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Traffic Calming
Old Bennington

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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Design Team:</td>
<td>2</td>
</tr>
<tr>
<td>User Responsibilities</td>
<td>5</td>
</tr>
<tr>
<td>Accessibility Statement</td>
<td>5</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>6</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>7</td>
</tr>
<tr>
<td>Map: Project Location</td>
<td>9</td>
</tr>
<tr>
<td>Project Description/Goals</td>
<td>10</td>
</tr>
<tr>
<td>Traffic Calming / Neighborhood Traffic Management</td>
<td>12</td>
</tr>
<tr>
<td>Traffic Calming / Neighborhood Traffic Management</td>
<td>13</td>
</tr>
<tr>
<td>Context Sensitive Design</td>
<td>15</td>
</tr>
<tr>
<td>Background Information</td>
<td>16</td>
</tr>
<tr>
<td>Community Profile</td>
<td>16</td>
</tr>
<tr>
<td>The Bennington Monument</td>
<td>17</td>
</tr>
<tr>
<td>Demographics</td>
<td>17</td>
</tr>
<tr>
<td>Zoning</td>
<td>18</td>
</tr>
<tr>
<td>Traffic Impacts</td>
<td>18</td>
</tr>
<tr>
<td>The Bennington Bypass</td>
<td>19</td>
</tr>
<tr>
<td>Existing Physical Conditions</td>
<td>20</td>
</tr>
<tr>
<td>Roadway Network</td>
<td>21</td>
</tr>
<tr>
<td>Community Character</td>
<td>23</td>
</tr>
<tr>
<td>Cyclist Network</td>
<td>24</td>
</tr>
<tr>
<td>Pedestrian Network</td>
<td>25</td>
</tr>
<tr>
<td>Signage System</td>
<td>27</td>
</tr>
<tr>
<td>Traffic Volume</td>
<td>27</td>
</tr>
<tr>
<td>Traffic Speed</td>
<td>30</td>
</tr>
<tr>
<td>Traffic Safety (Crash Data)</td>
<td>36</td>
</tr>
<tr>
<td>Crash Data</td>
<td>37</td>
</tr>
<tr>
<td>Vermont 9</td>
<td>37</td>
</tr>
<tr>
<td>Elm Street</td>
<td>37</td>
</tr>
<tr>
<td>Monument Circle</td>
<td>38</td>
</tr>
<tr>
<td>Monument Avenue, Old Bennington Village</td>
<td>38</td>
</tr>
<tr>
<td>Walloomsac And Fairview Streets</td>
<td>38</td>
</tr>
<tr>
<td>Bicycle And Pedestrian Involved Crashes</td>
<td>38</td>
</tr>
<tr>
<td>Injuries/Fatalities</td>
<td>39</td>
</tr>
<tr>
<td>Design Standards And Recommendations</td>
<td>40</td>
</tr>
<tr>
<td>New Vermont Standards</td>
<td>40</td>
</tr>
<tr>
<td>New Vermont Standards</td>
<td>41</td>
</tr>
<tr>
<td>Design Recommendations</td>
<td>43</td>
</tr>
<tr>
<td>Case Studies</td>
<td>47-62</td>
</tr>
</tbody>
</table>

*Traffic Calming: Old Bennington*  
*University at Albany Planning Studio, Fall 2003*
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Photo: Old First Church from the Bennington Battle Monument.
Acknowledgements

State University of New York at Albany
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Citizens
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Arnold Ricks, Roads Commissioner and Village Historian

Bennington County Regional Commission
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Vermont Agency of Transportation

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Executive Summary

The Fall 2003 traffic calming studio project was developed as a response to traffic issues in the Village of Old Bennington, Vermont. Increases in traffic over the past several decades has led to safety, speeding and pedestrian mobility issues in the village. Old Bennington's residents take pride in the historic character of their community. The entire village is listed on the National Register of Historical Places. Therefore, a plan is needed to solve the modern problem of traffic, while preserving the quality of life of this charming eighteenth century village. The students of the University at Albany Planning program have provided a context sensitive design solution for the Village in order to create a more balanced traffic flow and to increase the overall safety of the residents and visitors of Old Bennington.

Students worked directly with community leaders to develop a scope of services, collect data, conduct public meetings, provide alternatives, discuss solutions and prepare a written and graphic report at the conclusion of the project. Key issues resolved by the project include speeding traffic, pedestrian / bicyclist safety, and providing solutions which reflect the historic character of the community. This project has been developed both as a specific plan for Old Bennington and as a prototype for other historic villages in the region. It is a potential model for combining the contemporary practice of traffic calming and context sensitive design.
Community-Wide Traffic Calming
Village of Old Bennington, Vermont

UAlbany Graduate Planning Studio, Fall 2003

For more information or to submit questions or comments to the project team, Please Contact: Jeff Olson, University at Albany, Department of Geography and Planning, AS 230, 1400 Washington Avenue, Albany, NY 12222; 518.442.4378, e-mail: trails2k@aol.com
Project Location: Old Bennington, Vermont
Project Description/Goals

The University at Albany Graduate Planning Studio has been authorized to work with the community of Old Bennington, Vermont to develop a traffic-calming plan. The project is funded through the Bennington County Regional Commission (BCRC) using federal transportation funds. The project agreement state that, "Students will work directly with community leaders to develop a scope of services, collect data, conduct public meetings, provide alternatives, discuss solutions and prepare a 50 page written and graphic report at the conclusion of the project. Key issues to be resolved by the project include speeding traffic, pedestrian / bicyclist safety, and providing solutions which reflect the historic character of the community. The project will be developed both as a specific plan for Old Bennington and as a potential prototype for other historic villages in the region."

As students of the University at Albany graduate planning studio, we made an initial field visit to Old Bennington on September 15, 2003. Once we arrived we met with Village Trustee, and longtime Bennington Village resident Arnold Ricks. A professor of Southern Vermont College, Arnold was able to provide us with a wealth of technical information and an in depth oral history of the Village. We proceeded to take a walking tour of the Village, taking street and sidewalk measurements, noting all signage as well as documenting any other observations we deemed necessary for our project.
One observation that everyone noted was the period architecture and the natural beauty of the village. The tree lined streets adorned with tall maple trees and marble sidewalks was a distinctive part of the village. Our primary goal was to maintain the historic character and beauty of the village while addressing the concerns of village residents.

During our first initial meeting with members of the Old Bennington community, village residents complained of excessive speeding. Residents described that vehicles were traveling well above the 25 mph speed limit set for the village. The loud noises from large trucks and the high volume of traffic that comes through the village to get to Vermont 9 was also a concern. Residents complained of feeling unsafe when they were running, bicycling or walking in the village due to the high volume of traffic, excessive speeds and the lack of attention to signage.

After assessing what needed to be done to preserve the Village’s character and control the traffic problems occurring in Old Bennington, our projection of some of the things that needed to be done for this project were to be the following:

- Creating or upgrading existing signage.
- Bikability—creating a bike lane where bicyclists are able to bike safely and not in the path of oncoming traffic.
- Walkability—creating an atmosphere where pedestrians are able to walk safely and not be in the path of oncoming traffic. Fixing
sidewalks that are deemed unsafe and are not under compliance with the American Disability Act.

- Curb excessive speeding in the village with better traffic controls.
- Creation of an island or a safety place for tourists to take pictures of the Monument.
- Additional or better quality lighting at intersections where there were many crashes.
- Making sure the character of the community was included in all of our goals for the project.

During the planning process we encouraged residents input and was appreciative of the many responses. Citizen participation and feedback was necessary in achieving our goal of traffic calming.

View out of Church Window
Source: SUNY–Albany Planning Studio
Traffic Calming / Neighborhood Traffic Management

The term "traffic" is defined by New York State Law as, "pedestrians, bicycles, horses, and other conveyances for using a public way." According to the Institute of Traffic Engineers/Federal Highway Administration (FHWA), neighborhood traffic management "attempts to improve the residential environment by directly affecting traffic thereby cutting off undesired impacts at the source." It does this by limiting the amount of traffic on the residential streets usually by restricting accessibility and continuity or by affecting the behavior of drivers. Behavior patterns induced are ones such that those continuing to use the "managed" streets will not generate the adverse effects they might were the streets uncontrolled, and drivers whose driving styles are not amenable to the demands of a residential environment will choose to use other streets".¹

There are two categories of traffic calming techniques, active and passive. Active traffic calming involves "changes in street alignment, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through volumes, in the interest of street safety, livability, and other public purposes."² Passive traffic calming measures involve the use of better or improved signage as well as painting stripes on roadside right of ways. Striping gives the effect of visual narrowing that is the driver perceives the road as being narrower when in effect it is not.

¹ www.ite.org
² www.trafficcalming.org
The overall goal of this studio project is to decrease the speed of cars in the Village of Old Bennington by 10 to 15 MPH, create a more pedestrian friendly environment, and increase the safety around the village. Currently many offenders are traveling at speeds in excess of 40 MPH, while the posted speed limit in the Village is 25 MPH. During our study we observed that a majority of the people are indeed in excess of speeds well over 40 mph.
Context Sensitive Design

The approach we followed throughout the process of this project was called *Context Sensitive Design* (CSD). CSD refers to roadway standards and development practices that are flexible and sensitive to community values. CSD allows roadway design decisions to better balance economic, social and environmental objectives. In this project we have tried to meet the needs of the users, the neighboring communities, and the environment, while following these six key principles:

1. Balance safety, mobility, community, and environmental goals.
2. Involve the public and affected agencies early and continuously.
3. Use an interdisciplinary team tailored to project needs.
4. Address all modes of travel.
5. Apply flexibility inherent in design standards.
6. Incorporate aesthetics as an integral part of good design.

These six principles have been our guidebook to develop an effective traffic calming solutions for the citizens of the Village of Old Bennington and its neighboring communities to be enjoyed for generations to come.

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3 http://www.vtpi.org/tdm/tdm57.htm
Background Information

Community Profile

The Village of Old Bennington was added to the National Historic Register in 1984. The Village was founded in 1761 by religious separatists from Connecticut and Massachusetts according to the Village Plan. The majority of the structures in the Village were constructed before the twentieth century. One of the most striking buildings in the Village is the Church, located at the intersection of Route 9 and Monument Avenue. The Old First Congregational Church was built between 1803 and 1805, and is a popular place for weddings as well as tourists.

The homes located on Monument Avenue are of three architectural styles, Federal, Colonial Revival, and Greek revival. "There are eighty-one residential buildings, of which 33% were built between 1763 and about 1820, in the Federal style. Between 1830 and the end of the civil War in 1865, Bennington residents built a few houses in the Greek Revival style, which accounts for an additional 5%."4 The streets are lined with majestic maple trees that are well over a century old. The marble sidewalks located on Monument Avenue are

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4 Village of Old Bennington Plan, Zoning by-laws p.26
extremely old and add to the historic character of the Village. A famous resident was the poet Robert Frost, who is buried in the cemetery behind the church.

The Bennington Monument

At the termination of Upper Monument Avenue stands the Bennington Battle Monument. The Monument is 306 feet tall and was completed in 1891. It was erected to commemorate the defeat of the British troops by the Green Mountain Boys of Vermont, and represents a turning point in the Revolutionary War. Roughly 45,000 people visit the Bennington Monument annually.

Demographics

The population of Bennington County in 1990 was 35,845. In the year 2000 the population increased slightly to 37,148. The mean travel time to work in 2000 was 19.1 minutes according to the US Census. The Village of Old Bennington population in the year 2000 was 232 according to the US Census. The 1990 population was 279, and was slightly higher in 1980 with 353 residents. The median age of Village residents in 1990 was 44.7 years. According to the 2000 Census there were 118 housing units in

5 www.census.gov
the Village of Old Bennington. There has been a steady decline in
population in the Village over the last twenty years. This trend is expected
to continue throughout the next ten years.

Zoning

Current land uses in the Village of Old Bennington include single-family
residential, non-conforming commercial, and park property. The majority of
the Village is single-family residential. The non-conforming commercial
parcels include the Four Chimneys Restaurant and Inn, Hall House (34 West
Rd.), the Monument Elementary School, the Monument Gift Shop located on
Monument Circle, the Old First Church, and the Summer Sonatina. The park
property and public open space refers to the grassed area immediately
surrounding the Monument, and three grassed medians located on
Monument Avenue at the intersection of Route 9. Two uses classified as
Conditional use: The Bennington Museum and any apartments located in
older residences.

