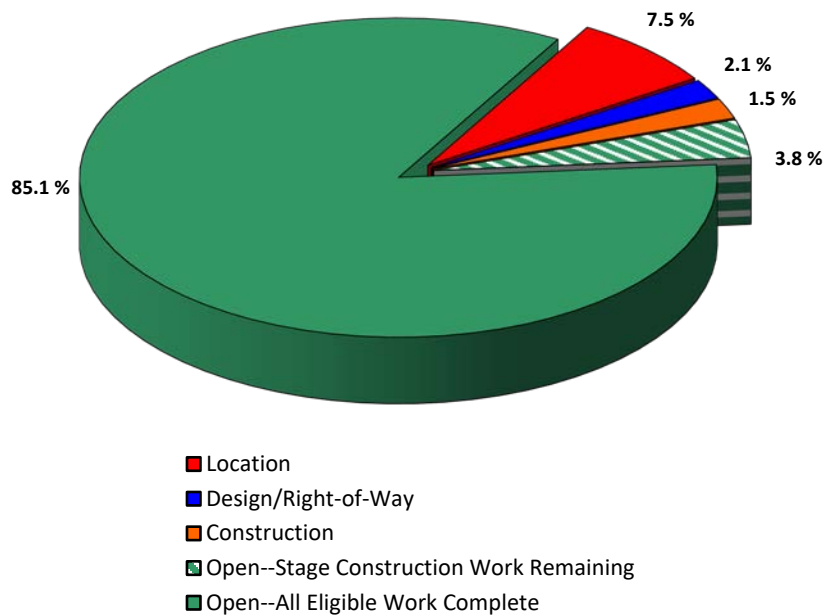


- ADHS Miles Open to Traffic
- ADHS Miles Not Open to Traffic
- Interstate Highway System

**Table 1 – Status of Completion of the ADHS (Miles)
as of December 31, 2018**

State	Miles Open to Traffic		Miles Not Open to Traffic			Total Miles Eligible for ADHS Funding
	Complete	Remaining Stage Construction	Construction Under Way	Design Stage	Location Stage	
Alabama	187.8	42.2	3.2	19.2	43.3	295.7
Georgia	101.5	0.0	0.0	10.5	20.5	132.5
Kentucky	408.7	0.0	9.1	0.5	8.0	426.3
Maryland	77.0	3.7	0.0	0.0	2.5	83.2
Mississippi	109.2	0.0	0.0	8.3	0.0	117.5
New York	220.7	1.3	0.0	0.0	0.0	222.0
North Carolina	178.2	8.0	0.0	0.0	18.1	204.3
Ohio	194.4	0.0	0.0	0.0	7.1	201.5
Pennsylvania	336.9	2.9	17.5	8.4	87.4	453.1
South Carolina	22.9	0.0	0.0	0.0	0.0	22.9
Tennessee	250.4	61.4	3.4	0.0	14.1	329.3
Virginia	163.5	0.0	6.5	7.5	14.7	192.2
West Virginia	379.4	0.0	7.3	7.6	15.3	409.6
System Totals	2,630.6	119.5	47.0	62.0	231.0	3,090.1

**Figure 2 – ADHS Status of Completion as of 12/31/2018
3090.1 Eligible Miles**



ADHS Investments are Decreasing since Dedicated Funding was Eliminated

From 1965 to 2012, states received Federal funding specifically allocated to complete the ADHS. The funds could only be used on approved ADHS corridor segments, and were supplemented by state and local funds (typically an 80/20 split). But starting with the Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2012, dedicated funding was eliminated. The legislation continued to recognize that “the timely completion of the ADHS is a transportation priority in the national interest” and allowed states to use up to 100% Federal-aid funding on ADHS corridors. It also required that Appalachian states detail their completion plans with annual completion targets and a target completion date.

States are gradually using their remaining obligated funds for the ADHS (though about \$1 billion is still unspent), and some (like West Virginia) are utilizing other federal-aid or state funds to finish ADHS corridors. But many others have effectively stopped work on key ADHS corridors, given the lack of directed federal funding. For example, in the [2013 Completion Plan Report](#), Pennsylvania indicated they have “no current plans to complete their portion of the ADHS other than an 11.4 mile segment on Corridor N.” Similarly, Mississippi stated that they have “no current plans to complete 8.3 miles of Corridor V near the Alabama state line. The state has no ADHS-specific funds remaining and has indicated that for any future ADHS project to move forward, a new funding source would have to be identified” (note that Mississippi has since changed course and now considers Corridor V a high priority).

Figure 3 shows the number of miles of active ADHS construction in each year from 2005 to 2017. As evidenced, there has been a steady decline in activity, which is in part due to loss of dedicated funding. Additionally, since 2012 the number of miles of ADHS routes in the planning stage (pre-NEPA) has remained the same at 231 miles. This, again, reflects the lack of recent activity in completing the ADHS. Discussions with state departments of transportation (DOTs) across Appalachia are consistent with these findings – states that lack dedicated ADHS funding, with no clear pathway to new funds, have stalled highway projects throughout the Region.

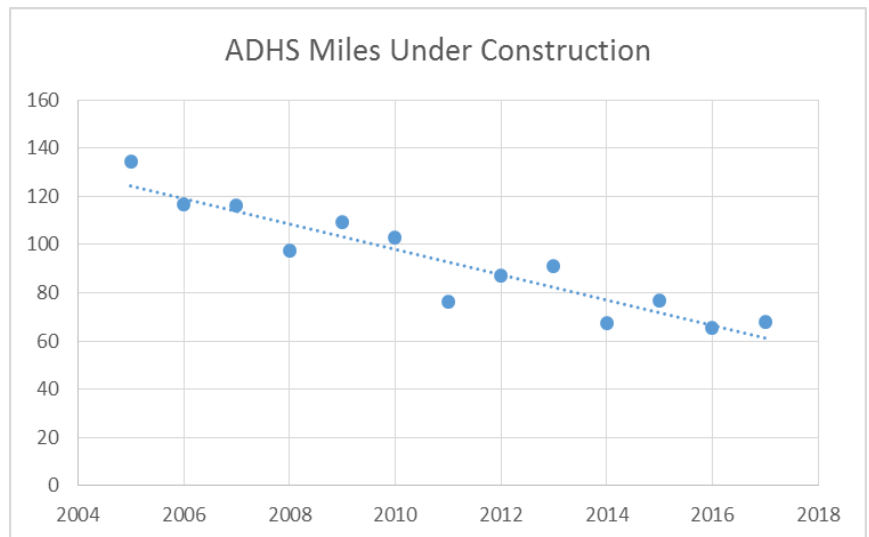


Figure 3 – Active ADHS Construction Miles by Year

State DOT Project Prioritization Processes Favor non-ADHS Projects

State DOTs across the country are implementing data-driven project prioritization methods to choose transportation investments and allocate scarce funding. An initial scan of these processes and the performance measures underlying them, makes clear that the processes favor urban projects with large

traffic volumes which provide congestion relief. The projects also favor funding for system preservation, such as reinvesting in bridges in poor condition. The performance measures often place relatively low value on geographic equity, economic impact, or accessibility to markets and services – factors that are more important in rural areas. The consequence is that ADHS projects are not “scoring” well and are receiving low-prioritization rankings. A prime example is Corridor H in Virginia, which is a vital connection at the eastern edge of the overall corridor, providing direct linkage to I-81 from Appalachia. While West Virginia continues work towards completion and is building new segments of this major corridor, Virginia shows no signs of completing their shorter segment since it does not rank as high as other state priorities and was not even scored in Virginia’s Smart Scale recent prioritization process.

ADHS Still Needed to Address Regional Economic Inequities

While much progress has been made since 1965, the Appalachian Region still lags the nation by most socioeconomic measures like poverty, unemployment, and incomes. The original rationale to create and complete the ADHS is still valid – for example, Appalachia’s per capita income (not including transfers) was \$29,282 in 2015 compared to \$39,778 at the US level. In 10 of 13 Appalachian states, Appalachian counties have lower per capita income than the overall state (West Virginia is fully within Appalachia and has a per capita income of just \$26,392). The discrepancy is over \$5,000 per person in Kentucky, North Carolina, Ohio, Pennsylvania, and Tennessee. The income gap between Appalachia and the overall state is over \$17,500 in Maryland, New York, and Virginia.

