

2045 Long Range Transportation Plan

Executive Summary

This Long Range Transportation Plan (LRTP) is the second Long Range Plan for the Staunton-Augusta-Waynesboro Metropolitan Planning Organization (SAWMPO), which was established in 2012 following the 2010 U.S. Census. It offers a model for collaborative, regional decision making about transportation needs, and lays the groundwork for future long range planning updates.

The SAWMPO 2045 LRTP emphasizes the transportation system's role in economic vitality for the region, and safety for all travelers on the network. The SAWMPO 2045 LRTP documents:

E-1: Planning Context and Requirements. The background of the SAWMPO and federal transportation planning law, purpose and context for the Plan, and compliance with Title VI, the Map-21, and the Americans with Disabilities Act (see Introduction and Chapter 1).

E-2: Public Outreach. The public and stakeholder outreach and involvement process that accompanied development of the Plan, as well as the interagency consultations with resource agencies (see Chapter 2).

E-3: Existing Conditions. The existing land use and transportation conditions and deficiencies that help define future transportation needs for the region (see Chapter 3).

E-4: Socio-Economic Trends and the Transportation Demand Model. The statewide and regional trends for future growth, and how the 2045 LRTP Scenario Planning Process has been updated to reflect these changing regional trends (see Chapter 4).

E-5: Multi-Modal Transportation Needs. The transportation deficiencies that should be addressed over the 25-year period (see Chapter 5).

E-6: Performance-Based Programming and Project Evaluation. The project evaluation and ranking process that provided decision makers with objective, data-based indicators of project need and value (see Chapter 6).

E-7: Revenue and Cost. The estimated costs to fund projects contained in the LRTP, and the estimated revenues available to fund projects over the life of the plan, i.e., through the year 2045 (see Chapter 7).

E-8: Constrained Long Range Plan. The Constrained Long Range Plan (CLRP), which identifies projects and their year of expenditure and estimated cost, and a review of the Benefits and Burdens analysis (see Chapter 8).

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E – 1 Planning Context and Requirements

As a result of the 2010 U.S. Census, the Cities of Staunton and Waynesboro and portions of Augusta County were defined as an Urbanized Area (UZA), and required the formation of a Metropolitan Planning Organization (MPO) to provide for cooperative transportation planning efforts amongst the jurisdictions. As a newly-formed MPO, an initial responsibility is to develop the region's Long Range Transportation Plan (LRTP). The purpose of the 2045 SAWMPO LRTP is to satisfy the metropolitan planning requirements of the federal transportation planning process and to establish an informed program for implementing priority transportation investments in the region.

Overview of Federal Laws & the Transportation Planning Process

The LRTP for the SAWMPO was developed in accordance with the current federal transportation law known as The Fixing America's Surface Transportation (FAST) Act. Passed by Congress in 2015, the FAST Act is a funding and authorization bill to govern United States federal surface transportation spending. The \$305 billion, five-year bill is funded without increasing transportation user fees. Along with the Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2012, these two federal laws have shaped the way transportation investments are conceived, planned, funded, and implemented at the state and regional levels of government.

Compliance with Federal Regulations

A primary purpose of the LRTP is to establish compliance with all current federal laws and regulations. These regulations require all MPO's to develop a Unified Planning Work Program (UPWP), a Transportation Improvement Program (TIP), and the LRTP. The LRTP's goals as outlined in **Chapter 6** are shaped by the involvement of the region's citizens and stakeholders. Chapter 2 describes specific stakeholder and community outreach.

Federal Planning Factors

The MAP-21 identifies eight planning factors (23 CFR 450.316) which must be considered as part of the transportation planning process for all metropolitan areas. The SAWMPO LRTP addresses these factors in the plan goals, existing conditions inventory, alternatives/scenario analysis, and the CLR. P.

Title VI of the Civil Rights Act of 1964

The SAWMPO is a sub-recipient of federal financial assistance, and is required to comply with Title VI and other federal non-discrimination laws. It is also required to provide an overview of how the SAWMPO addresses Executive Order 12898 on Environmental Justice, as well as Executive Order 13166 on Limited English Proficiency (LEP), and how it complies with the Title VI plan. As part of addressing Environmental Justice, a Benefits and Burdens Analysis is included in Chapter 7, where the plan's fiscally constrained projects are identified with respect to the location of underserved or potentially vulnerable population segments.

Americans with Disabilities Act (ADA)

Enacted in 1990, The Americans with Disabilities Act (ADA) prohibits discrimination on the basis of disability by public entities. A primary function of transportation is to deliver opportunities for basic mobility to society. The greatest challenge of the LRTP is to prioritize and implement a transportation network that is multimodal and inclusive of all users. Transportation facilities should be accessible to all users allowing full participation in society, including employment, school, commerce and recreation activities. It is vital that government strive to ensure that transportation systems are not only safe and efficient, but usable by all.

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E – 2 Public Outreach and Consultation

The public and stakeholder outreach process focused on two phases. The phase included an online survey and a series of pop-up meetings at multiple venues around the region. Staff brought maps, flyers, and postcards with survey links to community events and venues in Staunton, Verona, and Waynesboro in the fall of 2019.

Due to the limitations on safely holding in-person meetings during the COVID-19 pandemic, the final round of public engagement to share the proposed list of projects was conducted exclusively online with an extensive, mobile-ready interactive website with project maps and a survey. Comments received during the 21-day public comment period are included in **Appendix D**.

The outreach process for the LRTP also includes consulting with state and federal resource management agencies on the identification of transportation needs and the selection of projects, which may affect the programs, lands, or policies over which they administer. **Appendix E** contains the letter used to contact each agency and the responses to the request for comment on the project evaluation and selection processes.