Traffic Impacts

The current Village zoning states, "Almost nothing can adversely impact the
quality of life in a residential Village like Old Bennington more than
excessive traffic. Heavy traffic creates a hazard to residents, pedestrians,
and pets, increases noise and air pollution, and detracts from the quiet,
peaceful and historical ambiance sought by the Village."6

6 Village of Old Bennington Village Plan, Zoning Bylaws, and Subdivision Regulations. p.18
A set of three recommendations was drafted, the first having to do with the construction of the bypass "as soon as it is practical." The second states that "any projects to improve or rebuild Village roads should not widen the roadways beyond the existing paved portion of the road, since to do so would only increase the capacity of the road for additional undesirable traffic, and would detract from the historical nature of the roads, and would harm many mature trees." The final states that "Speed limits and stop sign regulations now existing, or which may be enacted in the future should be strictly enforced. This action should help to lower the incidence of motorists using Village roads for shortcuts." 7

The Bennington Bypass

The construction of a major new bypass road is in underway. The BCRC Regional Transportation Plan states that this will help to reduce some of the Village traffic volume, although there is question of how many trucks will continue to use Route 9 through the Village. The Regional Transportation Plan addresses this issue by stating "A decision to re-route trucks along the new highway produces immediate relief for Old Bennington but shifts the burden to other areas of the local network.

7 Village of Old Bennington Village Plan, Zoning By-Laws, and Subdivision Regulations p.18
The Vermont Agency of Transportation has indicated that it would prefer to maintain the current truck route through Old Bennington and has committed to developing a sign system. The westernmost portion of the Bennington bypass is completed and is scheduled to open in 2004, with the Eastern and Southern bypass sections still under construction. When fully complete in 2007, traffic levels are expected to drop by an average of 2000 or more vehicles per day. A little under half of this drop is expected to be in the form of interstate truck traffic. Potentially, the percentage of trucks along Route 9 could fall close to the average on local Village roads.

View of New Bypass from the Monument

Source: SUNY–Albany Planning Studio

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8 BCRC Transportation Plan p.24
Existing Physical Conditions

The University at Albany Studio Class made several field trips to Old Bennington to make field observations and collect data on current conditions and identify potential issues related to traffic safety and community livability. Information was gathered from these field trips through direct observation and input from local residents during field tours and three public meetings as well as referencing available data sources within the following categories:

- Roadway Network
- Community Character
- Cyclist Network
- Pedestrian Network
- Signage System
- Traffic Volume
- Traffic Speed
- Traffic Safety (Crash Data)

Roadway Network

There are 12 named roads within the Village boundaries, listed by Vermont Agency of Transportation functional class below:

**Principal Arterial**
- Main Street (Vermont Route 9 – east of ‘Village Green’)
- West Road (Vermont Route 9 – west of ‘Village Green’)

**Collector**
- Bank Street
- Elm Street
- Fairview Street
- Monument Avenue
- Monument Circle
- Walloomsac Road
Local
- Appletree Lane
- Catamount Lane
- Church Street
- Seminary Lane

There are also two small, unnamed one-way road segments bordering the 'Village Green' islands at the intersection of Monument Avenue and Route 9.

The figure below depicts the entire Village roadway network as well as the boundaries of study area segments defined by the studio class for the purpose of detailed inventory and analysis.

[Image of a map indicating Old Bennington, Vermont Traffic Calming Study Areas with a key for streets, water bodies, and study areas.]
Detailed information on current road network conditions and issues obtained through observation and research is assembled by study area in the appendix of this document.

Students noted that most vehicles on the Monument Circle traveled in a counter-clockwise direction, even though it is a two-lane road. This left a major part of the available road space unused. Tour buses parked in the designated parking lot in the circle, but not without some difficulty maneuvering. On several occasions we watched as bus drivers struggled with repeated backing maneuvers to angle the bus correctly in the parking lot.

The intersection of Route 9 and Monument Avenue has a very unusual configuration with three island green spaces each with its own small adjacent one-way street. We observed several vehicles traveling the wrong way on some of these one-ways, as well as some difficulty in making the left turn from Route 9 onto upper Monument Avenue due to sight distance issues.

Community Character

The scenic quality of this traditional New England community was the dominant observation of the studio class. The large number of traditional and historic homes and buildings, venerable sugar maples and other street trees, marble sidewalks, as well as ample green space along roadways in the
form of the ‘Village Green’ islands and deep setbacks were all noted as distinctive elements of the Village’s appeal to residents and visitors.

The use of granite pavers lining the drainage swales along upper Monument Avenue and Walloomsac Road was noted as a potential element to incorporate as a design feature in proposed traffic calming treatments. Village representatives indicated that this design would also be used on the future reconstruction of lower Monument Avenue.

Light fixtures of ‘traditional’ appearance were noted at several locations throughout the Village, but were not uniformly used. Several locations had standard ‘Cobra Head’ lights, which students noted as detracting from the historic character of the community. Some community feedback indicated that wholesale distribution of even ‘traditional’ lighting fixtures throughout the Village could itself detract from community character, though light pollution.

**Cyclist Network**

Vermont Route 9 is a designated Bike Route. However, while Route 9 is striped for a bike lane west of the Village border, pavement markings terminated in the Village although pavement width was adequate to accommodate a marked bike lane. While in the field, the studio class also noted several cyclists using Route 9, Monument Avenue, and Walloomsac Road. Students noted that the proximity of the Bennington Secondary
School, Southern Vermont College, and Bennington College to Old Bennington increased the potential for cyclists using both the Monument Avenue and the Route 9 Bike Route to reach downtown Bennington.

An abandoned railroad grade currently used as a utility right-of-way was noted as a potential linear park with a shared-use trail serving to link the Bennington Monument with the Bennington School, Catamount Elementary School and the Bennington Museum site and downtown Bennington.

**Pedestrian Network**

The BCRC Transportation Plan notes that there are two locations in the Village with high pedestrian traffic. The first is the area immediately surrounding the Monument, and the second is located at the intersection of Route 9 and Monument Avenue. Studio field trips reinforced this categorization. The class observed significant numbers of tourists crossing and entering the middle of the roadway at the intersection of Monument Avenue and Walloomsac Road in order to take photos of the Monument. The levels of pedestrians observed crossing from upper Monument to Lower Monument were not as high as at Monument Circle, but community representatives verified this Route 9 crossing as an important link for tour groups. A significant percentage of these groups walk between the Bennington Monument and the Old First Presbyterian Church after getting dropped off at one of the locations by their tour bus. The primary issue identified for pedestrians in this study area was the confusing traffic pattern
and a lack of defined crossing areas to reach the 'green' areas. The studio class also observed significant numbers of tourists stopping their cars along Monument Avenue just north of the Bank Street intersection to take photos of the tree-lined street with the Bennington Monument in the background.

The Monument appears to be a local attraction to area residents as well as tourists with several joggers observed using it as a destination point. This pedestrian traffic was mostly utilizing the roadway of Monument Avenue rather than the sidewalks. Studio members agreed this was likely due to the narrow and often poor condition of several sidewalk segments along upper Monument Avenue and the lack of sidewalks on lower Monument Avenue.

Class members observed informal recreational use of the abandoned rail corridor by pedestrians traveling north from the area of the Bennington Museum Woods and crossing Route 9 to the Catamount School area. This underscores its potential value as a linear park with a shared-use path. Several other general pedestrian system issues were identified through observation and analysis of data:

- Several Breaks in the Sidewalk System Due to Lack of Facilities, or Poor Condition
- Lack of Crosswalks at Some Key Crossings
- Some Logical Pedestrian Destinations Are Not Linked (Bennington Museum & Old First Church, e.g.)
- Sidewalk Segments Vary in Width and Materials
Signage System

The studio class observed the following general issues with traffic control and informational signage in the Village:

- Gaps in Coverage at Key Spots (speed limit signs near museum e.g.)
- Small Signs Are Hard To See
- Signs Are Often Obscured By Vegetation
- Walking Tour for Tourists Not Marked
- No Gateway Signs

Traffic Volume

University at Albany Planning studio participants analyzed Vermont Agency of Transportation data from Automatic Traffic Recording Stations to develop an understanding of trends and issues related to traffic volume within and around the Village of Old Bennington.

Traffic volume within the Village of Old Bennington is currently typified by very high (around 10000 Average Annual Daily Traffic – AADT) east–west flows along Vermont Route 9, moderate (around 2400 AADT) north–south flows along Monument Avenue, and relatively low (under 1000 AADT) volumes on local streets.\(^9\) Data was collected by the Vermont Agency of Transportation for various locations in and around Old Bennington using automatic traffic recorders.

Traffic volumes rose throughout the Village road system over the past 26 years of available data. The trend on most streets (except Route 9) was about a 30% rise in AADT. This probably reflects national trends in rising automobile ownership, suburban development, and increased travel distance to places of work. Elm Street is an exception to the trend with a drop in AADT since 1976, though volumes have held close to an average around 1800 AADT. Bank Street is also a notable exception with a fairly steady rise of 113% in volume between 1976 and 1997. Given local resident complaints about cut-through traffic on this road it would be helpful to obtain current volume data on this road to determine if this trend is continuing.

Vermont Route 9 is clearly the dominant traffic artery in the community, linking New York State with downtown Bennington, and Vermont Route 7. As a designated segment of the National Highway System, Route 9 has a high percentage of trucks (about 10% of AADT) with a slightly higher level on the east side of the Village than the west. This volume is almost evenly split between trucks classified as medium (5.2% AADT) and heavy (4.8% AADT). Truck traffic on other Village area roads is significantly lower, averaging around 3% of their AADT levels. Since 1976, traffic along Route 9 on the west side of the Village grew by approximately 104% while AADT rose approximately 65% on the east side. Volume increases roughly peaked in 1994 and AADT has reached a plateau to the west of the Village and dropped slightly in the past few years on the eastern portion of Route 9.
Monument Avenue is the second busiest traveled corridor in the Village, linking Route 9 to the popular tourist destination of the Bennington Monument as well as the employment centers of the Southern Vermont College and the Southwestern Vermont Medical Center. Volumes on upper Monument Avenue rose around 28% during the 1980's and have held fairly steady around 2650 AADT through the 1990's.

There is a significant drop in volume (approximately 1400 AADT in 2001) on Walloomsac Road west of Fairview Avenue. This indicates that a significant portion of the daily volume on upper Monument arises from travel between the Old Bennington and North Bennington areas along Fairview Avenue.

A rough drop of 500 AADT occurs across most data years between upper Monument Avenue and Walloomsac Road just west of the Monument Circle. This volume drop, about 19% of the AADT on upper Monument, likely represents the average daily volume contribution from tourist traffic. While tourist traffic is undoubtedly visible and high during peak visitation periods, most of the travel along this corridor appears to serve locally generated trips and commuting through the Village.

Lower Monument appears to be experiencing a more rapid and recent rise in traffic levels. AADT grew by approximately 38% between 1985 and 2001 on Monument Avenue just south of Elm Street. Recent volume data for lower Monument Avenue between Route 9 and Elm Street is not available, but as of 1989 it had comparable AADT's and rates of increase with upper Monument. If traffic volumes on this road segment has increased at the rate just south
of Elm Street then current levels could be as high as 3300 AADT, making it
the most heavily traveled street in the Village other than Route 9.

The Bennington Bypass project discussed in the previous section is likely to
reduce traffic volumes along Vermont Route 9 significantly. When fully
complete in 2007, traffic levels are expected to drop by an average of 2000
vehicles per day. A little under half of this drop is expected to be in the form
of interstate truck traffic. Potentially, the percentage of trucks along Route 9
could fall close to the average on local Village roads.

Traffic Speed

The Village of Old Bennington has a persistent and pervasive problem with
speeding cars. The community's qualitative perception of this issue is
reinforced by speed data gathered in the field as well as from records of
traffic tickets issued.

Traffic ticket data was collected from the monthly activity reports of the Old
Bennington special patrol. General information on total tickets issued, officer
hours, and total fines was available for the period of 9/1/98 to 8/31/03.
More detailed information on speed citations was available for the period of
1/1/01 to 8/31/03.

The Old Bennington special patrol is arranged through the Town of
Bennington Police Department. Through this arrangement a dedicated officer
patrols exclusively in Old Bennington an average of ten percent of the total
hours in any month. This is above and beyond any regular patrol coverage provided by the Town Police in the normal course of their duties.

The charts below show that the Old Bennington special patrol is devoting an increasing portion of its available monthly hours to speed enforcement. The frequency of tickets issued per officer hour spent on the Bennington Patrol has risen 47% in the past five years.

Data obtained from speeding tickets issued throughout the Village between January 2001 and August of 2003 by the special patrol (see chart below) show that the average ticketed speed was 45 mph or 20 mph over the posted limit for most Village streets and 15 mph over the posted limit of 30 mph along Vermont Route 9. A high number of tickets were issued for 44 mph, which is 19 mph over the 25 mph limit.

This speed level may represent a 'discretionary' threshold for the ticketing officer allowing a significant fine to be applied without triggering more serious consequences of added points on a license. It is possible that a significant number of tickets could have been issued for higher speeds.
There were almost no tickets issued for violations below 40 mph (15 mph over the general Village limit and 10 mph over the limit on Route 9). For many pragmatic reasons, enforcement may be targeted at the most blatant speed violations or those that are most effectively prosecuted in court.