Meanwhile, economic studies of the ADHS continue to find that highway corridor investments in the Region provide strong economic returns to Appalachia. The 2017 study, [*Economic Analysis of Completing the Appalachian Development Highway System*](#), estimates that:

- As of 2015, ADHS investments create \$10.7 billion per year in transportation cost savings and productivity gains. These gains extend beyond the Appalachian Region, benefiting the entire U.S. economy with the creation of over 168,000 added jobs with nearly \$7.3 billion in added worker income annually.
- ADHS investments made between 1965 and 2015 generated more than \$19.6 billion per year of added business sales in Appalachian, contributing to over \$11 billion in annual gross regional product growth.
- Improvements in market accessibility to workers, freight delivery markets and intermodal facilities in the Appalachian Region will directly lead to increased economic development opportunities. Appalachia is estimated to gain \$2.6 billion in economic activity due to market accessibility gains.
- ADHS completion will produce a very positive ROI for the Region and U.S. The present value of benefits – travel time and cost, safety, logistics, market access and environmental benefits – is estimated to be \$16.3 billion. These benefits are estimated to be 3.7 times greater than costs of system completion.

ADHS VISION, MISSION, DESIRED OUTCOMES AND GOALS

Congress's original intent when creating the ADHS over 50 years ago was to spur economic development by opening up access to opportunities and services for residents and businesses of Appalachia. While this purpose certainly remains relevant today, the vision, mission, and goals to achieve completion have evolved to keep up with current challenges.

Vision

The ADHS is complete, open to traffic, and serves an integral role in economic growth throughout the Appalachian Region.

Mission

Work with FHWA, state DOTs, and regional leaders to identify and implement innovative, efficient, and effective completion strategies for each Corridor and the overall system.

Desired Outcomes from ADHS Completion (Past, Present, and Future)

- Improve accessibility throughout the Appalachian Region.
- Connect residents to opportunities and services, and businesses to supplies, markets, and the labor force.
- Promote economic development and job growth.
- Balance project delivery timeliness and efficiency with consideration of community and environmental impacts.

Completion Goals

- By 2025, at least 95% of eligible miles (2,935.5) are either complete, under construction, in the final design or right of way acquisition stage, or designated as new [completion category 5c](#).²
- By 2035, 100% of eligible miles are complete, under construction, in the final design or right of way acquisition stage, or designated as completion category 5c.
- By 2040, 100% of eligible miles are either complete or designated as completion category 5c.

DEFINITION OF ADHS COMPLETION

- Each corridor or section is considered "complete" when all eligible work reflected in the latest Completion Plan (formerly known as the Cost-to-Complete estimate), or any approved updates, has been fully constructed and is open to traffic.
- The overall system will be complete when all 3,090 miles are fully constructed, open to traffic and match the alignment, key design criteria, cross section details, and access control type indicated in the latest Completion Plan, or any subsequent updates approved by ARC.

² Category 5c: Previously completed stage construction work is satisfying needs and no additional work is currently planned; eligible for additional work to fully satisfy completion definition if circumstances change.

ARC's ADHS PRIORITIES

ARC generally places higher priority on working to complete unfinished ADHS corridors with the greatest anticipated economic impact and the highest likelihood of being completed. Furthermore, ARC primarily focuses technical assistance and advocacy activities on projects which meet one or more of the following conditions:

- Projects which closely align with ADHS transportation and overall economic development goals. Priority is given to projects with greatest expected economic benefit, including greatest positive impact to accessibility or connecting economically distressed areas to opportunities, services, and markets.
- Projects which are part of a Corridor that is nearly complete, such as projects which will finish one of the final connecting pieces of a regional Corridor, especially those which cross state lines.
- Projects which the respective state has made a high priority and has shown an interest in completing.
- Projects which have dedicated ADHS funding or other committed funding available.

ARC may choose to limit completion efforts to routine program administration and annual status reviews (aside from specific technical assistance requests from Congress, FHWA or a state DOT) on projects which meet one or more of the following criteria:

- No movement and minimal state interest in making progress.
- Limited ADHS funding with no state interest in prioritizing non-ADHS funds, or seeking innovative or unconventional funding sources.
- Past ADHS construction, in combination with the existing regional road network, is largely meeting local traffic needs and providing adequate access for residents to opportunities and businesses to markets.
- Projects are in areas with competitive or growing economies, and the highway project is not expected to create a significant economic impact.

ADHS COMPLETION STRATEGIES AND ACTIVITIES

ARC, FHWA and the participating state DOTs developed the following list of strategies and activities to make progress toward completion which primarily applies to high priority corridors. These strategies may also spur movement on corridors currently considered low priority, particularly if they are coupled with new funding or a renewed interest from state officials to pursue completion.

Maintain Existing Efforts

- Continue to research and quantify benefits of the ADHS, and strategically market research findings and results.
- Continue to provide targeted technical assistance to states based on ADHS priorities.
- Continue to advocate for ADHS completion and rural transportation access improvements more broadly at state, regional, and national conferences as well as in meetings with local, state and federal officials.

- Greater engagement from ARC Executive Director, Federal Co-Chair and State Alternates with state and federal transportation leaders to prioritize ADHS completion.

Support Pursuit of Grants and Innovative Funding Sources

- Provide technical assistance and other support to state DOTs preparing applications to competitive USDOT grant programs for ADHS projects.
- Assist with modeling and identifying non-traditional project benefits for inclusion in grant application benefit-cost analysis sections.
- Facilitate joint applications between multiple states for common Corridors.
- Provide official ARC letters of support to include in applications.
- Provide funding to hire consultants to develop applications.

Establish Recurring Strategic Planning Meetings – Hold biennial meetings of State DOT leadership, FHWA and ARC to assess status and future outlook of the ADHS and recalibrate completion strategies. The next meeting is scheduled for June 2020.

Closely Review Status Details and Correct Errors – Inventory and review status details for all ADHS segments as part of the annual ADHS Status Update process and clean up incorrect or outdated details and designations (by October 2019).

- In the event the inventory and review process reveals a mileage deficit or surplus on any route (constructed mileage is less than planned mileage), ARC will work with states to consider ways to account for mileage discrepancy.
- If any route is found to have an incorrect status classification, or the state has no intention to move forward with additional work on a particular segment and wishes to abandon future plans, consider the following:
 - If section has been partially completed with ADHS funds and miles cannot be moved, change status classification to complete, unless ADHS funds were also expended to purchase right of way for the ultimate cross section.³
 - If ADHS funds have not been expended previously on segment, consider moving miles to other routes or relinquishing miles to another state.

Update ADHS Status Classifications – Modify current ADHS status classification categories and add new categories. States can indicate these status categories in their FY 19 ADHS status updates (due October 2019). See Figure 4 for proposed new status classifications. Of particular note is the new category 5c, defined as follows: *Previously completed stage construction work is satisfying needs and no additional work is currently planned; eligible for additional work to fully satisfy completion definition if circumstances change.*

Former classifications 4a2, 4a4, 4a5, and 5a2 have been removed. All other previous classifications remain but have been reworded or reorganized in some cases. See Appendix A for the previous ADHS status classification table. See Appendix B for the ADHS status classification flow through a typical project’s life under the new classification designations. See Appendix C for the logical conversion chart from previous classifications to the new classifications.

³ If funds have been used to purchase future right of way, the status designation must remain as stage construction until all construction is complete or state repays funding expended for right of way acquisition.

