



# Vermont Rail Capital Investment Policy Plan

Vermont Agency of Transportation

## Executive Summary

*Prepared by:*

Parsons Brinckerhoff Quade & Douglas, Inc.  
with  
Cambridge Systematics, Inc.  
Fitzgerald & Halliday, Inc.  
Richard Whalen

*October 2001*

## Executive Summary

The Vermont Agency of Transportation has prepared a *Rail Capital Investment Policy Plan* (RCIPP) for the purpose of providing guidance for the functioning of Vermont's rail System. The term "rail" identifies that mode of transportation used to move people and or goods on the public and private railroad infrastructure by all rail operators functioning in the state.

As enabled by the General Assembly, the project is a cooperative effort of the state of Vermont and its partners who are involved in providing and utilizing rail services, per the following directive:

*The Agency shall produce a rail capital investment policy plan which shall be submitted to the House and Senate Committees on Transportation by January 15, 2001. The plan shall be created by the Agency of Transportation through a cooperative effort with: the railroads operating in Vermont, the Railroad Association of Vermont, shippers, receivers, regional planning commissions, the Chittenden County Metropolitan Planning Organization, public transit operators, regional development corporations, the Conservation Law Foundation, the Agency of Commerce and Community and the General Assembly.*

The report represents the culmination of eight months of work by the study participants. During this period, interviews were held with rail operators and selected shippers; background data and reports were reviewed and analyzed; and pertinent criteria, policies, and evaluation measures were formulated. This work activity was developed in consultation with a Study Advisory Committee consisting of representatives of the aforementioned cooperating entities. Additional input was obtained from consultation with staff members of the VTrans Rail Division. Several public forums were held to brief attendees as to the particulars of this project and solicit input as to concerns and issues that should be addressed. Formal presentations were made for the Southern Windsor County Regional Planning Commission TAC, The Rutland Regional Planning Commission TAC, the Chittenden County Metropolitan Planning Organization TAC, and for a joint meeting of the Two Rivers Regional Planning Commission and the Upper Valley/Lake Sunapee Regional Commission.

Briefings were also held on a regular basis for the State Rail Council. Following completion of a draft version of the *Rail Capital Investment Policy Plan*, members of the State Legislature were briefed on the findings of the project. Subsequent questions and comments pertaining to the Plan, as provided by the Legislature, the Study Advisory Committee and senior staff at VTrans, have been incorporated in the final version of the document.

Preparation of the *Rail Capital Investment Policy Plan* is the latest of a series of steps undertaken by VTrans, mandated in part by the General Assembly, in order to:

- Review funding policies and procedures;
- Provide direction for public investment in railroads;
- Investigate underlying policy assumptions; and
- Identify steps towards a more focused approach to improving railroad facilities and operations throughout the state.

This report is structured to present the reader with an overview of rail operations and programs in Vermont in terms of the state perspective, and in terms of the rail system's relation to regional and national issues and concerns. Specific attention is given to state rail programs and financing. A set of goals, criteria and supporting policies is presented, incorporating extensive input from the Study Advisory Committee. Reflecting the instructions of the General Assembly, the report concludes with the presentation of several specific topics pertaining to rail services and rail-highway grade crossing maintenance concerns.

The *Rail Capital Investment Policy Plan* was been conducted on an expedited schedule to comply with the Legislature's request. Nonetheless, the development of the Plan has sought to incorporate the maximum possible opportunity for input from the Study Advisory Committee, members of the Legislature the general public and from VTrans staff. The report, as presented, reflects coordination with the Statewide Freight Study and the Long-Range Transportation Plan Update being prepared by VTrans. Both of these undertakings were completed in a timeframe generally corresponding to the preparation of the *Rail Capital Investment Policy Plan*.

The preparers hereby acknowledge the assistance of the members of the Study Advisory Committee in preparing this report, the contributions of individual railroad operators, the input received from members of the general public and assistance provided by VTrans staff and other state agencies. Additional particulars as to the project participants are provided in Section 3.0.

