



*Communities working together to
meet Chittenden County's transportation needs*

**CHITTENDEN COUNTY METROPOLITAN PLANNING
ORGANIZATION**

Vermont's Western Corridor Transportation Management Plan

Request for Proposals

March 21, 2007

**Proposals Due
April 13, 2007 at 4:00 pm**

CCMPO
30 Kimball Ave, Suite 206, South Burlington, Vermont 05403
(802) 660-4071 / (802) 660-4079 Fax
www.ccmpto.org / echurchill@ccmpto.org

I. GENERAL INFORMATION

Introduction

The Chittenden County Metropolitan Planning Organization (CCMPO) acting as project manager for the Vermont Agency of Transportation (VTrans), the Chittenden County Regional Planning Commission, the Addison County Regional Planning Commission, the Bennington County Regional Commission, the Northwest Regional Planning Commission and the Rutland Regional Planning Commission is issuing this Request for Proposals (RFP) for consultant services to conduct a Multimodal Transportation Corridor Management Plan for Western Vermont.

An earmark provision in SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users—Section 1934) provided funds for “*Western Corridor Rail Improvements, ABRB&E.*” Development of a multimodal Corridor Management Plan for western Vermont was deemed necessary by VTrans and its regional partners, to determine the most effective ways to improve the infrastructure and operations of the transportation system—highway and rail—in western Vermont over the next 20 years thus improving the economic opportunities of the region. VTrans and the Regional Planning Commissions (RPCs) along this corridor requested that the CCMPO act as the overall project manager for this plan with the RPCs providing guidance and support as well as participating in the public outreach at their respective regions.

The western corridor’s study area extends from the Massachusetts state line to the Canadian border. The Western Corridor Transportation Management Plan (WCTMP) will be multimodal in nature in that it will address highway and rail modes of travel for passenger and freight as well as public transportation (rail and bus), air, bicycle and pedestrian modes, where appropriate.

The major objective of the WCTMP is to develop a long term vision for the highways and rail corridors in western Vermont and develop strategies to achieve the vision. Equal emphasis should be placed on strategies to maximize the efficiency of both rail and highway modes of travel in order to address and promote economic opportunities for the region.

The WCTMP should include a system-wide approach that addresses present and future transportation needs through multimodal transportation and land use strategies and policies. Creative strategies, collaborative approaches and public-private partnerships to solving existing and preventing future transportation problems should be promoted. At the completion of the study, the WCTMP should be an important reference to and be endorsed by a broad set of stakeholders that have jurisdictional responsibility for land use and transportation in the corridor as well as business and transportation (railroad operators, truck associations, etc.) interests and other interested parties.

Specific goals and objectives of the study include but are not limited to the following:

- Balance and coordinate rail and highway operations to maximize the efficiency of both modes of travel.
- Develop and prioritize strategies with consideration for safety, mobility, economic opportunity and the environment.

- Assess opportunities to balance freight movements between the two primary modes (rail and highway) in the corridor.
- Assess opportunities for improving public transportation including interstate and intrastate intercity passenger rail and transit.
- Assess opportunities for improving pedestrian/bicycle connections along and to the corridor.
- Improve economic opportunities for Western Vermont.

The CCMPO is seeking to hire a consultant team to develop a comprehensive, multimodal Transportation Corridor Management Plan for Western Vermont. The selected firm or firms will be required to follow relevant procedures outlined in the *Vermont Agency of Transportation's (VTrans) Corridor Management Handbook* (<http://www.aot.state.vt.us/planning/VTcorridor.htm>) with additional focus on rail issues.

CCMPO's anticipated budget for the WCTMP is \$500,000—which includes managing and participating costs for the CCMPO and RPCs—over a two-year period. The study is slated to commence in May 2007.

The selected consultant should utilize, to the extent possible, existing data and studies, available technical tools (e.g., statewide and/or regional travel demand models) and other resources from study participants. A working list of available studies and tools are provided in Attachment #1.