In response to community concerns that Bank Street was being used as a by-pass of traffic congestion and lights in downtown Bennington, targeted patrols were instituted starting in November 2001. The chart below shows the profile of ticketed speeds on Bank Street during these patrols.

The average ticketed speed of 46 mph (21 mph over the posted limit) was 1 mph higher than for the Village as a whole. The most violations were for speeds of 45 mph. No tickets were issued for violations less than 17 mph over the limit. There were a few significant outlying speeds over twice the posted speed limit.
When engaged in a special Bank Street patrol, the officer was focused entirely on speed enforcement and issued an average of 0.77 tickets per hour. However, the duration of these speed patrols was very limited. Applying the average ticketing rate for the limited patrols to a whole day would yield an average of 19 ticketed violations per day (1.5% of Bank Street’s 1300 vehicle average daily volume – AADT – of 1997)\(^\text{10}\).

However, it may be reasonable to assume that around 15% of all vehicles traveling over the posted speed of 25 mph are actually cited due to focus on the highest speed levels and ‘blind’ times during traffic stops and writing of tickets. The estimated number of speeders would then rise to 127 per day (9.8% of Bank Street’s AADT).

The increased frequency of ticketing throughout the Village and carrying out patrols on Bank Street appear to correlate with a decrease in the average ticketed speed, implying that the speeds in the village have shifted down toward the posted limits. However, the two charts below show that this has had a relatively small effect.

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The average ticketed speeds throughout the Village has dropped only about 1 mph in two years while the effect has been only about half that on Bank Street.

Speed data was also collected in the field by members of the studio class using radar guns on the afternoon of 10/20/03. The charts below show speed profiles of the traffic at several locations throughout the Village.

Source: SUNY–Albany Planning Studio
This data provides a rough snapshot of the average speeds on the primary roads in the village at 35 miles per hour. However, eastbound traffic had a slightly higher average of 40 mph coming into the village and 37 mph leaving it.

The average speed throughout the Village appears to be about 10 mph over the posted limit. The eastern gateway area is an exception to this, possibly due to its proximity to the more congested (and slower) downtown Bennington, the steep grade, and the ‘School Zone’ pavement markings.
What is most significant about these speed profiles is that the majority of traffic appears to be exceeding the posted limits. That means there are significant portions of the traffic stream well in excess of the posted limits. The field data, though limited, does reinforce the conclusions derived from speeding ticket data. Taking the speeding ticket data into account, average speeds on Village of Old Bennington roads appear to range from 10–20 mph over the posted limits.

It appears that focused enforcement patrols on Bank Street and throughout the Village for the past two years have resulted in only a minimal reduction in average speeds. This 'holding of the line' for the average ticketed speed may represent a unique victory for the Village in combating rising regional and national speeding trends. An aggressive level of traffic enforcement should be therefore be maintained and expanded if practical. However, the fact remains that most traffic through the Village exceeds the posted limits and enforcement has not significantly reduced average speeds. Therefore, there is a need for physical traffic calming measures in the Village of Old Bennington.

Traffic Safety (Crash Data)
In 2000 there were an estimated 6,356,000 car crashes in the United States. There were more than 3.22 million injuries and 41,821 fatalities involved in are due to speeding and failing to be attentive to signage. The Vermont
vehicle crashes.\textsuperscript{11} Contributing factors with fatalities is alcohol, which can attest to 40\% of all fatalities. Speeding is another contributing factor, which involves 29\% of all vehicle fatalities two to five miles from miles from home.\textsuperscript{12}

The Village of Bennington has had its share of crashes, which has made residents and local police enforcement weary. The majority of these crashes are due to speeding and failing to be attentive to signage. The Vermont Regional Transportation Agency has gathered crash data for the 2000 and 2001 time period. Their findings are below.

\textbf{Crash Data}

\textit{Vermont 9}

There were 66 crashes during 2000 that occurred on Vermont 9 during the hours of 11am to 8pm with cloudy weather conditions. Contributing circumstances that occurred during the crashes has been listed as "other improper action." There were 89 crashes during 2001 that occurred on Vermont 9. These crashes usually took place during the late afternoon during cloudy weather conditions.

\textit{Elm Street}

We can deduce from the 2000–2001 General Summaries Traffic Accident Data that the majority of crashes on Elm Street seem to occur in the afternoon during the hours of 12pm to 3pm. Drivers were either not paying

\textsuperscript{11} \url{http://www.car-accidents.com/}

\textsuperscript{12} \url{http://www.legallawhelp.com/safety_and_health/auto_accidents/}
attention or they disregarded traffic signs and signals. The weather was clear for all but one crash. There were 7 crashes in 2000 and 2 crashes in 2001.

**Monument Circle**
Crashes on Monument Circle all occurred during the afternoon hours of 12pm to 6pm. Weather was either cloudy or clear with only one crash occurring when there was snow. Drivers were either disregarding traffic signs and signals, distracted by technology or exceeded the authorized speed limit. There were 4 crashes recorded in 2000 and 1 crash in 2001.

**Monument Avenue, Old Bennington Village**
Crashes on Monument Avenue occurred during the afternoon hours of 12pm to 7pm. Weather was either cloudy or rainy. There were 4 crashes in 2000 and none in 2001.

**Walloomsac and Fairview Streets**
There was one crash on Fairview in 2001 and one crash on Walloomsac in the year 2000. Weather conditions were clear in both cases.

**Bicycle and Pedestrian Safety Data**
There were only 8 crashes that involved a bicyclist and 15 crashes that involved a pedestrian during the 2000-2001 time periods. There is very little data on these crashes. However, we do know that there were no fatalities. Drivers often failed to yield right of way, followed too closely or were inattentive and driving too fast.
Injuries/Fatalities
Research shows that younger drivers (15–24) and older drivers (69 and up) have fatality rates much higher than those drivers that are between the ages of 25 and 69.13

For the town of Bennington we don’t have documentation stating the age and sex of the driver or the persons injured. However it has been well documented what time of day and what the weather conditions were as well as what specifically caused the crash. Most injuries occurred during the afternoon on to the evening hours (12pm–10pm) in clear or rainy weather conditions. Drivers often failed to yield right of way, followed too closely or were inattentive and driving too fast.

No fatalities were recorded during the 2000–2001 time period, however there were a number of injuries in 2000. It seems that the majority of motorists who suffered from injuries were traveling westbound on Vermont 9. The cause for these injuries and crashes needs to be explored.

Monument Photographer

Source: SUNY–Albany Planning Studio

13 http://www.legallawhelp.com/safety_and_health/auto_accidents/
Design Standards and Recommendations

According to Vermont AOT’s traffic calming matrix “Traffic calming devices generally are not deployed on Arterial or Collector Roads. For Village setting this policy is waived and the listed device may be used.” This is important for our study, since Route 9 is classified as a principal arterial of the National Highway System, but because Old Bennington is a Village, traffic calming measures can be implemented on Route 9. The State of Vermont design standards should be upheld and referenced in designing a plan for the Village of Old Bennington.

View of Fence along the Cemetery

Source: SUNY-Albany Planning Studio
New Vermont Standards

The Vermont Agency of Transportation provides design guidelines for roadway elements and techniques that can be used to reduce the speed or volume of traffic to levels consistent with road functions. The studio class took into account all the different methods of calming traffic. The following illustrations are examples of traffic calming measures, which have been approved for use in the state of Vermont.

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14 Vermont Pedestrian and Bicycle Facility Planning and Design Manual: Chapter Seven Traffic Calming
For a more detailed list of guidelines and benefits of traffic calming go to the Vermont Pedestrian and Bicycle Facility Planning and Design Manuel: Chapter Seven Traffic Calming or the Vermont Agency of Transportation Traffic Calming Design Guidelines, 2004 (draft).

15 www.trafficcalming.org
Design Recommendations

General Recommendations

The studio class identified two overarching goals to guide the future implementation of a comprehensive traffic-calming program in the Village of Old Bennington:

1. Increase comfort & safety for village residents and visitors for all transportation modes
2. Maintain & enhance community character

Under goal one the class makes the following recommendations:

**Make Community More Walkable**

- Sidewalks
  - Identify and fill 'gaps' in current sidewalk system ensuring main resident & tourist destinations are linked
  - Reconstruct / rehabilitate degraded segments
  - Work with Town of Bennington to link sidewalk system to West Road destinations of crafts stores and Performing Arts Center west of Village border
  - Rectify ADA non-compliance by implementing curb ramps at all crossings

- Crosswalks
  - Use ‘piano key’ treatment for all marked crossings (single for ‘minor’ crossings; double for ‘major’ crossings & all across Route 9)
  - Identify high priority locations for marked crossings (such as accident clusters at Main Street & Catamount Lane, West Road & Seminary Lane / 4 Chimneys Inn, Main Street & Monument Avenue, West Road at the middle island of Village Green)
  - Install pedestrian refuge islands and raised crossings at priority locations and difficult / 'high traffic' spots where significant pedestrian / vehicle interaction is known or expected
Make Community More Bikeable

- Mark bike lanes (6 ft shoulder) along VT Route 9 through Village with green shaded & textured surface to delineate space for cyclists while keeping travel lane visually narrow
- Mark bike lanes along Monument Avenue or sign as a ‘Shared Road’ if widths are inadequate for bike lane markings
- Mark wide bike lanes / shoulder along Walloomsac Road (with colored & textured surface) in lieu of sidewalk due to low traffic volume & number of homes
- Work with town and county to identify or sign potential local loop routes linking regional destinations such as downtown Bennington, Bennington Monument, and the Bennington & Southern Vermont Colleges

Reduce Traffic Volume on Local Streets

- Use of less aggressive ‘visual cues’ to Village context along with minor vehicle deflections on primary E-W traffic flow of Route 9 should have some calming effect without creating traffic spillover pressure on local streets
- More aggressive comprehensive system of vehicle deflection measures along ‘internal’ Village roads should make cut-through patterns unattractive to through traffic
- Volume reduction of 2000 AADT on Route 9 from bypass project should reinforce the relative attractiveness of this corridor for all E-W through traffic

Reduce Speeds On All Village Roads

- The comprehensive pairing or grouping of traffic calming measures at strategic locations throughout the Village road network has potential to reduce average speeds by the 10 to 15 mph target (according to VT AOT’s traffic calming specs and the ITE Traffic Calming Guide)\(^{16}\)

\(^{16}\) Vermont Pedestrian and Bicycle Facility Planning and Design Manuel: Chapter Seven Traffic Calming
• Field data from projects to date in the ITE guide indicates that cumulative speed reductions from multiple calming measures are not a given. 17

**Reduce Crash Potential**

• Realign key intersections (upper Monument / Route 9, lower Monument / Route 9 / Church Street, upper Monument / Monument Circle / Walloomsac Road e.g.) to increase the clarity and visibility of traffic patterns for drivers and cyclists and increase visibility and shelter for pedestrians

**Enhance Traffic Control & Visitor Information Signage**

• Fill in gaps of ‘missing’ traffic control signs
• Consider use of larger traffic control signs
• Replace faded traffic control signs and remove obscuring vegetation
• Install gateway signage to cue drivers to Village context
• Work with Bennington Museum to install unique and visible ‘walking tour’ route markers (monument markers e.g.) along safest route

**Develop Old Rail Bed as a Linear Park with Shared-Use Trail**

• Directly abuts Bennington Museum, the museum woods, Monument Elementary School, garden apartments just over Village border, & Bennington School
• Potential to link to Bennington Monument & Proposed Walloomsac Riverwalk via old Stage Road, Performing Arts Center, and Benmont Avenue commercial strip (using a utility ROW)
• Need to work with Town and County to fund and implement

Under goal two the class makes the following recommendations:

• Use granite pavers as a primary design element in traffic calming measures throughout community

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17 Vermont Pedestrian and Bicycle Facility Planning and Design Manuel: Chapter Seven Traffic Calming
- Identify range of appropriate low-cost ‘gateway’ design elements/features and select one for consistent use at all Village entry points (‘monument’ stones e.g.)
- Develop alternative sidewalk surface to polished marble slabs that echoes its aesthetic appeal
- Develop context-sensitive lamp design for consistent (though not universal) placement throughout Village

![Catamount Tavern](image)

*Figure: Example of Wayside Sign for the Monument Trail. Source: John B. Thomas*

- Use larger, mature Sugar Maples for street tree plantings whenever feasible to maintain appearance of full canopies along Village roads
- Use a minimum 3’ planting strip between curb and sidewalk to allow space for tree planting and maintain ‘traditional’ look of deep sidewalk setbacks along Village roads, especially Route 9
- Use colored (green) & textured surface to delineate bike lanes within Village borders to maintain visually narrow travel lane
- Develop an ‘historic rail crossing’ design treatment for use with development of old rail bed as a multi-use path
- Integrate local art and culture into traffic calming features, such as Robert Frost poetry, sculpture, historic markers, stone walls and architectural materials.
Design Recommendations: Case Studies
STUDY AREA #1
VT ROUTE 9 / SEMINARY LANE, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Western entrance to village. Undefined village gateway with high vehicle speed and lack of bicycle and pedestrian facilities.

