



2050 Long Range Transportation Plan Update

SCOPE OF WORK



**Staunton Augusta
Waynesboro**
Metropolitan Planning
Organization

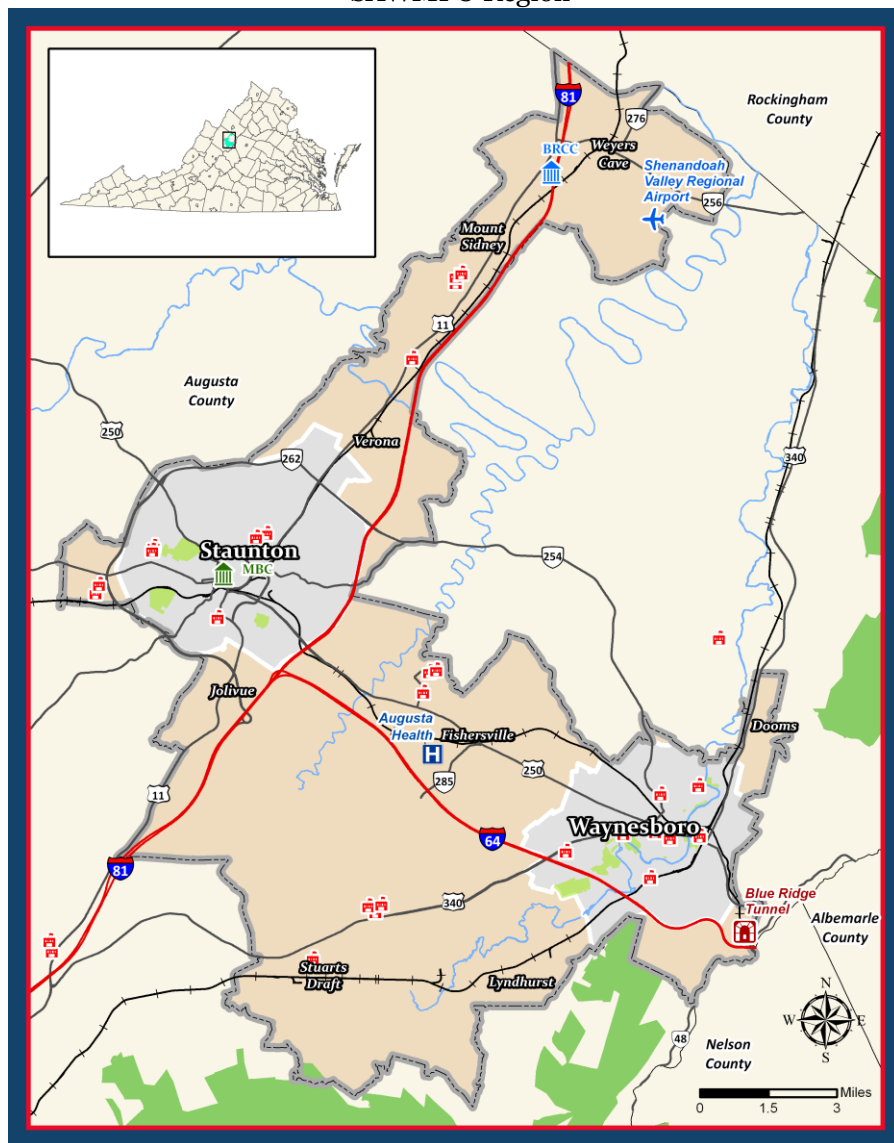
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Project Purpose and Overview

The previous Staunton-Augusta-Waynesboro Metropolitan Planning Organization (SAWMPO) Long Range Transportation Plan (LRTP) was approved in December 2020. The Federal Highway Administration (FHWA) requires that Metropolitan Planning Organizations (MPOs) update long range plans every five years, and the SAWMPO is now beginning the process of updating the LRTP to complete the 2050 update by December 2025.

LRTPs must identify regional transportation needs, specific transportation projects, and include a financial plan that indicates how the improvements will be funded over the five-year period.

