

CHAPTER I

INTRODUCTION

Connect Central Virginia 2045 set a blueprint for creating a more efficient, connected, and resilient transportation system in the Central Virginia region over the next 25 years. The region's Transportation Planning Organization (TPO) is the entity responsible for preparing this plan, which builds on the 2040 Long Range Transportation Plan (LRTP), the 2017 Lynchburg Connectivity Study, and the 2040 Rural Long Range Transportation Plan (RLRTP).

The TPO pursued an extensive public and stakeholder engagement process to learn about the concerns of residents, employers, elected officials, and other contributors. EPR, P.C., the TPO's consultants used in developing this plan, facilitated public intercepts, workshops, a town hall, and other outreach approaches. VDOT and TPO staff launched an unprecedented survey effort and led conversations that helped to define concerns and desires for the transportation network's future. The plan is also shaped by transportation trends, data on the system's performance, and regional economic plans and desires.

The TPO took into consideration this constellation of perspectives and data points to evaluate all possible transportation improvements and ultimately select a set of specific projects for improving the transportation system. These projects meet the TPO's goal of enhancing the quality and interconnectivity of the transportation system.



CENTRAL VIRGINIA TPO

The Central Virginia Transportation Planning Organization (CVTPO), previously known as the Central Virginia Metropolitan Planning Organization (CVTPO), is a federally mandated organization representing the transportation interests for the City of Lynchburg, the Town of Amherst, and portions of Amherst County, Bedford County, and Campbell County. It is one of 342 MPOs that were created by the U.S. Congress through the Federal-Aid Highway Act of 1962 to ensure that existing and future expenditures of governmental funds for transportation projects and programs are based on a continuing, cooperative, and comprehensive (“3-C”) planning process. All federal funding for transportation projects and programs in these urbanized areas and surrounding counties are channeled through the planning process implemented by the TPO.

CVTPO, like other MPOs, is charged with creating and maintaining two primary documents: the Transportation Improvement Program (TIP), which budgets for transportation projects to be implemented over a 5-year period, and the LRTP, which is the focus of this document.

How is the MPO Area Determined?

An MPO is established for all urban areas in the United States with a population greater than 50,000. Several federal agencies are involved in defining the MPO’s service area, including the Census Bureau, Office of Management and Budget, and the Federal Highway Administration/ U.S. Department of Transportation. The MPO is responsible for serving all areas included in a city’s Urbanized Area boundary, as well as any surrounding areas that are expected to be developed in the foreseeable future.

LONG RANGE TRANSPORTATION PLANS

The LRTP is a federally required plan that outlines the region’s priority transportation improvements over the coming decades. It is a fundamental plan

that articulates a vision for the future of the region’s transportation system and identifies projects to implement over the next 25 years. The LRTP considers all modes of transportation including private vehicles, public transit, bicycles, and pedestrians. These plans can also address other transportation issues such as bridge maintenance and air service.

Per federal guidelines, the CVTPO’s LRTP must be updated every five years. The preceding version, approved by the TPO Policy Board in October 2015, was named the 2040 LRTP. In the title, the year corresponds with the horizon or vision year. The updated plan presented in this document is Connect Central Virginia 2045, as it serves as more than the LRTP and sets a regional transportation vision for the horizon year of 2045.

THE 2040 LONG RANGE TRANSPORTATION PLAN

The last update of the LRTP marked a significant step for CVTPO by aligning with new federal and state government emphasis on using transportation performance standards to select transportation projects. The TPO created an analytical framework to prioritize transportation improvements based on their consistency with the TPO’s goals, as well as federal and state policies. This initiative not only launched the TPO’s foray into performance-based planning, but also set the region up to compete effectively in the state’s SMART SCALE transportation funding program. SMART SCALE, developed in parallel with the 2040 LRTP, has since become an established program that has transformed how state-funded projects are selected via performance standards.

Several developments since October 2015 influenced the 2045 LRTP. There were a number of changes on the federal, state, regional and local levels that reshaped the project evaluation approach and methodology. Those changes are summarized below and explored in greater detail in [Chapter VI](#).

SMART SCALE

SMART SCALE is Virginia’s method for selecting transportation projects to ensure the best use of limited tax dollars. The Commonwealth launched SMART SCALE in 2014 with House Bill 2. SMART





SCALE uses a transparent and data-driven approach to select projects that best achieve desired performance criteria. Since SMART SCALE has become an important source of funding for transportation projects in Virginia, the 2045 LRTP reflects those scoring approaches. SMART SCALE is one of several state funding programs taken into account in developing the project lists. This consistency with state funding processes positions the TPO for greater success in getting its priorities funded at the state level.

FAST ACT

Congress adopted the nation's latest transportation funding legislation, Fixing America's Surface Transportation Act (FAST Act), in 2015. The FAST Act built on the prior law's (MAP-21) emphasis on performance-based planning and project selection, while increasing the emphasis and funding for freight related planning and projects.

VTRANS

VTrans is Virginia's statewide multimodal transportation plan. The latest version, called VTrans 2040, was completed in January of 2018. The plan establishes a framework to guide the state's investment decisions

FAST Act

The TPO developed this plan in accordance with the latest federal transportation law, Fixing America's Surface Transportation (FAST) Act. The following requirements are just a few of the Act's many requirements:

- » "The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date."
- » "The transportation plan shall include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system"
- » "In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity."
- » "The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals described in 23 U.S.C. 150(b) and the general purposes described in 49 U.S.C. 5301(c)."

