

VT 22A Truck Route Study – Request for Proposal

The Addison County Regional Planning Commission (ACRPC) in partnership with the Vermont Agency of Transportation is requesting proposals from qualified consultants or consultant teams for a scope of work and budget to evaluate the feasibility and preference for alternative truck routes to VT Route 22A through the City of Vergennes, VT.

Background

VT Route 22A is a minor arterial that serves as a major truck route from New York State to northern Vermont. Based on the most recent counts, there are over 700 trucks per day on VT 22A as it passes through Main Street in the center of downtown Vergennes. Almost 60% of these trucks, 430 per day, are large tractor trailers that create significant noise, vibration, safety and traffic operational issues affecting the quality of life for Main Street businesses and homes and to the general travelling public. There have been two significant planning efforts over the last twenty years, summarized below, that evaluated alternate routes and other short-term options to mitigate the negative impacts of truck traffic. While some changes have been made to help calm traffic and improve the pedestrian environment, the volume of trucks passing through Vergennes has not abated and the negative impacts persist. A recent proposal by former Vergennes Mayor Bill Benton to divert northbound trucks to VT 17 was not well received by adjoining towns but has served as motivation to reconsider all options.

The Vergennes Route 22A *Bypass Preliminary Design Report* was completed by a consultant team in 1995 for the ACRPC. The study evaluated the feasibility of constructing an alternate truck route on a new roadway alignment in three general corridors including a far west option, near west option and an eastern option. The near west option was selected as the preferred corridor based on a qualitative assessment of traffic demand impacts, land use plans, natural features, infrastructure needs, and impacts to community character and scenic quality. A more detailed conceptual alignment was developed within the preferred “near west” corridor. The near west corridor evaluated in the *Preliminary Design Report* has one alignment from its northern intersection with VT 22A to MacDonough Drive. There were three alignment options considered from MacDonough Drive, across the Otter Creek and Panton Road to the southern intersection with VT 22A in Panton. Both the southern and northern intersections with VT 22A were assumed to be roundabouts. *The Preliminary Design Report* also presents different roadway design alternatives including a typical two-lane rural highway designed for 55 mph with wide travel lanes and shoulders and a 100-foot wide ROW; a modified roadway standard with shoulders for on-road biking and vegetation closer to the roadway; and a city parkway concept. *The Preliminary Design Report* also presented several scenarios demonstrating how these design options would support different land use development patterns. *The Preliminary Design Report* compared the pros and cons of the different alignment, roadway design and land use pattern options but did not recommend a specific alignment or design.

The bypass concept was supported by the City of Vergennes, but the surrounding towns had concerns. The 2002 *Greater Vergennes Traffic Impact Feasibility Study* was undertaken by the ACRPC with consultant assistance to build consensus on the issues creating the need for an alternate truck route and to identify feasible short and longer-term solutions. The Study’s recommendations were based on a series of workshops in Vergennes, Panton and Ferrisburgh with the public and others with expertise and knowledge of the issues. Based on the workshops, the Study presents a Purpose and Need statement that clearly articulates a desire to “...address and mitigate the negative impacts, existing and

anticipated, relating to the heavy truck traffic travelling through the City of Vergennes and to facilitate freight travel along the Route 22A corridor with a minimum of restrictions and hindrances.” It documents a variety of concerns and provides comments on the following solution areas: Bypass around Vergennes, Alternative Routes, Alternative Transportation Systems and Downtown Improvements. The Study recommends some short-term actions and concludes that the long-term approach should be to find an alternative route to VT 22A through Vergennes for trucks and recommends further consideration of the bypass. The Study also recommends that VT 17, which connects VT 22A to US 7 south of Vergennes should also be evaluated as an alternate route since costs are comparable to the bypass but no new roadway alignment would be required.

The *1995 22A Bypass Preliminary Design Report* is available here:

http://54.172.27.91/Downloads/TACmaterials/VergennesRoute22ABypassPreliminaryDesignReport_1995.pdf.