SAWMPO Region



Federal and State Planning Considerations

Federal Requirements

Section 134 (h) of Title 23 U.S.C of Federal Highway Administration and the Federal Transit Administration section 5303 (h) of Title 49 U.S.C list ten planning factors that must be considered as part of the transportation planning process:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for motorized and non-motorized users.
3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase the accessibility and mobility of people and for freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
10. Enhance travel and tourism.

State Requirements

[Title 33.2-214](#) of the Code of Virginia requires that MPO LRTPs are consistent with the statewide long range transportation plan VTrans developed by the Office of Intermodal Planning and Investment (OIPI).

Task 1: MPO Coordination

Objective

This task ensures that the 2050 LRTP is developed in an effective and efficient manner with the SAWMPO Policy Board and Technical Advisory Committee (TAC), and regional, state, and federal stakeholders.

Methodology

The 2050 LRTP Working Group will direct the planning process and ensure the plan meets local, state, and federal needs. The Working Group will include SAWMPO staff and the TAC, and representatives from the Virginia

Department of Transportation (VDOT), the Virginia Department of Rail and Public Transit (DRPT), and BRITE Transit.

Deliverables

SAWMPO staff will organize meetings and prepare meeting and presentation materials (handouts, displays, presentations, etc.), and provide presentations as needed for plan stakeholders.

Working Group Meetings

- *Kick-Off Meeting:* The initial meeting will discuss the planning process, responsibilities of the Working Group, and expected outcomes of the plan. Staff will provide an update on the demographic trends between 2019 and 2024 to compare actual growth versus projections in the 2045 LRTP. Staff will review the 2045 Travel Demand Model scenario, and what assumptions could inform the 2050 scenario update.
- *Existing Conditions Review:* The Working Group will review the existing conditions chapter and provide feedback to SAWMPO staff on data accuracy before the TAC and Policy Board reviews the draft chapter.
- *Multi-Modal Needs Review:* The Working Group will review the needs analysis following the first round of public and stakeholder input, documentation of needs from recent studies, and the base year and 2050 No-Build operations and deficiency analyses.
- *Goals, Objectives, and Screening Criteria Review:* The Working Group will review the Goals, Objectives, and proposed screening criteria that will be used to evaluate project performance and inclusion in the CLRP.
- *Vision Plan Review:* The Working Group will work with MPO and VDOT staff one-on-one and as a group to finalize the project descriptions and cost estimates for the Vision Plan projects.
- *Draft Constrained Long-Range Plan:* Following Vision List project scoring, staff will match the highest-scoring projects and available revenues to create a draft CLRP for the Working Group to review, prior to sharing the draft CLRP with the TAC and the Policy Board.

Task 2: Public and Agency Involvement

Objective

This task emphasizes the importance of conducting a multi-phased public outreach campaign that informs all members of the public on the MPO planning process, and provides multiple opportunities for the public to provide input on the transportation needs, goals, and projects identified in the plan.

Methodology

SAWMPO staff will coordinate with the Working Group to develop a multi-phased public engagement strategy that includes all members of the public, is informed by federal Environmental Justice guidance for transportation planning and state public engagement principles outlined in VTrans, and includes the following:

- **Public Information Meetings:** In-person and virtual information sessions that explain the purpose of the MPO, the long range planning process, and opportunities to ask questions and provide input on the different aspects of the plan.
- **Public Survey:** An online and print public survey that solicits public input on transportation needs and improvements.
- **Website Updates:** SAWMPO staff will maintain a page on the sawmpo.org website to share updates on the process, present draft recommendations, and provide a means for public comment.

Deliverable

- Document and presentation available to the Working Group, SAWMPO Policy Board, and the public summarizing the public engagement results.

Task 3: Evaluate Existing Conditions

Objective

This task will review all relevant plans and data that will provide essential background information on the existing highway and multi-modal network conditions, to include bicycle and pedestrian infrastructure, freight, transit, and transportation demand management; safety and congestion data; population, employment, and development trends.

Methodology

SAWMPO staff will review and evaluate city, county, and regional planning and economic development documents; transportation studies; goods movement data; and economic, demographic, and transportation-related data from sources including U.S. Census, Virginia Employment Commission, Bureau of Economic Analysis, and local Chambers of Commerce.