Table 2 – New ADHS Status Classifications

Non-Participating	Planning & NEPA →	Final Design & R/W →	Stage Construction →	Final Construction →	Complete or Meeting Needs
Ineligible mileage	Planning, NEPA, preliminary engineering – No prior ADHS-funded construction	Final Design and/or R/W underway or completed – No prior ADHS-funded construction	Stage construction underway or previously completed	All eligible work under construction	Fully complete or partially complete and meeting needs
<p>NP: Integral parts of the ADHS corridors that are not to be improved with ADHS funds.</p>	<p>1a: Not started – General corridor location has been established but work to determine alignment and termini locations, design elements and completion definition has not started (approved estimates are subject to change based on future studies).</p> <p>1b: Studying, approval pending – Studies to determine alignment and termini locations, design elements and completion definition are underway or completed (approved estimates are subject to change based on completion of current studies and subsequent ARC and FHWA approval).</p> <p>1c: Approved – Alignment and termini locations, design elements and completion definition have been approved by ARC and FHWA - subsequent adjustments may be necessary based on detailed design activities.</p>	<p>2a: Final design is complete or underway for only a portion of eligible work; R/W acquisition has not started.</p> <p>2b: Final design and R/W acquisition is complete or underway for only a portion of eligible work.</p> <p>2c: Final design is complete or underway for all eligible work; R/W acquisition has not started.</p> <p>2d: Final design and R/W acquisition is complete or underway for all eligible work.</p>	<p>3a1: First stage construction contract currently underway; serving traffic.</p> <p>3a2: First stage construction contract currently underway; not serving traffic.</p> <p>3b1: Stage construction previously completed and serving traffic; no contracts underway for final design, R/W acquisition, or construction.</p> <p>3b2: Stage construction previously completed but not serving traffic; no contracts underway for final design, R/W acquisition, or construction.</p> <p>3c1: Stage construction previously completed and serving traffic; final design and/or R/W acquisition underway or complete for remaining eligible work.</p> <p>3c2: Stage construction previously completed but not serving traffic; final design and/or R/W acquisition underway or completed for remaining eligible work.</p>	<p>4a: Final construction contract underway for all eligible work; no prior construction has occurred with ADHS funding.</p> <p>4b1: Stage construction previously completed and open to traffic – Final construction contract underway for remaining eligible work.</p> <p>4b2: Stage construction previously completed but not open to traffic – Final construction contract underway for remaining eligible work.</p>	<p>5a: Complete and Open to traffic – All work eligible for ADHS funds has been completed.</p> <p>5b: Complete but not open to traffic – all work eligible for ADHS funding has been completed.</p> <p>5c: Partially complete, inactive but meeting needs – Previously completed stage construction work is fully meeting traffic demands with no current need to complete remaining eligible work; section remains eligible for additional work to fully satisfy completion definition if circumstances change.</p>

Track ADHS Future Outlook Annually – Add new EADHS designation web portal for ADHS future outlook and require annual updates from states starting in October 2019 (with initial designation in spring 2019).

- In addition to completion/status designation, states will indicate each unfinished ADHS section’s future outlook based on current circumstances. **Future outlook categories include:**
 - ❖ *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*
- Outcome - Produce annual map with only participating miles shown in the four future outlook categories (shown above) to clearly depict completion progress. See Figure 4 for a prototype map.

Reinstitute a Simplified Cost-to-Complete Estimate – Develop a streamlined, simplified Cost-to-Complete estimate by January 2020. This new document will be referred to as the Completion Plan for each Section of each Corridor. State plans developed by 2020 will be considered new targets for “completion” status. Additional notes regarding the Completion Plan:

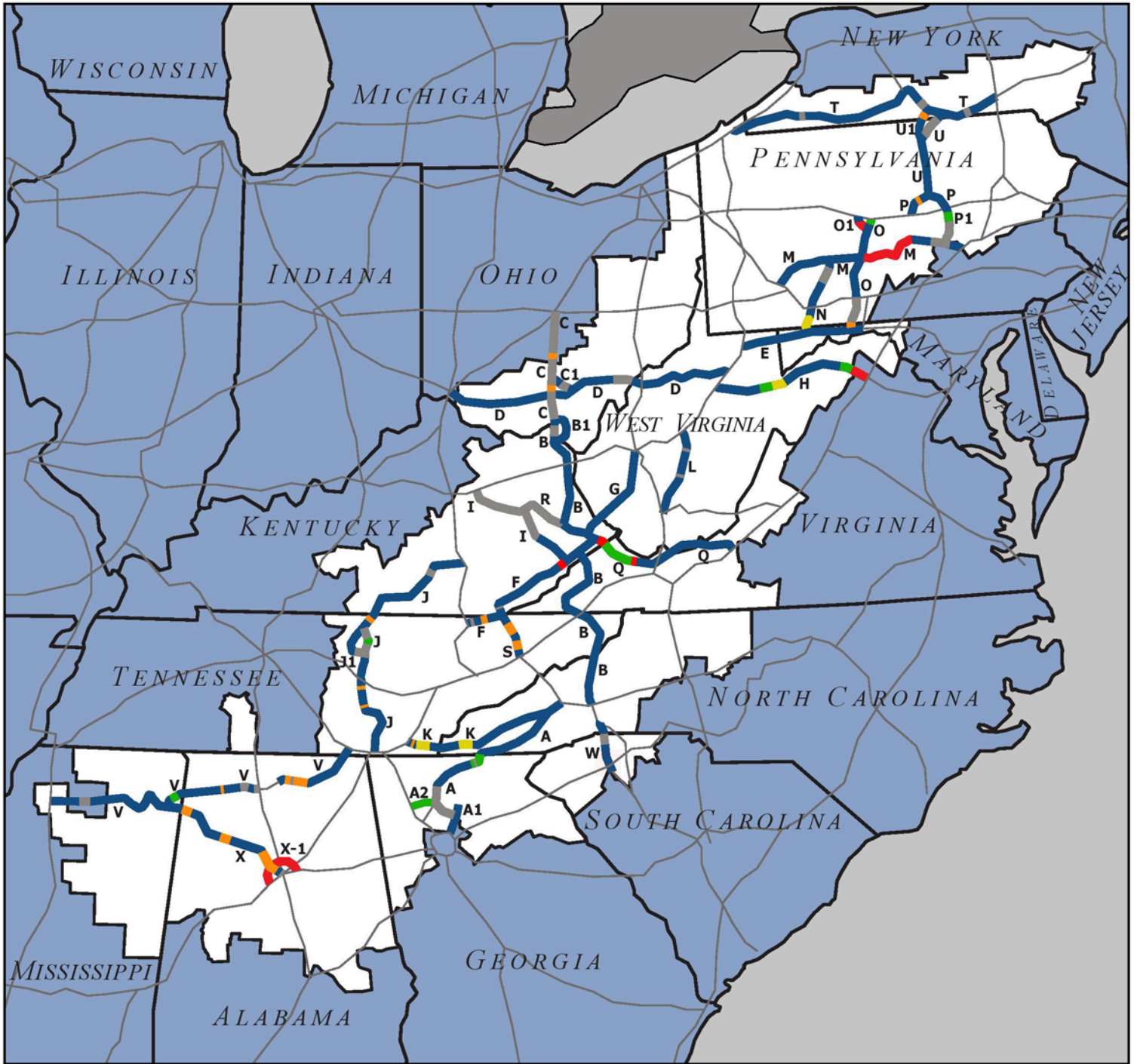
- Significant changes from the 2012 Cost-to-Complete estimate will be presented to the Commission for approval in February 2020. See the [Approving ADHS Route Changes](#) section for the types of changes that are significant enough to warrant full Commission approval.
- Minor changes from the 2012 Cost-to-Complete estimate, or changes which have been approved previously, will be adopted by ARC approval of each state’s Completion Plan.
- States wishing to reclassify any segments from stage construction to complete will reflect the current and final cross section, alignment, and access type in the Completion Plan.
- Completion Plans will be updated every five years. However, states may propose changes to their most recently approved Completion Plan at any time.

See Table 3 for examples of Completion Plan content. Actual Completion Plan structure, content, and other details will be finalized by ARC, state DOTs, and FHWA after this Strategic Plan is approved by the Commission.