The *2002 Greater Vergennes Traffic Impact Feasibility Study* is available here:

http://54.172.27.91/Downloads/TACmaterials/GreaterVergennesTrafficImpactFeasibilityStudy_2002.pdf

It has been more than twenty years since the *1995 Preliminary Design Report* was completed and more than 15 years since the *2002 Greater Vergennes Traffic Impact Feasibility Study*. While the City of Vergennes has made progress improving the streetscape and pedestrian environment along VT 22A in its downtown, the volume of large trucks and associated negative impacts persist. This study will evaluate the following options:

VT 22A Truck Route. VT 22A would continue to serve as the primary truck route. Modifications would be made to VT 22A near and within Vergennes to mitigate the safety, traffic operation, noise and vibration impacts of large trucks.

New Alignment Truck Route. A road would be constructed on a new alignment that diverts through trucks from Vergennes (trucks without an origin or destination in Vergennes). The feasibility analysis of the broad corridors and alignment evaluated in the 1995 report will be updated. To the extent practical within the scope of work, the unanswered questions related to its traffic impact, alignment, design and land development implications will be addressed. The specific objectives for the evaluation of the New Alignment Truck Route are:

- Verify the selection of the preferred corridor from the three options considered in the 1995 report.
- Quantify the change in traffic volumes for trucks and cars and related operational impacts that could result from a new alignment truck route for the preferred corridor including the effects on connecting local roads.
- Update the screening of natural and cultural resources, identify federal and state permitting requirements and identify any red flags.
- Evaluate options for the northern and southern intersections of the new alignment truck route with VT 22A and document advantages and disadvantages.
- Select a preferred alignment within the preferred corridor. If the “Near West” corridor is preferred, select a preferred alignment between MacDonough Drive and VT 22A in Pantton.
- Select a preferred roadway cross-section design.

- Provide direction on the preferred land use development pattern.
- Update the order of magnitude cost estimate.

VT 17 Truck Route. Through trucks travelling on VT 22A would be diverted to VT 17 between VT 22A and US 7. VT 17, including major intersections, would be reconstructed as necessary to accommodate increased truck traffic. The VT 17 bridge over the Otter Creek is scheduled to be reconstructed in 2018 with lane and shoulder widths consistent with state standards. Other modifications along VT 17 would be required to safely and efficiently accommodate an increased volume of large trucks. The study will identify modifications that may be required at the intersection of VT 17 with US 7, including any related changes to the adjacent at-grade railroad crossing, and potential changes to the other two major intersections with VT 23 and VT 22A. It will also identify the location of other significant roadway alignment or grade changes that may be necessary. Federal and state permit requirements will be identified, and order of magnitude cost estimate prepared.

Scope of Work

The project will be managed by the ACRPC. A small working group of ACRPC and VTrans staff will provide general direction and technical guidance per the scope of work. The ACRPC Transportation Advisory Committee (TAC), which has representatives from all towns in Addison County, will provide feedback and direction to the consultant at major milestones. The target completion date is nine months from the issuance of a notice to proceed. The following scope of work presents the major tasks, meetings and expected outcomes. The consultant is encouraged to suggest modifications to the scope of work to help improve the desired outcomes.

Task 1. Verify the Purpose and Need Statement

- Prepare for and facilitate a kick-off meeting with the ACRPC TAC to review the scope, identify initial comments, and to learn about available sources of information, lines of communication, etc. Coordinate with the ACRPC/VTrans staff working group as necessary to prepare for the kick-off meeting.
- Compile, analyze and summarize existing data to document current conditions.
 - Prepare a base plan with sufficient detail to allow for the development and feasibility analysis of the options.
 - Compile and summarize available vehicle and truck traffic and safety data from VTrans and the ACRPC.
 - Document issues related to truck traffic along the VT 22A corridor in general and in Vergennes specifically including noise, vibration, traffic operations and safety.
 - Identify existing land use, zoning, land ownership, and the natural and cultural resources with the potential to affect alternatives and incorporate on the base plan as appropriate.
 - Document any related pedestrian and bicycle facilities and issues.
 - Review the ACRPC regional plan, municipal plans, and municipal zoning and land use bylaws in the area affected by the alternatives and summarize policy or other findings relative to alternative truck routes.
 - Summarize relative findings from related studies completed since the *2002 Greater Vergennes Traffic Impact Feasibility Study*.