Deliverables

- Collection of evaluated data representing the regional transportation network and operations consisting of the following:
 - Socioeconomic characteristics (population, employment, etc.)
 - Transportation system infrastructure and existing conditions
 - Traffic safety and congestion

- Development patterns and land use
- Multimodal facilities
- Draft Existing Conditions Chapter discussing existing conditions relative to the plan.

Task 4: Develop 2050 Projections and Evaluate Preferred Growth Scenario

Objective

This task will develop population and employment growth projections for 2050 and consider updating the Preferred Growth Scenario with these projections based on the 2040 LRTP Travel Demand Model inputs in comparison to 2024 U.S. Census data. The LRTP Working Group will also consider alternatives to updating the preferred growth scenario, and evaluate the potential to evaluate the MPO's future needs through determining sub-areas in the MPO where needs are most acute based on socio-demographic data, housing, economic data, and other data and sectors that overlap with transportation planning.

Methodology

The MPO will use the 2045 LRTP Travel Demand Model and the 2018 base year data as a baseline for determining 2050 growth assumptions. MPO staff will coordinate with the Working Group and VDOT to analyze the regional impact of potential new capacity projects under consideration for the Constrained Long Range Plan (CLRP) project list.

This task will develop reasonable socioeconomic forecasts for the region on which to base future transportation needs. This will involve comparing the 2045 data with current U.S. Census data and updated population, employment, household projections to arrive at a 2050 projection for each factor.

Task 5: Evaluate Multi-Modal Transportation Needs

Objective

Federal MPO planning requirements emphasize the importance of multi-modal transportation solutions. These solutions involve evaluating not only private vehicle highway users, but also expanding bicycle and pedestrian network and shared use paths, increasing transit ridership and expanding transit service, identifying the potential impact of emerging technologies such as electric vehicles on the transportation network, and transportation demand management needs.

The subtasks below will analyze transportation deficiencies and assess transportation needs to provide the basis for the development of the 2050 project recommendations. The needs evaluation will consider the ten federal planning factors, federal coordination requirements, early environmental mitigation, and environmental justice planning.

The SAWMPO will consult with state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the long range transportation plan.

Roadway Deficiencies

Objective

The objective of this task is to forecast travel demand, conduct capacity analysis, review crash data, and review geometric characteristics to provide a comprehensive assessment of roadway deficiencies.

Methodology

Base year 2018 operating conditions will be assessed based on data collected, including identification of existing deficient roadways through base year Average Daily Traffic (ADT) and Volume to Capacity Ratios (V/C). These data points will be represented through mapping and tables within the LRTP.

The Working Group will evaluate the 2045 forecast to reaffirm segments that may have future capacity issues. The roadway deficiencies analysis will incorporate data from VDOT's statewide Potential Safety Improvement (PSI) and safety concerns related to roadway characteristics; roadway structure deficiencies such as bridges and railroads from VDOT and DRPT data; previous SAWMPO and VDOT studies conducted since the 2045 LRTP update, such as the SAWMPO Highway Safety Plan, PSI Study, Exit 235 Study, Route 250 Study; and input from the LRTP Working Group and the public.

Climate Mitigation Strategies

Objective

The objective of this task will be to provide a systemic, multi-modal approach to addressing the transportation sector's contribution to greenhouse gas emissions in the SAWMPO region, including electric vehicle readiness, and transportation demand management strategies.

Methodology

Staff will evaluate opportunities to reduce single-occupant vehicle (SOV) trips, including expanding transit, and opportunities for localities and partners to expand the regional network of public and private EV charging stations and municipal fleet conversions.

Pedestrian And Bicycle Planning

Objective

This task will identify needs and opportunities for active modes of travel. The 2050 LRTP will incorporate the recommendations from bicycle and pedestrian plans from the MPO, Staunton, Augusta County, and Waynesboro.

Methodology

SAWMPO staff and the working group will review bicycle and pedestrian needs and recommendations from the current plans. These recommendations will be incorporated into the LRTP and prioritized along with the other multi-modal recommendations.

Transit

Objective

This task will identify the needs and opportunities for transit service and receive input from BRITE Transit in assessing transit deficiencies and developing transit plan recommendations.