- **Section 1.0 - Overview of Vermont Rail Operations and Programs** - Provides a description of the existing rail lines and operators in the state of Vermont. This encompasses 10 railroads or rail operators encompassing the entire state. Of the active railroad track system in the state, approximately 50 percent is used for both freight and passenger service with the balance being used only for freight service. Although rail freight operations are often less visible to the general public than passenger service, the well-being of rail freight industry is of prime importance to the rail system as a whole. In recognition of the interconnected nature of a rail system, operating data and descriptions are provided for both the state-owned and private rail lines within the state. Of particular importance is the overall operating and financial performance of short-line and regional railroads that typify the rail operators in Vermont. The operational overview thus includes a comparison of Vermont's rail operations to those of regional and short-line railroads on a national basis. The ongoing national effort by short-line and regional railroads to secure federal assistance for upgrading the railroad infrastructure is also addressed. Owing to the necessary interconnectivity of the

railroad network, this has become a national concern. Expanding, in part, on the State of Vermont's 1998 Rail Policy Plan, The institutional relationships between the railroad operators, VTrans, and other interested parties are identified in terms of the involvement within planning and oversight of rail operations.

- **Section 2.0 – State Rail Programs and Financing** – Presents a detailed review of VTrans railroad budgeting processes, including a review of the various expenditure categories incorporated in the annual budgeting process. These categories incorporate new capital projects, maintenance, operations, and planning support and have shown considerable growth in recent years as Vermont has initiated an aggressive program of railroad project development. Of particular concern for the *Rail Capital Investment Policy Plan* is the need to differentiate between new capital projects and the recurring annual operations and maintenance costs. The sources of state funding for railroad activities is reviewed, with particular attention being directed to revenues accruing to the State's Transportation Fund. Sources of revenue and projected growth in these revenues are presented through the year 2025, corresponding to the analysis contained in the Long-Range Transportation Plan Update. A long-term issue is the competition for funds generated by transportation revenues. Overall, railroad-generated revenue are not anticipated to provide sufficient resources for the capital program needs. In addition, the implementation of new services, notably passenger operations, will increase the need for maintenance and associated operating cost expenditures.

Additional sources of railroad project funding are examined in the context of presently available federal grant and loan programs, including various Federal Transit Administration and Federal Railroad Administration Programs. Vermont already participates in such programs by virtue of funding commitments for projects such as the Burlington-Charlotte Commuter Rail Project, the Albany-Bennington-Rutland-Burlington Passenger Rail Project, and the Burlington-Essex Junction Rail Corridor Project. Recognizing that various funding programs are utilized by other states, budgeting and funding prioritization processes used by several other states were examined. These processes range from financially-based cost/benefit analyses to more general topics encompassing social and environmental concerns. Members of the Study Advisory Committee, notably railroad operators, have also contributed their perspectives on funding mechanisms encountered in other states.

- **Section 3.0 – Study Coordination and Public Outreach** – Presents the cooperative and collaborative outreach associated with the development of this project. Members of the Study Advisory Committee included:

Albert Perry, Rail Council  
Byron Hathorn, Vermont Transportation Authority  
Anthony Otis, Railroad Association of Vermont  
Ken Enzor, Shippers  
Ruth Gale, Shippers  
Mark Germanowski, Regional Planning Commissions  
Richard Agnee, Regional Development Corporations  
Peter Keating, Chittenden County Metropolitan Planning Organization

Donna Bate (Pat Crocker as alt.), Public Transit Operator  
Mark Sinclair, Conservation Law Foundation  
Greg Maguire, Agency of Commerce and Community Development  
Rep. Richard Pembroke, General Assembly – House  
Richard T. Mazza, General Assembly, Senate  
Jerome Hebda, Vermont Rail Systems  
Michael Olstead, New England Central Railroad  
William Magee, Northern Vermont Railroad  
David A. Fink, Guiford Rail System  
Robert Grossman, St. Lawrence and Atlantic Railroad, Twin State Railroad  
Drew Galloway, Amtrak  
Mike Gooden, Twin State Railroad

The RCIPP contains summary meeting minutes of four public meetings conducted during development of the Plan.

- **Section 4.0 – Vermont Rail Goals, Criteria, and Policies** – Presents a set of goals, criteria, and policies pertaining to Vermont’s rail system and the anticipated investments required for the system. Overall, the report acknowledges that the increased growth in the VTrans railroad budget and associated scope of activities requires a uniform means of establishing the priorities for such expenditures.

The report identifies a statement as to the vision of Vermont’s rail system: “A system that provides time and service-competitive freight and passenger service along the north-south corridors on both the eastern and western sides of the state. The system will also provide connections between these paralleling north-south corridors to prevent fragmentation of the rail system and to provide sufficient redundancy in the event of temporary loss of service in any one portion of the system. Connecting branch lines will provide access to markets that warrant rail service. Passenger stations and freight facilities will be located and constructed in a manner that supports efficient operation of the system and that complements the setting and concerns of the host community. The system will be overlaid with local, commuter and tourist passenger services in locales where market conditions warrant such operations. The system will continue to be a mixture of state and privately-owned rights-of-way, although the state may periodically evaluate options for returning rights-of-way to private railroad ownership.

