

APPENDIX A – SUMMARY OF PREVIOUS STUDIES

Three notable studies of the US 4 corridor were conducted between 1972 and 2001. Summaries of those studies are provided below:

1.1 Route 4 in the Ottauquechee Valley: A Transportation Analysis (1972) Summary

Study Name:	Route 4 in the Ottauquechee Valley: A Transportation Analysis (1972)
Scope/Study Area:	Segments of Route 4 within the Ottauquechee Valley
Funding:	The Ottauquechee Regional Planning and Development Commission, with funding from the Vermont Agency of Development and Community Affairs
Purpose:	To investigate potential changes for Route 4 using a community approach; to identify and present the impacts of various alternatives using engineering, social and environmental criteria.
Issues/Findings:	<ul style="list-style-type: none">▪ Problems along the corridor and growth factors in the area suggest that the road will, with future traffic growth, become seriously congested.▪ Completion of nearby interstate highways brings the metropolitan areas of Boston, New York and Montreal within a short ride of the area. As a result, the pressures of spreading development are affecting the valley. There has been an increase in second home development within the Quechee Lakes and Killington development being major components of a trend towards larger developments.
Recommendations:	<p>Five alternatives identified</p> <ul style="list-style-type: none">▪ Develop programs that offer a variety of transportation options within key segments of the Do nothing▪ Alternative modes of transportation▪ Construction of a 4 lane or improved 2 lane road outside the valley▪ Construction of a 4 lane road through the valley▪ Improvement of the existing 2 lane road in the valley <p>Alternative 5 selected: Improvement of the existing road to the present standards west of Bridgewater Corners.</p> <ul style="list-style-type: none">▪ Operational improvements to trouble spots – deals with safety▪ Operational improvements to village areas – deals with safety and congestion in Woodstock and Bridgewater.▪ Improvements of present route – widening and straightening of the road as was done west of Bridgewater Corners could greatly increase the capacity and safety of Route 4.▪ Construction of village bypasses – would aid congestion and noise in the villages.▪ Improvements of a scenic nature – improvements to rest areas and provisions for multiple use of the corridor (adjacent trails, for example) might be implemented.

1.2 Route 4 Transportation Study and Land Use Planning Study (1992) Summary

Study Name:	U.S. Route 4 Transportation Study and Land Use Planning Study (1992)
Scope/Study Area:	White River Junction to Bridgewater
Funding:	Two Rivers-Ottauquechee Regional Commission, and a \$5,000 grant by VTrans
Purpose:	Work towards the development of a coordinated strategy between affected municipalities, regions, and the State of Vermont to more effectively integrate land use planning and implementation programs with the transportation needs of the traveling public.
Issues/Findings:	<ul style="list-style-type: none">▪ Future development in the Ottauquechee Valley and surrounding region will have an impact on the capacity of Route 4 to adequately serve traffic at reasonable levels.▪ Existing problems are caused by design limitations such as poor geometry, inadequate shoulders, short sight distance and old guardrails. This causes platoons of motor vehicles to

	<ul style="list-style-type: none"> move slowly and limits adequate passing opportunities. ▪ Average Annual Daily Traffic (AADT) will exceed Design Hour Volume (DHV) given projected volume through 10-12 years. ▪ Inadequate provisions exist for bicycles and pedestrians.
Recommendations:	<p>Growth Management</p> <ul style="list-style-type: none"> ▪ Develop programs that offer a variety of transportation options within key segments of the corridor – i.e. vans, car pooling, etc. ▪ Work to ensure that driveways, intersections, and other roadways near the segments at lower levels of service (D,E,F) do not further degrade levels of service; and ▪ Monitor travel demands, safety, and background conditions within certain impact areas and develop land use policies and practices to limit demand and maintain optimum capacity. <p>Future Planning Options</p> <ul style="list-style-type: none"> ▪ Land use management and transportation system management from Woodstock Village easterly to Exit 1 is critical. Access management strategies, changes in local and regional plan policies and string linkages between land use planning and transportation system management must occur. Local bylaw amendments are suggested to help achieve these goals. ▪ Future design and construction improvements must incorporate provisions for bicycle and pedestrian uses. ▪ Improved signage is necessary, particularly for travelers heading easterly toward White River Junction to avoid traffic safety problems. ▪ Zoning bylaws and zone locations must be coordinated between town boundaries to ensure a logical intensity and location of commercial, residential, industrial and other activities along Route 4. ▪ Some sections of Route 4 are logical candidates for realignment to reduce accident potentials and increase corridor throughout efficiency. ▪ Public involvement in land use management techniques and road engineering solutions

1.3 East-West Highway Study (2001) Summary

Study Name:	East-West Highway Study (2001)
Scope/Study Area:	US 4 Corridor Wide
Funding:	VTrans – Legislative mandate
Purpose:	Response to a legislative mandate to determine ways to address the inadequacy of U.S. 4 (from Rutland to White River Junction and beyond) to accommodate current and future truck traffic as well as longer 53” trailers.
Issues/Findings:	<ul style="list-style-type: none"> ▪ A variety of geometric constraints that prohibit the easy movement of big trucks, especially through village centers. ▪ No consensus on a desirable solution. ▪ The potential for the Green Mountain Railroad to provide relief to highway mobility is limited. ▪ The benefits of a new limited access highway relative to the traffic problems it is intended to solve are minimal. Various model scenarios conclude that the overall percent of traffic that would be diverted from US 4 and VT 103 is not substantial. ▪ The cost for three possible alignment alternatives range from about \$500 million to \$750 million in 2000 dollars. This is roughly equivalent to 16 to 25 years of highway construction and improvement funding for state highways based on recent budgetary allocations.
Recommendations:	<ul style="list-style-type: none"> ▪ Solutions to east-west mobility rest in wise land use planning, regulatory decision-making and judicious investments in the major highway and rail infrastructure already existing in the corridor, and to the state infrastructure to which they connect.
