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2040 Long Range Transportation Plan

Executive Summary

This Long Range Transportation Plan (LRTP) is the first such document for the Staunton-Augusta-Waynesboro Metropolitan Planning Organization (MPO), which was designated 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 2040 LRTP emphasizes the transportation system's role in economic vitality for the region, and safety for all travelers on the network.

The SAWMPO 2040 LRTP documents:

E-1: The LRTP Goals, compliance with federal transportation planning law, background and context for the Plan, and compliance with the Americans with Disabilities Act (see Introduction and Chapter 1)

E-2: 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: The existing land use and transportation conditions and deficiencies that help define future transportation needs for the region (see Chapter 3)

E-4: The development of a regional vision for 2040, and a set of transportation needs to inform project selection (see Chapter 4)

E-5: 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 2040 (see Chapter 5)

E-6: 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: The definition of a Constrained Long Range Plan (CLRP), which identifies projects and their year of expenditure estimated cost

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E – 1 Planning Context, Federal Requirements and Plan Goals

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 2040 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.

SAWMPO 2040 Plan Goals

The LRTP Goals reflect planning factors required by the federal law Moving Ahead for Progress in the 21st Century (MAP-21). These goals were used in guiding the development of the LRTP's priorities and policies.

2040 LRTP Goals	
Goal 1	Support and improve the economic vitality of the region by encouraging a transportation system that provides access to jobs, and education, and attracts businesses and entrepreneurs to the region.
Goal 2	Maintain the existing transportation system and facilities and promote efficient system management
Goal 3	Increase the safety and security of the transportation system for all users.
Goal 4	Encourage the coordination of land use and transportation planning in order for transportation improvements to support future growth.
Goal 5	Ensure connectivity of the transportation system across modes for the transport of both people and goods.
Goal 6	Provide an efficient, reliable transportation system for pedestrians, bicyclists and transit users, including traditionally underserved populations.
Goal 7	Improve quality of life by protecting and enhancing historic and natural resources, promoting energy conservation, maintaining air quality, and expanding regional recreation networks.

Planning Background and Context

Historically, VDOT prepared small urban plans for towns and cities throughout the Commonwealth to identify transportation investments. In the late 1990s, VDOT updated Thoroughfare Plans for the Cities of Staunton and Waynesboro, which were adopted by those jurisdictions in the early 2000s. These plans analyzed highway capacity, safety, geometry, and local citizen/stakeholder input.

In 2011, the Central Shenandoah Planning District Commission (CSPDC) adopted the Rural Long Range Transportation Plan (RLRTP) for the entire region, incorporating and highlighting transportation priorities for the five-county region that includes towns and cities that are not part of an urbanized area.

The SAWMPO 2040 LRTP process included reviewing and carrying over on-going priority projects from the RLRTP.



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Overview of Federal Laws & the Transportation Planning Process

The LRTP for the newly designated SAWMPO was developed in accordance with the current federal transportation law known as MAP-21. In 2012, MAP-21 replaced the previous federal transportation law, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Together 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. The LRTP's goals as outlined in the Introduction, are shaped by the involvement of the region's citizens and stakeholders. Chapter 2 describes specific stakeholder and community outreach.

Federal Planning Factors

The prior transportation act, SAFETEA-LU, identifies eight planning factors (23 CFR 450.316) which must be considered as part of the transportation planning process for all metropolitan areas. These planning factors were integrated into the development of the SAWMPO LRTP process through the definition of the plan goals, listed above.

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, Stakeholder Involvement and Agency

Consultations

The public and stakeholder outreach process focused on two large meetings in October, 2013. The purpose of the stakeholder meeting was twofold: to provide information on the LRTP, and to solicit information on transportation issues and concerns in the region that stakeholders would like to see addressed in the LRTP.

Feedback from the stakeholder meeting included noting an increase in pedestrian and bicycle activity in the region. There was an emphasis on better accommodating transit-dependent populations as well as those that use transit by choice. Overall, there was an interest in incorporating complete streets concepts, taking into account all users, when developing the Long Range Transportation Plan.

The public meeting echoed the stakeholder desire for improving the transit options and service. Participants noted an insufficiency in the current transit system for employees to get to and from work, as well as for errands such as grocery shopping. Work commutes from Staunton to Stuarts Draft and Waynesboro were of particular interest. Input also indicated an interest in promoting economic development and ensuring that existing roads and bridges are maintained. Maintenance concerns included snow removal.

The SAWMPO solicited comments from state and federal resource agencies regarding the draft list of projects and environmental quality evaluation measures. No substantive comments were received.