“A system that can generate sufficient revenues and support for additional public investment so as to permit maintenance and necessary upgrading to be performed in a thorough and timely manner. The vision will ensure that this transportation asset can achieve and sustain its full value as a component in the state, national and ultimately global transportation network.”

A set of goals and associated criteria for investment was formed around the framework of this vision statement. The investment criteria address operational and physical components of proposed projects, and also address issues of public support, financing, and resource impacts.

Recognizing that VTrans has previously prepared a Rail Policy Plan, this section concludes with set of seven additional proposed policies focused on the need to provide standards and reporting procedures sufficient to support the review and monitoring of projects as necessitated by the evaluation and scoring system. Copies of the scoring sheets are attached on pages ES-8 through ES-10. The policies are entitled:

Policy 1 - Rail Line Classification

Policy 2 - Rail Facility Standards

Policy 3 - Rail Network Classification

Policy 4 - State Rail Plan

Policy 5 - Funding Categories

Policy 6 - Project Partnering

Policy 7 - Funding Availability

The policies are focused, in part, on seeking to quantify and describe the so-called “benchmarks” or standards to which are designed and maintained. The balance of the policies address the issues of long-term funding sources and the need to periodically review and reassess the rail projects and programs being undertaken by the state.

- **Section 5.0 – Rail Capital Investment Program** - Presents the particulars of the criteria for capital investment evaluation, the corresponding project scoring process and the relation of the project scoring process to the cyclical VTrans budgeting process. The formulation of the various criteria and the project scoring process are closely related, in that the various measurements associated with the criteria are a key factor in assigning the project scores. This methodology has been formulated to address the features of capital projects, typically consisting of the provision of new facilities and associated services. Recurring investments, usually encompassing operating and maintenance expenses, are not covered this methodology. For the purposes of the project proponents and VTrans, the evaluation and scoring process is intended to facilitate an initial examination of the particulars of a proposed project, prior to making a decision as to the commitment of public resources.

A set of 13 criteria are identified, being used as the basis for a weighted scoring system that utilizes data and supporting documentation, provided by the project proponents (pages ES-8 through ES-10). The report proposes that project data be submitted to VTrans at the beginning of the fiscal year, so as to enable staff to review the data, perform the scoring analysis and then incorporate successful projects in the budget for the subsequent fiscal year. The scoring system is configured to allow projects of various size, duration, and complexity to compete for approval on an equal footing.

As depicted on the accompanying graphic entitled “Process for VTrans Rail Division Project Evaluation and Funding” (page ES-7), the project review, scoring and ranking

process would proceed, as follows, in conjunction with the annual budget development process.

The Rail Division will conduct three regional meetings to discuss ongoing projects, potential new projects, and any modifications to the review and ranking system. These meetings, open to the general public, shippers, railroad operators, and other interested parties, are intended to serve as a precursor to the submittal of proposed new projects to VTrans. The project descriptions and supporting data will then be reviewed and scored by a committee comprised of VTrans staff, including key staff members of the Rail Division and the Policy and Planning Division. The scoring is based on the criteria and associated measures set forth on pages ES-8 through ES-10. Projects will then be ranked and then be selected for inclusion in the proposed VTrans Capital Program and Project Development Plan based upon the rankings, availability of funding, and the recommendation of the VTrans ranking committee.

