

# 1.0 Introduction

## ■ 1.1 Highway System Policy Plan Context and Objectives

The 1995 Vermont Long-Range Transportation Plan (LRTP) and its 2002 update provide a framework for transportation planning, design, construction, operation and maintenance in Vermont, including all modes of travel. The LRTP was developed through an extensive public process that included community visits, outreach forums, a transportation summit, and a public opinion survey. The three major objectives defined in the LRTP and subsequently modified by the agency's Secretary and Executive Staff in early 2003 are to:

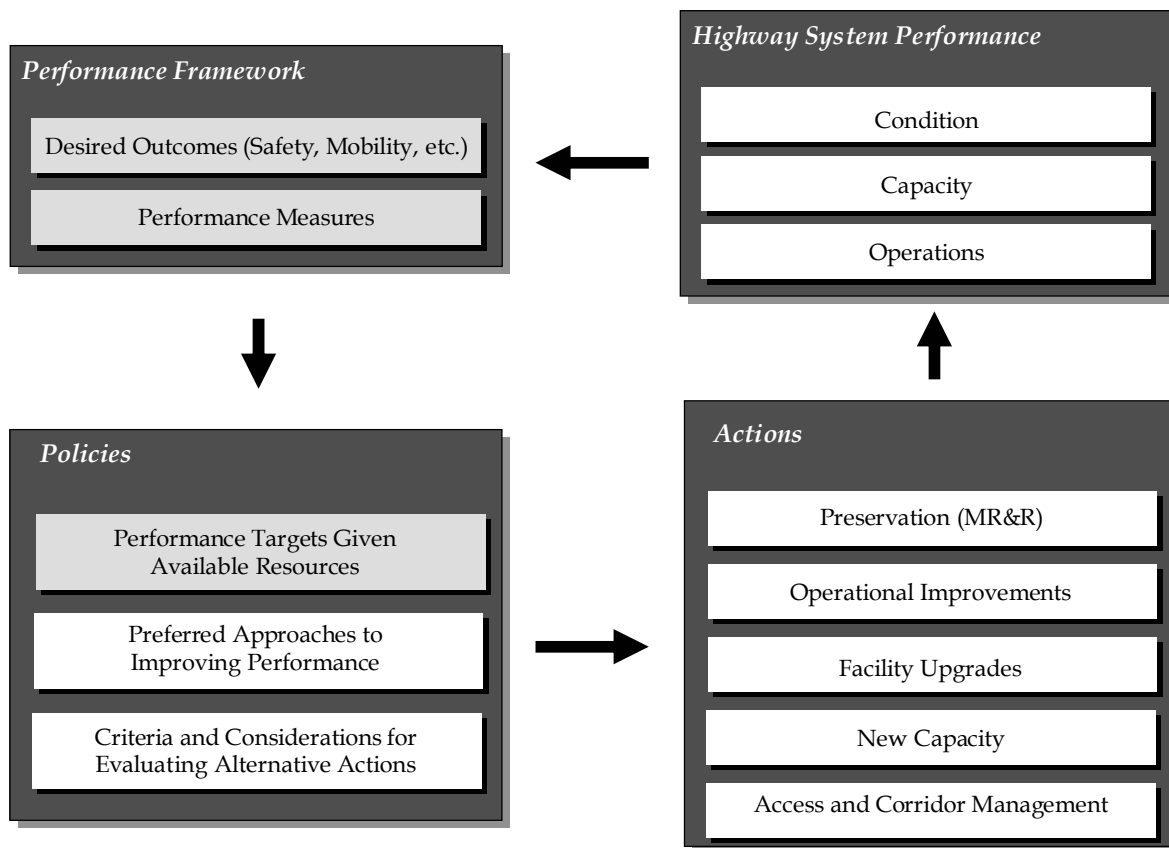
- Manage and improve the State's existing transportation infrastructure to provide capacity, safety, and flexibility in the most effective and efficient manner;
- Develop a seamless, integrated transportation system that incorporates all transportation modes and provides Vermonters with choices; and
- Strengthen the economy, protect and enhance the quality of the natural environment, and improve Vermonters' quality of life.

The LRTP called for the development of modal policy plans to set more specific policies for each mode of travel. All of the modal policy plans are guided by the broad set of transportation system goals, objectives, and strategies that were established in the LRTP.

The Highway System Policy Plan (HSPP) is the last in this series of modal policy plans to be completed. Its purpose is to develop policies and action strategies to guide the Vermont Agency of Transportation (VTrans) in preserving, maintaining, and enhancing Vermont's highway network over the next 20 years.

The HSPP does not recommend specific projects; rather it provides a performance-based framework for highway investment decisions. Figure 1.1 provides an overview of this framework. The plan defines desired outcomes (such as safety, mobility, system preservation, and environmental protection); and performance measures that can be used to track progress towards achieving those outcomes. It presents an analysis of the likely future trends in performance given different investment levels. This analysis provides a model for future resource allocation tradeoffs across different elements of the system.