Streamline Process to Modify ADHS Corridors – Streamline the process to change ADHS Completion Plan details outside of the formal Completion Plan update period, including alignment, route location, mileage designations, cross section details (e.g. number of lanes), and access control type. See [Approving ADHS Route Changes](#) section for additional details.

Update ARC Code – Reflect new procedures, priorities, and guidance in updates to Chapter 9 of the ARC Code. See Appendix D for approved Code changes.

Figure 4 – Example of ADHS Future Outlook Map



- 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

Table 3 – Example of Completion Plan Content (For Illustration Only – This is Not Actual Data)

State	Corridor	Section	Latest Status Classification	Future Outlook Classification	Alignment/Termini	Design Speed	# of Thru Lanes	Typical X-Section	Access Control Type	Other Requirements for Completion	Work Remaining to Achieve Completion	Cost Estimate to Complete
MS	V	A 12.1.1	4A1	Incomplete – Significant Progress	No changes from 2012 Cost-to-Complete Estimate. See here . ⁴	65	4	See here	Full	-	All construction	\$10 Million
AL	X	A 01.0.0	1c	Partially Complete – Meeting Traffic Needs	No changes from 2012 Cost-to-Complete Estimate. See here . ⁵	60	4	See here	Full	Welcome Center	Welcome Center and related work	\$20 Million
TN	J	J 21.1.0	1c	Partially Complete – Meeting Traffic Needs	No changes from 2012 Cost-to-Complete Estimate. See here . ⁵	60	4	See here	Partial	Interchange	Interchange and related work	\$20 Million
NC	K	K 04.9.0	5A1	Incomplete – Some Progress	Proposed new alignment (include link). ⁵	50	2	Link	Partial	Safety and operational improvements to existing route	All construction	\$100 Million
GA	A-2	A2 07.0.0	5A1	Incomplete – Significant Progress	No changes from alignment approved by Commission in 2018. See here . ⁵	55	4	Link	Partial	-	All construction	\$20 Million

⁴ Changes could be made to the electronic [ADHS Information Management System](#) so that individual sections can be linked to directly.

⁵ A new “proposed changes” section of the ADHS Information Management System could be created so proposed alignments and other changes can be directly linked to while they are under consideration.

STATE ADHS COMPLETION STRATEGIES

In addition to the overarching ADHS completion strategies, ARC worked with each state DOT and FHWA to identify state-specific completion strategies. In October 2018 each state provided an overview of the status and future outlook of their unfinished Corridors which led to discussions between ARC, FHWA and each state to develop completion strategies. The state summaries shown below provide an overview of the completion strategies which resulted from these discussions.

Alabama

- Corridor V:
 - Consider changing remaining unfinished section west of Decatur (A 11.2.0) to complete or consider moving miles.
 - Consider changing all other incomplete sections to [new category 5c](#).
- Corridor X:
 - Consider changing incomplete sections in Jefferson County to category 5c.
 - Consider changing the Welcome Center section at the Mississippi State Line to category 5c.
 - Consider changing stage construction sections west of Jasper (A 02.9.0 and A 03.0.0) to complete.
- Corridor X-1
 - Consider reflecting [future outlook classification](#) as “Incomplete – Completion Date Undetermined”. Sections currently under construction may reflect a different outlook classification.
 - Identify prioritization of remaining unfinished sections.
 - Consider use of public-private-partnerships, tolling, applying for [USDOT competitive grants](#), and other innovative funding mechanisms for high-priority portions of X1. Consider commissioning a feasibility/planning study to look at innovative funding opportunities.

Georgia

- Corridor A-1 is complete.
- Continue ongoing planning, environmental, design and project development activities for new Corridor A-2 (added by Commission resolution in February 2018). Expedite project delivery to the extent practicable.
- Corridor A
 - Continue ROW acquisition and other project development activities for Corridor A near the NC state line.
 - Consider advocating for use of state funds and a portion of remaining ADHS funding balance (over \$160 Million as of October 31, 2018), to complete remaining unfinished sections.

- Seek innovative funding opportunities, such as [USDOT competitive grants](#) like the Nationally Significant Federal Lands and Tribal Projects (NSFLTP) program which GDOT applied for in December 2018.

Kentucky

- Participating portions of Corridors J, B, and G are complete. Corridor R is non-participating.
- Consider [modifying Cost-to-Complete Estimate details](#) for Corridor F to reflect a two-lane cross section with operational and safety accommodations for remaining unfinished portion over Pine Mountain.
- Corridor Q
 - Advocate for state and federal funding to complete the bridge over Russell Fork on Corridor Q, the final unfunded portion of Corridor Q in Kentucky.
 - Consider innovative funding opportunities, including [USDOT discretionary grant](#) programs (possibly as a bi-state application with Virginia – see below).
 - Advocate nationally for greater federal funding (beyond completion of the ADHS) in rural areas that are still isolated and lack adequate connectivity to opportunities and services.

Maryland

- Corridor E is complete.
- Consider reclassifying Corridor O to [new category 5c](#). This Corridor has been partially constructed and is meeting local traffic demands with no pressing need for widening. Should circumstances change due to increased traffic volume or other factors, the Corridor remains eligible for enhancements to achieve completion, per the criteria defined in the approved Completion Plan.
- Corridor N
 - Continue design-build project for 1.3 mile portion of Corridor N from I-68 to Old Salisbury Road.
 - Consider joint completion strategy with Pennsylvania for remainder of Corridor N (Old Salisbury Road to PA state line and PA state line to Meyersdale, PA), including possible joint application for [USDOT discretionary grant](#) funding.

Mississippi

- Corridor X is complete.
- Corridor V – USDOT INFRA grant secured in 2019, matched with other federal and state funding, to complete the final portion of Corridor V.

New York

- Corridors T and U are complete.

- Consider reclassifying remaining unfinished portion of Corridor U1 to [new category 5c](#). Only construction of a rest area at the PA state line, and related work, is left to complete Corridor U1. The Corridor is meeting local traffic needs at this time.

North Carolina

- Corridors B and W are complete.
- Corridor A
 - Continue project development activities for portion of Corridor A along NC 69 near the GA state line and portion of Corridor A along US 64 east of Hayesville.
- Corridor K
 - Support state and local efforts to develop preferred alignments and related corridor modifications for environmental study and public consideration.
 - [Streamline approval](#) of selected alternative by ARC Commission. Ensure Commission is prepared to approve preferred project that results from NEPA process.
 - To the extent practicable, expedite completion of NEPA and project development so remaining balance of unused ADHS funds can be utilized in a timely manner.

Ohio

- Corridors B, D and C1 are complete.
 - Corridor B was completed in December 2018 with the opening of the Southeast Veterans Memorial Highway near Portsmouth, OH. Update official status designations for Corridor B accordingly.
- Corridor C
 - Consider reclassifying Corridor C as complete or to [new category 5c](#).
 - If classification to “complete” is preferred, consider moving miles to other eligible routes in the state. If miles cannot be moved to other eligible routes, consider offering miles to other states in the Region.

Pennsylvania

- Corridors U and U1 are complete.
- Corridor M
 - Consider reflecting [future outlook classification](#) as “Incomplete – Completion Date Undetermined”.
- Corridor N
 - Advocate for state and federal funding to complete remaining portion of Corridor N from Meyersdale to the MD state line. Consider pursuit of joint funding strategies with Maryland.
- Continue project development activities for remainder of Corridor O given recent grant funding award from USDOT.
- Reflect [future outlook classification](#) as “Incomplete – Completion Date Undetermined” for Corridors O-1 and P.

- Continue construction and project development activities for Corridor P-1 utilizing state funds.

South Carolina

- Corridor W is complete.
- ADHS balance remains. Consider changing ARC Code to allow SCDOT to utilize more than \$3 Million annually of ADHS balances for Local Access Road projects (Update: Code changes were recently approved which removes the annual Local Access Road approval cap for South Carolina).