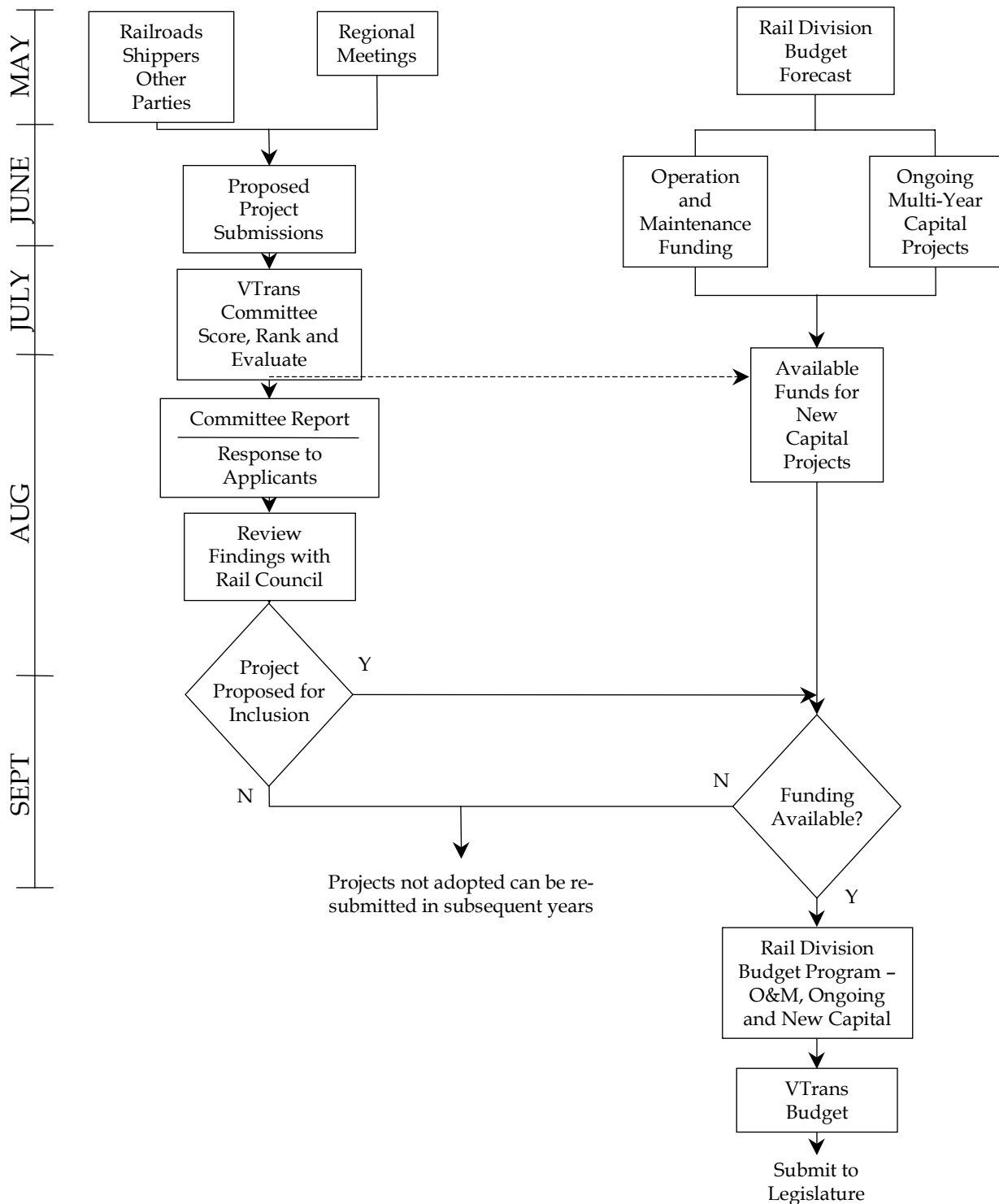
- **Section 6.0 - Special Topics** - Presents a review of several special topics pertaining to rail car weights, double-stack rail container operations, combined passenger and freight services, and grade crossing and signal system maintenance practices and programs.

The topics of freight rail car weights and double-stack operations reflect concerns with providing Vermont's rail network with the capability to interchange cars with the national railroad network. The double-stack issue pertains to the need to provide sufficient clearances on routes that are used for such services. Rail car weights are a general concern of providing adequate systemwide capacity to handle cars that are becoming a standard throughout the national system. The report notes that, accordingly, this is a national issue being pursued by the railroad industry. Vermont needs to monitor these national developments and may be able to pursue federal funding sources should funds become available.

The combination of freight and passenger services focuses on the potential for expanding various express and mail freight services, already offered nationwide by Amtrak, onto the Amtrak services operated in Vermont. These services do not compete with the standard services provided by freight railroads and provide opportunities for increasing revenues (thereby decreasing subsidies) on existing Amtrak routes.

The evaluation of rail-highway grade crossing and signal maintenance practices, programs and needs is a companion to the separate VTrans *Rail-Highway Grade Crossing Program*. The Program includes the inventory and evaluation of grade crossings, with subsequent identification, prioritization and implementation of grade crossing projects. The RCIPP report includes an analysis of railroad maintenance staffing procedures and associated costs. Methodologies for documenting existing conditions at rail-highway grade crossings, and a procedure for subsequently ranking the condition of each crossing, by means of a sufficiency rating, are also presented.