- Document related planned infrastructure improvements in the study area including roadway, bicycle and pedestrian facilities, water and wastewater improvements, streetscape and traffic calming improvements, electric and telecommunication utilities, etc. using information provided by VTrans, ACRPC and the City.
- Prepare for and facilitate a public meeting to summarize collected information and to gather feedback on the purpose and need for action. ACRPC will make arrangements for the meeting space and will publicize the meeting. The consultant will provide a draft press release and flyer to assist with notification and will document and summarize comments gathered during the meeting.
- Prepare a Draft Purpose and Need Statement and technical memorandum that documents the information compiled and public comments.
- Meet with the ACRPC TAC to review and confirm the Draft Purpose and Need.

Task 2. Evaluate the VT 22A Truck Route Option

- Document previous efforts implemented on VT 22A in Vergennes and any progress made towards reducing the negative impacts caused by trucks.
- Identify design and operational strategies for VT 22A that could reduce the negative impacts of large trucks as they approach and pass through downtown Vergennes. Options may include traffic calming designs to reduce speeds, intersection modifications to improve operations, road base reconstruction to reduce noise and vibration, ordinances that restrict use of air brakes, etc.
- Provide a qualitative assessment of the feasibility and potential to reduce negative impacts of these options. Provide order of magnitude cost estimates.

Task 3. Evaluate the New Alignment Truck Route Option

- Update the evaluation from the 1995 Report of the three broad corridor options. Assume the same level of evaluation used in the 1995 report.
- Prepare an analysis to quantify how a New Alignment Truck Route within the preferred corridor would change traffic patterns and performance for base and planning years at its intersections with VT 22A (and with New Haven Road and US 7 if the eastern corridor is preferred), and along the connecting town highways. The University of Vermont is under a standing contract with VTrans to maintain the statewide travel demand model. UVM will, at no cost to the consultant, apply the model to generate estimated build and no-build traffic volumes for the bypass. The model generates annual average daily traffic volumes that the consultant will use to derive peak hour traffic volumes at the intersections and road segments to be evaluated. Peak hour volumes generated for the bypass intersection will inform design options. The consultant will use the traffic volume forecasts to prepare LOS analyses for the intersections of VT 22A with Panton, MacDonough-South Water Street, and Green Street and to evaluate whether traffic pattern changes might require other modifications on local roads that would connect to the New Alignment Truck Route. The consultant will coordinate with the ACRPC/VTrans working group and UVM to verify land use and other assumptions for the planning year forecast.
- Develop general alignments within the preferred corridor. If the Near West corridor is selected, review and modify as necessary the three alignment options presented in the 1995 *Preliminary Design Report* to reflect changing conditions since then. The overall alignment options shall be indicated on a base plan at a similar level of detail to the 1995 *Preliminary Design Report*

enhanced with recent aerial photography, parcel and other GIS data. Existing conditions and constraints should be verified to the extent practical with field observations. Document potential impacts and costs, permitting requirements and the general advantages, disadvantages, risks and opportunities relative to the purpose and need statement for each alignment to inform a discussion of a preferred alignment.