Tennessee

- Consider reclassifying unfinished sections of Corridors J, S, and V to complete or [new category 5c](#). Remaining unfinished sections on these corridors are four or more lanes and are meeting local traffic demands with no need for additional improvements.
- Support ongoing project development activities for completion of Corridor F.
- Corridor K
 - Support state and local efforts to develop preferred alignments for environmental study and public consideration.
 - [Streamline approval](#) of selected alternative by ARC Commission. Ensure Commission is prepared to approve preferred project that results from NEPA process.
 - To the extent practicable, expedite completion of NEPA and project development so remaining balance of unused ADHS funds can be utilized in a timely manner.

Virginia

- Corridor B is complete.
- Corridor H
 - Reflect [future outlook classification](#) as “Incomplete – Completion Date Undetermined”.
 - Consider modifying ultimate cross section in [Completion Plan](#) to match traffic needs while providing a reliable, limited access, high speed facility.
 - Consider joint completion strategy with West Virginia, including possible joint application for [USDOT discretionary grant](#) funding.
- Corridor Q
 - Advocate for state/federal funding and consider innovative funding strategies to complete final unfunded section near Grundy, VA.
 - Consider joint completion strategy with Kentucky, including possible joint application for [USDOT discretionary grant](#) funding.

West Virginia

- Corridors G, L, D, and E are complete.

- Corridor H
 - Support ongoing construction and project development efforts on Corridor H.
 - Consider innovative funding sources and project delivery methods such as TIFIA, P3s, and applying for [USDOT competitive grant](#) funding.
 - Advocate nationally for greater federal funding in rural areas that are still isolated and lack adequate connectivity to opportunities and services.
 - Consider joint completion strategy with Virginia, including possible joint application for USDOT discretionary grant funding.

APPROVING ADHS ROUTE CHANGES (FROM THE LATEST APPROVED COMPLETION PLAN)

Given that dedicated ADHS funding is no longer provided to each state, and ARC state apportionments are no longer tied in any way to ADHS funding or completion status, changes made by a particular state to their ADHS routes typically have no financial impact on other states in the Region. Therefore, formal Commission approval by vote is only needed if a proposed ADHS change is regionally significant (potentially impacting multiple states), politically sensitive, precedent setting, or otherwise deemed by the Executive Director or Federal Co-Chair to be significant enough that the full Commission should be aware of the change and given the opportunity to weigh in. Most changes can be approved by the ARC Executive Director or at the ARC staff level.

ADHS Corridor changes which require some form of ARC approval primarily include:

- Modifying alignment of route – particularly important if the new alignment impacts route mileage or section numbering which corresponds with county lines, urban/rural boundaries, congressional districts, and several other factors.
- Updating typical cross section – particularly important if the ultimate number of lanes (e.g. two instead of four) changes.
- Change in access control type – particularly important if full access control is now being reduced to a lesser access control type.
- Requests to transfer eligible miles to another ADHS Corridor or to create a new Corridor for unused miles.

Types of changes warranting different levels of approval are shown next. State DOTs should work with the ARC Senior Transportation Advisor to determine which category their proposed change falls under.

- Full Commission approval needed when:
 - State proposes a modified alignment that could impact the alignment of the same Corridor in an adjacent state.
 - State proposes moving unused eligible miles to an entirely new route (e.g. Corridor A-2 in Georgia).
 - Proposed modification is regionally significant, politically sensitive, precedent setting or otherwise deemed by the Executive Director or Federal Co-Chair to be significant

enough that the full Commission should be aware of the change and given the opportunity to weigh in.

- ARC Executive Director approval needed when:
 - New alignment changes Corridor mileage eligibility situation (e.g., new alignment is longer, thus requiring a portion of new alignment to be classified as non-participating).
 - New alignment significantly modifies starting or ending location of a route but does not impact the ADHS in neighboring states.
 - State proposes modifications to the typical cross section that results in an average design speed of less than 50 mph.
 - State proposes reducing the ultimate cross section from four (or more) lanes to less than four.
 - State proposes reducing access control level from full to partial or none.
 - State proposes moving unused eligible miles to an existing non-participating section.

- ARC Senior Transportation Advisor approval needed when:
 - Alignment or route modification is proposed but change does not impact overall mileage totals, does not affect multiple states, does not significantly modify the starting and ending location of a route, and does not fall into one of the categories which warrants Executive Director or full Commission approval.

Approval Process for Changes

All alignment, cross section, access control type, mileage eligibility and other change proposals should generally be submitted and approved prior to the start of final design or right of way acquisition activities. The typical processes for approving changes, depending on which level of approval is needed, are shown below. State DOTs should work with the ARC Senior Transportation Advisor to determine which category their proposed change falls under.

- When full Commission approval is needed:
 - ARC State Alternate and State DOT must submit a joint letter or separate letters to the Federal Co-Chairman requesting the modification. Copy of the letter should be sent to the local FHWA Division Office.
 - Federal Co-Chairman will add the proposed change to the next Commission meeting agenda for consideration.
 - ARC Staff will work with State DOT staff to draft Commission resolution and prepare to summarize the proposed change to the full Commission.
 - Commission meets and votes on change (or, in some cases, may approve a mail ballot for Governor's to vote on the change).
 - If the change is approved, ARC Staff will work with State DOT to modify project information in the online system to reflect approved change. Change will also be reflected in any future Completion Plan updates.

- When Executive Director approval is needed:
 - State DOT emails or sends letter to the ARC Executive Director requesting the modification. The local FHWA Division Office and ARC Senior Transportation Advisor should be copied.
 - If change is approved by the Executive Director (via email), ARC Staff will work with the State DOT to modify project information in the online system to reflect approved change. Change will also be reflected in any future Completion Plan updates.

- When ARC Staff approval is needed:
 - State DOT must email the ARC Senior Transportation Advisor, copying their local FHWA Division Office, to request the change.
 - If approved, ARC staff works with state DOT to modify project information in the online system and future Completion Plan update.

See Figure 5 for a breakdown of the typical ADHS corridor modification process depending on the type of changes proposed. This matrix serves as a general reference and is not necessarily a hard and fast standard. State DOTs should work with the ARC Senior Transportation Advisor to determine which approval category a specific proposed change falls under.

		Full Commission Approval Required When:		ARC Executive Director Approval Required When:		ARC Senior Transportation Advisor Approval Required When:
Proposal Type	Modify Alignment/Corridor Location	Proposed change could affect the alignment of the same Corridor in an adjacent state or could significantly impact the transportation network in an adjacent state.		New alignment creates a surplus or deficit in eligible mileage.	New alignment significantly modifies starting or ending location of a route without impacting an adjacent state.	Proposed change does not impact overall mileage total, does not affect multiple states, does not significantly modify the starting or ending location of the Corridor, and does not otherwise warrant Executive Director or full Commission approval.
	Change Design Criteria (e.g., number of lanes, design speed)	Proposed change is determined to be politically sensitive or precedent setting (as viewed by the Federal Co-Chair).		Proposed design speed is less than 50 mph.	Proposed reduction in number of lanes from four (or more) to less than four.	Minor changes which do not fall into one of the categories warranting Executive Director or Full Commission approval.
	Change Access Control Type	Proposed change is determined to be politically sensitive or precedent setting (as viewed by the Federal Co-Chair).		Access control type reduced from full to partial or none or from partial to none.		Access control type increased from none to partial or full or from partial to full.
	Move Eligible Miles	From an existing eligible section, thereby resulting in the old section becoming non-participating or removed from the ADHS entirely.	To an entirely new route anywhere on the ADHS or to a non-participating section in another state.	From a mileage surplus created by an approved alignment/location change to an existing non-participating section in the same state.		From a minor mileage surplus (less than 0.5 miles) realized during a routine administrative process (e.g. Annual Status Update) to a nearby section within the same Corridor within the same state.
	Other Proposed Change to Section or Overall Corridor	Results in deletion of any portion of an existing Corridor or addition of a new Corridor.	Affects multiple states.	Regionally significant, precedent setting, politically sensitive, or otherwise viewed by the Federal Co-Chair to be significant enough that the full Commission should weigh in.	Results in change to the location of eligible mileage within the existing network of Corridors.	Unique request that requires ARC leadership input, but not necessarily the full Commission.
Summary of Approval Process		<ul style="list-style-type: none"> ARC State Alternate and state DOT submit letter to the Federal Co-Chair requesting the modification (copy to local FHWA Division). ARC staff works with state DOT staff to draft Commission resolution and prepare to summarize the proposed change to the full Commission. If approved by Commission, ARC staff works with state DOT to modify project information in the online system and future Completion Plan update. 		<ul style="list-style-type: none"> ARC State Alternate and state DOT email the ARC Executive Director requesting the modification (copy to local FHWA Division and ARC Senior Transportation Advisor). If approved by the Executive Director (via email), ARC staff works with state DOT to modify project information in the online system and future Completion Plan update. 		<ul style="list-style-type: none"> State DOT emails the ARC Senior Transportation Advisor (copy to local FHWA Division). If change is approved, ARC staff works with state DOT to modify project information in the online system and future Completion Plan update.