Committee Structure and Public Process

A *Steering Committee* has been formed to oversee the WCTMP development. This committee consists of members from the CCMPO and VTrans, the Addison County Regional Planning Commission (ACRPC), the Bennington County Regional Commission (BCRC), the Northwest Regional Planning Commission (NRPC), the Rutland Regional Planning Commission (RRPC), and the Federal Highway Administration (FHWA). The Steering Committee will focus both on the technical and policy aspects of the study and will work closely with the consultant, providing input, guidance and comments on all work products.

A *Stakeholders Committee* will also be formed with representation from a wide range of public and private interests from all five regions in western Vermont. This Committee will include representatives from: federal, state and regional agencies and organizations as well as municipal representatives; business and multimodal transportation interests (rail, freight, public transit, bike and pedestrian); advocate groups and private citizens; border agencies; and other interested parties.

The Stakeholder Committee will provide overall guidance to the consultant team and review draft products and recommendations.

It is expected that each phase of the study will require meetings for both the Steering and Stakeholders Committees. Public meetings will also be conducted at all participating regions to present the draft findings of the plan. The selected consultant, in close cooperation with the Steering Committee and project manager, will be responsible for scheduling and conducting all meetings. The consultant will be responsible for: development and distribution of all material to the appropriate parties at least two weeks prior to the meeting, facilitating the meetings; taking and distributing minutes to all participants and interested parties.

In addition to the committee meetings, a number of **Regional Forums** will be conducted at specific junctures of the WCTMP at each participating region. These forums will be used to gather input on regional issues, disseminate information on the WCTMP process and discuss multimodal strategies and recommendations for the corridor. The consultant will work closely with the RPCs and the project manager to plan and conduct these forums.

II. PROPOSAL REQUIREMENTS

All consultants or consultant teams will be required to submit a **Technical Proposal** and a **Cost Proposal**. In order to be considered responsive to this RFP, each proposal must conform to the following requirements. The consultant shall:

- Submit **fifteen (15)** copies of the Technical Proposal (see requirements below). The Technical Proposal shall not have acetate or plastic covers and shall not exceed 20 pages (1-sided or 2-sided). Number all pages consecutively. In addition to the project approach, the technical proposal shall include the following information:
 - A Gantt chart indicating study timetable for each project task, committee meetings, public forums and meetings and deliverables.
 - An organizational chart of personnel and resources assigned to the project.
 - Tables indicating estimated labor hours per task and by class of labor for the prime consultant and any sub-consultant's assigned staff.
- Submit **seven (7)** copies of the Cost Proposal (see requirements below) in a sealed, separate package.
- Submit **one (1)** copy of the required Financial Forms (see requirements below) in a sealed, separate package.
- Clearly label the following on the outside of the Technical Proposal and the two sealed packages:
 1. Project name (Vermont's Western Corridor Transportation Management Plan);
 2. Contents (Technical Proposal, Cost Proposal or Financial Information); and
 3. Name and address of the prime consultant.

Submissions must be received by **April 13, 2007 at 4:00 pm** at:

Chittenden County Metropolitan Planning Organization
30 Kimball Ave, Suite 206
South Burlington, VT 05403

If any of the above requirements are not met, the proposal will not be considered.

Proposals received after the deadline will not be accepted.

Faxed or emailed proposals will not be accepted.

All questions and communications regarding this Request for Proposals should be directed to Eleni Churchill, CCMPO Senior Transportation Planner, via e-mail at echurchill@ccmpo.org. The CCMPO will maintain a list of questions and answers linked to the CCMPO RFP website (<http://www.ccmpo.org/consultants/rfps.html>). *Questions will be accepted until **March 30, 2007** to ensure that all parties have adequate time to review the answers.*

Technical Proposal Requirements

The Technical Proposal should demonstrate that the Consultant understands the intent and scope of the project, the character of the deliverables, the services required for their delivery and the specific tasks that must be performed in the course of supplying these services. In addition, consultant qualifications necessary to successfully complete this project should be demonstrated. In order to assist in the evaluation process, please include the following information in the technical proposal:

I. Cover Letter

II. Project Abstract

This section should summarize the Consultant's overall understanding of the project. It should briefly describe the proposed approach to be taken to achieve stated project goals and objectives.