DETAILED DESCRIPTION:
VT Route 9 is major east-west truck route in the region and part of the National Highway System. Seminary Lane is a local residential road. This is the main entrance to the Village of Old Bennington. However, no definitive “Gateway” has been established. Route 9 was repaved in October 2003. Pavement condition on Seminary lane is good. Posted speed limit is 35mph but speed data indicates an average inbound speed of 41mph. Wide roadway design contributes to speeding. Existing pedestrian facilities limited to a sidewalk on the south side of Route 9, east of Seminary Lane. No crosswalks, pedestrian signals or bicycle facilities have been installed.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- High vehicle volume and speed
- Lack of sidewalks and crosswalks
- Lack of connection with adjacent commercial facilities.

SPECIFIC PROBLEMS FOR BICYCLISTS:
- High speed and volume creates the need for a designated cyclist right-of-way.
- Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicle traffic.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Speed limit reduced to 30mph without change in roadway design
- Heavy volume during peak hours may make turns from Seminary Lane difficult.
- Truck traffic may limit sight distance for motorists at eastern end of study area.

SPEED DATA ANALYSIS: by Kevin McLoughlin, Jeff Gritsavage

Traffic Calming: Old Bennington

University at Albany Planning Studio, Fall 2003
RECOMMENDED SOLUTIONS:

A
- Install planters and picket fence at Village/Town line to establish "Gateway".
- Install splitter island to divert traffic.
- Install pedestrian refuge with crosswalks at new "Gateway".
- Install sidewalk on the north side and extend sidewalk on the south side of Route 9.
- Install crosswalks at Seminary Lane and junction of Route 9 and Monument Avenue (at Village Green).

B
- Install bicycle lanes
- Install textured crosswalks
- Install textured intersection

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS: by John Thomas, Jeff Gritsavage

Existing Village Entrance

New Gateway

Gateway Pedestrian Connection

Burlington, VT Lakefront Gateway

Orthoimagery: USGS

Photographs: University at Albany Planning Studio
VILLAGE GREEN
STUDY AREA #2

VT ROUTE 9 / MONUMENT AVENUE, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Main intersection in the Village with Route 9 intersecting Monument Avenue. Lack of pedestrian crossings and bicycle facilities. Awkward traffic pattern.

DETAILED DESCRIPTION:
VT Route 9 is major east–west truck route in the region and part of the National Highway System. Monument Avenue is the major North–South axis in the Village. This is a busy intersection that is defined by three grassed medians, which traffic must negotiate, to reach Upper and Lower Monument Avenue. Existing pedestrian facilities limited to a sidewalk on both sides of the road with the western sidewalk terminating before the intersection. No crosswalks, pedestrian signals or bicycle facilities have been installed. The Old First Congregational Church is a major tourist attraction and hosts weddings and special events. The access road and other minor roads in the area are used for tourist and church event parking.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- Lack of sidewalks and crosswalks
- Unsafe crossing from church to Upper Monument Avenue
- Established Village walking tour lacks signage
- Marble sidewalks enhance Village character, but condition is deteriorated

SPECIFIC PROBLEMS FOR BICYCLISTS:
- Major east–west route needs a designated cyclist right–of–way.
- Lack of appropriate bicycle right–of–way forces the cyclist to compete with vehicle traffic.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Heavy volume during peak hours may make turns to/from Lower and Upper Monument Avenue difficult.
- Limited sight distance for those vehicles turning left onto Upper Monument Avenue.
- Confusing roadway design distracts the motorist.
- Truck traffic and sharp, narrow turns may limit sight distance.
RECOMMENDED SOLUTIONS:

A
- Install textured or raised crosswalk on Route 9 to establish safe pedestrian connection.
- Install raised and/or textured crosswalk in front of church to connect green with church property.
- Install textured bulbouts at ends of green to visually distinguish Route 9 from secondary roads.
- Eliminate secondary road leading to Lower Monument Avenue.
- Redesign access to Upper Monument Avenue to improve sight distance.

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS: by John Thomas, Jeff Gritsavage

Existing Design

New Village Green

Redesigned Intersection—Rt. 9/Upper Monument Ave.

Redesigned Intersection—Rt. 9/Lower Monument Ave.

Orthoimagery: USGS

Photographs: University at Albany Planning Studio
LOWER MONUMENT
Study Area #3

LOWER MONUMENT AVENUE / ELM STREET, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Southern entrance to village. Undefined secondary gateway with high vehicle speed and lack of bicycle and pedestrian facilities.

DETAILED DESCRIPTION:
Lower Monument Avenue serves as a residential street, but is also used as a major cut through to Southwestern Vermont Medical Center and Southern Vermont College. Wide roadway design contributes to speeding. Posted speed limit is 25 mph. Presently there are no existing pedestrian facilities. However, a road reconstruction project is planned that will reduce lane width and install a sidewalk on the western side of Monument Avenue. Elm Street also lacks pedestrian and bicycle facilities. Traffic is controlled by a 3-way stop at the intersection.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
• High vehicle volume and speed
• Lack of sidewalks and crosswalks
• Wide, sterile roadway design does not create a comfortable pedestrian environment.

SPECIFIC PROBLEMS FOR BICYCLISTS:
• High speed and volume creates the need for a designated cyclist right-of-way.
• Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicle traffic.
• Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
• Existing signage is inadequate for vehicles (i.e. faded stop sign)
• Roadway width invites excessive speed.
RECOMMENDED SOLUTIONS:

A
- Narrow travel lanes to 12 feet
- Install granite swales to visually narrow roadway.
- Install sidewalk along west side of Monument Avenue
- Install crosswalks intersection of Monument Avenue and Elm Street.

B
- Install median in center of Monument Avenue (separated travel lane width = 12ft.)
- Replace 3-way stop with neighborhood traffic circle.
- Install crosswalks intersection of Monument Avenue and Elm Street.
- Install crushed stone multi-use path along east side of Monument Avenue.
- Install crushed stone multi-use path along north side of Elm Street, to connect with Town of Bennington sidewalk network.

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS: by John Thomas, Jeff Gritsavage

Existing Roadway Design

Possible New Alignment of Monument Avenue

Neighborhood Traffic Circle Design Concept

Neighborhood Scale Boulevard, Cooperstown, NY

Orthoimagery: USGS

Photographs: University at Albany Planning Studio
UPPER MONUMENT
Study Area #4

UPPER MONUMENT AVENUE, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Main road leading to the Bennington Battle Monument. Corridor is congested with local and tourist traffic volume during peak seasons. Sight line issues as Upper Monument travels uphill, with cars traveling downhill at excessive speed. Lack of bicycle facilities and deteriorated marble sidewalks.

DETAILED DESCRIPTION:
Upper Monument Avenue serves as a residential street, but is also used as a cut through to Silk Road and NY Route 67. Also heavily used for tourism traffic, frequently in the form of large tour buses. Tourists frequently stop at the intersection of Monument Avenue and Bank Street to photograph the Monument. Wide roadway design contributes to speeding. Posted speed limit is 25 mph. Marble sidewalks enhance Village character but are often cracked with sections missing. There are no crosswalks for pedestrians to cross safely and a lack of bicycle facilities.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- High vehicle volume and speed
- Lack of sidewalks and crosswalks
- Tourists stand in roadway at Monument/Bank to photograph the Battle Monument

SPECIFIC PROBLEMS FOR BICYCLISTS:
- High speed and volume creates the need for a designated cyclist right-of-way.
- Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicle traffic.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Existing signage is inadequate for vehicles
- Tourists stand in roadway at Monument/Bank to photograph the Battle Monument

SPEED DATA ANALYSIS: by Kevin McLoughlin, Jeff Gitsavage

![Students recording speed data](University at Albany Planning Studio Photos)
GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS: by John Thomas, Jeff Gritsavage

Raised Intersection with through Bike Lanes, Splitter Island at Monument/Bank provides safe pedestrian refuge and photo-op

Redesigned intersection Improves Sight Distance and Reclaims green space.

Marble sidewalks enhance Village character but raise pedestrian safety issues.

A median along Monument Avenue could improve safety and aesthetics.

Orthoimagery: USGS

Photographs: University at Albany Planning Studio
MONUMENT CIRCLE
Study Area #5
BENNINGTON BATTLE MONUMENT, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Major tourist destination within the Village boundaries. High vehicle speed and lack of bicycle and pedestrian facilities have raised safety issues with local law enforcement.

DETAILED DESCRIPTION:
Lower Monument Avenue serves as a residential street, but is also used as a major cut through to the Hospital. Wide roadway design contributes to speeding. Posted speed limit is 25 mph. Presently there are no existing pedestrian facilities on both sides of Lower Monument Avenue although it is planned for a sidewalk to be installed on the western side of the road. No crosswalks, pedestrian signals or bicycle facilities have been installed on Elm Ave as well.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- Unsafe vantage point of Monument
- Lack of crosswalks
- Two-way traffic on circle
- Existing parking lot obscures view from back of circle.

SPECIFIC PROBLEMS FOR BICYCLISTS:
- Two-way traffic on circle
- Existing parking lot obscures view from back of circle.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Two-way traffic on circle
- Existing design restricts right turn onto Walloomsac from circle.
- Lack of signage at intersection of Monument Avenue and circle.
- Existing parking capacity inadequate to accommodate tour busses and vehicles during peak season.
GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS: by Matt VanSlyke, Jeff Gritsavage

Roundabout at Monument Circle would improve traffic flow, safety and aesthetics.

Visitors often stand in the roadway to photograph the Battle Monument.

Parking capacity gained on the circle would allow the existing parking lot to be used as a picnic area.

Eliminating two-way traffic would improve safety, traffic flow and parking capacity.

Orthoimagery: USGS

Photographs: University at Albany Planning Studio
WALLOOMSAC
Study Area #5
WALLOOMSAC ROAD / FAIRVIEW STREET, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Northern entrance to village. High vehicle speed and lack of bicycle and pedestrian
facilities at this intersection.

DETAILED DESCRIPTION:
Walloomasac Road serves as a residential street, but is also used as a major cut through
to Silk Road and NY Route 67. Posted speed limit is 25 mph. Presently there are no
existing pedestrian facilities on either side of Fairview Ave and a sidewalk located on the
southern side of Walloomasac Avenue, ending at the Fairview intersection. A 3-way stop
controls traffic at the intersection. However, speed on Fairview remains high.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
• High vehicle volume and speed
• Lack of sidewalks on Fairview Street
• Lack of crosswalks at intersection
• Short sight distance and narrow roadway

SPECIFIC PROBLEMS FOR BICYCLISTS:
• High speed and volume creates the need for a designated cyclist right-of-way.
• Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicles.
• Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
• Lack of shoulder
• Lack of effective speed control device(s) invites speeding.

SPEED DATA ANALYSIS: by Kevin McLoughlin, Jeff Gritsavage

Fairview - Inbound

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{fairview_histogram.png}
\caption{Histogram of vehicle speed at Fairview.}
\end{figure}

\begin{itemize}
\item Std. Dev. = 4.15
\item Mean = 36.0
\item N = 30.0
\end{itemize}
RECOMMENDED SOLUTIONS:

- Install sidewalks on Fairview Street
- Replace 3-way stop with neighborhood traffic circle.
- Re-stripe shoulders and centerlines
- Install splitter island at Village line to provide secondary Village gateway and reduce vehicle speed.

Sidewalks on Walloomsac are in good condition

Sidewalks end at Intersection

Historic home on Walloomsac

Splitter islands provide traffic calming and Gateway

www.trafficcalming.org
EASTERN GATEWAY
West Main Street (VT Route 9)
VERMONT ROUTE 9, OLD BENNINGTON, VERMONT

RECOMMENDED SOLUTIONS:
- Install planters and splitter island at Village/Town line to establish "Gateway".
- Install pedestrian refuge with crosswalks at new "Gateway".
- Develop utility right-of-way into linear park/multi-use path that connects to nature trails, south of museum.
- Improve signage at new crossing.
- Install bicycle lanes along Route 9.
- Establish pedestrian connection from museum to church, cemetery and Village walking tour.
- Redesign museum entrance/exit.

PROBLEM STATEMENT:
Eastern entrance to Village. Undefined Village gateway lacks adequate bicycle and pedestrian facilities. Heavy truck traffic and excessive speed entering Village.