E – 3 Existing Conditions and Deficiencies

Existing conditions with regard to population, demographics, existing infrastructure, and transportation system performance help us identify existing deficiencies within the Staunton-Augusta-Waynesboro MPO (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. Network gaps and deficiencies exist where key new connections need to be made, where anticipated growth will require reconstruction of an existing facility, and where transit service and bike and pedestrian facilities are missing.

E – 4 Regional Vision and Transportation Needs

Transportation needs are defined as the gap between existing deficiencies in the system and the 2040 Preferred Scenario. For this planning process, needs were identified in a land use and transportation scenario planning exercise, and validated by public input and a review of prior planning documents.

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The scenario planning process used projected population, household and job growth data to develop two initial 2040 scenarios—a Baseline, “business as usual” scenario, and an alternative, which featured a considerably more compact growth pattern for the same number of households and jobs as the Baseline. The MPO arrived at a Preferred 2040 scenario for the SAW region by blending elements of the Baseline and Alternative scenarios to achieve a vision for the future that balanced the needs for economic growth and preservation of the high quality of life in the Shenandoah Valley.

The Preferred Alternative and its location of residential and commercial growth in Staunton, Fishersville, Waynesboro, and to a lesser extent, Stuarts Draft and Weyers Cave, further highlights the need for improved multi-modal connectivity and accessibility in the region.

E – 5 Revenue Projections and Project Cost Estimates

As a condition of receiving federal funding for transportation projects, MPOs were required to demonstrate that projects in the Long Range Transportation Plan (LRTP) are reasonably expected to be funded over the life of the plan. Despite uncertainty about federal revenues in the future, the LRTP has projected revenues over a twenty-five year period to 2040.

Most recently in Virginia, the traditional formula-based approach to allocating federal transportation funds is transitioning to a performance-based evaluation through House Bill 2. Despite this shift in philosophy at the state level, the LRTP is required to include a financial plan that estimates revenues for identified transportation improvements.

The SAWMPO region has transportation needs that exceed revenue projections, but projects are prioritized, and the highest priorities are included in the Constrained Long Range Plan (CLRP). The 2040 CLRP projects total \$97 million for highway projects, \$8.2 million for Transportation Alternatives (bike and pedestrian) projects, and \$74 million for transit operations. Total needs for the MPO exceed \$585 million, a funding gap of nearly \$441 million.

E – 6 Project Evaluation and Ranking Process

The SAWMPO has evaluated projects using an objective, performance data-based process to ensure that the region meets its transportation system needs over the next 25 years. MPO planning efforts have increased emphasis on performance management within the federal-aid highway and transit programs. This best practice for long range transportation planning has been adopted both by the State of Virginia, and the SAWMPO.

The SAWMPO evaluation process was based on how well candidate projects met the 7 plan goals.

The universe of potential transportation projects was drawn from three sources:

1. Priority projects identified by the MPO in 2013
2. SAWMPO-area projects in the Central Shenandoah Planning District Commission 2011 Rural Long Range Transportation Plan

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3. Projects identified in local plans from Augusta County, Staunton, and Waynesboro.

Goal Weighting

Following the Policy Board's adoption of the seven plan goals, the Board ranked the goals in terms of their relative importance for the LRTP and the region. The goal weights clarify what is most important for the region, and allow for refinement of project evaluation.

Project Evaluation

Each goal had between 1 and 3 evaluation criteria, with each criterion associated with 1 evaluation metric. To evaluate the candidate projects, staff assigned each metric a possible score of 0-3 points. The "raw score" was then multiplied by a weighting factor tied to the Goal Weights discussed in Section 6-4.

Cost Effectiveness

Projects were also evaluated based on their cost effectiveness. A simple indicator of cost effectiveness is cost/ADT. This additional metric brought balance to the evaluation process. Projects with high scores, but also high costs per trip were balanced against more cost effective solutions, such as smaller scale project addressing a critical location, instead of a long corridor reconstruction project.

Policy Board members used the weighted project scores and cost effectiveness index in their decision making process about which projects to include in the Constrained Long Range Plan (CLRP).

E – 7 Definition of the Constrained Long Range Plan (CLRP)

A CLRP is the core requirement of a MPO Long Range Transportation Plan. The SAWMPO CLRP is comprised of two sets of projects. The first set is "previously committed" projects which are already listed in VDOT's Six Year Improvement Program (SYIP). If the projects were not fully funded in the SYIP, then projected revenues were first dedicated to fully funding these projects. The second set of projects is "newly committed" projects identified by the MPO as priorities for the next 25 years.

As part of the LRTP's compliance with the Title VI Act, the project team performed 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.