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RESOURCE SYSTEMS GROUP, INC.

■ Documentation for:

## **VT LONG RANGE TRANSPORTATION BUSINESS PLAN**

Working Paper 2: State Agency Issue  
Review

■ Prepared for:

### **Vermont Agency of Transportation**

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■ In Partnership with:

Snelling Center for Government

TransManagement

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**VT LONG RANGE TRANSPORTATION BUSINESS PLAN**  
Working Paper 2: State Agency Issue Review

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## INTRODUCTION

The Vermont Agency of Transportation (VTTrans) is currently updating its Long Range Transportation Business Plan (LRTBP). The LRTBP establishes the vision, goals, and objectives that guide how VTTrans maintains, operates, and builds the state's transportation system. The current plan was adopted in 2002. It built upon the findings and recommendations of modal policy plans (aviation, bike/pedestrian, highways, transit and rail), transportation plans completed at the regional level, and public opinion surveys and outreach. It refined the three major objectives of the 1995 Long Range Plan, and emphasizes system management<sup>1</sup>.

This working paper, one of many to be prepared in support of the plan<sup>2</sup>, was prepared by the Snelling Center which surveyed Vermont state government agencies and departments for information regarding transportation plans and policies that should be taken into account in the update of the VTTrans Long Range Transportation Business Plan. State agencies and departments were requested to identify major policy areas, in their jurisdictions, that need to be taken into account in the planning leading up to the LRTBP. Specifically, they were asked for reports, written policies and policy statements that address issues of which VTTrans needs to be mindful in its planning work for the LRTBP.

Six agencies and departments responded; Agency of Natural Resources, Agency of Human Services, Agency of Commerce and Community Development, Agency of Administration and the Department of Public Service and Department of Public Safety.

Generally, six areas emerged, for which there is fairly clear report documentation since the last long range transportation plan update. In this memorandum we describe the six areas and some of the policy statements and plans. A complete list of policy statements and plans and contacts at the agencies and departments is attached. The six areas are grouped as follows.

- Water Quality
- Greenhouse gas emissions/internal combustion engine issues
- Smart Growth
- Public Transportation
- Communications corridors

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<sup>1</sup> 2002 objectives (paraphrased): Manage the state's existing transportation system facilities to provide capacity, safety, and flexibility; Improve all modes to provide Vermonters with choices; Strengthen the economy, protect and enhance the natural environment, and improve Vermonters' quality of life.

<sup>2</sup> Visit the VT Long Range Transportation Business Plan web site at <http://www.rsginc.com/vtplan/vermontplan/tasks.htm> for a complete list of all working papers to be produced and for an overview of the entire planning process.

- Wildlife corridors

## WATER QUALITY INITIATIVES

The Agency of Natural Resources has several policies and planning initiatives related to water quality protection including:

- Watershed planning – numerous basin specific watershed plans and TMDLs<sup>1</sup>
- Municipal Separate Storm Sewer Systems (MS4);
- Lake Champlain Basin Program – Opportunities for Action;
- Clean and Clear Initiative;
- Stormwater and Erosion Control Program and Regulation;
- River Management Program and Planning; and
- the Vermont Wetlands Program.

***Issue and Gaps:*** Storm water management and riparian buffers are points of connection with VTtrans that are specifically reflected in ANR reports. Storm water management with respect to highways extends to road design, construction, culvert engineering, permitting, etc. Based on reports and policy statements, there is emphasis on “Better Back Roads” as a stream bank erosion control issue. The Clean and Clear program is a governor’s initiative led by a volunteer committee and supported by the Agency of Natural Resources. The program has a primary but not exclusive focus on the Lake Champlain watershed.

De-icing is presumably a water quality issue, although we saw no current reports on the subject.

## GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

The Governor’s Commission on Climate Change is the primary forum for evaluating options for reduction of green house gases ([www.vtclimate.us](http://www.vtclimate.us)). Vermont’s largest source of green house gases is vehicle exhaust, which bears on transportation fuel consumption and vehicle miles traveled. The

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<sup>1</sup> A TMDL or Total Maximum Daily Load is the calculation of the maximum amount of a pollutant that a water body can receive and still meet [Vermont Water Quality Standards](#). In a broader sense, a TMDL is a plan that identifies the pollutant reductions a water body needs to meet Vermont's Water Quality Standards and develops a means to implement those reductions. See <http://www.anr.state.vt.us/dec/waterq/planning/htm/pl%5Ftmdl.htm> for more information.



ANR web-page for the Air Pollution Control Division includes numerous publications and citations about greenhouse gases. The Air Pollution Control Division is also managing the state's adoption of the California Low Emission Vehicle program which impacts on transportation policy through requiring vehicles to reduce green house gas emissions.

In addition, the Department of Public Service is responsible for updating Vermont's Comprehensive Energy Plan, with a target completion date of October 2007. The Comprehensive Energy Plan will recommend strategies and policies that bear on transportation fuel consumption. Greenhouse Gas Emissions and the role of transportation in Vermont as a contributor will be a portion of the plan. The DPS has also been actively supporting a number of initiatives to promote alternative fuels in vehicles, such as the bio-diesel project in coordination with the Vermont Sustainable Jobs Fund, and the Clean Cities program.

The Department of Buildings and General Services created a comprehensive program with accompanying documentation entitled, Comprehensive Environmental and Resource Management Program (CERMP), dated April 28, 2004. The program defines the environmental footprint of Vermont state government. CERMP is divided into the following sections:

Building Infrastructure, Transportation (Fleet Management, Transportation Demand Management) and Statewide Purchasing Management

At the same time, Executive Order 14-03, created the Climate Neutral Working Group (CNWG) to direct state government agencies and departments to reduce greenhouse gas emissions from state government buildings and operations. The CNWG is just completing its first biennial report. Pertinent to the VT LRTBP, the biennial report requires all state government agencies, offices, and departments to:

- Purchase vehicles that have the highest available fuel efficiency in each respective vehicle class (e.g., passenger cars, light duty trucks, etc.), pursuant to performance specifications approved by the Climate Neutral Working Group. In setting these performance specifications, the Working Group shall consider vehicles that not only meet high fuel economy standards but that also provide lower total overall emissions of greenhouse gases, criteria pollutants, and hazardous air contaminants. To this end alternative transportation fuels have been investigated, including: Biodiesel VTtrans Highway truck pilot project in Central Vermont); Electric (Electric car pilot project )
- Develop programs to encourage state employees, through the use of incentives, to use transportation alternatives to a single person in a single motor vehicle for commuting and business travel, including incentives as may be bargained with the collective bargaining units. Cost modeling has started for an intercomplex Central Vermont Shuttle Service. A complementary "No-Idling" Campaign is in development

Section 44 of No. 121, Acts of 2004 amended 3 V.S.A. section 217 (c) to read:



At least 50 percent of the vehicles purchased annually by the commissioner shall be low emission passenger vehicles. Exceeding this mandate, all of the 100 new Fleet program acquisitions meet the low emissions standards while 25 of those 100 new vehicles are super low emission hybrids.

***Issues and Gaps:*** Both the Commission on Climate Change and the DPS update of Vermont's Comprehensive Energy Plan referenced above are just getting underway, with reports due in 2007. The Comprehensive Energy Plan will have a Transportation section.

LRTBP Advisory Committee members also raised the impact of climate change on existing state transportation infrastructure (November 2, 2006). Emergency management procedures and impact analysis may have to be updated based on climate change scenarios. No state plans exist on this subject at this time.

## SMART GROWTH

The principles and policies of "Smart Growth" are reflected in the Downtown Development Act and supported by Governor Douglas. Pursuant to the principles of the Downtown Development Act, the Department of Housing and Community Development has provided funding application guidelines for "Downtown Transportation and Related Capital Improvements," and guidelines for development of and around new interstate highway interchanges.