III. Introduction to the Consultant Firm(s)

Consultants shall provide the following information relative to their firms. Similar information must be provided for each sub-consultant and member of a joint venture. Sub-consultant roles should be clearly defined.

- a) Firm name and business address, including telephone number and email contact.
- b) Year established. Include former firm names and year established, if applicable.
- c) Type of ownership, and name and location of parent company and subsidiaries, if any.
- d) Indication that the firm is licensed to do business in the State of Vermont.
- e) Number of full-time employees. Part-time employees or consultants routinely engaged by the Respondent may be included if clearly identified as such.

IV. Methodology

This section should address the tasks described in the Scope of Work (SOW). In addition to the stated tasks, consultants are encouraged to propose additional tasks and/or methodologies that are relevant and might enhance this plan. The Consultant should provide detailed approaches and schedule for each task and also describe deliverables and milestones. Please highlight any particular issues or aspects of the WCTMP that you believe may need special consideration and discuss in detail resource requirements for Steering Committee members and/or their staff.

V. Public Involvement Plan

A detailed public involvement plan should be provided which specifies at a minimum:

- Number, format and timing of Steering and Stakeholders Committee meetings and proposed public meetings.

- Number and description of regional forums that could be used as means to gather input from and disseminate information to the regional stakeholders.
- Roles of study participants (RPCs).
- Methods to manage the flow and exchange of information among the committees and the general public interested in this project; and discuss other innovative ways to receive public input (e.g., interactive web site).

In addition, the consultant should anticipate presentations (not to exceed two) to VTrans Executive Staff, CCMPO Board and Operations Council as well as the Vermont Senate and House Transportation Committees.

VI. Qualifications and Experience of the Consultant Firm(s)

This section should detail the Consultant team's previous experience relating specifically to corridor management studies. Include a listing of all relevant recent work (within the past three years) which would indicate experience with corridor studies. This listing shall include a description of the work, the approximate date the work was completed, project budget, and the name and telephone number of the client's project manager. Include information as to whether the project's time schedule and budget were met. Expertise in all aspects of corridor planning should be highlighted, as well as understanding of transportation/land use relationships, rail and bicycle/pedestrian issues, economic development principles as well as socio-economic and environmental issues.

References: The consultant shall submit names, addresses, and phone numbers of at least three references familiar with the consultant's ability, experience, and reliability in the performance and management of projects of a similar nature.

VII. Qualifications, Experience and Role of Key Staff

This section shall contain brief resumes for only those individuals that will participate in the project with an emphasis on previous experience on corridor management studies. It should clearly identify the project manager and other key individuals assigned to this project and include their function and/or responsibility along with their level of involvement in this project. Include a Gantt chart indicating study timetable and major milestones (meetings and deliverables). Tables indicating estimated labor hours per task as outlined in the SOW should be provided. This section shall also include a staff availability chart. This chart shall detail the availability of each staff member based on the percentage of time he or she will have to devote to this project, taking into consideration their other project commitments.

Cost Proposal Requirements

The consultant will be reimbursed upon successful completion of each task and acceptance of each deliverable by the project manager and the Steering Committee; however the CCMPO is willing to negotiate a payment schedule with the selected consultant if necessary. Direct costs for meals, travel and lodging will be considered part of the firm fixed price.

The Cost Proposal should include the following, listing the prime consultant and any sub-consultants separately:

1. Provide a firm fixed price and assigned personnel hours for the completion of each task as detailed in the SOW. In case where additional tasks are proposed, please provide the same information for each additional task.
2. Provide a firm fixed price for the public process component of the project as proposed by the consultant.
3. Also, provide in the cost proposal a composite schedule of direct labor hours, direct labor cost per class of labor, overhead rate and fee for each study task

Financial Forms

Copies of the financial forms are available for download from the CCMPO website at <http://www.ccmppo.org/consultants/rfps.html>, or you may contact Bernie Ferenc at 802-660-4071 Ext. 10 or bferenc@ccmpo.org for paper copies.