**Figure 1.1 Highway System Policy Plan Overview**



The HSPP defines options to be considered to improve highway performance on different system elements, and provides criteria for choosing among alternative actions. These criteria are necessarily at a fairly general level. VTrans recognizes that there are numerous criteria that must be weighed in any specific transportation decision; and that a general policy plan cannot be a substitute for more detailed planning efforts and public involvement activities that take place for specific corridors and projects.

Development of this policy plan was guided by an Advisory Committee with representation from VTrans, the Department of Motor Vehicles, the Chittenden County Metropolitan Planning Organization (CCMPO), the Vermont Association of Planning and Development Agencies (VAPDA), and the Federal Highway Administration (FHWA). It also reflects comments received from members of the Transportation Planning Initiative (TPI), a partnership between VTrans and Vermont’s Regional Planning Commissions (RPCs).

## ■ 1.2 Key Highway Policy Issues

The Vermont Highway System Policy Plan responds to a number of key issues that affect transportation conditions and future needs in Vermont:

- **Aging Infrastructure** - Vermont roads and bridges are at an age where maintenance and rehabilitation requirements are substantial and increasing. Careful planning is required to ensure that appropriate levels of resources are targeted towards infrastructure maintenance and that these resources are used in the most effective manner.
- **Limited Resources for Transportation** - Even in the best economic times, there is never enough funding to address all of the legitimate needs for infrastructure maintenance and improvement. In the current economic climate, transportation resources are increasingly uncertain at all levels of government. In Vermont, there currently are more projects that are ready for construction than can be funded with available resources. In this environment, in which critical transportation projects must compete for increasingly scarce improvement funds, it is important to have a clear framework for assessing proposed projects within the context of established system performance objectives.
- **Project Mix** - Major projects currently in progress - the Bennington Bypass, the Mississquoi Bay Bridge, and the Circumferential Highway in Chittenden County - account for a large share of the highway program. A number of other significant projects are in the pipeline. The need to move forward with these more visible projects must be balanced against other, more dispersed but nevertheless real needs across the State.
- **Increased Emphasis on Highway Operations and Management** - Given the limited resources and the myriad complexities and impacts of adding new highway capacity, transportation agencies across the country have recognized the need to put greater emphasis on highway operations and management strategies. These include a wide variety of traditional and emerging traffic management techniques from roundabouts to incident management programs. In addition to managing existing traffic, a growing number of agencies have implemented strong access management programs to prevent future traffic and safety problems from developing.
- **Recognition of Transportation/Land Use Relationships** - The linkage between transportation investment and land use development has long been recognized in Vermont. A coordinated approach to land use and transportation decisions at the corridor level must be combined with careful highway access management in order to maintain mobility and safety on existing highways while allowing for economic development.
- **Recognizing the Effect of Freight Movements on Vermont's Transportation System** - Like most northern New England states, Vermont is heavily dependent on trucks for its freight shipments, and the transportation network must be designed and managed to accommodate truck traffic. However, trucks operating in Vermont can have significant impacts on pavement and bridge condition, highway congestion, air quality, and overall

quality of life. These impacts must be mitigated to the greatest possible extent without impeding the flow of goods that is so vital to Vermont's economy.

- **Balancing Quality of Life, Mobility, Environmental, and Economic Development Concerns** – The need to achieve a balance between promoting economic well-being, providing convenient travel options for both freight and passengers, and preserving the character and scenic beauty of Vermont has been a central theme of previous planning efforts. The 1997 Vermont highway design standards developed by VTrans are an important example of Vermont's commitment to incorporate a diverse set of considerations into highway policy. This policy plan continues the emphasis on achieving a balance among competing objectives.
- **Multimodal, Interconnected Transportation System** – The LRTP policies clearly emphasize a strong multimodal transportation system with solid intermodal connections. Highway investment decisions need to be made with consideration of modal alternatives (existing or potential future) and also with consideration of the role of highway segments in an interconnected multimodal transportation system.

## ■ 1.3 Policy Plan Overview

The remainder of this plan is divided into four sections, plus three appendices:

- **Section 2.0** provides a current profile of the highway system in Vermont, including its physical characteristics, operational characteristics, and connectivity with other modes.
- **Section 3.0** describes a framework for making future investment decisions. This framework includes a set of system elements (networks, corridors, and land use types), a set of goals and objectives, and a set of performance measures and performance targets for different portions of the system. It also describes the impacts of alternative investment scenarios on bridge and pavement conditions across the state highway network.
- **Section 4.0** provides policy guidance on the selection of different types of highway investments, based on the performance goals established.
- **Section 5.0** includes implementation steps for the recommended policies, including specific actions, responsibilities, and a timeframe for implementation.
- **Appendix A** reviews current highway policies and programs in Vermont. This material provided important baseline information for the development of this policy plan.
- **Appendix B** provides results of different investment scenarios analyzed using the Highway Economic Requirements System (HERS) model. This model supplements the information in Section 3.0, providing insight into the relative impacts of different investment levels on a variety of performance measures, including highway user costs.
- **Appendix C** contains background information on relevant topics, including corridor planning, access management, and acquisition of access rights.
- **Appendix D** contains a glossary of terms used throughout the plan.