The Vermont Department of Health released a plan in April 2006 promoting community efforts to increase physical activity (biking and walking) through changes to the built environment and conducted a survey of the availability of sidewalks and other pedestrian amenities in Vermont's towns and villages.

***Issues and Gaps:*** Less clearly stated, but of importance to ANR, DHCA and the Department of Health, are reports and policies promoting pedestrian and bicycle infrastructure and public transportation. (A Growth Center Planning Manual will be issued in January, 2007).

## TRANSIT FOR HUMAN SERVICES

VTrans is charged with the responsibility for administering the Elders and Persons with Disabilities Transportation Program. Until July 1, 2004, that responsibility was delegated to the Department of Disabilities, Aging and Independent Living. The memorandum between the Agency of Human Services and VTrans reflects the deep concerns at that time that, with VTrans taking back control of the program, the service levels would drop.

In a December 2005 evaluation report, the Agency of Human Services reviewed the performance of the public transportation providers, and several other contractors, which provide "on-demand" transportation services to low income Vermonters who need a ride to work.



In a 2006 “Analysis of Impediments to Fair Housing”, by the Vermont Human Rights Commission, lack of public transportation is cited as one of nine impediments to fair housing.

At the present time, VTrans is drafting a “Public Policy Plan for Human Service Transportation”, which will be completed and released following a period of public comment. This plan should take into account the documents referenced above.

**Issues and Gaps:** The challenges of providing comprehensive public transportation in a rural state are obvious and well known. There is clearly a funding gap.

## COMMUNICATIONS CORRIDORS

There is tremendous interest, coming from many directions, in the use of transportation corridors for fiber optic cable and other communications infrastructure. The commentary comes from the:

- Department of Public Service which wrote the 2004 Vermont Telecommunications Plan;
- Department of Innovation and Information which leads on Connect Vermont project for cell and wireless coverage;
- Department of Public Safety which leads on the Vermont Communications (VCOMM) project for law enforcement communications;
- Division of Tourism and Marketing which expressed interest in the 511 communications, the Intelligent Transportation System project and broadband access;
- Department of Economic Development which produced the “Strategic Vision and Business Plan for Job Creation and Economic Advancement” in January 2004, which presents the Governor’s goals for broadband and wireless coverage and access.

**Issues and Gaps:** There are no obvious gaps although VTrans might review its policies with respect to using rights of way for this purpose and determine whether it is being as supportive as possible in the development of communications infrastructure.

## WILDLIFE CORRIDORS

The Department of Fish and Wildlife has produced several documents stressing the importance of properly designed culverts for fish and road crossings for land wildlife.

**Issues and Gaps:** There are no obvious gaps.

## OTHER INFORMATION

LRTBP Advisory Committee members identified the lack of written plans connecting economic development issues with transportation infrastructure at a meeting with VTrans staff and the consultant team on November 2, 2006.



The Snelling Center is also aware of several other transportation planning initiatives that may provide information to inform the development of the Long Range Transportation Business Plan.

On August 22, 2006, 350 Vermonters gathered for a summit on energy and transportation issues at a conference convened by the Vermont Council on Rural Development. Two of the working groups at this conference called for the creation of a transportation efficiency utility that would mirror the work of Efficiency Vermont in the transportation field and invest in mechanisms to reduce vehicles miles traveled (Local Power: Energy & Economic Development in Rural Vermont, Final Report).

The new University Transportation Center at UVM has opened with \$16 million in funding and a mission to promote sustainable transportation systems and advanced technologies for northern rural climates. The UTC recently requested proposals for signature projects and received 35 by the deadline of September 31. Several of the proposals will directly look at technologies and policies that research, test and demonstrate sustainable transportation policies, programs and models in Vermont and nationally ([www.uvm.edu/~transctr](http://www.uvm.edu/~transctr)).

The Vermont AARP has been coordinating an in-depth look at quality of life measures including transportation for seniors in Burlington, Vermont. The project is part of a nation-wide livable communities demonstration and research effort by the AARP.