In a separate labeled and sealed envelope submit VTrans Form AF38 (Revised 6/30/04) for each firm included in the proposal as well as a completed copy of Standard Form 330 (Architect-Engineer Qualifications).

III. CONSULTANT SELECTION PROCEDURE

Review of Technical Proposals

The proposals will be reviewed and evaluated by the Steering Committee or a subgroup designated by the Steering Committee. The technical proposals will be evaluated considering the following criteria:

CRITERIA	MAXIMUM POINTS
1. Project understanding and approach - Clarity and creativity of proposal (Methodology and public process)	50
2. General qualifications of the firm (Projects and references).	15
3. Organizational Chart and personnel and resources assigned to the project.	15
4. Gantt Chart indicating study timetable and team members assigned to each task in the SOW.	10
5. Proven record of successful completion of similar projects.	10

Once the technical proposal is discussed and ranked, the cost proposal will be reviewed for consistency with, and in light of, the evaluation of the technical proposal. The Selection Committee reserves the right to seek clarification of any proposal submitted and to select the proposal considered to best promote the public interest.

Interviews and Presentations

The Selection Committee may elect to have consultants present their proposals and interview them prior to final selection. If interviews are desired, the following procedure will be employed. Each consultant will be permitted 20 minutes to make an oral presentation with a question and answer session to follow not to exceed 40 minutes. The consultant teams may wish to present the following information: descriptions, sketches, photos or plans of projects of a similar nature which have been completed by each firm; any unique features of the project(s); and relevant methodology/experience in dealing with environmental, land use, economic development and transportation impacts that may be encountered during the development of this plan. Firms may also wish to provide samples of materials that have developed for public informational meetings. The oral presentations will be evaluated using the same criteria as the written proposals. Presentations will take place at the CCMPO offices or a site designated by CCMPO.

The Steering Committee will be responsible for selecting the consultant team deemed most qualified to provide the required services.

Standards

The consultant shall comply with all VTrans policies, standards, guidelines and procedures. To the extent possible, this plan will be developed in accordance to the processes described in VTrans' Vermont Corridor Management Handbook. All mapping shall be in accordance with the Vermont Center for Geographic Information (VCGI) standards.

The consultant shall maintain a file containing all correspondence and document the minutes for all meetings held pertaining to the project. All project documents shall be available on an FTP site provided by the consultant.

All deliverables in both paper and electronic format shall be the property of VTrans upon completion of the project or termination of the contract with copies available to the CCMPO and participating RPCs.

The consultant shall abide by any existing legislation that may play a role in alternatives development.

Schedules and Submittals

The consultant shall submit and maintain a schedule with specified milestone dates for each project task. The schedules must allow for necessary review periods for all parties involved with the project.

All materials to be utilized at committee and public meetings shall be reviewed and approved by the project manager and members of the Steering Committee at least two weeks prior to any meeting.

Invoices should be submitted at the successful completion of each task and acceptance of the deliverable by the project manager and Steering Committee. If a monthly payment schedule has been agreed upon, the consultant shall submit detailed project status report on the first of each month to the CCMPO project manager indicating the percent completion for each project task. The project manager reserves the right to request supplemental information to ensure appropriate project progress.

Disadvantaged Business Enterprise (DBE) Program

VTrans sets an overall annual goal for DBE participation on federally funded contracts that is reviewed and revised each year, in accordance with the requirements of 49 CFR Section 26.45. For the specification of the overall annual DBE goal and an explanation of goal-setting methodology, consultants are directed to the VTrans DBE webpage: <http://www.aot.state.vt.us/CivilRights/DBE.htm>. The CCMPO and its consultants, and any subconsultants, shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of this work

IV. SCOPE OF WORK

Background

As discussed in the introductory section of the RFP, the major objective of the WCTMP is to articulate a long term vision for the transportation network in western Vermont (highway and rail) and develop and prioritize strategies to achieve the vision. Selected strategies should maximize the efficiency of both rail and highway modes of travel and should address economic opportunities for the study region.