Figure 5 – ADHS Corridor and Section Changes Matrix

KEY NEXT STEPS AND MILESTONES

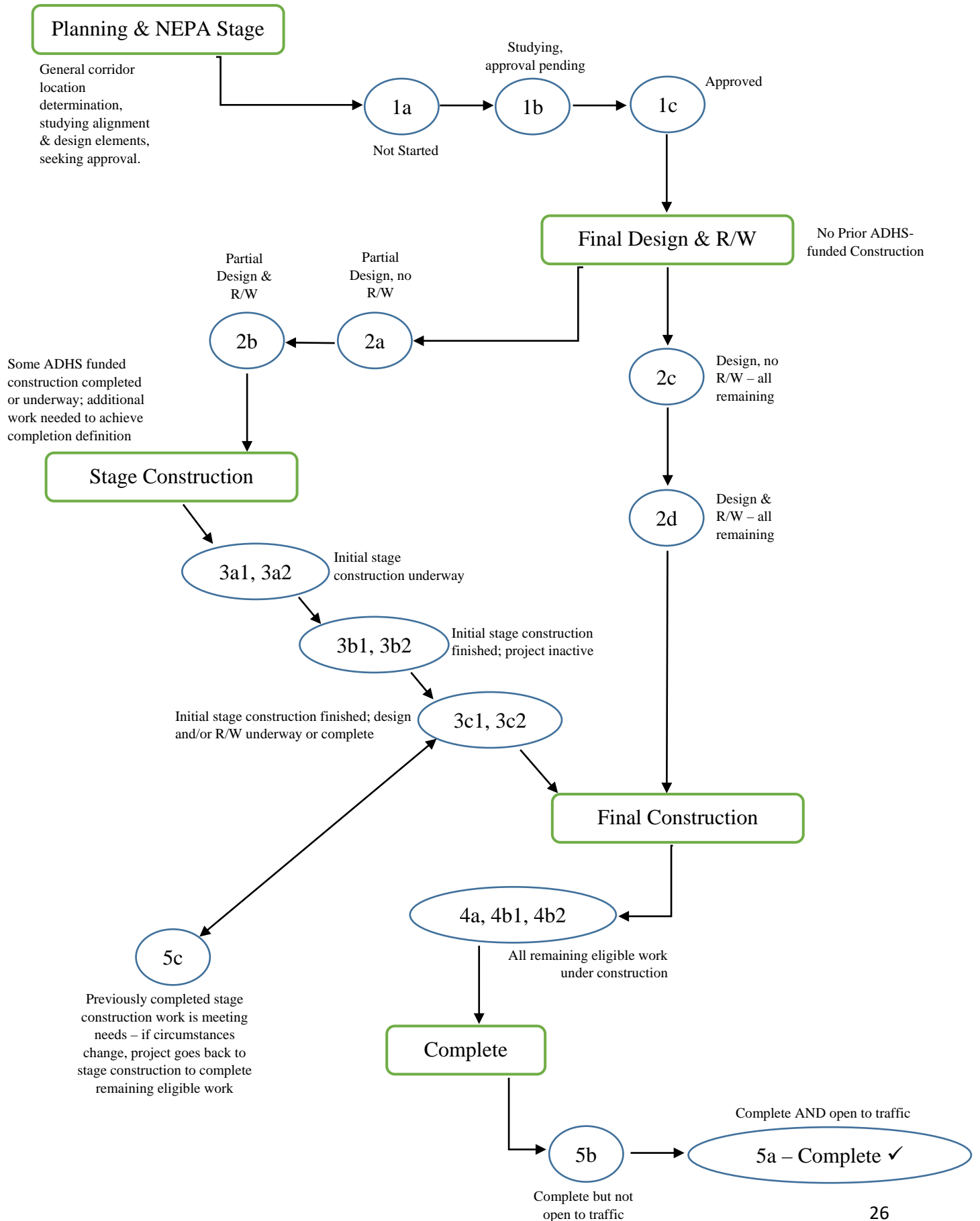
The following timeline summarizes the key next steps and milestones to formalize this Strategic Plan and to begin implementing the recommendations contained herein.

- Present Strategic Plan recommendations and proposed changes to ARC Code at Commission Policy Meeting in **Summer 2019**.
- Commission consideration of resolution to approve ARC Code changes and concepts outlined in ADHS Strategic Plan in **Fall 2019**.
- Create EADHS portal for future outlook designations by **October 2019** and populate with initial information by each state.
- Develop future outlook map with categories provided by each state by **January 2020**.
- Through FY 19 ADHS Status Update process, inventory all ADHS segments and correct incorrect mileage designations by **January 2020**. States to convert old status classifications to new categories and indicate new status categories, if applicable.
- Develop a simplified Cost-to-Complete estimate which will be referred to as the Completion Plan for each Section within each Corridor by **Fall 2020**, with recurring updates every five years. The Completion Plan will focus on route and section alignment, cross section, access control type and estimated cost. Details included in the 2020 Completion Plan will be considered new targets for “completion” status once approved by the Commission.
- Host next ADHS Conference with FHWA and State DOTs from all states with unfinished ADHS routes in **Spring 2020**.
- Approve Completion Plan details by **Fall 2020** for use as completion targets moving forward.

APPENDIX A – CURRENT ADHS STATUS CLASSIFICATIONS

All Work Complete Stage <i>(Status Group 1)</i>	Final Construction Stage <i>(Status Group 3)</i>	Stage Construction Stage <i>(Status Group 3)</i>	Design R/W Stage <i>(Status Group 4)</i>	Location Study Stage <i>(Status Group 5)</i>	Non-Participating <i>(Status Group NP)</i>
Mileage improved to AASHTO Standards	Under Construction	Stage Construction	PS&E Preparation and/or R/W acquisition underway or completed	Designated mileage	Ineligible mileage
<p>1a: Open to traffic - All work eligible for ADHS funds has been completed.</p> <p>1b: Not open to traffic - all work eligible for ADHS funding has been completed.</p>	3a2: Final construction contract underway - All work eligible for ADHS funding has been included in the contract.	<p>3a3a: Stage construction - No contract currently underway; serving traffic.</p> <p>3a3b: Same as above, except not serving traffic.</p> <p>3a3c: Stage construction contract currently underway; serving traffic.</p> <p>3a3d: Same as above; except not serving traffic.</p>	<p>4a1: Preparation of PS&E and R/W acquisition are concurrently underway or completed.</p> <p>4a2: Design is completed and R/W acquisition (only) is underway or completed on a selected construction location.</p> <p>4a3: Preparation of designs and other PS&Es (only) covering the construction upon a proper location are underway or completed.</p> <p>4a4: Design approved only</p> <p>4a5: Design public hearing held, or opportunity afforded.</p>	<p>5a1: Location approved by ARC and FHWA even though subsequent adjustments in centerline location may be necessary at a later stage.</p> <p>5a2: Location public hearing held or opportunity afforded.</p> <p>5a3: Studies to determine route locations are underway or completed.</p> <p>5a4: General corridor location has been established but route location work has not been started.</p>	NP: Integral parts of the ADHS corridors that are not to be improved with ADHS funds