DETAILED DESCRIPTION:
VT Route 9 is major east-west truck route in the region and part of the National Highway System. This is eastern entrance to the Village of Old Bennington. However, no definitive "Gateway" has been established. Route 9 was repaved in October 2003. Posted speed limit is 35 mph but speed data indicates an average eastbound speed of 37 mph. Existing pedestrian facilities limited to a sidewalk on the north side of Route 9. No crosswalks, pedestrian signals or bicycle facilities have been installed. There is an old railbed that is currently used as a utility right-of-way. This corridor has potential recreational uses. The Bennington Museum is a major tourist attraction on Route 9, at the Village/Town line. The entrance to the Museum parking lot is wide, with undefined entrance and exit points.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- Lack of sidewalks connecting museum to the church
- Unsafe crossing from museum to north side of Route 9
- Established Village walking tour lacks signage
- Potential trail/linear park has not been developed

SPECIFIC PROBLEMS FOR BICYCLISTS:
- Heavy volume creates the need for a designated cyclist right-of-way.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.
- Unsafe crossing from museum parking lot to Route 9, westbound
- Potential trail/linear park has not been developed

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Truck traffic may limit sight distance
- Undefined museum entrance/exit
SPEED DATA ANALYSIS: by Kevin McLoughlin, Jeff Gritsavage

Eastern Gateway (Rte 9) - Inbound

Eastern Gateway (Rte 9) - Outbound

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS: by John Thomas, Jeff Gritsavage

New crossing with textured crosswalk

Truck traffic on Route 9

Entrance to proposed linear park

Proposed Gateway

Orthoimagery: USGS

Photographs: University at Albany Planning Studio
PROBLEM STATEMENT:
High speed and volume of vehicles, used as a cut through to Town. Catamount Lane is a local road but often sees truck/bus traffic due to awkward design of other intersections.

DETAILED DESCRIPTION:
Bank Street is a narrow residential street in the Village with high vehicle speed and volume. Targeted police patrols have yielded numerous speeding violations. No pedestrian or bicycle facilities exist on Bank Street nor Catamount Lane. There is an old railbed that is currently used as a utility right-of-way. This corridor has potential recreational uses. At the crossing, there is potential to develop a secondary Village Gateway, employing traffic calming devices.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- High vehicle volume and speed
- Narrow roadway lacking sidewalks
- Lack of crosswalks at Bank/Catamount
- Potential trail/linear park has not been developed

SPECIFIC PROBLEMS FOR BICYCLISTS:
- High speed and volume creates the need for a designated cyclist right-of-way.
- Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicle traffic.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.
- Potential trail/linear park has not been developed

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Lack of traffic control devices invites excessive speed
- Lack of shoulder
RECOMMENDED SOLUTIONS:

A
- Install splitter island at Village/Town line to establish secondary Gateway.
- Install pedestrian refuge with crosswalks at new Gateway.
- Install textured crossing where proposed linear park/multi-use path crosses Bank Street

B
- Install neighborhood traffic circle as traffic calming device at Bank/Catamount intersection
- Plant mature street trees along south side of Bank Street to provide passive traffic calming
- Paint center stripe on Bank Street
- Evaluate the need for installation of textured intersection as additional traffic calming device at Bank/Catamount

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS: by John Thomas, Jeff Gritzavage
**Photo Renderings**

Disclaimer:
The following photo renderings are intended to be used for planning purposes only. Actual engineering and final project results may vary in their appearance. The software used to produce these renderings includes: Adobe Photoshop, MGI PhotoSuite 8.1, Microsoft Powerpoint 2003, and Sierra Custom Land Designer 3D 7.0.

*Photo: Green Mountain National Forest in Autumn from Village of Old Bennington. Source: UAlbany Planning Studio*
Photo R1A: Vermont Route 9 West Village Line

Photo R1B: Vermont Route 8 West Village GATEWAY
Photo R2A: Vermont Route 9 East Village Line

Photo R2B: Vermont Route 9 Eastern GATEWAY and TRAIL
Photo R3A: Vermont Route 9, Village Green

Photo R3B: Vermont Route 9 Village Green
Photo 4A: Upper Monument Avenue & Vermont Route 9

Photo R4B: Upper Monument Avenue & Vermont Route 9: CHICANE
Photo R5A: Bank Street

Photo R5B: Bank Street: LANE STRIPING & SPLITTER ISLAND
Photo R6A: Upper Monument Avenue

Photo R6B: Upper Monument Avenue: LANDSCAPED MEDIAN
Photo R7A: Lower Monument Ave

Photo R7B: Lower Monument Avenue: STRIPING, BIKE LANE, SIDEWALK
Photo R8A: Rail/Utility Right of Way at Bank Street

Photo R8B: LINEAR PARK and MULTIPLE USE TRAIL
Photo Rendering 9A: Upper Monument and Bank

Photo Rendering 9B: Upper Monument & Bank Raised Intersection with through Bike Lanes
Beyond Old Bennington

The work of the University at Albany’s traffic calming studio class has potential applications to many other communities in Berkshire County and Vermont.

Old Bennington is a small, traditional, rural New England Village with significant historic and scenic qualities. It shares these attributes with many other Vermont communities. It is likely that the residents of these communities are as determined as those of Old Bennington to maintain their special character and sense of place.

Despite the high volumes of traffic on Route 9, residents were not enthusiastic about use of more aggressive traffic calming measures such as roundabouts if installation meant significant alterations to the central Village ‘greens’. Any traffic calming effort in this type of community should adopt the goal of maintaining and enhancing community character as the primary aim in order to reassure residents that the primary objective of slowing cars is to reinforce the positive community qualities and not simply reduce speeds by installing whatever physical measures are most efficient.
By identifying local design elements such as the granite pavers to include in traffic calming features as well as general sensitivity to important community character features, the studio class combined traffic calming and context sensitive design into a unified approach. This is the approach to success in other communities like Old Bennington. A simple, engineering approach to slowing vehicles won't work unless coupled with a strong emphasis on and reflection of the unique local context as well as quality, non-boilerplate design.

Many other Vermont communities share the feature of a central main street road that carries the bulk of traffic volume. These corridors are often focal points for the application of traffic calming features due to typically higher speeds and truck volumes. However, the studio class observed the potential for spillover of traffic onto local streets from overly aggressive traffic calming designs along the primary traffic corridor. The class approached traffic calming designs comprehensively across the whole community with strategic location and grouping of facilities. The aim was to calm local traffic more intensively than that on Route 9. This would be accomplished by using more aggressive deflection measures on local streets while using primarily visual cues for drivers to the 'village context' along with some mild deflection measures along Route 9. In this way, traffic would be calmed slightly along Route 9, but it would be relatively more attractive to cut-through traffic.
The class also found that its efforts to facilitate a more walkable and bikeable environment in the community reinforced the measures to slow traffic. For example, marking a bike lane along Route 9 with a different treatment than that found west of Old Bennington could also serve to visually narrow the travel lane by reducing the apparent width of blacktop for drivers. Realignment of an intersection to increase pedestrian visibility at a crossing was coupled with curb extensions to slow turns as well as the creating an opportunity to implement a chicane. Median/ splitter-island treatments were also combined with high-visibility crossings and pedestrian refuges at Village gateway areas sending the immediate message to drivers that they are in a community where walking is given a high degree of priority.

Whether in Old Bennington or in another "main street" community, the techniques of traffic calming and context sensitive design can help improve safety and quality of life. In conclusion, the words of Robert Frost speak to the past, present and future:

"Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference." 18

-Robert Frost, The Road Not Taken

18 http://www.quotationspage.com/quotes/Robert_Frost/11
Appendix A: Meeting Minutes

9/15/03 Meeting

Village Trustee Charles Edson introduced the purpose of the meeting and provided background on the development of the project. Officer Jim Marsden provided a brief overview of traffic issues in the Village. Professor Jeff Olson gave background on the involvement of the University at Albany in the project. Student John Thomas provided a brief overview of traffic calming. Student Jeff Gritsavage gave a brief overview of the classes’ first site visit earlier that day. Student Kevin McLoughlin provided a rough outline of the class project work and community meeting schedule. Student Tameka Macon facilitated a question and answer session with meeting attendees.

This discussion raised the following points, observations, or issues:

- Noise from Jacobsen truck brakes in and near church on Route 9 is an issue for residents
- Making Route 9 near church might help reinforce Bennington by-pass diversion of traffic
- Traffic speed and noise is definitely perceived as a quality of life issue for residents
- It is important to residents to maintain or restore the historic character and fabric of the community
- Gateways, especially the western approach to the Village, are an important consideration for this project
- Street lighting has some history of contention among Village residents with some for and some against (in order to preserve ‘traditional rural’ dark skies)
- The marble sidewalks do add to Village maintenance costs, but are considered important to the community character and should be preserved where they exist
- Marble sidewalks are very slick when wet
- Speed limit signs may be too small and obscured by landscaping
• Old specimen trees area distinctive quality of the Village
• Cost consideration will be a factor in the Villages decision to implement recommendations
• There is consideration by the Village to phase elements of the plan
• The current redesign of Lower Monument is in preliminary stage and may have opportunities for influence by studio recommendations
• There are some streets where children play regularly
• There is no physical barrier or deterrent to cut-through traffic within the Village
• Concerted traffic enforcement efforts have not reduced traffic speeding problem
• There was a question of use of pole lights versus overhead lights requiring more frequent placement

10/20/03 Meeting

The second meeting with the Village Trustees and residents of Old Bennington took place on October 20, 2003. As recorded on the sign in sheet there were two Village Trustees present: Charles Edson and Arnold Ricks. The meeting began at 7:30 pm and Charles Edson introduced the UNIVERSEITY AT ALBANY studio students and professor Jeff Olson. An introduction to traffic calming was given by John Thomas along with a power point presentation to illustrate his points. Tameka Macon then reviewed the traffic safety and crash data to the community.

Residents actively participated by offering their comments throughout the presentation. One resident had many concerns as he was hit by a car while jogging in the Village several years ago. Despite differences of opinion between some residents, they all seemed to agree that something must be done to reduce the speeds and volume of vehicles in the Village. The intersection of the greatest importance was the VT 9 and Monument Avenue
intersection. A lot of discussion focused on the speed of cars and truck brakes here. It was noted that Mapquest shows VT Route 9 proceeding straight through the cemetry and the grave of Robert Frost. A discussion about the intersection of Monument and Bank Street followed where residents stated they were concerned with speeding traffic and some solutions were discussed.

Toward the end of the meeting the class showed some design ideas to the residents. Several design scenarios appealed to the residents such as white asphalt continuing the sidewalks where they are discontinued on Monument Avenue.

11/24/03 Meeting

The 3rd and Final Meeting with the Village Trustees and residents of Old Bennington took place on November 24, 2003. As recorded on the sign in sheet there were twenty people present. The meeting began at 7:30 where an open Charrette took place with each of the individual sections placed on tables and those present got to express their concerns on those areas. At approximately 8:00 we gathered the group and Jeff G. started presenting the proposed changes that we had made. During this time public participation was not encouraged and Jeff G. went through his presentation examining each of sections in the village. Next at approximately 8:15 John took over and presented his photo reddening of the sections. The slides of the before and after went over has a huge success to those in attendance.

Next Kevin, displayed some slides of traffic calming examples, then we
opened the floor for questions and comments around 8:30. Some of the comments from those in attendance where;

- "The new Village Green is wonderful idea”
- "The photo rendering of each of the sections give us are real good picture of the future of Old Bennington”.
- "Trails and sidewalks are excellent ideas, as well as keeping the town character in place”.