The study area extends from the Massachusetts state line to the Canadian border. The WCTMP will address highway and rail modes of travel for passenger and freight as well as air, public transportation, bicycle and pedestrian modes, where appropriate. The highway corridor could be divided into natural segments based on land use and functionality—rural, suburban, urban, growth centers, etc.—for analysis purposes. The challenge of moving freight through village centers and downtowns should be addressed and the impact of special traffic generators should be considered.

The *Vermont Corridor Management Handbook* should be used for relevant WCTMP tasks. This scope of work has been prepared to mirror the major phases outlined in the VTrans' Handbook:

- 1) Getting Organized;
- 2) Analysis of Existing and Future Conditions;
- 3) Develop Vision and Goals;
- 4) Develop Preferred Strategies; and
- 5) Develop Corridor Management Plan.

The following project tasks outline the recommended methodology to achieve the Corridor Management Plan's goals and objectives. Consultant teams are required to address each of these tasks but they are also encouraged to propose additional tasks and/or methodologies that are relevant and might enhance this corridor management plan.

Consultants should utilize data, information and appropriate elements of past studies to the extent possible. The selected consultant will also have access to VTrans' statewide travel demand and truck model and CCMPO's regional model for possible use in the existing and future conditions analyses (see Attachment #1).

Methodology

Task 1: Establish Study Goals and Objectives and Define Corridor Boundaries

The selected consultant will work with the Steering Committee to define the WCTMP goals and objectives as well as the study area boundaries and special facilities that will be analyzed as part of this study. The proposed Public Involvement Plan will also be discussed and finalized.

Deliverable: Project Memorandum #1: Study Goals and Objectives & Final Public Involvement Plan

Task 2: Analyze Existing Conditions

Create land use and transportation inventories of existing conditions within the study area in terms of infrastructure (for highway and rail including special transportation facilities and traffic generators), functionality and performance. Refer to the minimum data requirements found on pages 2-3 and 2-4 of the *Vermont Corridor Management Handbook*. During this task, discrete sub-sections of the corridor that are consistent in character, functionality and landscape could be identified for determining the level of analyses for each section.

Traffic data (highway) is available through VTrans and the CCMPO offices. It is not expected that the consultant will conduct any new traffic counts for this study. Rail traffic data could be gathered through current and past VTrans studies and the Vermont Rail System and New England Central Railroad. Land use data is available through the RPC and town offices as well as VCGI.

Deliverable: Project Memorandum #2: Existing Land Use and Transportation Conditions

Task 3: Analyze Future Conditions and Performance

Assess how land use, economic, demographic and transportation conditions in the study area might be expected to change in the future—over a 20 year time horizon—if improvements to the transportation infrastructure are not implemented. Assess future conditions for passenger travel and freight movements on highways and rail in the study area.

Available travel demand models and relevant micro-simulation tools could be used to assess the future performance of the highway network in the study area. Meet applicable minimum future conditions data and analyses requirements found on page 2-5 of the *Vermont Corridor Management Handbook*.

Deliverable: Project Memorandum #3: Analysis of Future Conditions and Performance

Task 4: Develop Corridor Vision and Strategies

Establish a Vision and Goals, Objectives, and Performance Measures for the Corridor

In close cooperation with the study committees and with public input, develop a concise statement that describes the desired future condition of western Vermont from a land use, economic and transportation perspective. Establish goals that lay out desired long-range outcomes to be achieved by the corridor plan. Supplement the vision and goals statements by graphics and maps showing the desired outcomes for the future transportation network, growth policy areas (village centers, growth centers, etc.) and typical cross-sections for specific segments of the corridor. Develop a set of more specific objectives and quantitative performance measures that support the vision and goals of the corridor. Impacts to consider while developing goals and objectives include but are not limited to: mobility, accessibility and safety; economic development; environment and quality of life; and freight movements within and through the corridor.