- Review the three roadway cross-section options presented in the 1995 *Preliminary Design Report*, update them to reflect current standards as appropriate, and document advantages and disadvantages relative to the purpose and need statement to inform the discussion of a preferred roadway cross-section.
- Using the planning year traffic forecasts, evaluate design options for the VT 22A southern and northern intersections with the New Alignment Truck Route including roundabouts (per the 1995 report), and a non-roundabout option at each intersection. Prepare schematic design plans at a sufficient level of detail to determine construction feasibility and footprint impacts. Identify the lane configuration and control type for the intersections of the New Alignment Truck Route with connecting local roads. Document advantages and disadvantages relative to the purpose and need statement to inform the discussion of preferred intersection designs.
- Conduct a preliminary, GIS-level screening of natural and cultural resources that may be impacted by the alignment.
- Prepare an order of magnitude cost estimates.
- Update the analysis of future land use development patterns and related alignment location in the 1995 *Preliminary Design Report* in light of the current Vergennes Municipal Plan and zoning regulations.

Task 4. VT 17 Alternate Truck Route Analysis

- Estimate the truck volume change associated with designation of VT 17 as the required route for all north and south bound through trucks currently using VT 22A. Assume that the required state and local regulations are implemented to prohibit through trucks from travelling on VT 22A through Vergennes. Origin and destination data from the statewide travel demand model will be provided to assist the consultants with estimating the amount of through-trucks that could be diverted to VT 17. Consultants may propose alternative methods, such as a license plate field survey or use of big data sources, to estimate origin and destination of trucks trips passing through Vergennes. Any additional cost for an alternative method should be indicated in the cost proposal.
- Evaluate the impact of increased truck trips on level of service, delay and safety at the intersections of VT 17 with US 7, VT 23 and VT 22A. Identify intersection lane and control modifications if necessary. Prepare schematic design plans at a sufficient level of detail to determine construction feasibility and footprint impacts of potential design changes at these intersections.
- Identify locations along VT 17 with limited sight distance or other physical constraints that may need reconstruction to address safety or traffic operational concerns.
- Conduct a preliminary, GIS-level screening of natural and cultural resources that may be impacted by modifications to the roadway.
- Prepare an order of magnitude cost estimate for the roadway and intersection modifications necessary to safely and efficiently accommodate the increased truck traffic along VT 17.

- Document advantages and disadvantages relative to the purpose and need statement

Task 5. Initial and Draft Reports

- Prepare an initial draft report that summarizes the analyses and findings from the previous tasks for review by the ACRPC/VTrans staff working group.
- Prepare a draft report that addresses the staff comments.
- Meet with ACRPC TAC to review the draft report prior to public meeting.

Task 6. Alternatives Evaluation Public Meeting

- Prepare for and facilitate a public meeting to present the findings in the draft report, gather comments and concerns, and potential feedback on a preferred truck route option. ACRPC will make arrangements for the meeting space and will publicize the meeting. The consultant will provide a draft press release and flyer to assist with notification and will document and summarize comments gathered during the meeting.
- Meet with the ACRPC TAC to review public comments and propose final modifications to the report including identification of a preferred truck route alternative.

Task 7. Prepare Final Report

- Prepare a final report with all supporting narratives, analyses, and graphics. Narrative in the final report should be brief with the supporting technical analyses provided in appendices. A conference call or meeting may be necessary to discuss any significant comments by the ACRPC/VTrans working group.

NEED TO THE ADD THE FOLLOWING:

- Vermont Western Corridor Transportation Management Plan:
<http://acrpc.org/resources/minutes-agendas/tac-minutes/>.
- Other documents related to the issue can be found on ACRPC's Transportation Advisory Committee minutes page here: <http://acrpc.org/resources/minutes-agendas/tac-minutes/>.
- Study Area Map
- Updated ACRPC Regional Transportation Plan (to be adopted at April ACRPC Full Commission meeting)
- Links to Town Plans to be reviewed:
 - Vergennes
 - Panton
 - Ferrisburgh
 - Addison
 - Waltham
 - New Haven
- Studies within Vergennes regarding roadway and alignment improvements:
- List of other related studies (are there any?)