The meeting wrapped up with those in attendance thanking the Studio class for a wonderful job and on the project and said they couldn’t wait for our final results.
Appendix B: Data Sheets

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Village Green (Route 9)</th>
<th>Village Green (Mon Ave)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endpoint Intersections</td>
<td>E Crosswalk to Seminary Lane</td>
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<td>Mixed Cobra/Lantern</td>
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<td>&gt;8% Trucks (10600 VPD (1998))</td>
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<td>Historic Monuments &amp; Art</td>
<td>Village Green/Old First Church</td>
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<td>Accident Locations</td>
<td>Route 9 and Monument</td>
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<tr>
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<td>New</td>
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<td>Curbs/drainage</td>
<td>Paved Shoulders</td>
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<td>Alignment/Ped Traffic/Photo Ops</td>
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<tr>
<td>Study Area</td>
<td>Fairview</td>
<td>Walloomsac</td>
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<td>Monument Circle(E)/Village Line(W)</td>
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<td>on South Side 4' Stops just E of Fair View</td>
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<td>Lantern Style</td>
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<td>Endpoint Intersections</td>
<td>Village Line West/Village Line East</td>
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<td>Sidewalks, width, setback</td>
<td>South Side of Rout 9, 4' Wide</td>
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<td>Lamps</td>
<td>Cobra</td>
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<td>Crosswalks</td>
<td>1 Just East of Monument Ave</td>
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<tr>
<td>Traffic volume</td>
<td>&gt;8% Trucks - 10600 VPD (1998)</td>
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<td>Village Green/Old First Church</td>
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<td>Accident Locations</td>
<td>Route 9 and Monument</td>
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<td>Surface Condition</td>
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<td>46' (E of Mon)</td>
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<td>West Main: N Side of Rt.9 4' Wide</td>
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<td>Lamps</td>
<td>Cobra</td>
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<td>crosswalks</td>
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<td>Historic Monuments &amp; Art</td>
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<td>Distinctive Features</td>
<td>School/Museum/Rail ROW</td>
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## Village of Old Bennington
### Traffic Calming Study Data Sheets

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</tr>
<tr>
<td>Surveyed By</td>
<td>PLN881 SUNY Albany</td>
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<th>Upper Monument</th>
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<td>Endpoint Intersections</td>
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<td>See Entire Village</td>
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<td>Driveways/Bank</td>
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<td>Surface Condition</td>
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</tr>
<tr>
<td>Curbs/drainage</td>
<td>Ditches</td>
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<tr>
<td>Distinctive Features</td>
<td>Slope</td>
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<td>Study Area</td>
<td>Bank</td>
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<td><strong>Endpoint Intersections</strong></td>
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<td><strong>Distinctive Features</strong></td>
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### Appendix C: Automatic Traffic Recorder Data

**Automatic Traffic Recorder Data**

**Village of Old Bennington**

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<td>S6B156</td>
<td>Elm St</td>
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<td>480</td>
<td>27.1%</td>
<td>545</td>
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<td>2800</td>
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<td>1600</td>
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<td>29.4%</td>
<td>1920</td>
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</table>

Appendix D: Automatic Vehicle Classification Report

2002 Automatic Vehicle Classification Report - Day & Peak Averages

| Site ID | Route | Street Name | FC 2001 | AADT 2001 | ACF 2001 | Conv. FC | Conv. AADT | Conv. ACF
<table>
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<tr>
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<tbody>
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<td>EAU102</td>
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<td>1.024</td>
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</table>

Vermont Agency of Transportation
Technical Services Division
Traffic Research Unit

2001 Automatic Vehicle Classification Report

The following report is a compilation of short term vehicle classification counts taken throughout the state. The counts in this report meet the following criteria:

1. They were conducted within the most recent four year counting cycle
2. They are the most recent classification count at that site
3. For non-interstate counties, they are at least six a day or half days in length, and do not include federal holidays
4. For interstate counts, they are at least 48 hours in length, and conducted on weekends only
5. Peak hour data is the highest hour for each weekday of the count, averaged for each count

This book is divided into three sections, fc avg, day and peak.

- FC Averages are most often used when a site specific count is not available.
- Daily averages are most often used for pavement design, when an overall traffic pattern must be established.
- Peak hour averages are most often used for analysis.

Caution must be used when applying functional class average traffic volumes to any specific site, as local truck generator may cause large spikes in truck traffic. For example, local streets may be residential in character, with low truck volumes, or commercial in character with higher truck volumes.

2002 Automatic Vehicle Classification Report, Vermont Agency of Transportation
www.dot.state.vt.us/ted/services/Documents/TrafResearch/Publications/pub.htm
## Appendix E: Bennington Cyclist Report

### 2000-2001 Bennington Bicyclist Report

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<thead>
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<th>AOT Route</th>
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<td>10115</td>
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<td>Valentine ST.</td>
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</tr>
<tr>
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<td>8/22/2001</td>
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<tr>
<td>13188</td>
<td>8/12/2001</td>
<td>Hunt St West</td>
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<td>3/3/2000</td>
<td>VT-9</td>
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<td>9125</td>
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Total of 5 Records Reported

## 2000-2001 Bennington Pedestrian Report

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<td>13818</td>
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<td>14077</td>
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<tr>
<td>8560</td>
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Total of 16 Records Reported

*Source: Vermont Transportation Agency*
New ideas may cut the speed in village

Andrew DeKeever

OLD BENNINGTON — Speeding motorists through town are a serious problem, one that requires some bold thinking, residents say.

A traffic study is being launched by a group of seven graduate students from the State University of New York at Albany to develop solutions, paid for by a $7,000 state grant.

"You have a unique opportunity being at the beginning of Vermont," said John Thomas, one of the students who presented some preliminary findings at a meeting of the board of trustees of Old Bennington. "The only thing that tells them they're coming into Old Bennington is a small sign on top of a hill.

The need for more visual signals to motorists is absolutely necessary to slow them down, the study found. Speed limits on Route 9 and 25 mph speed limits on the various side streets is critical," said Peter Steenstra, a resident who said he had been hit by a car while jogging two years ago.

"I'm very concerned with speeding," he said. "It's a constant problem. There's a lot of people walking around taking photographs.

There were 56 accidents on Route 9 within Old Bennington in 2000, which jumped to 89 accidents in 2001, according to the Vermont Agency of Transportation. The majority of the accidents occur between 2 p.m. and 3 p.m., and are due to drivers who are talking or not paying attention, according to the agency. However, none of these accidents resulted in a fatality.

Also, traffic volume around the Old Bennington Battle Monument is more than 10,000 vehicles per day on average. The number of traffic tickets handed out has gone up by 87 percent over the past five years, according to the agency.

The goal of the next meeting is to come up with some possible ways to slow motorists down as they drive through the village, said Professor Jeff Olson of SUNY-Albany, whose students are conducting the study as part of their graduate course work.

The Bennington County Regional Commission is working with them since the results of their study might be applied to other communities in the area, he said.

The combination of funding ways of slowing down traffic with historic preservation made for an interesting exercise for his students, he said.

Sometime in December, a final report will be issued by the group, he said.

The next presentation is scheduled for Nov. 25.
Appendix H: Letter from Police Commissioner to Citizens of Old Bennington

* * * IMPORTANT VILLAGE MEETING * * *

To: The Residents of the Village of Old Bennington
From: Charles Edson, Police Commissioner/Trustee
Date: November 4, 2003
Subject: Speeding in the Village

Many residents of the Village have complained about speeding on Village streets and that police enforcement has not been able to control the excessive speeding. The number of tickets issued continues to climb so we need some additional means to control speed. An engineering technique called "traffic calming" can be used to construct roadway features that can help to reduce speed.

In September, the graduate students in planning at the State University of New York in Albany started investigating the speeding problem. They have collected data and developed some initial ideas. Some of these ideas include:
- Install two traffic circles at either end of the village green and realign Monument Ave to connect the circles.
- Install a planted median divider along Monument Ave.
- Install raised crosswalks at the Bank Street intersection with Monument Ave.
- at Elm Street and Monument Ave.
- Install speed humps at selected locations.
- Install a small circle at Monument Ave. and Bank Street.
- Special entrance structures and plantings at the entrances to the village.

The students will present their final ideas at a Village meeting to be held
- Date: Monday, November 24, 2003
- Time: 7:30 PM
- Place: Church Barn

This will be the last time for your review and input prior to the students finalizing their recommendations. The students will listen to your approval or suggested changes on that night, after which they will finalize their Village Plan and submit it to the Trustees for implementation.

If you have ideas, complaints or disagree with the plans, this is the time to voice your position. If you wait until construction starts, you will be too late.

Please set aside the time for this date and time to listen to the plan and voice your opinion.

Signed,

Charles Edson
Trustee and Police Commissioner
Appendix I: Course Syllabus

COURSE DESCRIPTION:
Traffic Calming: Old Bennington
(TC:OB)
Graduate Planning Studio
State University of New York at Albany – SUNYA
Initiative for Healthy Infrastructure (iHi)
School of Geography and Planning - Albany, New York USA

COURSE # APLN 681 Planning Studio (Graduate, 4 Credits)
Fall, 2003

Schedule: Monday, 1:00 – 3:50pm, Room AS 0123
Faculty: Jeff Olson, R.A. (phone 584-6634 or e-mail Trails2k@aol.com)
Office Hours: (by appointment, Room AS230)

COURSE OBJECTIVE: To work with the community of Old Bennington, Vermont to
develop a traffic calming plan. The project is funded through the Bennington County
Regional Commission (BCRC) using federal transportation funds. Students will work
directly with community leaders to develop a scope of services, collect data, conduct
public meetings, provide alternatives, discuss solutions and prepare a 50 page written and
graphic report at the conclusion of the project. Key issues to be resolved by the project
include speeding traffic, pedestrian / bicyclist safety, and providing solutions which
reflect the historic character of the community. The project will be developed both as a
specific plan for Old Bennington and as a potential prototype for other historic villages in
the region.

NOTE: The contents of this course description are the property of Jeffrey S. Olson, R.A., any use,
distribution or reproduction of this material requires the written consent of the author. Other materials,
such as videotapes and journal articles, will be made available to the students from the faculty, and will be
provided for sign-out or reproduction on a limited basis.
2. COURSE OUTLINE and SCHEDULE:

SESSION 1: September 8
Introduction: An overview of the semester's activities will be provided and logistics regarding course requirements and performance standards will be distributed. Students will view an introductory video which will establish the context of traffic calming as part of the 'state of the art' in transportation planning. There will be a brief lecture entitled: Integrated Safety and Mobility: Traffic Calming. Traffic Calming is the development of streets which balance the safety needs of all forms of travel, with priority given to pedestrian mobility. This lecture will present numerous historic and contemporary examples of traffic calming, and will offer students the opportunity to redevelop a 'typical' intersection or street.

Video: Making Streets That Work - Seattle
Activity: Project Scoping Session – Team Assignments

SESSION 2: September 15
Field Trip #1 to Old Bennington - Data Collection
Discussion of Project Scope with Village Trustees

SESSION 3: September 22
Existing Conditions Report

SESSION 4: September 29
Alternatives Analysis 1

SESSION 5: October 6 – No Class (Yom Kippur Holiday)

SESSION 6: October 13
Alternatives Analysis 2

SESSION 7: October 20 – Mid Term
Field Trip # 2 - Client Presentation in Old Bennington

SESSION 8: November 3
Plan Development -

SESSION 9: November 10
Plan Development

SESSION 10: November 17
Plan Development

SESSION 11: November 24
Field Trip #3 – Public Presentation in Old Bennington

SESSION 12: December 1
Public Comment Response / Revision

SESSION 13: December 8
Final Report Development

SESSION 14: December 15
Final Report Due
3. COURSE EVALUATION CRITERIA:

GRADUATE STUDENTS:
-20% Attendance and Participation
-50% Team Assignments
-30% Overall Class Results

4. COURSE MATERIALS:

Traffic Calming: State of the Practice
FEDERAL HIGHWAY ADMINISTRATION and INSTITUTE OF TRANSPORTATION ENGINEERS,


Main Street: When a Highway Runs Through It – November 1999
OREGON STATE DEPARTMENT OF TRANSPORTATION
355 Capitol Street NE, 5th Floor, Salem, OR 97301-3871
FAX: (503) 986-4063, Phone (503) 986-3555 http://www.odot.state.or.us/techserv

Design and Safety of Pedestrian Facilities - Publication Number RP-026A
Traditional Neighborhood Development Street Design Guidelines – October 1999
Alternative Treatments for At-Grade Pedestrian Crossings – 2001 Publication Number LP-629
INSTITUTE OF TRANSPORTATION ENGINEERS (ITE), Institute of Transportation Engineers, , ITE,
525 School St., SW, Suite 410, Washington, D.C. 20024, Phone: (202) 554-8050, fax: 863-5486

Guide for the Development of Bicycle Facilities
AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS (AASHTO)
1999, 3rd Edition, Document # GBF-3 (text or CD), AASHTO, 444 N.Capitol Street, NW, Suite 225,
Washington, D.C. 20001, Phone (202) 624-5800, www.aashto.org

Improving Conditions for Bicycling and Walking: A Best Practices Report,
THE ASSOCIATION OF BICYCLE AND PEDESTRIAN PROFESSIONALS, 1998 www.apbp.org

Vermont State Design Standards
Vermont Agency of Transportation, 1997
http://www.aot.state.vt.us/progdev/standards/statabta.htm
Local Transportation Facilities Guidebook, 2001
http://www.aot.state.vt.us/progdev/Sections/LTF/LTFGuidebook/LocalTransportationFacilitiesGuidebook.htm
Appendix J: Public Meeting Attendees
Old Bennington Out Reach Meeting #1
Monday, September 15, 2003

Attendees
Dan Green
Jim Sullivan
Jeff Gritsavage
Bob Bullington
Arnold Ricks
Peter Stromgen
Frank Waterman
Charles Edson
James H. Marsden
Jeffrey Hescock
Tameka Macon
Matthew VanSlyke
John Thomas

Old Bennington Out Reach Meeting #2
Monday, October 20, 2003

Attendees
Bill Deery
Charles Edson
Bob Bullington
Andrew McKeever
Mrs Newton Parks
Robin Stromgen
Gayle Barton
Jan Fabricusi
Dick Fabricus

Peter Stromgen
Arnold Ricks
Donna Berry
John Kallary
SUNY Albany Project Team (8)

Old Bennington Traffic Calming Presentation
Monday, November 24, 2003

Attendees
Charles Edson
Jim Sullivan
John Perkins
Donna Berry
Frank Waterman
James H. Marsden
Peter Stromgen
Suzy Smacor
Ann Babcock
Steve Edmonds
Tim Schloemer
Don Miller
Arnold Ricks
Joseph Parks
SUNY Albany Project Team
Department of Geography and Planning

Fall 2003 Studio Project Team:

Jeffrey Gritsavage
Jeffrey Hescock
Tameka Macon
John Thomas
Jennifer Thorne
Matthew VanSlyke
Kevin McLoughlin

Traffic Calming
Old Bennington

Faculty

Jeff Olson, R.A.
Initiative for Healthy Infrastructure -iHi
State University of New York at Albany
1400 Washington Avenue, AS 230
Albany, New York, USA, 12222
Phone: 518.442.4478   E-mail: trails2k@aol.com

BCRC

This project was created with support from the Bennington County Regional Commission and the Village of Old Bennington, Vermont.
Traffic Calming: Old Bennington, VT:

Project Summary Report

The Fall 2003 University at Albany traffic calming studio project was developed as a response to traffic issues in the Village of Old Bennington, Vermont. Increases in traffic over the past several decades have led to safety, speeding and pedestrian mobility issues in the village. Old Bennington’s residents take pride in the historic character of their community and the entire village is listed on the National Register of Historical Places. Therefore, a plan is needed to solve the modern problem of traffic, while preserving the quality of life of this charming eighteenth century village.