Deliverable: Project Memorandum #4: Corridor Vision and Goals, Objectives, and Performance Measures

Task 5: Identify, Analyze and Prioritize Strategies

Define a range of practical strategies to achieve the stated goals. Develop a set of screening criteria to select specific strategies for analysis. Criteria should consider:

- Feasibility—including strategy costs as well as public and political support
- Effectiveness in achieving desired outcomes for the corridor
- Consistency with established policy, plans and programs

The consultant with close consultation with the Steering and Stakeholders Committees will evaluate strategies using quantitative and qualitative methods to set priorities and make recommendations for implementation. The proposed strategies will be assigned into short, medium and long-term priority categories. This process shall be documented, including the rationale behind the prioritization strategies, and why strategies were rejected or eliminated from consideration.

Deliverable: Project Memorandum #5: Preferred Strategies to Accomplish Goals

Task 6: Develop Implementation Plan

Identify Implementation Steps

Detail the steps necessary to implement the plan as a whole and each recommended strategy in particular. Identify the responsible parties for each implementation step as well as possible funding sources and develop a time horizon for implementation.

Identify Agreements to Implement and Monitor Plan

For each recommended strategy, identify relationships among different government agencies, local jurisdictions and private businesses or processes and institutional relationships that may need to be established.

Establish Incentives and Contingencies

Identify strategies that involve multiple parties and any incentives or contingencies that may be beneficial in implementing the strategy.

Identify Monitoring Activities

Identify elements to monitor as well as action triggers and responses. The organization responsible for specific monitoring activities should be identified and the type, frequency of data needed, as well as analysis methods specified. Specify performance thresholds that indicate the need for further action or implementation of specific strategies.

Deliverable: Draft Implementation Plan

Task 7: Finalize Corridor Management Plan

Assemble Materials into a Plan Document for review

Compile all relevant products developed during the course of the WCTMP into a draft plan, based on the Vermont Corridor Management Handbook format.

Deliverable: Draft Western Corridor Transportation Management Plan

Final Corridor Plan

The plan should be finalized, taking into consideration stakeholder and public comments and concerns. A method for plan distribution should be developed to help create public awareness and understanding of the plan.

Deliverable: Final Western Transportation Corridor Management Plan

Payment Schedule

Payments will be made upon **successful completion of study tasks and acceptance of each task deliverable by the Project Manager and the Steering Committee.**

The consultant should propose a payment schedule that indicates percent payment per identified deliverable—see SOW and include any proposed new tasks. In addition, a payment schedule for the public process component of this study should be proposed. The Selection Committee reserves the right to negotiate with the selected consultant and modify the proposed payment schedules.

Final Reports

Copies of the Draft Final *Western Corridor Transportation Management Plan* will be provided to all members of the Steering and Stakeholders Committees two weeks prior to their meetings, for their review and comment. Fifty (50) hard copies in an 8 1/2"x11" typewritten format of the *final report & executive summary* will be provided to VTrans for distribution with additional copies to the CCMPO and the participating RPCs. In addition, one set of reproducible (camera-ready) originals should be provided along with all electronic files of the data gathered and analyses conducted during the development of the plan in a format acceptable by VTrans (MS Word , PDF, GIS, etc.) Upon successful completion of this project all documents, results from data analyses and GIS mapping would become the property of VTrans with copies to the CCMPO and participating RPCs.

ATTACHMENT #1

STUDIES

General:

<http://www.aot.state.vt.us/planning/Studies2.htm>

Chittenden County MPO:

<http://www.ccmmpo.org/freight/>

Northwest Regional Planning Commission

- Federal Street Corridor Study - 2005 Update
- US 7/VT 105 Intersection Alternative Alignment Study (2004)
- St. Albans Circulation Study (2002)
- Exit 20 Transportation Financing Plan (2006)
- US 7 Corridor Study (1996)
- St. Albans Sidewalk Master plan (2003)
- Northwest Vermont Public Transit Network Short Range Public Transit Plan (2002)
- 2003-2008 Northwest Regional long Range Transportation plan