E – 3 Existing Conditions

Existing conditions with regard to population, demographics, existing infrastructure, and transportation system performance help identify existing deficiencies within the SAWMPO planning area. The maps and tables in **Chapter 3** illuminate demographic trends including higher-than-state average disabled, aging, and low-income populations that contrast with infrequent transit service and an incomplete non-motorized transportation network, and indicate deficiencies in the transportation system that future investments should address.

Analysis of existing roadway and traffic conditions reveals adequate capacity on the region's roadways, but heavy truck freight movement on the interstate system. New roadway connections, improvements to existing facilities, and expansion of transit service and bike and pedestrian facilities address network gaps and deficiencies

E – 4 Socio-Economic Trends and Travel Demand Model

This chapter reviews statewide and regional trends for future growth, and how the 2040 LRTP Scenario Planning Process has been updated to reflect these changing regional trends. The 2040 LRTP Scenario Planning Process created a preferred scenario for where growth would occur in the region. The preferred scenario then informed the selection of transportation investments in the Plan. Updated population and employment growth trends for 2018-2045 informed the development of the SAWMPO's first Travel Demand Model.

Scenario Planning Process from the 2040 Plan

At the outset of the 2045 LRTP update process, the SAWMPO TAC and Board agreed to uphold the 2040 preferred Growth Scenario and update it as needed.

Changes to the 2040 Preferred Scenario

The most notable updates to the 2040 Preferred Growth Scenario for population growth are Weldon Cooper Center's revised projection for population growth in the County, and the MPO's revised assumption for the percentage of that growth that will occur within the MPO's planning area. The 2040 Plan assumed that 75% of the County's growth between 2015 and 2040 would occur within the MPO planning area, while the 2045 update adjusts the estimate to be 50%.

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Travel Demand Model

The first travel demand model for the SAWMPO region, the program is a computer-based forecasting tool used to estimate travel behavior and travel demand on the transportation network on a large scale based on a set of regional land-use and transportation related assumptions. The SAWMPO model inputs were calibrated to local traffic data, socio-demographic factors, travel behavior (such as the amount of travel), and other variables for the 2018 base year.

E – 5 Multi-Modal Transportation Needs

Transportation needs are defined as the gap between existing transportation network deficiencies and the 2045 vision for the region. Needs were identified by the general public; local stakeholders across all transportation modes and industries; and staff from local, regional, state and federal agencies. This chapter focuses on the network capacity and safety needs for roads and freight, bridges, transit, Transportation Demand Management, and bicycle and pedestrian infrastructure.

Many of the needs identified in the 2040 LRTP have remained the same. Congestion forecasts illustrate that the region will experience limited traffic congestion between 2020 and 2045. Needs continue to be focused on addressing the congestion, safety, multi-modal, and transit needs along the interstate corridors, in the cities of Staunton and Waynesboro, and Augusta County's designated growth areas in Fishersville, Stuarts Draft, and Verona. Stakeholder and public input indicate that addressing congestion on I-81, improving multi-modal connections and transit service, and continuing to maintain existing roadways are the highest regional priorities.

E – 6 Performance-Based Programming and Project Evaluation

With the passage of Moving Ahead for Progress in the 21st Century (MAP-21) in 2012, and the subsequent Fixing America's Surface Transportation (FAST) Act in 2015, the FHWA and FTA mandated that States and MPOs establish performance measures to integrate system-performance management into the transportation and transit planning process.

The 2045 LRTP updates the 2040 LRTP's goals to meet current federal and state performance-based planning requirements. The region's goals are informed by MAP-21 goals, the FAST Act, and VTrans 2045 goals, and regional priorities. The MPO's Travel Demand Model outputs measure specific projects to further ensure goals are addressed.

The LRTP Working Group developed a project scoring methodology that reflects the needs of each locality and provides an objective scoring framework to evaluate projects in the region. The methodology includes the Plan's goals, Travel Demand Model outputs, SMART SCALE project factors weighted to reflect the region's priorities, and planning-level cost estimates.

E – 7 Costs and Revenues

This chapter explains the methodology for developing project cost estimates and revenue projections. As a condition of receiving federal funding for transportation projects, MPOs are required to demonstrate that projects

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in the Plan are reasonably expected to be funded over a 25-year period. Revenue projections are projected over seven funding categories: Interstate-81 Improvement Program, District Grant Program, High Priority Projects, Transportation Alternatives, Revenue Sharing, Highway Safety Improvement Program, State of Good Repair, and projects funded by private developers.

Projects are prioritized by the project scoring methodology outlined in **Chapter 6**, and the highest priorities are included in the Constrained Long Range Plan (CLRP), which is a list of projects fiscally constrained by projected revenues over the 25-year period. If additional funding becomes available during the life of the LRTP, projects included on the Vision (unfunded) List could be eligible to receive funding.

E – 8 Constrained Long Range Plan

The final requirement of the LRTP is a fiscally constrained list of projects called the Constrained Long Range Plan (CLRP), which identifies what projects the MPO may finance over a 25-year period. A total of 48 projects are included in the CLRP, of which 22 are new projects since the 2040 Plan. The remaining projects, which are unfunded but meet key regional needs, are included in the Vision List in **Appendix A**.

As part of the LRTP's compliance with the Title VI Act, staff conducted a "Benefits and Burdens" analysis on the projects in the CLRP. Project locations were overlaid with U.S. Census data on the locations of underserved or minority populations in order to evaluate if projects would either unduly burden a certain population, or conversely, underserve a population. The analysis revealed that projects in the CLRP are equitably distributed across the MPO Planning Area, and proposed new construction, or capacity-adding projects seem unlikely to burden minority or underserved populations in their proposed alignments.