**APPENDIX A: STATE POLICY AND PLAN INVENTORY**Agency of Natural Resources

Contact: Dennis Malloy, Chief of Policy and Planning  
802 241-3614 [dennis.malloy@state.vt.us](mailto:dennis.malloy@state.vt.us)

1. Report of: The Governor's Funders Summit, Making Commitments to the Lake Champlain Phosphorous TMDL, December 2, 2003  
With respect to transportation, this report stresses "Better Back Roads".
2. Governor's Clean and Clear Action Plan, current web-site;  
The solutions indicated in the action plan make specific reference to "Better Back Roads" as an important factor in storm water run-off and erosion control.
3. Catalog of States' Green House Gas Reduction Policy Options, September 7, 2006; prepared for the Governor's Commission on Climate Change
4. Air Pollution Control Division; many web-site references to automobile emissions as a source of pollutants and green house gases. Seeking updates on Vermont Air Quality Improvement Plan.
5. Vermont's Wildlife Action Plan, September 2005;  
Department of Fish and Wildlife  
This plan stresses the importance of better road crossings and culverts, maintenance and restoration of aquatic and riparian habitat connectivity, and the provision of access to critical habitats for fish and 'other Species of Greatest conservation Need'.
6. Vermont Wildlife Linkage Habitat Analysis, May 16, 2006  
A GIS Based, Landscape-level Identification of Potentially Significant Wildlife Linkage Habitats Associated with State of Vermont Roadways
7. Riparian Buffers and Corridors, 2005  
Guidance for Agency Act 250 and Section 248 Comments Regarding Riparian Buffers, December 9, 2005



These publications provide guidance for projects, including road construction, that fall under the jurisdiction of Act 250.

8. Climate Neutral Working Group (CNWG) First Biennial Report, April 2005.

Provides a clear summary of the ongoing energy consumption and greenhouse gas (GHG) emissions inventory of Vermont State Government operations. In addition, the report includes potential emission reduction strategies, energy consumption case studies, and other relevant work conducted by the CNWG since the signing of the Executive Order regarding Climate Change.

9. Stormwater Impaired Waters

Stormwater-Impaired Watershed Remediation Plan Development.

Stormwater Advisory Group – Milestone Meeting August 29, 2005.

The VTDEC Stormwater Management Section presented a comprehensive overview of the process to develop remediation plans for the 17 stormwater-impaired receiving waters that are listed on Vermont's 303(d) list. The purpose of the meeting was to present and discuss a complete 'straw-man' example of how the VTDEC proposes to develop both watershed targets and the subsequent watershed-wide permits for the stormwater impaired watersheds.

#### Agency of Human Services

Contact: Cathy Voyer, Director of Housing and Transportation  
802 241-4624 [cathyv@ahs.state.vt.us](mailto:cathyv@ahs.state.vt.us)

1. Vermont Elders and Persons with Disabilities, Transportation Program Review, March 2004; prepared for the Vermont Department of Aging and Independent Living
2. SFY 2005 Memorandum of Understanding, August 31, 2004  
Agency of Human Services and Agency of Transportation
3. ESD Program Evaluation Services: Reach Up Teen Parent Education, On-Demand Transportation and Independence Place programs, December 2005; prepared for Vermont Agency of Human Services, Economic Services Division



4. Human Services Transportation Coordination, Draft Plan, August 22, 2006

Agency of Commerce and Community Development

Contact: Denise Diehl, Office of the Secretary

802 828-3211

[Denise.Diehl@state.vt.us](mailto:Denise.Diehl@state.vt.us)

1. Downtown Development Act, 24 VSA 2794(a)(1)

This statute indicates that downtowns are to receive “priority consideration by any agency of the state administering any state or federal assistance program providing funding or other aid to a municipal downtown area.”