Addison County Regional Planning Commission

1) Transit related:

- a) *Addison County Transit Study (July 2006)*: This identifies and prioritizes need and transit services growth and changes in the region.
- b) *Fiscal Year 2004-2008 Strategic Plan for Addison County Transit Resources & ACRPC (Sept 2003)*: A five-year strategic & operational plan outlining goals & strategies for services, funding, marketing, and infrastructure.
- c) *Short Range Public Transportation Plan for Addison County Transit Resources (Mar 2003)*: This document presents the short-range public transportation plan for Addison County
- d) *Short Range Public Transportation Plan for Addison County Transit Resources (July 1995)*: This document presents the short-range public transportation plan for Addison County

2) Bike/Ped Related

- a) *The Town of Cornwall – Bicycle & Pedestrian Planning & Feasibility Study (April 2006)*: Identifies bike/ped routes between Cornwall and Middlebury along VT 30 & VT 125.
- b) *Addison County Regional Bicycle & Pedestrian Report (2002)*: Assesses the bike/ped needs of the towns in the region and makes recommendations as to strategies and solutions.
- c) *Traffic Calming and Non-Vehicular Routes for Five Addison County Towns (Starksboro, Bridport, Addison, Shoreham, Monkton; Sept 1997)*: The intent of this traffic calming & alternative transportation study is to better integrate transportation facilities more closely with the life of the subject communities.

3) Route/Corridor Studies

- a) *Vergennes VT 22A – South Water Street – MacDonough Drive Intersection Study (Oct 2006)*: Makes recommendations to improve efficiency and safety at this intersection.
- b) *Town of Lincoln Village Study (2006)*: analyzes proposes solutions for pedestrian mobility and safety issues in the village center.
- c) *Middlebury US 7 Corridor Improvements (NHG 019-3(53) SC; Feb 2005)*: The purpose of the study is to improve mobility and safety on US 7 between Creek Road and Center Plaza. The study scoped roundabouts at the Middle, Creek, Centre Road intersections.

- d) *Town of Weybridge Bicycle & Pedestrian Planning & Feasibility Study (Sept 2004):* Recommends improvements to better serve bike/ped safety along Morgan Horse Farm Rd, Pulp Mill Bridge Rd, Hamilton Road, and Quaker Village Road.
- e) *Downtown Bristol Traffic Study (Feb 2003):* This downtown study makes recommendations intended to improve bicycle and pedestrian safety in downtown Bristol and to nearby non-vehicular destination points.
- f) *Town of New Haven Sidewalk Feasibility Study (Sept 2003):* Makes infrastructure recommendations to improve pedestrian safety in the village.
- g) *Greater Vergennes Traffic Impact Feasibility Study (July 2002):* Intended to address and mitigate negative impacts from heavy truck traffic through the City of Vergennes along the VT 22A corridor.
- h) *Middlebury/US 7 Corridor Management Study (Nov 1998):* Focus area: VT 7 from East Middlebury to Exchange St. It was conducted as a far-reaching congestion management effort for this unique segment of roadway. Its recommendations address the full gamut of needs from facilitating traffic flow and/or safety at key locations, to providing for business access and pedestrian convenience and safety, to enhancing the business climate of the roadway itself. It is tied to the wider goals of community character and economic vitality as well as to traffic improvements.
- i) *Middlebury Gap Scenic Highway Corridor Management Plan (April 1996):* This is a Corridor Management Plan for a 15-mile section of VT 125 between: Hancock, Ripton, and East Middlebury.
- j) *Vergennes Route 22A Bypass Preliminary Design Report (Nov 1995):* Analysis of 3 potential truck route bypass corridors around the city of Vergennes.
- k) *Analysis of the Most Cost Effective Solution to a Year Round East/West Route in Southern Addison County (Dec 1995):* Evaluates & recommends improvements minimize the effects of seasonal closure due to annual flooding for the regionally important east /west routes: VT 73 and Leicester/Whiting Road.
- l) *US 7 Corridor Transportation Management Study (1994 – Wilbur Smith):* Provides an overall strategy for improvements along the US 7 corridor

4) Rail Related

- a) *Middlebury Rail Spur Study (1995)*
- b) *Middlebury Multi-Modal Transportation Center Feasibility Study (Phase I: Oct 2001; Phase II: Dec 2002):* Identifies ways to enhance and promote the use of public transportation and reduce automobile dependency by providing central and efficient multi-modal transfer facilities in the town of Middlebury.