## Process for VTrans Rail Division Project Evaluation and Funding Rail Capital/Investment Policy Plan





<u>CRITERIA</u>	<u>MEASURE</u>	<u>CALCULATION</u>	<u>POINTS</u>	<u>AWARD</u>	<u>SCORE</u>
A.1 Railroad Operations - Freight	Number of Ton Miles, or Number of Car Miles	Increase Over Existing: 0 to 5% Increase Over Existing: 5 to 10% Increase Over Existing: 10% +	10	single	[ ]
			20		
			40		
A.2 Railroad Operations - Passenger	Number of Revenue Miles, or Number of Pass. Miles	Increase Over Existing: 0 to 5% Increase Over Existing: 5 to 10% Increase Over Existing: 10%+	10	single	[ ]
			20		
			40		
B. Line Conditions (existing)	FRA Track Classification	Excepted and Class 1 Class 2 Class 3 >Class 3	10	single	[ ]
			20		
			40		
			60		
C. Line Costs and Revenue	Incremental Revenues Incremental O&M Costs	Net Revenue < 0 Net Revenue = 0 Net Revenue > 0	0	single	[ ]
			10		
			40		
D. Facility Standards	Upgrade to Minimum Line Criteria Clearances - Plate H ADA Features Intermodal Connect.	(as defined) " " "	50	cumulative (max. 110)	[ ]
			20		
			20		
			20		
E. Vermont-Based Activity	Carloads Origin/Term. In VT Overhead Carloads Pass. Boarding/Alighting in VT. Rail Jobs in VT	Net Increase - Not Diverted from Existing Rail Net Increase - Not Diverted from Existing Rail Net Increase - Not Diverted from Existing Rail Documentation - Operating & Management	(1-50)	cumulative (max. 120)	[ ]
			(1-20)		
			(1-20)		
			(1-30)		

<u>CRITERIA</u>	<u>MEASURE</u>	<u>CALCULATION</u>	<u>POINTS</u>	<u>AWARD</u>	<u>SCORE</u>
F. Government and Local Support	RPC/MPO Consistency	Documentation in Writing	15		
	Local Official Support	Documentation in Writing	10	<i>cumulative</i>	
	Supportive Zoning	Documentation	10	(max. 65)	
	Proximity to Generators	Mapping/Documentation	20		
	Act 250 Implications	Documentation	10		
G. Economic Development	Support From State Econ. Agency	Documentation in Writing	20	<i>cumulative</i>	
	Support From Regional EDC	Documentation in Writing	20	(max. 60)	
	Payroll or Business Benefit	Supporting Data	(1-20)		
H. Existing & Prior Funding Commitments	Funding Available Current Year	Source Documentation	30	<i>single entry</i>	
	Funding Programmed 1-5 Years	Source Documentation	20		
	No Funding Programmed within 5 Years	Proponent Statement	0		
	Earmarks (Federal)	Documentation	10	<i>cumulative</i>	
	Previous Development Support	Documentation	10	(max. 20)	
I. Opportunities for External (Non-State Transportation) Funding	FRA/FTA/Amtrak/FHWA Sources	Documentation	(1-40)		
	State Economic Funding	Documentation	(1-20)	<i>cumulative</i>	
	Private Railroad Funding	Documentation	(1-25)	(max 125)	
	Private Funding	Documentation	(1-20)		
	Innovative Financing	Documentation	(1-20)		

<u>CRITERIA</u>	<u>MEASURE</u>	<u>CALCULATION</u>	<u>POINTS</u>	<u>AWARD</u>	<u>SCORE</u>
J. Resource Impacts	No Anticipated Impact	Documentation / Mapping	60		[ ]
	Minor Impact - No Mitigation	Documentation / Mapping	40	single	
	Major Impact - Mitigation Expected	Documentation / Mapping	10		
K. Regional Scope	Provision of Multiple Gateway(s)	Documentation / Mapping	10		[ ]
	Partnership with Other States	Written Testimony	20	cumulative	
	Enhance Competitive Service	Service Plan	10	(max. 60)	
	Intermodal / Port Connections	Mapping	20		
L. Schedule - defined by Time Frame for Implementation	Short 0-1 Years	Project Phase Schedule	30		[ ]
	Medium 1-3 Years	Project Phase Schedule	20	single	
	Long >3 Years	Project Phase Schedule	10		
M. General Safety	Grade Crossings	(as defined)	60		[ ]
	Security Trespass Prevention	(as defined)	40	cumulative	
	Public Awareness / Information	(as defined)	20	(max. 190)	
	"Hazmat"	(as defined)	40		
	R.O.W. Structures	(as defined)	30		