Methodology

SAWMPO staff and the working group will work with BRITE Transit to evaluate potential transit alternatives to address any identified transportation deficiencies in the region, especially as they relate to accessibility of jobs and services in the region. The evaluation will be based on needs identified in BRITE's Transit Development Plan (TDP).

Freight and Goods Movement

Objective

The I-81 and I-64 corridors and the regional industrial and commercial base have unique goods movement needs and capabilities that must be addressed in the LRTP. The goal of this task is to develop an understanding of goods movement needs and trends in the SAWMPO region and address these needs through specific recommendations in the LRTP.

Methodology

SAWMPO staff will update information on locations of shipping/delivery facilities; assessing truck traffic percentage on I-81, I-64, and other major corridors, identifying the associated routes for goods movements to these commercial establishments; reviewing existing rail freight service and any planned improvements based upon information available from DRPT including improvements to the I-81 corridor from the I-81 Corridor Improvement Plan and contacting freight carriers regarding intermodal needs. The plan will identify potential strategies to accommodate goods movement serving the two interstates.

Deliverables

- Evaluation of the network performance of 2050 No-Build and Preferred Growth Scenario
- Mapping analysis of crash and bridge sufficiency data
- Multimodal Transportation needs chapter
- Summary of goods movement needs and potential improvement strategies

Accessibility And Land Use Coordination

Objective

Transportation investments in the SAWMPO region must support the recruitment and retention of a skilled workforce, focusing on the sub-areas where new housing is being built, and providing facilities and services that get people where they need to go. This task will identify focus areas of the region with the greatest transportation needs as they relate to workforce access to transportation and economic activity zones that contribute to the overall health and competitiveness of the region.

Methodology

SAWMPO staff and the Working Group will cross reference socio-demographic data like zero car households, areas with new housing starts, new commercial and industrial development with existing multi-modal facilities and transit service to identify gaps in the network most critical to supporting regional economic competitiveness and local housing and economic development strategies.

Task 6: Update Goals, Objectives, and Screening Criteria

Objective

This task will review and update regional Goals and Objectives, identify relevant criteria to prioritize projects for the Constrained 2050 Transportation Plan, and document how the screening and evaluation criteria align with VTrans and meet MAP-21 performance-based planning and programming requirements.

Methodology

The Working Group will evaluate if the 2045 LRTP Goals and Objectives are still relevant, and ensure that the Goals, Objectives, and screening criteria align with VTrans. MPO staff will present a range of performance measures to the Working Group for comment before applying them to the Vision Plan projects for screening and prioritization. Potential evaluation criteria include cost, potential environmental impacts, safety needs, travel demand or other factors.

Deliverable

- Updated Goals, Objectives, and Screening Criteria to inform Task 8.

Task 7: Update Year 2050 Vision Plan Recommendations

The Vision Plan defines the full range of projects that will be necessary to eliminate or reduce deficiencies, provide better community services, and compliment the goals of other planning activities. The Vision Plan is the pool from which projects may be drawn to include in the Constrained Plan (CLRP).

Vision Plan Recommendations

Objective

The findings of the multimodal needs assessment from Task 4 and projects developed through recent planning studies are the basis for the 2050 Vision Plan. The 2050 Vision Plan should address congestion, safety concerns, operational deficiencies, and multi-modal transportation needs.

Methodology

SAWMPO staff, in consultation with the Working Group, TAC, Policy Board, and locality representatives, will prepare a list of transportation recommendations based on the identification of needs conducted in Task 5. The draft Universe of Projects list will be screened to determine whether a candidate project met a VTrans need, aligned with the 2050 LRTP Goals, and addressed identified needs. Projects not meeting the screening criteria, and not advancing to the final Universe of Projects list, will be included in a Projects for Future Study list or a project Vision List.

Update Cost Estimates

Objective

This subtask will develop cost estimates for the 2050 CLRP. Planning level cost estimates will be updated for each vision plan recommendation developed. The Working Group will also develop estimated project delivery time periods in order to provide cost estimates in Year of Expenditure (YOE) amounts, growing project costs by at 3%/year inflation rate.

Methodology

Working with existing unit-based cost factors developed by VDOT, SAWMPO staff will create cost estimates for each Vision plan recommendation. The Working Group will review the cost estimates and adjust them based upon additional consideration of local factors. The cost estimates will be presented to the TAC for their review. No engineering will be conducted to create the cost estimates, which are planning-level estimates.