5) Lake Champlain Ferries Related

- a) 1998 Lake Champlain Ferries Study

6) Studies Scheduled for 2007:

- a) *Addison County Long Range Transportation Plan Update*
- b) *Leicester Salt Shed Study:* This is a study to identify potential alternative salt shed locations for the town. The current shed is located immediately adjacent to a wetland area, and the town would like to relocate the facility to another location which has less potential watershed impact.
- c) *Cornwall VT 30/VT 125 Bike/Ped Supplemental Study –* This is a supplemental to a 2005 feasibility study which shared use shoulders along the VT 30/VT 125 corridor. This study will identify locations of greatest safety risk to drivers, pedestrians, and bicyclists along this corridor which should first be considered for shoulder improvement.
- d) *Starksboro VT 116 Traffic Calming/Pedestrian Access Survey –* This survey will be targeted at the residents and owners of properties facing “Main Street” (VT 116) in the Village of Starksboro. The purpose is to determine attitudes about 3 topics:
 - i) The use of landscaping as a traffic calming element along VT 116
 - ii) The perceived adequacy of current shoulder conditions
 - iii) Interest in pursuing alternative pedestrian access routes

TOOLS

VTrans statewide travel demand & truck model:

The Vermont Agency of Transportation (VTrans) maintains and operates a statewide travel demand model using the Cube/Voyager software platform. The model is based on the traditional 4-step process of trip generation, trip distribution, mode split, and trip assignment. The model is designed for analysis at the daily trip level (ADT). Given the current resolution of the model it is best suited for regional and statewide analysis. Intra-city travel can be modeled with further refinement of sub-areas.

The model has a base year of 2000 and a future year of 2025. The model is divided into 698 traffic analysis zones (TAZs); of which 70 represent external zones. Small towns are typically divided into 1-5 TAZs, while larger towns and cities have considerably more zone resolution. The roadway network models all interstate, major arterial, minor arterial and major collectors in Vermont. A significant number of minor collectors are also represented as well as a limited number of select local roads.

Trip generation information (households and employment) is based on the 2000 census. Trip distribution is accomplished using a gravity model. The transit (bus trips) component of the model is limited and passenger rail is not included. The trip assignment phase of the model uses an equilibrium assignment process.

In addition to the passenger trip model, a freight model has been developed that utilizes the network structure described above. This model is a daily truck model. Rail is not part of the freight model. The model exists as a combination of excel spreadsheets that are used in conjunction with the Cube/Voyager travel demand model.

CCMPO's regional transportation model:

The CCMPO maintains and operates a 4-step regional travel demand model which estimates AM and PM Peak Hour traffic conditions in Chittenden County. This model runs on a TransCAD Platform and includes the following travel modes: drive alone, share ride, bus, rail, and walk/bike. Additional documentation on the regional transportation model is available through the CCMPO.

The most recent update of this model provided the following enhancements:

- The model base year is updated to the year 2000 with updated information and data on housing, employment, and travel times, including information from the 2000 Census;
- An Interstate 89 intercept survey was performed to determine how many people are coming from inside and outside of the County on I-89. This data was used to estimate through-traffic on Interstate 89.
- Several “special generators”, or businesses or areas with unique transportation issues and large numbers of employees will be better represented in the model. Areas included as special generators are IBM, UVM and Fletcher Allen, Burlington International Airport, University Mall, and St Michael’s College.
- The model now estimates truck trips in the morning and afternoon peak hours and accounts for the impact of truck trips on roadway congestion.