The students of the University at Albany Urban Planning program have provided a context sensitive design solution for the Village in order to create a more balanced traffic flow and to increase the overall safety of the residents and visitors of Old Bennington. This project has been developed both as a specific plan for the community of Old Bennington and as a prototype for other historic villages in the region. It is a potential model for combining the practice of traffic calming with context sensitive design.

Students worked directly with community leaders to develop a scope of services, collect data, conduct public meetings, provide alternatives, discuss solutions and prepare a written and graphic report at the conclusion of the project. Issues identified by the project include speeding traffic, pedestrian / bicyclist safety, and providing solutions which reflect the historic character of the community. Specific findings include:

1. Speeding: Data obtained from speeding tickets issued throughout the Village between January 2001 and August of 2003 by the special patrol show that the average ticketed speed was 45 mph or 20 mph over the posted limit for most Village streets and 15 mph over the posted limit of 30 mph along Vermont Route 9.
2. **Enforcement:** Most traffic through the Village exceeds the posted limits and enforcement has not significantly reduced average speeds. Therefore, there is a need for physical traffic calming measures in the Village of Old Bennington.

3. **Quality of Life:** The community takes considerable pride in its quality of life, and there are significant opportunities available to improve conditions for walking, bicycling and public spaces through the integration of traffic calming and context sensitive design improvements.

The current Old Bennington Village zoning ordinance states:

> "Almost nothing can adversely impact the quality of life in a residential Village like Old Bennington more than excessive traffic. Heavy traffic creates a hazard to residents, pedestrians, and pets, increases noise and air pollution, and detracts from the quiet, peaceful and historical ambiance sought by the Village."

The planning and design concepts presented in this document, and new Traffic Calming Design Guidelines published by the Vermont Department of Transportation will help the village make decisions that create a balanced infrastructure for all residents and visitors.

Whether in Old Bennington or in another "main street" community, the techniques of traffic calming and context sensitive design can help improve safety and quality of life. In conclusion, the words of local resident Robert Frost speak to the past, present and future:

> "Two roads diverged in a wood, and I--
I took the one less traveled by,
And that has made all the difference."

-Robert Frost, The Road Not Taken
Design Recommendations

General Recommendations

The studio class identified two overarching goals to guide the future implementation of a comprehensive traffic-calming program in the Village of Old Bennington:

1. Increase comfort & safety for village residents and visitors for all transportation modes
2. Maintain & enhance community character

Under goal one the class makes the following recommendations:

Make Community More Walkable

- Sidewalks
  - Identify and fill 'gaps' in current sidewalk system ensuring main resident & tourist destinations are linked
  - Reconstruct / rehabilitate degraded segments
  - Work with Town of Bennington to link sidewalk system to West Road destinations of crafts stores and Performing Arts Center west of Village border
  - Rectify ADA non-compliance by implementing curb ramps at all crossings

- Crosswalks
  - Use 'piano key' treatment for all marked crossings (single for 'minor' crossings; double for 'major' crossings & all across Route 9)
  - Identify high priority locations for marked crossings (such as accident clusters at Main Street & Catamount Lane, West Road & Seminary Lane / 4 Chimneys Inn, Main Street & Monument Avenue, West Road at the middle island of Village Green)
  - Install pedestrian refuge islands and raised crossings at priority locations and difficult / 'high traffic' spots where significant pedestrian / vehicle interaction is known or expected
Make Community More Bikeable

- Mark bike lanes (6 ft shoulder) along VT Route 9 through Village with green shaded & textured surface to delineate space for cyclists while keeping travel lane visually narrow
- Mark bike lanes along Monument Avenue or sign as a ‘Shared Road’ if widths are inadequate for bike lane markings
- Mark wide bike lanes / shoulder along Walloomsac Road (with colored & textured surface) in lieu of sidewalk due to low traffic volume & number of homes
- Work with town and county to identify or sign potential local loop routes linking regional destinations such as downtown Bennington, Bennington Monument, and the Bennington & Southern Vermont Colleges

Reduce Traffic Volume on Local Streets

- Use of less aggressive ‘visual cues’ to Village context along with minor vehicle deflections on primary E-W traffic flow of Route 9 should have some calming effect without creating traffic spillover pressure on local streets
- More aggressive comprehensive system of vehicle deflection measures along ‘internal’ Village roads should make cut-through patterns unattractive to through traffic
- Volume reduction of 2000 AADT on Route 9 from bypass project should reinforce the relative attractiveness of this corridor for all E-W through traffic

Reduce Speeds On All Village Roads

- The comprehensive pairing or grouping of traffic calming measures at strategic locations throughout the Village road network has potential to reduce average speeds by the 10 to 15 mph target (according to VT AOT’s traffic calming specs and the ITE Traffic Calming Guide)\(^1\)

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\(^1\) Vermont Pedestrian and Bicycle Facility Planning and Design Manuel: Chapter Seven Traffic Calming
• Field data from projects to date in the ITE guide indicates that cumulative speed reductions from multiple calming measures are not a given.²

Reduce Crash Potential

• Realign key intersections (upper Monument / Route 9, lower Monument / Route 9 / Church Street, upper Monument / Monument Circle / Walloomsac Road e.g.) to increase the clarity and visibility of traffic patterns for drivers and cyclists and increase visibility and shelter for pedestrians

Enhance Traffic Control & Visitor Information Signage

• Fill in gaps of ‘missing’ traffic control signs
• Consider use of larger traffic control signs
• Replace faded traffic control signs and remove obscuring vegetation
• Install gateway signage to cue drivers to Village context
• Work with Bennington Museum to install unique and visible ‘walking tour’ route markers (monument markers e.g.) along safest route

Develop Old Rail Bed as a Linear Park with Shared-Use Trail

• Directly abuts Bennington Museum, the museum woods, Monument Elementary School, garden apartments just over Village border, & Bennington School
• Potential to link to Bennington Monument & Proposed Walloomsac Riverwalk via old Stage Road, Performing Arts Center, and Benmont Avenue commercial strip (using a utility ROW)
• Need to work with Town and County to fund and implement

Under goal two the class makes the following recommendations:

• Use granite pavers as a primary design element in traffic calming measures throughout community

² Vermont Pedestrian and Bicycle Facility Planning and Design Manuel: Chapter Seven Traffic Calming
- Identify range of appropriate low-cost 'gateway' design elements/features and select one for consistent use at all Village entry points (‘monument’ stones e.g.)
- Develop alternative sidewalk surface to polished marble slabs that echoes its aesthetic appeal

![Catamount Tavern](Village of Old Bennington Monument Trail)

*Figure: Example of Wayside Sign for the Monument Trail. Source: John B. Thomas*

- Use larger, mature Sugar Maples for street tree plantings whenever feasible to maintain appearance of full canopies along Village roads
- Use a minimum 3' planting strip between curb and sidewalk to allow space for tree planting and maintain ‘traditional’ look of deep sidewalk setbacks along Village roads, especially Route 9
- Use colored (green) & textured surface to delineate bike lanes within Village borders to maintain visually narrow travel lane
- Develop an ‘historic rail crossing’ design treatment for use with development of old rail bed as a multi-use path
- Integrate local art and culture into traffic calming features, such as Robert Frost poetry, sculpture, historic markers, stone walls and architectural materials.

**Design Recommendations: Case Studies**
The following pages are summaries for each study area within the Village. Detailed information is provided in the full final report and CD.
STUDY AREA #1

VT ROUTE 9 / SEMINARY LANE, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Western entrance to village. Undefined village gateway with high vehicle speed and lack of bicycle and pedestrian facilities.

DETAILED DESCRIPTION:
VT Route 9 is major east–west truck route in the region and part of the National Highway System. Seminary Lane is a local residential road. This is the main entrance to the Village of Old Bennington. However, no definitive “Gateway” has been established. Route 9 was repaved in October 2003. Pavement condition on Seminary lane is good. Posted speed limit is 35mph but speed data indicates an average inbound speed of 41mph. Wide roadway design contributes to speeding. Existing pedestrian facilities limited to a sidewalk on the south side of Route 9, east of Seminary Lane. No crosswalks, pedestrian signals or bicycle facilities have been installed.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- High vehicle volume and speed
- Lack of sidewalks and crosswalks
- Lack of connection with adjacent commercial facilities.

SPECIFIC PROBLEMS FOR BICYCLISTS:
- High speed and volume creates the need for a designated cyclist right–of–way.
- Lack of appropriate bicycle right–of–way forces the cyclist to compete with vehicle traffic.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Speed limit reduced to 30mph without change in roadway design
- Heavy volume during peak hours may make turns from Seminary Lane difficult.
- Truck traffic may limit sight distance for motorists at eastern end of study area.

SPEED DATA ANALYSIS:

<table>
<thead>
<tr>
<th>Western Gateway (Rte 9) - Inbound</th>
<th>Western Gateway (Rte 9) - Outbound</th>
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</thead>
<tbody>
<tr>
<td><img src="image1" alt="Histogram" /></td>
<td><img src="image2" alt="Histogram" /></td>
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Traffic Calming: Old Bennington VT

Executive Summary
RECOMMENDED SOLUTIONS:

A
- Install planters and picket fence at Village/Town line to establish “Gateway”.
- Install splitter island to divert traffic.
- Install pedestrian refuge with crosswalks at new “Gateway”.
- Install sidewalk on the north side and extend sidewalk on the south side of Route 9.
- Install crosswalks at Seminary Lane and junction of Route 9 and Monument Avenue (at Village Green).

B
- Install bicycle lanes
- Install textured crosswalks
- Install textured intersection

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS:

Existing Village Entrance

Gateway Pedestrian Connection

Orthoimagery: USGS

New Gateway

Burlington, VT Lakefront Gateway

Photographs: University at Albany Planning Studio
VILLAGE GREEN
STUDY AREA #2
VT ROUTE 9 / MONUMENT AVENUE, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Main intersection in the Village with Route 9 intersecting Monument Avenue. Lack of pedestrian crossings and bicycle facilities. Awkward traffic pattern.

DETAILED DESCRIPTION:
VT Route 9 is major east-west truck route in the region and part of the National Highway System. Monument Avenue is the major North-South axis in the Village. This is a busy intersection that is defined by three grassed medians, which traffic must negotiate, to reach Upper and Lower Monument Avenue. Existing pedestrian facilities limited to a sidewalk on both sides of the road with the western sidewalk terminating before the intersection. No crosswalks, pedestrian signals or bicycle facilities have been installed. The Old First Congregational Church is a major tourist attraction and hosts weddings and special events. The access road and other minor roads in the area are used for tourist and church event parking.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
• Lack of sidewalks and crosswalks
• Unsafe crossing from church to Upper Monument Avenue
• Established Village walking tour lacks signage
• Marble sidewalks enhance Village character, but condition is deteriorated

SPECIFIC PROBLEMS FOR BICYCLISTS:
• Major east-west route needs a designated cyclist right-of-way.
• Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicle traffic.
• Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
• Heavy volume during peak hours may make turns to/from Lower and Upper Monument Avenue difficult.
• Limited sight distance for those vehicles turning left onto Upper Monument
• Confusing roadway design distracts the motorist.
• Truck traffic and sharp, narrow turns may limit sight distance.
RECOMMENDED SOLUTIONS:

A
- Install textured or raised crosswalk on Route 9 to establish safe pedestrian connection.
- Install raised and/or textured crosswalk in front of church to connect green with church property
- Install textured bulbouts to visually distinguish Route 9 from secondary roads
- Eliminate secondary road leading to Lower Monument Avenue.
- Redesign access to Upper Monument Avenue to improve sight distance.
- Install bicycle lanes on both sides of Route 9.