APPENDIX B – TYPICAL ADHS STATUS CLASSIFICATION FLOW



APPENDIX C – ADHS STATUS CLASSIFICATIONS CONVERSION CHART

Non-Participating	Planning & NEPA			Final Design & R/W			Stage Construction		Final Construction		Complete or Meeting Needs				
Ineligible mileage	Planning, NEPA, preliminary engineering – No prior ADHS-funded construction			Final Design and/or R/W underway or completed – No prior ADHS-funded construction			Stage construction underway or previously completed		All eligible work under construction		Fully complete or partially complete and meeting needs				
NP: No change	<i>New Classifications</i>	<i>Old Classifications (if any)</i>		<i>New Classifications</i>	<i>Old Classifications (if any)</i>			<i>New Classifications</i>	<i>Old Classifications (if any)</i>	<i>New Classifications</i>	<i>Old Classifications (if any)</i>	<i>New Classifications</i>	<i>Old Classifications (if any)</i>		
	1a	5a1	-	2a	-			3a1	3a3c	4a	3a2	5a	1a		
	1b	5a2	5a3	2b	-			3a2	3a3d	4b1	3a2	5b	1b		
	1c	5a4	-	2c	4a3	4a4	4a5	3b1	3a3a	4b2	3a2	5c	-		
					2d	4a1	4a2	-	3b2	3a3b					
								3c1	-						
								3c2	-						

APPENDIX D – APPROVED ARC CODE CHANGES

CHAPTER 9 - HIGHWAYS

Section 9.1–System Criteria.

The Appalachian Development Highway System (ADHS) shall be constructed in accord with the following criteria.

- (1) The Appalachian Development Highway System shall at the earliest practical date, provide a safe, economical transport network, adequate for the predicted type and volume of traffic to be served by the respective segments.
- (2) The design of the Development Highway System shall be comparable with prevailing federal-aid highway standards, specifications, policies and guides applicable to the projected type and volume of traffic.
- (3) The design and construction shall be coordinated with the objective of achieving continuity and reasonable uniformity throughout the system, and an average travel speed of approximately 50 miles per hour between major termini of the System, commensurate with terrain. Elements of design, such as number of lanes, grade, alignment, and degree of access control may be varied to achieve this objective.
- (4) The System shall be built to provide the maximum number of miles of highway that can be constructed, considering the available federal funds. The System shall be designed, insofar as practicable, to standards which, as applied to each actual construction project, may be adequate to enable such project to accommodate the types and volumes of traffic anticipated for such project for the 20-year period commencing on the date of approval, under usual federal-aid highway procedures, of the plans, specifications and estimates for the actual construction of such project; Provided, however, that nothing herein shall prohibit staged construction where, in the discretion of the state, its finances so require. The right-of-way width on the System shall be adequate to permit construction of projects on the System to these standards.
- (5) The projected type and volume of traffic shall be considered in the determination of access control. Provision shall be made for partial or full control of access where necessary in order to preserve safety and capacity for traffic.
- (6) The scenic beauty of the Region shall be preserved and enhanced to the extent practicable by incorporating landscaping and beautification into the design of the Development Highway System.
- (7) Provision shall be made for maximum use of local labor in construction of the System.
- (8) The use of indigenous and locally produced materials shall be encouraged.
- (9) The Commission intends to continue its effort towards the construction of those segments of the Appalachian Development Highway System that have the highest priority for the attainment of the development objectives of the Region.

Section 9.2—Appalachian Development Highway System.

- a. **Corridors and Termini.** The general corridor locations and termini described in Appendix 1, and shown in Appendix 2, are approved as the Appalachian Development Highway System: Provided that the Commission shall in no event assist in the construction or right-of-way acquisition of any portion of such System which exceeds the number of miles authorized by law.
- b. **Concurrence in Detailed Highway LocationsCorridor Sections.** Each corridor will be divided into sections in order to define completion, estimate completion costs, and track completion progress based on criteria agreed to between Commission staff, the Federal Highway Administration, and the State Departments of Transportation in the Appalachian Region.
- c. **Corridor Section Details.** The Commission shall concur in the following corridor section details: highway location, termini, design speed, number of thru travel lanes, typical cross section, and access control type.
- d. **Completion Definition.** Approved corridor section details shall serve as the completion definition for each corridor section. Each corridor section's completion definition must be satisfied for the corridor section to be considered complete.
- e. **Completion Plan.**
b.—

~~(1)~~ **(1) General.** Each state shall submit a Completion Plan which defines completion for each unfinished corridor section on a recurring schedule agreed to by Commission staff, the Federal Highway Administration and the State Departments of Transportation.

(2) Contents of Completion Plan. Each state's Completion Plan shall, at a minimum, include the following information for each unfinished corridor section:

(a) Cost estimate to complete construction.

(b) Corridor section details which define completion, including: highway location, termini, typical cross section, design speed, number of thru lanes, and access control type.

~~Commission concurrence in detailed highway locations shall be obtained for all projects in accordance with the agreement between the Commission and the Federal Highway Administration, described in the current Federal Highway Administration's Federal Aid Policy Guide.~~

(32) Staff Review. The Commission staff shall review ~~each~~each location ~~Completion Plan~~ Completion Plan submitted for Commission concurrence and report its findings.

(43) Procedure. Pursuant to the procedures in Section 303 of the Act, action for the Commission will be taken:

(a) to concur in ~~detailed locations (and construction centerlines where applicable)~~ Completion Plan contents and communicate said concurrence first to the state member (or alternate) on the Commission, and then to the state highway department concerned and the appropriate Federal Highway Administration (FHWA) Division Administrator; or to allow a ten-day period, after receipt of maps ~~and details thereof~~ from the state highway department by the Commission, to expire without action, in which event concurrence shall be assumed; or

(b) to withhold concurrence in ~~detailed locations any or all contents in a Completion Plan or construction centerlines~~ and inform first the state member (or alternate) on the Commission, and then the state highway department concerned and the appropriate FHWA Division Administrator of such withholding; Provided that any such action shall be reported to the Commission, no later than the next meeting, for such further action as the Commission may deem appropriate.

f. Completion Definition Prior to Completion Plan Approval. Prior to approval of the first Completion Plan for each state, corridor section details and completion definition will be based on the most recent Cost-to-Complete Estimate, or subsequently approved changes.

g. Changes to Corridor Section Details.

1. General. States may propose changes to general corridor locations, termini, or corridor section details contained in the most recent Completion Plan or Cost-to-Complete Estimate for Commission consideration at any time.

2. Commission Vote Required. In general, approval by Commission vote is required when:

(a) Proposed modification to highway location could impact the location of the same Corridor in another state.

(b) State proposes moving unused eligible miles to an existing non-participating corridor section or to create a new Corridor.

(c) Proposed modification to Corridor location, termini, or corridor section details is regionally significant, politically sensitive, precedent setting or otherwise determined by the Federal Co-Chairman or Executive Director that the proposed change should be brought before the Commission for a vote.

3. Executive Director Approval Required. In general, approval by the Executive Director is required when:

(a) Proposed highway location change affects Corridor mileage totals.

(b) Proposal modifies Corridor termini location but does not impact any Corridor in another state.

(c) State proposes modifications to the typical cross section on any corridor section that results in an average design speed of less than 50 mph for that corridor section.

(d) State proposes reducing the ultimate cross section for a corridor section from four or more lanes of traffic to less than four lanes.

(e) State proposes reducing the access control level on any corridor section from full access control to partial or none.

4. **Staff Approval Required.** In general, approval by the Commission staff is required when the proposed modification does not impact overall Corridor mileage totals, does not affect multiple states, does not affect Corridor termini, and does not fall into one of the categories listed in Section 9.2 (g)(2) or Section 9.2 (g)(3) which warrants Executive Director or full Commission approval.

h. **Corridor Completion.** Each Corridor is considered complete when each corridor section within that Corridor has been constructed, is open to traffic and fully aligns with the most recently approved corridor section details.