The Federal Highway Administration provides access to the rules governing metropolitan transportation planning, including LRTPs, at the following webpage: <https://www.fhwa.dot.gov/fastact/guidance.cfm>.



and is strongly connected to the SMART SCALE scoring process. The latest version represented a significant step forward in the state's pivot toward a performance-based planning approach. During development of Connect Central Virginia 2045, the Office of Intermodal Planning and Investment (OIPI) was in the middle of a VTrans update. Due to scheduling of the two planning efforts, Connect Central Virginia 2045 may not include certain elements of the pending statewide plan.

The CVTPO is the Central Virginia MPO (Lynchburg) Regional Network in the VTrans planning process. Additionally, there are five Urban Development Areas in the TPO:

- » Town of Amherst Development Areas
- » Tyler Tracts (Amherst County)
- » City of Lynchburg
- » Airport Area (Campbell County)
- » Liberty Ridge (Campbell County)

The Constrained and Vision Lists

The LRTP consists of two lists: constrained and vision. The constrained list is limited by a reasonable estimation of future state and federal transportation funding sources through year 2045. Once the total amount of anticipated funding has been allocated, the LRTP is established, and remaining projects fall into the unconstrained list, called the Vision List.

STATE AND MPO PERFORMANCE TARGETS AND MEASURES

Nationally, a shift towards performance-based planning and project selection is one of the most significant developments in transportation planning over the last decade. OIPI is responsible for developing transportation performance measures and targets in accordance with the FAST Act. The state, through VTrans, has established five goals and 39 performance measures that allow it to track progress towards:

1. Economic Competitiveness and Prosperity
2. Accessible and Connected Places

3. Safety for All Users
4. Proactive System Management
5. Healthy Communities and Sustainable Transportation Communities

PLANS AND STUDIES

Local and regional plans were critical inputs for the 2045 transportation planning process. The Lynchburg Regional Connectivity Study is a core element of this plan. Its inclusion is intended to sync economic development and transportation efforts. Local comprehensive plans helped to determine the 2045 goals, performance measures, and project lists. All studies from the City of Lynchburg, the Town of Amherst, Amherst County, Bedford County, or Campbell County that involved transportation fed into the project evaluation process. A list of all known transportation recommendations in the region formed a Candidate List of Projects that eventually developed into the Constrained and Vision Lists. Over forty local and regional planning documents influenced the 2045 process. Appendix C lists those documents with a summary of the most important.

CONNECT CENTRAL VIRGINIA CHAPTERS

Connect Central Virginia 2045 consists of eight chapters, intended to support the Constrained List and Vision List shown in the last chapter. Chapters, as well as the appendix, document the 2045 process and answer questions for decision-makers determining next steps for project funding and implementation. The narrative of this plan also sets regional transportation goals, policies, and strategies for improving the Central Virginia transportation network.

CHAPTER II: PLANNING CONTEXT AND BACKGROUND

The 2045 process operates against an increasingly complex backdrop of regional, state, and federal policies, standards, and requirements. There are three primary contexts in this framework – goals, factors, and targets. This chapter illustrates how the



LRTP, Lynchburg Connectivity Study, and Rural Long Range Plan came together to form Connect Central Virginia 2045.

CHAPTER III: PUBLIC AND STAKEHOLDER ENGAGEMENT

Five engagement goals guided interactions with the public and stakeholders. A toolkit of strategies supported those goals, resulting in an engagement process that far exceeded the 2040 effort. Refer to this chapter to find information about the engagement process and to Appendix E for full documentation of results.

CHAPTER IV: STATE OF THE SYSTEM REPORT

This State of the System Report serves as the existing conditions element. This chapter also provides a baseline for forecasts of future needs, using additional data sources and results from the travel demand model. The State of the System Report identifies new project recommendations for the Candidate List of Projects and feeds into final project selection.

CHAPTER V: DEMOGRAPHICS OF THE REGION

This chapter examines the demographics trends of the region in the context of the transportation system. The distribution of people and jobs across the region plays a crucial role in the functioning of the transportation system.

CHAPTER VI: GOALS AND PERFORMANCE MEASURES

Goals and performance measures are central to the project selection process. CVTPO developed five goals and 16 performance measures to evaluate projects and determine both the Constrained List of Projects, as well as the Vision List. This chapter describes the federal, state, and local considerations influenced the development of the 2045 goals and measures. This chapter also explains the Project Evaluation Tool, used to score and prioritize project recommendations.

CHAPTER VII: 2045 PERFORMANCE-BASED PROCESS

The 2045 process involved multiple phases of project evaluation, using the Project Evaluation Tool described in the previous chapter. **Chapter VII** documents the project evaluation results and illustrates how the project consultants identified, developed, and scored projects. While Appendix G documents this process in more technical detail, **Chapter VII** is a general overview.

CHAPTER VIII: 2045 DEPLOYMENT AND IMPLEMENTATION

This chapter details transportation-related recommendations for the Central Virginia Region, including the TPO and Rural Transportation Program (RTP) areas. All chapters are intended to support the recommendations and projects lists found in this chapter. Connect Central Virginia 2045 incorporates vision themes and recommendations from the Lynchburg Connectivity study, project lists from the LRTP, and the Constrained and Vision List of Projects from the 2040 LRTP. For high-ranking projects from the Vision List, profile sheets identify potential funding sources and guide decision-makers on next steps.

APPENDIX

The appendix comprises the Technical Report version of Connect Central Virginia 2045. These appendices document the process, store technical evaluations of project selection, record public and stakeholder comments, and detail other aspects of the 2045 process not included in the chapters. Throughout Connect Central Virginia 2045, there are references to the appendix where readers can obtain additional detail on any given topic.