Environmental Review

Objective

The objective of this subtask is to integrate broad environmental issues into the transportation planning process at an early stage.

Methodology

A cursory environmental review will be conducted at a system level to identify environmental features that may be impacted by Vision Plan recommendations that encompass new location or widening projects involving two lanes or more. Agricultural districts, forestal districts, hazardous material sites, historic properties, wetlands, stream crossings, trout stream crossings, Virginia Byway locations, open space easements, park and recreation sites, and general range of business and residential displacements will be identified in the overview.

The overview will identify the above resources based upon secondary data provided by VDOT or readily secured through Internet database searches. No primary data or field investigative data will be secured. Historic property data will be secured through existing files at the offices of the Virginia Department of Historic Resources.

Assessments of impacts or effects, determinations of eligibility, conclusions on the extent of impact area, qualitative evaluations of the resources and environmental mitigation (including costs) will not be provided. The overview will recognize the existence of the resources based upon the availability of secondary data sources provided. The environmental overview will be provided as an input to the screening criteria for prioritization of plan recommendations. Appropriate agencies will be consulted with for review of the environmental evaluation.

Environment Mitigation Activities

The LRTP will include a discussion of potential environmental mitigation activities. These activities will address issues from a policy or strategic level rather than from a project-specific level. This discussion will be developed in consultation with federal, state wildlife, land management, and regulatory agencies. In addition, the MPO will allow reasonable opportunities for these agencies to perform their consultation duties, as appropriate.

Federal regulation requires that the MPO, as a part of the consultation process, must provide a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan. These activities should also be developed in consultation with federal, state, and tribal wildlife, land management, and regulatory agencies.

Deliverables

- Vision List and Projects for Future Study lists
- Updated Vision List cost estimates
- Updated project screening criteria
- Environmental data for project evaluation
- Record of consultation process with state and federal agencies

Task 8: Develop Fiscally Constrained 2050 Transportation Plan

Objective

The LRTP must demonstrate that the proposed transportation investments are consistent with available and projected sources of revenue. The plan must also demonstrate that fiscal resources are available for the preservation and maintenance of the existing transportation system. Environmental Justice analysis of the constrained plan is also required by FHWA. An estimate of future revenues will be developed and projects will be prioritized to ensure the 2050 Transportation Plan demonstrates a consistency between recommendations, system maintenance, and projected funding.

Methodology

Develop 2050 Projected Revenues by Funding Program (SMART SCALE, TAP, Revenue Sharing, High Safety Improvement Program, etc.)

VDOT will provide a revenues projection for the SAWMPO as a starting point for the revenue forecast. SAWMPO staff will review the estimates of available funding and the initial project prioritization resulting from the TAC's work. SAWMPO staff will then develop a draft of the fiscal constraint outlook for the Transportation Plan.

Project Scoring and Prioritization

The Vision Plan Projects will be prioritized through the screening criteria and performance measurements developed in Task 6. These prioritization rankings will be used to assist in the development of the constrained project list. The recommendations will be further assessed through the TDM process.

Environmental Justice Review

SAWMPO staff will use 2020 Census data and more recent ACS estimates to identify low income and minority concentrations using county averages. The linkages between these residential areas and employment concentrations will be examined by mode. This analysis will be done using GIS. The constrained long-range plan will be evaluated for potential disproportionate impacts, either in terms of having focused impacts in the identified environmental justice communities, or in terms of having a lower level of transportation investments planned to serve these communities. The findings of this analysis will be incorporated via a Benefits and Burdens analysis.

Deliverables

- Projected Revenue Spreadsheet
- Project Screening and Prioritization Spreadsheet
- Environmental Justice Benefits and Burdens Analysis

Task 9: Document

Objective

The information developed in Tasks 2 through 8 will be refined based on MPO, Working Group, and public input, and a 2050 Constrained Long Range Plan will be developed to address all federal planning requirements.

Methodology

SAWMPO staff will prepare a Plan document that meets all state and federal requirements for an MPO area plan.

Deliverable

- A final 2050 LRTP approved by the SAWMPO Policy Board by December 2025.