Section 9.3—Priorities: Eligibility for Assistance-ADHS Completion Priorities

- a. **Principles for Establishing Priorities.** The Commission's general objective is to provide, to the greatest degree possible, a highway system which, in conjunction with the Interstate System and other federal-aid highways, will provide the greatest access into and within the Region and open up areas of the Region with development potential.

To carry out the general objective, highest priority shall be accorded to: (1) segments within each state which carry the highest overall traffic volume and contribute most to regional economic development opportunities; (2) segments which eliminate the most restrictive gaps in continuity; (3) segments which would complete the final connection of an overall Corridor; ~~(3) segments which carry the largest volumes of coal;~~ and (4) segments which would complete the most critical state line crossings.

Additionally, given the common financial, technical, and project delivery challenges associated with ADHS projects, the Commission places high priority on projects which have dedicated ADHS funding or other committed funding available and which the respective state has made a high priority to complete.

- ~~b. **State Priorities.** Each state shall establish annual priorities among its eligible cost sections in accordance with the principles in (a) above. The state's priorities shall be reported to the Commission annually according to a schedule to be agreed upon by the federal co-chairman and alternates.~~

- ~~e.b.~~ **Eligibility for Planning.** All ~~cost estimate~~ corridor sections of the Appalachian Development Highway System shall be eligible ~~for to use-~~ funds authorized or appropriated by Congress for the completion of the ADHS Section 201 assistance for route planning and location studies to determine ~~in~~ detailed locations and cost estimates.

d.c. Eligibility for Other Activities. All ~~cost estimate~~corridor sections shall be eligible for other highway activity assistance, including preliminary engineering, design, right-of-way acquisition and construction except the following sections shall be considered ineligible:

- (1) ~~cost estimate~~corridor sections which were considered adequate under previous Commission adequacy ratings but which were subsequently identified as inadequate; or
- (2) ~~cost estimate~~corridor sections which are to be funded with other than ARDA Section 201 funds; funds authorized or appropriated by Congress for the completion of the ADHS; or
- (3) ~~cost estimate~~corridor sections which were constructed with funds authorized or appropriated by Congress for the completion of the ADHS~~ARDA Section 201 funds~~, but which have been identified in subsequent cost estimates as requiring additional activities.

e.d. Changes in Classifications. Changes in eligibility classification must be approved at a meeting of the Commission.

Section 9.4—Procedures for Approval of Obligations of Funds for Eligible Highway Activities.

a. **General.** Funds transferred to the Federal Highway Administration or allocated to the states by the Commission for the development of the highway system under Section 9.5 shall, subject to limitations therein, be available for obligation for work on approved projects when (1) the project is included in the statewide transportation improvement program developed by the state and approved by the FHWA and Federal Transit Administration; and (2) the project is approved and authorized by the Federal Highway Administration under federal-aid procedures.

b. **Obligations for Eligible Activities.**

- (1) A state may proceed to obligate Section 201 funds authorized or appropriated by Congress for the completion of the ADHS ~~funds~~ for corridor planning, location studies, and cost estimates as provided in Section 9.4.a.
- (2) Upon completion of planning and location studies, a state may proceed to obligate Section 201 funds authorized or appropriated by Congress for the completion of the ADHS ~~funds~~ for preliminary engineering, design, right-of-way acquisition and construction when:
 - (a) the Commission has concurred in the detailed location;
 - (b) in the case of preliminary engineering and design, the state has committed to undertake construction (or right-of-way acquisition) within ten years;
 - (c) in the case of right-of-way acquisition, the state has committed to obligate funds for the construction of the section within 20 years following the fiscal year in which such right-of-way acquisition is authorized by the Federal Highway Administration; and
 - (d) conditions of Section 9.4.a. are met.

- c. **Pre-Financing.** Any state which performs work on an approved project with its own funds may be reimbursed the ~~Section 201~~ share of its costs; provided that (1) to be eligible for reimbursement, any such work shall be approved as provided by this Section 9.4 and authorized by the Federal Highway Administration in the same manner as a project assisted with allocated available funds; and (2) the total obligations during the current fiscal year, including pre-financed work to be converted to obligations in such fiscal year, shall not exceed the state's cumulative annual allocation.

Section 9.5—Allocations of Available Funds.

- a. **General.** It is Commission policy to allocate highway authorizations and anticipated appropriations as early as possible in order to enable the states to develop their plans for making the most effective use of funds for their Appalachian Development Highways and Local Access Roads. The Commission will make allocations for the Appalachian Development Highway System as set forth in this section and in accordance with legislative instructions. The Commission will annually review its allocation policy in light of appropriations and the need for local access roads and special regional needs and opportunities.
- b. **Basis of Allocations.** Allocation of ADHS funding s will be based in general on each state's remaining estimated need to complete eligible sections of the ~~Appalachian Development Highway System~~ ADHS as determined from the latest available cost estimates for completion of the System. Such cost estimates shall be produced at approximate five year intervals. Allocations of funding for the Appalachian Development Public Transportation Assistance Program (ADTAP) will be based in general on each state's remaining estimated need to complete eligible sections of the ADHS as determined by the 2012 Cost-to-Complete Estimate. Allocations of both ADHS and ADTAP funding shall contain upper and lower limits in amounts or percentages to be determined by the Commission and shall be made in accordance with legislative instructions.
- c. **Local Access Road Authority.** Each State is authorized to request approval from ARC to use use for local access roads up to \$3,000,000 annually from balances of funds that have been allocated to it for completion of the ADHS ~~the Appalachian Development Highway Program~~, except funds specially designated by Congress for Corridor construction, for local access roads. States with uncompleted ADHS Corridor Sections may only use up to \$5,000,000 annually in balances of ADHS funds for local access roads. Additional funding for access roads is permitted with Area Development funds or with funds from non-ARC sources unless otherwise restricted.
- d. **Reallocation.** Upon a declaration by an Appalachian State that it will not need all or some portion of the balance of funds in its ADHS account at the Federal Highway Administration (FHWA), such funds shall be redistributed among those States that indicate their willingness to receive them on a pro-rata basis in accordance with the allocation principles set forth in Subsection 9.5.b of the ARC Code, Basis of Allocations. The Executive Director is instructed to arrange such redistribution and to provide timely notification to FHWA of the amounts to be redistributed.

Section 9.6—Local Access Roads.

a. **Approval of Projects.** The Commission will approve, pursuant to the provision of Section 303 of the Act, only those local access road projects ~~to be funded under Section 201 of the Act~~ which meet the requirements of this section. Appropriated highway funds allocated or made available under this Code to any state for the local access road program shall be available for work on approved projects, when included by the state in its statewide transportation improvement program and authorized by the Federal Highway Administration, under federal-aid procedures.

b. **Project Criteria.**

(1) Industrial, Commercial and Service Areas. Local access road projects shall serve industrial and commercial sites and parks and service areas which will provide significant employment opportunities or otherwise meet the criteria set forth in approved State Strategy Statements. There shall be in existence, or specifically planned and funded, programs for stimulating economic development at the site, park, or service area to be served by a project. Such programs shall make provisions for necessary utilities, and shall be compatible with other development plans for the area.

(2) Residential Developments. Local access road projects shall provide access to sites required to satisfy demonstrated needs for permanent housing.

(3) Recreation Areas. The Commission will consider local access road projects to serve recreational development that will have a significant impact on a local economy in any area of the region. There shall be in existence, or specifically planned and funded, programs for stimulating the development of the area to be served by the project.

(4) Educational Areas. The Commission will consider local access road projects to serve school consolidation programs or other educational activities in any area of the Region. However, such projects shall be designed, wherever possible, to serve additional developmental objectives.

(5) Timber Areas. The Commission will consider access road projects to facilitate the harvesting of timberlands in the Region which have significant commercial value. Priority shall be given to projects that complement other developmental activities serving the same areas.