2. Application Guidelines for the Downtown Transportation and Related Capital Improvement Fund for FY 2007, prepared July 2006 by the Vermont Downtown Program, Department of Housing and Community Affairs.
3. Vermont Interstate Interchange Planning Project, August 12, 2003; and

Interstate Interchanges Planning and Development Design Guidelines, 2004;

Vermont Department of Housing and Community Affairs

4. Analysis of Impediments to Fair Housing Choice in Vermont, 2006; Department of Housing and community Affairs and Vermont Human Rights Commission

“Lack of Public Transportation Options” is one of nine impediments to fair housing identified in the report. Remedial actions are suggested.

5. Department of Tourism and Marketing

Issues are cited, although not apparently documented in reports:

- Issues pertaining to road signage
- The 511 information system
- Intelligent Transportation System (ITS) initiatives
- Initiatives and tools that help to identify and map recreational, cultural and heritage assets
- Broadband access for the Vermont travel Planner

6. Division of Historic Preservation

Many reports and other documents pertinent to transportation are cited. No dates are indicated as when the reports or other documents were issued.

- AOT Programmatic Agreement (among FHA, VTrans, and Historic Preservation)
- Historic Bridge Programmatic Agreement



- Historic Covered Bridge Preservation Plan
  - Vermont Historic Metal Truss Bridge Study
  - Criteria for Evaluating the Effect of Telecommunications facilities on Historic Resources
  - Locating Telecommunications Towers in Historic Buildings
7. Strategic Vision and Business Plan for Job Creation and Economic Advancement, January 2004; Department of Economic Development

This plan makes specific reference to goals for broadband and wireless voice communication access and coverage in Vermont including on major travel corridors such as the interstate system and routes 2, 4, 7 and 9.

Agency of Administration, Department of Innovation and Information

Contact: Tom Murray, Commissioner

Connect Vermont Project

This is a collaboration of various departments, led by the Department of Information and Innovation, with the purpose of achieving the Governor's goals for broadband and wireless access and coverage.

Department of Public Service

Contact: Walter Poor, Policy and Program Analyst

802 828-0544 [Walter.Poor@state.vt.us](mailto:Walter.Poor@state.vt.us)

1. Vermont Telecommunications Plan, September 2004; prepared by the Vermont Department of Public Service.
2. Vermont Comprehensive Energy Plan; in process; target completion: Q4 2007

This project is directed by statute (30 VSA 202b). It updates the current plan which is dated July 1998. The plan covers a minimum of a 20 year period and includes, "A comprehensive analysis and projections regarding the use, cost, supply and environmental effects of all forms of energy resources used within Vermont." Transportation is a major section of the Vermont Comprehensive Energy Plan.

Department of Public Safety

Contact: Captain Chris Reinfurt

Director, Vermont Homeland Security Unit

802 241-5357 [creinfurt@dps.state.vt.us](mailto:creinfurt@dps.state.vt.us)



1. Vermont Communications (VCOMM); officially recognized under an Executive Order by Governor James H. Douglas, June 5, 2006

The goal is to replace and modernize the mobile data and two-way voice communications system for law enforcement and public safety functions in Vermont. VCOMM will leverage and integrate with the work of other agencies of state government including the use of fiber optic cable being placed in transportation corridors.

2. Operation Safe Commerce (Classified): This is a Homeland Security project, driven by the U.S. Department of Transportation, focused on commercial vehicle security and cross-border transportation issues.

### Department of Health

Contact: Susan Coburn

1. The Vermont Department of Health released a plan in April 2006 promoting community efforts to increase physical activity (biking and walking) through changes to the built environment (Fit and Health Vermonters, Preventing Obesity in Vermont, April 2006). The DOH recommends improving sidewalks and street crossing safety, encouraging mixed use development and housing located in downtowns.
2. DOH contracted with CRS to conduct a survey of community assets that promote physical activity like bike paths, sidewalks and playgrounds. CRS found that less than 50 percent of Vermont communities have sidewalks, 8 percent have speed bumps to slow traffic and less than 40 percent have cross-walks. The survey results were based on responses from 93 percent of Vermont's 246 municipalities (CRS Report: Inventory of Public Resources Related to Health for Cities and Towns in Vermont, April, 2006).