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS:

Existing Design

New Village Green

Redesigned Intersection–Rt. 9/Upper Monument Ave.

Redesigned Intersection–Rt. 9/Lower Monument Ave.

Orthoimagery: USGS

Photographs: University at Albany Planning Studio
PROBLEM STATEMENT:
Southern entrance to village. Undefined secondary gateway with high vehicle speed and lack of bicycle and pedestrian facilities.

DETAILED DESCRIPTION:
Lower Monument Avenue serves as a residential street, but is also used as a major cut through to Southwestern Vermont Medical Center and Southern Vermont College. Wide roadway design contributes to speeding. Posted speed limit is 25 mph. Presently there are no existing pedestrian facilities. However, a road reconstruction project is planned that will reduce lane width and install a sidewalk on the western side of Monument Avenue. Elm Street also lacks pedestrian and bicycle facilities. Traffic is controlled by a 3-way stop at the intersection.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- High vehicle volume and speed
- Lack of sidewalks and crosswalks
- Wide, sterile roadway design does not create a comfortable pedestrian environment.

SPECIFIC PROBLEMS FOR BICYCLISTS:
- High speed and volume creates the need for a designated cyclist right-of-way.
- Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicle traffic.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Existing signage is inadequate for vehicles (i.e. faded stop sign)
- Roadway width invites excessive speed.
RECOMMENDED SOLUTIONS:

A
- Narrow travel lanes to 12 feet
- Install granite swales to visually narrow roadway.
- Install sidewalk along west side of Monument Avenue
- Install crosswalks intersection of Monument Avenue and Elm Street.

B
- Install median in center of Monument Avenue (separated travel lane width = 12 ft.)
- Replace 3-way stop with neighborhood traffic circle.
- Install crosswalks intersection of Monument Avenue and Elm Street.
- Install crushed stone multi-use path along east side of Monument Avenue.
- Install crushed stone multi-use path along north side of Elm Street, to connect with Town of Bennington sidewalk network.

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS:

Existing Roadway Design       Possible New Alignment of Monument Avenue

Neighborhood Traffic Circle Design Concept       Neighborhood Scale Boulevard, Cooperstown, NY

Orthoimagery: USGS       Photographs: University at Albany Planning Studio

Traffic Calming: Old Bennington VT

Executive Summary 15
PROBLEM STATEMENT:
Main road leading to the Bennington Battle Monument. Corridor is congested with local and tourist traffic volume during peak seasons. Sight line issues as Upper Monument travels uphill, with cars traveling downhill at excessive speed. Lack of bicycle facilities and deteriorated marble sidewalks.

DETAILED DESCRIPTION:
Upper Monument Avenue serves as a residential street, but is also used as a cut through to Silk Road and NY Route 67. Also heavily used for tourism traffic, frequently in the form of large tour buses. Tourists frequently stop at the intersection of Monument Avenue and Bank Street to photograph the Monument. Wide roadway design contributes to speeding. Posted speed limit is 25 mph. Marble sidewalks enhance Village character but are often cracked with sections missing. There are no crosswalks for pedestrians to cross safely and a lack of bicycle facilities.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
• High vehicle volume and speed
• Lack of sidewalks and crosswalks
• Tourists stand in roadway at Monument/Bank to photograph the Battle Monument

SPECIFIC PROBLEMS FOR BICYCLISTS:
• High speed and volume creates the need for a designated cyclist right-of-way.
• Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicle traffic.
• Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
• Existing signage is inadequate for vehicles
• Tourists stand in roadway at Monument/Bank to photograph the Battle Monument

SPEED DATA ANALYSIS:
RECOMMENDED SOLUTIONS:
- Realign southern end of Monument Avenue to improve sight distance.
- Install pedestrian refuge with crosswalks at intersection with Bank Street.
- Replace missing/damaged sidewalks with materials consistent with Village context.

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS:

Raised Intersection with through Bike Lanes, Refuge Island provides safe photo-op

Redesigned intersection Improves Sight Distance and Reclaims green space.

Orthoimagery: USGS

Proposed speed table, crossings and shoulders at Bank/Upper Monument.

A median along Monument Avenue could improve safety and aesthetics.

Photographs: University at Albany Planning Studio
MONUMENT CIRCLE
Study Area #5
BENNINGTON BATTLE MONUMENT, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Major tourist destination within the Village boundaries. High vehicle speed and lack of bicycle and pedestrian facilities have raised safety issues with local law enforcement.

DETAILED DESCRIPTION:
Lower Monument Avenue serves as a residential street, but is also used as a major cut through to the Hospital. Wide roadway design contributes to speeding. Posted speed limit is 25 mph. Presently there are no existing pedestrian facilities on both sides of Lower Monument Avenue although it is planned for a sidewalk to be installed on the western side of the road. No crosswalks, pedestrian signals or bicycle facilities have been installed on Elm Ave as well.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- Unsafe vantage point of Monument
- Lack of crosswalks
- Two-way traffic on circle
- Existing parking lot obscures view from back of circle.

SPECIFIC PROBLEMS FOR BICYCLISTS:
- Two-way traffic on circle
- Existing parking lot obscures view from back of circle.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Two-way traffic on circle
- Existing design restricts right turn onto Walloomsac from circle.
- Lack of signage at intersection of Monument Avenue and circle.
- Existing parking capacity inadequate to accommodate tour busses and vehicles during peak season.

Monument Gift Shop
RECOMMENDED SOLUTIONS:

- Eliminate two-way traffic on circle
- Create parking lane on circle
- Convert existing parking lot into green space / picnic area
- Install neighborhood scale roundabout with splitter islands at entrance to circle.
- Install crosswalks to allow safe pedestrian access to statue / photo-op in center of circle.

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS:

Roundabout at Monument Circle would improve traffic flow, safety and aesthetics.

Visitors often stand in the roadway to photograph the Battle Monument.

Parking capacity gained on the circle would allow the existing parking lot to be used as a picnic area.

Eliminating two-way traffic would improve safety, traffic flow and parking capacity.

Orthoimagery: USGS

Photographs: University at Albany Planning Studio
WALLOOMSAC
Study Area #6
WALLOOMSAC ROAD / FAIRVIEW STREET, OLD BENNINGTON, VERMONT

PROBLEM STATEMENT:
Northern entrance to village. High vehicle speed and lack of bicycle and pedestrian facilities at this intersection.

DETAILED DESCRIPTION:
Walloomsac Road serves as a residential street, but is also used as a major cut through to Silk Road and NY Route 67. Posted speed limit is 25 mph. Presently there are no existing pedestrian facilities on either side of Fairview Ave and a sidewalk located on the southern side of Walloomsac Avenue, ending at the Fairview intersection. A 3-way stop controls traffic at the intersection. However, speed on Fairview remains high.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
• High vehicle volume and speed
• Lack of sidewalks on Fairview Street
• Lack of crosswalks at intersection
• Short sight distance and narrow roadway

SPECIFIC PROBLEMS FOR BICYCLISTS:
• High speed and volume creates the need for a designated cyclist right-of-way.
• Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicles.
• Inadequate signage fails to warn the motorist of possible bicycle traffic.

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
• Lack of shoulder
• Lack of effective speed control device(s) invites speeding.

SPEED DATA ANALYSIS:

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Existing conditions

Traffic Calming: Old Bennington VT

Executive Summary
RECOMMENDED SOLUTIONS:

- Install sidewalks on Fairview Street
- Replace 3-way stop with neighborhood traffic circle.
- Re-stripe shoulders and centerlines
- Install splitter island at Village line to provide secondary Village gateway and reduce vehicle speed.

Splitter islands provide traffic calming  Existing sidewalks end at Intersection

www.trafficcalming.org

Traffic Calming can be combined with context sensitive design, as shown in this neighborhood circle made from materials similar to the Old Bennington streetscape.
EASTERN GATEWAY
West Main Street (VT Route 9)

VERMONT ROUTE 9, OLD BENNINGTON, VERMONT

RECOMMENDED SOLUTIONS:
- Install planters and splitter island at Village/Town line to establish “Gateway”.
- Install pedestrian refuge with crosswalks at new “Gateway”.
- Develop utility right-of-way into linear park/multi-use path that connects to nature trails, south of museum.
- Improve signage at new crossing
- Install bicycle lanes along Route 9
- Establish pedestrian connection from museum to church, cemetery and Village walking tour.
- Redesign museum entrance/exit

PROBLEM STATEMENT:
Eastern entrance to Village. Undefined Village gateway lacks adequate bicycle and pedestrian facilities. Heavy truck traffic and excessive speed entering Village.

DETAILED DESCRIPTION:
VT Route 9 is major east-west truck route in the region and part of the National Highway System. This is eastern entrance to the Village of Old Bennington. However, no definitive “Gateway” has been established. Route 9 was repaved in October 2003. Posted speed limit is 35 mph but speed data indicates an average eastbound speed of 37 mph. Existing pedestrian facilities limited to a sidewalk on the north side of Route 9. No crosswalks, pedestrian signals or bicycle facilities have been installed. There is an old railbed that is currently used as a utility right-of-way. This corridor has potential recreational uses. The Bennington Museum is a major tourist attraction on Route 9, at the Village/Town line. The entrance to the Museum parking lot is wide, with undefined entrance and exit points.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- Lack of sidewalks connecting museum to the church
- Unsafe crossing from museum to north side of Route 9
- Established Village walking tour lacks signage
- Potential trail/linear park has not been developed

SPECIFIC PROBLEMS FOR BICYCLISTS:
- Heavy volume creates the need for a designated cyclist right-of-way.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.
- Unsafe crossing from museum parking lot to Route 9, westbound
- Potential trail/linear park has not been developed

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Truck traffic may limit sight distance
- Undefined museum entrance/exit
SPEED DATA ANALYSIS:

Eastern Gateway (Rte 9) - Inbound

Eastern Gateway (Rte 9) - Outbound

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS:

New crossing with textured crosswalk

Truck traffic on Route 9

Entrance to proposed linear park

Proposed Gateway

Orthoimagery: USCS

Photographs: University at Albany Planning Studio
PROBLEM STATEMENT:
High speed and volume of vehicles, used as a cut through to Town. Catamount Lane is a local road but often sees truck/bus traffic due to awkward design of other intersections.

DETAILED DESCRIPTION:
Bank Street is a narrow residential street in the Village with high vehicle speed and volume. Targeted police patrols have yielded numerous speeding violations. No pedestrian or bicycle facilities exist on Bank Street nor Catamount Lane. There is an old railbed that is currently used as a utility right-of-way. This corridor has potential recreational uses. At the crossing, there is potential to develop a secondary Village Gateway, employing traffic calming devices.

SPECIFIC PROBLEMS FOR PEDESTRIANS:
- High vehicle volume and speed
- Narrow roadway lacking sidewalks
- Lack of crosswalks at Bank/Catamount
- Potential trail/linear park has not been developed

SPECIFIC PROBLEMS FOR BICYCLISTS:
- High speed and volume creates the need for a designated cyclist right-of-way.
- Lack of appropriate bicycle right-of-way forces the cyclist to compete with vehicle traffic.
- Inadequate signage fails to warn the motorist of possible bicycle traffic.
- Potential trail/linear park has not been developed

SPECIFIC PROBLEMS FOR MOTOR VEHICLES:
- Lack of traffic control devices invites excessive speed
- Lack of shoulder

Bank Street: EXISTING CONDITIONS
RECOMMENDED SOLUTIONS:

A
- Install splitter island at Village/Town line to establish secondary Gateway.
- Install pedestrian refuge with crosswalks at new Gateway.
- Install textured crossing where proposed linear park/multi-use path crosses Bank Street

B
- Install neighborhood traffic circle as traffic calming device at Bank/Catamount intersection
- Plant mature street trees along south side of Bank Street to provide passive traffic calming
- Paint center stripe on Bank Street
- Evaluate the need for installation of textured intersection as additional traffic calming device at Bank/Catamount

GRAPHIC REPRESENTATION OF RECOMMENDED SOLUTIONS:

Proposed Secondary gateway and crossing

Proposed Neighborhood traffic circle

Bank Street: LANE STRIPING & SPLITTER ISLAND